



City of Muscatine

CITY COUNCIL

Thursday, March 20, 2025

Brad Bark, Mayor

Don Lampe, 1st Ward
Jeff Osborne, 2nd Ward
Peggy Gordon, 3rd Ward
Nadine Brockert, 4th Ward
John Jindrich, 5th Ward

Angie Lewis, At Large
Matt Conard, At Large
Matt Mardesen, City Administrator
Cinda Hilger, City Clerk
Brent Hinders, City Attorney

City Council meetings are held at 6:00 p.m. on the 1st and 3rd Thursday of each month. In-depth sessions are held at 6:00 p.m. on the 2nd Thursday of each month. All meetings are available for review on the City of Muscatine YouTube page.

March 20, 2025, 6:00 PM

AGENDA

1. CALL TO ORDER
2. INVOCATION- Ray Oehme, Vineyard Church
3. ROLL CALL
4. PLEDGE OF ALLEGIANCE
5. FROM THE MAYOR

- A. Proclamation - **Child Abuse Awareness Month - April 2025**
- B. Proclamation - **Junior Achievement Day - April 3, 2025**

6. **APPROVAL OF AGENDA AS PRESENTED AND/OR AS AMENDED**

7. **COMMUNICATIONS - CITIZENS**

8. **COUNCILMEMBER FOLLOW UP TO CITIZEN COMMUNICATION**

9. **CONSENT AGENDA * (ITEMS 10-14)**

The following items are considered to be routine by the City Council and will be enacted by one motion. There will be no separate discussion of these items unless a Council Member so requests, in which event the item will be removed from the Consent Agenda and considered separately.

10. *** REVIEW AND POTENTIAL VOTE TO APPROVE MINUTES**

- A. March 6, 2025 City Council Regular Meeting Minutes
- B. March 13, 2025 In-Depth Meeting Minutes

11. *** PETITIONS AND COMMUNICATIONS**

- A. Request for Road Closure on Oak Street for Replacement of Rooftop HVAC Unit at HNI
- B. Request on second reading of a Class "C" Retail Alcohol License for Krave Bar & Grill, 810 Park Avenue – Williamsons LLC (pending inspections and insurance)
- C. Request for renewal of a Class "C" Retail Alcohol License, Outdoor Service and Catering for Pete's Tap, 1820 Angle Street – Oscar's LLC (pending inspections and insurance)

12. *** COMMUNICATION – RECEIVE AND FILE**

- A. March 3, 2025 Muscatine County Board of Supervisors Meeting Minutes
- B. March 10, 2025 Muscatine County Board of Supervisors Meeting Minutes

13. *** PURCHASE ORDERS AND AGREEMENTS**

14. *** APPROVAL OF BILLS**

It is recommended bills totaling \$2,315,875.60, be approved and that the City Council

authorize the Mayor and City Clerk to issue warrants for the same. It should be noted that this listing is subject to the approval of any related agenda item(s).

- A. March 20, 2025 Bills for Approval

15. PUBLIC HEARING

- A. Public Hearing on Amending an Ordinance to Mirror the State Historic Building Code in the City Building Code, by Amending Section 4, Chapter 1, Title 8 of City Code
- B. Public Hearing for Review of the Plans and Specifications for the West Hill Sewer Separation Phase 6D Project.
- C. Public Hearing for Review of the Plans and Specifications for the Fulliam Avenue Reconstruction Phase 3 Project.
- D. Public Hearing for Review of the Plans and Specifications for the Cured-In-Place-Pipe-Liner Project.
- E. Public Hearing for Review of Plans and Specifications for Snow Removal Equipment at the Muscatine Municipal Airport

16. BOARDS AND COMMISSIONS

17. FROM THE CITY ADMINISTRATOR

- A. First Reading of an Ordinance Amending Title 8, Chapter 1, Section 4 of City Code to Mirror the State Historic Building Code. Public Hearing A
- B. Resolution to Approve the Plans and Specifications for the West Hill Sewer Separation Phase 6D Project. Public Hearing B.
- C. Resolution to Approve the Plans and Specifications for the Fulliam Avenue Reconstruction Phase 3 Project. Public hearing C.
- D. Resolution to Approve the Plans and Specifications for the Cured-In-Place-Pipe-Liner Project. Public Hearing D.
- E. Resolution Approving Plans and Specifications for Snow Removal Equipment at the Muscatine Municipal Airport. Public Hearing E.
- F. First Reading of an Ordinance to Vacate and Deed Undeveloped Right of Way between the Adjoining Property Owner of 607 Van Buren Street and Parcel ID 082518004
- G. First Reading of an Ordinance to Vacate and Deed an Undeveloped Right of Way to the Adjoining Property Owners Located at 1719 Pearlview Court and 1715 Pearlview Court
- H. Resolution Authorizing Special Assessments for Unpaid Abatement Service Fees and Rental Housing Fees to Private Properties

- I. Resolution Approving the Final Plat of AUR Northland Subdivision
- J. Resolution Awarding A Contract to S&R Lawncare LLC, in the amount of \$16,500.00, for Lift Station Mowing and Lawn Care Services.
- K. Resolution Setting a Public Hearing on April 17, 2025, at 6:00 pm in the City Council Chambers, for the City of Muscatine Transit (Muscabus) Annual Application for State and Federal Transit Funds Through the Consolidated Funding Application.
- L. Resolution Setting a Public Hearing on April 3, 2025, at 6:00 pm on an Ordinance Amending City Code to Promote Residential Infill by Relaxing Side-Yard Setback Requirements for Certain Preexisting Very Narrow Residential Parcels, by Amending Section 2, Chapter 26, Title 10, of City Code
- M. Resolution Setting a Public Hearing on April 3, 2025, at 6:00 pm on an Ordinance to the City Building Code that Would Remove the Need for the Submission of Engineered Plans for Post-Framed Buildings that are Less 1,440 Square Feet in Size, by Amending Section 4, Chapter 1, Title 8, And Section 2, Chapter 10, Title 8 Of City Code
- N. Resolution Setting A Public Hearing on April 3, 2025, at 6:00 pm for the Purpose of Hearing Community Comments Regarding the Sale and Consumption of Alcoholic Beverages at the new MUSCO Sports Center.
- O. Resolution Setting a Public Hearing on April 3, 2025, at 6:00 pm on the Status of the Community Development Block Grant Funded Downtown Revitalization Project
- P. **Resolution Setting a Public Hearing on April 17, 2025, at 6:00 pm for the Receipt and Approval of Proposals for the Disposal and Development of Certain City-owned Real Property in the Consolidated Muscatine Urban Renewal Area**
- Q. **Resolution Setting a Public Hearing on April 17, 2025, at 6:00 pm at which it is Proposed to Approve a Development Agreement with Lumber Lofts, LLC, (BTS) including Annual Appropriation Tax Increment Payments.**
- R. Request to Enter Into a Professional Services Agreement with Bolton & Menk, Inc., for an Amount Not to Exceed \$24,600.00, for the Design of a Railroad Trail Crossing at Oregon Street.
- S. Request to Issue Payment to the Federal Aviation Administration (FAA) in an Amount Not to Exceed \$21,293.28 to Perform a Commissioning Flight Inspection of the Runway Lights at the Muscatine Municipal Airport.
- T. Request to Approve Supplemental Agreement 2 With Stanley Consultants for the West Hill Sewer Separation Design Contract for an Amount Not to Exceed \$1,237,576.00.
- U. Request to Approve a Request From 76 Township Trustees To Expand The Muscatine Fire Department Ambulance Coverage For The Entire 76 Township.

- V. Request to Approve the Issuance of a Purchase Order in the Amount of \$331,000.00 to Superior Seawall, Docks and Dredging for the Marina Dredging Project.

18. MAYOR AND COUNCIL REPORTS

19. ADJOURNMENT

PROCLAMATION

Child Abuse Awareness Month

April 2025

WHEREAS, children are vital to our state's future success, prosperity and quality of life as well as being our most vulnerable assets; and

WHEREAS, all children deserve to have the safe, stable, nurturing homes and communities they need to foster their healthy growth and development; and

WHEREAS, child abuse and neglect are a community responsibility affecting both the current and future quality of life of a community; and

WHEREAS, communities that provide parents with the social support, knowledge of parenting and child development and concrete resources they need to cope with stress and nurture their children ensure all children grow to their full potential; and

WHEREAS, effective child abuse prevention strategies succeed because of partnerships created among citizens, human service agencies, schools, faith communities, health care providers, civic organizations, law enforcement agencies, and the business community; and

NOW, THEREFORE, BE IT RESOLVED THAT, We, the City of Muscatine, do hereby proclaim April 2025 as Child Abuse Awareness Month in Muscatine and call upon all citizens, community agencies, faith groups, medical facilities, elected leaders and businesses to increase their participation in our efforts to support families, thereby preventing child abuse and strengthening the communities in which we live.

SIGNATURE _____ DATE _____

SIGNATURE _____ DATE _____

SIGNATURE _____ DATE _____



City of Muscatine

Mayor Brad Bark

PROCLAMATION

WHEREAS, the City of Muscatine will observe Junior Achievement Day on the first Thursday in April, as an opportunity to recognize and celebrate Junior Achievement of the Heartland for empowering our young people to own their economic success.

WHEREAS, Junior Achievement of the Heartland's educational contribution equips our young people to become the next generation of productive employees and self-sufficient citizens to ensure the economic prosperity of Muscatine.

WHEREAS, it is fitting for parents, educators, businesses and other members of the community to join in Junior Achievement's effort to ensure the future success and economic health of our young people and the communities in which they live.

NOW, THEREFORE, I, Brad Bark, Mayor of Muscatine, do hereby proclaim official recognition of April 3, 2025 and every first Thursday of April hereafter as

Junior Achievement Day
in the City of Muscatine

City of Muscatine, Thursday, March 6, 2025, City Council Meeting Minutes-215 Sycamore Street

Mayor Bark called the City Council meeting for March 6, 2025, to order at 06:00 PM.

Invocation: Fr. Chris Weber, Saints Mary & Mathias

Councilmembers Present: Brockert, Jindrich, Osborne, Gordon, Lewis, Lampe, Conard.

Mayor Bark Recognized the Muscatine High School State Bowling Championship Team.

Approval of Agenda as presented: Gordon/Lewis – All ayes - passed

Approval of Consent Agenda: Lewis/Lampe – 6 ayes, 1 nay(Jindrich) – passed (Feb 18, 20 and 25 City Council Budget Session Minutes – Request for use of City Property from Missipi Brew – Road closure for work 320 Main Street – Alcohol license: The Creek, Krave Bar and Grill, Mikes Hilltop Tap, Loos Inc, Best Western Pearl City Inn – Receive and File: Muscatine County Board of Supervisors Minutes Feb 17 & 24 – Purchase orders to Carriage House Carpet and Diamond Floor Finish – March 6, 2025 Bills totaling \$1,816,898.62.

Public Hearings:

Consideration of the Vacation, Surplus, and Deeding Over to the Adjoining Property Owner the Undeveloped Right of Way of Van Buren Street of the Original Town in the City of Muscatine, Muscatine County, Iowa. There were no written or oral comments regarding this public hearing. Lampe/Gordon, moved for the public hearing to be closed. All ayes - Passed.

Consideration of the Vacation, Surplus, and Deeding Over to the Adjoining Property Owners Undeveloped Right of Way of Pearlview Court of the Original Town in the City of Muscatine, Muscatine County, Iowa. There were no written or oral comments regarding this public hearing. Gordon/Lewis, moved for the public hearing to be closed. All ayes – passed.

Review of the Plans and Specifications for the Lake Park Boulevard Bridge Deck Overlay Project. There were no written or oral comments regarding this public hearing. Brockert/Lewis moved for the public hearing to be closed. All ayes – passed.

From the City Administrator:

Third and Final Reading of Ordinance Amending The Zoning Ordinance Of The City Of Muscatine, Iowa (Rezoning Southwest Corner Of The Muscatine Community College Campus). Gordon/Lampe All ayes - passed.

Third and Final Reading of Ordinance Amending Title 10 of City Code, Zoning, Creating the CF-Community Facility District. Jindrich/Lewis Ayes – 6, Nays – 1(Osborne) passed.

Request to Waive Third Reading and to Approve on Second and Final Reading of Ordinance Amending Title 3 - Public Ways, Chapter 5- Public Parks, Section 10 - Other Regulations to Remove Subsection S - Prohibiting Those Over Fourteen in Age from Fishing in the Weed Park Lagoon. Lewis/Brockert – All ayes-passed.

Resolution to Approve the Plans and Specifications for the Lake Park Bridge Deck Overlay Project. Conard/Gordon All ayes – passed.

Resolution Accepting Completed Work by Heuer Construction, Inc. for the Grandview Avenue Reconstruction Project. Lewis/Lampe All ayes - passed

Resolution Awarding Contract to Sulzco LLC, in the Amount of \$12,650, for the Demolition of a Structure Located at 718 E 7th Street. Gordon/Lewis All ayes – passed.

Resolution Awarding Contract to Sulzco, LLC, in the Amount of \$9,650.00, for the Demolition of a Structure Located at 506 Spring Street. Lewis/Jindrich All ayes – passed.

Resolution Setting Public Hearing on March 20, 2025 on Amending an Ordinance to Mirror the State Historic Building Code in the City Building Code, by Amending Section 4, Chapter 1, Title 8 of City Code Osborne/Lewis All ayes – passed.

Resolution Setting a Public Hearing on March 20, 2025, for Review of the Plans and Specifications for the West Hill Sewer Separation Phase 6D Project. Lewis/Gordon All ayes – passed.

Resolution Setting a Public Hearing on March 20, 2025, for Review of the Plans and Specifications for the Fulliam Avenue Reconstruction Phase 3 Project. Lewis/Jindrich All ayes – passed.

Resolution Setting a Public Hearing on March 20, 2025, for Review of the Plans and Specifications for the Cured-In-Place-Pipe-Liner Project. Lewis/Gordon All ayes – passed.

Resolution Setting a Public Hearing on March 20, 2025, for Review Plans and Specifications for Snow Removal Equipment at the Muscatine Municipal Airport. Lampe/Lewis All ayes – passed.

Request to Enter Into Contract with Top Choice Construction & Roofing as the City General Contractor for Minor City Construction Projects. Gordon/Lewis Ayes – 6, Nays – 1(Lampe) passed.

Request to Approve a Revision to the Purchase Agreement for 539 Hagerman Drive for the West Hill Sewer Separation Project Phase 6D. Gordon/Lewis All ayes – passed.

Request to Approve Updated Parks and Recreation Fee Schedule. Lewis/Conard All ayes – passed.

Request to Approve Change Order #2 for the Muscatine Indoor Sports Complex Project Lewis/Lampe All ayes – passed.

Request to Issue a Purchase Order to Freers & Sons Tree Service, in the Amount of \$27,000.00, for Removal of Trees as Part of the West Hill Sewer Separation Phase 6D. Lewis/Gordon All ayes – passed.

Request to enter closed session at 6:50 pm per Iowa Code Section 21.5.1.c to discuss strategy with counsel in matters that are presently in litigation or where litigation is imminent and where its disclosure would be likely to prejudice or disadvantage the position of the governmental body in the litigation, and in accordance with Iowa Code Section 622.10 to discuss attorney/client privileged and attorney work product matters with legal counsel. Gordon/Brockert All ayes – passed.

Request to Exit Closed Session at 7:19 pm: Lampe/Brockert All ayes – passed.

Lewis motioned to adjourn at 7:20 pm

Cinda Hilger, City Clerk

Brad Bark, Mayor

City of Muscatine , City Council Meeting Minutes, March 13, 2025

Mayor Bark called the City Council meeting for March 13, 2025, to order at 06:00 PM.

Councilmembers Present: Brockert, Jindrich, Osborne, Gordon, Lewis, Lampe, Conard.
Pledge of Allegiance.

Presentation and request for TIF Assistance by Andy Carver, Megan Randall, Kevin Custis and Mike Moyer - Carver Pump. There was a consensus with City Council to move forward with TIF request.

Presentation by Andrew Fangman, Community Development to get Council Feedback on the recommendation of the Construction Appeals and Advisory Board to amend City Code to allow for the removal of submission of engineering plans for post framed buildings that are less than 1440 sq. ft. in size. There was question from the Council clarifying this does not affect any of the permitting processes that were addressed by Mr. Fangman. There was a consensus with City Council to move forward with this change.

Andrew Fangman - Community Development - presented a recommendation from the Planning and Zoning Board to amend City Code to relax side yard setback requirements for certain preexisting very narrow residential parcels. This would allow for better use of parcels that have had previous structures that have been torn down to be replaced and to infill many small lots that are currently in Muscatine. Council had questions to verify this would only affect preexisting lots and new lots could not be developed this size in newer neighborhoods. there was a consensus with City Council to move forward with these code changes,

Mayor and Council reports:

Councilmember Jindrich recognized Larry and Susan Miller for their role in helping make Muscatine a beautiful place and gave his condolences to the family for the loss of Susan in January.

Councilmember Lewis requested the City Administrator have the speed bump put back on Clermont Drive due to the issues with speeding in that location.

Councilmember Gordon recognized Officer Pena with the Police Department for he old in the Community and for role in the Iowa Women's Police Association,

Councilmember Gordon moved the meeting be adjourned at 07:08 PM.



Request for Closure

1: Location of Closure 200 Oak St.

2: Contractor Brus Construction

One day between March 31st thru April 4th

3: Dates and Duration of Closure One day between April 7th thru April 18th

4: Company Responsible for Detour and
Signage SELCO

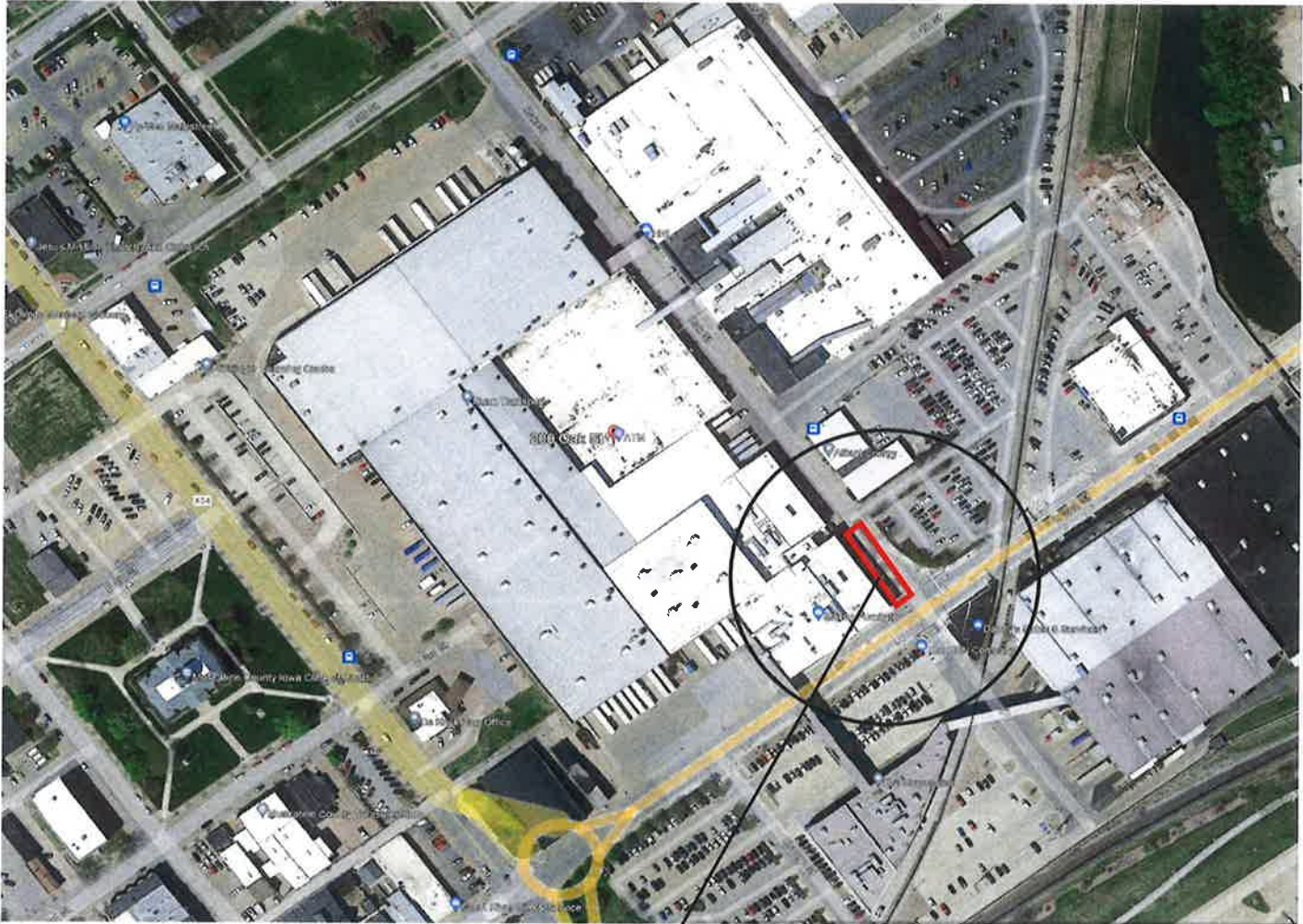
5: Reason Closure is
Needed Replace (1) 30ton roof top HVAC unit

Date Submitted 02/12/2025

Applicant Matt Wesolowski

Brus Construction_HON RTU Lift Plan Needing Road Closure

Location: HON HQ 200 Oak St. Muscatine, IA 52761



Proposed Road Closure ALL Lanes

For Crane to Remove and Set (1) New RTU over One Week

Brus Construction

407 N. Neisse St.
Blue Grass, IA 52726

Brus Contact: Matt Wesolowski
Mobile: (563) 529-1410
E-Mail: Matt@brusconstruction.com

HNI Contact: Todd Bermel
Mobile: (563) 299-5078

Lift #1 : One day between
March 31st thru April 4th

Lift #2: One Day Between
April 7th thru April 18th
Weather Dependent

Scope of Work:

- SELCO to set and install barricades and signage to close all lanes on Oak St Street in front of HON HQ for crane work
- Crane trip #1 (One Day): Remove existing RTU and curb, set structural steel to modify existing
- Brus to remove barricades and signage to re-open Oak St. after crane trip #1 and will re-install before crane trip #2
- Crane trip #2: (One Day) Set new curb and RTU
- SELCO to remove barricades
- Duration: (2) days over a (3) week period

Brus Construction_HON RTU Replacement_Road Closure



Muscatine County Board of Supervisors
Monday, March 3, 2025

The Muscatine County Board of Supervisors met in regular session at 9:00 A.M. with Chick, Mather, Sauer and Sorensen present. Kirchner was absent. Chairperson Mather presiding.

On a motion by Sorensen, second by Sauer, the agenda was approved as presented. Ayes: All.

On a motion by Sorensen, second by Chick, the Board approved claims dated March 3, 2025 in the amount of \$239,346.71. Ayes: All.

On a motion by Sorensen, second by Chick, the Board approved an application for a FY25/26 Iowa Byrne Justice Assistance Grant (JAG) in the amount of \$33,915.00. Ayes: All.

On a motion by Sorensen, second by Sauer, the Board approved 12 upcoming special event permits for Ardon Creek Vineyard and Winery, LLC (Article III, Section 3.26 of the Zoning Ordinance allows native wineries or cider mills as a special use, subject to specific requirements, including Board of Supervisors' approval of any special event at which (1) wine will be sold for onsite consumption and (2) attendance of more than 35 persons is anticipated). Ayes: All.

County Development Director, Eric Furnas, updated the Board on the Courthouse Roof Project. Stone slate has been placed on the roof. Weather permitting, the rotunda should be completed soon.

On a motion by Sauer, second by Sorensen, the Board approved the minutes of the February 24, 2025 regular meeting. Ayes: All.

Correspondence:

Sauer received several phone calls from a resident at the M&W Mobile Home Park in regards to their water issues. Sauer has been corresponding with Furnas regarding this concern.

Mather stated a couple Board members received an email in relation to the Carosh HIPPA transfer of information.

Chick received a phone call from a citizen regarding water quality concerns at Lutheran Homes.

Chick received an email from Steven Kraklio in regards to solar stop signs.

Chick stated the Board received an email for an open record request for the opioid settlement and he referred the email to Administrative Services Director Nancy Schreiber and County Attorney Jim Barry.

Chick signed off on a shared liability agreement for the Mississippi Valley Workforce Area Board.

Committee & Meeting Reports:

Chick and Sorensen attended the Bi-State Regional Planning Commission meeting on February 26, 2025.

Chick attended the Greater Muscatine Chamber of Commerce and Industry meeting on February 26, 2025.

Sorensen met with Nora Dwyer and Jessica Bopes regarding local food pantries on February 26, 2025.

Sorensen attended the Eastern Iowa Mental Health Region meeting on February 24, 2025.

Sorensen attended a Muscatine County Joint Communications Commission meeting on February 26, 2025.

On a motion by Sorensen, second by Sauer, the Board accepted the February 2025 payroll claims. Ayes: All.

Merlin Bartz, Iowa County Outreach Manager for Invenergy LLC of Chicago, proposed a future formal presentation to the Board for a 200 megawatt project in Muscatine County. Bartz will provide written materials for presentation to Budget Administrator, Kala Naber prior to the March 31, 2025 Board meeting.

The Board recessed at 9:18 A.M. and reconvened at 9:23 A.M.

On a motion by Sorensen, second by Sauer, the Board went into closed session at 9:23 A.M. pursuant to Code of Iowa, Section 21.5 (c) to discuss strategy with counsel in matter where litigation is imminent where its disclosure would be likely to prejudice or disadvantage the position of the governmental body in that litigation; and/or Section 21.2 (j) to discuss the purchase or sale of particular real estate only where premature disclosure could be reasonably expected to increase the price the governmental body would have to pay for the property or reduce the price the governmental body would receive for the property. Roll call vote: Ayes: All. On a motion by Sorensen, second by Sauer, the Board returned to open session at 9:35 A.M. Roll call vote: Ayes: All.

The meeting was adjourned at 9:35 A.M.

ATTEST:

Tibe Vander Linden
County Auditor

Nathan Mather, Chairperson
Board of Supervisors

Muscatine County Board of Supervisors
Monday, March 10, 2025

The Muscatine County Board of Supervisors met in regular session at 9:00 A.M. with Chick, Kirchner, Mather, Sauer and Sorensen present. Chairperson Mather presiding.

On a motion by Sorensen, second by Sauer, the agenda was approved as presented. Ayes: All.

Conservation Director Katie Hammond held discussion with the Board regarding the startup and process of online reservations for Muscatine County Conservation amenities. Hammond stated the department makes approximately \$80,000 in annual revenue between the Deep Lakes cabins, Salisbury lodge, shelters and campground reservations. Hammond stated the proposed online reservation system that is being considered is through www.mycountyparks.com with a third of Iowa counties using it for ecommerce and all 99 Iowa county conservation departments having a presence on it. Hammond stated they will start online reservations with the Salisbury campground, shelters/lodge and the Deep Lakes cabins. Hammond stated the Deep Lakes camp site reservations will also be available, once the sites are available for rentals. Hammond stated she has been working with the County Treasurer Amy Zybarth and Budget Administrator Kala Naber to set up a separate bank account for the reservations. Hammond stated she has also worked with Information Services Director Bill Riley regarding the authorize.net website so the department is not holding the liability. Hammond stated the public acceptance reported by other counties who use the online reservations has been well accepted and streamlines the process. Hammond stated the projected start date for reservations is April 1, 2025. Hammond stated there are startup expenses of a \$49.00 set up fee and \$25.00 monthly fee for authorize.net, \$300 to start and maintain the separate bank account and they will be ordering checks. Hammond stated the Conservation Board has discussed a “no refunds” reservation policy but in some cases a coupon maybe issued for a cancellation if requested.

Community Services Director Jessica Bopes held discussion and possible action to approve Resolution #03-10-25-01 Approving a Request to Release Data to Iowa Department of Health and Human Services. Bopes stated she has had discussion with Carosh Compliance Solutions and everything is in order with no concerns to release the Community Services Network (CSN) data. Bopes stated the release form has been reviewed and revised by County Attorney Jim Barry.

On a motion by Sorensen, second by Chick, the Board approved Resolution #03-10-25-01 Approving a Request Data to Iowa Department of Health and Human Services. Roll call vote: Ayes: All.

RESOLUTION #03-10-25-01
APPROVING REQUEST TO RELEASE DATA TO IHHS

WHEREAS, the Iowa Department of Health and Human Services is requesting all records in the Community Services Network (CSN) as part of the Behavioral Health Re-Alignment; and

WHEREAS, Muscatine County is the custodian of the committal records in the Community Services Network (CSN) as the staff in the Community Services Department entered the data into the system over the years; and

WHEREAS, as the custodian of the records, the IHHS request to release the records is approved and the Chairman is authorized to sign the Data Release Form.

NOW, THEREFORE BE IT RESOLVED that the Muscatine County Board of Supervisors hereby approves the release of records to IHHS.

PASSED AND APPROVED this 10th day of March, 2025.

ATTEST:

/s/Tibe Vander Linden
Muscatine County Auditor

/s/Nathan Mather, Chairperson
Muscatine County Board of Supervisors

County Development Director Eric Furnas held discussion and possible action to accept a bid from Molina Mechanical, Milan, Illinois, in the amount of \$10,000 to replace two furnaces at the Muscatine County Sheriff's Office.

On a motion by Chick, second by Sorensen, the Board accepted a bid from Molina Mechanical, Milan, Illinois, in the amount of \$10,000 to replace two furnaces at the Muscatine County Sheriff's Office. Ayes: All.

Furnas updated the Board on the Administration Building roof repair water infiltration that occurred last week. Furnas stated the problem has been resolved.

Mike Nolan, Horizon Architecture reviewed bids and possible action to accept a bid for the Muscatine County Administration Maintenance Project – Phase 2. Nolan reviewed two bids for the Administration Building exterior vertical wall tuck pointing, painting, stucco and sidewalk repair. Nolan presented bids as follows: Wolfe Contracting, Muscatine, Iowa - \$114,700.00 base bid total; E & H Restoration, Davenport, Iowa - \$145,265.00 and TNT Tuckpointing – decline to bid.

Nolan recommended to accept the low bid from Wolfe Contracting with waiving the qualification statement.

On a motion by Sorensen, second by Kirchner, the Board accepted a bid for the Muscatine County Administration Maintenance Project – Phase 2 from Wolfe Contracting, Muscatine, Iowa in the amount of \$114,700.00 with a waiver of the qualification statement. Ayes: All.

Nolan updated the Board on the Muscatine County Administration Maintenance Project – Phase 1, stating Phase 1 is expected to be completed today with a revised and more permanent solution to repair and roof over the skylights. Nolan stated the County Jail Access Panel Project has received positive communication with the vendor with expected delivery of the panels in early

April 2025. Nolan updated the Board regarding the expected six-month lead time with a door replacement at the County Jail. Nolan stated the bid process for the Community Services Project exterior walls, back stair replacement and ramp project is expected to occur in May 2025.

On a motion by Sorensen, second by Sauer, the Board approved Resolution #03-10-25-02 Suspending the Collection of Taxes. Roll call vote: Ayes: All.

**RESOLUTION #03-10-25-02
SUSPENDING THE COLLECTION OF TAXES**

WHEREAS, notice from the Director of Human Services has been received regarding the eligibility of Travis Beck, Muscatine, Iowa, (the ‘recipient’) for medical and facility care; and

WHEREAS, as such recipient of such assistance is deemed to be unable to contribute to the public revenue pursuant to Section 427.9, Code of Iowa; and

WHEREAS, the recipient is the owner of property described as follows:

Address: 801 Marquette St, Muscatine, IA 52761
Parcel No: 0826377008
Legal Description: 26-77-2W Lot 1 Blk 4 Fulliam’s Add 2nd Sec

NOW, THEREFORE, BE IT HEREBY RESOLVED by the Muscatine County Board of Supervisors:

1. That the County Treasurer is hereby ordered to suspend the collection of all taxes, including special assessments, rates or charges, interest, fees and costs for the current year and those unpaid from prior years. As long as the petitioner is authorized by DHS no interest accrues during suspension but payments can be made.
2. If the parcel is sold, passes by bequest or inheritance to any person other than the spouse or minor child of the petitioner, all taxes and special assessments become due and payable by the next semi-annual installment date. Interest at the rate of 1 ½% per month will start on the next delinquency date after the suspended taxes become due.

Passed and approved this 10th day of March, 2025.

ATTEST:

/s/Tibe Vander Linden
Muscatine County Auditor

/s/Nathan Mather, Chairperson
Muscatine County Board of Supervisors

County Treasurer Amy Zybarth gave an explanation of the County Tax Sale that occurs annually on the third Monday of June.

On motion by Sorensen, second by Sauer, the Board approved the minutes of the March 3, 2025 regular meeting. Ayes: All.

Correspondence:

All Supervisors received an email from Muscatine County Fair Director Kelsie Meyer regarding the groundbreaking ceremony for the County Fair Event Center to be held March 19, 2025 at 4:30 P.M.

Sorensen was contacted by Bob Schaapveld to thank Veteran's Affairs Director Eric Sanders for his work with local veterans.

Chick had a discussion with Don Lampe regarding properties that were suspended for the collection of taxes.

Chick received a call from Terry Martin regarding an issue with the levee pumping station. Emergency Manager Chris Jasper was notified.

Chick received a call from Gary Hepker regarding a solar power application.

Mather received an email forwarded by the County Auditor regarding a request from Noah Daniel of the Renewable Energy Siting Associate to remotely attend a Board meeting that Invenergy may give a presentation at.

Committee & Meeting Reports:

All Supervisors attended a Conference Board meeting on March 4, 2025.

Sorensen, Sauer, Chick and Mather attended a groundbreaking ceremony at Deep Lakes Campground on March 3, 2025.

Sorensen, Sauer and Chick attended a Muscatine Power and Water Power Breakfast on March 7, 2025.

Sorensen and Chick attended a Community Foundation event to celebrate 25 years on March 5, 2025.

Sorensen attended a City of Muscatine Advisory Committee to discuss their Comprehensive Plan on March 5, 2025.

Sorensen attended a meeting along with Community Services Director Jessica Bopes at Muscatine Center for Social Action to discuss the pending changes for community services on March 6, 2025.

Sorensen attended a conference call with Kim Warren and Bopes regarding childcare in Muscatine County.

Kirchner attended the Muscatine County Fair Fundraiser on March 1, 2025.

Kirchner attended the Muscatine Joint Communications meeting on February 26, 2025.

Kirchner attended the West Liberty Economic Area Development on February 27, 2025.

Chick and Sorensen attended a Levee Safety meeting on March 3, 2025.

Mather stated the Veteran's Affairs Commission received a donation of \$650 from a lady who donated to the county in honor of her son who was a marine and gave the ultimate sacrifice in the Iraq War. She participates in the veteran's hair cut event. The Veteran's Affairs Commission has sent her a thank you note.

The Board recessed at 9:40 A.M. and reconvened at 9:43 A.M.

On a motion by Chick, second by Sorensen, the Board went into closed session at 9:44 A.M. pursuant to Code of Iowa, Section 21.5.1 (i) for performance evaluation. Roll call vote: Ayes: All. On a motion by Sorensen, second by Sauer, the Board returned to open session at 10:36 A.M. Roll call vote: Ayes: All.

The Board recessed at 10:36 A.M. and reconvened at 10:38 A.M.

On a motion by Sorensen, second by Kirchner, the Board went into closed session at 10:38 A.M. pursuant to Code of Iowa, Section 21.5.1 (c), to discuss strategy with counsel in matter where litigation is imminent. Roll call vote: Ayes: All. On a motion by Sorensen, second by Chick, the Board returned to open session at 10:54 A.M. Roll call vote: Ayes: All.

The meeting was adjourned at 10:54 A.M.

ATTEST:

Tibe Vander Linden
County Auditor

Danny Chick, Vice-Chairperson
Board of Supervisors

BILLS FOR APPROVAL SUMMARY
March 21, 2025

Computer Bill Lists

Regular Bills 3/21/25		\$	1,186,379.72
Special Ck Run 3/18/25	Operating		4,373.37
Payroll Vendor Checks 3/14/25			18,170.78
Payroll Vendor ACH Payments 3/14/25			104,761.47
	Subtotal	\$	<u>1,313,685.34</u>

ACH Debit Memo Payments

Wellmark Insurance	Health/Dental Insurance March	\$	84,000.00
Wellmark Insurance	Health/Dental Insurance March		84,000.00
Payroll Account	Transfer		490,564.77
Treasurer State of Iowa	State Tax Withholding		23,961.96
Federal Aviation Admin	Flight Inspection of Project Lights		21,293.28
Internal Revenue Service	Federal Withholding		127,743.62
	Subtotal	\$	<u>831,563.63</u>

Voucher Program

Various Landlords	Estimated April Rent	\$	175,000.00
		\$	<u>175,000.00</u>

Voids

Void CK 3/18/25	Operating	\$	(4,373.37)
	Subtotal	\$	<u>(4,373.37)</u>

Total Expenditures	\$	<u><u>2,315,875.60</u></u>
---------------------------	----	----------------------------

Accounts Payable

Transactions by Account

User: SMeyer
 Printed: 03/18/2025 - 3:20PM
 Batch: 00004.03.2025



City of
MUSCATINE
 City Hall
 215 Sycamore St
 Muscatine, Iowa 52761
www.muscatineiowa.gov
 (563) 264-1550

Account Number	Vendor	Description	GL Date	Check No	Amount	PO No
1000-00-0000-23550	RELIANCE STANDARD LIFE INS CCPR	Batch 00002.02.2025 Life Insurance	02/28/2025	0	1.20	
1000-00-0000-23550	RELIANCE STANDARD LIFE INS CCPR	Batch 00002.02.2025 Life Insurance	02/28/2025	0	1.54	
	Vendor Subtotal:				2.74	
1000-00-0000-23630	RELIANCE STANDARD LIFE INS CCPR	Batch 00001.02.2025 Optional Life	02/14/2025	0	301.82	
1000-00-0000-23630	RELIANCE STANDARD LIFE INS CCPR	Batch 00002.02.2025 Optional Life	02/28/2025	0	309.53	
	Vendor Subtotal:				611.35	
1000-01-1111-52600	TCM BANK NA VISA	WalMart - Budget Meals	03/18/2025	0	90.10	
1000-01-1111-52600	TCM BANK NA VISA	Aldi - Budget Meals	03/18/2025	0	150.11	
1000-01-1111-52600	TCM BANK NA VISA	HyVee Mainstreet - Budget Meals	03/18/2025	0	6.00	
1000-01-1111-52600	TCM BANK NA VISA	WalMart - Budget Meals	03/18/2025	0	112.19	
1000-01-1111-52600	TCM BANK NA VISA	HyVee - Budget Meals	03/18/2025	0	22.20	
1000-01-1111-52600	TCM BANK NA VISA	WalMart - Budget Meals	03/18/2025	0	46.31	
1000-01-1111-52600	TCM BANK NA VISA	GeoJohns Pizza - Budget Meals	03/18/2025	0	68.90	
	Vendor Subtotal:				495.81	
1000-01-1111-64200	TCM BANK NA VISA	IA League of Cities - Reg Peggy Gordon	03/18/2025	0	50.00	
1000-01-1111-64200	TCM BANK NA VISA	IA League of Cities - Reg Nadine Brocke	03/18/2025	0	50.00	
	Vendor Subtotal:				100.00	
1000-01-1121-61225	MUSCATINE COUNTY TREASURER	Quarterly Prosecutor	03/18/2025	0	10,000.00	
	Vendor Subtotal:				10,000.00	
1000-01-1131-46200	RELIANCE STANDARD LIFE INS CC	Life Ins Mar	03/01/2025	0	57.13	

			Vendor Subtotal:		57.13
1000-01-1131-46600	RELIANCE STANDARD LIFE INS CCLTD Mar 24		03/01/2025	0	70.66
			Vendor Subtotal:		70.66
1000-01-1131-61340	TCM BANK NA VISA	Bitly.com - Core plan 2/10/25-2/9/26	03/18/2025	0	120.00
1000-01-1131-61340	TCM BANK NA VISA	Adobe ID	03/18/2025	0	59.99
			Vendor Subtotal:		179.99
1000-01-1131-62310	XEROX CORPORATION	Copies	03/18/2025	0	16.10
			Vendor Subtotal:		16.10
1000-01-1132-46200	RELIANCE STANDARD LIFE INS CCLife Ins Mar		03/01/2025	0	19.50
			Vendor Subtotal:		19.50
1000-01-1132-46600	RELIANCE STANDARD LIFE INS CCLTD Mar 24		03/01/2025	0	24.04
			Vendor Subtotal:		24.04
1000-01-1132-52890	PETTY CASH	Plates/Napkins	03/18/2025	0	4.15
			Vendor Subtotal:		4.15
1000-01-1132-62310	XEROX CORPORATION	Copies	03/18/2025	0	4.60
			Vendor Subtotal:		4.60
1000-01-1132-62530	CROSSROADS INC.	Shredding	03/17/2025	0	22.00
			Vendor Subtotal:		22.00
1000-01-1132-64700	SKYE HR CONSULTING LLC	RMLA/ADA Training	03/18/2025	0	1,000.00

			Vendor Subtotal:		1,000.00
1000-01-1132-64700	DAVID HARRIS	Leza, Kemper, and Goodwin Balance to 1	03/17/2025	0	6,000.00 00030101
			Vendor Subtotal:		6,000.00
1000-01-1144-46200	RELIANCE STANDARD LIFE INS CC	Life Ins Mar	03/01/2025	0	5.56
			Vendor Subtotal:		5.56
1000-01-1144-46600	RELIANCE STANDARD LIFE INS CCLTD	Mar 24	03/01/2025	0	6.40
			Vendor Subtotal:		6.40
1000-01-1144-52820	TCM BANK NA VISA	Amer Heart Shop CPR - CPR Video	03/18/2025	0	16.50
1000-01-1144-52820	TCM BANK NA VISA	Amer Heart Shop CPR - CPR Video	03/18/2025	0	16.50
1000-01-1144-52820	TCM BANK NA VISA	Amer Heart Shop CPR - CPR Video	03/18/2025	0	16.50
			Vendor Subtotal:		49.50
1000-01-1144-61550	DSI MEDICAL SERVICES INC	Randoms - Popp/Etzel/Wedekind/Popp	03/17/2025	0	196.00
1000-01-1144-61550	DSI MEDICAL SERVICES INC	Post Accidents - Nesbit	03/17/2025	0	97.00
			Vendor Subtotal:		293.00
1000-01-1218-68100	GREATER MUSCATINE CHAMBER	Quarterly Subsidy	03/18/2025	0	10,750.00
			Vendor Subtotal:		10,750.00
1000-05-1141-46200	RELIANCE STANDARD LIFE INS CC	Life Ins Mar	03/01/2025	0	32.94
			Vendor Subtotal:		32.94
1000-05-1141-46600	RELIANCE STANDARD LIFE INS CCLTD	Mar 24	03/01/2025	0	57.14
			Vendor Subtotal:		57.14

1000-05-1141-65100	QUAD CITY TIMES & MUSC JOURN	Public Hearing Vacation Pearlview	03/18/2025	0	27.36
1000-05-1141-65100	QUAD CITY TIMES & MUSC JOURN	Public Hearing Vacation Van Buren	03/18/2025	0	23.26
1000-05-1141-65100	QUAD CITY TIMES & MUSC JOURN	Minutes 3/6/25	03/18/2025	0	283.18
1000-05-1141-65100	QUAD CITY TIMES & MUSC JOURN	Ordinance MCC Property	03/18/2025	0	48.56
1000-05-1141-65100	QUAD CITY TIMES & MUSC JOURN	Ordinance Weed Park Fishing	03/18/2025	0	45.83
1000-05-1141-65100	QUAD CITY TIMES & MUSC JOURN	Ordinance CF Zone	03/18/2025	0	83.45
1000-05-1141-65100	QUAD CITY TIMES & MUSC JOURN	Minutes 3/20/25	03/18/2025	0	355.68
1000-05-1141-65100	QUAD CITY TIMES & MUSC JOURN	Budget Min Feb	03/18/2025	0	25.31
1000-05-1141-65100	QUAD CITY TIMES & MUSC JOURN	Public Notice Historic Building Codes	03/18/2025	0	35.57
1000-05-1141-65100	QUAD CITY TIMES & MUSC JOURN	Budget Minutes 3/18/25	03/18/2025	0	10.26
		Vendor Subtotal:			938.46
1000-05-1143-46200	RELIANCE STANDARD LIFE INS CC	Life Ins Mar	03/01/2025	0	45.10
		Vendor Subtotal:			45.10
1000-05-1143-46600	RELIANCE STANDARD LIFE INS CCLTD	Mar 24	03/01/2025	0	51.85
		Vendor Subtotal:			51.85
1000-05-1143-62310	XEROX CORPORATION	Copies	03/18/2025	0	41.38
		Vendor Subtotal:			41.38
1000-05-1143-64200	TCM BANK NA VISA	GFOA - Reg LeAnna M	03/18/2025	0	75.00
		Vendor Subtotal:			75.00
1000-05-1145-63300	PITNEY BOWES GLOBAL FINANCI	Postage Machine Lease	03/17/2025	0	424.32
		Vendor Subtotal:			424.32
1000-05-1145-63300	XEROX CORPORATION	Copier	03/18/2025	0	166.47
		Vendor Subtotal:			166.47
1000-05-1145-69200	UNITED STATES POSTAL SERVICE	Postage	03/17/2025	0	6,000.00

			Vendor Subtotal:		6,000.00
1000-05-1146-46200	RELIANCE STANDARD LIFE INS CCLife Ins Mar		03/01/2025	0	29.50
			Vendor Subtotal:		29.50
1000-05-1146-46600	RELIANCE STANDARD LIFE INS CCLTD Mar 24		03/01/2025	0	38.65
			Vendor Subtotal:		38.65
1000-05-1146-51400	PETTY CASH	PCI Bracket	03/18/2025	0	6.71
			Vendor Subtotal:		6.71
1000-05-1146-61330	WINSOR CONSULTING GROUP LLCConsulting		03/18/2025	0	3,222.00
			Vendor Subtotal:		3,222.00
1000-05-1146-65240	MUSCATINE POWER & WATER	Jan/Feb Machlink	03/18/2025	0	1,057.84
1000-05-1146-65240	MUSCATINE POWER & WATER	February Internet - Greenwood	03/13/2025	0	59.99
1000-05-1146-65240	MUSCATINE POWER & WATER	February Internet - Greenwood	03/13/2025	0	83.18
1000-05-1146-65240	MUSCATINE POWER & WATER	February Internet - Weed Park	03/13/2025	0	83.18
			Vendor Subtotal:		1,284.19
1000-10-1221-46200	RELIANCE STANDARD LIFE INS CCLife Ins Mar		03/01/2025	0	74.41
			Vendor Subtotal:		74.41
1000-10-1221-46600	RELIANCE STANDARD LIFE INS CCLTD Mar 24		03/01/2025	0	109.36
			Vendor Subtotal:		109.36
1000-10-1221-62120	A NOTCH ABOVE TREE SERVICE	1308 Fillmore St - Removal of Dead RO'	03/13/2025	0	1,235.00 00029992
1000-10-1221-62120	A NOTCH ABOVE TREE SERVICE	Removal of 4 Trees at 519 Orange	03/18/2025	0	1,750.00 00030078
			Vendor Subtotal:		2,985.00

1000-10-1221-62310	ADVANCED BUSINESS SYSTEMS IT Copier		03/13/2025	0	25.75
1000-10-1221-62310	ADVANCED BUSINESS SYSTEMS IT Copier		03/13/2025	0	34.92
		Vendor Subtotal:			60.67
1000-10-1221-62310	XEROX CORPORATION	February Copier	03/13/2025	0	27.58
1000-10-1221-62310	XEROX CORPORATION	February Copies	03/13/2025	0	0.38
1000-10-1221-62310	XEROX CORPORATION	Copies	03/18/2025	0	9.20
		Vendor Subtotal:			37.16
1000-10-1221-64200	TCM BANK NA VISA	IA Assoc of Bldg Officials - Reg A Limb	03/18/2025	0	75.00
1000-10-1221-64200	TCM BANK NA VISA	IABO - Training Reg - Nick & Seth	03/18/2025	0	150.00
		Vendor Subtotal:			225.00
1000-10-1221-65275	VERIZON WIRELESS	February Cell Phones	03/13/2025	0	233.02
		Vendor Subtotal:			233.02
1000-10-1221-65275	TCM BANK NA VISA	Google Voice	03/18/2025	0	52.99
		Vendor Subtotal:			52.99
1000-10-1221-65275	VERIZON	February GPS	03/13/2025	0	71.12
		Vendor Subtotal:			71.12
1000-10-1221-69800	POINT & PAY LLC	December CC Fees	03/13/2025	0	122.77
		Vendor Subtotal:			122.77
1000-15-1311-33430	GATSO USA INC.	ATE Fees - February	03/18/2025	0	6,588.00
		Vendor Subtotal:			6,588.00
1000-15-1311-33435	TCM BANK NA VISA	USPS - ATE Filing Postage	03/18/2025	0	10.24
1000-15-1311-33435	TCM BANK NA VISA	USPS - ATE Filing Postage	03/18/2025	0	10.24

			Vendor Subtotal:		20.48
1000-15-1311-33440	MUNICIPAL COLLECTIONS OF AMI	Collection Agent Fee - Feb	03/18/2025	0	1,195.00
			Vendor Subtotal:		1,195.00
1000-15-1311-46200	RELIANCE STANDARD LIFE INS CC	Life Ins Mar	03/01/2025	0	300.18
			Vendor Subtotal:		300.18
1000-15-1311-46600	RELIANCE STANDARD LIFE INS CCBW	LTD Mar	03/01/2025	0	12.13
1000-15-1311-46600	RELIANCE STANDARD LIFE INS CC	LTD Mar 24	03/01/2025	0	262.84
			Vendor Subtotal:		274.97
1000-15-1311-51100	AMAZON.COM	Brother Label Maker Tape, 2 pk, Black o	03/13/2025	0	11.95 00029938
			Vendor Subtotal:		11.95
1000-15-1311-51300	AMAZON.COM	256 GB USB Flash Drive (2 pack)	03/13/2025	0	129.95 00029938
1000-15-1311-51300	AMAZON.COM	500 GB 2.5" Ultra Slim Portable Externa	03/13/2025	0	56.56 00029938
			Vendor Subtotal:		186.51
1000-15-1311-52300	PANTHER UNIFORMS INC	New Issue - B Baughman	03/13/2025	0	1,656.60
			Vendor Subtotal:		1,656.60
1000-15-1311-52300	UNIFORM DEN INC	New Issue - A Sink	03/13/2025	0	763.92
			Vendor Subtotal:		763.92
1000-15-1311-52890	AMAZON.COM	Flash Drives/USB Cable	03/13/2025	0	27.26
			Vendor Subtotal:		27.26
1000-15-1311-52890	TCM BANK NA VISA	Sirchie - Rifle Boxes	03/18/2025	0	88.83

1000-15-1311-52890	TCM BANK NA VISA	Walmart - Evidence Ziplock Bags	03/18/2025	0	31.71
		Vendor Subtotal:			120.54
1000-15-1311-61340	WEST PUBLISHING CORPORATION	Clear Web Plus	03/13/2025	0	526.37
		Vendor Subtotal:			526.37
1000-15-1311-62310	XEROX CORPORATION	Copies	03/18/2025	0	4.60
		Vendor Subtotal:			4.60
1000-15-1311-62410	TEMP ASSOCIATES	Temp Employee Week Ending 3/9/25	03/13/2025	0	847.20
		Vendor Subtotal:			847.20
1000-15-1311-62530	STERICYCLE INC	Shredding	03/13/2025	0	39.68
		Vendor Subtotal:			39.68
1000-15-1311-64120	TCM BANK NA VISA	Meals - Pancho Villa - Kies	03/18/2025	0	22.38
1000-15-1311-64120	TCM BANK NA VISA	PTC EZPass - Toll fees	03/18/2025	0	54.30
1000-15-1311-64120	TCM BANK NA VISA	Meal - Texas Roadhouse - Kies	03/18/2025	0	28.00
1000-15-1311-64120	TCM BANK NA VISA	Outback Steakhouse - Meals Kies	03/18/2025	0	28.00
1000-15-1311-64120	TCM BANK NA VISA	Gatsby - Meals Kies	03/18/2025	0	26.33
1000-15-1311-64120	TCM BANK NA VISA	Orofino - Meals Kies	03/18/2025	0	28.00
1000-15-1311-64120	TCM BANK NA VISA	Meal Overage - Orofino - Kies	03/18/2025	0	1.77
1000-15-1311-64120	TCM BANK NA VISA	Holiday inn - Lodging - Arnaman	03/18/2025	0	89.60
1000-15-1311-64120	TCM BANK NA VISA	Meal - Bul Go GI - Kies	03/18/2025	0	26.46
1000-15-1311-64120	TCM BANK NA VISA	Meal - Buffalo Wild Wings - Kies	03/18/2025	0	28.00
1000-15-1311-64120	TCM BANK NA VISA	Meal - Redrock - Kies	03/18/2025	0	28.00
		Vendor Subtotal:			360.84
1000-15-1311-64700	DAVID HARRIS	Dabit	03/17/2025	0	500.00 00030101
		Vendor Subtotal:			500.00
1000-15-1311-65210	MUSCATINE POWER & WATER	February Phones - PSB	03/13/2025	0	44.28

			Vendor Subtotal:		44.28
1000-15-1311-67140	A-1 QUALITY TIRE & CAR CARE	Tire Repair #763	03/13/2025	0	28.50
			Vendor Subtotal:		28.50
1000-15-1311-69200	PETTY CASH	Postage	03/18/2025	0	21.05
1000-15-1311-69200	PETTY CASH	Postage	03/18/2025	0	3.31
			Vendor Subtotal:		24.36
1000-15-1311-69200	TCM BANK NA VISA	USPS Postage	03/18/2025	0	23.88
1000-15-1311-69200	TCM BANK NA VISA	Mailboxes & Parcel Depot - Shipping	03/18/2025	0	18.65
1000-15-1311-69200	TCM BANK NA VISA	USPS - Postage	03/18/2025	0	18.65
			Vendor Subtotal:		61.18
1000-15-1311-69400	TCM BANK NA VISA	MOCIC - Team Membership	03/18/2025	0	200.00
			Vendor Subtotal:		200.00
1000-15-1312-46200	RELIANCE STANDARD LIFE INS CC	Life Ins Mar	03/01/2025	0	3.13
			Vendor Subtotal:		3.13
1000-15-1312-46600	RELIANCE STANDARD LIFE INS CCBW	LTD Mar	03/01/2025	0	14.97
			Vendor Subtotal:		14.97
1000-15-1312-61530	MUSCATINE VETERINARY HOSPIT	Vet Services - Deuce	03/13/2025	0	87.53
			Vendor Subtotal:		87.53
1000-15-1312-61650	PETDATA, INC	Pet Data	03/13/2025	0	500.00
			Vendor Subtotal:		500.00

1000-15-1316-61530	MUSCATINE VETERINARY HOSPIT	Vet Services - Riki	03/13/2025	0	54.00
		Vendor Subtotal:			54.00
1000-15-1316-69400	CANINE DEVELOPMENT GROUP	Handler Subscrption	03/13/2025	0	140.00
		Vendor Subtotal:			140.00
1000-15-1317-65260	MUSCATINE CO ADMINISTRATION	February HIDTA Phone	03/13/2025	0	131.51
		Vendor Subtotal:			131.51
1000-20-1321-46200	RELIANCE STANDARD LIFE INS CC	Life Ins Mar	03/01/2025	0	434.36
		Vendor Subtotal:			434.36
1000-20-1321-46600	RELIANCE STANDARD LIFE INS CC	LTD Mar 24	03/01/2025	0	192.19
		Vendor Subtotal:			192.19
1000-20-1321-52300	HEIMAN FIRE EQUIPMENT	Bullard FX Helmet Retractable Face Shie	03/18/2025	0	985.88 00029614
		Vendor Subtotal:			985.88
1000-20-1321-52300	PANTHER UNIFORMS INC	NAME EMBROIDERED	03/18/2025	0	10.00 00029982
1000-20-1321-52300	PANTHER UNIFORMS INC	#ELB-E2814LCD PANT - NAVY: 6	03/18/2025	0	124.00 00029982
1000-20-1321-52300	PANTHER UNIFORMS INC	#5-74363ABR7243032 EMS PANT-NA`	03/18/2025	0	72.00 00029982
1000-20-1321-52300	PANTHER UNIFORMS INC	EMBROIDER LOGO	03/18/2025	0	16.00 00029982
1000-20-1321-52300	PANTHER UNIFORMS INC	#3730 JOB SHIRT-NAVY : M/R	03/18/2025	0	147.90 00029982
1000-20-1321-52300	PANTHER UNIFORMS INC	Shirt - Ewers	03/18/2025	0	107.00
1000-20-1321-52300	PANTHER UNIFORMS INC	NAME EMBROIDERED	03/18/2025	0	10.00 00029972
1000-20-1321-52300	PANTHER UNIFORMS INC	EMBROIDER LOGO	03/18/2025	0	16.00 00029972
1000-20-1321-52300	PANTHER UNIFORMS INC	#3730 JOB SHIRT-NAVY : M/R	03/18/2025	0	147.90 00029972
1000-20-1321-52300	PANTHER UNIFORMS INC	#5-743637243232 EMS PANT-NAVY: 1	03/18/2025	0	216.00 00029972
1000-20-1321-52300	PANTHER UNIFORMS INC	Uniforms - D Rudolph	03/18/2025	0	48.00
		Vendor Subtotal:			914.80
1000-20-1321-52300	AMAZON.COM	Work Boots/Grafton	03/13/2025	0	71.05

Vendor Subtotal:					71.05
1000-20-1321-52300	DINGES PARTNERS GROUP LLC	Mens QR14 Boot Lion-804-6369-12.5W	03/17/2025	0	375.00 00029480
1000-20-1321-52300	DINGES PARTNERS GROUP LLC	Boots - Petersen/Colon	03/17/2025	0	750.00
1000-20-1321-52300	DINGES PARTNERS GROUP LLC	Return	03/17/2025	0	-730.72
1000-20-1321-52300	DINGES PARTNERS GROUP LLC	V-FORCE IsoDri Set of Bunker Gear - E	03/17/2025	0	4,100.00 00029535
1000-20-1321-52300	DINGES PARTNERS GROUP LLC	Mens QR14 Boot Lion-804-6369-15.0 E	03/17/2025	0	375.00 00029480
Vendor Subtotal:					4,869.28
1000-20-1321-52300	TCM BANK NA VISA	Phelps - Tshirt Uniforms - D Rudolph	03/18/2025	0	51.27
1000-20-1321-52300	TCM BANK NA VISA	Phelps - Tshirt Uniforms - J Hammes	03/18/2025	0	51.27
1000-20-1321-52300	TCM BANK NA VISA	Reeves Company - Namepins - D Rudolph	03/18/2025	0	24.20
1000-20-1321-52300	TCM BANK NA VISA	Reeves Company - Namepins Rudolph &	03/18/2025	0	11.23
Vendor Subtotal:					137.97
1000-20-1321-52750	BERGEN PERRY	Reimb Kerosene	03/18/2025	0	46.44
Vendor Subtotal:					46.44
1000-20-1321-52830	MACQUEEN EQUIPMENT INC	DP17-800X50CL-ARN BIG 10 1.75X50	03/17/2025	0	197.00 00029392
1000-20-1321-52830	MACQUEEN EQUIPMENT INC	DP25-800X50CL-ARN BG10 WH 2.5X	03/17/2025	0	520.00 00029392
1000-20-1321-52830	MACQUEEN EQUIPMENT INC	RC50-450X100Y-5STORZ KEY LDH 5	03/17/2025	0	2,164.50 00029392
1000-20-1321-52830	MACQUEEN EQUIPMENT INC	DP17-TRUX50R-ARN TRUID 1.75X50	03/17/2025	0	1,075.00 00029392
1000-20-1321-52830	MACQUEEN EQUIPMENT INC	DP17-TRUX50Y-ARN TRUID 1.75X50	03/17/2025	0	860.00 00029392
Vendor Subtotal:					4,816.50
1000-20-1321-52830	AMAZON.COM	Chainsaw Sharpener	03/17/2025	0	29.99
Vendor Subtotal:					29.99
1000-20-1321-52840	TCM BANK NA VISA	Oxygen Sensor for MultiRAE monitors F	03/18/2025	0	305.18 00029835
1000-20-1321-52840	TCM BANK NA VISA	Oxygen Sensor for MultiRAE monitors F	03/18/2025	0	7.77
1000-20-1321-52840	TCM BANK NA VISA	Cal Gas Direct - Vinyl Calibration gas tu	03/18/2025	0	9.00
1000-20-1321-52840	TCM BANK NA VISA	GASCO 44-413-18 Calibration Gas Mixt	03/18/2025	0	190.00 00029854
1000-20-1321-52840	TCM BANK NA VISA	GASCO 44-248-100 100PPM Isobutylen	03/18/2025	0	165.00 00029854
1000-20-1321-52840	TCM BANK NA VISA	GASCO 70-Series Calibration Gas Regul	03/18/2025	0	115.00 00029854

		Vendor Subtotal:			791.95
1000-20-1321-52890	MENARDS (MUSC)	Staples	03/13/2025	0	18.12
		Vendor Subtotal:			18.12
1000-20-1321-52890	SIGUORNEY TRACTOR & IMPLEMENTS	Chain Loop	03/17/2025	0	77.98
		Vendor Subtotal:			77.98
1000-20-1321-52890	AMAZON.COM	Glow Tape	03/13/2025	0	11.68
1000-20-1321-52890	AMAZON.COM	Bath Towels	03/17/2025	0	99.96
		Vendor Subtotal:			111.64
1000-20-1321-52890	TCM BANK NA VISA	Harbor Freight - Generator Storage Cont	03/18/2025	0	17.99
1000-20-1321-52890	TCM BANK NA VISA	Witmer Public Safety Group - CMC Resc	03/18/2025	0	64.53
		Vendor Subtotal:			82.52
1000-20-1321-53140	MENARDS (MUSC)	Frogtape/Rags	03/18/2025	0	47.82
		Vendor Subtotal:			47.82
1000-20-1321-53150	MENARDS (MUSC)	Bracket/Stake	03/13/2025	0	36.88
		Vendor Subtotal:			36.88
1000-20-1321-53220	ALEXIS FIRE EQUIPMENT CO	Rear Springs #8779-0 (Emergency repair	03/13/2025	0	2,212.20 00029821
1000-20-1321-53220	ALEXIS FIRE EQUIPMENT CO	Aux/Helper Spring #76205-7 (Emergenc	03/13/2025	0	600.00 00029821
1000-20-1321-53220	ALEXIS FIRE EQUIPMENT CO	Freight	03/13/2025	0	267.64
		Vendor Subtotal:			3,079.84
1000-20-1321-53220	RELIANT FIRE APPARATUS	Whelen M6 Blue Clear Lens #M6C-blue	03/18/2025	0	250.56 00030029
		Vendor Subtotal:			250.56

1000-20-1321-61340	TCM BANK NA VISA	Simpleinout.com- Annual Fee	03/18/2025	0	107.99
Vendor Subtotal:					107.99
1000-20-1321-61520	RIVER REHABILITATION INC	Medical M Hartman DOS 2/19/25 Code:	03/17/2025	0	125.05
1000-20-1321-61520	RIVER REHABILITATION INC	Medical M Hartman DOS 2/19/25 Code:	03/17/2025	0	26.42
1000-20-1321-61520	RIVER REHABILITATION INC	Medical M Hartman DOS 2/19/25 Code:	03/17/2025	0	31.88
1000-20-1321-61520	RIVER REHABILITATION INC	Medical M Hartman DOS 2/21/25 Code:	03/17/2025	0	125.05
1000-20-1321-61520	RIVER REHABILITATION INC	Medical M Hartman DOS 2/21/25 Code:	03/17/2025	0	26.42
1000-20-1321-61520	RIVER REHABILITATION INC	Medical M Hartman DOS 2/21/25 Code:	03/17/2025	0	31.88
1000-20-1321-61520	RIVER REHABILITATION INC	Medical M Hartman DOS 2/19/25 Code:	03/17/2025	0	69.30
1000-20-1321-61520	RIVER REHABILITATION INC	Medical M Hartman DOS 2/21/25 Code:	03/17/2025	0	69.30
Vendor Subtotal:					505.30
1000-20-1321-61520	EQUIAN LLC	Medical Fee J Barnhart DOS 1/3/25	03/17/2025	0	7.98
1000-20-1321-61520	EQUIAN LLC	Medical Fee D Rudolph DOS 1/21/25	03/17/2025	0	13.39
1000-20-1321-61520	EQUIAN LLC	Medical Fee M Hartman DOS 2/14/25	03/17/2025	0	767.10
1000-20-1321-61520	EQUIAN LLC	Medical Fee M Hartman DOS 2/21/25	03/17/2025	0	11.09
1000-20-1321-61520	EQUIAN LLC	Medical Fee M Hartman DOS 2/24/25	03/17/2025	0	11.09
1000-20-1321-61520	EQUIAN LLC	Medical Fee M Hartman DOS 1/9/25	03/17/2025	0	24.94
1000-20-1321-61520	EQUIAN LLC	Medical Fee J Barnhart DOS 1/22/25	03/17/2025	0	5.73
Vendor Subtotal:					841.32
1000-20-1321-61520	ORA ORTHOPEDICS PC	Medical M Hartman DOS 1/9/25 Code: 9	03/17/2025	0	449.45
1000-20-1321-61520	ORA ORTHOPEDICS PC	Medical M Hartman DOS 1/9/25 Code: 7	03/17/2025	0	115.80
Vendor Subtotal:					565.25
1000-20-1321-61520	ANESTHESIA & ANALGESIA PC	Medical M Hartman DOS 2/14/25 Code:	03/17/2025	0	780.00
1000-20-1321-61520	ANESTHESIA & ANALGESIA PC	Medical M Hartman DOS 2/14/25 Code:	03/17/2025	0	181.62
Vendor Subtotal:					961.62
1000-20-1321-61560	CARDIOVASCULAR MEDICINE PC	Medical J Barnhart DOS 1/22/25 Code: C	03/17/2025	0	39.60
1000-20-1321-61560	CARDIOVASCULAR MEDICINE PC	Medical J Barnhart DOS 1/21/25 Code: 9	03/17/2025	0	18.45
1000-20-1321-61560	CARDIOVASCULAR MEDICINE PC	Medical J Barnhart DOS 1/21/25 Code: 9	03/17/2025	0	27.99
1000-20-1321-61560	CARDIOVASCULAR MEDICINE PC	Medical J Barnhart DOS 1/3/25 Code: 99	03/17/2025	0	245.70
1000-20-1321-61560	CARDIOVASCULAR MEDICINE PC	Medical J Barnhart DOS 1/3/25 Code: 93	03/17/2025	0	41.40

1000-20-1321-61560	CARDIOVASCULAR MEDICINE PC	Medical J Barnhart DOS 1/22/25 Code: 9	03/17/2025	0	166.50
		Vendor Subtotal:			539.64
1000-20-1321-61560	TMESYS LLC	Prescription K McCarthy	03/17/2025	0	179.64
1000-20-1321-61560	TMESYS LLC	Prescription J Barnhart	03/17/2025	0	328.58
1000-20-1321-61560	TMESYS LLC	Prescription K McCarthy	03/17/2025	0	704.90
1000-20-1321-61560	TMESYS LLC	Prescription M Collins	03/17/2025	0	895.56
1000-20-1321-61560	TMESYS LLC	Prescription T Eagle	03/17/2025	0	250.06
		Vendor Subtotal:			2,358.74
1000-20-1321-61660	CITY OF DAVENPORT	CPAT Maintenance Fee	03/17/2025	0	100.00
		Vendor Subtotal:			100.00
1000-20-1321-62210	PHELPS THE UNIFORM SPECIALIST	Laundry - Fire	03/17/2025	0	30.39
1000-20-1321-62210	PHELPS THE UNIFORM SPECIALIST	Laundry - Fire	03/13/2025	0	30.85
		Vendor Subtotal:			61.24
1000-20-1321-62310	XEROX CORPORATION	Copies	03/18/2025	0	9.20
		Vendor Subtotal:			9.20
1000-20-1321-62370	SYCAMORE PRINTING INC	Cabinet Covers and Installation	03/17/2025	0	460.00 00029795
		Vendor Subtotal:			460.00
1000-20-1321-64120	TCM BANK NA VISA	NFA Meal Ticket - M. Collins (3/2-3/7/2	03/18/2025	0	314.23 00029973
		Vendor Subtotal:			314.23
1000-20-1321-65240	MUSCATINE POWER & WATER	February Phones - PSB	03/13/2025	0	44.29
		Vendor Subtotal:			44.29
1000-20-1321-67130	TANTARA TRANSPORTATION COR	Repairs to the Brake, Exhaust, and Suspe	03/17/2025	0	15,870.91 00029934

			Vendor Subtotal:		15,870.91
1000-20-1321-67310	ADVANCED BUSINESS SYSTEMS INC	Copier	03/13/2025	0	51.59
			Vendor Subtotal:		51.59
1000-20-1321-67320	ACUREN INSPECTION INC.	Equipment Inspection	03/18/2025	0	188.00
			Vendor Subtotal:		188.00
1000-20-1321-69400	TCM BANK NA VISA	NFPA - Ewers - Annual Membership	03/18/2025	0	225.00
			Vendor Subtotal:		225.00
1000-20-1321-69400	BRIAN PLATZ - SECRETARY TREAS	Memberships - Ewers/Hillard/Ronzheim	03/13/2025	0	140.00
			Vendor Subtotal:		140.00
1000-25-1115-46200	RELIANCE STANDARD LIFE INS CO	Life Ins Mar	03/01/2025	0	3.19
			Vendor Subtotal:		3.19
1000-25-1115-46600	RELIANCE STANDARD LIFE INS CO	LTD Mar 24	03/01/2025	0	5.48
			Vendor Subtotal:		5.48
1000-25-1411-46200	RELIANCE STANDARD LIFE INS CO	Life Ins Mar	03/01/2025	0	3.13
			Vendor Subtotal:		3.13
1000-25-1411-46600	RELIANCE STANDARD LIFE INS CO	BW LTD Mar	03/01/2025	0	17.80
			Vendor Subtotal:		17.80
1000-25-1411-65210	MUSCATINE POWER & WATER	February Phones - Greenwood	03/13/2025	0	30.69
1000-25-1411-65210	MUSCATINE POWER & WATER	February Phones - Greenwood	03/13/2025	0	33.70

		Vendor Subtotal:			64.39
1000-25-1411-67130	ACUREN	EQUIPMENT LIFT INSPECTION	03/13/2025	0	142.50 00029681
		Vendor Subtotal:			142.50
1000-25-1411-67150	TCM BANK NA VISA	SHIPPING	03/18/2025	0	48.00 00029946
1000-25-1411-67150	TCM BANK NA VISA	SNOW PLOW CUTTER BLADES (SET	03/18/2025	0	665.30 00029946
1000-25-1411-67150	TCM BANK NA VISA	Cutting Edge Bolt Kit	03/18/2025	0	18.00
		Vendor Subtotal:			731.30
1000-25-1411-74200	SIGUORNEY TRACTOR & IMPLEMENT MOWER		03/13/2025	0	17,588.37 00028243
		Vendor Subtotal:			17,588.37
1000-25-1421-46200	RELIANCE STANDARD LIFE INS CCLife Ins Mar		03/01/2025	0	28.44
		Vendor Subtotal:			28.44
1000-25-1421-46600	RELIANCE STANDARD LIFE INS CCLTD Mar 24		03/01/2025	0	34.52
		Vendor Subtotal:			34.52
1000-25-1421-51300	AMAZON.COM	106R03690 Xerox WorkCentre 6515 Cyz	03/17/2025	0	203.61 00030041
1000-25-1421-51300	AMAZON.COM	106R03480 Xerox WorkCentre 6515 Bla	03/17/2025	0	160.94 00030041
		Vendor Subtotal:			364.55
1000-25-1421-61340	RECKDESK LLC	RECKDESK ANNUAL FEE	03/13/2025	0	8,300.00 00030014
		Vendor Subtotal:			8,300.00
1000-25-1421-62310	XEROX CORPORATION	Copies	03/18/2025	0	4.60
		Vendor Subtotal:			4.60

1000-25-1421-65210	MUSCATINE POWER & WATER	February Base PRI	03/18/2025	0	71.33
		Vendor Subtotal:			71.33
1000-25-1423-38620	BLAKE ALLINGTON	Refund - Credit Card Test	03/13/2025	0	40.00
		Vendor Subtotal:			40.00
1000-25-1423-46200	RELIANCE STANDARD LIFE INS CC	Life Ins Mar	03/01/2025	0	32.00
		Vendor Subtotal:			32.00
1000-25-1423-46600	RELIANCE STANDARD LIFE INS CCLTD	Mar 24	03/01/2025	0	16.10
1000-25-1423-46600	RELIANCE STANDARD LIFE INS CCBW LTD	Mar	03/01/2025	0	100.43
		Vendor Subtotal:			116.53
1000-25-1423-52100	MENARDS (MUSC)	Salt Stick	03/13/2025	0	26.96
		Vendor Subtotal:			26.96
1000-25-1423-52100	LUCY'S SOIL SOURCE INC	#2 GROWING MIX	03/18/2025	0	478.67 00029656
		Vendor Subtotal:			478.67
1000-25-1423-52250	CLESENS	Captain XTR	03/13/2025	0	344.00 00029925
1000-25-1423-52250	CLESENS	Shipping	03/13/2025	0	162.64
		Vendor Subtotal:			506.64
1000-25-1423-52400	MENARDS (MUSC)	Glove	03/13/2025	0	6.99
		Vendor Subtotal:			6.99
1000-25-1423-52720	TCM BANK NA VISA	Caseys- Fuel - J Axley	03/18/2025	0	79.17
1000-25-1423-52720	TCM BANK NA VISA	Caseys - Fuel - M Baker	03/18/2025	0	67.11
		Vendor Subtotal:			146.28

1000-25-1423-53110	MUSCATINE LUMBER	Safety Hasp	03/17/2025	0	27.49
		Vendor Subtotal:			27.49
1000-25-1423-53130	GRAINGER DEPT 802675066	2" STAINLESS STEEL FLEX CONNEC	03/13/2025	0	463.36 00030040
1000-25-1423-53130	GRAINGER DEPT 802675066	2" STAINLESS STEEL 90	03/13/2025	0	161.84 00030076
		Vendor Subtotal:			625.20
1000-25-1423-53130	HEMPEL PIPE & SUPPLY INC	2" SCH80 PVC BALL VALVE	03/13/2025	0	458.40 00030019
		Vendor Subtotal:			458.40
1000-25-1423-53130	PLUMB SUPPLY COMPANY	PVC Tee	03/13/2025	0	28.11
1000-25-1423-53130	PLUMB SUPPLY COMPANY	Adapter	03/13/2025	0	39.92
1000-25-1423-53130	PLUMB SUPPLY COMPANY	Adapter	03/13/2025	0	39.92
1000-25-1423-53130	PLUMB SUPPLY COMPANY	PVC P Trap	03/17/2025	0	1.81
1000-25-1423-53130	PLUMB SUPPLY COMPANY	Wax Ring/Toilet Seat	03/17/2025	0	58.11
		Vendor Subtotal:			167.87
1000-25-1423-53140	MENARDS (MUSC)	Spray Paint	03/13/2025	0	67.84
		Vendor Subtotal:			67.84
1000-25-1423-53140	SHERWIN WILLIAMS	Paint	03/13/2025	0	55.00
		Vendor Subtotal:			55.00
1000-25-1423-53220	ARNOLD MOTOR SUPPLY	Lift Support	03/13/2025	0	40.44
		Vendor Subtotal:			40.44
1000-25-1423-53220	GRAINGER DEPT 802675066	DOOR VENT LOUVERS	03/17/2025	0	290.88 00029983
		Vendor Subtotal:			290.88
1000-25-1423-53220	MENARDS (MUSC)	Tie Downs	03/13/2025	0	47.48

			Vendor Subtotal:		47.48
1000-25-1423-53220	NAPA OF MUSCATINE	Light Bulbs	03/13/2025	0	3.57
			Vendor Subtotal:		3.57
1000-25-1423-62210	PHELPS THE UNIFORM SPECIALIST	Laundry - Weed Park	03/18/2025	0	14.20
1000-25-1423-62210	PHELPS THE UNIFORM SPECIALIST	Laundry - Weed Park	03/13/2025	0	14.20
			Vendor Subtotal:		28.40
1000-25-1423-62260	PS3 Enterprises Inc.	Temp Sanitation	03/17/2025	0	110.00
			Vendor Subtotal:		110.00
1000-25-1423-64120	JACKSON AXLEY	Reimb Meal 2/19/25	03/13/2025	0	30.68
			Vendor Subtotal:		30.68
1000-25-1423-64120	TCM BANK NA VISA	Best Western Plus - Lodging J Axley	03/18/2025	0	111.08
			Vendor Subtotal:		111.08
1000-25-1423-64200	IOWA STATE UNIVERSITY EXTENS	Ornamental & Turf - Baker/Strong/Palm	03/13/2025	0	225.00
			Vendor Subtotal:		225.00
1000-25-1423-65210	MUSCATINE POWER & WATER	February Phones - Weed Park	03/13/2025	0	31.35
1000-25-1423-65210	MUSCATINE POWER & WATER	January Phones - River Center	03/13/2025	0	21.39
			Vendor Subtotal:		52.74
1000-25-1423-65275	VERIZON WIRELESS	February Cell Phones	03/13/2025	0	80.02
			Vendor Subtotal:		80.02
1000-25-1423-65310	ALLIANT ENERGY	February Gas - Pearl City Station	03/13/2025	0	412.84

1000-25-1423-65310	ALLIANT ENERGY	February Gas - Harbor	03/13/2025	0	337.13
1000-25-1423-65310	ALLIANT ENERGY	February Gas - Weed Park	03/13/2025	0	555.21
Vendor Subtotal:					1,305.18
1000-25-1423-65320	MUSCATINE POWER & WATER	January Electric - Park Comm	03/13/2025	0	18.51
1000-25-1423-65320	MUSCATINE POWER & WATER	January Electric - River Center	03/13/2025	0	13.18
1000-25-1423-65320	MUSCATINE POWER & WATER	January Electric - Maint Shed	03/13/2025	0	801.34
Vendor Subtotal:					833.03
1000-25-1423-65410	MUSCATINE POWER & WATER	January Water - River Center	03/13/2025	0	37.14
1000-25-1423-65410	MUSCATINE POWER & WATER	January Water - Maint Shed	03/13/2025	0	22.13
Vendor Subtotal:					59.27
1000-25-1423-67130	ACUREN	EQUIPMENT LIFT INSPECTION	03/13/2025	0	142.50 00029681
Vendor Subtotal:					142.50
1000-25-1423-67140	A-1 QUALITY TIRE & CAR CARE	ST235/80R16/10 TOWMAX STR II 124	03/13/2025	0	380.00 00030061
1000-25-1423-67140	A-1 QUALITY TIRE & CAR CARE	MOUNTING	03/13/2025	0	54.00 00030061
1000-25-1423-67140	A-1 QUALITY TIRE & CAR CARE	Pressure Stem	03/13/2025	0	15.80
Vendor Subtotal:					449.80
1000-25-1424-46200	RELIANCE STANDARD LIFE INS CC	Life Ins Mar	03/01/2025	0	9.07
Vendor Subtotal:					9.07
1000-25-1424-46600	RELIANCE STANDARD LIFE INS CCLTD	Mar 24	03/01/2025	0	8.61
1000-25-1424-46600	RELIANCE STANDARD LIFE INS CCBW LTD	Mar	03/01/2025	0	8.90
Vendor Subtotal:					17.51
1000-25-1424-52100	MENARDS (MUSC)	Mole Killer	03/13/2025	0	35.98
Vendor Subtotal:					35.98

1000-25-1424-53130	PLUMB SUPPLY COMPANY	Joint Washers	03/17/2025	0	69.37
		Vendor Subtotal:			69.37
1000-25-1424-53220	MENARDS (MUSC)	6INCH X 100 FT CORRUGATED DRA	03/13/2025	0	849.95 00028928
		Vendor Subtotal:			849.95
1000-25-1424-53220	SITEONE LANDSCAPE SUPPLY	Coupling Valve	03/13/2025	0	1.76
		Vendor Subtotal:			1.76
1000-25-1424-53220	TCM BANK NA VISA	Vevor.com- HD Commercial Hand Dryer	03/18/2025	0	79.37
		Vendor Subtotal:			79.37
1000-25-1424-64120	TCM BANK NA VISA	Holiday Inn - Lodging - C Hull	03/18/2025	0	133.28
		Vendor Subtotal:			133.28
1000-25-1424-64200	TCM BANK NA VISA	CONFERENCE REGISTRATION - JEF	03/18/2025	0	285.00 00029764
1000-25-1424-64200	TCM BANK NA VISA	CONFERENCE REGISTRATION - COI	03/18/2025	0	285.00 00029764
		Vendor Subtotal:			570.00
1000-25-1424-65210	CENTURYLINK	March Phones - Kent Stein	03/13/2025	0	79.76
		Vendor Subtotal:			79.76
1000-25-1424-67140	TCM BANK NA VISA	SET OF 2: 22 X 9.5 - 10	03/18/2025	0	129.99 00029815
		Vendor Subtotal:			129.99
1000-25-1424-69400	TCM BANK NA VISA	IA STMA - Sports Turf Manager Membe	03/18/2025	0	75.00
		Vendor Subtotal:			75.00
1000-25-1424-73900	PLUMB SUPPLY COMPANY	SINK PEA TRAPS	03/13/2025	0	186.53 00029986

1000-25-1424-73900	PLUMB SUPPLY COMPANY	SINK DRAINS	03/13/2025	0	77.40 00029986
1000-25-1424-73900	PLUMB SUPPLY COMPANY	SINK DRAINS	03/13/2025	0	0.04
Vendor Subtotal:					263.97
1000-25-1427-46200	RELIANCE STANDARD LIFE INS CC	Life Ins Mar	03/01/2025	0	9.07
Vendor Subtotal:					9.07
1000-25-1427-46600	RELIANCE STANDARD LIFE INS CCLTD	Mar 24	03/01/2025	0	8.61
1000-25-1427-46600	RELIANCE STANDARD LIFE INS CCBW LTD	Mar	03/01/2025	0	8.90
Vendor Subtotal:					17.51
1000-25-1427-53130	GRAINGER DEPT 802675066	Water Supply Stop	03/13/2025	0	62.82
Vendor Subtotal:					62.82
1000-25-1427-53130	SITEONE LANDSCAPE SUPPLY	SHIPPING	03/13/2025	0	13.65 00030060
1000-25-1427-53130	SITEONE LANDSCAPE SUPPLY	5RC- QUICK CONNECT	03/13/2025	0	465.81 00030060
Vendor Subtotal:					479.46
1000-25-1427-53140	MENARDS (MUSC)	Paint Liner/PVC Pipe	03/13/2025	0	55.04
Vendor Subtotal:					55.04
1000-25-1427-53220	MENARDS (MUSC)	Boards	03/13/2025	0	77.85
1000-25-1427-53220	MENARDS (MUSC)	Pegboard/Locknut/Nipple/Magnetic Hold	03/13/2025	0	73.26
1000-25-1427-53220	MENARDS (MUSC)	Coupler/Adapter	03/13/2025	0	81.58
Vendor Subtotal:					232.69
1000-25-1427-53220	SIGUORNEY TRACTOR & IMPLEMENT	HALL EFFECT SENSOR - RE213475	03/13/2025	0	159.14 00030022
Vendor Subtotal:					159.14
1000-25-1427-53220	MUSCATINE LUMBER	Fender Washer/ Hex Wash	03/13/2025	0	27.97

Vendor Subtotal:					27.97
1000-25-1427-53220	TCM BANK NA VISA	EBAY- Carburetor	03/18/2025	0	31.93
1000-25-1427-53220	TCM BANK NA VISA	EBAY - Shock Absorber Upper Mount B	03/18/2025	0	53.18
1000-25-1427-53220	TCM BANK NA VISA	EBAY - Carburetor	03/18/2025	0	30.79
Vendor Subtotal:					115.90
1000-25-1427-64120	TCM BANK NA VISA	Holiday Inn - Lodging - J Limburg	03/18/2025	0	266.56
Vendor Subtotal:					266.56
1000-25-1427-65210	VERIZON WIRELESS	February Cell Phones	03/13/2025	0	40.01
Vendor Subtotal:					40.01
1000-25-1427-67130	ACUREN	EQUIPMENT LIFT INSPECTION	03/13/2025	0	142.50 00029681
Vendor Subtotal:					142.50
1000-25-1431-38340	PETTY CASH	Portion of Sales for Starting Cash	03/18/2025	0	50.00
Vendor Subtotal:					50.00
1000-25-1431-46200	RELIANCE STANDARD LIFE INS CC	Life Ins Mar	03/01/2025	0	12.13
Vendor Subtotal:					12.13
1000-25-1431-46600	RELIANCE STANDARD LIFE INS CC	LTD Mar 24	03/01/2025	0	13.93
Vendor Subtotal:					13.93
1000-25-1431-62310	XEROX CORPORATION	Copies	03/18/2025	0	4.60
Vendor Subtotal:					4.60
1000-25-1432-53130	TCM BANK NA VISA	PUMP SEAL KIT	03/18/2025	0	289.75 00029964

Vendor Subtotal:					289.75
1000-25-1432-65210	MUSCATINE POWER & WATER	February Phones - Weed Park	03/13/2025	0	71.27
Vendor Subtotal:					71.27
1000-30-1511-46200	RELIANCE STANDARD LIFE INS CC	Life Ins Mar	03/01/2025	0	79.26
Vendor Subtotal:					79.26
1000-30-1511-46600	RELIANCE STANDARD LIFE INS CC	LTD Mar 24	03/01/2025	0	114.06
Vendor Subtotal:					114.06
1000-30-1511-51300	AMAZON.COM	W1380X HP #138X Black Toner Cartrid	03/17/2025	0	129.89 00030069
Vendor Subtotal:					129.89
1000-30-1511-52890	AMAZON.COM	File Folder Tabs	03/13/2025	0	30.02
1000-30-1511-52890	AMAZON.COM	Acrylic Shelves	03/17/2025	0	37.17
1000-30-1511-52890	AMAZON.COM	Acrylic Book Stands/Sign Holders	03/18/2025	0	92.66
Vendor Subtotal:					159.85
1000-30-1511-52890	TCM BANK NA VISA	Demco - Laminate Vinyl Gloss Book Co	03/18/2025	0	76.13
Vendor Subtotal:					76.13
1000-30-1511-61340	RELIABLE NETWORK SOLUTIONS	Webcam Re-Install Sky Camera	03/13/2025	0	204.00 00029383
Vendor Subtotal:					204.00
1000-30-1511-61340	TCM BANK NA VISA	Big Imprint - Website Monthly	03/18/2025	0	116.00
1000-30-1511-61340	TCM BANK NA VISA	Adobe - Creative Cloud All Apps Cancel	03/18/2025	0	659.88
1000-30-1511-61340	TCM BANK NA VISA	Zoom - Monthly Fee	03/18/2025	0	63.99
1000-30-1511-61340	TCM BANK NA VISA	Mailchimp - E-Newsletter Fee	03/18/2025	0	110.00

			Vendor Subtotal:		949.87
1000-30-1511-61660	UNIQUE MANAGEMENT SERVICES	Collection Agency Fee	03/13/2025	0	256.30
			Vendor Subtotal:		256.30
1000-30-1511-62370	TCM BANK NA VISA	DRI Uprinting - Misc Printing Services N	03/18/2025	0	84.51
			Vendor Subtotal:		84.51
1000-30-1511-62460	AMAZON.COM	Craft Magnets/Sticky DOTS	03/13/2025	0	66.75
1000-30-1511-62460	AMAZON.COM	Label Tape	03/18/2025	0	83.12
1000-30-1511-62460	AMAZON.COM	Batteries	03/17/2025	0	36.73
1000-30-1511-62460	AMAZON.COM	Juggling Scarves/Egg Shaker	03/18/2025	0	88.96
			Vendor Subtotal:		275.56
1000-30-1511-62460	TCM BANK NA VISA	Walmart - Program Fees Creative Escape	03/18/2025	0	86.06
1000-30-1511-62460	TCM BANK NA VISA	Walmart - Galentines Program	03/18/2025	0	78.80
1000-30-1511-62460	TCM BANK NA VISA	Walmart - Creative Escape Program	03/18/2025	0	53.06
			Vendor Subtotal:		217.92
1000-30-1511-63300	XEROX CORPORATION	Copier	03/18/2025	0	207.55
			Vendor Subtotal:		207.55
1000-30-1511-65210	MUSCATINE POWER & WATER	February Phones - Library	03/17/2025	0	204.78
			Vendor Subtotal:		204.78
1000-30-1511-65240	MUSCATINE POWER & WATER	February Internet - Library	03/17/2025	0	570.00
			Vendor Subtotal:		570.00
1000-30-1511-65240	T-MOBILE	Remote Hot Spot February	03/17/2025	0	110.50

			Vendor Subtotal:		110.50
1000-30-1511-74500	LIBRARY SYSTEMS & SERVICES	L Books/Materials	03/18/2025	0	1,393.99
			Vendor Subtotal:		1,393.99
1000-30-1511-74500	TCM BANK NA VISA	Hearst Shops Woman's Day - Library & l	03/18/2025	0	18.00
1000-30-1511-74500	TCM BANK NA VISA	Antique Trader - Library Books & Mag S	03/18/2025	0	29.95
1000-30-1511-74500	TCM BANK NA VISA	Wall Street Journal Print Edition - Month	03/18/2025	0	60.49
			Vendor Subtotal:		108.44
1000-35-1521-46200	RELIANCE STANDARD LIFE INS CC	Life Ins Mar	03/01/2025	0	50.02
			Vendor Subtotal:		50.02
1000-35-1521-46600	RELIANCE STANDARD LIFE INS CCLTD	Mar 24	03/01/2025	0	73.74
			Vendor Subtotal:		73.74
1000-35-1521-51100	AMAZON.COM	Sticky Notes/Wireless Mouse	03/17/2025	0	23.98
			Vendor Subtotal:		23.98
1000-35-1521-51200	TCM BANK NA VISA	Rowman & Littlefield - Leaning into Val	03/18/2025	0	44.20
			Vendor Subtotal:		44.20
1000-35-1521-52820	AMAZON.COM	Pencils/Erasers	03/17/2025	0	28.68
1000-35-1521-52820	AMAZON.COM	Bone Folders	03/17/2025	0	87.42
1000-35-1521-52820	AMAZON.COM	Duo-Finish Paper	03/17/2025	0	56.82
1000-35-1521-52820	AMAZON.COM	Fast Food Tray	03/17/2025	0	72.47
1000-35-1521-52820	AMAZON.COM	Canvases for Painting	03/17/2025	0	55.82
			Vendor Subtotal:		301.21
1000-35-1521-52890	AMAZON.COM	Swiffer Dusters	03/17/2025	0	48.90
1000-35-1521-52890	AMAZON.COM	Battery Operated Clock	03/17/2025	0	24.74

			Vendor Subtotal:		73.64	
1000-35-1521-61660	CHARLES A POTTER	Tune Piano	03/17/2025	0	56.25	
			Vendor Subtotal:		56.25	
1000-35-1521-62370	GORDON FLESCH COMPANY	Copier	03/17/2025	0	102.00	
			Vendor Subtotal:		102.00	
1000-35-1521-64200	TCM BANK NA VISA	MACC - Cleaning Collection Materials V	03/18/2025	0	400.00	
			Vendor Subtotal:		400.00	
1000-35-1521-64400	KATY LOOS	Reimb Meal 3/5/25	03/17/2025	0	25.00	
			Vendor Subtotal:		25.00	
1000-35-1521-64500	MELANIE ALEXANDER	Reimb Mileage 2/27/25	03/18/2025	0	53.55	
1000-35-1521-64500	MELANIE ALEXANDER	Reimb Mileage 3/4/25 - 3/7/25	03/18/2025	0	331.38	
			Vendor Subtotal:		384.93	
1000-35-1521-64500	KATY LOOS	Reimb Mileage 3/5 - 3/8	03/17/2025	0	422.10	
			Vendor Subtotal:		422.10	
1000-35-1521-65210	MUSCATINE POWER & WATER	February Phones - Art Center	03/17/2025	0	166.94	
			Vendor Subtotal:		166.94	
1000-35-1521-65240	MUSCATINE POWER & WATER	February Internet - Art Center	03/17/2025	0	82.97	
			Vendor Subtotal:		82.97	
1000-35-1521-69400	TCM BANK NA VISA	Membership with the American Associa	03/18/2025	0	237.00	00029822
1000-35-1521-69400	TCM BANK NA VISA	Mid Atlantic - 2025 Ready Aim Build W	03/18/2025	0	100.00	

Vendor Subtotal:					337.00
1000-35-1522-51300	AMAZON.COM	HP 131A Black, Cyan, Magenta, Yellow	03/17/2025	0	356.06 00030003
Vendor Subtotal:					356.06
1000-35-1522-61310	PASTPERFECT SOFTWARE	Data Conversion	03/18/2025	0	3,800.00 00030104
Vendor Subtotal:					3,800.00
1000-35-1522-61640	ANNETTE HOVLAND	Teaching Fee Class ID 7335	03/17/2025	0	50.00
1000-35-1522-61640	ANNETTE HOVLAND	Teaching Fee Class ID 7336	03/17/2025	0	50.00
1000-35-1522-61640	ANNETTE HOVLAND	Teaching Fee Class ID 7337	03/17/2025	0	50.00
1000-35-1522-61640	ANNETTE HOVLAND	Teaching Fee Class ID 7338	03/17/2025	0	50.00
1000-35-1522-61640	ANNETTE HOVLAND	Teaching Fee Class ID 7342	03/17/2025	0	50.00
1000-35-1522-61640	ANNETTE HOVLAND	Teaching Fee Class ID 7360	03/17/2025	0	50.00
Vendor Subtotal:					300.00
1000-35-1522-61640	JIM ELIAS	Teaching Fee Class ID 7358	03/17/2025	0	50.00
Vendor Subtotal:					50.00
1000-35-1522-61640	JULIE LEAR	Teaching Fee Class ID 7349	03/17/2025	0	50.00
Vendor Subtotal:					50.00
1000-35-1522-61640	HEATHER MICHELE SEIBEL	Teaching Fee Class ID 7352	03/17/2025	0	150.00
Vendor Subtotal:					150.00
1000-35-1526-61310	PASTPERFECT SOFTWARE	Data Conversion	03/18/2025	0	2,600.00 00030104
Vendor Subtotal:					2,600.00
1000-35-1526-61340	PASTPERFECT SOFTWARE	Web Edition Set Up	03/18/2025	0	996.00 00030104
1000-35-1526-61340	PASTPERFECT SOFTWARE	Hosting & Support	03/18/2025	0	696.00 00030104

			Vendor Subtotal:		1,692.00
1000-40-1151-46200	RELIANCE STANDARD LIFE INS CCLife Ins Mar		03/01/2025	0	23.46
			Vendor Subtotal:		23.46
1000-40-1151-46600	RELIANCE STANDARD LIFE INS CCLTD Mar 24		03/01/2025	0	17.97
1000-40-1151-46600	RELIANCE STANDARD LIFE INS CCBW LTD Mar		03/01/2025	0	41.34
			Vendor Subtotal:		59.31
1000-40-1151-52400	MENARDS (MUSC)	Bounce/Wipes	03/17/2025	0	83.32
1000-40-1151-52400	MENARDS (MUSC)	Xtra/ZEP/Cascade	03/17/2025	0	98.39
1000-40-1151-52400	MENARDS (MUSC)	Lysol	03/17/2025	0	95.64
1000-40-1151-52400	MENARDS (MUSC)	Ajax Orange	03/13/2025	0	39.70 00030023
1000-40-1151-52400	MENARDS (MUSC)	Xtra Detergent	03/13/2025	0	77.88 00030023
1000-40-1151-52400	MENARDS (MUSC)	ZEP Pine Cleaner	03/13/2025	0	6.89 00030023
1000-40-1151-52400	MENARDS (MUSC)	Santeen Drain Opener	03/13/2025	0	23.97 00030023
1000-40-1151-52400	MENARDS (MUSC)	Swiffer Duster Refill	03/13/2025	0	39.36 00030023
			Vendor Subtotal:		465.15
1000-40-1151-52740	ARNOLD MOTOR SUPPLY	Filter	03/17/2025	0	27.38
			Vendor Subtotal:		27.38
1000-40-1151-52740	MUSCATINE LAWN & POWER	Oil	03/17/2025	0	19.98
			Vendor Subtotal:		19.98
1000-40-1151-52830	MENARDS (MUSC)	Bits/Wire Brush	03/17/2025	0	12.84
			Vendor Subtotal:		12.84
1000-40-1151-52830	TCM BANK NA VISA	Harbor Freight - Texture Spray Gun	03/18/2025	0	53.97
			Vendor Subtotal:		53.97

1000-40-1151-52890	MENARDS (MUSC)	Adhesive/Caulk	03/17/2025	0	24.21
1000-40-1151-52890	MENARDS (MUSC)	Shim/Screws	03/17/2025	0	10.26
1000-40-1151-52890	MENARDS (MUSC)	Filters/Screws	03/17/2025	0	87.95
1000-40-1151-52890	MENARDS (MUSC)	Bracket	03/17/2025	0	8.58
1000-40-1151-52890	MENARDS (MUSC)	Drywall Mud	03/17/2025	0	19.99
1000-40-1151-52890	MENARDS (MUSC)	1x12-16' Standard Boards	03/13/2025	0	56.38 00030023
1000-40-1151-52890	MENARDS (MUSC)	11" Bracket Track Mounts	03/13/2025	0	38.28 00030023
1000-40-1151-52890	MENARDS (MUSC)	Mirror	03/18/2025	0	89.88
1000-40-1151-52890	MENARDS (MUSC)	Hex Nuts	03/18/2025	0	2.36 00030087
1000-40-1151-52890	MENARDS (MUSC)	1 5/8" x 10' Strut Channel	03/18/2025	0	102.90 00030087
1000-40-1151-52890	MENARDS (MUSC)	Flat Washers	03/18/2025	0	1.89 00030087
1000-40-1151-52890	MENARDS (MUSC)	10' Threaded Rod	03/18/2025	0	23.96 00030087
1000-40-1151-52890	MENARDS (MUSC)	Channel Spring Nut	03/18/2025	0	8.94 00030087
1000-40-1151-52890	MENARDS (MUSC)	Wood Panel	03/18/2025	0	23.96
1000-40-1151-52890	MENARDS (MUSC)	Washer/Nut	03/18/2025	0	6.28
1000-40-1151-52890	MENARDS (MUSC)	Hook/Eye	03/18/2025	0	7.98
Vendor Subtotal:					513.80
1000-40-1151-52890	MUSCATINE LAWN & POWER	Filter/Blade	03/17/2025	0	99.94
Vendor Subtotal:					99.94
1000-40-1151-53120	VAN METER INDUSTRIAL INC	Box Covers	03/17/2025	0	22.82
1000-40-1151-53120	VAN METER INDUSTRIAL INC	Light Panel	03/17/2025	0	51.96
Vendor Subtotal:					74.78
1000-40-1151-53130	MENARDS (MUSC)	Fittings	03/17/2025	0	15.67
1000-40-1151-53130	MENARDS (MUSC)	Wax Ring/Flange	03/17/2025	0	23.97
1000-40-1151-53130	MENARDS (MUSC)	Toilet	03/17/2025	0	99.00
Vendor Subtotal:					138.64
1000-40-1151-53140	MENARDS (MUSC)	Masking Tape/Foam Brush/Paint	03/17/2025	0	44.38
1000-40-1151-53140	MENARDS (MUSC)	Stain	03/17/2025	0	28.97
Vendor Subtotal:					73.35
1000-40-1151-65210	MUSCATINE POWER & WATER	February Phones	03/18/2025	0	22.39
1000-40-1151-65210	MUSCATINE POWER & WATER	February Phones	03/18/2025	0	22.39

1000-40-1151-65210	MUSCATINE POWER & WATER	February Phones	03/18/2025	0	61.77
1000-40-1151-65210	MUSCATINE POWER & WATER	February Base PRI	03/18/2025	0	183.41
Vendor Subtotal:					289.96
1000-40-1151-65220	MUSCATINE POWER & WATER	February LD	03/18/2025	0	15.68
Vendor Subtotal:					15.68
1000-40-1151-65310	ALLIANT ENERGY	February Gas - Library	03/17/2025	0	282.90
1000-40-1151-65310	ALLIANT ENERGY	February Gas - Library	03/17/2025	0	0.01
Vendor Subtotal:					282.91
1000-40-1151-67320	MUSCATINE LAWN & POWER	Filter/Blades	03/18/2025	0	94.94
1000-40-1151-67320	MUSCATINE LAWN & POWER	Blade	03/18/2025	0	32.94
1000-40-1151-67320	MUSCATINE LAWN & POWER	Blades	03/18/2025	0	113.01
Vendor Subtotal:					240.89
1000-40-1151-67330	RAYNOR DOOR CO INC OF THE QU	14' 2" x 24" Window Section Replacement	03/13/2025	0	1,936.00 00029608
1000-40-1151-67330	RAYNOR DOOR CO INC OF THE QU	Installation - Labor & Equipment	03/13/2025	0	340.00 00029608
1000-40-1151-67330	RAYNOR DOOR CO INC OF THE QU	Installation - Labor & Equipment	03/13/2025	0	23.00
1000-40-1151-67330	RAYNOR DOOR CO INC OF THE QU	Liftmaster Trolley Operator w/ Photo Eye	03/13/2025	0	1,250.00 00029609
1000-40-1151-67330	RAYNOR DOOR CO INC OF THE QU	Installation - Labor & Equipment	03/13/2025	0	605.00 00029609
Vendor Subtotal:					4,154.00
1000-40-1151-67330	TRANE US INC	Emergency Repair - Art Center	03/18/2025	0	1,380.00
Vendor Subtotal:					1,380.00
1000-40-1151-67330	STATE CHEMICAL	Q4160 Aluminum Boiler Treatment GL4	03/17/2025	0	987.90 00029671
Vendor Subtotal:					987.90
1000-40-1151-67330	SCHUMACHER ELEVATOR COMPA	Quarterly Maintenance	03/18/2025	0	2,797.02
Vendor Subtotal:					2,797.02

1000-40-1151-67330	TCM BANK NA VISA	Bell & Gossett Circulation Pump	03/18/2025	0	616.99 00029899
1000-40-1151-67330	TCM BANK NA VISA	Mr Heater/ Enerco - Heater parts	03/18/2025	0	29.91
Vendor Subtotal:					646.90
1000-40-1611-46200	RELIANCE STANDARD LIFE INS CC	Life Ins Mar	03/01/2025	0	35.35
Vendor Subtotal:					35.35
1000-40-1611-46600	RELIANCE STANDARD LIFE INS CCLTD	Mar 24	03/01/2025	0	49.78
Vendor Subtotal:					49.78
1000-40-1611-64120	TCM BANK NA VISA	Holiday Inn - Hotel Room for Conference	03/18/2025	0	537.60
1000-40-1611-64120	TCM BANK NA VISA	Holiday Inn - Hotel Room for Conference	03/18/2025	0	537.60
Vendor Subtotal:					1,075.20
1000-40-1611-64400	TCM BANK NA VISA	Pizza Ranch - Utility Lunch - Matt Whitl	03/18/2025	0	18.67
1000-40-1611-64400	TCM BANK NA VISA	Pizza Ranch - Utility Lunch - Kevin Co	03/18/2025	0	18.67
1000-40-1611-64400	TCM BANK NA VISA	Holiday Inn - Conference Meal	03/18/2025	0	7.49
1000-40-1611-64400	TCM BANK NA VISA	McDonalds - Conference Meal	03/18/2025	0	11.33
1000-40-1611-64400	TCM BANK NA VISA	McDonalds Conference Meal	03/18/2025	0	9.94
1000-40-1611-64400	TCM BANK NA VISA	Francies - Conference meal	03/18/2025	0	19.38
1000-40-1611-64400	TCM BANK NA VISA	Francies - Conference meal	03/18/2025	0	19.38
1000-40-1611-64400	TCM BANK NA VISA	Francies - Conference meal	03/18/2025	0	28.75
1000-40-1611-64400	TCM BANK NA VISA	Francies - Conference meal	03/18/2025	0	33.00
1000-40-1611-64400	TCM BANK NA VISA	HyVee Market Grill - Conference Meal	03/18/2025	0	10.70
1000-40-1611-64400	TCM BANK NA VISA	HyVee Market Grill - Conference Meal	03/18/2025	0	8.56
Vendor Subtotal:					185.87
1000-40-1611-65260	US CELLULAR	March Cell Phones	03/17/2025	0	166.76
Vendor Subtotal:					166.76
1000-40-1611-65275	VERIZON WIRELESS	February Cell Phones	03/17/2025	0	120.03
Vendor Subtotal:					120.03

1000-40-1621-46200	RELIANCE STANDARD LIFE INS CC	Life Ins Mar	03/01/2025	0	51.65	
		Vendor Subtotal:			51.65	
1000-40-1621-46600	RELIANCE STANDARD LIFE INS CCLTD	Mar 24	03/01/2025	0	20.64	
1000-40-1621-46600	RELIANCE STANDARD LIFE INS CCBW LTD	Mar	03/01/2025	0	167.06	
		Vendor Subtotal:			187.70	
1000-40-1621-52300	JASON HOPKINS	Reimb Shoes - J Hopkins	03/17/2025	0	52.00	
		Vendor Subtotal:			52.00	
1000-40-1621-52300	MITCH GRAHAM	Reimb Uniforms - M Graham	03/18/2025	0	125.00	
		Vendor Subtotal:			125.00	
1000-40-1621-52750	CARQUEST OF MUSCATINE	Racing Fuel	03/13/2025	0	80.08	
		Vendor Subtotal:			80.08	
1000-40-1621-52830	MICHAEL TODD INDUSTRIAL SUP	IPAR 248 Shovels	03/17/2025	0	49.65	00030046
1000-40-1621-52830	MICHAEL TODD INDUSTRIAL SUP	IPAS 248 Shovels	03/17/2025	0	165.50	00030046
		Vendor Subtotal:			215.15	
1000-40-1621-52830	SIGUORNEY TRACTOR & IMPLEME	Chainsaw Chains	03/13/2025	0	82.97	
		Vendor Subtotal:			82.97	
1000-40-1621-52890	MENARDS (MUSC)	Hex Bolt/Insert	03/18/2025	0	12.31	
		Vendor Subtotal:			12.31	
1000-40-1621-52890	TCM BANK NA VISA	Blains' Farm and Fleet - Paint	03/18/2025	0	54.99	
		Vendor Subtotal:			54.99	

1000-40-1621-53130	TCM BANK NA VISA	Fertilizer Solution Hoses	03/18/2025	0	112.25 00029832
1000-40-1621-53130	TCM BANK NA VISA	Hose clamps	03/18/2025	0	23.97 00029832
Vendor Subtotal:					136.22
1000-40-1621-64400	TCM BANK NA VISA	Pizza Ranch - Utility Lunch - Tyson Wee	03/18/2025	0	18.68
Vendor Subtotal:					18.68
1000-40-1621-64700	DAVID HARRIS	Kral	03/17/2025	0	500.00 00030101
1000-40-1621-64700	DAVID HARRIS	Hoon	03/17/2025	0	500.00 00030101
Vendor Subtotal:					1,000.00
1000-40-1621-65210	MUSCATINE POWER & WATER	February Base PRI	03/18/2025	0	71.33
Vendor Subtotal:					71.33
1000-40-1621-65260	US CELLULAR	March Cell Phones	03/17/2025	0	108.49
Vendor Subtotal:					108.49
1000-40-1621-65275	VERIZON WIRELESS	February Cell Phones	03/17/2025	0	120.03
Vendor Subtotal:					120.03
1000-40-1621-65275	VERIZON	February GPS	03/13/2025	0	184.54
1000-40-1621-65275	VERIZON	February GPS	03/13/2025	0	35.56
Vendor Subtotal:					220.10
1000-40-1621-65310	ALLIANT ENERGY	February Gas - PW	03/13/2025	0	870.86
1000-40-1621-65310	ALLIANT ENERGY	February Gas - PW	03/13/2025	0	373.38
1000-40-1621-65310	ALLIANT ENERGY	February Gas - PW	03/13/2025	0	1,221.06
1000-40-1621-65310	ALLIANT ENERGY	February Gas - Lower Lot	03/13/2025	0	302.95
1000-40-1621-65310	ALLIANT ENERGY	February Gas - Morgan Bldg	03/13/2025	0	677.97
Vendor Subtotal:					3,446.22

1000-40-1623-46200	RELIANCE STANDARD LIFE INS CC	Life Ins Mar	03/01/2025	0	5.95
	Vendor Subtotal:				5.95
1000-40-1623-46600	RELIANCE STANDARD LIFE INS CCBW LTD	Mar	03/01/2025	0	30.51
	Vendor Subtotal:				30.51
1000-40-1624-46200	RELIANCE STANDARD LIFE INS CC	Life Ins Mar	03/01/2025	0	3.13
	Vendor Subtotal:				3.13
1000-40-1624-46600	RELIANCE STANDARD LIFE INS CCBW LTD	Mar	03/01/2025	0	17.80
	Vendor Subtotal:				17.80
1000-40-1624-52890	MICHAEL TODD INDUSTRIAL SUP	White Post Deliniators	03/17/2025	0	193.80 00030046
1000-40-1624-52890	MICHAEL TODD INDUSTRIAL SUP	Shipping	03/17/2025	0	64.93
	Vendor Subtotal:				258.73
1000-40-1624-65320	EASTERN IOWA LIGHT & POWER C	February Power - Hwy 61 & University	03/17/2025	0	123.26
1000-40-1624-65320	EASTERN IOWA LIGHT & POWER C	February Power - Hwy 61 & Mulberry	03/17/2025	0	140.70
1000-40-1624-65320	EASTERN IOWA LIGHT & POWER C	February Power - 38 & Bidwell	03/17/2025	0	52.96
1000-40-1624-65320	EASTERN IOWA LIGHT & POWER C	February Power - Bypass Lights	03/17/2025	0	142.60
	Vendor Subtotal:				459.52
1000-40-1641-46200	RELIANCE STANDARD LIFE INS CC	Life Ins Mar	03/01/2025	0	28.41
	Vendor Subtotal:				28.41
1000-40-1641-46600	RELIANCE STANDARD LIFE INS CCLTD	Mar 24	03/01/2025	0	33.94
	Vendor Subtotal:				33.94
1000-40-1641-51100	AMAZON.COM	Rubber Bands/Sharpies	03/17/2025	0	21.37

			Vendor Subtotal:		21.37
1000-40-1641-62370	GORDON FLESCH COMPANY	Copier	03/13/2025	0	184.55
			Vendor Subtotal:		184.55
1000-40-1641-65210	MUSCATINE POWER & WATER	February Base PRI	03/18/2025	0	71.33
			Vendor Subtotal:		71.33
			Subtotal for FUND: 1000		177,215.95
3981-30-3981-74500	LIBRARY SYSTEMS & SERVICES	L Books/Materials	03/18/2025	0	16.25
			Vendor Subtotal:		16.25
3981-30-3983-61340	RELIABLE NETWORK SOLUTIONS	Sky Cam Streaming to Website	03/18/2025	0	286.00
3981-30-3983-61340	RELIABLE NETWORK SOLUTIONS	Monthly Fee	03/13/2025	0	49.00
			Vendor Subtotal:		335.00
3981-30-3983-61340	TCM BANK NA VISA	Boxcast - Computer Software Support/ M	03/18/2025	0	139.53
3981-30-3983-61340	TCM BANK NA VISA	Boxcast - Computer Software Support/ M	03/18/2025	0	219.00
			Vendor Subtotal:		358.53
3981-30-3983-65240	MUSCATINE POWER & WATER	February Channel 5 - Library	03/17/2025	0	330.83
			Vendor Subtotal:		330.83
			Subtotal for FUND: 3981		1,040.61
4159-40-4159-61420	HDR ENGINEERING, INC	Isett Ave/Cypress Street Corridor	03/18/2025	0	39,734.01
			Vendor Subtotal:		39,734.01

Subtotal for FUND: 4159					39,734.01
4180-40-4180-61420	BOLTON & MENK INC	Fulliam Ave Phase III	03/18/2025	0	8,175.00
Vendor Subtotal:					8,175.00
4180-40-4180-65100	QUAD CITY TIMES & MUSC JOURN	Public Notice Fulliam Ave #3	03/18/2025	0	13.68
Vendor Subtotal:					13.68
Subtotal for FUND: 4180					8,188.68
4187-40-4187-65100	QUAD CITY TIMES & MUSC JOURN	Hearing Lake Park Overlay	03/18/2025	0	15.05
Vendor Subtotal:					15.05
Subtotal for FUND: 4187					15.05
4195-40-4199-61420	BOLTON & MENK INC	Carver Corner Roundabout	03/18/2025	0	15,311.00
Vendor Subtotal:					15,311.00
Subtotal for FUND: 4195					15,311.00
4206-50-4206-61660	HTH COMPANIES INC	Scaffold Services for Abatement.	03/18/2025	0	4,798.50 00029916
Vendor Subtotal:					4,798.50
Subtotal for FUND: 4206					4,798.50
4276-40-4276-61660	MARTIN & WHITACRE SURVEYOR	Additional Land Surveying Services for T	03/18/2025	0	5,900.00 00029994
Vendor Subtotal:					5,900.00
4276-40-4276-64400	TCM BANK NA VISA	Pizza Ranch - Utility Lunch - Jeremy Ho	03/18/2025	0	18.67

			Vendor Subtotal:		18.67
4276-40-4276-65100	QUAD CITY TIMES & MUSC JOURN	Public Notice WHSSP 6D	03/18/2025	0	13.68
			Vendor Subtotal:		13.68
4276-40-4276-73100	KE FLATWORK INC	West Hill Phase 6A/B Pay App #38	03/18/2025	0	118,925.82
			Vendor Subtotal:		118,925.82
			Subtotal for FUND: 4276		124,858.17
4498-25-4498-73900	MERIT CONSTRUCTION	Dome Project Pay App #6	03/18/2025	0	271,615.49
			Vendor Subtotal:		271,615.49
			Subtotal for FUND: 4498		271,615.49
4638-15-4638-61420	BOLTON & MENK INC	Law Enforcement Training	03/18/2025	0	2,307.50
			Vendor Subtotal:		2,307.50
			Subtotal for FUND: 4638		2,307.50
4639-40-4639-61420	LEGAT ARCHITECTS INC	Wash Bay	03/18/2025	0	238.50
			Vendor Subtotal:		238.50
			Subtotal for FUND: 4639		238.50
4864-10-4864-61420	BOLTON & MENK INC	Snow Removal Equipment	03/18/2025	0	4,900.00
			Vendor Subtotal:		4,900.00
4864-10-4864-65100	QUAD CITY TIMES & MUSC JOURN	Public Notice - Airport SRE	03/18/2025	0	13.68

			Vendor Subtotal:	13.68
			Subtotal for FUND: 4864	4,913.68
5211-00-0000-23630	RELIANCE STANDARD LIFE INS CCPR Batch 00002.02.2025 Optional Life	02/28/2025	0	3.30
5211-00-0000-23630	RELIANCE STANDARD LIFE INS CCPR Batch 00001.02.2025 Optional Life	02/14/2025	0	3.31
			Vendor Subtotal:	6.61
5211-40-5211-46200	RELIANCE STANDARD LIFE INS CCLife Ins Mar	03/01/2025	0	21.76
			Vendor Subtotal:	21.76
5211-40-5211-46600	RELIANCE STANDARD LIFE INS CCLTD Mar 24	03/01/2025	0	28.57
			Vendor Subtotal:	28.57
5211-40-5211-64120	AMY FORTENBACHER Reimb Meal 3/5/25	03/17/2025	0	21.54
			Vendor Subtotal:	21.54
5211-40-5211-65210	MUSCATINE POWER & WATER February Base PRI	03/18/2025	0	40.74
			Vendor Subtotal:	40.74
5211-40-5211-65310	ALLIANT ENERGY February Gas - Transit	03/13/2025	0	160.02
5211-40-5211-65310	ALLIANT ENERGY February Gas - Transit	03/13/2025	0	373.23
5211-40-5211-65310	ALLIANT ENERGY February Gas - Transit	03/13/2025	0	523.31
			Vendor Subtotal:	1,056.56
5211-40-5212-46200	RELIANCE STANDARD LIFE INS CCLife Ins Mar	03/01/2025	0	0.63
			Vendor Subtotal:	0.63
5211-40-5212-46600	RELIANCE STANDARD LIFE INS CCBW LTD Mar	03/01/2025	0	3.35

				Vendor Subtotal:	3.35
				Subtotal for FUND: 5211	1,179.76
5311-05-5311-46200	RELIANCE STANDARD LIFE INS CC	Life Ins Mar	03/01/2025	0	6.48
				Vendor Subtotal:	6.48
5311-05-5311-46600	RELIANCE STANDARD LIFE INS CCBW LTD	Mar	03/01/2025	0	5.79
5311-05-5311-46600	RELIANCE STANDARD LIFE INS CCLTD	Mar 24	03/01/2025	0	8.46
				Vendor Subtotal:	14.25
5311-05-5311-52300	AMAZON.COM	Coat - L Brower	03/17/2025	0	55.98
				Vendor Subtotal:	55.98
5311-05-5311-52890	TCM BANK NA VISA	#17863 - Polyvinyl Thermal Paper 3.125'	03/18/2025	0	424.46 00029798
5311-05-5311-52890	TCM BANK NA VISA	Freight - Two Technologies	03/18/2025	0	22.92
				Vendor Subtotal:	447.38
5311-05-5311-62310	XEROX CORPORATION	Copies	03/18/2025	0	1.15
				Vendor Subtotal:	1.15
				Subtotal for FUND: 5311	525.24
5451-25-5451-46200	RELIANCE STANDARD LIFE INS CC	Life Ins Mar	03/01/2025	0	18.76
				Vendor Subtotal:	18.76
5451-25-5451-46600	RELIANCE STANDARD LIFE INS CCLTD	Mar 24	03/01/2025	0	17.99
5451-25-5451-46600	RELIANCE STANDARD LIFE INS CCBW LTD	Mar	03/01/2025	0	16.83
				Vendor Subtotal:	34.82

5451-25-5451-52720	SPRATT OIL SALES	UNLEADED GAS	03/13/2025	0	1,234.10 00030059
		Vendor Subtotal:			1,234.10
5451-25-5451-52730	SPRATT OIL SALES	DIESEL FUEL	03/13/2025	0	917.40 00030059
		Vendor Subtotal:			917.40
5451-25-5451-52890	SIGN PRO	Signs	03/13/2025	0	45.00
		Vendor Subtotal:			45.00
5451-25-5451-52890	VAN WALL EQUIPMENT INC.	Set Screw	03/17/2025	0	7.50 00029919
5451-25-5451-52890	VAN WALL EQUIPMENT INC.	Cup Cutter Shell	03/17/2025	0	150.00 00029919
5451-25-5451-52890	VAN WALL EQUIPMENT INC.	Plug Gasket	03/17/2025	0	15.00 00029919
5451-25-5451-52890	VAN WALL EQUIPMENT INC.	Bunker Rake Head	03/17/2025	0	204.00 00029919
5451-25-5451-52890	VAN WALL EQUIPMENT INC.	Flagsticks	03/17/2025	0	144.00 00029919
5451-25-5451-52890	VAN WALL EQUIPMENT INC.	Yellow Flag Set	03/17/2025	0	126.00 00029919
5451-25-5451-52890	VAN WALL EQUIPMENT INC.	Tee Towels	03/17/2025	0	210.00 00029919
5451-25-5451-52890	VAN WALL EQUIPMENT INC.	Riji Cup	03/17/2025	0	162.00 00029919
5451-25-5451-52890	VAN WALL EQUIPMENT INC.	Bunker Rake Handle	03/17/2025	0	155.88 00029919
5451-25-5451-52890	VAN WALL EQUIPMENT INC.	Tee Marker	03/17/2025	0	72.00 00029919
5451-25-5451-52890	VAN WALL EQUIPMENT INC.	Lid Gasket	03/17/2025	0	108.00 00029919
5451-25-5451-52890	VAN WALL EQUIPMENT INC.	Lid Screw	03/17/2025	0	15.00 00029919
5451-25-5451-52890	VAN WALL EQUIPMENT INC.	Blue Flag Set	03/17/2025	0	126.00 00029919
5451-25-5451-52890	VAN WALL EQUIPMENT INC.	Practice Cup	03/17/2025	0	19.50 00029919
5451-25-5451-52890	VAN WALL EQUIPMENT INC.	Red Flag Set	03/17/2025	0	126.00 00029919
5451-25-5451-52890	VAN WALL EQUIPMENT INC.	Plug Gasket	03/17/2025	0	15.00
5451-25-5451-52890	VAN WALL EQUIPMENT INC.	Discount	03/17/2025	0	-413.00
		Vendor Subtotal:			1,242.88
5451-25-5451-53220	MENARDS (MUSC)	Trash Can/Disinfectant	03/18/2025	0	92.20
		Vendor Subtotal:			92.20
5451-25-5451-62210	PHELPS THE UNIFORM SPECIALIST	Laundry - Golf	03/18/2025	0	32.08
		Vendor Subtotal:			32.08

5451-25-5451-64120	TCM BANK NA VISA	Holiday Inn - Lodging - C Hull	03/18/2025	0	133.28
		Vendor Subtotal:			133.28
5451-25-5451-65210	MUSCATINE POWER & WATER	February Phones - Golf	03/13/2025	0	27.99
		Vendor Subtotal:			27.99
5451-25-5451-65240	MUSCATINE POWER & WATER	Jan/Feb Machlink	03/18/2025	0	61.99
		Vendor Subtotal:			61.99
5451-25-5451-65310	ALLIANT ENERGY	February Gas - Golf	03/13/2025	0	361.17
5451-25-5451-65310	ALLIANT ENERGY	February Gas - Golf	03/13/2025	0	396.15
		Vendor Subtotal:			757.32
5451-25-5451-67130	ACUREN	EQUIPMENT LIFT INSPECTION	03/13/2025	0	142.50 00029681
		Vendor Subtotal:			142.50
5451-25-5451-67330	TCM BANK NA VISA	Webstraunt Store - Scale Carriage	03/18/2025	0	90.14
		Vendor Subtotal:			90.14
5451-25-5452-46200	RELIANCE STANDARD LIFE INS CCLife Ins Mar		03/01/2025	0	17.25
		Vendor Subtotal:			17.25
5451-25-5452-46600	RELIANCE STANDARD LIFE INS CCLTD Mar 24		03/01/2025	0	19.91
		Vendor Subtotal:			19.91
5451-25-5452-52852	COCA-COLA BOTTLING COMPANY	Soda for Resale	03/13/2025	0	447.70
		Vendor Subtotal:			447.70
5451-25-5452-52852	PERFORMANCE FOOD SERVICE	Food for Resale	03/13/2025	0	589.80

5451-25-5452-52852	PERFORMANCE FOOD SERVICE	Food for Resale	03/13/2025	0	45.95
Vendor Subtotal:					635.75
5451-25-5452-52853	CALLAWAY GOLF COMPANY	SHIPPING	03/13/2025	0	28.91 00030008
5451-25-5452-52853	CALLAWAY GOLF COMPANY	CALLAWAY ELYTE MAX FAST IRO	03/13/2025	0	739.90 00030008
5451-25-5452-52853	CALLAWAY GOLF COMPANY	ERC SOFT DOZEN	03/18/2025	0	7.50
5451-25-5452-52853	CALLAWAY GOLF COMPANY	CHROME SOFT DOZEN	03/18/2025	0	990.72 00029431
5451-25-5452-52853	CALLAWAY GOLF COMPANY	SUPERSOFT DOZEN	03/18/2025	0	673.56 00029431
5451-25-5452-52853	CALLAWAY GOLF COMPANY	Shipping	03/18/2025	0	75.00
5451-25-5452-52853	CALLAWAY GOLF COMPANY	CALLAWAY ELYTE FAIRWAY WOC	03/18/2025	0	498.80 00029429
5451-25-5452-52853	CALLAWAY GOLF COMPANY	CALLAWAY ELYTE DRIVER	03/18/2025	0	1,709.68 00029429
5451-25-5452-52853	CALLAWAY GOLF COMPANY	ERC SOFT DOZEN	03/18/2025	0	179.34 00029431
5451-25-5452-52853	CALLAWAY GOLF COMPANY	CALLAWAY TRIPLE DIAMOND DRI	03/18/2025	0	463.54 00029429
5451-25-5452-52853	CALLAWAY GOLF COMPANY	Shipping	03/18/2025	0	30.04
5451-25-5452-52853	CALLAWAY GOLF COMPANY	SHIPPING	03/17/2025	0	23.15 00029969
5451-25-5452-52853	CALLAWAY GOLF COMPANY	CALLAWAY ELYTE DRIVER	03/17/2025	0	463.54 00029969
Vendor Subtotal:					5,883.68
5451-25-5452-52853	TAYLOR MADE GOLF COMPANY	TAYLOR MADE SPEED SOFT DOZEN	03/17/2025	0	173.36 00029309
5451-25-5452-52853	TAYLOR MADE GOLF COMPANY	TAYLOR MADE SPIDER PUTTERS	03/17/2025	0	807.48 00029309
5451-25-5452-52853	TAYLOR MADE GOLF COMPANY	TAYLOR MADE SPIDER PUTTERS	03/17/2025	0	3.39
5451-25-5452-52853	TAYLOR MADE GOLF COMPANY	TP5 DOZEN BALLS	03/17/2025	0	1,065.84 00029309
5451-25-5452-52853	TAYLOR MADE GOLF COMPANY	TAYLOR MADE TOUR RESPONSE D	03/17/2025	0	778.05 00029309
Vendor Subtotal:					2,828.12
5451-25-5452-52853	TITLEIST	TITLEIST HEADWEAR	03/13/2025	0	549.12 00029432
5451-25-5452-52853	TITLEIST	FJ RIVAL TOURS	03/13/2025	0	396.00 00029664
5451-25-5452-52853	TITLEIST	WEATHEROF GLOVES	03/13/2025	0	675.00 00029664
5451-25-5452-52853	TITLEIST	FJ FLEX	03/13/2025	0	360.00 00029664
5451-25-5452-52853	TITLEIST	FOOTJOY FUEL/FUEL SPORT	03/13/2025	0	312.00 00029664
5451-25-5452-52853	TITLEIST	FJ TRADITIONS	03/13/2025	0	360.00 00029664
5451-25-5452-52853	TITLEIST	FJ ROLL TAB SOCKS	03/13/2025	0	108.00 00029664
5451-25-5452-52853	TITLEIST	Shipping	03/13/2025	0	0.37
Vendor Subtotal:					2,760.49
5451-25-5452-52853	TCM BANK NA VISA	EVNROLL Putters - Merch for Resale	03/18/2025	0	315.98
5451-25-5452-52853	TCM BANK NA VISA	J&M Golf - Merch for Resale	03/18/2025	0	120.67

		Vendor Subtotal:			436.65
5451-25-5452-62370	TCM BANK NA VISA	Sycamore Printing - Misc	03/18/2025	0	39.00
		Vendor Subtotal:			39.00
5451-25-5452-65240	MUSCATINE POWER & WATER	Jan/Feb Machlink	03/18/2025	0	61.99
		Vendor Subtotal:			61.99
5451-25-5452-65510	MUSCATINE POWER & WATER	February Cable - Golf	03/13/2025	0	208.10
		Vendor Subtotal:			208.10
5451-25-5452-69850	DEPT OF INSPECTIONS & APPEALS	Food Service License	03/18/2025	0	300.00
		Vendor Subtotal:			300.00
		Subtotal for FUND: 5451			18,469.10
5642-00-0000-23550	RELIANCE STANDARD LIFE INS CCPR Batch 00002.02.2025	Life Insurance	02/28/2025	0	0.40
		Vendor Subtotal:			0.40
5642-00-0000-23630	RELIANCE STANDARD LIFE INS CCPR Batch 00002.02.2025	Optional Life	02/28/2025	0	207.64
5642-00-0000-23630	RELIANCE STANDARD LIFE INS CCPR Batch 00001.02.2025	Optional Life	02/14/2025	0	207.62
		Vendor Subtotal:			415.26
5642-45-5642-35210	MUNICIPAL COLLECTIONS OF AMI	Collection Agent Fee - Feb	03/18/2025	0	589.57
		Vendor Subtotal:			589.57
5642-45-5642-46200	RELIANCE STANDARD LIFE INS CC	Life Ins Mar	03/01/2025	0	47.21
		Vendor Subtotal:			47.21

5642-45-5642-46600	RELIANCE STANDARD LIFE INS CCLTD Mar 24		03/01/2025	0	36.42
5642-45-5642-46600	RELIANCE STANDARD LIFE INS CCBW LTD Mar		03/01/2025	0	108.79
		Vendor Subtotal:			145.21
5642-45-5642-52890	ARNOLD MOTOR SUPPLY	Fittings	03/17/2025	0	94.33
		Vendor Subtotal:			94.33
5642-45-5642-62245	REPUBLIC SERVICES OF IOWA LLC Recycling February		03/17/2025	0	34,882.82
		Vendor Subtotal:			34,882.82
5642-45-5642-62285	MICHAEL WEIKERT JR	Scrap Appliances	03/13/2025	0	96.00
		Vendor Subtotal:			96.00
5642-45-5642-65240	MUSCATINE POWER & WATER	Jan/Feb Machlink	03/18/2025	0	61.99
		Vendor Subtotal:			61.99
5642-45-5642-65260	US CELLULAR	February Cell Phones	03/17/2025	0	67.80
		Vendor Subtotal:			67.80
5642-45-5642-65275	VERIZON	February GPS	03/13/2025	0	124.46
		Vendor Subtotal:			124.46
5642-45-5642-65310	ALLIANT ENERGY	February Gas - Transfer	03/17/2025	0	1,614.78
		Vendor Subtotal:			1,614.78
5642-45-5642-65410	MUSCATINE POWER & WATER	February Water - Recycle	03/17/2025	0	38.89
		Vendor Subtotal:			38.89
5642-45-5642-65420	MUSCATINE POWER & WATER	February Sewer - Recycle	03/17/2025	0	14.77

5642-45-5642-65420	MUSCATINE POWER & WATER	February Sewer - Recycle	03/17/2025	0	23.13
		Vendor Subtotal:			37.90
		Subtotal for FUND: 5642			38,216.62
5652-00-0000-23630	RELIANCE STANDARD LIFE INS CCPR Batch 00002.02.2025	Optional Life	02/28/2025	0	41.12
5652-00-0000-23630	RELIANCE STANDARD LIFE INS CCPR Batch 00001.02.2025	Optional Life	02/14/2025	0	41.14
		Vendor Subtotal:			82.26
5652-45-5652-46200	RELIANCE STANDARD LIFE INS CC	Life Ins Mar	03/01/2025	0	10.37
		Vendor Subtotal:			10.37
5652-45-5652-46600	RELIANCE STANDARD LIFE INS CCLTD	Mar 24	03/01/2025	0	11.95
		Vendor Subtotal:			11.95
5652-45-5652-52890	MENARDS (MUSC)	Parking Paint	03/17/2025	0	15.98
5652-45-5652-52890	MENARDS (MUSC)	Safety Hasp/Screwdriver Set	03/18/2025	0	16.46
		Vendor Subtotal:			32.44
5652-45-5652-65320	EASTERN IOWA LIGHT & POWER C	February Power - Ward	03/17/2025	0	175.98
5652-45-5652-65320	EASTERN IOWA LIGHT & POWER C	February Power - Landfill	03/17/2025	0	114.27
		Vendor Subtotal:			290.25
5652-45-5652-69900	IA DEPT OF NATURAL RESOURCES	State Surcharge October - December 202	03/18/2025	0	21,631.91
		Vendor Subtotal:			21,631.91
		Subtotal for FUND: 5652			22,059.18
5658-45-5658-46200	RELIANCE STANDARD LIFE INS CC	Life Ins Mar	03/01/2025	0	19.69
		Vendor Subtotal:			19.69

5658-45-5658-46600	RELIANCE STANDARD LIFE INS CCBW LTD Mar		03/01/2025	0	41.44
5658-45-5658-46600	RELIANCE STANDARD LIFE INS CCLTD Mar 24		03/01/2025	0	17.33
	Vendor Subtotal:				58.77
5658-45-5658-51300	AMAZON.COM	Toner	03/17/2025	0	90.89
5658-45-5658-51300	AMAZON.COM	W1380X HP #138X Black Toner Cartrid	03/17/2025	0	129.89 00030069
	Vendor Subtotal:				220.78
5658-45-5658-52750	S.J. SMITH CO.	Propane	03/17/2025	0	95.20
	Vendor Subtotal:				95.20
5658-45-5658-52890	ARNOLD MOTOR SUPPLY	Hub Cap	03/17/2025	0	42.66
5658-45-5658-52890	ARNOLD MOTOR SUPPLY	Hub Cap/Gasket	03/13/2025	0	46.53
	Vendor Subtotal:				89.19
5658-45-5658-52890	ELLIOTT EQUIPMENT COMPANY	Latch Kit	03/13/2025	0	84.72
	Vendor Subtotal:				84.72
5658-45-5658-52890	FASTENAL COMPANY	Hardware	03/17/2025	0	62.11
	Vendor Subtotal:				62.11
5658-45-5658-52890	HOTSY EQUIPMENT CO	Aluminum Brightener	03/17/2025	0	141.90 00030031
	Vendor Subtotal:				141.90
5658-45-5658-52890	AMAZON.COM	Polish/Polishing Tool	03/17/2025	0	46.61
5658-45-5658-52890	AMAZON.COM	Tire Valve Cores	03/17/2025	0	17.67
	Vendor Subtotal:				64.28
5658-45-5658-53140	MENARDS (MUSC)	Paint	03/17/2025	0	50.47

Vendor Subtotal:					50.47
5658-45-5658-53150	ARNOLD MOTOR SUPPLY	Hoses for Crane	03/17/2025	0	103.68 00029943
5658-45-5658-53150	ARNOLD MOTOR SUPPLY	Wiper Blades	03/17/2025	0	27.57
Vendor Subtotal:					131.25
5658-45-5658-62210	PHELPS THE UNIFORM SPECIALIST	Laundry - Transfer	03/17/2025	0	12.19
5658-45-5658-62210	PHELPS THE UNIFORM SPECIALIST	Laundry - Transfer	03/17/2025	0	12.19
5658-45-5658-62210	PHELPS THE UNIFORM SPECIALIST	Laundry - Transfer	03/17/2025	0	12.19
Vendor Subtotal:					36.57
5658-45-5658-62250	LAJEK PEST CONTROL SOLUTIONS	Pest Control	03/17/2025	0	45.00
Vendor Subtotal:					45.00
5658-45-5658-62285	MICHAEL WEIKERT JR	Scrap Appliances	03/13/2025	0	366.00
Vendor Subtotal:					366.00
5658-45-5658-62410	TEAM STAFFING SOLUTIONS INC	Temp Employee Week Ending 2/23/25	03/17/2025	0	186.90
5658-45-5658-62410	TEAM STAFFING SOLUTIONS INC	Temp Employee Week Ending 3/2/25	03/17/2025	0	186.90
5658-45-5658-62410	TEAM STAFFING SOLUTIONS INC	Temp Employee Week Ending 3/9/25	03/17/2025	0	186.90
Vendor Subtotal:					560.70
5658-45-5658-62520	JON BRAUNS	February 2025 Fuel Surcharge	03/17/2025	0	1,238.45
Vendor Subtotal:					1,238.45
5658-45-5658-64200	TCM BANK NA VISA	Metro Waste Authority - Class	03/18/2025	0	154.43
5658-45-5658-64200	TCM BANK NA VISA	Metro Waste Authority - Class	03/18/2025	0	154.43
Vendor Subtotal:					308.86
5658-45-5658-65210	MUSCATINE POWER & WATER	February Phone - Transfer	03/17/2025	0	125.74

			Vendor Subtotal:		125.74
5658-45-5658-65220	MUSCATINE POWER & WATER	February LD - Transfer	03/17/2025	0	0.93
			Vendor Subtotal:		0.93
5658-45-5658-65275	VERIZON	February GPS	03/13/2025	0	35.56
			Vendor Subtotal:		35.56
5658-45-5658-65310	ALLIANT ENERGY	February Gas - Transfer	03/17/2025	0	5,833.05
			Vendor Subtotal:		5,833.05
5658-45-5658-65320	MUSCATINE POWER & WATER	February Electric - Transfer	03/17/2025	0	2,581.81
			Vendor Subtotal:		2,581.81
5658-45-5658-65410	MUSCATINE POWER & WATER	February Water - Transfer	03/17/2025	0	183.48
			Vendor Subtotal:		183.48
5658-45-5658-65420	MUSCATINE POWER & WATER	February Sewer - Transfer	03/17/2025	0	14.77
5658-45-5658-65420	MUSCATINE POWER & WATER	February Sewer - Transfer	03/17/2025	0	540.83
			Vendor Subtotal:		555.60
5658-45-5658-67320	WALZ SCALE	Scale Repair	03/17/2025	0	2,383.68 00029845
			Vendor Subtotal:		2,383.68
5658-45-5658-69850	STATE OF IOWA - ELEVATOR SAFE	Permit Fee	03/17/2025	0	175.00
			Vendor Subtotal:		175.00
			Subtotal for FUND: 5658		15,448.79

5660-00-0000-23630	RELIANCE STANDARD LIFE INS CCPR Batch 00001.02.2025 Optional Life	02/14/2025	0	201.00
5660-00-0000-23630	RELIANCE STANDARD LIFE INS CCPR Batch 00002.02.2025 Optional Life	02/28/2025	0	201.00
	Vendor Subtotal:			402.00
5660-50-5661-46200	RELIANCE STANDARD LIFE INS CC Life Ins Mar	03/01/2025	0	31.75
	Vendor Subtotal:			31.75
5660-50-5661-46600	RELIANCE STANDARD LIFE INS CC LTD Mar 24	03/01/2025	0	40.76
	Vendor Subtotal:			40.76
5660-50-5661-51100	AMAZON.COM Postcards	03/13/2025	0	20.63
5660-50-5661-51100	AMAZON.COM Office Supplies	03/13/2025	0	59.41 00030026
5660-50-5661-51100	AMAZON.COM Sticky Notes Dispenser	03/17/2025	0	8.90
	Vendor Subtotal:			88.94
5660-50-5661-51300	AMAZON.COM Toner	03/13/2025	0	209.78 00030026
	Vendor Subtotal:			209.78
5660-50-5661-51400	AMAZON.COM Cabinet/Stand	03/13/2025	0	125.98 00030043
	Vendor Subtotal:			125.98
5660-50-5661-62370	GORDON FLESCH COMPANY Copier	03/13/2025	0	18.11
	Vendor Subtotal:			18.11
5660-50-5661-65240	MUSCATINE POWER & WATER Jan/Feb Machlink	03/18/2025	0	61.99
	Vendor Subtotal:			61.99
5660-50-5662-35230	MUNICIPAL COLLECTIONS OF AMI Collection Agent Fee - Feb	03/18/2025	0	1,043.59
	Vendor Subtotal:			1,043.59

5660-50-5662-46200	RELIANCE STANDARD LIFE INS CC	Life Ins Mar	03/01/2025	0	60.37
		Vendor Subtotal:			60.37
5660-50-5662-46600	RELIANCE STANDARD LIFE INS CCLTD	Mar 24	03/01/2025	0	51.55
5660-50-5662-46600	RELIANCE STANDARD LIFE INS CCBW LTD	Mar	03/01/2025	0	81.98
		Vendor Subtotal:			133.53
5660-50-5662-52400	MENARDS (MUSC)	Supplies	03/13/2025	0	24.74
		Vendor Subtotal:			24.74
5660-50-5662-52750	TCM BANK NA VISA	Parts Washer	03/18/2025	0	139.99 00029954
5660-50-5662-52750	TCM BANK NA VISA	Parts Cleaning Fluid	03/18/2025	0	109.99 00029996
		Vendor Subtotal:			249.98
5660-50-5662-52830	MENARDS (MUSC)	Pliers	03/13/2025	0	9.99
		Vendor Subtotal:			9.99
5660-50-5662-52830	TCM BANK NA VISA	Fluke 707 Loop Calibrator	03/18/2025	0	475.00 00029863
		Vendor Subtotal:			475.00
5660-50-5662-52840	MENARDS (MUSC)	Supplies	03/13/2025	0	14.98
		Vendor Subtotal:			14.98
5660-50-5662-52890	MENARDS (MUSC)	Supplies	03/13/2025	0	14.33
		Vendor Subtotal:			14.33
5660-50-5662-52890	SIGN PRO	Decal	03/13/2025	0	76.00
		Vendor Subtotal:			76.00

5660-50-5662-53120	MENARDS (MUSC)	Weld Rod/Butt Splice	03/13/2025	0	31.86
		Vendor Subtotal:			31.86
5660-50-5662-53120	VAN METER INDUSTRIAL INC	Tape	03/17/2025	0	61.88
		Vendor Subtotal:			61.88
5660-50-5662-53120	AMAZON.COM	Wall Mount TV Bracket	03/17/2025	0	14.21 00030042
5660-50-5662-53120	AMAZON.COM	Amico 2x2 Flat Panel LED lights	03/17/2025	0	157.99 00030042
		Vendor Subtotal:			172.20
5660-50-5662-53130	MUNICIPAL SUPPLY INC	Hydrant Tool	03/13/2025	0	753.38 00029951
5660-50-5662-53130	MUNICIPAL SUPPLY INC	Hydrant Tool	03/13/2025	0	88.27
		Vendor Subtotal:			841.65
5660-50-5662-53130	MENARDS (MUSC)	Pipe Coupling	03/13/2025	0	13.58
		Vendor Subtotal:			13.58
5660-50-5662-53130	TCM BANK NA VISA	Stewart Backflow Preventer Check Repai	03/18/2025	0	276.30 00029831
		Vendor Subtotal:			276.30
5660-50-5662-53140	SHERWIN WILLIAMS	Paint	03/13/2025	0	394.40 00030054
		Vendor Subtotal:			394.40
5660-50-5662-53210	MOTION INDUSTRIES INC	View Gauge for Blower Building	03/17/2025	0	114.69 00030057
		Vendor Subtotal:			114.69
5660-50-5662-53210	AMAZON.COM	Part Cleaner	03/13/2025	0	72.99
5660-50-5662-53210	AMAZON.COM	Adapter	03/13/2025	0	24.85
5660-50-5662-53210	AMAZON.COM	Bracket	03/13/2025	0	77.78

		Vendor Subtotal:			175.62
5660-50-5662-53210	DRACO MECHANICAL SUPPLY INC	Gaskets	03/13/2025	0	85.50
5660-50-5662-53210	DRACO MECHANICAL SUPPLY INC	Penn Valley Pump Gaskets	03/13/2025	0	405.00 00030017
5660-50-5662-53210	DRACO MECHANICAL SUPPLY INC	Shipping	03/13/2025	0	40.10
		Vendor Subtotal:			530.60
5660-50-5662-53210	TCM BANK NA VISA	Ebay - Bearings	03/18/2025	0	77.40
		Vendor Subtotal:			77.40
5660-50-5662-53210	CONTEGRA INC	Float Switches for Wet Wells	03/13/2025	0	494.00 00030001
5660-50-5662-53210	CONTEGRA INC	Shipping	03/13/2025	0	28.33
		Vendor Subtotal:			522.33
5660-50-5662-53220	MENARDS (MUSC)	Wipers/Gloves	03/13/2025	0	76.94
5660-50-5662-53220	MENARDS (MUSC)	Salt Water	03/13/2025	0	62.04
		Vendor Subtotal:			138.98
5660-50-5662-53220	REEVES BATTERY SALES	Battery	03/13/2025	0	74.00
		Vendor Subtotal:			74.00
5660-50-5662-53220	ZIMMER & FRANCESCON INC	Rebuild Kit for Septage Wet Well Pump	03/13/2025	0	964.00 00029866
5660-50-5662-53220	ZIMMER & FRANCESCON INC	Freight	03/13/2025	0	21.14
		Vendor Subtotal:			985.14
5660-50-5662-53220	AMAZON.COM	Center Finder	03/13/2025	0	17.98
		Vendor Subtotal:			17.98
5660-50-5662-53220	TCM BANK NA VISA	6" Running Boards for 2024 F350	03/18/2025	0	230.00 00029817

			Vendor Subtotal:		230.00
5660-50-5662-62210	PHELPS THE UNIFORM SPECIALIST	Laundry - WRRF	03/13/2025	0	272.67
			Vendor Subtotal:		272.67
5660-50-5662-62250	LAJEK PEST CONTROL SOLUTIONS	Pest Control	03/13/2025	0	45.00
			Vendor Subtotal:		45.00
5660-50-5662-65210	MUSCATINE POWER & WATER	February Phones - WRRF Plant	03/17/2025	0	20.99
			Vendor Subtotal:		20.99
5660-50-5662-65210	CLEARFLY	February Phones - WRRF	03/13/2025	0	193.54
			Vendor Subtotal:		193.54
5660-50-5662-65260	VERIZON WIRELESS	February Cell Phones	03/17/2025	0	169.89
			Vendor Subtotal:		169.89
5660-50-5662-65310	ALLIANT ENERGY	February Gas - Grit Bldg	03/13/2025	0	6,241.02
5660-50-5662-65310	ALLIANT ENERGY	February Gas - WRRF Plant	03/13/2025	0	3,150.95
			Vendor Subtotal:		9,391.97
5660-50-5662-65320	MUSCATINE POWER & WATER	February Electric - W Bank	03/17/2025	0	24,326.80
5660-50-5662-65320	MUSCATINE POWER & WATER	February Electric - E Bank	03/17/2025	0	7,863.92
			Vendor Subtotal:		32,190.72
5660-50-5662-65410	MUSCATINE POWER & WATER	February Water - WRRF Plant	03/17/2025	0	186.98
			Vendor Subtotal:		186.98
5660-50-5662-65510	MUSCATINE POWER & WATER	February Internet - WRRF Plant	03/17/2025	0	62.97

			Vendor Subtotal:		62.97
5660-50-5662-73700	HOMETOWN PLUMBING & HEATING	Grit Building Ionizer Odor Control	03/13/2025	0	4,080.00 00029620
			Vendor Subtotal:		4,080.00
5660-50-5663-46200	RELIANCE STANDARD LIFE INS CO	Life Ins Mar	03/01/2025	0	18.13
			Vendor Subtotal:		18.13
5660-50-5663-46600	RELIANCE STANDARD LIFE INS CO	LTD Mar 24	03/01/2025	0	17.22
5660-50-5663-46600	RELIANCE STANDARD LIFE INS CO	BW LTD Mar	03/01/2025	0	17.20
			Vendor Subtotal:		34.42
5660-50-5663-52830	AMAZON.COM	Screw Pitch Gauge Measuring Tool	03/13/2025	0	29.99
5660-50-5663-52830	AMAZON.COM	Caliper	03/17/2025	0	66.29
			Vendor Subtotal:		96.28
5660-50-5663-52840	MENARDS (MUSC)	Gloves	03/13/2025	0	35.94
			Vendor Subtotal:		35.94
5660-50-5663-53120	TCM BANK NA VISA	Ebay - Supplies	03/18/2025	0	37.10
5660-50-5663-53120	TCM BANK NA VISA	Ebay - Fuse	03/18/2025	0	33.05
5660-50-5663-53120	TCM BANK NA VISA	Ebay - International Fee	03/18/2025	0	0.93
5660-50-5663-53120	TCM BANK NA VISA	Ebay - Fan Cover	03/18/2025	0	34.00
			Vendor Subtotal:		105.08
5660-50-5663-53130	TCM BANK NA VISA	Backflow Preventer Rebuild Kits	03/18/2025	0	150.44 00029844
			Vendor Subtotal:		150.44
5660-50-5663-53220	ARNOLD MOTOR SUPPLY	U-Joint Bearings for Papoose Pump #1	03/13/2025	0	186.12 00030037
5660-50-5663-53220	ARNOLD MOTOR SUPPLY	Universal Joint	03/13/2025	0	62.04
5660-50-5663-53220	ARNOLD MOTOR SUPPLY	V Belt	03/17/2025	0	11.10

5660-50-5663-53220	ARNOLD MOTOR SUPPLY	V Belt	03/17/2025	0	11.60
Vendor Subtotal:					270.86
5660-50-5663-53220	MOTION INDUSTRIES INC	Pillow Block Bearing for #1 Drive Shaft	03/13/2025	0	3.39
5660-50-5663-53220	MOTION INDUSTRIES INC	Pillow Block Bearing for #1 Drive Shaft	03/13/2025	0	292.19 00030038
5660-50-5663-53220	MOTION INDUSTRIES INC	Lockwasher	03/17/2025	0	41.67
Vendor Subtotal:					337.25
5660-50-5663-65260	VERIZON WIRELESS	February Cell Phones	03/17/2025	0	169.88
Vendor Subtotal:					169.88
5660-50-5663-65275	MUSCATINE POWER & WATER	February Internet - Mad Creek	03/17/2025	0	63.18
Vendor Subtotal:					63.18
5660-50-5663-65310	ALLIANT ENERGY	February Gas - Schley	03/13/2025	0	128.55
5660-50-5663-65310	ALLIANT ENERGY	February Gas - Progress	03/13/2025	0	1,390.49
5660-50-5663-65310	ALLIANT ENERGY	February Gas - Arbor Commons	03/17/2025	0	34.93
Vendor Subtotal:					1,553.97
5660-50-5663-65320	MUSCATINE POWER & WATER	February Electric - Arbor Commons	03/13/2025	0	277.09
5660-50-5663-65320	MUSCATINE POWER & WATER	February Electric - Spinning Wheel	03/13/2025	0	114.37
5660-50-5663-65320	MUSCATINE POWER & WATER	February Electric - Houser	03/13/2025	0	166.17
5660-50-5663-65320	MUSCATINE POWER & WATER	February Electric - Stewart	03/13/2025	0	800.49
5660-50-5663-65320	MUSCATINE POWER & WATER	January Electric - Canon	03/13/2025	0	450.27
5660-50-5663-65320	MUSCATINE POWER & WATER	February Electric - Papoose	03/17/2025	0	3,184.71
5660-50-5663-65320	MUSCATINE POWER & WATER	February Electric - Isett	03/17/2025	0	2,051.17
5660-50-5663-65320	MUSCATINE POWER & WATER	February Electric - Slough	03/17/2025	0	27.83
5660-50-5663-65320	MUSCATINE POWER & WATER	February Electric - Sunset	03/17/2025	0	118.59
5660-50-5663-65320	MUSCATINE POWER & WATER	February Electric - Mad Creek	03/17/2025	0	1,816.67
5660-50-5663-65320	MUSCATINE POWER & WATER	February Electric - Stormwater	03/17/2025	0	55.88
5660-50-5663-65320	MUSCATINE POWER & WATER	February Electric - Love	03/17/2025	0	519.86
5660-50-5663-65320	MUSCATINE POWER & WATER	February Electric - Sampson	03/17/2025	0	1,245.37
5660-50-5663-65320	MUSCATINE POWER & WATER	February Electric - 57th	03/17/2025	0	821.43
5660-50-5663-65320	MUSCATINE POWER & WATER	February Electric - Progress	03/17/2025	0	537.32
5660-50-5663-65320	MUSCATINE POWER & WATER	February Electric - Tipton	03/17/2025	0	547.90

Vendor Subtotal:					12,735.12
5660-50-5663-65410	MUSCATINE POWER & WATER	February Water - Arbor Commons	03/13/2025	0	26.54
5660-50-5663-65410	MUSCATINE POWER & WATER	January Water - Canon	03/13/2025	0	44.24
5660-50-5663-65410	MUSCATINE POWER & WATER	February Water - Houser	03/13/2025	0	33.52
5660-50-5663-65410	MUSCATINE POWER & WATER	February Water - Stewart	03/13/2025	0	26.54
5660-50-5663-65410	MUSCATINE POWER & WATER	February Water - Isett	03/17/2025	0	147.38
5660-50-5663-65410	MUSCATINE POWER & WATER	February Water - Mad Creek	03/17/2025	0	128.21
5660-50-5663-65410	MUSCATINE POWER & WATER	February Water - Love	03/17/2025	0	35.39
5660-50-5663-65410	MUSCATINE POWER & WATER	February Water - Sampson	03/17/2025	0	23.89
5660-50-5663-65410	MUSCATINE POWER & WATER	February Water - 57th	03/17/2025	0	22.13
5660-50-5663-65410	MUSCATINE POWER & WATER	February Water - Progress	03/17/2025	0	-6.09
5660-50-5663-65410	MUSCATINE POWER & WATER	February Water - Tipton	03/17/2025	0	22.13
5660-50-5663-65410	MUSCATINE POWER & WATER	February Water - Papoose	03/17/2025	0	1,194.42
Vendor Subtotal:					1,698.30
5660-50-5663-67130	CRAWFORD COMPANY INC	Canon Lift Station Exhaust Fan/Duct Rep	03/17/2025	0	1,989.00 00029865
Vendor Subtotal:					1,989.00
5660-50-5665-46200	RELIANCE STANDARD LIFE INS CC	Life Ins Mar	03/01/2025	0	26.76
Vendor Subtotal:					26.76
5660-50-5665-46600	RELIANCE STANDARD LIFE INS CCLTD	Mar 24	03/01/2025	0	23.58
5660-50-5665-46600	RELIANCE STANDARD LIFE INS CCBW LTD	Mar	03/01/2025	0	32.92
Vendor Subtotal:					56.50
5660-50-5665-52210	AIRGAS USA LLC	Compressed Air	03/13/2025	0	137.96 00029869
Vendor Subtotal:					137.96
5660-50-5665-52210	IDEXX DISTRIBUTION INC	Colilert 20-pack	03/13/2025	0	239.00 00030045
5660-50-5665-52210	IDEXX DISTRIBUTION INC	Quanti-Tray 2000	03/13/2025	0	727.66 00030045
5660-50-5665-52210	IDEXX DISTRIBUTION INC	Shipping	03/13/2025	0	49.48
Vendor Subtotal:					1,016.14

5660-50-5665-52210	MIDLAND SCIENTIFIC INC	Alcojet Detergent	03/13/2025	0	90.60
5660-50-5665-52210	MIDLAND SCIENTIFIC INC	Lab Supplies	03/13/2025	0	1,433.08 00030018
5660-50-5665-52210	MIDLAND SCIENTIFIC INC	Lab Supplies	03/13/2025	0	470.04
5660-50-5665-52210	MIDLAND SCIENTIFIC INC	Pipettes	03/13/2025	0	483.78 00029937
5660-50-5665-52210	MIDLAND SCIENTIFIC INC	Alcojet Detergent	03/13/2025	0	226.88
5660-50-5665-52210	MIDLAND SCIENTIFIC INC	Ammonium Molybdate Reag	03/17/2025	0	84.78
5660-50-5665-52210	MIDLAND SCIENTIFIC INC	Potassium Antimony Tartrate Trihydra	03/17/2025	0	77.13
Vendor Subtotal:					2,866.29
5660-50-5665-52210	ANALYTICHEM CANADA INC	Digi Filters	03/13/2025	0	495.00 00030053
5660-50-5665-52210	ANALYTICHEM CANADA INC	Freight	03/13/2025	0	100.00
Vendor Subtotal:					595.00
5660-50-5665-52210	USA BLUE BOOK	Alcotabs Cleaning Compound	03/13/2025	0	145.59 00030010
5660-50-5665-52210	USA BLUE BOOK	Alkaline Iodide Azide Reagent	03/13/2025	0	46.20 00030010
Vendor Subtotal:					191.79
5660-50-5665-52210	TCM BANK NA VISA	Aqua Phoenix - Tax Refund	03/18/2025	0	-6.99
Vendor Subtotal:					-6.99
5660-50-5665-53220	DELL MARKETING L.P.	OptiPlex Micro Plus Form Factor	03/17/2025	0	1,670.15 00029957
Vendor Subtotal:					1,670.15
5660-50-5665-62510	ENVIRONMENTAL RESOURCE ASS	Testing	03/13/2025	0	539.15 00030049
Vendor Subtotal:					539.15
5660-50-5665-62530	ALS GROUP USA, CORP	Testing	03/13/2025	0	1,044.00
Vendor Subtotal:					1,044.00
5660-50-5665-63500	PHELPS THE UNIFORM SPECIALIST	Laundry - WRRF	03/13/2025	0	28.40

			Vendor Subtotal:		28.40
5660-50-5665-74200	AQUATIC INFORMATICS INC	WIMS-FACIL-NEWIMP - WIMS New I	03/13/2025	0	12,432.00 00028281
5660-50-5665-74200	AQUATIC INFORMATICS INC	DM_WIMS-SERVICES - Remote Hourl	03/13/2025	0	12,880.00 00028281
			Vendor Subtotal:		25,312.00
5660-50-5666-46200	RELIANCE STANDARD LIFE INS CC	Life Ins Mar	03/01/2025	0	9.39
			Vendor Subtotal:		9.39
5660-50-5666-46600	RELIANCE STANDARD LIFE INS CCBW LTD	Mar	03/01/2025	0	54.46
			Vendor Subtotal:		54.46
5660-50-5666-52830	MENARDS (MUSC)	Wrench Set/Bit Extention	03/13/2025	0	43.44
			Vendor Subtotal:		43.44
5660-50-5666-53220	ARNOLD MOTOR SUPPLY	Rocker	03/13/2025	0	7.39
5660-50-5666-53220	ARNOLD MOTOR SUPPLY	Front & Rear Floor Liners	03/17/2025	0	243.90 00030047
			Vendor Subtotal:		251.29
5660-50-5666-65320	EASTERN IOWA LIGHT & POWER C	February Power - Musser	03/13/2025	0	85.00
			Vendor Subtotal:		85.00
5660-50-5666-69900	TCM BANK NA VISA	County Recorder - Boat Registration	03/18/2025	0	42.90
			Vendor Subtotal:		42.90
5660-50-5668-46200	RELIANCE STANDARD LIFE INS CC	Life Ins Mar	03/01/2025	0	6.26
			Vendor Subtotal:		6.26
5660-50-5668-46600	RELIANCE STANDARD LIFE INS CCBW LTD	Mar	03/01/2025	0	33.84

		Vendor Subtotal:			33.84
5660-50-5668-52830	MENARDS (MUSC)	Pliers	03/13/2025	0	12.99 00030085
		Vendor Subtotal:			12.99
5660-50-5668-53130	TCM BANK NA VISA	Proflow - Plumbing	03/18/2025	0	99.46
		Vendor Subtotal:			99.46
5660-50-5668-53220	ARNOLD MOTOR SUPPLY	Paper Towels	03/13/2025	0	24.68
		Vendor Subtotal:			24.68
5660-50-5668-53220	MENARDS (MUSC)	5 CF Fridge	03/13/2025	0	156.50 00030085
		Vendor Subtotal:			156.50
5660-50-5668-53220	AMAZON.COM	Stamp Kit	03/13/2025	0	16.50
5660-50-5668-53220	AMAZON.COM	Compost Bins & Bags	03/13/2025	0	296.33 00030024
		Vendor Subtotal:			312.83
5660-50-5668-67130	RAYNOR DOOR CO INC OF THE QU	Southeast Dock Door Opener Assy. Repl	03/13/2025	0	2,767.50 00029203
5660-50-5668-67130	RAYNOR DOOR CO INC OF THE QU	Bottom Door Assembly Replacement	03/13/2025	0	1,405.00 00029202
		Vendor Subtotal:			4,172.50
5660-50-5668-67130	CRAWFORD COMPANY INC	Emergency Repairs for More Heater Dan	03/17/2025	0	3,000.00 00029860
5660-50-5668-67130	CRAWFORD COMPANY INC	Emergency Repairs for More Heater Dan	03/17/2025	0	981.00
		Vendor Subtotal:			3,981.00
		Subtotal for FUND: 5660			116,376.70
5664-00-0000-23550	RELIANCE STANDARD LIFE INS CCPR	Batch 00002.02.2025 Life Insurance	02/28/2025	0	0.06

			Vendor Subtotal:	0.06
5664-00-0000-23630	RELIANCE STANDARD LIFE INS CCPR Batch 00002.02.2025 Optional Life	02/28/2025	0	3.30
5664-00-0000-23630	RELIANCE STANDARD LIFE INS CCPR Batch 00001.02.2025 Optional Life	02/14/2025	0	3.30
			Vendor Subtotal:	6.60
5664-40-5664-46200	RELIANCE STANDARD LIFE INS CCLife Ins Mar	03/01/2025	0	32.85
			Vendor Subtotal:	32.85
5664-40-5664-46600	RELIANCE STANDARD LIFE INS CCBW LTD Mar	03/01/2025	0	73.58
5664-40-5664-46600	RELIANCE STANDARD LIFE INS CCLTD Mar 24	03/01/2025	0	25.18
			Vendor Subtotal:	98.76
5664-40-5664-52890	MENARDS (MUSC) PVC Pipes	03/17/2025	0	9.38
			Vendor Subtotal:	9.38
5664-40-5664-65100	QUAD CITY TIMES & MUSC JOURNPublic Notice Sewer Lining	03/18/2025	0	15.05
			Vendor Subtotal:	15.05
5664-40-5664-65260	US CELLULAR March Cell Phones	03/17/2025	0	45.62
			Vendor Subtotal:	45.62
5664-40-5664-65275	VERIZON WIRELESS February Cell Phones	03/17/2025	0	40.01
			Vendor Subtotal:	40.01
5664-40-5664-65275	VERIZON February GPS	03/13/2025	0	10.95
			Vendor Subtotal:	10.95
5664-50-5667-46200	RELIANCE STANDARD LIFE INS CCLife Ins Mar	03/01/2025	0	7.67

			Vendor Subtotal:		7.67
5664-50-5667-46600	RELiance STANDARD LIFE INS CCLTD Mar 24		03/01/2025	0	10.55
			Vendor Subtotal:		10.55
5664-50-5667-64200	TCM BANK NA VISA	ISWEP - Registration Koch	03/18/2025	0	37.50
5664-50-5667-64200	TCM BANK NA VISA	Homegrown - Registration Koch	03/18/2025	0	25.87
			Vendor Subtotal:		63.37
			Subtotal for FUND: 5664		340.87
5711-10-5711-65210	MUSCATINE POWER & WATER	February Electric - Airport Gate	03/17/2025	0	52.09
			Vendor Subtotal:		52.09
5711-10-5711-65320	MUSCATINE POWER & WATER	February Electric - Airport Runway	03/17/2025	0	42.42
5711-10-5711-65320	MUSCATINE POWER & WATER	February Electric - Airport Comm	03/17/2025	0	75.30
5711-10-5711-65320	MUSCATINE POWER & WATER	February Electric - Airport Lights	03/17/2025	0	36.17
5711-10-5711-65320	MUSCATINE POWER & WATER	February Electric - Airport Comm	03/17/2025	0	31.72
			Vendor Subtotal:		185.61
			Subtotal for FUND: 5711		237.70
5811-00-0000-11550	MUNICIPAL COLLECTIONS OF AMI	Collection Agent Fee - Feb	03/18/2025	0	1,126.06
			Vendor Subtotal:		1,126.06
5811-00-0000-23550	RELiance STANDARD LIFE INS CCPR	Batch 00002.02.2025 Life Insurance	02/28/2025	0	0.40
			Vendor Subtotal:		0.40
5811-20-5811-35150	IOWA MEDICAID ENTERPRISE (IME	March GEMT MCO Payment	03/17/2025	0	13,838.95
			Vendor Subtotal:		13,838.95

5811-20-5811-35160	CIGNA MEDICARE SUPPLEMENT	Reimb Duplicate Payment K Osborn CK	03/13/2025	0	72.86
		Vendor Subtotal:			72.86
5811-20-5811-35160	ELSE PAUL	Refund Ambulance Run 9-29-20	03/17/2025	0	100.00
		Vendor Subtotal:			100.00
5811-20-5811-35160	HEARTLAND HOSPICE	Duplicate Payment D McIntire CK# EFT	03/17/2025	0	333.14
5811-20-5811-35160	HEARTLAND HOSPICE	Duplicate Payment D McIntire CK# EFT	03/17/2025	0	316.06
		Vendor Subtotal:			649.20
5811-20-5811-35160	COLE EICHELBERGER	Refund Ambulance Run 2-21-22	03/17/2025	0	200.00
		Vendor Subtotal:			200.00
5811-20-5811-35160	AETNA MEDICARE	Refund L Peine CK #882216701021750	03/17/2025	0	132.06
		Vendor Subtotal:			132.06
5811-20-5811-35160	AETNA	Duplicate Payment R Robi CK #1317472	03/17/2025	0	134.37
		Vendor Subtotal:			134.37
5811-20-5811-35160	STATE FARM INSURANCE	Duplicate Payment L Peine CK 1069486:	03/17/2025	0	350.00
		Vendor Subtotal:			350.00
5811-20-5811-35160	UNITED HEALTHCARE	Refund L Hopper EF82498632 0296568	03/13/2025	0	111.80
		Vendor Subtotal:			111.80
5811-20-5811-35160	AMERIGROUP	Refund B Bierman Claim ID 257279251'	03/13/2025	0	93.36
5811-20-5811-35160	AMERIGROUP	Refund M Hyndman Claim ID 26462094	03/13/2025	0	124.74
		Vendor Subtotal:			218.10

5811-20-5811-35160	IOWA TOTALCARE	Reimb Dup Payment S Weatherman CK	03/13/2025	0	111.18
		Vendor Subtotal:			111.18
5811-20-5811-46200	RELIANCE STANDARD LIFE INS CC	Life Ins Mar	03/01/2025	0	18.66
		Vendor Subtotal:			18.66
5811-20-5811-46600	RELIANCE STANDARD LIFE INS CCLTD	Mar 24	03/01/2025	0	24.64
		Vendor Subtotal:			24.64
5811-20-5811-51100	AMAZON.COM	Memo Pads/Legal Pads	03/17/2025	0	42.32
5811-20-5811-51100	AMAZON.COM	3 Ring Binders/Tab Inserts	03/17/2025	0	58.48
		Vendor Subtotal:			100.80
5811-20-5811-51300	AMAZON.COM	Toner	03/13/2025	0	69.89
		Vendor Subtotal:			69.89
5811-20-5811-52720	TCM BANK NA VISA	Kum & Go, Grinnell, Fuel transport to Cl	03/18/2025	0	68.39
5811-20-5811-52720	TCM BANK NA VISA	Kum & Go - Fuel transfer to Clive	03/18/2025	0	69.88
5811-20-5811-52720	TCM BANK NA VISA	Git N Go - Fuel- Transfer to Clive	03/18/2025	0	14.97
		Vendor Subtotal:			153.24
5811-20-5811-52840	ARNOLD MOTOR SUPPLY	Oil Dri/Washer Fluid	03/18/2025	0	72.80
		Vendor Subtotal:			72.80
5811-20-5811-52840	BOUND TREE MEDICAL LLC	#2212-11200 Curaplex Disposable Hydr	03/18/2025	0	113.25 00029981
5811-20-5811-52840	BOUND TREE MEDICAL LLC	#NAR10-0037 HyFin Vent Chest Seal T	03/18/2025	0	187.90 00029981
5811-20-5811-52840	BOUND TREE MEDICAL LLC	#1714-31081 Curaplex IV Extension Set	03/18/2025	0	142.00 00029981
5811-20-5811-52840	BOUND TREE MEDICAL LLC	#1012-47135 Curaplex TritonGrip TE E	03/18/2025	0	130.90 00029981
5811-20-5811-52840	BOUND TREE MEDICAL LLC	#2762-53060 Assure Prism Multi Contrc	03/18/2025	0	13.99 00029981
5811-20-5811-52840	BOUND TREE MEDICAL LLC	#1880-13022 Combat Application Tourr	03/18/2025	0	298.70 00029981
5811-20-5811-52840	BOUND TREE MEDICAL LLC	#96-MCW-2B Oxygen Cylinder Wrencl	03/18/2025	0	32.90 00029981
5811-20-5811-52840	BOUND TREE MEDICAL LLC	#36014 Curaplex Blood Pressure Cuff T	03/18/2025	0	10.89 00029981

5811-20-5811-52840	BOUND TREE MEDICAL LLC	#CRAAREG8725B2D Oxygen Regulat	03/18/2025	0	299.95 00029981
5811-20-5811-52840	BOUND TREE MEDICAL LLC	#36013 Curaplex Blood Pressure Cuff L	03/18/2025	0	21.78 00029981
5811-20-5811-52840	BOUND TREE MEDICAL LLC	#L980010 Stifneck Select Extrication C	03/18/2025	0	159.50 00029981
5811-20-5811-52840	BOUND TREE MEDICAL LLC	#16242 Curaplex Select Direct Connect	03/18/2025	0	226.74 00029981
5811-20-5811-52840	BOUND TREE MEDICAL LLC	#1613-86220 Curaplex CuraSlide BC Sa	03/18/2025	0	144.50 00029981
5811-20-5811-52840	BOUND TREE MEDICAL LLC	#30050 Curaplex Nasal Cannula Green	03/18/2025	0	28.00 00029981
5811-20-5811-52840	BOUND TREE MEDICAL LLC	#3141-91010 Curaplex Instant Head Imr	03/18/2025	0	92.20 00029981
5811-20-5811-52840	BOUND TREE MEDICAL LLC	#36011 Curaplex Blood Pressure Cuff C	03/18/2025	0	32.67 00029981
5811-20-5811-52840	BOUND TREE MEDICAL LLC	#301-435EA Curaplex Bacterial and Vir	03/18/2025	0	53.00 00029981
5811-20-5811-52840	BOUND TREE MEDICAL LLC	#1850-10010 InfuseIT Pressure Infusor I	03/18/2025	0	192.90 00029981
5811-20-5811-52840	BOUND TREE MEDICAL LLC	#728932 Bandage Shears 7.5in Black	03/18/2025	0	46.25 00029981
5811-20-5811-52840	BOUND TREE MEDICAL LLC	#301-201EA Curaplex Select Nebulizer	03/18/2025	0	38.00 00029981
5811-20-5811-52840	BOUND TREE MEDICAL LLC	#661109 SAM Splint Standard Roll Gra	03/18/2025	0	112.90 00029981
5811-20-5811-52840	BOUND TREE MEDICAL LLC	#2160-87014 Decompression Needle 14	03/18/2025	0	108.90 00029981
5811-20-5811-52840	BOUND TREE MEDICAL LLC	#16107 Curaplex Yankauer Suction Tip	03/18/2025	0	168.00 00029981
5811-20-5811-52840	BOUND TREE MEDICAL LLC	#2113-10270 Curaplex Cuffed Endotrach	03/18/2025	0	15.00 00029981
5811-20-5811-52840	BOUND TREE MEDICAL LLC	Return	03/18/2025	0	-180.93
5811-20-5811-52840	BOUND TREE MEDICAL LLC	Return	03/18/2025	0	-8.39
5811-20-5811-52840	BOUND TREE MEDICAL LLC	Gloves/Catheter/Oxygen Masks	03/18/2025	0	426.02
5811-20-5811-52840	BOUND TREE MEDICAL LLC	#36010 Curaplex Blood Pressure Cuff Ir	03/18/2025	0	21.78 00029981
5811-20-5811-52840	BOUND TREE MEDICAL LLC	#1012-47136 Curaplex TritonGrip TE E	03/18/2025	0	130.90 00029981
5811-20-5811-52840	BOUND TREE MEDICAL LLC	#1211-63603 Israeli T3 Bandage	03/18/2025	0	51.45 00029981
5811-20-5811-52840	BOUND TREE MEDICAL LLC	#G2291 Cynch-Lok with Tamper Evider	03/18/2025	0	60.46 00029981
5811-20-5811-52840	BOUND TREE MEDICAL LLC	#1613-86218 Curaplex CuraSlide BC Sa	03/18/2025	0	144.50 00029981
5811-20-5811-52840	BOUND TREE MEDICAL LLC	#36012 Curaplex Blood Pressure Cuff A	03/18/2025	0	27.44 00029981
5811-20-5811-52840	BOUND TREE MEDICAL LLC	#1214-35034 QuikClot Combat Hemost	03/18/2025	0	243.95 00029981
5811-20-5811-52840	BOUND TREE MEDICAL LLC	#533-MS-25060EA Curaplex Non-Rebr	03/18/2025	0	65.50 00029981
5811-20-5811-52840	BOUND TREE MEDICAL LLC	Return	03/18/2025	0	-211.68
5811-20-5811-52840	BOUND TREE MEDICAL LLC	Return	03/18/2025	0	-209.74
5811-20-5811-52840	BOUND TREE MEDICAL LLC	#301-5707F-SE Curaplex EtCO2/O2 Du	03/17/2025	0	129.80 00029915
5811-20-5811-52840	BOUND TREE MEDICAL LLC	#1212-12112 Curaplex Sterile Gauze Pac	03/17/2025	0	14.76 00029915
5811-20-5811-52840	BOUND TREE MEDICAL LLC	#2120-21282 Bougie-To-Go ET Tube Int	03/17/2025	0	91.92 00029915
5811-20-5811-52840	BOUND TREE MEDICAL LLC	#1330-85300 Curaplex Alcohol Prep Pad	03/17/2025	0	3.92 00029915
5811-20-5811-52840	BOUND TREE MEDICAL LLC	#2146-03236 Single Use Blade for UES	03/17/2025	0	257.56 00029915
5811-20-5811-52840	BOUND TREE MEDICAL LLC	#B9900-312 Primary IV Set Vented/Nor	03/17/2025	0	169.50 00029782
5811-20-5811-52840	BOUND TREE MEDICAL LLC	Ambulance Supplies	03/17/2025	0	74.25
5811-20-5811-52840	BOUND TREE MEDICAL LLC	Exhalation Filter	03/17/2025	0	87.45
Vendor Subtotal:					4,061.24
5811-20-5811-52840	S.J. SMITH CO.	Pull Over Seal	03/18/2025	0	56.78
5811-20-5811-52840	S.J. SMITH CO.	Oxygen	03/18/2025	0	75.04
5811-20-5811-52840	S.J. SMITH CO.	Oxygen	03/17/2025	0	121.65

Vendor Subtotal:					253.47
5811-20-5811-52840	3B MEDICAL	#PRT-00850-000 External Bacterial Filt	03/13/2025	0	80.69 00029980
5811-20-5811-52840	3B MEDICAL	#F2V1002 F2 Single-Patient Vented Ful	03/13/2025	0	270.00 00029980
5811-20-5811-52840	3B MEDICAL	#F2V1001 F2 Single-Patient Vented Ful	03/13/2025	0	270.00 00029980
5811-20-5811-52840	3B MEDICAL	#F2V1001 F2 Single-Patient Vented Ful	03/13/2025	0	35.30
Vendor Subtotal:					655.99
5811-20-5811-53220	ARNOLD MOTOR SUPPLY	Hatch Lift	03/18/2025	0	48.53
5811-20-5811-53220	ARNOLD MOTOR SUPPLY	Air Filter	03/18/2025	0	21.50
5811-20-5811-53220	ARNOLD MOTOR SUPPLY	Brake Pads and Rotor for Emergency Rej	03/18/2025	0	493.58 00029809
5811-20-5811-53220	ARNOLD MOTOR SUPPLY	Taper Bearing Cone/Wheel Seal	03/18/2025	0	56.38
5811-20-5811-53220	ARNOLD MOTOR SUPPLY	Spin On	03/18/2025	0	14.36
5811-20-5811-53220	ARNOLD MOTOR SUPPLY	Filters	03/17/2025	0	17.61
Vendor Subtotal:					651.96
5811-20-5811-62220	STERICYCLE INC	March Medical Waste Hauling	03/18/2025	0	247.13
Vendor Subtotal:					247.13
5811-20-5811-62290	STERICYCLE INC	Shredding	03/13/2025	0	39.68
Vendor Subtotal:					39.68
5811-20-5811-64200	EASTERN IA COMMUNITY COLLEC	BLS Registration Fees	03/17/2025	0	36.00
Vendor Subtotal:					36.00
5811-20-5811-64400	TCM BANK NA VISA	Bakers Square - Meal Brooke & Clark	03/18/2025	0	53.41
5811-20-5811-64400	TCM BANK NA VISA	Burger King Des Moines - Meal Hickenb	03/18/2025	0	28.12
5811-20-5811-64400	TCM BANK NA VISA	Taco Bell - Meal - Transfer to Clive	03/18/2025	0	15.81
5811-20-5811-64400	TCM BANK NA VISA	Taco Bell - Meal - Transfer to Clive	03/18/2025	0	23.50
Vendor Subtotal:					120.84
5811-20-5811-65240	MUSCATINE POWER & WATER	Janaury Internet - Fire #2	03/17/2025	0	255.00

		Vendor Subtotal:			255.00
5811-20-5811-65260	T-MOBILE	February Phones	03/13/2025	0	207.26
		Vendor Subtotal:			207.26
5811-20-5811-67130	COURTESY FORD	Emergency Repairs to Ambulance 351	03/13/2025	0	567.62 00030033
		Vendor Subtotal:			567.62
5811-20-5811-67310	ADVANCED BUSINESS SYSTEMS INC	Copier	03/18/2025	0	263.55
		Vendor Subtotal:			263.55
5811-20-5811-67320	TCM BANK NA VISA	Station Automation - Monthly License R	03/18/2025	0	333.33
		Vendor Subtotal:			333.33
5811-20-5811-69400	TCM BANK NA VISA	Iowa DPH Regulatory Programs -IA Par	03/18/2025	0	25.00
5811-20-5811-69400	TCM BANK NA VISA	Iowa DPH Regulatory Programs - IA Par	03/18/2025	0	25.00
5811-20-5811-69400	TCM BANK NA VISA	IL Dep Public Health - IL Paramedic Cer	03/18/2025	0	41.00
5811-20-5811-69400	TCM BANK NA VISA	IL Dep Public Health - IL Paramedic Cer	03/18/2025	0	41.00
5811-20-5811-69400	TCM BANK NA VISA	IL Dep Public Health - IL Paramedic Cer	03/18/2025	0	41.00
5811-20-5811-69400	TCM BANK NA VISA	IA DPH - Paramedic Cert - Rock	03/18/2025	0	25.00
5811-20-5811-69400	TCM BANK NA VISA	IA DPH - Paramedic Cert - Verschoore	03/18/2025	0	25.00
		Vendor Subtotal:			223.00
5811-20-5811-74200	LIFEMED SAFETY, INC	i-STAT 1 Handheld Blood Gas Analyzer	03/13/2025	0	32,750.00 00029862
		Vendor Subtotal:			32,750.00
		Subtotal for FUND: 5811			58,151.08
7625-00-0000-23630	RELIANCE STANDARD LIFE INS CCPR Batch 00002.02.2025	Optional Life	02/28/2025	0	47.00
7625-00-0000-23630	RELIANCE STANDARD LIFE INS CCPR Batch 00001.02.2025	Optional Life	02/14/2025	0	47.00

		Vendor Subtotal:		94.00
7625-40-7625-46200	RELIANCE STANDARD LIFE INS CCLife Ins Mar	03/01/2025	0	25.02
		Vendor Subtotal:		25.02
7625-40-7625-46600	RELIANCE STANDARD LIFE INS CCLTD Mar 24	03/01/2025	0	17.97
7625-40-7625-46600	RELIANCE STANDARD LIFE INS CCBW LTD Mar	03/01/2025	0	53.16
		Vendor Subtotal:		71.13
7625-40-7625-52740	RAINBO OIL CO-JET BULK OIL 5w30 Engine Oil	03/13/2025	0	645.00 00029977
7625-40-7625-52740	RAINBO OIL CO-JET BULK OIL 55 Gallon Drum of 0W20 Engine Oil	03/13/2025	0	620.95 00029977
		Vendor Subtotal:		1,265.95
7625-40-7625-53210	ARNOLD MOTOR SUPPLY Switch	03/13/2025	0	15.61
7625-40-7625-53210	ARNOLD MOTOR SUPPLY Filters for Stock	03/13/2025	0	253.86 00030083
7625-40-7625-53210	ARNOLD MOTOR SUPPLY Fittings	03/13/2025	0	5.60
7625-40-7625-53210	ARNOLD MOTOR SUPPLY Switch	03/13/2025	0	16.66
7625-40-7625-53210	ARNOLD MOTOR SUPPLY Bulbs	03/18/2025	0	49.32
		Vendor Subtotal:		341.05
7625-40-7625-53210	NAPA OF MUSCATINE Anitseize	03/13/2025	0	7.79
		Vendor Subtotal:		7.79
7625-40-7625-53210	AMAZON.COM Latches	03/13/2025	0	52.35
7625-40-7625-53210	AMAZON.COM Batteries	03/13/2025	0	9.84
		Vendor Subtotal:		62.19
7625-40-7625-53220	ARNOLD MOTOR SUPPLY Filter	03/13/2025	0	32.70
7625-40-7625-53220	ARNOLD MOTOR SUPPLY Filters	03/13/2025	0	96.85
7625-40-7625-53220	ARNOLD MOTOR SUPPLY Drain Plug/Steering Stabilizer/Gloves	03/13/2025	0	66.81
7625-40-7625-53220	ARNOLD MOTOR SUPPLY Light	03/17/2025	0	81.90
7625-40-7625-53220	ARNOLD MOTOR SUPPLY Pigtail	03/17/2025	0	7.90
7625-40-7625-53220	ARNOLD MOTOR SUPPLY Air Filters for 418	03/18/2025	0	148.40 00030080

7625-40-7625-53220	ARNOLD MOTOR SUPPLY	Air Filter	03/18/2025	0	16.34
		Vendor Subtotal:			450.90
7625-40-7625-53220	ELLIOTT EQUIPMENT COMPANY	Switches	03/13/2025	0	53.44
		Vendor Subtotal:			53.44
7625-40-7625-53220	PLETCHER ENTERPRISES INC	Steel for 440	03/13/2025	0	885.00 00029930
		Vendor Subtotal:			885.00
7625-40-7625-53220	MENARDS (MUSC)	Strainer/Gloves	03/13/2025	0	24.10
		Vendor Subtotal:			24.10
7625-40-7625-53220	MOTION INDUSTRIES INC	Seal Ring for 440	03/17/2025	0	122.68 00029628
7625-40-7625-53220	MOTION INDUSTRIES INC	Seal Ring for 440	03/17/2025	0	21.44
		Vendor Subtotal:			144.12
7625-40-7625-53220	NAPA OF MUSCATINE	Hubs, Sensors, Seals for 803	03/13/2025	0	641.31 00030086
7625-40-7625-53220	NAPA OF MUSCATINE	Anitseize	03/13/2025	0	7.79
7625-40-7625-53220	NAPA OF MUSCATINE	Sway Bar	03/17/2025	0	24.78
7625-40-7625-53220	NAPA OF MUSCATINE	Lamp	03/17/2025	0	13.57
		Vendor Subtotal:			687.45
7625-40-7625-53220	GTG PETERBILT - DAVENPORT	Dipstick and Tube for 439	03/13/2025	0	920.99 00030002
		Vendor Subtotal:			920.99
7625-40-7625-53220	REEVES BATTERY SALES	Battery	03/13/2025	0	50.00
7625-40-7625-53220	REEVES BATTERY SALES	Batteries	03/18/2025	0	380.00
		Vendor Subtotal:			430.00
7625-40-7625-53220	SIGUORNEY TRACTOR & IMPLEME	Filter Tee	03/13/2025	0	94.93

		Vendor Subtotal:			94.93
7625-40-7625-53220	AMAZON.COM	Gaskets/Thermostat	03/13/2025	0	65.23
		Vendor Subtotal:			65.23
7625-40-7625-53220	TCM BANK NA VISA	sensor for new lift	03/18/2025	0	625.00 00029949
7625-40-7625-53220	TCM BANK NA VISA	sensor for new lift - Freight	03/18/2025	0	22.45
		Vendor Subtotal:			647.45
7625-40-7625-53220	EMAG MUSCATINE FD LLC	Power Steering Pump Reservior for #124	03/13/2025	0	130.00 00030034
7625-40-7625-53220	EMAG MUSCATINE FD LLC	Power Steering Pump Reservior for #124	03/13/2025	0	0.80
7625-40-7625-53220	EMAG MUSCATINE FD LLC	Multi Function Switch Bus #253	03/17/2025	0	224.00 00030068
		Vendor Subtotal:			354.80
7625-40-7625-62530	ACUREN INSPECTION INC.	Lifts and Crane Inspection	03/17/2025	0	250.00 00029679
7625-40-7625-62530	ACUREN INSPECTION INC.	Lifts and Crane Inspection	03/17/2025	0	440.00
		Vendor Subtotal:			690.00
7625-40-7625-65275	VERIZON	February GPS	03/13/2025	0	17.78
		Vendor Subtotal:			17.78
7625-40-7625-67130	ELLIOTT EQUIPMENT COMPANY	New PTO Installed on 439	03/13/2025	0	4,160.96 00029987
		Vendor Subtotal:			4,160.96
7625-40-7625-67130	PLETCHER ENTERPRISES INC	Rebuild Packer Slides on 440	03/13/2025	0	6,165.00 00029929
		Vendor Subtotal:			6,165.00
7625-40-7625-67130	TRUCK AND AUTO REPAIR	Monthly Inspection for RC Trailers	03/13/2025	0	281.00 00029971
		Vendor Subtotal:			281.00

7625-40-7625-67140	A-1 QUALITY TIRE & CAR CARE	Tire Repair #262	03/17/2025	0	42.00
7625-40-7625-67140	A-1 QUALITY TIRE & CAR CARE	Tire Repair #404	03/13/2025	0	261.50
7625-40-7625-67140	A-1 QUALITY TIRE & CAR CARE	Tire Repair #402	03/13/2025	0	88.50
Vendor Subtotal:					392.00
7625-40-7625-67140	EASTERN IOWA TIRE INC	315/80R22.5 Caps for Stock	03/18/2025	0	1,061.85 00029979
Vendor Subtotal:					1,061.85
Subtotal for FUND: 7625					19,394.13
7650-00-7650-46100	REGENEXX	Health Claims	03/18/2025	0	208.74
7650-00-7650-46100	REGENEXX	Health Claims	03/18/2025	0	9,058.61
7650-00-7650-46100	REGENEXX	Health Claims	03/18/2025	0	39,792.25
Vendor Subtotal:					49,059.60
Subtotal for FUND: 7650					49,059.60
7921-00-7921-69900	RELIANCE STANDARD LIFE INS CC	Prior Month Adjustment	03/01/2025	0	-2.00
Vendor Subtotal:					-2.00
7921-00-7921-69900	SUNSET PARK	Setoff Collections - B Mitchell	03/18/2025	0	485.00
7921-00-7921-69900	SUNSET PARK	Setoff Collections - D Wessel	03/18/2025	0	7.00
Vendor Subtotal:					492.00
7921-00-7921-69900	SECTION 8 PROGRAM CITY OF MU	Setoff Collections - S Lerma	03/18/2025	0	220.25
7921-00-7921-69900	SECTION 8 PROGRAM CITY OF MU	Setoff Collections - B Santiago	03/18/2025	0	1,090.00
Vendor Subtotal:					1,310.25
7921-00-7921-69900	TCM BANK NA VISA	Meal Overage - Texas Roadhouse - Kies	03/18/2025	0	12.71
7921-00-7921-69900	TCM BANK NA VISA	Meal Overage - Redrock - Kies	03/18/2025	0	9.19
7921-00-7921-69900	TCM BANK NA VISA	Tax - Amer Heart Shop CPR - CPR Vide	03/18/2025	0	1.16
7921-00-7921-69900	TCM BANK NA VISA	Meal - Overage	03/18/2025	0	0.44

7921-00-7921-69900	TCM BANK NA VISA	Tax - Amer Heart Shop CPR - CPR Vide	03/18/2025	0	1.16
7921-00-7921-69900	TCM BANK NA VISA	Tax - Amer Heart Shop CPR - CPR Vide	03/18/2025	0	1.16
7921-00-7921-69900	TCM BANK NA VISA	Meal Overage - Buffalo Wild Wings - Ki	03/18/2025	0	7.81
7921-00-7921-69900	TCM BANK NA VISA	Meal Overage - Outback Steakhouse - Ki	03/18/2025	0	13.67
7921-00-7921-69900	TCM BANK NA VISA	Meal Overage - Pancho Villa - Kies	03/18/2025	0	0.59
7921-00-7921-69900	TCM BANK NA VISA	Tax - Library & Books & Magazine Subs	03/18/2025	0	1.26
Vendor Subtotal:					49.15
7921-00-7921-69900	DAVENPORT PUBLIC LIBRARY	Reimb Lost DVD	03/17/2025	0	65.00
Vendor Subtotal:					65.00
Subtotal for FUND: 7921					1,914.40
7940-00-7940-46200	RELIANCE STANDARD LIFE INS CCLife Ins Mar		03/01/2025	0	24.27
7940-00-7940-46200	RELIANCE STANDARD LIFE INS CCLife Ins Mar		03/01/2025	0	21.78
7940-00-7940-46200	RELIANCE STANDARD LIFE INS CCLife Ins Mar		03/01/2025	0	6.69
7940-00-7940-46200	RELIANCE STANDARD LIFE INS CCLife Ins Mar		03/01/2025	0	16.87
Vendor Subtotal:					69.61
7940-00-7940-46600	RELIANCE STANDARD LIFE INS CCLTD Mar 24		03/01/2025	0	19.39
7940-00-7940-46600	RELIANCE STANDARD LIFE INS CCLTD Mar 24		03/01/2025	0	32.63
7940-00-7940-46600	RELIANCE STANDARD LIFE INS CCLTD Mar 24		03/01/2025	0	29.83
7940-00-7940-46600	RELIANCE STANDARD LIFE INS CCBW LTD Mar		03/01/2025	0	8.37
7940-00-7940-46600	RELIANCE STANDARD LIFE INS CCBW LTD Mar		03/01/2025	0	8.37
7940-00-7940-46600	RELIANCE STANDARD LIFE INS CCLTD Mar 24		03/01/2025	0	11.50
Vendor Subtotal:					110.09
7940-00-7940-61220	LAW OFFICES OF HOPKINS & HUBI	Feb Legal	03/18/2025	0	292.50
Vendor Subtotal:					292.50
7940-00-7940-62310	XEROX CORPORATION	Copies	03/18/2025	0	8.05
7940-00-7940-62310	XEROX CORPORATION	Copies	03/18/2025	0	1.15
7940-00-7940-62310	XEROX CORPORATION	Copies	03/18/2025	0	1.15
7940-00-7940-62310	XEROX CORPORATION	Copies	03/18/2025	0	9.20

			Vendor Subtotal:		19.55
7940-00-7940-65100	QUAD CITY TIMES & MUSC JOURN	Set Hearing for Housing Plan	03/18/2025	0	30.10
			Vendor Subtotal:		30.10
7940-00-7940-65210	MUSCATINE POWER & WATER	February Base PRI	03/18/2025	0	71.33
			Vendor Subtotal:		71.33
7940-00-7940-65240	MUSCATINE POWER & WATER	Jan/Feb Machlink	03/18/2025	0	123.98
			Vendor Subtotal:		123.98
7940-00-7940-65275	VERIZON	February GPS	03/13/2025	0	35.56
			Vendor Subtotal:		35.56
7940-00-7940-69200	PETTY CASH	Postage Due	03/18/2025	0	0.28
			Vendor Subtotal:		0.28
			Subtotal for FUND: 7940		753.00
8142-10-8142-61420	BOLTON & MENK INC	Mulberry Ave Sidewalk Reconstruction	03/18/2025	0	7,125.00
			Vendor Subtotal:		7,125.00
			Subtotal for FUND: 8142		7,125.00
8148-10-8148-46200	RELIANCE STANDARD LIFE INS CC	Life Ins Mar	03/01/2025	0	15.75
			Vendor Subtotal:		15.75
8148-10-8148-46600	RELIANCE STANDARD LIFE INS CC	LTD Mar 24	03/01/2025	0	25.08

			Vendor Subtotal:		25.08	
8148-10-8148-65275	TCM BANK NA VISA	Google Voice	03/18/2025	0	26.49	
			Vendor Subtotal:		26.49	
			Subtotal for FUND: 8148		67.32	
8180-90-8180-46200	RELIANCE STANDARD LIFE INS CC	Life Ins Mar	03/01/2025	0	3.44	
			Vendor Subtotal:		3.44	
8180-90-8180-46600	RELIANCE STANDARD LIFE INS CCLTD	Mar 24	03/01/2025	0	5.89	
			Vendor Subtotal:		5.89	
			Subtotal for FUND: 8180		9.33	
8400-05-8400-74100	KARL CHEVROLET	2024 Blk Chevy Tahoe Police Squad w/itl	03/13/2025	0	69,177.16	00029528
			Vendor Subtotal:		69,177.16	
			Subtotal for FUND: 8400		69,177.16	
8450-05-8450-74250	DELL MARKETING L.P.	OptiPlex Small Form Factor Plus	03/18/2025	0	5,152.70	00029847
8450-05-8450-74250	DELL MARKETING L.P.	OptiPlex Micro Form Factor Plus	03/18/2025	0	12,358.20	00029847
8450-05-8450-74250	DELL MARKETING L.P.	Microsoft Office Home & Business 2024	03/18/2025	0	2,667.39	00029847
8450-05-8450-74250	DELL MARKETING L.P.	MFS22 AIO Stand	03/18/2025	0	701.91	00029847
8450-05-8450-74250	DELL MARKETING L.P.	OptiPlex Tower Plus	03/18/2025	0	1,436.26	00029847
			Vendor Subtotal:		22,316.46	
8450-05-8450-74250	AMAZON.COM	ASUS External Blu-ray Burner - USB 3.0	03/17/2025	0	124.99	00030041
			Vendor Subtotal:		124.99	

8450-05-8450-74250	TCM BANK NA VISA	2COCOM NERO - Nero License	03/18/2025	0	252.56
		Vendor Subtotal:			252.56
		Subtotal for FUND: 8450			22,694.01
9002-90-9020-41100	CITY OF MUSCATINE HOUSING RE Admin Longevity 3/14/25		03/17/2025	0	4.23
9002-90-9020-41100	CITY OF MUSCATINE HOUSING RE Admin Full-Time Wages 3/14/25		03/17/2025	0	3,461.00
9002-90-9020-41100	CITY OF MUSCATINE HOUSING RE Admin Part-Time Wages 3/14/25		03/17/2025	0	132.41
		Vendor Subtotal:			3,597.64
9002-90-9020-41300	CITY OF MUSCATINE HOUSING RE Law Office Hopkins - Cozad Eviction		03/18/2025	0	67.50
		Vendor Subtotal:			67.50
9002-90-9020-41400	TCM BANK NA VISA	NAHRO - Training Registration	03/18/2025	0	1,025.00
		Vendor Subtotal:			1,025.00
9002-90-9020-41500	CITY OF MUSCATINE HOUSING RE Auto Allowance 3/14/25		03/17/2025	0	37.50
		Vendor Subtotal:			37.50
9002-90-9020-41903	AMAZON.COM	Switch	03/17/2025	0	89.77
		Vendor Subtotal:			89.77
9002-90-9020-41904	MUSCATINE POWER & WATER	February Phone - Clark House	03/18/2025	0	88.94
		Vendor Subtotal:			88.94
9002-90-9020-41904	US CELLULAR	March Cell Phones - Credit on Account	03/18/2025	0	0.50
		Vendor Subtotal:			0.50
9002-90-9020-41905	CITY OF MUSCATINE HOUSING RE Postage		03/18/2025	0	9.92

			Vendor Subtotal:		9.92
9002-90-9020-41910	CROSSROADS INC.	Shredding	03/18/2025	0	11.00
			Vendor Subtotal:		11.00
9002-90-9020-41910	TENANT REPORTS.COM LLC	Background Checks	03/18/2025	0	14.00
			Vendor Subtotal:		14.00
9002-90-9020-41914	MUSCATINE POWER & WATER	February Internet - Clark House	03/18/2025	0	82.97
			Vendor Subtotal:		82.97
9002-90-9020-43100	MUSCATINE POWER & WATER	February Water - Clark House	03/18/2025	0	335.22
			Vendor Subtotal:		335.22
9002-90-9020-43200	MUSCATINE POWER & WATER	February Electric - Clark House	03/18/2025	0	4,357.82
			Vendor Subtotal:		4,357.82
9002-90-9020-43700	ALLIANT ENERGY	February Gas - Clark House	03/18/2025	0	3,278.94
			Vendor Subtotal:		3,278.94
9002-90-9020-43900	MUSCATINE POWER & WATER	February Sewer - Clark House	03/18/2025	0	1,006.50
			Vendor Subtotal:		1,006.50
9002-90-9020-44100	CITY OF MUSCATINE HOUSING RE Maint Longevity 3/14/25		03/17/2025	0	11.05
9002-90-9020-44100	CITY OF MUSCATINE HOUSING RE Maint Full-Time Wages 3/14/25		03/17/2025	0	3,170.31
9002-90-9020-44100	CITY OF MUSCATINE HOUSING RE Maint Part-Time Wages 3/14/25		03/17/2025	0	1,482.00
			Vendor Subtotal:		4,663.36
9002-90-9020-44201	MENARDS (MUSC)	Paper Towels	03/18/2025	0	31.00

9002-90-9020-44201	MENARDS (MUSC)	Water	03/18/2025	0	17.00
		Vendor Subtotal:			48.00
9002-90-9020-44202	CITY OF MUSCATINE HOUSING RE	February Fuel	03/18/2025	0	78.56
		Vendor Subtotal:			78.56
9002-90-9020-44204	MENARDS (MUSC)	Ceiling Fan	03/18/2025	0	99.52
9002-90-9020-44204	MENARDS (MUSC)	CH 307 Blinds Rehab: Bali Essentials V	03/18/2025	0	324.72 00029955
9002-90-9020-44204	MENARDS (MUSC)	Screws	03/18/2025	0	19.45
		Vendor Subtotal:			443.69
9002-90-9020-44204	AMAZON.COM	Commerical Passage Door Lever Handle	03/18/2025	0	88.42
		Vendor Subtotal:			88.42
9002-90-9020-44204	TCM BANK NA VISA	Swisco - Cam-Action Hinge	03/18/2025	0	93.55
9002-90-9020-44204	TCM BANK NA VISA	Swisco - Cam-Action Hinge	03/18/2025	0	112.42
9002-90-9020-44204	TCM BANK NA VISA	Swisco - Cam-Action Hinge - Refund	03/18/2025	0	-112.42
		Vendor Subtotal:			93.55
9002-90-9020-44204	STEPHANIE DIETRICH	Duplicate Keys	03/18/2025	0	22.00
		Vendor Subtotal:			22.00
9002-90-9020-44205	MENARDS (MUSC)	Bulbs	03/18/2025	0	53.91
		Vendor Subtotal:			53.91
9002-90-9020-44206	MENARDS (MUSC)	Shower Curtains	03/18/2025	0	55.86
9002-90-9020-44206	MENARDS (MUSC)	Wax Ring	03/18/2025	0	13.14
		Vendor Subtotal:			69.00
9002-90-9020-44206	PLUMB SUPPLY COMPANY	Toilet Tank	03/18/2025	0	36.00
9002-90-9020-44206	PLUMB SUPPLY COMPANY	SS 2804E Waterheater Replacement: Na	03/18/2025	0	1,336.00 00029932

		Vendor Subtotal:		1,372.00
9002-90-9020-44301	CITY OF MUSCATINE HOUSING RE February Refuse	03/18/2025	0	8.40
		Vendor Subtotal:		8.40
9002-90-9020-44303	AMAZON.COM Bed Bug Interceptors/Bed Frame	03/18/2025	0	78.42
		Vendor Subtotal:		78.42
9002-90-9020-44303	THOMAS L SPANN JR & SONYA CO Monthly Pest Control	03/18/2025	0	700.00
9002-90-9020-44303	THOMAS L SPANN JR & SONYA CO Pest Control 1007	03/18/2025	0	20.00
9002-90-9020-44303	THOMAS L SPANN JR & SONYA CO Pest Control 1000	03/18/2025	0	20.00
9002-90-9020-44303	THOMAS L SPANN JR & SONYA CODOS 3-6-25 CH 904, 901, 513, 413, 304,	03/18/2025	0	600.00 00030028
9002-90-9020-44303	THOMAS L SPANN JR & SONYA CO Pest Control 204	03/18/2025	0	20.00
		Vendor Subtotal:		1,360.00
9002-90-9020-44307	SCHUMACHER ELEVATOR COMPA Quarterly Maintenance	03/18/2025	0	1,127.94
		Vendor Subtotal:		1,127.94
9002-90-9020-44314	CARRIAGE HOUSE CARPET ONE Repair	03/18/2025	0	75.00
		Vendor Subtotal:		75.00
9002-90-9020-44315	SAMUEL ANDERSON CH 408 Paint Rehab	03/18/2025	0	500.00 00029813
		Vendor Subtotal:		500.00
9002-90-9020-44318	BURNS & SON'S DIRECT APPLIANC Service Call	03/18/2025	0	59.50
9002-90-9020-44318	BURNS & SON'S DIRECT APPLIANC CH 10th Floor Washer Repair: Labor Pe	03/18/2025	0	44.00 00030048
9002-90-9020-44318	BURNS & SON'S DIRECT APPLIANC CH 10th Floor Washer Repair: Service C	03/18/2025	0	119.00 00030048
		Vendor Subtotal:		222.50
9002-90-9020-45103	CITY OF MUSCATINE HOUSING RE Unemployment 3/14/25	03/17/2025	0	8.30

			Vendor Subtotal:		8.30
9002-90-9020-45401	CITY OF MUSCATINE HOUSING RE FICA 3/14/25		03/17/2025	0	624.13
			Vendor Subtotal:		624.13
9002-90-9020-45402	CITY OF MUSCATINE HOUSING RE IPERS 3/14/25		03/17/2025	0	779.80
			Vendor Subtotal:		779.80
9002-90-9020-75500	VALLEY CONSTRUCTION Elevator Upgrades Pay App #5		03/18/2025	0	38,137.75
			Vendor Subtotal:		38,137.75
			Subtotal for FUND: 9002		63,857.95
9006-90-9060-31100	MUSCATINE POWER & WATER March Utility Credit R Piaga Howard 280		03/18/2025	0	138.00
9006-90-9060-31100	MUSCATINE POWER & WATER March Utility Credit G De Artiga Perez 2		03/18/2025	0	112.00
9006-90-9060-31100	MUSCATINE POWER & WATER March Utility Credit A Garren 2812 C Bl		03/18/2025	0	146.00
9006-90-9060-31100	MUSCATINE POWER & WATER March Utility Credit M Krajnik 2900 D F		03/18/2025	0	9.00
9006-90-9060-31100	MUSCATINE POWER & WATER March Utility Credit I Sherrill 2908 C Bl		03/18/2025	0	143.00
9006-90-9060-31100	MUSCATINE POWER & WATER March Utility Credit C Hernandez 2700 I		03/18/2025	0	119.00
9006-90-9060-31100	MUSCATINE POWER & WATER March Utility Credit A Dickess 2704 A F		03/18/2025	0	112.00
9006-90-9060-31100	MUSCATINE POWER & WATER March Utility Credit A Dickess 2704 A F		03/18/2025	0	112.00
9006-90-9060-31100	MUSCATINE POWER & WATER March Utility Credit F Nesbit 2704 D Bl		03/18/2025	0	146.00
9006-90-9060-31100	MUSCATINE POWER & WATER March Utility Credit J Fisher 2708 C Blo		03/18/2025	0	90.00
9006-90-9060-31100	MUSCATINE POWER & WATER March Utility Credit A Rios 2708 E Bloc		03/18/2025	0	112.00
9006-90-9060-31100	MUSCATINE POWER & WATER March Utility Credit A Carer 2800A Blo		03/18/2025	0	112.00
9006-90-9060-31100	MUSCATINE POWER & WATER March Utility Credit D Wilson 2800 B B		03/18/2025	0	44.00
			Vendor Subtotal:		1,395.00
9006-90-9060-36920	MUNICIPAL COLLECTIONS OF AMIAgent Collections - B Mitchell		03/18/2025	0	49.20
9006-90-9060-36920	MUNICIPAL COLLECTIONS OF AMIAgent Collections - D Wessel		03/18/2025	0	1.40
			Vendor Subtotal:		50.60
9006-90-9060-41100	CITY OF MUSCATINE HOUSING RE Admin Full-Time Wages 3/14/25		03/17/2025	0	2,219.21

9006-90-9060-41100	CITY OF MUSCATINE HOUSING RE Admin Part-Time Wages 3/14/25		03/17/2025	0	132.41
9006-90-9060-41100	CITY OF MUSCATINE HOUSING RE Admin Longevity 3/14/25		03/17/2025	0	3.90
	Vendor Subtotal:				2,355.52
9006-90-9060-41500	CITY OF MUSCATINE HOUSING RE Auto Allowance 3/14/25		03/17/2025	0	25.00
	Vendor Subtotal:				25.00
9006-90-9060-41904	MUSCATINE POWER & WATER	February Phone - Sunset	03/18/2025	0	49.27
	Vendor Subtotal:				49.27
9006-90-9060-41904	TCM BANK NA VISA	Google Voice	03/18/2025	0	13.25
	Vendor Subtotal:				13.25
9006-90-9060-41910	CROSSROADS INC.	Shredding	03/18/2025	0	11.00
	Vendor Subtotal:				11.00
9006-90-9060-41910	TENANT REPORTS.COM LLC	Background Checks	03/18/2025	0	7.00
	Vendor Subtotal:				7.00
9006-90-9060-41914	MUSCATINE POWER & WATER	February Internet - Sunset	03/18/2025	0	82.97
	Vendor Subtotal:				82.97
9006-90-9060-43100	MUSCATINE POWER & WATER	February Water - 2806 Apt F	03/18/2025	0	26.54
	Vendor Subtotal:				26.54
9006-90-9060-43200	MUSCATINE POWER & WATER	February Electric - Sunset	03/18/2025	0	62.21
9006-90-9060-43200	MUSCATINE POWER & WATER	February Electric - 2806 Apt F	03/18/2025	0	192.40
	Vendor Subtotal:				254.61

9006-90-9060-43700	ALLIANT ENERGY	January Gas - 2704 Apt D	03/18/2025	0	38.01
9006-90-9060-43700	ALLIANT ENERGY	February Gas - 2700 Apt E	03/18/2025	0	55.61
9006-90-9060-43700	ALLIANT ENERGY	February Gas - 2700 Apt C	03/18/2025	0	131.94
9006-90-9060-43700	ALLIANT ENERGY	February Gas - 2804 Apt E	03/18/2025	0	127.14
9006-90-9060-43700	ALLIANT ENERGY	February Gas - 2900 Apt C	03/18/2025	0	19.00
9006-90-9060-43700	ALLIANT ENERGY	February Gas - 2704 Apt C	03/18/2025	0	90.46
Vendor Subtotal:					462.16
9006-90-9060-43900	MUSCATINE POWER & WATER	February Sewer - 2806 Apt F	03/18/2025	0	34.56
Vendor Subtotal:					34.56
9006-90-9060-44100	CITY OF MUSCATINE HOUSING RE Maint	Full-Time Wages 3/14/25	03/17/2025	0	2,558.77
9006-90-9060-44100	CITY OF MUSCATINE HOUSING RE Maint	Part-Time Wages 3/14/25	03/17/2025	0	1,407.90
9006-90-9060-44100	CITY OF MUSCATINE HOUSING RE Maint	Longevity 3/14/25	03/17/2025	0	18.20
Vendor Subtotal:					3,984.87
9006-90-9060-44201	MENARDS (MUSC)	Paper Towels/Lysol	03/18/2025	0	98.36
9006-90-9060-44201	MENARDS (MUSC)	Combo Pan/Outlet/P-Trap	03/18/2025	0	73.40
Vendor Subtotal:					171.76
9006-90-9060-44201	AMAZON.COM	Steel Mesh Scrubber	03/18/2025	0	68.52
Vendor Subtotal:					68.52
9006-90-9060-44202	CITY OF MUSCATINE HOUSING RE	February Fuel	03/18/2025	0	38.70
Vendor Subtotal:					38.70
9006-90-9060-44204	MENARDS (MUSC)	PVC/Slip Joint/Adapter	03/18/2025	0	21.00
9006-90-9060-44204	MENARDS (MUSC)	SS Blinds Stock: Lumino 1" White Light	03/18/2025	0	286.20 00030058
9006-90-9060-44204	MENARDS (MUSC)	SS Blinds Stock: Lumino 1" White Light	03/18/2025	0	53.84 00030058
9006-90-9060-44204	MENARDS (MUSC)	SS Interior Trim Stock: Mastercraft® 1/2"	03/18/2025	0	299.98 00030095
Vendor Subtotal:					661.02
9006-90-9060-44204	AMAZON.COM	Passage Door Lever Handle Set	03/18/2025	0	84.65

			Vendor Subtotal:		84.65
9006-90-9060-44206	PLUMB SUPPLY COMPANY	Drain Cleaner	03/18/2025	0	48.02
9006-90-9060-44206	PLUMB SUPPLY COMPANY	Valves	03/18/2025	0	72.73
			Vendor Subtotal:		120.75
9006-90-9060-44218	AMAZON.COM	Range Burner	03/18/2025	0	80.88
			Vendor Subtotal:		80.88
9006-90-9060-44301	CITY OF MUSCATINE HOUSING RE	February Refuse	03/18/2025	0	7.00
			Vendor Subtotal:		7.00
9006-90-9060-44303	THOMAS L SPANN JR & SONYA CO	Monthly Pest Control	03/18/2025	0	50.00
9006-90-9060-44303	THOMAS L SPANN JR & SONYA CO	Pest Control 2900 E	03/18/2025	0	50.00
9006-90-9060-44303	THOMAS L SPANN JR & SONYA CO	Monthly Pest Control	03/18/2025	0	500.00
			Vendor Subtotal:		600.00
9006-90-9060-44311	KELLY HEATING COOLING & PLBC	Tub Leak 2804-C	03/18/2025	0	177.23
9006-90-9060-44311	KELLY HEATING COOLING & PLBC	Water Heater Repair 2804 E	03/18/2025	0	120.00
9006-90-9060-44311	KELLY HEATING COOLING & PLBC	Replace Shower Valve 2812 E	03/18/2025	0	414.50
			Vendor Subtotal:		711.73
9006-90-9060-44314	CARRIAGE HOUSE CARPET ONE	Repair	03/18/2025	0	75.00
			Vendor Subtotal:		75.00
9006-90-9060-45103	CITY OF MUSCATINE HOUSING RE	Unemployment 3/14/25	03/17/2025	0	6.34
			Vendor Subtotal:		6.34
9006-90-9060-45401	CITY OF MUSCATINE HOUSING RE	FICA 3/14/25	03/17/2025	0	477.58

			Vendor Subtotal:	477.58
9006-90-9060-45402	CITY OF MUSCATINE HOUSING RE IPERS 3/14/25	03/17/2025	0	598.55
			Vendor Subtotal:	598.55
9006-90-9060-75200	CARRIAGE HOUSE CARPET ONE SS Bulk Plank Flooring per ft² : Earthwe	03/18/2025	0	5,534.59 00029451
			Vendor Subtotal:	5,534.59
9006-90-9060-75200	MENARDS (MUSC) Vinyl Flooring Supplies	03/18/2025	0	85.88
			Vendor Subtotal:	85.88
			Subtotal for FUND: 9006	18,075.30
9007-90-9070-33002	MUNICIPAL COLLECTIONS OF AMIOffset Collections - Lerma	03/18/2025	0	11.37
9007-90-9070-33002	MUNICIPAL COLLECTIONS OF AMIOffset Collections - Santiago	03/18/2025	0	54.85
			Vendor Subtotal:	66.22
9007-90-9070-33004	MUNICIPAL COLLECTIONS OF AMIOffset Collections - Lerma	03/18/2025	0	11.36
9007-90-9070-33004	MUNICIPAL COLLECTIONS OF AMIOffset Collections - Santiago	03/18/2025	0	54.85
			Vendor Subtotal:	66.21
9007-90-9070-41100	CITY OF MUSCATINE HOUSING RE Admin Full-Time Wages 3/14/25	03/17/2025	0	5,790.18
9007-90-9070-41100	CITY OF MUSCATINE HOUSING RE Admin Part-Time Wages 3/14/25	03/17/2025	0	1,059.28
9007-90-9070-41100	CITY OF MUSCATINE HOUSING RE Admin Longevity 3/14/25	03/17/2025	0	13.33
			Vendor Subtotal:	6,862.79
9007-90-9070-41400	TCM BANK NA VISA BDO - Training Reg	03/18/2025	0	318.00
			Vendor Subtotal:	318.00
9007-90-9070-41500	CITY OF MUSCATINE HOUSING RE Auto Allowance 3/14/25	03/17/2025	0	12.50

			Vendor Subtotal:		12.50
9007-90-9070-41902	ADVANCED BUSINESS SYSTEMS INC	Copier	03/13/2025	0	20.22
			Vendor Subtotal:		20.22
9007-90-9070-41904	MUSCATINE POWER & WATER	February Phones	03/18/2025	0	22.39
			Vendor Subtotal:		22.39
9007-90-9070-41905	CITY OF MUSCATINE HOUSING RE	Postage	03/18/2025	0	371.64
			Vendor Subtotal:		371.64
9007-90-9070-41910	CROSSROADS INC.	Shredding	03/18/2025	0	22.00
			Vendor Subtotal:		22.00
9007-90-9070-41910	TENANT REPORTS.COM LLC	Background Checks	03/18/2025	0	140.00
			Vendor Subtotal:		140.00
9007-90-9070-45103	CITY OF MUSCATINE HOUSING RE	Unemployment 3/14/25	03/17/2025	0	6.90
			Vendor Subtotal:		6.90
9007-90-9070-45401	CITY OF MUSCATINE HOUSING RE	FICA 3/14/25	03/17/2025	0	504.99
			Vendor Subtotal:		504.99
9007-90-9070-45402	CITY OF MUSCATINE HOUSING RE	IPERS 3/14/25	03/17/2025	0	647.87
			Vendor Subtotal:		647.87
9007-90-9070-47150	MUSCATINE HOUSING LTD PARTN	New HAP D Snyder 29 of 31 Days Marc	03/18/2025	0	177.00
			Vendor Subtotal:		177.00

9007-90-9070-47150	W & H LLC	Abatement Ends 28 of 31 Days March	03/18/2025	0	623.00
		Vendor Subtotal:			623.00
9007-90-9070-47150	COLORADO SENIOR LOFTS LLC	New HAP G Reddick Full Feb/March	03/18/2025	0	670.00
		Vendor Subtotal:			670.00
9007-90-9071-41100	CITY OF MUSCATINE HOUSING RE Admin Full-Time Wages 3/14/25		03/17/2025	0	2,040.81
9007-90-9071-41100	CITY OF MUSCATINE HOUSING RE Admin Longevity 3/14/25		03/17/2025	0	3.25
		Vendor Subtotal:			2,044.06
9007-90-9071-41904	TCM BANK NA VISA	Google Voice	03/18/2025	0	26.49
		Vendor Subtotal:			26.49
9007-90-9071-41911	PETTY CASH	Bus Passes - Fonner/Meltzer	03/18/2025	0	64.00
		Vendor Subtotal:			64.00
9007-90-9071-45103	CITY OF MUSCATINE HOUSING RE Unemployment 3/14/25		03/17/2025	0	2.05
		Vendor Subtotal:			2.05
9007-90-9071-45401	CITY OF MUSCATINE HOUSING RE FICA 3/14/25		03/17/2025	0	149.05
		Vendor Subtotal:			149.05
9007-90-9071-45402	CITY OF MUSCATINE HOUSING RE IPERS 3/14/25		03/17/2025	0	192.96
		Vendor Subtotal:			192.96
		Subtotal for FUND: 9007			13,010.34

Report Total:

1,186,379.72

3/14/2025	PAYROLL CHECKS	AFA FLEX BILLING	4,711.63
3/14/2025	PAYROLL CHECKS	AFLAC	549.16
3/14/2025	PAYROLL CHECKS	ALLSTATE	14.94
3/14/2025	PAYROLL CHECKS	AMERICAN FIDELITY	3,433.59
3/14/2025	PAYROLL CHECKS	CITY OF MUSCATINE	8,645.11
3/14/2025	PAYROLL CHECKS	POLICE & FIRE INS	194.94
3/14/2025	PAYROLL CHECKS	POLK CO SHERIFF	79.37
3/14/2025	PAYROLL CHECKS	POTTAWATTAMIE CO	195.64
3/14/2025	PAYROLL CHECKS	STATE OF IL	198.40
3/14/2025	PAYROLL CHECKS	UNITED WAY	148.00
3/14/2025	ACH PAYROLL	MISSION SQUARE ICMA RETIRE	13,611.38
3/14/2025	ACH PAYROLL	MISSION SQUARE ICMA RC	2,201.29
3/14/2025	ACH PAYROLL	MUNICIPAL FIRE & POLICE	83,053.80
3/14/2025	ACH PAYROLL	NATIONWIDE	5,895.00
3/18/2025	SPECIAL CK	ALADTEC	3,847.00
3/18/2025	SPECIAL CK	WEST PUBLISHING	526.37



City of Muscatine

ITEM NUMBER

AGENDA ITEM SUMMARY

DATE: 3/20/2025

STAFF

Andrew Fangman, Assistant Community Development Director

SUBJECT

Public Hearing on Amending an Ordinance to Mirror the State Historic Building Code in the City Building Code, by Amending Section 4, Chapter 1, Title 8 of City Code

EXECUTIVE SUMMARY

The State Historic Building Code aims to provide greater flexibility in redeveloping historic buildings, especially concerning accessibility. It seeks to balance this flexibility with maintaining safety standards and complying with federal accessibility requirements under the Americans with Disabilities Act (ADA). The Construction Appeal and Advisory Board recommends adopting a City Building Code amendment that replicates the State Historic Building Code. Prior to action on such an amendment, a public hearing must be held.

STAFF RECOMMENDATION

BACKGROUND/DISCUSSION

Both the City of Muscatine and the State of Iowa have adopted the 2015 International Building Code (IBC) as their respective building codes. This includes the 2015 International Existing Building Code (IEBC), which governs work on existing structures.

The State of Iowa has also incorporated the State Historic Building Code within its building code framework. This code prioritizes the restoration and modification of historic buildings while preserving their original architectural integrity. It maintains safety while promoting cost-effective solutions. The State Historic Building Code replaces certain accessibility requirements in the IEBC with standards from Chapter 302 of the Iowa Administrative Code, offering greater flexibility in meeting federal accessibility regulations.

The City of Muscatine has adopted the 2015 IEBC without any modifications.

The State Historic Building Code applies to buildings covered by the State Building Code that

meet one of the following criteria:

- Designated as a historic property under local or state legislation or survey.
- Certified as a contributing resource within a National Register-listed or locally designated historic district.
- Possess an opinion or certification confirming their eligibility for inclusion on the state or National Register of Historic Places, either individually or as a contributing building to a historic district.

Since Muscatine has its own building code, the State Building Code does not apply to non-state-owned buildings within the city. Consequently, the increased flexibility offered by the State Historic Building Code is unavailable to qualifying historic buildings in Muscatine.

Prior to action on such an amendment, a public hearing must be held. This resolution sets that public hearing for the March 20th City Council meeting.

The city could achieve similar flexibility by adopting the same 2015 IEBC amendment as the state. This amendment would replace specific accessibility requirements in the IEBC with standards from Chapter 302 of the Iowa Administrative Code.

Following extensive discussions across multiple meetings on creating such flexibility, the Construction Appeals and Advisory Board voted to recommend the adoption of a City Building Code amendment that mirrors the State Historic Building Code.

The board discussed eligibility criteria for applying the proposed amendment to the code. Two approaches were discussed:

- 1) Mirroring, the State Historic Building Code: Require structures to be individually listed on the National Register, listed as contributing structures in a National Register-listed historic district, or have a certification of eligibility; or
- 2) Establishing Age or Built-By Date: Locally set a specific age or built-by date for eligible structures.

The board came to consensus that the State Historic Building Code's eligibility criteria should be maintained. Using this approach, the 13 structures individually listed on the National Register of Historic Places and the 459 buildings listed as contributing structures in one of the three National Register-listed historic districts would be eligible for the modified accessibility standards. For structures not listed, the City Historic Preservation Commission could issue an opinion on eligibility for listing on the state or National Register, either individually or as a contributing building to a historic district.

For additional information and understanding of the proposal, the following documents are attached:

- **Draft Code Language:** This proposed addition to Section 8-1-4(D) would implement the recommendation of the Construction Appeals and Advisory Board.
- **Full Text of the State Historic Building Code:** This includes Chapter 302 of the State Building Code and the relevant sections of the 2015 International Existing Building Code (IEBC) that would be replaced.
- **List of Structures:** This document includes properties in Muscatine that are individually listed on the National Register of Historic Places or are designated as contributing structures within one of the three National Register-listed historic districts.
- **Construction Appeals and Advisory Board Minutes:** These minutes document the discussions regarding this issue by the Board.

CITY FINANCIAL IMPACT

ATTACHMENTS

1. Draft Code Language (Proposed Section 8-1-4(D) of City Code)
2. Sections of 2015 IEBC That Would be Superseded by Adoption of the Historic Building Code
3. State Historic Building Code
4. Chapter 302 State Building Code—Accessibility of Buildings and Facilities Available to the Public
5. EligibleStructureList
6. 09.25.2024 Construction Appeal and Advisory Board Minutes
7. 08.28.2024 Construction Appeal and Advisory Board Minutes

8-1-4(D) Historic Building Code

1. Purpose

The purpose of the historic building code is to facilitate the restoration or change of occupancy of qualified historic buildings or structures so as to preserve their original or restored architectural elements and features and, concurrently, to provide reasonable safety to occupants and users, through a cost-effective approach to preservation.

2. Scope

This Section applies to any structure that meets any of the following criteria:

- a.** Is listed in the state or National Register of Historic Places
 - b.** Is certified as a contributing resource within a National Register-listed designated historic district.
 - c.** That has an opinion that the property is eligible to be listed on the state or National Register of Historic Places either individually or as a contributing building to a historic district by the City of Muscatine Historic Preservation Commission.
- 3.** This Section provides alternative standards to following certain specifically identified provisions of the International Existing Building Code, 2015 edition.
 - a.** The following sections are deleted:
 - i.** Section 705
 - ii.** Section 906
 - iii.** Section 1012.8
 - iv.** Section 1105.1
 - v.** Section 1205.1
 - vi.** Appendix B
 - b.** In lieu of the sections of the IEBC referenced in Section 8-1-4(D)(3)(a), the provisions of *the Iowa Administrative Code 661—Chapter 302 State Building Code—Accessibility of Buildings and Facilities Available to the Public*, may be applied to qualifying structures.
 - c.** Definition The definition of “Historic Building” is amended to read as follows: “Historic Building” means any structure meeting the eligibly criteria set forth in Section 8-1-4(D)(2) of “Historic Building”

CHAPTER 2

DEFINITIONS

SECTION 201 GENERAL

[A] HISTORIC BUILDING. Any building or structure that is one or more of the following:

1. Listed, or certified as eligible for listing, by the State Historic Preservation Officer or the Keeper of the National Register of Historic Places, in the National Register of Historic Places.
2. Designated as historic under an applicable state or local law.
3. Certified as a contributing resource within a National Register, state designated or locally designated historic district.

SECTION 705 ACCESSIBILITY

705.1 General.

A *facility* that is altered shall comply with the applicable provisions in Sections 705.1.1 through 705.1.14, and Chapter 11 of the *International Building Code* unless it is *technically infeasible*. Where compliance with this section is *technically infeasible*, the alteration shall provide access to the maximum extent that is technically feasible.

A *facility* that is constructed or altered to be accessible shall be maintained accessible during occupancy.

Exceptions:

1. The altered element or space is not required to be on an accessible route unless required by Section 705.2.

SECTION 906 ACCESSIBILITY

906.1 General.

A building, *facility* or element that is altered shall comply with this section and Sections 705 and 806.

906.2 Type B dwelling or sleeping units.

Where four or more Group I-1, 1-2, R-1, R-2, R-3 dwelling or sleeping units are being altered, the requirements of Section 1107 of the *International Building Code* for Type B units and Chapter 9 of the *International Building Code* for visible alarms apply only to the quantity of the spaces being altered.

1012.8 Accessibility

Existing buildings that undergo a change of group or occupancy classification shall comply with this section.

Exception: Type B dwelling or sleeping units required by Section 1107 of the *International Building Code* are not required to be provided in existing buildings and facilities undergoing a *change of occupancy* in conjunction with less than a Level 3 alteration.

1012.8.1 Partial change in occupancy.

Where a portion of the building is changed to a new occupancy classification, any alteration shall comply with Sections 705, 806 and 906, as applicable.

1012.8.2 Complete change of occupancy.

Where an entire building undergoes a *change of occupancy*, it shall comply with Section 1012.8.1 and shall have all of the following accessible features:

1. At least one accessible building entrance.
2. At least one accessible route from an accessible building entrance to *primary function* areas.
3. Signage complying with Section 1111 of the *International Building Code*.
4. Accessible parking, where parking is provided.
5. At least one accessible passenger loading zone, where loading zones are provided.
6. At least one accessible route connecting accessible parking and accessible passenger loading zones to an accessible entrance.

Where it is *technically infeasible* to comply with the new construction standards for any of these requirements for a change of group or occupancy, the above items shall conform to the requirements to the maximum extent technically feasible.

Exception: The accessible features listed in Items 1 through 6 are not required for an accessible route to Type B units.²⁰¹⁵

SECTION 1105 ACCESSIBILITY

1105.1 Minimum requirements.

Accessibility provisions for new construction shall apply to additions. An addition that affects the accessibility to, or contains an area of, *primary function* shall comply with the requirements of Sections 705, 806 and 906, as applicable.

SECTION 1205 CHANGE OF OCCUPANCY

1205.15 Accessibility requirements.

The provisions of Section 1012.8 shall apply to facilities designated as historic structures that undergo a *change of occupancy*, unless *technically infeasible*. Where compliance with the requirements for accessible routes, ramps, entrances, or toilet rooms would threaten or destroy the historic significance of the building or *facility*, as determined by the authority having jurisdiction, the alternative requirements of Sections 1204.1.1 through 1204.1.4 for those elements shall be permitted

Exception: Type B dwelling or sleeping units required by Section 1107 of the *International Building Code* are not required to be provided in historical buildings.

APPENDIX B

SUPPLEMENTARY ACCESSIBILITY REQUIREMENTS FOR EXISTING BUILDINGS AND FACILITIES

The provisions contained in this appendix are not mandatory unless specifically referenced in the adopting ordinance.

SECTION B101 QUALIFIED HISTORICAL BUILDINGS AND FACILITIES

B101.1 **General.**

Qualified historic buildings and facilities shall comply with Sections B101.2 through B101.5.

B101.2 Qualified historic buildings and facilities.

These procedures shall apply to buildings and facilities designated as historic structures that undergo alterations or a *change of occupancy*.

B101.3 Qualified historic buildings and facilities subject to Section 106 of the National Historic Preservation Act.

Where an *alteration* or *change of occupancy* is undertaken to a qualified *historic building* or facility that is subject to Section 106 of the National Historic Preservation Act, the federal agency with jurisdiction over the undertaking shall follow the Section 106 process. Where the state historic preservation officer or Advisory Council on Historic Preservation determines that compliance with the requirements for accessible routes, ramps, entrances, or toilet facilities would threaten or destroy the historic significance of the building or facility, the alternative requirements of Section 410.9 for that element are permitted.

B101.4 Qualified historic buildings and facilities not subject to Section 106 of the National Historic Preservation Act.

Where an *alteration* or *change of occupancy* is undertaken to a qualified *historic building* or facility that is not subject to Section 106 of the National Historic Preservation Act, and the entity undertaking the alterations believes that compliance with the requirements for accessible routes, ramps, entrances, or toilet facilities would threaten or destroy the historic significance of the building or facility, the entity shall consult with the state historic preservation officer. Where the state historic preservation officer determines that compliance with the accessibility requirements for accessible routes, ramps, entrances, or toilet facilities would threaten or destroy the historical significance of the building or facility, the alternative requirements of Section 410.9 for that element are permitted.

B101.4.1 Consultation with interested persons.

Interested persons shall be invited to participate in the consultation process, including state or local accessibility officials, individuals with disabilities, and organizations representing individuals with disabilities.

B101.4.2 Certified local government historic preservation programs.

Where the state historic preservation officer has delegated the consultation responsibility for

purposes of this section to a local government historic preservation program that has been certified in accordance with Section 101 of the National Historic Preservation Act of 1966 [(16 U.S.C. 470a(c))] and implementing regulations (36 CFR 61.5), the responsibility shall be permitted to be carried out by the appropriate local government body or official.

B101.5 Displays.

In qualified historic buildings and facilities where alternative requirements of Section 1105 are permitted, displays and written information shall be located where they can be seen by a seated person. Exhibits and signs displayed horizontally shall be 44 inches (1120 mm) maximum above the floor.

SECTION B102 FIXED TRANSPORTATION FACILITIES AND STATIONS

B102.1 General.

Existing fixed transportation facilities and stations shall comply with Section B102.2.

B102.2 Existing facilities—key stations.

Rapid rail, light rail, commuter rail, intercity rail, high-speed rail and other fixed guideway systems, altered stations, and intercity rail and key stations, as defined under criteria established by the Department of Transportation in Subpart C of 49 CFR Part 37, shall comply with Sections B102.2.1 through B102.2.3.

B102.2.1 Accessible route.

At least one accessible route from an accessible entrance to those areas necessary for use of the transportation system shall be provided. The accessible route shall include the features specified in Appendix E109.2 of the *International Building Code*, except that escalators shall comply with *International Building Code* Section 3004.2.2. Where technical unfeasibility in existing stations requires the accessible route to lead from the public way to a paid area of the transit system, an accessible fare collection machine complying with *International Building Code* Appendix E109.2.3 shall be provided along such accessible route.

B102.2.2 Platform and vehicle floor coordination.

Station platforms shall be positioned to coordinate with vehicles in accordance with applicable provisions of 36 CFR Part 1192. Low-level platforms shall be 8 inches (250 mm) minimum above top of rail.

Exception: Where vehicles are boarded from sidewalks or street-level, low-level platforms shall be permitted to be less than 8 inches (250 mm).

B102.2.3 Direct connections.

New direct connections to commercial, retail, or residential facilities shall, to the maximum extent feasible, have an accessible route complying with Section 705.2 from the point of connection to boarding platforms and transportation system elements used by the public. Any elements provided to facilitate future direct connections shall be on an accessible route connecting boarding platforms and transportation system elements used by the public.

**SECTION B103
DWELLING UNITS AND SLEEPING UNITS**

B103.1 Communication features.

Where dwelling units and sleeping units are altered or added, the requirements of Section E104.3 of the *International Building Code* shall apply only to the units being altered or added until the number of units with accessible communication features complies with the minimum number required for new construction.

**SECTION B104
REFERENCED STANDARDS**

Y3.H626 2P National Historic Preservation J101.2, 43/933 Act of 1966, as amended J101.3, 3rd Edition, Washington, DC: J101.3.2 US Government Printing Office, 1993.

2012 *International Building Code*. Washington, DC: International Code Council, 2011.

49 CFR Part 37.43 (c), Alteration of Transportation Facilities by Public Entities, Department of Transportation, 400 7th Street SW, Room

CHAPTER 350
STATE HISTORIC BUILDING CODE

661—350.1(103A) Scope and definition.

350.1(1) Scope. This chapter applies to buildings which meet the requirements for placement on the National Register of Historic Places. This chapter is an alternative to the state building code or local building codes for the buildings to which it applies.

“Historic building” means any building or structure that is listed in the state or National Register of Historic Places; that is designated as a historic property under local or state designation law or survey; that is certified as a contributing resource within a National Register-listed or locally designated historic district; or that has an opinion or certification that the property is eligible to be listed on the state or National Register of Historic Places either individually or as a contributing building to a historic district by the state historic preservation officer pursuant to Iowa Code section 103A.42 or the Keeper of the National Register of Historic Places.

350.1(2) Administration. The provisions of 661—Chapter 300 are adopted by reference.

350.1(3) Adoption. The provisions of the International Existing Building Code, 2015 edition, published by the International Code Council, 500 New Jersey Avenue NW, 6th Floor, Washington, D.C. 20001, are hereby adopted as the alternative requirements for rehabilitation, preservation, restoration, repair, alteration, change of occupancy and relocation of and addition to historic buildings, with the following amendments:

Delete section 101.1.

Delete section 101.4.2 and insert in lieu thereof the following new section:

101.4.2 Buildings previously occupied. The legal occupancy of any structure existing on the date of adoption of this code shall be permitted to continue without change, except as specifically covered in this code or the state fire code, or as deemed necessary by the building code commissioner for the general safety and welfare of the occupants and the public.

Delete section 101.5.

Delete section 101.6.

Delete section 101.7.

Delete sections 103, 104, and 105 and sections therein.

Delete sections 106.1, 106.3, 106.4, 106.5, and 106.6.

Delete sections 108, 109, 110, 112, 113, 114, 115, 116 and 117 and sections therein.

Delete the definition of “historic building.”

Delete section 705.

Delete section 906.

Delete section 1012.8.

Delete section 1105.1.

Delete section 1205.15.

Delete appendix B and insert in lieu thereof “Any building or facility subject to this Chapter shall comply with the provisions of 661—Chapter 302.”

Delete all references to the “International Fuel Gas Code” and insert in lieu thereof “rule 661—301.9(103A).”

Delete all references to the “International Plumbing Code” and insert in lieu thereof “state plumbing code.”

Delete all references to the “International Mechanical Code” and insert in lieu thereof “state mechanical code.”

Delete all references to the “International Building Code” and insert in lieu thereof “rule 661—301.3(103A).”

Delete all references to the “International Residential Code” and insert in lieu thereof “rule 661—301.8(103A).”

Delete all references to the “International Fire Code” and insert in lieu thereof “state fire code.”

EXCEPTION: A construction project subject to the provisions of this rule may comply with either the requirements adopted herein or the provisions of this rule as it was previously published if the project is commenced on or before June 30, 2016.

NOTE 1: International Existing Building Code, 2015 edition, Resource A, provides guidelines for evaluating fire ratings of archaic materials and assemblies which may be used by designers and code officials when evaluating compliance with provisions of this chapter.

NOTE 2: Except for elevators excluded from the jurisdiction of the Iowa division of labor services by the provisions of Iowa Code section 89A.2, each elevator is required to comply with any applicable requirements established by the Iowa division of labor services and is subject to enforcement of any applicable regulations by the Iowa division of labor services.

NOTE 3: Except for boilers and pressure vessels excluded from the jurisdiction of the Iowa division of labor services by the provisions of Iowa Code section 89.4, each boiler or pressure vessel is required to comply with any applicable requirements established by the Iowa division of labor services and is subject to enforcement of any applicable regulations by the Iowa division of labor services.

Any boiler which is subject to requirements established by the Iowa department of natural resources is required to comply with any such requirements and is subject to enforcement of any applicable regulations by the Iowa department of natural resources.

This rule is intended to implement Iowa Code sections 103A.41 through 103A.45.

[ARC 8304B, IAB 11/18/09, effective 1/1/10; ARC 2493C, IAB 4/13/16, effective 5/18/16]

[Filed 12/2/05, Notice 9/14/05—published 12/21/05, effective 4/1/06]

[Filed 11/1/06, Notice 9/27/06—published 11/22/06, effective 1/1/07]

[Filed ARC 8304B (Notice ARC 8180B, IAB 9/23/09), IAB 11/18/09, effective 1/1/10]

[Filed ARC 2493C (Notice ARC 2265C, IAB 11/25/15), IAB 4/13/16, effective 5/18/16]

CHAPTER 302
STATE BUILDING CODE—ACCESSIBILITY OF BUILDINGS AND
FACILITIES AVAILABLE TO THE PUBLIC

[Prior to 12/21/05, see rules 661—16.700(103A,104A) to 661—16.720(103A,104A)]

661—302.1(103A,104A) Purpose and scope. Rules 661—302.1(103A,104A) through 661—302.20(103A,104A) are intended to ensure that buildings and facilities used by the public, other than places of worship, are accessible to, and functional for, persons with disabilities. Rule 661—302.3(103A,104A) applies statewide to new construction of buildings and facilities available to the public and to renovation and rehabilitation projects on existing buildings and facilities when local or state building codes require compliance with standards for new construction. Rule 661—302.20(103A,104A) applies statewide to construction of multiunit residential buildings.

NOTE A: Although rule 661—302.2(103A,104A) is based upon the federal 2010 ADA Standards for Accessible Design and adopts the language of the 2010 ADA Standards for Accessible Design by reference, and rule 661—302.20(103A,104A) is based upon the requirements of the federal Fair Housing Act, state and local building officials charged with enforcement of these rules are unable to warrant the acceptance of any approval of design or construction by federal agencies or any other state. A state or local official's decision to approve a building plan under these rules does not prevent the federal government or another state from making a different decision under applicable law, notwithstanding any similarities among such laws.

NOTE B: Other federal and state laws address requirements for accessibility for persons with disabilities and may be applicable to buildings and facilities subject to rules 661—302.1(103A,104A) through 661—302.20(103A,104A). Nothing in these rules should be interpreted as limiting the applicability of other provisions of state or federal law. These provisions include, but are not limited to, the following:

1. Iowa Code chapter 216, the Iowa civil rights Act of 1965.
2. Iowa Code chapter 216C, which enumerates the rights of persons who are blind or partially blind and persons with physical disabilities.
3. Iowa Code chapter 321L and 661—Chapter 18, which relate to requirements for parking for persons with disabilities.
4. The federal Architectural Barriers Act of 1968 (Public Law 90-480).
5. The federal Rehabilitation Act of 1973 (Public Law 93-112).
6. The federal Fair Housing Act of 1968 (Public Law 90-284), the federal Fair Housing Amendments Act of 1988 (Public Law 100-430), and related regulations, including 24 CFR 100, Subpart D.

[ARC 9993B, IAB 2/8/12, effective 3/15/12]

661—302.2(103A,104A) Definitions. The following definitions are adopted for purposes of rules 661—302.1(103A,104A) through 661—302.20(103A,104A).

“ADA” means the federal Americans with Disabilities Act, Public Law 101-336.

“ADAAG” means Americans with Disabilities Act Accessibility Guidelines for Buildings and Facilities, 28 CFR Part 36, Appendix A, as revised through July 1, 1994.

“ADASAD 2010” means 2010 ADA Standards for Accessible Design, published by the U.S. Department of Justice, September 15, 2010. Included in the publication are accessibility standards for state and local government facilities and accessibility standards for public accommodations and commercial facilities.

NOTE: Copies of ADASAD 2010 and additional explanatory material may be downloaded from <http://www.ada.gov/regs2010/ADAregs2010.htm>.

“IBC 2015” means the International Building Code, 2015 edition, published by the International Code Council, 500 New Jersey Avenue NW, 6th Floor, Washington, D.C. 20001.

[ARC 9993B, IAB 2/8/12, effective 3/15/12; ARC 2492C, IAB 4/13/16, effective 5/18/16]

661—302.3(103A,104A) Accessibility of buildings and facilities available to the public. Buildings and facilities which are available to the public, other than places of worship, shall comply with one of the following:

302.3(1) Applicable provisions of ADASAD 2010, or

302.3(2) IBC 2015, Chapter 11 and applicable accessibility provisions contained in IBC 2015.

NOTE: Approval of construction plans based upon compliance with the applicable provisions of the International Building Code, 2015 edition, as provided, does not relieve the designer, builder, building owner, or building operator from responsibility under federal law to comply with all applicable provisions of the 2010 ADA Standards for Accessible Design.

[ARC 9993B, IAB 2/8/12, effective 3/15/12; ARC 2492C, IAB 4/13/16, effective 5/18/16]

Rules 661—302.1(103A,104A) to 661—302.3(103A,104A) are intended to implement Iowa Code sections 103A.7, 103A.9, and 104A.1.

661—302.4(103A,104A) Site development. Rescinded IAB 2/8/12, effective 3/15/12.

661—302.5(103A,104A) Building elements and spaces accessible to the physically handicapped. Rescinded IAB 2/8/12, effective 3/15/12.

661—302.6(103A,104A) Restaurants and cafeterias. Rescinded IAB 2/8/12, effective 3/15/12.

661—302.7(103A,104A) Medical care facilities. Rescinded IAB 2/8/12, effective 3/15/12.

661—302.8(103A,104A) Business and mercantile facilities. Rescinded IAB 2/8/12, effective 3/15/12.

661—302.9(103A,104A) Libraries. Rescinded IAB 2/8/12, effective 3/15/12.

661—302.10(103A,104A) Transient lodging facilities. Rescinded IAB 2/8/12, effective 3/15/12.

661—302.11(103A,104A) Transportation facilities. Rescinded IAB 2/8/12, effective 3/15/12.

661—302.12 to 302.19 Reserved.

661—302.20(103A,104A) Making apartments accessible and functional for persons with disabilities.

302.20(1) Multiple dwelling unit buildings. This rule shall apply to all multiple dwelling unit buildings that consist of four or more dwelling units, if such buildings have one or more elevators. In such buildings without an elevator, all ground floor units must be accessible. The requirements of this rule shall apply to the individual dwelling units and the common use spaces which are accessible to persons with disabilities in multiple dwelling unit buildings.

EXCEPTION 1: A multiple dwelling unit building shall be deemed to be in compliance with this rule if it is located in a local jurisdiction which has enacted accessibility rules which have been recognized by the U.S. Department of Housing and Urban Development as providing a safe harbor for compliance with the accessibility requirements established in the federal Fair Housing Act and if the building has been found to be in compliance with those requirements, unless the building is required to comply with the requirements of the Uniform Federal Accessibility Standards, or other applicable standards which may be more restrictive than the provisions of this rule.

EXCEPTION 2: Certain multiple dwelling unit buildings are required to comply with the Uniform Federal Accessibility Standards, published by the U.S. Access Board, 1988. Compliance with the provisions of this rule does not substitute for compliance with any applicable provision of the Uniform Federal Accessibility Standards, or any other applicable standards which may be more restrictive than the provisions of this rule.

NOTE: Compliance with the Uniform Federal Accessibility Standards is generally required for buildings and facilities constructed with federal financial assistance.

“Dwelling unit” means a single unit of residence for a household of one or more persons. Examples of a dwelling unit covered by these rules include a condominium, an apartment unit within an apartment building, and another type of dwelling in which sleeping accommodations are provided but toilet or cooking facilities are shared by occupants of more than one room or portion of the dwelling. Examples of the latter include dormitory rooms and sleeping accommodations in shelters intended for occupancy as a residence for homeless persons.

“Ground floor” means a floor of a building with a building entrance on an accessible route. A building may have one or more ground floors. Where the first floor containing dwelling units in a building is above grade, all units on that floor must be served by a building entrance on an accessible route. This floor will be considered to be a ground floor.

a. The individual dwelling units shall contain an accessible route into and through the unit.

(1) All doors intended for use as passage through the dwelling unit shall have a clear opening of at least 32" nominal width with the door open 90 degrees, measured between the face of the door and the stop. Openings more than 24" in depth are not considered doorways.

NOTE: A 34" door, hung in the standard manner, provides an acceptable 32" opening.

(2) Except at doorways, the minimum clear width of the accessible route shall be at least 36" wide.

(3) In single-story units, special features such as lofts or sunken or raised areas are not required to be on an accessible route provided the areas do not interrupt the accessible route through the remainder of the dwelling unit.

(4) In multistory dwelling units in buildings with elevators, the story of the unit that is served by the building elevator shall be the primary entry to the unit and such entry/accessible floor shall comply with the requirements of subparagraphs (1), (2) and (3) above. The entry/accessible floor shall contain a bathroom or powder room which complies with paragraph “c” below.

(5) Exterior deck, patio, or balcony surfaces shall be no more than ½" below the floor level of the interior of the dwelling unit, unless they are constructed of impervious material such as concrete, brick or flagstone. In such case, the surface shall be no more than 4" below the floor level of the interior or lower if required by local building code.

(6) Thresholds at exterior doors, including sliding tracks, shall be no higher than ¾". Thresholds and changes in elevations as in subparagraph (5) above shall be beveled with a slope no greater than 1:2.

b. Kitchens shall meet or be adaptable to meet the following:

(1) A clear floor space at least 30" × 48" that allows a parallel approach by a person in a wheelchair must be provided at the range or cooktop and the sink. Either a parallel or forward approach must be provided at the oven, dishwasher, refrigerator/freezer or trash compactor.

(2) Clearance between counters and all opposing base cabinets, countertops, appliances or walls must be at least 40". In U-shaped kitchens with a sink or cooktop at the base of the “U,” the base cabinets must be removable at that location or a 60" turning radius must be provided.

c. All bathrooms of covered multifamily dwelling units shall comply with provisions of subparagraph (1) of this paragraph or at least one bathroom in the dwelling unit shall comply with provisions of subparagraph (2) of this paragraph and all other bathrooms and powder rooms within the dwelling unit must be on an accessible route with usable entry doors in accordance with paragraph “a” above.

However, in multistory dwelling units, only those bathrooms on the accessible level are subject to these requirements. Where the powder room is the only facility provided on the accessible level of a multistory dwelling unit, the powder room must comply with the provisions of subparagraph (1) or (2) of this paragraph.

(1) Sufficient maneuvering space shall be provided within the bathroom for a person using a wheelchair or other mobility aid to enter and close the door, use the fixtures, reopen the door and exit. Doors may swing into the clear floor space provided at any fixture if the maneuvering space is provided. Maneuvering space may include any knee space or toe space available below the bathroom fixtures.

Clear floor space at fixtures may overlap.

If the shower stall is the only bathing facility provided in the covered dwelling unit, the shower stall shall measure at least 36" × 36".

NOTE: Cabinets under lavatories are acceptable provided the bathroom has space to allow a parallel approach by a person in a wheelchair; if parallel approach is not possible within the space, any cabinets provided would have to be removable to afford the necessary knee clearance for forward approach.

(2) Where the door swings into the bathroom, there shall be a clear space (2'6" × 4'0") within the room to position a wheelchair or other mobility aid clear of the path of the door as it is closed and to permit the use of the fixtures. This clear space can include any knee space and toe space available below the bathroom fixtures.

Where the door swings out, a clear space shall be provided within the bathroom for a person using a wheelchair or other mobility aid to position the wheelchair such that the person is allowed use of the fixtures. There also shall be a clear space to allow persons using wheelchairs to reopen the door to exit.

When both tub and shower fixtures are provided in the bathroom, at least one fixture shall be made accessible. When two or more lavatories are provided in a bathroom, at least one shall be made accessible.

Toilets shall be located within bathrooms in a manner that permits a grab bar to be installed on one side of the fixture. In locations where toilets are adjacent to walls or bathtubs, the centerline of the fixture shall be a minimum of 1'6" from the obstacle. The other (nongrab bar) side of the toilet fixture shall be a minimum of 1'3" from the finished surface of the adjoining walls, vanities, or the edge of a lavatory.

Vanities and lavatories shall be installed with the center line of the fixture a minimum of 1'3" horizontally from an adjoining wall or fixture. The top of the fixture rim is a maximum height of 2'10" above the finished floor. If knee space is provided below the vanity, the bottom of the apron is at least 2'3" above the floor. If provided, full knee space (for front approach) is at least 1'5" deep.

Bathtubs and tub/showers located in the bathroom shall provide a clear access aisle adjacent to the lavatory that is at least 2'6" wide and extends for a length of 4'0" (measured from the head of the bathtub).

Stall showers in the bathroom may be of any size or configuration. A minimum clear floor space 2'6" wide × 4'0" deep should be available outside the stall. If the shower stall is the only bathing facility provided in the covered dwelling unit, or on the accessible level of a covered multistory unit, and measures a nominal 36" × 36", the shower stall must have reinforcing to allow for installation of an optional wall-hung bench seat.

d. Walls in bathrooms which are to be adaptable shall be reinforced to allow later installation of grab bars around toilet, tub, shower stall and shower seat where provided.

Where the toilet is not placed adjacent to a side wall, provision shall be made for floor-mounted foldaway or similar alternative grab bars. Where the powder room is the only toilet facility located on an accessible level of a multistory dwelling unit, it must comply with this requirement for reinforced walls for grab bars. "Powder room" means a room with a toilet and sink.

NOTE: A tub may have shelves or benches at either end; or a tub may be installed without surrounding walls, if there is provision for alternative mounting of grab bars. For example, a sunken tub placed away from walls could have reinforced areas for installation of floor-mounted grab bars. The same principle applies to shower stalls, e.g., glass-walled stalls could be planned to allow floor-mounted grab bars to be installed later.

Reinforcement for grab bars may be provided in a variety of ways (for example, by plywood or wood blocking) so long as the necessary reinforcement is placed so as to permit later installation of appropriate grab bars.

e. Public and common use areas shall be readily accessible to and usable by persons with disabilities.

f. Light switches, electrical outlets, thermostats and other environmental controls shall be located no higher than 48", and no lower than 15", above the floor. If the reach is over an obstruction (for example, an overhanging shelf) between 20" and 25" in depth, the maximum height is reduced to 44" for forward approach; or 46" for side approach, provided the obstruction (for example, a kitchen base cabinet) is no more than 24" in depth. Obstructions should not extend more than 25" from the wall beneath a control. (See ADAAG Figure 5.)

NOTE: Controls or outlets that do not satisfy these specifications are acceptable provided that comparable controls or outlets (i.e., that perform the same functions) are provided within the same area and are accessible.

302.20(2) Elevators. An elevator shall be required in any apartment building of four or more stories. An elevator required by this subrule shall meet the requirements established for accessible elevators in rule 661—302.5(103A,104A), which adopts by reference section 4.10 of the Americans with Disabilities Act Accessibility Guidelines (28 CFR Part 36, Appendix A).

NOTE: Elevators are not required in apartment buildings of three or fewer stories; however, the Uniform Federal Accessibility Standards, or any other applicable standard, may require the installation of an elevator. If an elevator is not required to be installed by this rule, then the elevator is not subject to the requirements of rule 661—302.5(103A,104A).

302.20(3) Any covered units within a multiple unit dwelling which comply with a code or standard which has been certified as a safe harbor for compliance with the accessibility requirements of the federal Fair Housing Act by the U.S. Department of Housing and Urban Development shall be deemed to be in compliance with rule 661—302.20(103A,104A), unless the covered units are required to comply with the Uniform Federal Accessibility Standards or any other applicable requirements which may be more restrictive than the provisions of this rule.

Rule 661—302.20(103A,104A) is intended to implement Iowa Code sections 103A.7(5) and 104A.2.

[Filed 12/2/05, Notice 9/14/05—published 12/21/05, effective 4/1/06]

[Filed ARC 9993B (Notice ARC 9922B, IAB 12/14/11), IAB 2/8/12, effective 3/15/12]

[Filed ARC 2492C (Notice ARC 2250C, IAB 11/25/15), IAB 4/13/16, effective 5/18/16]

Structures Individually Listed on the National Register of Historic Places of Historic Places

- S. M. McKibben House – Walnut St.
- Old Jail – 411 E. 4th St. – 1974
- Sinnett Octagon House – Park Ave near Hwy 61 bypass
- Trinity Episcopal Church – 411 E. 2nd St.
- Alexander Clark House – 203 W. 3rd St.
- First Presbyterian Church – 401 Iowa Ave.
- J. C. B. Warde House – 205 Cherry St.
- Welch Apartments – 224 Iowa Ave.
- Muscatine County Courthouse – 3rd St.
- W. Joseph Fuller House – 1001 Mulberry Ave.
- Clark-Blackwell House – 206 Cherry St.
- Pliny and Adelia Fay House – 112 Locust St.
- Greenwood Cemetery Chapel – 1814 Lucas

Structures Listed as Contributing to the Downtown Commercial Historic District

- 228 W. 2nd Street
- 224 W. 2nd Street
- 218 W. 2nd Street
- 217-219 W. 2nd Street
- 212 W. 2nd Street
- 209-211 W. 2nd Street
- 208-210 W. 2nd Street
- 207 W. 2nd Street
- 206 W. 2nd Street
- 205 W. 2nd Street
- 201-203 W. 2nd Street
- 200-202-204 W. 2nd Street
- 131-133 W. 2nd Street
- 128 W. 2nd Street
- 124-126 W. 2nd Street
- 123-129 W. 2nd Street
- 117-121 W. 2nd Street
- 100-102 W. 2nd Street
- 100 E. 2nd Street
- 101 E. 2nd Street
- 102-104 E. 2nd Street
- 106-108 E. 2nd Street
- 110-112-114-116 E. 2nd Street
- 115 E. 2nd Street
- 121-123 E. 2nd Street
- 124 E. 2nd Street
- 127 E. 2nd Street
- 129 E. 2nd Street
- 130 E. 2nd Street
- 200 E. 2nd Street
- 201 E. 2nd Street
- 203 E. 2nd Street
- 204 E. 2nd Street
- 205 E. 2nd Street
- 206 E. 2nd Street
- 207-209 E. 2nd Street
- 208-210-212 E. 2nd Street
- 211 E. 2nd Street
- 213 E. 2nd Street
- 214-216-218-220 E. 2nd Street
- 215 E. 2nd Street
- 217 E. 2nd Street
- 219-221-223 E. 2nd Street
- 225 E. 2nd Street
- 227 E. 2nd Street
- 229 E. 2nd Street
- 301 E. 2nd Street
- 303 E. 2nd Street
- 305 E. 2nd Street
- 307-309-311 E. 2nd Street
- 313 E. 2nd Street
- 315-317 E. 2nd Street
- 319-321 E. 2nd Street
- 323-325 E. 2nd Street
- 327-329-331 E. 2nd Street
- 411 E. 2nd Street
- 413-415 E. 2nd Street
- 417 E. 2nd Street
- 419 E. 2nd Street
- 224 E. 3rd Street
- 301 E. 3rd Street
- 317 E. 3rd Street
- 400 E. 3rd Street
- 206-208 Cedar Street
- 210 Cedar Street
- 115 Chestnut Street
- 116 Chestnut Street
- 117 Chestnut Street
- 118 Chestnut Street
- 119 Chestnut Street
- 213 Chestnut Street
- 214 Chestnut Street
- 107 Iowa Avenue
- 109-111-113 Iowa Av
- 214 Iowa Avenue
- 214 ½ Iowa Avenue
- 216-218 Iowa Ave
- 220-224-226 Iowa
- 315-317 W. Mississippi Dr
- 305 W. Mississippi Dr
- 301 W. Mississippi Dr
- 221-225 W. Mississippi Drive
- 101 W. Mississippi Dr
- 101 E. Mississippi Dr
- 117 E. Mississippi Dr
- 126 Pine Street
- 214-216-218 Sycamore St
- 215 Sycamore Street
- 206-208 Walnut St
- 210 Walnut Street
- 212 Walnut Street
- 214 Walnut Street
- 216 Walnut Street
- 218 Walnut Street
- 220 Walnut Street
- 222 Walnut Street
- 224 Walnut Street
- 228 Walnut Street

Structures Listed as Contributing to the West Hill Historic District

- 301 W. 2nd Street
- 309 W. 2nd Street
- 313 W. 2nd Street
- 315 W. 2nd Street
- 317-319 W. 2nd St
- 321 W. 2nd Street
- 323 W. 2nd Street
- 326 W. 2nd Street
- 403 W. 2nd Street
- 411 W. 2nd Street
- 415 W. 2nd Street
- 419 W. 2nd Street
- 326 W. 2nd Street
- 400 W. 2nd Street
- 406 W. 2nd Street
- 414 W. 2nd Street
- 107 Spruce Street
- 502 W. 2nd Street
- 506 W. 2nd Street
- 510 W. 2nd Street
- 516 W. 2nd Street
- 503 W. 2nd Street
- 507 W. 2nd Street
- 511 W. 2nd Street
- 107 Locust Street
- 112 Locust Street
- 515 W. 2nd Street
- 608 W. 2nd Street
- 609 W. 2nd Street
- 207 Broadway Street
- 706 W. 2nd Street
- 718 W. 2nd Street
- 814 W. 2nd Street
- 201 W. 3rd Street
- 203-205 W. 3rd St
- 209 W. 3rd Street
- 213 W. 3rd Street
- 219 W. 3rd Street
- 216 W. 3rd Street
- 300 W. 3rd Street
- 212 Pine Street
- 306 W. 3rd Street
- 310 W. 3rd Street
- 314 W. 3rd Street
- 316 W. 3rd Street
- 305 W. 3rd Street
- 303 W. 3rd Street
- 307 W. 3rd Street
- 211 Linn Street
- 309 W. 3rd Street
- 311 W. 3rd Street
- 313 W. 3rd Street
- 315 W. 3rd Street
- 210 Linn Street
- 212 Linn Street
- 404 W. 3rd Street
- 406 W. 3rd Street
- 408 W. 3rd Street
- 414 W. 3rd Street
- 416 W. 3rd Street
- 401 -403 W. 3rd St
- 405 W. 3rd Street
- 407 W. 3rd Street
- 411 W. 3rd Street
- 413 W. 3rd Street
- 415 W. 3rd Street
- 417 W. 3rd Street
- 505 W. 3rd Street
- 509 W. 3rd Street
- 513 W. 3rd Street
- 519 W. 3rd Street
- 514 W. 3rd Street
- 518 W. 3rd Street
- 606 W. 3rd Street
- 614 W. 3rd Street
- 601 W. 3rd Street
- 605 W. 3rd Street
- 615 W. 3rd Street
- 617-619 W. 3rd St
- 700 W. 3rd Street
- 706 W. 3rd Street
- 710 W. 3rd Street
- 716 W. 3rd Street
- 701 W. 3rd Street
- 705 W. 3rd Street
- 715 W. 3rd Street
- 205 Cherry Street
- 206 Cherry Street
- 208 Cherry Street
- 800 W. 3rd Street
- 809 W. 2nd Street
- 201 Ash Street
- 802 W. 3rd Street
- 806 W. 3rd Street
- 812 W. 3rd Street
- 816 W. 3rd Street
- 801 W. 3rd Street
- 807 W. 3rd Street
- 308 Cherry Street
- 809 W. 3rd Street
- 200 Ash Street
- 206-208 Ash Street
- 900 W. 3rd Street
- 901 W. 3rd Street
- 905 W. 3rd Street
- 310 Chestnut Street
- 316 Chestnut Street
- 318 Chestnut Street
- 408 Chestnut Street
- 406 Chestnut Street
- 402 Chestnut Street
- 209 W. 4th Street
- 211 W. 4th Street
- 217 W. 4th Street
- 204 W. 4th Street
- 409 Pine Street
- 317 Pine Street
- 208 W. 4th Street
- 212 W. 4th Street
- 310 Pine Street
- 312 -314 Pine St
- 316-318 Pine Street
- 308 W. 4th Street
- 310 W. 4th Street
- 312 W. 4th Street
- 314 W. 4th Street
- 316 W. 4th Street
- 309 W. 4th Street
- 309 Linn Street
- 301 W. 4th Street
- 315 W. 4th Street
- 319 W. 4th Street
- 400 W. 4th Street
- 402 W. 4th Street
- 410 W. 4th Street
- 310 Linn Street
- 412 W. 4th Street
- 414 W. 4th Street
- 420 W. 4th Street
- 403 W. 4th Street
- 405 W. 4th Street
- 407 W. 4th Street
- 411 W. 4th Street
- 417 W. 4th Street
- 312 Spruce Street
- 502 W. 4th Street
- 504 W. 4th Street
- 506 W. 4th Street
- 508 W. 4th Street
- 510 W. 4th Street
- 514 W. 4th Street
- 516 W. 4th Street
- 518 W. 4th Street
- 501 W. 4th Street
- 505 W. 4th Street
- 507 W. 4th Street
- 509 W. 4th Street
- 511 W. 4th Street
- 513 W. 4th Street
- 517 W. 4th Street
- 312 Locust Street
- 314 Locust Street
- 316 Locust Street
- 408 Locust Street
- 313 Broadway St
- 311 Broadway St
- 601 W. 4th Street
- 603 W. 4th Street
- 605 W. 4th Street
- 611 W. 4th Street
- 613 W. 4th Street
- 617 W. 4th Street
- 701 W. 4th Street
- 705 W. 4th Street
- 707 W. 4th Street
- 709 W. 4th Street
- 3 Cherry Lane
- 408 Broadway St
- 404 Broadway St
- 715 W. 4th Street
- 312 Broadway St
- 314 Broadway St
- 710 W. 4th Street
- 804 W. 4th Street
- 317 Cherry Street
- 313 Cherry Street
- 400 Cherry Street
- 810 W. 4th Street
- 805 W. 4th Street
- 809 W. 4th Street
- 402 Cherry Street
- 410 Cherry Street

Structures Listed as Contributing to the Fair Oaks Historic District



Figure 43. Map of properties surveyed in the Fair Oaks neighborhood, with preliminary evaluations.

also see table on following pages for preliminary evaluations of individual resources

MINUTES
September 25, 2024 – 5:30 p.m.
Construction Appeal & Advisory Board
Muscatine City Hall
Lower-Level Conference Room

Present: Devin Abel, Jim Nobel, and Tim Kelly

Absent: Ken Gilkerson and James Miller

Staff: Andrew Fangman, Assistant Community Development Director

Also Present: Jeff Osborne

Minutes:

Meeting called to order at 5:24 pm.

Jim Nobel moved, seconded by Devin Able to approve the minutes from the June 12, 2024. The motion passed by a 3-0 vote.

Tim Kelly moved, seconded by Jim Nobel to approve the minutes from the August 25, 2024. The motion passed by a 3-0 vote.

A discussion took place regarding the State Historic Building Code. This code aims to restore or modify historic buildings while preserving their original architecture, ensuring safety and cost-effectiveness. It replaces certain accessibility sections of the International Existing Building Code (IEBC) with standards from Chapter 302 of the Iowa Administrative Code, offering more flexibility in meeting federal accessibility requirements. Jeff Osborne spoke in favor such an amendment.

Having previously agreed to recommend a local amendment mirroring the State Historic Building Code, the board discussed eligibility criteria for applying the proposed amendment to the code.

Two approaches were discussed:

- Mirroring State Historic Building Code: Require structures to be individually listed on the National Register, listed as contributing structures in a National Register-listed historic district, or have a certification of eligibility.
- Establishing Age or Built-By Date: Set a specific age or built-by date for eligible structures

After weighing the pros and cons of each approach, the board reached a consensus that a local amendment to the City Building Code mirroring the State Historic Building Code should also use the same eligibility criteria.

Tim Kelly moved, seconded by Devin Able to make a recommendation that City Council adopted an amendment to the City Building Code mirroring the State Historic Building Code, including the eligibility criteria. The motion passed by a 3-0 vote.

The board discussed a potential amendment to eliminate the engineering plan requirement for post-framed buildings under 1,440 square feet. They expressed conceptual support for this change.

Questions arose about how post-frame buildings currently bypass the engineering requirement. The board agreed to address this issue at the next meeting as a potential action item. They requested answers to their specific questions about the current handling of such buildings be included in the agenda packet for the next meeting.

Meeting adjourned at 6:01 p.m.

ATTEST:

Respectfully Submitted,

Devin Abel Chairperson
Construction Appeal & Advisory Board

Andrew Oien, Secretary
Building Division Manager

MINUTES
August 28, 2024 – 5:30 p.m.
Construction Appeal & Advisory Board
Muscatine City Hall
Lower-Level Conference Room

Present: Devin Abel, Ken Gilkerson, and Tim Kelly

Absent: Jim Noble and James Miller

Staff: Andrew Fangman, Assistant Community Development Director
Andrew Oien, Building Division Manager

Minutes:

Meeting called to order at 5:30 pm.

Action on approving the minutes from the June 12th meeting was tabled until the next meeting, as they were not included in the agenda packet.

Devin Abel moved, seconded by Ken Gilkerson, to amend the bylaws to change the permanent standing meeting time and date to 5:30 PM on the fourth Wednesday of the month. The motion passed by a 3-0 vote.

Andrew Oien discussed potential state action to adopt a mandatory statewide building permit, similar to the state's implementation of electrical and plumbing codes.

A general discussion took place regarding the State Historic Building Code. This code aims to restore or modify historic buildings while preserving their original architecture, ensuring safety and cost-effectiveness. It replaces certain accessibility sections of the International Existing Building Code (IEBC) with standards from Chapter 302 of the Iowa Administrative Code, offering more flexibility in meeting federal accessibility requirements. While Muscatine City has adopted the 2015 IEBC without changes, its own building code means the State Building Code doesn't apply to non-state-owned buildings within the city. Therefore, the additional flexibility offered by the State Historic Building Code is not available to qualifying historic buildings in Muscatine.

The board discussed the benefits of creating similar flexibility in Muscatine by adopting a local code amendment. A specific example of a downtown business relocation that could have been facilitated by such flexibility was cited. The board reached a consensus that they would like to see an action item on making a formal recommendation to the City Council to include a local amendment to the State Historic Building Code on the next agenda.

Andrew Oien informed the board that staff intends to present a proposed amendment at the next meeting that would eliminate the requirement for engineered plans for post-framed buildings under 1,440 square feet. The board indicated their desire to discuss this proposed amendment at their next meeting.

A discussion took place regarding the format and content of applications for appeals to the board. Forms used by Linn County for this purpose were reviewed, and the general consensus was that they served as a good template. Specific requests were made for the appellant to have a space to explain the rationale for the appeal, and for the inclusion of relevant pictures or illustrations when possible.

Meeting adjourned at 6:23 p.m.

ATTEST:

Respectfully Submitted,

Devin Abel Chairperson
Construction Appeal & Advisory Board

Andrew Oien, Secretary
Building Division Manager



City of Muscatine

ITEM NUMBER

AGENDA ITEM SUMMARY

DATE: 3/20/2025

STAFF

Kevin Coon, City Engineer
Brian Stineman, Public Works Director

SUBJECT

Public Hearing for Review of the Plans and Specifications for the West Hill Sewer Separation Phase 6D Project.

EXECUTIVE SUMMARY

STAFF RECOMMENDATION

BACKGROUND/DISCUSSION

This is the next phase in the West Hill Sewer Separation Project. This is a continuation of our yearly schedule of letting a sewer separation project.

CITY FINANCIAL IMPACT

ATTACHMENTS

1. WHSSP6D_WATER_MPW_CITY_FINAL PLANS 03032025 signed
2. WestHill-6D_Final-Signed_3-12-2025
3. ProjectManual - West Hill Area Phase 6D - IFB 03-12-2025

LEGEND

W	PROPOSED WATER MAIN
W _x	EXISTING WATER MAIN
G _x	NATURAL GAS
FO _x	EXISTING FIBER OPTIC
OE	OVERHEAD ELECTRIC
ES _x	BURIED ELECTRIC
	PROPERTY LINE
SS _x	EXISTING SANITARY SEWER
SS	SANITARY SEWER
SD _x	EXISTING STORM SEWER
SD	STORM SEWER
	PERIMETER EROSION BARRIER
WV	VALVE
	HYDRANT
	CURB STOP AND BOX
	REDUCER
S	SANITARY MANHOLE
D	STORM MANHOLE
	AREA LIGHT
	STREET LIGHT
	UTILITY POLE
	CONTROL POINTS
	PROPERTY CORNER
	TREE

ABBREVIATIONS

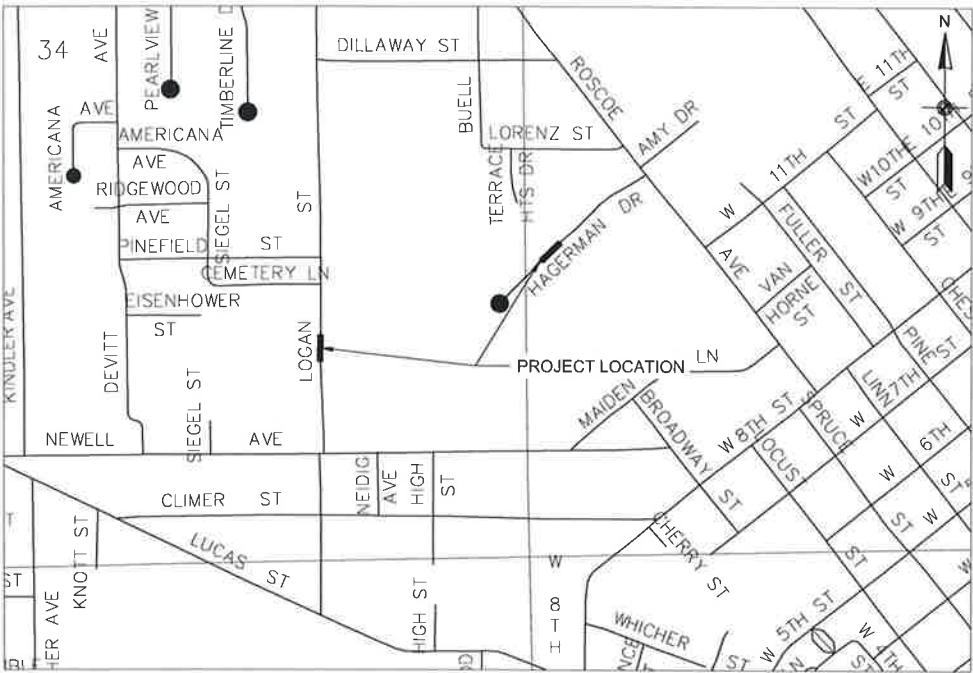
APPROX	APPROXIMATE
AVE	AVENUE
DI	DUCTILE IRON
DR	DRIVE
EXST	EXISTING
INV	INVERT
LF	LINEAR FEET
MAX	MAXIMUM
MH	MANHOLE
MIN	MINIMUM
N	NORTH
PH	PHASE
S	SOUTH
SAN	SANITARY
ST	STREET
STA	STATION
TYP	TYPICAL

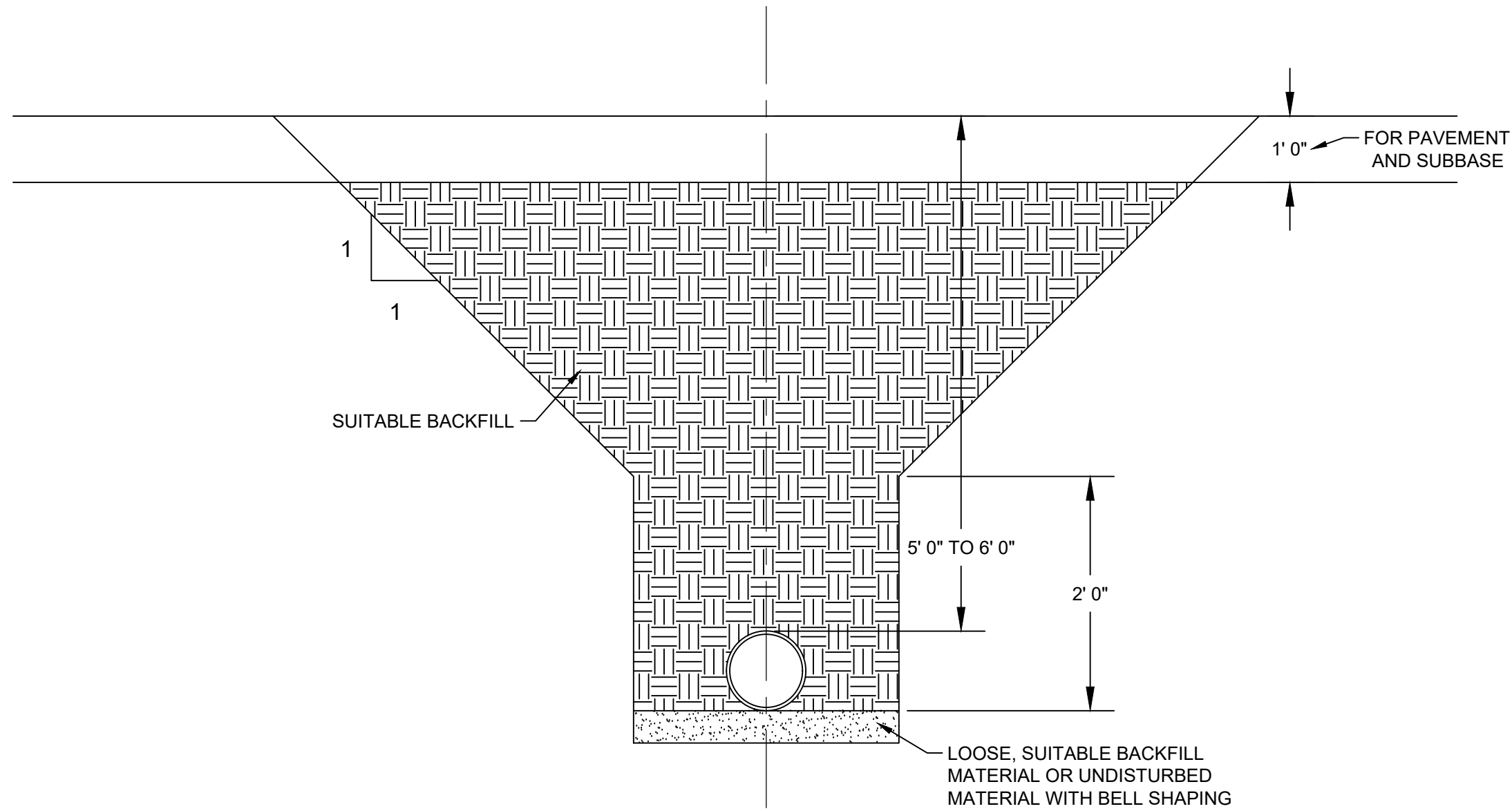
WEST HILL AREA
SEWER SEPARATION - PHASE 6D
WATER MAIN PROJECT
CITY OF MUSCATINE
MUSCATINE, IOWA

GENERAL NOTES

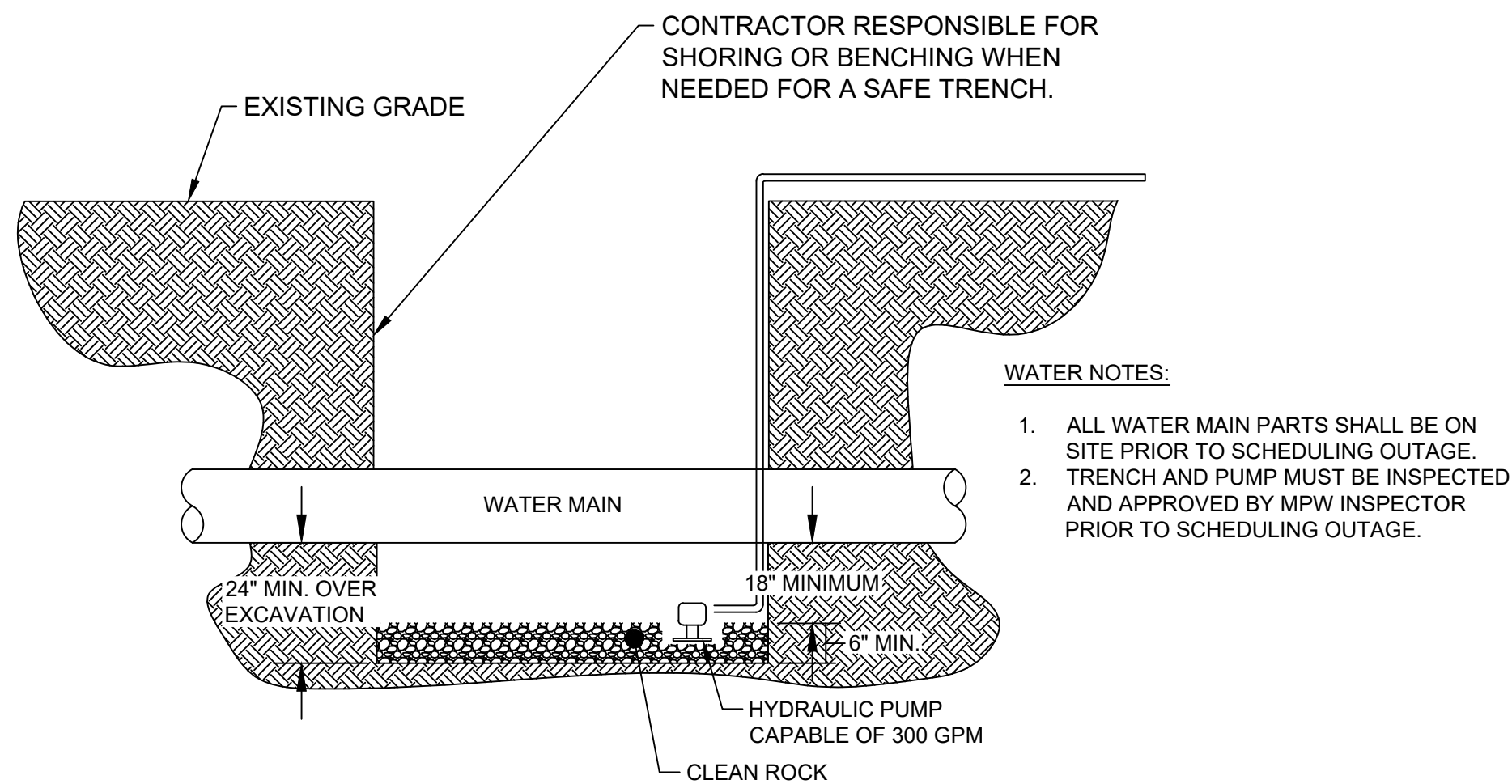
1. CONSTRUCT ACCORDING TO MUSCATINE POWER AND WATER STANDARD SPECIFICATIONS FOR WATER DISTRIBUTION SYSTEM IMPROVEMENTS, 2023.
2. ALL BURIED UTILITY LOCATIONS ARE APPROXIMATE AND SHALL BE FIELD LOCATED PRIOR TO EXCAVATION. SEWER, NATURAL GAS, IRRIGATION, TELECOM, AND OTHER HOUSE SERVICE LINES ARE NOT SHOWN ON PLANS. THERE MAY BE OTHER EXISTING UTILITY LINES, STRUCTURES, AND SERVICE CONNECTIONS NOT KNOWN AND NOT SHOWN ON THE DRAWINGS. IN ADDITION, CONTRACTOR SHALL USE POT-HOLING OR OTHER METHODS AT KNOWN UTILITY CROSSINGS FOR VISUAL CLEARANCE CHECK DURING DIRECTIONAL DRILLING OPERATIONS.
3. CONTRACTOR SHALL PROTECT ALL EXISTING UTILITIES, DRIVES, STREETS AND OTHER ITEMS TO REMAIN, INCLUDING ANY NOT SPECIFICALLY SHOWN IN THE DRAWINGS. DAMAGE TO EXISTING UTILITIES, DRIVES, STREETS AND OTHER ITEMS SHALL BE REPAIRED BY THE CONTRACTOR AT THEIR EXPENSE.
4. CONTRACTOR SHALL COORDINATE WITH RESIDENTS REGARDING CONTINUATION OF TRASH REMOVAL, MAIL BOXES AND MAIL DELIVERIES, AND ACCESS TO THEIR DRIVEWAYS DURING CONSTRUCTION.
5. CONTRACTOR SHALL NOTIFY THE OWNER IMMEDIATELY OF ANY CONFLICTS BETWEEN THE DRAWINGS AND EXISTING FEATURES.
6. CONTRACTOR SHALL NOTIFY THE OWNER IMMEDIATELY OF UNEXPECTED SUB-SURFACE CONDITIONS. DISCONTINUE WORK IN AREA UNTIL NOTIFIED BY OWNER TO RESUME WORK.
7. CONTRACTOR IS RESPONSIBLE FOR PROVIDING CONSTRUCTION LAYOUT FOR ALL GRADES AND FEATURES.

LOCATION MAP





1 STANDARD TRENCH DETAIL
PVC WATER PIPE CLASS P-1
SCALE: NONE



2 WATER MAIN SANITARY CONDITIONS IN TRENCH
SCALE: NONE



CITY OF MUSCATINE

MUSCATINE, IOWA 52761

(563) 263 8933

www.muscatineiowa.gov

Date	Revision

MPW WHSSP6D
WATER MAIN

WEST HILL AREA SEWER
AND SANITARY SEPARATION
CITY OF MUSCATINE
MUSCATINE
IOWA

ENGINEERING DEPARTMENT

Date: 3/3/2025

Designed by: AAE	Field Book No:
---------------------	----------------

Drawn by: AAE	Scale:
------------------	--------

Checked by: KJC	Sheet No:
--------------------	-----------

Project No: WHSSP6D	MPW B.01
------------------------	----------

PROJECT QUANTITIES

PROJECT QUANTITIES				
ITEM NO.	SUDAS	DESCRIPTION	UNIT	ESTIMATED QUANTITIES
201	5010-A1	WATER MAIN, TRENCHED, C-900 PVC, RESTRAINED JOINT 6"	LF	97
202	5010-C1	FITTINGS, 90 DEGREE ELBOW, 6"	EA	1
203	5010-C1	FITTINGS, 45 DEGREE ELBOW, 6"	EA	7
204	5010-C1	FITTINGS, 90 DEGREE STREET ELBOW, 6"	EA	1
205	5010-E	WATER SERVICE ADJUSTMENT, COPPER, 3/4" (REF. NOTE 1)	EA	2
206	5010-E	WATER SERVICE ADJUSTMENT, COPPER, 1" (REF. NOTE 2)	EA	1
207	5010-F	WATER MAIN ABANDONMENT	LF	85
208	5010-F	WATER MAIN ABANDONMENT, CAP	EA	2
209	5010-XX	CUT-IN-CONNECTION, 6"	EA	2
210	5020-B	TAPPING SLEEVE AND VALVE, 6"	EA	2

ESTIMATE REFERENCE NOTES

ESTIMATE REFERENCE NOTES			
ITEM NO.	SUDAS	UNIT	DESCRITION
201	5010-A1	LF	WATER MAIN, TRENCHED, C-900 PVC, RESTRAINED JOINT A. REFER TO SHEETS MPW M.01 THRU MPW M.02 FOR LAYOUT AND SHEET MPW C.01 FOR TABULATION. THIS ITEM INCLUDES TRENCHING HAULING OFF EXCAVATED SOIL TO AN APPROVED LOCATION, INSTALLATION OF PIPE APPURTENANCES, PLACEMENT OF BEDDING AND BACKFILL MATERIAL, COMPACTION TRACER SYSTEM, TESTING AND DISINFECTION. B. BEDDING CLASS SHALL BE P-1 AS SHOWN ON B.01 TESTING AND DISINFECTION SHALL BE COMPLETED BY THE CONTRACTOR IN ACCORDANCE WITH SPECIFICATIONS. AFTER COMPLETION OF DISINFECTION THE HIGHLY CHLORINATED WATER MUST BE DECHLORINATED TO LESS THAN 3 PPM CHLORINE.
			FITTINGS A. REFER TO SHEETS MPW M.01 THRU MPW M.02 FOR LAYOUT AND SHEET MPW C.01 FOR TABULATION. THIS ITEM INCLUDES INSTALLATION OF FITTINGS, RESTRAINTS, THRUST BLOCKS, AND POLYETHYLENE WRAP B. ALL FITTINGS SHALL BE MECHANICAL JOINT. ALL BOLTS, NUTS, AND WASHERS SHALL BE STAINLESS STEEL OR HIGHSTRENGTH LOW ALLOY CORTEN BLUE.
202-204	5010-C1	EA	WATER SERVICE ADJUSTMENT, COPPER, 3/4", (REFERENCE NOTE 1) A. REFER TO SHEETS MPW M.01 THRU MPW M.02 FOR LAYOUT AND SHEET MPW C.01 FOR TABULATION. THIS ITEM INCLUDES THE REPLACEMENT OR ADJUSTMENT OF 1" TYPE K COPPER SERVICE LINE TO PROVIDE CLEARANCE FOR PROPOSED SEWER, UP TO 10 LF OF TYPE K COPPER SERVICE LINE, AND RECONNECTION TO EXISTING SERVICE.
			WATER SERVICE CONNECTION, COPPER, 1", (REFERENCE NOTE 2) A. REFER TO SHEETS MPW M.01 THRU MPW M.02 FOR LAYOUT AND SHEET MPW C.01 FOR TABULATION. THIS ITEM INCLUDES THE INSTALLATION OF A 1" SERVICE SADDLE WITH CORP STOP, UP TO 10 LF OF 1" TYPE K COPPER SERVICE LINE, AND RECONNECTION TO EXISTING WATER SERVICE.
205	5010-E	EA	WATER MAIN ABANDONMENT, CAP A. REFER TO SHEETS MPW M.01 THRU MPW M.02 FOR LAYOUT AND SHEET MPW C.01 FOR TABULATION. THIS ITEM INCLUDES TRENCHING, HAULING OFF EXCAVATED SOIL TO AN APPROVED LOCATION, PIPE CUTTING, REMOVAL AND DISPOSAL OF PIPE, DISPOSAL OF TRENCH WATER, INSTALLATION OF CAP WITH THRUST RESTRAINT, PLACEMENT OF BEDDING AND BACKFILL MATERIAL AND COMPACTION. B. THIS ITEM REQUIRES THE INSTALLATION OF TWO CAPS AND DRY BLOCKING BETWEEN CAPS. C. ALL CAPS SHALL BE MECHANICAL JOINT. ALL BOLTS, NUTS, AND WASHERS SHALL BE STAINLESS STEEL OR HIGH STRENGTH LOW ALLOY CORTEN BLUE. D. THE CONTRACTOR SHALL CONFIRM OUTSIDE DIAMETER OF WATER MAIN PRIOR TO THE OUTAGE FOR CAPS (WATERMAIN IN THIS AREA MAY BE CAST IRON SIZE PIPE). THE LENGTH OF CUT AND CAP TIME SHALL BE KEPT TO A MINIMUM. E. CONTRACTOR SHALL PROVIDE MPW WITH MINIMUM 3 DAYS NOTICE PRIOR TO ANY CUSTOMER OUTAGE.
			CUT-IN-CONNECTION MEASUREMENT & PAYMENT BY EACH CUT-IN CONNECTION MADE. THE UNIT PRICE FOR EACH ITEM INCLUDES, BUT IS NOT LIMITED TO ADVANCED COORDINATION WITH MUSCATINE POWER AND WATER FOR REQUIRED CUSTOMER NOTICES AND OUTAGES; MEASURING, CUTTING, AND REMOVING SECTION OF EXISTING WATER PIPE, PLUG, OR FITTING; DEWATERING AND CLEANING EXISTING WATER PIPE; FURNISHING AND USING ALL TEMPORARY PLUGS AND DISINFECTANT TO PREVENT CONTAMINATION OF EXISTING WATER PIPE; POLYETHLENE WRAP; FURNISHING AND INSTALLING COUPLING, SLEEVE (S), GASKETS, MECHANICAL JOINT GLAND, RESTRAINING DEVICES; LEAK TESTING; BRACING; CONNECTING NEW WATER PIPE TO EXISTING WATER PIPE, FITTING, OR VALVE; EXCAVATION; BACKFILL; COMPACTION; AND FURNISHING ALL LABOR, MATERIALS AND EQUIPMENT NECESSARY TO COMPLETE WORK.
206	5010-E	EA	TAPPINGS SLEEVE AND VALVE A. REFER TO SHEETS MPW M.01 THRU MPW M.02 FOR LAYOUT AND SHEET MPW C.01 FOR TABULATION. THIS ITEM INCLUDES, BUT IS NOT LIMITED TO, TAPPING SLEEVE, TAPPING VALVE, THE TAP, VALVE BOX AND COVER, VALVE BOX EXTENSION, AND VALVE STEM EXTENSION. B.THE TAPPING VALVE AND SLEEVE MUST MEET MPW'S MATERIAL SPECIFICATIONS.
207-208	5010-F	LF	
209	5010-XX	EA	
210	5020-B	EA	

TABULATIONS

VALVE				
NO.	ALIGNMENT	APPROX. STATION	APPROX. ELEVATION	TYPE
1	LOGAN	500+03.99'	665.24'	MJ GATE VALVE, 6"
2	LOGAN	500+75.76'	663.44'	MJ GATE VALVE, 6"

WATER MAIN FITTINGS				
NO.	ALIGNMENT	APPROX. STATION	APPROX. ELEVATION	TYPE
1	HAGERMAN	400+09.69'	622.39'	45 DEGREE VERTICAL ELBOW, 6" MJ
2	HAGERMAN	400+17.31'	618.55'	45 DEGREE VERTICAL ELBOW, 6" MJ
3	HAGERMAN	400+25.21'	618.53'	45 DEGREE VERTICAL ELBOW, 6" MJ
4	HAGERMAN	400+32.25'	622.22'	45 DEGREE VERTICAL ELBOW, 6" MJ
5	LOGAN	500+02.58'	665.23'	6" TAPPING SLEEVE
6	LOGAN	500+11.05'	663.88'	90 DEGREE ELBOW, 6" MJ
7	LOGAN	500+13.64', 8.5' RIGHT	665.25'	6" CAP ON EXISTING MAIN
8	LOGAN	500+51.23'	663.16'	45 DEGREE ELBOW, 6" MJ
9	LOGAN	500+59.19'	662.12'	45 DEGREE ELBOW, 6" MJ
10	LOGAN	500+71.38'	662.07'	45 DEGREE VERTICAL ELBOW, 6" MJ
11	LOGAN	500+72.41', 2.5' RIGHT	663.84'	6" CAP ON EXISTING MAIN
12	LOGAN	500+74.41'	663.41'	90 DEGREE STREET ELBOW, 6" MJ
13	LOGAN	500+76.90'	663.44'	6" TAPPING SLEEVE

WATER SERVICE ADJUSTMENTS						
NO.	ALIGNMENT	APPROX STATION	SIDE	ADDRESS	TYPE	EXISTING MATERIAL
1	HAGERMAN	400+28.87'	LEFT	538 HAGERMAN ST	ADJUSTMENT	COPPER, 3/4"
2	HAGERMAN	400+29.99'	LEFT	542 HAGERMAN ST	ADJUSTMENT	COPPER, 1"
3	LOGAN	500+70.91'	RIGHT	1224 LOGAN ST	ADJUSTMENT	COPPER, 3/4"

WATER MAIN						
NO.	ALIGNMENT	APPROX. START STATION	APPROX. END STATION	SIZE (IN)	TYPE	APPROX LENGTH (FT)
1	HAGERMAN	400+09.69'	400+32.25'	6	C-900 PVC	22.6
2	LOGAN	500+02.55'	500+76.90'	6	C-900 PVC	74.4

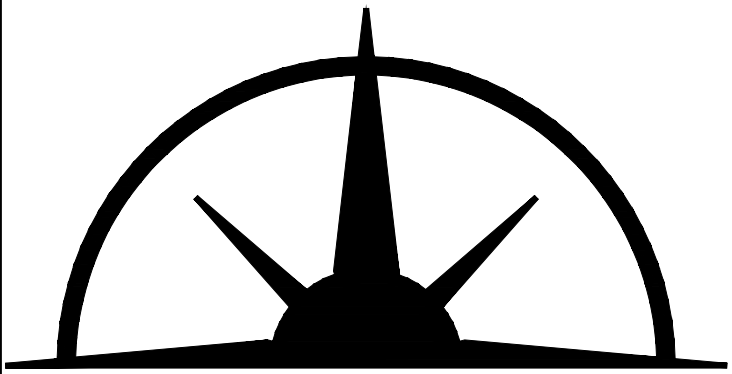
REFERENCE NOTES

- 1

INSTALL 3/4" SERVICE SADDLE WITH CORP STOP. INSTALL UP TO 10 LF OF 3/4" TYPE K COPPER SERVICE LINE. RECONNECT TO EXISTING WATER SERVICE.
- 2

INSTALL 1" SERVICE SADDLE WITH CORP STOP. INSTALL UP TO 10 LF OF 1" TYPE K COPPER SERVICE LINE. RECONNECT TO EXISTING WATER SERVICE.
- 3

REFER TO PROPOSED SEWER PLANS FOR LOCATION AND ELEVATION. SEWERS ARE SHOWN ON WATER PLANS FOR REFERENCE ONLY.



MUSCATINE

CITY OF MUSCATINE

MUSCATINE, IOWA 52761
(563) 263 8933

www.muscatineiowa.gov

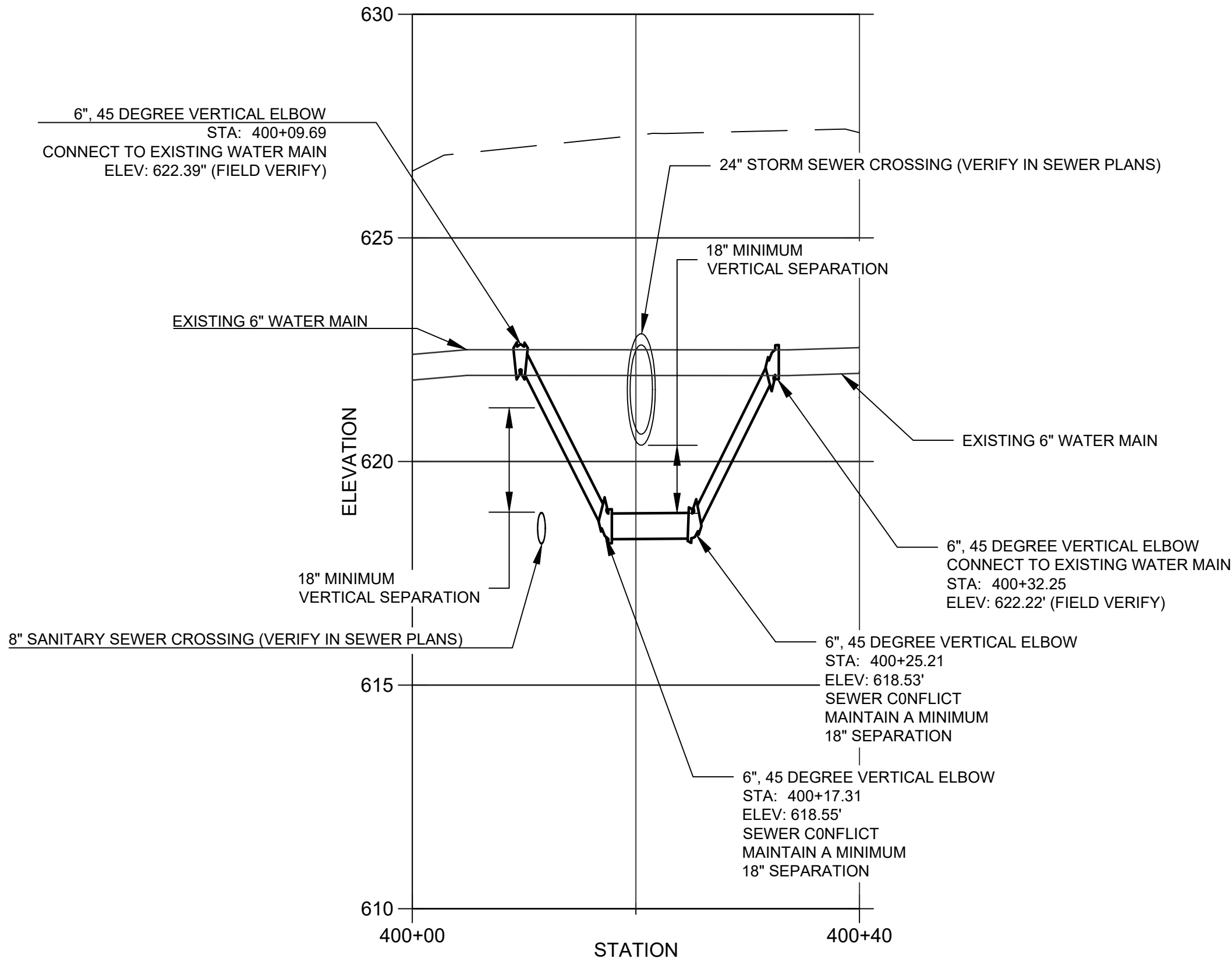
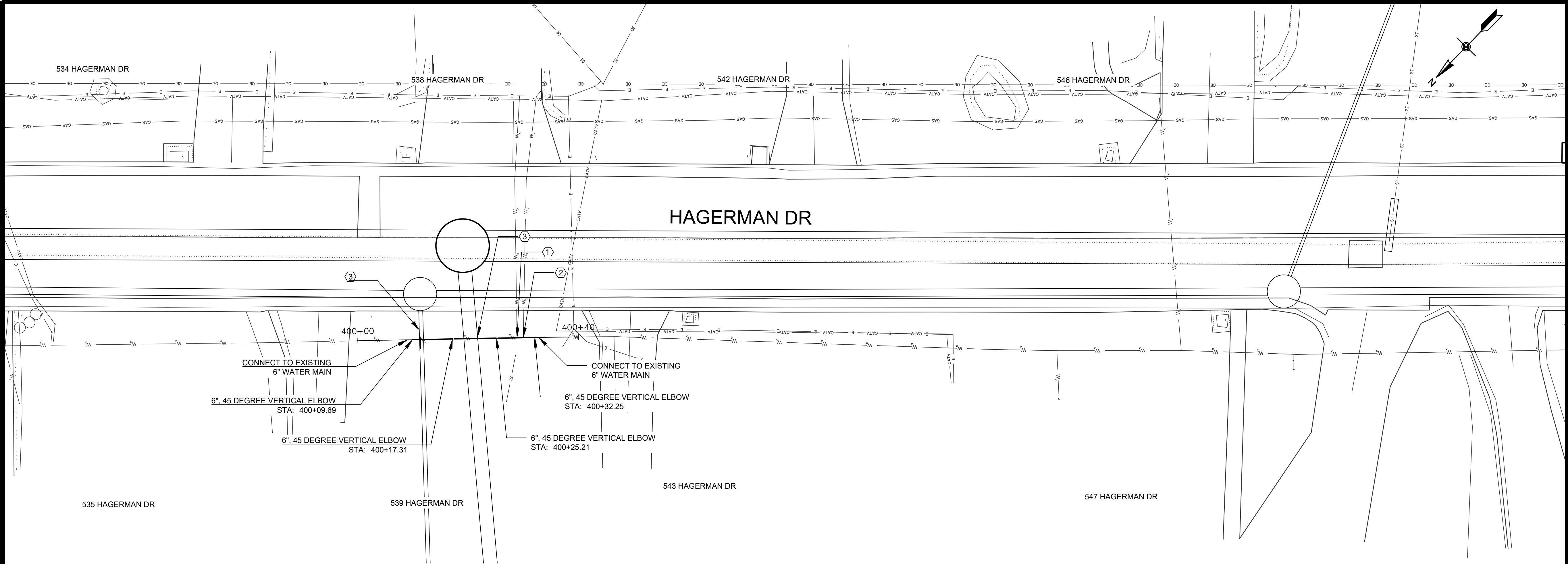
Date	Revision
------	----------

MPW WHSSP6D
WATER MAIN

WEST HILL AREA SEWER
AND SANITARY SEPARATION
CITY OF MUSCATINE
MUSCATINE
IOWA

ENGINEERING DEPARTMENT

Date: 3/3/2025	
Designed by: AAE	Field Book No:
Drawn by: AAE	Scale:
Checked by: KJC	Sheet No: MPW C.01
Project No: WHSSP6	



- REFERENCE NOTES
1. INSTALL 3/4" SERVICE SADDLE WITH CORP STOP. INSTALL UP TO 10 LF OF 3/4" TYPE K COPPER SERVICE LINE. RECONNECT TO EXISTING WATER SERVICE.
 2. INSTALL 1" SERVICE SADDLE WITH CORP STOP. INSTALL UP TO 10 LF OF 1" TYPE K COPPER SERVICE LINE. RECONNECT TO EXISTING WATER SERVICE.
 3. REFER TO PROPOSED SEWER PLANS FOR LOCATION AND ELEVATION. SEWERS ARE SHOWN ON WATER PLANS FOR REFERENCE ONLY.



CITY OF MUSCATINE
MUSCATINE, IOWA 52761
(563) 263 8933
www.muscatineiowa.gov

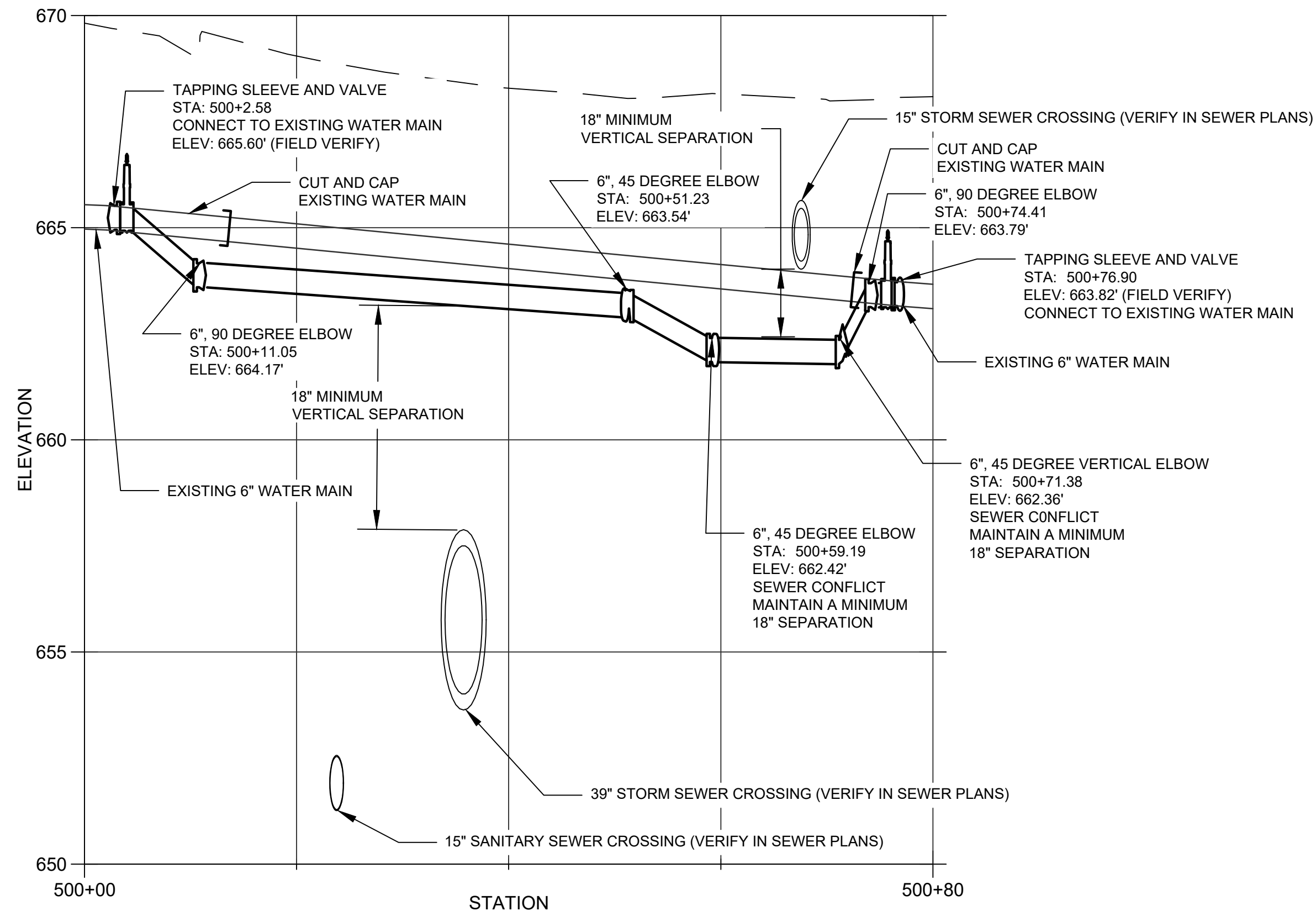
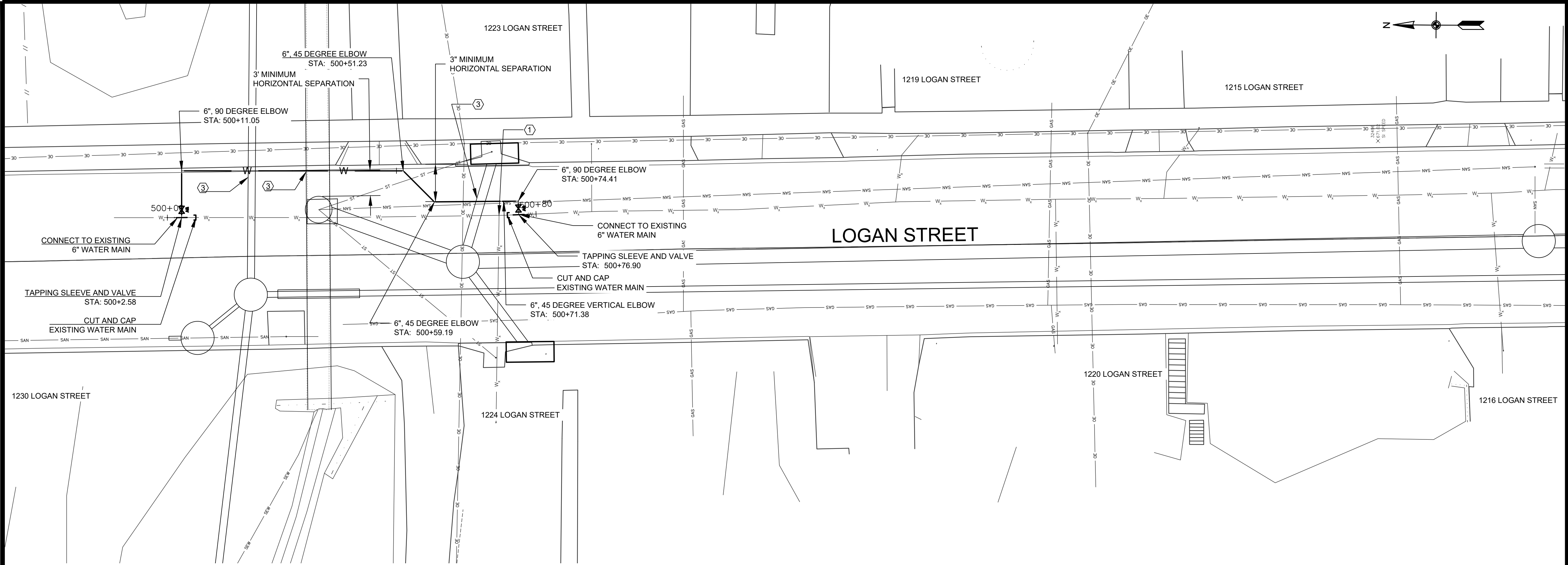
Date	Revision

MPW WHSSP6D WATER MAIN

WEST HILL AREA SEWER
AND SANITARY SEPARATION
CITY OF MUSCATINE
MUSCATINE
IOWA

ENGINEERING DEPARTMENT

Date:	3/3/2025
Designed by: AAE	Field Book No:
Drawn by: AAE	Scale:
Checked by: KJC	Sheet No: MPW M.01
Project No: WHSSP6	



- REFERENCE NOTES**
- 1. INSTALL 3/4" SERVICE SADDLE WITH CORP STOP. INSTALL UP TO 10 LF OF 3/4" TYPE K COPPER SERVICE LINE. RECONNECT TO EXISTING WATER SERVICE.
 - 2. INSTALL 1" SERVICE SADDLE WITH CORP STOP. INSTALL UP TO 10 LF OF 1" TYPE K COPPER SERVICE LINE. RECONNECT TO EXISTING WATER SERVICE.
 - 3. REFER TO PROPOSED SEWER PLANS FOR LOCATION AND ELEVATION. SEWERS ARE SHOWN ON WATER PLANS FOR REFERENCE ONLY.



CITY OF MUSCATINE
MUSCATINE, IOWA 52761
(563) 263 8933
www.muscatineiowa.gov

Date	Revision

MPW WHSSP6D WATER MAIN

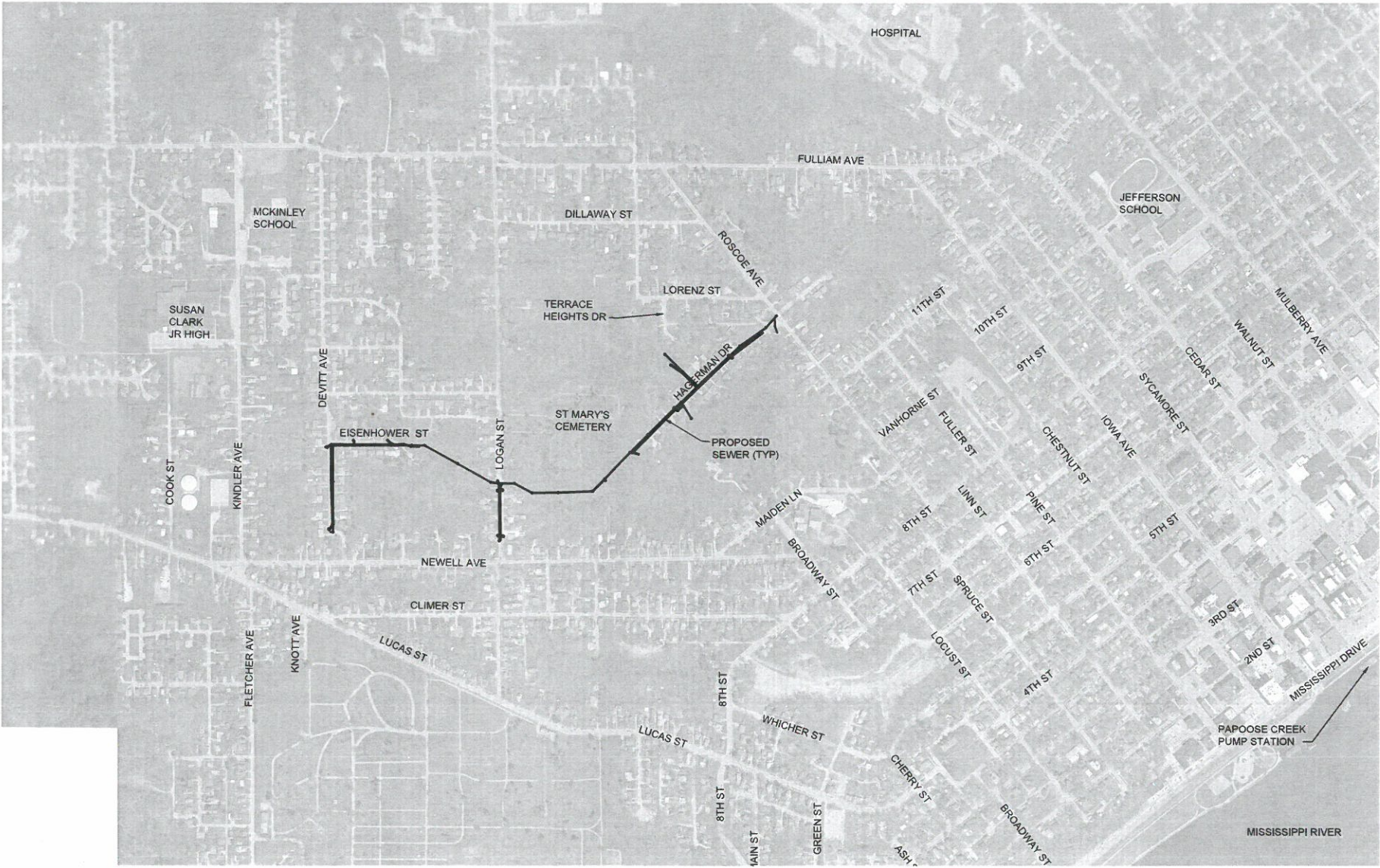
WEST HILL AREA SEWER
AND SANITARY SEPARATION
CITY OF MUSCATINE
MUSCATINE
IOWA

ENGINEERING DEPARTMENT

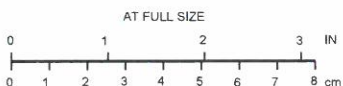
Date:	3/3/2025
Designed by: AAE	Field Book No:
Drawn by: AAE	Scale:
Checked by: KJC	Sheet No: MPW M.02
Project No: WHSSP6	

WEST HILL AREA SANITARY AND STORM SEWER SEPARATION - PHASE 6D CITY OF MUSCATINE, IOWA

VICINITY MAP



LOCATION MAP



I HEREBY CERTIFY THAT REVISION 9 TO THIS ENGINEERING DOCUMENT WAS PREPARED BY ME OR UNDER MY DIRECT PERSONAL SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF IOWA.
Patrick M. Johnson 3-12-2025
PATRICK M. JOHNSON
03-12-2025
MY LICENSE RENEWAL DATE IS 12-31-25
PAGES OR SHEETS COVERED BY THIS SEAL:
ALL B, D, L, R, W SHEETS
C.18, C.19, G.01, J.01, J.02

I HEREBY CERTIFY THAT REVISION 9 TO THIS ENGINEERING DOCUMENT WAS PREPARED BY ME OR UNDER MY DIRECT PERSONAL SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF IOWA.
Karmen K. Heim 3-12-25
KARMEN K. HEIM
03-12-2025
MY LICENSE RENEWAL DATE IS 12-31-26
PAGES OR SHEETS COVERED BY THIS SEAL:
ALL A, M, S, A, CE, RR SHEETS
C.01 - C.14, J.03

NO.	REVISIONS	DSGN	CHKD	APVD	DATE

225 Iowa Avenue, Muscatine, Iowa 52761-3764
www.stanleyconsultants.com

CITY OF MUSCATINE - PHASE 6D
WEST HILL AREA SANITARY AND STORM SEWER SEPARATION
MUSCATINE, IOWA

COVER SHEET

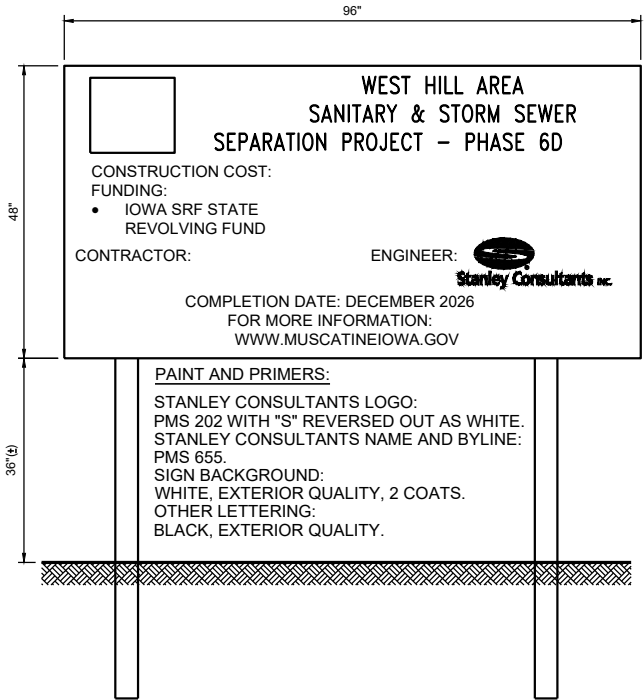
DESIGNED: KK HEIM	SCALE: AS NOTED
DRAWN: GM REEVES	NO. 17660.60.30
CHECKED: ER SCHALLERT	REV. 0
APPROVED: JM BRADY	
APPROVED: KK HEIM	
DATE: MARCH 12, 2025	

G
F
E
D
C
B
A
LOAD D3-R6

DRAWING SHEET INDEX		
Sheet Number	Sheet Title	Sheet Description
A.01	COVER SHEET	
A.02	INDEX SHEET	
A.03	LEGEND AND NOTES	
A.04	PIPE DETAILS	
A.05	MISCELLANEOUS SEWER DETAILS	
B.01	PAVEMENT TYPICAL SECTIONS	
B.02	PAVEMENT DETAILS	
C.01	ESTIMATED PROJECT QUANTITIES	
C.02	ESTIMATE REFERENCE NOTES	SHEET 1
C.03	ESTIMATE REFERENCE NOTES	
C.04	ESTIMATE REFERENCE NOTES	
C.05	ESTIMATE REFERENCE NOTES	
C.06	ESTIMATE REFERENCE NOTES	
C.07	ESTIMATE REFERENCE NOTES	
C.08	ESTIMATE REFERENCE NOTES	
C.09	MISCELLANEOUS TABLES	
C.10	STRUCTURE TABLE	
C.11	PIPE TABLES	
C.12	STRUCTURE TABLE	
C.13	PIPE TABLES	
C.14	SANITARY SERVICE LINES	TABLE
C.18	DRIVEWAY TABLES	
C.19	LANDSCAPING TABLES	
CE.01	STORMWATER POLLUTION	PREVENTION PLAN
G.01	ROADWAY ALIGNMENT TABLES	
G.04	TOPOGRAPHICAL SURVEY	REFERENCE INFORMATION
D.00	OVERALL SITE PAVEMENT	RESTORATION & KEY PLAN
D.01	PAVEMENT RESTORATION PLAN	HAGERMAN DR - SHEET 1
D.02	PAVEMENT RESTORATION PLAN	HAGERMAN DR - SHEET 2
D.03	PAVEMENT RESTORATION PLAN	HAGERMAN DR - SHEET 3
D.04	PAVEMENT RESTORATION PLAN	BETWEEN HAGERMAN DR & LOGAN ST
D.05	PAVEMENT RESTORATION PLAN	BETWEEN HAGEMAN DR & LOGAN ST
D.06	PAVEMENT RESTORATION PLAN	BETWEEN LOGAN ST & EISENHOWER
D.07	PAVEMENT RESTORATION PLAN	EISENHOWER ST
D.08	PAVEMENT RESTORATION PLAN	EISENHOWER ST & DEVITT AVE
D.09	PAVEMENT RESTORATION PLAN	DEVITT AVE - SHEET 1
D.10	PAVEMENT RESTORATION PLAN	DEVITT AVE - SHEET 2
D.11	PAVEMENT RESTORATION PLAN	LOGAN ST - SHEET 1
D.12	PAVEMENT RESTORATION PLAN	LOGAN ST - SHEET 2
J.01	TRAFFIC CONTROL	
J.02	TRAFFIC CONTROL	
J.03	STAGING PLAN	
L.01	HAGERMAN DRIVE CULDESAC	

L.02	EAST END OF EISENHOWER ST	
L.03	EISENHOWER ST & DEVITT ST	INTERSECTION
M.00	OVERALL STORM SEWER KEY PLAN	
M.01	HAGERMAN DRIVE	SHEET 1
M.02	HAGERMAN DRIVE	SHEET 2
M.03	HAGERMAN DRIVE	SHEET 3
M.07	EISENHOWER ST	
M.08	EISENHOWER ST & DEVITT AVE	
M.09	DEVITT AVE	
M.11	LOGAN ST	
M.13	STORM INLETS ON HAGERMAN DRIVE	
M.14	STORM INLETS ON LOGAN ST	
M.15	ON PROPERTY OF 539	HAGERMAN DRIVE
M.16	STORM INLETS ON DEVITT ST	& NEAR HAGERMAN DR
M.17	STORM INLETS ON EISENHOWER ST	
M.18	INLETS ON LOGAN ST	
MSA.00	OVERALL SANITARY KEY PLAN	
MSA.01	HAGERMAN DRIVE	SHEET 1
MSA.02	HAGERMAN DRIVE	SHEET 2
MSA.03	HAGERMAN DRIVE	SHEET 3
MSA.04	HAGERMAN DRIVE	SHEET 4
MSA.05	HAGERMAN DRIVE	SHEET 5
MSA.06	LOGAN ST TO EISENHOWER ST	
MSA.07	EISENHOWER STREET	SHEET 7
MSA.08	EISENHOWER ST & DEVITT AVE	
MSA.09	DEVITT AVENUE	
MSA.11	LOGAN STREET	
MSA.12	LOGAN STREET	SHEET 2
MSA.13	EXISTING COMBINED	BRANCH TO LOGAN
MSA.14	LOGAN AND UWBS	
MSA.15	539 HAGERMAN DRIVE	
MSA.16	SANITARY SERVICE FOR	703 MAIDEN LANE
MSA.17	UWBS REPAIR	
R.00	DEMOLITION OVERALL SITE	AND KEY PLAN
R.01	DEMOLITION PLAN	HAGERMAN DRIVE
R.02	DEMOLITION PLAN	HAGERMAN DRIVE
R.03	DEMOLITION PLAN BETWEEN	HAGERMAN DR & EISENHOWER ST
R.04	DEMOLITION PLAN	EISENHOWER ST & DEVITT AVE
R.05	DEMOLITION PLAN - DEVITT AVENUE	
R.06	DEMOLITION PLAN - LOGAN STREET	
RR.00	OVERALL EROSION CONTROL	& KEY PLAN
RR.01	EROSION CONTROL PLAN - SHEET 1	
RR.02	EROSION CONTROL PLAN - SHEET 2	
RR.03	EROSION CONTROL PLAN - SHEET 3	
RR.04	EROSION CONTROL PLAN - SHEET 4	
RR.05	EROSION CONTROL PLAN - SHEET 5	
RR.06	EROSION CONTROL PLAN - SHEET 6	
RR.07	EROSION CONTROL PLAN - SHEET 7	
RR.08	EROSION CONTROL PLAN - SHEET 8	

RR.09	EROSION CONTROL PLAN - SHEET 9	
RR.10	EROSION CONTROL PLAN - SHEET 10	
RR.11	EROSION CONTROL PLAN - SHEET 11	
RR.12	EROSION CONTROL PLAN - SHEET 12	
W.01	HAGERMAN DRIVE - SHEET 1	
W.02	HAGERMAN DRIVE - SHEET 2	
W.03	HAGERMAN DRIVE - SHEET 3	
W.04	HAGERMAN DRIVE - SHEET 4	
W.05	HAGERMAN DRIVE - SHEET 5	
W.06	HAGERMAN DRIVE - SHEET 6	
W.07	HAGERMAN DRIVE - SHEET 7	
W.08	LOGAN STREET - SHEET 1	
W.09	LOGAN STREET - SHEET 2	
W.10	LOGAN STREET - SHEET 3	
W.11	EISENHOWER STREET - SHEET 1	
W.12	EISENHOWER STREET - SHEET 2	
W.13	EISENHOWER STREET - SHEET 3	
W.14	DEVITT AVENUE - SHEET 1	
W.15	DEVITT AVENUE - SHEET 2	
W.16	DEVITT AVENUE - SHEET 3	
W.17	DEVITT AVENUE - SHEET 4	
W.18	DEVITT AVENUE - SHEET 5	

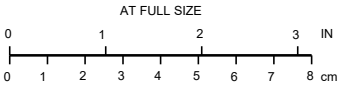


PROJECT SIGN DETAIL

SCALE: NONE

NOTES:

- CONTRACTOR TO PROVIDE TWO PROJECT SIGNS ON OPPOSITE ENDS OF PROJECT. SEE SECTION 01 50 00 FOR SPECIFIC REQUIREMENTS. SEE ITEM "SPECIAL SIGNAGE" FOR PAYMENT AND REQUIREMENTS.
- CONTRACTOR TO PROTECT AND RELOCATE SIGN AS NEEDED TO PREVENT DAMAGE.



NOTES

- SEE PROJECT MANUAL FOR PROJECT MILESTONE REQUIREMENTS. SEE SHEET J.03 FOR STAGING PLAN.
- THE PROPOSED IMPROVEMENTS INCLUDED IN THESE DRAWINGS HAVE BEEN DESIGNED IN ACCORDANCE WITH THE 2025 EDITION IOWA STATEWIDE URBAN DESIGN AND SPECIFICATIONS MANUALS (SUDAS). REFER TO CONTRACT DOCUMENTS; DRAWINGS AND PROJECT MANUAL, FOR PROJECT SPECIFIC REQUIREMENTS.
- CONTRACTOR IS RESPONSIBLE FOR CALLING UTILITY ONE-CALL BEFORE ANY EXCAVATION OCCURS. CONTRACTOR IS RESPONSIBLE FOR PROTECTING EXISTING FEATURES AND RESTORING DAMAGED FEATURES TO EXISTING CONDITIONS AT NO ADDITIONAL COST TO THE CITY.
- SEE WATER MAIN DRAWINGS FOR REPLACEMENT WORK INCLUDED IN THIS CONTRACT.

NO.	REVISIONS	DSGN	CHKD	APVD	DATE
 Stanley Consultants inc. 225 Iowa Avenue, Muscatine, Iowa 52761-3764 www.stanleyconsultants.com					
CITY OF MUSCATINE - PHASE 6D WEST HILL AREA SANITARY AND STORM SEWER SEPARATION MUSCATINE, IOWA					
INDEX SHEET					
DESIGNED <u>KK HEIM</u>		SCALE: AS NOTED			
DRAWN <u>GM REEVES</u>		NO. 17660.60.30		REV.	
CHECKED <u>ER SCHALLERT</u>					
APPROVED <u>JM BRADY</u>					
APPROVED <u>KK HEIM</u>					
DATE <u>MARCH 12, 2025</u>					
		A.02		0	

NOTES

DETAIL NAME

DIMENSIONS AND SCALE

DIMENSIONS AND/OR ELEVATIONS MARKED THUS (*) ARE APPROXIMATE. OBTAIN FINAL DIMENSIONS FOR CONSTRUCTION FROM THE ENGINEER.

DIMENSIONS AND/OR ELEVATIONS MARKED THUS (†) ARE ASSUMED AND MAY BE VARIED BY THE CONTRACTOR TO SUIT EQUIPMENT FURNISHED. FINAL DIMENSIONS ARE SUBJECT TO THE REVIEW OF THE ENGINEER.

DIMENSIONS AND/OR ELEVATIONS MARKED THUS (±) MUST BE VERIFIED IN THE FIELD BY THE CONTRACTOR.

DIMENSIONS ARE GENERALLY TO SCALE, BUT SHOULD NOT BE SCALED. USE DIMENSIONS SHOWN. NOTES (NOT TO SCALE) IS SHOWN ONLY WHERE DIMENSION IS OBVIOUSLY OUT OF SCALE.

NUMERIC SCALE VALUES (1/4"=1'-0", ETC) APPLY ONLY AT FULL SCALE.

	EXISTING
	NEW
	CENTER LINE
	SURFACE BREAK LINE
	MATERIAL BREAK LINE
	MATCH LINE

CL OR CL	CENTER LINE
Ø	DIAMETER OR ROUND
PL	PROPERTY LINE
W/	WITH
W/O	WITH OUT

SAN	SANITARY
ST	STORM
SD	SUBDRAIN
C	COMBINED
FM	FORCE MAIN
E	ELECTRICAL
G	GAS
W	WATER
T	TELEPHONE
COMM	COMMUNICATIONS
TD	TELEPHONE DUCT
FO	FIBER OPTICS
OE, OHE	OVERHEAD ELECTRIC
	CONTROL POINT
	CONSTRUCTION LIMIT/TEMPORARY EASEMENT
	PERMANENT EASEMENT
	PROPERTY LINE
	SILT FENCE
	PROPOSED GRADE ON PROFILES
	EXISTING GROUND ON PROFILES
	CREEKS & STREAMS
	ROW ACQUISITION
	PERMANENT EASEMENT
	TEMPORARY EASEMENT

SUDAS NO.	DETAIL NAME
2010.102	DESIGNATIONS OF ROADWAY EARTHWORK ITEMS
3010.101	TRENCH BEDDING AND BACKFILL ZONES
3010.102	RIGID GRAVITY PIPE TRENCH BEDDING
3010.103	FLEXIBLE GRAVITY PIPE TRENCH BEDDING
3010.104	PRESSURE PIPE TRENCH BEDDING
4010.201	SANITARY SEWER SERVICE STUB
4010.203	SANITARY SEWER CLEANOUT
4020.222	CIRCULAR CONCRETE APRONS
4020.224	CONCRETE PIPE APRON GUARD
4020.231	SUBDRAINS
4020.233	SUBDRAIN OUTLETS
6010.301	CIRCULAR SANITARY SEWER MANHOLE
6010.303	SANITARY SEWER MANHOLE OVER EXISTING SEWER
6010.401	CIRCULAR STORM SEWER MANHOLE
6010.406	SHALLOW RECTANGULAR SEWER MANHOLE
6010.501	SINGLE GRATE INTAKE
6010.502	CIRCULAR SINGLE GRATE INTAKE
6010.507	SINGLE OPEN-THROAT CURB INTAKE, SMALL BOX
6010.509	DOUBLE OPEN-THROAT CURB INTAKE, SMALL BOX
6010.512	CIRCULAR AREA INTAKE
7010.101	JOINTS
7010.102	PCC CURB DETAILS
7010.103	MANHOLE BOXOUTS IN PCC PAVEMENT
7010.901	PCC PAVEMENT JOINTING
7010.904	TYPICAL JOINTING LAYOUT
7030.101	CONCRETE DRIVEWAY, TYPE A
7030.103	DRIVEWAY GRADING
7030.104	ROW GRADING
7030.201	CLASSES OF SIDEWALKS
7030.202	CURB DETAILS FOR CLASS A SIDEWALK
7030.204	GENERAL FEATURES OF AN ACCESSIBLE SIDEWALK
7030.205	GENERAL SIDEWALK AND CURB RAMP DETAILS
7030.206	CURB RAMPS OUTSIDE OF INTERSECTION RADIUS
7030.207	CURB RAMP FOR CLASS B OR C SIDEWALK
7030.208	ALTERNATIVE CURB RAMP FOR CLASS B OR C SIDEWALK
7030.209	CURB RAMPS FOR CLASS A SIDEWALK
7030.210	DETECTABLE WARNING PLACEMENT
7040.101	FULL DEPTH PCC PATCHES LESS THAN OR EQUAL TO 15' LONG
7040.102	FULL DEPTH PCC PATCHES GREATER THAN 15' LONG
8030.101	TEMPORARY TRAFFIC CONTROL GENERAL INFORMATION
8030.111	LANE CLOSEURE AT AN INTERSECTION
8030.116	STREET OR ROAD CLOSURE
8030.117	SIDEWALK DETOUR
8030.119	CLOSURE OF MARKED OR UNMARKED CROSSWALK
9040.102	FILTER BERM AND FILTER SOCK
9040.103	ROLLED EROSION CONTROL PRODUCT (RECP) INSTALLATION ON SLOPES
9040.105	WATTLE
9040.111	RIP RAP APRON FOR PIPE OUTLET INTO CHANNEL
9040.119	SILT FENCE
9040.120	STABILIZED CONSTRUCTION EXIT
9080.101	TYPE A CONCRETE STEPS WITH HANDRAIL
9080.102	TYPE B CONCRETE STEPS WITH HANDRAIL
11030.101	TEMPORARY MAILBOXES
11040.101	TEMP. GRANULAR SIDEWALK/TEMP RESIDENTIAL ACCESS
11040.102	TEMPORARY PEDESTRIAN CHANNELIZING DEVICE

NOTES:

1. SUDAS DETAILS FROM THE LATEST 2025 VERSION (CURRENT AT THE TIME OF BID) SHALL BE USED FOR ENTIRE PROJECT DURATION. SEE PROJECT MANUAL FOR A COPY OF SUDAS FIGURES LISTED.
2. OTHER DETAILS MAY BE APPLICABLE OTHER THAN THOSE LISTED HERE.

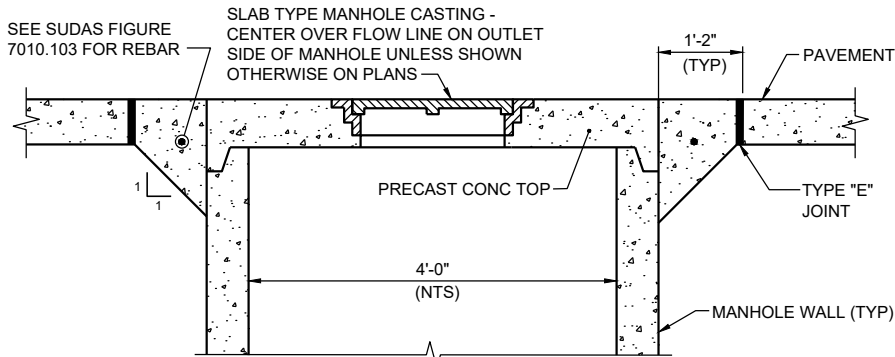
1. ALL SYMBOLS AND ABBREVIATIONS SHOWN ON THIS LEGEND MAY NOT APPEAR IN THIS SET OF DRAWINGS.
2. SEE INDIVIDUAL LEGENDS ON D, J, R AND S SERIES SHEETS.
3. SEE TOPOGRAPHIC SURVEY LEGEND ON G.04.

NO.	REVISIONS	DSGN	CHKD	APVD	DATE



CITY OF MUSCATINE - PHASE 6D
WEST HILL AREA SANITARY AND STORM SEWER SEPARATION
MUSCATINE, IOWA

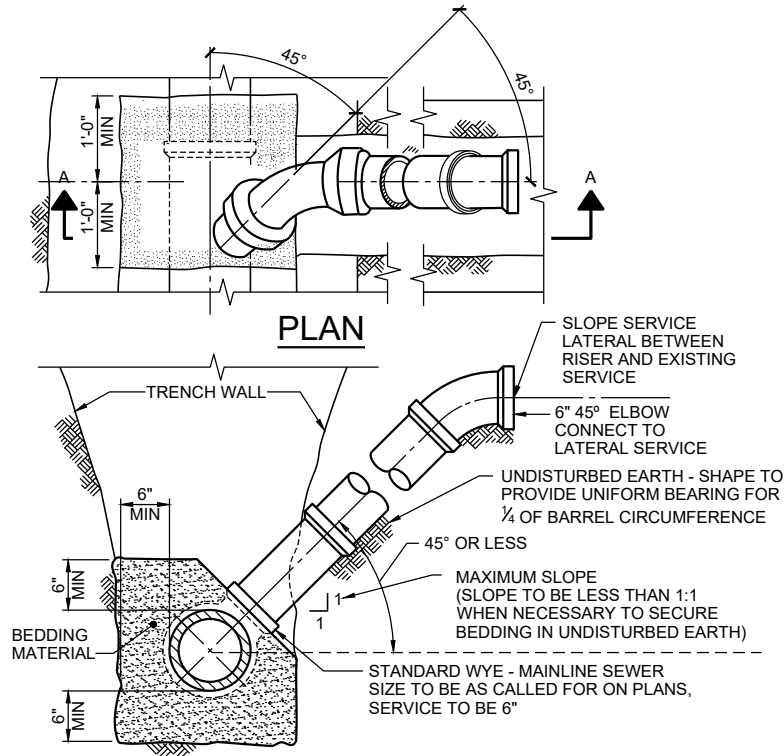
DESIGNED	KK HEIM	SCALE: AS NOTED	NO. 17660.60.30	REVISION
DRAWN	GM REEVES			
CHECKED	ER SCHALLERT	A.03		
APPROVED	JM BRADY			
APPROVED	KK HEIM			
DATE	MARCH 12, 2025			



- NOTE:
1. USE ONLY WHERE PIPING TO/FROM MANHOLE DOES NOT ALLOW ENOUGH UNDER PAVEMENT TO PERMIT INSTALLATION OF STANDARD MANHOLE CASTING.
 2. CASTING: EAST JORDAN 2870A WITH MACHINED BEARING SURFACES, SOLID COVER AND DROP HANDLES.
 3. PRECAST TOP DESIGNED FOR H20 LOADING.

DETAIL - FLAT TOP MANHOLE (LOW HEADROOM)

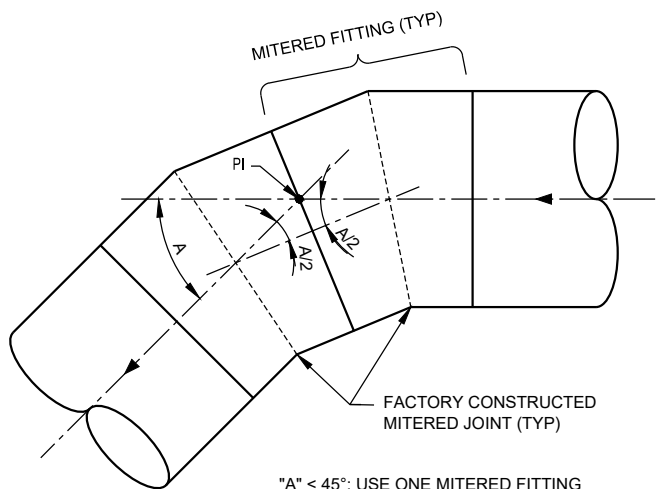
SCALE: 3/4" = 1'-0"



- NOTES:
1. FOR PIPE AND BEDDING MATERIAL SEE SPECIFICATIONS.

SEWER RISER

NO SCALE



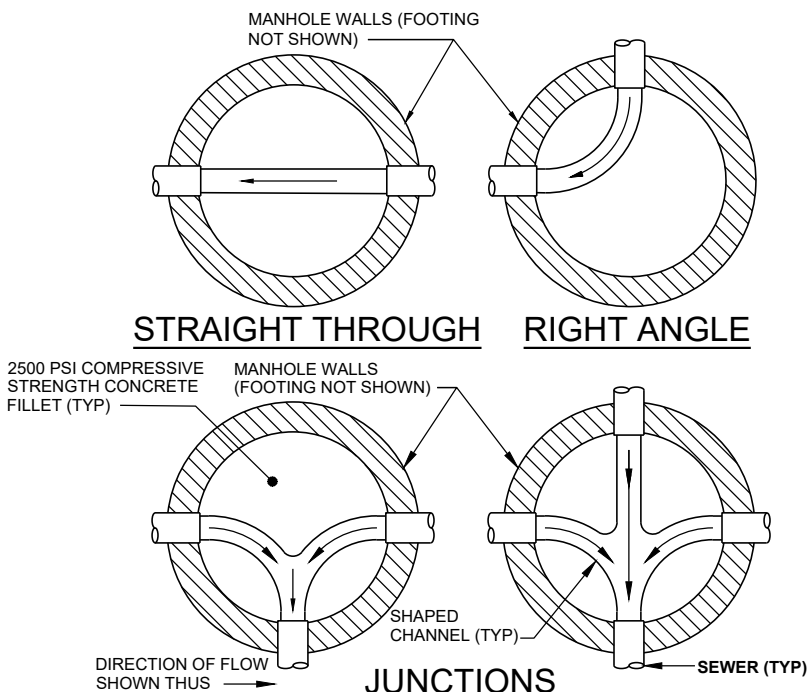
- "A" < 45°; USE ONE MITERED FITTING
- "A" > 45°; USE TWO EQUAL MITERED FITTINGS

NOTE:

ALL STATIONING CONTINUOUS THRU PI WITH NO EQUATION.

TYPICAL BEND DETAIL

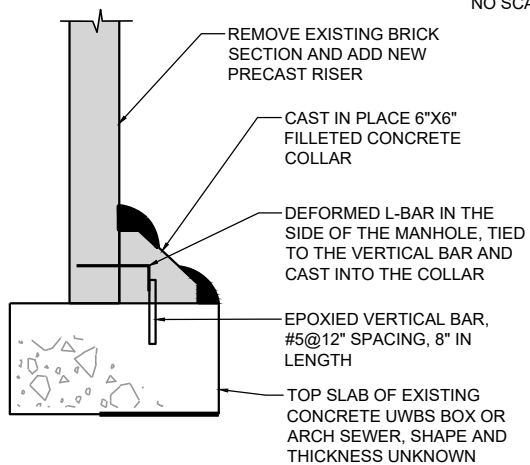
SCALE: NONE



DEPTH OF ALL CHANNELS TO BE 3/4 X DIAMETER OF THE LARGEST SEWER ENTERING OR LEAVING MANHOLE.

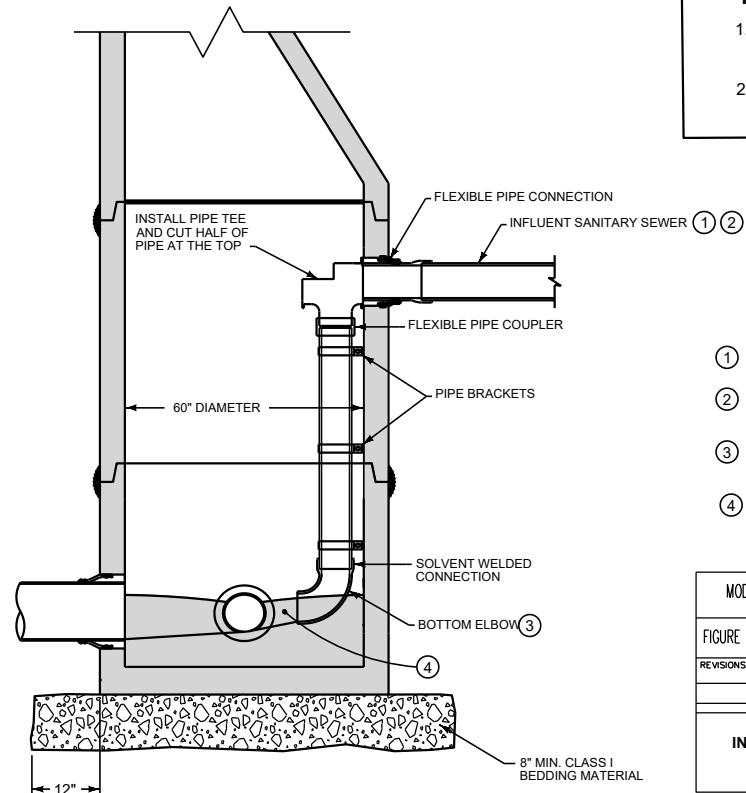
MANHOLE BOTTOMS

SCALE: NONE



RISER CONNECTION DETAIL

SCALE: NONE

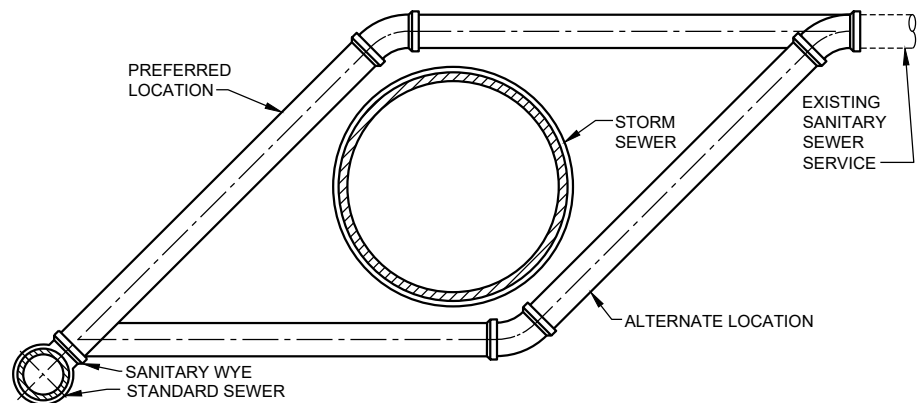


NOTE:

1. SEE SHEET A.03 FOR LIST OF SUDAS DETAILS THAT APPLY TO THIS PROJECT.
2. ALL DETAILS SHOWN ON THIS SHEET MAY NOT BE UTILIZED IN PROJECT.

- ① CORE DRILL OPENINGS AT LEAST 12 INCHES FROM EXISTING MANHOLE JOINTS.
- ② INSTALL FLEXIBLE PIPE COUPLER OR PIPE JOINT ON NEW SANITARY SEWER 18 TO 24 INCHES FROM OUTSIDE OF MANHOLE WALL.
- ③ ALIGN ELBOW SO DISCHARGE IS DIRECTED AT OUTLET PIPE OR AT 45 DEGREES TO MANHOLE FLOW.
- ④ RESHAPE FILLET TO PROVIDE A SMOOTH TRANSITION AND TO DIRECT FLOW TO OUTLET.

MODIFIED		REVISION	
		1	04-20-21
FIGURE 6010.308		SW-308 MODIFIED	
REVISIONS:		SHEET 1 of 1	
INTERNAL DROP CONNECTION FOR SANITARY SEWER MANHOLE			



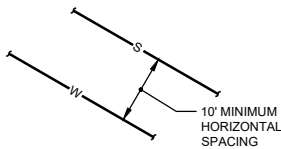
TYPICAL SERVICE CONNECTION

NO SCALE

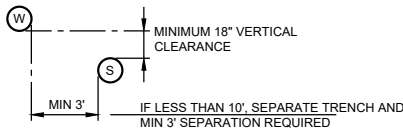
NO.	REVISIONS	DSGN	CHKD	APVD	DATE
 Stanley Consultants Inc. 225 Iowa Avenue, Muscatine, Iowa 52761-3764 www.stanleyconsultants.com					
CITY OF MUSCATINE - PHASE 6D WEST HILL AREA SANITARY AND STORM SEWER SEPARATION MUSCATINE, IOWA					
PIPE DETAILS					
DESIGNED	KK HEIM		SCALE: AS NOTED		
DRAWN	GM REEVES		NO. 17660.60.30		REV.
CHECKED	ER SCHALLERT		A.04		0
APPROVED	JM BRADY				
APPROVED	KK HEIM				
DATE	MARCH 12, 2025				

STATE OF IOWA HORIZONTAL GRAVITY SEWER & WATERMAIN SEPARATION CRITERIA

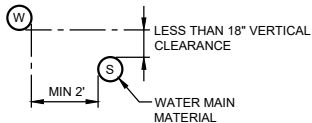
1. HORIZONTAL SEPARATION OF WATER MAINS FROM GRAVITY SEWERS. WATER MAINS SHALL BE SEPARATED FROM GRAVITY SEWERS BY HORIZONTAL DISTANCE OF AT LEAST 10 FEET.



2. IF 10' SEPARATION IS NOT POSSIBLE, A LESSER DISTANCE MAY BE CONSIDERED IF; THE BOTTOM OF THE WATER MAIN IS AT LEAST 18 INCHES ABOVE THE TOP OF THE SEWER; AND THE WATER MAIN IS PLACED IN EITHER A SEPARATE TRENCH OR IN THE SAME TRENCH ON A BENCH OF UNDISTURBED EARTH, AT A MINIMUM HORIZONTAL SEPARATION OF THREE FEET FROM THE SEWER.



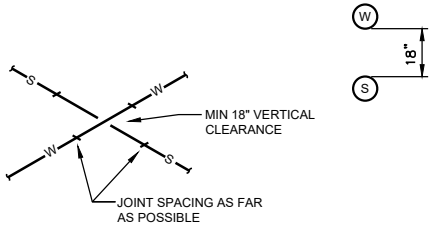
3. IF IT IS NOT POSSIBLE TO OBTAIN THE REQUIRED HORIZONTAL CLEARANCE OF THREE FEET AND VERTICAL SEPARATION OF 18 INCHES BETWEEN THE WATER MAIN AND SEWER, THE SEWER MUST BE CONSTRUCTED OF WATER MAIN MATERIALS MEETING A MINIMUM PRESSURE RATING OF 150 PSI. A LINEAR SEPARATION OF AT LEAST TWO FEET SHALL BE PROVIDED.



4. GRAVITY SEWER AND WATER MAIN SEPARATION REQUIREMENTS SUMMARIZED HERE CAN BE FOUND IN SUDAS SPECIFICATION SECTION 4010 AND SECTION 5010, IOWA WASTEWATER FACILITIES DESIGN STANDARDS CHAPTER 12, AND 567 IOWA ADMINISTRATIVE CODE CHAPTER 43.

STATE OF IOWA WATERMAIN AND SEWER CROSSING CRITERIA

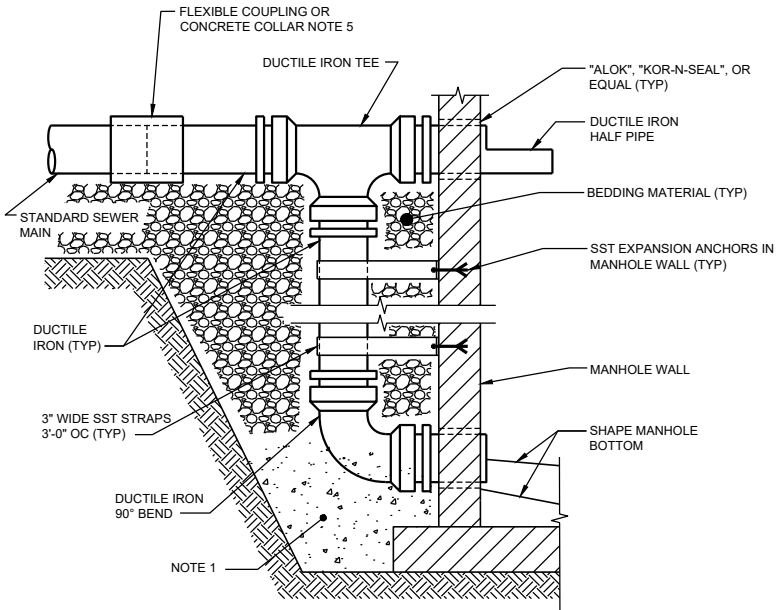
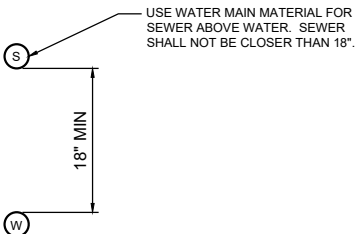
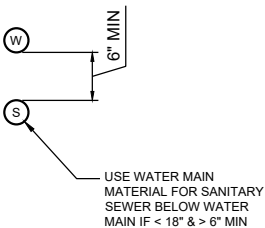
1. PREFERRED CROSSINGS WITH SEWERS: (SANITARY, COMBINED OR STORM)
- VERTICAL SEPARATION OF WATER MAINS CROSSING OVER ANY SEWER SHALL BE AT LEAST 18-INCHES WHEN MEASURED FROM THE BOTTOM OF THE WATER MAIN TO THE TOP OF THE SEWER.
 - ALL JOINTS SHALL BE PLACED AS FAR AS POSSIBLE FROM THE POINT OF CROSSING.
 - PIPES SHALL BE ADEQUATELY SUPPORTED
 - JOINTS SHALL BE WATERTIGHT
 - LOW PERMEABILITY SOIL SHALL BE USED FOR BACKFILL MATERIAL WITHIN 10-FEET OF POINT OF CROSSING.



2. ALTERNATIVE ALLOWABLE CROSSING VERICAL SEPARATION:
- IF PHYSICAL CONDITIONS PROHIBIT PREFERRED CROSSING CONFIGURATION:
- SEWER SHALL NOT BE PLACED CLOSER THAN 6-INCHES BELOW A WATER MAIN; OR,
 - SEWER SHALL NOT BE PLACED CLOSER THAN 18-INCHES ABOVE WATER MAIN.

USE WATER MAIN MATERIAL FOR SEWER WHEN:

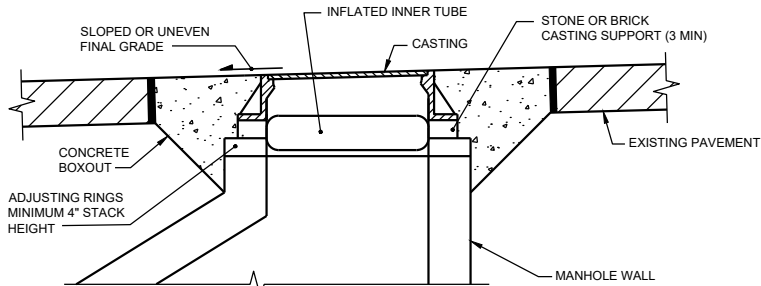
- SANITARY SEWER CROSSES BELOW WATER MAIN AND VERTICAL SEPARATION IS LESS THAN 18-INCHES AND GREATER THAN 6-INCHES.
- SANITARY SEWER CROSSES ABOVE WATER MAIN AND VERTICAL SEPARATION IS GREATER THAN 18-INCHES.
- STORM SEWERS CROSSING ABOVE WATER MAIN WITH 18" (MINIMUM CLEARANCE) MAY BE CONSTRUCTED OF GASKETTED RCP OR WATER MAIN MATERIAL.
- STORM SEWERS CROSSING BELOW WATER MAIN AND SEPARATION IS LESS THAN 18-INCHES AND GREATER THAN 6-INCHES, STORM SEWER CONSTRUCTED OF GASKETED RCP OR WATER MAIN MATERIAL.



- NOTES:
- SUPPORT 90° BEND ON CONCRETE THRUST BLOCK WITH 2500 PSI COMPRESSIVE STRENGTH CONCRETE. ENCASE ELBOW IN CONCRETE, 12-INCHES MINIMUM ON ALL SIDES.
 - ALL JOINTS SHALL BE RESTRAINED.
 - EXTERNAL DROP CONNECTION ONLY USED WHERE INDICATED ON DRAWINGS. ALL OTHER DROP CONNECTIONS SHALL BE INTERNAL DROP CONNECTIONS.
 - MINIMIZE BY USING SHORTEST WORKABLE HORIZONTAL PIPE SPOOLS.
 - JOINT SHALL BE OUTSIDE OF DEEP EXCAVATION, MINIMUM 8'.
 - DUCTILE IRON PIPE FOR DROP DOES NOT REQUIRE SPECIAL LINING FOR SANITARY SEWERS. USE STANDARD CEMENT MORTAR LINING WITH SEAL COAT.

EXTERNAL DROP CONNECTION DETAIL

NO SCALE



- NOTES:
- ADJUST CASTING ELEVATION USING A MINIMUM OF 3 STONES, BRICKS OR OTHER SUITABLE SUPPORT.
 - INSTALL INNER TUBE AS SHOWN AND INFLATE TO PROVIDE "FORM" FOR CONCRETE INSTALLATION.
 - POUR CONCRETE BOXOUT AROUND MANHOLE TOP AS DETAILED AND WORK CONCRETE UNDER CASTING AND AROUND SUPPORT.
 - REMOVE TUBE AFTER CONCRETE SETS.
 - INSTALL INTERIOR INFILTRATION BARRIER SEAL (SANITARY MANHOLES ONLY).
 - CITY STAFF IS AVAILABLE TO DEMONSTRATE THIS METHOD.
 - SEE SUDAS DETAIL 7010-103 FOR MANHOLE BOXOUT REQUIREMENTS IN PCC PAVEMENT.
 - SEE SUDAS SECTION 6010 FOR ADJUSTMENT OF CASTINGS.

DETAIL-FLUSH CASTING INSTALLATION

SCALE: 3/4" = 1'-0"



NOTES

NO.	REVISIONS	DSGN	CHKD	APVD	DATE

225 Iowa Avenue, Muscatine, Iowa 52761-3764
www.stanleyconsultants.com

CITY OF MUSCATINE - PHASE 6D
WEST HILL AREA SANITARY AND STORM SEWER SEPARATION
MUSCATINE, IOWA

MISCELLANEOUS SEWER DETAILS

DESIGNED_KK HEIM	SCALE: AS NOTED	REV. A.050
DRAWN_GM REEVES	NO. 17660.60.30	
CHECKED_ER SCHALLERT		
APPROVED_JM BRADY		
APPROVED_KK HEIM		
DATE_MARCH 12, 2025		

1. LIMITS OF SIDEWALK AND DRIVEWAY/ALLEY REMOVAL AND REPLACEMENT VARY. SEE PLAN.
2. PAVEMENT CONSTRUCTION WHERE NEW PAVEMENT BUTTS UP TO EXISTING BRICK BASE PAVEMENT SHALL USE "B" JOINT FROM SUDAS DETAIL 7010.101.
3. INSTALL CLASS A SIDEWALK WHEN SIDEWALK IS ALONG BACK OF CURB PER SUDAS DETAIL 7030.201. 5' MINIMUM WIDTH SEE PLANS FOR LOCATIONS AND SIDEWALK WIDTHS. TRANSVERSE SIDEWALK ISOLATION JOINTS SHALL BE LOCATED AT INTERVALS NOT MORE THAN 100' IN LENGTH OF SIDEWALK. LOCATE TO CREATE LEAST VISUAL DETRACTION POSSIBLE.
4. SEE SUDAS DETAIL 7010.102 FOR 6" STANDARD CURB AND GUTTER DETAIL.
5. TRANSVERSE JOINTS: 7" PCC SHALL HAVE TYPE "CD" TRANSVERSE JOINTS AT 15' MAXIMUM INTERVAL. 7" PCC DOWELED CONTRACTION JOINTS SHALL BE 3/4" DOWEL DIAMETER.
6. LONGITUDINAL JOINTS: 7" PCC SHALL HAVE TYPE L-1, KT-1, OR BT-1 LONGITUDINAL JOINTS DEPENDING ON THE PAVING SEQUENCE. SEE SUDAS DETAIL 7010.101 FOR BAR SIZES.
7. SLOPE BEHIND SIDEWALK VARIES. GRADE UNIFORMLY BETWEEN BACK OF SIDEWALK AND GRADING LIMITS. 3:1 MAXIMUM.
8. SEE SUDAS DETAIL 7030.101 FOR DRIVEWAY/ALLEY OPENINGS AND DROP CURB HEIGHT.
9. SEE W SERIES SHEETS FOR PROPOSED CROSS SECTIONS. DROP CURB HEIGHT: 1.5'.
10. WHEN SUBDRAIN IS IN CONFLICT WITH LONGITUDINAL STORM SEWER PIPE, ELIMINATE SUBDRAIN.
11. SEE SUDAS DETAIL 4040.231 FOR SUBDRAIN LOCATION OPTIONS AND SECTION REQUIREMENTS.
12. PAVING MUST BE DONE USING A SLIP FORM PAVER, HAND POOR, OR OTHER SUDAS APPROVED METHOD. POWER/LASER SCREED WILL NOT BE ALLOWED ON MAINLINE DRIVING SURFACE.
13. TRANSITION PAVEMENT CROSS SLOPE TO MATCH EXISTING CROSS SLOPE OVER 24 FEET MINIMUM.



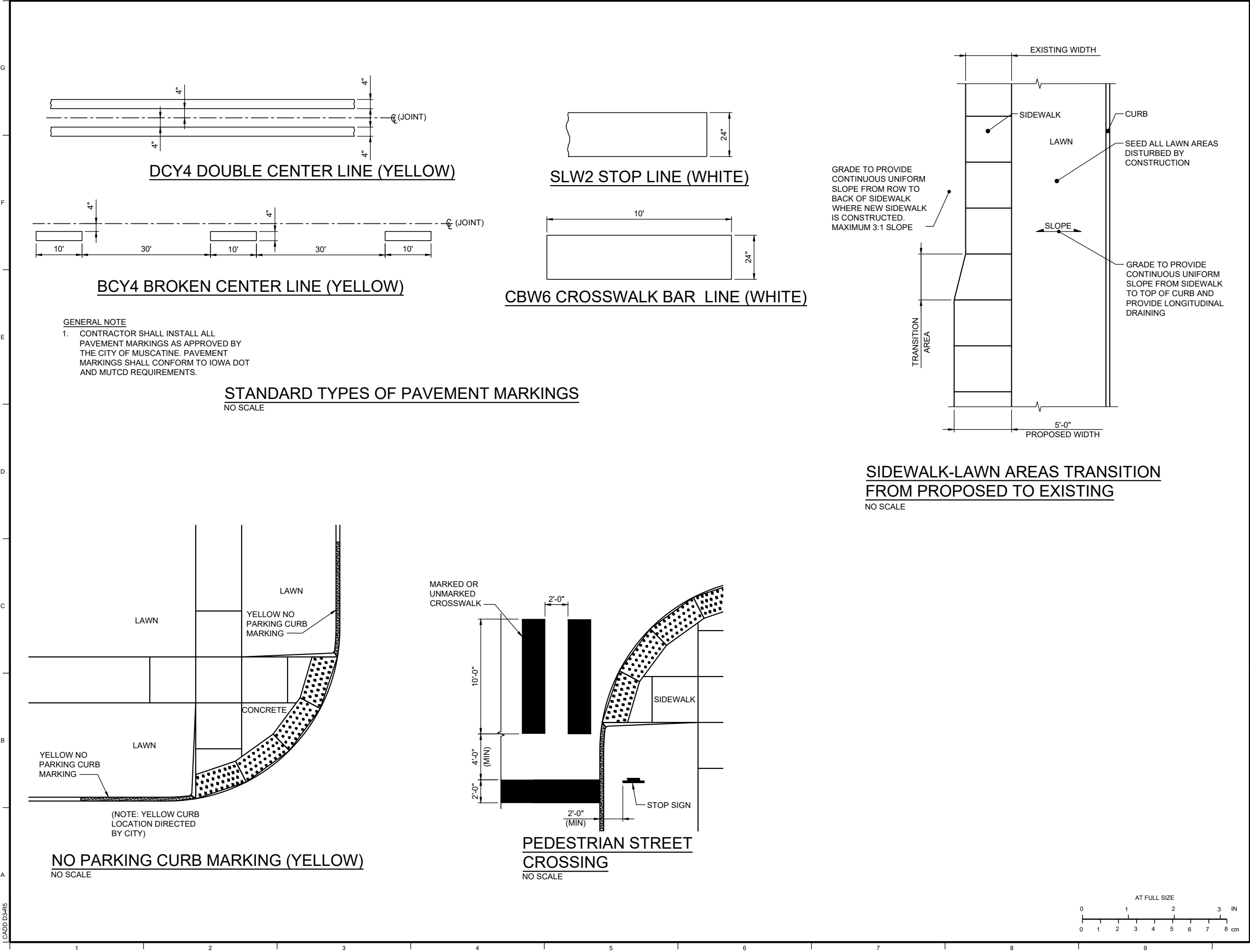
PAVEMENT CROSS SLOPE		
STREET	LEFT CROSS SLOPE	RIGHT CROSS SLOPE
HAGERMAN DR	2%	2%
LOGAN ST	3%	2%
EISENHOWER ST	2%	2%
DEVITT AVE	3.5%	2%



AT FULL SIZE

0 1 2 3 IN

0 1 2 3 4 5 6 7 8 cm



NOTES

NO.	REVISIONS	DSGN	CHKD	APVD	DATE

Stanley Consultants INC.

225 Iowa Avenue, Muscatine, Iowa 52761-3764
www.stanleyconsultants.com

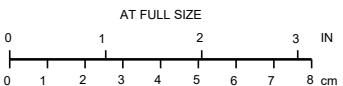
CITY OF MUSCATINE - PHASE 6D
WEST HILL AREA SANITARY AND STORM SEWER SEPARATION
MUSCATINE, IOWA

PAVEMENT DETAILS

DESIGNED	PM JOHNSON	SCALE:	AS NOTED
DRAWN	GM REEVES	NO.	17660.60.30
CHECKED	ER SCHALLERT	REV.	
APPROVED	KK HEIM		
APPROVED	PM JOHNSON		
DATE	MARCH 12, 2025		

B.02	0
------	---

LOAD D3-R6



ESTIMATED PROJECT QUANTITIES				
ITEM NO	SUDAS ITEM CODE	DESCRIPTION	UNIT	ESTIMATED QUANTITY
1	2010-A	CLEARING AND GRUBBING BY UNITS	UNIT	195.1
2	2010-C	GRUBBING BY LUMP SUM	LS	1
3	2010-D-1	TOPSOIL, ON-SITE TOPSOIL	CY	1648
4	2010-D-3	TOPSOIL, OFF-SITE TOPSOIL, CONTRACTOR PROVIDED	CY	1344
5	2010-D-3	TOP SOIL, OFF-SITE TOPSOIL, OWNER PROVIDED	CY	149
6	2010-E	CLASS 10 EXCAVATION	CY	2181
7	2010-E	CLASS 10 EXCAVATION, GRADING EARTHWORK	CY	204
8	2010-E	CLASS 13 EXCAVATION - DEBRIS REMOVAL AND DISPOSAL	TONS	120
9	2010-H	GRANULAR STABILIZATION, 12" GRANULAR SUBBASE	SY	2764
10	2010-I	SUBGRADE TREATMENT, GEOTEXTILE	SY	2764
11	2010-J	GRANULAR SUBBASE - 6" (UNDER ROADWAY PAVEMENT) (CONTRACTOR PROVIDED)	SY	6634
12	2010-J	GRANULAR SUBBASE - 6" (UNDER ROADWAY PAVEMENT) (CITY FURNISHED CRUSHED CONCRETE)	SY	4423
13	2010-J	SPECIAL BACKFILL - CONTRACTOR PROVIDED MATERIAL - 6" (UNDER DRIVEWAY/ALLEY)	SY	1380
14	2010-J	SPECIAL BACKFILL - CONTRACTOR PROVIDED MATERIAL - 4" (UNDER SIDEWALKS)	SY	97
15	2010-J	TEMPORARY GRANULAR SURFACE	TONS	491
16	2010-K-3	REMOVALS, PIPES	LF	250
17	2010-K-3-X	REMOVALS, PIPES, EXISTING UWBS	LF	1234
18	2010-L-1	FILLING AND PLUGGING OF PIPE	LF	190
19	2505-XX	STEEL BEAM GUARDRAIL	LF	54
20	3010-C	TRENCH FOUNDATION (1-INCH CLEAN)	CY	300
21	3010-C	STABILIZED (FOUNDATION) MATERIALS	CY	50
22	3010-XX	SHEETING LEFT IN PLACE	SF	400
23	3010-XX	EXPLORATORY TRENCH AND TEST DIGS	LF	100
24	3010-XX	VIBRATION MONITORING	LS	1
25	3010-xx	EXCAVATION PLAN	LS	1
26	4010-A-1	SANITARY SEWER SERVICE, 4" OR 6" PVC (ASTM D3034)	LF	524
27	4010-A-1	SANITARY SEWER SERVICE, 4" OR 6" PVC (ASTM D3034) OUTSIDE OF ROW	LF	246
28	4010-A-1	SANITARY SEWER SERVICE, TRENCHLESS	LF	140
29	4010-A-1	SANITARY SEWER, POLYVINYL CHLORIDE COMPOSITE PIPE (TRUSS TYPE PVC), 8"	LF	362
30	4010-A-1	SANITARY SEWER, POLYVINYL CHLORIDE COMPOSITE PIPE (TRUSS TYPE PVC), 12"	LF	411
31	4010-A-1	SANITARY SEWER, POLYVINYL CHLORIDE COMPOSITE PIPE (TRUSS TYPE PVC), 15"	LF	3124
32	4010-A-1	SANITARY SEWER, 18" PVC	LF	23
33	4010-A-1	SANITARY SEWER, 15" DIP	LF	87
34	4010-A-2	SANITARY SEWER, TRENCHLESS CONSTRUCTION, 12" SEWER	LF	15
35	4010-A-2	SANITARY SEWER, TRENCHLESS CONSTRUCTION, 15" SEWER	LF	30
36	4010-xx	SANITARY SEWER SERVICE CONNECTIONS TO MAIN, (4" AND 6")	EA	46
37	4010-I	SANITARY SEWER CLEANOUT	EA	1
38	4010-XX	SANITARY SEWER INTERNAL HOME REPLUMBING	LS	1
39	4010-A	SEWER, DIP, WATER MAIN MATERIAL, FOR CONFLICTS, 8"	LF	30
40	4010-A	SEWER, DIP, WATER MAIN MATERIAL, FOR CONFLICTS, 12"	LF	30
41	4010-A	SEWER, DIP, WATER MAIN MATERIAL, FOR CONFLICTS, 16"	LF	30
42	4010-A	SEWER, PVC, WATER MAIN MATERIAL, FOR CONFLICTS, 8"	LF	30
43	4010-A	SEWER, PVC, WATER MAIN MATERIAL, FOR CONFLICTS, 12"	LF	30
44	4010-A	SEWER, PVC, WATER MAIN MATERIAL, FOR CONFLICTS, 16"	LF	30
45	4020-A-1	STORM SEWER, 12", CLASS IV RCP	LF	8
46	4020-A-1	STORM SEWER, 15", CLASS IV RCP	LF	380
47	4020-A-1	STORM SEWER, 18", CLASS IV RCP	LF	1152
48	4020-A-1	STORM SEWER, 21", CLASS IV RCP	LF	9
49	4020-A-1	STORM SEWER, 24", CLASS IV RCP	LF	267
50	4020-A-1	STORM SEWER, 30", CLASS IV RCP	LF	383
51	4020-A-1	STORM SEWER, 48" ELLIPTICAL (38"HX60"W), CLASS IV RCP	LF	1221
52	4020-A-1	STORM SEWER INLET PIPING, 12" PVC (ASTM F949)	LF	20
53	4020-A-1	STORM SEWER INLET PIPING, 15" PVC (ASTM F949)	LF	20
54	4030-B	PIPE APRON, FOOTING, GUARD	EA	5
55	4040-A	TYPE 1 SUBDRAINS (LONGITUDINAL) CORRUGATED PE, 4"	LF	5857
56	4040-D-1	SUBDRAIN OUTLETS AND CONNECTIONS	EA	15
57	4050-A-2	PRE-REHABILITATION CLEANING AND INSPECTION, ALL DIAMETERS	LF	994
58	4050-C-1	CIPP MAIN LINING, 12"	LF	594
59	4050-C-1	CIPP MAIN LINING, 15"	LF	400
60	4050-C-2	BUILDING SANITARY SEWER SERVICE REINSTATEMENT	EA	30
61	4050-G	BYPASS PUMPING, HAGERMAN DR STORM	LS	1

ESTIMATED PROJECT QUANTITIES				
ITEM NO	SUDAS ITEM CODE	DESCRIPTION	UNIT	ESTIMATED QUANTITY
62	4060-XX	INTERNAL VIDEO INSPECTION (ALL SEWER)	LF	7427
63	5010-E-1	WATER SERVICE PIPE, COPPER, 1"	LF	600
64	5010-E-2	WATER SERVICE CORPORATION	EA	15
65	5010-E-3	WATER SERVICE CURB STOP AND BOX	EA	15
66	5020-C	FIRE HYDRANT ASSEMBLY	EA	1
67	6010-A	SANITARY MANHOLE, ECCENTRIC, SW-301, 5' DIAMETER (8' DEEP)	EA	21
68	6010-A	SANITARY MANHOLE, EXTRA DEPTH, 5' DIAMETER	LF	59.9
69	6010-A	SANITARY MANHOLE, SW-301 FLAT TOP, 5' DIAMETER	EA	1
70	6010-A	STORM MANHOLE, FLAT TOP, SW-401, 5' DIAMETER (UP TO 8' DEEP)	EA	7
71	6010-A	STORM MANHOLE, EXTRA DEPTH, 5' DIAMETER	LF	10.7
72	6010-A	STORM MANHOLE, SW-401, 8' DIAMETER	EA	3
73	6010-A	STORM MANHOLE, SW-401, 8' DIAMETER WITH 4' DIAMETER RISER	EA	1
74	6010-A	MANHOLE REPLACEMENT RISER SECTIONS, 3' RISER	LF	9.6
75	6010-A	STORM MANHOLE, SW-406, SHALLOW RECTANGULAR (8'X8')	EA	1
76	6010-B	STORM INLET, SW-501	EA	1
77	6010-B	STORM INLET, SW-502, 5'	EA	4
78	6010-B	STORM INLET, SW-507	EA	5
79	6010-B	STORM INLET, SW-509	EA	7
80	6010-B	STORM INLET, SW-512, 24" DIAMETER, 604 TYPE 5	EA	1
81	6010-C-1	SANITARY INTERNAL DROP CONNECTION	EA	3
82	6010-H	REMOVE MANHOLE OR INTAKE	EA	24
83	6010-X	CURB OPENING CASTING	EA	10
84	6010-X	MANHOLE CASTING	EA	1
85	7010-A	PCC PAVEMENT, 7 INCH	SY	9756
86	7010-I	PCC PAVEMENT SAMPLES AND TESTING	LS	1
87	7020-A	ASPHALT PAVEMENT BY TON	TON	75
88	7030-A-3	REMOVAL OF DRIVEWAY/ALLEY	SY	1312
89	7030-A-1	REMOVAL OF SIDEWALK	SY	92
90	7030-B	REMOVAL OF CURB, LIMESTONE CURB	LF	20
91	7030-E	PCC SIDEWALK, 4-INCH	SY	97
92	7030-E	PCC SIDEWALK, 6-INCH	SY	3
93	7030-G	DETECTABLE WARNINGS	SF	25
94	7030-H-1	PAVED DRIVEWAYS, AND ALLEYS, PCC, 6-INCH	SY	1380
95	7040-G	MILLING	SY	7587
96	7040-H	PAVEMENT REMOVAL, CONCRETE	SY	1770
97	7040-XX	SUBBASE MATERIAL REMOVAL AFTER MILLING	SY	7587
98	8020-C	PAINTED PAVEMENT MARKINGS, DURABLE	STA	1.2
99	8030-A	TEMPORARY TRAFFIC CONTROL	LS	1
100	8030-XX	SPECIAL SIGNAGE	SF	64
101	9010-B	SEEDING, FERTILIZING & MULCHING FOR CONVENTIONAL SEEDING, RESIDENTIAL (TYPE 1)	SF	1000
102	9010-B	SEEDING, FERTILIZING, & MULCHING FOR HYDRAULIC SEEDING, RESIDENTIAL (TYPE 1)	SF	80649
103	9010-B	SEEDING, FERTILIZING, & MULCHING FOR HYDRAULIC SEEDING, NOT MOVED MX (TYPE 2)	SF	88966
104	9030-A	PLANTS, LANDSCAPING BY AREA	SF	406
105	9040-A-2	SWPPP MANAGEMENT	LS	1
106	9040-D	FILTER SOCKS	LF	5857
107	9040-E	TEMPORARY ROLLED EROSION CONTROL PRODUCTS (RECP) TYPE 4.B (LONG TERM)	SY	7125
108	9040-J	RIPRAP, CLASS D AND E REVETMENT	TONS	10
109	9040-J	EROSION STONE	TONS	40
110	9040-N	SILT FENCE OR SILT FENCE DITCH CHECK	LF	1670
111	9040-O	STABILIZED CONSTRUCTION EXIT	EA	9
112	9040-Q-2	EROSION CONTROL MULCHING, HYDROMULCHING	ACRE	3.9
113	9040-T	INLET PROTECTION DEVICE, DROP IN PROTECTION	EA	10
114	9040-T	INLET PROTECTION DEVICE, OPEN-THROAT CURB INTAKE SEDIMENT FILTER, EC-602	LF	40
115	9040-XX	TURF REINFORCEMENT MESH (TEMPORARY)	SF	4000
116	9060-D	REMOVAL AND REINSTALLATION OF EXISTING FENCE	LF	165
117	9070-A	RETAINING WALL, ALL TYPES	SF	95
118	9080-A	CONCRETE STEPS	SF	70
119	9080-B	HANDRAIL	LF	30
120	11,010-A	CONSTRUCTION SURVEY	LS	1
121	11,010-XX	RECORD DRAWINGS	LS	1
122	11,020-A	MOBILIZATION	LS	1
123	11,020-A	MOBILIZATION, EROSION CONTROL	EA	9
124	11,020-XX	EXISTING CONDITIONS VIDEO RECORD	LS	1
125	11,030-A	MAINTENANCE OF POSTAL SERVICE	LS	1
126	11,030-B	MAINTENANCE OF SOLID WASTE COLLECTION	LS	1
127	11,050-A	CONCRETE WASHOUT	LS	1

NOTES

1. REFER TO WATER MAIN PLANS FOR ADDITIONAL ESTIMATED PROJECT QUANTITIES.
2. ESTIMATED PROJECT QUANTITIES ARE PROVIDED ON THIS SHEET FOR CONVENIENCE AND SHOULD MATCH THOSE IN THE PROJECT MANUAL. IF DISCREPANCIES ARE FOUND ESTIMATED QUANTITIES IN THE PROJECT MANUAL PREVAIL.

NO.	REVISIONS	DSGN	CHKD	APVD	DATE



225 Iowa Avenue, Muscatine, Iowa 52761-3764
www.stanleyconsultants.com

CITY OF MUSCATINE - PHASE 6D
WEST HILL AREA SANITARY AND STORM SEWER SEPARATION
MUSCATINE, IOWA

ESTIMATED PROJECT QUANTITIES

DESIGNED	KK HEIM	
DRAWN	GM REEVES	
CHECKED	ER SCHALLERT	
APPROVED	JM BRADY	
APPROVED	KK HEIM	
DATE	MARCH 12, 2025	

SCALE: AS NOTED	
NO. 17660.60.30	REV
C.01	0

			ESTIMATE REFERENCE NOTES
ITEM NO	ITEM CODE	UNIT	DESCRIPTION
1	2010-A	UNIT	CLEARING AND GRUBBING BY UNITS A. REFER TO SUDAS SECTION 2010, 1.08 FOR MEASUREMENT AND PAYMENT OF TREES AND STUMPS. B. INCLUDES ALL LISTED ITEMS IN 1.08 FOR REMOVING STREET TREES AND STUMPS WITH TRUNK DIAMETER 6-INCHES OR GREATER ALONG THE SEWER ALIGNMENT IN DIRECT CONFLICT WITH TRENCH ALIGNMENT, STREET RESTORATION, OR AS DIRECTED BY CITY. C. REMOVING TREES 6-INCHES IN DIAMETER AND SMALLER IS CONSIDERED INCIDENTAL TO TRENCH EXCAVATION. APPROVAL TO REMOVE TREE IS REQUIRED FROM THE CITY. STREET TREE REMOVAL CAN BE PERFORMED YEAR ROUND. D. DISPOSAL OF TREES, STUMPS, BRUSH, ROOTS AND OTHER VEGETATION AT CONTRACTOR SELECTED SITE. E. FOR TREES TO BE SAVED, EXCAVATE UNDER ROOTS. CUT NO TREE ROOTS LARGER THAN 3-INCHES IN DIAMETER. F. REFER TO R SHEETS FOR KNOWN TRUNK DIAMETER OF TREES WITHIN THE PROJECT AREA AND ANY TREES ANTICIPATED FOR REMOVAL OR PROTECTION. G. CITY TIPPING FLOOR IS NOT AVAILABLE FOR TREE DISPOSAL.
2	2010-C	LS	GRUBBING BY LUMP SUM A. REFER TO SUDAS SECTION 2010, 1.08 AND 3.01. B. GRUBBING TO BE PERFORMED BY CONTRACTOR WITHIN CONSTRUCTION LIMITS NOTED ON SHEETS R.02 THRU R.04. GRUBBING LIMITS MUST BE CITY APPROVED PRIOR TO ACTIVITIES. C. TREE CUTTING BETWEEN HAGERMAN DRIVE AND EISENHOWER WILL OCCUR BETWEEN DATES OCTOBER 1 THROUGH MARCH 31 BY OTHERS . D. PROPERTY OWNERS MAY TAKE POSSESSION OF TREES THAT HAVE DOWNED ON THEIR PROPERTY. COORDINATE WITH CITY. ITEM DOES NOT INCLUDE TREE CLEARING OR GRUBBING IN CITY ROW ALONG RESIDENTIAL STREETS. E. INCLUDES COSTS TO DISPOSE OF ALREADY FELLED TREES.
3	2010-D-1	CY	TOPSOIL, ON-SITE TOPSOIL A. INCLUDES ALL LISTED ITEMS IN 1.08. B. FINISHED DEPTH OF PLACED TOPSOIL SHALL BE MINIMUM OF 6-INCHES. C. STRIPPING AND STOCKPIILING TOPSOIL SHALL BE DONE IN GRASSED AND WOODED AREA BETWEEN HAGERMAN DRIVE AND EISENHOWER UNLESS CITY REQUIRES OTHERWISE. D. MEASUREMENT FOR PAYMENT WILL BE BASED ON THE AREAS ON-SITE TOPSOIL WAS PLACED AND WILL BE COMPUTED ON THE BASIS OF A UNIFORM 6-INCH FINISHED DEPTH.
4	2010-D-3	CY	TOP SOIL, OFF-SITE TOPSOIL, CONTRACTOR PROVIDED A. INCLUDES ALL LISTED ITEMS IN 1.08. B. FINISHED DEPTH OF PLACED TOPSOIL SHALL BE MINIMUM OF 6-INCHES. ALL TOPSOIL FOR THIS ITEM SHALL BE FURNISHED BY CONTRACTOR. CONTRACTOR'S OFF-SITE SOURCE SHALL BE APPROVED BY CITY. C. REFER TO D SHEETS FOR SEEDING AREAS. PROVIDE OFFSITE TOPSOIL FOR SEEDED AREAS. QUANTITY ESTIMATE WAS SPLIT BETWEEN OWNER PROVIDED AND CONTRACTOR PROVIDED. D. USE OF THIS ITEM REQUIRES CITY ENGINEER'S PRIOR APPROVAL. E. MEASUREMENT FOR PAYMENT WILL BE BASED ON THE AREAS TOPSOIL WAS PLACED AND WILL BE COMPUTED ON THE BASIS OF A UNIFORM 6-INCH FINISHED DEPTH.
5	2010-D-3	CY	TOP SOIL, OFF-SITE TOPSOIL, OWNER PROVIDED A. INCLUDES ALL LISTED ITEMS IN 1.08. B. PLACED TOPSOIL FINISHED DEPTH SHALL BE A MINIMUM OF 6-INCHES. C. ALL TOPSOIL FOR THIS ITEM SHALL BE FURNISHED BY CITY. CONSULT CITY IF AVAILABLE. MATERIAL MAY BE AVAILABLE AT CITY'S LAKE PARK BOULEVARD COMPOST SITE (FORMER DOT SITE). CITY PROVIDED MATERIAL MAY REQUIRE CONTRACTOR PREPARATION FOR USE AS TOPSOIL MEETING REQUIREMENTS OF SUDAS SPEC. D. QUANTITY ESTIMATE IS BASED ON FINISHED DEPTH OF 6-INCHES OF PLACED TOPSOIL WITHIN RESIDENTIAL SEEDING AREA SHOWN ON D SERIES SHEETS. QUANTITY ESTIMATE WAS SPLIT BETWEEN OWNER PROVIDED AND CONTRACTOR PROVIDED. F. MEASUREMENT FOR PAYMENT WILL BE BASED ON THE AREAS TOPSOIL WAS PLACED AND WILL BE COMPUTED ON THE BASIS OF A UNIFORM 6-INCH FINISHED DEPTH.
6	2010-E	CY	CLASS 10 EXCAVATION A. REFER TO SUDAS SECTION 2010 AND IOWA DOT SPECIFICATIONS SECTION 2102 B. ITEM INCLUDES, BUT IS NOT LIMITED TO, COST TO EXCAVATE, LOAD, HAUL, AND PROPERLY DISPOSE OF COMMONLY ENCOUNTERED EXCAVATED MATERIALS. THIS ITEM IS USED FOR REMOVAL OF AGGREGATE MATERIAL UNDER EXISTING STREETS. C. MEASUREMENT SHALL BE PER COMMONLY ACCEPTED PER-TRUCK VOLUME AS AGREED UPON BY THE CITY AND CONTRACTOR. SEE 1.08 E. 1, b, 2). D. QUANTITY IS ESTIMATED BASED ON A NOMINAL 6-INCH THICKNESS UNDER REMOVED PAVEMENT TO PROVIDE DEPTH FOR PLACEMENT OF GRANULAR SUBBASE.
7	2010-E	CY	CLASS 10 EXCAVATION, GRADING EARTHWORK A. REFER TO D SHEETS FOR GRADING TO CREATE ACCESS PATH. B. INCLUDES WORK ITEMS LISTED IN 1.08 AND ALL ASSOCIATED EARTHWORK NEED TO SHAPE AND GRADE THE AREA. C. PAYMENT WILL BE MADE BASED ON PLAN ESTIMATE WITHOUT FINAL FIELD MEASUREMENT. MEASUREMENT ADJUSTMENTS CAN BE MADE AS OUTLINED IN 1.08. D. ESTIMATED VOLUME OF EARTHWORK FOR THE ACCESS PATH IS 204 CY CUT AND 138 CY FILL. E. ESTIMATED VOLUME OF EARTHWORK FOR THE CUL-DE-SAC IS 334 CY CUT AND 9 CY FILL.
8	2010-E	TONS	CLASS 13 EXCAVATION - DEBRIS REMOVAL AND DISPOSAL A. REFER TO SUDAS SECTION 2010 AND IOWA DOT SPECIFICATIONS SECTION 2102, EXCEPT AS MODIFIED HEREIN. B. ITEM INCLUDES, BUT IS NOT LIMITED TO, COST TO EXCAVATE, LOAD, HAUL, AND PROPERLY DISPOSE OF USED RAILROAD TIES, CONCRETE DEBRIS AND ASSOCIATED MATERIALS. ITEM TO INCLUDE CITY LANDFILL TIPPING FEE. CONTRACTOR TO TRANSPORT MATERIAL TO LANDFILL AFTER MATERIAL IS WEIGHED AT TRANSFER STATION. C. MEASUREMENT AND PAYMENT IS BASED ON SCALED WEIGHT OF DEBRIS AND ASSOCIATED MATERIAL IN TONS. D. THIS PROVISIONAL ITEM IS INCLUDED TO ESTABLISH A UNIT PRICE..

			ESTIMATE REFERENCE NOTES
ITEM NO	ITEM CODE	UNIT	DESCRIPTION
9	2010-H	SY	GRANULAR STABILIZATION, 12" GRANULAR SUBBASE A. THIS ITEM IS USED FOR EXTRA AGGREGATE AT A THICKNESS OF 12" TO REPLACE UNSTABLE SUBGRADE . THE AGGREGATE MATERIAL SHALL BE GRANULAR SUBBASE LISTED UNDER SUDAS 2010, 2.04, D. 2. SEE 3.06 FOR SUBGRADE PREPARATION INSTALLATION REQUIREMENTS. B. QUANTITY ESTIMATE INCLUDES UP TO A MAXIMUM OF 2 FOOT HORIZONTALLY OF GRANULAR SUBBASE FOR SUBGRADE STABILIZATION BEYOND PAVEMENT EDGE. CONTRACTOR WILL NOT BE PAID FOR ADDITIONAL GRANULAR SUBBASE PLACED BEYOND THE MAXIMUM STATED. C. ITEM INCLUDES BUT IS NOT LIMITED TO SUBGRADE STABILIZATION AGGREGATE FURNISHING, LOADING, HAULING, PLACING, COMPACTING AND TRIMMING TO PROPER GRADE. PAY ITEM ALSO INCLUDES SUBGRADE PREPARATION, MANIPULATION, COMPACTION, SHAPING, AND TRIMMING TO PREPARE FOR SUBGRADE STABILIZATION AGGREGATE PLACEMENT. D. SUBGRADE STABILIZATION AGGREGATE COMPACTION TESTING SHALL BE PROVIDED BY CONTRACTOR IN ACCORDANCE WITH SUDAS SECTION 2010, 3.09. E. SUBGRADE STABILIZATION AGGREGATE SHALL BE PROOF-ROLLED. PROOF-ROLLING MUST BE WITNESSED AND APPROVED BY CITY.
10	2010-I	SY	SUBGRADE TREATMENT, GEOTEXTILE A. REFER TO SUDAS SECTION 2010, 2.04, C. 6; AND 3.07, B. B. THIS PROVISIONAL ITEM IS INCLUDED TO ESTABLISH A UNIT PRICE. CITY ENGINEER MUST AUTHORIZE PAY ITEM USAGE. C. ITEM IS USED TO STABILIZE SUBGRADE UNDER PAVEMENT. USE WOVEN, UV-STABILIZED GEOTEXTILE WITH A MINIMUM TENSILE STRENGTH OF 135 LB/FT ACCORDING TO SUDAS SECTION 9040, 2.14 B. D. INCLUDES ITEMS LISTED IN 1.08 E. MEASUREMENT INCLUDES INCORPORATING THE GEOTEXTILE UNDER THE SUBBASE INCLUDING 2 FEET BEHIND THE BACK OF CURB ON EACH SIDE.
11	2010-J	SY	GRANULAR SUBBASE - 6" (UNDER ROADWAY PAVEMENT) (CONTRACTOR PROVIDED) A. REFER TO SUDAS SECTION 2010; 2.04, D, 2; IOWA DOT SPECIFICATION 4121 B. QUANTITY ESTIMATE INCLUDES UP TO A MAXIMUM OF 2 FEET HORIZONTALLY OF GRANULAR SUBBASE BEYOND PAVEMENT EDGE. CONTRACTOR WILL NOT BE PAID FOR EXCESS GRANULAR SUBBASE BEYOND THE MAXIMUM STATED. ITEM ALSO INCLUDES SUBGRADE PREPARATION, MANIPULATION, COMPACTION, SHAPING, AND TRIMMING TO PREPARE FOR SUBBASE PLACEMENT AND LOADING AND HAULING OF SUBBASE. C. GRANULAR SUBBASE AGGREGATE SHALL BE GRADATION 12A OR 12B OR 14 ACCORDING TO DOT TABLE 4109.02-1. SEE TYPICAL SECTIONS ON DRAWING B.01. D. SUBBASE COMPACTION TESTING SHALL BE PROVIDED BY CONTRACTOR IN ACCORDANCE WITH SUDAS SECTION 2010, 3.09. E. SUBGRADE SHALL BE PROOF-ROLLED. PROOF-ROLLING MUST BE WITNESSED AND APPROVED BY CITY. F. THIS MATERIAL IS CONTRACTOR FURNISHED AGGREGATE USED FOR SUBBASE UNDER PCC PAVMENT
12	2010-J	SY	GRANULAR SUBBASE - 6" (UNDER ROADWAY PAVEMENT) (CITY FURNISHED CRUSHED CONCRETE) A. ALL ITEMS LISTED UNDER 'GRANULAR SUBBASE - CONTRACTOR PROVIDED' APPLY TO THIS ITEM. B. GRANULAR SUBBASE SHALL BE CITY SUPPLIED CRUSHED CONCRETE CRUSHED TO GRADATION 12A OR 12B ACCORDING TO DOT TABLE 4109.02-1. C. THIS MATERIAL IS CITY FURNISHED CRUSHED CONCRETE USED FOR SUBBASE UNDER PCC PAVEMENT.
13	2010-J	SY	SPECIAL BACKFILL - CONTRACTOR PROVIDED MATERIAL - 6" (UNDER DRIVEWAY/ALLEY) A. REFER TO SECTION 2010, 2.04, D, 1; AND 3.08. B. QUANTITY ESTIMATE DOES NOT INCLUDE ANY SPECIAL BACKFILL BEYOND THE PAVEMENT EDGE. C. ITEM INCLUDES, BUT IS NOT LIMITED TO, ALL COSTS FOR LABOR, MATERIAL, AND EQUIPMENT FOR HAULING; PLACING, COMPACTING, AND REMOVAL AS NECESSARY. D. SPECIAL BACKFILL SHALL MEET THE GRADATION REQUIREMENTS OF IOWA DOT SECTION 4132.02 GRADATION 30. E. SEE DRAWING B.01 FOR TYPICAL SECTION. E. COMPACTION TESTING SHALL BE PROVIDED BY CONTRACTOR IN ACCORDANCE WITH SUDAS SECTION 2010, 3.09. SUBGRADE PROOFROLLING IS NOT REQUIRED.
14	2010-J	SY	SPECIAL BACKFILL - CONTRACTOR PROVIDED MATERIAL - 4" (UNDER SIDEWALKS) A. ALL ITEMS DESCRIBED UNDER 6" SPECIAL BACKFILL APPLY TO THIS ITEM.
15	2010-J	TON	TEMPORARY GRANULAR SURFACE A. MATERIAL SHALL BE INSTALLED FOR TEMPORARY CONSTRUCTION AND RESIDENT VEHICLE ACCESS ROUTES PARALLEL TO PAVEMENTS UNDER CONSTRUCTION WHEN FIELD DIRECTED BY THE CITY. PRIOR AUTHORIZATION OF THIS ITEM IS REQUIRED BEFORE INSTALLATION. B. ITEM INCLUDES, BUT IS NOT LIMITED TO, ALL COSTS FOR LABOR, MATERIAL, AND EQUIPMENT FOR HAULING; PLACING, COMPACTING, AND REMOVAL AS NECESSARY. C. MATERIAL SHALL BE IOWA DOT SECTION 4123 OR 4109, GRADATION 12, GRANULAR SUBBASE, OR IOWA DOT SECTION 4132, GRADATION 30 OR 31, SPECIAL BACKFILL SO THAT IT CAN BE LEFT IN PLACE AS PAVEMENT BASE OR REUSED UNDER DRIVEWAYS AND SIDEWALKS ADJACENT TO THE PAVEMENT. D. REFER TO SUDAS SECTION 2010, 3.08, FOR (SUBBASE) INSTALLATION REQUIREMENTS TO BE APPLIED TO CRUSHED STONE INSTALLATION. E. QUANTITY WAS ESTIMATED INCLUDING POSSIBLE USAGE ON HAGERMAN DRIVE.
16	2010-K-3	LF	REMOVALS, PIPES A. THIS ITEM SHALL BE USED AT THE DISCRETION OF THE CITY ENGINEER. CONTRACTOR SHALL OBTAIN APPROVAL PRIOR TO UTILIZING THIS ITEM. B. USE ITEM FOR REMOVAL OF EXISTING SEWER PIPES OUTSIDE THE EXCAVATED TRENCH TO INSTALL NEW SEWERS. USE WHEN REMOVED PIPE IS 10 FEET OR MORE AWAY FROM NEW SEWERS. SEPARATE PAYMENT WILL NOT BE MADE FOR DIFFERENT SIZES AND TYPES OF EXISTING PIPES. PAYMENT WILL NOT BE MADE FOR REMOVAL OF PIPES WITHIN THE PIPE TRENCH OF NEW SEWERS. C. INCLUDED ITEMS LISTED ARE LISTED IN 1.08 PLUS EXCAVATION TO REMOVE THE PIPE AND PROTECTION OF EXISTING UTILITIES AND BACKFILLING.
17	2010-K-3-X	LF	REMOVALS, PIPES, EXISTING UWBS A. USE FOR REMOVAL OF EXISTING UWBS ON HAGERMAN DRIVE. SEE SHEETS M.01, M.02 AND M.03. B. INCLUDES ALL ITEMS LISTED IN 1.08 K 3 TO CAREFUL REMOVE AND DISPOSE OF EXISTING 3.2' X 3.2' EXISTING CONCRETE BOX STRUCTURE.

NOTES

1. ALL SUDAS REFERENCES ARE TO SUDAS SPECIFICATIONS 2025 EDITION.
2. FOR EACH ITEM, CONTRACTOR SHALL CAREFULLY REVIEW THE REFERENCED SUDAS SPECIFICATION IN ITS ENTIRETY. SUDAS SPEC, ESTIMATE REFERENCE NOTES, SPECIAL PROVISIONS SECTION 00 75 00, AND THE DRAWINGS MUST BE REVIEWED TOGETHER FOR EACH PROJECT ITEM. UNLESS NOTED OTHERWISE IN THESE CONTRACT DOCUMENTS, ALL PROVISIONS OF SUDAS APPLY.
3. MEASUREMENT AND PAYMENT DESCRIPTIONS IN PART 1.08 UNDER EACH SUDAS STANDARD SPECIFICATION SECTION SHALL BE REVIEWED IN CONJUNCTION WITH THESE ESTIMATE REFERENCE NOTES.

NO.	REVISIONS	DSGN	CHKD	APVD	DATE



225 Iowa Avenue, Muscatine, Iowa 52761-3764
www.stanleyconsultants.com

CITY OF MUSCATINE - PHASE 6D
WEST HILL AREA SANITARY AND STORM SEWER SEPARATION
MUSCATINE, IOWA

SANITARY SEWER ESTIMATE REFERENCE NOTES

DESIGNED	KK HEIM	SCALE: AS NOTED	
DRAWN	GM REEVES	NO. 17660.60.30	REV.
CHECKED	ER SCHALLERT		
APPROVED	JM BRADY		
APPROVED	KK HEIM		
DATE	MARCH 12, 2025	C.02	0

ESTIMATE REFERENCE NOTES			
ITEM NO	ITEM CODE	UNIT	DESCRIPTION
18	2010-L-1	LF	FILLING AND PLUGGING OF PIPES A. CONTRACTOR SHALL OBTAIN APPROVAL FROM CITY ENGINEER PRIOR TO UTILIZING THIS ITEM. B. THIS ITEM IS FOR FILLING ANY SIZE SEWER PIPE WITH FLOWABLE MORTAR ACCORDING TO SPECIFICATION 3010, 2.06 AND IOWA DOT ARTICLE 2506.02 FOR FLOWABLE MORTAR WITH CRITICAL FLUIDITY. C. ITEM INCLUDES BUT IS NOT LIMITED TO ALL WORK, MATERIALS AND EQUIPMENT TO PLACE FLOWABLE MORTAR TO FILL PIPE TO THE CROWN INCLUDING FLOWABLE MORTAR, EXCAVATION TO ACCESS THE PIPE, VENT AND GROUT TUBES, BULKHEADS AND BACKFILLING. D. LOCATIONS WHERE THE CITY COULD CONSIDER USING INCLUDE THE EXISTING 8-INCH SANITARY ON EAST SIDE OF LOGAN ST.
19	2505-XX	LF	STEEL BEAM GUARDRAIL A. INSTALL NEW STANDARD W-BEAM GUARDRAIL AT END OF EISENHOWER ST. SEE SHEET D.07. B. CONSTRUCT STEEL BEAM GUARDRAIL IN ACCORDANCE WITH IOWA DOT SECTION 2505 REQUIREMENTS. C. ITEM INCLUDES FURNISHING ALL MATERIALS, EQUIPMENT, TOOLS, AND LABOR NECESSARY TO INSTALL NEW GUARDRAIL AND POSTS, BLOCKOUTS, BRACKETS, END ANCHORS, HARDWARE, INCLUDING EXCAVATION, AND PLACING BACKFILL.
20	3010-C	CY	TRENCH FOUNDATION (1-INCH CLEAN) A. CRUSHED ROCK OR CLEAN GRAVEL HAVING SAME GRADATION AS CLASS 1 PIPE BEDDING MATERIAL (1-INCH CLEAN). SEE 2.02, A. B. INCLUDES THOSE ITEMS LISTED IN 1.08 C PLUS COSTS FOR EXCAVATION, DEWATERING AND INCIDENTALS FOR PROVIDING AND INSTALLING ADDITIONAL GRANULAR MATERIAL IN PLACE OF UNSUITABLE PIPE TRENCH FOUNDATION MATERIALS. C. CITY ENGINEER MUST AUTHORIZE ITEM USAGE. MATERIAL USED TO CORRECT UNAUTHORIZED OVER-EXCAVATION WILL NOT BE MEASURED. DOES NOT INCLUDE PIPE BEDDING MATERIAL THICKNESS SHOWN ON FIGURE 3010.101. D. PAYMENT WILL BE MEASURED USING WEIGHT TICKETS RECORDED IN TONS FOR MATERIAL DELIVERED AND INCORPORATED INTO PROJECT. TONS SHALL BE CONVERTED TO CUBIC YARDS WITH STANDARD IOWA DOT CONVERSION RATES 127 PCF FOR TRENCH FOUNDATION. E. THIS PROVISIONAL ITEM IS INCLUDED TO ESTABLISH A UNIT PRICE. F. USE FOR OVER-EXCAVATION AND FOUNDATION STONE IDENTIFIED ON FIGURE 3010.101.
21	3010-C	CY	STABILIZED (FOUNDATION) MATERIALS A. ALL ITEMS LISTED UNDER TRENCH FOUNDATION (1-INCH CLEAN) APPLIES EXCEPT THOSE NOTED. B. STABILIZATION (FOUNDATION) MATERIALS CAN BE USED AS TRENCH FOUNDATION MATERIAL FOR OVEREXCAVATION. C. STABILIZATION (FOUNDATION) MATERIALS MEETING REQUIREMENTS OF 2.05, A (CLEAN 2 1/2 INCH CRUSHED STONE) OR B (GRADATION 13A - MACADAM ST BASE). D. PAYMENT WILL BE MEASURED USING WEIGHT TICKETS RECORDED IN TONS FOR MATERIAL DELIVERED AND INCORPORATED INTO THE PROJECT. TONS SHALL BE CONVERTED TO CUBIC YARDS WITH STANDARD IOWA DOT CONVERSION RATES OF 130 PCF FOR MACADAM STONE.
22	3010-XX	SF	SHEETING LEFT IN PLACE A. ITEM INCLUDES MATERIAL COST AND LABOR TO PROVIDE AND INSTALL SHEETING AND SHORING ONLY WHEN AUTHORIZED BY CITY ENGINEER TO BE LEFT IN PLACE. B. SHEETING AND SHORING, WHICH MAY BE REMOVED WITHOUT ENDANGERING UTILITIES OR STRUCTURES SHALL BE CONSIDERED INCIDENTAL TO PIPE INSTALLATION AND SHALL NOT BE PAID FOR. TOP OF SHEETING LEFT IN PLACE SHALL BE CUT OFF 2-FOOT BELOW FINISHED GRADE C. THIS PROVISIONAL ITEM IS INCLUDED TO ESTABLISH A UNIT PRICE. D. MEASUREMENT AND PAYMENT WILL BE AT THE UNIT PRICE PER FACE SQUARE FEET OF SHEET PILE INSTALLED, BOTH ABOVE AND BELOW GRADE.
23	3010-XX	LF	EXPLORATORY TRENCH AND TEST DIGS A. ITEM MAY BE USED FOR UNEXPECTED CONFLICTS. CITY WILL DEFINE LIMITS OF EXPLORATORY TRENCH AND TEST DIGS IN THE FIELD. B. ROUTINE UTILITY POTHOLING AND EXPLORATORY TEST DIGS IN ADVANCE OF ANY PIPE LAYING OR EXCAVATION WORK TO VERIFY DEPTH OF UTILITIES THAT COULD BE IN CONFLICT IS INCIDENTAL TO PIPE INSTALLATION. C. MEASUREMENT AND PAYMENT FOR THIS ITEM WILL BE AT THE UNIT PRICE PER LINEAR FOOT ALONG EXPLORATORY TRENCH. D. LOCATIONS WHERE THIS ITEM CAN BE USED ARE: SHEETS MSA.01 THRU MSA.03 HAGERMAN DRIVE INVESTIGATIVE EXCAVATIONS TO DETERMINE BOTTOM ELEVATION OF UWBS: SHEET MSA.11 LOGAN STREET TO INVESTIGATE BOTTOM ELEVATION OF UWBS TO CONFIRM CLEARANCE FOR TRENCHLESS CONSTRUCTION. OTHER LOCATIONS MUST BE AUTHORIZED BY CITY ENGINEER.
24	3010-XX	LS	VIBRATION MONITORING A. INCLUDES ALL COSTS TO PERFORM VIBRATION MONITORING TO PROTECT BUILDINGS OR STRUCTURES FROM IMPACTS. THIS ITEM SHOULD NOT BE USED FOR SLOPE STABILITY MONITORING. CITY RESERVES THE RIGHT TO ASK THE CONTRACTOR TO USE VIBRATION MONITORING AT THEIR DISCRETION. B. VIBRATION MONITORING IS NOT REQUIRED FOR STRUCTURES IN THE PROJECT AREA. THIS ITEM IS INCLUDED AS A PROVISIONAL ALLOWANCE. ALLOWANCE IS \$20,000. C. SEE SPECIAL PROVISIONS SECTION 00 75 00 FOR VIBRATION MONITORING REQUIREMENTS. C. COSTS TO INCLUDE PREPARING A WRITTEN MONITORING PLAN, INSTALLING, MONITORING, AND REMOVING VIBRATION MONITORING EQUIPMENT, PREPARING AND PROVIDING REPORT DOCUMENTATION; NOTIFICATION OF VIBRATION EVENTS. THERE WILL BE NO COMPENSATION FOR DELAYS AS THE RESULT OF EXCEEDING THE VIBRATION TRIGGER THRESHOLD OR DELAYS FOR FAULTY OR DAMAGED EQUIPMENT. THERE WILL BE NO COMPENSATION FOR ADJUSTMENT OF CONSTRUCTION ACTIVITIES OR EQUIPMENT TO REDUCE VIBRATIONS TO LEVELS BELOW THE ALLOWABLE LIMIT.

ESTIMATE REFERENCE NOTES			
ITEM NO	ITEM CODE	UNIT	DESCRIPTION
25	3010-XX	LS	EXCAVATION PLAN A. CONTRATOR SHALL SUBMIT PIPE INSTALLATION EXCAVATION PLAN BETWEEN HAGERMAN DRIVE AND EISENHOWER STREET. EXCAVATION PLAN SHALL CONSIDER EXISTING CONTOURS AND SLOPES. CONTRATOR'S PLAN SHALL BE REVIEWED AND SEALED BY A LICENSED ENGINEER QUALIFIED TO EVALUATE SHORING AND EXCAVATION STABILITY. B. SEE SEWER PIPE WORK ON SHEETS MSA.04, MSA.05, MSA.06, MSA.07, M.07 AND SHEETS D.04 AND D.05 FOR GRADED ACCESS PATH WORK WITHIN STEEP TERRAIN AREAS. C. CONTRACTOR TO MONITOR THE SOIL CONDITIONS FOR MOVEMENT. PERFORM CONSTRUCTION TO PROTECT EXISTING SLOPES FROM POTENTIAL EROSION AND SLOPE DESTABILIZATION. MINIMIZE DURATION AND LENGTH OF OPEN PIPE EXCAVATIONS. EXCAVATIONS SHALL BE FILLED IF WORK IS NOT ACTIVE. SHEET, SHORE AND BRACE ADEQUATELY TO PREVENT GROUND MOVEMENT AND DAMAGE. CONTRACTOR MONITORING AND SHEET, SHORING, OR BRACING IS INCIDENTAL TO PIPE INSTALLATION.
	4010-A	LF	SANITARY SEWER GRAVITY MAIN, GENERAL FOR ITEMS 26 THRU 36 A. REFER TO SECTION 4010 FOR PIPE MATERIAL AND INSTALLATION; AND SECTION 4060 FOR TESTING. B. INCLUDES ALL ITEMS LISTED IN 4010, 1.08 A. PLUS FIELD ENGINEERING; LABORATORY TESTING SERVICES; DEWATERING; SHEETING, SHORING; PIPING AND PUMPING FOR BYPASSING SEWAGE FLOW AS NECESSARY TO MAINTAIN SERVICE; REMOVAL OF EXISTING SEWER PIPES WITHIN TRENCH LIMITS; PLUGGING OF EXISTING PIPING AND MANHOLES; UTILITY COMPANY CHARGES FOR TEMPORARY RELOCATIONS, SUPPORTS OR BRACING, UTILITY REPAIR; WATER AND SEWER HOUSE SERVICE VERIFICATION AND REPAIR; CONNECTIONS TO EXISTING SYSTEM AND PIPE CONNECTIONS; LEAKAGE AND DEFLECTION TESTING OF PVC SEWERS (MANDREL), CLEANING, HAULING AND DISPOSAL OF UNSUITABLE TRENCH EXCAVATED MATERIAL, AND INCIDENTAL WORK. C. PAYMENT WILL BE MADE FOR VARIOUS DEPTHS OF CUT MEASURED TO PIPE INVERT AND DIAMETERS LISTED. LENGTH WILL BE MEASURED ALONG CENTER LINE OF PIPE WITH NO DEDUCTION FOR MANHOLES. D. TRENCH BEDDING CLASS FOR ALL SANITARY SEWER SERVICE AND MAIN LINE TRUSS, PVC, OR DIP SHALL BE CLASS F-3 ACCORDING TO FIGURE 3010.103. USE CLASS 1 CRUSHED STONE BEDDING MATERIAL. CONSOLIDATE AND COMPACT BEDDING. E. WHEN PIPE CENTERLINE IS LOCATED UNDER, OR WITHIN 2-FEET OF THE OUTER EDGE OF PAVEMENT, FINAL TRENCH BACKFILL ABOVE THE BEDDING ZONE SHALL BE CLASS II GRANULAR BACKFILL MATERIAL MEETING THE REQUIREMENTS OF SECTION 3010. CLASS A ROADSTONE (IOWA DOT GRADATION 11) IS ACCEPTABLE. ALL BACKFILL MATERIAL IS INCLUDED IN THE PRICE OF THE PIPE. MANSAND SHALL NOT BE USED. F. COMPACTION SHALL BE IN ACCORDANCE WITH SECTION 3010 FOR CLASS II BACKFILL MATERIAL AND COHESIONLESS SOILS. COMPACT BACKFILL TO AT LEAST 65% RELATIVE DENSITY WITHIN RIGHT OF WAY. HYDRAULIC COMPACTION (FLOODING WITH WATER) IS NOT ALLOWED UNLESS AUTHORIZED BY CITY ENGINEER. G. REFER TO C SHEETS FOR PIPE SUMMARY TABLE. H. INTERNAL VIDEO INSPECTION OF NEW SANITARY SEWERS IS REQUIRED AND PAID SEPARATELY. I. UNSUITABLE EXCAVATED TRENCH MATERIAL MUST BE HAULED AWAY AND DISPOSED OF A SITE TO BE DETERMINED BY THE CONTRACTOR. CITY'S RAVINE FILL SITE NEAR LOCUST STREET IS NOT AVAILABLE. DISPOSAL OF TRENCH SPOIL MATERIAL IS INCLUDED IN THE PRICE OF THE PIPE.
26	4010-A-1	LF	SANITARY SEWER SERVICE, 4" OR 6" PVC (ASTM D3034) A. REFER TO 2.04, C, 1. FOR PVC SERVICE PIPE MEETING REQUIREMENTS OF ASTM D3034, SDR 23.5. B. USE TO REPLACE SANITARY SERVICES FROM PIPE TRENCH TO LOCATION OUTSIDE OF PAVEMENT, 5' BEHIND THE CURB. FIRST 10' OF SANITARY SERVICE REPLACEMENT IS NOT PAID FOR WITH THIS ITEM. SEE "SANITARY SERVICE CONNECTIONS TO MAIN" ITEM FOR WYE CONNECTION TO MAIN AND FIRST 10' OF SEWER SERVICE. C. USE TO REPLACE EXISTING SANITARY SERVICES FROM PIPE TRENCH TO LOCATIONS BEHIND THE CURB THAT ARE NOT PVC OR DIP IN GOOD CONDITION. CONNECT TO EXISTING SERVICE IN SOUND CONDITION.
27	4010-A-1	LF	SANITARY SEWER SERVICE, 4" OR 6" PVC (ASTM D3034) OUTSIDE OF ROW A. ITEM IS THE SAME AS SANITARY SEWER SERVICE ABOVE BUT USED FOR SERVICES OUTSIDE CITY ROW. B. BACKFILL WITH GRANULAR BACKFILL IS NOT REQUIRED IF NOT UNDER PAVEMENT.
28	4010-A-2	LF	SANITARY SEWER SERVICE, TRENCHLESS A. USE FOR SANITARY SERVICES REQUIRING TRENCHLESS INSTALLATION UNDER EXISTING UWBS OR TRENCHLESS SERVICE INSTALLATION ON PRIVATE PROPERTY FOR SERVICE RECONFIGURATION OUTSIDE OF THE HOME. B. USE DIP SERVICE PIPE OR INSTALL PVC IN CASING PIPE.
29	4010-A-1	LF	SANITARY SEWER, POLYVINYL CHLORIDE COMPOSITE PIPE (TRUSS TYPE PVC), 8" A. REFER TO SUDAS SECTION 4010, 2.01, E. FOR TRUSS PIPE MEETING REQUIREMENTS OF ASTM D 2680.
30	4010-A-1	LF	SANITARY SEWER, POLYVINYL CHLORIDE COMPOSITE PIPE (TRUSS TYPE PVC), 12" A. REFER TO SECTION 4010, 2.01, E. FOR TRUSS PIPE MEETING REQUIREMENTS OF ASTM D 2680.
31	4010-A-1	LF	SANITARY SEWER, POLYVINYL CHLORIDE COMPOSITE PIPE (TRUSS TYPE PVC), 15" A. REFER TO SECTION 4010, 2.01, E. FOR TRUSS PIPE MEETING REQUIREMENTS OF ASTM D 2680.
32	4010-A-1	LF	SANITARY SEWER, 18" PVC A. REFER TO SECTION 4010, 2.01, B. FOR SOLID WALL POLYVINYL CHLORIDE PIPE (PVC) MEETING REQUIREMENTS OF ASTM F 679.
33	4010-A-1	LF	SANITARY SEWER , 15" DIP A. USE FOR CROSSING CREEK/DRAINAGE WAY ON SHEET MSA.07. B. USE 2.01 G FOR CERAMIC EPOXY LINED DIP THICKNESS CLASS 52 WITH MECHANICAL JOINTS. C. BACKFILL REMAINING PIPE TRENCH ABOVE PIPE ENVELOP WITH GRAVEL BACKFILL, CLASS A ROAD STONE (IOWA DOT GRADATION 11) TO TOP OF EROSION STONE LAYER.
34	4010-A-2	LF	SANITARY SEWER, TRENCHLESS CONSTRUCTION, 12" SEWER A. REFER TO SECTION 4010 AND 3020 FOR REQUIREMENTS. B. USE STEEL CASING PIPE IN ACCORDANCE WITH SECTION 3020, 2.02, MINIMUM THICKNESS 0.375". STEEL PRODUCTS SHALL BE COMPATIBLE WITH AMERICAN IRON AND STEEL REQUIREMENTS. C. SEWER PIPE SHALL BE TRUSS PIPE MEETING ASTM D 2680. D. ITEM INCLUDES ALL COSTS FOR MATERIAL, LABOR, EXCAVATION, DEWATERING, SHEETING AND SHORING, PIPE PUSHING, DIRECTIONAL DRILLING, JACKING, BORING, OR AUGERING, OR OTHER TRENCHLESS CONSTRUCTION METHOD, FURNISHING AND INSTALLING SEWER PIPE AND CASING PIPE, SPACERS, AND END SEALS, EXCAVATION, BEDDING, BACK FILL PLACEMENT AND COMPACTION FOR LAUNCHING AND RECEIVING PITS AND PIPE, TRENCH PROTECTION MEASURES, PROTECTION OF EXISTING FEATURES AND PROTECTION OF UTILITIES, PIPE CONNECTIONS, TESTING, AND INSPECTION. E. CONTRACTOR MUST SUBMIT TRENCHLESS TECHNOLOGY PLAN PRIOR TO BEGINNING WORK.

NOTES

1. ALL SUDAS REFERENCES ARE TO SUDAS SPECIFICATIONS 2025 EDITION.
2. FOR EACH ITEM, CONTRACTOR SHALL CAREFULLY REVIEW THE REFERENCED SUDAS SPECIFICATION IN ITS ENTIRETY. SUDAS SPEC, ESTIMATE REFERENCE NOTES, SPECIAL PROVISIONS SECTION 00 75 00, AND THE DRAWINGS MUST BE REVIEWED TOGETHER FOR EACH PROJECT ITEM. UNLESS NOTED OTHERWISE IN THESE CONTRACT DOCUMENTS, ALL PROVISIONS OF SUDAS APPLY.
3. MEASUREMENT AND PAYMENT DESCRIPTIONS IN PART 1.08 UNDER EACH SUDAS STANDARD SPECIFICATION SECTION SHALL BE REVIEWED IN CONJUNCTION WITH THESE ESTIMATE REFERENCE NOTES.

NO.	REVISIONS	DSGN	CHKD	APVD	DATE



CITY OF MUSCATINE - PHASE 6D
WEST HILL AREA SANITARY AND STORM SEWER SEPARATION
MUSCATINE, IOWA

SANITARY SEWER ESTIMATE REFERENCE NOTES

DESIGNED	KK HEIM	SCALE: AS NOTED	
DRAWN	GM REEVES	NO. 17660.60.30	REV.
CHECKED	ER SCHALLERT		
APPROVED	JM BRADY		
APPROVED	KK HEIM		
DATE	MARCH 12, 2025	C.03	0

ESTIMATE REFERENCE NOTES			
ITEM NO	ITEM CODE	UNIT	DESCRIPTION
35	4010-A-2	LF	SANITARY SEWER, TRENCHLESS CONSTRUCTION, 15" SEWER A. THIS PROVISIONAL ITEM IS INCLUDED TO ESTABLISH A UNIT PRICE. CITY MUST AUTHORIZE USE. INCLUDED FOR POSSIBLE TRENCHLESS CONSTRUCTION ALTERNATIVE TO OPEN CUT IN HILLY PARTS OF RAVINE AREA. B. DESCRIPTION UNDER 12" TRENCHLESS SEWER CONSTRUCTION APPLIES TO THIS ITEM.
36	4010-E	EA	SANITARY SEWER SERVICE CONNECTIONS TO MAIN, (4" AND 6") A. REFER TO SECTION 4010, 2.04, A. PIPE SHALL BE PVC CONFORMING TO ASTM D3034 WITH SDR 23.5. B. ITEM INCLUDES ALL COSTS FOR LOCATING AND CONNECTING SANITARY SERVICE DIRECTLY TO NEW SANITARY SEWER, INCLUDING SPECIAL FITTINGS ON THE MAIN AND SERVICE CONNECTION, AND UP TO 10' OF SERVICE PIPING TO CONNECT THE MAIN WITH THE SERVICE. COST FOR NEW SERVICE PIPING BEYOND 10' TO BE PAID FOR AS ITEM "SANITARY SEWER SERVICE". C. CONNECTIONS SHALL BE MADE WITH PREFORMED WYE FITTINGS. PREFORMED TAPPING SADDLES ARE NOT ALLOWED FOR INITIAL INSTALLATION OF PROPOSED SEWERS. D. SIZE OF ALL EXISTING SERVICE LINES ARE NOT KNOWN. WYE FITTINGS SHALL BE 6-INCH CONNECTIONS MADE TO EXISTING SERVICE WITH WATERTIGHT COUPLER.
37	4010-I	EA	SANITARY SEWER CLEANOUT A. REFER TO 1.08 FOR MEASUREMENT AND PAYMENT DESCRIPTION. B. REFER TO FIGURE 4010.203 FOR REQUIREMENTS. C. CLEANOUTS REQUIRED WHEN CONNECTING TO EXISTING SANITARY SERVICE WHICH RESULTS IN A HORIZONTAL CHANGE IN DIRECTION. CLEANOUT SHALL BE PLACED IN GRASS BOULEVARD WHEN POSSIBLE. D. THIS PROVISIONAL ITEM IS INCLUDED TO ESTABLISH A UNIT PRICE.
38	4010-XX	LS	SANITARY SEWER INTERNAL HOME REPLUMBING A. A TOTAL LUMP SUM ALLOWANCE UP TO \$80,000 IS ALLOWED FOR INTERNAL HOME REPLUMBING UNDER THIS CONTACT FOR THE HOMES LISTED IN THIS DESCRIPTION. CONTRACTOR MUST SUBMIT ITEMIZED RECEIPTS FOR THE INTERNAL WORK FOR EACH HOME PRIOR TO REQUESTING PAYMENT FOR THIS ITEM. SUBMITTAL OF ANTICIPATED COST PRIOR TO WORK BEGINNING AND RECEIPTS AFTER WORK IS COMPLETED IS REQUIRED. CONTRACTOR WILL BE PAID FOR THE WORK PERFORMED NOT TO EXCEED THE LUMP SUM AMOUNT UNLESS AUTHORIZED BY THE CITY ENGINEER. B. WORK MUST BE PERFORMED BY A LICENSED PLUMBER AND IN CONFORMANCE WITH CITY AND INTERNATIONAL PLUMBING CODE. C. PLUMBER MUST CONTACT CITY PLUMBING INSPECTOR PRIOR TO BEGINNING WORK. CONTRACTOR TO OBTAIN PLUMBING PERMIT FOR EACH HOUSE. CITY PERMIT WILL BE PROVIDED AT NO COST TO CONTRACTOR. D. THIS ALLOWANCE COVERS INTERNAL HOME REPLUMBING AT THE FOLLOWING ADDRESSES: 1223 LOGAN STREET, 1211 LOGAN STREET, 1207 LOGAN STREET, 1205 LOGAN STREET. E. IF EXTERNAL SEWER SERVICE WORK IS NEEDED ON PRIVATE PROPERTY, EXTERNAL WORK IS COVERED USING THE SANITARY SEWER SERVICE WORK ITEMS. IF HOMES NOT LISTED REQUIRE INTERNAL REPLUMBING, THIS ITEM CAN BE USED UP TO THE DOLLAR AMOUNT ALLOWANCE.
	4010-A	LF	SANITARY OR STORM SEWER, WATER MAIN EQUIVALENT MATERIAL, FOR CONFLICTS, GENERAL APPLIES TO 39-44 A. INCLUDES ALL ITEMS LISTED UNDER "SANITARY SEWER, GENERAL" IN ADDITION TO THE WATER MAIN EQUIVALENT PIPE MATERIAL. ITEM INCLUDES ALL COSTS FOR LABOR, MATERIALS, EXCAVATION, BACKFILL, TRENCH SPOILS REMOVAL AND DISPOSAL, INSTALLATION OF WATER MAIN EQUIVALENT PIPE MATERIAL IN LIEU OF SPECIFIED SEWER PIPE MATERIAL AT LOCATIONS IN CLOSE PROXIMITY TO WATER MAINS. PAYMENT WILL BE MADE BY PIPE DIAMETER AND PIPE MATERIAL. B. CRITERIA FOR USING WATER MAIN EQUIVALENT PIPE MATERIAL IS LISTED IN SUDAS SECTION 4010, 4020, 5010, AND IS SUMMARIZED ON DRAWING A.05. C. TRENCH BEDDING CLASS SHALL BE CLASS F-3 ACCORDING TO SUDAS FIGURE 3010.103. USE CLASS 1 BEDDING MATERIAL. CONSOLIDATE AND COMPACT BEDDING MATERIAL. COMPACTION OF GRANULAR FINAL TRENCH BACKFILL SHALL BE AS DESCRIBED UNDER SANITARY SEWER.
39	4010-A	LF	SEWER, DIP, WATER MAIN MATERIAL, FOR CONFLICTS, 8" A. REFER TO SUDAS SECTION 5010, 2.01 B FOR DIP MEETING AWWA C151. THIS PROVISIONAL ITEM IS INCLUDED TO ESTABLISH A UNIT PRICE.
40	4010-A	LF	SEWER, DIP, WATER MAIN MATERIAL, FOR CONFLICTS, 12" A. REFER TO SECTION 5010, 2.01 B FOR DIP MEETING AWWA C151. THIS PROVISIONAL ITEM IS INCLUDED TO ESTABLISH A UNIT PRICE.
41	4010-A	LF	SEWER, DIP, WATER MAIN MATERIAL, FOR CONFLICTS, 16" A. REFER TO SECTION 5010, 2.01 B FOR DIP MEETING AWWA C151. THIS PROVISIONAL ITEM IS INCLUDED TO ESTABLISH A UNIT PRICE.
42	4010-A	LF	SEWER, PVC, WATER MAIN MATERIAL, FOR CONFLICTS, 8" A. REFER TO SECTION 5010, 2.01 A FOR PVC MEETING AWWA C900. THIS PROVISIONAL ITEM IS INCLUDED TO ESTABLISH A UNIT PRICE.
43	4010-A	LF	SEWER, PVC, WATER MAIN MATERIAL, FOR CONFLICTS, 12" A. REFER TO SECTION 5010, 2.01 A FOR PVC MEETING AWWA C900. THIS PROVISIONAL ITEM IS INCLUDED TO ESTABLISH A UNIT PRICE.
44	4010-A	LF	SEWER, PVC, WATER MAIN MATERIAL, FOR CONFLICTS, 16" A. REFER TO SECTION 5010, 2.01 A FOR PVC MEETING AWWA C900. THIS PROVISIONAL ITEM IS INCLUDED TO ESTABLISH A UNIT PRICE..

ESTIMATE REFERENCE NOTES			
ITEM NO	ITEM CODE	UNIT	DESCRIPTION
	4020-A-1	LF	STORM SEWER, TRENCHED ; GENERAL APPLIES TO ITEMS 45 THRU 53 A. REFER TO SECTIONS 4020 AND SECTION 4060 IN THEIR ENTIRETY FOR REQUIREMENTS. B. THIS ITEM INCLUDES EVERYTHING LISTED IN 4020 1.08 A. 1 PLUS FIELD ENGINEERING; LABORATORY TESTING SERVICES; DEWATERING; SHEETING; SHORING; PIPING AND PUMPING FOR BYPASSING FLOW TO MAINTAIN SERVICE; REMOVAL OF EXISTING SEWER PIPES, WITHIN TRENCH LIMITS; PLUGGING OF EXISTING PIPING AND MANHOLES; WATER AND SEWER HOUSE SERVICE VERIFICATION AND REPAIR; UTILITY REPAIR; UTILITY COMPANY CHARGES FOR TEMPORARY RELOCATIONS, SUPPORTS OR BRACING; CONNECTIONS TO EXISTING SYSTEM AND PIPE CONNECTIONS; DEFLECTION TESTING OF PVC SEWERS (MANDREL), CLEANING, HAULING AND DISPOSAL OF UNSUITABLE TRENCH EXCAVATED MATERIAL, AND INCIDENTAL WORK. C. MEASUREMENT AND PAYMENT WILL BE MADE FOR VARIOUS DIAMETERS AND PIPE TYPE LISTED. LENGTH WILL BE MEASURED ALONG CENTER LINE OF PIPE WITH NO DEDUCTION FOR STRUCTURES. NO DIFFERENTIATION WILL BE MADE FOR DEPTH OF PIPE. D. FOR RCP PIPING, TRENCH BEDDING CLASS SHALL BE CLASS R-2 ACCORDING TO SUDAS FIGURE 3010.102 . PLACE CLASS I BEDDING MATERIAL TO SPRINGLINE (HORIZONTAL CENTERLINE) OF PIPE . MATERIAL SHALL BE IN ACCORDANCE WITH SECTION 3010 2.02A. CONSOLIDATE AND COMPACT BEDDING MATERIAL. E. WHEN PIPE CENTERLINE IS LOCATED UNDER, OR WITHIN 2-FEET OF THE OUTER EDGE OF PAVEMENT, FINAL TRENCH BACKFILL ABOVE THE BEDDING ZONE SHALL BE CLASS II GRANULAR BACKFILL MATERIAL MEETING THE REQUIREMENTS OF SECTION 3010. MANSAND IS NOT ALLOWED. ALL BACKFILL MATERIAL IS INCLUDED IN THE PRICE OF THE PIPE. F. REFER TO C SERIES SHEETS FOR PIPE SUMMARY TABLE. G. FOR PVC INLET PIPING, TRENCH BEDDING CLASS SHALL BE CLASS F-3 ACCORDING TO SUDAS FIGURE 3010.103. USE CLASS 1 BEDDING MATERIAL ACCORDING TO 3010 2.02A. CONSOLIDATE AND COMPACT BEDDING MATERIAL. H. INTERNAL VIDEO INSPECTION OF STORM SEWERS ARE REQUIRED AND PAID AS A SEPARATE ITEM. I. MAINTAINING AND CONTROLLING STORM WATER FLOW IS REQUIRED BY CONTRACTOR. TEMPORARY PIPE CONNECTIONS MAY BE NEEDED. CONTRACTOR TO SUBMIT PLAN TO CITY FOR REVIEW. J. UNSUITABLE EXCAVATED TRENCH MATERIAL MUST BE HAULED AWAY AND DISPOSED OF AT A SITE TO BE DETERMINED BY THE CONTRACTOR. CITY'S RAVINE FILL SITE NEAR LOCUST STREET IS NOT AVAILABLE. DISPOSAL OF TRENCH SPOIL MATERIAL IS INCLUDED IN THE PRICE OF THE PIPE.
45	4020-A-1	LF	STORM SEWER, 12", CLASS IV RCP A. REFER TO 2.01 A; PIPE SHALL CONFORM TO ASTM C76 WITH RUBBER O-RING OR PROFILE GASKETS MEETING ASTM C443. OUTSIDE JOINT WRAP NOT REQUIRED. B. USE FOR ALL INLET PIPING AND MAINLINE STORM SEWER.
46	4020-A-1	LF	STORM SEWER, 15", CLASS IV RCP A. REFER TO 2.01 A; PIPE SHALL CONFORM TO ASTM C76 WITH RUBBER O-RING OR PROFILE GASKETS MEETING ASTM C443. OUTSIDE JOINT WRAP NOT REQUIRED. B. USE FOR ALL INLET PIPING AND MAINLINE STORM SEWER.
47	4020-A-1	LF	STORM SEWER, 18", CLASS IV RCP A. REFER TO 2.01 A; PIPE SHALL CONFORM TO ASTM C76 WITH RUBBER O-RING OR PROFILE GASKETS MEETING ASTM C443. OUTSIDE JOINT WRAP NOT REQUIRED.
48	4020-A-1	LF	STORM SEWER, 21", CLASS IV RCP A. REFER TO 2.01 A; PIPE SHALL CONFORM TO ASTM C76 WITH RUBBER O-RING OR PROFILE GASKETS MEETING ASTM C443. OUTSIDE JOINT WRAP NOT REQUIRED.
49	4020-A-1	LF	STORM SEWER, 24", CLASS IV RCP A. REFER TO 2.01 A; PIPE SHALL CONFORM TO ASTM C76 WITH RUBBER O-RING OR PROFILE GASKETS MEETING ASTM C443. OUTSIDE JOINT WRAP NOT REQUIRED.
50	4020-A-1	LF	STORM SEWER, 30", CLASS IV RCP A. REFER TO 2.01 A; PIPE SHALL CONFORM TO ASTM C76 WITH RUBBER O-RING OR PROFILE GASKETS MEETING ASTM C443. OUTSIDE JOINT WRAP NOT REQUIRED.
51	4020-A-1	LF	STORM SEWER, 48" ELLIPTICAL (38"HX60"W), CLASS IV RCP A. REFER TO 2.01 C; PIPE SHALL CONFORM TO ASTM C507 WITH RUBBER O-RING OR PROFILE GASKETS MEETING ASTM C443. OUTSIDE JOINT WRAP NOT REQUIRED. B. USE CLASS R-5 TRENCH BEDDING CONDITION FOR REINFORCED HORIZONTAL ELLIPTICAL PIPE, FIGURE 3010.102. CLASS I BEDDING MATERIAL SHALL BE PLACED TO 1' ABOVE THE PIPE.
52	4020-A-1	LF	STORM SEWER INLET PIPING, 12" PVC (ASTM F949) A. ITEM IS CORRUGATED EXTERIOR, SMOOTH INTERIOR PIPING (ASTM F949) ACCORDING TO 2.01 E., 1. A. 1). B. USE AS AN INLET PIPING OPTION UPON APPROVAL OF CITY ENGINEER. C. THIS PROVISIONAL ITEM IS INCLUDED TO ESTABLISH A UNIT PRICE.
53	4020-A-1	LF	STORM SEWER INLET PIPING, 15" PVC (ASTM F949) A. ITEM IS CORRUGATED EXTERIOR, SMOOTH INTERIOR PIPING (ASTM F949) ACCORDING TO 2.01 E., 1. A. 1). B. USE AS AN INLET PIPING OPTION UPON APPROVAL OF CITY ENGINEER. C. THIS PROVISIONAL ITEM IS INCLUDED TO ESTABLISH A UNIT PRICE.
54	4030-B	EA	PIPE APRON, FOOTING, GUARD A. PROVIDE PIPE APRON AND FOOTING FOR STORM SEWER OUTLETS. PROVIDE PIPE APRON AND GUARD FOR STORM SEWER INLETS. PIPE INLET LOCATIONS CAN BE FOUND ON M.03, M.15, M.16. PIPE OUTLET LOCATION CAN BE FOUND ON M.07. B. INCLUDES ALL ITEMS AS LISTED IN 1.08 B, C, AND D FOR PIPE APRON, FOOTING, AND GUARD. C. APRONS SHALL BE CONCRETE ACCORDING TO FIGURE 4030.222. SEE FIGURE 4030.221 FOR APRON FOOTING, AND FIGURE 4030.224 FOR GUARD.
55	4040-A	LF	TYPE 1 SUBDRAINS (LONGITUDINAL) CORRUGATED PE, 4" A. SUBDRAINS SHALL BE INSTALLED UNDER ALL NEW PCC PAVEMENT ON BOTH SIDES. DRAWINGS DO NOT SHOW LOCATION OF REQUIRED SUBDRAIN. SEE TYPICAL PAVEMENT SECTION ON PLAN SHEET B.01. B. POROUS BACKFILL MATERIAL SHALL BE IN ACCORDANCE WITH 4040, 2.04 A, CRUSHED STONE OR PROCESSED GRAVEL, ENGINEERING FABRIC SHALL BE IN CONFORMANCE WITH 4040, 2.07. PLACEMENT OF SUBDRAIN MAY VARY DEPENDING ON LOCATION OF EXISTING UTILITIES. REFER TO SUDAS FIGURE 4040.231 FOR LOCATION OPTIONS. C. INCLUDES ITEMS LISTED IN 1.08 PLUS FURNISHING AND PLACING POROUS BACKFILL MATERIAL, ENGINEERING FABRIC, SPECIAL FITTINGS. SOCKED PIPE IS ACCEPTABLE IN LIEU OF ENGINEERING FABRIC.

NOTES

1. ALL SUDAS REFERENCES ARE TO SUDAS SPECIFICATIONS 2025 EDITION.
2. FOR EACH ITEM, CONTRACTOR SHALL CAREFULLY REVIEW THE REFERENCED SUDAS SPECIFICATION IN ITS ENTIRETY. SUDAS SPEC, ESTIMATE REFERENCE NOTES, SPECIAL PROVISIONS SECTION 00 75 00, AND THE DRAWINGS MUST BE REVIEWED TOGETHER FOR EACH PROJECT ITEM. UNLESS NOTED OTHERWISE IN THESE CONTRACT DOCUMENTS, ALL PROVISIONS OF SUDAS APPLY.
3. MEASUREMENT AND PAYMENT DESCRIPTIONS IN PART 1.08 UNDER EACH SUDAS STANDARD SPECIFICATION SECTION SHALL BE REVIEWED IN CONJUNCTION WITH THESE ESTIMATE REFERENCE NOTES.

NO.	REVISIONS	DSGN	CHKD	APVD	DATE



225 Iowa Avenue, Muscatine, Iowa 52761-3764
www.stanleyconsultants.com

CITY OF MUSCATINE - PHASE 6D
WEST HILL AREA SANITARY AND STORM SEWER SEPARATION
MUSCATINE, IOWA

SANITARY SEWER ESTIMATE REFERENCE NOTES

DESIGNED	KK HEIM	SCALE: AS NOTED	
DRAWN	GM REEVES	NO. 17660.60.30	REV.
CHECKED	ER SCHALLERT		
APPROVED	JM BRADY		
APPROVED	KK HEIM		
DATE	MARCH 12, 2025	C.04	0

G
F
E
D
C
B
A
LOAD D3-R6

ESTIMATE REFERENCE NOTES			
ITEM NO	ITEM CODE	UNIT	DESCRIPTION
77	6010-B	EA	STORM INLET, SW-502, 5' DIAMETER A. CIRCULAR 5' DIAMETER INLET STRUCTURE WITH CURB BOX AND GRATE. REFER TO C SERIES SHEETS FOR INLET STRUCTURE TABULATION. REFER TO SUDAS FIGURE 6010.502 (SW-502) AND CASTING SW-603 TYPE R. REFER TO M SERIES SHEETS FOR LOCATIONS.
78	6010-B	EA	STORM INLET, SW-507 A. SUDAS SINGLE OPEN THROAT CURB INLET SMALL BOX. REFER TO SUDAS FIGURE 6010.507 (SW-507). REFER TO C SERIES SHEETS FOR INLET STRUCTURE TABULATION. REFER TO M SERIES SHEETS FOR LOCATIONS.
79	6010-B	EA	STORM INLET, SW-509 A. SUDAS DOUBLE OPEN THROAT CURB INLET SMALL BOX. REFER TO SUDAS FIGURE 6010.509 (SW-509). REFER TO C SERIES SHEETS FOR INLET STRUCTURE TABULATION. REFER TO M SERIES SHEETS FOR LOCATIONS.
80	6010-B	EA	STORM INLET, SW-512, 24" DIAMETER, 604 TYPE 5 A. SEE SHEET M.08 FOR LOCATION. B. SUDAS CIRCULAR AREA INTAKE, RCP RISER PIPE WITH CASTING IN PIPE BELL. REFER TO FIGURE 6010.512 (SW-512). REFER TO C SERIES SHEETS FOR INLET STRUCTURE TABULATION.
81	6010-C-1	EA	SANITARY INTERNAL DROP CONNECTION A. REFER TO MODIFIED SUDAS DETAIL FIGURE 6010.308 (SW-308) ON SHEET A.04 FOR INTERNAL DROP CONNECTION REQUIREMENTS. REPLACE RECEIVING BOWL FOR PIPE TEE WITH TOP OF PIPE CUT OUT. B. INCLUDES LISTED ITEMS IN 1.08 PLUS INTERNAL PIPE TEE, ALL PIPE AND FITTINGS, AND MISCELLANEOUS WORK TO CONSTRUCT DROP CONNECTION. C. PIPE MATERIAL OF DROP PIPE SHALL BE PVC IN ACCORDANCE WITH SUDAS SECTION 6010, 2.16, A, 3.
82	6010-H	EA	REMOVE MANHOLE OR INTAKE A. INCLUDES LISTED ITEMS IN 1.08 TO REMOVE EXISTING MANHOLES AND INTAKES IN THEIR ENTIRTY PLUS EXCAVATION, DEWATERING, SHEETING, SHORING, TRANSPORTATION, AND DISPOSAL OF REMOVED STRUCTURE, AND EXCAVATED MATERIAL AND INCIDENTAL WORK. B. REMOVAL AND SALVAGE OF EXISTING FRAME AND LID SHALL BE CONSIDERED INCIDENTAL WORK AND TAKEN TO CITY STORAGE YARD. STRUCTURES SHALL NOT BE FILLED WITH FLOWABLE MORTAR BUT REMOVED COMPLETELY. ALL PIPE ENDS OF PIPES TO ABANDONED SHALL BE PLUGGED AND FILLED WITH CONCRETE ACCORDING TO 3.07. C. SEE SHEET C.09 FOR TABULATION.
83	6010-X	EA	CURB OPENING CASTING A. USE FOR CONNECTING EXISTING DOWNSPOUT AND STORM WATER DRAINS TO CURB, ONLY WHEN APPROVED BY THE CITY. CITY PREFERENCE IS OVERLAND FLOW TO THE STREET. B. ITEM INCLUDES ALL COSTS TO INSTALL CASTING IN THE CURB BEFORE OR AFTER THE CONCRETE CURB HAS BEEN PLACED. CASTING SHALL BE MODEL NEENAH R-3262. C. PROVISIONAL ITEM IS INCLUDED TO ESTABLISH A UNIT PRICE.
84	6010-X	EA	MANHOLE CASTING A. SEE SHEET MSA.04 AND MSA.17 FOR EX MH 5455 RISER REMOVAL AND CASTING REPLACEMENT ON EXISTING UWBS. B. ITEM INCLUDES ALL LABOR, MATERIALS, EQUIPMENT TO REMOVE EXISTING MANHOLE RISER AND REPLACE WITH NEW CASTING TO MATCH SIZE OF EXISTING OPENING. C. CASTING SHALL BE EAST JORDAN 1045Z MEETING THE REQUIREMENTS FOR THIS LOCATION.
85	7010-A	SY	PCC PAVEMENT, 7-INCH <u>MACHINE PAVING IS REQUIRED UNLESS CITY ENGINEER APPROVES OTHER PLACEMENT METHODS.</u> A. SEE SHEET B.01 FOR TYPICAL SECTIONS. REFER TO D SHEETS FOR LAYOUT. REFER TO L SHEETS FOR JOINTING AT INTERSECTIONS. B. IOWA DOT C4-WR-C15-S20 CONCRETE MIX SHALL BE USED. SUBSTITUTE MIX DESIGNS TO BE APPROVED BY CITY ENGINEER. MIXES WITH FLY ASH AND SLAG MAYBE ACCEPTABLE UPON APPROVAL. C. PAYMENT FOR THIS ITEM WILL BE SUBJECT TO LIMITATIONS OUTLINED AS FOLLOWS: a. NO PAYMENT WILL BE MADE FOR PAVEMENT REPLACEMENT OUTSIDE THE LIMITS SHOWN ON PLANS UNLESS AUTHORIZED BY CITY ENGINEER. b. COLD WEATHER AND RAIN PROTECTION IS INCIDENTAL TO STREET PAVEMENT REPLACEMENT AND NO ADDITIONAL PAYMENT WILL BE MADE WHEN PROTECTION IS REQUIRED. SEE SECTION 7010, 3.04. c. ITEM INCLUDES QUANTITIES FOR CURB AND GUTTER SECTIONS CONNECTED TO PAVEMENT. d. ITEM INCLUDE ALL LABOR AND MATERIALS FOR INSTALLATION OF REINFORCEMENT. SEE FIGURE 7010.101 FOR JOINT DETAILS. 7" PCC SHALL HAVE TYPE L-1, KT-1 OR BT-1 LONGITUDINAL JOINTS DEPENDING ON PAVING SEQUENCE. 7" PCC TRANSVERSE JOINTS SHALL HAVE EPOXY COATED DOWELS. e. REFER TO 1.08 FOR MEASUREMENT AND PAYMENT DESCRIPTION.
86	7010-I	LS	PCC PAVEMENT SAMPLES AND TESTING A. REFER TO SUDAS SECTION 7010, 3.07 FOR TESTING QUALITY CONTROL. B. INCLUDES ITEMS LISTED IN 1.08 PLUS SLUMP AND AIR TESTING, PAVEMENT SMOOTHNESS STRAIGHTEDGE TESTING AND OTHER TESTS AT CONTRACTOR DISCRETION. C. CERTIFIED PLANT INSPECTION AND MATURITY TESTING ARE REQUIRED ACCORDING TO SECTION 3.07 A. D. SLUMP AND AIR CONTENT TESTING ARE REQUIRED ACCORDING TO SECTION 3.07 A AND B. CITY WILL PERFORM INDEPENDENT ON GRADE SLUMP AND AIR FIELD TESTING. E. PAVEMENT SMOOTHNESS STRAIGHTEDGE TESTING SHALL BE PROVIDED ACCORDING TO SECTION 3.07, C. 1. F. PROFILOGRAPH TESTING IS NOT REQUIRED. PAVEMENT THICKNESS TESTING IS NOT REQUIRED. G. CONTRACTOR SHALL PERFORM TESTS AT THEIR DISCRETION FOR QUALITY ASSURANCE.
87	7020-A	TON	ASPHALT PAVEMENT BY TON A. THIS PROVISIONAL ITEM IS INCLUDED TO ESTABLISH A UNIT PRICE. B. INCLUDED ITEMS ARE LISTED IN 1.08 PLUS ALL COSTS FOR LABOR, MATERIALS AND EQUIPMENT FOR MIX DESIGN, PRODUCING, PLACING AND TESTING THE BITUMINOUS PAVING MIXTURE. INCLUDES DEVELOPMENT OF MIX DESIGN, PREPARATION AND CLEANING OF THE ROADBED, APPLICATION OF TACK COATS, PLACEMENT AND COMPACTION OF LEVELING AND SURFACE COURSES, AND TESTING OF EACH LIFT PER SECTION 7020. C. ITEM MAY BE USED FOR TEMPORARY ROADWAYS UPON CITY APPROVAL.
88	7030-A-3	SY	REMOVAL OF DRIVEWAY/ALLEY A. INCLUDED ITEMS ARE AS LISTED IN 1.08 B. SEE R (DEMOLITION) DRAWINGS FOR LIMITS OF DRIVEWAY, AND ALLEY REMOVAL. C. PAYMENT OF DRIVEWAY/ALLEY PAVEMENT REMOVED WILL BE BASED ON THE ACTUAL QUANTITY OF PAVEMENT REMOVED UP TO THE MAXIMUM LIMITS DEFINED ON DRAWINGS UNLESS ADDITIONAL AREAS HAVE BEEN AUTHORIZED BY CITY ENGINEER. ESTIMATED QUANTITY INCLUDES SIDEWALK PANELS THAT FALL WITHIN THE DRIVEWAY.

ESTIMATE REFERENCE NOTES			
ITEM NO	ITEM CODE	UNIT	DESCRIPTION
89	7030-A-1	SY	REMOVAL OF SIDEWALK A. SEE R (DEMOLITION) DRAWINGS FOR LIMITS OF SIDEWALK REMOVAL. B. UNIT PRICE INCLUDES ALL ITEMS LISTED IN 1.08 AND INCLUDES CAREFUL REMOVAL AND SALVAGE OF DECORATIVE SIDEWALK IF ENCOUNTERED ON THE PROJECT OR DIRECTED BY THE ENGINEER. DECORATIVE SIDEWALK PAVERS SHALL BE SALVAGED AND STOCKPILED FOR PROPERTY OWNER AT A LOCATION AGREED UPON WITH PROPERTY OWNER. C. PAYMENT FOR SIDEWALK REMOVED WILL BE BASED ON ACTUAL QUANTITY OF SIDEWALK REMOVED NOT TO EXCEED LIMITS DEFINED ON DRAWINGS UNLESS ADDITIONAL AREAS HAVE BEEN AUTHORIZED BY CITY ENGINEER.
90	7030-B	LF	REMOVAL OF CURB, LIMESTONE CURB A. ITEM INCLUDES, BUT IS NOT LIMITED TO, ALL COSTS FOR LABOR, MATERIALS AND EQUIPMENT FOR REMOVING AND SALVAGING LIMESTONE CURB UNITS. INCLUDES EXCAVATION, CAREFUL REMOVAL, LOADING, HAULING, UNLOADING AND STACKING CURB UNITS AT CITY'S PUBLIC WORKS FACILITY ON WASHINGTON STREET. B. LOCATIONS WITH LIMESTONE CURBS HAVE NOT BEEN IDENTIFIED ON THE DRAWINGS. IF ENCOUNTERED, SALVAGE AS INDICATED. C. THIS PROVISIONAL ITEM IS INCLUDED TO ESTABLISH A UNIT PRICE.
91	7030-E	SY	PCC SIDEWALK, 4-INCH A. INCLUDES ITEMS LISTED IN 1.08. B. SEE D SERIES SHEETS FOR LIMITS OF SIDEWALK PLACEMENT. C. PAYMENT WILL BE BASED ON THE ACTUAL AREA INSTALLED UP TO THE MAXIMUM LIMITS SHOWN ON THE DRAWINGS UNLESS ADDITIONAL SIDEWALK REPLACEMENT IS AUTHORIZED BY CITY ENGINEER. D. COLD WEATHER AND RAIN PROTECTION IS INCIDENTAL. NO ADDITIONAL PAYMENT WILL BE MADE WHEN REQUIRED. E. SIDEWALK SHALL BE THICKENED AT LOCATIONS OF DETECTABLE WARNING TILE INSTALLATIONS AND PAID FOR SEPARATELY AS 6-INCH PCC SIDEWALK.
92	7030-E	SY	PCC SIDEWALK, 6-INCH A. SAME NOTES APPLY TO THIS ITEM AS LISTED UNDER PCC SIDEWALK, 4-INCH. B. THIS ITEM IS SOLELY FOR THICKENED SIDEWALK AT LOCATIONS OF DETECTABLE WARNING TILE INSTALLATION. C. THIS PROVISIONAL ITEM IS INCLUDED TO ESTABLISH A UNIT PRICE.
93	7030-G	SF	DETECTABLE WARNINGS A. INCLUDES ALL ITEMS LISTED IN 1.08. B. THIS PROVISIONAL ITEM IS INCLUDED TO ESTABLISH A UNIT PRICE. C. SEE SUDAS DETAILS FOR PLACEMENT AND REQUIREMENTS. D. MANUFACTURER SHALL BE ENGINEERED PLASTICS, INC. WILLIAMSVILLE, NY, ARMOR-TILE OR EQUAL. COLOR SHALL BE BRICK RED AND MATERIAL SHALL BE VITRIFIED POLYMER COMPOSITE (VPC).
94	7030-H-1	SY	PAVED DRIVEWAYS, AND ALLEYS, PCC, 6-INCH A. INCLUDES ALL ITEMS LISTED IN 1.08. B. SEE D SERIES SHEETS FOR LIMITS OF DRIVEWAY/ALLEY PLACEMENT. C. PAYMENT FOR THIS ITEM WILL BE BASED ON THE ACTUAL AREA INSTALLED UP TO THE MAXIMUM LIMITS SHOWN ON THE DRAWINGS. NO PAYMENT WILL BE MADE BEYOND THE MAXIMUM LIMITS SHOWN ON THE DRAWINGS UNLESS AUTHORIZED BY CITY ENGINEER. D. COLD WEATHER AND RAIN PROTECTION IS INCIDENTAL. NO ADDITIONAL PAYMENT WILL BE MADE WHEN REQUIRED. E. SEE TABLE IN C SERIES SHEETS FOR LIST OF DRIVEWAY REMOVALS AND REPLACEMENTS.
95	7040-G	SY	MILLING A. INCLUDES ALL ITEMS LISTED IN 1.08 PLUS PERFORMING CLEANUP AND PROVIDING SAFE DRIVABLE SURFACES FOR RESIDENTIAL ACCESS AFTER MILLING BUT PRIOR TO EXISTING SUBBASE REMOVAL. B. MILLINGS SHALL BE HAULED TO CITY LOT ON WASHINGTON STREET. C. ASPHALT REMOVAL PERFORMED WITH EXCAVATOR <u>WILL NOT</u> BE PAID FOR AND IS INCIDENTAL TO SEWER OR PAVEMENT INSTALLATION.
96	7040-H	SY	PAVEMENT REMOVAL, CONCRETE A. INCLUDES ALL ITEMS LISTED IN 1.08. B. REMOVED CONCRETE SHALL BE SALVAGED, HAULED AND UNLOADED AT THE CITY LOT ON WASHINGTON STREET. C. PAYMENT WILL BE MADE FOR THE ACTUAL QUANTITY OF PAVEMENT REMOVED UP TO THE MAXIMUM LIMITS SHOWN ON DRAWINGS. NO PAYMENT WILL BE MADE FOR PAVEMENT REMOVED OUTSIDE THE LIMITS SHOWN ON THE DRAWINGS UNLESS AUTHORIZED BY THE CITY ENGINEER.
97	7040-XX	SY	SUBBASE MATERIAL REMOVAL AFTER MILLING A. REFER TO SUDAS SECTION 7040, 1.08, H; AND 3.08. B. ITEM INCLUDES, BUT IS NOT LIMITED TO, ALL COSTS FOR LABOR, MATERIALS AND EQUIPMENT REQUIRED TO REMOVE THE BASE MATERIAL UNDERNEATH THE TOP DRIVING SURFACE (ASPHALT OR CONCRETE PAVING). BASE MATERIAL COULD BE CONCRETE OR PAVING BRICKS BELOW THE STREET SURFACE. INCLUDES SAW-CUTTING, BREAKING, LOADING, HAULING AND DISPOSAL OF PAVEMENT MATERIALS, DEBRIS REMOVED, AND BRICKS SALVAGED. C. MEASUREMENT AND PAYMENT FOR THIS ITEM WILL BE AT THE UNIT PRICE PER SQUARE YARD FOR THE ACTUAL QUANTITY OF SUBBASE MATERIAL REMOVED UP TO THE MAXIMUM LIMITS SHOWN IN THE DRAWINGS. NO PAYMENT WILL BE MADE FOR SUBBASE MATERIAL REMOVED OUTSIDE THE LIMITS SHOWN ON THE DRAWINGS UNLESS AUTHORIZED BY THE CITY ENGINEER. D. ITEM INCLUDES REMOVING, CAREFULLY SALVAGING, LOADING PAVING BRICK UNITS AT THE PROJECT SITE. ITEM INCLUDES HAULING, AND UNLOADING PAVING BRICK UNITS, AT PUBLIC WORKS FACILITY ON WASHINGTON STREET. E. ITEM DOES NOT INCLUDE EXCAVATION OF AGGREGATES UNDER THE DRIVING SURFACE WHICH IS PAID FOR ACCORDING TO ITEM CLASS 10 EXCAVATION.
98	8020-C	STA	PAINTED PAVEMENT MARKINGS, DURABLE A. SEE D SHEETS FOR PAVEMENT MARKING PROPOSED LOCATIONS. LOGAN STREET HAS EXISTING PAVEMENT MARKINGS. B. SEE SECTION 8020, 1.03 FOR SUBMITTAL REQUIREMENTS. C. PRIOR TO BEGINNING OF STREET DEMOLITION, CONTRACTOR TO RECORD LOCATION OF EXISTING PAVEMENT MARKINGS. COORDINATE WITH CITY PRIOR TO PLACEMENT OF NEW MARKINGS. D. INCLUDES ALL ITEMS LISTED IN 1.08. E. CONSTRUCTION TO MATCH EXISTING USING DURABLE PAINT WITH GLASS BEADS. PAYMENT WILL BE MADE FOR ALL TYPES OF MARKINGS BASED ON LENGTH, MEASURED IN STATIONS (STA).

NOTES

1. ALL SUDAS REFERENCES ARE TO SUDAS SPECIFICATIONS 2025 EDITION.
2. FOR EACH ITEM, CONTRACTOR SHALL CAREFULLY REVIEW THE REFERENCED SUDAS SPECIFICATION IN ITS ENTIRETY. SUDAS SPEC, ESTIMATE REFERENCE NOTES, SPECIAL PROVISIONS SECTION 00 75 00, AND THE DRAWINGS MUST BE REVIEWED TOGETHER FOR EACH PROJECT ITEM. UNLESS NOTED OTHERWISE IN THESE CONTRACT DOCUMENTS, ALL PROVISIONS OF SUDAS APPLY.
3. MEASUREMENT AND PAYMENT DESCRIPTIONS IN PART 1.08 UNDER EACH SUDAS STANDARD SPECIFICATION SECTION SHALL BE REVIEWED IN CONJUNCTION WITH THESE ESTIMATE REFERENCE NOTES.

NO.	REVISIONS	DSGN	CHKD	APVD	DATE
 Stanley Consultants inc. 225 Iowa Avenue, Muscatine, Iowa 52761-3764 www.stanleyconsultants.com					
CITY OF MUSCATINE - PHASE 6D WEST HILL AREA SANITARY AND STORM SEWER SEPARATION MUSCATINE, IOWA					
SANITARY SEWER ESTIMATE REFERENCE NOTES					
DESIGNED <u>KK HEIM</u>		SCALE: AS NOTED			
DRAWN <u>GM REEVES</u>		NO. 17660.60.30		REV.	
CHECKED <u>ER SCHALLERT</u>					
APPROVED <u>JM BRADY</u>					
APPROVED <u>KK HEIM</u>					
DATE <u>MARCH 12, 2025</u>					
		C.06		0	

G
F
E
D
C
B
A

REMOVAL MANHOLE OR INTAKE						
SHEET NUMBER	EXISTING STRUCTURE NAME	STREET	NOTES	LOCATION	EXISTING TYPE	COUNT
M.02, M.13	CB 4213	HAGERMAN DR	BY HOUSE # 518	INLET IN CURB	OPEN THROAT CURB CASTING, CONCRETE STRUCTURE	1
M.02, M.13	CB 4212	HAGERMAN DR	BY HOUSE # 519	INLET IN CURB	OPEN THROAT CURB CASTING, CONCRETE STRUCTURE	1
M.02	MH 4214	HAGERMAN DR	BY HOUSE # 530+531	MH IN STREET PAVEMENT	BRICK/CONCRETE RISER ON UWBS	1
M.03	MH 4215	HAGERMAN DR	BY HOUSE # 546+547	MH IN STREET PAVEMENT	BRICK RISER ON UWBS	1
M.03, M.13	CB 5460	HAGERMAN DR	BY HOUSE # 601	INLET OPEN THROAT	EXTENDED OPEN THROAT CURB OPENING, BRICK STRUCTURE	1
M.03, M.13	CB 5459	HAGERMAN DR	BY HOUSE # 602	INLET OPEN THROAT	EXTENDED OPEN THROAT CURB OPENING, BRICK STRUCTURE	1
M.03	CB 5458	OFF HAGERMAN	618 PROPERTY	GRASS	RECTANGULAR CONCRETE AREA INTAKE WITH GRATE	1
M.03	MH 5456	OFF HAGERMAN	ST MARY'S PROPERTY	GRASS	CASTING AND BRICK RISER ON UWBS	1
MSA.04	MH 5455	OFF HAGERMAN	897 NEWELL PROPERTY	GRASS, ON UWBS	CASTING AND BRICK RISER ON UWBS	1
MSA.06	MH 5450	OFF LOGAN	900 EISENHOWER PROPERTY	GRASS	EXISTING BRICK MANHOLE	1
MSA.07	MH 5449	OFF EISENHOWER	926 CEMETERY PROP	GRASS	EXISTING BRICK MANHOLE	1
MSA.07	MH 3995	EISENHOWER ST	BY HOUSE # 904	GRASS	EXISTING BRICK MANHOLE WITH 1" OPENINGS FOR STORM WATER	1
MSA.08	MH 3993	EISENHOWER ST	INTERSECTION OF EISENHOWER AND DEVITT	GRASS	EXISTING BRICK MANHOLE	1
M.08, M.16	CB 3992	DEVITT AVE	BY HOUSE #930	IN STREET PAVEMENT	INLET IN CURB WITH GRATE, CONCRETE STRUCTURE	1
M.08, M.16	CB 3994	DEVITT AVE	BY HOUSE # 1450	IN CURB LINE	CIRCULAR INLET CASTING IN CURB LINE, CONCRETE STRUCTURE	1
M.09	CB 4004	DEVITT AVE	BY HOUSE # 1419	IN STREET PAVEMENT	INLET IN CURB WITH GRATE	1
M.09	CB 4005	DEVITT AVE	BY HOUSE # 1414	IN STREET PAVEMENT	INLET IN CURB WITH GRATE	1
MSA.09	MH 4006	DEVITT AVE	BY HOUSE # 1410	IN STREET PAVEMENT	EXISTING BRICK MANHOLE	1
MSA.11	MH 4282	LOGAN ST	BY HOUSE # 1224	IN STREET PAVEMENT	EXISTING PRECAST CONCRETE MANHOLE	1
M.11, M.14	MH 4281	LOGAN ST	BY HOUSE # 1223	IN STREET PAVEMENT	BRICK RISER ON UWBS	1
M.14	CB 4279	LOGAN ST	BY HOUSE # 1223	INLET IN CURB	EXTENDED OPEN THROAT CURB OPENING, CONCRETE STRUCTURE	1
M.14	CB 4280	LOGAN ST	BY HOUSE #1224	INLET IN CURB	EXTENDED OPEN THROAT CURB OPENING, CONCRETE STRUCTURE	1
MSA.11	MH 4278	LOGAN ST	BY HOUSE # 1211	IN STREET PAVEMENT	EXISTING CONCRETE STRUCTURE	1
MSA.12	MH 4026	LOGAN ST	BY HOUSE # 1204	IN STREET PAVEMENT	EXISTING BRICK MANHOLE	1
TOTAL						24

SANITARY DROP CONNECTIONS								
SHEET	MANHOLE	IE IN	IE OUT	DROP LENGTH, FT	COUNT	INTERNAL OR EXTERNAL	DROP DIRECTION	SIZE, INCHES
MSA.06, .11	SS D19	662.25	651.50	10.8	1	INTERNAL	NORTHWEST	8
MSA.08	SS D16	702.24	693.66	8.6	1	INTERNAL	NORTH	8
MSA.15	SS D21	632.11	628.00	4.1	1	INTERNAL	NORTH	8
TOTAL				23.4	3			
TOTAL INTERNAL DROP CONNECTIONS					3			
TOTAL EXTERNAL DROP CONNECTIONS					0			

NOTE:

REFER TO MSA SERIES SHEETS FOR LOCATION AND ELEVATIONS OF DROP.
IF DISCREPANCY IS FOUND, MSA SHEETS GOVERN.

NOTES

1. DETAILED QUANTITY TABULATIONS ARE PROVIDED FOR CONVENIENCE OF CONTRACTOR AND CITY. REFER TO PLANS FOR SPECIFIC REQUIREMENTS. IF DISCREPANCIES ARE FOUND, PLAN DRAWINGS INFORMATION GOVERNS. DISCREPANCIES SHOULD BE BROUGHT TO DESIGN ENGINEER TO CONFIRM DESIGN INTENT.

NO.	REVISIONS	DSGN	CHKD	APVD	DATE		



Stanley Consultants

INC.

225 Iowa Avenue, Muscatine, Iowa 52761-3764

www.stanleyconsultants.com

CITY OF MUSCATINE - PHASE 6D

WEST HILL AREA SANITARY AND STORM SEWER SEPARATION

MUSCATINE, IOWA

SANITARY SEWER

MISCELLANEOUS TABLES

DESIGNED	KK HEIM	SCALE: AS NOTED NO. 17660.60,30 REV. 0 C.09
DRAWN	GM REEVES	
CHECKED	ER SCHALLERT	
APPROVED	JM BRADY	
APPROVED	KK HEIM	
DATE	MARCH 12, 2025	

G
F
E
D
C
B
A

LOAD D3-R6

SANITARY STRUCTURE TABLE									
STRUCTURE NAME	PHASE	STRUCTURE STATION	ALIGNMENT	RIM ELEVATION	MANHOLE DEPTH	INVERT IN	INVERT OUT	NORTHING	EASTING
EXST B1	BEND	STA	SAN-ALIGN-6D-SERV-MAIDEN-LN	RIM E 657.04		INV IN: +656.50	INV OUT: +656.50	528746.99	2309458.11
REV-6C-SS10	PH6C	STA 100+04	SAN-ALIGN-HAGERMAN-TO-DEVITT	RIM ELEV: +617.53	20.53'	INV IN: +604.17 INV IN: +610.00 INV IN: +608.75	INV OUT: +597.00	529522.12	2310002.38
REV-6C SS19	PH6C	STA 101+11	SAN-ALIGN-HAGERMAN-TO-DEVITT	RIM ELEV: +620.15	15.45'	INV IN: +604.80	INV OUT: +604.70	529442.58	2309930.93
SS D1	301	STA 103+31	SAN-ALIGN-HAGERMAN-TO-DEVITT	RIM ELEV: +619.85	13.95'	INV IN: +606.00	INV OUT: +605.90	529315.29	2309751.59
SS D2	301	STA 107+30	SAN-ALIGN-HAGERMAN-TO-DEVITT	RIM ELEV: +626.42	10.16'	INV IN: +616.36 INV IN: +616.86	INV OUT: +616.26	529040.35	2309462.95
SS D3	301	STA 108+86	SAN-ALIGN-HAGERMAN-TO-DEVITT	RIM ELEV: +629.43	8.53'	INV IN: +621.00 INV IN: +622.35	INV OUT: +620.90	528931.05	2309350.83
SS D4	301	STA 112+06	SAN-ALIGN-HAGERMAN-TO-DEVITT	RIM ELEV: +636.45	9.37'	INV IN: +627.18	INV OUT: +627.08	528707.44	2309121.68
SS D5	301	STA 113+80	SAN-ALIGN-HAGERMAN-TO-DEVITT	RIM ELEV: +637.34	7.55'	INV IN: +629.89	INV OUT: +629.79	528584.28	2308998.60
SS D6	301-FLATTOP	STA 116+31	SAN-ALIGN-HAGERMAN-TO-DEVITT	RIM ELEV: +641.19	6.29'	INV IN: +635.00	INV OUT: +634.90	528402.98	2308825.86
SS D7	301	STA 117+50	SAN-ALIGN-HAGERMAN-TO-DEVITT	RIM ELEV: +645.78	7.21'	INV IN: +638.67	INV OUT: +638.57	528318.13	2308742.50
SS D8	301	STA 119+84	SAN-ALIGN-HAGERMAN-TO-DEVITT	RIM ELEV: +649.96	7.31'	INV IN: +642.75	INV OUT: +642.65	528309.95	2308508.67
SS D9	301	STA 121+64	SAN-ALIGN-HAGERMAN-TO-DEVITT	RIM ELEV: +659.66	11.25'	INV IN: +648.50	INV OUT: +648.40	528308.56	2308328.15
SS D10	301	STA 123+00	SAN-ALIGN-HAGERMAN-TO-DEVITT	RIM ELEV: +663.96	13.76'	INV IN: +650.87	INV OUT: +650.20	528372.81	2308208.38
SS D11	301	STA 124+64	SAN-ALIGN-HAGERMAN-TO-DEVITT	RIM ELEV: +662.37	8.39'	INV IN: +654.07	INV OUT: +653.97	528380.32	2308045.34
SS D12	301	STA 127+24	SAN-ALIGN-HAGERMAN-TO-DEVITT	RIM ELEV: +665.96	8.96'	INV IN: +657.10	INV OUT: +657.00	528507.82	2307818.53
SS D13	301	STA 129+79	SAN-ALIGN-HAGERMAN-TO-DEVITT	RIM ELEV: +670.62	9.72'	INV IN: +661.00	INV OUT: +660.90	528631.05	2307595.40
SS D14	301	STA 130+66	SAN-ALIGN-HAGERMAN-TO-DEVITT	RIM ELEV: +675.92	13.61'	INV IN: +664.21	INV OUT: +662.31	528631.90	2307508.20
SS D15	301	STA 132+05	SAN-ALIGN-HAGERMAN-TO-DEVITT	RIM ELEV: +694.96	10.70'	INV IN: +686.16	INV OUT: +684.26	528632.56	2307369.01
SS D16	301	STA 136+05	SAN-ALIGN-HAGERMAN-TO-DEVITT	RIM ELEV: +709.53	15.97'	INV IN: +694.72 INV IN: +695.53 INV IN: +702.24	INV OUT: +693.56	528632.31	2306968.99
SS D17	301	STA 138+55	SAN-ALIGN-HAGERMAN-TO-DEVITT	RIM ELEV: +711.47	14.48'	INV IN: +697.09	INV OUT: +696.99	528383.01	2306969.63
SS D18	301	STA 141+99	SAN-ALIGN-HAGERMAN-TO-DEVITT	RIM ELEV: +707.18	6.78'	INV IN: +700.69	INV OUT: +700.40	528038.23	2306970.60
SS D19	301	STA 300+24	SAN-ALIGN-LOGAN	RIM ELEV: +669.25	17.85'	INV IN: +652.27 INV IN: +651.50 INV IN: +662.25	INV OUT: +651.40	528373.63	2308101.70
SS D20	301	STA 304+17	SAN-ALIGN-LOGAN	RIM ELEV: +673.55	11.65'	INV IN: +663.79 INV IN: +664.05 INV IN: +664.90	INV OUT: +661.90 INV OUT: +663.79	527980.55	2308106.88
SS D21	301	STA 83+12	SAN-ALIGN-539-HAGERMAN	RIM ELEV: +637.51	9.51'	INV IN: +632.11	INV OUT: +628.00	529257.65	2309239.52
SS D22	301	STA 300+07	SAN-ALIGN-LOGAN	RIM ELEV: +669.88	7.28'	INV IN: +662.92	INV OUT: +662.60	528389.36	2308093.82
SS D23 (FUT)	301	STA 91+32	SAN-ALIGN-6D-SERV-MAIDEN-LN	RIM ELEV: +638.11	11.26'		INV OUT: +626.85	528819.08	2309420.14

- NOTES
1. DETAILED QUANTITY TABULATIONS ARE PROVIDED FOR CONVENIENCE OF CONTRACTOR AND OWNER. REFER TO PLANS FOR SPECIFIC REQUIREMENTS. IF DISCREPANCIES ARE FOUND, PLAN DRAWINGS INFORMATION GOVERNS. DISCREPANCIES SHOULD BE BROUGHT TO DESIGN ENGINEER TO CONFIRM DESIGN INTENT.
 2. SEE SHEET C.11 FOR SANITARY SEWER PIPE TABLE.
 3. ITEMS WITH EXISTING, FUTURE, OR PHASE 6C IN THE STRUCTURE NAME ARE NOT INCLUDED IN QUANTITY TABULATION FOR PHASE 6D.

NO.	REVISIONS	DSGN	CHKD	APVD	DATE
 Stanley Consultants inc. 225 Iowa Avenue, Muscatine, Iowa 52761-3764 www.stanleyconsultants.com					
CITY OF MUSCATINE - PHASE 6D WEST HILL AREA SANITARY AND STORM SEWER SEPARATION MUSCATINE, IOWA					
SANITARY SEWER STRUCTURE TABLE					
DESIGNED <u>KK HEIM</u> DRAWN <u>GM REEVES</u> CHECKED <u>ER SCHALLERT</u> APPROVED <u>JM BRADY</u> APPROVED <u>KK HEIM</u> DATE <u>MARCH 12, 2025</u>				SCALE: AS NOTED NO. 17660.60.30 REV. 0	

G
F
E
D
C
B
A

LOAD D3-R6

SANITARY SEWER PIPE TABLE											
PIPE ID	START MANHOLE	END MANHOLE	PIPE DIAMETER (INCHES)	PIPE LENGTH, FT	PIPE SLOPE	START INVERT	END INVERT	START STATION	END STATION	NOTE	ALIGNMENT
EX-P-SRV-324R			4	59	1.00%	+610.17	+610.76	100+61	100+88	EXST SRV	SAN-ALIGN-HAGERMAN-TO-DEVITT
P-SRV-324R			6	63	0.78%	+609.81	+610.30	100+23	100+68	NEW SRV	SAN-ALIGN-HAGERMAN-TO-DEVITT
P-SRV-1410D	SS D18		6	22	1.00%	+700.69	+700.91	141+99	141+99	PVC SRV STUB	SAN-ALIGN-HAGERMAN-TO-DEVITT
P-SRV-P-502H			6	95	7.31%	+604.50	+611.46	101+67	101+66	EXST SRV	SAN-ALIGN-HAGERMAN-TO-DEVITT
P-SRV-P-506H			6	66	8.72%	+606.50	+612.29	102+29	102+27	EXST SRV	SAN-ALIGN-HAGERMAN-TO-DEVITT
P-SRV-P-703M (2)	EXST B1		6	91	0.00%	+656.50	+656.50		91+22	EXST SRV	SAN-ALIGN-6D-SERV-MAIDEN-LN
P-SRV-P-703M (3)		EXST B1	6	226	0.00%	+656.50	+656.50			EXST SRV	SAN-ALIGN-6D-SERV-MAIDEN-LN
P - 1		SS D1	15	188	0.50%	+604.96	+605.90	101+43	103+31	PVC	SAN-ALIGN-HAGERMAN-TO-DEVITT
P - 2	SS D1	SS D2	15	399	2.57%	+606.00	+616.26	103+31	107+30	PVC	SAN-ALIGN-HAGERMAN-TO-DEVITT
P - 3	SS D2	SS D3	15	157	2.90%	+616.36	+620.90	107+30	108+86	PVC	SAN-ALIGN-HAGERMAN-TO-DEVITT
P - 4	SS D3	SS D4	15	320	1.90%	+621.00	+627.08	108+86	112+06	PVC	SAN-ALIGN-HAGERMAN-TO-DEVITT
P - 5	SS D4	SS D5	15	174	1.50%	+627.18	+629.79	112+06	113+80	PVC	SAN-ALIGN-HAGERMAN-TO-DEVITT
P - 6	SS D5	SS D6	15	250	2.00%	+629.89	+634.90	113+80	116+31	PVC	SAN-ALIGN-HAGERMAN-TO-DEVITT
P - 7	SS D6	SS D7	15	119	3.00%	+635.00	+638.57	116+31	117+50	PVC	SAN-ALIGN-HAGERMAN-TO-DEVITT
P - 8	SS D7	SS D8	15	234	1.70%	+638.67	+642.65	117+50	119+84	PVC	SAN-ALIGN-HAGERMAN-TO-DEVITT
P - 9	SS D8	SS D9	15	181	3.13%	+642.75	+648.40	119+84	121+64	PVC	SAN-ALIGN-HAGERMAN-TO-DEVITT
P - 10	SS D9	SS D10	15	136	1.25%	+648.50	+650.20	121+64	123+00	PVC	SAN-ALIGN-HAGERMAN-TO-DEVITT
P - 11	SS D10	SS D19	15	107	0.50%	+650.87	+651.40	123+00	124+07	PVC	SAN-ALIGN-HAGERMAN-TO-DEVITT
P - 12	SS D19	SS D11	15	57	3.00%	+652.27	+653.97	124+07	124+64	PVC	SAN-ALIGN-HAGERMAN-TO-DEVITT
P - 13	SS D11	SS D12	15	260	1.12%	+654.07	+657.00	124+64	127+24	PVC	SAN-ALIGN-HAGERMAN-TO-DEVITT
P - 14	SS D12	SS D13	15	255	1.49%	+657.10	+660.90	127+24	129+79	PVC	SAN-ALIGN-HAGERMAN-TO-DEVITT
P - 15	SS D13	SS D14	15	87	1.50%	+661.00	+662.31	129+79	130+66	DIP	SAN-ALIGN-HAGERMAN-TO-DEVITT
P - 16	SS D14	SS D15	15	139	14.40%	+664.21	+684.26	130+66	132+05	PVC	SAN-ALIGN-HAGERMAN-TO-DEVITT
P - 17	SS D15	SS D16	15	400	1.85%	+686.16	+693.56	132+05	136+05	LINE	SAN-ALIGN-HAGERMAN-TO-DEVITT
P - 18	SS D16	SS D17	12	249	0.91%	+694.72	+696.99	136+05	138+55	LINE	SAN-ALIGN-HAGERMAN-TO-DEVITT
P - 19	SS D17	SS D18	12	345	0.96%	+697.09	+700.40	138+55	141+99	LINE	SAN-ALIGN-HAGERMAN-TO-DEVITT
Pipe - (800)	SS D19	SS D22	8	18	2.00%	+662.25	+662.60	300+24	300+07	PVC	SAN-ALIGN-LOGAN
Pipe - (801)	SS D22		8	5	5.17%	+662.92	+663.17	300+07	300+02	PVC	SAN-ALIGN-LOGAN
Pipe - (802)			16	15	2.65%	+651.53	+651.93	300+29	300+44	CASING	SAN-ALIGN-LOGAN
Pipe - (805)	REV-6C-SS10	REV-6C SS19	15	107	0.50%	+604.17	+604.70	100+04	101+11	PH6C	SAN-ALIGN-HAGERMAN-TO-DEVITT
Pipe - (806)	REV-6C SS19		15	32	0.50%	+604.80	+604.96	101+11	101+43	PH6C	SAN-ALIGN-HAGERMAN-TO-DEVITT
Pipe - (808)	REV-6C-SS10		8	4	3.07%	+610.00	+610.14	100+04	100+04	PH6C	SAN-ALIGN-HAGERMAN-TO-DEVITT
Pipe - (809)	REV-6C-SS10		8	5	2.85%	+608.75	+608.89	100+04	100+05	PH6C	SAN-ALIGN-HAGERMAN-TO-DEVITT
Pipe - (810)		REV-6C-SS10	18	4	0.95%	+596.96	+597.00	100+00	100+04	PH6C	SAN-ALIGN-HAGERMAN-TO-DEVITT
Pipe - (811)	SS D2	SS D21	8	312	3.57%	+616.86	+628.00	80+00	83+12	PVC	SAN-ALIGN-539-HAGERMAN
Pipe - (813)	SS D3	SS D23 (FUT)	6	132	3.42%	+622.35	+626.85	90+00	91+32	FUTURE	SAN-ALIGN-6D-SERV-MAIDEN-LN
Pipe - (817)	SS D21		8	8	10.35%	+632.11	+632.93	83+12	83+20	PVC STUB	SAN-ALIGN-539-HAGERMAN
Pipe - (818)	SS D20		12	10	2.33%	+663.79	+664.02	304+17	304+27	PVC STUB	SAN-ALIGN-LOGAN
Pipe - (819)	SS D20		18	14	1.00%	+664.05	+664.19	304+17	304+25	PVC STUB	SAN-ALIGN-LOGAN
Pipe - (820)	SS D19	SS D20	12	393	2.65%	+651.50	+661.90	300+24	304+17	PVC	SAN-ALIGN-LOGAN
Pipe - (821)		SS D20	18	5	12.06%	+663.18	+663.79	304+14	304+17	PVC STUB	SAN-ALIGN-LOGAN
Pipe - (822)	SS D20		12	8	1.00%	+664.90	+664.98	304+17	304+25	PVC STUB	SAN-ALIGN-LOGAN
Pipe - 20	SS D16		8	10	0.59%	+702.24	+702.30	136+05	136+05	PVC STUB	SAN-ALIGN-HAGERMAN-TO-DEVITT
Pipe - 25	SS D16		15	10	0.32%	+695.53	+695.56	136+05	136+05	PVC STUB	SAN-ALIGN-HAGERMAN-TO-DEVITT

NOTES

1. DETAILED QUANTITIES TABULATIONS ARE PROVIDED FOR CONVENIENCE OF CONTRACTOR AND OWNER. REFER TO PLANS FOR SPECIFIC REQUIREMENTS. IF DISCREPANCIES ARE FOUND, PLAN DRAWINGS INFORMATION GOVERNS. DISCREPANCIES SHOULD BE BROUGHT TO ENGINEER TO CONFIRM DESIGN INTENT.
2. SEE SHEET C.10 FOR SANITARY STRUCTURE TABLE.

NO.	REVISIONS	DSGN	CHKD	APVD	DATE		
 Stanley Consultants INC. 225 Iowa Avenue, Muscatine, Iowa 52761-3764 www.stanleyconsultants.com CITY OF MUSCATINE - PHASE 6D WEST HILL AREA SANITARY AND STORM SEWER SEPARATION MUSCATINE, IOWA SANITARY SEWER PIPE TABLES							
DESIGNED <u>KK HEIM</u>		SCALE: AS NOTED					
DRAWN <u>GM REEVES</u>		NO. 17660.60.30		REV.			
CHECKED <u>ER SCHALLERT</u>							
APPROVED <u>JM BRADY</u>							
APPROVED <u>KK HEIM</u>							
DATE <u>MARCH 12, 2025</u>		C.11		0			

NOTES

1. DETAILED QUANTITY TABULATIONS ARE PROVIDED FOR CONVENIENCE OF CONTRACTOR AND CITY. REFER TO PLANS FOR SPECIFIC REQUIREMENTS. IF DISCREPANCIES ARE FOUND, PLAN DRAWINGS INFORMATION GOVERNS. DISCREPANCIES SHOULD BE BROUGHT TO DESIGN ENGINEER TO CONFIRM DESIGN INTENT.
2. PROPOSED INLET RIM ELEVATIONS ARE TAKEN FROM PROPOSED OR EXISTING SURFACE IN THE MIDDLE OF THE STRUCTURE. CENTER OF STRUCTURE PLACEMENT FOR SW-501 AND SW-502 STYLE INLETS IS 1' IN FRONT OF BACK OF CURB. FOR SW-507 AND 509 STYLE INLETS CENTER OF STRUCTURE IS 1.5' BEHIND BACK OF CURB. RIM ELEVATIONS SHALL BE ADJUSTED TO MATCH ELEVATIONS OF AS PLACED PAVEMENT WITH ADJUSTMENT RINGS. SEE DETAIL ON SHEET A.05 FOR INNER TUBE TECHNIQUE TO INSTALL CASTINGS FLUSH WITH PAVEMENT.

STORM STRUCTURES TABLE									
STRUCTURE NAME	PHASE / STRUCTURE	STRUCTURE STATION	ALIGNMENT	RIM ELEVATION	STRUCTURE DEPTH	INVERT IN	INVERT OUT	NORTHING	EASTING
C5455	CASTING	STA	6D-ALIGN-ST-HAGERMAN	RIM ELEV: +642.49	1.00'			528391.47	2308832.23
D1	502-5'	STA 126+92	6D-ALIGN-ST-EISENHOWER-DEVITT	RIM ELEV: +710.12	10.43'	INV IN: +699.79	INV OUT: +699.69	528611.26	2306959.77
D2	507	STA 510+36	6D-ALIGN-INLETS-DEV-1	RIM ELEV: +710.89	4.89'	INV IN: +708.53	INV OUT: +706.00	528620.07	2306929.17
D3	507	STA 132+12	6D-ALIGN-ST-EISENHOWER-DEVITT	RIM ELEV: +708.11	4.87"	INV IN: +703.34	INV OUT: +703.24	528091.60	2306970.00
D4	507	STA 132+54	6D-ALIGN-ST-EISENHOWER-DEVITT	RIM ELEV: +708.02	4.12'		INV OUT: +703.90	528057.46	2306945.13
D5	512-24", 604-Type 5	STA 510+44	6D-ALIGN-INLETS-DEV-1	RIM ELEV: +711.11	2.30'		INV OUT: +708.81	528620.12	2306921.13
E3	502-5'	STA 122+46	6D-ALIGN-ST-EISENHOWER-DEVITT	RIM ELEV: +693.93	7.06'	INV IN: +686.97 INV IN: +688.39	INV OUT: +686.87	528637.55	2307379.02
E4	502-5'	STA 512+46	6D-ALIGN-INLETS-EIS-2	RIM ELEV: +695.45	4.05'		INV OUT: +691.40	528665.52	2307342.19
E5	502-5'	STA 125+09	6D-ALIGN-ST-EISENHOWER-DEVITT	RIM ELEV: +705.06	7.26'	INV IN: +697.90 INV IN: +700.93	INV OUT: +697.80	528637.44	2307116.13
E6	501	STA 513+28	6D-ALIGN-INLETS-EIS-3	RIM ELEV: +705.24	3.74'		INV OUT: +701.50	528665.44	2307111.91
FES 1	FES	STA 142+40	6D-ALIGN-ST-539-HAGERMAN	RIM ELEV: +624.90			INV OUT: +622.57	529185.50	2309282.52
H1	509	STA 500+06	6D-ALIGN-INLETS-HAG-1	RIM ELEV: +621.16	4.11'		INV OUT: +617.05	529253.87	2309676.46
H2	509	STA 500+36	6D-ALIGN-INLETS-HAG-1	RIM ELEV: +621.11	3.39'		INV OUT: +617.72	529235.71	2309700.83
H3	509	STA 505+07	6D-ALIGN-INLETS-HAG-2	RIM ELEV: +631.11	5.02'		INV OUT: +626.09	528893.33	2309304.77
H4	509	STA 505+37	6D-ALIGN-INLETS-HAG-2	RIM ELEV: +630.96	5.87"	INV IN: +625.19	INV OUT: +625.09	528874.94	2309328.96
H5	509	STA 505+75	6D-ALIGN-INLETS-HAG-2	RIM ELEV: +630.04	4.48'	INV IN: +625.66	INV OUT: +625.56	528900.89	2309355.73
L1	509	STA 503+43	6D-ALIGN-INLETS-LOGAN-1	RIM ELEV: +668.38	4.08'		INV OUT: +664.30	528329.44	2308127.27
L2	509	STA 503+04	6D-ALIGN-INLETS-LOGAN-1	RIM ELEV: +668.60	4.60'		INV OUT: +664.00	528325.71	2308091.73
L3	507	STA 514+39	6D-ALIGN-INLETS-LOGAN-3	RIM ELEV: +673.52	3.41'		INV OUT: +670.11	528010.79	2308132.68
L4	507	STA 514+02	6D-ALIGN-INLETS-LOGAN-3	RIM ELEV: +673.87	6.47"		INV OUT: +667.40	528014.27	2308096.63
ST 1	401-8' BASE	STA 254+52	6D-ALIGN-ST-HAGERMAN	RIM ELEV: +615.34	4.84'	INV IN: +610.81	INV OUT: +610.50	529245.23	2309688.75
ST 1A	401-4' RISER	STA 254+52	6D-ALIGN-ST-HAGERMAN	RIM ELEV: +620.82	5.16'	INV IN: +616.30 INV IN: +616.95		529245.23	2309688.75
ST 2	401-8	STA 256+37	6D-ALIGN-ST-HAGERMAN	RIM ELEV: +624.32	8.65'	INV IN: +615.66 INV IN: +615.75	INV OUT: +615.66	529116.86	2309555.23
ST 3	401-8	STA 257+65	6D-ALIGN-ST-HAGERMAN	RIM ELEV: +626.75	7.75'	INV IN: +618.99 INV IN: +620.46	INV OUT: +618.99	529028.70	2309463.53
ST 4	401-8	STA 259+69	6D-ALIGN-ST-HAGERMAN	RIM ELEV: +630.66	6.30'	INV IN: +624.46 INV IN: +625.64 INV IN: +624.91	INV OUT: +624.36	528886.77	2309315.91
ST 5	406	STA 263+95	6D-ALIGN-ST-HAGERMAN	RIM ELEV: +641.00	7.15'	INV IN: +634.34 INV IN: +633.85 INV IN: +634.84	INV OUT: +633.85	528586.80	2309014.28
ST 6	401-3'D RISER	STA 100+15	6D-ALIGN-ST-LOGAN-UWBS-TO-NEWELL	RIM ELEV: +668.58	9.58'	INV IN: +660.96		528361.33	2308117.11
ST 7	401	STA 100+43	6D-ALIGN-ST-LOGAN-UWBS-TO-NEWELL	RIM ELEV: +668.30	6.68'	INV IN: +661.72 INV IN: +663.44 INV IN: +664.10	INV OUT: +661.62	528335.18	2308107.66
ST 8	401	STA 103+61	6D-ALIGN-ST-LOGAN-UWBS-TO-NEWELL	RIM ELEV: +673.52	7.23'	INV IN: +666.39 INV IN: +666.90 INV IN: +669.89	INV OUT: +666.29	528016.48	2308111.98
ST 9	401	STA 126+65	6D-ALIGN-ST-EISENHOWER-DEVITT	RIM ELEV: +710.00	10.55'	INV IN: +699.56 INV IN: +705.34	INV OUT: +699.46	528638.01	2306959.82
ST 10	401	STA 129+11	6D-ALIGN-ST-EISENHOWER-DEVITT	RIM ELEV: +710.98	10.09'	INV IN: +700.99	INV OUT: +700.89	528391.63	2306959.82
ST 11	401	STA 121+22	6D-ALIGN-ST-EISENHOWER-DEVITT	RIM ELEV: +680.05	10.12'	INV IN: +670.03	INV OUT: +669.93	528626.31	2307501.23
ST 12	401	STA 141+49	6D-ALIGN-ST-539-HAGERMAN	RIM ELEV: +630.50	8.72'	INV IN: +621.88	INV OUT: +621.78	529133.21	2309357.49
ST E1	401-GRATED-LID	STA 121+71	6D-ALIGN-ST-EISENHOWER-DEVITT	RIM ELEV: +691.48	11.25'	INV IN: +680.32	INV OUT: +680.22	528638.38	2307454.07

NO.	REVISIONS	DSGN	CHKD	APVD	DATE		



Stanley Consultants INC.

225 Iowa Avenue, Muscatine, Iowa 52761-3764
www.stanleyconsultants.com

CITY OF MUSCATINE - PHASE 6D

WEST HILL AREA SANITARY AND STORM SEWER SEPARATION

MUSCATINE, IOWA

STORM SEWER STRUCTURE TABLE

DESIGNED <u>KK HEIM</u> DRAWN <u>GM REEVES</u> CHECKED <u>ER SCHALLERT</u> APPROVED <u>JM BRADY</u> APPROVED <u>KK HEIM</u> DATE <u>MARCH 12, 2025</u>	SCALE: AS NOTED NO. 17660.60.30 C.12 0
---	---

STORM SEWER PIPE TABLE									
PIPE ID	START MANHOLE	END MANHOLE	PIPE DIAMETER (INCHES)	PIPE LENGTH (FT)	PIPE SLOPE	START INVERT	END INVERT	NOTE	ALIGNMENT
P-106	ST 2		24	14	1.36%	+615.75	+615.94	RCP	6D-ALIGN-ST-HAGERMAN
P-107	ST 3	ST 12	24	149	0.88%	+620.46	+621.78	RCP	6D-ALIGN-ST-539-HAGERMAN
Pipe - (1)	ST 6	ST 7	30	28	2.38%	+660.96	+661.62	RCP	6D-ALIGN-ST-LOGAN-UWBS-TO-NEWELL
Pipe - (2)	ST 7	ST 8	30	319	1.43%	+661.72	+666.29	RCP	6D-ALIGN-ST-LOGAN-UWBS-TO-NEWELL
Pipe - (4)	ST 8		30	36	2.60%	+666.39	+667.34	RCP	6D-ALIGN-ST-LOGAN-UWBS-TO-NEWELL
Pipe - (11)		ST 11	18	62	5.00%	+666.82	+669.93	RCP	6D-ALIGN-ST-EISENHOWER-DEVITT
Pipe - (12)	ST 11	ST E1	18	49	20.94%	+670.03	+680.22	RCP	6D-ALIGN-ST-EISENHOWER-DEVITT
Pipe - (13)	ST E1	E3	18	75	8.72%	+680.32	+686.87	RCP	6D-ALIGN-ST-EISENHOWER-DEVITT
Pipe - (14)	E3	E5	18	263	4.12%	+686.97	+697.80	RCP	6D-ALIGN-ST-EISENHOWER-DEVITT
Pipe - (15)	E5	ST 9	18	156	0.99%	+697.90	+699.46	RCP	6D-ALIGN-ST-EISENHOWER-DEVITT
Pipe - (16)	ST 9	D1	18	27	0.49%	+699.56	+699.69	RCP	6D-ALIGN-ST-EISENHOWER-DEVITT
Pipe - (17)	D1	ST 10	18	220	0.50%	+699.79	+700.89	RCP	6D-ALIGN-ST-EISENHOWER-DEVITT
Pipe - (18)	ST 10	D3	18	300	0.75%	+700.99	+703.24	RCP	6D-ALIGN-ST-EISENHOWER-DEVITT
Pipe - (19)	D3	D4	15	42	1.33%	+703.34	+703.90	RCP	6D-ALIGN-ST-EISENHOWER-DEVITT
Pipe - (24)	ST 5		15	53	4.94%	+634.84	+637.49	RCP	6D-ALIGN-INLETS-HAG-3
Pipe - (25)	ST 5		24	13	9.49%	+634.34	+635.53	RCP	6D-ALIGN-INLETS-HAG-3
Pipe - (26)	H5		21	9	9.84%	+625.66	+626.54	RCP	6D-ALIGN-INLETS-HAG-2
Pipe - (27)	H4	H5	15	37	1.00%	+625.19	+625.56	RCP	6D-ALIGN-INLETS-HAG-2
Pipe - (28)	ST 4	H3	15	13	3.50%	+625.64	+626.09	RCP	6D-ALIGN-INLETS-HAG-2
Pipe - (29)	ST 4	H4	15	18	1.00%	+624.91	+625.09	RCP	6D-ALIGN-INLETS-HAG-2
Pipe - (30)	ST 1A	H1	15	15	5.00%	+616.30	+617.05	RCP	6D-ALIGN-INLETS-HAG-1
Pipe - (31)	ST 1A	H2	15	15	5.00%	+616.95	+617.72	RCP	6D-ALIGN-INLETS-HAG-1
Pipe - (32)	ST 7	L1	15	20	1.00%	+664.10	+664.30	RCP	6D-ALIGN-INLETS-LOGAN-1
Pipe - (33)	ST 7	L2	15	19	3.00%	+663.44	+664.00	RCP	6D-ALIGN-INLETS-LOGAN-1
Pipe - (35)	ST 9	D2	15	36	1.87%	+705.34	+706.00	RCP	6D-ALIGN-INLETS-DEV-1
Pipe - (36)	D2	D5	12	8	3.50%	+708.53	+708.81	RCP	6D-ALIGN-INLETS-DEV-1
Pipe - (37)		E2	15	24	2.00%	+687.39	+687.87	RCP	6D-ALIGN-INLETS-EIS-1
Pipe - (38)	E3	E4	15	46	6.50%	+688.39	+691.40	RCP	6D-ALIGN-INLETS-EIS-2
Pipe - (39)	E5	E6	15	28	2.00%	+700.93	+701.50	RCP	6D-ALIGN-INLETS-EIS-3
Pipe - (40)	ST 8	L4	15	16	3.20%	+666.90	+667.40	RCP	6D-ALIGN-INLETS-LOGAN-3
Pipe - (41)	ST 8	L3	15	21	1.00%	+669.89	+670.11	RCP	6D-ALIGN-INLETS-LOGAN-3

STORM SEWER PIPE TABLE									
PIPE ID	START MANHOLE	END MANHOLE	PIPE SIZE (FT)	PIPE LENGTH (FT)	PIPE SLOPE	START INVERT	END INVERT	NOTE	ALIGNMENT
P-100		ST 1	3.2 X 5.0	278	2.57%	+603.34	+610.50	RCP ELL	6D-ALIGN-ST-HAGERMAN
P-101	ST 1	ST 2	3.2 X 5.0	185	2.62%	+610.81	+615.66	RCP ELL	6D-ALIGN-ST-HAGERMAN
P-102	ST 2	ST 3	3.2 X 5.0	127	2.62%	+615.66	+618.99	RCP ELL	6D-ALIGN-ST-HAGERMAN
P-103	ST 3	ST 4	3.2 X 5.0	205	2.62%	+618.99	+624.36	RCP ELL	6D-ALIGN-ST-HAGERMAN
P-104	ST 4	ST 5	3.2 X 5.0	425	2.21%	+624.46	+633.85	RCP ELL	6D-ALIGN-ST-HAGERMAN
P-105	ST 5		4.0 X 4.0	7	1.65%	+633.85	+633.97	STUB CONN TO EXST	6D-ALIGN-ST-HAGERMAN

NOTES

1. DETAILED QUANTITY TABULATIONS ARE PROVIDED FOR CONVENIENCE OF CONTRACTOR AND CITY. REFER TO PLANS FOR SPECIFIC REQUIREMENTS. IF DISCREPANCIES ARE FOUND, PLAN DRAWINGS INFORMATION GOVERNS. DISCREPANCIES SHOULD BE BROUGHT TO DESIGN ENGINEER TO CONFIRM DESIGN INTENT.

NO.	REVISIONS	DSGN	CHKD	APVD	DATE		



Stanley Consultants INC.

225 Iowa Avenue, Muscatine, Iowa 52761-3764
www.stanleyconsultants.com

CITY OF MUSCATINE - PHASE 6D

WEST HILL AREA SANITARY AND STORM SEWER SEPARATION

MUSCATINE, IOWA

STORM SEWER PIPE TABLES

DESIGNED <u>KK HEIM</u> DRAWN <u>GM REEVES</u> CHECKED <u>ER SCHALLERT</u> APPROVED <u>JM BRADY</u> APPROVED <u>KK HEIM</u> DATE <u>MARCH 12, 2025</u>	SCALE: AS NOTED NO. 17660.60.30 C.13
	REV. 0

SANITARY SERVICE LINES					
ADDRESS NUMBER	LENGTH OF SERVICE, FT NOTE 1	LENT H AFTER 10' FT NOTE 4	LINING REINSTATEMEN T	SERVICE CONNECTION	SERVICE OUTIDE OF ROW NOTE 2
900 EISENHOWER ST		5.0		1	
903 EISENHOWER ST			1		
904 EISENHOWER ST			1		
908 EISENHOWER ST			1		
909 EISENHOWER ST			1		
913 EISENHOWER ST			1		
916 EISENHOWER ST			1		
920 EISENHOWER ST			1		
921 EISENHOWER ST			1		
924 EISENHOWER ST			1		
927 EISENHOWER ST			1		
928 EISENHOWER ST			1		
929 EISENHOWER ST			1		
930 EISENHOWER ST	15.0	5.0	1	1	
931 EISENHOWER ST			1		
1450 DEVITT AVE	43.0	33.0	1	1	
1446 DEVITT AVE	43.0	33.0	1	1	
1438 DEVITT AVE			1		
1437 DEVITT AVE			1		
1434 DEVITT AVE			1		
1433 DEVITT AVE			1		
1431 DEVITT AVE			1		
1430 DEVITT AVE			1		
1427 DEVITT AVE			1		
1426 DEVITT AVE			1		
1423 DEVITT AVE			1		
1422 DEVITT AVE			1		
1421 DEVITT AVE			1		
1419 DEVITT AVE			1		
1418 DEVITT AVE			1		
1414 DEVITT AVE			1		
1410 DEVITT AVE	13.0	3.0		1	9
1230 LOGAN ST	0.0	0.0		1	
1224 LOGAN ST	14.6	4.6		1	
1223 LOGAN ST	28.0	18.0		1	64
1220 LOGAN ST	14.0	4.0		1	
1219 LOGAN ST	29.0	19.0		1	
1216 LOGAN ST	13.6	3.6		1	
1215 LOGAN ST	29.0	19.0		1	
1211 LOGAN ST	29.0	19.0		1	31
1210 LOGAN ST	13.5	3.5		1	
1207 LOGAN ST	29.0	19.0		1	40
1205 LOGAN ST	29.0	19.0		1	34
1204 LOGAN ST	13.3	3.3		1	25
941 NEWELL AVE	11.2	1.2		1	43
TOTAL THESE ADDRESSES		212.2	30	18	246.0

SANITARY SERVICE LINES, NOTE 3			
ADDRESS NUMBER	LENGTH OF SERVICE , FT NOTE 1	LENGTH AFTER 10' FT NOTE 4	SERVICE CONNECTION
502 HAGERMAN DR	35.5	25.5	1
506 HAGERMAN DR	25.9	15.9	1
510 HAGERMAN DR	22.6	12.6	1
514 HAGERMAN DR	25.7	15.7	1
515 HAGERMAN DR	11.6	1.6	1
518 HAGERMAN DR	26.6	16.6	1
519 HAGERMAN DR	11.0	1.0	1
522 HAGERMAN DR	26.5	16.5	1
523 HAGERMAN DR	10.4	0.4	1
526 HAGERMAN DR	27.4	17.4	1
527 HAGERMAN DR	10.0	0.0	1
530 HAGERMAN DR	27.8	17.8	1
531 HAGERMAN DR	9.5	0.0	1
535 HAGERMAN DR	8.7	0.0	1
534 HAGERMAN DR	28.6	18.6	1
538 HAGERMAN DR	28.4	18.4	1
539 HAGERMAN DR	0.0	0.0	0
542 HAGERMAN DR	29.2	19.2	1
543 HAGERMAN DR	8.2	0.0	1
546 HAGERMAN DR	28.9	18.9	1
547 HAGERMAN DR	8.3	0.0	1
601 HAGERMAN DR	8.8	0.0	1
602 HAGERMAN DR	28.2	18.2	1
605 HAGERMAN DR	8.8	0.0	1
606 HAGERMAN DR	28.5	18.5	1
609 HAGERMAN DR	9.2	0.0	1
610 HAGERMAN DR	28.0	18.0	1
614 HAGERMAN DR	28.0	18.0	1
618 HAGERMAN DR	33.0	23.0	1
TOTAL THESE ADDRESSES		311.8	28

NOTES

1. DETAILED QUANTITY TABULATIONS ARE PROVIDED FOR CONVENIENCE OF CONTRACTOR AND CITY. REFER TO PLANS FOR SPECIFIC REQUIREMENTS. IF DISCREPANCIES ARE FOUND, PLAN DRAWING INFORMATION GOVERNS. DISCREPANCIES SHOULD BE BROUGHT TO DESIGN ENGINEER TO CONFIRM DESIGN INTENT.

NOTE 1	LENGTH OF SANITARY SERVICE LISTED IS A HORIZONTAL ESTIMATE FROM NEW SEWER MAIN ACROSS PAVEMENT TO A POINT 5' BEHIND BACK OF CURB. SEE NOTE 18 ON MSA.00 FOR SANITARY SERVICE LINE REPLACEMENT APPROACH. REPLACE EXISTING SERVICE UNDER ROAD WHEN SERVICE LINE IS IN POOR CONDITION OR WHEN MATERIAL IS NOT PVC OR DIP. CONNECT NEW PIPE TO EXISTING PIPE IN SOUND CONDITION.
NOTE 2	1223 LOGAN, 1211 LOGAN, 1207 LOGAN, 1205 LOGAN MAY REQUIRE INTERNAL HOME REPLUMBING. PIPE LENGTH IS INCLUDED IN THIS TABLE FOR LENGTH ESTIMATE OUTSIDE OF ROW IN YARD.
NOTE 3	TRENCHLESS INSTALLATION OF SERVICES UNDER UWBS ON HAGERMAN DRIVE MAY BE UTILIZED ON SOUTH SIDE EVEN NUMBER SERVICES BETWEEN 502 AND 618 HAGERMAN DR.
NOTE 4	SEE ESTIMATE REFERENCE NOTES FOR DESCRIPTION OF PAYMENT OF SANITARY SEWER SERVICE CONNECTIONS TO MAIN WHICH INCLUDES CONNECTION TO MAIN AND UP TO 10' OF SERVICE PIPING TO CONNECT MAIN TO SERVICE

NO.	REVISIONS	DSGN	CHKD	APVD	DATE				



Stanley Consultants INC.

225 Iowa Avenue, Muscatine, Iowa 52761-3764
www.stanleyconsultants.com

CITY OF MUSCATINE - PHASE 6D

WEST HILL AREA SANITARY AND STORM SEWER SEPARATION

MUSCATINE, IOWA

SANITARY SERVICE LINES

TABLE

DESIGNED <u>KK HEIM</u> DRAWN <u>GM REEVES</u> CHECKED <u>ER SCHALLERT</u> APPROVED <u>JM BRADY</u> APPROVED <u>KK HEIM</u> DATE <u>MARCH 12, 2025</u>	SCALE: AS NOTED NO. 17660.60.30 REV. C.14 0
---	---

DRIVEWAY REMOVAL/REPLACEMENT		
ADDRESS	DRIVEWAY REMOVAL (SY)	DRIVEWAY REPLACEMENT (SY)
900 EISENHOWER ST	73	11
903 EISENHOWER ST	14	13
904 EISENHOWER ST (WEST DRMEWAY)	28	29
904 EISENHOWER ST (EAST DRMEWAY)	N/A	35
908 EISENHOWER ST	11	13
909 EISENHOWER ST	22	26
913 EISENHOWER ST	12	14
916 EISENHOWER ST	9	10
920 EISENHOWER ST	12	12
921 EISENHOWER ST	13	14
924 EISENHOWER ST	13	15
927 EISENHOWER ST	13	15
928 EISENHOWER ST	12	14
929 EISENHOWER ST	19	22
930 EISENHOWER ST	24	25
931 EISENHOWER ST	15	15
1450 DEVITT AVE	16	21
1446 DEVITT AVE	11	15
1438 DEVITT AVE	16	16
1437 DEVITT AVE	13	14
1434 DEVITT AVE	19	17
1433 DEVITT AVE	12	13
1431 DEVITT AVE	12	14
1430 DEVITT AVE	14	15
1427 DEVITT AVE	12	14
1426 DEVITT AVE	12	14
1423 DEVITT AVE	12	13
1422 DEVITT AVE	11	13
1421 DEVITT AVE	22	26
1419 DEVITT AVE	15	17
1418 DEVITT AVE	12	14
1414 DEVITT AVE	21	26
1410 DEVITT AVE	38	34
1230 LOGAN ST	19	23
1224 LOGAN ST	13	15
1223 LOGAN ST (NORTH DRMEWAY)	10	9
1223 (SOUTH DRMEWAY)/1219 LOGAN ST	23	23
1220 LOGAN ST	22	23
1216 LOGAN ST	17	17
1215 LOGAN ST	9	10
1211 LOGAN ST	11	10
1210 LOGAN ST	13	14
1207 LOGAN ST (NORTH DRMEWAY)	10	10
1207 (SOUTH DRMEWAY)/1205 LOGAN ST	30	32
1204 LOGAN ST (NORTH DRMEWAY)	13	12
1204 LOGAN ST (SOUTH DRMEWAY)	15	16
1017 NEWELL AVE	12	12

[illegible]

NOTES

NO.	REVISIONS	DSGN	CHKD	APVD	DATE		



Stanley Consultants INC.

225 Iowa Avenue, Muscatine, Iowa 52761-3764
www.stanleyconsultants.com

CITY OF MUSCATINE - PHASE 6D
 WEST HILL AREA SANITARY AND STORM SEWER SEPARATION
 MUSCATINE, IOWA

DRIVEWAY TABLES

DESIGNED <u>PM JOHNSON</u> DRAWN <u>GM REEVES</u> CHECKED <u>ER SCHALLERT</u> APPROVED <u>PM JOHNSON</u> APPROVED <u>KK HEIM</u> DATE <u>MARCH 12, 2025</u>	SCALE: AS NOTED <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 60%;">NO. 17660.60.30</td> <td style="width: 40%;">REV.</td> </tr> <tr> <td style="text-align: center; font-size: 24px;">C.18</td> <td style="text-align: center; font-size: 24px;">0</td> </tr> </table>	NO. 17660.60.30	REV.	C.18	0
NO. 17660.60.30	REV.				
C.18	0				

CA00 D3-R5

A

B

C

D

E

F

G

A
—
B
—
C
—
D
—
E
—
F
—
G

A — B

STORMWATER POLLUTION PREVENTION PLAN FOR PHASE 6D:

ALL CONTRACTORS/SUBCONTRACTORS SHALL CONDUCT THEIR OPERATIONS IN A MANNER THAT MINIMIZES EROSION AND PREVENTS SEDIMENTS FROM LEAVING THE CITY'S RIGHT-OF-WAY AND/OR PROJECT SITE. THIS STORMWATER POLLUTION PREVENTION PLAN (SWPPP) ILLUSTRATES GENERAL MEASURES TO BE TAKEN FOR COMPLIANCE WITH THE NPDES PERMIT. THE CONTRACTOR MUST MAINTAIN THIS SWPPP AND DOCUMENTATION. CONTRACTOR MAY SUBMIT ALTERNATIVES TO THIS SWPPP FOR REVIEW BY THE CITY AND DESIGN ENGINEER.

THIS SWPPP INCLUDES THE FOLLOWING DOCUMENTS, SHEET CE.01 (SWPPP), DETAILS INCLUDED ON CE SHEETS IN THE DRAWING SET, SUDAS SPECIFICATIONS AND REQUIREMENTS AND DETAILS REFERENCED IN THE ESTIMATE, REFERENCE NOTES AND CONTRACT DOCUMENTS, SWPPP SIGNED COMPLIANCE FORMS AS PROVIDED IN THE PROJECT MANUAL INCLUDING SWPPP OWNER CERTIFICATION, SWPPP CONTRACTOR AND SUBCONTRACTOR CERTIFICATION, SWPPP TRAINING LOG, STORMWATER CONSTRUCTION SITE INSPECTION REPORT, SWPPP AMENDMENT LOG, AND EROSION CONTROL SITE PLANS ON RR SERIES SHEETS. INSPECTION REPORTS, SIGNED CERTIFICATION STATEMENTS FROM THE OWNER AND CONTRACTOR AND ALL LISTED DOCUMENTATION BECOME PART OF THE SWPPP.

1. SITE DESCRIPTION:

A. THIS SWPPP COVERS THE 6D CONSTRUCTION OF SANITARY SEWER AND STORM SEWER SYSTEMS, DRINKING WATER SYSTEMS, REMOVAL AND REPLACEMENT OF PAVEMENT, SURFACE RESTORATION, AND OTHER RELATED WORK IN THE PHASE

B. THIS SWPPP COVERS APPROXIMATELY 6.2 ACRES WITH AN ESTIMATED 6.2 ACRES BEING DISTURBED ALONG STREET ROW AND EASEMENTS TO INSTALL SEWERS.

C. THE SWPPP IS LOCATED IN AN AREA OF THE FAYETTE AND MISSISSIPPI RIVER BOTTOM SOIL ASSOCIATION. THE ESTIMATED AVERAGE SOIL CONSERVATION SERVICE RUNOFF CURVE NUMBER FOR THIS SWPPP AFTER COMPLETION SHALL BE 82.

D. A SITE MAP IS SHOWN ON SHEET RR.0. EROSION CONTROL PLANS ARE SHOWN ON THE RR SERIES SHEETS.

E. A COPY OF THIS PLAN SHALL BE ON FILE AT THE CITY ENGINEER'S OFFICE AND AT THE CONSTRUCTION SITE. RUNOFF FROM THIS WORK WILL FLOW INTO THE MUSCATINE STORM SEWER SYSTEM WHICH FLOWS INTO THE PAPOOSE CREEK SEWER AND EVENTUALLY TO THE MISSISSIPPI RIVER NEAR SYCAMORE STREET.

F. POTENTIAL SOURCES OF POLLUTION; SOURCES OF POLLUTION GENERATED AS A RESULT OF THIS WORK RELATE TO SILTS AND SEDIMENT THAT MAY BE TRANSPORTED AS A RESULT OF A STORM EVENT.

2. CONTROLS:

A. AT LOCATIONS WHERE RUNOFF CAN MOVE OFFSITE, SILT FENCE AND/OR FILTER SOCKS AND/OR OTHER EROSION AND SEDIMENT CONTROL MEASURES SHALL BE PLACED. INSTALL PRIOR TO BEGINNING PAVEMENT REMOVAL, GRADING, EXCAVATION OR CLEARING AND GRUBBING OPERATIONS. VEGETATION IN AREAS NOT NEEDED FOR CONSTRUCTION SHALL BE PRESERVED. AS AREAS REACH THEIR FINAL GRADE, ADDITIONAL SILT FENCES, INTERCEPTING DITCHES, LETDOWNS, AND EARTH DIKES AND/OR OTHER EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED AS SPECIFIED IN THE PLANS AND/OR AS REQUIRED BY THE PROJECT ENGINEER. TEMPORARY STABILIZING SEEDING SHALL BE COMPLETED AS THE DISTURBED AREAS ARE CONSTRUCTED. INITIALIZE SOIL STABILIZATION MEASURES IMMEDIATELY WHEN SOIL DISTURBING ACTIVITIES HAVE PERMANENTLY CEASED OR TEMPORARILY CEASED ON ANY PORTION OF THE SITE AND WILL NOT RESUME FOR A PERIOD EXCEEDING 14 CALENDAR DAYS.

B. STABILIZED CONSTRUCTION EXITS WILL BE INSTALLED AT EACH ACCESS LOCATION BEFORE EQUIPMENT LEAVES ROADWAYS AND CROSSES INTO VEGETATED OR GRASSED AREAS. EXITS SHALL BE MAINTAINED OVER THE PROJECT DURATION.

C. STOCKPILED MATERIALS SUCH AS AGGREGATES USED FOR PIPE BEDDING, PIPE BACKFILL, ROAD SUBBASE, AND TOPSOIL FROM ONSITE OR OFFSITE SHALL BE CONTAINED AND SEDIMENT FROM STOCKPILE PROTECTED WITH EROSION CONTROLS TO PREVENT MIGRATION OF MATERIAL INTO DRAINAGE PATHS.

D. SOIL DISTURBED THROUGHOUT THE CONSTRUCTION SITE SHALL BE CONTAINED AND PROTECTED FROM WASHING INTO DRAINAGE PATHWAYS.

E. TOPSOIL PLACED FOR RESTORATION SHALL BE PROTECTED FROM EROSION UNTIL TEMPORARY AND/OR PERMANENT SEEDING IS ESTABLISHED.

F. AS THE WORK PROGRESSES, ADDITIONAL EROSION CONTROL ITEMS MAY BE REQUIRED AS DETERMINED BY THE OWNER OR ENGINEER AFTER FIELD INVESTIGATION. THE CONTRACTOR SHALL COMPLETE THE CONSTRUCTION WITH THE ESTABLISHMENT OF PERMANENT PERENNIAL VEGETATION IN ALL DISTURBED EARTHEN AREAS.

G. EROSION AND SEDIMENT CONTROL MEASURES SHALL CONFORM TO THE IOWA STATEWIDE URBAN DESIGN AND SPECIFICATIONS (SUDAS) REQUIREMENTS AND THE MANUFACTURERS INSTALLATION INSTRUCTIONS AND RECOMMENDATIONS. IN CASE OF CONFLICTS BETWEEN REQUIREMENTS, THE MORE STRINGENT REQUIREMENTS SHALL GOVERN.

H. CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL OF EROSION CONTROL MATERIALS/METHODS ONCE FINAL STABILIZATION IS ACHIEVED.

3. OTHER CONTROLS:

A. CONTRACTOR DISPOSAL OF UNUSED CONSTRUCTION MATERIALS AND CONSTRUCTION MATERIAL WASTES SHALL COMPLY WITH APPLICABLE STATE AND LOCAL WASTE DISPOSAL, SANITARY SEWER, OR SEPTIC SYSTEM REGULATIONS. IN THE EVENT OF A CONFLICT WITH OTHER GOVERNMENTAL LAWS, RULES AND REGULATIONS, THE MORE RESTRICTIVE LAWS, RULES OR REGULATIONS SHALL APPLY.

B. STREETS ADJACENT TO THE CONSTRUCTION SITE SHALL BE INSPECTED DAILY AND CLEANED AS NECESSARY TO REMOVE EXCESS MUD, DIRT, OR ROCK TRACKED FROM THE SITE. DUMP TRUCKS HAULING MATERIAL FROM THE SITE SHALL BE PROPERLY COVERED WITH A TARPULIN. CONTRACTOR SHALL PROVIDE AND USE A VEHICLE WASH-RACK AT EXIT LOCATIONS IF NECESSARY TO DECREASE SEDIMENT TRANSPORT OFF-SITE.

C. APPROVED STATE OR LOCAL PLANS: DURING THE COURSE OF THIS CONSTRUCTION, IT IS POSSIBLE THAT SITUATIONS WILL ARISE WHERE UNKNOWN MATERIALS WILL BE ENCOUNTERED. WHEN SUCH SITUATIONS ARE ENCOUNTERED, THEY SHALL BE HANDLED ACCORDING TO ALL FEDERAL, STATE, AND LOCAL REGULATIONS IN EFFECT AT THE TIME.

D. THE LOCATIONS OF ENTRANCES, TOILET FACILITIES, AND OTHER CONTROLS SHALL BE DETERMINED AT THE PRECONSTRUCTION CONFERENCE WHEN REVIEWING THE CONSTRUCTION PLAN.

E. CONTRACTOR SHALL PROVIDE PARKING AREAS FOR CONSTRUCTION PERSONNEL. THESE MAY BE ON-SITE ON TEMPORARY GRAVEL OR PERMANENT SURFACES OR ALONG THE ROADWAYS IF PARKING IS ALLOWED BY THE OWNER.

F. IF THE CONTRACTOR USES ON-SITE CONSTRUCTION TRAILERS, THEY SHALL BE PLACED ON-SITE UPON TEMPORARY GRAVEL OR PERMANENT SURFACES.

STORMWATER POLLUTION PREVENTION PLAN NOTES (CONTINUED):

4. INSPECTION AND MAINTENANCE: CONTRACTOR IS REQUIRED TO MAINTAIN ALL TEMPORARY EROSION CONTROL MEASURES IN PROPER WORKING ORDER, INCLUDING CLEANING, REPAIRING, OR REPLACING THEM THROUGHOUT THE CONTRACT PERIOD. THE FOLLOWING INSPECTION AND MAINTENANCE PRACTICES SHALL BE USED TO MAINTAIN EROSION AND SEDIMENT CONTROLS AND STABILIZATION MEASURES:
- A. ALL CONTROL MEASURES SHALL BE INSPECTED JOINTLY BY THE CONTRACTOR AND THE CONTRACTING AUTHORITY AT LEAST ONCE EVERY SEVEN (7) CALENDAR DAYS AND WITHIN 24 HOURS AFTER ANY STORM EVENT OF 0.5 INCHES OR GREATER.
- B. ALL MEASURES SHALL BE MAINTAINED IN GOOD WORKING ORDER. IF A REPAIR IS NECESSARY, IT SHALL BE COMPLETED WITHIN THREE (3) CALENDAR DAYS OF THE INSPECTION.
- C. ANY BUILT-UP SEDIMENT SHALL BE REMOVED FROM SILT FENCE WHEN IT HAS REACHED ONE-HALF OF THE HEIGHT OF THE FENCE.
- D. SILT FENCES SHALL BE INSPECTED FOR DEPTH OF SEDIMENT, TEARS, UNDERCUTTING, ETC., TO SEE IF THE FABRIC IS SECURELY ATTACHED TO THE FENCE POSTS, AND TO SEE THAT THE FENCE POSTS ARE SECURELY FASTENED IN THE GROUND.
- E. EROSION CONTROL DEVICES SHALL BE CLEANED WHEN LOSS OF 50% CAPACITY OCCURS.
- F. TEMPORARY AND PERMANENT SEEDING AND PLANTING SHALL BE INSPECTED FOR BARE SPOTS, WASHOUTS, AND HEALTHY GROWTH.
- G. AN INSPECTION REPORT FORM (FOUND IN PROJECT MANUAL) SHALL BE COMPLETED AFTER EACH INSPECTION AND RECORDED ON THE INSPECTION FORM. THESE REPORTS SHALL BE RETAINED AS PART OF THE SWPPP. THE REPORT SHALL CONTAIN:
- 1) SCOPE OF THE INSPECTION.
- 2) NAME OF THE PERSON MAKING THE INSPECTION AND DATE.
- 3) MAJOR OBSERVATIONS RELATING TO THE SWPPP.
- 4) CORRECTIVE ACTION NEEDED.
- 5) CERTIFICATION AND SIGNATURE.
- H. CONTRACTOR SHALL BE RESPONSIBLE FOR SELECTING A "QUALIFIED" INSPECTOR TO CONDUCT THE INSPECTIONS. "QUALIFIED" IS DEFINED AS A PERSON KNOWN/DEARABLE IN THE PRINCIPLES AND PRACTICES OF EROSION AND SEDIMENT CONTROLS. THEY SHALL POSSESS THE SKILLS NECESSARY TO ASSESS CONDITIONS AT THE CONSTRUCTION SITE THAT COULD IMPACT STORMWATER QUALITY. THEY SHALL ASSESS THE EFFECTIVENESS OF ANY SEDIMENT AND EROSION CONTROL MEASURES SELECTED.
- I. CONTRACTOR SHALL UPDATE/CHANGE THE SWPPP AS NEEDED AND MAINTAIN A RECORD OF SWPPP AMENDMENTS. AMENDMENT LOG FORM MAY BE FOUND IN THE PROJECT MANUAL.
- J. CONTRACTOR SHALL MAINTAIN RECORDS OF CONSTRUCTION ACTIVITIES, INCLUDING:
- 1) DATES OF MAJOR GRADING ACTIVITIES.
- 2) DATES WHEN ACTIVITIES CEASE IN AN AREA.
- 3) DATES WHEN AREAS ARE STABILIZED.
- 4) RECORDS SHALL BE KEPT FOR THREE (3) YEARS FROM THE DATE OF FINAL STABILIZATION.
5. MATERIALS MANAGEMENT PLAN: THIS SWPPP ALSO PROVIDES FOR OTHER OPERATIONS THAT MAY AFFECT STORMWATER RUNOFF AND MAY NEED TO BE ADDRESSED.
- A. THE FOLLOWING IS A LIST OF MATERIALS OR SUBSTANCES EXPECTED TO BE PRESENT ON-SITE DURING CONSTRUCTION:
- 1) CONCRETE.
- 2) FERTILIZERS.
- 3) SOLIDS AND CONSTRUCTION WASTES.
- 4) DIESEL FUEL AND LUBRICANTS.
- B. MATERIAL MANAGEMENT PRACTICES: THE FOLLOWING IS A LIST OF MATERIAL MANAGEMENT PRACTICES THAT SHALL BE USED TO MINIMIZE THE RISK OF SPILLS OR OTHER ACCIDENTAL EXPOSURE OF MATERIALS AND SUBSTANCES TO STORMWATER RUNOFF.
- 1) GOOD HOUSEKEEPING:
- i. AN EFFORT SHALL BE MADE TO STORE ON-SITE ONLY ENOUGH PRODUCTS REQUIRED TO COMPLETE THE JOB.
- ii. ALL MATERIALS STORED ON-SITE SHALL BE KEPT IN A NEAT ORDERLY MANNER AND IN THEIR APPROPRIATE CONTAINERS. IF POSSIBLE, PRODUCTS SHALL BE KEPT UNDER A ROOF OR OTHER ENCLOSURE.
- iii. MATERIALS SHALL BE KEPT IN THEIR ORIGINAL CONTAINERS WITH THE ORIGINAL MANUFACTURER'S LABEL.
- iv. SUBSTANCES SHALL NOT BE MIXED WITH ONE ANOTHER UNLESS RECOMMENDED BY THE MANUFACTURER.
- v. WHENEVER POSSIBLE, ALL OF A PRODUCT SHALL BE USED UP BEFORE DISPOSING OF THE CONTAINER.
- vi. MANUFACTURER'S RECOMMENDATIONS FOR PROPER USE AND DISPOSAL SHALL BE FOLLOWED.
- vii. THE JOB SITE SUPERINTENDENT SHALL BE RESPONSIBLE FOR DAILY INSPECTIONS TO ENSURE PROPER USE AND DISPOSAL OF MATERIALS.

STORMWATER POLLUTION PREVENTION PLAN NOTES (CONTINUED):

- 2) HAZARDOUS PRODUCTS:
- i. PRODUCTS SHALL BE KEPT IN THEIR ORIGINAL CONTAINERS WITH THE ORIGINAL MANUFACTURER'S LABEL.
- ii. THE ORIGINAL LABELS AND MATERIAL SAFETY DATA SHEETS SHALL BE KEPT FOR EACH OF THE MATERIALS, AS THEY CONTAIN IMPORTANT PRODUCT INFORMATION.
- iii. DISPOSAL OF ANY EXCESS PRODUCT SHALL BE DONE IN A MANNER THAT FOLLOWS ALL MANUFACTURERS, FEDERAL, STATE, AND LOCAL RECOMMENDED METHODS FOR PROPER DISPOSAL.
- C. PRODUCT SPECIFIC PRACTICES: THE FOLLOWING IS A LIST OF POTENTIAL SOURCES OF POLLUTION AND SPECIFIC PRACTICES TO REDUCE POLLUTANT DISCHARGES FROM MATERIALS OR SOURCES EXPECTED TO BE PRESENT DURING CONSTRUCTION:
- 1) PETROLEUM STORAGE TANKS: ALL ON-SITE VEHICLES SHALL BE INSPECTED AND MONITORED FOR LEAKS AND RECEIVE PREVENTIVE MAINTENANCE TO REDUCE THE CHANCE OF LEAKAGE. STEPS SHALL BE TAKEN BY THE CONTRACTOR TO ELIMINATE CONTAMINANTS FROM STORAGE TANKS FROM ENTERING THE SOIL. ANY PETROLEUM STORAGE TANKS KEPT ON-SITE SHALL BE LOCATED WITH AN IMPERVIOUS SURFACE BETWEEN THE TANK AND THE SOIL.
- 2) FERTILIZERS SHALL BE APPLIED IN MINIMAL AMOUNTS AS RECOMMENDED BY THE IOWA SUDAS STANDARDS. IT SHALL BE WORKED INTO THE SOIL SO AS TO MINIMIZE CONTACT WITH STORMWATER DISCHARGES.
- 3) CONCRETE TRUCKS SHALL BE ALLOWED TO WASHOUT OR DISCHARGE EXCESS CONCRETE IN SPECIFICALLY DESIGNATED AREAS WHICH HAVE BEEN PREPARED TO MINIMIZE CONTACT BETWEEN THE CONCRETE AND STORMWATER DISCHARGES FROM THE SITE. THE HARDENED PRODUCT FROM THE CONCRETE WASHOUT AREAS SHALL BE DISPOSED OF AS OTHER NONHAZARDOUS WASTE MATERIALS OR MAY BE BROKEN UP AND USED ON THE SITE FOR OTHER APPROPRIATE USES.
- 4) SOLID AND CONSTRUCTION WASTES: ALL TRASH AND CONSTRUCTION DEBRIS SHALL BE DEPOSITED INTO A COVERED DUMPSTER THAT SHALL BE EMPTIED AS NECESSARY. NO CONSTRUCTION WASTE MATERIALS SHALL BE BURIED ON-SITE. THE DUMPSTERS MUST BE PUT IN A LOCATION WHERE CONTACT WITH STORMWATER DISCHARGE IS MINIMIZED.
- 5) SANITARY WASTES: IF CONTRACTOR PROVIDES PORTABLE RESTROOM FACILITIES LOCATED ON-SITE AT ALL TIMES, WASTES SHALL BE COLLECTED AND DISPOSED OF IN COMPLETE COMPLIANCE WITH FEDERAL, STATE, AND LOCAL REGULATIONS. THIS FACILITY SHALL BE LOCATED IN AN AREA WHERE CONTACT WITH STORMWATER DISCHARGE IS MINIMAL.
- D. SPILL PREVENTION AND RESPONSE PROCEDURES: CONTRACTOR IS RESPONSIBLE FOR TRAINING ALL PERSONNEL IN THE PROPER HANDLING AND CLEANUP OF SPILLED MATERIALS. NO SPILLED HAZARDOUS MATERIALS OR WASTES SHALL BE ALLOWED TO COME INTO CONTACT WITH STORMWATER DISCHARGES. IF CONTACT DOES OCCUR, THE STORMWATER DISCHARGE SHALL BE CONTAINED ON-SITE UNTIL APPROPRIATE MEASURES FOR COMPLIANCE WITH ALL FEDERAL, STATE, AND LOCAL REGULATIONS ARE FOLLOWED TO DISPOSE OF THE HAZARDOUS SUBSTANCE. THE FOLLOWING PRACTICES SHALL BE FOLLOWED FOR SPILL PREVENTION AND CLEANUP:
- 1) IN ADDITION TO THE PRACTICES DISCUSSED IN THE PREVIOUS SECTIONS OF THIS PLAN, THE FOLLOWING PRACTICES SHALL BE DONE TO MINIMIZE THE POTENTIAL FOR HAZARDOUS MATERIAL SPILLS AND TO REDUCE THE RISK OF THE SPILL COMING IN CONTACT WITH STORMWATER.
- i. MANUFACTURER'S RECOMMENDED METHODS FOR SPILL CLEANUP SHALL BE CLEARLY POSTED AND SITE PERSONNEL SHALL BE TRAINED REGARDING THESE PROCEDURES AND THE LOCATION OF THE INFORMATION AND CLEANUP SUPPLIES.
- ii. MATERIALS AND EQUIPMENT NECESSARY FOR SPILL CONTROL, CONTAINMENT, AND CLEANUP SHALL BE PROVIDED ON-SITE IN A MATERIAL STORAGE AREA. EQUIPMENT AND MATERIALS SHALL INCLUDE BUT NOT BE LIMITED TO BROOMS, DUST PANS, MOPS, RAGS, GLOVES, GOGGLES, KITTY LITTER, SAND, SAWDUST, AND PLASTIC AND METAL TRASH CONTAINERS.
- 2) IN THE EVENT OF A SPILL, THE FOLLOWING PROCEDURES SHALL BE FOLLOWED:
- i. ALL SPILLS SHALL BE CLEANED UP IMMEDIATELY AFTER DISCOVERY.
- ii. THE SPILL AREA SHALL BE KEPT WELL VENTILATED AND PERSONNEL SHALL WEAR APPROPRIATE PROTECTIVE CLOTHING TO PREVENT INJURY FROM CONTACT WITH THE HAZARDOUS SUBSTANCE.
- iii. SPILLS OF TOXIC OR HAZARDOUS MATERIAL SHALL BE REPORTED TO THE APPROPRIATE STATE OR LOCAL GOVERNMENTAL AGENCY AND TO THE PROJECT MANAGER AND ENGINEER, REGARDLESS OF THE SIZE OF THE SPILL. SPILLS OF AMOUNTS THAT EXCEED REPORTABLE QUANTITIES OF CERTAIN SUBSTANCES SPECIFICALLY MENTIONED IN FEDERAL REGULATIONS MUST BE IMMEDIATELY REPORTED TO THE EPA NATIONAL RESPONSE CENTER (1-800-424-8802) THE JOB SITE SUPERINTENDENT SHALL BE RESPONSIBLE FOR CONTACTING THE EPA AND ANY OTHER GOVERNMENTAL AGENCIES.

STORMWATER POLLUTION PREVENTION PLAN NOTES (CONTINUED):

- iv. IF THE SPILL EXCEEDS A REPORTABLE QUANTITY, THE SWPPP MUST BE MODIFIED WITHIN 14 DAYS AFTER THE SPILL AND A WRITTEN DESCRIPTION OF THE EVENTS MUST BE INCLUDED. THE MODIFICATION SHALL INCLUDE A DESCRIPTION OF THE RELEASE, THE DATE OF THE RELEASE, AN EXPLANATION OF WHY THE SPILL HAPPENED, A DESCRIPTION OF PROCEDURES TO PREVENT FUTURE SPILLS AND/OR RELEASES FROM HAPPENING, AND A DESCRIPTION OF RESPONSE PROCEDURES SHOULD THE SPILL OR RELEASE OCCUR AGAIN.
- v. CONTRACTOR'S SUPERINTENDENT SHALL BE RESPONSIBLE FOR THE DAY-TO-DAY SITE OPERATIONS AND SHALL BE THE SPILL PREVENTION CLEANUP COORDINATOR. HE OR SHE SHALL DESIGNATE OTHER SITE PERSONNEL WHO SHALL RECEIVE SPILL PREVENTION AND CLEANUP TRAINING. THESE INDIVIDUALS SHALL EACH BECOME RESPONSIBLE FOR A PARTICULAR PHASE OF PREVENTION AND CLEANUP. THE NAMES OF THESE INDIVIDUALS SHALL BE POSTED IN THE MATERIAL STORAGE AREA AND IN THE OFFICE TRAILER.
6. NON-STORMWATER DISCHARGES: THE FOLLOWING IS A LIST OF NON-STORMWATER DISCHARGES THAT MAY OCCUR AT THE JOB SITE. POLLUTANTS SHALL NOT BE ALLOWED TO COME INTO CONTACT WITH THESE WATER SOURCES PRIOR TO THEIR DISCHARGE FROM THE SITE:
- A. WATER FROM FIRE-FIGHTING ACTIVITIES AND FIRE HYDRANT FLUSHING.
- B. WATER USED TO CLEAN VEHICLES.
- C. POTABLE WATER SOURCES INCLUDING WATERLINE FLUSHING, IRRIGATION DRAINAGE, AND ROUTINE EXTERNAL BUILDING WASH-DOWNS EXCLUDING DETERGENTS.
- D. PAVEMENT WASHWATERS WHERE SPILLS OR LEAKS OF HAZARDOUS MATERIALS HAVE NOT OCCURRED.
- E. AIR CONDITIONING CONDENSATE
- F. SPRINGS
- G. FOUNDATION OR FOOTING DRAINS WHERE FLOWS ARE NOT CONTAMINATED WITH PROCESS MATERIALS SUCH AS SOLVENTS.

CONTRACTOR RESPONSIBILITIES NOTES:

1. CONTRACTORS TO PROVIDE TRAINING TO SITE PERSONNEL FOR EROSION AND SEDIMENT CONTROL INSTALLATION; MAINTENANCE REMOVAL; CONSTRUCTION WASTE DISPOSAL, HAZARDOUS WASTE DISPOSAL, SANITARY WASTE DISPOSAL, SPILL PREVENTION PRACTICES, AND HANDLING AND CLEANUP OF SPILLED MATERIALS. COMPLETE AND MAINTAIN SWPPP TRAINING LOG FOUND IN PROJECT MANUAL.
2. CONTRACTOR TO MAINTAIN A COPY OF THE SWPPP, INCLUDING REPORTS AND CERTIFICATIONS, AT THE CONSTRUCTION SITE FROM DATE OF PROJECT INITIATION TO DATE OF FINAL STABILIZATION.
3. CONTRACTOR IS RESPONSIBLE FOR CONTINUALLY MAINTAINING A SITE MAP (PLAN) OF THE PROJECT SITE WHICH REFLECTS THE CURRENT SITE CONDITIONS AND EROSION AND SEDIMENT CONTROL MEASURES IMPLEMENTED. ITEMS SUCH AS ALTERATIONS TO THE SWPPP, ADDITIONS AND MAINTENANCE OF THE EROSION AND SEDIMENT CONTROL MEASURES, AND AREAS THAT HAVE BEEN SEEDDED OR PERMANENTLY STABILIZED SHALL BE DOCUMENTED. CONCRETE WASHOUT AREAS AND HAZARDOUS SUBSTANCE STORAGE AREAS SHALL BE IDENTIFIED ON THE SITE MAP (PLAN). THE CURRENT SITE CONDITION MAP SHALL BE MADE AVAILABLE AT ALL TIMES AT THE SITE.
4. CONTRACTOR SHALL TAKE APPROPRIATE MEASURES TO PREVENT PORTABLE RESTROOM FACILITY FROM BEING OVER-TURNED DUE TO ACCIDENT, HIGH WINDS, OR VANDALS.

EROSION PROTECTION NOTES:

1. CODE COMPLIANCE: CONTRACTOR SHALL COMPLY WITH SOIL EROSION CONTROL REQUIREMENTS OF THE IOWA CODE, THE IOWA DEPARTMENT OF NATURAL RESOURCES NPDES PERMIT, AND LOCAL ORDINANCES. CONTRACTOR SHALL TAKE ALL NECESSARY MEASURES TO PROTECT AGAINST EROSION AND DUST POLLUTION ON THIS PROJECT SITE AND ALL OFF-SITE BORROW OR DEPOSIT/DISPOSAL AREAS DURING PERFORMANCE OR AS A RESULT OF PERFORMANCE.
2. DAMAGE CLAIMS: CONTRACTOR SHALL HOLD THE CITY AND ENGINEER HARMLESS FROM ANY AND ALL CLAIMS OF ANY TYPE WHATSOEVER RESULTING FROM DAMAGES TO ADJOINING PUBLIC OR PRIVATE PROPERTY, INCLUDING REASONABLE ATTORNEY FEES. FURTHER, IF CONTRACTOR FAILS TO TAKE NECESSARY STEPS TO PROMPTLY REMOVE EARTH SEDIMENTATION OR DEBRIS WHICH COMES ON TO ADJOINING PUBLIC OR PRIVATE PROPERTY, THE CITY MAY, BUT NEED NOT, REMOVE SUCH ITEMS AND DEDUCT THE COST THEREOF FROM AMOUNTS DUE THE CONTRACTOR.
3. PRIOR TO START OF ANY LAND DISTURBING ACTIVITY, CONTRACTOR AND SUBCONTRACTORS SHALL SUBMIT SIGNED CERTIFICATION FORM TO THE OWNER. FORM CAN BE FOUND IN PROJECT MANUAL.

STORM WATER DISCHARGE PERMIT NOTES:

1. THIS PROJECT REQUIRES OBTAINING AN NPDES GENERAL PERMIT NO. 2 FOR STORM WATER DISCHARGE ASSOCIATED WITH INDUSTRIAL ACTIVITY FOR CONSTRUCTION ACTIVITIES FROM THE IOWA DEPARTMENT OF NATURAL RESOURCES (IDNR), AS REQUIRED BY THE ENVIRONMENTAL PROTECTION AGENCY. THE CITY SHALL OBTAIN THE PERMIT. THE PRIME CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLIANCE AND IMPLEMENTATION OF THE SWPPP FOR THEIR ENTIRE CONTRACT. THIS RESPONSIBILITY SHALL BE FURTHER SHARED WITH SUBCONTRACTORS WHOSE WORK IS A SOURCE OF POTENTIAL POLLUTION AS DEFINED IN THE SWPPP.
2. ALL DOCUMENTS RELATED TO THE STORM WATER DISCHARGE PERMIT SHALL BE KEPT ON SITE AT ALL TIMES AND MUST BE PRESENTED TO THE IDNR UPON REQUEST. DOCUMENTS INCLUDE THE NOTICE OF INTENT, PROOF OF PUBLICATION, SWPPP, PROJECT INSPECTION DIARY, AND OTHER ITEMS. FAILURE TO COMPLY WITH THE DISCHARGE REQUIREMENTS IS IN VIOLATION OF THE CLEAN WATER ACT AND THE CODE OF IOWA.
3. UPON FINAL STABILIZATION OF THE DISTURBED AREAS, CONTRACTOR SHALL NOTIFY THE CITY WITHIN 30 DAYS THAT FINAL STABILIZATION HAS BEEN ACHIEVED. A "NOTICE OF DISCONTINUATION" MUST BE FILED BY THE CITY WITH THE IDNR. ALL PLANS, INSPECTION REPORTS, AND OTHER DOCUMENTS MUST BE RETAINED FOR A PERIOD OF THREE YEARS AFTER PROJECT COMPLETION. CONTRACTOR SHALL RETAIN RECORD COPY, AND PROVIDE ORIGINAL DOCUMENTS TO THE CITY UPON ISSUANCE OF THE NOTICE OF DISCONTINUATION.

NO.	REVISIONS	DSGN	CHKD	APVD	DATE



Stanley Consultants inc.

225 Iowa Avenue, Muscatine, Iowa 52761-3764
www.stanleyconsultants.com

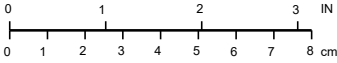
CITY OF MUSCATINE - PHASE 6D
WEST HILL AREA SANITARY AND STORM SEWER SEPARATION
MUSCATINE, IOWA

**EROSION CONTROL
STORMWATER POLLUTION
PREVENTION PLAN**

DESIGNED_ <u>KK HEIM</u>	SCALE: AS NOTED	
DRAWN_ <u>GM REEVES</u>	NO. 17660.60.30	REV.
CHECKED_ <u>ER SCHALLERT</u>		
APPROVED_ <u>JM BRADY</u>		
DATE_ <u>KK HEIM</u>		
<u>MARCH 12, 2025</u>		

CE.01	0
--------------	----------

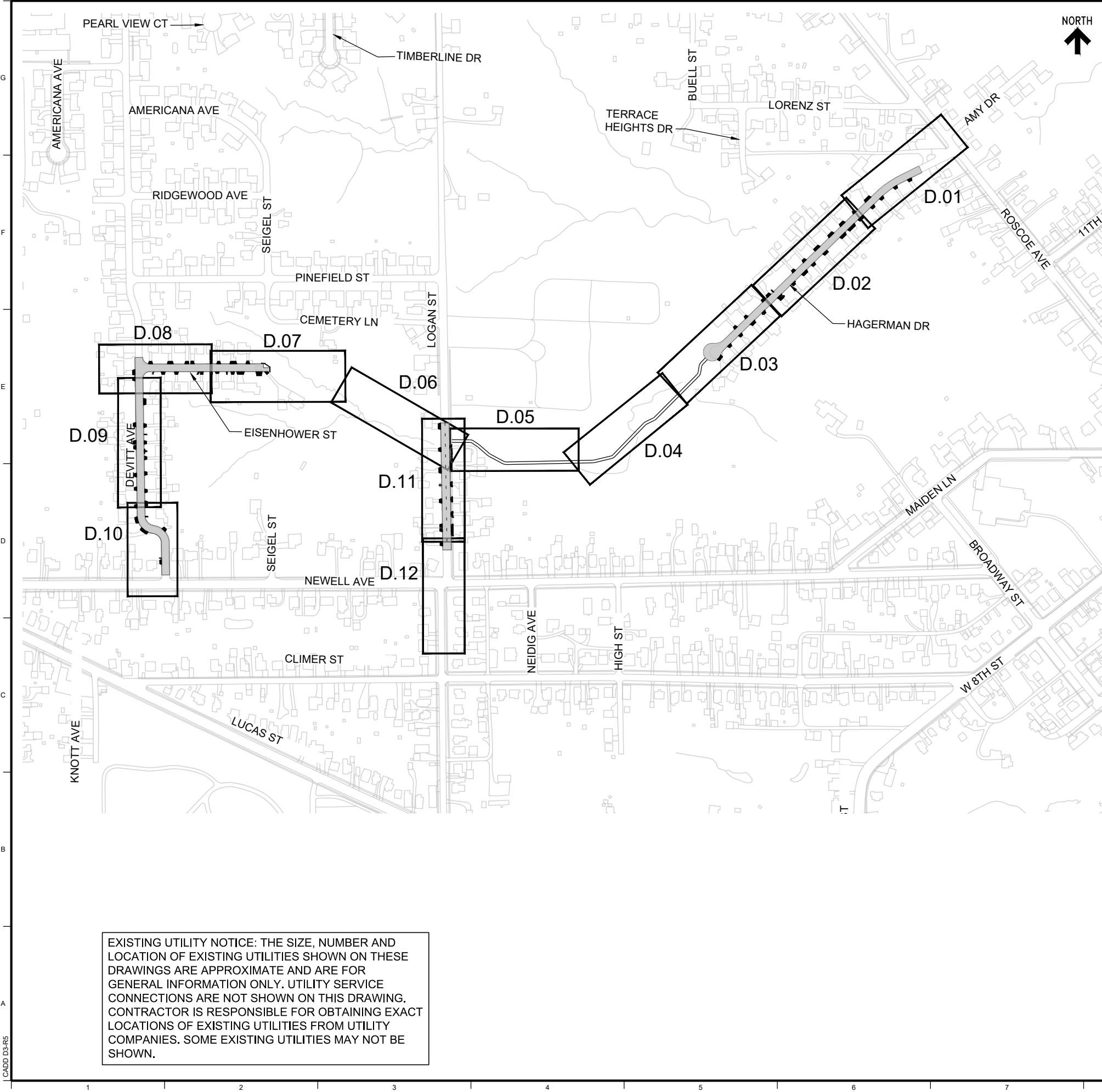
AT FULL SIZE



BENCH MARK LIST PHASE 6D (NAVD88)		
NAME	ELEVATION	DESCRIPTION
DE 1	715.27	FIRE HYDRANT @ 1434 DEVITT AVE., ARROW
EI 1	711.90	FIRE HYDRANT @ NE QUAD DEVITT AVE. & EISENHOWER ST., TAG BOLT
EI 2	695.65	FIRE HYDRANT @ END OF EISENHOWER ST., TAG BOLT
HA 1	637.28	FIRE HYDRANT @ NORTH SIDE OF HAGERMAN DR., SE BOLT
HA 2	632.43	FIRE HYDRANT @ 547 HAGERMAN DR., BOLT IN THE WORD "MUELLER"
HA 3	622.69	FIRE HYDRANT @ 515 HAGERMAN DR., BOLT IN THE WORD "MUELLER"
LO 2	670.41	BENCH TIE IN SOUTH FACE OF P.P. @ 1223 LOGAN ST.
R10	625.07	FIRE HYDRANT @ #401 ROSCOE AVE., WEST BOLT

CONTROL POINTS (IOWA STATE PLANE, SOUTH ZONE, NAD83 MODIFIED TO GROUND, SCALE FACTOR = 0.9999338456, SCALED ABOUT MUSCATINE COUNTY GPS POINT #315				
POINT #	NORTHING	EASTING	ELEVATION	DESCRIPTION
641	529310.37	2309782.20	620.29	SET 1/2" REBAR 3' SOUTH OF B/C AT 518 HAGERMAN DR
642	529011.90	2309420.41	627.98	SET 1/2" REBAR 6' NORTH OF B/C AT 543 HAGERMAN DR. BEHIND MAILBOX
643	528681.23	2309131.39	635.76	SET 1/2" REBAR 4' WEST OF B/C AT 618 HAGERMAN DR. AT END OF CUL-DE SAC
644	528548.34	2309013.87	641.00	SET 1/2" REBAR SW OF CP #643 AT BACK OF LOT OF 618 HAGERMAN DR.
645	528323.54	2308797.17	645.03	SET 1/2" REBAR SW OF CP #644 IN WOODED AREA
646	528238.77	2308505.63	650.47	SET 1/2" REBAR WEST OF CP #645 IN WOODED AREA
647	528297.67	2308139.65	668.96	SET 1/2" REBAR 3' NORTH OF DRIVEWAY, 6' EAST OF WALK AT 1223 LOGAN ST.
648	528358.21	2307983.45	669.75	SET 1/2" REBAR 40' NW OF NW CORNER OF 1224 LOGAN ST.
649	528628.22	2307415.15	692.71	SET 1/2" REBAR AT DEAD OF ROAD AT 900 EISENHOWER ST.
650	528674.26	2307168.12	704.02	SET 1/2" REBAR 8' NORTH OF NORTH B/C 921 EISENHOWER ST.
651	528654.61	2306926.74	711.04	SET 1/2" REBAR 4' WEST OF WEST B/C AT 1450 DEVITT AVE.
652	528215.09	2306932.01	710.56	SET 1/2" REBAR 4' WEST OF WEST B/C AT 1422 DEVITT AVE.

(IOWA STATE PLANE, SOUTH ZONE, NAD83 MODIFIED TO GROUND, SCALE FACTOR = 0.9999338456, SCALED ABOUT MUSCATINE COUNTY GPS POINT #315)



GENERAL NOTES

1. PROPERTY AND ROW LINES INDICATED ON PLANS ARE AT APPROXIMATE LOCATION. INFORMATION WAS OBTAINED FROM ONLINE SURVEY INFORMATION FROM MUSCATINE AREA GEOGRAPHICAL INFORMATION CONSORTIUM (MAGIC). PROPERTY SURVEY IS REQUIRED TO DETERMINE EXACT LOCATIONS.
2. TOPOGRAPHIC INFORMATION SHOWN ON PLANS HAS BEEN OBTAINED FROM MARTIN & WHITACRE SURVEY (SURVEY COMPLETED BETWEEN 2021 AND 2024). BUILDING OUTLINES SHOWN ARE FROM CITY OF MUSCATINE DATA SOURCE AND MAY NOT REFLECT CURRENT CONDITIONS.
3. ANY STREET SIGNS IN THE IMPACTED AREA SHOULD BE SALVAGED AND DELIVERED/STOCKPILED AT THE CITY PUBLIC WORKS STORAGE YARD IMMEDIATELY AFTER REMOVAL. IF SIGNS ARE DAMAGED OR MISSING, CONTRACTOR MAY BE SUBJECT TO FINES AS DETERMINED BY THE CITY.
4. ALL DISTURBED AREAS WITHIN ROW THAT ARE NOT RESTORED BY PAVEMENT SHALL MATCH EXISTING SURFACING MATERIAL OR BE SEEDED, FERTILIZED, AND MULCHED.
5. REFER TO PAVEMENT TYPICAL SECTIONS ON SHEET B.01.
6. TEMPORARY TRANSITION PAVEMENT TO MAINTAIN TRAFFIC BETWEEN PHASES WILL BE REQUIRED.
7. REFER TO SANITARY AND STORM SEWER PLAN DRAWINGS FOR PROPOSED SEWERS, MANHOLES, AND INLETS. ABANDONED OR REMOVED FACILITIES ARE HATCHED ON THE M AND MSA SERIES DRAWINGS.
8. RESTORE DISTURBED LANDSCAPING FEATURES WITHIN ROW AND EASEMENT LIMITS. REFER TO SHEET C.19 FOR TABULATION.
9. PRESERVE AND PROTECT TREES TO GREATEST EXTENT POSSIBLE. REFER TO R SHEETS FOR TREE REMOVAL LEGEND. COORDINATE WITH CITY ON DECISION TO REMOVE ADDITIONAL TREES.
10. SEE WATER DRAWINGS FOR PROPOSED WATER MAIN IMPROVEMENTS.
11. REFER TO SHEET C.18 FOR DRIVEWAY REPLACEMENT TABULATION.
12. REFER TO SHEET B.02 FOR PAVEMENT MARKING DETAILS. PAVEMENT MARKING TYPES AND LOCATIONS SHOWN ON D SHEETS.
13. REFER TO L SHEETS FOR PAVEMENT JOINTING LAYOUT AT INTERSECTIONS.
14. REFER TO W SHEETS FOR ROADWAY CROSS SECTIONS.
15. TEMPORARY AND PERMANENT EASEMENT LIMITS ARE SHOWN ON SANITARY SEWER (MSA) SHEETS. CONTRACTOR IS REQUIRED TO STAY WITHIN EASEMENTS AND CONSTRUCTION LIMITS. STAKING OF EASEMENTS AND CONSTRUCTION LIMITS IS THE RESPONSIBILITY OF THE CONTRACTOR. EASEMENT EXHIBITS, PLATS, AND SHAPES CAN BE PROVIDED ELECTRONICALLY TO CONTRACTOR.
16. SUBDRAIN IS NOT SHOWN ON PLAN DRAWINGS. SUBDRAIN IS REQUIRED UNDER PAVEMENT ACCORDING TO DETAIL ON SHEET B.01 AND ESTIMATE REFERENCE NOTES. SUBDRAIN SHALL BE OUTLET TO NEAREST INLET.
17. SEE R SHEETS FOR REMOVAL LIMITS AND EXISTING FEATURES SURVEY INCLUDING MATERIAL OF DRIVEWAY, SIDEWALK, LANDSCAPING FEATURES SUCH AS PLANTINGS AND RETAINING WALLS.
18. REFER TO G SHEETS FOR ROAD ALIGNMENT TABLE AND EXISTING SURVEY CONTROL.
19. PAVING MUST BE DONE USING A SLIP FORM PAVER, HAND POUR, OR OTHER SUDAS APPROVED METHOD. POWER/LASER SCREED WILL NOT BE ALLOWED ON MAINLINE DRIVING SURFACE.
20. RESTORE DISTURBED FENCING OR RETAINING WALLS TO MATCH EXISTING CONDITIONS.
21. IF UTILITY WORK OR SERVICE LINE WORK EXTENDS BEYOND THE LIMITS SHOWN ON THE DRAWINGS, RESTORE DISTURBED AREA TO MATCH EXISTING CONDITIONS.
22. TEMPORARY ACCESS TO RESIDENTS MUST BE PROVIDED TO THEIR HOMES AS CONSTRUCTION PROGRESSES. HAGERMAN DRIVE AND EISENHOWER STREET ARE DEAD END STREETS. TEMPORARY ACCESS MAY BE PROVIDED WITH TEMPORARY GRAVEL ACCESS ROADS, PAVING HALF THE ROAD AT A TIME, AND TEMPORARY DRIVEWAY APPROACHES TO MAINTAIN ACCESS. CONTRACTOR'S TEMPORARY ACCESS PLAN MUST BE AUTHORIZED BY THE CITY. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ADEQUATE LEVEL OF ACCESS FOR SERVICES SUCH AS MAIL, DELIVERY, GARBAGE, AND EMERGENCY SERVICES.

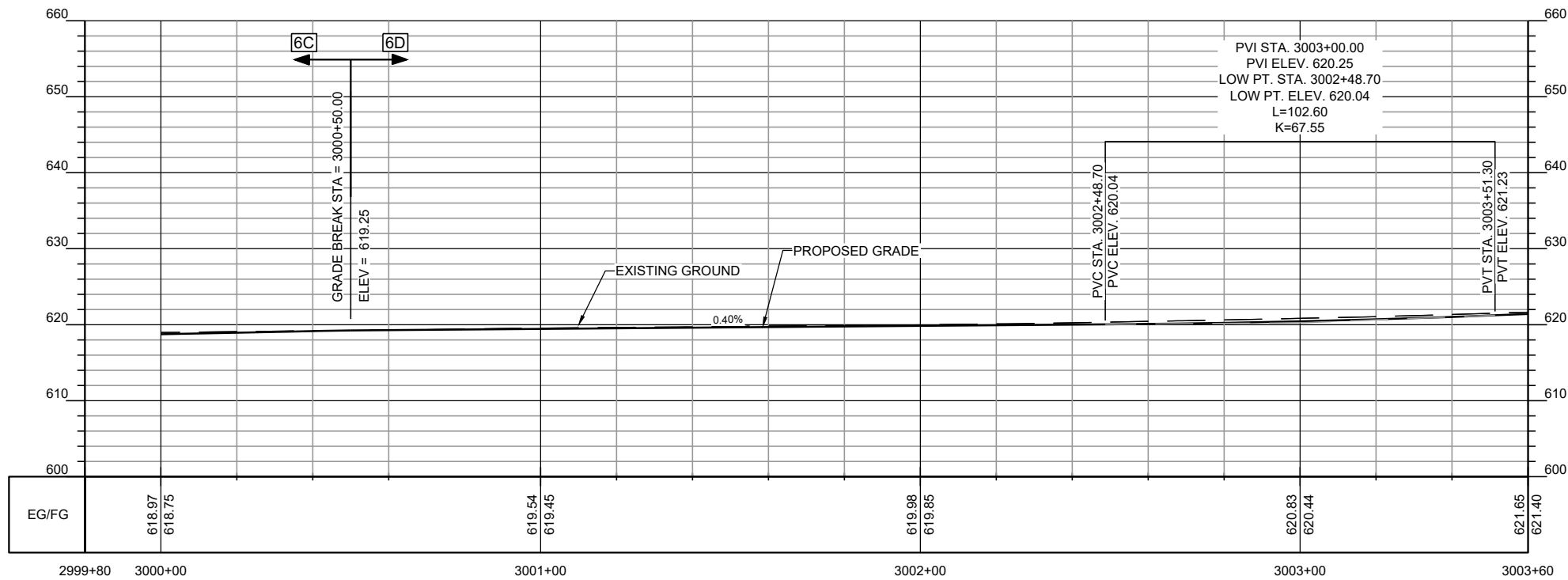
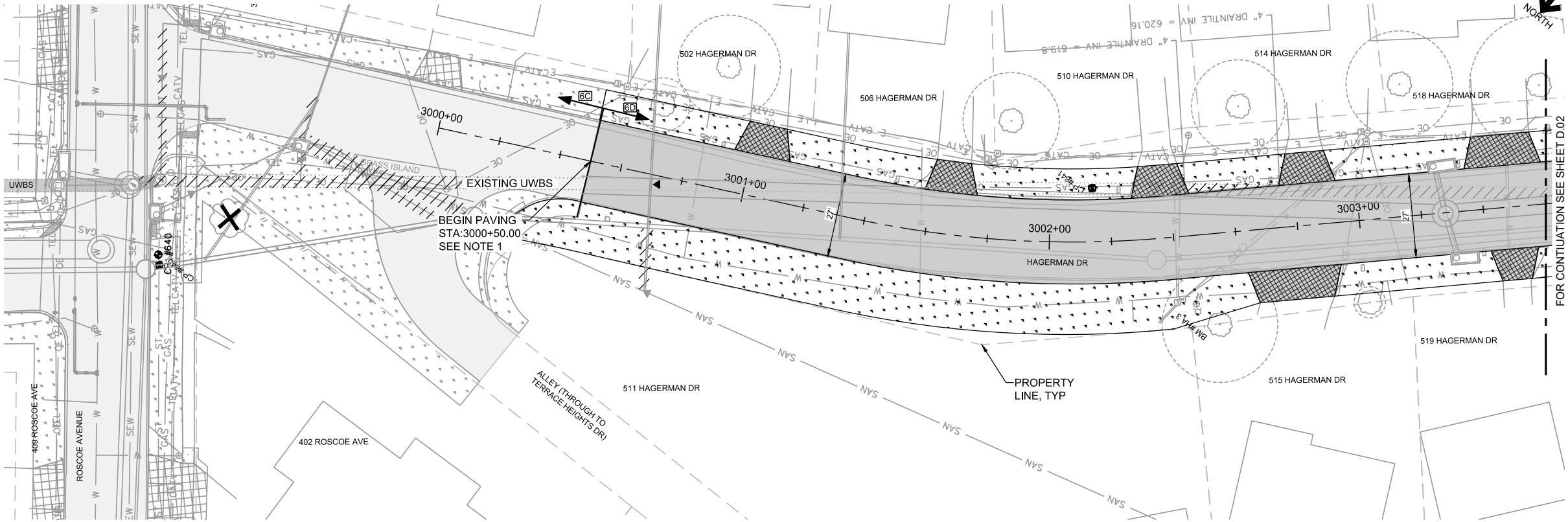
EXISTING UTILITY NOTICE: THE SIZE, NUMBER AND LOCATION OF EXISTING UTILITIES SHOWN ON THESE DRAWINGS ARE APPROXIMATE AND ARE FOR GENERAL INFORMATION ONLY. UTILITY SERVICE CONNECTIONS ARE NOT SHOWN ON THIS DRAWING. CONTRACTOR IS RESPONSIBLE FOR OBTAINING EXACT LOCATIONS OF EXISTING UTILITIES FROM UTILITY COMPANIES. SOME EXISTING UTILITIES MAY NOT BE SHOWN.

NO.	REVISIONS	DSGN	CHKD	APVD	DATE
Stanley Consultants INC. 225 Iowa Avenue, Muscatine, Iowa 52761-3764 www.stanleyconsultants.com					
CITY OF MUSCATINE - PHASE 6D WEST HILL AREA SANITARY AND STORM SEWER SEPARATION MUSCATINE, IOWA					
OVERALL SITE PAVEMENT RESTORATION & KEY PLAN					
DESIGNED <u>PM JOHNSON</u> DRAWN <u>GM REEVES</u> CHECKED <u>ER SCHALLERT</u> APPROVED <u>KK HEIM</u> APPROVED <u>PM JOHNSON</u> DATE <u>MARCH 12, 2025</u>				SCALE: AS NOTED NO. 17660.60.30 REV. <u>0</u>	

0 1 2 3 4 5 6 7 8

IN
cm

10 ©STANLEY CONSULTANTS



NOTES

1. LOCATE END OF PAVEMENT FROM PHASE 6C CONTRACT BY OTHERS AND CONTINUE PAVEMENT INSTALLATION IN THIS PHASE 6D CONTRACT.

LEGEND

- 7" PCC PAVEMENT REPLACEMENT
- SIDEWALK REPLACEMENT
- DRIVEWAY AND ALLEY REPLACEMENT
- SEEDING
- DETECTABLE WARNING SURFACE

NO.	REVISIONS	DSGN	CHKD	APVD	DATE



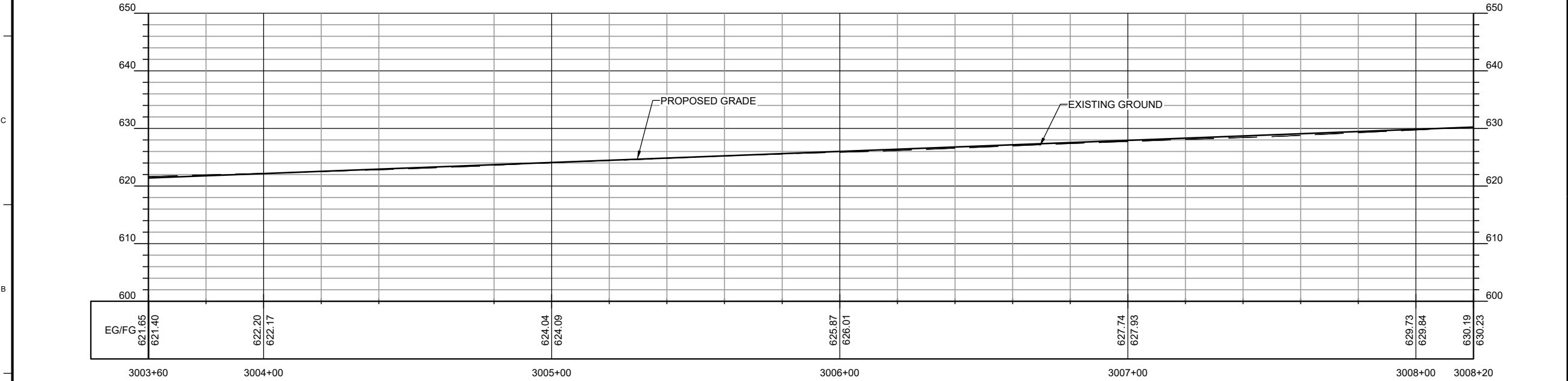
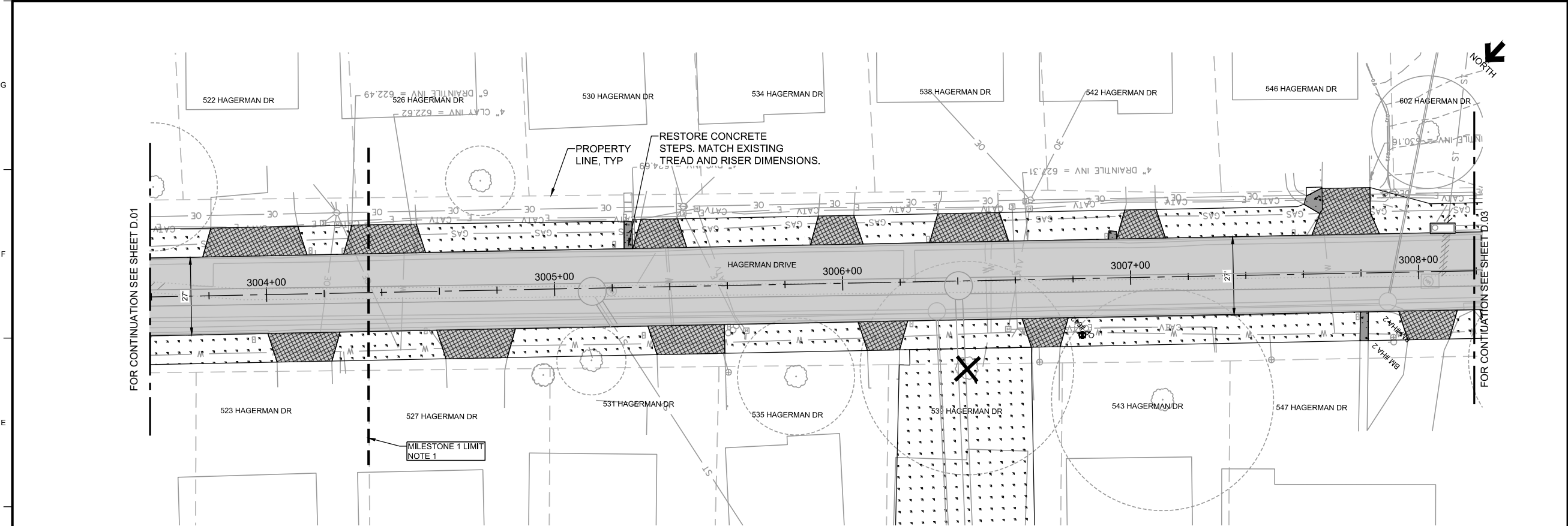
Stanley Consultants Inc.
225 Iowa Avenue, Muscatine, Iowa 52761-3764
www.stanleyconsultants.com

CITY OF MUSCATINE - PHASE 6D
WEST HILL AREA SANITARY AND STORM SEWER SEPARATION
MUSCATINE, IOWA

**PAVEMENT
PAVEMENT RESTORATION PLAN
HAGERMAN DR - SHEET 1**

DESIGNED PM JOHNSON	SCALE: 1" = 20'
DRAWN GM REEVES	NO. 17660.60.30
CHECKED ER SCHALLERT	REV.
APPROVED KK HEIM	D.01
APPROVED PM JOHNSON	0
DATE MARCH 12, 2025	





- ### NOTES
1. INSTALL PIPE AND MAINLINE PAVING TO MILESTONE 1 LIMIT, BEYOND THE DRIVEWAYS FOR 522 AND 523 HAGERMAN DRIVE BEFORE THE MILESTONE 1 CONTRACT DATE.
 2. COORDINATE WITH CITY FOR WORK ON 539 HAGERMAN DRIVE PARCEL.

LEGEND

	7" PCC PAVEMENT REPLACEMENT
	SIDEWALK REPLACEMENT
	DRIVEWAY AND ALLEY REPLACEMENT
	SEEDING
	DETECTABLE WARNING SURFACE

NO.	REVISIONS	DSGN	CHKD	APVD	DATE



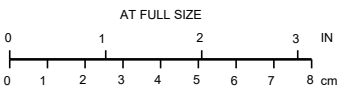
Stanley Consultants inc.

225 Iowa Avenue, Muscatine, Iowa 52761-3764
www.stanleyconsultants.com

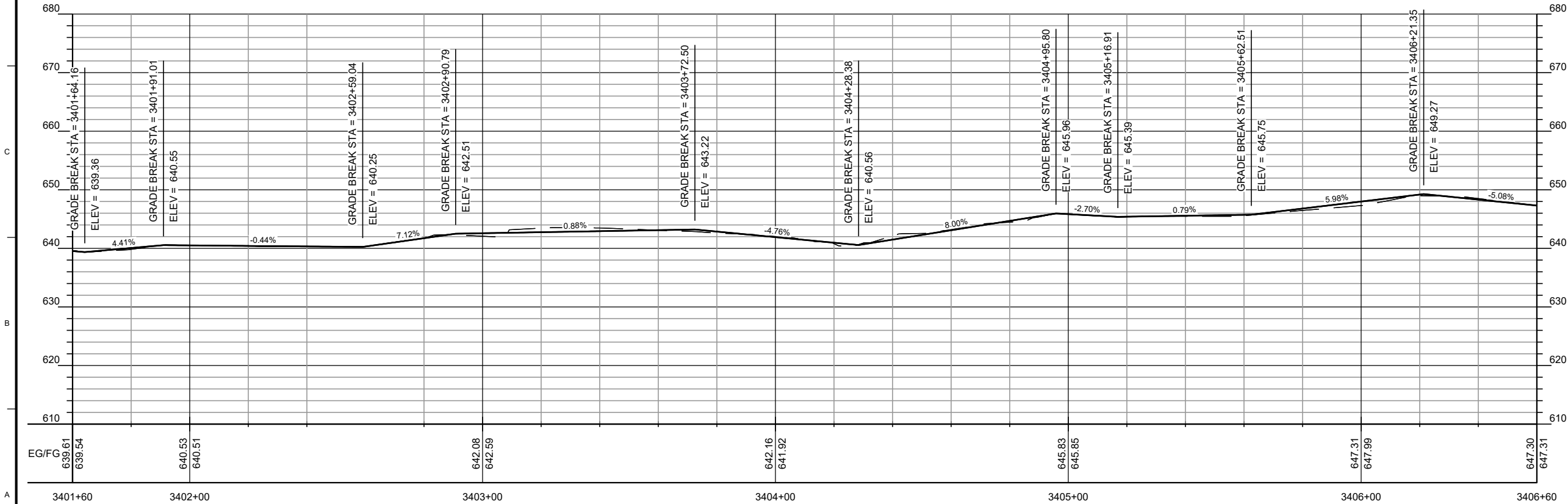
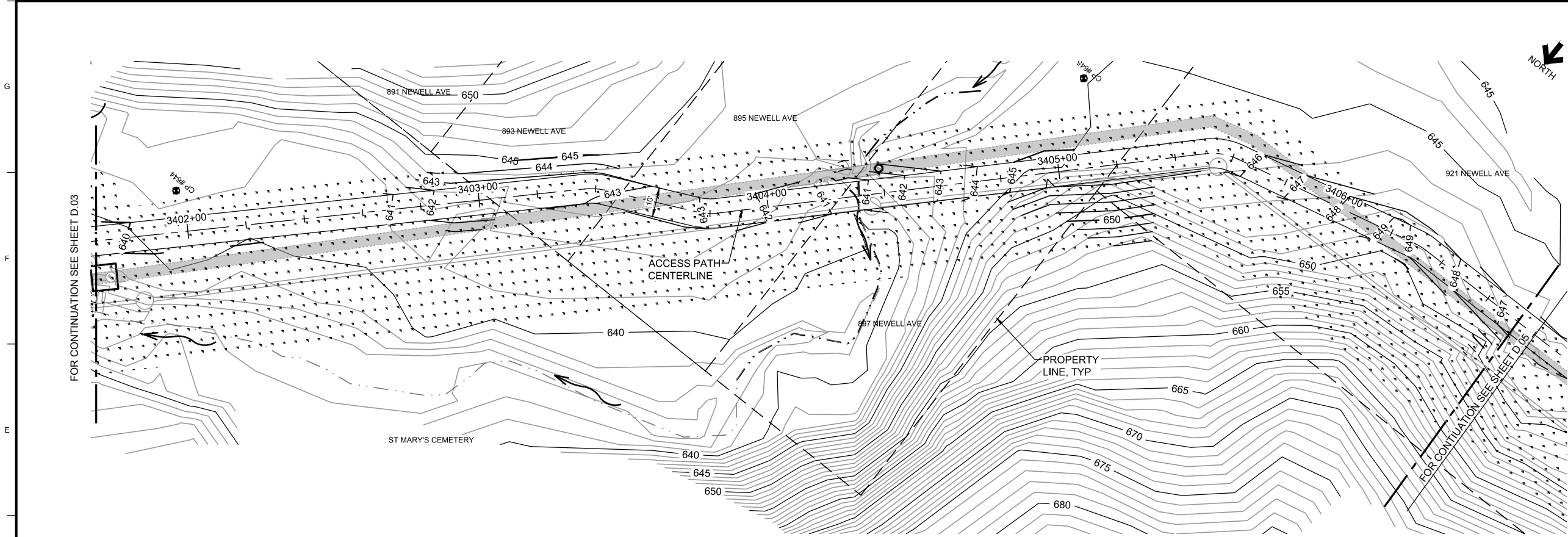
CITY OF MUSCATINE - PHASE 6D
WEST HILL AREA SANITARY AND STORM SEWER SEPARATION
MUSCATINE, IOWA

PAVEMENT PAVEMENT RESTORATION PLAN HAGERMAN DR - SHEET 2

DESIGNED <u>PM JOHNSON</u>	SCALE: 1" = 20'	REV.
DRAWN <u>GM REEVES</u>	NO. 17660.60.30	
CHECKED <u>ER SCHALLERT</u>		
APPROVED <u>KK HEIM</u>		
APPROVED <u>PM JOHNSON</u>		
DATE <u>MARCH 12, 2025</u>	D.02	0



LOAD D3-R6



NOTES

LEGEND

- 7" PCC PAVEMENT REPLACEMENT
- SIDEWALK REPLACEMENT
- DRIVEWAY AND ALLEY REPLACEMENT
- SEEDING
- DETECTABLE WARNING SURFACE

NO.	REVISIONS	DSGN	CHKD	APVD	DATE
-----	-----------	------	------	------	------

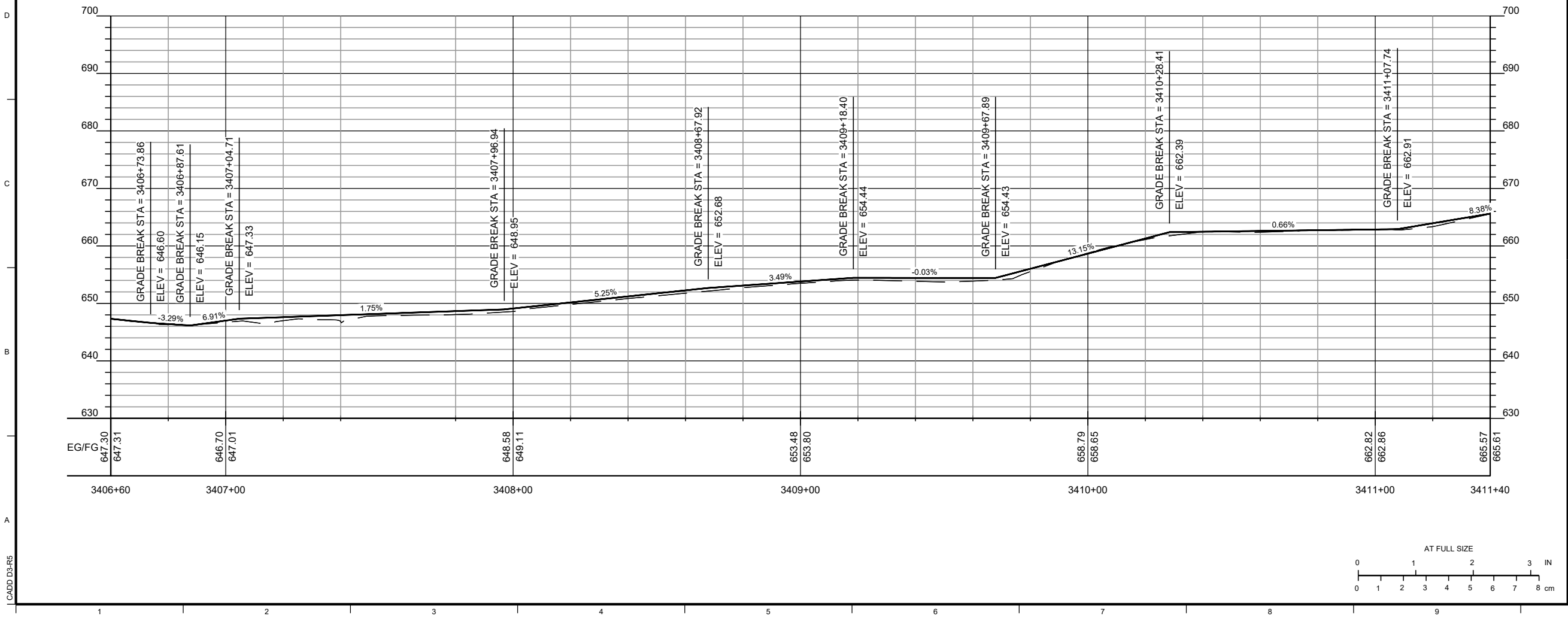
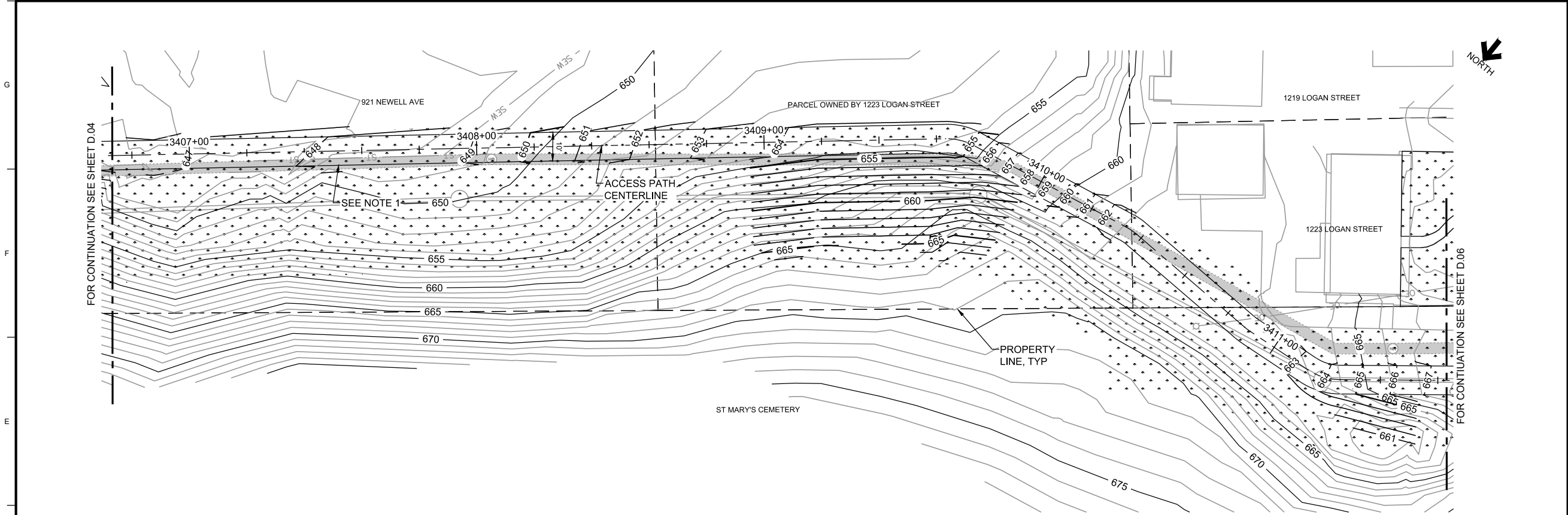


CITY OF MUSCATINE - PHASE 6D
WEST HILL AREA SANITARY AND STORM SEWER SEPARATION
MUSCATINE, IOWA

PAVEMENT PAVEMENT RESTORATION PLAN BETWEEN HAGERMAN DR & LOGAN ST

DESIGNED PM JOHNSON	SCALE: 1" = 20'
DRAWN GM REEVES	NO. 17660.60.30
CHECKED ER SCHALLERT	REV.
APPROVED KK HEIM	
APPROVED PM JOHNSON	
DATE MARCH 12, 2025	

D.04 0



NOTES

1. SURVEY SHOWS THAT THE EXISTING TUNNEL IS EXPOSED IN THIS AREA. WHERE THE TUNNEL IS EXPOSED, REDUCE THE RIGHT SIDE WIDTH OF THE PATH TO MATCH THE EDGE OF THE TUNNEL AND ADJUST GRADING TO TIE TO THE TOP EXPOSED EDGE OF THE TUNNEL.

LEGEND

- 7" PCC PAVEMENT REPLACEMENT
- SIDEWALK REPLACEMENT
- DRIVEWAY AND ALLEY REPLACEMENT
- SEEDING
- DETECTABLE WARNING SURFACE

NO.	REVISIONS	DSGN	CHKD	APVD	DATE



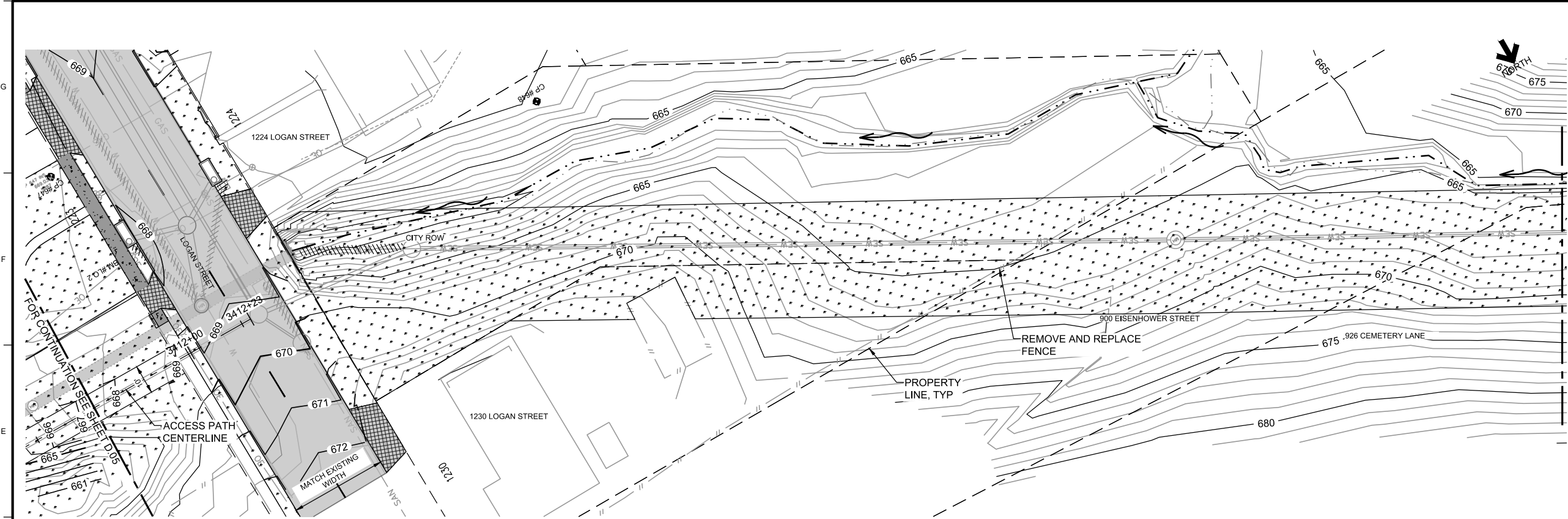
Stanley Consultants INC.
225 Iowa Avenue, Muscatine, Iowa 52761-3764
www.stanleyconsultants.com

CITY OF MUSCATINE - PHASE 6D
WEST HILL AREA SANITARY AND STORM SEWER SEPARATION
MUSCATINE, IOWA

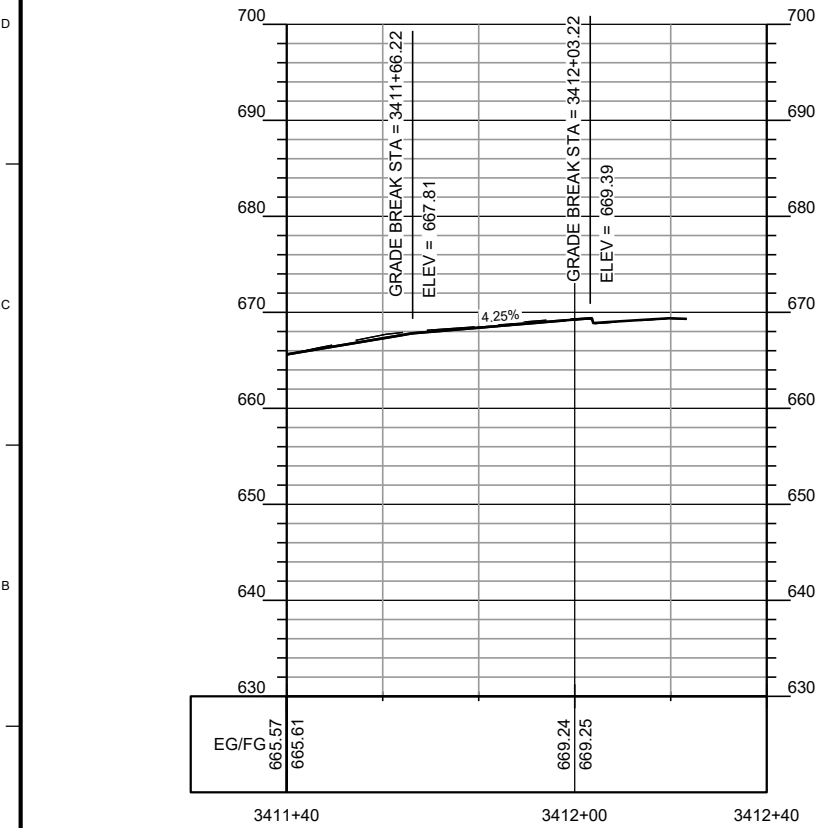
**PAVEMENT
PAVEMENT RESTORATION PLAN
BETWEEN HAGEMAN DR & LOGAN ST**

DESIGNED	PM JOHNSON	SCALE: 1" = 20'
DRAWN	GM REEVES	NO. 17660.60.30
CHECKED	ER SCHALLERT	REV.
APPROVED	KK HEIM	
APPROVED	PM JOHNSON	
DATE	MARCH 12, 2025	

D.05	0
------	---



FOR CONTINUATION SEE SHEET D.07



NOTES

LEGEND

- 7" PCC PAVEMENT REPLACEMENT
- SIDEWALK REPLACEMENT
- DRIVEWAY AND ALLEY REPLACEMENT
- SEEDING
- DETECTABLE WARNING SURFACE

NO.	REVISIONS	DSGN	CHKD	APVD	DATE



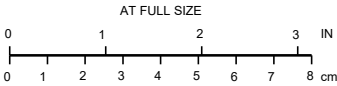
Stanley Consultants inc.

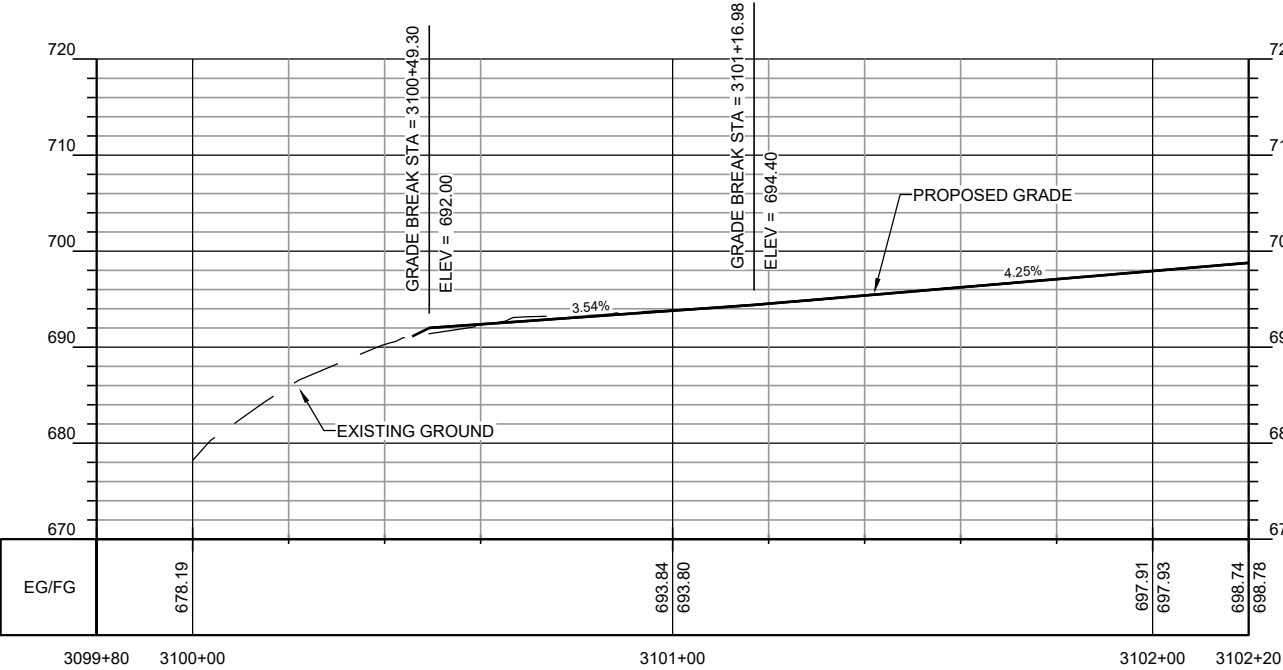
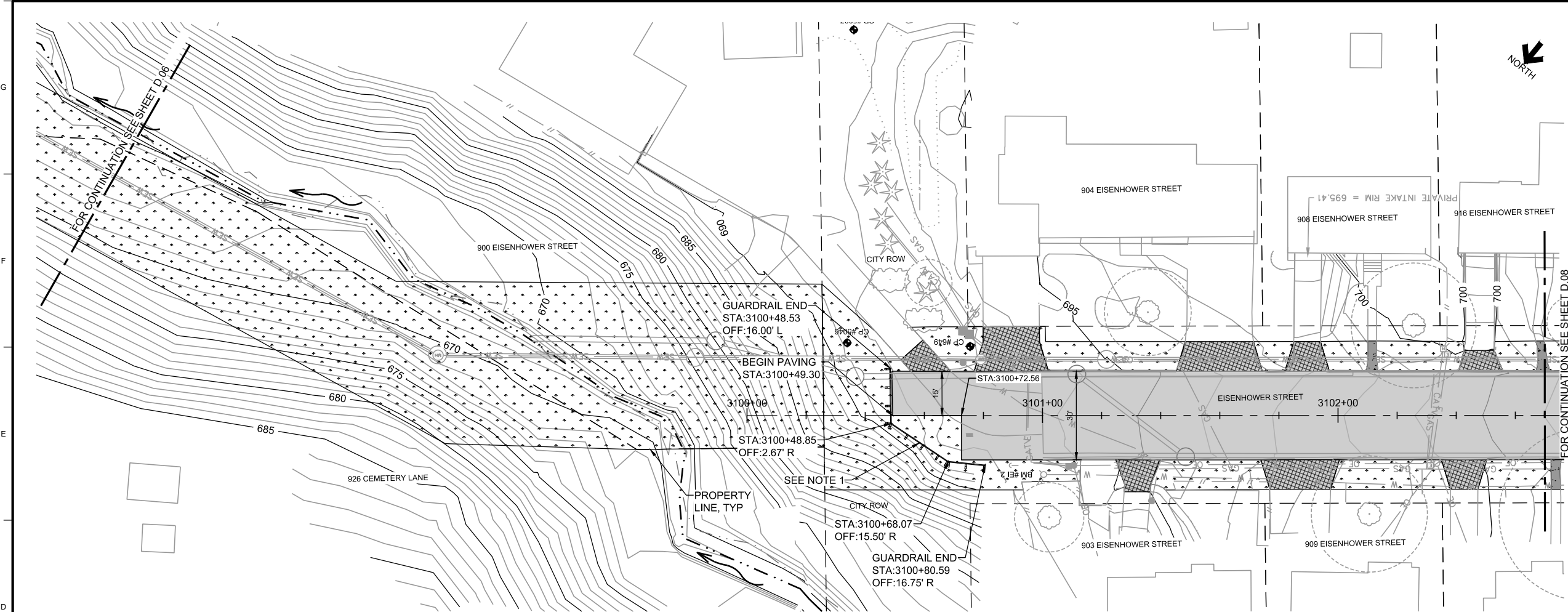
225 Iowa Avenue, Muscatine, Iowa 52761-3764
www.stanleyconsultants.com

CITY OF MUSCATINE - PHASE 6D
WEST HILL AREA SANITARY AND STORM SEWER SEPARATION
MUSCATINE, IOWA

**PAVEMENT
PAVEMENT RESTORATION PLAN
BETWEEN LOGAN ST & EISENHOWER**

DESIGNED	PM JOHNSON	SCALE: 1" = 20'	
DRAWN	GM REEVES	NO. 17660.60.30	REV.
CHECKED	ER SCHALLERT		
APPROVED	KK HEIM		
APPROVED	PM JOHNSON		
DATE	MARCH 12, 2025		
		D.06	0





NOTES

1. INSTALL STANDARD W-BEAM GUARDRAIL WITH WOOD POSTS. REFER TO IOWA DOT STANDARD ROAD PLAN BA-200 FOR DIMENSIONS AND POST SPACING. INSTALL W-BEAM END ANCHORS AT ENDS. REFER TO IOWA DOT STANDARD ROAD PLAN BA-203.

- ## LEGEND
- 7" PCC PAVEMENT REPLACEMENT
 - SIDEWALK REPLACEMENT
 - DRIVEWAY AND ALLEY REPLACEMENT
 - SEEDING
 - DETECTABLE WARNING SURFACE

NO.	REVISIONS	DSGN	CHKD	APVD	DATE

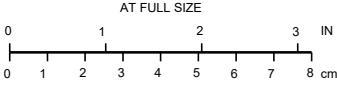


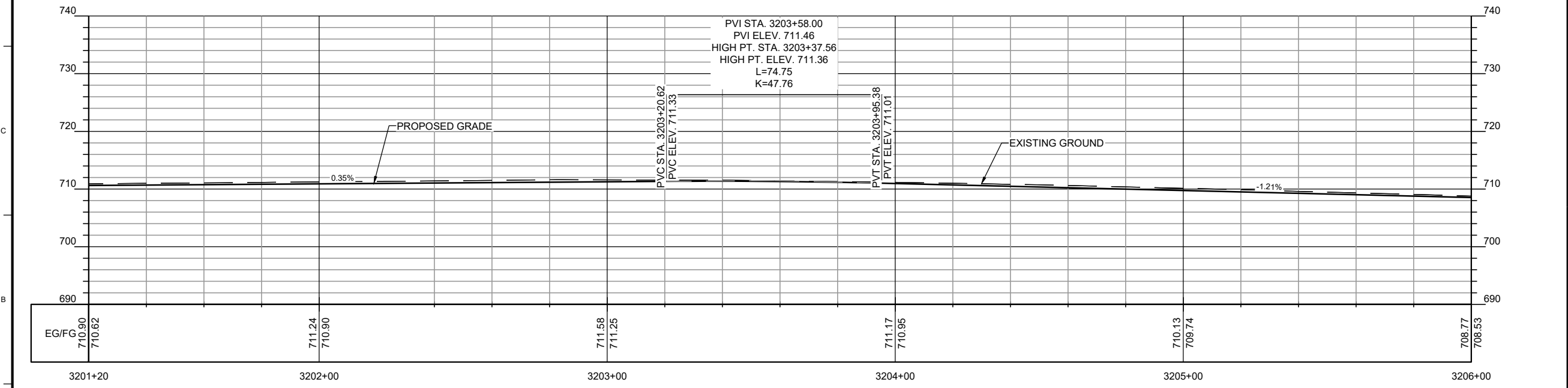
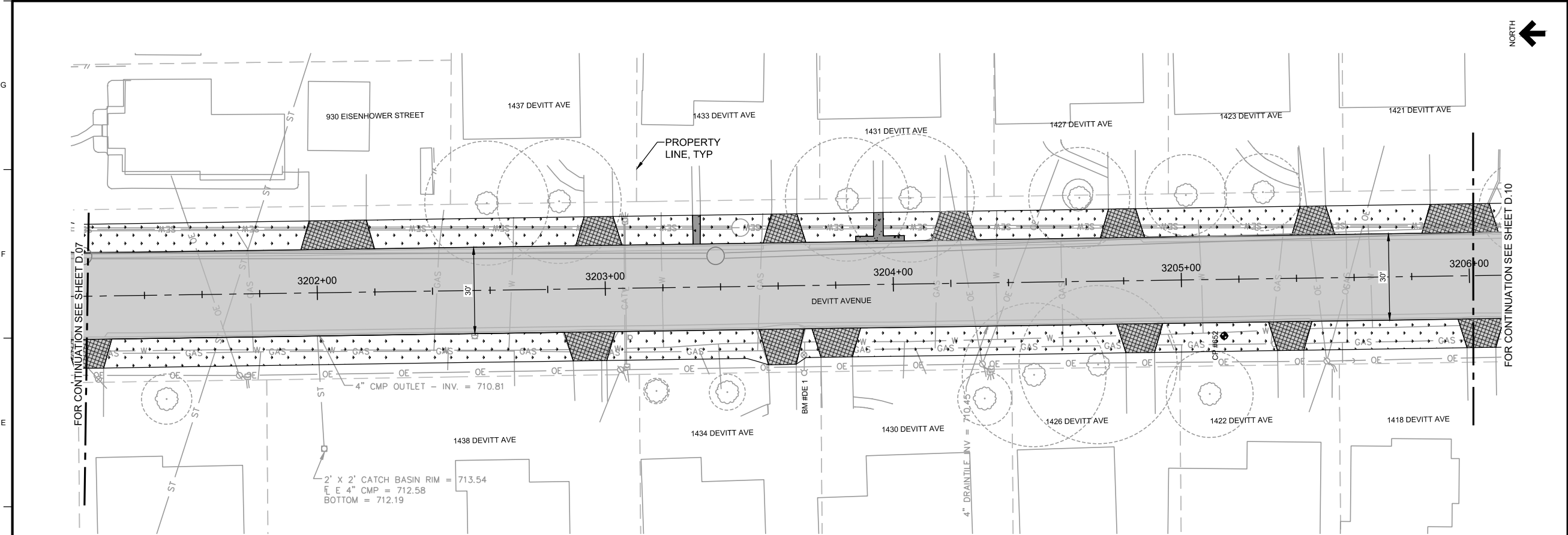
Stanley Consultants Inc.
225 Iowa Avenue, Muscatine, Iowa 52761-3764
www.stanleyconsultants.com

CITY OF MUSCATINE - PHASE 6D
WEST HILL AREA SANITARY AND STORM SEWER SEPARATION
MUSCATINE, IOWA

PAVEMENT PAVEMENT RESTORATION PLAN EISENHOWER ST

DESIGNED PM JOHNSON	SCALE: 1" = 20'	REV.
DRAWN GM REEVES	NO. 17660.60.30	
CHECKED ER SCHALLERT		
APPROVED KK HEIM		
APPROVED PM JOHNSON		
DATE MARCH 12, 2025	D.07	0





NOTES

1. DEVITT AVE PAVEMENT CROSS SLOPE:
3.5% LEFT, 2% RIGHT

LEGEND

- 7" PCC PAVEMENT REPLACEMENT
- SIDEWALK REPLACEMENT
- DRIVEWAY AND ALLEY REPLACEMENT
- SEEDING
- DETECTABLE WARNING SURFACE

NO.	REVISIONS	DSGN	CHKD	APVD	DATE

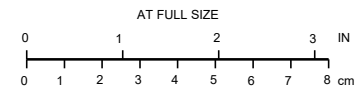
225 Iowa Avenue, Muscatine, Iowa 52761-3764
www.stanleyconsultants.com

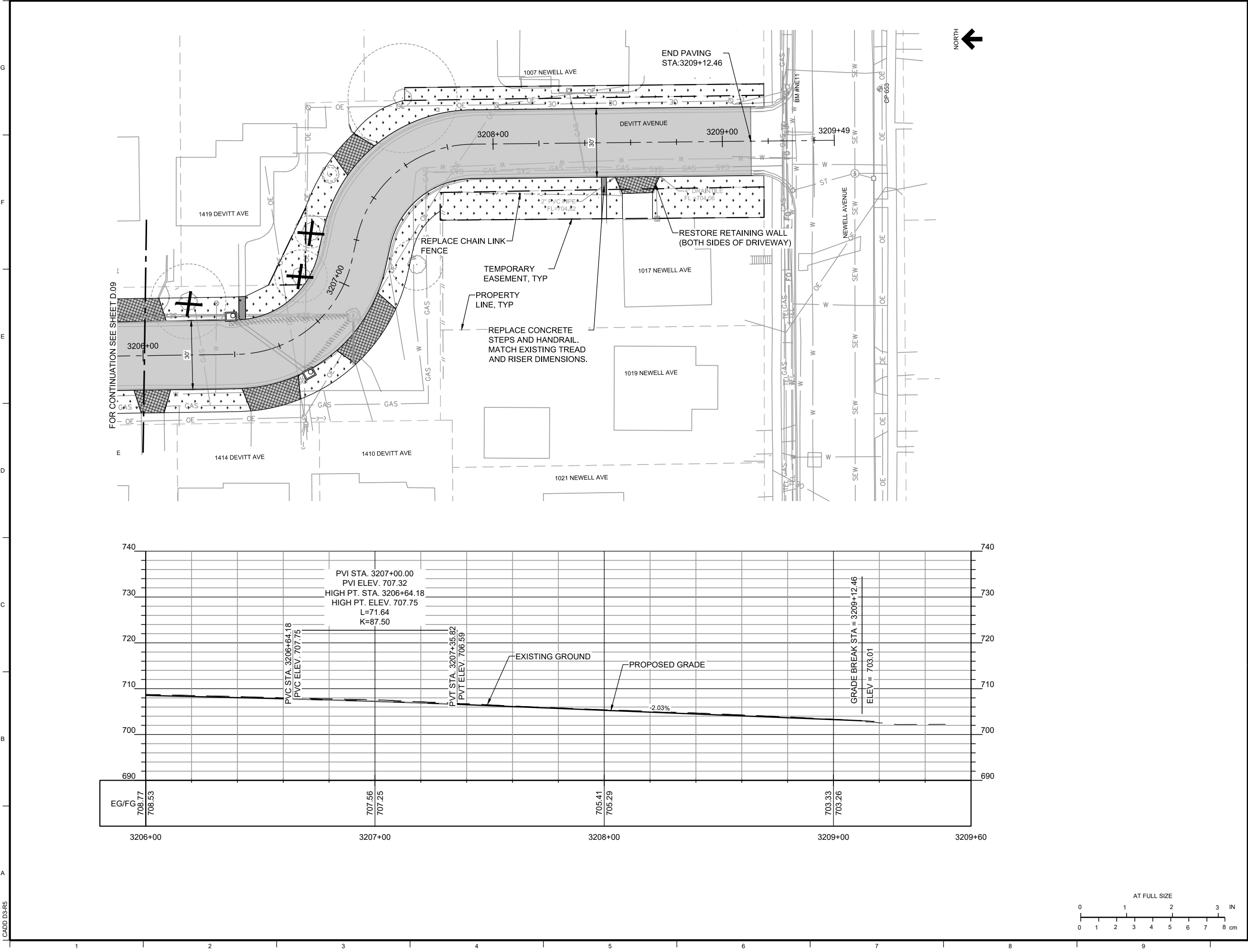
CITY OF MUSCATINE - PHASE 6D
WEST HILL AREA SANITARY AND STORM SEWER SEPARATION
MUSCATINE, IOWA

**PAVEMENT
PAVEMENT RESTORATION PLAN
DEVITT AVE - SHEET 1**

DESIGNED PM JOHNSON	SCALE: 1" = 20'	
DRAWN GM REEVES	NO. 17660.60.30	REV.
CHECKED ER SCHALLERT	D.09	0
APPROVED KK HEIM		
APPROVED PM JOHNSON		
DATE MARCH 12, 2025		

LOAD D3-R6





NOTES

1. DEVITT AVE PAVEMENT CROSS SLOPE:
3.5% LEFT, 2% RIGHT

LEGEND

- 7" PCC PAVEMENT REPLACEMENT
- SIDEWALK REPLACEMENT
- DRIVEWAY AND ALLEY REPLACEMENT
- SEEDING
- DETECTABLE WARNING SURFACE

NO.	REVISIONS	DSGN	CHKD	APVD	DATE

Stanley Consultants INC.

225 Iowa Avenue, Muscatine, Iowa 52761-3764
www.stanleyconsultants.com

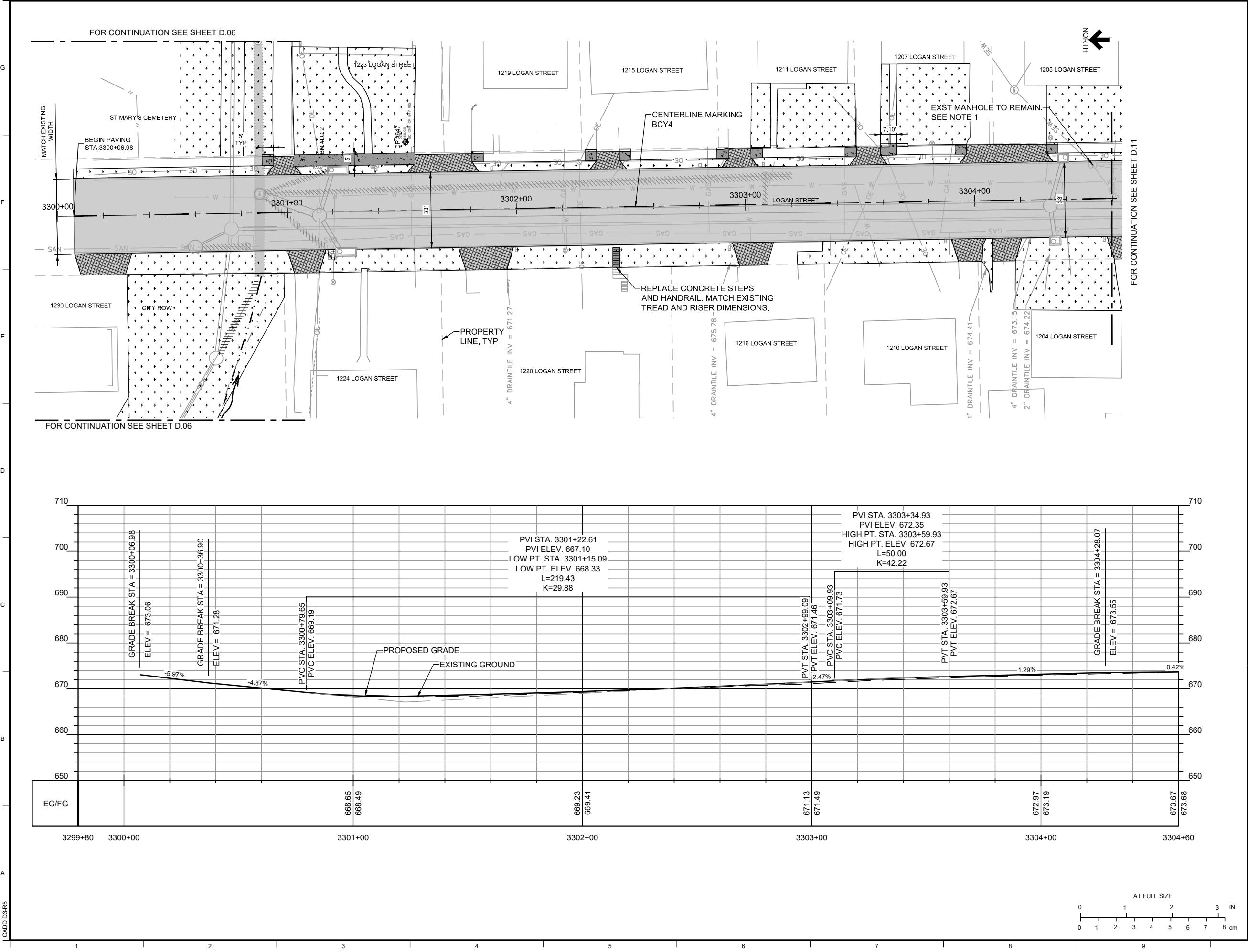
CITY OF MUSCATINE - PHASE 6D
WEST HILL AREA SANITARY AND STORM SEWER SEPARATION
MUSCATINE, IOWA

**PAVEMENT
PAVEMENT RESTORATION PLAN
DEVITT AVE - SHEET 2**

DESIGNED	PM JOHNSON	SCALE: 1" = 20'
DRAWN	GM REEVES	NO. 17660.60.30
CHECKED	ER SCHALLERT	REV.
APPROVED	KK HEIM	D.10
APPROVED	PM JOHNSON	0
DATE	MARCH 12, 2025	

10 ©STANLEY CONSULTANTS

Page 175 of 1049



NOTES

1. LOCATE TRANSVERSE PAVING JOINTS TO PLACE MANHOLE WITHIN ONE PAVEMENT PANEL.
2. PRIVATE PROPERTY MAY BE DISTURBED FOR SANITARY SERVICE LINE WORK ON PROPERTIES OF 1223 LOGAN, 1211 LOGAN, 1207 LOGAN, 1205 LOGAN, 1204 LOGAN, AND 941 NEWELL. RESTORE AREA DISTURBED ON PRIVATE PROPERTY OUTSIDE OF ROW TO MATCH EXISTING CONDITIONS INCLUDING BUT NOT LIMITED TO SEEDING, LANDSCAPING, RETAINING WALLS, DRIVEWAYS, AND SIDEWALK REPLACEMENT.
3. LOGAN ST PAVEMENT CROSS SLOPE: 3% LEFT, 2% RIGHT

LEGEND

- 7" PCC PAVEMENT REPLACEMENT
- SIDEWALK REPLACEMENT
- DRIVEWAY AND ALLEY REPLACEMENT
- SEEDING
- DETECTABLE WARNING SURFACE

NO.	REVISIONS	DSGN	CHKD	APVD	DATE



Stanley Consultants INC.

225 Iowa Avenue, Muscatine, Iowa 52761-3764
www.stanleyconsultants.com

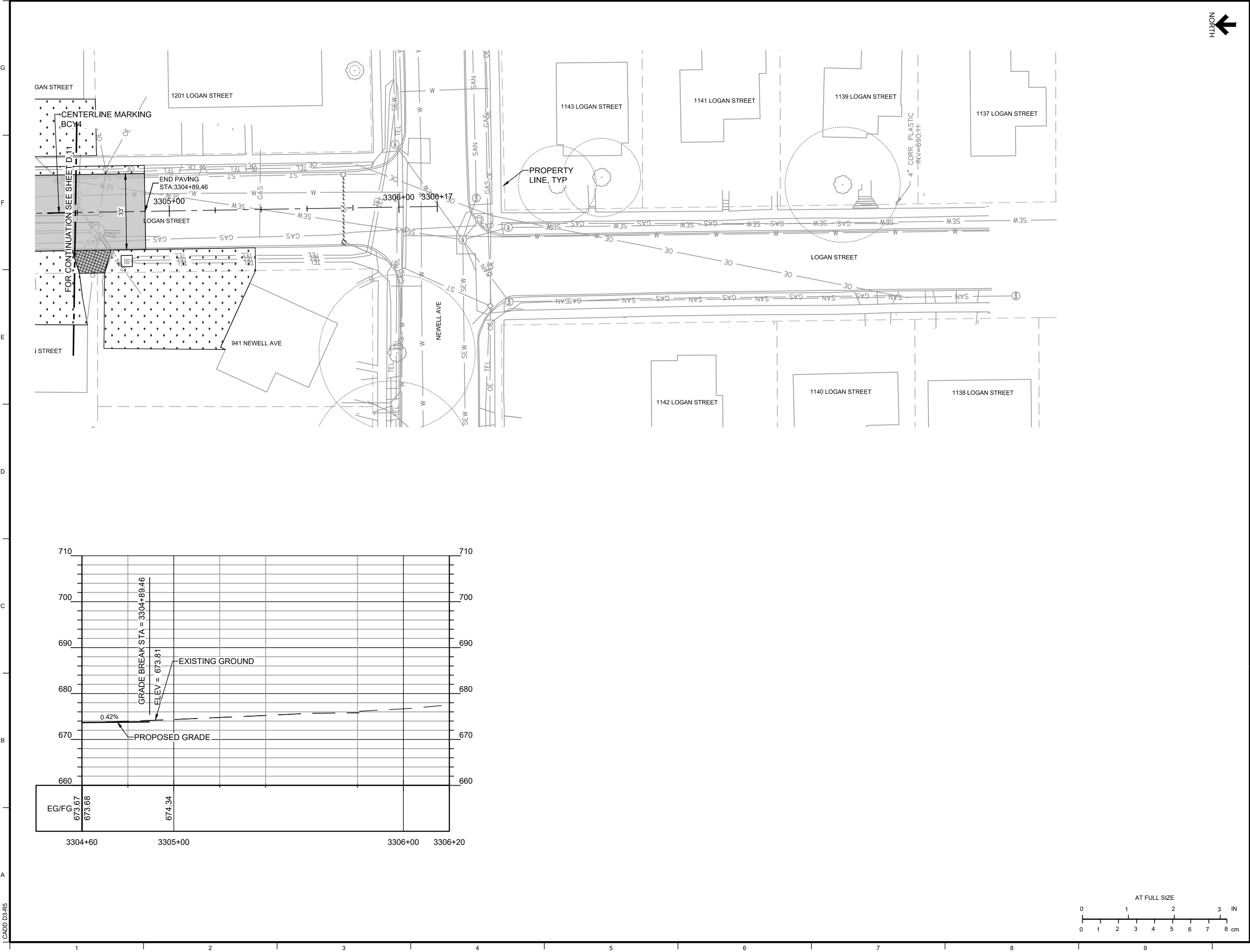
CITY OF MUSCATINE - PHASE 6D
WEST HILL AREA SANITARY AND STORM SEWER SEPARATION
MUSCATINE, IOWA

PAVEMENT PAVEMENT RESTORATION PLAN LOGAN ST - SHEET 1

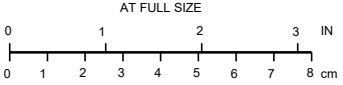
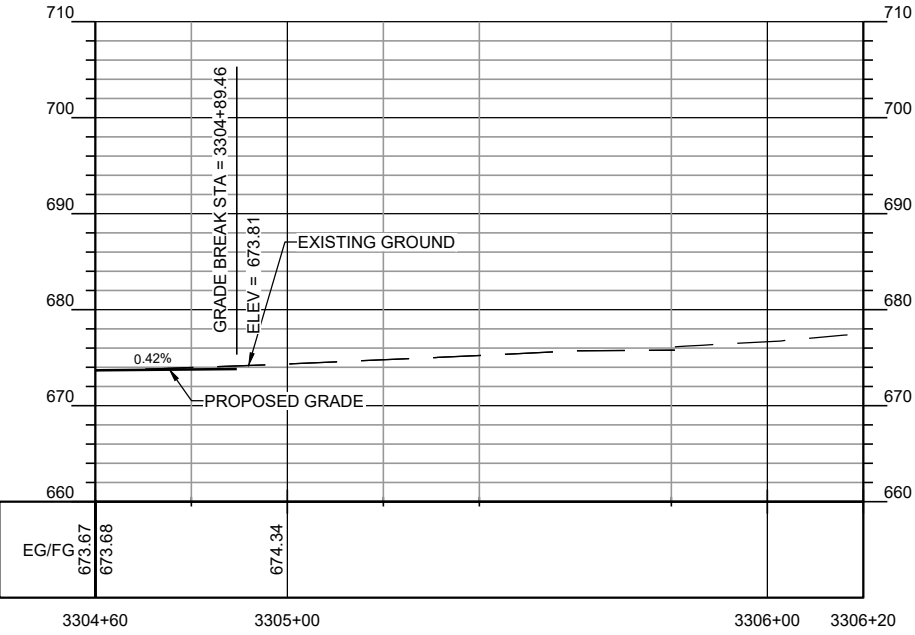
DESIGNED PM JOHNSON	SCALE: 1" = 20'
DRAWN GM REEVES	NO. 17660.60.30
CHECKED ER SCHALLERT	REV.
APPROVED KK HEIM	D.11
APPROVED PM JOHNSON	0
DATE MARCH 12, 2025	

10 ©STANLEY CONSULTANTS

Page 176 of 1049



- NOTES**
1. PRIVATE PROPERTY MAY BE DISTURBED FOR SANITARY SERVICE LINE WORK ON PROPERTIES OF 1223 LOGAN, 1211 LOGAN, 1207 LOGAN, 1205 LOGAN, 1204 LOGAN, AND 941 NEWELL. RESTORE AREA DISTURBED ON PRIVATE PROPERTY OUTSIDE OF ROW TO MATCH EXISTING CONDITIONS INCLUDING BUT NOT LIMITED TO SEEDING, LANDSCAPING, RETAINING WALLS, DRIVEWAYS, AND SIDEWALK REPLACEMENT.
 2. LOGAN ST PAVEMENT CROSS SLOPE: 3% LEFT, 2% RIGHT



NO.	REVISIONS	DSGN	CHKD	APVD	DATE

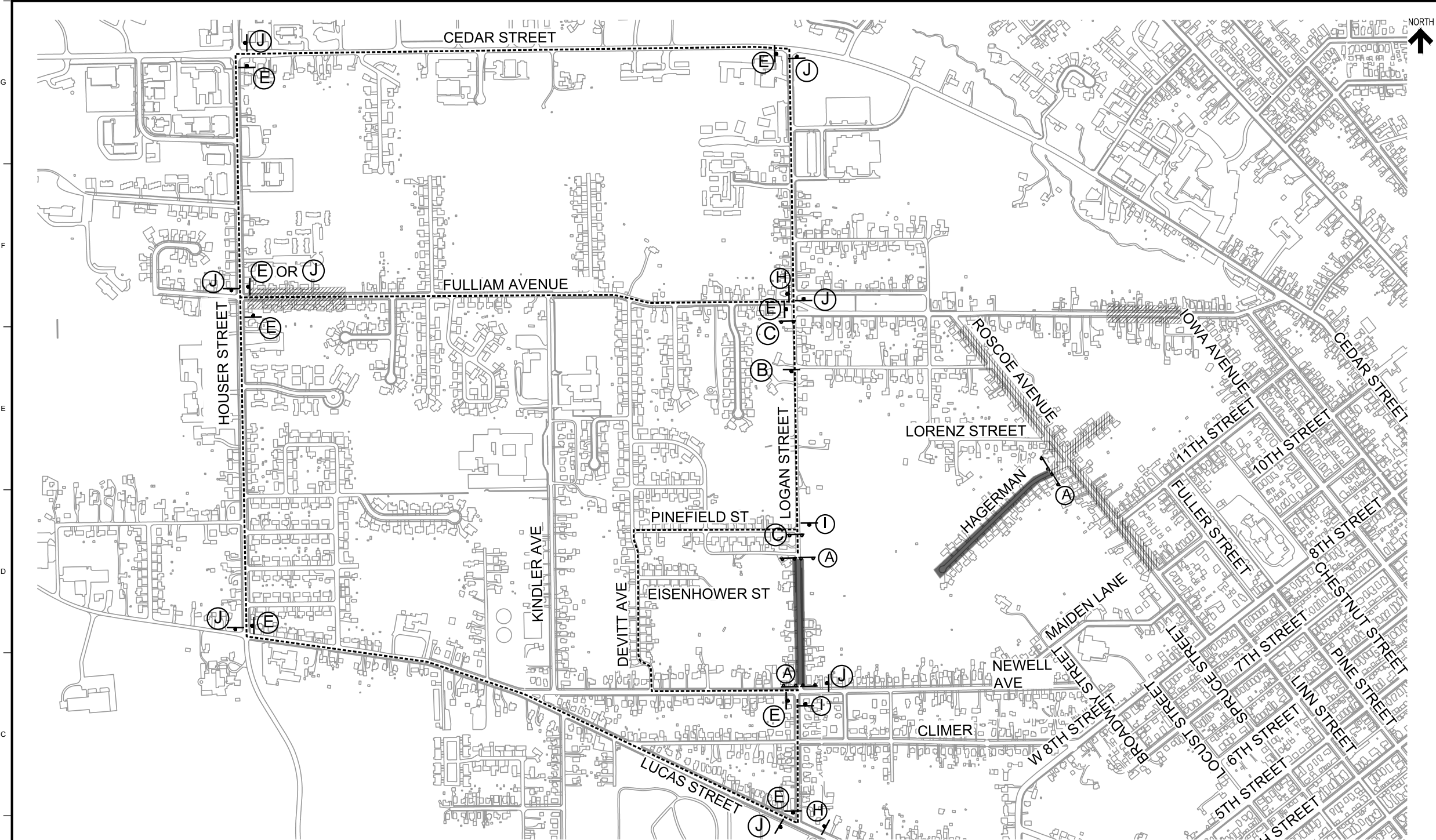
Stanley Consultants inc.
225 Iowa Avenue, Muscatine, Iowa 52761-3764
www.stanleyconsultants.com

CITY OF MUSCATINE - PHASE 6D
WEST HILL AREA SANITARY AND STORM SEWER SEPARATION
MUSCATINE, IOWA

**PAVEMENT
PAVEMENT RESTORATION PLAN
LOGAN ST - SHEET 2**

DESIGNED <u>PM JOHNSON</u>	SCALE: 1" = 20'	
DRAWN <u>GM REEVES</u>	NO. 17660.60.30	REV.
CHECKED <u>ER SCHALLERT</u>	D.12	0
APPROVED <u>KK HEIM</u>		
APPROVED <u>PM JOHNSON</u>		
DATE <u>MARCH 12, 2025</u>		

LOAD D3-R6



NOTES

TRAFFIC CONTROL LEGEND:

AREA OF STREET CLOSURES OR CONCURRENT CONSTRUCTION

(A) R11-2 48"x30" **STREET CLOSED** MOUNTED ABOVE ONE OF THE TYPE III BARRICADE (5'X10') (2 EACH)

(E) M4-9R 30"x24" **DETOUR** →

(F) M4-8 24"x12" M5-1L 21"x15" **DETOUR** ← USED IN ADVANCE OF (J)

(B) **STREET CLOSED AHEAD** W20-3 36"x36"

(G) M4-8 24"x12" M5-1R 21"x15" **DETOUR** → USED IN ADVANCE OF (E)

(C) R11-4 60"x30" **STREET CLOSED TO THRU TRAFFIC** MOUNTED ABOVE TYPE III BARRICADE (5'X10') (1 REQUIRED)

(H) M4-8 24"x12" M6-3 21"x15" **DETOUR** ↑

(I) M4-8a 24"x18" **END DETOUR**

(D) **DETOUR AHEAD** W20-2 36"x36"

(J) M4-9L 30"x24" **DETOUR** ←

1. MOUNT BELOW "STREET CLOSED TO THRU TRAFFIC" SIGN.
2. INSERT FOR "XXXX" THE APPROPRIATE CLOSURE LOCATION.

↑ SIGN POST
↑ TYPE III BARRICADE
--- DETOUR ROUTE

AREA OF CONCURRENT CONSTRUCTION BY OTHERS

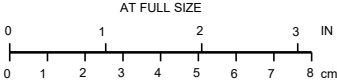
TRAFFIC CONTROL NOTES:

- STREET CLOSURES THIS SHEET ARE LIMITED TO AREAS: HAGERMAN DR AND LOGAN ST.
- MISSISSIPPI DRIVE CLOSURE - FLOOD DETOUR ROUTE "AND" DETOUR ROUTE FOR FLOOD - MISSISSIPPI DRIVE/EAST 2ND STREET CLOSURE MAY OCCUR WITHIN THE DOWNTOWN AREA.
- ALL TRAFFIC ROUTING FOR THE WEST HILL CONSTRUCTION DETOURS SHALL BE COORDINATED WITH ANY OTHER DETOURS THAT MAY BE IN PLACE. THE FLOOD DETOUR PLANS MAY BE OBTAINED FROM THE CITY OF MUSCATINE PUBLIC WORKS.
- "STREET CLOSED TO THRU TRAFFIC" SIGNS MOUNTED ON TYPE III BARRICADES (5'X10') SHALL BE ERRECTED AT ALL STREETS/ALLEYS THAT ARE TO BE CLOSED DUE TO CONSTRUCTION. THESE SIGNS SHALL BE ERRECTED AT THE NEAREST CROSS STREET/ALLEY FROM CONSTRUCTION ZONE.
- SIDEWALKS THAT ARE TO BE CLOSED SHALL BE SIGNED APPROPRIATELY TO WARN PEDESTRIANS OF CLOSED SIDEWALK. SIGN INSTALLATIONS SHALL CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), 11TH EDITION AND SUDAS. ALTERNATE ROUTES SHALL BE PROVIDED WHERE SIDEWALKS ARE CLOSED. ALTERNATE

- ROUTES SHALL COMPLY WITH PUBLIC RIGHT OF WAY ACCESSIBILITY GUIDELINES (PROWAG).
- CONSTRUCTION SCHEDULE SHALL BE APPROVED BY THE CITY OF MUSCATINE. THE CONTRACTOR SHALL MODIFY THE CONSTRUCTION SCHEDULE AS REQUIRED BY THE CITY OF MUSCATINE.
 - NO PAVEMENT CONSTRUCTION SHALL BE INITIATED DURING THE LATE FALL AND WINTER MONTHS. CONSTRUCTION SHALL BE CONCLUDED BEFORE WINTER SHUT DOWN SO THAT ALL STREETS ARE OPEN TO TRAFFIC DURING THE WINTER MONTHS. CONTRACTOR SHALL NOT BE PAID FOR "WINTER PROTECTION" ACTIVITIES.
 - PARKING SPACES MAY BE REMOVED ALONG DETOUR ROUTES WHERE ADDITIONAL WIDTH OF TRAVEL WAY IS NEEDED FOR TURNING AND ROUTING OF VEHICLES. ALL CHANGES TO PARKING MUST BE COORDINATED WITH AND APPROVED BY THE CITY OF MUSCATINE. CONTRACTOR SHALL CONTACT CITY'S FIELD ENGINEERING REPRESENTATIVE, CITY OF MUSCATINE PUBLIC WORKS DEPT (563-263-8933), PRIOR TO IMPLEMENTING THE TRAFFIC CONTROL PLAN. CONTRACTOR TO PROVIDE TRAFFIC CONES WITH NO PARKING SIGNS.
 - LOCAL STREETS CLOSED DUE TO CONSTRUCTION SHALL BE

- SIGNED FOR CLOSURES AS INDICATED ON PLANS. DETOURS FOR TRAFFIC SHALL BE SIGNED AS REQUIRED BY THE CITY OF MUSCATINE. CLOSURES AND DETOURS SIGN INSTALLATIONS SHALL CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), 11TH EDITION AND SUDAS.
- TEMPORARY DRIVING SURFACE SHALL BE PROVIDED IMMEDIATELY AFTER THE TRENCH HAS BEEN FILLED WITH SUITABLE FILL MATERIAL TO OPEN INTERSECTIONS TO A MINIMUM OF ONE LANE TRAFFIC AS SOON AS POSSIBLE AFTER SEWER CONSTRUCTION.
 - ORANGE SAFETY FENCE SHALL BE ERRECTED CURB TO CURB BEHIND THE "STREET CLOSED" SIGNS MOUNTED ON TYPE III BARRICADES WHICH ARE INSTALLED IMMEDIATELY ADJACENT TO THE CURRENT CONSTRUCTION ACTIVITIES.
 - ACCESS SHALL BE PROVIDED TO LOCAL RESIDENTS' HOMES, AS MUCH AS FEASIBLE, EITHER FROM ALLEY OR PARTIAL STREET CLOSURE.
 - ALL CHANGES TO THE TRAFFIC CONTROL PLAN SHALL BE COORDINATED WITH AND APPROVED BY THE CITY OF MUSCATINE. CONTRACTOR SHALL CONTACT CITY'S FIELD

- ENGINEERING REPRESENTATIVE, CITY OF MUSCATINE PUBLIC WORKS (563-263-8933) PRIOR TO IMPLEMENTING CHANGES.
- ADDITIONAL STANDARD MUTCD SIGNING WILL BE REQUIRED WHEN MORE THAN ONE AREA IS UNDER CONSTRUCTION AT ONE TIME.
 - CONTRACTOR SHALL RESTRICT PLACEMENT OF EQUIPMENT TO AREAS APPROVED BY THE CITY OF MUSCATINE. PAVEMENT OUTSIDE OF PROJECT SHALL BE PRESERVED. CONTRACTOR IS RESPONSIBLE FOR RESTORATION OF PAVEMENT TO PRE-CONSTRUCTION CONDITION OR BETTER IF DAMAGE OCCURS DUE TO CONSTRUCTION ACTIVITIES. NO ADDITIONAL PAYMENT WILL BE MADE FOR RESTORATION OF PAVEMENT OUTSIDE OF WHAT IS SHOWN ON DRAWINGS.
 - LOGAN ST DETOUR UTILIZES CEDAR ST WHEN FULLIAM AVE IS CLOSED. DETOUR SIGNAGE SHOWN FOR BOTH SITUATIONS.
 - LOGAN ST LOCAL DETOUR UTILIZES PINEFIELD ST, DEVITT AVE, AND NEWELL AVE WHEN DEVITT AVE IS OPEN. DETOUR SIGNAGE NOT SHOWN FOR CLARITY.



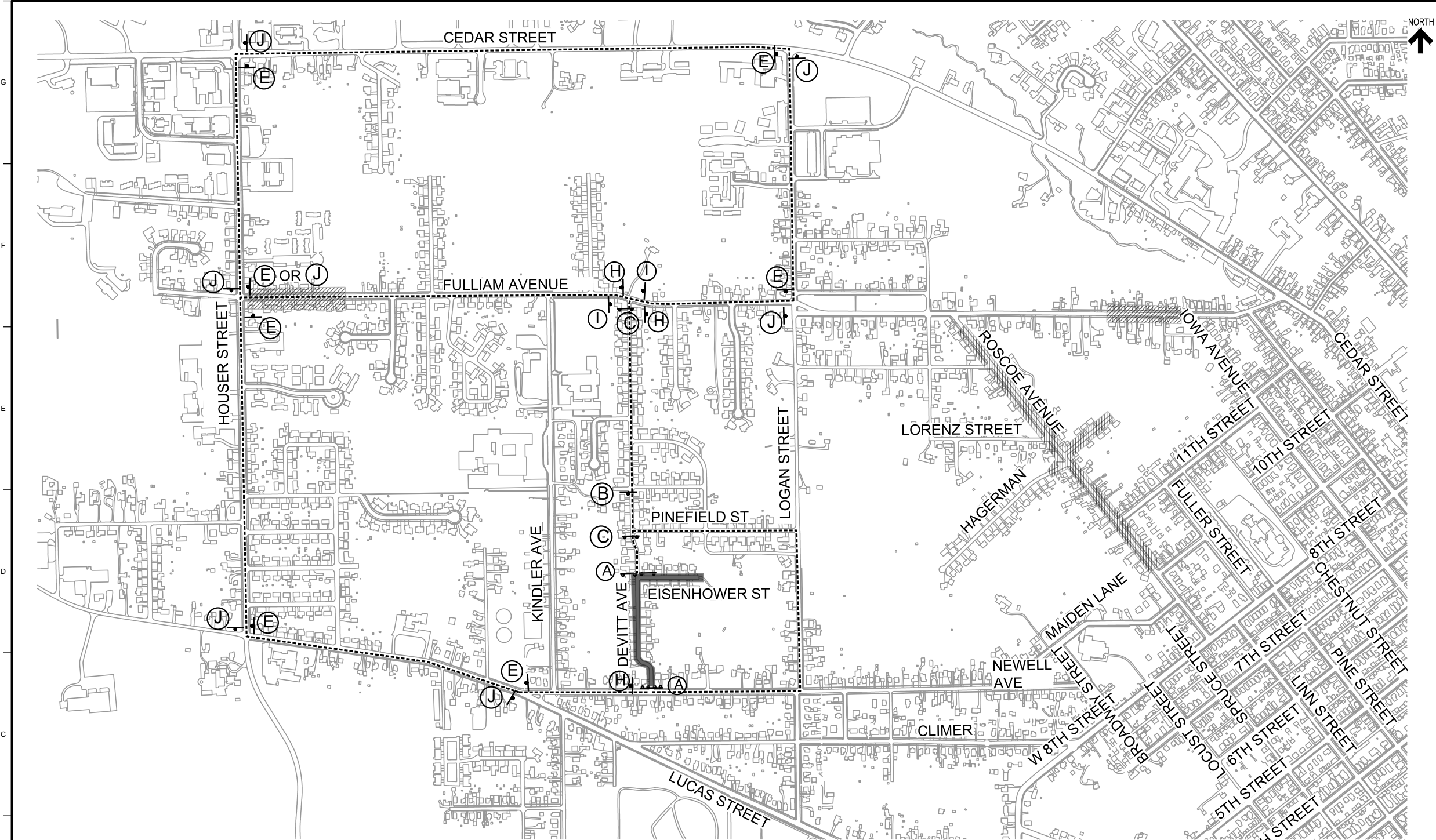
NO.	REVISIONS	DSGN	CHKD	APVD	DATE

225 Iowa Avenue, Muscatine, Iowa 52761-3764
www.stanleyconsultants.com

CITY OF MUSCATINE - PHASE 6D
WEST HILL AREA SANITARY AND STORM SEWER SEPARATION
MUSCATINE, IOWA

**TRAFFIC CONTROL
HAGERMAN DR AND LOGAN ST**

DESIGNED: PM JOHNSON	SCALE: 1" = 400'
DRAWN: GM REEVES	NO. 17660.60.30
CHECKED: ER SCHALLERT	REV.
APPROVED: KK HEIM	J.01
APPROVED: PM JOHNSON	0
DATE: MARCH 12, 2025	



TRAFFIC CONTROL NOTES:

1. STREET CLOSURES THIS SHEET ARE LIMITED TO AREAS: EISENHOWER ST AND DEVITT AVE.
2. REFER TO SHEET J.01 FOR ADDITIONAL TRAFFIC CONTROL NOTES.
3. DEVITT AVE DETOUR UTILIZES CEDAR ST WHEN FULLIAM AVE IS CLOSED. DETOUR SIGNAGE SHOWN FOR BOTH SITUATIONS.
4. DEVITT AVE LOCAL DETOUR UTILIZES PINEFIELD ST, LOGAN ST, AND NEWELL AVE WHEN LOGAN ST IS OPEN. DETOUR SIGNAGE NOT SHOWN FOR CLARITY.

NOTES

TRAFFIC CONTROL LEGEND:

AREA OF STREET CLOSURES OR CONCURRENT CONSTRUCTION

(A) R11-2 48"x30" **STREET CLOSED**
MOUNTED ABOVE ONE OF THE TYPE III BARRICADE (5'X10') (2 EACH)

(B) **STREET CLOSED AHEAD**
W20-3 36"x36"

(C) R11-4 60"x30" **STREET CLOSED TO THRU TRAFFIC**
MOUNTED ABOVE TYPE III BARRICADE (5'X10') (1 REQUIRED)
CLOSED AT XXXX STREET

(D) **DETOUR AHEAD**
W20-2 36"x36"

(E) M4-9R 30"x24" **DETOUR** (Right Arrow)

(F) M4-8 24"x12" M5-1L 21"x15" **DETOUR** (Left Arrow)
USED IN ADVANCE OF (J)

(G) M4-8 24"x12" M5-1R 21"x15" **DETOUR** (Right Arrow)
USED IN ADVANCE OF (E)

(H) M4-8 24"x12" M6-3 21"x15" **DETOUR** (Up Arrow)

(I) M4-8a 24"x18" **END DETOUR**

(J) M4-9L 30"x24" **DETOUR** (Left Arrow)

SIGN POST TYPE III BARRICADE DETOUR ROUTE

AREA OF CONCURRENT CONSTRUCTION BY OTHERS

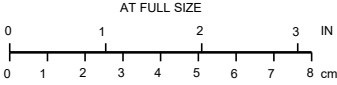
NO.	REVISIONS	DSGN	CHKD	APVD	DATE

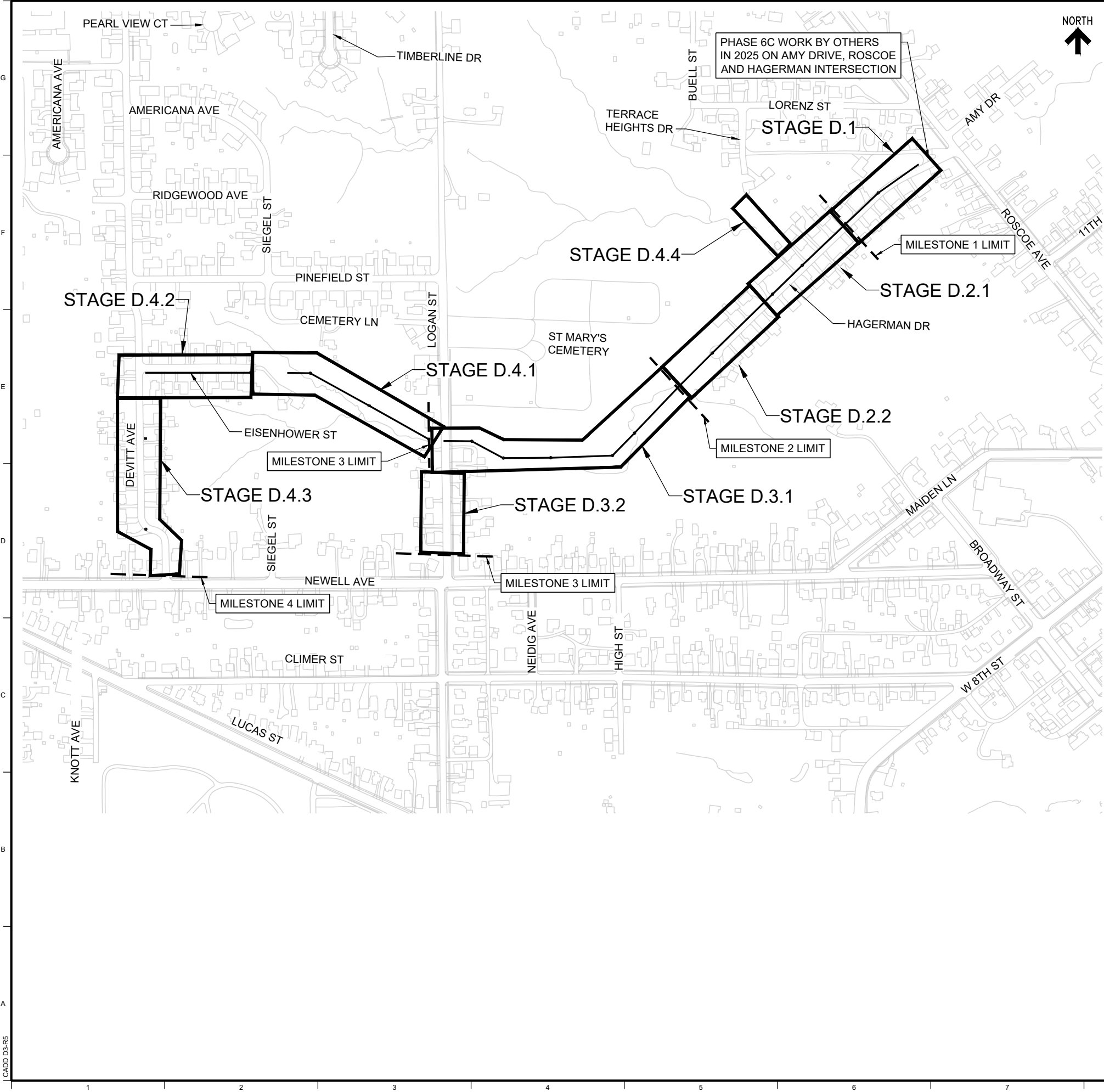
Stanley Consultants INC.
225 Iowa Avenue, Muscatine, Iowa 52761-3764
www.stanleyconsultants.com

CITY OF MUSCATINE - PHASE 6D
WEST HILL AREA SANITARY AND STORM SEWER SEPARATION
MUSCATINE, IOWA

**TRAFFIC CONTROL
EISENHOWER ST AND DEVITT AVE**

DESIGNED <u>PM JOHNSON</u>	SCALE: 1" = 400'	REV. <u> </u>
DRAWN <u>GM REEVES</u>	NO. 17660.60.30	
CHECKED <u>ER SCHALLERT</u>		
APPROVED <u>KK HEIM</u>		
APPROVED <u>PM JOHNSON</u>		J.02
DATE <u>MARCH 12, 2025</u>		





GENERAL NOTES

- 1. PHASING AND STAGES SHOWN REPRESENT ONE WAY TO STAGE THE WORK. REFER TO CONTRACT MILESTONES AND PHASING CONSTRAINTS IN THE CONTRACT DOCUMENTS FOR REQUIREMENTS.

STAGING CONSTRAINTS

- 1. AT NO TIME DURING CONSTRUCTION SHALL MORE THAN 2 BLOCKS (800') BE CLOSED TO TRAFFIC UNLESS AUTHORIZED BY THE CITY.
- 2. INSTALLATION OF TEMPORARY DRIVING SERVICES BEHIND THE TRENCH AND AT DRIVEWAYS IS ACCEPTABLE PENDING AUTHORIZATION FROM THE CITY. TEMPORARY DRIVING SURFACES INSTALL BEFORE PAVING ARE CONSIDERED INCIDENTAL TO CONTRACT COSTS. COORDINATE WITH CITY FOR AVAILABILITY OF CITY'S MILLINGS FOR TEMPORARY SURFACING OR TRANSITIONS TO UNEVEN DRIVING SURFACES.
- 3. COORDINATE CONSTRUCTION PHASING WITH PHASE 6C CONTRACTOR INSTALLING WORK ON ROSCOE AVE, AMY DRIVE, HAGERMAN DR IN 2025. COORDINATE WITH PHASE 6AB CONTRACTOR WORKING ON FULLIAM EAST OF ROSCOE IN 2025. COORDINATE WITH FUTURE FULLIAM AVE RECONSTRUCTION CONTRACTOR WORKING IN SUMMER 2025 BETWEEN 2716 WEST FULLIAM AVENUE AND HOUSER.
- 4. COORDINATE CONSTRUCTION PHASING WITH MPW CONSTRUCTION CREW AND UTILITY COMPANY CREWS PERFORMING RELOCATIONS OR WORK IN THE PROJECT AREA.
- 5. CONTRACTOR TO SUBMIT REQUESTS FOR CHANGES TO STAGING PLAN WHICH MUST BE APPROVED PRIOR TO PROCEEDING. ADDITIONAL COSTS INCURRED TO SEQUENCE WORK DIFFERENTLY SHALL NOT BE CHARGED TO THE CITY.
- 6. CUTTING OF TREES 3-INCH AND LARGER MUST OCCUR BETWEEN OCTOBER 1 AND MARCH 31 ST IN WOODED AREA BETWEEN HAGERMAN DRIVE AND EISENHOWER STREET. TREE CUTTING IN THIS AREA WILL BE PERFORMED BY OTHERS BY MARCH 31, 2025. STREET TREES IN URBAN AREAS ARE CONSIDERED UNSUITABLE BAT HABITAT AND CAN BE CUT YEAR ROUND.
- 7. MAINTAIN LOCAL ACCESS TO DEAD ENDS, HAGERMAN DRIVE AND EISENHOWER ST. IF THE INTERSECTION OF HAGERMAN AND ROSCOE IS BLOCKED, ALLEY ACCESS FROM HAGERMAN DRIVE TO ALLEY TO TERRACE HEIGHTS DR TO THE NORTH MAY BE UTILIZED.

STAGING REQUIREMENTS

- 1. COMPLETE STAGE D.1 PIPING AND PAVING BY MILESTONE 1 (AUGUST 1, 2025). LIMITED TO NO WORK IS ALLOWED IN OTHER STAGES UNTIL COMPLETION OF THIS STAGE.
- 2. COMPLETE STAGE D.2.1 AND D.2.2 PIPING AND PAVING ON HAGERMAN, BY MILESTONE 2 (NOVEMBER 28, 2025).
- 3. COMPLETE STAGE D.3.1 AND D.3.2 PIPING THROUGH PRIVATE PROPERTY AND TO LOGAN ST MANHOLE SS D20 BY MILESTONE 3 (APRIL 17, 2026).
 - A. STAGE D.3.1 AND D.3.2 PIPE WORK CAN BEGIN BEFORE COMPLETION OF HAGERMAN PAVING.
 - B. CONTRACTOR IS ENCOURAGED TO COMPLETE STAGE D.3.1 AND D.3.2 PIPE WORK BEFORE WINTER WEATHER SHUTDOWNS FOR 2025.
- 4. COMPLETE ALL REMAINING WORK INCLUDING STAGES D.4.1 THROUGH PRIVATE PROPERTY, AND STAGES D.4.2 AND D.4.3 ON EISENHOWER AND DEVITT BY MILESTONE 4 (NOVEMBER 29, 2026 SUBSTANTIAL COMPLETION AND DECEMBER 31, 2026 FINAL COMPLETION).
 - A. SEWER LINING WORK ON EISENHOWER AND DEVITT CAN OCCUR WHILE OTHER STAGES ARE BEING COMPLETED IF WORK CAN BE COMPLETED WITH NO STREET CLOSURES. CITY MUST AUTHORIZE START OF LINING AND PUBLIC MUST BE NOTIFIED.
 - B. STAGE D.4.4 WORK START DATE MUST BE AUTHORIZED BY THE CITY. WORK MAY OCCUR DURING THE 2026 CONSTRUCTION SEASON.

NO.	REVISIONS	DSGN	CHKD	APVD	DATE
-----	-----------	------	------	------	------



Stanley Consultants inc.

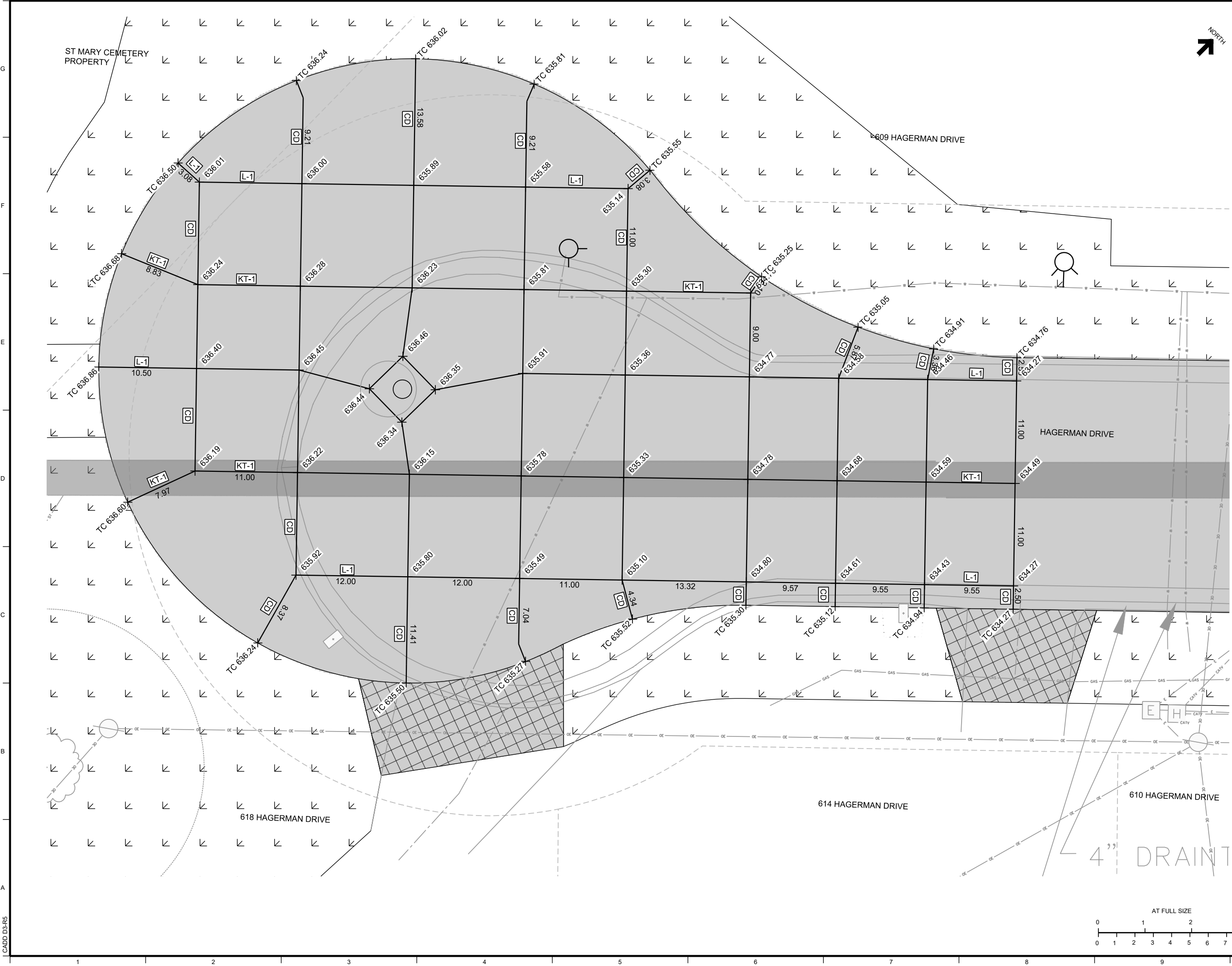
225 Iowa Avenue, Muscatine, Iowa 52761-3764
www.stanleyconsultants.com

CITY OF MUSCATINE - PHASE 6D
WEST HILL AREA SANITARY AND STORM SEWER SEPARATION
MUSCATINE, IOWA

STAGING PLAN

DESIGNED <u>KK HEIM</u>	SCALE: AS NOTED	
DRAWN <u>GM REEVES</u>	NO. 17660.60.30	REV.
CHECKED <u>ER SCHALLERT</u>	J.03	0
APPROVED <u>JM BRADY</u>		
APPROVED <u>KK HEIM</u>		
DATE <u>MARCH 12, 2025</u>		

10 ©STANLEY CONSULTANTS Page 180 of 1049



NOTES

1.

LEGEND

- 7" PCC PAVEMENT REPLACEMENT
- SIDEWALK REPLACEMENT
- DRIVEWAY AND ALLEY REPLACEMENT
- SEEDING
- DETECTABLE WARNING SURFACE

NO.	REVISIONS	DSGN	CHKD	APVD	DATE

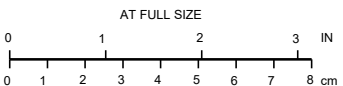
Stanley Consultants INC.
225 Iowa Avenue, Muscatine, Iowa 52761-3764
www.stanleyconsultants.com

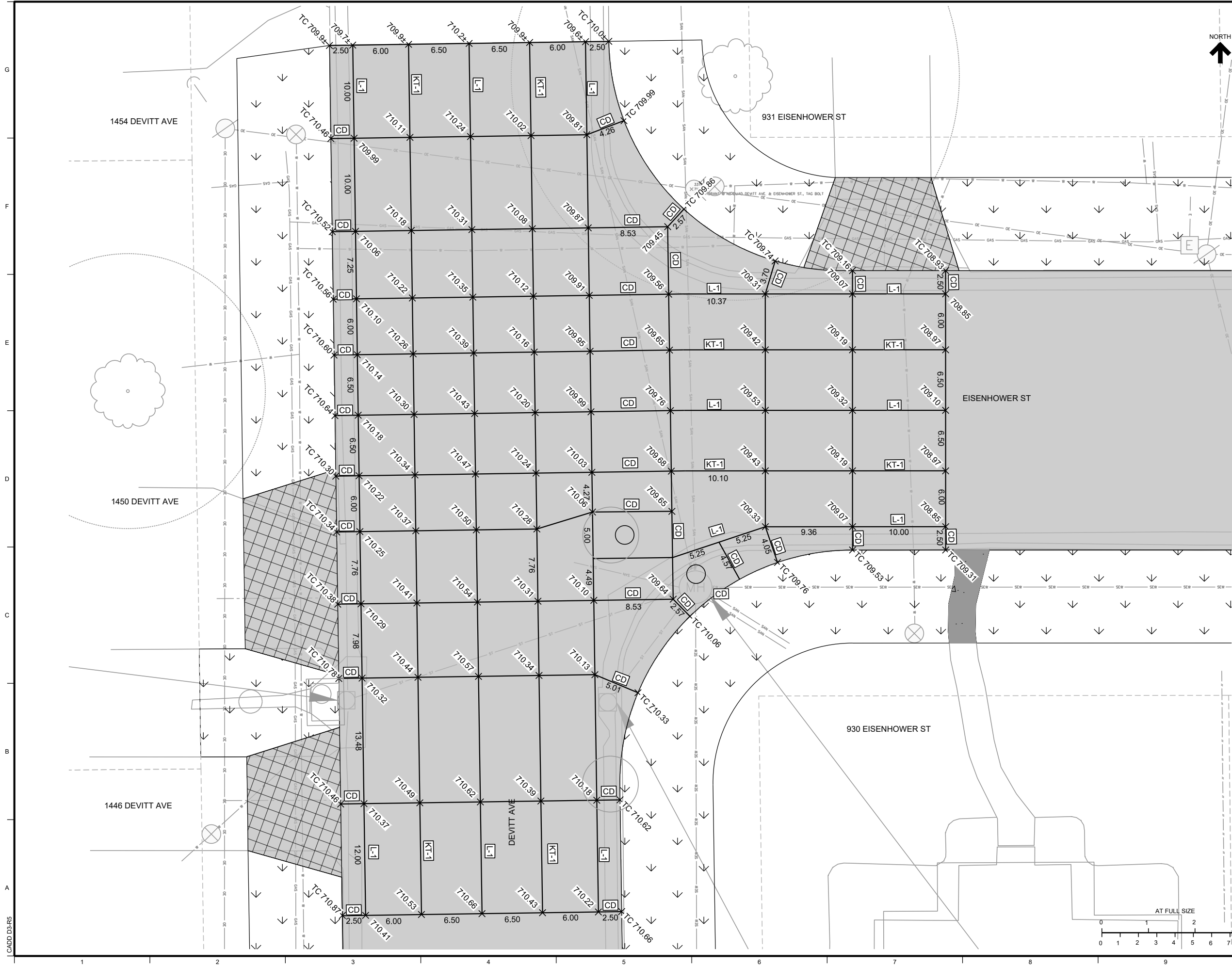
CITY OF MUSCATINE - PHASE 6D
WEST HILL AREA SANITARY AND STORM SEWER SEPARATION
MUSCATINE, IOWA

**JOINTING PLANS
HAGERMAN DRIVE CULDESAC**

DESIGNED PM JOHNSON	SCALE: 1" = 5'	
DRAWN GM REEVES	NO. 17660.60.30	REV.
CHECKED ER SCHALLERT	L.01	0
APPROVED KK HEIM		
APPROVED PM JOHNSON		
DATE MARCH 12, 2025		

LOAD D3-R6





NOTES

1.

LEGEND

7" PCC PAVEMENT REPLACEMENT

SIDEWALK REPLACEMENT

DRIVEWAY AND ALLEY REPLACEMENT

SEEDING

DETECTABLE WARNING SURFACE

NO.	REVISIONS	DSGN	CHKD	APVD	DATE



Stanley Consultants inc.

225 Iowa Avenue, Muscatine, Iowa 52761-3764
www.stanleyconsultants.com

CITY OF MUSCATINE - PHASE 6D
WEST HILL AREA SANITARY AND STORM SEWER SEPARATION
MUSCATINE, IOWA

**JOINTING PLANS
EISENHOWER ST & DEVITT ST
INTERSECTION**

DESIGNED <u>PM JOHNSON</u>	SCALE: 1" = 5'	
DRAWN <u>GM REEVES</u>	NO. 17660.60.30	REV.
CHECKED <u>ER SCHALLERT</u>		
APPROVED <u>KK HEIM</u>		
APPROVED <u>PM JOHNSON</u>		
DATE <u>MARCH 12, 2025</u>	L.03	0

AT FULL SIZE

0 1 2 3 4 5 6 7 8

IN

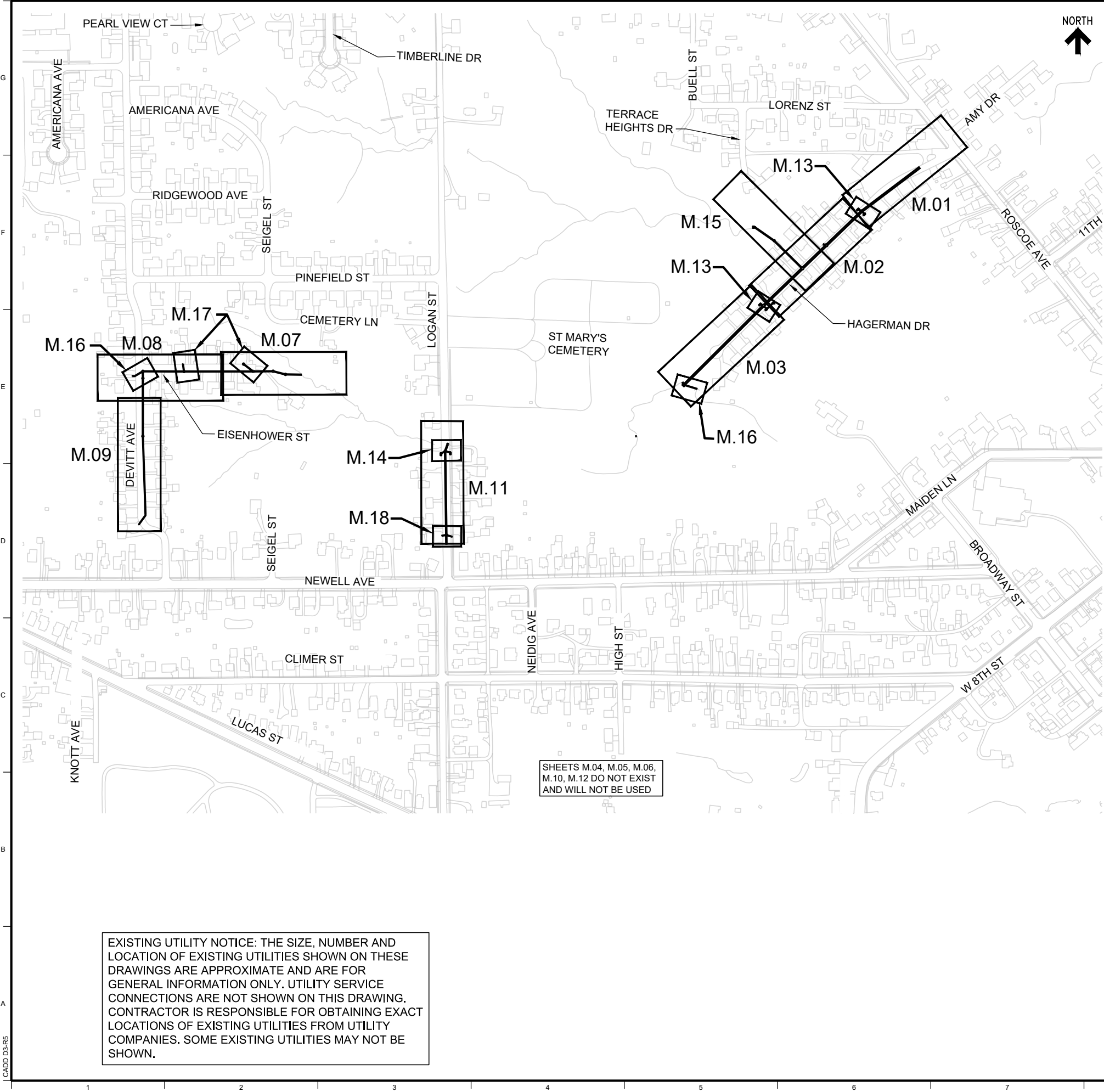
0 1 2 3 4 5 6 7 8

cm

10

©STANLEY CONSULTANTS

Page 183 of 1049



GENERAL NOTES

- 1. SHEETS M.04, M.05, M.06, M.10, M.12 DO NOT EXIST AND WILL NOT BE USED.
- 2. KEY PLAN DRAWING SHOWS PROPOSED STORM SEWERS SCHEMATICALLY ONLY. EXISTING UTILITIES ARE NOT SHOWN.
- 3. PROPOSED SANITARY SEWER IS SHOWN ON MSA SERIES DRAWINGS. REFER TO MSA.00 FOR GENERAL NOTES FOR SANITARY AND STORM SEWER CONSTRUCTION REQUIREMENTS.
- 4. STORM CONNECTION SHALL NOT BE MADE TO EXISTING OR NEW SANITARY SEWERS.
- 5. RIM ELEVATIONS OF MANHOLES ARE BASED ON PROPOSED GRADE ELEVATIONS WHERE PROPOSED SURFACE IS AVAILABLE. OTHER LOCATIONS SHALL MATCH EXISTING CONDITIONS. RIM ELEVATIONS SHALL BE ADJUSTED TO MATCH ELEVATIONS OF AS PLACED PAVEMENT.
- 6. PROPOSED INLET RIM ELEVATIONS ARE TAKEN FROM PROPOSED OR EXISTING SURFACE IN THE MIDDLE OF THE STRUCTURE. CENTER OF STRUCTURE PLACEMENT FOR SW-501 AND SW-502 STYLE INLETS IS 1' IN FRONT OF BACK OF CURB. FOR SW-507 AND SW-509 STYLE INLETS CENTER OF STRUCTURE IS 1.5' BEHIND BACK OF CURB. RIM ELEVATIONS SHALL BE ADJUSTED TO MATCH ELEVATIONS OF AS PLACED PAVEMENT.
- 7. MAINTAIN REQUIRED CLEARANCE BETWEEN WATER MAIN AND NEW STORM SEWER. SEE WATER MAIN CROSSING CRITERIA SUMMARIZED ON SHEET A.05.
- 8. REFER TO SUDAS DETAILS APPLICABLE TO PROJECT SUMMARIZED ON DRAWING A.03 TABLE AND ADDITIONAL PIPE DETAILS ON A SERIES SHEETS.
- 9. REFER TO C SERIES TABLES FOR INLET STRUCTURE TYPE AND CASTING/GRATE TYPE.
- 10. SHADING ON M SERIES STORM INLET BLOW UPS REPRESENTS PROPOSED PAVEMENT.
- 11. CONTRACTOR TO SEQUENCE WORK AND SUBMIT PLAN FOR REVIEW ON MAINTAINING COMBINED AND SANITARY SEWAGE, AND STORM WATER FLOW DURING CONSTRUCTION. TEMPORARY PIPE CONNECTIONS, SANDBAGGING, OR BYPASS PUMPING MAY BE NEEDED.
- 12. SEE J SHEETS FOR TRAFFIC CONTROL AND STAGING PLANS.
- 13. TEMPORARY AND PERMANENT EASEMENT LIMITS ARE SHOWN ON SANITARY SEWER (MSA) SHEETS. CONTRACTOR IS REQUIRED TO STAY WITHIN EASEMENTS AND CONSTRUCTION LIMITS. STAKING OF EASEMENTS AND CONSTRUCTION LIMITS IS THE RESPONSIBILITY OF THE CONTRACTOR. CONTRACTOR TO UTILIZE LICENSED SURVEYOR FOR CONSTRUCTION STAKING. EASEMENT EXHIBITS, PLATS, AND SHAPES CAN BE PROVIDED ELECTRONICALLY TO CONTRACTOR.
- 14. SUBDRAIN IS NOT SHOWN ON PLAN DRAWINGS. SUBDRAIN IS REQUIRED UNDER PAVEMENT ACCORDING TO DETAIL ON SHEET B.01 AND ESTIMATE REFERENCE NOTES. SUBDRAIN SHALL BE OUTLET TO NEAREST INLET.
- 15. SEE WATER SHEETS FOR PROPOSED WATER WORK UNDER THIS CONTRACT.

NO. REVISIONS DSGN CHKD APVD DATE

Stanley Consultants inc.

225 Iowa Avenue, Muscatine, Iowa 52761-3764
www.stanleyconsultants.com

CITY OF MUSCATINE - PHASE 6D
WEST HILL AREA SANITARY AND STORM SEWER SEPARATION
MUSCATINE, IOWA

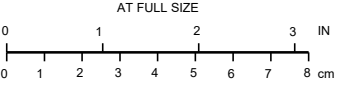
OVERALL STORM SEWER KEY PLAN

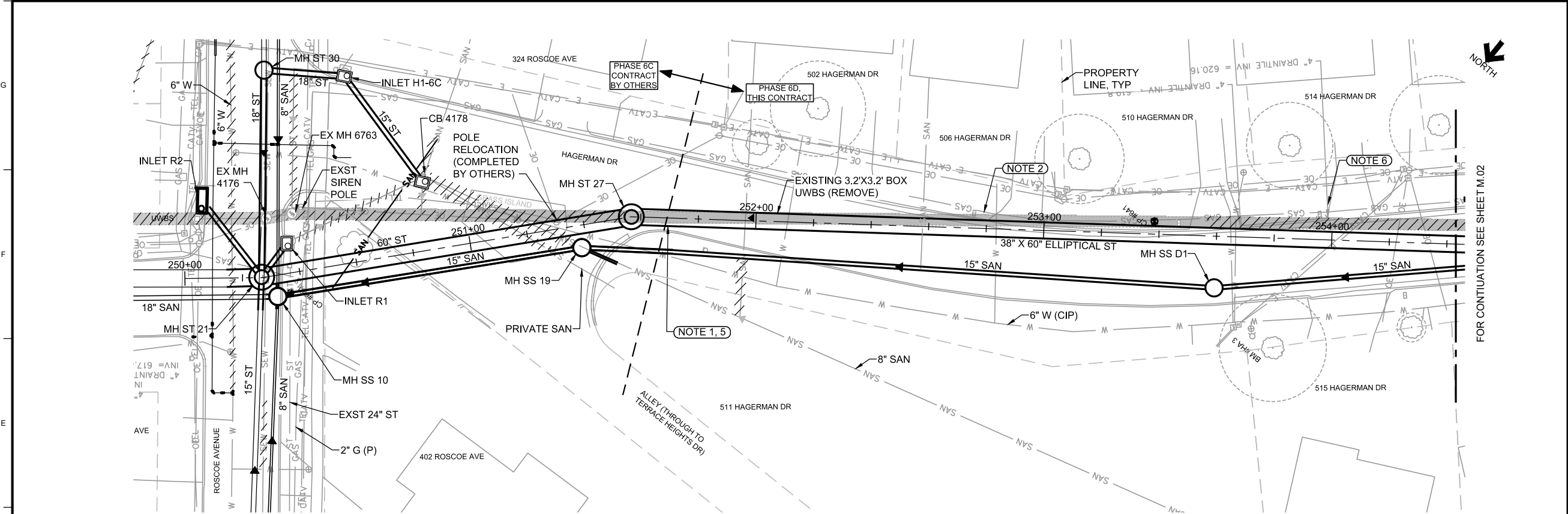
DESIGNED KK HEIM
DRAWN GM REEVES
CHECKED ER SCHALLERT
APPROVED JM BRADY
DATE MARCH 12, 2025

SCALE: AS NOTED
NO. 17660.60.30
REV.

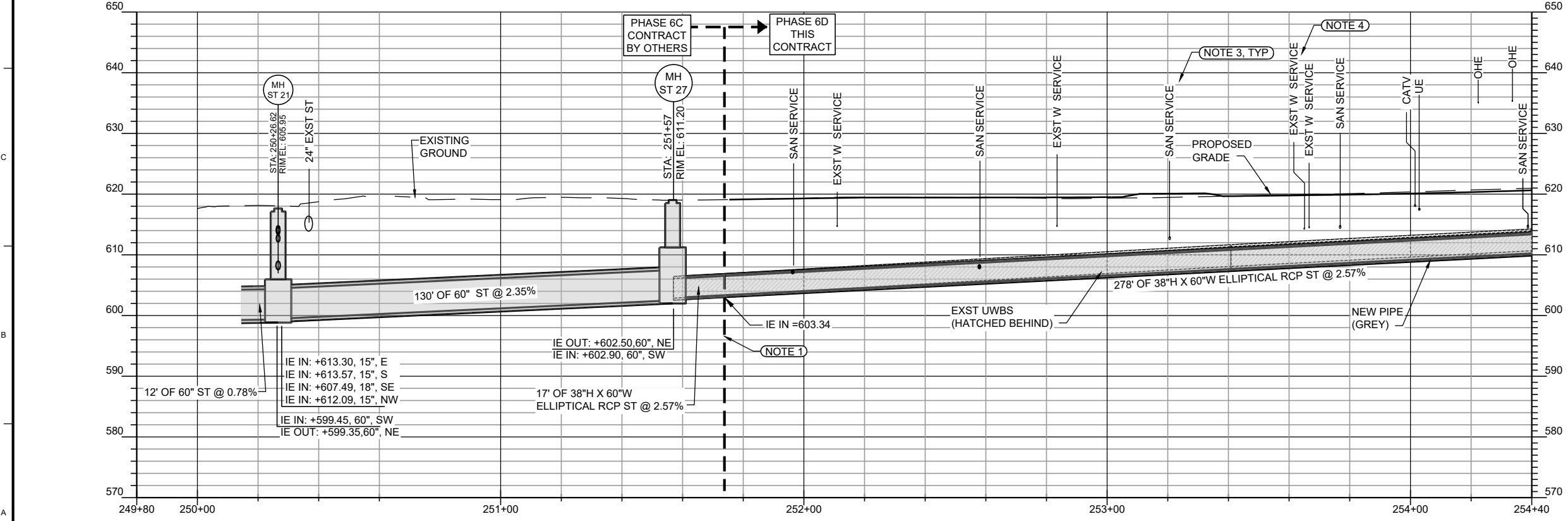
M.000

EXISTING UTILITY NOTICE: THE SIZE, NUMBER AND LOCATION OF EXISTING UTILITIES SHOWN ON THESE DRAWINGS ARE APPROXIMATE AND ARE FOR GENERAL INFORMATION ONLY. UTILITY SERVICE CONNECTIONS ARE NOT SHOWN ON THIS DRAWING. CONTRACTOR IS RESPONSIBLE FOR OBTAINING EXACT LOCATIONS OF EXISTING UTILITIES FROM UTILITY COMPANIES. SOME EXISTING UTILITIES MAY NOT BE SHOWN.





FOR CONTINUATION SEE SHEET M 02



- ### NOTES
- LOCATE END OF NEW CONSTRUCTION FROM PREVIOUS PHASE 6C AND CONTINUE REPLACEMENT OF EXISTING UWBS WITH NEW STORM PIPE. ELLIPTICAL PIPE MAY BE COLLARED TO EXISTING UWBS. REMOVE COLLAR AND CONTINUE INSTALLATION OF ELLIPTICAL PIPE.

INSTALL NEW 48-INCH HORIZONTAL ELLIPTICAL RCP PIPE TO REPLACE EXISTING UWBS. INSTALL ELLIPTICAL PIPE WITH 60-INCH DIMENSION HORIZONTALLY AND 38-INCH DIMENSION VERTICALLY. PROTECT EXISTING UTILITY SERVICES CROSSING ABOVE AND BELOW THE EXISTING UWBS.

INSTALL NEW STORM ON ALIGNMENT SHOWN. REMOVE EXISTING UWBS IN ITS ENTIRETY AS WORK PROGRESSES. MAINTAIN FLOW OF EXISTING COMBINED SEWAGE AT ALL TIMES. PROVIDE BYPASS PUMPING OR TEMPORARY PIPING CONNECTION AS NEEDED. PROTECT EXISTING AND PROPOSED SANITARY CONNECTIONS TO UWBS AND PREVENT SURCHARGING AND BACKUPS INTO SANITARY SERVICE LATERALS OR HOMES.
 - PROTECT EXISTING GAS LINE. COORDINATE PROTECTION AND ANY RELOCATION WITH GAS COMPANY.
 - TYPICAL ON ALL STORM SEWER PROFILES, AN APPROXIMATION OF SANITARY SERVICES LOCATION AND ELEVATION IS SHOWN. ACTIVE SANITARY SERVICES CONNECTED TO UWBS SHALL BE DISCONNECTED AND CONNECTED TO NEW SANITARY. SERVICES MAY REQUIRE TRENCHLESS CONSTRUCTION UNDER EXISTING UWBS OR NEW STORM.
 - PROTECT EXISTING WATER AND GAS SERVICES. RELOCATE WATER SERVICES IF NEEDED ACCORDING TO DETAIL ON SHEET A.05.
 - COMBINED SEWAGE FLOWS DURING DRY WEATHER IN THE UWBS ARE TYPICALLY A FEW INCHES DEEP. DURING AN EXTREME WET WEATHER EVENT, FLOWS COULD BE NEAR SEWER CAPACITY.
 - TYPICAL ALL PRIVATE DRAIN CONNECTIONS TO STREET GENERALLY SHOULD NOT BE CONNECTED TO STREET UNLESS AUTHORIZED BY THE CITY. CURB OPENING CASTINGS CAN BE USED ONLY IF CITY AUTHORIZES.

NO.	REVISIONS	DSGN	CHKD	APVD	DATE



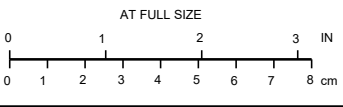
Stanley Consultants Inc.
225 Iowa Avenue, Muscatine, Iowa 52761-3764
www.stanleyconsultants.com

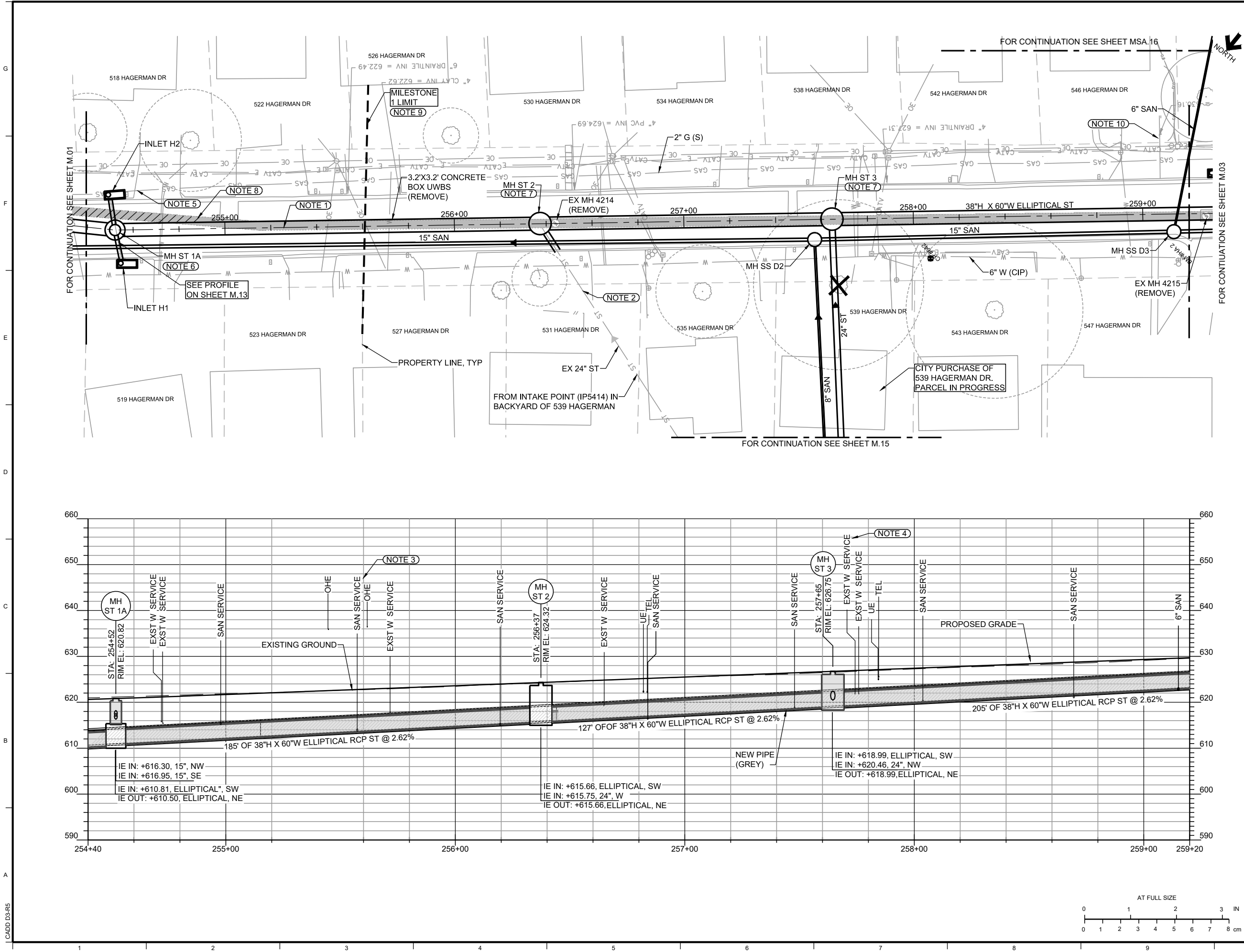
CITY OF MUSCATINE - PHASE 6D
WEST HILL AREA SANITARY AND STORM SEWER SEPARATION
MUSCATINE, IOWA

**STORM SEWER
HAGERMAN DRIVE
SHEET 1**

DESIGNED <u>KK HEIM</u>	SCALE: 1" = 20'
DRAWN <u>GM REEVES</u>	NO. 17660.60.30
CHECKED <u>ER SCHALLERT</u>	REV.
APPROVED <u>JM BRADY</u>	M.01
APPROVED <u>KK HEIM</u>	0
DATE <u>MARCH 12, 2025</u>	

LOAD D3-R6





NOTES

- INSTALL NEW STORM SEWER ON ALIGNMENT OF EXISTING COMBINED UWBS. REMOVE EXISTING UWBS AND MANHOLES. PROTECT EXISTING UTILITY SERVICES AND ANY UTILITIES CROSSING EXISTING UWBS. MAINTAIN FLOW IN EXISTING SEWERS. PROVIDE FLOW CONTROL, BYPASS PUMPING OR TEMPORARY CONNECTIONS AS NEEDED TO CONSTRUCT SEWERS.
- CONNECT EXISTING 24-INCH STORM FROM NORTHWEST INTO NEW STORM SEWER. AFTER NEW 24-INCH STORM IS INSTALLED ON 539 HAGERMAN DR PARCEL, PLUG PIPE END WITH 2' LENGTH OF CONCRETE AND ABANDON CONNECTION TO EXISTING 24-INCH STORM AT MH.
- LOCATE EXISTING SANITARY SERVICE LATERALS CONNECTED TO EXISTING UWBS (COMBINED SEWER) AND CONNECT TO NEW SANITARY. TRENCHLESS CONSTRUCTION OF NEW SANITARY LATERALS MAY BE NEEDED UNDER EXISTING UWBS.
- PROTECT EXISTING WATER AND GAS SERVICES. RELOCATE WATER SERVICES IF NEEDED ACCORDING TO DETAIL ON SHEET A.05.
- PROTECT EXISTING GAS MAIN. IF NECESSARY COORDINATE RELOCATION WITH GAS COMPANY.
- MANHOLE ST 1 IS COMBINATION MANHOLE WITH 8-FOOT DIAMETER BASE SECTION WITH 4-FOOT DIAMETER RISER SECTION. RISER SECTION IS REPRESENTED WITH "A" IN THE NAME. CONNECT RISER SECTION TO BASE SECTION ACCORDING TO DETAIL ON SHEET A.04.
- MANHOLES ST 2 AND ST 3 SHALL BE SW-401 8-FOOT DIAMETER MANHOLES.
- REMOVE EXISTING UWBS IN ITS ENTIRETY WHEN NEW STORM PIPE IS NOT ON ALIGNMENT OF EXISTING UWBS.
- INSTALL PIPE AND MAINLINE PAVING TO MILESTONE 1 LIMIT, BEYOND THE DRIVEWAYS FOR 522 AND 523 HAGERMAN DRIVE BEFORE THE MILESTONE 1 CONTRACT DATE.
- NO PIPE WORK CAN OCCUR BEYOND ROW ON 602 HAGERMAN DRIVE PROPERTY IN THIS PHASE 6D.

NO.	REVISIONS	DSGN	CHKD	APVD	DATE

225 Iowa Avenue, Muscatine, Iowa 52761-3764
www.stanleyconsultants.com

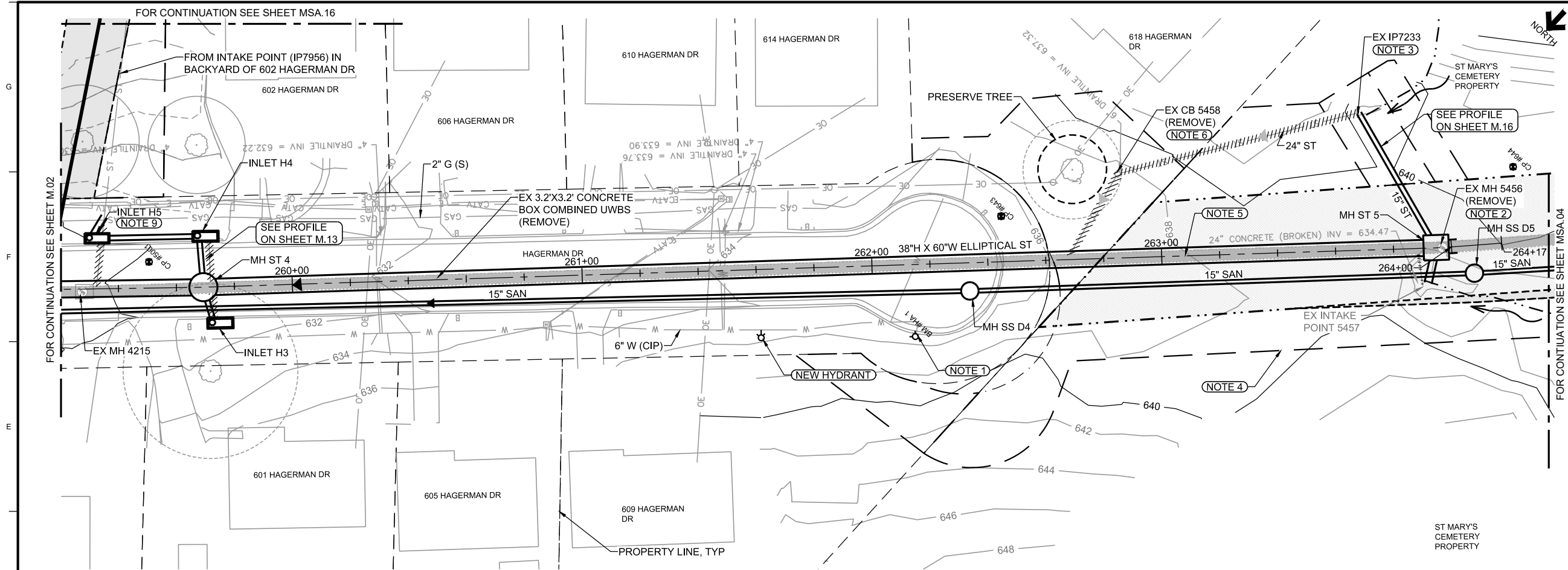
CITY OF MUSCATINE - PHASE 6D
WEST HILL AREA SANITARY AND STORM SEWER SEPARATION
MUSCATINE, IOWA

STORM SEWER HAGERMAN DRIVE SHEET 2

DESIGNED	KK HEIM	SCALE:	1" = 20'
DRAWN	GM REEVES	NO.	17660.60.30
CHECKED	ER SCHALLERT	REV.	
APPROVED	JM BRADY		
APPROVED	KK HEIM		
DATE	MARCH 12, 2025		

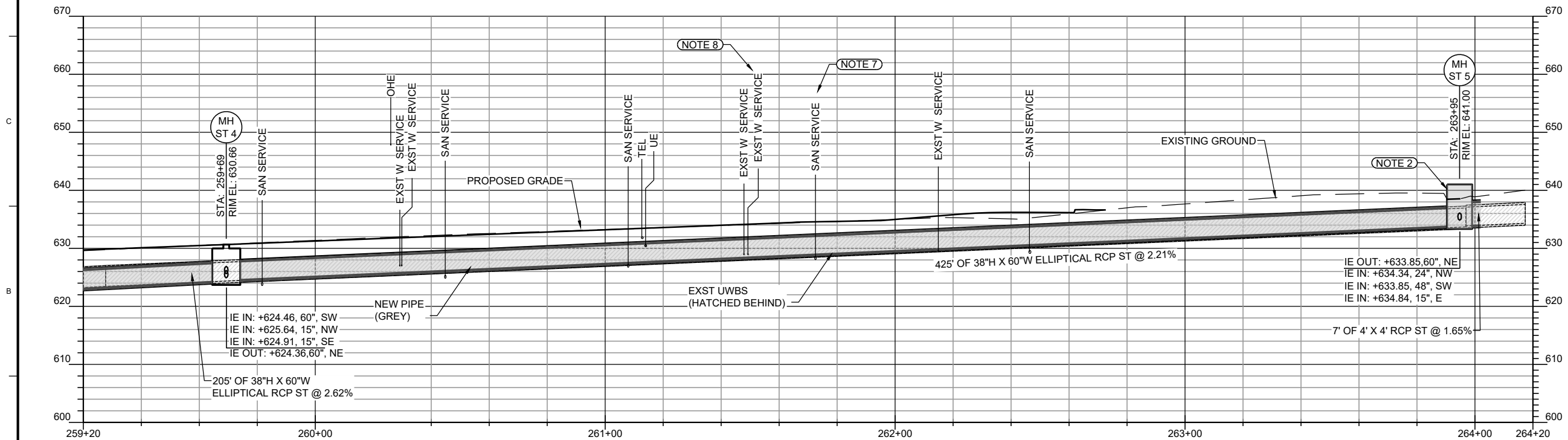
M.02	0
------	---

LOAD D3-R6



NOTES

1. MPW CREW TO REMOVE AND REPLACE EXISTING HYDRANT AT A LOCATION THAT DOES NOT CONFLICT WITH NEW CUL-DE-SAC. COORDINATE WITH CITY AND MPW TO DETERMINE WHO WILL BE INSTALLING HYDRANT. WORK TO STAY IN ROW.
2. REMOVE EXISTING MH 5456 AND INSTALL RECTANGULAR MH OVER EXISTING 3.2' X 3.2' INTERIOR CONCRETE BOX COMBINED SEWER. NEW STRUCTURE SHALL BE SUDAS SW-406. SHAPE INVERT. INSTALL STRUCTURE TO EXTEND HIGHER THAN GROUND AT ELEVATION LISTED. INSTALL NEW 24-INCH PIPE TO NORTHWEST, REPLACE THE BROKEN PIPE WHICH DRAINS EXISTING DRAINAGE AREA FROM INTAKE POINT 5457 FROM NORTH.
3. PLACE PIPE TO LOCATION OF EXISTING SURFACE FLOW INTAKE POINT (IP7233).
4. SEE MSA SHEETS FOR EASEMENTS AND CONSTRUCTION LIMITS.
5. INSTALL NEW STORM SEWER ON ALIGNMENT OF EXISTING COMBINED UWBS. REMOVE EXISTING UWBS AND MANHOLES. PROTECT EXISTING UTILITY SERVICES AND ANY UTILITIES CROSSING EXISTING UWBS. MAINTAIN FLOW IN EXISTING SEWERS. PROVIDE FLOW CONTROL SUCH AS BYPASS PUMPING AND TEMPORARY CONNECTIONS AS NEEDED TO CONSTRUCT SEWERS.
6. REMOVE EXISTING 2'X3' STEEL GRATE INLET AND EXISTING INLET PIPE. GRADE AREA WITH POSITIVE SLOPE TO PREVENT PONDING. PROTECT EXISTING DRAIN TILE AND DAYLIGHT TO YARD.
7. LOCATE EXISTING SANITARY SERVICE LATERALS CONNECTED TO EXISTING UWBS (COMBINED SEWER) AND CONNECT TO NEW SANITARY. TRENCHLESS CONSTRUCTION OF NEW SANITARY LATERALS MAY BE NEEDED UNDER EXISTING UWBS.
8. PROTECT EXISTING WATER AND GAS SERVICES. RELOCATE WATER SERVICES IF NEEDED ACCORDING TO DETAIL ON SHEET A.
9. DISCONNECT EXISTING STORM PIPE FROM 602 HAGERMAN DR PROPERTY AT UWBS AND CONNECT TO NEW INLET IN ROW. NO PIPE WORK CAN OCCUR BEYOND ROW ON 602 HAGERMAN DRIVE PROPERTY IN PHASE 6D.



NO.	REVISIONS	DSGN	CHKD	APVD	DATE

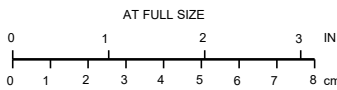

Stanley Consultants Inc.
225 Iowa Avenue, Muscatine, Iowa 52761-3764
www.stanleyconsultants.com

CITY OF MUSCATINE - PHASE 6D
WEST HILL AREA SANITARY AND STORM SEWER SEPARATION
MUSCATINE, IOWA

STORM SEWER HAGERMAN DRIVE SHEET 3

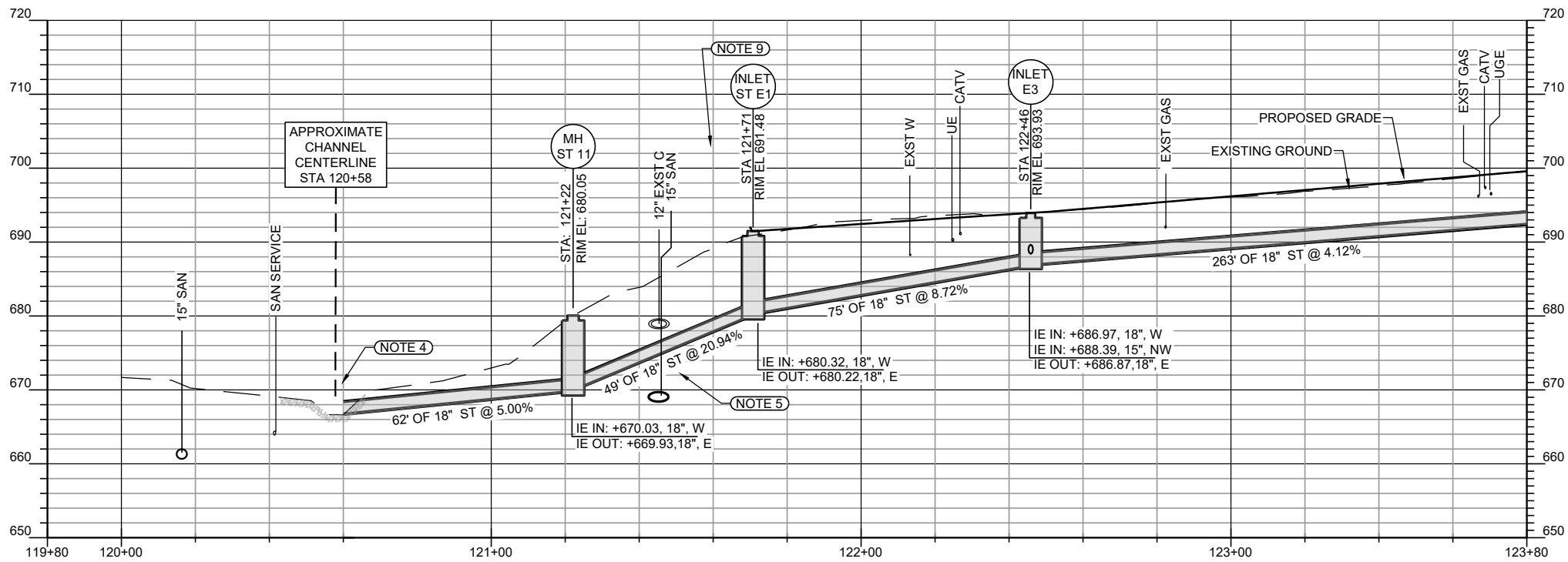
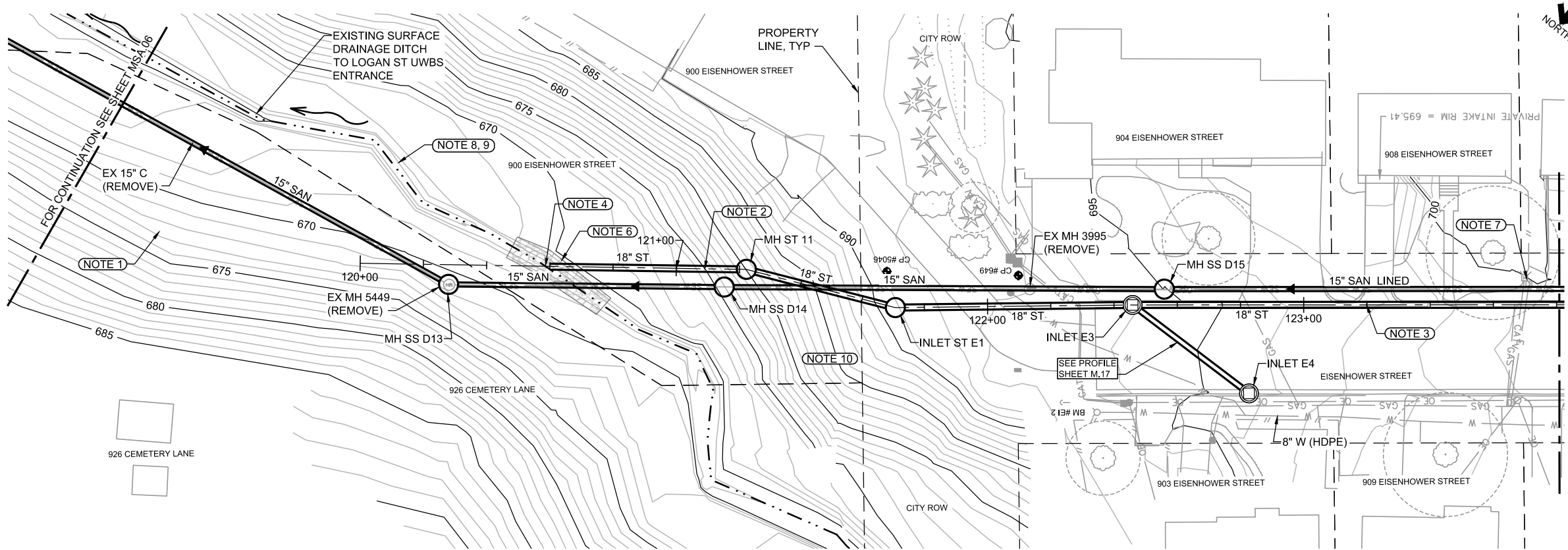
DESIGNED	KK HEIM	SCALE: 1" = 20'	REV.
DRAWN	GM REEVES	NO. 17660.60.30	
CHECKED	ER SCHALLERT		
APPROVED	JM BRADY		
APPROVED	KK HEIM		
DATE	MARCH 12, 2025		

M.03 0

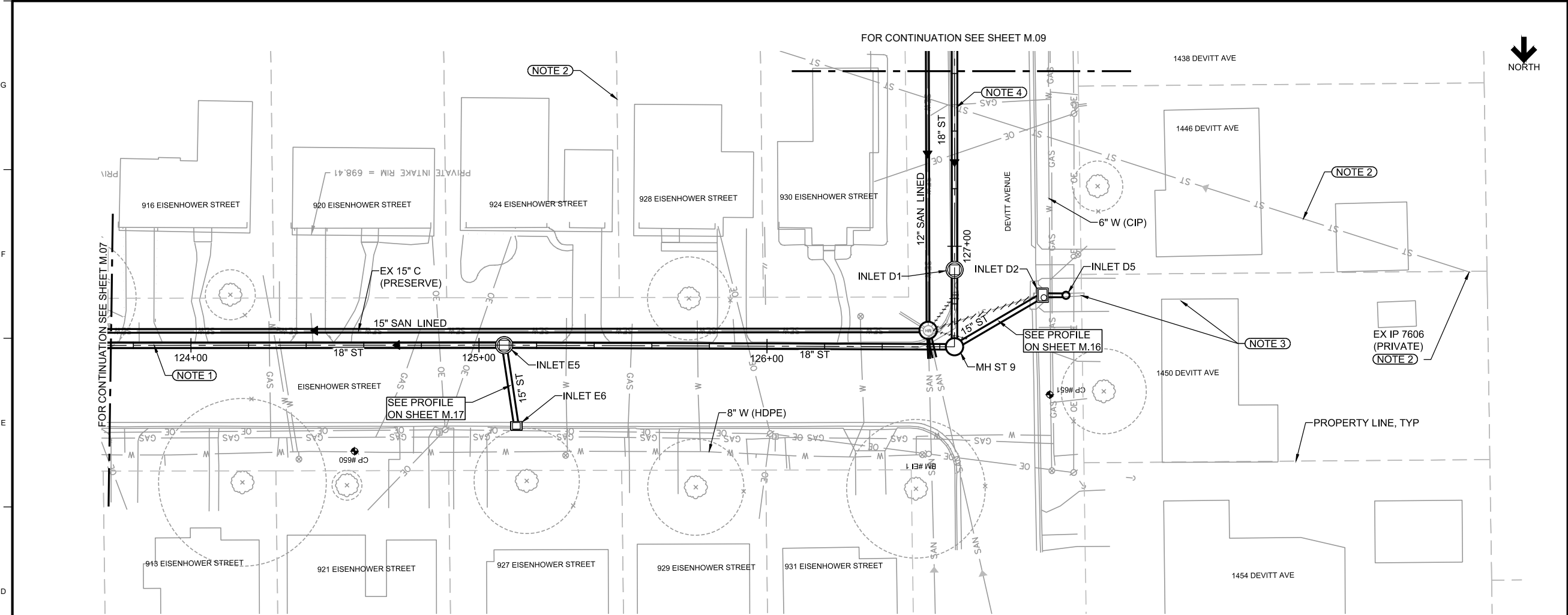


NOTES

- SEE MSA SHEETS FOR EASEMENT LINEWORK THIS AREA.
- INSTALL STORM SEWER ON ALIGNMENT SHOWN.
- MAINTAIN STORM WATER FLOW UPSTREAM ON DEVITT AVENUE AND EISENHOWER STREET DURING CONSTRUCTION. PROVIDE TEMPORARY CONNECTIONS TO MAINTAIN POSITIVE DRAINAGE. PROTECT CONSTRUCTION AREA FROM EROSION AT ALL TIMES.
- DAYLIGHT NEW STORM SEWER TO EXISTING DRAINAGE WAY. INSTALL CONCRETE PIPE APRON AND FOOTING ACCORDING TO SUDAS FIGURE 4030.221 AND 4030.222. INSTALL EROSION STONE APRON FOR PIPE OUTLET INTO CHANNEL ACCORDING TO SUDAS FIGURE 9040.111. INSTALL EROSION STONE WIDTH OF CHANNEL. ANCHOR THE LAST THREE CONCRETE PIPE SECTIONS AND APRON TOGETHER WITH TWO PIPE CONNECTIONS PER JOINT. SEE IDOT STANDARD ROAD PLANS DR-121 FOR CONCRETE PIPE TO CONCRETE PIPE FOR SEALED JOINTS.
- PIPE JOINTS SHALL BE TIED TOGETHER ON THIS SLOPE. TYING METHOD MUST BE SUITABLE FOR PIPE MATERIAL. TIE TOGETHER WITH TWO PIPE CONNECTIONS PER JOINT. SEE IDOT STANDARD ROAD PLANS DR-121 FOR CONCRETE PIPE TO CONCRETE PIPE FOR SEALED JOINTS.
- LINE DISTURBED DRAINAGE WAY WITH EROSION STONE. RESTORE CONTOURS TO MATCH EXISTING GROUND ELEVATIONS AND AVOID RAISING EXISTING CONTOURS. AVOID STORING MATERIAL AND PLACING MATERIAL STOCKPILES IN DRAINAGE WAY. THICKNESS OF EROSION STONE SHALL BE A MINIMUM OF 8" THICK. AREA AND AMOUNT OF EROSION STONE MUST BE APPROVED BY CITY.
- PROTECT UNDERGROUND ELECTRIC HANDHOLES IN PLACE IF POSSIBLE. IF RELOCATION IS NECESSARY COORDINATE WITH UTILITY OWNER.
- PROTECT DRAINAGE WAY FROM EROSION AND SEDIMENT IMPACTS DURING CONSTRUCTION.
- MAINTAIN UPSTREAM TO DOWNSTREAM FLOW PATH OF CHANNEL AT ALL TIMES DURING PIPE INSTALLATION OR SURFACE RESTORATION. MINIMIZE DISTURBANCE TO CHANNEL WHEN CROSSING WITH EQUIPMENT. SELECT ONE LOCATION TO CROSS CHANNEL WITH EQUIPMENT. REMOVE ANY TEMPORARY FILL MATERIAL OR TEMPORARY CULVERTS PLACED IN CHANNEL FOR A TEMPORARY EQUIPMENT CROSSING.
- PROTECT AND RESTORE SLOPE TO MATCH EXISTING. INSTALL STABILIZING MATTING AND/OR EROSION STONE TO DISTURBED AREA FOR SLOPE STABILIZATION WHEN APPROVED BY CITY.
- PERFORM ALL CONSTRUCTION TO PROTECT EXISTING SLOPES FROM POTENTIAL EROSION AND SLOPE DESTABILIZATION. MINIMIZE DURATION AND LENGTH OF EXCAVATION TO THAT NECESSARY FOR PIPE INSTALLATION WITH TRENCH PROTECTION. SUBMIT CERTIFIED EXCAVATION PLAN AS REQUIRED IN ESTIMATE REFERENCE NOTES.
- INSTALL FLAT ROUND INLET GRATE IN FRAME FOR MANHOLE ST E1 THAT FITS INSIDE THE CITY'S STANDARD EAST JORDAN FRAME.

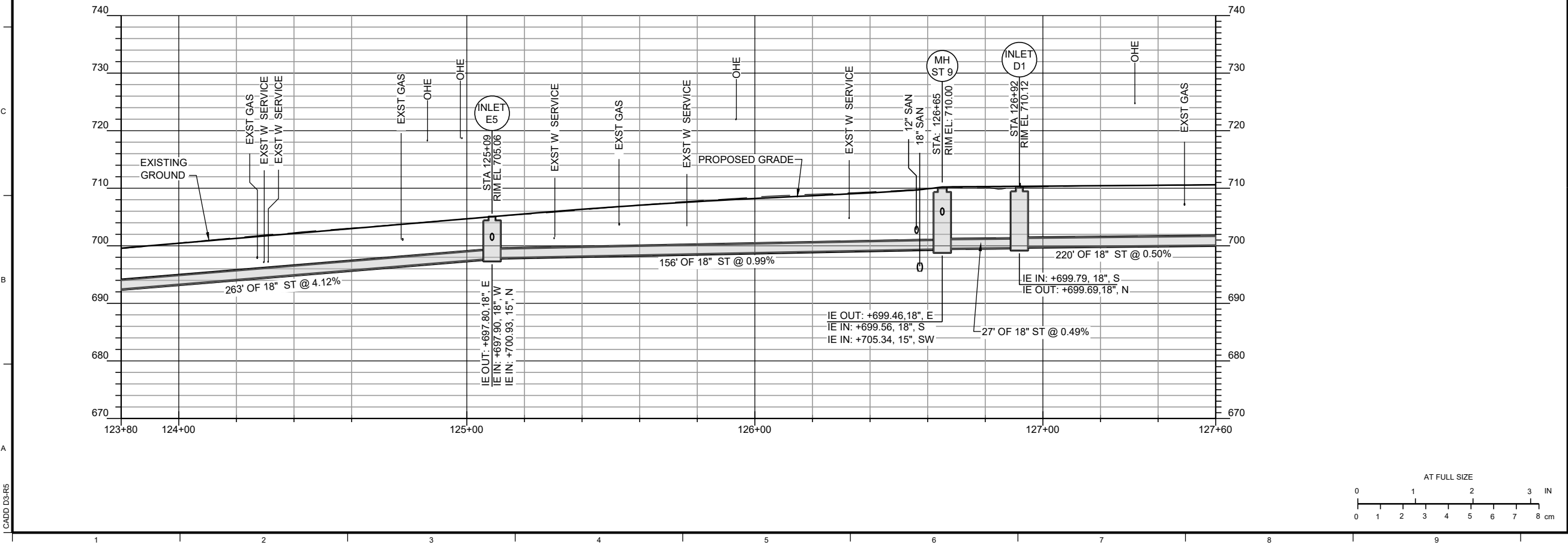


NO.	REVISIONS	DSGN	CHKD	APVD	DATE
 Stanley Consultants Inc. 225 Iowa Avenue, Muscatine, Iowa 52761-3764 www.stanleyconsultants.com					
CITY OF MUSCATINE - PHASE 6D WEST HILL AREA SANITARY AND STORM SEWER SEPARATION MUSCATINE, IOWA					
STORM SEWER EISENHOWER ST					
DESIGNED	KK HEIM	SCALE: 1" = 20'		NO. 17660.60.30	
DRAWN	GM REEVES	REV.		M.07	
CHECKED	ER SCHALLERT	NO. 17660.60.30		REV.	
APPROVED	JM BRADY	MARCH 12, 2025		0	
DATE	KK HEIM				



NOTES

1. INSTALL NEW STORM ON ALIGNMENT SHOWN. EXISTING COMBINED SEWER WILL BE PRESERVED, LINED AND REUSED FOR SANITARY SEWER. NEW SANITARY MANHOLES WILL REPLACE EXISTING COMBINED SEWER MANHOLES. SEE MSA SHEETS.
2. CITY RECORDS SHOWS PRIVATE INTAKE IN THE BACKYARD CORNER OF PROPERTIES 1446 AND 1450 DEVITT AVE. PIPING CROSSES DEVITT AT AN UNKNOWN LOCATION AND UNKNOWN SIZE AND DISCHARGES INTO DRAINAGE SWALE IN BACKYARD OF 924 EISENHOWER ST.
3. EXISTING PRIVATE PROPERTY ROCKED DRAINAGE SWALE EXTENDS TO FRONT EDGE OF 1450 DEVITT AVENUE.
4. CITY TO PROVIDE DECISION DURING CONSTRUCTION TO CONNECT PRIVATE STORM SEWER TO NEW STORM SEWER ON DEVITT AVENUE OR MAINTAIN EXISTING ROUTING.



NO.	REVISIONS	DSGN	CHKD	APVD	DATE

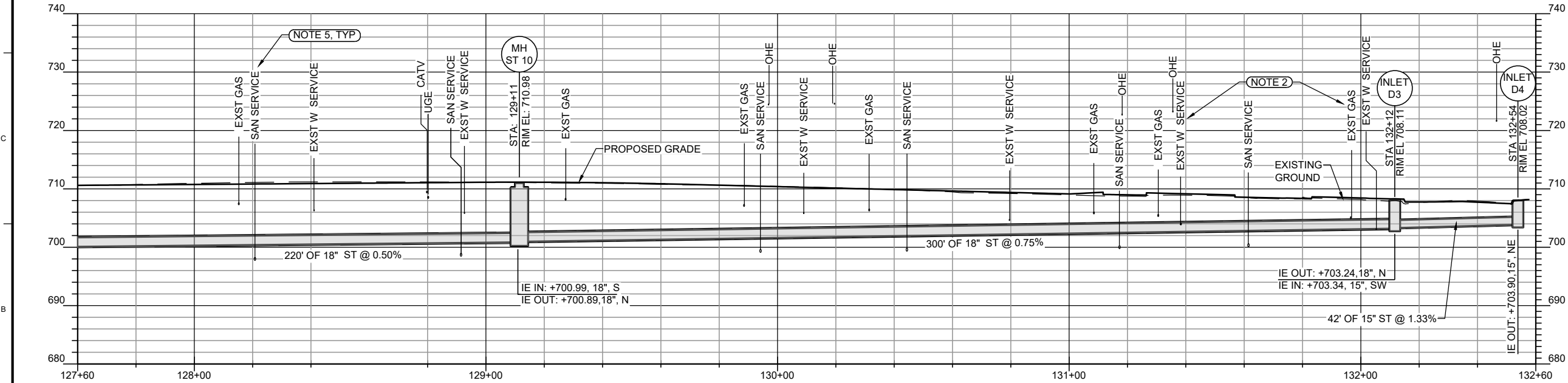
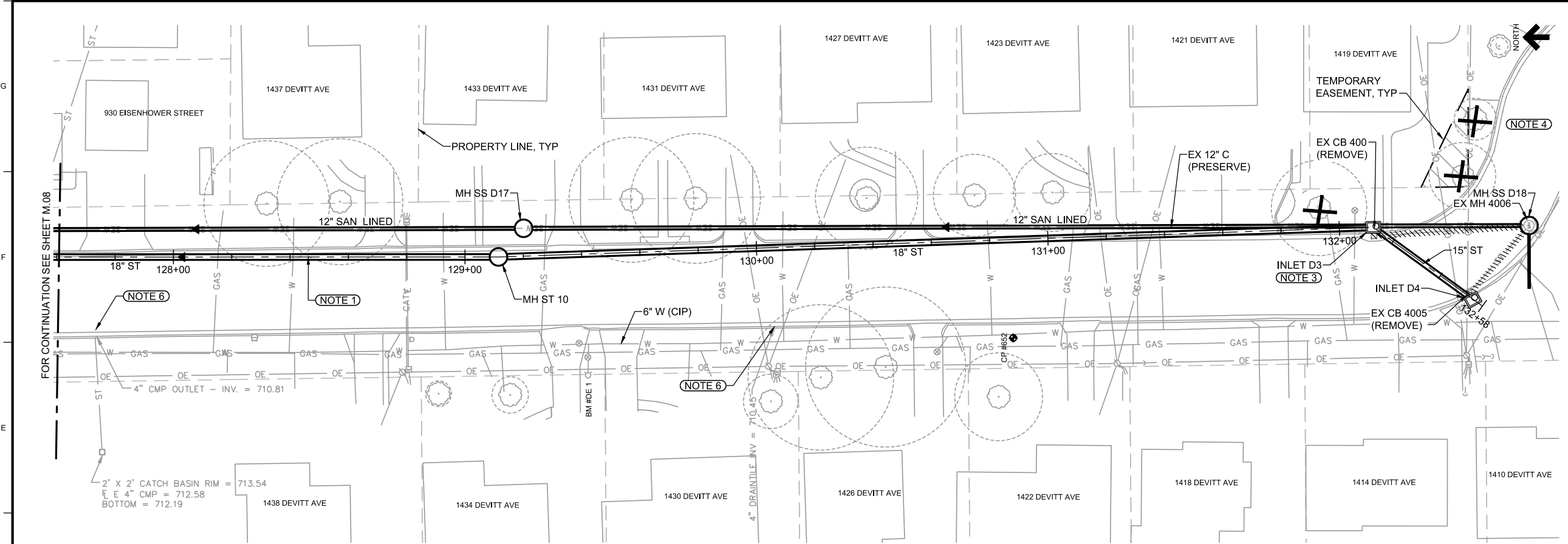
Stanley Consultants Inc.
225 Iowa Avenue, Muscatine, Iowa 52761-3764
www.stanleyconsultants.com

CITY OF MUSCATINE - PHASE 6D
WEST HILL AREA SANITARY AND STORM SEWER SEPARATION
MUSCATINE, IOWA

**STORM SEWER
EISENHOWER ST & DEVITT AVE**

DESIGNED <u>KK HEIM</u>	SCALE: 1" = 20'
DRAWN <u>GM REEVES</u>	NO. 17660.60.30
CHECKED <u>ER SCHALLERT</u>	REV.
APPROVED <u>JM BRADY</u>	M.08
APPROVED <u>KK HEIM</u>	0
DATE <u>MARCH 12, 2025</u>	

10 ©STANLEY CONSULTANTS



- ### NOTES
1. INSTALL NEW STORM AT ALIGNMENT SHOWN. EXISTING 12-INCH COMBINED SEWER WILL BE PRESERVED, LINED, AND REUSED FOR SANITARY SEWER. DISCONNECT EXISTING STORM CONNECTIONS FROM EXISTING MH 4006. NEW SANITARY MANHOLES WILL REPLACE EXISTING COMBINED MANHOLES. SEE MSA SHEETS.
 2. PROTECT EXISTING WATER AND GAS SERVICES IF FEASIBLE. RELOCATE WATER SERVICE TO AVOID NEW SEWERS IF NEEDED. SEE WATER SERVICE RELOCATION DETAIL ON SHEET A.05. GAS SERVICE RELOCATION SHALL ONLY BE PERFORMED BY GAS UTILITY COMPANY.
 3. NEW INLET AND STORM SEWER SITS AT A HIGHER ELEVATION THAN THE EXISTING COMBINED SEWER.
 4. SEE SHEET D.10 FOR REPLACEMENT OF DEVITT PAVEMENT TO NEWELL AVENUE AND EXTENT OF TEMPORARY EASEMENTS.
 5. LOCATION AND ELEVATION OF SANITARY SERVICES SHOWN IN PROFILE IS APPROXIMATE. IF NECESSARY ADJUST SEWER RISER ACCORDING TO DETAIL ON SHEET A.04 AND SUDAS FIGURE 4010.201.
 6. PRIVATE DRAIN CONNECTIONS TO STREET GENERALLY SHOULD NOT BE CONNECTED TO STREET UNLESS AUTHORIZED BY THE CITY. CURB OPENING CASTINGS CAN BE USED ONLY IF CITY AUTHORIZES.

NO.	REVISIONS	DSGN	CHKD	APVD	DATE



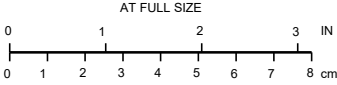
Stanley Consultants Inc.

225 Iowa Avenue, Muscatine, Iowa 52761-3764
www.stanleyconsultants.com

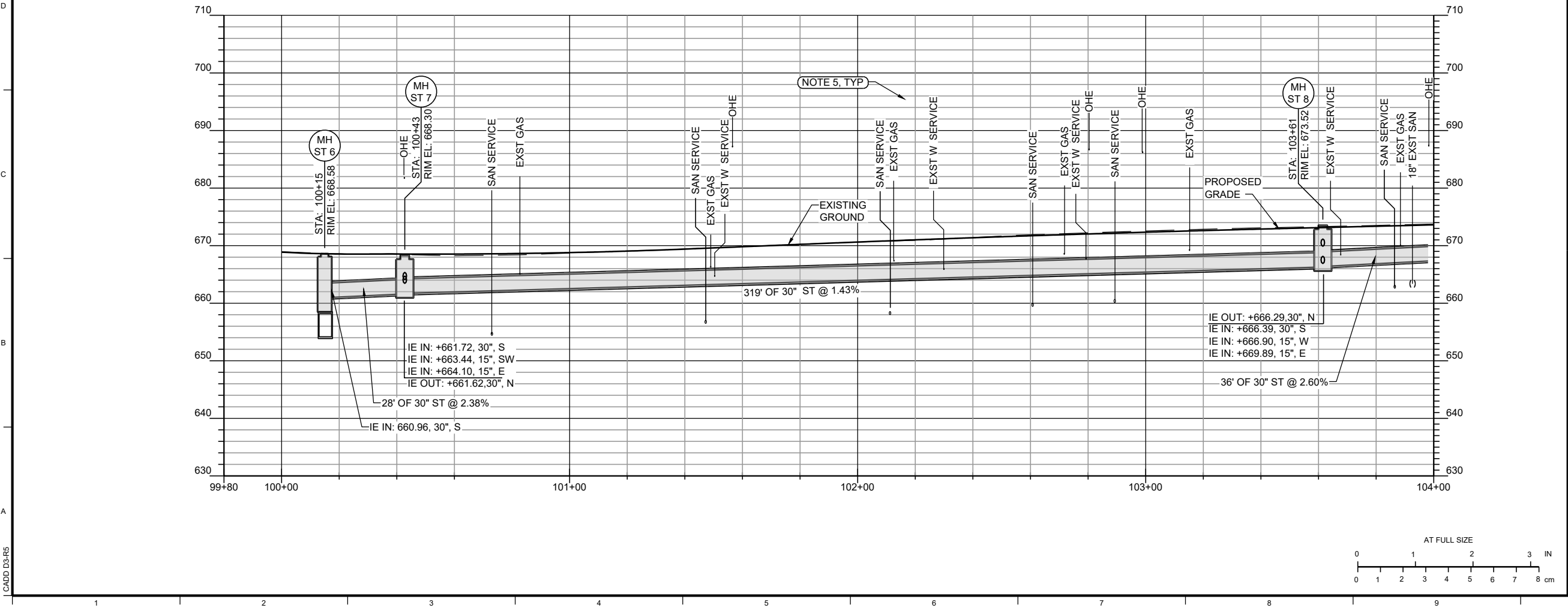
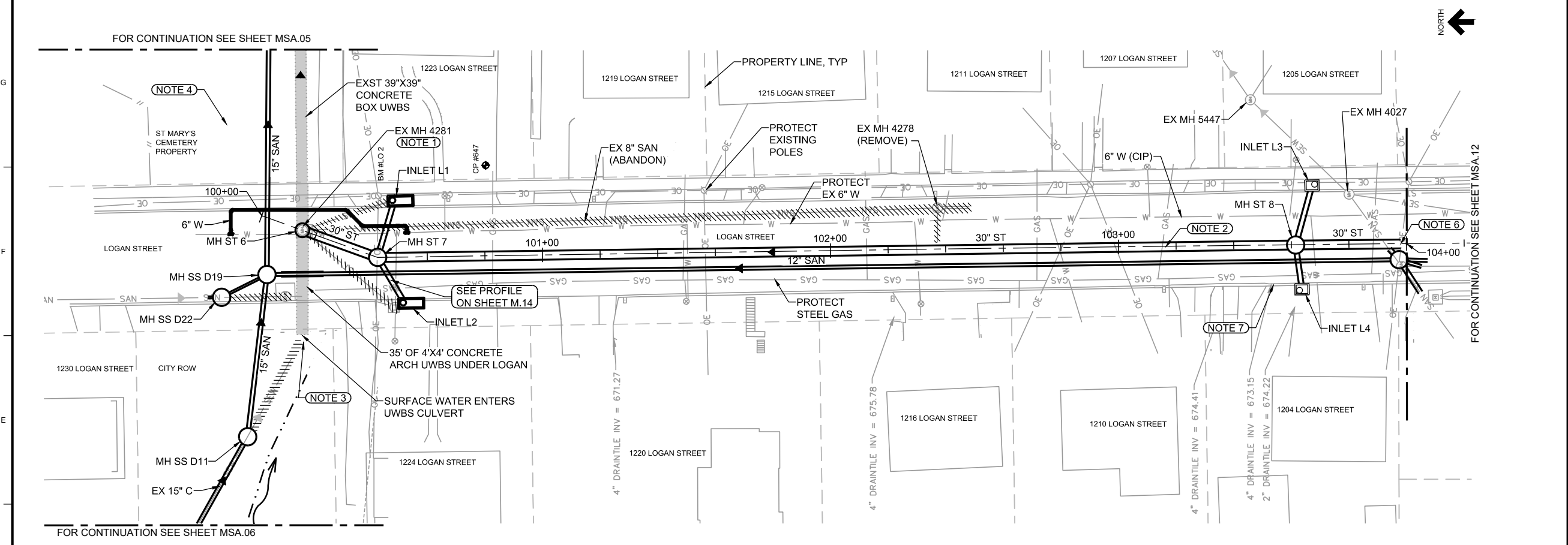
CITY OF MUSCATINE - PHASE 6D
WEST HILL AREA SANITARY AND STORM SEWER SEPARATION
MUSCATINE, IOWA

STORM SEWER DEVITT AVE

DESIGNED <u>KK HEIM</u>	SCALE: 1" = 20'	REV.
DRAWN <u>GM REEVES</u>	NO. 17660.60.30	
CHECKED <u>ER SCHALLERT</u>		
APPROVED <u>JM BRADY</u>		
APPROVED <u>KK HEIM</u>		
DATE <u>MARCH 12, 2025</u>	M.09	0



LOAD D3-R6



NOTES

- REMOVE EXISTING BRICK MH 4281 RISER AND REPLACE WITH NEW 36-INCH DIAMETER PRECAST RISER SECTIONS. EXISTING 6-INCH CIP WATER LINE MUST BE RELOCATED OUT OF SEWAGE MANHOLE. ATTACH NEW RISER TO EXISTING UWBS USING RISER CONNECTION DETAIL ON SHEET A.04. SEE WATER PLAN SHEET SHOWING WATER RELOCATION.
- INSTALL NEW STORM SEWER ON ALIGNMENT SHOWN. STORM SEWER JOINTS MUST BE GASKETTED AND WATERTIGHT. STORM SEWER MAY CARRY COMBINED SEWAGE UNTIL SEPARATION IS ACHIEVED UPSTREAM.
- SEE SHEET MSA.14 FOR PHOTOGRAPHS OF EXISTING 15-INCH COMBINED SEWER AT THE EXISTING UWBS ENTRANCE AND REMOVAL NOTES.
- EXISTING CONTOURS SHOW LOCALIZED LOW POINT 20' EAST OF EAST ROW LINE FOR LOGAN STREET. AREA IS FULL OF CONCRETE DEBRIS, CINDER BLOCKS. NO PIPED OUTLET IS KNOWN. SEE SHEET MSA.05 SHOWING THE CONTOURS IN THIS AREA.
- PROTECT EXISTING WATER AND GAS SERVICES IN PLACE IF FEASIBLE. RELOCATE WATER SERVICE TO AVOID NEW SEWERS IF NEEDED. SEE WATER SERVICE RELOCATION DETAIL ON SHEET A.05. GAS SERVICE RELOCATION SHALL ONLY BE PERFORMED BY GAS UTILITY COMPANY.
- INSTALL STORM SEWER STUB AND TEMPORARY SEAL WITH WATERTIGHT PLUG, AND MARK IN CONTINUATION FOR FUTURE PHASE BY OTHERS.
- PRIVATE DRAIN CONNECTIONS TO STREET GENERALLY SHOULD NOT BE CONNECTED TO STREET UNLESS AUTHORIZED BY THE CITY. CURB OPENING CASTINGS CAN BE USED ONLY IF CITY AUTHORIZES.

NO.	REVISIONS	DSGN	CHKD	APVD	DATE

225 Iowa Avenue, Muscatine, Iowa 52761-3764
www.stanleyconsultants.com

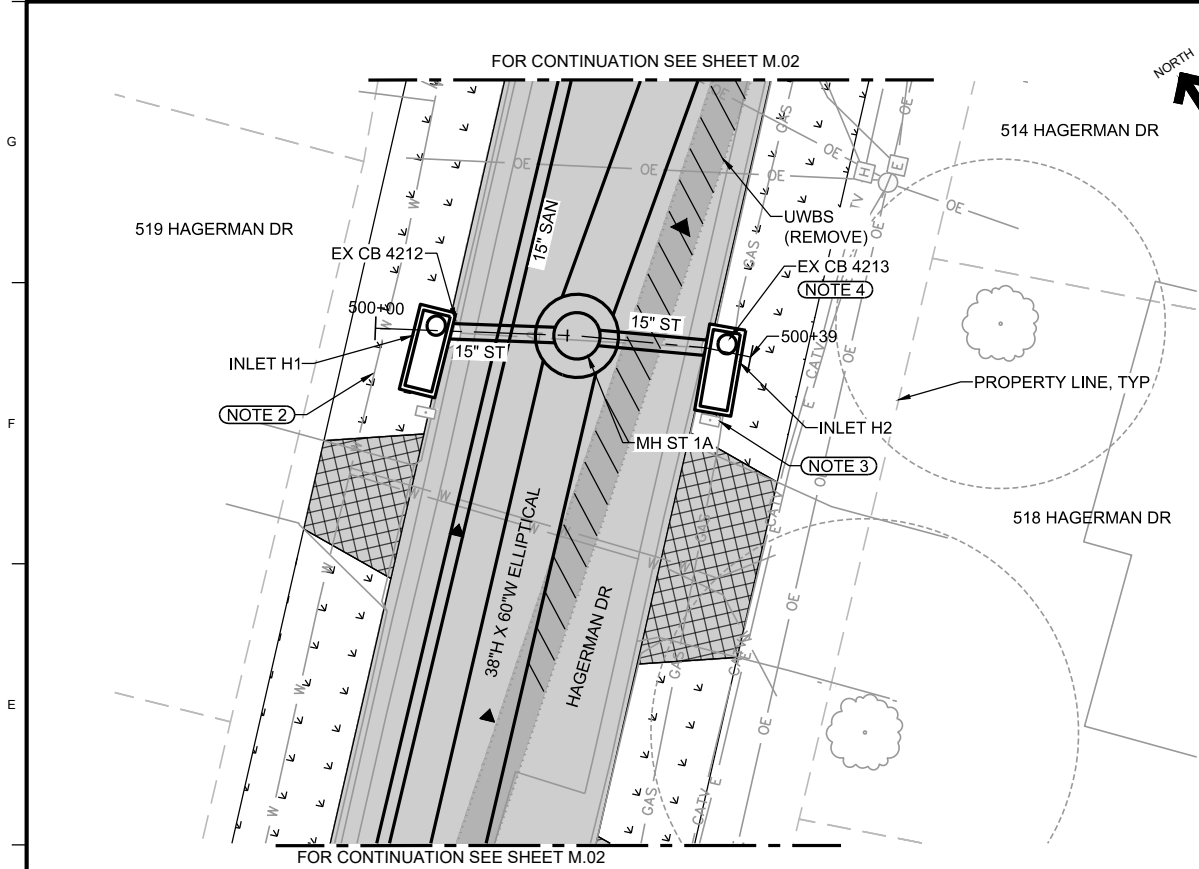
CITY OF MUSCATINE - PHASE 6D
WEST HILL AREA SANITARY AND STORM SEWER SEPARATION
MUSCATINE, IOWA

STORM SEWER LOGAN ST

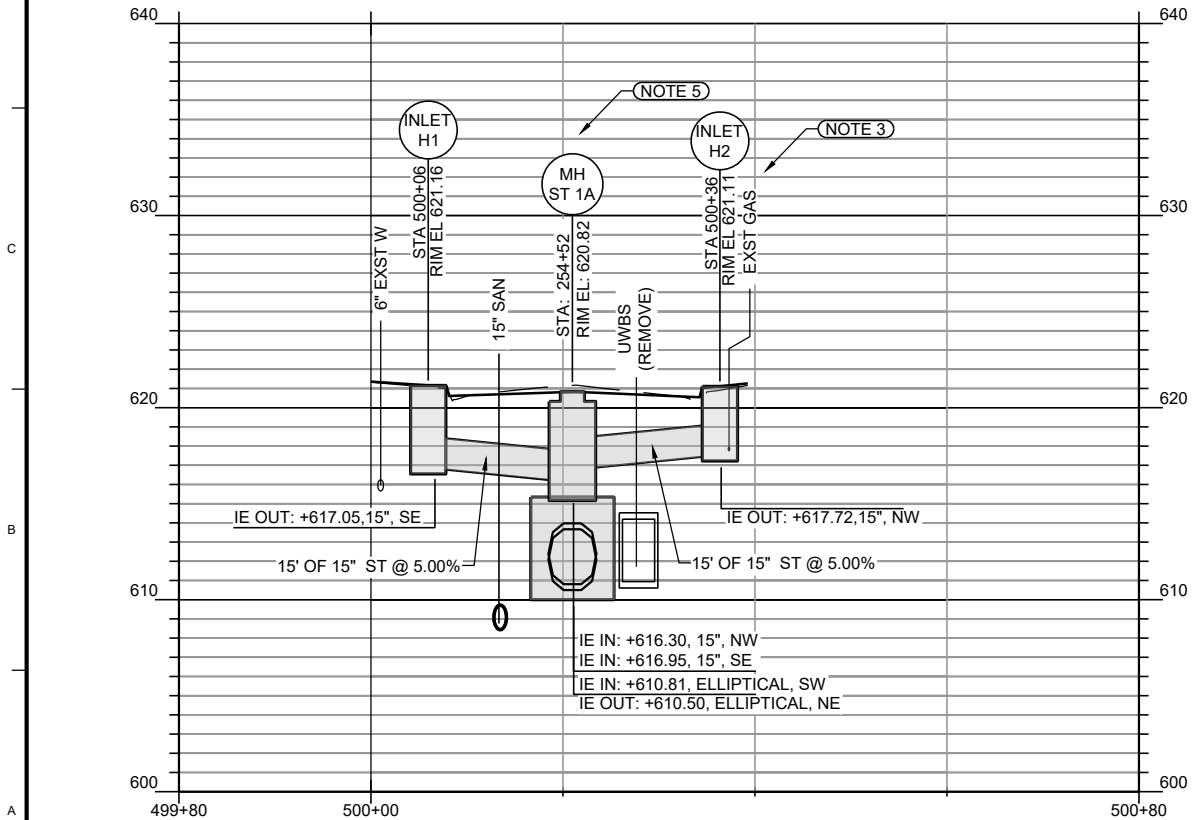
DESIGNED <u>KK HEIM</u>	SCALE: 1" = 20'
DRAWN <u>GM REEVES</u>	NO. 17660.60.30
CHECKED <u>ER SCHALLERT</u>	REV.
APPROVED <u>JM BRADY</u>	M.11
APPROVED <u>KK HEIM</u>	0
DATE <u>MARCH 12, 2025</u>	

10 ©STANLEY CONSULTANTS

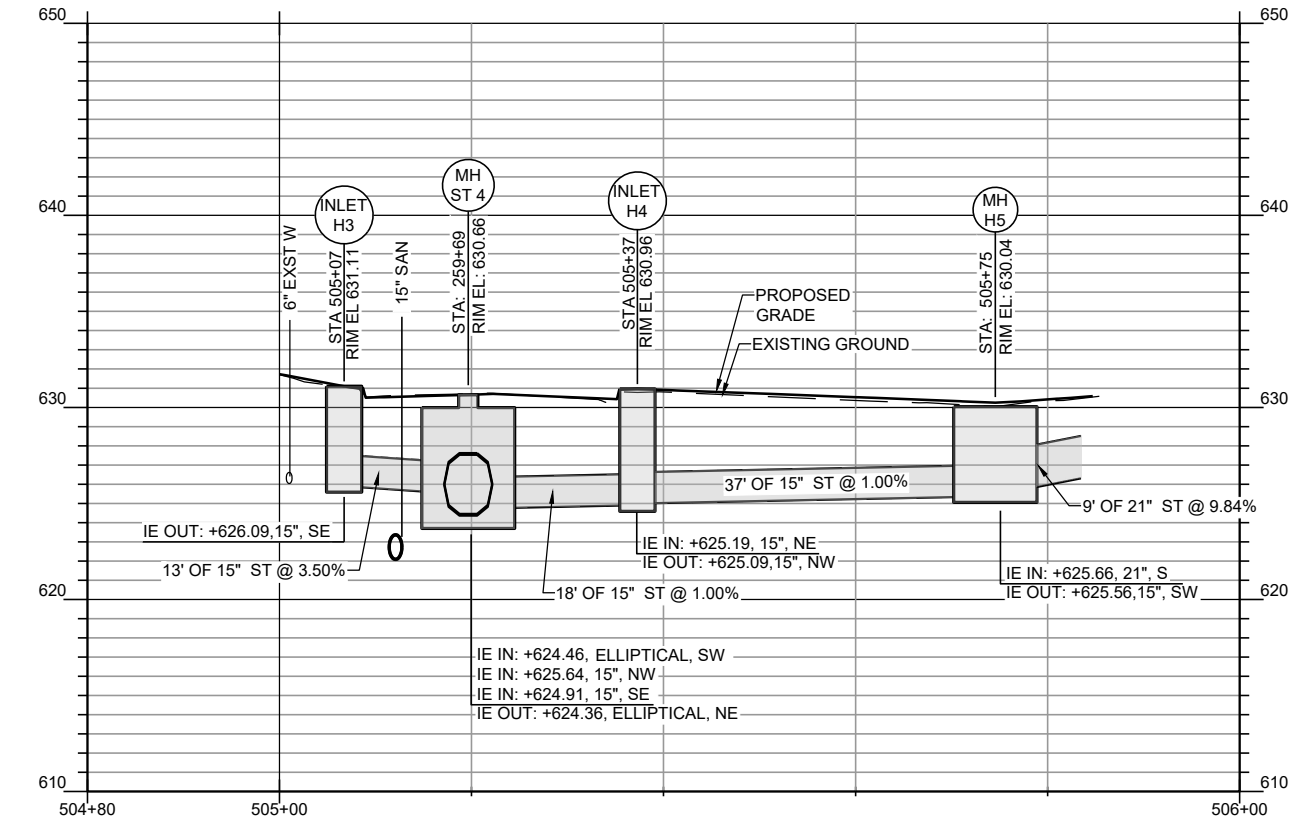
Page 191 of 1049



STORM INLET PLAN AND PROFILE
NEAR 518 HAGERMAN DR
STA 500+00



STORM INLET PLAN AND PROFILE
NEAR 602 HAGERMAN DR
STA 505+00



NOTES

1. CITY MAPPING SHOWS EXISTING STORM FROM 602 HAGERMAN PROPERTY AND IP7956 CONNECTS TO EXISTING UWBS 8-FEET DOWNSTREAM OF MH 4215. THIS PRINT SHOWS ST CONNECTING UPSTREAM OF MH WHICH LIKELY IS INCORRECT. LOCATE WHERE EXISTING STORM CROSSES THE CURB LINE AND LOCATE INLET H5 AT THAT LOCATION. CONNECT TO EXISTING 21-INCH CONCRETE PIPE. FIELD VERIFY LOCATION AND ELEVATION OF EXISTING PIPE. EXISTING PIPE TURNS TO 21-INCH RCP AT BEND, WITHIN CITY ROW.
2. MAINTAIN CLEARANCE BETWEEN EXISTING WATER AND NEW STORM STRUCTURE ACCORDING TO CRITERIA LISTED ON SHEET A.05 AND SUDAS SPECIFICATIONS.
3. PROTECT EXISTING GAS MAIN. IF RELOCATION IS NECESSARY COORDINATE RELOCATION GAS COMPANY.
4. REMOVE EXISTING INLETS IN THEIR ENTIRETY AND REPLACE WITH NEW AT LOCATIONS SHOWN.
5. RISER SECTION IS LABELED AS MH 1A. LOWER 8' DIAMETER IS LABELED AS MH 1..

NO.	REVISIONS	DSGN	CHKD	APVD	DATE



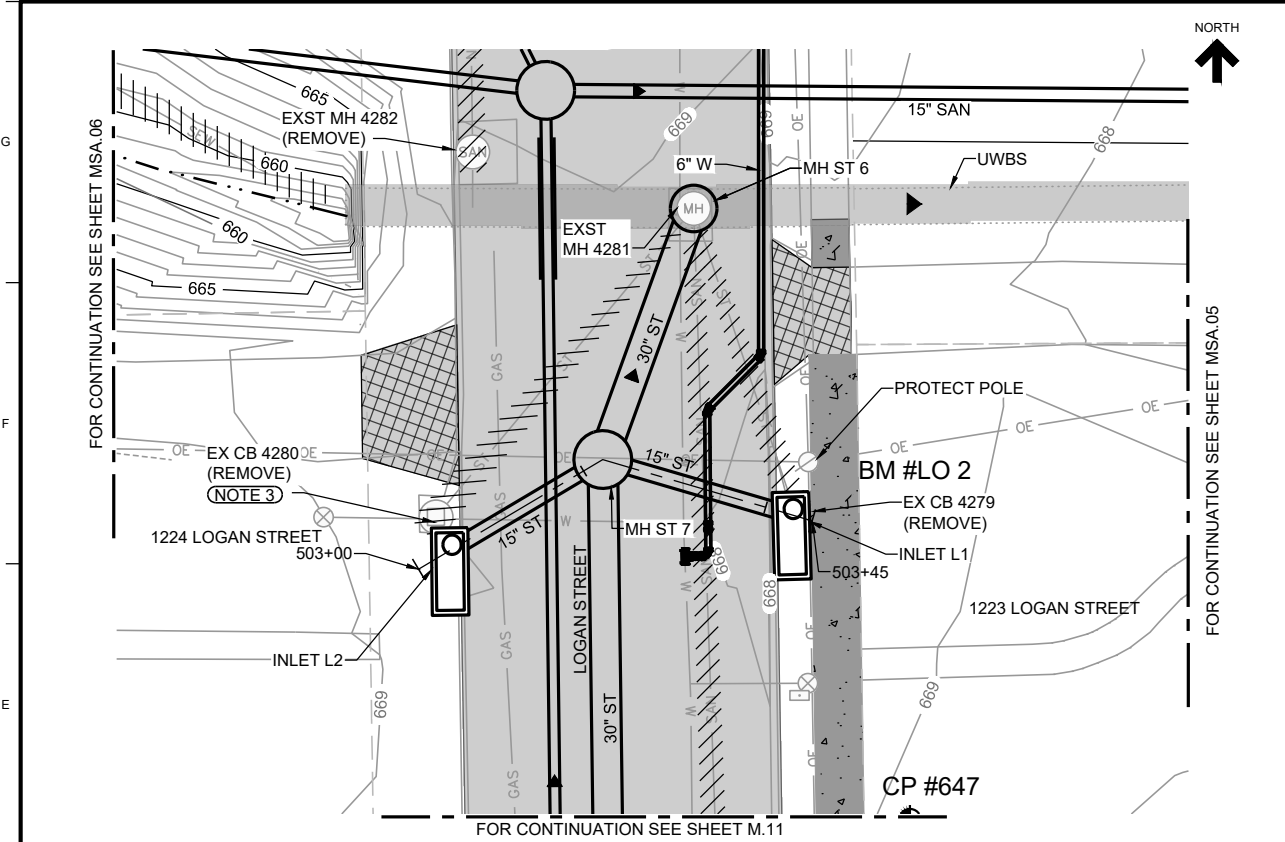
Stanley Consultants Inc.
225 Iowa Avenue, Muscatine, Iowa 52761-3764
www.stanleyconsultants.com

CITY OF MUSCATINE - PHASE 6D
WEST HILL AREA SANITARY AND STORM SEWER SEPARATION
MUSCATINE, IOWA

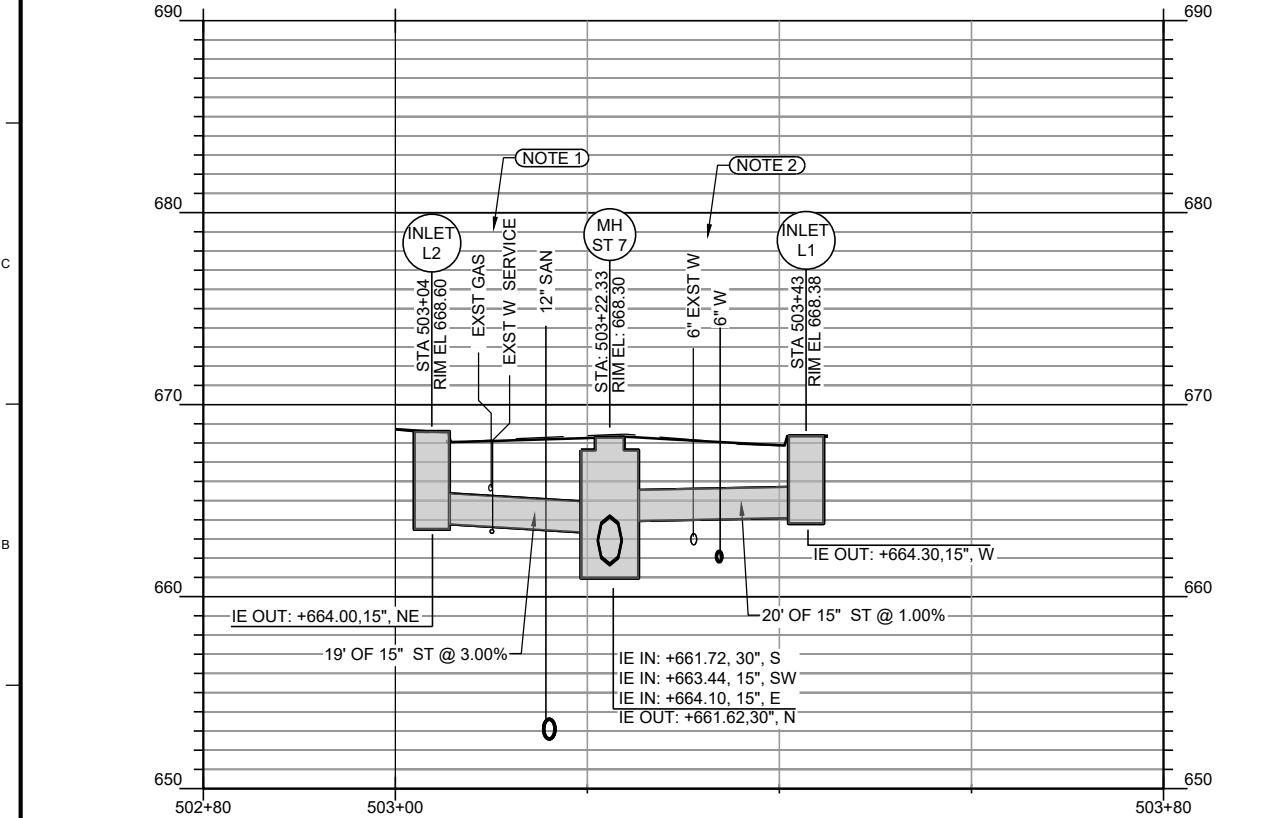
**STORM SEWER
STORM INLETS ON HAGERMAN DRIVE**

DESIGNED: KK HEIM	SCALE: 1" = 10'
DRAWN: GM REEVES	NO. 17660.60.30
CHECKED: ER SCHALLERT	REV.
APPROVED: JM BRADY	M.13
APPROVED: KK HEIM	0
DATE: MARCH 12, 2025	

10 ©STANLEY CONSULTANTS



STORM INLETS PLAN AND PROFILE
NEAR 1223 LOGAN ST
STA 503+00



- NOTES
1. PROTECT EXISTING WATER AND GAS SERVICES IF FEASIBLE. RELOCATE WATER SERVICE TO AVOID NEW SEWERS IF NEEDED. SEE WATER SERVICE RELOCATION DETAIL ON SHEET A.05. GAS SERVICE RELOCATION SHALL ONLY BE PERFORMED BY GAS UTILITY COMPANY.
 2. WATER LINE WILL BE RELOCATED IN CONJUNCTION WITH RELOCATION TO REMOVE WATER MAIN FROM INSIDE EX MH 4281. SEE WATER MAIN RELOCATION PLANS. ELEVATION OF TOP OF 6-INCH WATER LINE IN MANHOLE IS 664.53.
 3. AT EXISTING CB 4280 IS A 6-IN CMP CONNECTED FROM THE SOUTH. DETERMINE SOURCE OF PIPE AND CONNECT TO NEW INLET IF ACTIVE.

NO.	REVISIONS	DSGN	CHKD	APVD	DATE



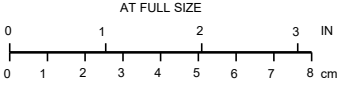
Stanley Consultants INC.

225 Iowa Avenue, Muscatine, Iowa 52761-3764
www.stanleyconsultants.com

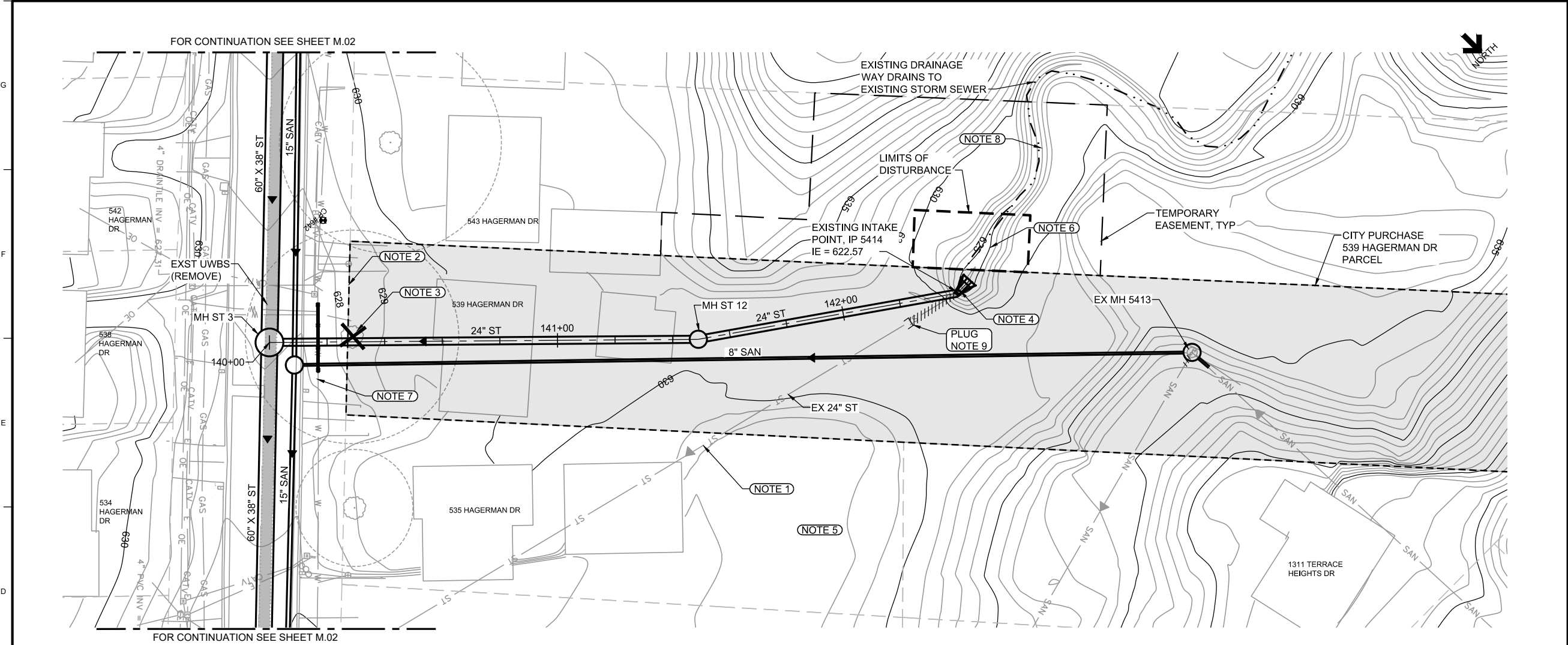
CITY OF MUSCATINE - PHASE 6D
WEST HILL AREA SANITARY AND STORM SEWER SEPARATION
MUSCATINE, IOWA

**STORM SEWER
STORM INLETS ON LOGAN ST**

DESIGNED <u>KK HEIM</u>	SCALE: 1" = 10'
DRAWN <u>GM REEVES</u>	NO. 17660.60.30
CHECKED <u>ER SCHALLERT</u>	REV.
APPROVED <u>JM BRADY</u>	M.14
APPROVED <u>KK HEIM</u>	0
DATE <u>MARCH 12, 2025</u>	

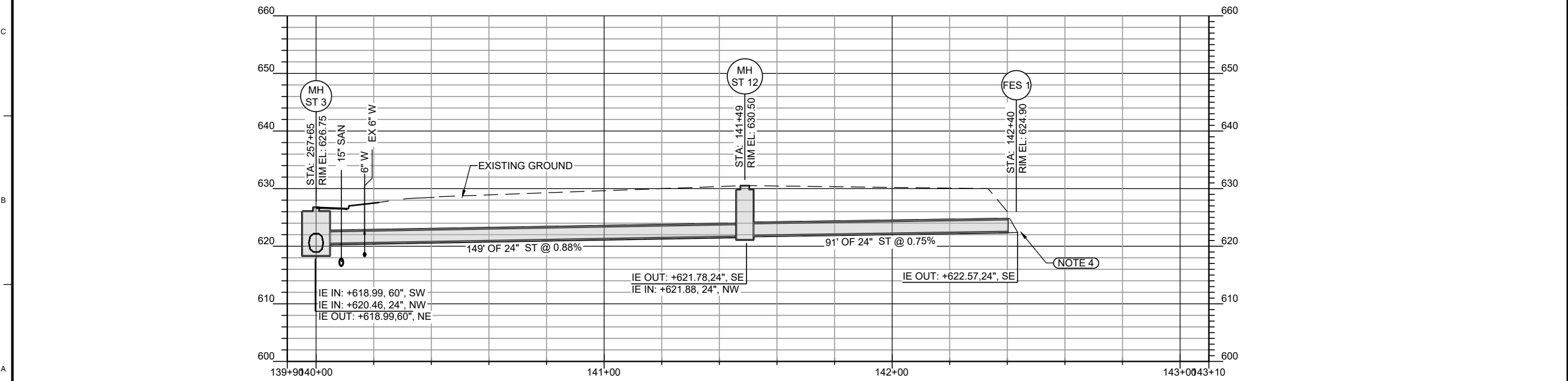


LOAD D3-R6



NOTES

- EXISTING STORM EXTENDS ACROSS 539, 535, AND 531 HAGERMAN DRIVE AND CONNECTS TO EXISTING UWBS NEAR EX MH 4214. SEE SHEET M.02 AND NOTES ABOUT PLUGGING PIPE ON HAGERMAN DRIVE.
- INSTALL NEW 24-INCH STORM TO PROPERTY LINE AND CAP. INSTALLATION OF STORM SEWER ON 539 HAGERMAN PARCEL MAY OCCUR LATER DURING THIS CONSTRUCTION CONTRACT AFTER PARCEL PURCHASE. CONSULT CITY PRIOR TO INSTALLING STORM SEWER ON PARCEL ON EXTENT OF IMPROVEMENT.
- CITY SHALL APPROVE TREE REMOVAL TIMING. REMOVE TREE ONLY AFTER CONFIRMATION THAT STORM SEWER WORK WILL OCCUR ON 539 HAGERMAN DR. PARCEL.
- REMOVE EXISTING ENTRANCE PIPE, CONCRETE HEADWALL COMPONENTS AND GRADER BARS. INSTALL CIRCULAR CONCRETE PIPE APRON WITH APRON GUARD ACCORDING TO SUDAS DETAILS 4030.222, AND 4030.224. PROTECT EXISTING CHANNEL, MINIMIZE DISTURBANCE AND RESTORE TO EXISTING CONTOURING. STABILIZE CHANNEL AND SIDE SLOPES AS NEEDED.
- CONTOURS SHOWN ON THIS SHEET ARE CITY 1' CONTOURS FROM 2000. AREA ON PRIVATE PROPERTY HAS NOT BEEN SURVEYED.
- MINIMIZE AREA DISTURBED TO EXTENT NEEDED FOR PIPE INSTALLATION. RESTORE ANY AREA DISTURBED TO MATCH EXISTING.
- REFER TO WATER MAIN PLANS FOR WATER RELOCATION.
- MAINTAIN FLOW PATH FOR EXISTING DRAINAGE CHANNEL. NOTE DRAINAGE AREA EXTENDS BEYOND LOGAN STREET TO DEVITT AVENUE WITH MULTIPLE DRAINAGE CHANNELS CONTRIBUTING HIGH FLOWS AND SEDIMENT TRANSPORT DURING RAIN EVENTS TO THIS INTAKE POINT.
- PLUG PIPE END OF EXISTING STORM SEWER COMPLETELY WITH A MINIMUM 2-FT LENGTH OF CONCRETE AFTER NEW PIPE IS INSTALLED, AND ABANDON REMAINING PIPE IN PLACE.



NO.	REVISIONS	DSGN	CHKD	APVD	DATE



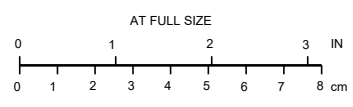
Stanley Consultants Inc.

225 Iowa Avenue, Muscatine, Iowa 52761-3764
www.stanleyconsultants.com

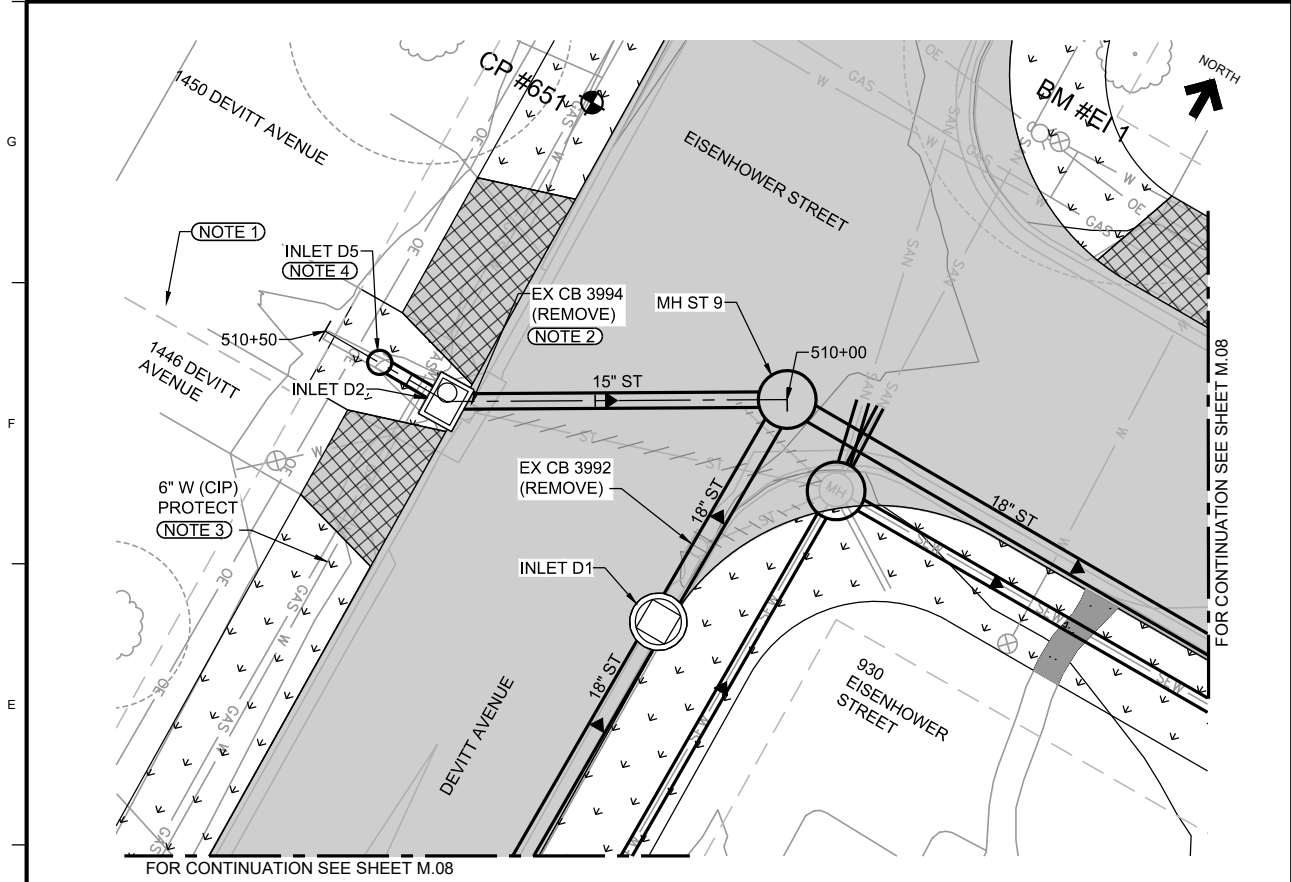
CITY OF MUSCATINE - PHASE 6D
WEST HILL AREA SANITARY AND STORM SEWER SEPARATION
MUSCATINE, IOWA

**STORM SEWER
ON PROPERTY OF 539
HAGERMAN DRIVE**

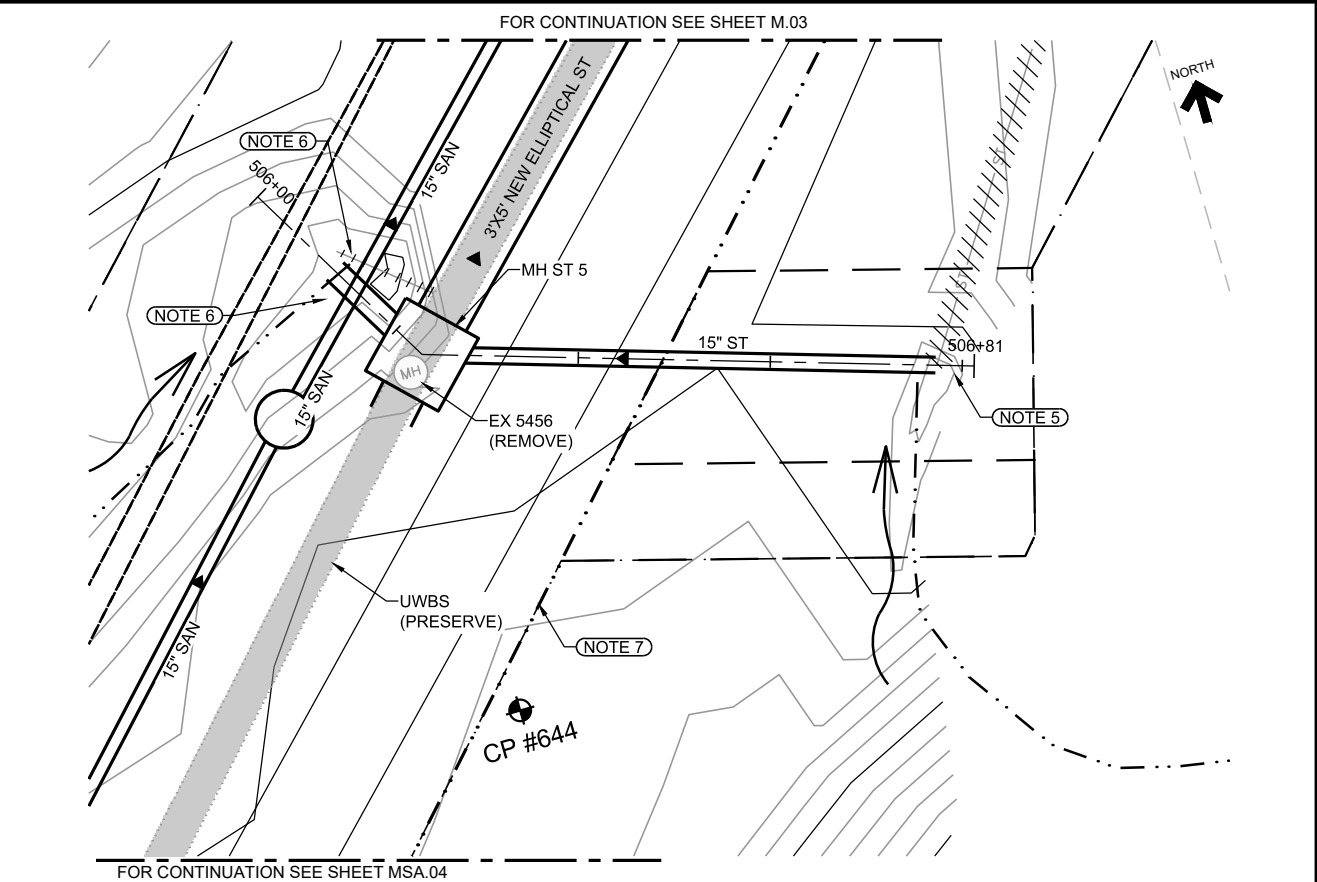
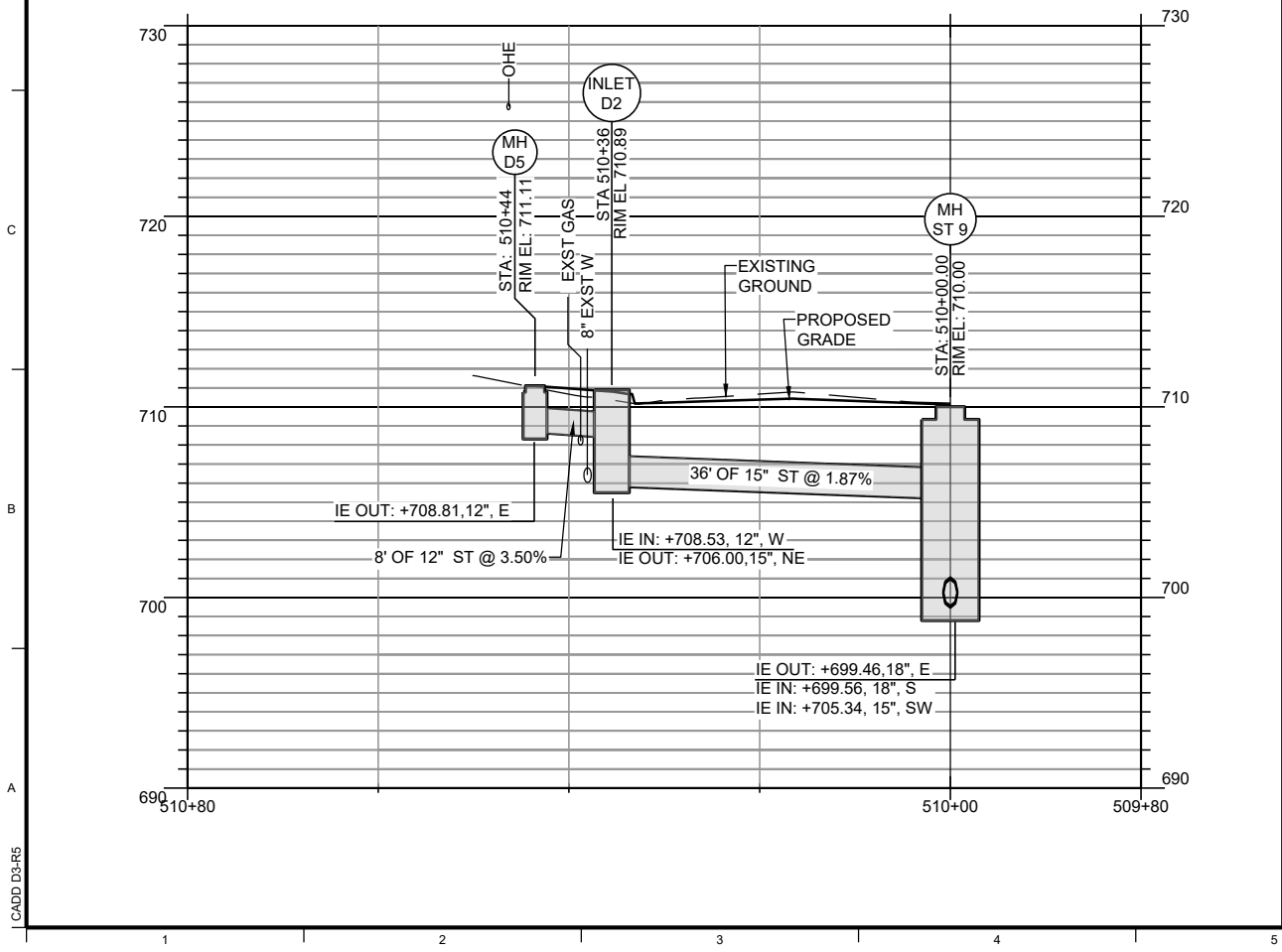
DESIGNED <u>KK HEIM</u>	SCALE: 1" = 20'	REV.
DRAWN <u>GM REEVES</u>	NO. 17660.60.30	
CHECKED <u>ER SCHALLERT</u>		
APPROVED <u>JM BRADY</u>		
APPROVED <u>KK HEIM</u>		
DATE <u>MARCH 12, 2025</u>	M.15	0



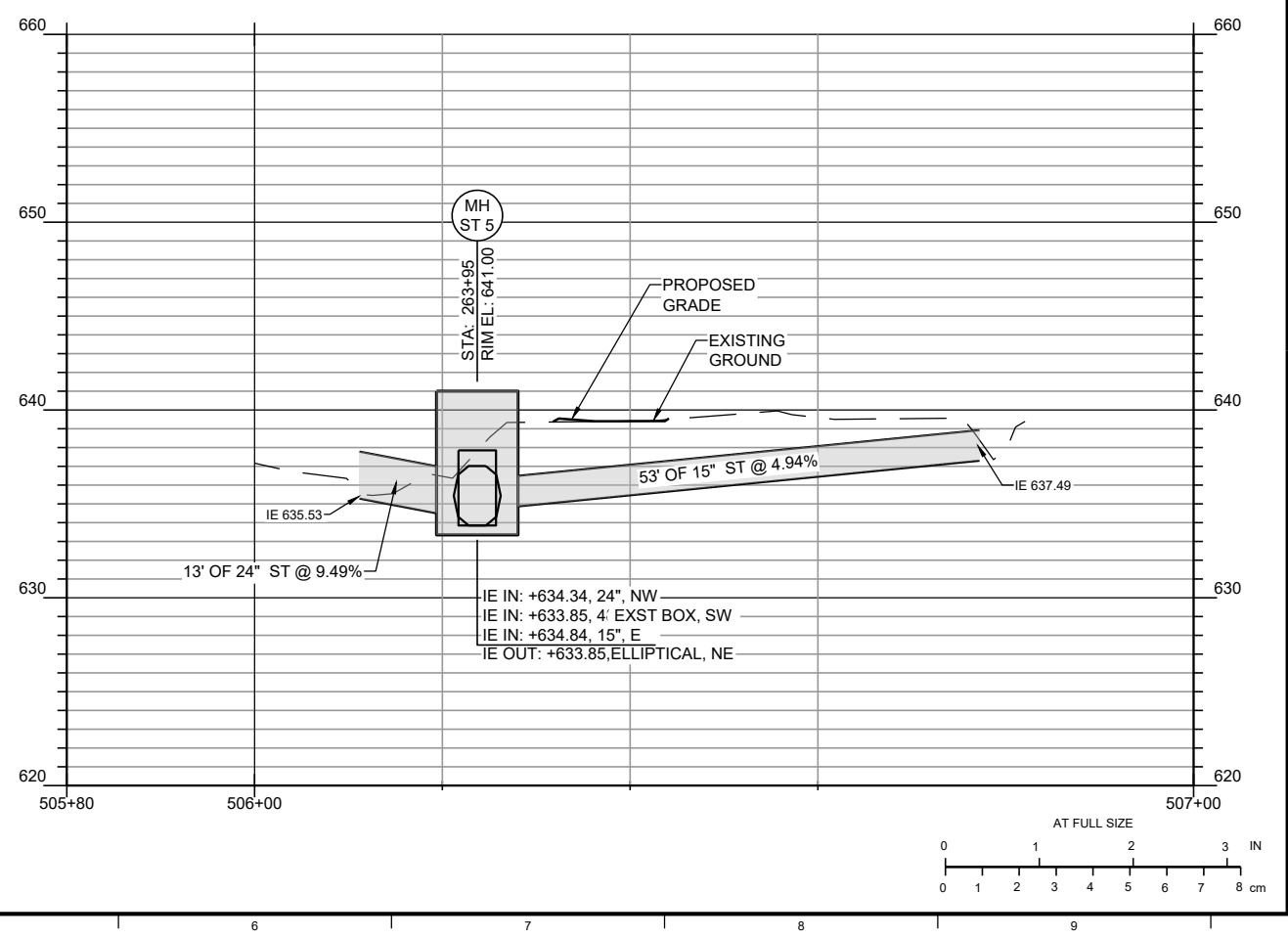
LOAD D3-R6



STORM INLETS PLAN AND PROFILE
NEAR 1450 DEVITT AVENUE
STA 500+00



STORM INLETS PLAN AND PROFILE
NEAR 618 HAGERMAN AVENUE
STA 506+00



- NOTES**
- EXISTING PRIVATE PROPERTY ROCKED DRAINAGE SWALE EXTENDS TO CURB LINE. MAINTAIN POSITIVE DRAINAGE TOWARD STREET. RESTORE ROCKED DRAINAGE SWALE TO EXTENT DISTURBED.
 - SALVAGE ALL EXISTING CASTINGS ON PROJECT AND TURN OVER TO CITY. ROUND VANE GRATE MUST BE SALVAGED AND RETURNED TO CITY.
 - PROTECT EXISTING UTILITIES. SUPPORT AS NEEDED DURING SEWER CONSTRUCTION. DETERMINE IF THERE IS AN ELEVATION CONFLICT WITH GAS LINE. COORDINATE WITH GAS COMPANY IF RELOCATION IS NEEDED.
 - INLET SHALL BE 24-INCH DIAMETER AREA INTAKE SW-512 WITH SW-604 TYPE 5 CASTING.
 - LOCATE EXISTING INTAKE POINT IP 7233. INSTALL NEW 24-INCH PIPE WITH APRON AND GUARD ACCORDING TO SUDAS DETAILS UP TO EXISTING INTAKE/LOW POINT. EXISTING DRAINTILE DISCHARGES TO THIS PIPE INTAKE. MAINTAIN DRAINTILE DISCHARGE TO DITCH. RESTORE AREA TO MATCH EXISTING CONTOURS. GRADE TO DRAIN. PROTECT AREA DISTURBED FROM EROSION WITH MATTING OR EROSION STONE/RIPRAP.
 - LOCATE END OF BROKEN 24-INCH PIPE (IP 5457) AND REMOVE BROKEN PIPE. INSTALL NEW PIPE TO DRAIN AREA WITH NEW PIPE APRON AND GUARD ACCORDING TO SUDAS DETAILS. LOCATE PIPE END AT LOW POINT AND SHAPE TO DRAIN. RESTORE DISTURBED AREA TO MATCH EXISTING CONTOURS AND PROTECT WITH EROSION MATTING OR EROSION STONE/RIPRAP IF NEEDED.
 - STAY WITHIN EASEMENTS AND CONSTRUCTION LIMITS.

NO.	REVISIONS	DSGN	CHKD	APVD	DATE

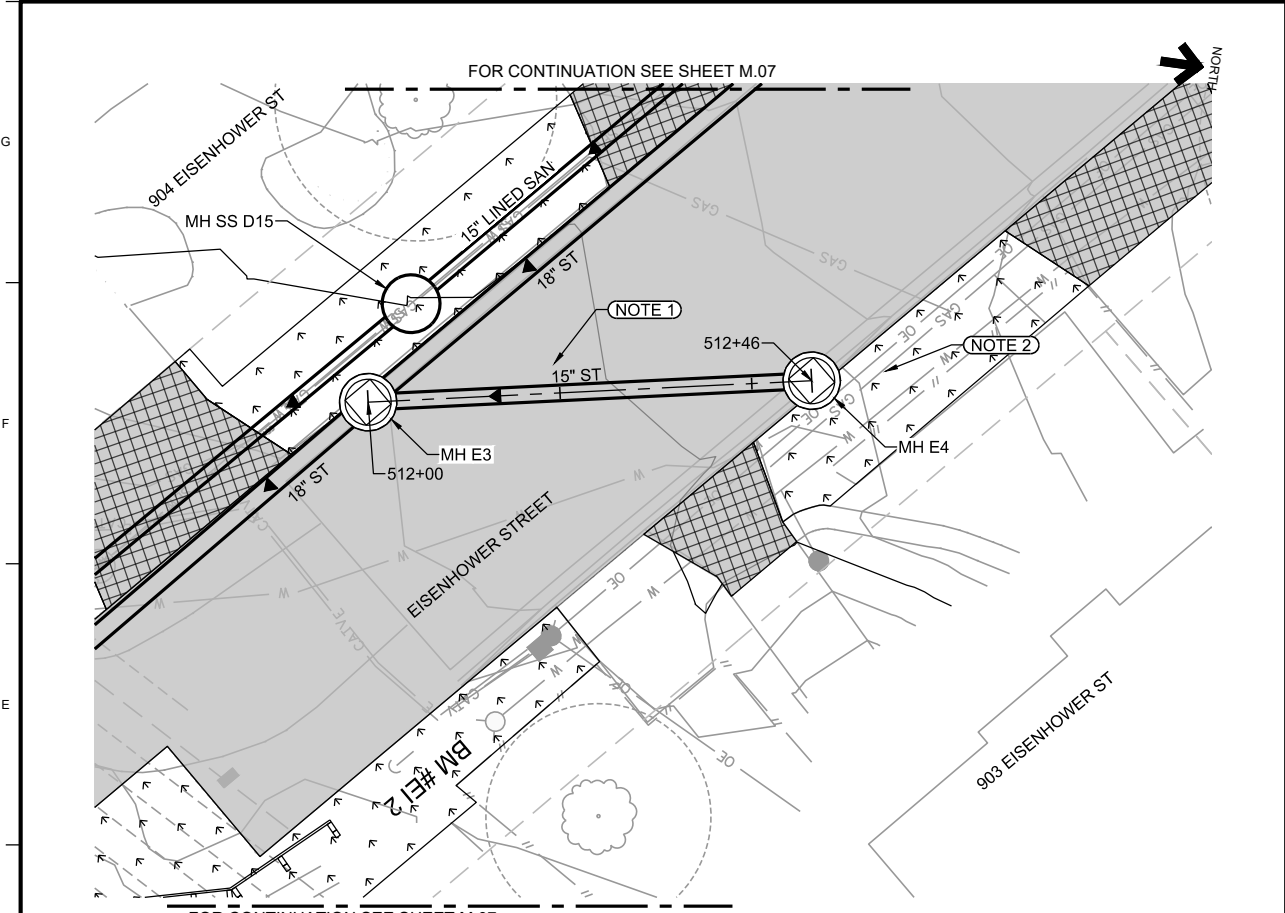
225 Iowa Avenue, Muscatine, Iowa 52761-3764
www.stanleyconsultants.com

CITY OF MUSCATINE - PHASE 6D
WEST HILL AREA SANITARY AND STORM SEWER SEPARATION
MUSCATINE, IOWA

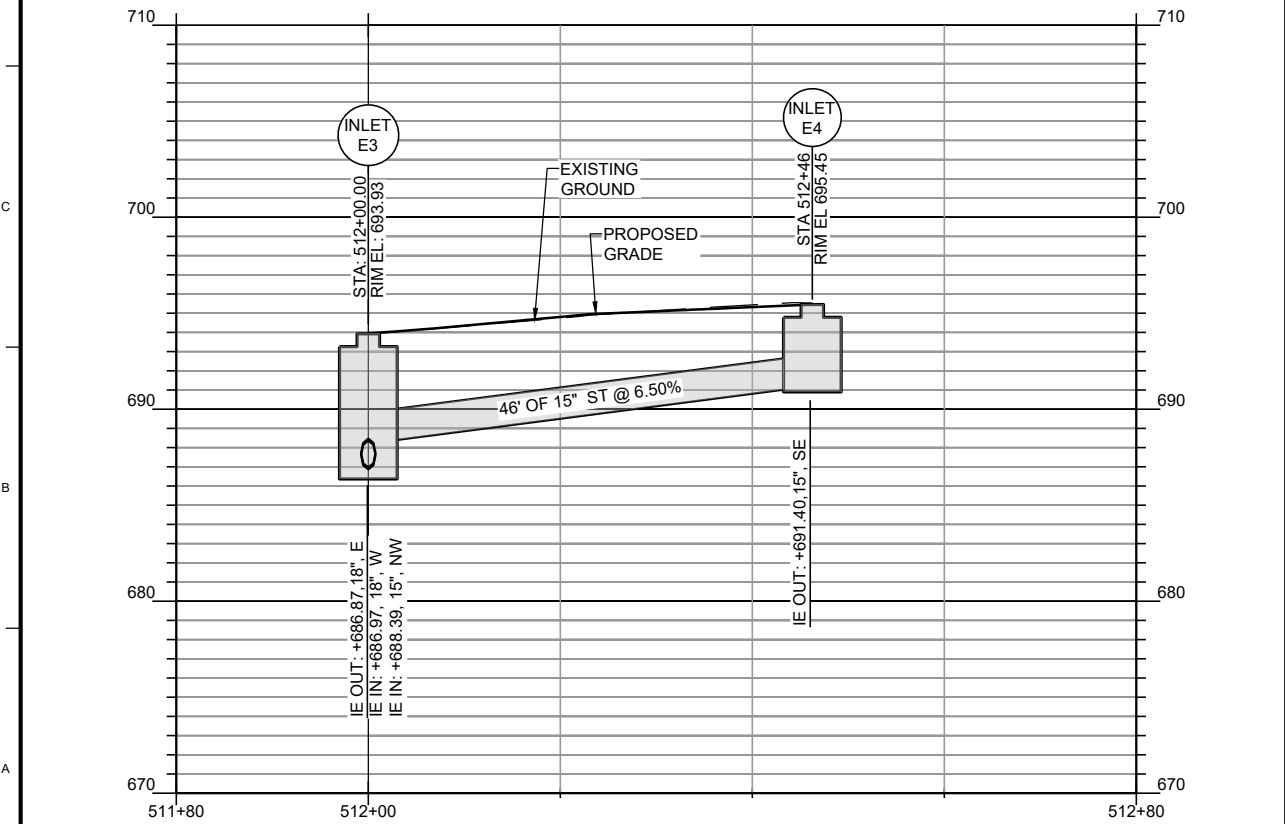
**STORM SEWER
STORM INLETS ON DEVITT ST
& NEAR HAGERMAN DR**

DESIGNED: KK HEIM	SCALE: 1" = 10'
DRAWN: GM REEVES	NO. 17660.60.30
CHECKED: ER SCHALLERT	REV.
APPROVED: JM BRADY	
APPROVED: KK HEIM	
DATE: MARCH 12, 2025	

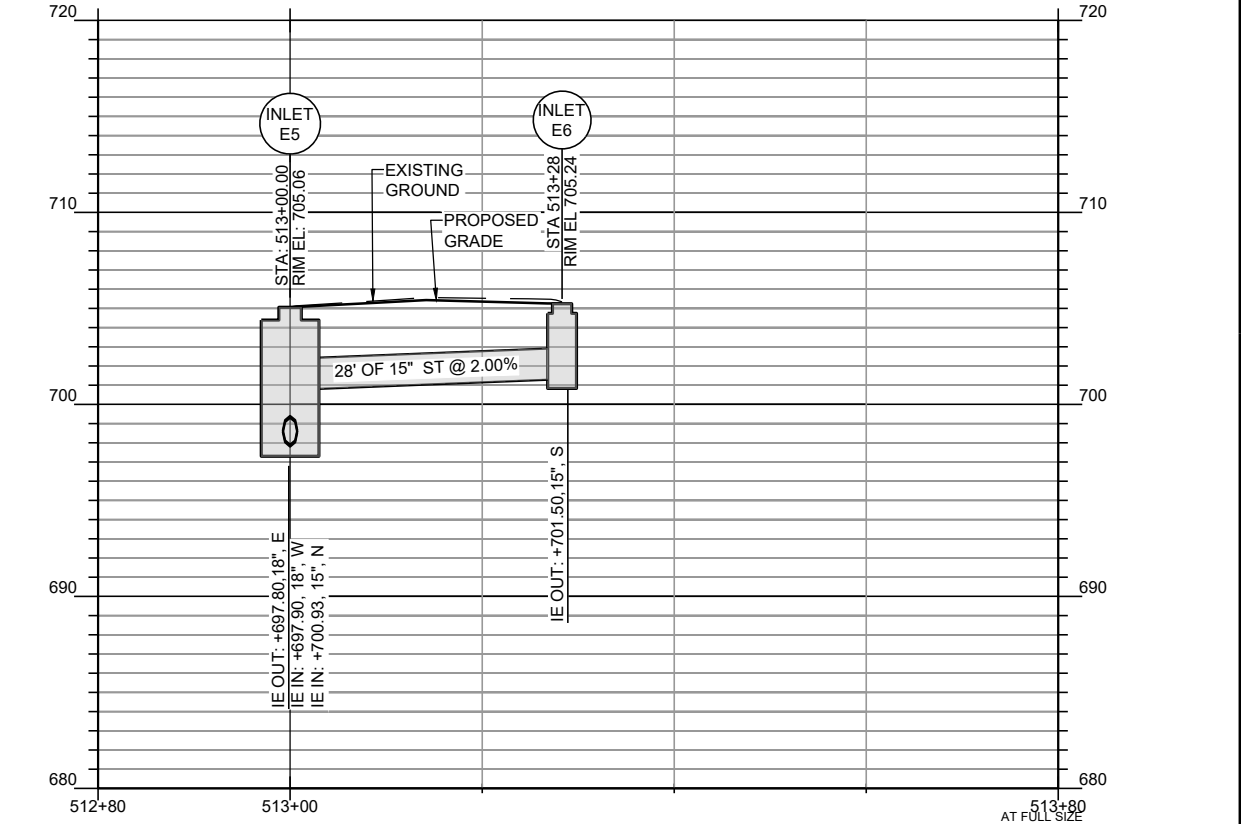
10 ©STANLEY CONSULTANTS



STORM INLETS PLAN AND PROFILE
NEAR 904 EISENHOWER ST
STA 512+00



STORM INLETS PLAN AND PROFILE
NEAR 924 EISENHOWER ST
STA 513+00



- NOTES
1. INSTALL NEW INLETS AT LOCATIONS SHOWN. POSITION INLET GRATES IN CURB LINE AS SHOWN ON SUDAS DETAILS.
 2. PROTECT EXISTING UTILITIES.

NO.	REVISIONS	DSGN	CHKD	APVD	DATE



Stanley Consultants INC.

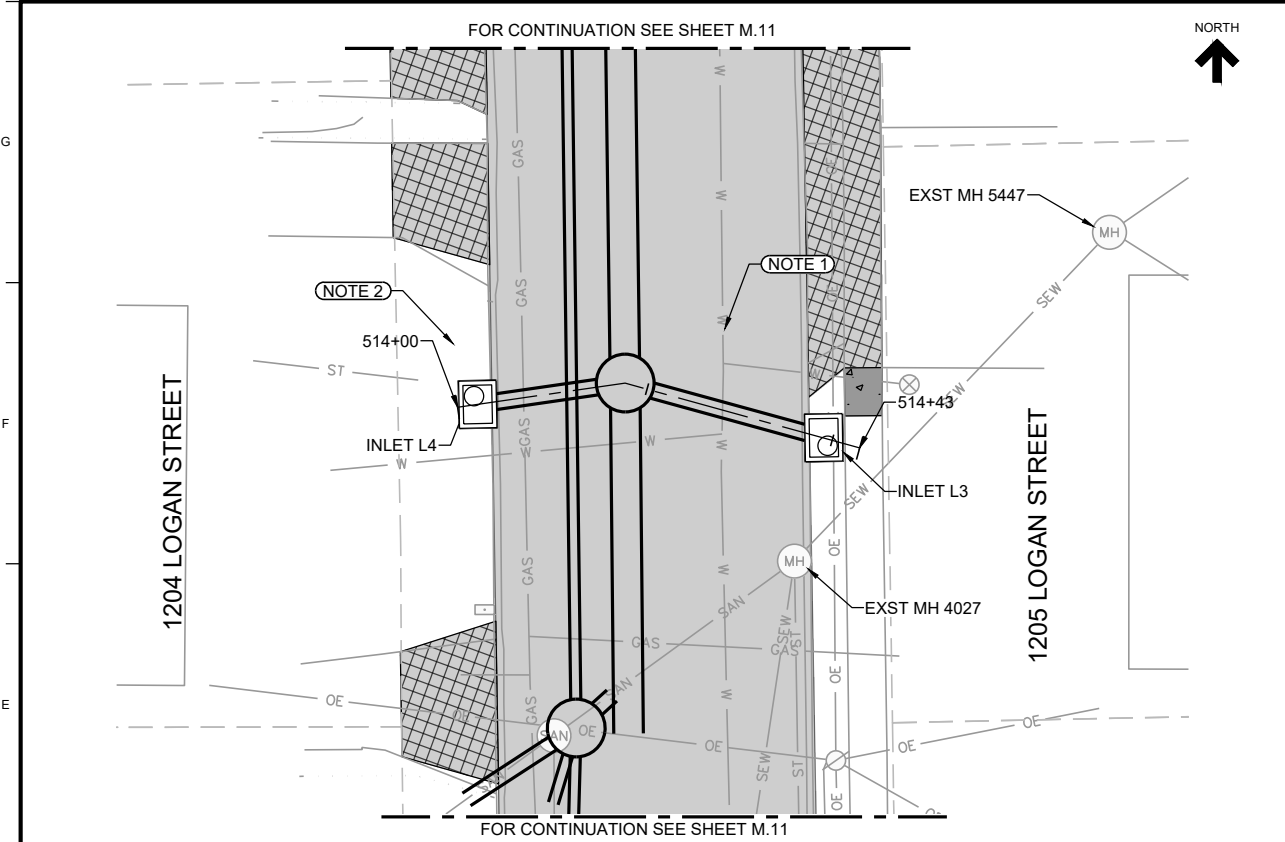
225 Iowa Avenue, Muscatine, Iowa 52761-3764
www.stanleyconsultants.com

CITY OF MUSCATINE - PHASE 6D
WEST HILL AREA SANITARY AND STORM SEWER SEPARATION
MUSCATINE, IOWA

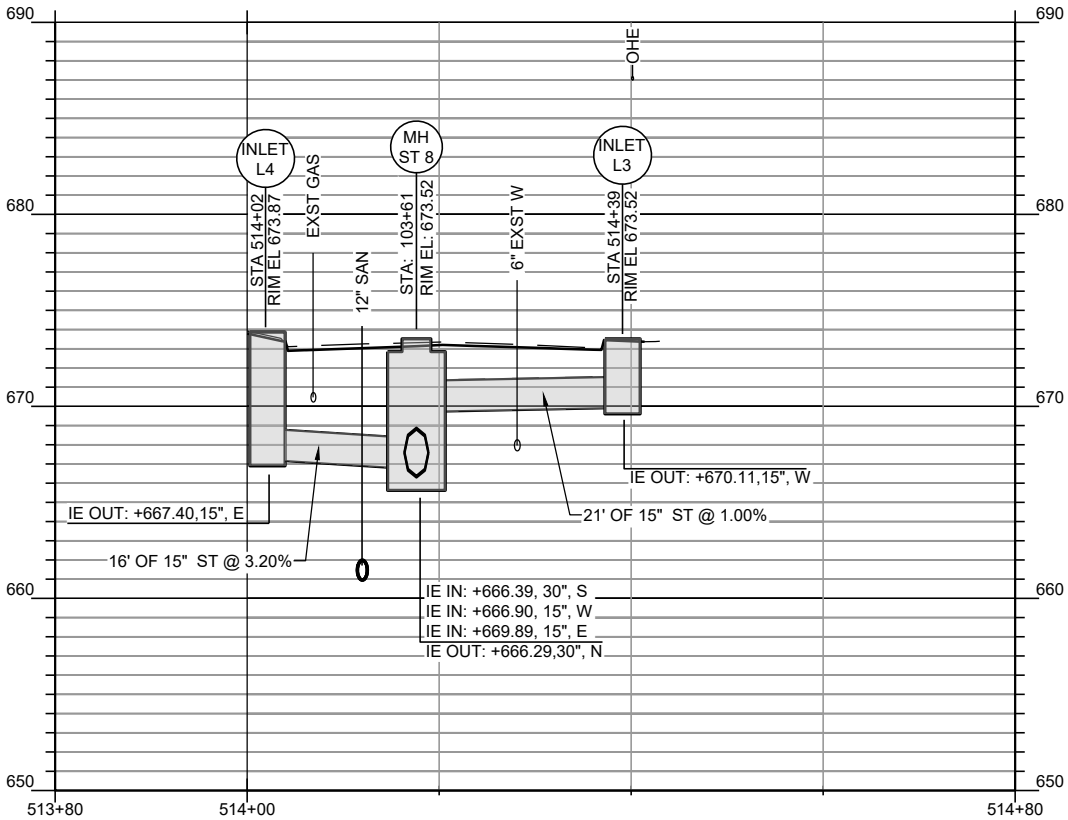
**STORM SEWER
STORM INLETS ON EISENHOWER ST**

DESIGNED: KK HEIM	SCALE: 1" = 10'
DRAWN: GM REEVES	NO. 17660.60.30
CHECKED: ER SCHALLERT	REV.
APPROVED: JM BRADY	M.17
APPROVED: KK HEIM	0
DATE: MARCH 12, 2025	

10 © STANLEY CONSULTANTS



STORM INLETS PLAN AND PROFILE
NEAR 1205 LOGAN ST
STA 514+00



- NOTES
1. POTHOLE AND DETERMINE ELEVATION OF EXISTING WATER LINE PRIOR TO INSTALLING INLETS. MAINTAIN CLEARANCE OF 18-INCHES BETWEEN STORM SEWER AND WATER LINE. SEE SHEET A.05 AND SUDAS SPECIFICATIONS FOR CLEARANCE REQUIREMENTS.

PROVIDE MINIMUM CLEARANCE ON STORM MANHOLE FOR PLACEMENT OF PIPE OPENING AS REQUIRED ON DETAIL SW-401. CONSIDER ELIMINATING ADJUSTMENT RINGS IF NECESSARY.
 2. INSTALL NEW INLETS AT LOCATIONS SHOWN. POSITION INLET STRUCTURE IN CURB LINE AS SHOWN ON SUDAS DETAILS.

NO.	REVISIONS	DSGN	CHKD	APVD	DATE

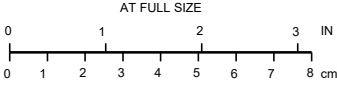


Stanley Consultants INC.
225 Iowa Avenue, Muscatine, Iowa 52761-3764
www.stanleyconsultants.com

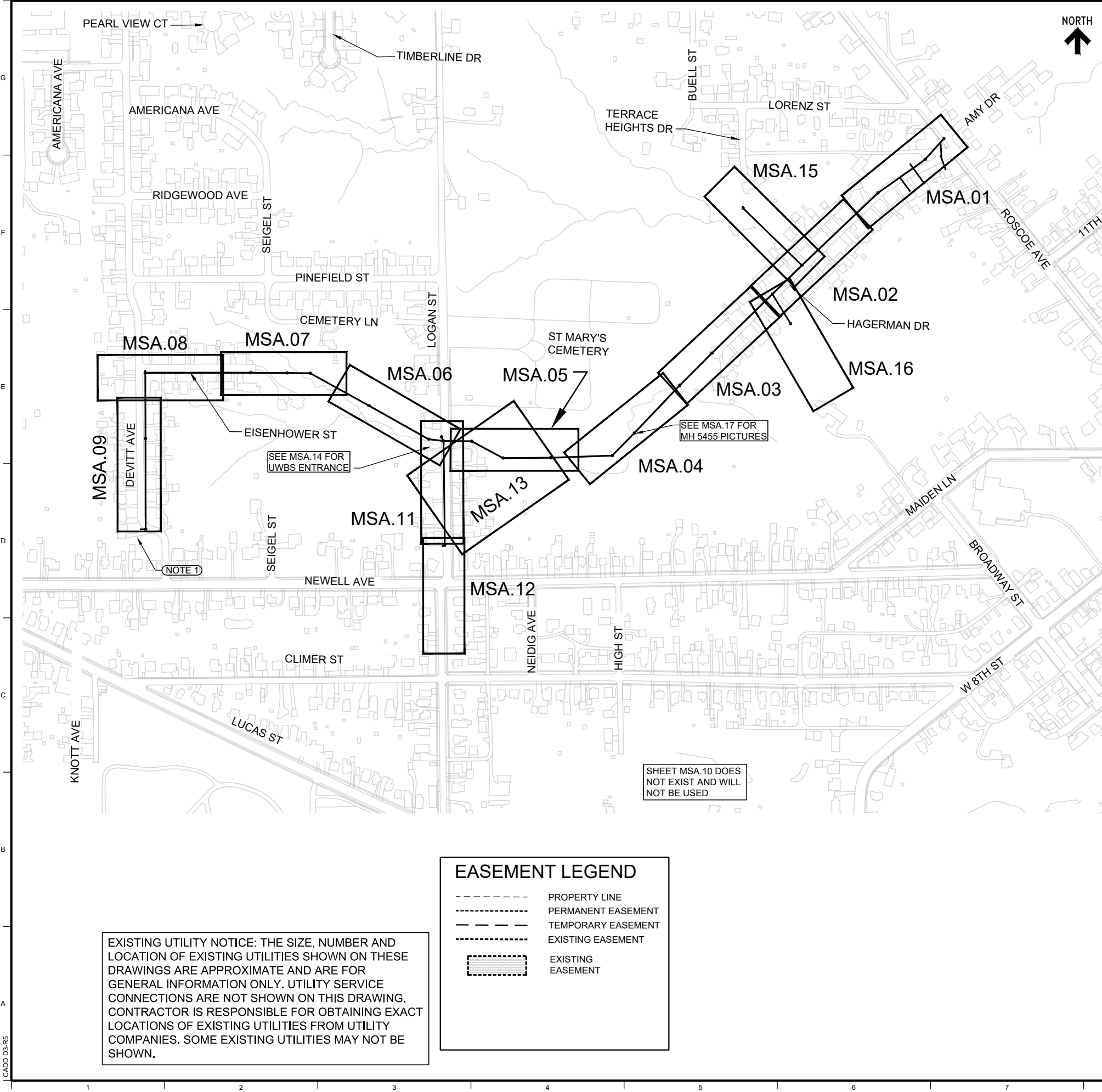
CITY OF MUSCATINE - PHASE 6D
WEST HILL AREA SANITARY AND STORM SEWER SEPARATION
MUSCATINE, IOWA

**STORM SEWER
INLETS ON LOGAN ST**

DESIGNED <u>KK HEIM</u>	SCALE: 1" = 10'
DRAWN <u>GM REEVES</u>	NO. 17660.60.30
CHECKED <u>ER SCHALLERT</u>	REV.
APPROVED <u>JM BRADY</u>	M.18
APPROVED <u>KK HEIM</u>	0
DATE <u>MARCH 12, 2025</u>	



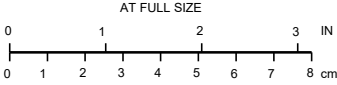
LOAD D3-R6



GENERAL NOTES

1. SHEET MSA.10 DOES NOT EXIST AND WILL NOT BE USED.
2. KEY PLAN DRAWING SHOWS PROPOSED SANITARY SEWERS SCHEMATICALLY. EXISTING UTILITIES ARE NOT SHOWN.
3. PROPOSED STORM SEWER IS SHOWN ON M SERIES DRAWINGS.
4. CONTRACTOR'S LICENSED LAND SURVEYOR SHALL PROVIDE RECORD DRAWING AS BUILT ELEVATIONS FOR ALL NEW AND EXISTING SEWERS, UTILITIES, AND SERVICE LINES ACCORDING TO SPECIFICATIONS.
5. SANITARY AND STORM SEWER PLAN DRAWINGS SHOW ONLY UTILITY SERVICES THAT WERE SURVEYED OR FIELD VERIFIED. NOT ALL SERVICES ARE SHOWN. CONTRACTOR SHALL LOCATE ALL SANITARY SERVICES ALONG PROPOSED SANITARY SEWER ALIGNMENT AND CONNECT TO NEW SANITARY SEWER. EACH PROPERTY OR RESIDENTIAL SERVICE SHALL BE ACCOUNTED FOR AND CONNECTED TO AN ACTIVE SANITARY TRUNK SEWER PRIOR TO CONTINUATION OF CONSTRUCTION PAST THAT PROPERTY. STORM CONNECTIONS SHALL NOT BE MADE TO NEW SANITARY SEWERS.
6. SANITARY SERVICE INFORMATION SHOWN IS SCHEMATIC AND MUST BE FIELD VERIFIED. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING IF SERVICES ARE LIVE AND WHETHER ITS STORM OR SANITARY. CONSULT CITY FOR CONFIRMATION ASSISTANCE.
7. CONTRACTOR SHALL STAY WITHIN CITY ROW LIMITS OR IDENTIFIED EASEMENTS AND CONSTRUCTION LIMITS AT ALL TIMES UNLESS OTHERWISE INDICATED. SURFACE REMOVAL AND REPLACEMENT LIMITS ON D SERIES DRAWINGS COINCIDE WITH CONSTRUCTION LIMITS. EASEMENT LIMITS ARE DENOTED ON SANITARY SEWER DRAWINGS. EASEMENT PLATS AND EXHIBITS WILL BE AVAILABLE TO CONTRACTOR'S SURVEYOR FOR USE DURING STAKING EASEMENTS. EASEMENT SHAPES CAN BE PROVIDED ELECTRONICALLY TO CONTRACTOR. STAKING OF EASEMENTS IS CONTRACTOR'S RESPONSIBILITY.
8. CONTRACTOR IS ENCOURAGED TO PERFORM EXPLORATORY TEST DIGS OR POTHOLING TO VERIFY DEPTH OF UTILITIES THAT COULD BE IN CONFLICT. COSTS TO PERFORM EXPLORATORY TEST DIGS OR POTHOLING ARE INCIDENTAL TO PIPE INSTALLATION UNLESS AUTHORIZED BY THE CITY AND SPECIFICALLY DEFINED AS AN ITEM TO BE PAID.
9. UNSUITABLE TRENCH EXCAVATED MATERIAL TO BE DISPOSED OF AT A LOCATION DETERMINED BY THE CONTRACTOR.
10. PRESERVE AND PROTECT TREES TO EXTENT POSSIBLE. COORDINATE WITH CITY ON EXTENT OF PROTECTION, DECISION TO REMOVE TREES, AND REMEDIAL ACTION IF DAMAGED. IF NECESSARY TRIM TREE BRANCHES BACK TO AVOID OVERHEAD CONFLICT WITH EXCAVATION MACHINERY TO PRESERVE TREES. SEE R SHEETS FOR LEGEND OF TREE REMOVALS.
11. SEE SUDAS SPECIFICATION SECTION 3010 FOR PIPE BACKFILL COMPACTION TESTING REQUIREMENTS AND FREQUENCY.
12. FIELD CONDITIONS DURING CONSTRUCTION MAY REQUIRE MODIFICATIONS TO PLAN LOCATION, PIPE SLOPES, OR ELEVATIONS OF PROPOSED GRAVITY SEWER. FIELD CHANGES MUST BE APPROVED BY CITY. SEWER CONSTRUCTION SHALL BE PERFORMED IN CONFORMANCE WITH DESIGN INTENT, CAPACITY CALCULATIONS, AND REGULATORY CRITERIA. IF NECESSARY, MODIFICATIONS TO PIPE SLOPE OR PIPE SIZE SHALL BE MADE CAREFULLY TO MAINTAIN MINIMUM DESIGN CAPACITY OF THE GRAVITY SEWERS. CONSULT DESIGN ENGINEER WHEN MODIFICATIONS REDUCE PIPE SIZE OR REDUCE/FLATTEN PIPE SLOPES TO CONFIRM PROJECT DESIGN CAPACITY IS MAINTAINED.
13. RIM ELEVATIONS OF MANHOLES ARE BASED ON PROPOSED GRADE ELEVATIONS WHERE PROPOSED GRADE ELEVATIONS ARE AVAILABLE. OTHER LOCATIONS SHALL MATCH EXISTING CONDITIONS. RIM ELEVATIONS SHALL BE ADJUSTED TO MATCH ELEVATIONS OF AS-PLACED PAVEMENT. SEE DETAIL A.05 FOR FLUSH CASTING INSTALLATION TECHNIQUE.
14. SEE C SERIES SHEETS FOR PIPE AND MANHOLES TABLES INCLUDING NORTHING AND EASTING COORDINATE OF CENTER OF MANHOLE STRUCTURE.
15. REFER TO SUDAS DETAILS APPLICABLE TO PROJECT SUMMARIZED ON SHEET A.02 TABLE AND ADDITIONAL PIPE DETAILS ON A SERIES SHEETS.
16. THE SIZE AND LOCATION OF THE UPPER WEST BRANCH SEWER ARE APPROXIMATED BASED ON BEST AVAILABLE INFORMATION. ACTUAL SIZE AND LOCATION MAY VARY FROM THAT SHOWN ON PLAN. CONTRACTOR IS REQUIRED TO CONFIRM ACTUAL LOCATION AND ELEVATION WITH EXPLORATORY EXCAVATION AT CRITICAL LOCATIONS.
17. SEE J SHEETS FOR TRAFFIC CONTROL AND STAGING PLANS.
18. WHEN EXISTING SANITARY SERVICES ARE CONNECTED TO NEW SANITARY SEWERS, REPLACE SERVICE TO A LOCATION OF 5' MAXIMUM BEYOND THE NEW BACK OF CURB WHEN SERVICE IS IN POOR CONDITION OR MATERIAL IS NOT PVC OR DIP. CONTRACTOR TO CONNECT NEW SERVICE PIPE TO AN EXISTING SERVICE PIPE IN SOUND CONDITION. ADDITIONAL SERVICE LINE REPLACEMENT BEYOND THE CURB GREATER THAN 5-FEET MUST BE APPROVED BY CITY.
19. SUBDRAIN IS NOT SHOWN ON PLAN DRAWINGS. SUBDRAIN IS REQUIRED UNDER PAVEMENT ACCORDING TO DETAIL ON SHEET B.01 AND ESTIMATE REFERENCE NOTES. SUBDRAIN SHALL BE OUTLET TO NEAREST INLET.
20. SEE C SHEETS FOR TABLES WITH INFORMATION ON MANHOLES AND INTAKES TO BE REMOVED; DROP CONNECTIONS; AND SANITARY SERVICE LINE LENGTH SUMMARY.
21. SEE WATER SHEETS FOR PROPOSED WATER WORK UNDER THIS CONTRACT.

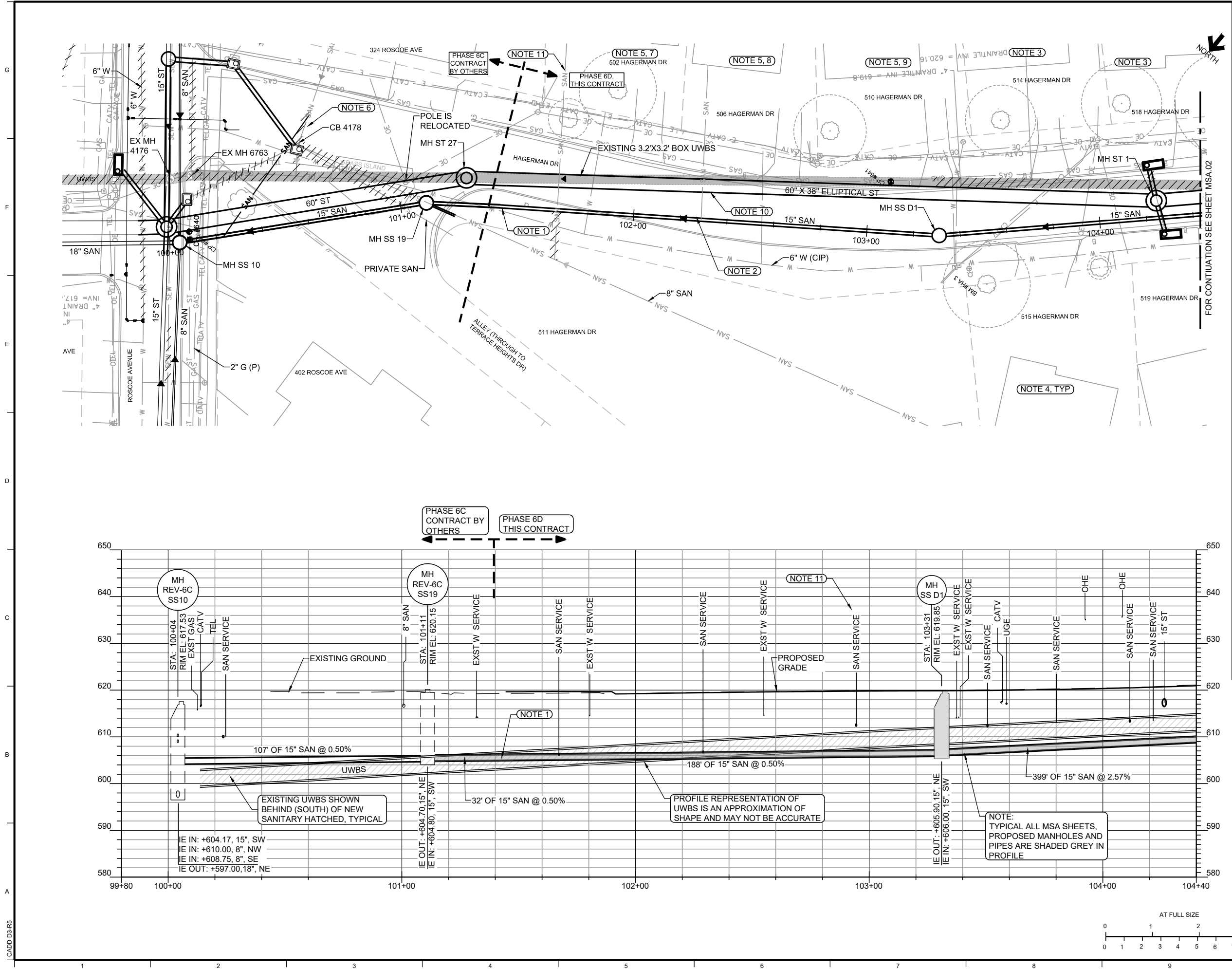
NO.	REVISIONS	DSGN	CHKD	APVD	DATE
 Stanley Consultants inc. 225 Iowa Avenue, Muscatine, Iowa 52761-3764 www.stanleyconsultants.com					
CITY OF MUSCATINE - PHASE 6D WEST HILL AREA SANITARY AND STORM SEWER SEPARATION MUSCATINE, IOWA					
OVERALL SANITARY KEY PLAN					
DESIGNED <u>KK HEIM</u>		SCALE: AS NOTED			
DRAWN <u>GM REEVES</u>		NO. 17660.60.30		REV.	
CHECKED <u>ER SCHALLERT</u>					
APPROVED <u>JM BRADY</u>					
APPROVED <u>KK HEIM</u>					
DATE <u>MARCH 12, 2025</u>					
MSA.00		0			



EXISTING UTILITY NOTICE: THE SIZE, NUMBER AND LOCATION OF EXISTING UTILITIES SHOWN ON THESE DRAWINGS ARE APPROXIMATE AND ARE FOR GENERAL INFORMATION ONLY. UTILITY SERVICE CONNECTIONS ARE NOT SHOWN ON THIS DRAWING. CONTRACTOR IS RESPONSIBLE FOR OBTAINING EXACT LOCATIONS OF EXISTING UTILITIES FROM UTILITY COMPANIES. SOME EXISTING UTILITIES MAY NOT BE SHOWN.

EASEMENT LEGEND

---	PROPERTY LINE
-----	PERMANENT EASEMENT
- - - -	TEMPORARY EASEMENT
.....	EXISTING EASEMENT
[Hatched Box]	EXISTING EASEMENT



NOTES

1. LOCATE PIPE END OF 15-INCH SANITARY INSTALLED IN PHASE 6C BY OTHERS. REMOVE PIPE CAP/PLUG AND CONTINUE PIPE INSTALLATION. CAPPED PIPE IS LOCATED APPROXIMATELY 32' FROM MANHOLE.
2. INSTALL NEW SANITARY ON ALIGNMENT SHOWN. CONNECT ALL ACTIVE SANITARY SERVICES CONNECTED TO EXISTING UWBS TO NEW SANITARY. PLUG ALL OPEN PIPE ENDS OF INACTIVE SERVICES AND ABANDON. FIELD VERIFY WHETHER SERVICE IS 'LIVE' AND WHETHER IT IS STORM OR SANITARY.
3. LOCATE ALL EXISTING SANITARY SERVICES ON SOUTH SIDE OF HAGERMAN DRIVE AND CONNECT TO NEW SANITARY SEWER ON NORTH SIDE OF HAGERMAN DRIVE. PLUG EXISTING SERVICE CONNECTIONS AT UWBS WITH CONCRETE. NEW SERVICES MAY REQUIRE INSTALLATION UNDER UWBS USING TRENCHLESS TECHNOLOGIES. SERVICES FOR 514 AND 518 HAGERMAN ARE ANTICIPATED NEEDING TO BE BORED UNDER THE EXISTING UWBS TO CONNECT TO NEW SANITARY ON THE NORTH.
4. INTERCEPT ALL NORTH SIDE SANITARY SERVICES ON HAGERMAN DRIVE THAT CURRENTLY CONNECT TO EXISTING UWBS AND CONNECT TO NEW SANITARY ON THE NORTH. PLUG SERVICE CONNECTION TO UWBS WITH CONCRETE AT UWBS AND WHERE SERVICE IS INTERCEPTED IN TRENCH.
5. CONFIRM EXISTING SAN SERVICE FOR 502, 506, 510 HAGERMAN DRIVE CAN BE PICKED UP AND CONNECTED TO NEW SANITARY ON NORTH SIDE OF EXISTING UWBS BY GOING OVER THE TOP OF UWBS.
6. EXISTING SERVICE FOR 324 ROSCOE GOES TO DEEP EXISTING INLET CB 4178 AND WILL BE PICKED UP IN PHASE 6C.
7. EXISTING 502 ROSCOE AVE SERVICE CONNECTS TO 8-INCH SANITARY NORTH OF THE UWBS THAT DISCHARGES TO EXISTING INLET CB4178. INTERCEPT SERVICE LINE FROM 502 AND CONNECT TO NEW SANITARY IN HAGERMAN.
8. EXISTING 506 ROSCOE AVE SERVICE GOES OVER EXISTING UWBS AND CONNECTS TO UWBS ON NORTH SIDE OF STRUCTURE.
9. EXISTING 510 ROSCOE SERVICE JOINS SERVICE LINE OF 514 ROSCOE AS A SINGLE SERVICE LINE (STACKED) CONNECTED TO UWBS. FIND SERVICES AND ELIMINATE STACKED SERVICE WITH INDIVIDUAL NEW CONNECTIONS TO NEW SANITARY MAINLINE SEWER.
10. PERFORM EXPLORATORY EXCAVATION TO DETERMINE BOTTOM OF UWBS ELEVATION PRIOR TO BEGINNING WORK FOR TRENCHLESS CONSTRUCTION OF SANITARY SERVICES. ELEVATIONS SHALL BE COLLECTED BY A SURVEYOR AND PROVIDED TO CITY AND DESIGN ENGINEER AT LEAST 2 WEEKS PRIOR TO BEGINNING HAGERMAN DRIVE SANITARY.
11. EXISTING SERVICES ARE GENERALLY NOT SHOWN ON ALL PLAN DRAWINGS. LOCATE EXISTING SERVICE AND CONNECT TO NEW SANITARY. ESTIMATED EXISTING SANITARY SERVICE LINE ELEVATIONS ARE SHOWN IN PROFILE THIS DRAWING.

NO.	REVISIONS	DSGN	CHKD	APVD	DATE



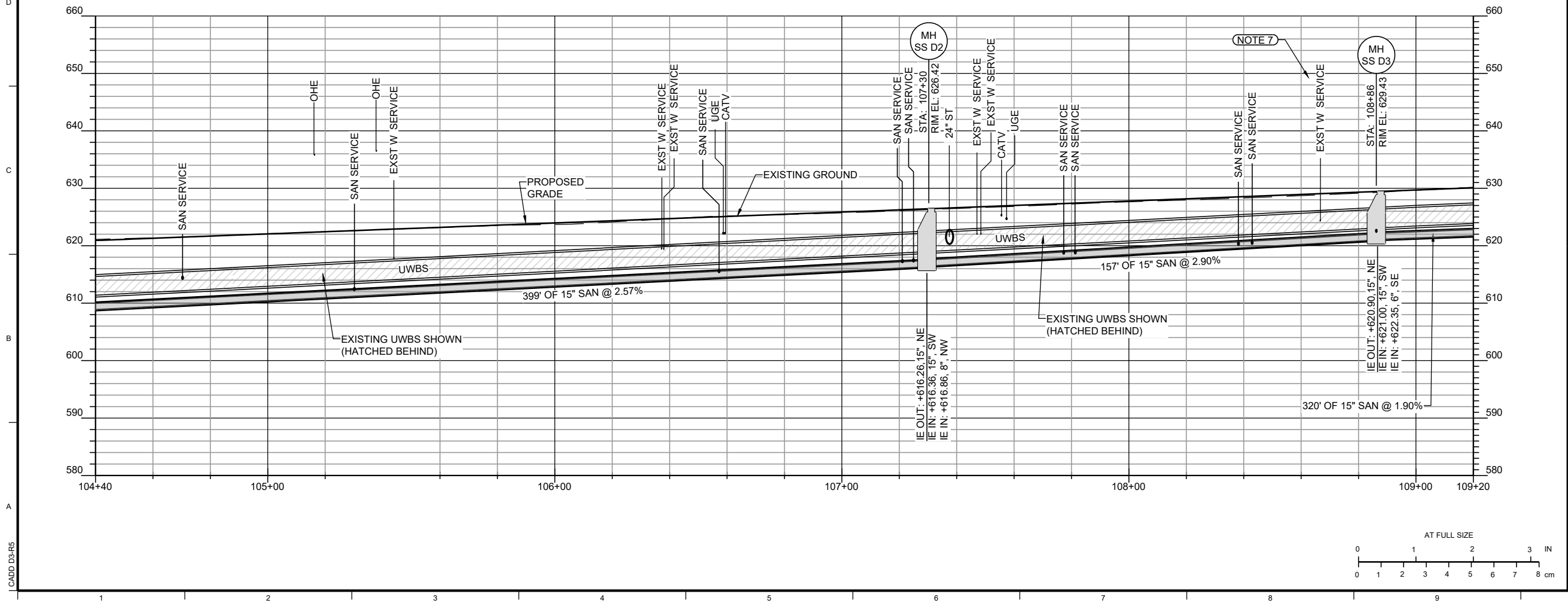
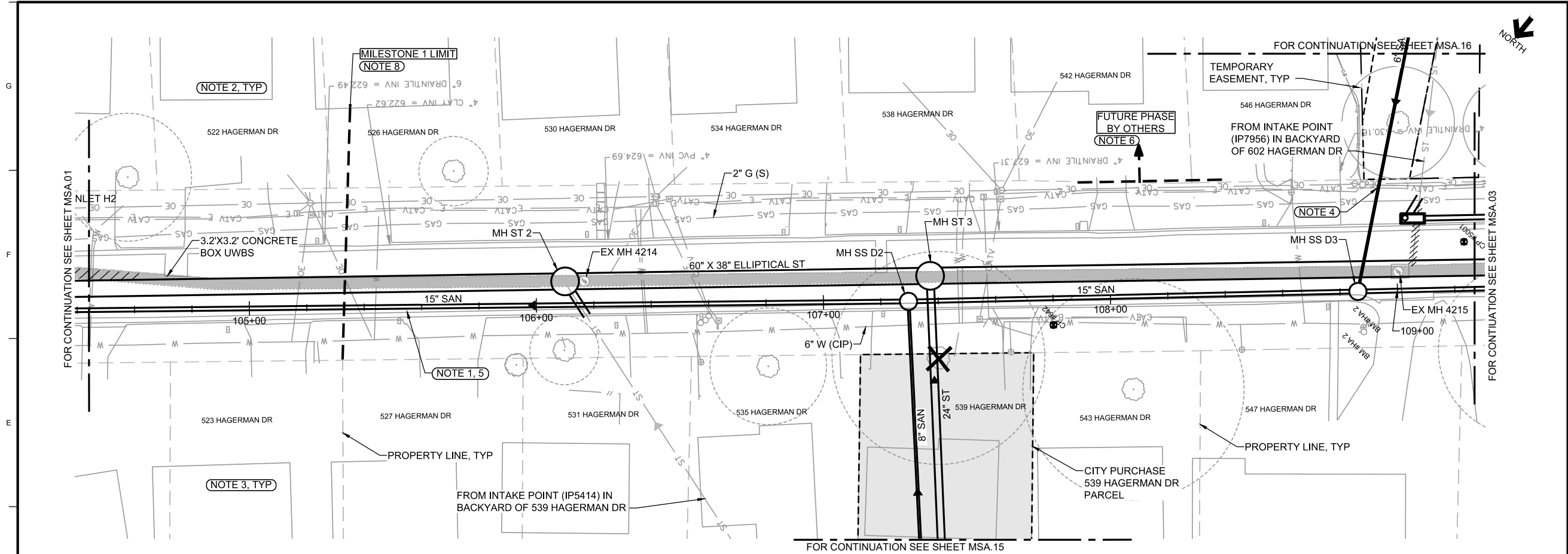
Stanley Consultants Inc.

225 Iowa Avenue, Muscatine, Iowa 52761-3764
www.stanleyconsultants.com

CITY OF MUSCATINE - PHASE 6D
WEST HILL AREA SANITARY AND STORM SEWER SEPARATION
MUSCATINE, IOWA

**SANITARY SEWER
HAGERMAN DRIVE
SHEET 1**

DESIGNED	KK HEIM	SCALE: 1" = 20'
DRAWN	GM REEVES	NO. 17660.60.30
CHECKED	ER SCHALLERT	REV.
APPROVED	JM BRADY	MSA.01
APPROVED	KK HEIM	0
DATE	MARCH 12, 2025	



NOTES

- INSTALL NEW SANITARY ON ALIGNMENT SHOWN. CONNECT ALL ACTIVE SANITARY SERVICES CONNECTED TO EXISTING UWBS TO NEW SANITARY. PLUG ALL OPEN PIPE ENDS OF INACTIVE SERVICES AND ABANDON. FIELD VERIFY WHETHER SERVICE IS 'LIVE' AND WHETHER IT IS STORM OR SANITARY.
- LOCATE ALL EXISTING SANITARY SERVICES ON SOUTH SIDE OF HAGERMAN DRIVE AND CONNECT TO NEW SANITARY SEWER ON NORTH SIDE OF HAGERMAN DRIVE. PLUG EXISTING SERVICE CONNECTIONS TO UWBS. SERVICES MAY REQUIRE INSTALLATION UNDER UWBS USING TRENCHLESS TECHNOLOGIES.
- INTERCEPT ALL NORTH SIDE SANITARY SERVICES ON HAGERMAN DRIVE THAT CURRENTLY CONNECT TO EXISTING UWBS AND CONNECT TO NEW SANITARY ON THE NORTH.
- INSTALL SERVICE LINE STUB FOR 702 MAIDEN LANE TO RIGHT OF WAY LINE. CAP SERVICE LINE WITH WATERTIGHT CAP AND INSTALL BURIED MARKER TO DETECT LOCATION OF SERVICE LINE IN THE FUTURE. IN THE FUTURE, SERVICE LINE WILL BE EXTENDED ACROSS PRIVATE PROPERTY AND DISCONNECTED FROM THE STORM INTAKE.
- PERFORM EXPLORATORY EXCAVATION TO DETERMINE BOTTOM OF UWBS ELEVATION PRIOR TO BEGINNING WORK FOR TRENCHLESS CONSTRUCTION OF SANITARY SERVICES. ELEVATIONS SHALL BE COLLECTED BY A SURVEYOR AND PROVIDED TO CITY AND DESIGN ENGINEER AT LEAST 2 WEEKS PRIOR TO BEGINNING HAGERMAN DRIVE SANITARY.
- WORK IN THIS PHASE 6D MUST STOP AT THE RIGHT OF WAY LINE. DO NOT PERFORM ANY EXCAVATION OR GROUND DISTURBING WORK ON PRIVATE PROPERTY FOR NEW SERVICE LINE.
- PROTECT EXISTING WATER AND GAS SERVICES. RELOCATE WATER SERVICES IF NEEDED ACCORDING TO DETAIL ON SHEET A.05.
- INSTALL PIPE AND MAINLINE PAVING TO MILESTONE 1 LIMIT, BEYOND THE DRIVEWAYS FOR 522 AND 523 HAGERMAN DRIVE BY THE MILESTONE 1 CONTRACT DATE.

NO.	REVISIONS	DSGN	CHKD	APVD	DATE

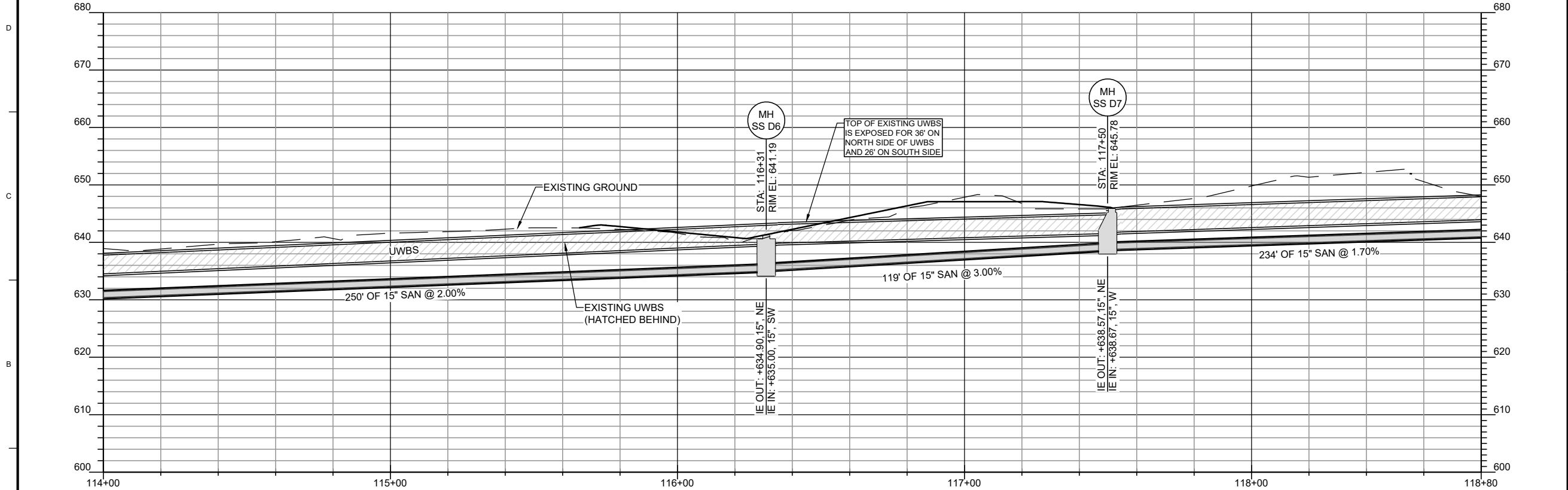
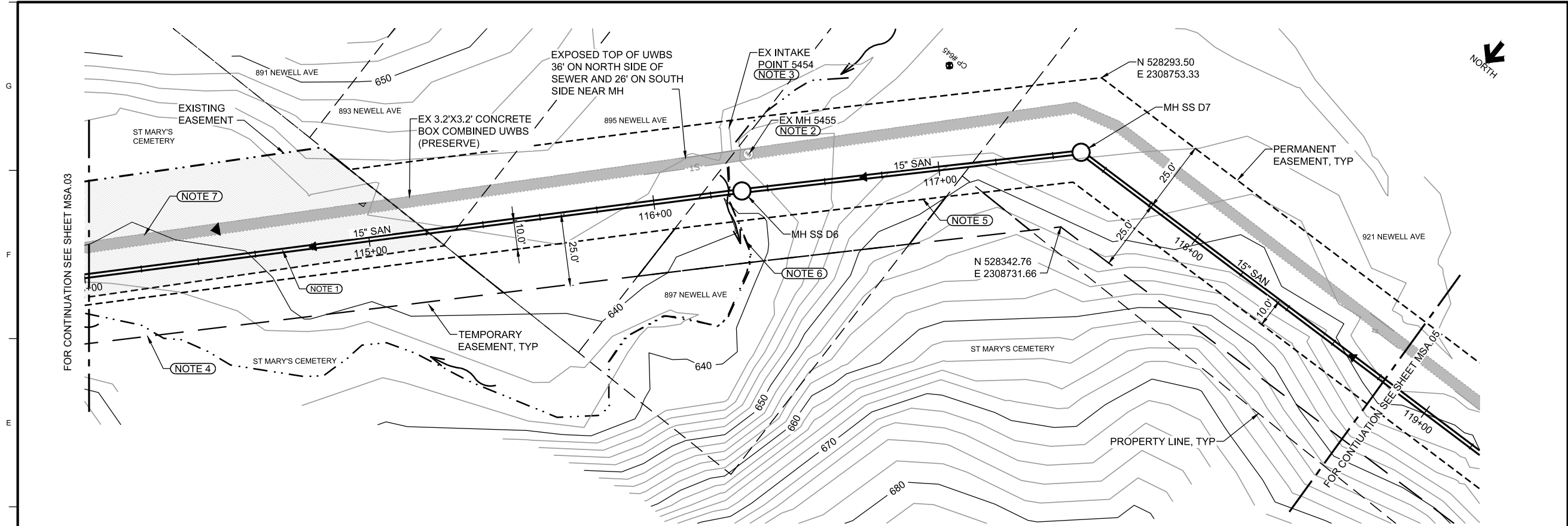
225 Iowa Avenue, Muscatine, Iowa 52761-3764
www.stanleyconsultants.com

CITY OF MUSCATINE - PHASE 6D
WEST HILL AREA SANITARY AND STORM SEWER SEPARATION
MUSCATINE, IOWA

SANITARY SEWER HAGERMAN DRIVE SHEET 2

DESIGNED	KK HEIM	SCALE:	1" = 20'
DRAWN	GM REEVES	NO.	17660.60.30
CHECKED	ER SCHALLERT	REV.	
APPROVED	JM BRADY	MSA.02	0
DATE	MARCH 12, 2025		

LOAD D3-R6



NOTES

1. INSTALL NEW SANITARY ON ALIGNMENT SHOWN. CONNECT ALL ACTIVE SANITARY SERVICES TO NEW SANITARY. PLUG ALL OPEN PIPE ENDS OF INACTIVE SERVICES AND ABANDON. FIELD VERIFY WHETHER SERVICE IS 'LIVE' AND WHETHER IT IS STORM OR SANITARY.
2. REMOVE BRICK RISER SECTION AND CASTING FROM MH 5455. PREVENT BRICKS FROM FALLING INTO SEWER. INSTALL NEW CASTING TO TOP OF EXISTING UWBS. CONTRACTOR TO MEASURE SIZE OF OPENING PRIOR TO ORDERING CASTING. CASTING SHALL HAVE A BOLT DOWN LID. SECURE CASTING FRAME TO TOP OF UWBS BY ANCHORING INTO CONCRETE STRUCTURE. SEE MSA.17 FOR PHOTOS OF EXISTING MH.
3. REPAIR EXISTING PIPE AND INTAKE POINT 5454 INTO UWBS. SEE MSA.17 FOR PHOTOS OF BROKEN PIPE. INSTALL 1 OR 2 PIPE SEGMENTS OF RCP WITH APRON AND GUARD.
4. CONSTRUCTION TO STAY WITHIN EASEMENTS SHOWN. CONTRACTOR TO STAKE EASEMENTS AND CONSTRUCTION LIMITS.
5. PERFORM ALL CONSTRUCTION TO PROTECT EXISTING SLOPES FROM POTENTIAL EROSION AND SLOPE DESTABILIZATION. MINIMIZE DURATION AND LENGTH OF PIPE EXCAVATION TO THAT NECESSARY FOR PIPE INSTALLATION WITH TRENCH PROTECTION. SUBMIT CERTIFIED EXCAVATION PLAN AS REQUIRED IN ESTIMATE REFERENCE NOTES.
6. PROTECT EXISTING DRAINAGE PATHS AND RESTORE TO EXISTING CONTOURS IF DISTURBED.
7. PROTECT EXISTING UWBS AND AVOID CONTINUOUS CONSTRUCTION TRAFFIC ON TOP OF EXISTING STRUCTURE.

NO.	REVISIONS	DSGN	CHKD	APVD	DATE



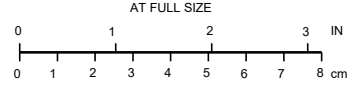
Stanley Consultants inc.

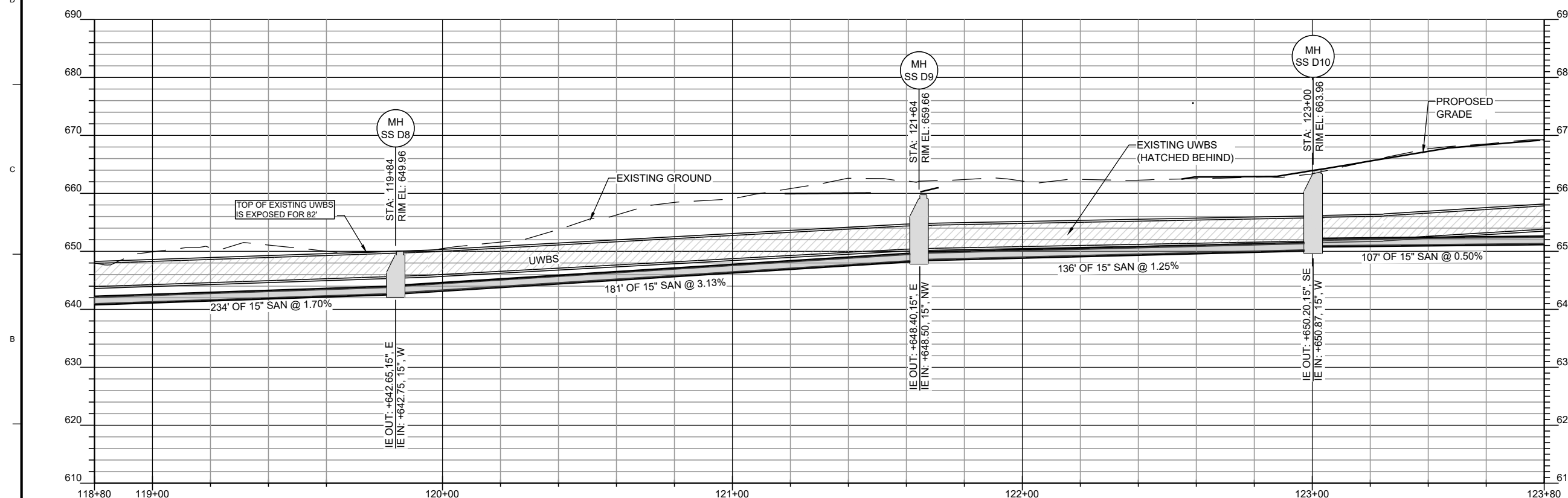
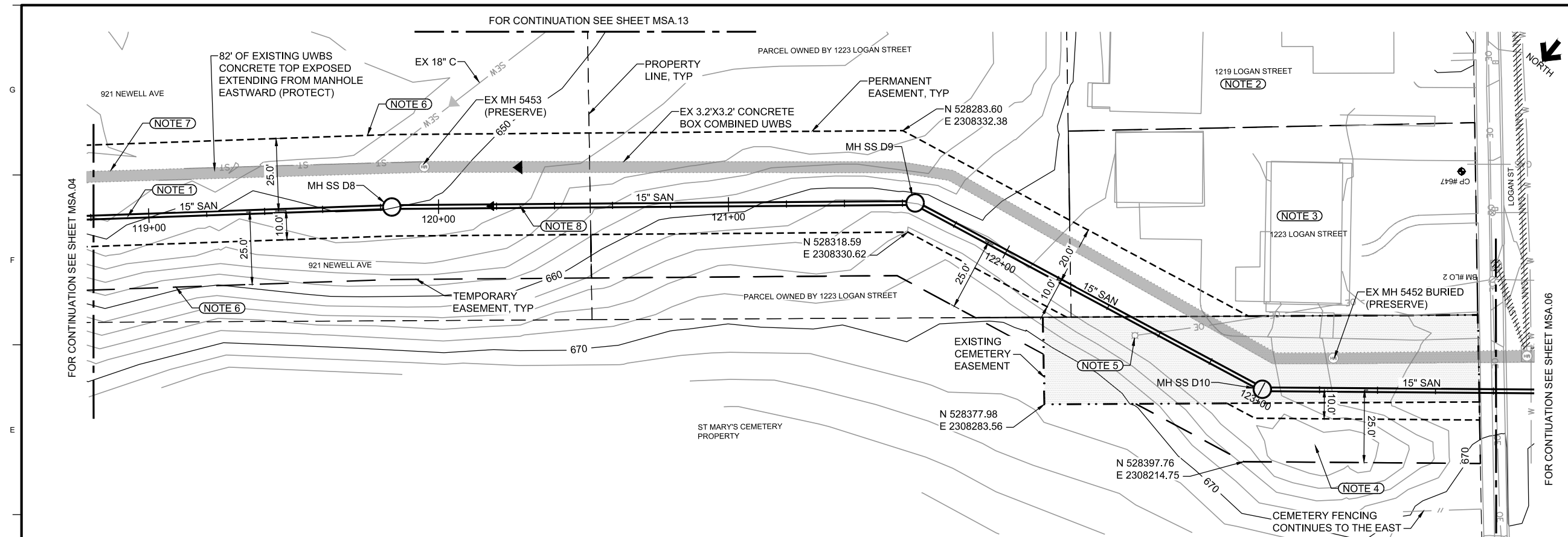
225 Iowa Avenue, Muscatine, Iowa 52761-3764
www.stanleyconsultants.com

CITY OF MUSCATINE - PHASE 6D
WEST HILL AREA SANITARY AND STORM SEWER SEPARATION
MUSCATINE, IOWA

SANITARY SEWER
HAGERMAN DRIVE
SHEET 4

DESIGNED <u>KK HEIM</u>	SCALE: 1" = 20'	NO. 17660.60.30	REV.
DRAWN <u>GM REEVES</u>			
CHECKED <u>ER SCHALLERT</u>			
APPROVED <u>JM BRADY</u>			
DATE <u>MARCH 12, 2025</u>			
MSA.04		0	





NOTES

1. INSTALL NEW SANITARY ON ALIGNMENT SHOWN. CONNECT ALL ACTIVE SANITARY SERVICES CONNECTED TO EXISTING UWBS TO NEW SANITARY. PLUG ALL OPEN PIPE ENDS OF INACTIVE SERVICES AND ABANDON. FIELD VERIFY WHETHER SERVICE IS 'LIVE' AND WHETHER IT IS STORM OR SANITARY.
2. SANITARY SERVICE FOR 1219 LOGAN STREET IS KNOWN TO CONNECT TO EXISTING LOGAN SANITARY.
3. EXISTING HOUSE SANITARY SERVICE FOR 1223 LOGAN ST. IS KNOWN TO CONNECT TO EXISTING UWBS. NEW SERVICE SHALL BE CONNECTED TO NEW SANITARY ON LOGAN. INTERNAL OR EXTERNAL HOME RE-PLUMBING MAY BE NEEDED. IF CONNECTION TO LOGAN ST IS NOT FEASIBLE, CONNECT TO NEW SANITARY NORTH OF EXISTING UWBS BY TRENCHLESS CONSTRUCTION UNDER UWBS.
4. EXISTING LOW AREA FILLED WITH TREES AND DEBRIS. REMOVE DEBRIS. RESTORE AREA TO EXISTING CONTOURS.
5. COORDINATE WITH MPW TO TEMPORARILY REMOVE LIGHTING POLE AND REPLACE. POLE IS ON PRIVATE PROPERTY IN EXISTING EASEMENT.
6. CONSTRUCTION TO STAY WITHIN EASEMENTS SHOWN. CONTRACTOR TO STAKE EASEMENTS AND CONSTRUCTION LIMITS.
7. PROTECT EXISTING UWBS AND AVOID CONTINUOUS CONSTRUCTION TRAFFIC ON TOP OF EXISTING STRUCTURE.
8. PERFORM ALL CONSTRUCTION TO PROTECT EXISTING SLOPES FROM POTENTIAL EROSION AND SLOPE DESTABILIZATION. MINIMIZE DURATION AND LENGTH OF PIPE EXCAVATION TO THAT NECESSARY FOR PIPE INSTALLATION WITH TRENCH PROTECTION. SUBMIT CERTIFIED EXCAVATION PLAN AS REQUIRED IN ESTIMATE REFERENCE NOTES.

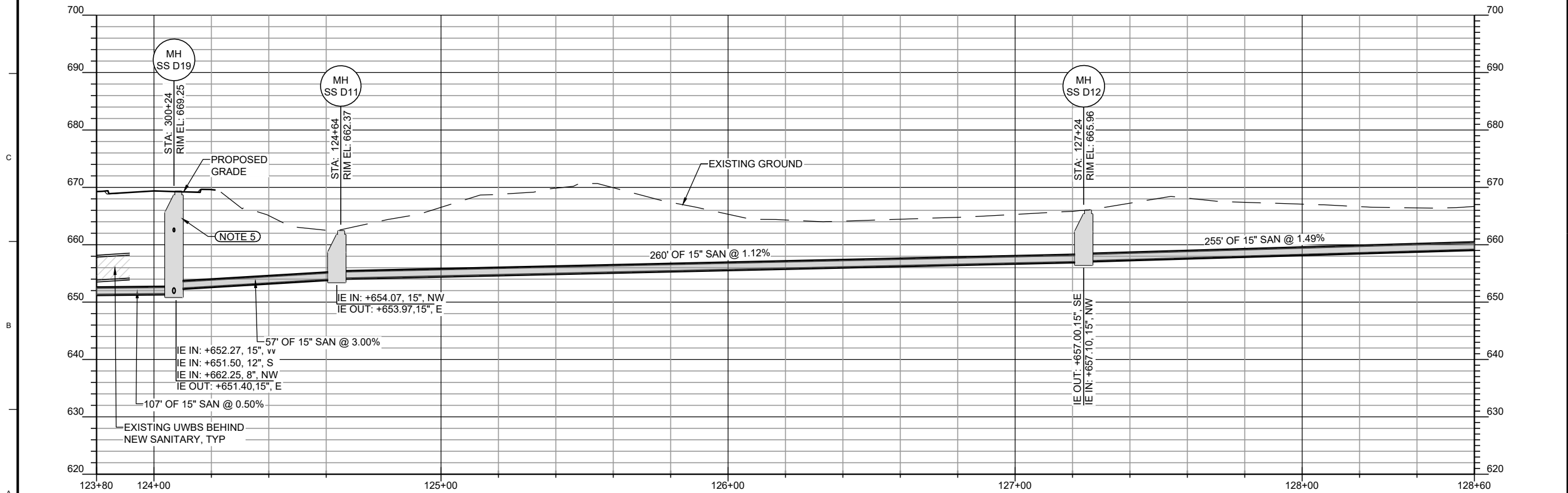
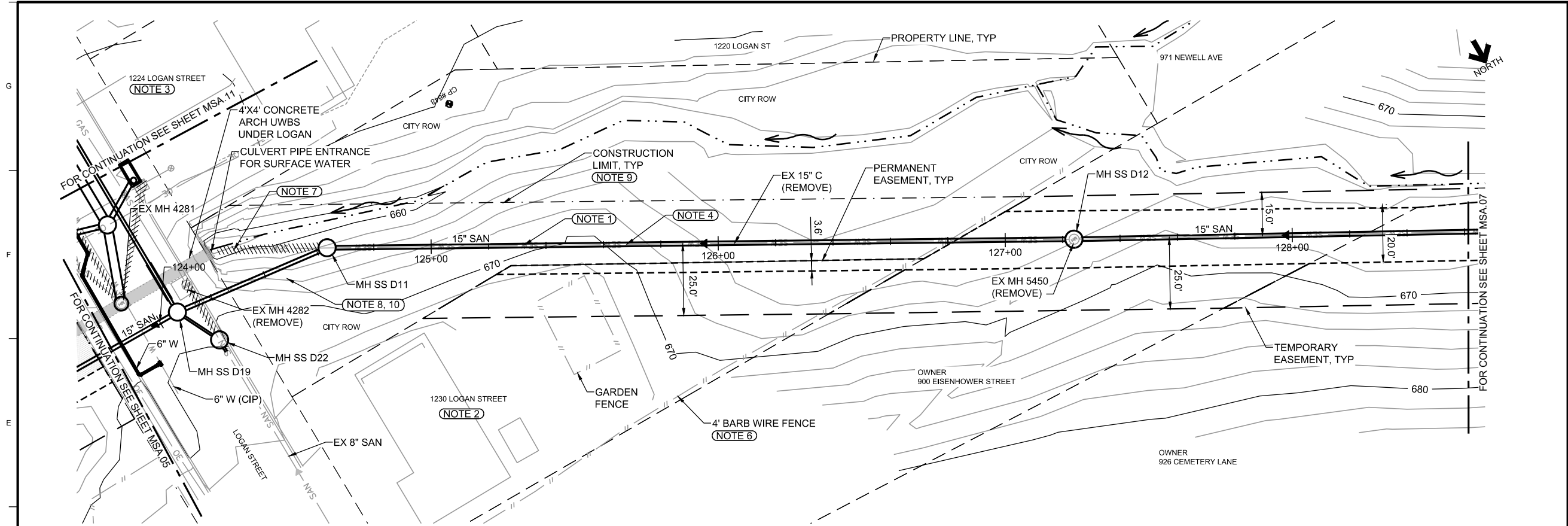
NO.	REVISIONS	DSGN	CHKD	APVD	DATE

225 Iowa Avenue, Muscatine, Iowa 52761-3764
www.stanleyconsultants.com

CITY OF MUSCATINE - PHASE 6D
WEST HILL AREA SANITARY AND STORM SEWER SEPARATION
MUSCATINE, IOWA

**SANITARY SEWER
HAGERMAN DRIVE
SHEET 5**

DESIGNED	KK HEIM	SCALE: 1" = 20'
DRAWN	GM REEVES	NO. 17660.60.30
CHECKED	ER SCHALLERT	REV.
APPROVED	JM BRADY	MSA.05
APPROVED	KK HEIM	0
DATE	MARCH 12, 2025	



NOTES

1. INSTALL NEW SANITARY ON ALIGNMENT OF EXISTING COMBINED AS SHOWN. REMOVE EXISTING COMBINED SEWER AND MANHOLES AS WORK PROGRESSES AND CONNECT ALL ACTIVE SANITARY SERVICES TO NEW SANITARY. PLUG ALL OPEN PIPE ENDS OF INACTIVE PIPES. FIELD VERIFY WHETHER PIPE IS 'LIVE' AND WHETHER IT IS STORM OR SANITARY.
2. EXISTING SANITARY SERVICE LINE FOR HOUSE 1230 LOGAN STREET CURRENTLY CONNECTS TO EXISTING 15" C TOWARD CREEK. INTERCEPT SERVICE LINE AND CONNECT TO NEW SANITARY SEWER.
3. EXISTING SANITARY SERVICE LINE FOR HOUSE 1224 LOGAN STREET CURRENTLY CONNECTS TO EXISTING SANITARY IN LOGAN STREET.
4. WHEN NEW SANITARY IS CONSTRUCTED ON ALIGNMENT OF EXISTING COMBINED, UPSTREAM FLOWS INCLUDING STORM AND SANITARY SEWAGE FROM EISENHOWER STREET AND DEVITT AVENUE WILL BE INTERCEPTED IN NEW SANITARY PIPE. MAINTAIN POSITIVE DRAINAGE OF UPSTREAM PIPED FLOWS DURING CONSTRUCTION OF NEW SEWER.
5. INSTALL INTERNAL DROP CONNECTION IN ACCORDANCE WITH DETAIL ON SHEET A.04.
6. REMOVE AND REPLACE FENCE TO MATCH EXISTING MATERIAL AND LOCATION.
7. SEE SHEET MSA.14 FOR ABANDONMENT AND REMOVAL OF EXISTING COMBINED SEWER WITHIN EXISTING UWBS. PROTECT EXISTING UWBS.
8. RESTORE DISTURBED AREA TO MATCH EXISTING CONTOURS. USE SLOPE PROTECTION LIKE RIPRAP OR EROSION TURF MATTING.
9. STAY IN LIMITS OF CONSTRUCTION LIMITS AND EASEMENTS. STAKE LIMITS TO ESTABLISH BOUNDARIES.
10. PERFORM ALL CONSTRUCTION TO PROTECT EXISTING SLOPES FROM POTENTIAL EROSION AND SLOPE DESTABILIZATION. MINIMIZE DURATION AND LENGTH OF PIPE EXCAVATION TO THAT NECESSARY FOR PIPE INSTALLATION WITH TRENCH PROTECTION. SUBMIT CERTIFIED EXCAVATION PLAN AS REQUIRED IN ESTIMATE REFERENCE NOTES.

NO.	REVISIONS	DSGN	CHKD	APVD	DATE



Stanley Consultants Inc.

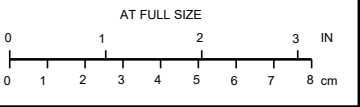
225 Iowa Avenue, Muscatine, Iowa 52761-3764
www.stanleyconsultants.com

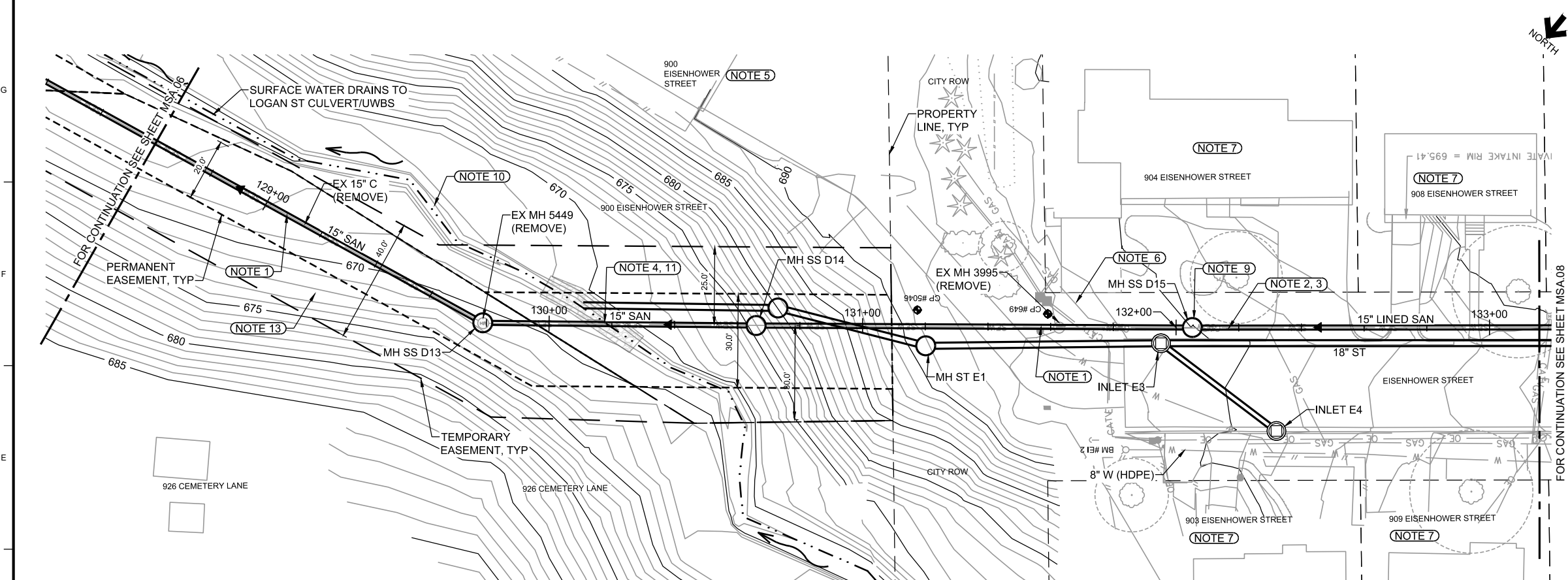
CITY OF MUSCATINE - PHASE 6D
WEST HILL AREA SANITARY AND STORM SEWER SEPARATION
MUSCATINE, IOWA

**SANITARY SEWER
LOGAN ST TO EISENHOWER ST**

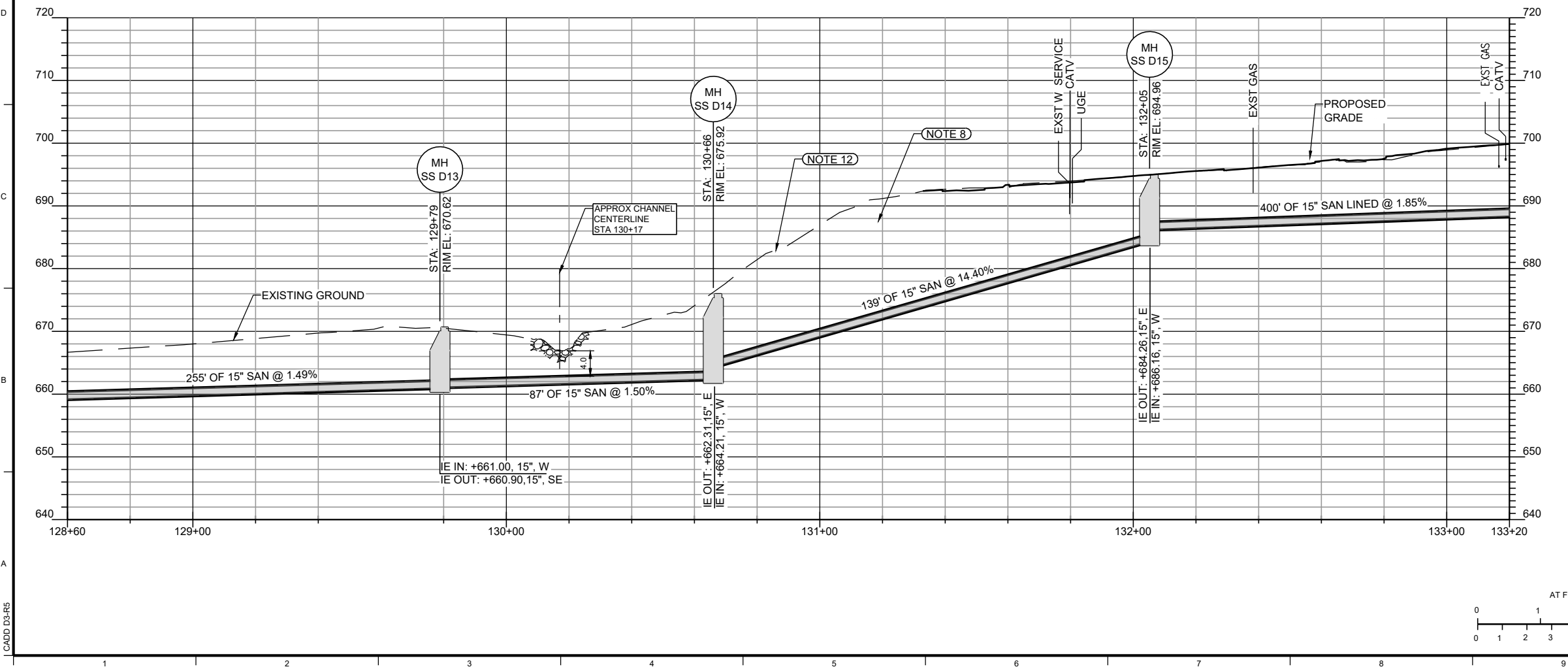
DESIGNED	KK HEIM	SCALE:	1" = 20'
DRAWN	GM REEVES	NO.	17660.60.30
CHECKED	ER SCHALLERT	REV.	
APPROVED	JM BRADY	MSA.06	0
DATE	MARCH 12, 2025		

LOAD D3-R6





- ### NOTES
- EAST OF NEW MH SS D 15, NEW SANITARY SEWER WILL BE INSTALLED ON ALIGNMENT OF EXISTING 15-INCH COMBINED SEWER. REMOVE EXISTING COMBINED SEWER AND MANHOLES AS WORK PROGRESSES AND CONNECT ALL ACTIVE SANITARY SERVICES TO NEW SANITARY. PLUG ALL OPEN PIPE ENDS OF INACTIVE PIPES. FIELD VERIFY WHETHER PIPE IS "LIVE" AND WHETHER IT IS STORM OR SANITARY.
 - EXISTING 15-INCH CLAY COMBINED SEWER ON EISENHOWER WILL BE PRESERVED WEST OF NEW MH SS D 15 AND LINED WITH CIPP LINER, AND REUSED FOR SANITARY SEWER. SEE SPECS FOR LINING REQUIREMENTS. EXISTING MANHOLES WILL BE REPLACED IN THEIR ENTIRETY AND NEW MANHOLES INSTALLED AT LOCATIONS SHOWN. ACTIVE SANITARY SERVICES SHALL BE IDENTIFIED AND SERVICE REINSTATED.
 - FOR SEWER LINING, CONTRACTOR SHALL ESTABLISH A PUBLIC INFORMATION AND NOTIFICATION PROGRAM AS DETAILED IN SUDAS SPEC 4050, 1.07 C.
 - EXISTING CHANNEL SHALL BE RESTORED TO PRE-CONSTRUCTION CONTOURS. AVOID RAISING CONTOURS. LINE DISTURBED DRAINAGE WAY WITH EROSION STONE. AVOID STORING MATERIAL AND PLACING MATERIAL STOCKPILES IN DRAINAGE WAY.
 - LOCATE EXISTING SANITARY SERVICE FOR 900 EISENHOWER AND CONNECT TO NEW SANITARY SEWER.
 - PROTECT GAS LINE. COORDINATE PROTECTION AND POTENTIAL RELOCATION OF GAS SERVICE WITH GAS COMPANY.
 - LOCATE ALL EXISTING SANITARY SERVICES AND REINSTATE SERVICES TO LINED SEWER.
 - ELEVATION OF EXISTING SEWER IS HIGHER THAN PROPOSED SEWER THROUGH THIS AREA. REMOVE EXISTING.
 - INSTALL NEW MANHOLE AT LOCATION SHOWN OVER EXISTING 15-INCH CLAY SEWER WHICH WILL REMAIN AND PIPE LINED. SEE FIGURE 6010.303.
 - MAINTAIN UPSTREAM TO DOWNSTREAM FLOW PATH OF CHANNEL ALL TIMES DURING PIPE INSTALLATION OR SURFACE RESTORATION. MINIMIZE DISTURBANCE TO CHANNEL WHEN CROSSING WITH EQUIPMENT. REMOVE ANY TEMPORARY FILL MATERIAL OR TEMPORARY CULVERTS PLACED IN CHANNEL FOR A TEMPORARY EQUIPMENT CROSSING.
 - INSTALL EROSION STONE (IDOT 4130) WITH 3 TO 6 INCHES GRADATION TO MINIMUM THICKNESS OF 1-FOOT ALONG CHANNEL SECTION. BACKFILL TRENCH WITH GRANULAR BACKFILL BETWEEN TOP OF PIPE ENVELOPE AND BOTTOM OF EROSION STONE LAYER. INSTALL MECHANICAL JOINT DUCTILE IRON PIPE LINED WITH PROTECTO 401 OR APPROVED WATER TIGHT PIPE BETWEEN MANHOLES. CENTER GRANULAR BACKFILL AND 15-FEET EACH SIDE OF CHANNEL CENTER LINE.
 - PROTECT AND RESTORE SLOPE TO MATCH EXISTING. INSTALL STABILIZING MATTING TO DISTURBED AREA.
 - PERFORM ALL CONSTRUCTION TO PROTECT EXISTING SLOPES FROM POTENTIAL EROSION AND SLOPE DESTABILIZATION. MINIMIZE DURATION AND LENGTH OF EXCAVATION TO THAT NECESSARY FOR PIPE INSTALLATION WITH TRENCH PROTECTION. SUBMIT CERTIFIED EXCAVATION PLAN AS REQUIRED IN ESTIMATE REFERENCE NOTES.



NO.	REVISIONS	DSGN	CHKD	APVD	DATE

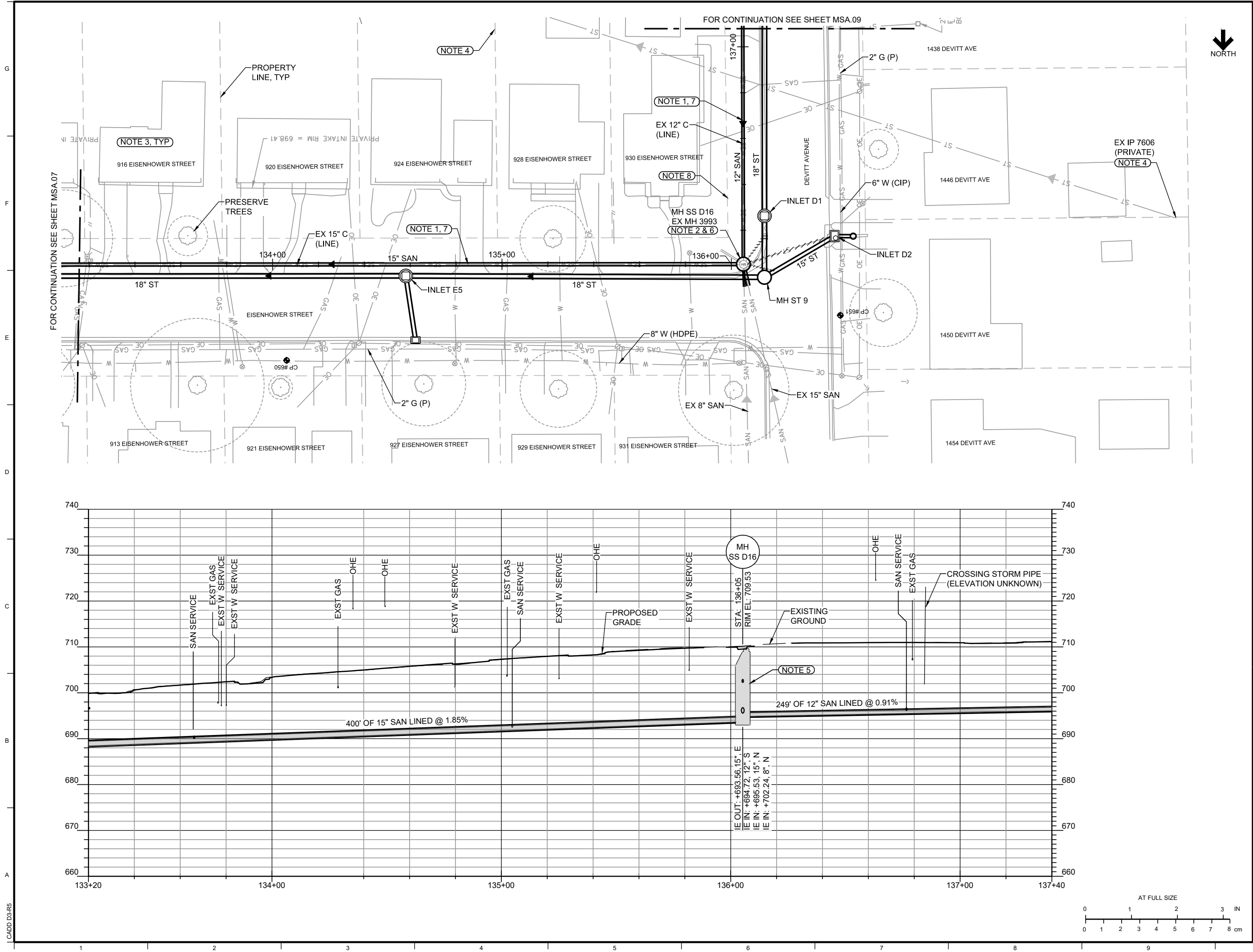
Stanley Consultants Inc.
225 Iowa Avenue, Muscatine, Iowa 52761-3764
www.stanleyconsultants.com

CITY OF MUSCATINE - PHASE 6D
WEST HILL AREA SANITARY AND STORM SEWER SEPARATION
MUSCATINE, IOWA

**SANITARY SEWER
EISENHOWER STREET**

DESIGNED <u>KK HEIM</u>	SCALE: 1" = 20'
DRAWN <u>GM REEVES</u>	NO. 17660.60.30
CHECKED <u>ER SCHALLERT</u>	REV.
APPROVED <u>JM BRADY</u>	
APPROVED <u>KK HEIM</u>	
DATE <u>MARCH 12, 2025</u>	

MSA.07	0
---------------	----------



NOTES

- EXISTING 12-INCH CLAY COMBINED SEWER ON DEVITT AND 15-INCH CLAY COMBINED SEWER ON EISENHOWER WILL BE PRESERVED, LINED WITH CIPP LINER, AND REUSE FOR SANITARY SEWER. SEE SPECS FOR LINING REQUIREMENTS. EXISTING MANHOLES WILL BE REPLACED IN THEIR ENTIRETY AND NEW MANHOLES INSTALLED AT LOCATIONS SHOWN. ACTIVE SANITARY SERVICES SHALL BE IDENTIFIED AND SERVICE REINSTATED.
- REMOVE EXISTING MH 3993 AND REPLACE WITH NEW MH. CONFIRM EACH OF THE FOUR 6-INCH PIPES CONNECTED TO EXISTING MH ARE SANITARY AND CONNECT INTO MAINLINE SEWER WITH WYE CONNECTIONS, IF SPACE ALLOWS. HIGH SERVICE LINE CONNECTIONS TO MANHOLE ARE NOT PREFERRED. INVERTS ON EXISTING SERVICES AT MH INCLUDE:
IE IN: 704.10, 6" PVC, S
IE IN: 702.81, 6" PVC, SE
IE IN: 702.61, 6" DIP, SE
IE IN: 702.36, 6" DIP, SW

CONNECT TWO SANITARY LINES FROM NORTH TO NEW MANHOLE AT ELEVATIONS SHOWN. THERE IS AN EXISTING 12-INCH CLAY LINE FROM THE WNW AT IE = 701.09 THAT IS CAPPED. LINE CAN BE REMOVED. INSTALL INTERNAL DROP CONNECTION ON 8-INCH LINE FROM THE NORTH.
- LOCATE ALL EXISTING SANITARY SERVICES AND REINSTATE SERVICES TO LINED SEWER.
- CITY RECORDS SHOW PRIVATE INTAKE IN THE BACKYARD CORNER OF PROPERTIES 1446 AND 1450 DEVITT AVE. PIPING CROSSES DEVITT AT AN UNKNOWN LOCATION AND UNKNOWN SIZE AND DISCHARGES INTO DRAINAGE SWALE IN BACKYARD OF 924 EISENHOWER ST.
- INSTALL INTERNAL DROP CONNECTION ACCORDING TO DETAIL ON SHEET A.04.
- LOCATE NEW MANHOLE CASTING OUTSIDE OF CURB LINE. ROTATE CONE IF NEEDED.
- FOR SEWER LINING, CONTRACTOR SHALL ESTABLISH A PUBLIC INFORMATION AND NOTIFICATION PROGRAM AS DETAILED IN SUDAS SPEC 4050, 1.07 C.
- PERFORM WORK WITHIN RIGHT OF WAY (ROW). WORKING OUTSIDE OF ROW IS PROHIBITED.

NO.	REVISIONS	DSGN	CHKD	APVD	DATE

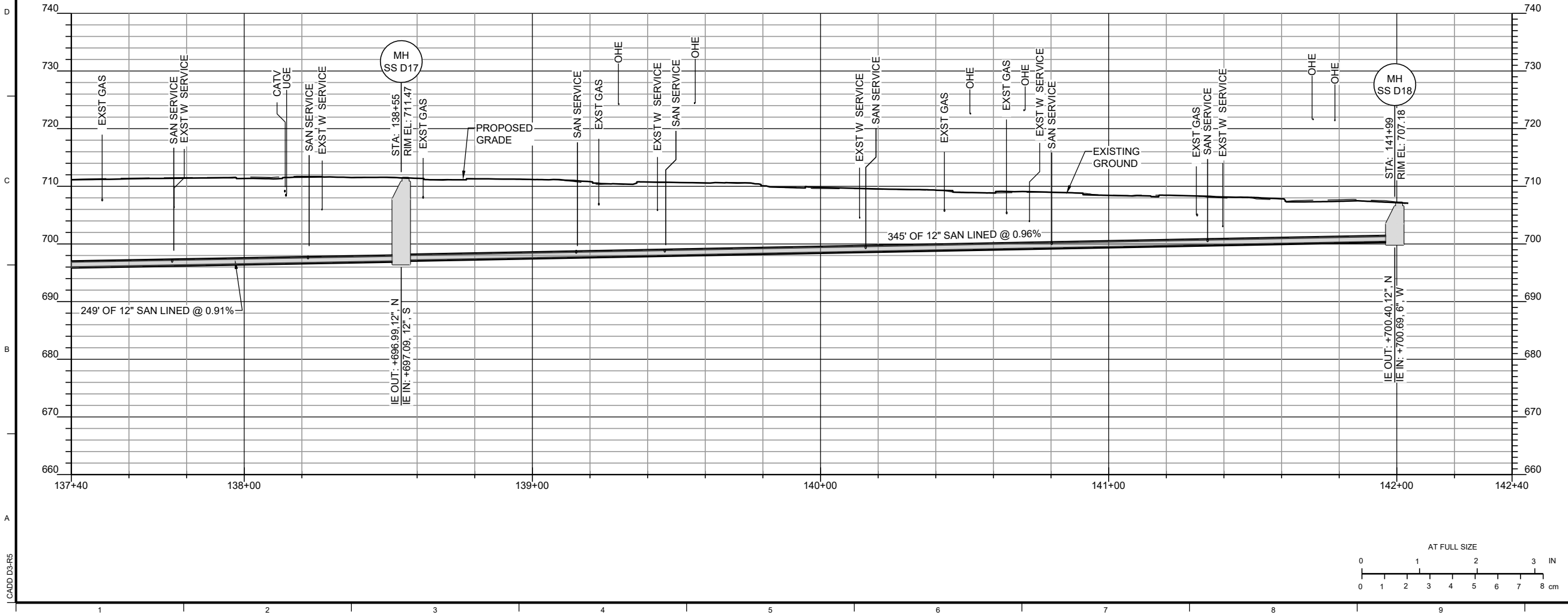
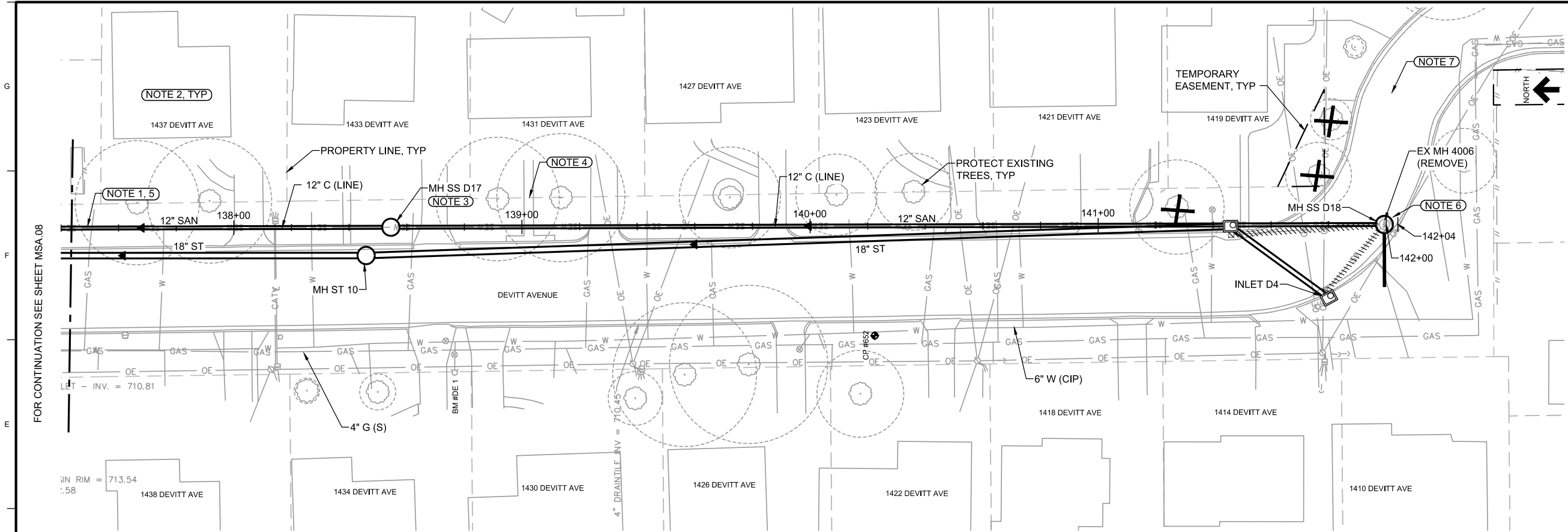
225 Iowa Avenue, Muscatine, Iowa 52761-3764
www.stanleyconsultants.com

CITY OF MUSCATINE - PHASE 6D
WEST HILL AREA SANITARY AND STORM SEWER SEPARATION
MUSCATINE, IOWA

SANITARY SEWER EISENHOWER ST & DEVITT AVE

DESIGNED: KK HEIM	SCALE: 1" = 20'
DRAWN: GM REEVES	NO. 17660.60.30
CHECKED: ER SCHALLERT	REV.
APPROVED: JM BRADY	MSA.08
APPROVED: KK HEIM	0
DATE: MARCH 12, 2025	

10 ©STANLEY CONSULTANTS



- ### NOTES
- EXISTING 12-INCH CLAY COMBINED SEWER ON DEVITT WILL BE PRESERVED, LINED WITH CIPP LINER, AND REUSE FOR SANITARY SEWER. SEE SPECS FOR LINING REQUIREMENTS. EXISTING MANHOLES WILL BE REPLACED IN THEIR ENTIRETY AND NEW MANHOLES INSTALLED AT LOCATIONS SHOWN. ACTIVE SANITARY SERVICES SHALL BE IDENTIFIED AND SERVICE REINSTATED.
 - LOCATE ALL EXISTING SANITARY SERVICES AND REINSTATE SERVICES TO LINED SEWER.
 - INSTALL NEW MANHOLE AT LOCATION SHOWN OVER EXISTING 12-INCH CLAY SEWER WHICH WILL REMAIN AND PIPE LINED. SEE FIGURE 6010.303.
 - PERFORM WORK WITHIN THE RIGHT OF WAY (ROW). WORKING OUTSIDE OF ROW IS PROHIBITED.
 - FOR SEWER LINING, CONTRACTOR SHALL ESTABLISH A PUBLIC INFORMATION AND NOTIFICATION PROGRAM AS DETAILED IN SUDAS SPEC 4050, 1.07 C.
 - AT EXISTING MH 4006 REPLACE WITH NEW MANHOLE. CONFIRM EXISTING 6-INCH CLAY PIPE FROM WEST IS AN ACTIVE SANITARY SERVICE AND CONNECT TO NEW SANITARY MANHOLE AT ELEVATION SHOWN. DISCONNECT CONNECTIONS TO STORM SEWER AND INSTALL NEW STORM SYSTEM AS DETAILED ON M SHEETS.
 - SEE SHEET D.10 FOR REPLACEMENT OF DEVITT AVENUE PAVEMENT TO NEWELL AVENUE AND TEMPORARY EASEMENT BOUNDARIES FOR PAVEMENT PLACEMENT.

NO.	REVISIONS	DSGN	CHKD	APVD	DATE

225 Iowa Avenue, Muscatine, Iowa 52761-3764
www.stanleyconsultants.com

CITY OF MUSCATINE - PHASE 6D
WEST HILL AREA SANITARY AND STORM SEWER SEPARATION
MUSCATINE, IOWA

SANITARY SEWER DEVITT AVENUE

DESIGNED <u>KK HEIM</u>	SCALE: 1" = 20'
DRAWN <u>GM REEVES</u>	NO. 17660.60.30
CHECKED <u>ER SCHALLERT</u>	REV.
APPROVED <u>JM BRADY</u>	MSA.09
APPROVED <u>KK HEIM</u>	0
DATE <u>MARCH 12, 2025</u>	

10 ©STANLEY CONSULTANTS

NOTES

1. TRENCHLESS CONSTRUCTION UNDER UWBS. INSTALL CASING IF REQUIRED FOR TRENCHLESS METHOD SELECTED. PROVIDE CASING DIAMETER AND CASING SPACERS IN ACCORDANCE WITH SUDAS SECTION 3020. PROTECT ALL EXISTING UTILITIES. PROTECT EXISTING UWBS TO REMAIN.
2. INSTALL NEW SANITARY ON ALIGNMENT SHOWN. LOCATE ALL ACTIVE SANITARY SERVICES AND CONNECT TO NEW SANITARY. PLUG ALL OPEN ENDS OF INACTIVE SERVICES; AND ABANDON REMAINING PIPING IN PLACE. FIELD VERIFY WHETHER SERVICE IS 'LIVE' AND WHETHER IT IS STORM OR SANITARY.
3. ABANDON EXISTING 8-INCH SANITARY AND CONNECT ALL SANITARY SERVICES TO NEW SANITARY. REMOVE EXISTING PIPE TO EXTENT POSSIBLE WITHIN EXPOSED TRENCHES. PLUG REMAINING PIPE ENDS WITH CONCRETE AND ABANDON REMAINING PIPING IN PLACE. PROTECT EXISTING WATER MAIN. MAINTAIN EXISTING UNTIL ALL SANITARY SEWAGE FROM LOGAN STREET AND UPSTREAM SOURCES IS DIVERTED TO NEW SANITARY.
4. EXISTING SANITARY SERVICE FOR 1211, 1207, AND 1205 LOGAN STREET FLOWS TO THE 18-INCH COMBINED SEWER EAST OF THE HOUSES. LOCATE EXISTING SERVICE AND DETERMINE IF HOUSE REQUIRES RE-PLUMBING INSIDE OR IF THE SERVICE CAN BE INTERCEPTED OUTSIDE THE HOUSE IN THE YARD. CONNECT HOUSE TO NEW SANITARY SEWER IN LOGAN STREET.
5. EXISTING SANITARY SERVICE FOR 1204 LOGAN STREET AND 941 NEWELL AVENUE CONNECTS TO EXISTING SANITARY UPSTREAM OF EXISTING MH 4026 (SEE SHEET MSA.12) THAT IS ESTIMATED TO EXTEND ACROSS THE PROPERTIES OF 941 AND 949 NEWELL AVENUE AND TERMINATES NEAR EXISTING MH 3704 ON NEWELL AVENUE. LOCATE SERVICES AND CONNECT TO SANITARY IN LOGAN ST. EXISTING SERVICES SHOULD BE ABLE TO BE INTERCEPTED IN YARDS.
6. EXISTING HOUSE SANITARY SERVICE FOR 1223 LOGAN STREET IS KNOWN TO CONNECT TO EXISTING UWBS. NEW SERVICE SHALL BE CONNECTED TO NEW SANITARY. INTERNAL OR EXTERNAL HOME RE-PLUMBING MAY BE NEEDED.
7. EXISTING SANITARY SERVICE LINE FOR HOUSE 1230 LOGAN STREET CURRENTLY CONNECTS TO EXISTING 15" C IN WOODED RAVINE AREA TO SOUTH. INTERCEPT SERVICE LINE AND CONNECT TO NEW SANITARY SEWER.
8. REMOVE EXISTING MH 4282 AND PLUG CONNECTION TO UWBS. INSTALL NEW MH SS D22 OVER EXISTING 8-INCH SANITARY AND CONNECT TO EXISTING SANITARY.
9. ADDRESSES ARE KNOWN TO FLOW TO EXISTING 8-INCH SANITARY ON EAST SIDE OF LOGAN. CONNECT TO NEW SANITARY ON WEST SIDE OF LOGAN.
10. INSTALL INTERNAL DROP CONNECTION IN ACCORDANCE WITH DETAIL ON A.04.
11. PERFORM EXPLORATORY EXCAVATION TO DETERMINE BOTTOM OF UWBS ELEVATION PRIOR TO BEGINNING WORK FOR TRENCHLESS CONSTRUCTION. ELEVATIONS SHALL BE COLLECTED BY A SURVEYOR AND PROVIDED TO CITY AND DESIGN ENGINEER AT LEAST 2 WEEKS PRIOR TO BEGINNING LOGAN STREET SANITARY.
12. SEE WATER PLANS FOR WATER RELOCATION OUTSIDE OF MH.
13. DETERMINE IF 4-INCH PVC FROM WEST AT EX MH 4278 IS SANITARY AND CONNECT TO NEW SANITARY SEWER WHERE SERVICE CROSSES TRENCH. DETERMINE IF 4-INCH DIP AND 8-INCH CLAY PIPES FROM SOUTH AT EX MH 4278 ARE SANITARY SERVICES AND CONNECT TO NEW SANITARY.
14. AT MH 5447 DETERMINE IF 4-INCH PVC FROM SE IS SANITARY AND IF IT SERVES 1205 LOGAN STREET. CONNECT SERVICE TO NEW SANITARY IN LOGAN STREET.
15. LOCATION AND SIZE OF BORE AND RECEIVING PITS ARE SUGGESTED. CONTRACTOR TO PROTECT EXISTING SITE FEATURES TO REMAIN. CAREFULLY BACKFILL AND COMPACT AROUND EXISTING UTILITIES.

NO.

REVISIONS

DSGN

CHKD

APVD

DATE



Stanley Consultants

INC.

225 Iowa Avenue, Muscatine, Iowa 52761-3764
www.stanleyconsultants.com

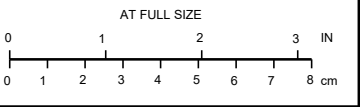
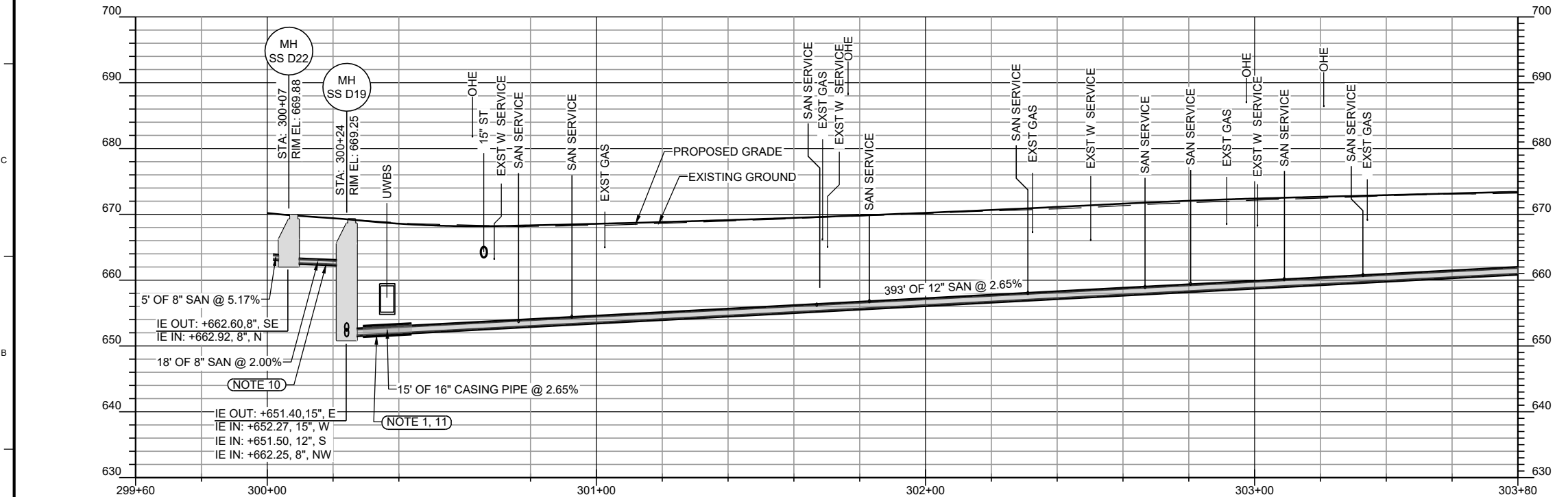
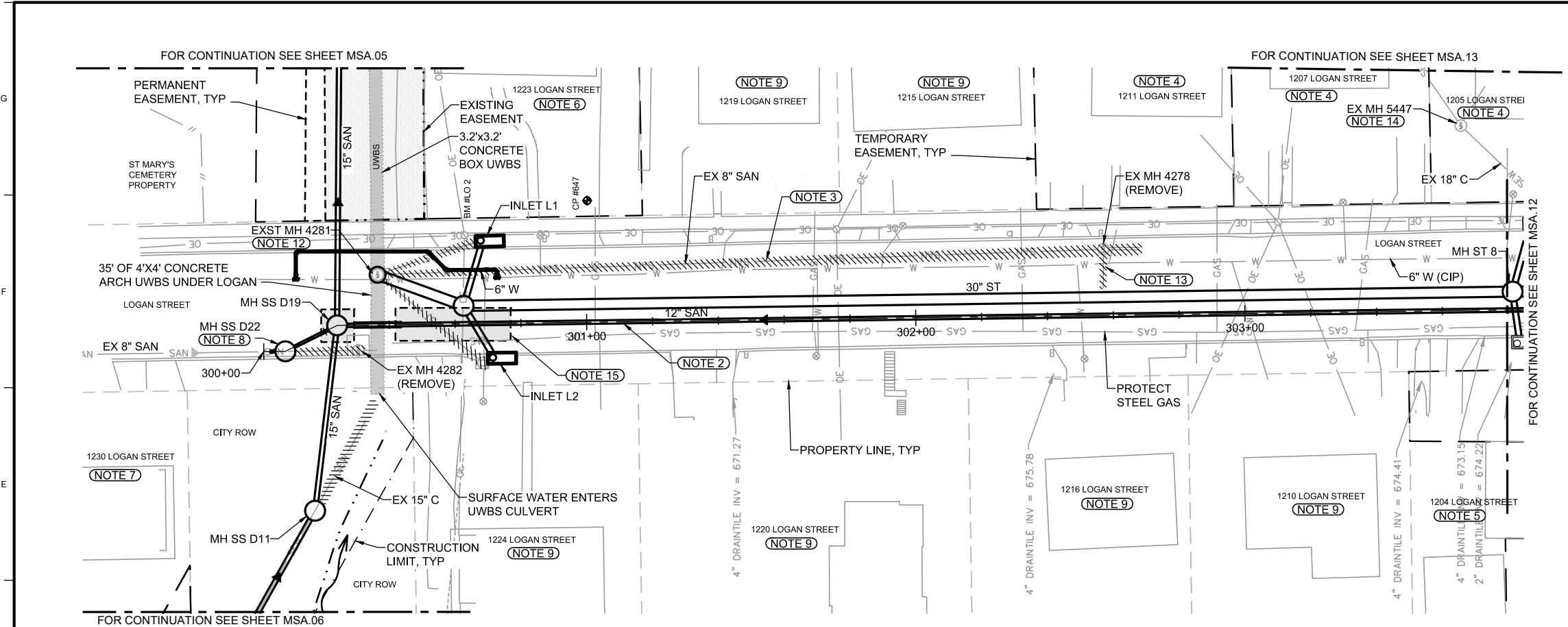
CITY OF MUSCATINE - PHASE 6D
WEST HILL AREA SANITARY AND STORM SEWER SEPARATION
MUSCATINE, IOWA

SANITARY SEWER
LOGAN STREET

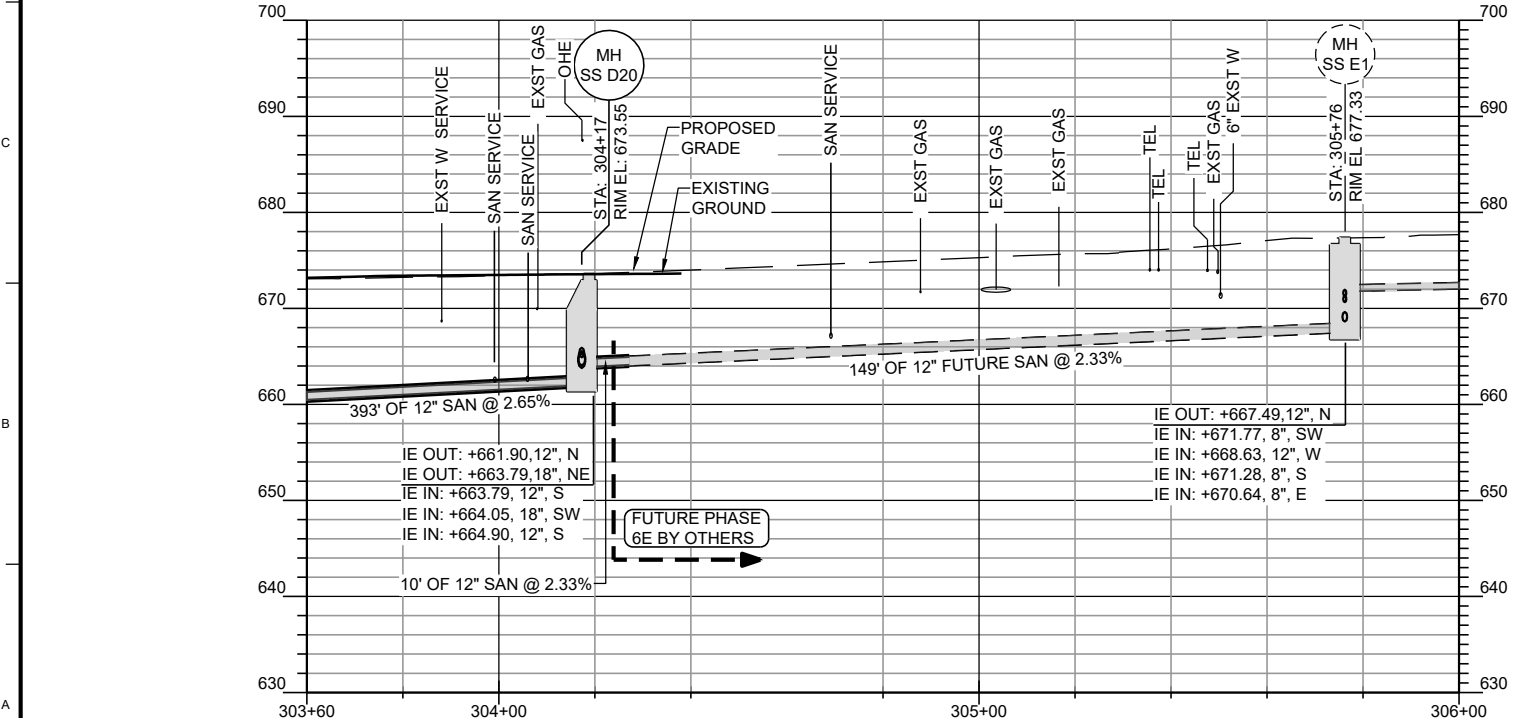
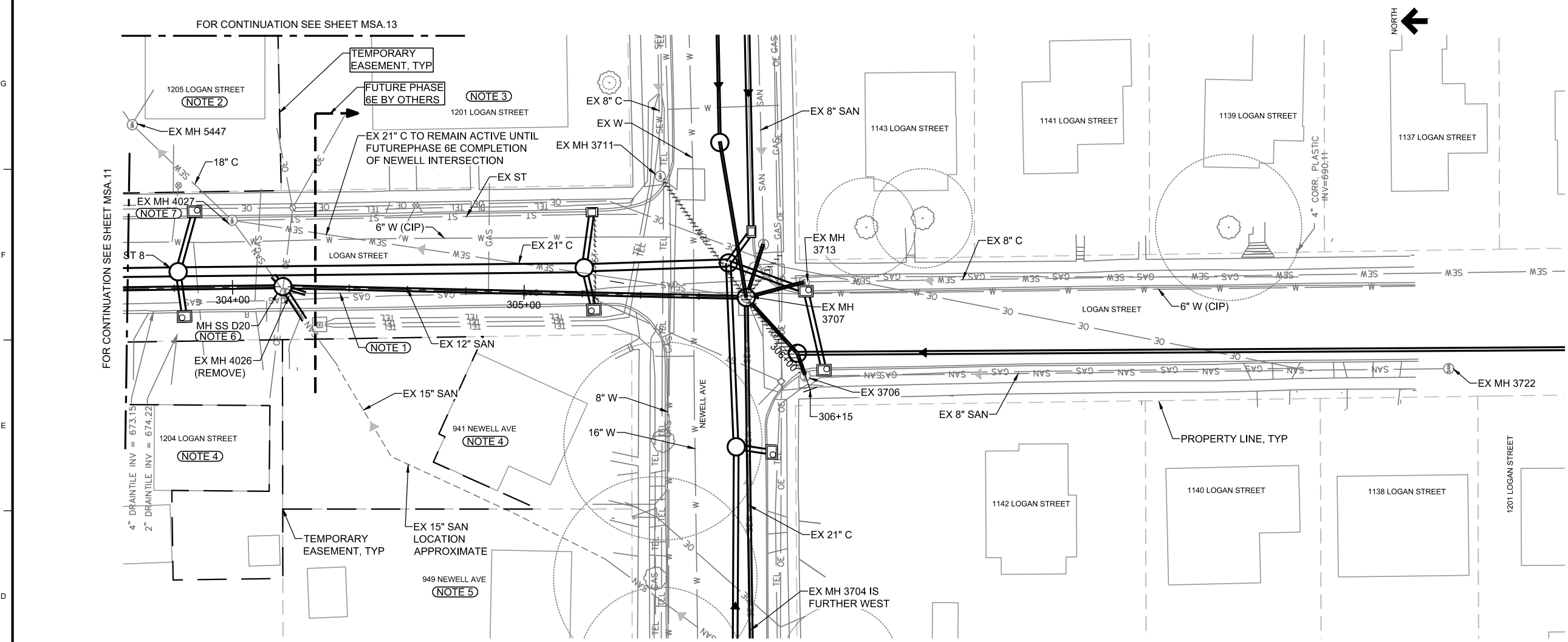
DESIGNED KK HEIM
DRAWN GM REEVES
CHECKED ER SCHALLERT
APPROVED JM BRADY
APPROVED KK HEIM
DATE MARCH 12, 2025

SCALE: 1" = 20'
NO. 17660.60.30
REV.

MSA.110



LOAD D3-R6



NOTES

- EXISTING SANITARY EXTENDS BETWEEN EX 4026 AND 3707 ON LOGAN TO NEWELL. EXACT LOCATION OF SANITARY ON LOGAN IS UNKNOWN AND DOES NOT CONNECT TO MH 3707. INSTALL NEW MH SS D20 AND REMOVE EX MH 4026. CONNECT TO EXISTING SANITARY FROM THE SOUTH AT IE 664.90 UNTIL FUTURE PHASE OR VERIFICATION OF NO FLOW OR SERVICES ARE CONNECTED TO SEWER. CONNECT TO EXISTING SAN TO SW AT IE 664.05 UNTIL FUTURE PHASE. IF NEEDED TO MAINTAIN FLOWS FROM SOUTH TEMPORARILY, CONNECT NEW MH D20 TO EXISTING 18-INCH PIPE TO THE NORTHEAST FLOWING TOWARD MH 4027 AT IE 663.79. PLUG PIPE TO NORTHEAST IN THE FUTURE, (BY OTHERS). MAINTAIN ALL FLOWS ENTERING COMBINED MH 4027 UNTIL FUTURE SEPARATION IN PHASE 6E. TEMPORARY CONNECTIONS TO EXISTING SW AND S SEWERS TO BE PERFORMED WITHOUT DROP CONNECTIONS DUE TO TEMPORARY NATURE.
- EXISTING SANITARY SERVICE FOR 1205 LOGAN STREET FLOWS TO THE 18-INCH COMBINED SEWER BEHIND THE HOUSES TO THE EAST. LOCATE EXISTING SERVICE AND DETERMINE IF HOUSE REQUIRES RE-PLUMBING INSIDE OR IF THE SERVICE CAN BE INTERCEPTED OUTSIDE THE HOUSE. CONNECT HOUSE TO NEW SANITARY SEWER IN LOGAN STREET.
- EXISTING SANITARY SERVICE FOR 1201 LOGAN STREET FLOWS TO THE 21-INCH COMBINED SEWER IN LOGAN STREET. CONNECT SERVICE TO NEW 8-INCH SANITARY IN LOGAN STREET IN FUTURE PHASE.
- EXISTING SANITARY SERVICE FOR 1204 LOGAN STREET AND 941 NEWELL AVENUE CONNECTS TO EXISTING SANITARY UPSTREAM OF EXISTING MH 4026 TO THE SOUTHWEST THAT IS ESTIMATED TO EXTEND ACROSS THE PROPERTIES OF 941 AND 949 NEWELL AVE AND TERMINATES NEAR EXISTING MH 3704 ON NEWELL AVENUE. EXISTING MH 3704 IS LOCATED 127' WEST OF EXMH 3707. LOCATE SERVICES AND CONNECT TO SANITARY IN LOGAN STREET. EXISTING SERVICES LIKELY CAN BE INTERCEPTED IN THE YARDS. CONNECTING SERVICES FOR 1204 LOGAN, 941 NEWELL AVE. AND 949 NEWELL MAY NEED TO OCCUR IN PHASE 6E TO TIE INTO NEW LOGAN STREET SANITARY.
- EXISTING SAN SERVICE FOR 949 NEWELL AVE. CONNECTS TO EXISTING 15" (OR 18") SAN CROSSING PROPERTY 941 NEWELL AVE. SERVICE MAY NEED TO BE PICKED UP IN LOGAN STREET OR IN A FUTURE PHASE ON NEWELL AVENUE.

NOTES CONTINUED

- AT MH SS D20, CONNECT TO EXISTING 15 (OR 18) INCH SANITARY FROM SOUTHWEST THAT RUNS THROUGH 941 NEWELL AVENUE PROPERTY UNTIL UPSTREAM FLOWS ARE SEPARATED IN FUTURE PHASE. CONNECTION SHALL BE PLUGGED IN THE FUTURE. TEMPORARILY CONNECT TO EXISTING 12-INCH SANITARY FROM SOUTH. CONFIRM FLOW FROM EXISTING SOUTHWEST AND SOUTH SANITARY BRANCHES IS LIMITED TO SERVICE CONNECTIONS FOR 941 AND 949 NEWELL, AND 1204 LOGAN. IF ADDITIONAL FLOWS BESIDES THESE SERVICES CONTRIBUTE TO THESE SEWERS ALERT CITY AND DESIGN ENGINEER.
- PROTECT AND REUSE EXISTING MH 4027. AT MH MAINTAIN ALL EXISTING CONNECTIONS UNTIL UPSTREAM FLOWS ARE SEPARATED AND CONNECTED TO NEW STORM OR SANITARY SEWERS IN FUTURE PHASES. MINIMAL RIM ADJUSTMENT IS ANTICIPATED AND IS INCIDENTAL TO PAVEMENT INSTALLATION.

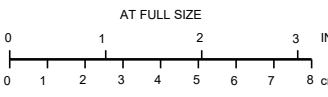
NO.	REVISIONS	DSGN	CHKD	APVD	DATE

225 Iowa Avenue, Muscatine, Iowa 52761-3764
www.stanleyconsultants.com

CITY OF MUSCATINE - PHASE 6D
WEST HILL AREA SANITARY AND STORM SEWER SEPARATION
MUSCATINE, IOWA

**SANITARY SEWER
LOGAN STREET
SHEET 2**

DESIGNED <u>KK HEIM</u>	SCALE: 1" = 20'
DRAWN <u>GM REEVES</u>	NO. 17660.60.30
CHECKED <u>ER SCHALLERT</u>	REV.
APPROVED <u>JM BRADY</u>	MSA.12
APPROVED <u>KK HEIM</u>	0
DATE <u>MARCH 12, 2025</u>	



LOAD D3-R6

G
F
E
D
C
B
A
LOAD D3-R6



PHOTO 1: UWBS ENTRANCE WEST OF LOGAN STREET



PHOTO 2: CREEK AND PIPE ENTRANCE



PHOTO 3:
INTERIOR OF UWBS SHOWING EXISTING COMBINED SEWER PIPE

NOTES

1. PHOTOS ARE TAKEN SHOWING THE BEGINNING OF THE UWBS AT THE CREEK AND COMBINED SEWER ENTRANCE WEST OF LOGAN STREET. PHOTOS ARE FROM 2021 SURVEY.
2. MAINTAIN PATH FOR SURFACE /CREEK FLOW INTO EXISTING UWBS AT ALL TIMES.
3. PROTECT EXISTING UWBS AND HEADWALL.

NO.	REVISIONS	DSGN	CHKD	APVD	DATE



Stanley Consultants INC.
225 Iowa Avenue, Muscatine, Iowa 52761-3764
www.stanleyconsultants.com

CITY OF MUSCATINE - PHASE 6D
WEST HILL AREA SANITARY AND STORM SEWER SEPARATION
MUSCATINE, IOWA

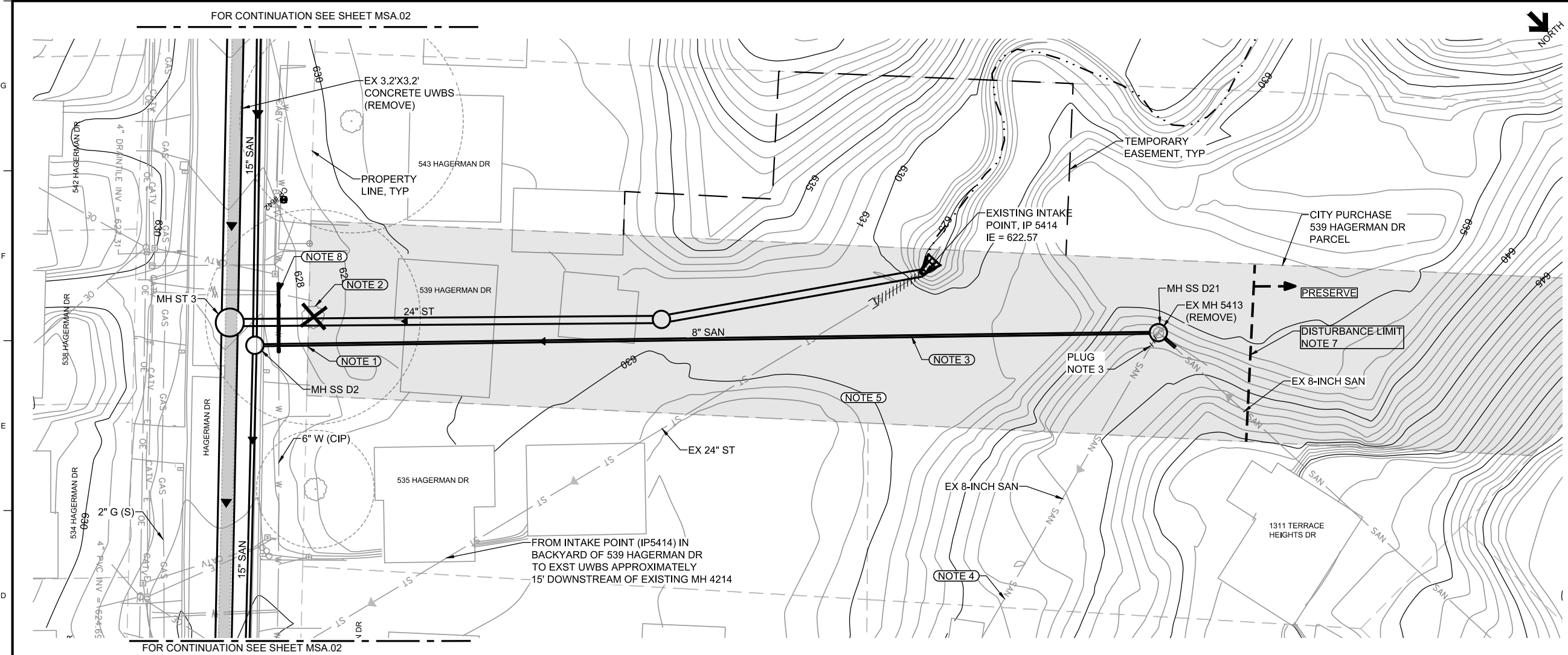
**SANITARY SEWER
LOGAN AND UWBS**

DESIGNED	PM JOHNSON	SCALE: 1" = 20'
DRAWN	GM REEVES	NO. 17660.60.30
CHECKED	ER SCHALLERT	REV.
APPROVED	KK HEIM	
APPROVED	PM JOHNSON	
DATE	MARCH 12, 2025	

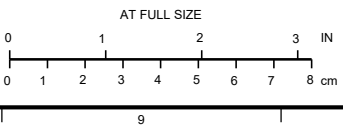
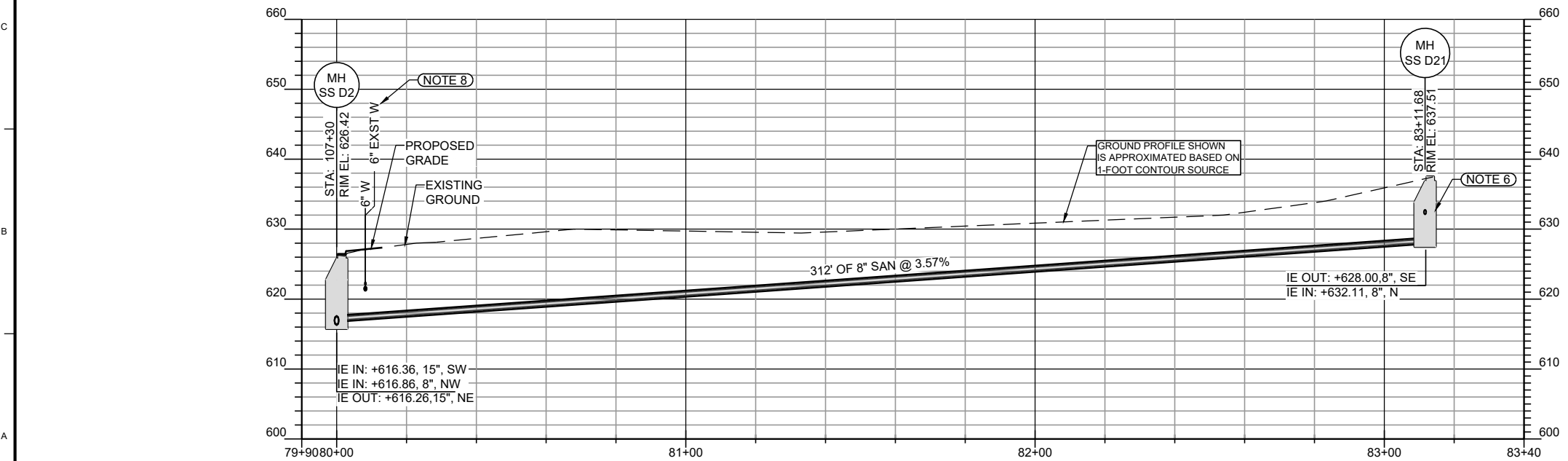
MSA.14

0





- ### NOTES
1. INSTALL NEW 8-INCH SANITARY TO PROPERTY LINE AND PLUG TEMPORARILY. INSTALLATION OF SANITARY SEWER ON 539 HAGERMAN PARCEL MAY OCCUR LATER DURING THIS CONSTRUCTION CONTRACT AFTER PARCEL PURCHASE. CONSULT CITY PRIOR TO INSTALLING SANITARY SEWER ON PARCEL AND EXTENT OF IMPROVEMENT.
 2. CITY SHALL APPROVE TREE REMOVAL TIMING. REMOVE TREE ONLY AFTER CONFIRMATION SEWER WORK WILL OCCUR ON 539 HAGERMAN DR. PARCEL.
 3. AFTER CITY AUTHORIZATION TO INSTALL SANITARY LINE, PROCEED TO INSTALL NEW SANITARY THROUGH PROPERTY AND CONNECT TO EXISTING SEWER FROM TERRACE HEIGHTS DRIVE. REMOVE EXISTING MANHOLE AND REPLACE WITH NEW. PLUG PIPE END TO NORTHEAST WITH 2' LENGTH CONCRETE PLUG.
 4. EXISTING 8" SANITARY EXTENDS ACROSS BACKYARDS TO HAGERMAN DRIVE AND CONNECTS TO EXISTING DEEP INLET CB 4178. SEE SHEET MSA.01 FOR LOCATION. PHASE 6C PROJECT BY OTHERS WILL CONNECT THIS SANITARY BRANCH TO NEW SANITARY IN HAGERMAN DRIVE.
 5. CONTOURS SHOWN ON THIS SHEET ARE CITY 1' CONTOURS FROM 2000. AREA ON PRIVATE PROPERTY HAS NOT BEEN SURVEYED.
 6. INSTALL INTERNAL DROP CONNECTION ACCORDING TO DETAIL ON SHEET A.04.
 7. MINIMIZE AREA DISTURBED TO EXTENT NEEDED FOR PIPE AND MANHOLE INSTALLATION.
 8. REFER TO WATER MAIN PLANS FOR WATER RELOCATION.



NO.	REVISIONS	DSGN	CHKD	APVD	DATE

Stanley Consultants Inc.

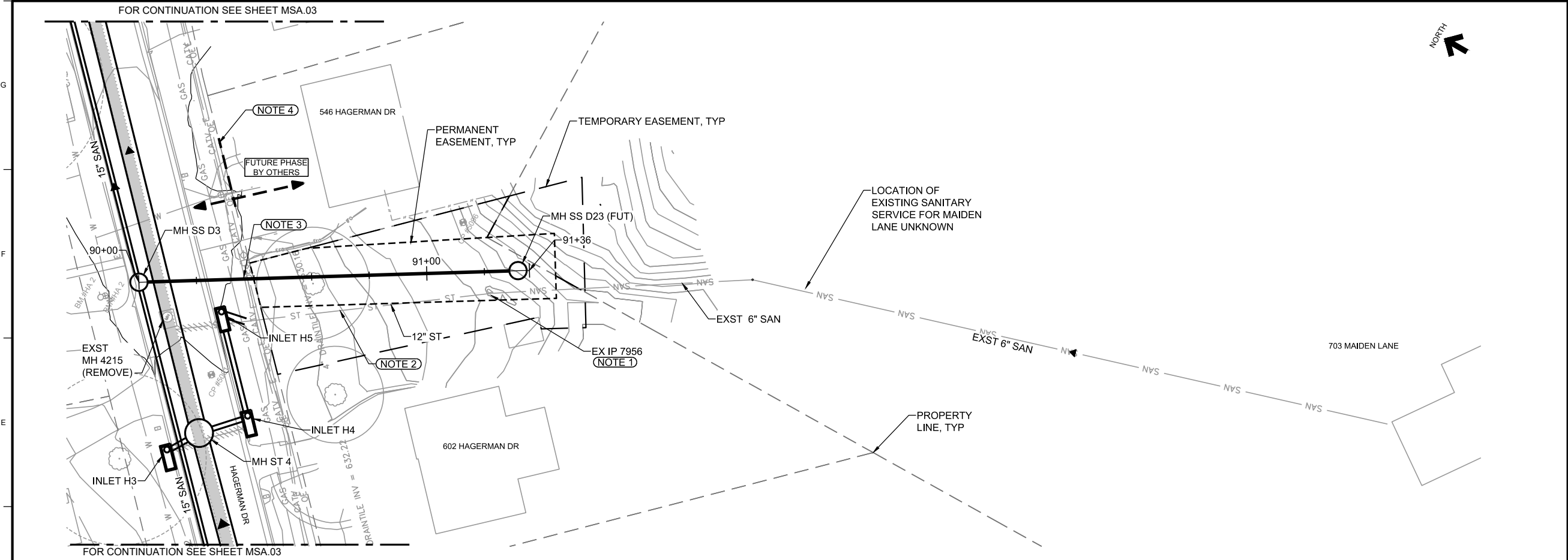
225 Iowa Avenue, Muscatine, Iowa 52761-3764
www.stanleyconsultants.com

CITY OF MUSCATINE - PHASE 6D
WEST HILL AREA SANITARY AND STORM SEWER SEPARATION
MUSCATINE, IOWA

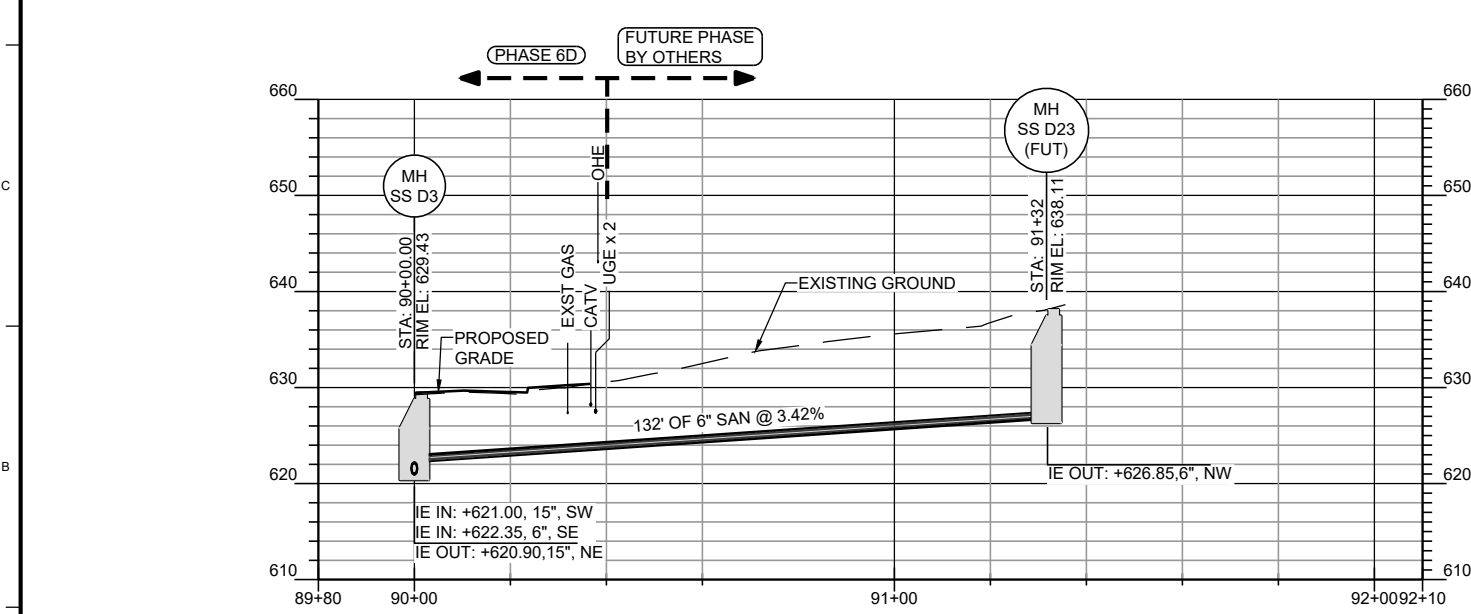
**SANITARY SEWER
539 HAGERMAN DRIVE**

DESIGNED: KK HEIM	SCALE: 1" = 20'
DRAWN: GM REEVES	NO. 17660.60.30
CHECKED: ER SCHALLERT	REV.
APPROVED: JM BRADY	MSA.15
APPROVED: KK HEIM	0
DATE: MARCH 12, 2025	

LOAD D3-R6



- ### NOTES
- EXISTING SANITARY SERVICE FOR 703 MAIDEN LANE DISCHARGES TO CORRUGATED PLASTIC INTAKE PIPE ON PROPERTY OF 602 HAGERMAN DRIVE. EXISTING PIPE INVERT OF STORM INTAKE IS IE = 635.46.
 - CITY MAP SHOWS EXISTING STORM PIPE FROM 602 HAGERMAN DR YARD CONNECTING TO UWBS APPROXIMATELY 8' DOWNSTREAM OF EX MH 4215. THIS PRINT SHOWS STORM CONNECTING UPSTREAM OF MH WHICH LIKELY IS INCORRECT. CITY MAPPING SHOWS A BEND IN THE EXISTING STORM LINE IN CITY ROW APPROXIMATELY 31' UPSTREAM FROM CENTERLINE OF EXISTING UWBS. ACTUAL STORM ALIGNMENT IS NOT STRAIGHT AND INCLUDES AT LEAST ONE BEND.
 - INSTALL SERVICE LINE STUB FOR 702 MAIDEN LANE TO RIGHT OF WAY LINE. CAP SERVICE LINE WITH WATERTIGHT CAP AND INSTALL BURIED MARKER TO DETECT LOCATION OF SERVICE LINE IN THE FUTURE. IN THE FUTURE, SERVICE LINE WILL BE EXTENDED ACROSS PRIVATE PROPERTY AND DISCONNECTED FROM THE STORM INTAKE.
 - WORK IN THIS PHASE 6D MUST STOP AT THE RIGHT OF WAY LINE. DO NOT PERFORM ANY EXCAVATION OR GROUND DISTURBING WORK ON PRIVATE PROPERTY FOR NEW SERVICE LINE.



WORK IN THIS PHASE 6D MUST STOP AT THE RIGHT OF WAY LINE. DO NOT PERFORM ANY EXCAVATION OR GROUND DISTURBING WORK ON PRIVATE PROPERTY FOR NEW SERVICE LINE

NO.	REVISIONS	DSGN	CHKD	APVD	DATE

225 Iowa Avenue, Muscatine, Iowa 52761-3764
www.stanleyconsultants.com

CITY OF MUSCATINE - PHASE 6D
WEST HILL AREA SANITARY AND STORM SEWER SEPARATION
MUSCATINE, IOWA

**SANITARY SERVICE FOR
703 MAIDEN LANE**

DESIGNED <u>KK HEIM</u>	SCALE: 1" = 20'	REV.
DRAWN <u>GM REEVES</u>	NO. 17660.60.30	
CHECKED <u>ER SCHALLERT</u>		
APPROVED <u>JM BRADY</u>		
DATE <u>MARCH 12, 2025</u>		

MSA.16 **0**

G
F
E
D
C
B
A
LOAD D3-R6



NOTE 3

PHOTO 1: UWBS BROKEN PIPE SOUTHEAST OF UWBS



PHOTO 3: MANHOLE 5455 - APPROXIMATELY 5 LAYERS OF BRICK RISER



NOTE 4

PHOTO 2: MANHOLE 5455 BRICK RISER SECTIONS ON UWBS



EXISTING 3.2' X 3.2' CONCRETE BOX COMBINED UWBS (PRESERVE)
NOTE 5

PHOTO 4: EXPOSED TOP OF UWBS LOOKING DOWNSTREAM (NORTHEAST)

NOTES

1. ALL PHOTOS ARE TAKEN NEAR EXISTING MH 5455. REFER TO SHEET MSA.04 FOR LOCATION ON PARCELS 897 AND 895 NEWELL AVENUE.
2. PHOTOS ARE FROM MARTIN AND WHITACRE SURVEY DONE IN 2021.
3. REPLACE PIPE TO MATCH EXISTING SIZE AND LENGTH. PATCH ANY HOLES OR OPENINGS IN UWBS TO FORM A SEALED WATERTIGHT CONNECTION. MAINTAIN POSITIVE DRAINAGE TO PIPE AND RESTORE AREA TO MATCH EXISTING CONTOURS AND PROTECT FROM EROSION. INSTALL PIPE APRON AND GUARD. SEE SUDAS FIGURE 4030.222 AND 4030.224.
4. REMOVE BRICK RISER SECTION AND CASTING FROM MH 5455. PREVENT BRICKS FROM FALLING INTO SEWER. INSTALL NEW CASTING TO TOP OF EXISTING UWBS. CONTRACTOR TO MEASURE SIZE OF OPENING PRIOR TO ORDERING CASTING. CASTING SHALL HAVE A BOLT DOWN LID. SECURE CASTING FRAME TO TOP OF UWBS BY ANCHORING INTO CONCRETE STRUCTURE.
5. AVOID DRIVING OVER EXPOSED PORTIONS OF SEWER WITH EQUIPMENT. PROTECT EXISTING EXPOSED AND BURIED PORTIONS OF UWBS FROM REPEATED CONSTRUCTION TRAFFIC LOADING.

NO.	REVISIONS	DSGN	CHKD	APVD	DATE

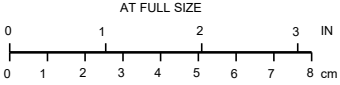


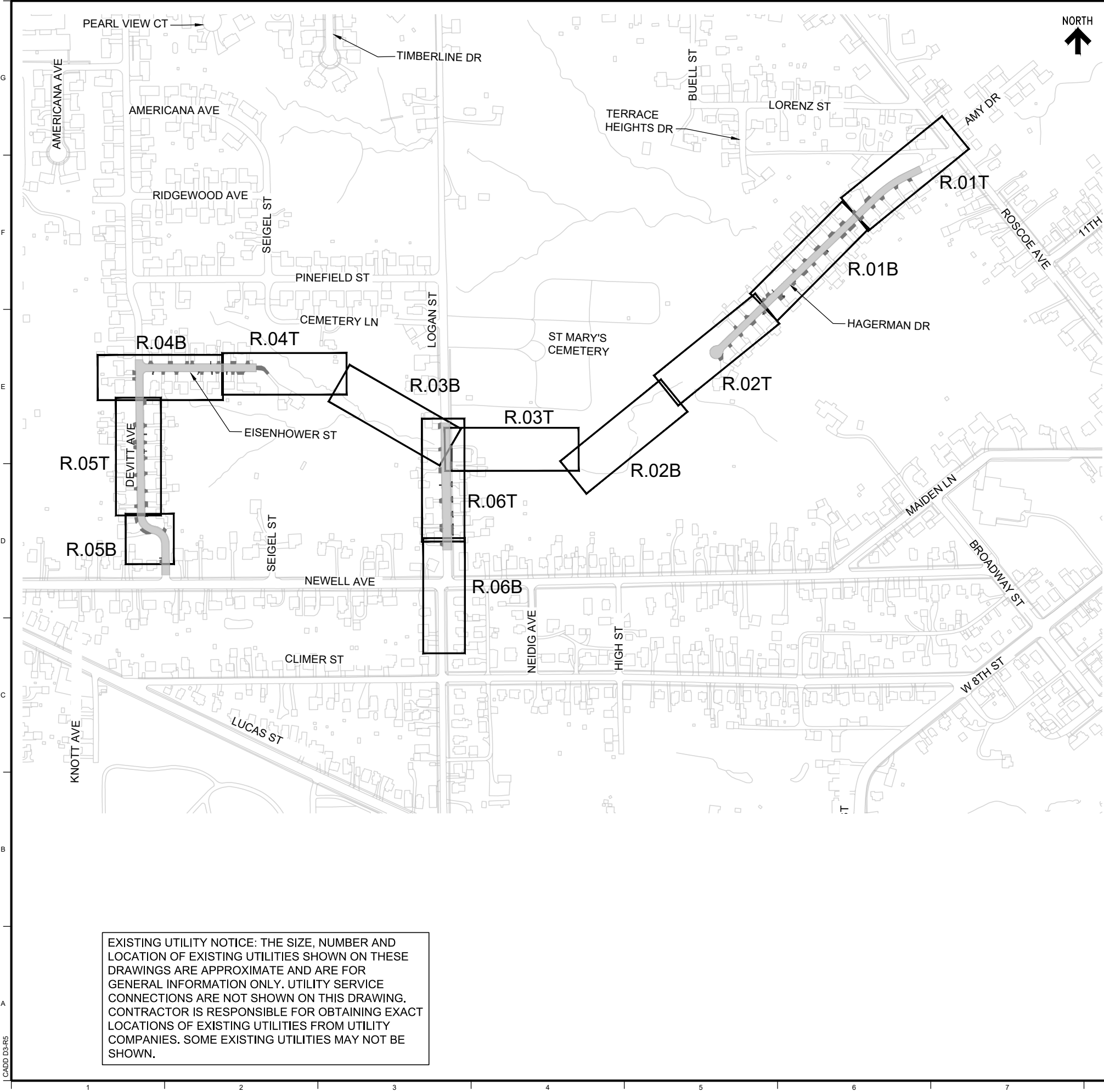
Stanley Consultants INC.
225 Iowa Avenue, Muscatine, Iowa 52761-3764
www.stanleyconsultants.com

CITY OF MUSCATINE - PHASE 6D
WEST HILL AREA SANITARY AND STORM SEWER SEPARATION
MUSCATINE, IOWA

**SANITARY SEWER
UWBS REPAIR**

DESIGNED PM JOHNSON	SCALE: 1" = 20'	
DRAWN GM REEVES	NO. 17660.60.30	REV.
CHECKED ER SCHALLERT	MSA.17	0
APPROVED KK HEIM		
APPROVED PM JOHNSON		
DATE MARCH 12, 2025		





GENERAL NOTES

- 1. ROW LINES INDICATED ON PLANS ARE NOT SURVEYED. INFORMATION WAS OBTAINED FROM ONLINE INFORMATION FROM MUSCATINE AREA GEOGRAPHICAL INFORMATION CONSORTIUM (MAGIC). PROPERTY SURVEY IS REQUIRED TO DETERMINE EXACT LOCATIONS. CONTRACTOR SHALL CONDUCT WORK WITHIN ROW LIMITS UNLESS EASEMENT OR CONSTRUCTION LIMITS ARE SHOWN ON PLANS.
- 2. CONTRACTOR SHALL PRESERVE AND PROTECT TREES TO GREATEST EXTENT POSSIBLE DURING CONSTRUCTION. COORDINATE WITH CITY ON DECISION TO REMOVE ADDITIONAL TREES.
- 3. CONTRACTOR SHALL PROTECT UNDERGROUND LIGHTING CONDUITS AND JUNCTION BOXES. IF DAMAGED, CONTRACTOR SHALL REPAIR ACCORDING TO MUSCATINE POWER AND WATER (MP&W) REQUIREMENTS. CONTRACTOR SHALL CONTACT MP&W IF DAMAGE OCCURS TO LIGHTING CONDUITS AND JUNCTION BOXES FOR REPAIR REQUIREMENTS. CONTRACTOR WILL NOT BE PAID DIRECTLY FOR LIGHTING REPAIR WORK. REPAIR WORK IS CONSIDERED INCIDENTAL TO THE COST OF THE PROJECT.
- 4. EXISTING DOWNSPOUT DRAIN PIPES THAT ARE LOCATED WITHIN THE CURB SECTION SHALL BE DISCONNECTED. CONNECTIONS ARE ONLY ALLOWED IF AUTHORIZED BY CITY. DISCONNECTING RELATED TO DOWNSPOUT DRAIN PIPES SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT CONSTRUCTION WORK. NO ADDITIONAL PAYMENT WILL BE PROVIDED TO THE CONTRACTOR FOR THIS WORK. PAYMENT WILL ONLY BE MADE UPON AUTHORIZATION BY THE CITY WHEN CONNECTING EXISTING DRAIN PIPES TO THE NEW CURB USING AUTHORIZED CURB CASTINGS.
- 5. CONTRACTOR SHALL PRESERVE AND PROTECT ALL EXISTING FEATURES ON PRIVATE PROPERTY. ITEMS THAT ARE DAMAGED DUE TO CONSTRUCTION SHALL BE REPLACED/RECONSTRUCTED BY CONTRACTOR AT NO ADDITIONAL COST TO CITY. CONSTRUCTION STAKING OF CONSTRUCTION LIMITS IS THE RESPONSIBILITY OF THE CONTRACTOR. COORDINATES OF CONSTRUCTION LIMITS ARE AVAILABLE WITH CADD FILE.
- 6. HMA MILLINGS AND PCC PAVEMENT REMOVED SHALL BE HAULED TO CITY OF MUSCATINE PUBLIC WORKS FACILITY ON WASHINGTON STREET, MUSCATINE, IA.
- 7. REMOVE AND SALVAGE BRICKS FROM BRICK STREET BASE. DELIVER SALVAGED BRICK TO CITY OF MUSCATINE PUBLIC WORKS FACILITY ON WASHINGTON STREET. LIMESTONE CURB THAT IS REMOVED SHALL BE HANDLED SAME AS BRICK.
- 8. IF NECESSARY, TRIM TREE BRANCHES BACK TO AVOID OVERHEAD CONFLICT WITH CONSTRUCTION MACHINERY TO PRESERVE TREES. CONTRACTOR SHALL COORDINATE WITH CITY.
- 9. TOPOGRAPHIC SURVEY INFORMATION SHOWN ON PLANS HAS BEEN OBTAINED FROM MARTIN & WHITACRE SURVEY (SURVEY COMPLETED BETWEEN 2021 AND 2024). BUILDING OUTLINES SHOWN ARE FROM CITY OF MUSCATINE DATA SOURCE AND MAY NOT REFLECT CURRENT CONDITIONS.
- 10. ANY STREET SIGNS IN THE IMPACTED AREA SHOULD BE SALVAGED AND DELIVERED/STOCKPILED AT THE CITY PUBLIC WORKS STORAGE YARD IMMEDIATELY AFTER REMOVAL. IF SIGNS ARE DAMAGED OR MISSING, CONTRACTOR MAY BE SUBJECT TO FINES AS DETERMINED BY THE CITY.
- 11. PLACE INLET PROTECTION AROUND INTAKES THAT ARE AT A LOCALIZED LOW POINT AND RECEIVE RUNOFF FROM DISTURBED AREAS. PROTECT ALL PROPOSED AND EXISTING INTAKES (ONSITE AND OFFSITE) THAT HAVE POTENTIAL TO CAPTURE SITE RUNOFF. SEE RR SHEETS FOR RECOMMENDED EROSION CONTROL PROTECTION MEASURES.
- 12. SILT FENCE TO BE INSTALLED IN ACCORDANCE WITH THE SWPPP DOCUMENT PROVIDED HEREIN. THIS APPLIES THROUGHOUT THE ENTIRE PROJECT.
- 13. EXISTING PAVEMENT MARKINGS SHALL BE DOCUMENTED BY THE CONTRACTOR PRIOR TO DEMOLITION.
- 14. MAKE A CLEAN, FULL DEPTH SAWCUT AT DEMO LIMITS AND AT PHASE BOUNDARIES.
- 15. REFER TO SANITARY AND STORM SEWER PLAN DRAWINGS FOR PROPOSED SEWERS, MANHOLES, AND INLETS. ABANDONED OR REMOVED PIPES AND MANHOLES ARE HATCHED ON THE M AND MSA SERIES DRAWINGS.
- 16. SIDEWALK REMOVAL LIMITS SHOWN ARE MINIMUM REQUIRED. REMOVE SIDEWALK TO NEAREST JOINT.

EXISTING UTILITY NOTICE: THE SIZE, NUMBER AND LOCATION OF EXISTING UTILITIES SHOWN ON THESE DRAWINGS ARE APPROXIMATE AND ARE FOR GENERAL INFORMATION ONLY. UTILITY SERVICE CONNECTIONS ARE NOT SHOWN ON THIS DRAWING. CONTRACTOR IS RESPONSIBLE FOR OBTAINING EXACT LOCATIONS OF EXISTING UTILITIES FROM UTILITY COMPANIES. SOME EXISTING UTILITIES MAY NOT BE SHOWN.

NO. REVISIONS DSGN CHKD APVD DATE



Stanley Consultants inc.

225 Iowa Avenue, Muscatine, Iowa 52761-3764
www.stanleyconsultants.com

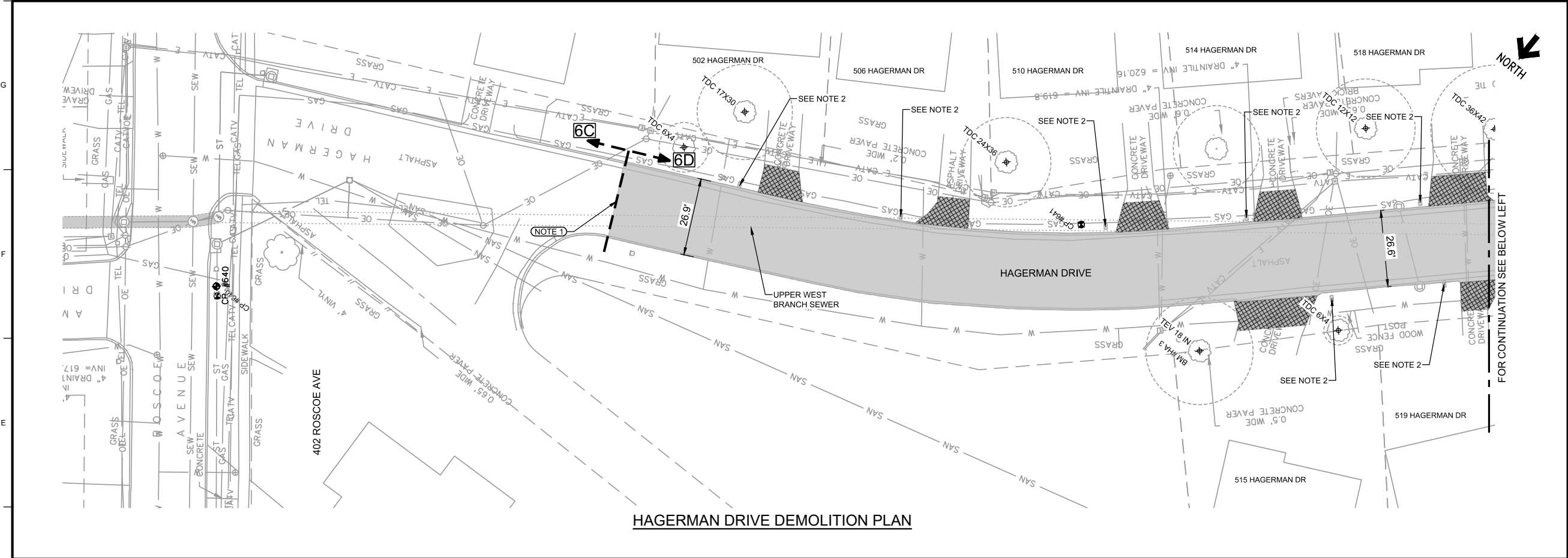
CITY OF MUSCATINE - PHASE 6D
WEST HILL AREA SANITARY AND STORM SEWER SEPARATION
MUSCATINE, IOWA

**DEMOLITION OVERALL SITE
AND KEY PLAN**

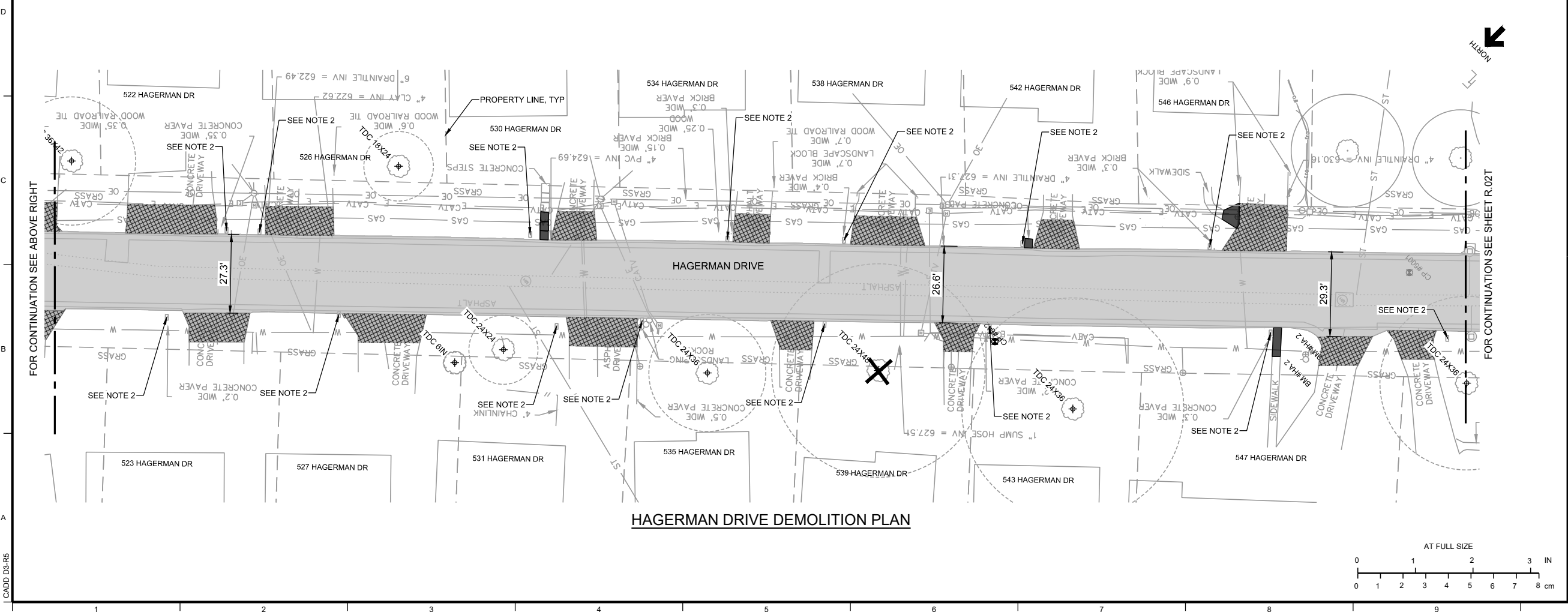
DESIGNED PM JOHNSON/KK HEIM
DRAWN GM REEVES
CHECKED ER SCHALLERT
APPROVED _____
DATE MARCH 12, 2025

SCALE: AS NOTED
NO. 17660.60.30
REV. **R.00**
0

Page 215 of 1049



HAGERMAN DRIVE DEMOLITION PLAN



HAGERMAN DRIVE DEMOLITION PLAN

NOTES

- COORDINATE WORK WITH PHASE 6C CONTRACTOR.
- REMOVE AND REINSTALL MAILBOX. COORDINATE WITH CITY AND PROPERTY OWNER FOR SAFE STORAGE OF MAILBOX DURING CONSTRUCTION.

LEGEND

- PAVEMENT DEMOLITION
- SIDEWALK DEMOLITION
- DRIVEWAY DEMOLITION
- TREE DEMOLITION
- SHRUB DEMOLITION
- REMOVE LANDSCAPING, SAVE AND REPLACE
- PROTECT TREE, REMOVE IF NECESSARY
- TREE TRUNK DIAMETER LABEL
- TREE DECIDUOUS
- TREE EVERGREEN

NO.	REVISIONS	DSGN	CHKD	APVD	DATE

Stanley Consultants Inc.
225 Iowa Avenue, Muscatine, Iowa 52761-3764
www.stanleyconsultants.com

CITY OF MUSCATINE - PHASE 6D
WEST HILL AREA SANITARY AND STORM SEWER SEPARATION
MUSCATINE, IOWA

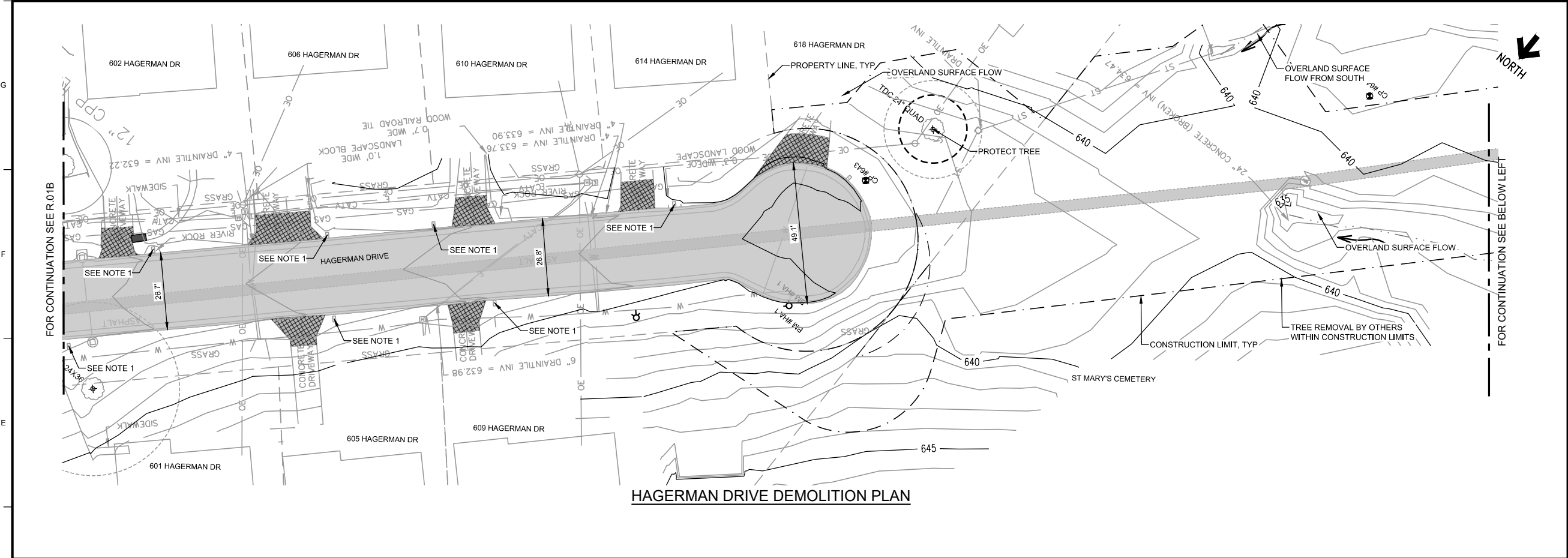
DEMOLITION PLAN HAGERMAN DRIVE

DESIGNED	PM JOHNSON	SCALE: 1" = 20'
DRAWN	GM REEVES	NO. 17660.60.30
CHECKED	ER SCHALLERT	REV.
APPROVED	KK HEIM	R.01
APPROVED	PM JOHNSON	0
DATE	MARCH 12, 2025	

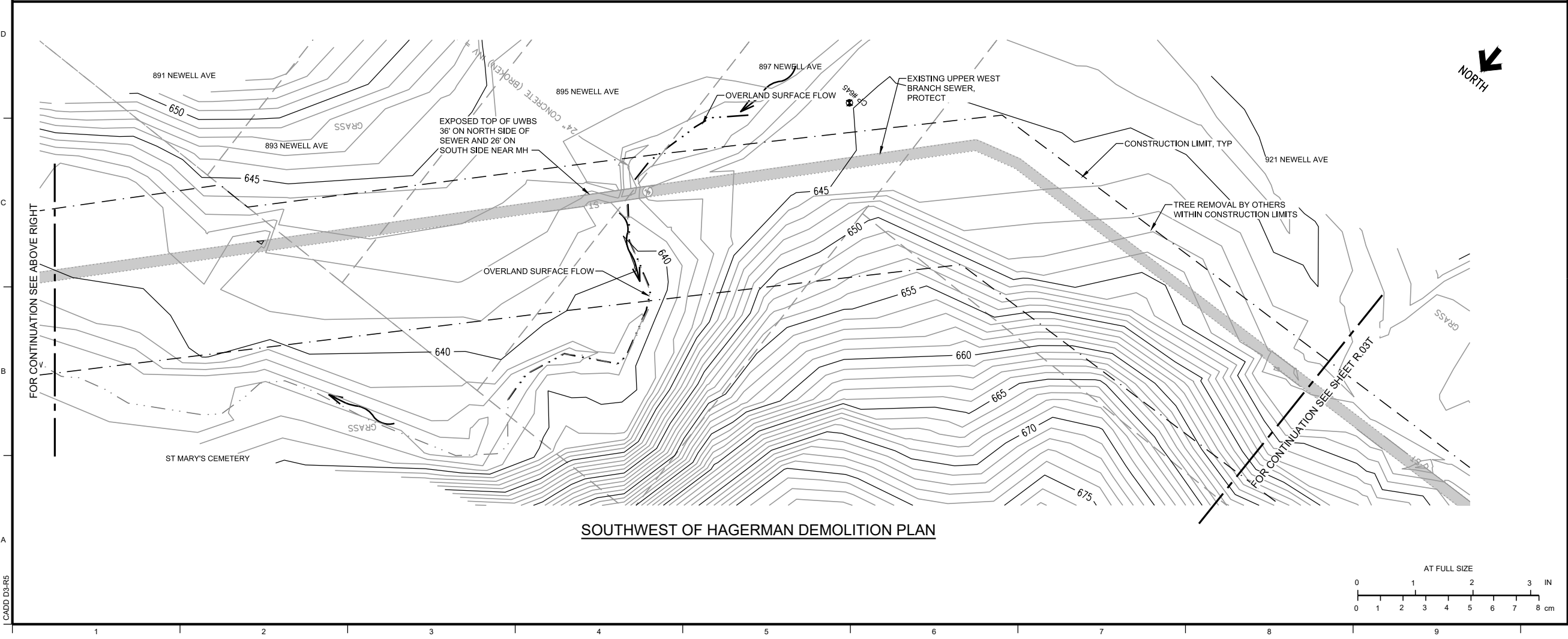
AT FULL SIZE

10 © STANLEY CONSULTANTS

Page 216 of 1049



HAGERMAN DRIVE DEMOLITION PLAN



SOUTHWEST OF HAGERMAN DEMOLITION PLAN

NOTES

1. REMOVE AND REINSTALL MAILBOX. COORDINATE WITH CITY AND PROPERTY OWNER FOR SAFE STORAGE OF MAILBOX DURING CONSTRUCTION.

LEGEND

PAVEMENT DEMOLITION

SIDEWALK DEMOLITION

DRIVEWAY DEMOLITION

TREE DEMOLITION

SHRUB DEMOLITION

REMOVE LANDSCAPING, SAVE AND REPLACE

PROTECT TREE, REMOVE IF NECESSARY

TREE TRUNK DIAMETER LABEL

TDC

TREE DECIDUOUS

TEV

TREE EVERGREEN

NO.	REVISIONS	DSGN	CHKD	APVD	DATE

225 Iowa Avenue, Muscatine, Iowa 52761-3764
www.stanleyconsultants.com

CITY OF MUSCATINE - PHASE 6D
WEST HILL AREA SANITARY AND STORM SEWER SEPARATION
MUSCATINE, IOWA

DEMOLITION PLAN
HAGERMAN DRIVE

DESIGNED PM JOHNSON
DRAWN GM REEVES
CHECKED ER SCHALLERT
APPROVED KK HEIM
DATE PM JOHNSON
MARCH 12, 2025

SCALE: 1" = 20'
NO. 17660.60.30
REV.
R.02
0

0 1 2 3 4 5 6 7 8 cm

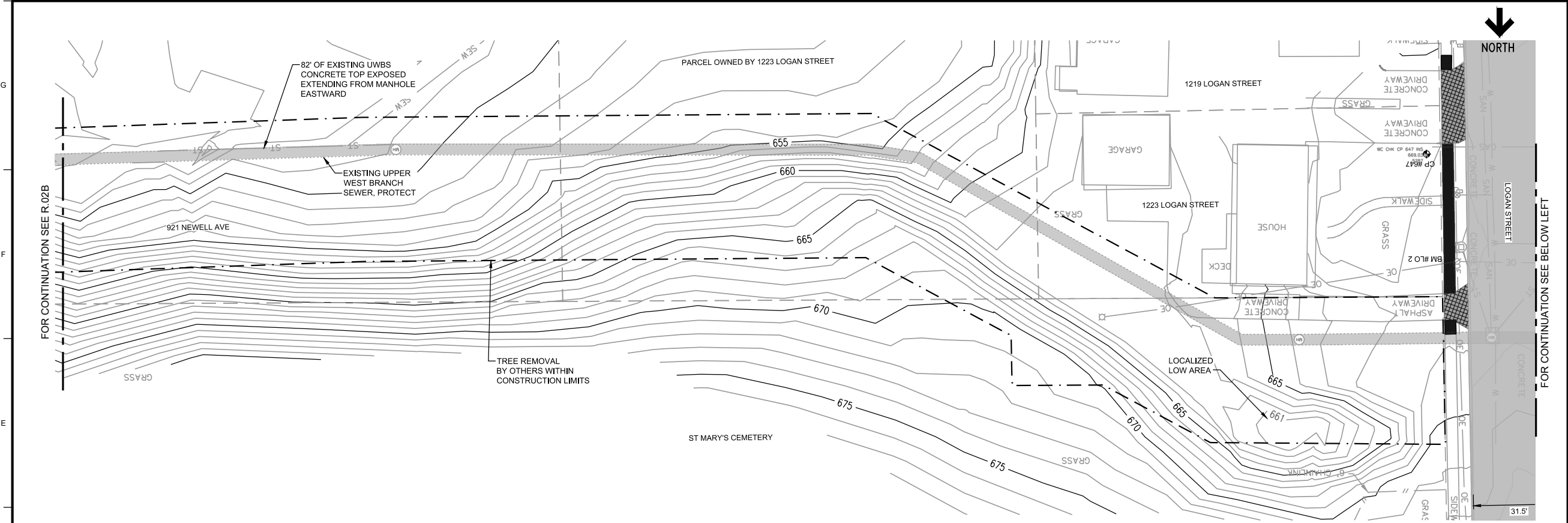
0 1 2 3 4 5 6 7 8 in

AT FULL SIZE

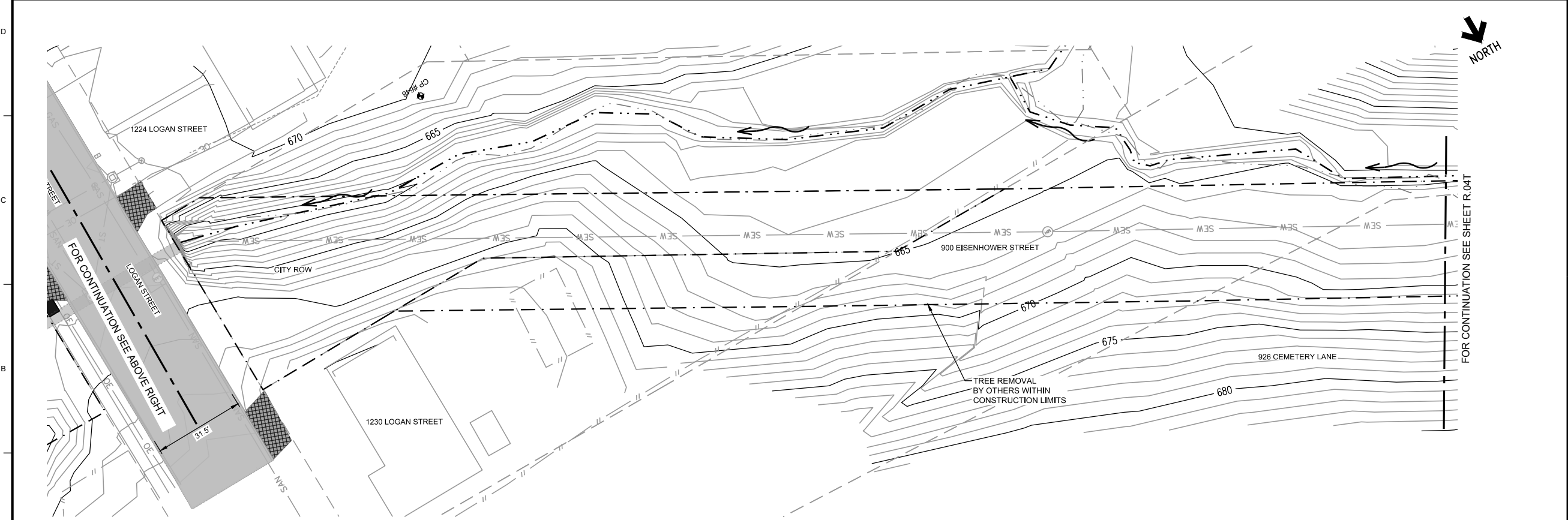
10

STANLEY CONSULTANTS

Page 217 of 1049



DEMOLITION PLAN BETWEEN HAGERMAN DR & LOGAN ST



DEMOLITION PLAN BETWEEN LOGAN ST & EISENHOWER ST

NOTES

LEGEND

- PAVEMENT DEMOLITION
- SIDEWALK DEMOLITION
- DRIVEWAY DEMOLITION
- TREE DEMOLITION
- SHRUB DEMOLITION
- REMOVE LANDSCAPING, SAVE AND REPLACE
- PROTECT TREE, REMOVE IF NECESSARY
- TDC 15M
- TREE TRUNK DIAMETER LABEL
- TDC TREE DECIDUOUS
- TEV TREE EVERGREEN

NO.	REVISIONS	DSGN	CHKD	APVD	DATE

Stanley Consultants INC.
225 Iowa Avenue, Muscatine, Iowa 52761-3764
www.stanleyconsultants.com

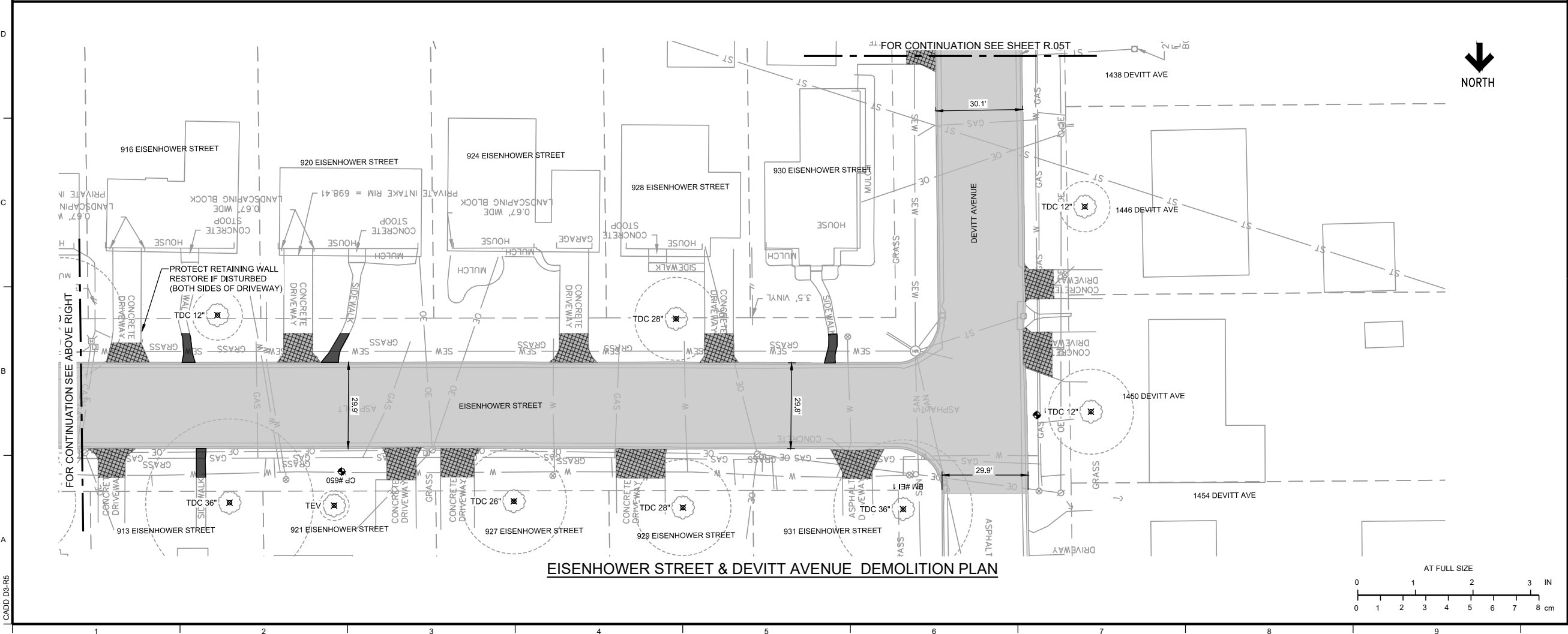
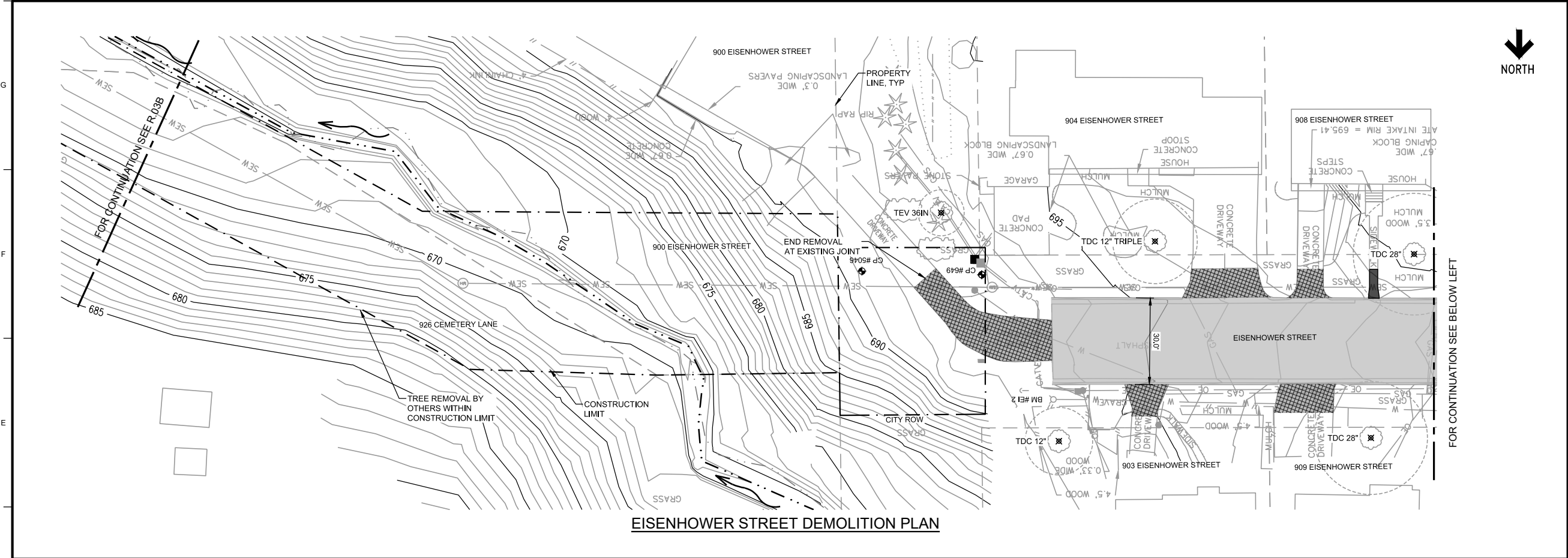
CITY OF MUSCATINE - PHASE 6D
WEST HILL AREA SANITARY AND STORM SEWER SEPARATION
MUSCATINE, IOWA

**DEMOLITION PLAN BETWEEN
HAGERMAN DR & EISENHOWER ST**

DESIGNED PM JOHNSON	SCALE: 1" = 20'	
DRAWN GM REEVES	NO. 17660.60.30	REV.
CHECKED ER SCHALLERT	R.03	0
APPROVED KK HEIM		
APPROVED PM JOHNSON		
DATE MARCH 12, 2025		

LOAD D3-R6





NOTES

LEGEND

- PAVEMENT DEMOLITION
- SIDEWALK DEMOLITION
- DRIVEWAY DEMOLITION
- TREE DEMOLITION
- SHRUB DEMOLITION
- REMOVE LANDSCAPING, SAVE AND REPLACE
- PROTECT TREE, REMOVE IF NECESSARY
- TREE TRUNK DIAMETER LABEL
- TDC TREE DECIDUOUS
- TEV TREE EVERGREEN

NO.	REVISIONS	DSGN	CHKD	APVD	DATE

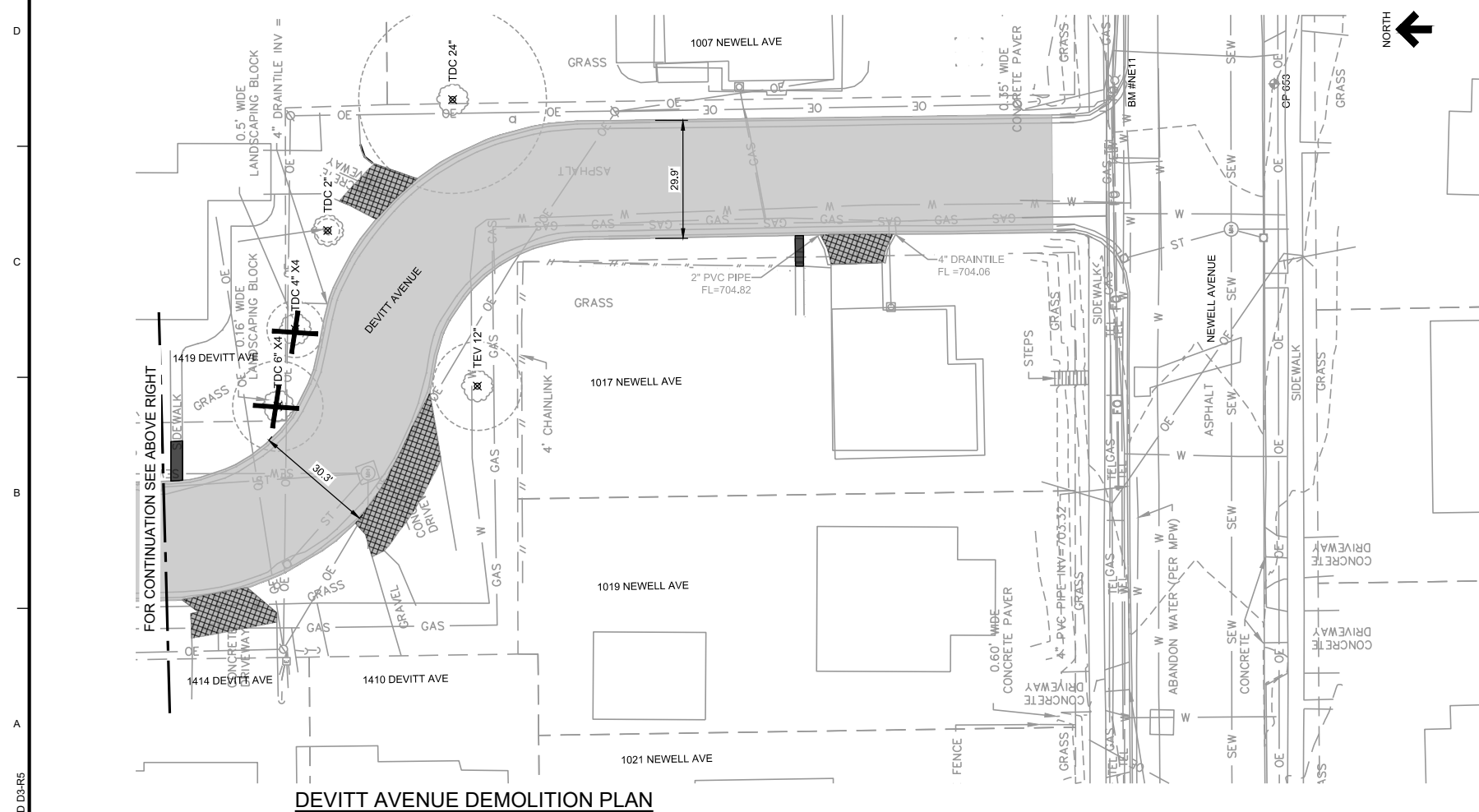
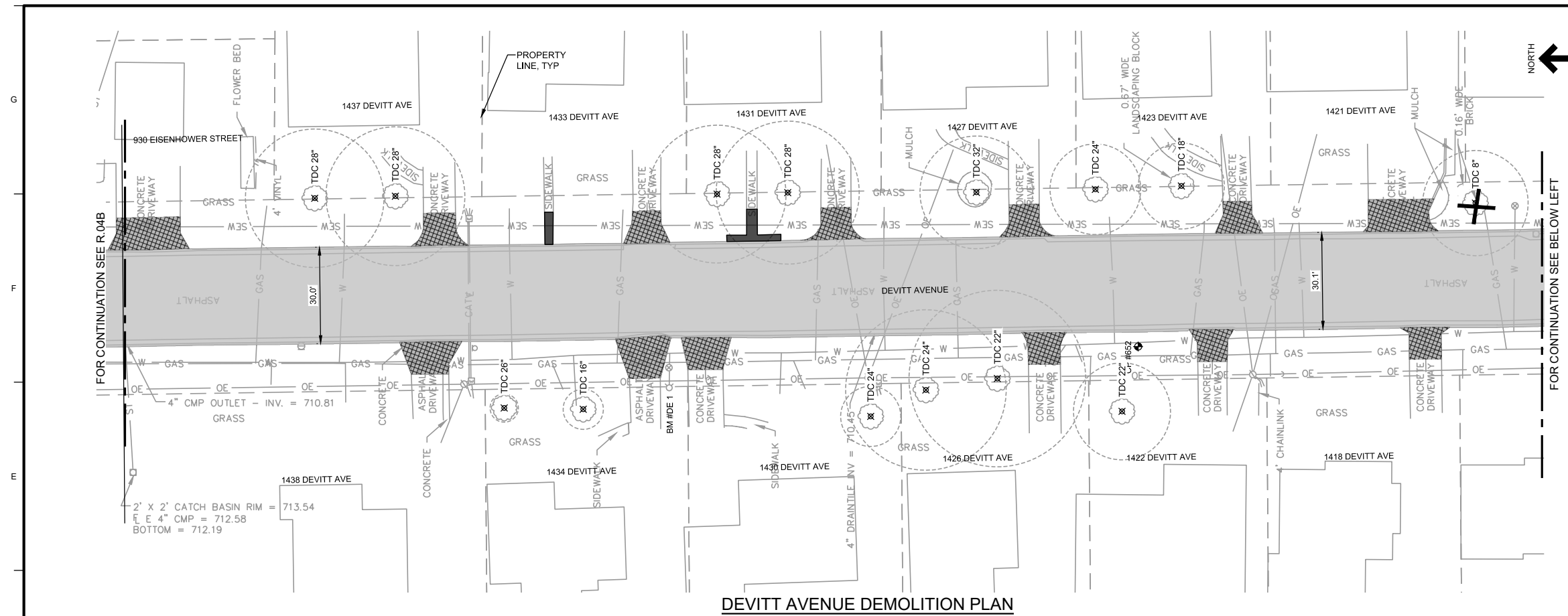
Stanley Consultants Inc.
225 Iowa Avenue, Muscatine, Iowa 52761-3764
www.stanleyconsultants.com

CITY OF MUSCATINE - PHASE 6D
WEST HILL AREA SANITARY AND STORM SEWER SEPARATION
MUSCATINE, IOWA

DEMOLITION PLAN
EISENHOWER ST & DEVITT AVE

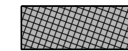
DESIGNED PM JOHNSON	SCALE: 1" = 20'
DRAWN GM REEVES	NO. 17660.60.30
CHECKED ER SCHALLERT	REV.
APPROVED KK HEIM	R.04
APPROVED PM JOHNSON	0
DATE MARCH 12, 2025	

LOAD D3-R6



NOTES

LEGEND



TRC TREE DECIDUOUS

IDC TREE DECIDUOUS

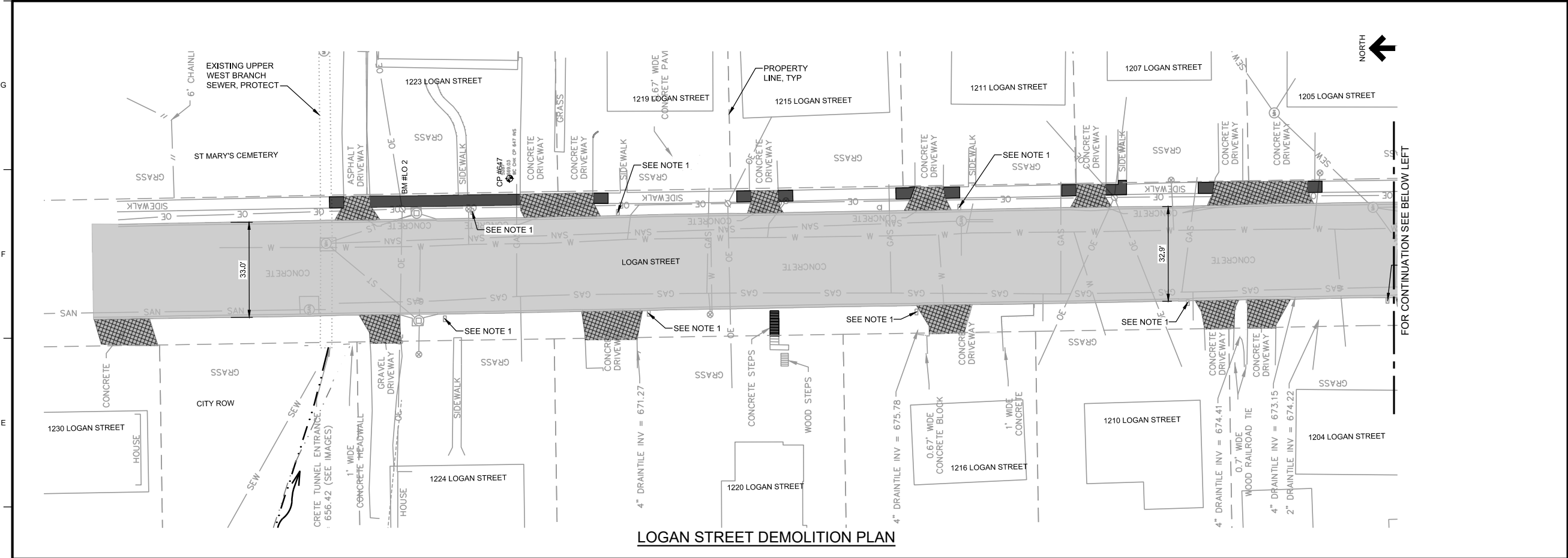
NO	REVISIONS	DSGN	CHKD	APVD	DATE

**Stanley Consultants INC.**

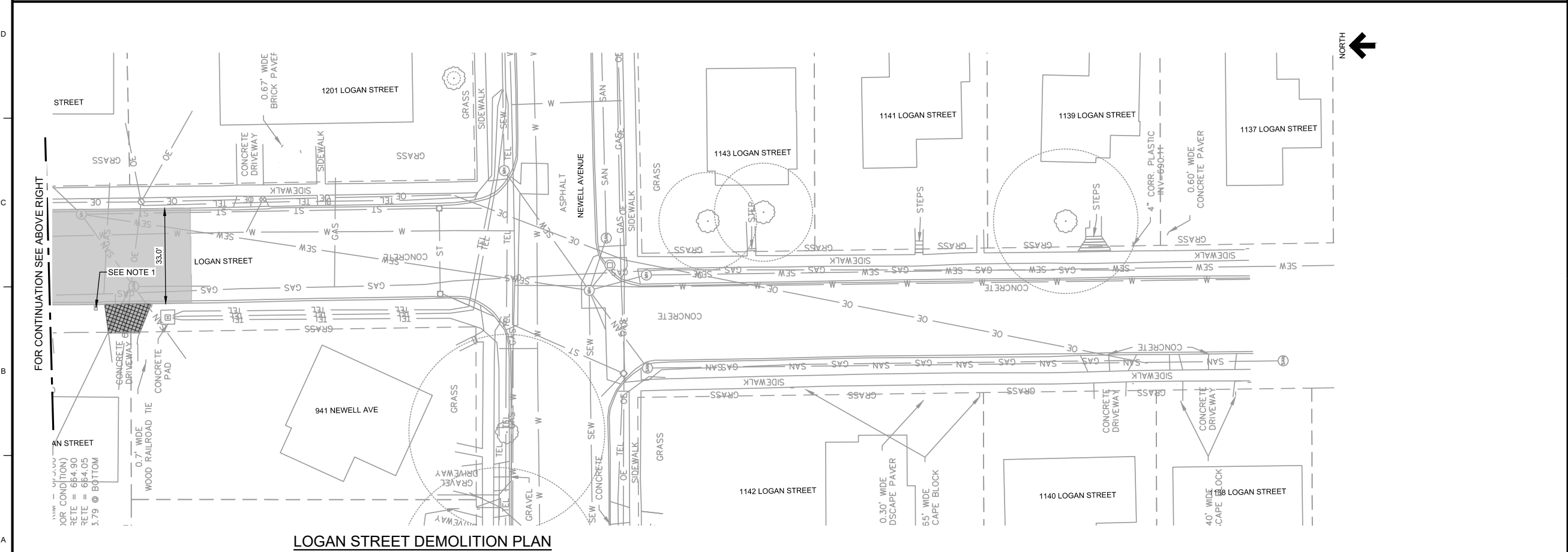
CITY OF MUSCATINE - PHASE 6D
WEST HILL AREA SANITARY AND STORM SEWER SEPARATION
MUSCATINE, IOWA

DEMOLITION PLAN - DEVITT AVENUE

DESIGNED	PM JOHNSON	SCALE: 1" = 20'	
DRAWN	GM REEVES	NO. 17660.60.30	REV.
CHECKED	ER SCHALLERT		
APPROVED	KK HEIM	R.05	0
APPROVED	PM JOHNSON		
DATE	MARCH 12, 2025		



LOGAN STREET DEMOLITION PLAN



LOGAN STREET DEMOLITION PLAN

NOTES

1. REMOVE AND REINSTALL MAILBOX. COORDINATE WITH CITY AND PROPERTY OWNER FOR SAFE STORAGE OF MAILBOX DURING CONSTRUCTION.

LEGEND

- PAVEMENT DEMOLITION
- SIDEWALK DEMOLITION
- DRIVEWAY DEMOLITION
- TREE DEMOLITION
- SHRUB DEMOLITION
- REMOVE LANDSCAPING, SAVE AND REPLACE
- PROTECT TREE, REMOVE IF NECESSARY
- TREE TRUNK DIAMETER LABEL
- TDC TREE DECIDUOUS
- TEV TREE EVERGREEN

NO.	REVISIONS	DSGN	CHKD	APVD	DATE

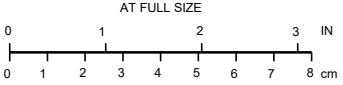


Stanley Consultants Inc.
225 Iowa Avenue, Muscatine, Iowa 52761-3764
www.stanleyconsultants.com

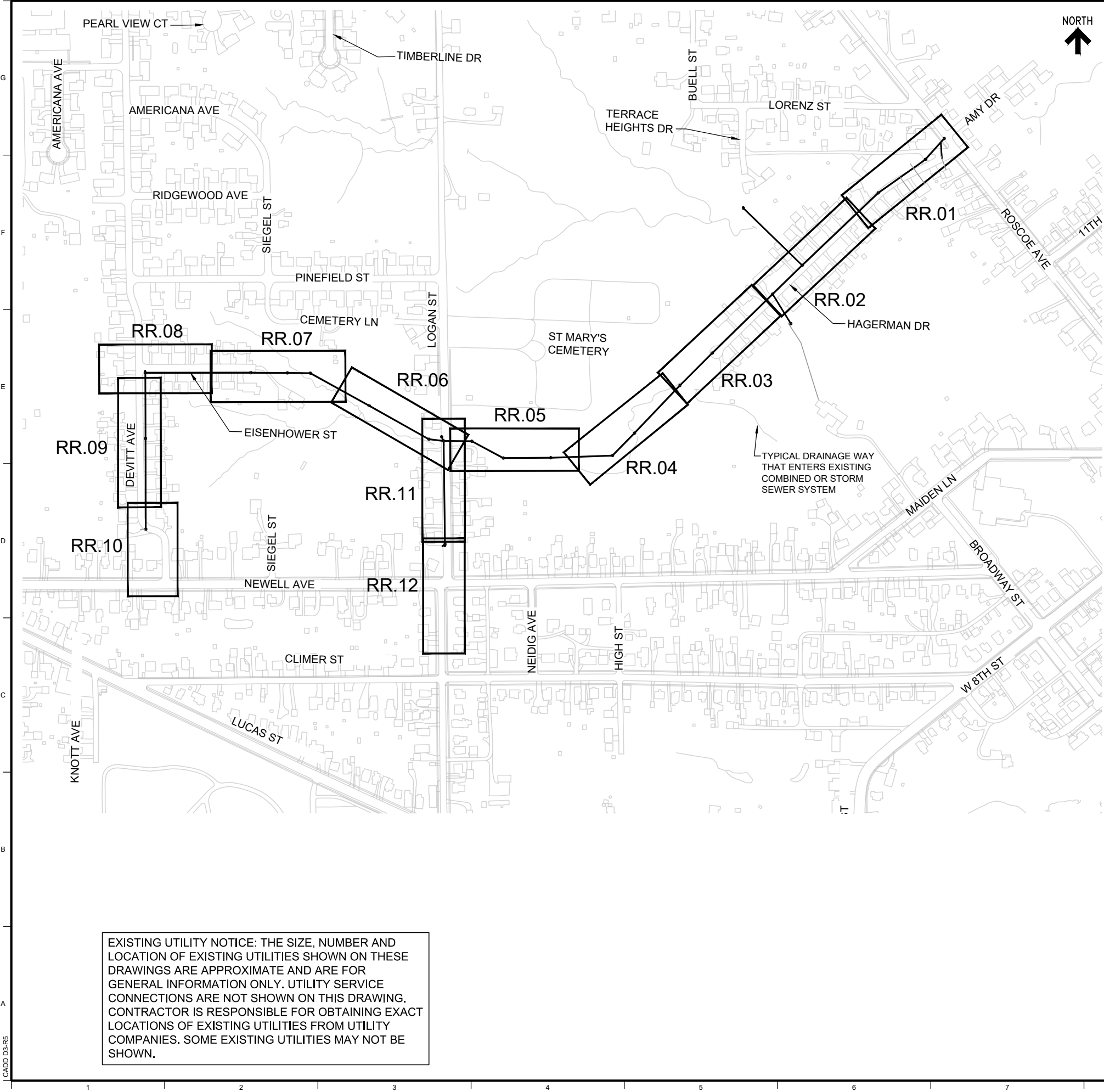
CITY OF MUSCATINE - PHASE 6D
WEST HILL AREA SANITARY AND STORM SEWER SEPARATION
MUSCATINE, IOWA

DEMOLITION PLAN - LOGAN STREET

DESIGNED PM JOHNSON	SCALE: 1" = 20'	REV. 0
DRAWN GM REEVES	NO. 17660.60.30	
CHECKED ER SCHALLERT		
APPROVED KK HEIM		
APPROVED PM JOHNSON		
DATE MARCH 12, 2025	R.06	



LOAD D3-R6



GENERAL NOTES

- KEEP ALL HAUL ROUTES FREE FROM SEDIMENT ACCUMULATION. INSPECT ROUTINELY AND CLEAN AS NEEDED.
- CONTRACTOR IS RESPONSIBLE FOR CONTINUALLY MAINTAINING SITE MAP (PLAN) OF PROJECT SITE REFLECTING CURRENT EROSION AND SEDIMENT CONTROL MEASURES IMPLEMENTED.
- SEE SHEET CE.01 FOR STORM WATER POLLUTION PREVENTION PLAN (SWPPP). SEE ESTIMATE REFERENCE NOTES AND SUDAS SECTION 9040 FOR REQUIREMENTS.

EROSION CONTROL LEGEND

- PROTECTION OF PROPOSED INLET
- PROTECTION OF EXISTING INLET
- DRAINAGE FLOW DIRECTION

RESTORATION LEGEND

- 7" PCC PAVEMENT REPLACEMENT
- SIDEWALK REPLACEMENT
- DRIVEWAY AND ALLEY REPLACEMENT
- SEEDING
- DETECTABLE WARNING SURFACE

DEMOLITION LEGEND

- TREE DEMOLITION
- SHRUB DEMOLITION
- REMOVE, SAVE AND REPLACE
- PROTECT, REMOVE IF NECESSARY

NO.	REVISIONS	DSGN	CHKD	APVD	DATE

Stanley Consultants INC.
225 Iowa Avenue, Muscatine, Iowa 52761-3764
www.stanleyconsultants.com

CITY OF MUSCATINE - PHASE 6D
WEST HILL AREA SANITARY AND STORM SEWER SEPARATION
MUSCATINE, IOWA

OVERALL EROSION CONTROL & KEY PLAN

DESIGNED <u>KK HEIM</u>	SCALE: AS NOTED	
DRAWN <u>GM REEVES</u>	NO. 17660.60.30	REV.
CHECKED <u>ER SCHALLERT</u>		
APPROVED <u>JM BRADY</u>		
APPROVED <u>KK HEIM</u>		
DATE <u>MARCH 12, 2025</u>		

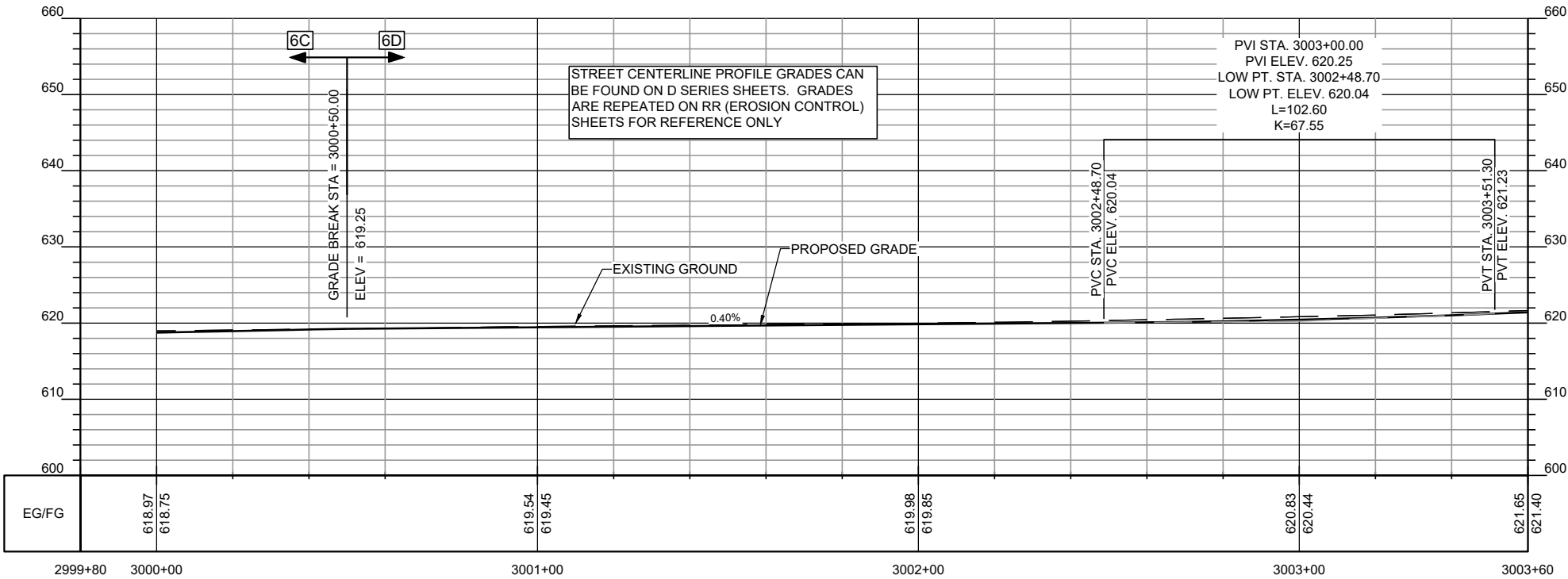
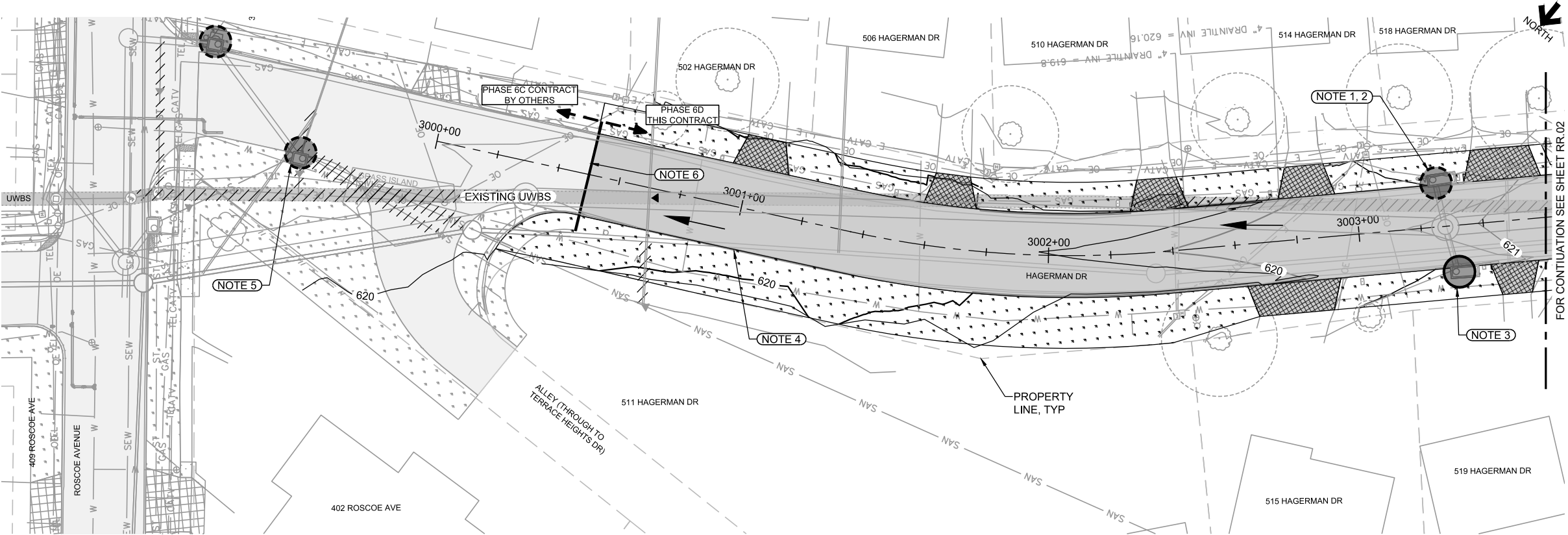
RR.00	0
-------	---

EXISTING UTILITY NOTICE: THE SIZE, NUMBER AND LOCATION OF EXISTING UTILITIES SHOWN ON THESE DRAWINGS ARE APPROXIMATE AND ARE FOR GENERAL INFORMATION ONLY. UTILITY SERVICE CONNECTIONS ARE NOT SHOWN ON THIS DRAWING. CONTRACTOR IS RESPONSIBLE FOR OBTAINING EXACT LOCATIONS OF EXISTING UTILITIES FROM UTILITY COMPANIES. SOME EXISTING UTILITIES MAY NOT BE SHOWN.

AT FULL SIZE

10 ©STANLEY CONSULTANTS

Page 222 of 1049



NOTES

1. PROTECT EXISTING AND PROPOSED INLETS AND STORM SEWERS FOR DURATION OF CONSTRUCTION. ADJUST EROSION PROTECTION METHODS WITH CHANGES TO WORK STAGE.
2. PROTECT ALL EXISTING INLETS AND EXISTING COMBINED AND STORM SEWERS FROM SEDIMENT DURING CONSTRUCTION OPERATIONS BEFORE NEW INLETS ARE PLACED.
3. PROTECT ALL PROPOSED INLETS AND STORM SEWERS FROM SEDIMENT DURING CONSTRUCTION UNTIL SOIL IS STABILIZED AND SITE IS CLEANED.
4. PREVENT TOPSOIL FROM ENTERING STREET WITH INSTALLATION OF SILT FENCE, WATTLES, FILTER SOCKS OR OTHER EROSION PROTECTION METHOD BEHIND CURB, NOT SHOWN.
5. PROTECT INLETS DOWNSTREAM OF THE PROJECT AREA ON HAGERMAN AND ROSCOE AS NEEDED.
6. PREVENT TRACKING MUD ONTO NEW PAVEMENT. INSTALL STABILIZED CONSTRUCTION EXIT OR EXTRA TEMPORARY AGGREGATE SURFACING AT PROJECT STARTING POINT. ADJUST AS PAVEMENT IS PLACED.

NO.	REVISIONS	DSGN	CHKD	APVD	DATE



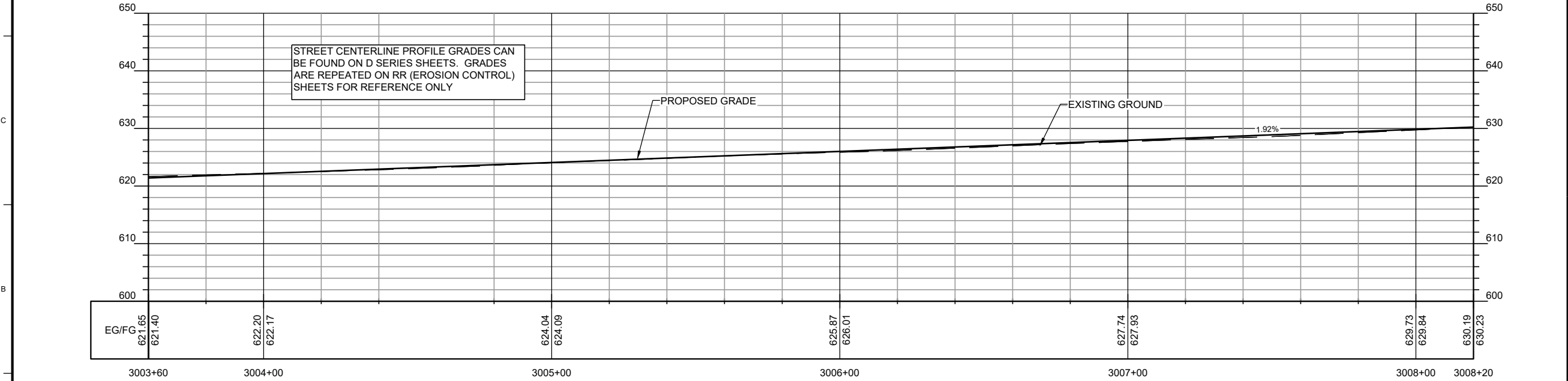
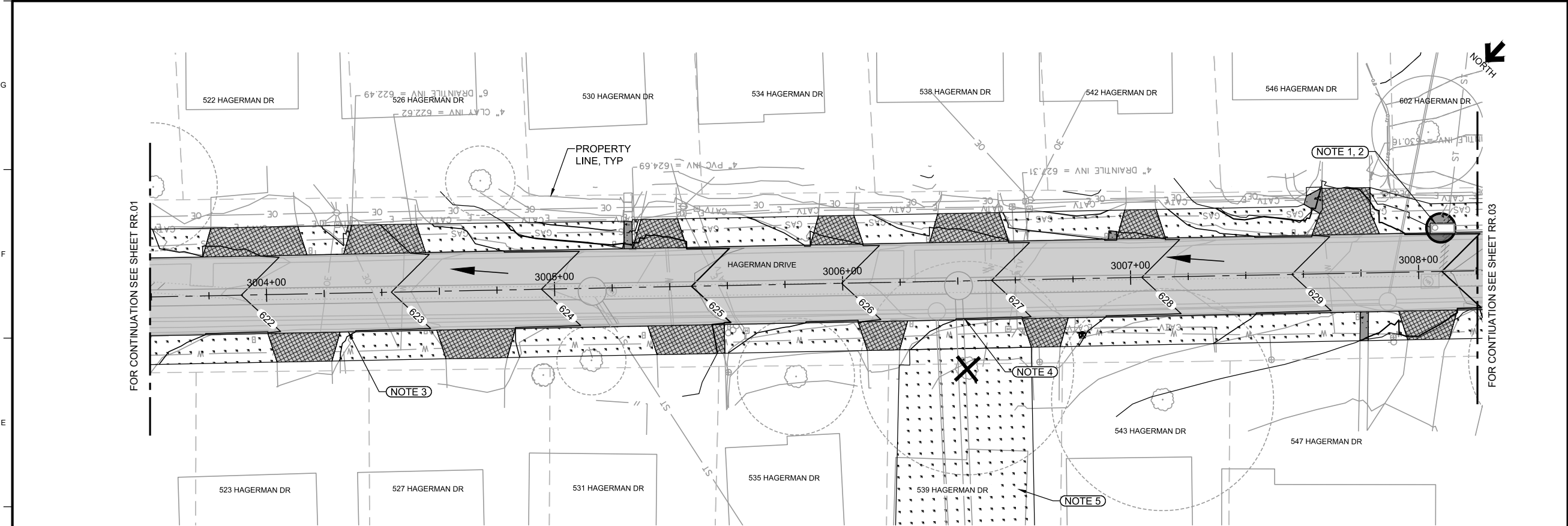
Stanley Consultants INC.

225 Iowa Avenue, Muscatine, Iowa 52761-3764
www.stanleyconsultants.com

CITY OF MUSCATINE - PHASE 6D
WEST HILL AREA SANITARY AND STORM SEWER SEPARATION
MUSCATINE, IOWA

EROSION CONTROL PLAN - SHEET 1

DESIGNED	KK HEIM	SCALE: 1" = 20'	
DRAWN	GM REEVES	NO. 17660.60.30	REV.
CHECKED	ER SCHALLERT		
APPROVED	JM BRADY		
APPROVED	KK HEIM		
DATE	MARCH 12, 2025	RR.01	0



NOTES

1. PROTECT EXISTING AND PROPOSED INLETS AND STORM SEWERS FOR DURATION OF CONSTRUCTION. ADJUST EROSION PROTECTION METHODS WITH CHANGES TO WORK STAGE.
2. PROTECT ALL PROPOSED INLETS AND STORM SEWERS FROM SEDIMENT DURING CONSTRUCTION UNTIL SOIL IS STABILIZED AND SITE IS CLEANED, TYP.
3. PREVENT TOPSOIL FROM ENTERING STREET WITH INSTALLATION OF SILT FENCE, WATTLES, FILTER SOCKS OR OTHER EROSION PROTECTION METHOD BEHIND THE CURB, NOT SHOWN.
4. PREVENT TRACKING MUD ONTO NEW PAVEMENT. INSTALL STABILIZED CONSTRUCTION EXIT OR EXTRA TEMPORARY AGGREGATE SURFACING FOR WORK ON 539 HAGERMAN DR PARCEL.
5. PROTECT ANY SLOPES DISTURBED ON 539 HAGERMAN PROPERTY WITH EROSION CONTROL BLANKETS ACCORDING TO FIGURE 9040.103. SEE SHEET MSA. 15 FOR CONTOURS ON 539 PROPERTY.

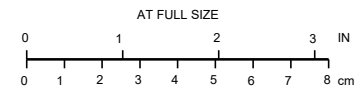
NO.	REVISIONS	DSGN	CHKD	APVD	DATE

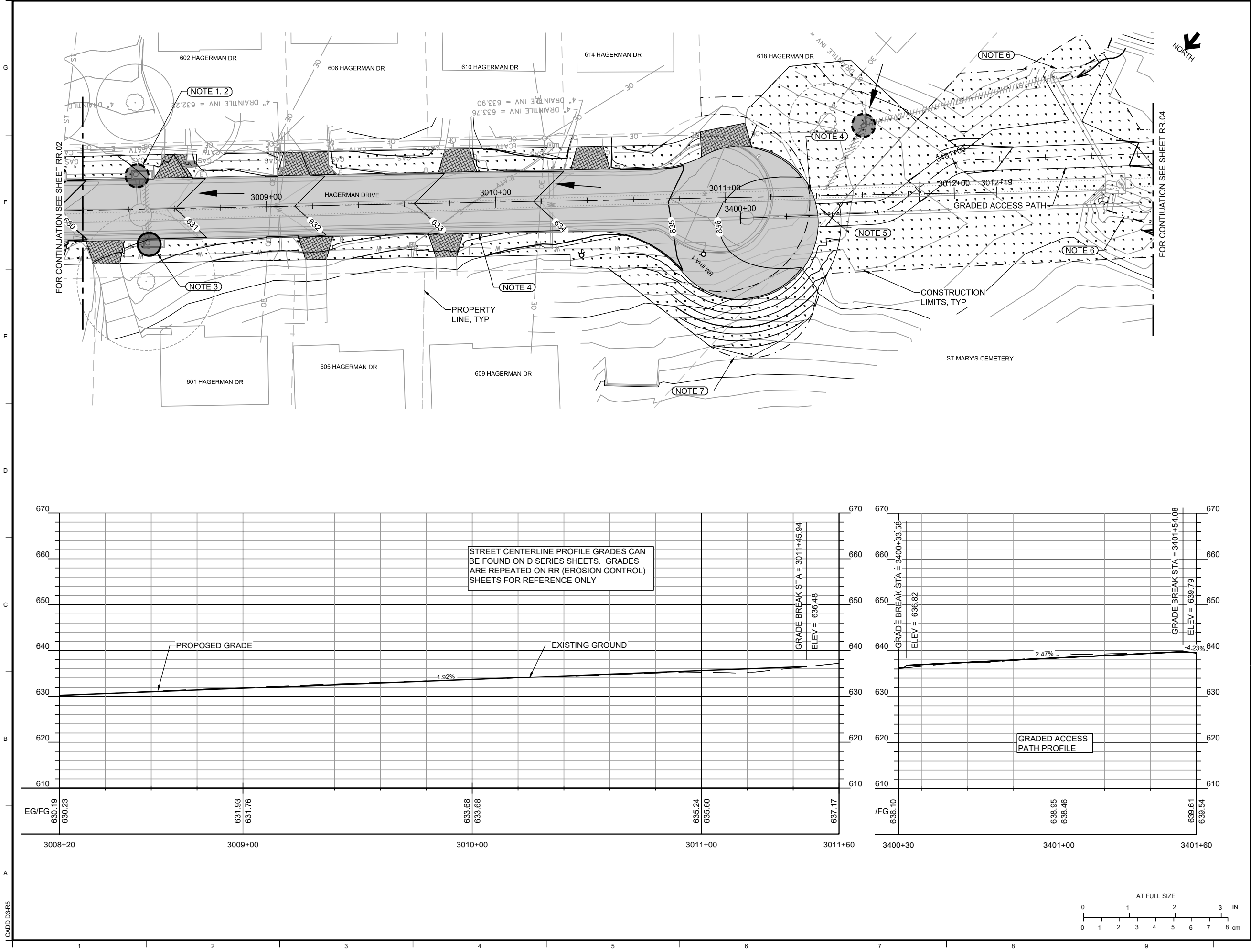

Stanley Consultants Inc.
225 Iowa Avenue, Muscatine, Iowa 52761-3764
www.stanleyconsultants.com

CITY OF MUSCATINE - PHASE 6D
WEST HILL AREA SANITARY AND STORM SEWER SEPARATION
MUSCATINE, IOWA

EROSION CONTROL PLAN - SHEET 2

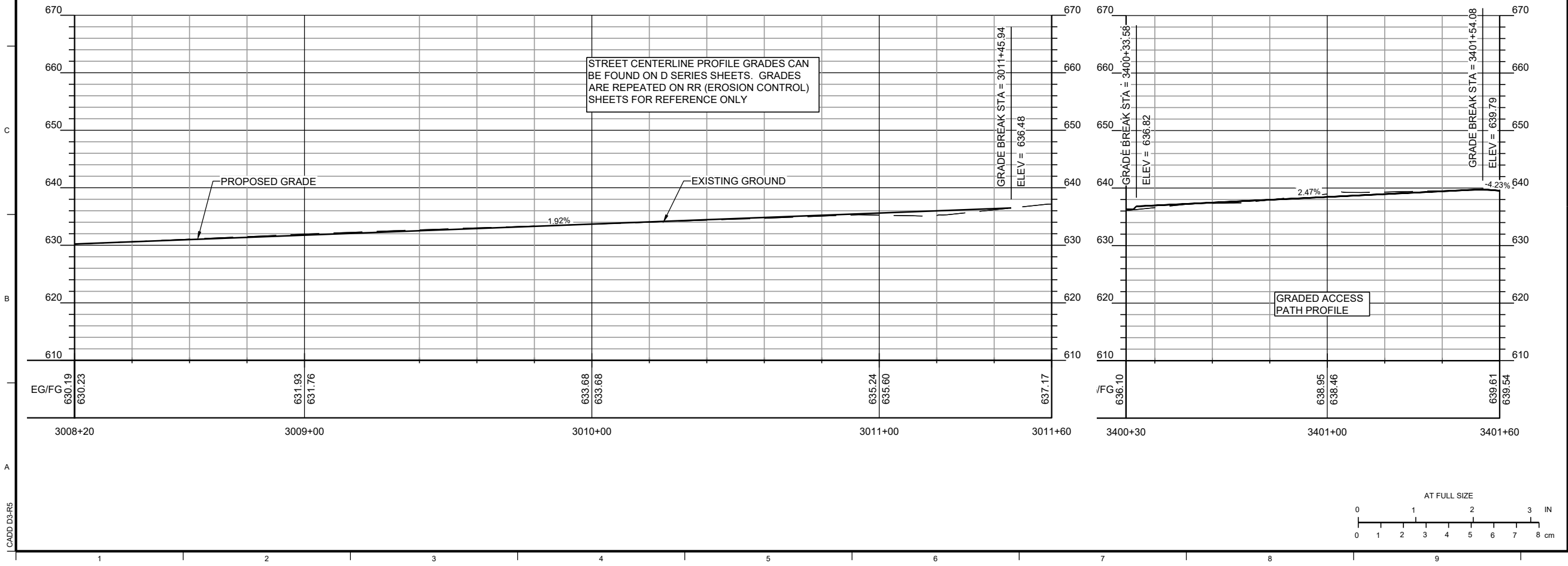
DESIGNED <u>KK HEIM</u>	SCALE: 1" = 20'	REV.
DRAWN <u>GM REEVES</u>	NO. 17660.60.30	
CHECKED <u>ER SCHALLERT</u>		
APPROVED <u>JM BRADY</u>		
APPROVED <u>KK HEIM</u>		
DATE <u>MARCH 12, 2025</u>	RR.02	0





NOTES

1. PROTECT EXISTING AND PROPOSED INLETS AND STORM SEWERS FOR DURATION OF CONSTRUCTION. ADJUST EROSION PROTECTION METHODS WITH CHANGES TO WORK STAGE.
2. PROTECT ALL EXISTING INLETS AND EXISTING COMBINED AND STORM SEWERS FROM SEDIMENT DURING CONSTRUCTION OPERATIONS BEFORE NEW INLETS ARE PLACED, TYP.
3. PREVENT ALL PROPOSED INLETS AND STORM SEWERS FROM SEDIMENT DURING CONSTRUCTION UNTIL SOIL IS STABILIZED AND SITE IS CLEANED, TYP.
4. PREVENT TOPSOIL FROM ENTERING STREET WITH INSTALLATION OF SILT FENCE, WATTLES, FILTER SOCKS OR OTHER EROSION PROTECTION METHOD BEHIND THE CURB, NOT SHOWN.
5. PROVIDE EROSION CONTROLS TO PREVENT SEDIMENT FROM ENTERING STREET. PROVIDE STABILIZED CONSTRUCTION EXIT. SEE SUDAS DETAIL 9040.120.
6. EXISTING DRAINAGE PATH ENTERS STORM SEWER SYSTEM. PROTECT OPEN INTAKE PIPES. INSTALL EROSION CONTROL TO PROTECT DISTURBED AREA UPSTREAM OF INTAKE POINT.
7. INSTALL ROLLED EROSION CONTROL PRODUCT ON SLOPES. SEE SUDAS DETAIL 9040.103.



NO.	REVISIONS	DSGN	CHKD	APVD	DATE



Stanley Consultants Inc.

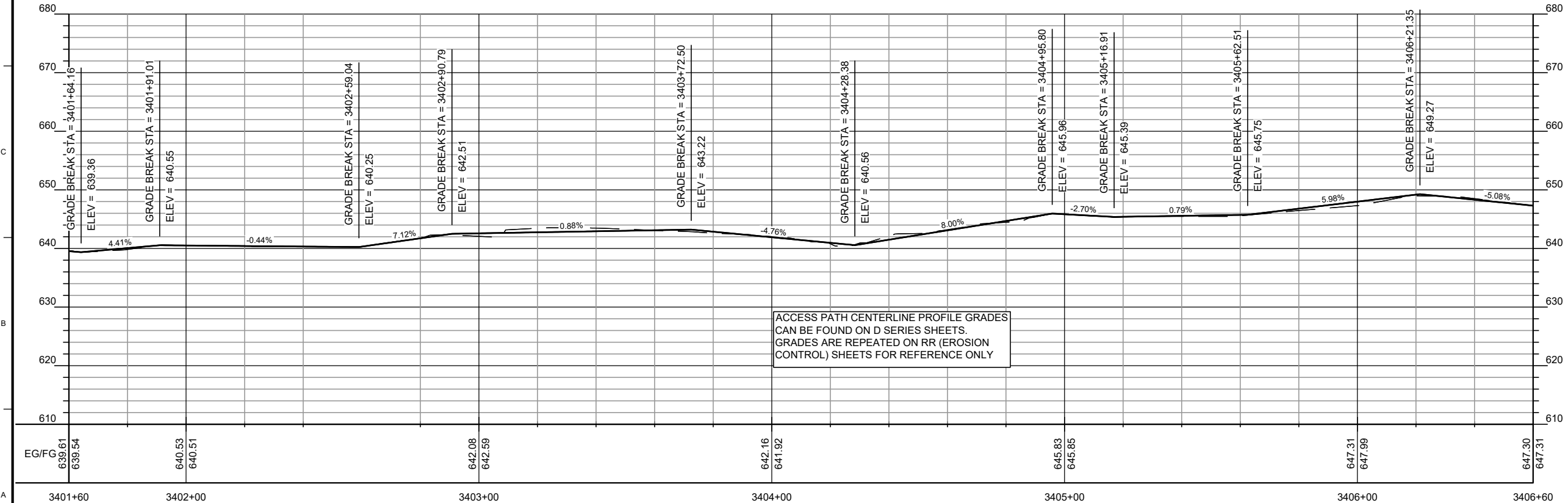
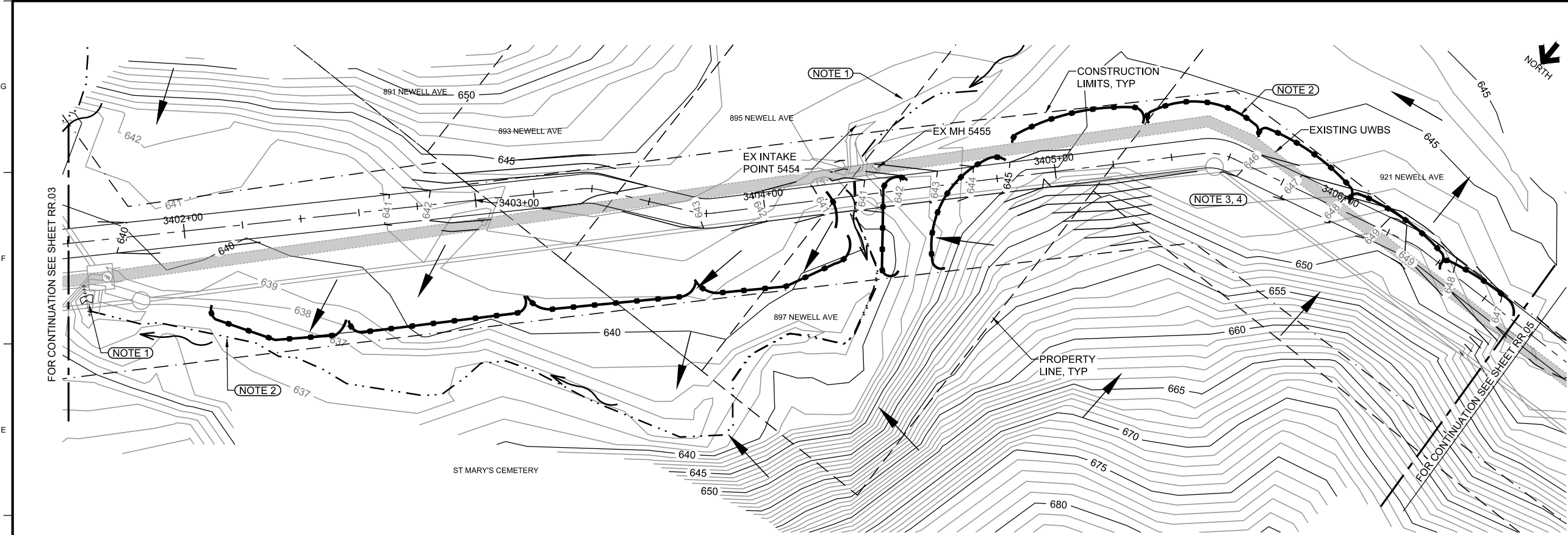
225 Iowa Avenue, Muscatine, Iowa 52761-3764
www.stanleyconsultants.com

CITY OF MUSCATINE - PHASE 6D
WEST HILL AREA SANITARY AND STORM SEWER SEPARATION
MUSCATINE, IOWA

EROSION CONTROL PLAN - SHEET 3

DESIGNED	KK HEIM	SCALE: 1" = 20'
DRAWN	GM REEVES	NO. 17660.60.30
CHECKED	ER SCHALLERT	REV.
APPROVED	JM BRADY	RR.03
APPROVED	KK HEIM	0
DATE	MARCH 12, 2025	

10 ©STANLEY CONSULTANTS



- ### NOTES
1. EXISTING DRAINAGE PATH ENTERS STORM SEWER SYSTEM. PROTECT OPEN INTAKE PIPES. INSTALL EROSION CONTROL TO PROTECT DISTURBED AREA UPSTREAM OF INTAKE POINT.
 2. INSTALL SILT FENCE OR OTHER EROSION PROTECTION MEASURE ALONG CONSTRUCTION LIMIT TO MINIMIZE SEDIMENT FROM WASHING INTO DRAINAGE WAY.
 3. SEED EXTENT OF CONSTRUCTION LIMIT ACCORDING TO D SHEET.
 4. INSTALL ROLLED EROSION CONTROL PRODUCTS ON SLOPES. SEE SUDAS DETAIL 9040.103.

NO.	REVISIONS	DSGN	CHKD	APVD	DATE



Stanley Consultants INC.
225 Iowa Avenue, Muscatine, Iowa 52761-3764
www.stanleyconsultants.com

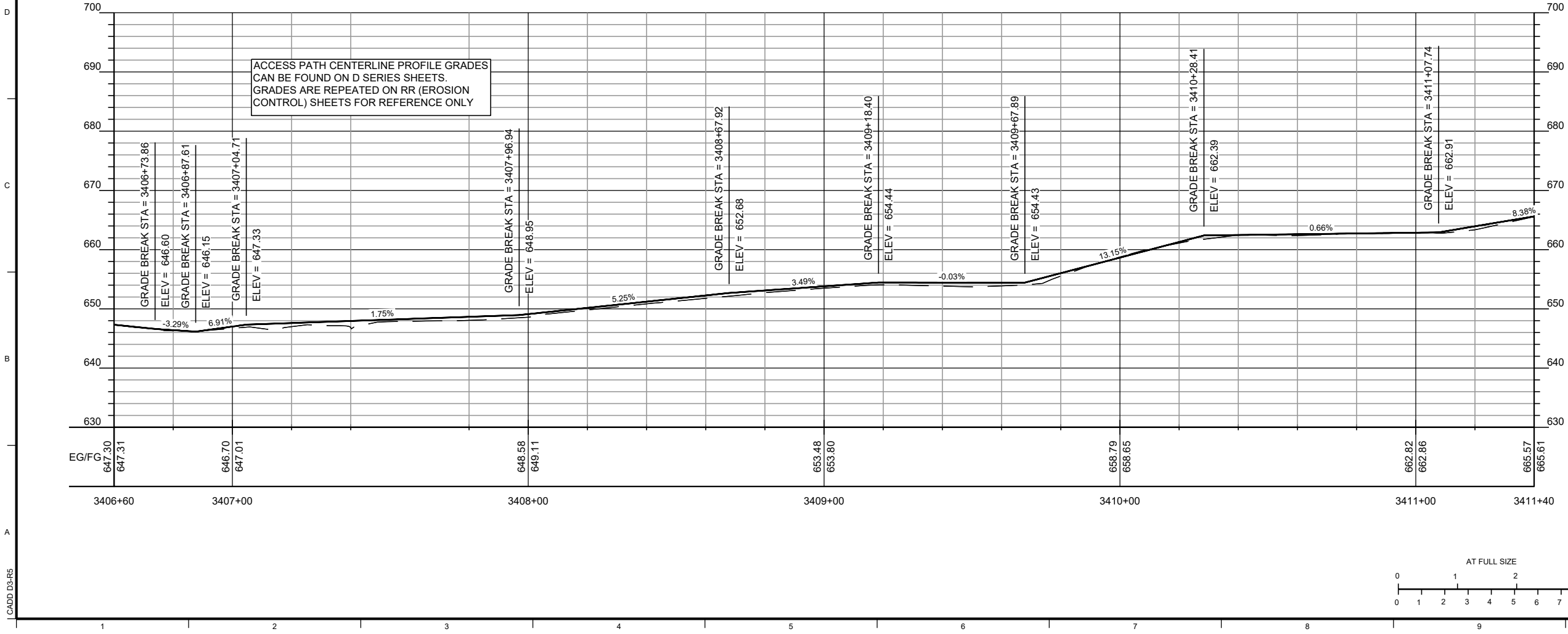
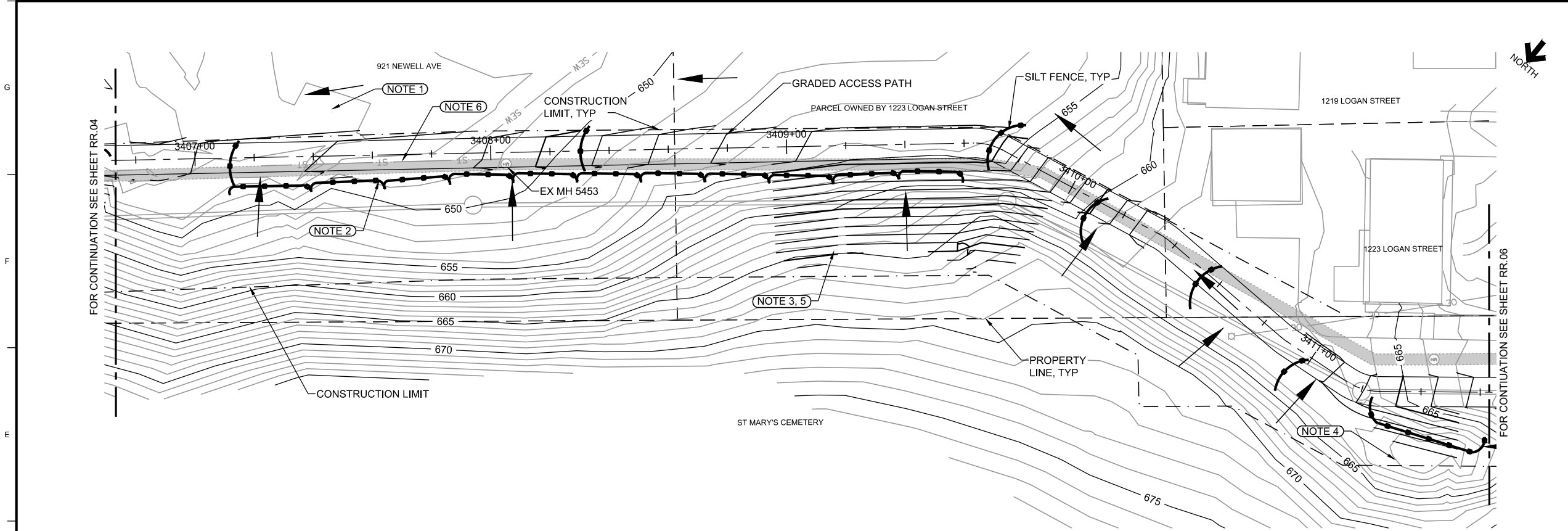
CITY OF MUSCATINE - PHASE 6D
WEST HILL AREA SANITARY AND STORM SEWER SEPARATION
MUSCATINE, IOWA

EROSION CONTROL PLAN - SHEET 4

DESIGNED <u>KK HEIM</u>	SCALE: 1" = 20'
DRAWN <u>GM REEVES</u>	NO. 17660.60.30
CHECKED <u>ER SCHALLERT</u>	REV.
APPROVED <u>JM BRADY</u>	RR.04
APPROVED <u>KK HEIM</u>	0
DATE <u>MARCH 12, 2025</u>	

LOAD D3-R6





- ### NOTES
1. PROTECT EXISTING DRAINAGEWAYS FROM EROSION FOR DURATION OF CONSTRUCTION. ADJUST EROSION PROTECTION METHODS WITH CHANGES TO WORK STAGE.
 2. INSTALL SILT FENCE OR OTHER EROSION PROTECTION MEASURE DOWNSTREAM OF TRENCH DISTURBANCE TO MINIMIZE SEDIMENT FROM WASHING DOWNSTREAM.
 3. SEED EXTENT OF CONSTRUCTION LIMIT ACCORDING TO D SHEET. PROVIDE TEMPORARY SEEDING IF PERMANENT SEEDING CAN'T BE INSTALLED IN SEEDING WINDOW.
 4. PROTECT EXISTING LOW AREA FROM SEDIMENT ACCUMULATION.
 5. INSTALL ROLLED EROSION CONTROL PRODUCTS ON SLOPES. SEE SUDAS DETAIL 9040.103.
 6. PROTECT TOP OF EXPOSED UWBS.

NO.	REVISIONS	DSGN	CHKD	APVD	DATE



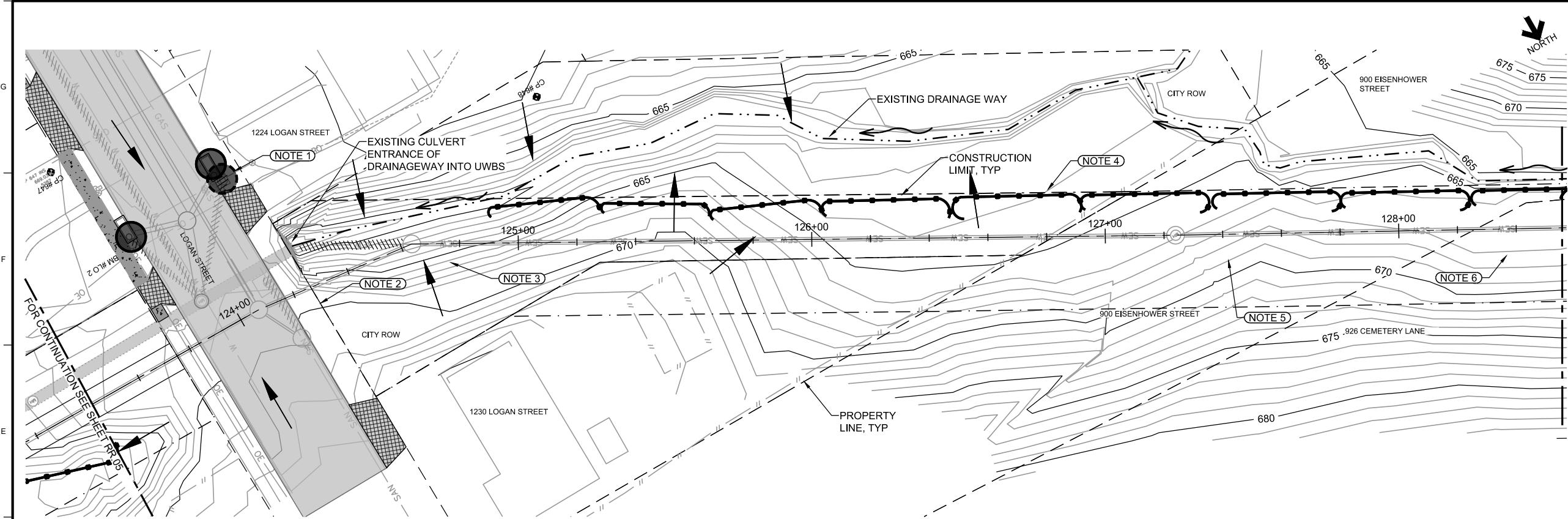
Stanley Consultants INC.
225 Iowa Avenue, Muscatine, Iowa 52761-3764
www.stanleyconsultants.com

CITY OF MUSCATINE - PHASE 6D
WEST HILL AREA SANITARY AND STORM SEWER SEPARATION
MUSCATINE, IOWA

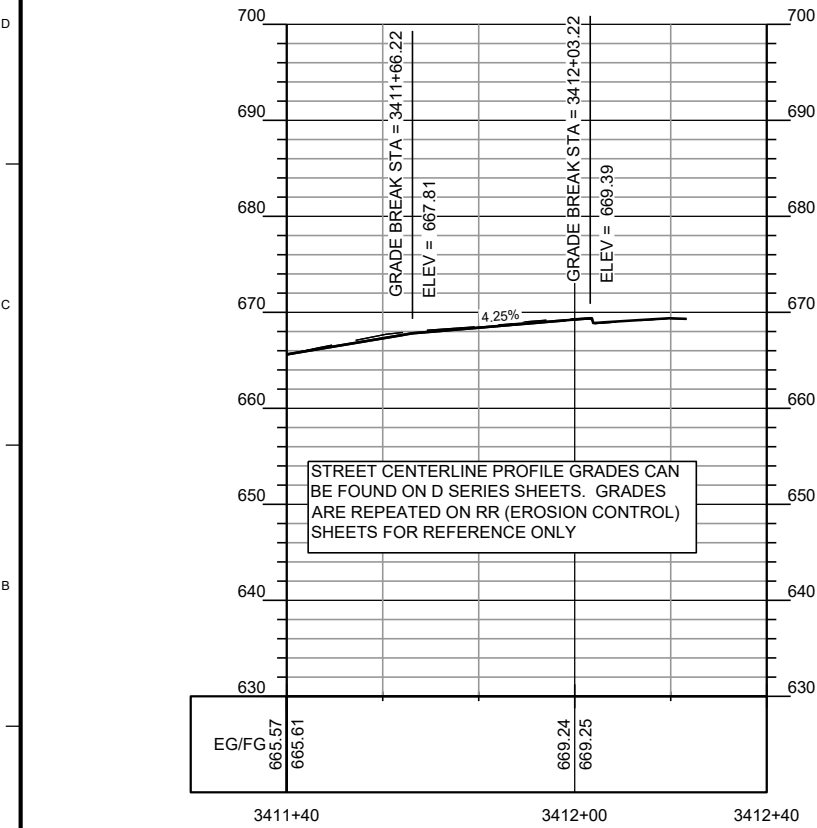
EROSION CONTROL PLAN - SHEET 5

DESIGNED <u>KK HEIM</u>	SCALE: 1" = 20'
DRAWN <u>GM REEVES</u>	NO. 17660.60.30
CHECKED <u>ER SCHALLERT</u>	REV.
APPROVED <u>JM BRADY</u>	RR.05
APPROVED <u>KK HEIM</u>	0
DATE <u>MARCH 12, 2025</u>	

10 ©STANLEY CONSULTANTS



- ### NOTES
1. PROTECT EXISTING AND PROPOSED INLETS AND STORM SEWERS FOR DURATION OF CONSTRUCTION. ADJUST EROSION PROTECTION METHODS WITH CHANGES TO WORK STAGE.
 2. INSTALL STABILIZED CONSTRUCTION EXIT FOR EQUIPMENT ACCESS. SEE SUDAS FIGURE 9040.120
 3. STABILIZE SLOPES FOR EROSION CONTROL AND STABILIZATION AS NEEDED THROUGH THE DURATION OF CONSTRUCTION. INSTALL EROSION CONTROL BLANKETS, RIPRAP, AND/OR EROSION STONE AS NEEDED TO PRESERVE BANK.
 4. INSTALL SILT FENCE OR OTHER EROSION PROTECTION MEASURE DOWNSTREAM OF TRENCH DISTURBANCE TO MINIMIZE SEDIMENT FROM WASHING INTO DRAINAGE WAY.
 5. SEED EXTENT OF CONSTRUCTION LIMIT ACCORDING TO D SHEET. PROVIDE TEMPORARY SEEDING IF PERMANENT SEEDING CAN'T BE INSTALLED IN SEEDING WINDOW.
 6. MINIMIZE DISTURBANCE TO SLOPES. INSTALL ROLLED EROSION CONTROL PRODUCT ON SLOPES. SEE SUDAS DETAIL 9040.103.



NO.	REVISIONS	DSGN	CHKD	APVD	DATE



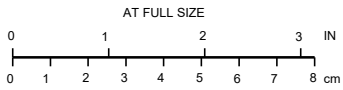
Stanley Consultants inc.

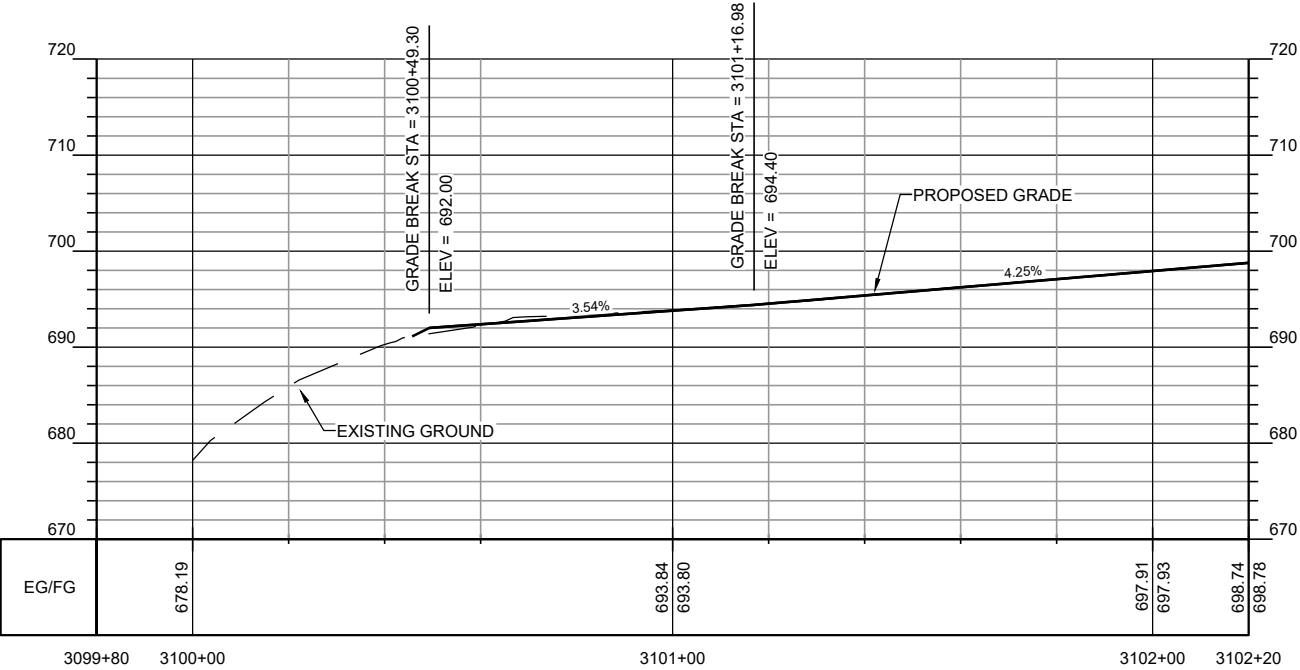
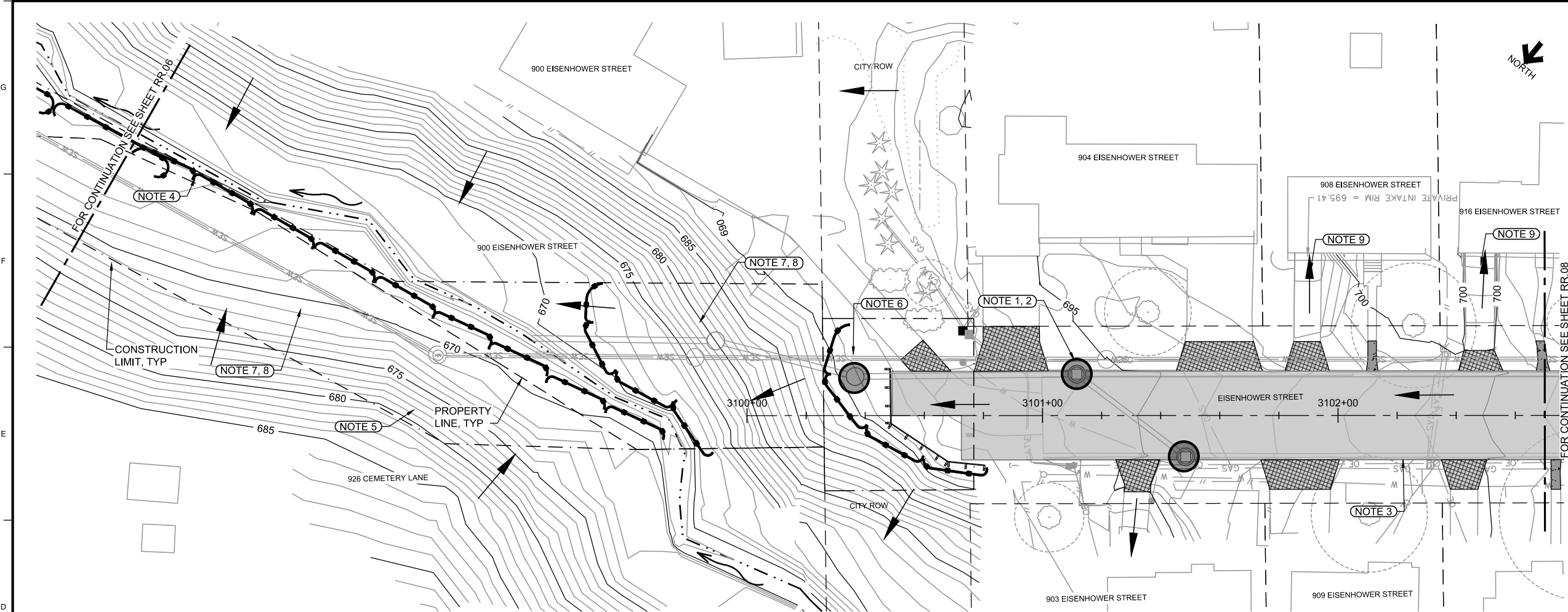
225 Iowa Avenue, Muscatine, Iowa 52761-3764
www.stanleyconsultants.com

CITY OF MUSCATINE - PHASE 6D
WEST HILL AREA SANITARY AND STORM SEWER SEPARATION
MUSCATINE, IOWA

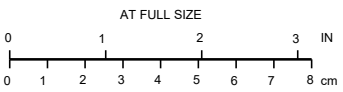
EROSION CONTROL PLAN - SHEET 6

DESIGNED	KK HEIM	SCALE: 1" = 20'	
DRAWN	GM REEVES	NO. 17660.60.30	REV.
CHECKED	ER SCHALLERT		
APPROVED	JM BRADY		
APPROVED	KK HEIM		
DATE	MARCH 12, 2025		
		RR.06	0





STREET CENTERLINE PROFILE GRADES CAN BE FOUND ON D SERIES SHEETS. GRADES ARE REPEATED ON RR (EROSION CONTROL) SHEETS FOR REFERENCE ONLY



NOTES

1. PROTECT EXISTING AND PROPOSED INLETS AND STORM SEWERS FOR DURATION OF CONSTRUCTION. ADJUST EROSION PROTECTION METHODS WITH CHANGES TO WORK STAGE.
2. PROTECT ALL PROPOSED INLETS AND STORM SEWERS FROM SEDIMENT DURING CONSTRUCTION UNTIL SOIL IS STABILIZED AND SITE IS CLEANED, TYP.
3. PREVENT TOPSOIL FROM ENTERING STREET WITH INSTALLATION OF SILT FENCE, WATTLES, FILTER SOCKS OR OTHER EROSION PROTECTION METHOD BEHIND THE CURB, NOT SHOWN.
4. INSTALL SILT FENCE OR OTHER EROSION PROTECTION TO MINIMIZE SEDIMENT FROM WASHING INTO DRAINAGE WAY ALONG CONSTRUCTION LIMIT.
5. SEED, FERTILIZE, AND MULCH EXTENT OF CONSTRUCTION LIMIT ACCORDING TO D SHEET. PROVIDE TEMPORARY SEEDING OR MULCH IF PERMANENT SEEDING CAN'T BE INSTALLED IN SEEDING WINDOW.
6. INSTALL STABILIZED CONSTRUCTION EXIT FOR EQUIPMENT ACCESS. SEE SUDAS FIGURE 9040.120.
7. STABILIZE SLOPES FOR EROSION CONTROL AND STABILIZATION AS NEEDED THROUGH THE DURATION OF CONSTRUCTION. USE ROLLED EROSION CONTROL PRODUCT ON SLOPES AS NEEDED. SEE SUDAS DETAIL 9040.103
8. MINIMIZE DISTURBANCE TO MAINTAIN STABLE SLOPES AND MINIMIZE EROSION.
9. PREVENT SEDIMENT FILLED CONSTRUCTION RUNOFF FROM FLOWING INTO DRIVEWAYS TOWARD GARAGES WHICH SIT LOWER THAN ROAD. PROTECT FROM EROSION.

NO.	REVISIONS	DSGN	CHKD	APVD	DATE



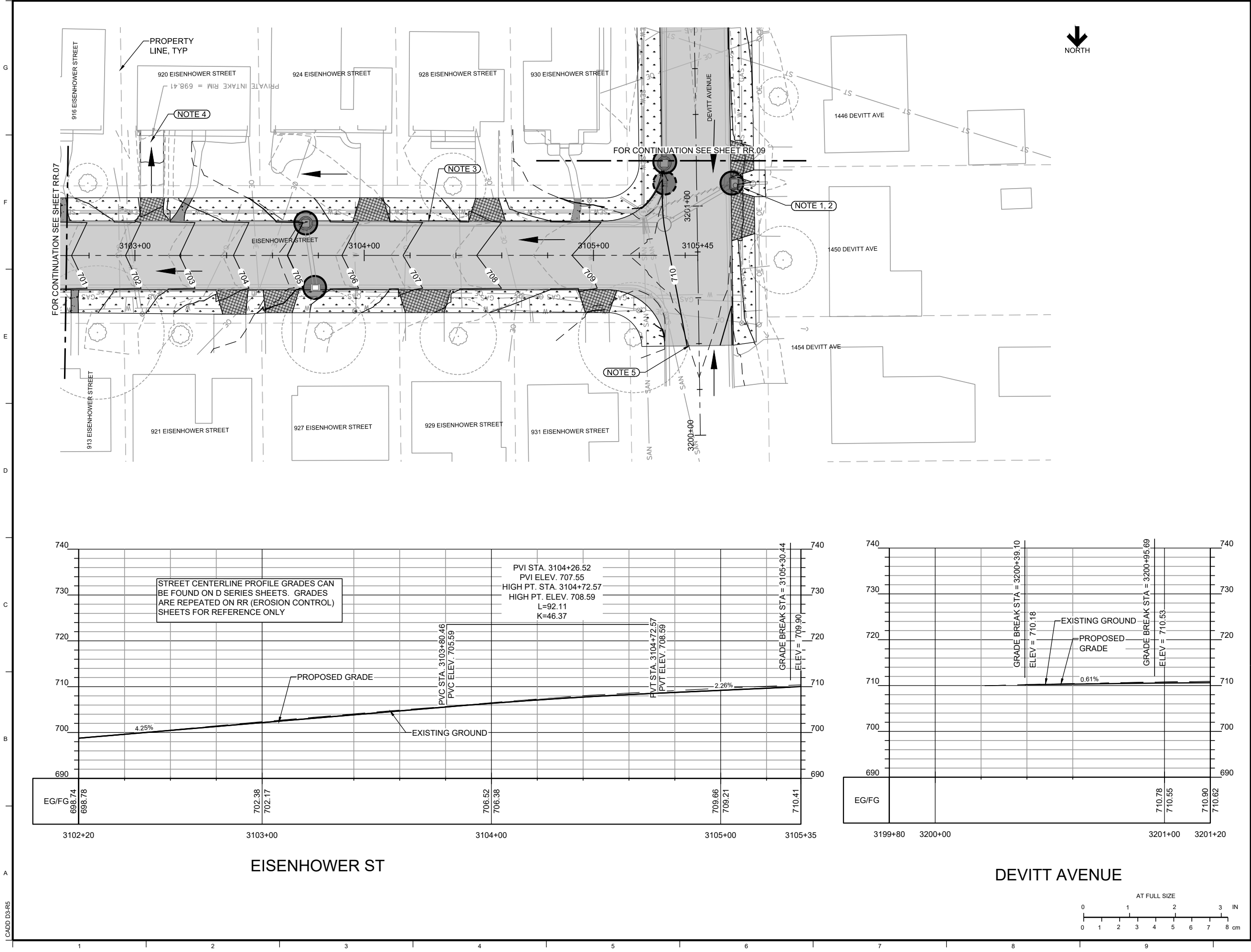
Stanley Consultants INC.

225 Iowa Avenue, Muscatine, Iowa 52761-3764
www.stanleyconsultants.com

CITY OF MUSCATINE - PHASE 6D
WEST HILL AREA SANITARY AND STORM SEWER SEPARATION
MUSCATINE, IOWA

EROSION CONTROL PLAN - SHEET 7

DESIGNED <u>KK HEIM</u>	SCALE: 1" = 20'	REV.
DRAWN <u>GM REEVES</u>	NO. 17660.60.30	
CHECKED <u>ER SCHALLERT</u>		
APPROVED <u>JM BRADY</u>		
DATE <u>MARCH 12, 2025</u>		
RR.07		0



NOTES

1. PROTECT EXISTING AND PROPOSED INLETS AND STORM SEWERS FOR DURATION OF CONSTRUCTION. ADJUST EROSION PROTECTION METHODS WITH CHANGES TO WORK STAGE.
2. PROTECT ALL PROPOSED INLETS AND STORM SEWERS FROM SEDIMENT DURING CONSTRUCTION UNTIL SOIL IS STABILIZED AND SITE IS CLEANED, TYP.
3. PREVENT TOPSOIL FROM ENTERING STREET WITH INSTALLATION OF SILT FENCE, WATTLES, FILTER SOCKS OR OTHER EROSION PROTECTION METHOD BEHIND THE CURB, NOT SHOWN.
4. PREVENT SEDIMENT FILLED CONSTRUCTION RUNOFF FROM FLOWING INTO DRIVEWAYS TOWARD GARAGES WHICH SIT LOWER THAN ROAD. PROTECT SITE FROM EROSION.
5. INSTALL STABILIZED CONSTRUCTION EXIT TO CONTROL TRACKING SEDIMENT ONTO STREETS. SEE SUDAS FIGURE 9040.120.

NO.	REVISIONS	DSGN	CHKD	APVD	DATE

225 Iowa Avenue, Muscatine, Iowa 52761-3764
www.stanleyconsultants.com

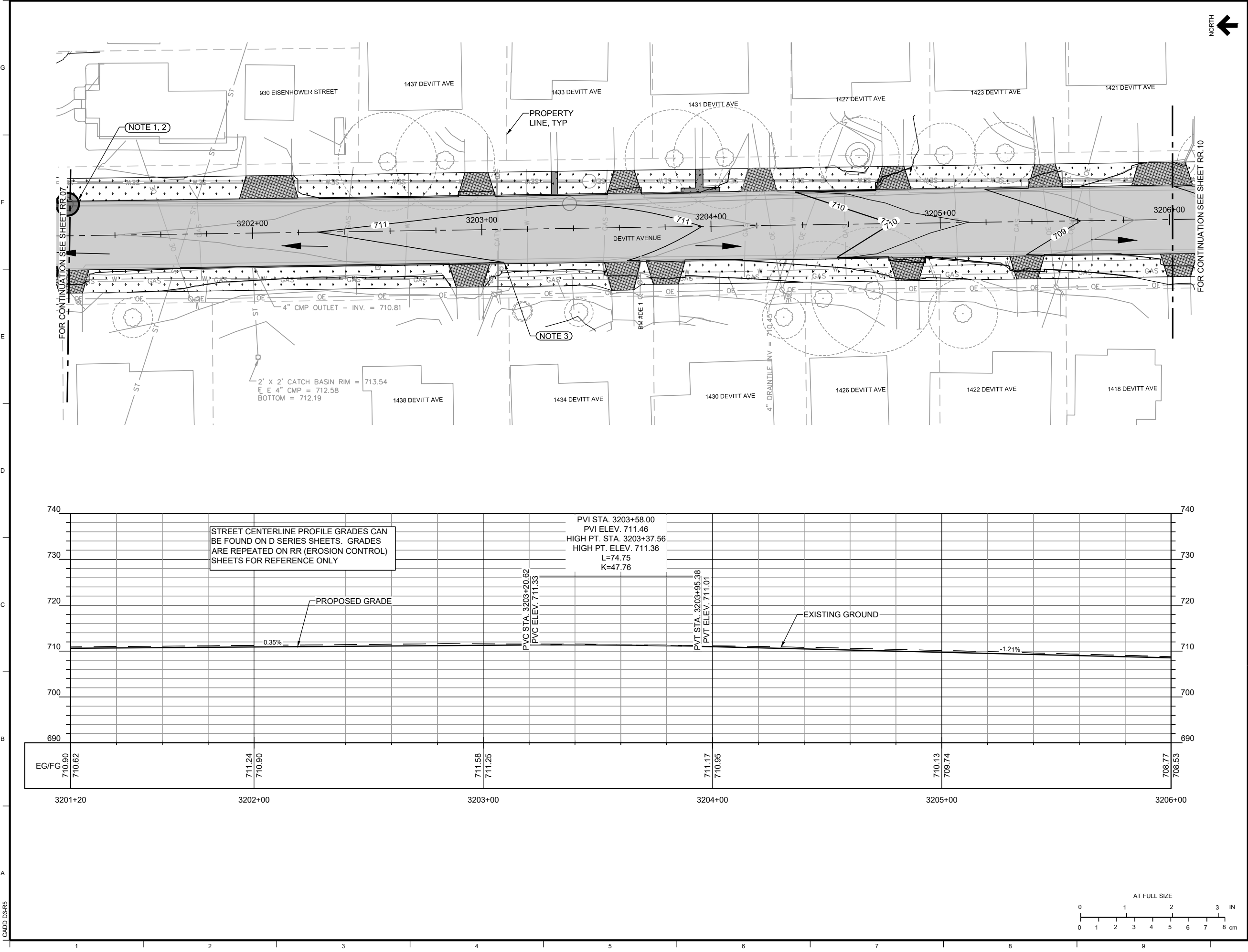
CITY OF MUSCATINE - PHASE 6D
WEST HILL AREA SANITARY AND STORM SEWER SEPARATION
MUSCATINE, IOWA

EROSION CONTROL PLAN - SHEET 8

DESIGNED	KK HEIM	SCALE:	1" = 20'
DRAWN	GM REEVES	NO.	17660.60.30
CHECKED	ER SCHALLERT	REV.	
APPROVED	JM BRADY		
APPROVED	KK HEIM		
DATE	MARCH 12, 2025		

RR.08	0
-------	---

Page 230 of 1049



NOTES

1. PROTECT EXISTING AND PROPOSED INLETS AND STORM SEWERS FOR DURATION OF CONSTRUCTION. ADJUST EROSION PROTECTION METHODS WITH CHANGES TO WORK STAGE.
2. PROTECT ALL PROPOSED INLETS AND STORM SEWERS FROM SEDIMENT DURING CONSTRUCTION UNTIL SOIL IS STABILIZED AND SITE IS CLEANED, TYP.
3. PREVENT TOPSOIL FROM ENTERING STREET WITH INSTALLATION OF SILT FENCE, WATTLES, FILTER SOCKS OR OTHER EROSION PROTECTION METHOD BEHIND THE CURB, NOT SHOWN.

NO.	REVISIONS	DSGN	CHKD	APVD	DATE

Stanley Consultants Inc.
225 Iowa Avenue, Muscatine, Iowa 52761-3764
www.stanleyconsultants.com

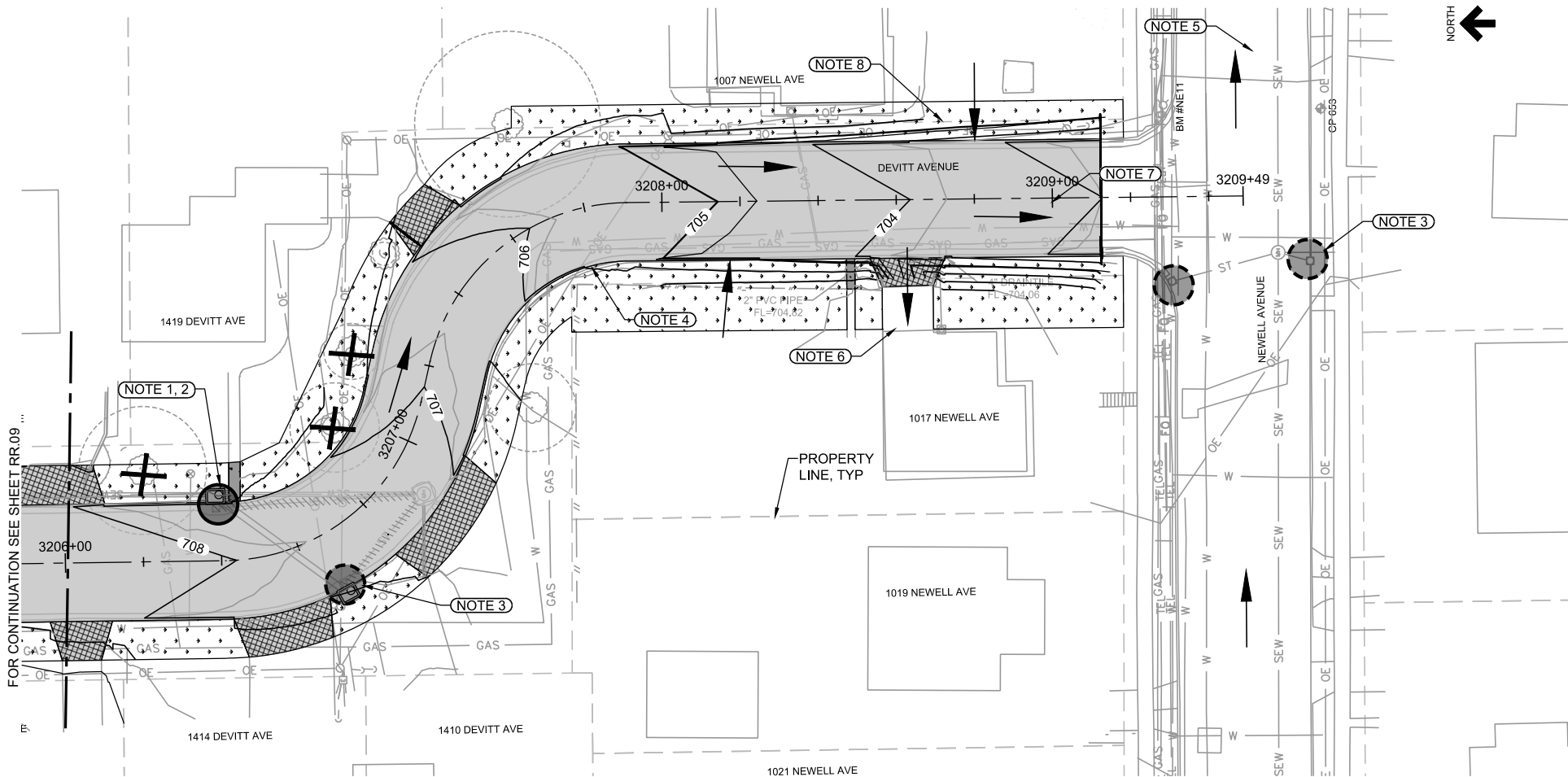
CITY OF MUSCATINE - PHASE 6D
WEST HILL AREA SANITARY AND STORM SEWER SEPARATION
MUSCATINE, IOWA

EROSION CONTROL PLAN - SHEET 9

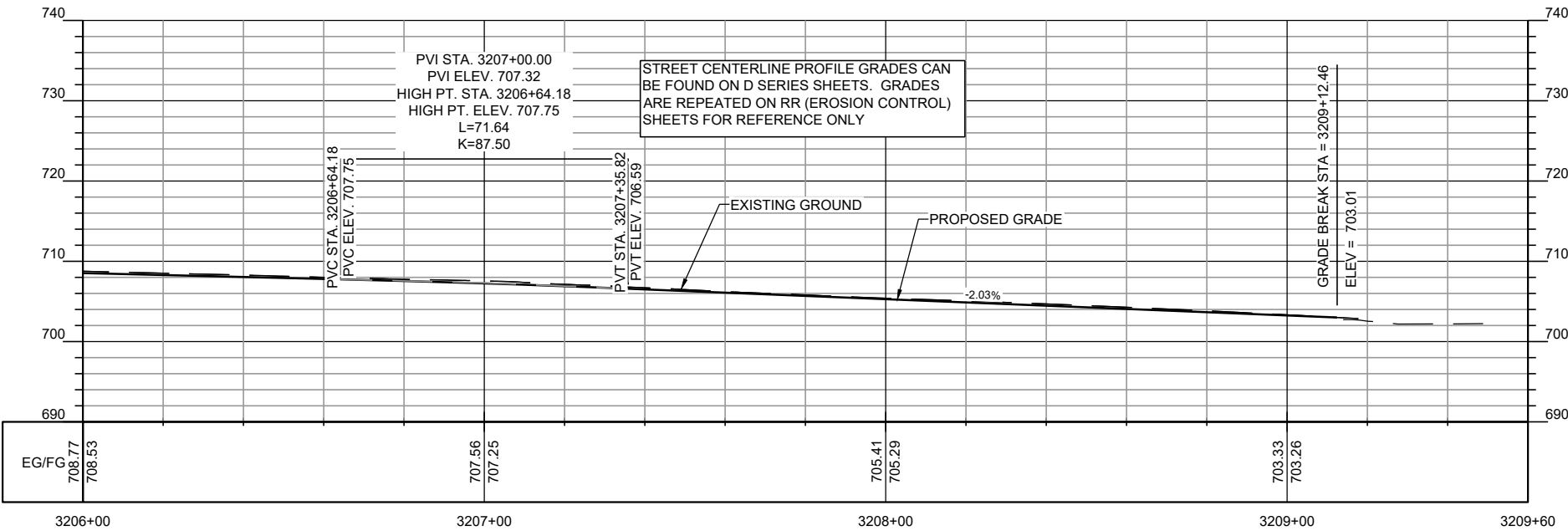
DESIGNED <u>KK HEIM</u>	SCALE: 1" = 20'
DRAWN <u>GM REEVES</u>	NO. 17660.60.30
CHECKED <u>ER SCHALLERT</u>	REV.
APPROVED <u>JM BRADY</u>	
APPROVED <u>KK HEIM</u>	
DATE <u>MARCH 12, 2025</u>	

RR.09	0
-------	---

10 ©STANLEY CONSULTANTS



- NOTES**
1. PROTECT EXISTING AND PROPOSED INLETS AND STORM SEWERS FOR DURATION OF CONSTRUCTION. ADJUST EROSION PROTECTION METHODS WITH CHANGES TO WORK STAGE.
 2. PROTECT ALL PROPOSED INLETS AND STORM SEWERS FROM SEDIMENT DURING CONSTRUCTION UNTIL SOIL IS STABILIZED AND SITE IS CLEANED, TYP.
 3. PROTECT ALL EXISTING INLETS AND EXISTING COMBINED AND STORM SEWERS FROM SEDIMENT DURING CONSTRUCTION OPERATIONS BEFORE NEW INLETS ARE PLACED, TYP.
 4. PREVENT TOPSOIL FROM ENTERING STREET WITH INSTALLATION OF SILT FENCE, WATTLES, FILTER SOCKS OR OTHER EROSION PROTECTION METHOD BEHIND THE CURB, NOT SHOWN.
 5. PROTECT INLETS FURTHER DOWNSTREAM ON NEWELL AVENUE IF NECESSARY.
 6. PREVENT CONSTRUCTION RUNOFF AND SEDIMENT FROM ACCUMULATING ON DRIVEWAY WHICH SLOPES TOWARD GARAGE.
 7. INSTALL STABILIZED CONSTRUCTION EXIT TO CONTROL TRACKING SEDIMENT INTO STREETS. SEE SUDAS FIGURE 9040.120.
 8. USE ROLLED EROSION CONTROL PRODUCT ON SLOPES AS NEEDED. SEE SUDAS DETAIL 9040.103.



NO.	REVISIONS	DSGN	CHKD	APVD	DATE

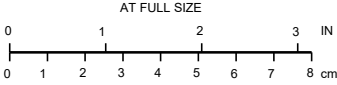
225 Iowa Avenue, Muscatine, Iowa 52761-3764
www.stanleyconsultants.com

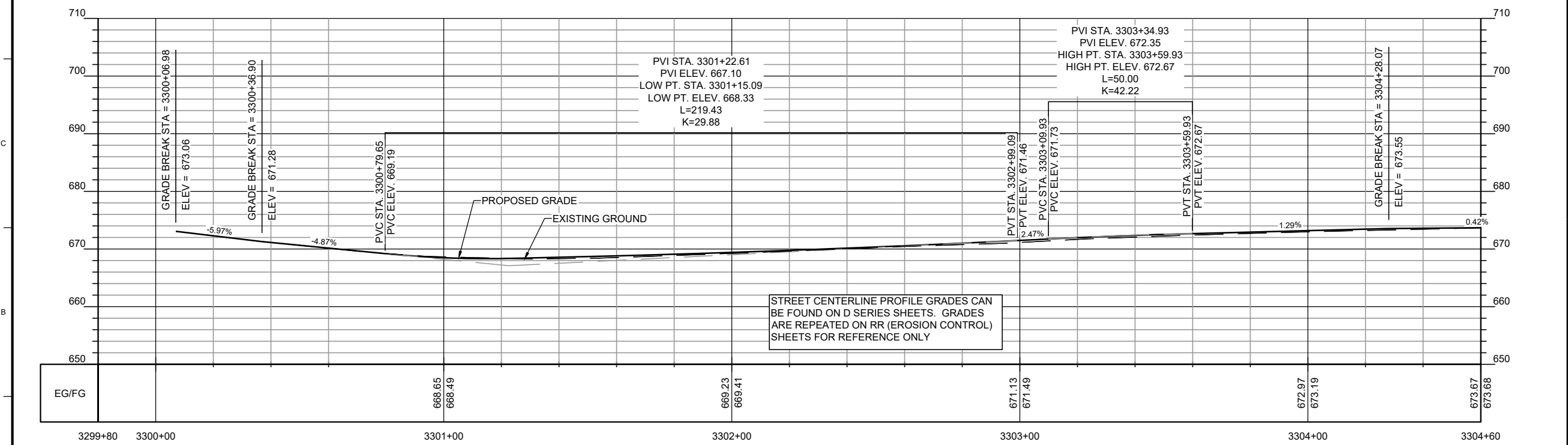
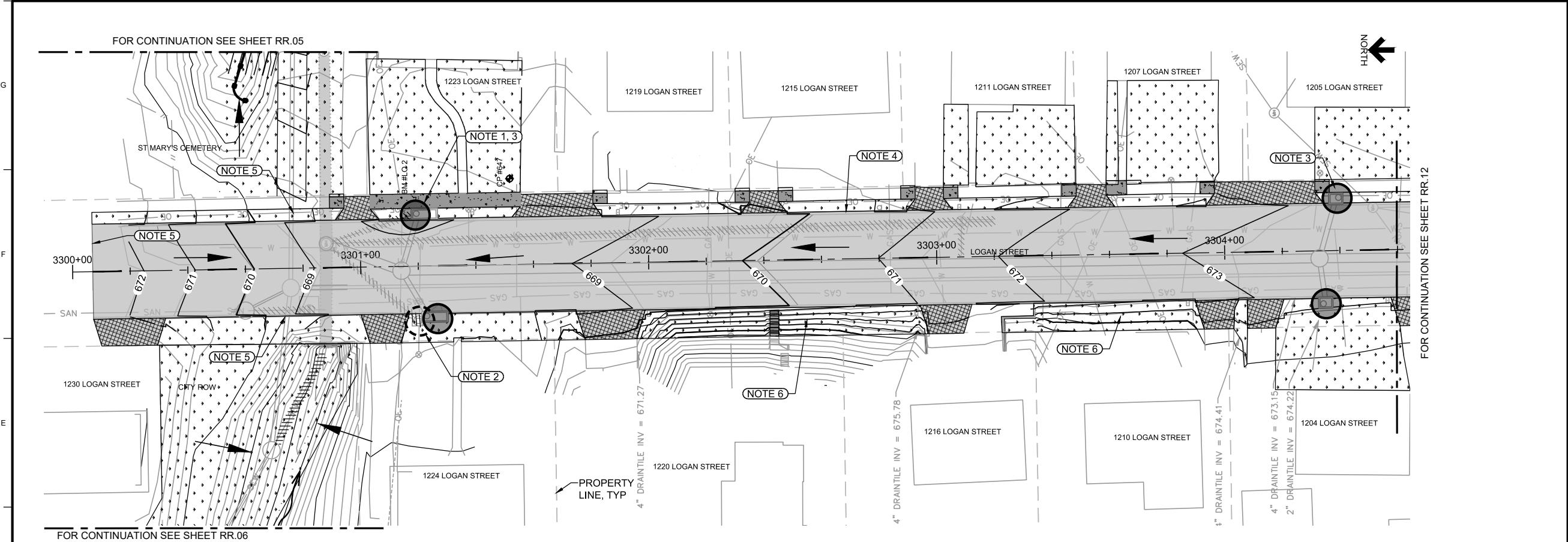
CITY OF MUSCATINE - PHASE 6D
WEST HILL AREA SANITARY AND STORM SEWER SEPARATION
MUSCATINE, IOWA

EROSION CONTROL PLAN - SHEET 10

DESIGNED <u>KK HEIM</u>	SCALE: 1" = 20'	
DRAWN <u>GM REEVES</u>	NO. 17660.60.30	REV.
CHECKED <u>ER SCHALLERT</u>		
APPROVED <u>JM BRADY</u>		
DATE <u>MARCH 12, 2025</u>		

RR.10	0
-------	---





NOTES

1. PROTECT EXISTING AND PROPOSED INLETS AND STORM SEWERS FOR DURATION OF CONSTRUCTION. ADJUST EROSION PROTECTION METHODS WITH CHANGES TO WORK STAGE.
2. PROTECT ALL EXISTING INLETS AND EXISTING COMBINED AND STORM SEWERS FROM SEDIMENT DURING CONSTRUCTION OPERATIONS BEFORE NEW INLETS ARE PLACED, TYP.
3. PROTECT ALL PROPOSED INLETS AND STORM SEWERS FROM SEDIMENT DURING CONSTRUCTION UNTIL SOIL IS STABILIZED AND SITE IS CLEANED.
4. PREVENT TOPSOIL FROM ENTERING STREET WITH INSTALLATION OF SILT FENCE, WATTLES, FILTER SOCKS OR OTHER EROSION PROTECTION METHOD BEHIND CURB, NOT SHOWN.
5. INSTALL STABILIZED CONSTRUCTION EXIT TO CONTROL TRACKING SEDIMENT INTO STREETS. SEE SUDAS FIGURE 9040.120.
6. INSTALL ROLLED EROSION CONTROL PRODUCT ON SLOPES. SEE SUDAS DETAIL 9040.103.

NO.	REVISIONS	DSGN	CHKD	APVD	DATE

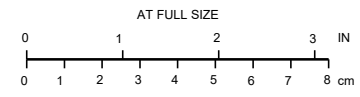

Stanley Consultants INC.
225 Iowa Avenue, Muscatine, Iowa 52761-3764
www.stanleyconsultants.com

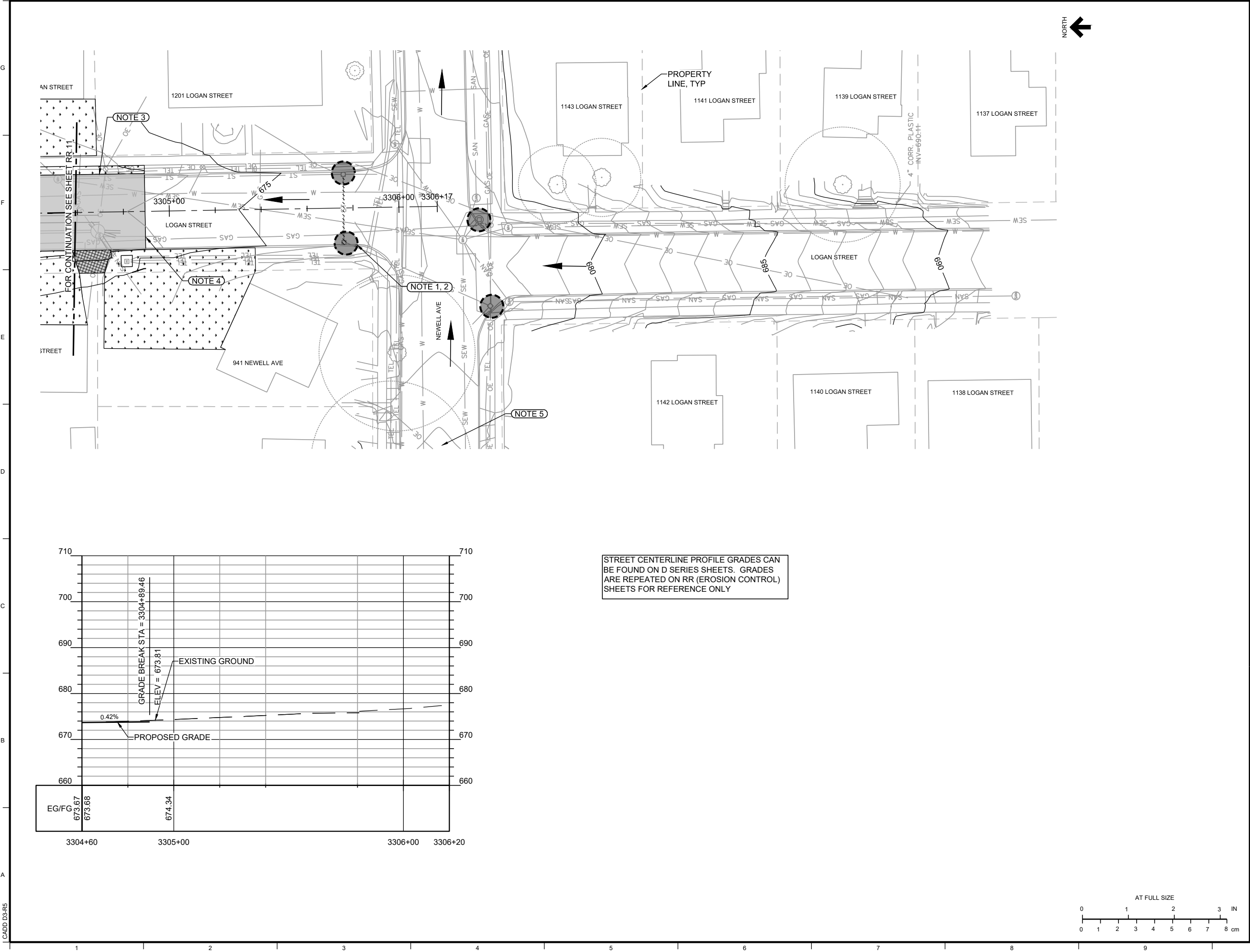
CITY OF MUSCATINE - PHASE 6D
WEST HILL AREA SANITARY AND STORM SEWER SEPARATION
MUSCATINE, IOWA

EROSION CONTROL PLAN - SHEET 11

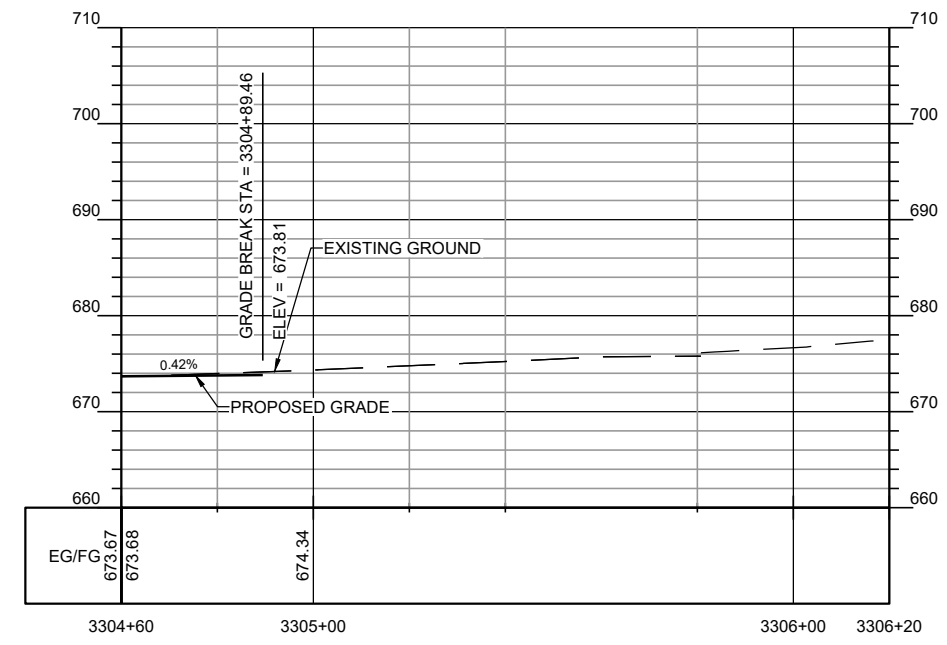
DESIGNED <u>KK HEIM</u>	SCALE: 1" = 20'	REV.
DRAWN <u>GM REEVES</u>	NO. 17660.60.30	
CHECKED <u>ER SCHALLERT</u>		
APPROVED <u>JM BRADY</u>		
APPROVED <u>KK HEIM</u>		
DATE <u>MARCH 12, 2025</u>		

RR.11 0





- ### NOTES
1. PROTECT EXISTING AND PROPOSED INLETS AND STORM SEWERS FOR DURATION OF CONSTRUCTION. ADJUST EROSION PROTECTION METHODS WITH CHANGES TO WORK STAGE.
 2. PROTECT ALL EXISTING INLETS AND EXISTING COMBINED AND STORM SEWERS FROM SEDIMENT DURING CONSTRUCTION OPERATIONS BEFORE NEW INLETS ARE PLACED, TYP.
 3. PREVENT TOPSOIL FROM ENTERING STREET WITH INSTALLATION OF SILT FENCE, WATTLES, FILTER SOCKS OR OTHER EROSION PROTECTION METHOD BEHIND THE CURB, NOT SHOWN.
 4. INSTALL STABILIZED CONSTRUCTION EXIT TO CONTROL TRACKING SEDIMENT INTO STREETS. SEE SUDAS DETAIL 9040.120.
 5. NEWELL AVENUE SLOPES FROM DEVITT TO LOGAN. INLET PROTECTION MAY BE NEEDED AT LOGAN INTERSECTION TO PROTECT FROM SEDIMENT WASHING INTO INTERSECTION.



STREET CENTERLINE PROFILE GRADES CAN BE FOUND ON D SERIES SHEETS. GRADES ARE REPEATED ON RR (EROSION CONTROL) SHEETS FOR REFERENCE ONLY

NO.	REVISIONS	DSGN	CHKD	APVD	DATE

Stanley Consultants INC.
225 Iowa Avenue, Muscatine, Iowa 52761-3764
www.stanleyconsultants.com

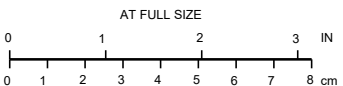
CITY OF MUSCATINE - PHASE 6D
WEST HILL AREA SANITARY AND STORM SEWER SEPARATION
MUSCATINE, IOWA

EROSION CONTROL PLAN - SHEET 12

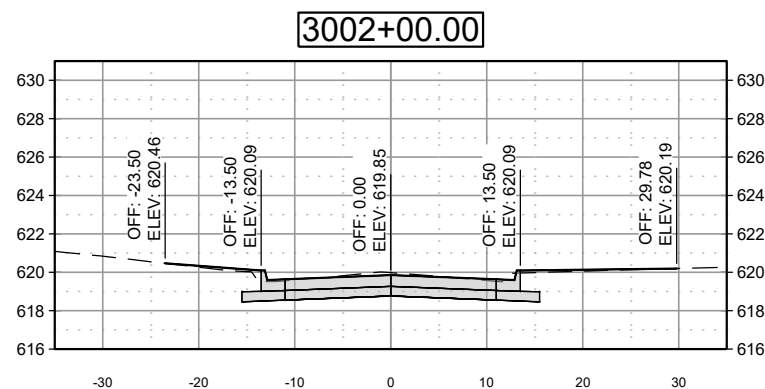
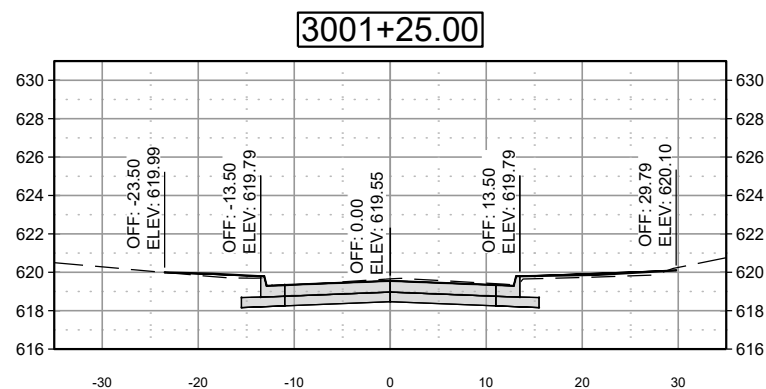
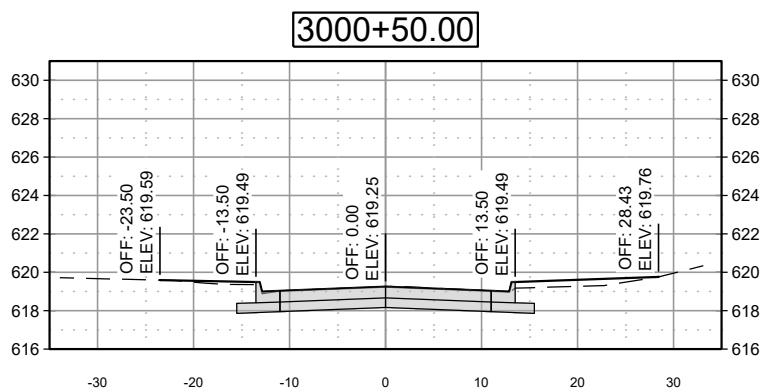
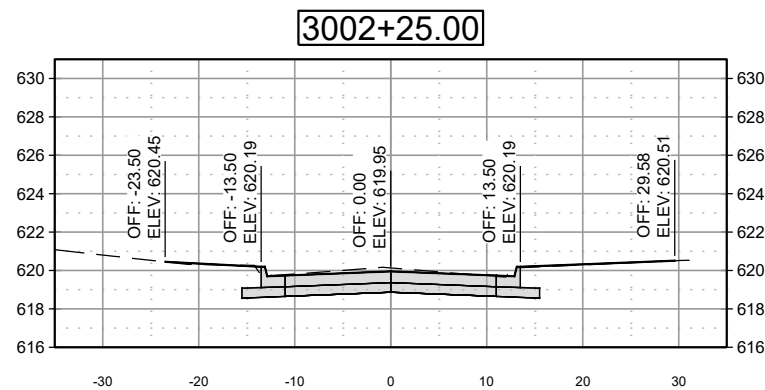
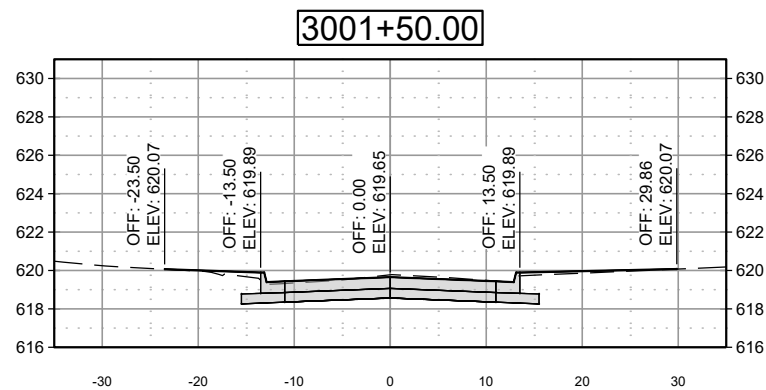
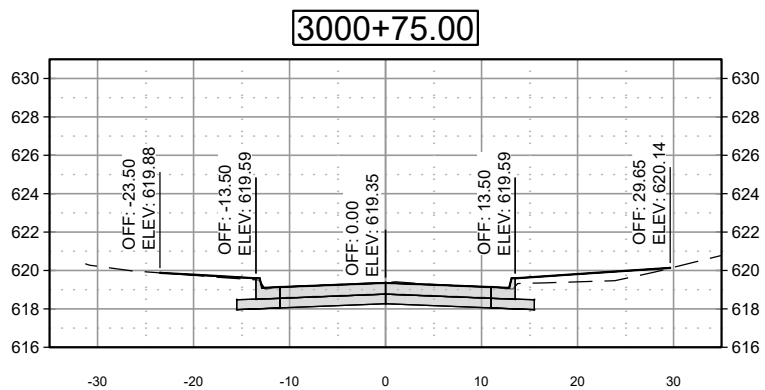
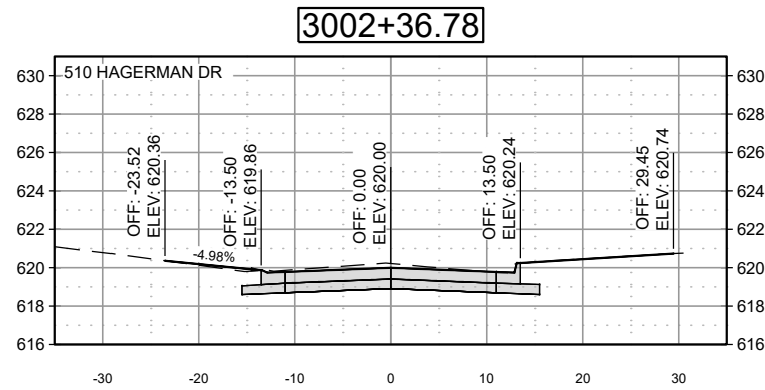
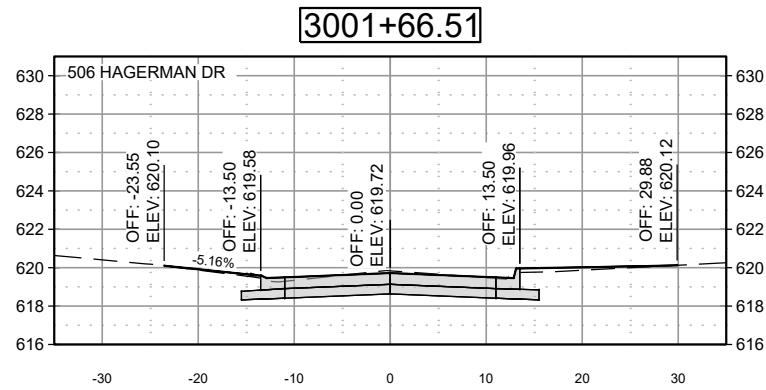
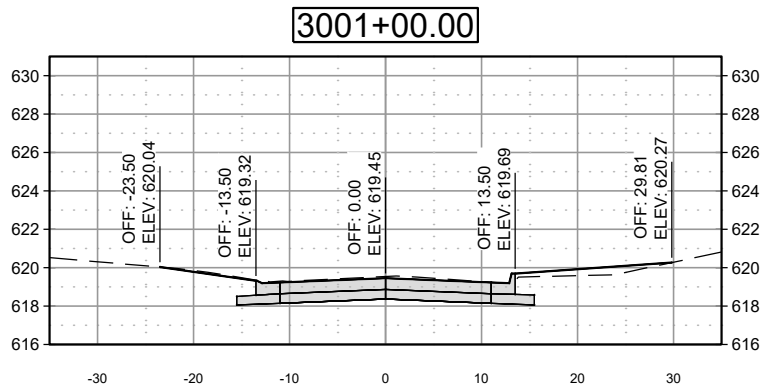
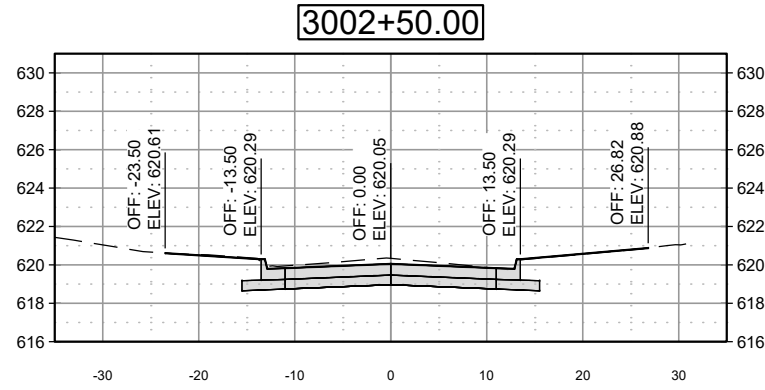
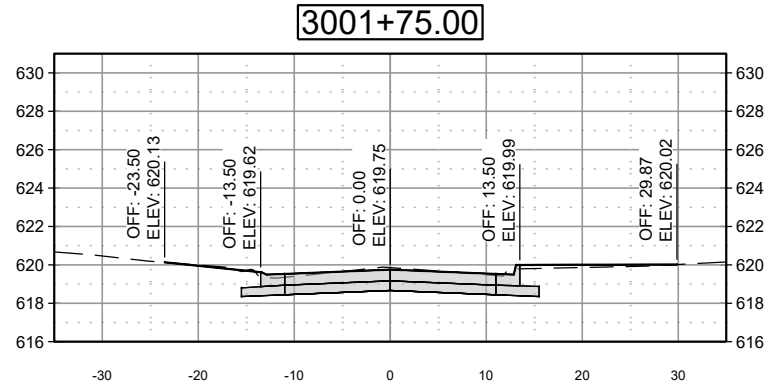
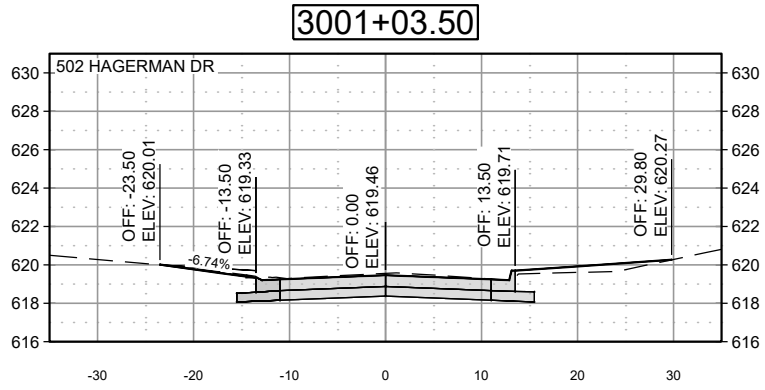
DESIGNED <u>KK HEIM</u>	SCALE: 1" = 20'	
DRAWN <u>GM REEVES</u>	NO. 17660.60.30	REV.
CHECKED <u>ER SCHALLERT</u>		
APPROVED <u>JM BRADY</u>		
DATE <u>MARCH 12, 2025</u>		

RR.12	0
-------	---

LOAD D3-R6



G
F
M
D
C
B
A
LOAD D3-R6



NOTES

NO.	REVISIONS	DSGN	CHKD	APVD	DATE



Stanley Consultants Inc.

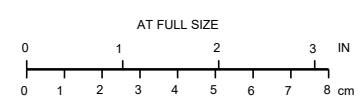
225 Iowa Avenue, Muscatine, Iowa 52761-3764
www.stanleyconsultants.com

CITY OF MUSCATINE - PHASE 6D
WEST HILL AREA SANITARY AND STORM SEWER SEPARATION
MUSCATINE, IOWA

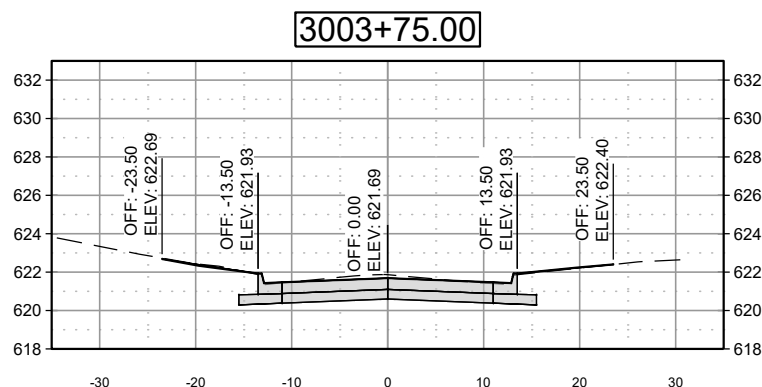
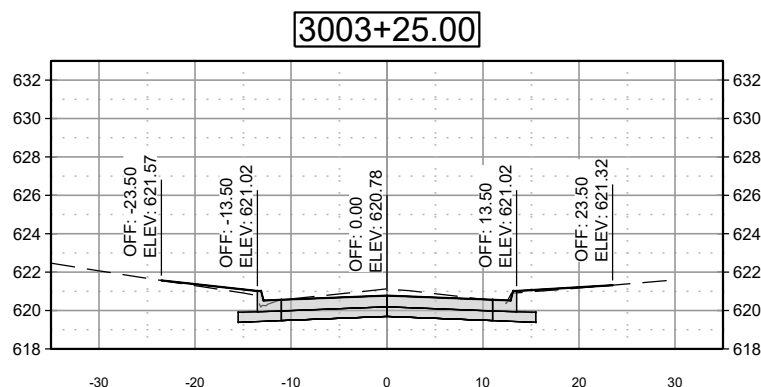
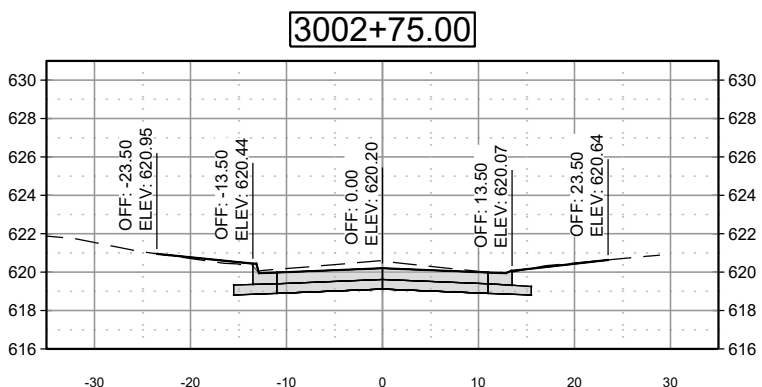
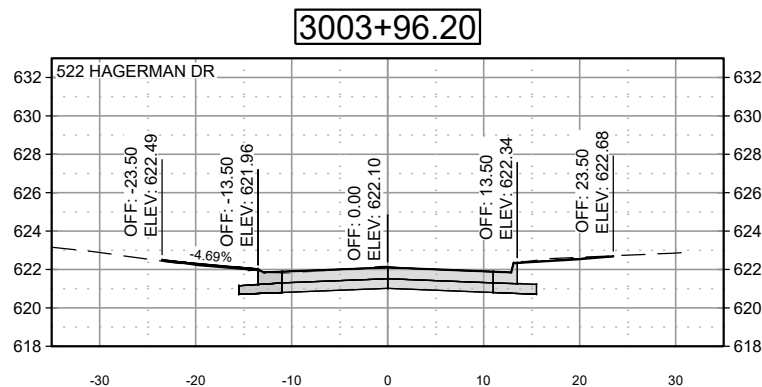
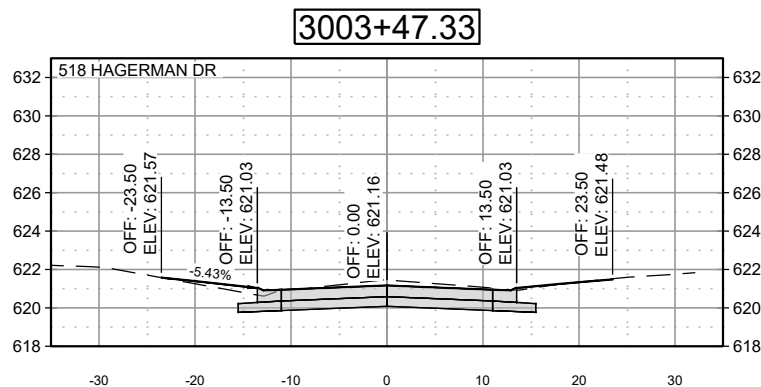
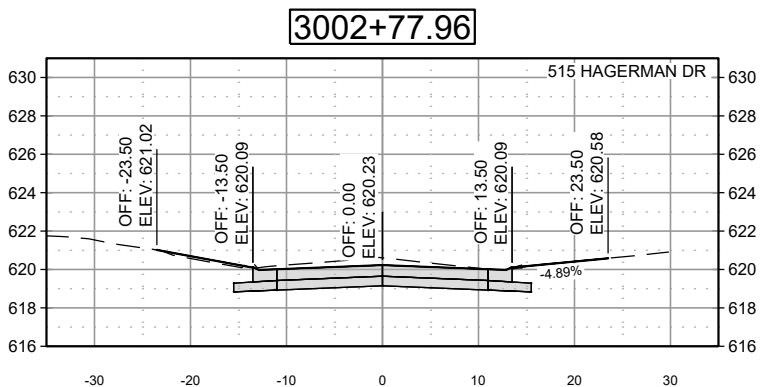
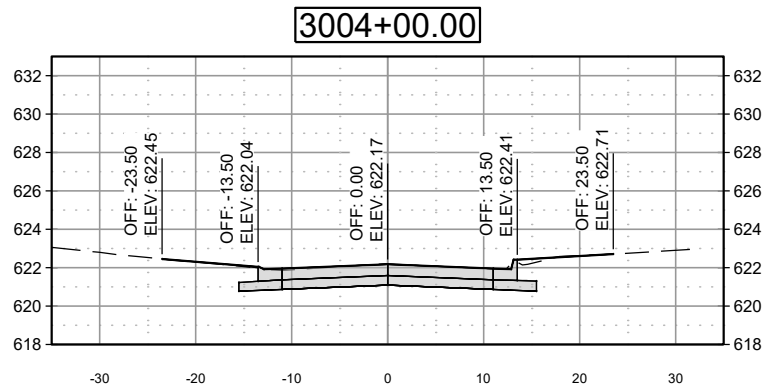
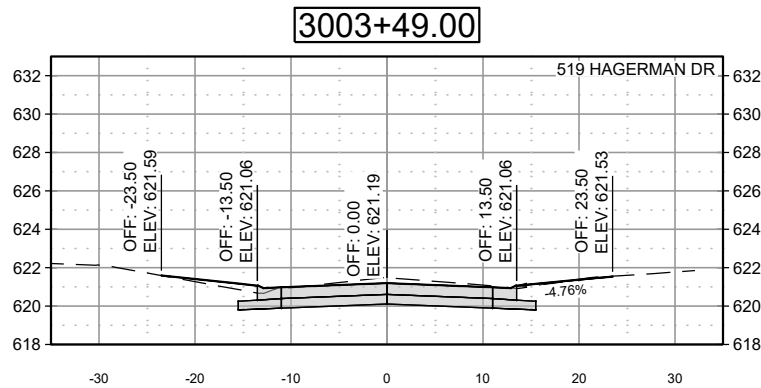
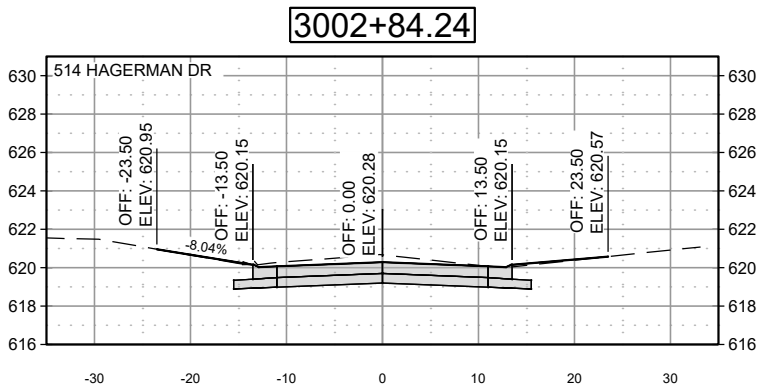
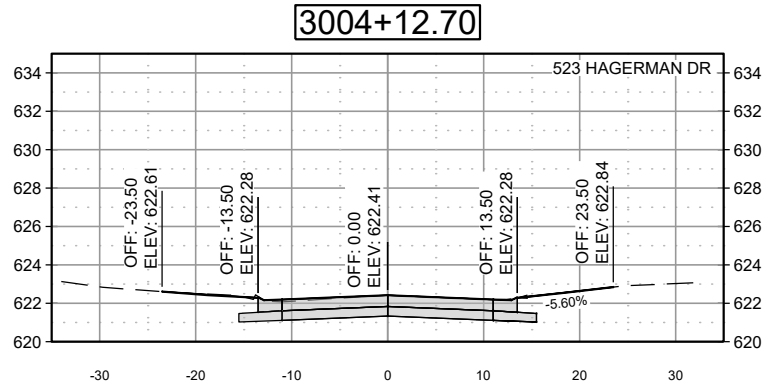
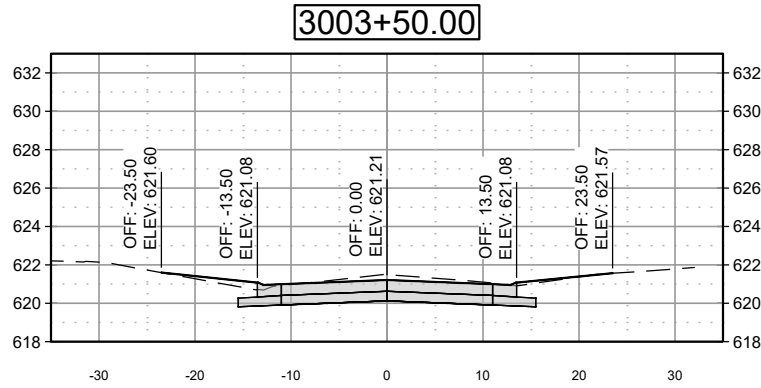
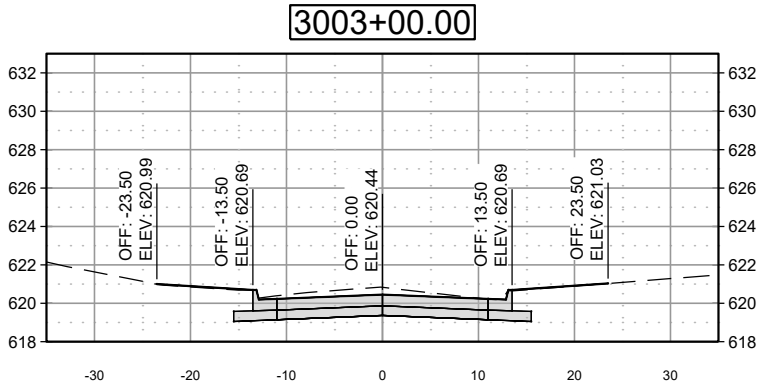
**PAVEMENT CROSS SECTIONS
HAGERMAN DRIVE - SHEET 1**

DESIGNED: PM JOHNSON	SCALE: 1" = 10'
DRAWN: GM REEVES	NO. 17660.60.30
CHECKED: ER SCHALLERT	REV.
APPROVED: KK HEIM	
APPROVED: PM JOHNSON	
DATE: MARCH 12, 2025	

W.01	0
------	---



G
F
E
D
C
B
A
LOAD D3-R6



NOTES

NO.	REVISIONS	DSGN	CHKD	APVD	DATE

225 Iowa Avenue, Muscatine, Iowa 52761-3764
www.stanleyconsultants.com

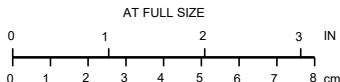
CITY OF MUSCATINE - PHASE 6D
WEST HILL AREA SANITARY AND STORM SEWER SEPARATION
MUSCATINE, IOWA

PAVEMENT CROSS SECTIONS
HAGERMAN DRIVE - SHEET 2

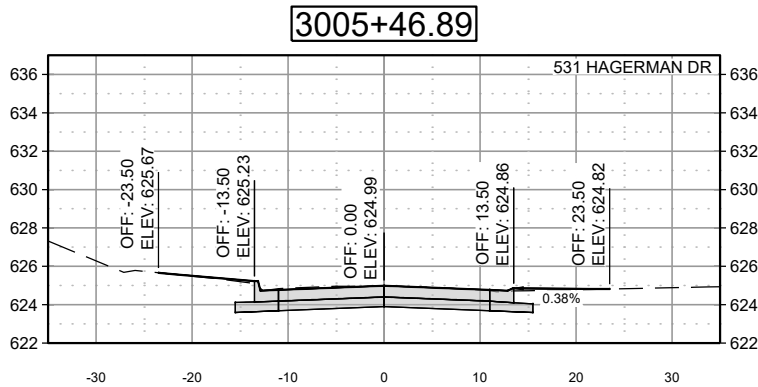
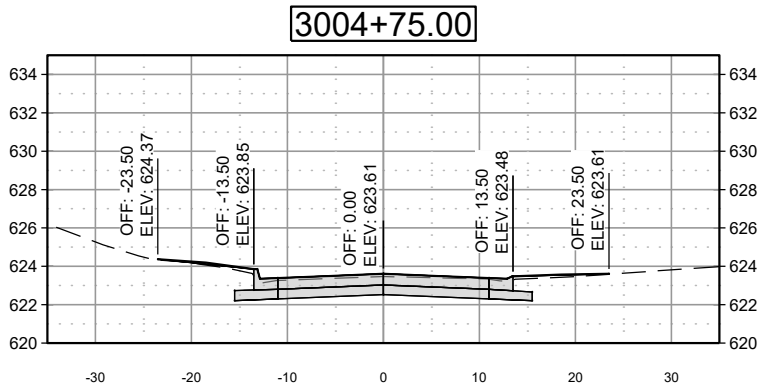
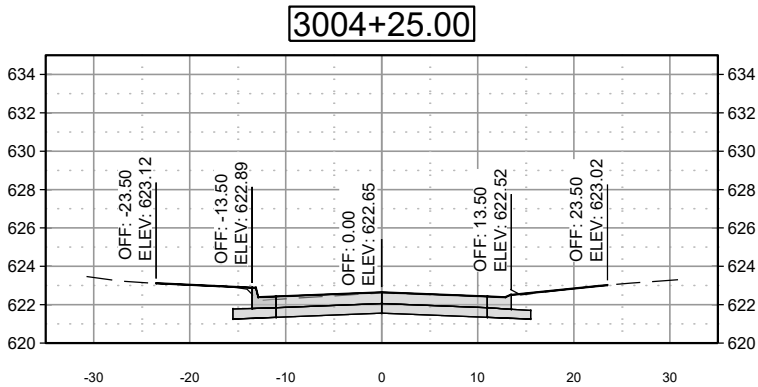
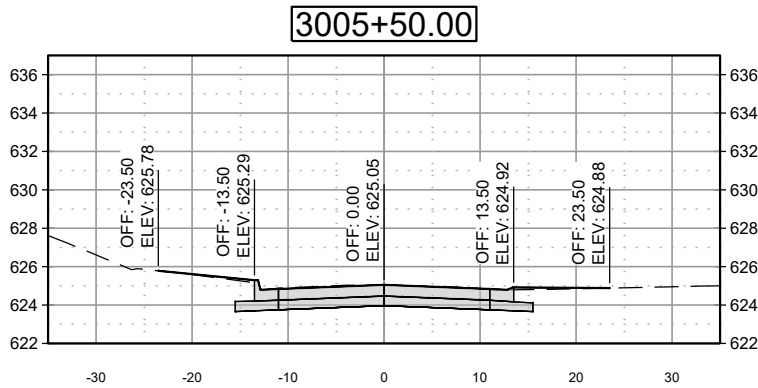
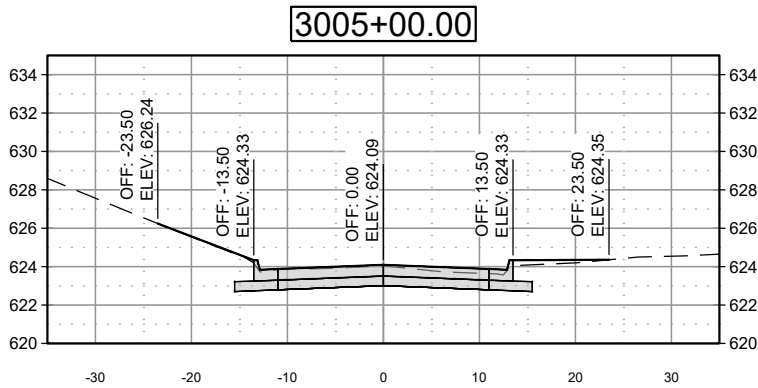
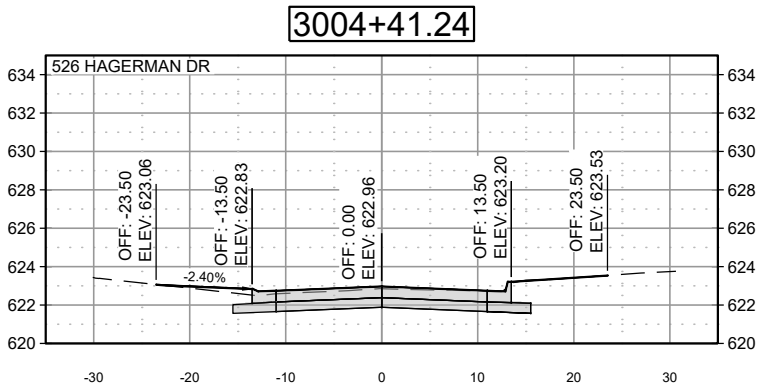
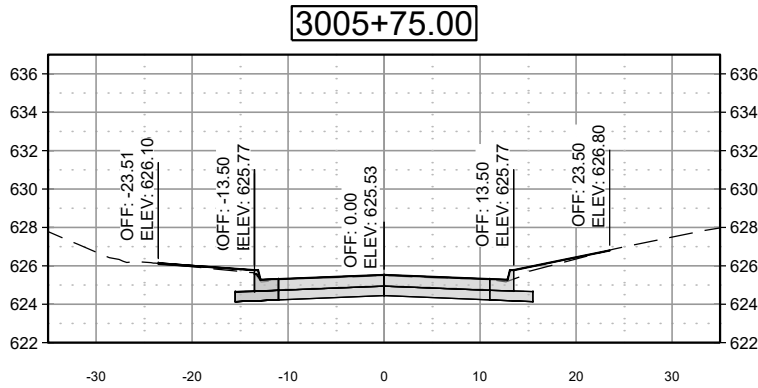
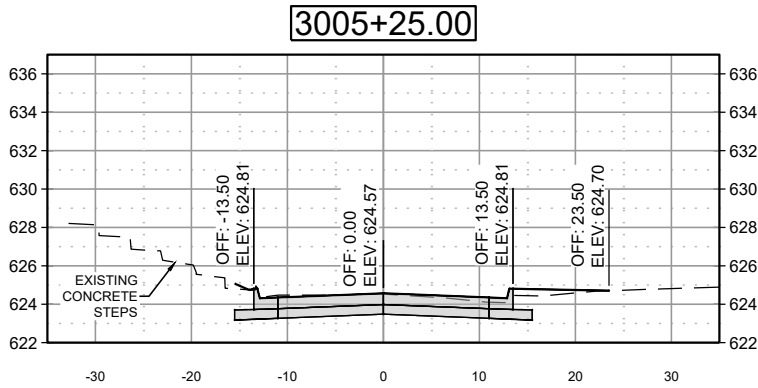
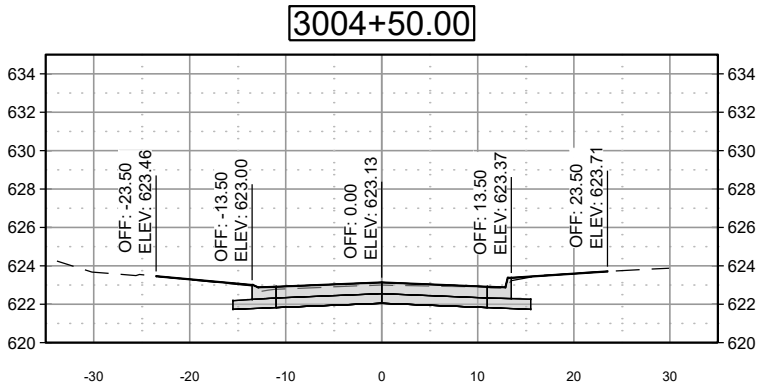
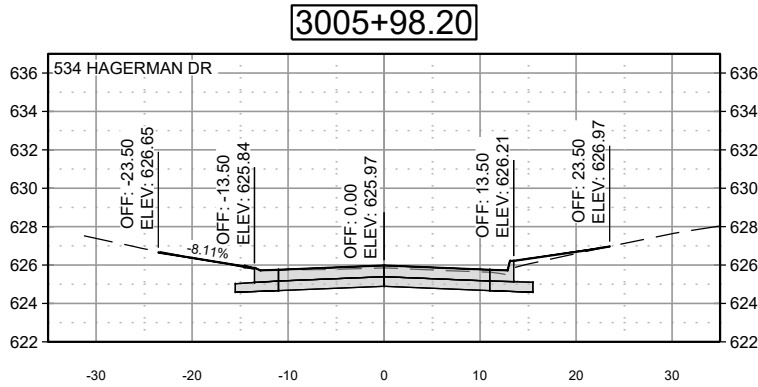
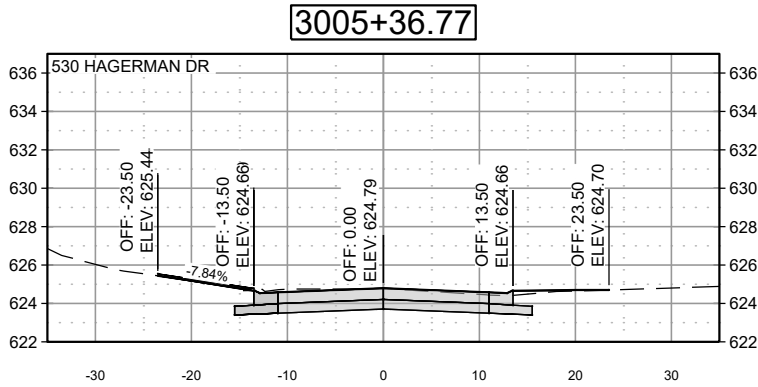
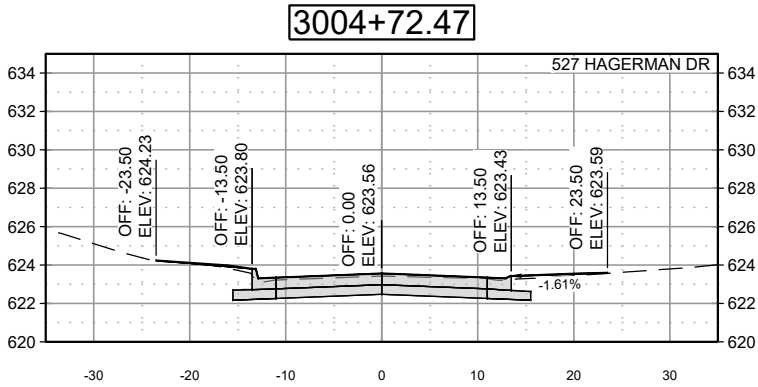
DESIGNED	PM JOHNSON	SCALE: 1" = 20'
DRAWN	GM REEVES	NO. 17660.60.30
CHECKED	ER SCHALLERT	REV.
APPROVED	KK HEIM	
APPROVED	PM JOHNSON	
DATE	MARCH 12, 2025	

W.02	0
------	---

Page 236 of 1049



G
F
M
D
C
B
A
LOAD D3-R6



NOTES

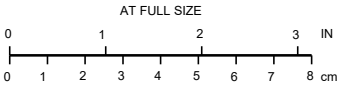
NO.	REVISIONS	DSGN	CHKD	APVD	DATE



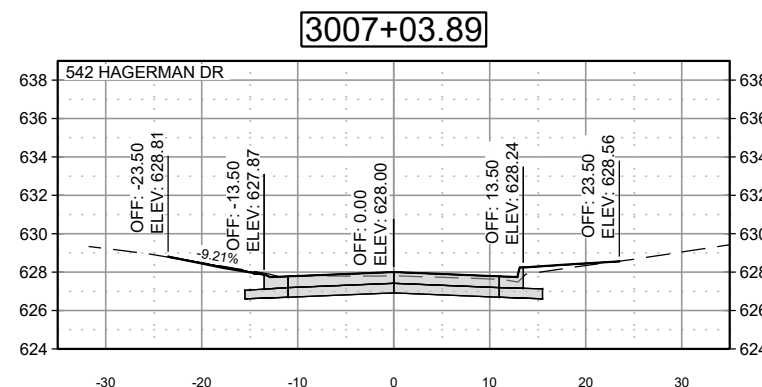
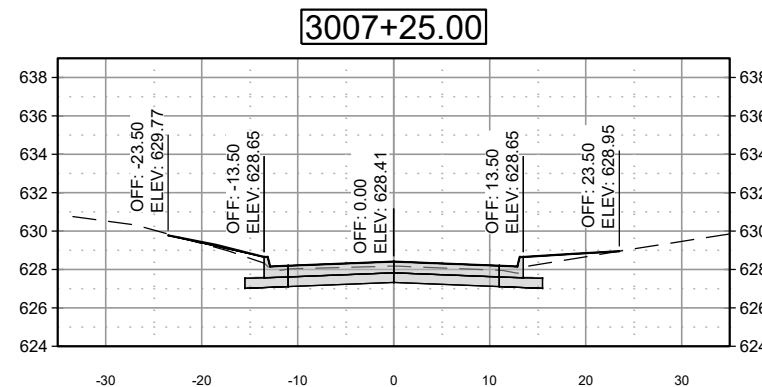
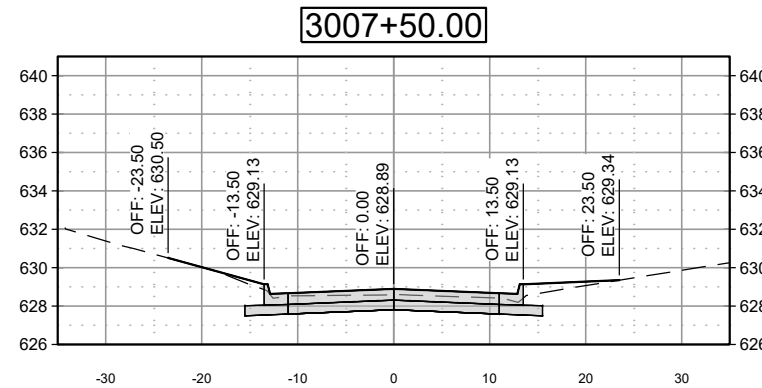
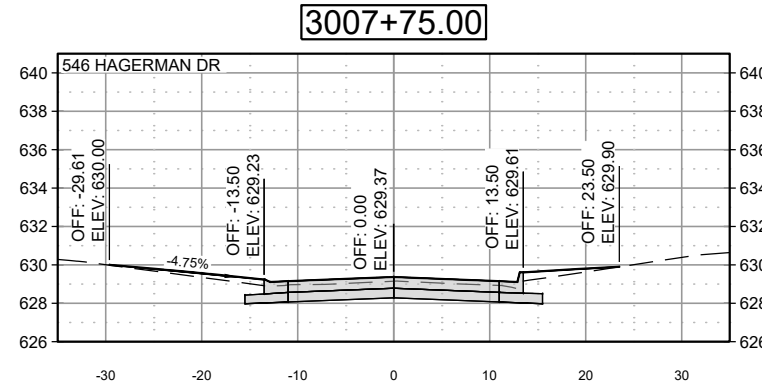
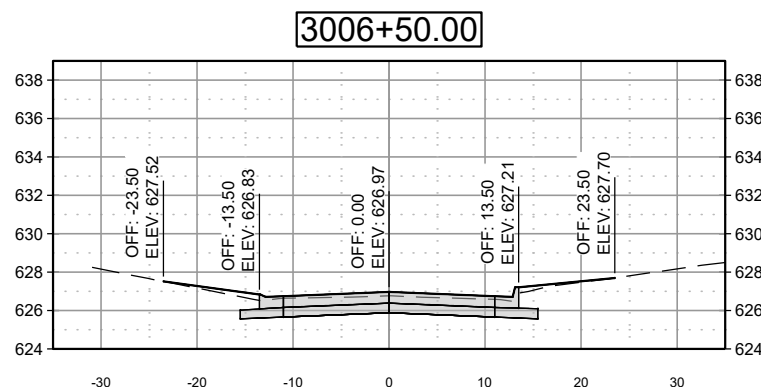
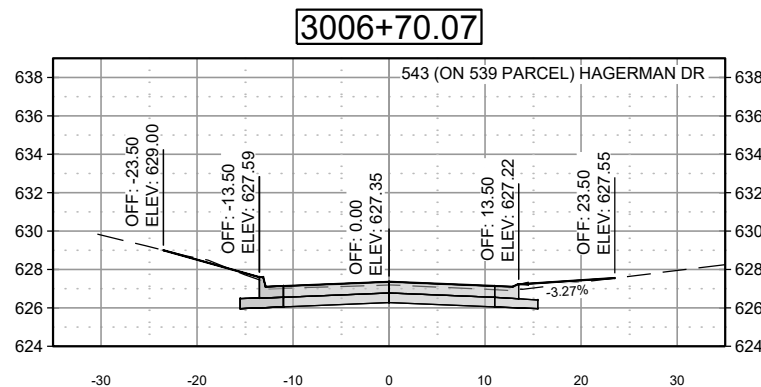
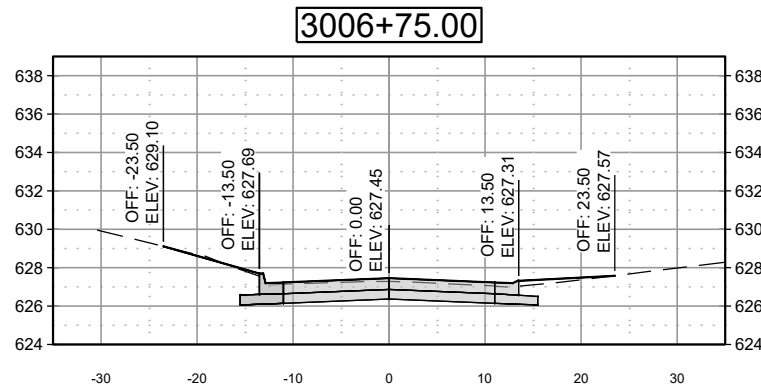
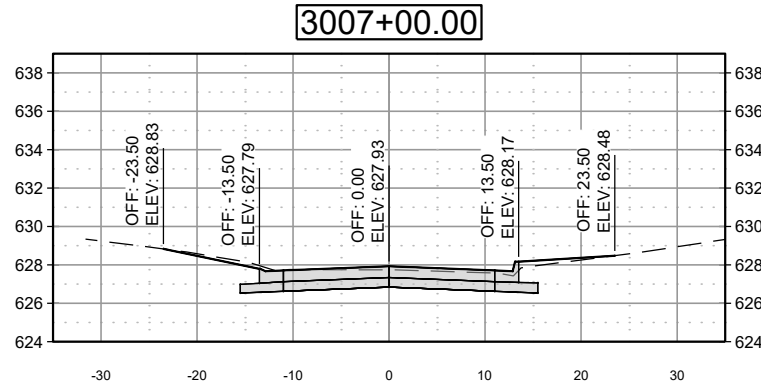
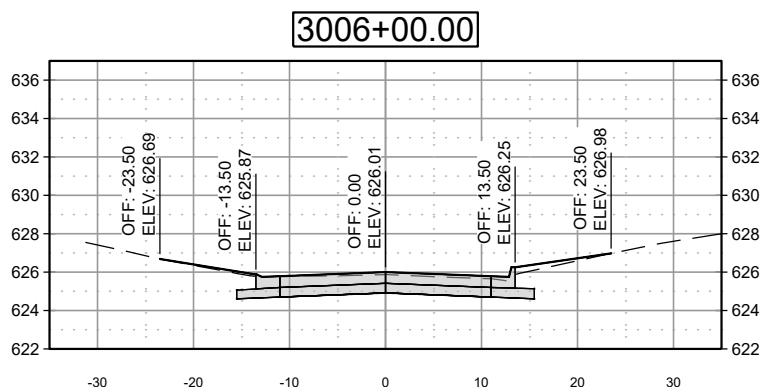
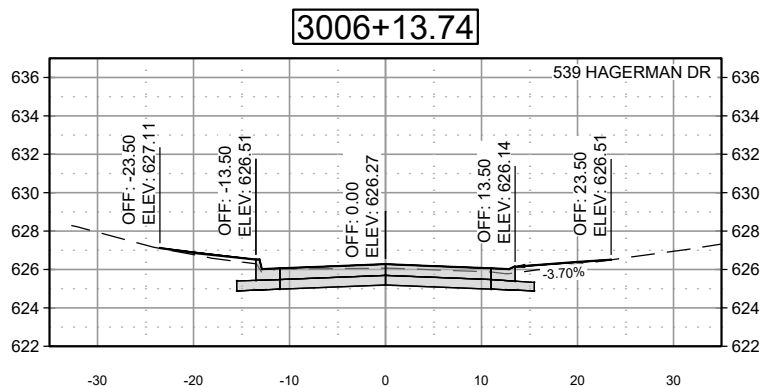
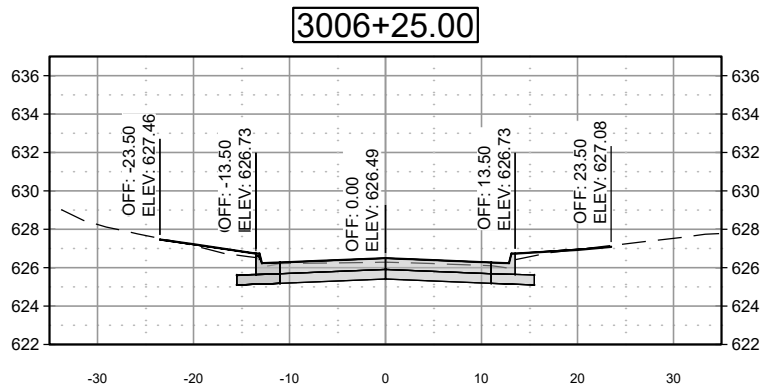
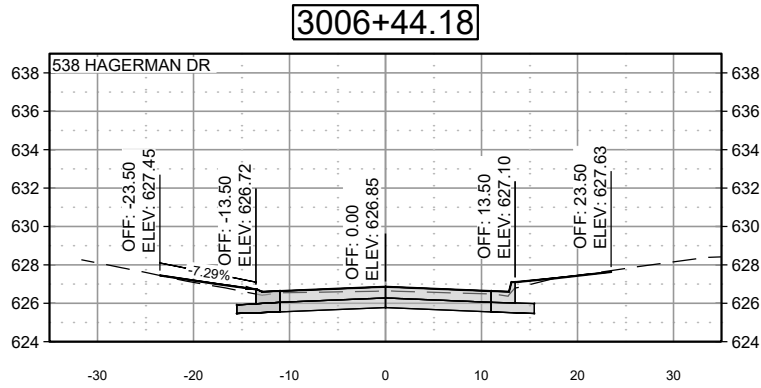
CITY OF MUSCATINE - PHASE 6D
WEST HILL AREA SANITARY AND STORM SEWER SEPARATION
MUSCATINE, IOWA

PAVEMENT CROSS SECTIONS
HAGERMAN DRIVE - SHEET 3

DESIGNED	PM JOHNSON	SCALE: 1" = 20'	REV.
DRAWN	GM REEVES	NO. 17660.60.30	
CHECKED	ER SCHALLERT		
APPROVED	KK HEIM		
APPROVED	PM JOHNSON		
DATE	MARCH 12, 2025		
		W.03	0



G
F
E
D
C
B
A
LOAD D3-R6



NOTES

NO.	REVISIONS	DSGN	CHKD	APVD	DATE



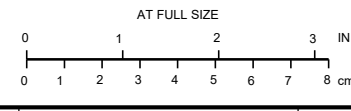
225 Iowa Avenue, Muscatine, Iowa 52761-3764
www.stanleyconsultants.com

CITY OF MUSCATINE - PHASE 6D
WEST HILL AREA SANITARY AND STORM SEWER SEPARATION
MUSCATINE, IOWA

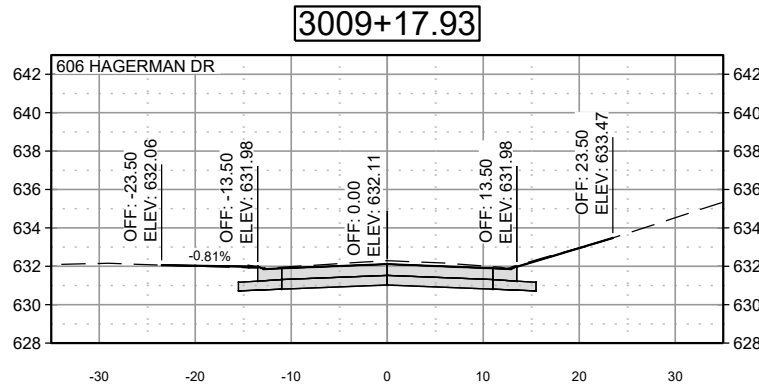
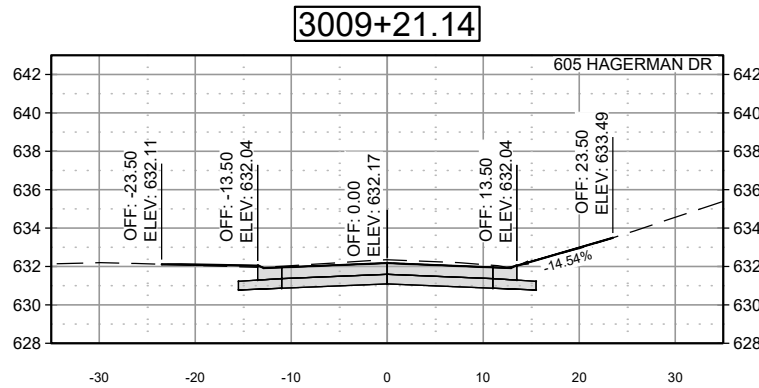
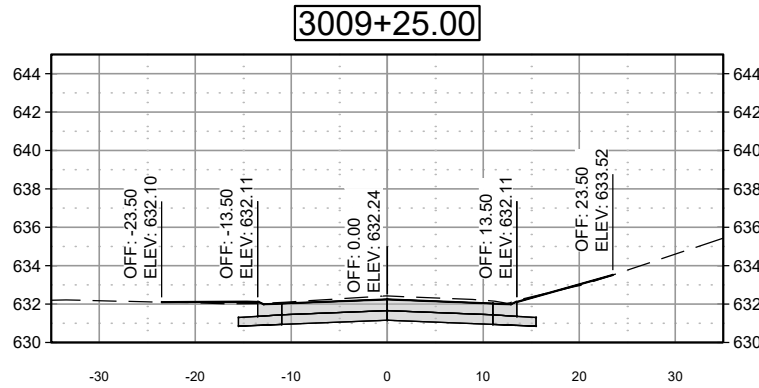
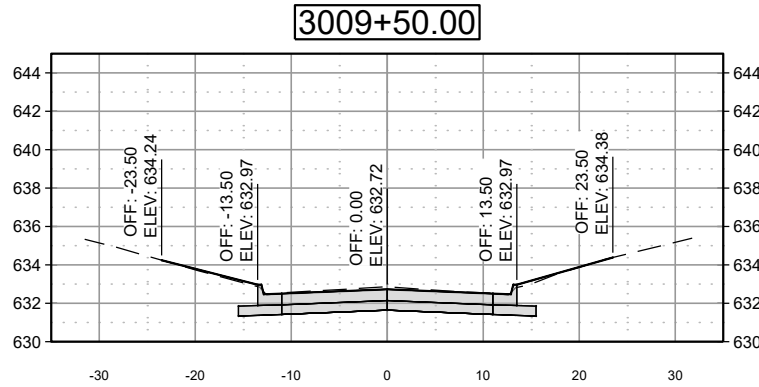
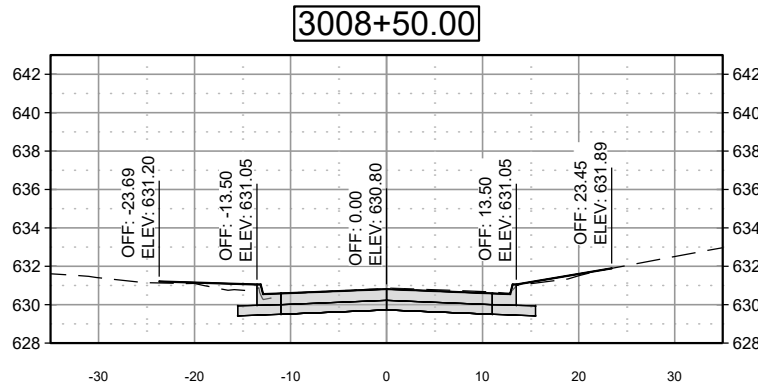
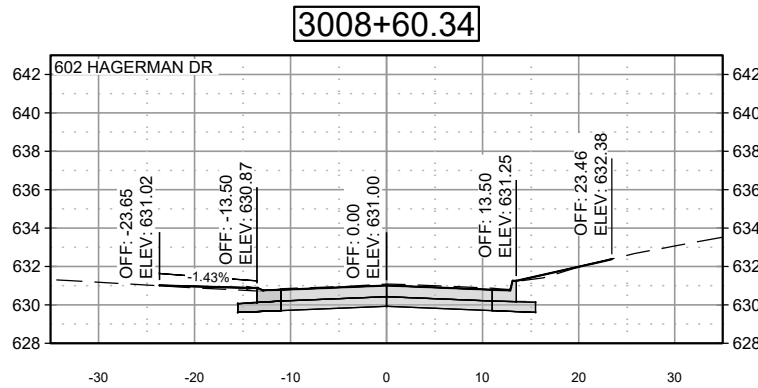
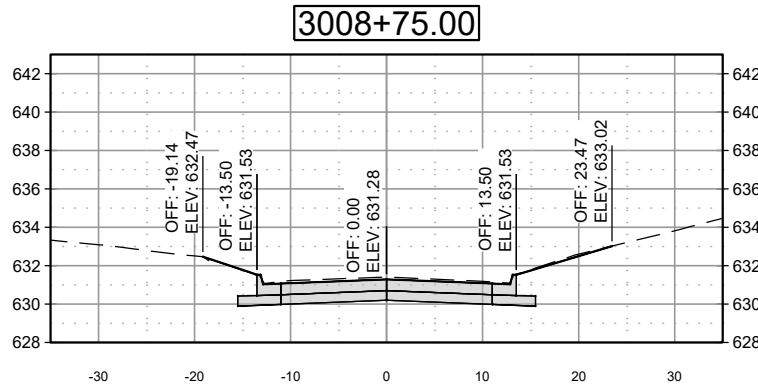
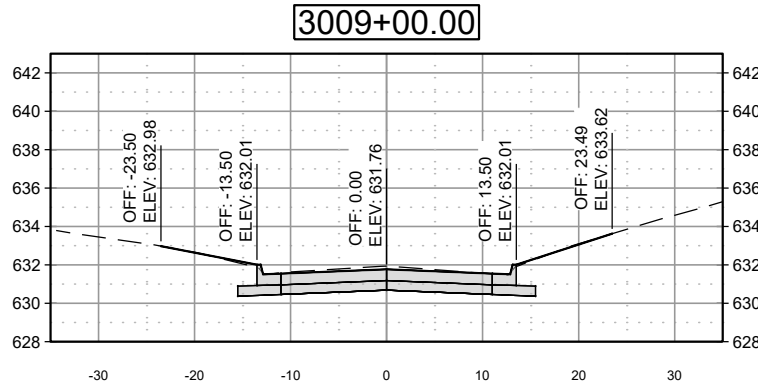
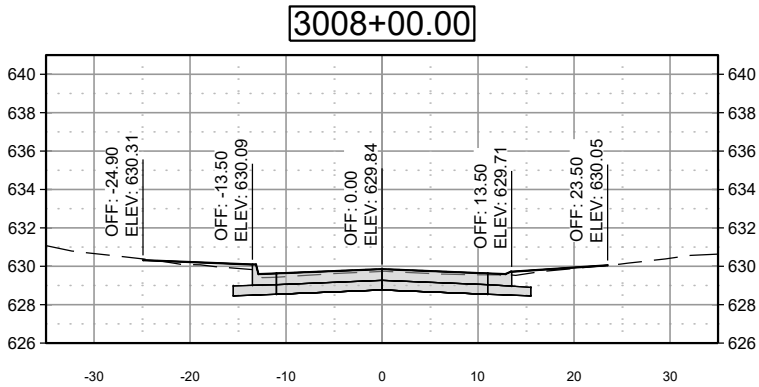
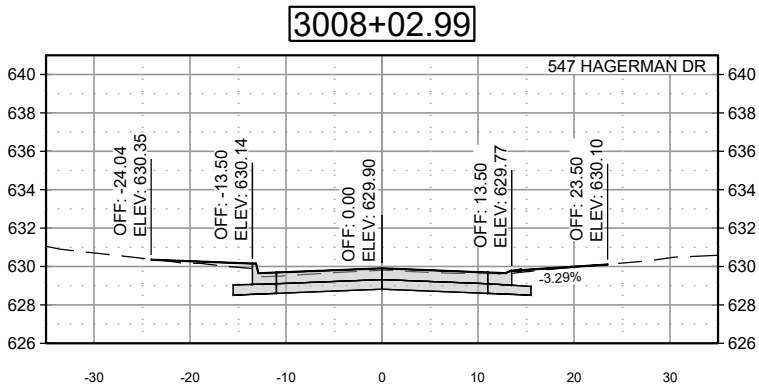
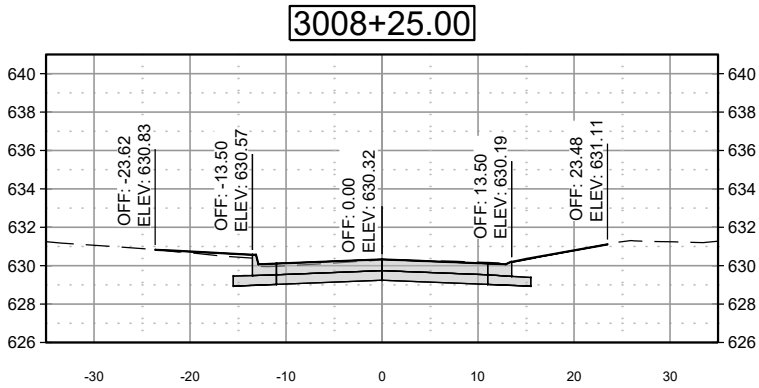
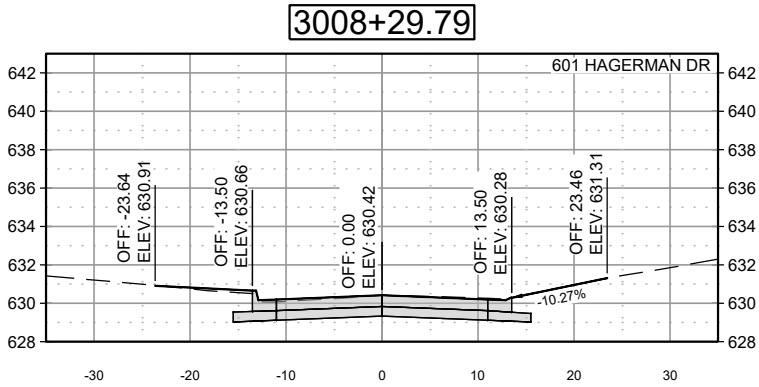
PAVEMENT CROSS SECTIONS
HAGERMAN DRIVE - SHEET 4

DESIGNED: PM JOHNSON	SCALE: 1" = 20'
DRAWN: GM REEVES	NO. 17660.60.30
CHECKED: ER SCHALLERT	REV.
APPROVED: KK HEIM	
APPROVED: PM JOHNSON	
DATE: MARCH 12, 2025	

W.04	0
------	---



G
F
E
D
C
B
A
LOAD D3-R6



NOTES

NO.	REVISIONS	DSGN	CHKD	APVD	DATE

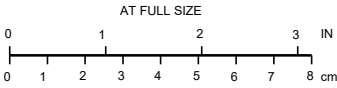
225 Iowa Avenue, Muscatine, Iowa 52761-3764
www.stanleyconsultants.com

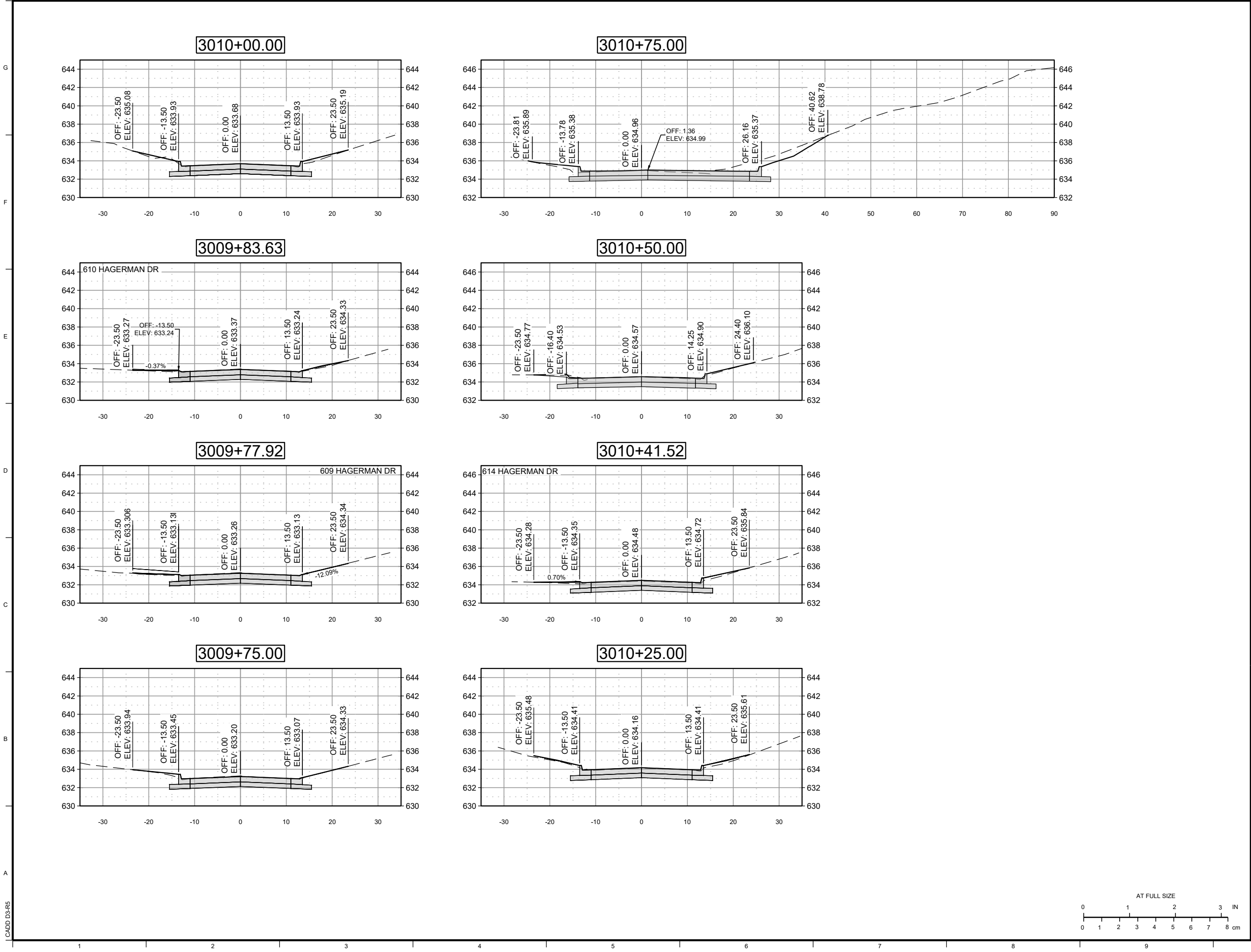
CITY OF MUSCATINE - PHASE 6D
WEST HILL AREA SANITARY AND STORM SEWER SEPARATION
MUSCATINE, IOWA

PAVEMENT CROSS SECTIONS
HAGERMAN DRIVE - SHEET 5

DESIGNED	PM JOHNSON	SCALE: 1" = 20'
DRAWN	GM REEVES	NO. 17660.60.30
CHECKED	ER SCHALLERT	REV.
APPROVED	KK HEIM	
APPROVED	PM JOHNSON	
DATE	MARCH 12, 2025	

W.05	0
------	---





NOTES

NO.	REVISIONS	DSGN	CHKD	APVD	DATE



Stanley Consultants Inc.

225 Iowa Avenue, Muscatine, Iowa 52761-3764
www.stanleyconsultants.com

CITY OF MUSCATINE - PHASE 6D
WEST HILL AREA SANITARY AND STORM SEWER SEPARATION
MUSCATINE, IOWA

**PAVEMENT CROSS SECTIONS
HAGERMAN DRIVE - SHEET 6**

DESIGNED	PM JOHNSON	SCALE: 1" = 20'	REV.
DRAWN	GM REEVES	NO. 17660.60.30	
CHECKED	ER SCHALLERT		
APPROVED	KK HEIM		
DATE	MARCH 12, 2025		

W.06

0

0 1 2 3 4 5 6 7 8 cm

0 1 2 3 4 5 6 7 8 9 10

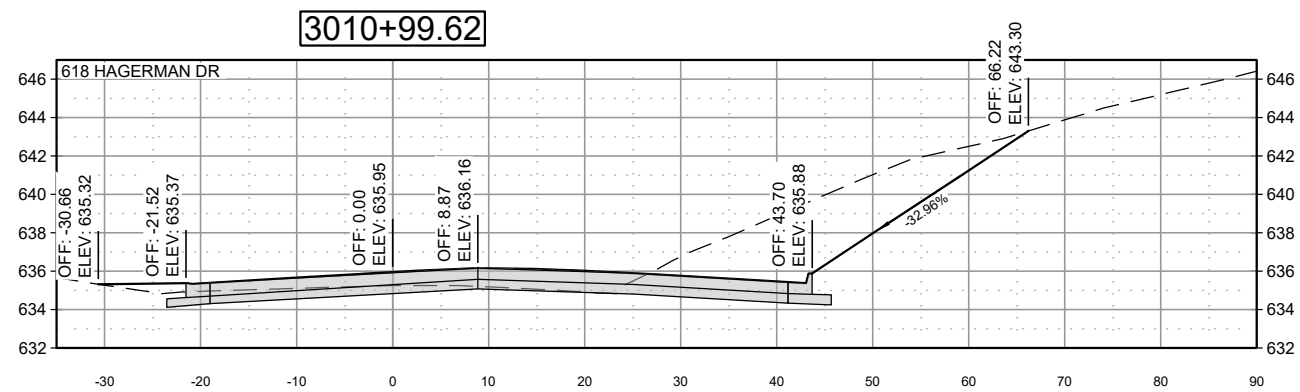
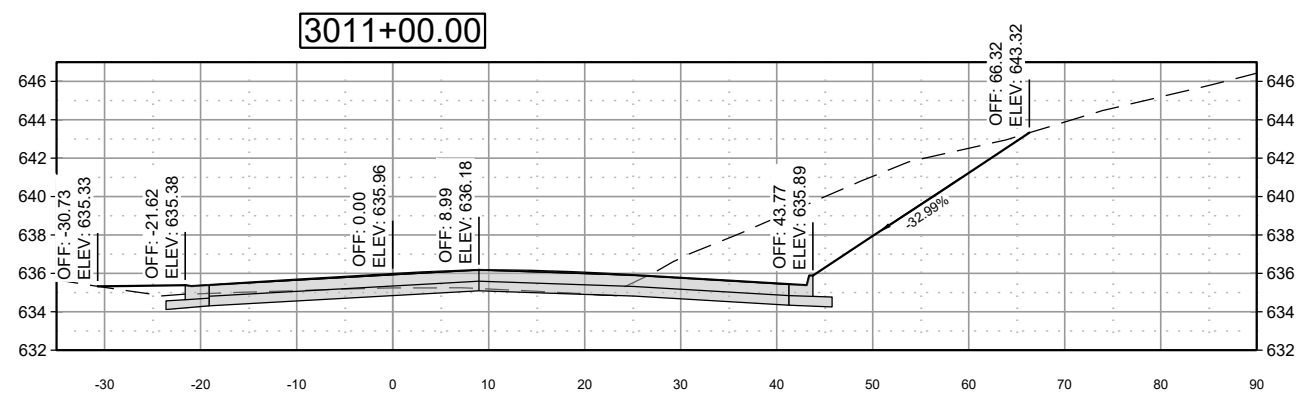
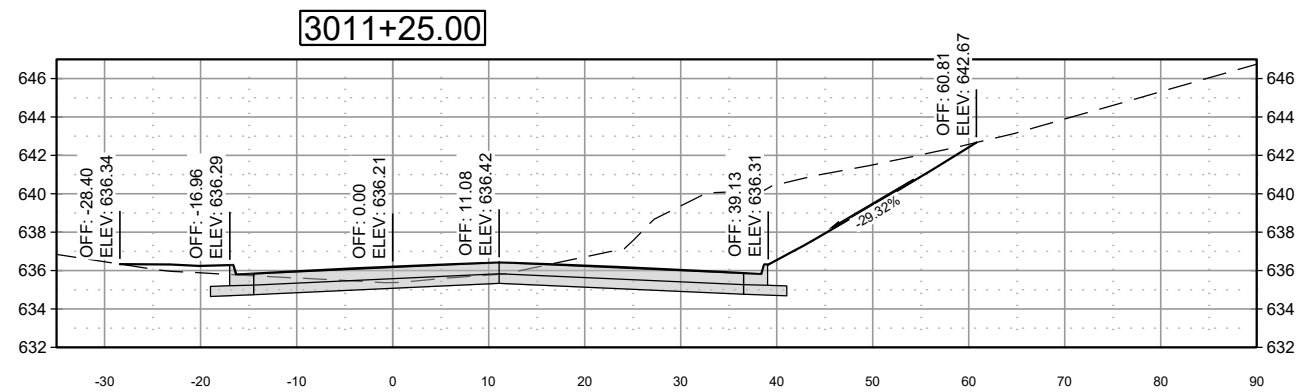
AT FULL SIZE

0 1 2 3 4 5 6 7 8 cm

0 1 2 3 4 5 6 7 8 9 10

© STANLEY CONSULTANTS

Page 240 of 1049



NOTES

NO.	REVISIONS	DSGN	CHKD	APVD	DATE



CITY OF MUSCATINE - PHASE 6D
WEST HILL AREA SANITARY AND STORM SEWER SEPARATION
MUSCATINE, IOWA

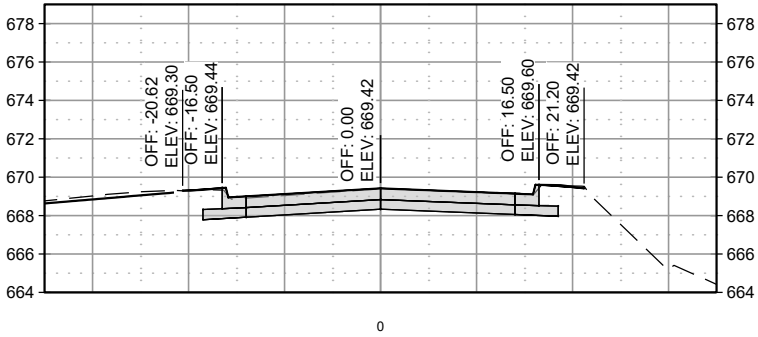
PAVEMENT CROSS SECTIONS
HAGERMAN DRIVE - SHEET 7

DESIGNED <u>PM JOHNSON</u>	SCALE: 1" = 20'	
DRAWN <u>GM REEVES</u>	NO. 17660.60.30	REV.
CHECKED <u>ER SCHALLERT</u>		
APPROVED <u>KK HEIM</u>		
APPROVED <u>PM JOHNSON</u>		
DATE <u>MARCH 12, 2025</u>	W.07	0

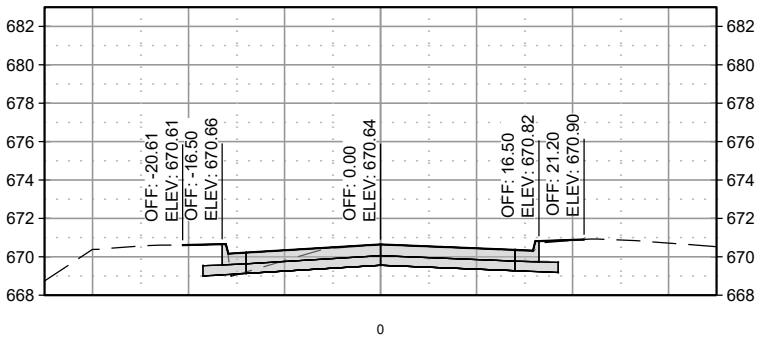
LOAD D3-R6

G
F
E
D
C
B
A

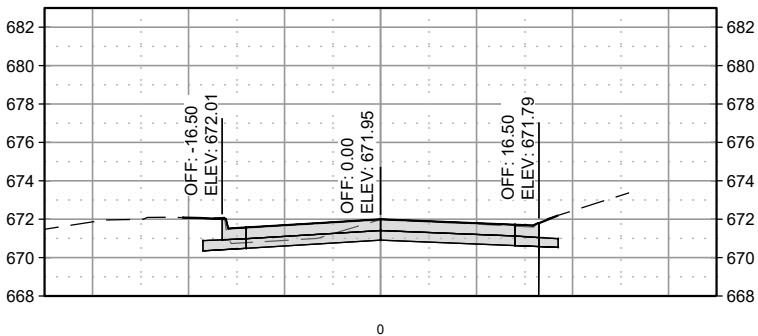
3300+75.00



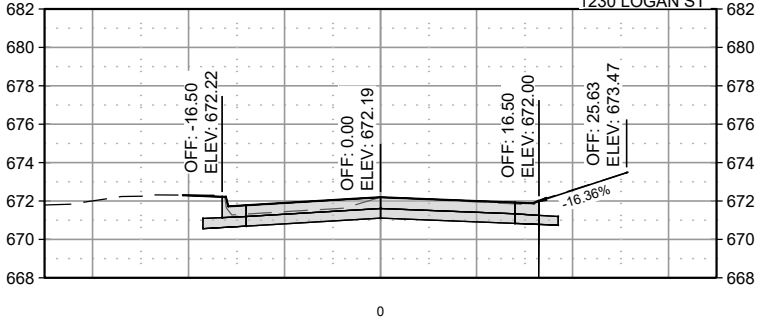
3300+50.00



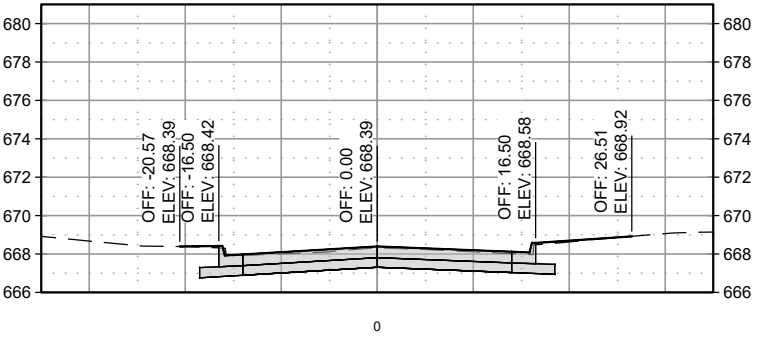
3300+25.00



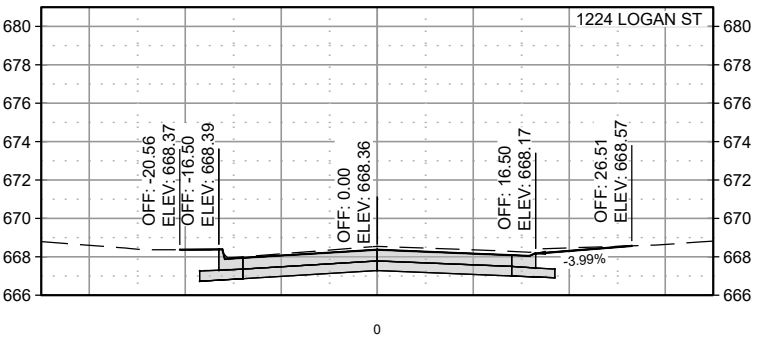
3300+21.55



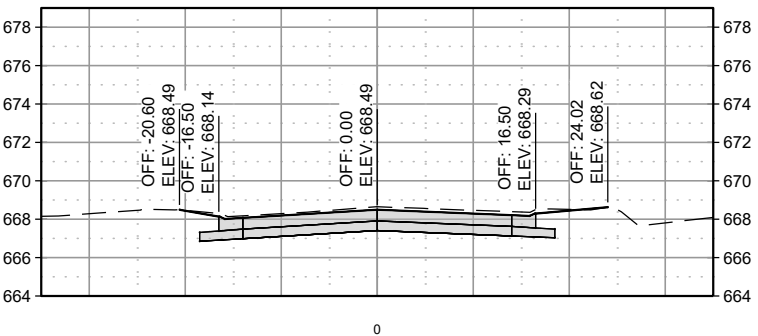
3301+25.00



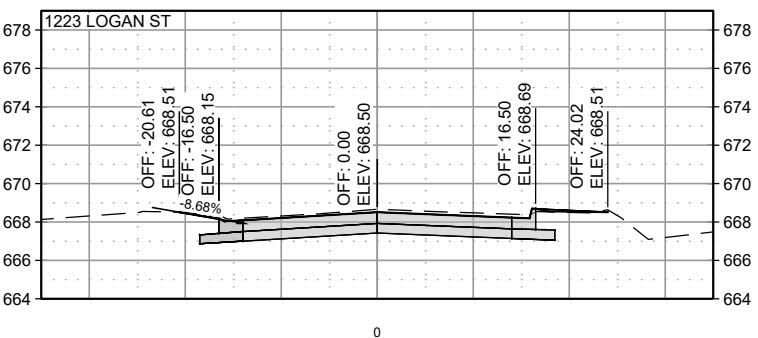
3301+08.22



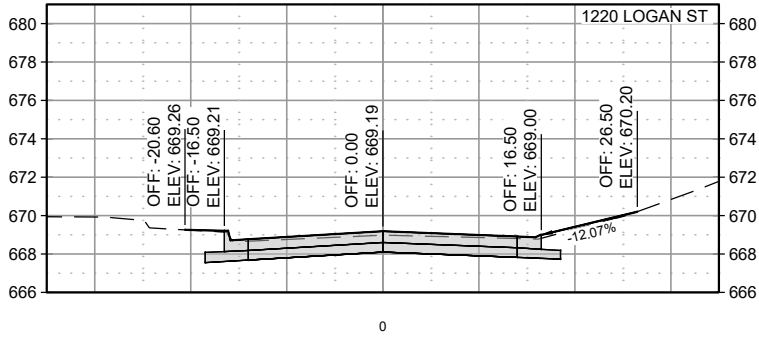
3301+00.00



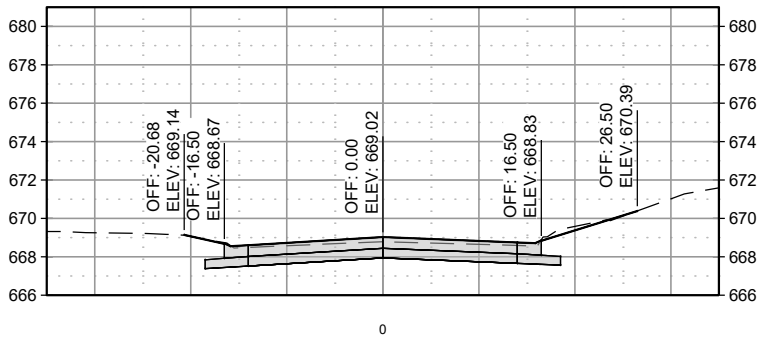
3300+99.24



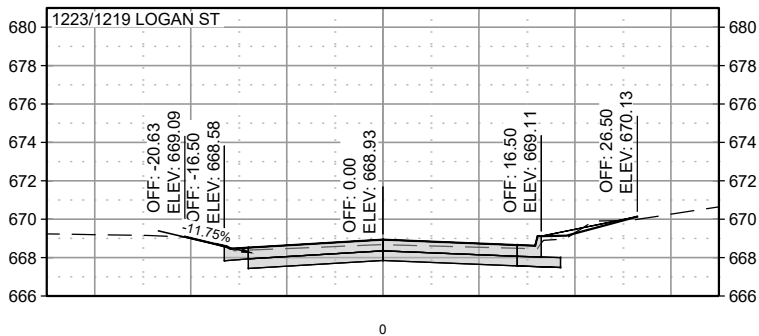
3301+85.99



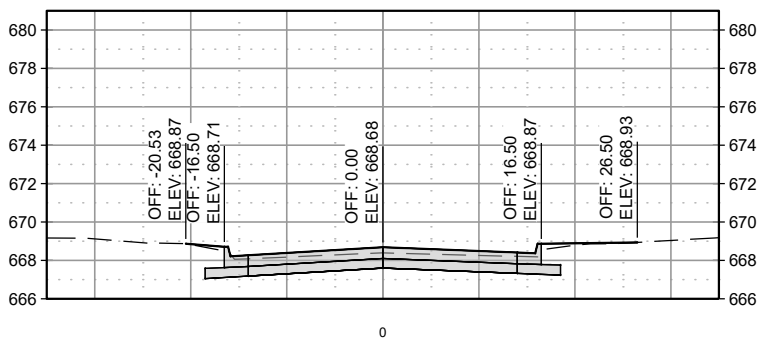
3301+75.00



3301+68.68



3301+50.00



NOTES

NO.	REVISIONS	DSGN	CHKD	APVD	DATE

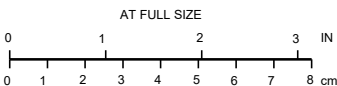
Stanley Consultants Inc.
225 Iowa Avenue, Muscatine, Iowa 52761-3764
www.stanleyconsultants.com

CITY OF MUSCATINE - PHASE 6D
WEST HILL AREA SANITARY AND STORM SEWER SEPARATION
MUSCATINE, IOWA

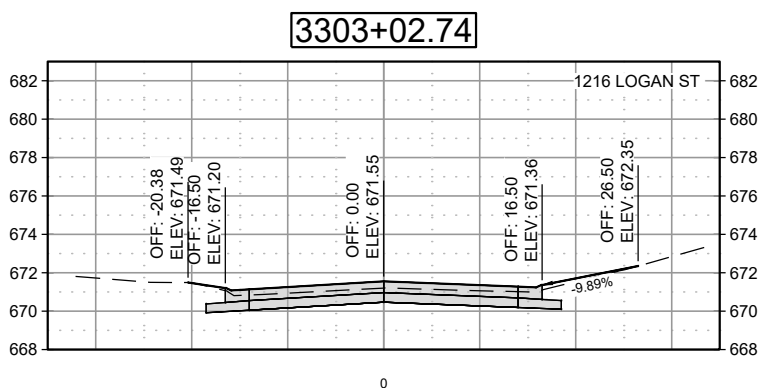
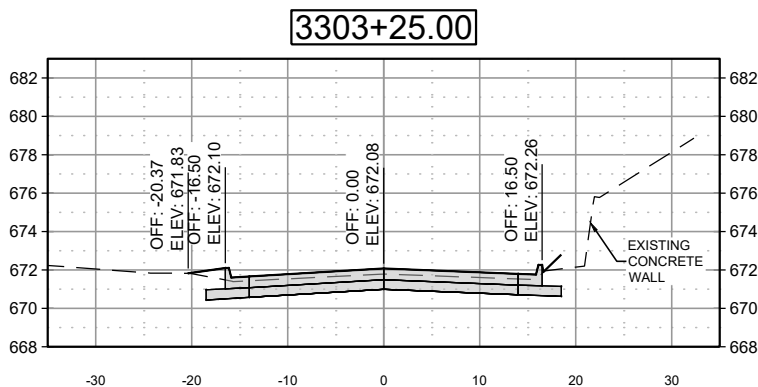
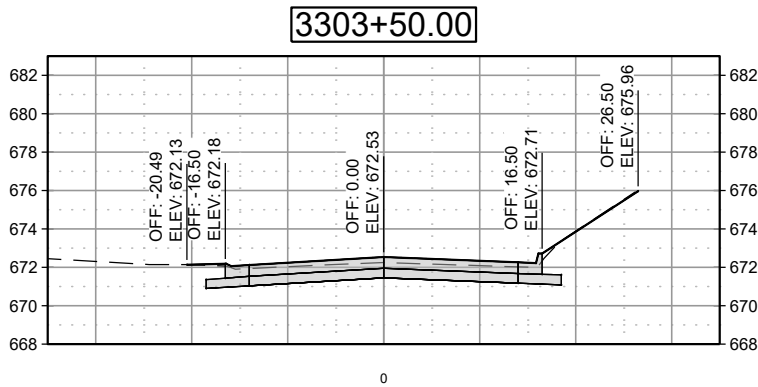
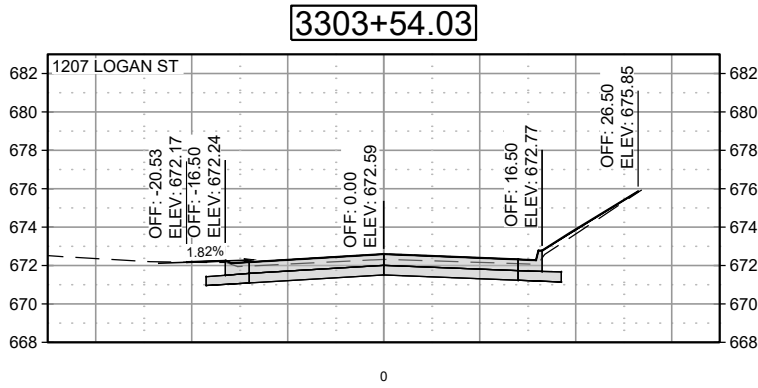
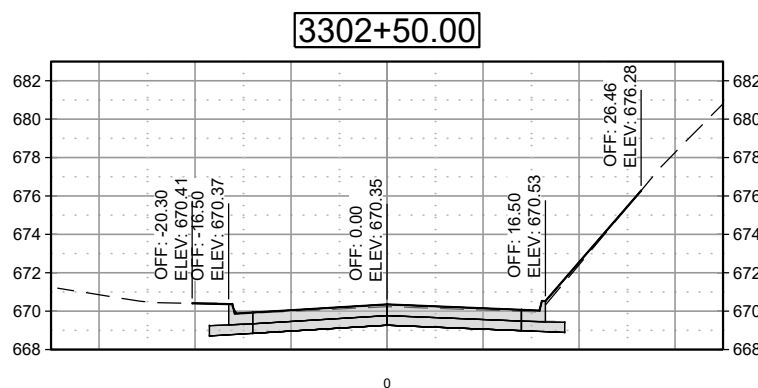
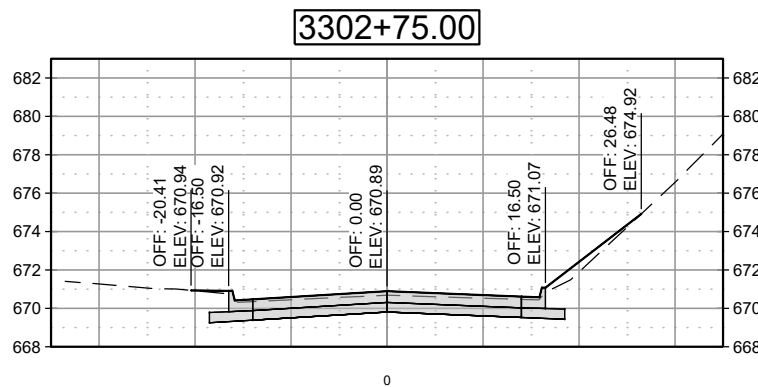
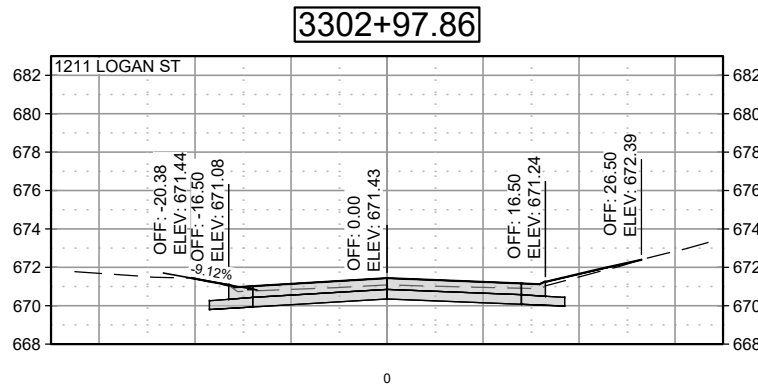
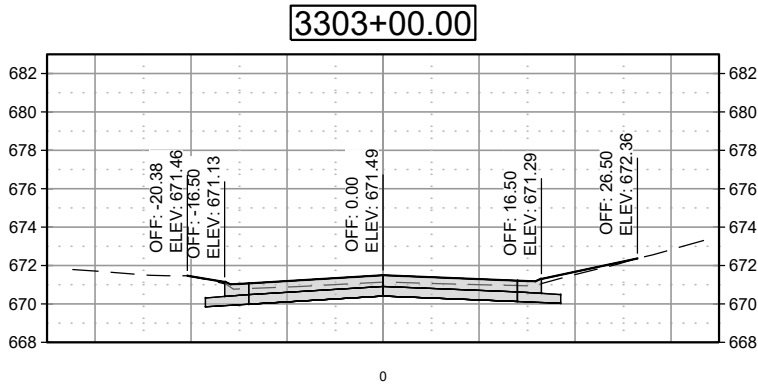
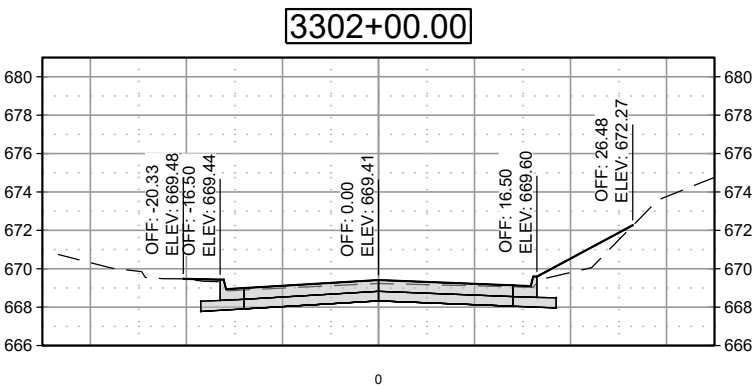
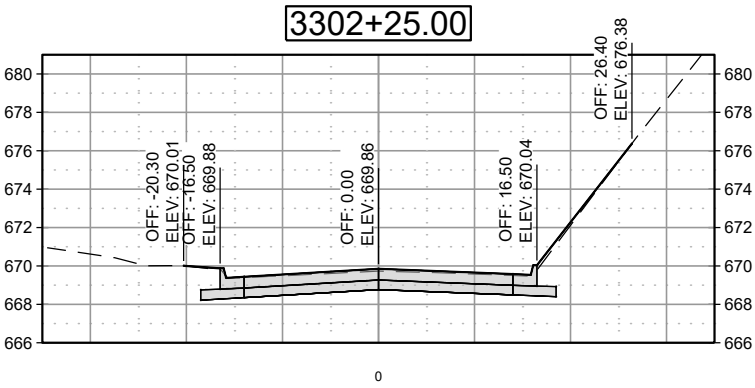
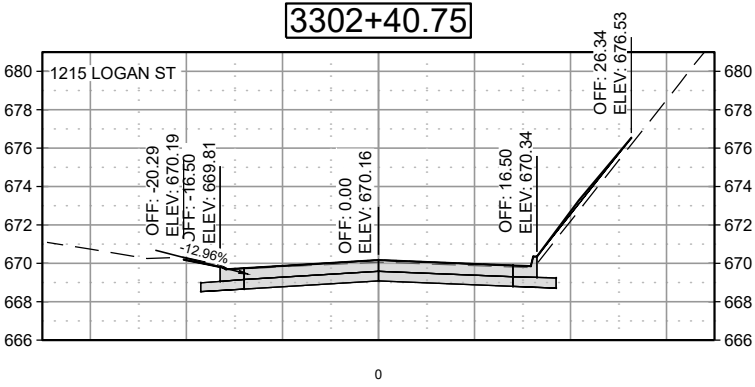
**PAVEMENT CROSS SECTIONS
LOGAN STREET - SHEET 1**

DESIGNED: PM JOHNSON	SCALE: 1" = 20'
DRAWN: GM REEVES	NO. 17660.60.30
CHECKED: ER SCHALLERT	REV.
APPROVED: KK HEIM	
APPROVED: PM JOHNSON	
DATE: MARCH 12, 2025	

W.08	0
------	---



G
F
E
D
C
B
A
LOAD D3-R6



NOTES

NO.	REVISIONS	DSGN	CHKD	APVD	DATE

Stanley Consultants Inc.

225 Iowa Avenue, Muscatine, Iowa 52761-3764
www.stanleyconsultants.com

CITY OF MUSCATINE - PHASE 6D
WEST HILL AREA SANITARY AND STORM SEWER SEPARATION
MUSCATINE, IOWA

**PAVEMENT CROSS SECTIONS
LOGAN STREET - SHEET 2**

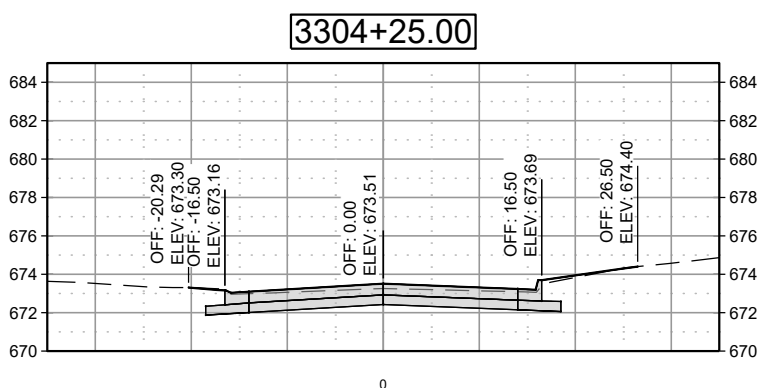
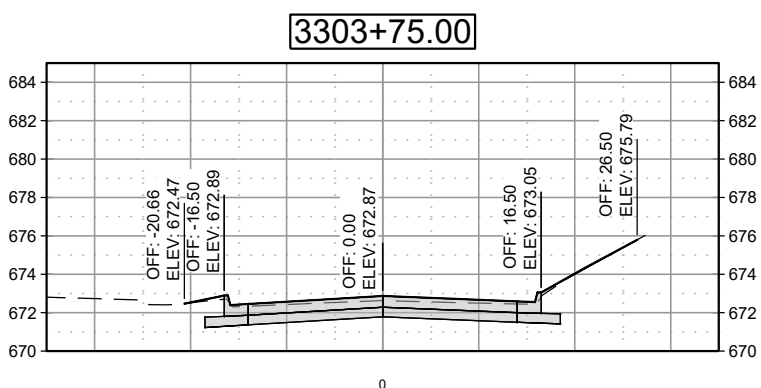
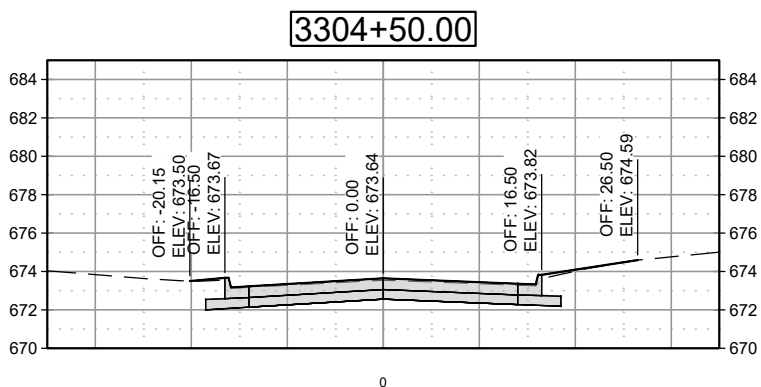
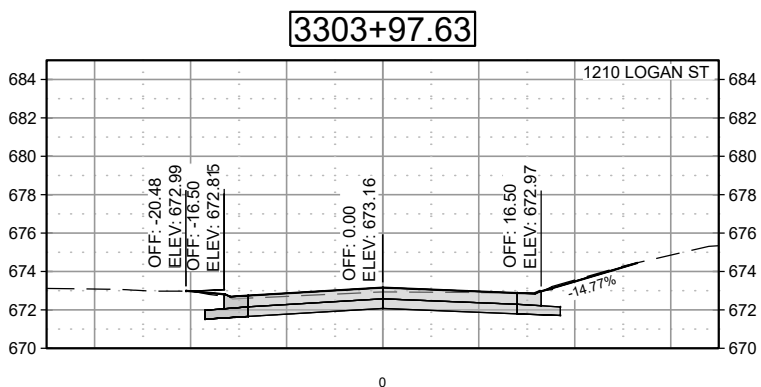
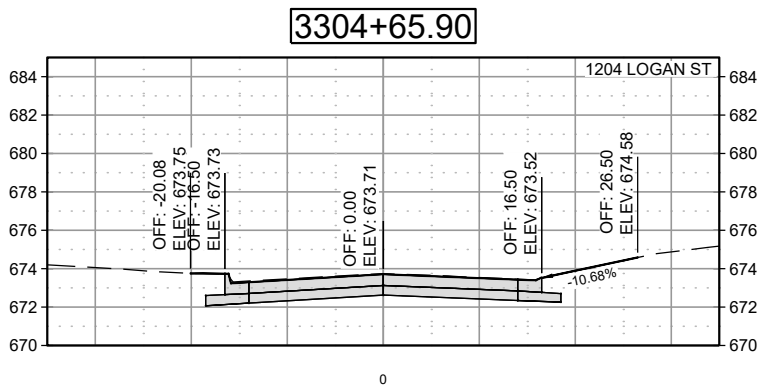
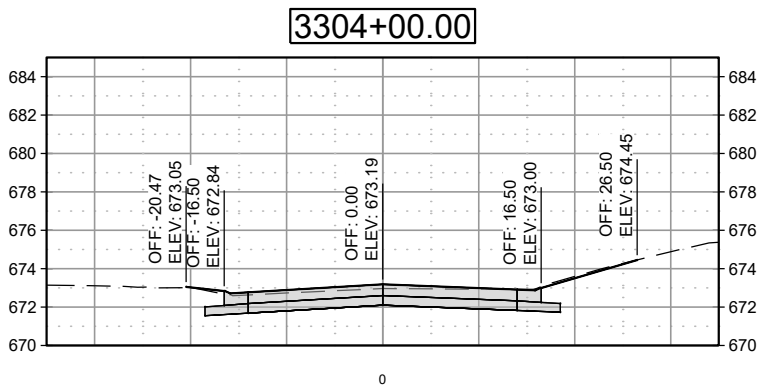
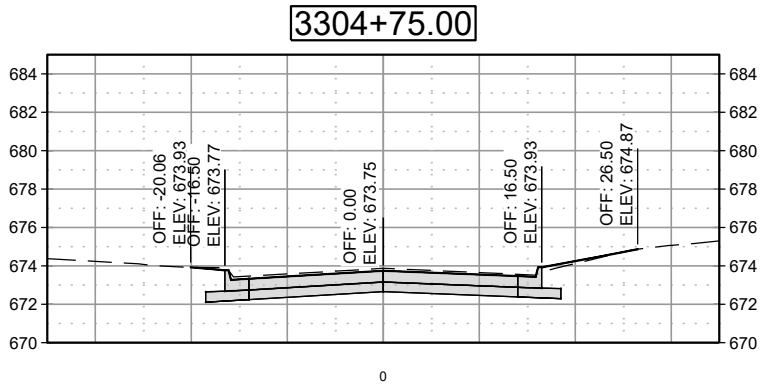
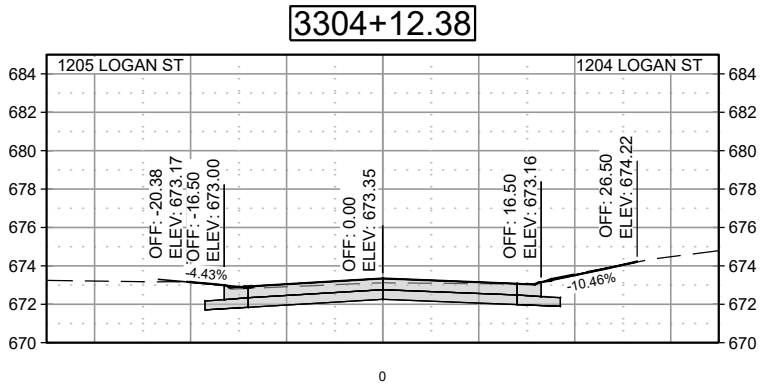
DESIGNED	PM JOHNSON	SCALE: 1" = 20'
DRAWN	GM REEVES	NO. 17660.60.30
CHECKED	ER SCHALLERT	REV.
APPROVED	KK HEIM	W.09
APPROVED	PM JOHNSON	0
DATE	MARCH 12, 2025	

AT FULL SIZE

10 ©STANLEY CONSULTANTS

Page 243 of 1049

G
F
E
D
C
B
A
LOAD D3-R6



NOTES

NO.	REVISIONS	DSGN	CHKD	APVD	DATE



Stanley Consultants INC.

225 Iowa Avenue, Muscatine, Iowa 52761-3764
www.stanleyconsultants.com

CITY OF MUSCATINE - PHASE 6D
WEST HILL AREA SANITARY AND STORM SEWER SEPARATION
MUSCATINE, IOWA

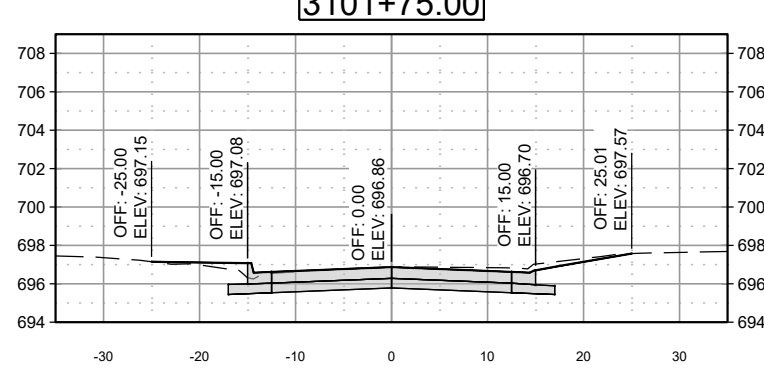
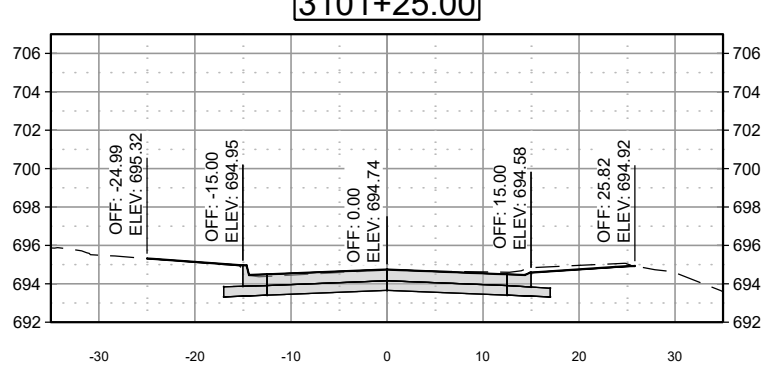
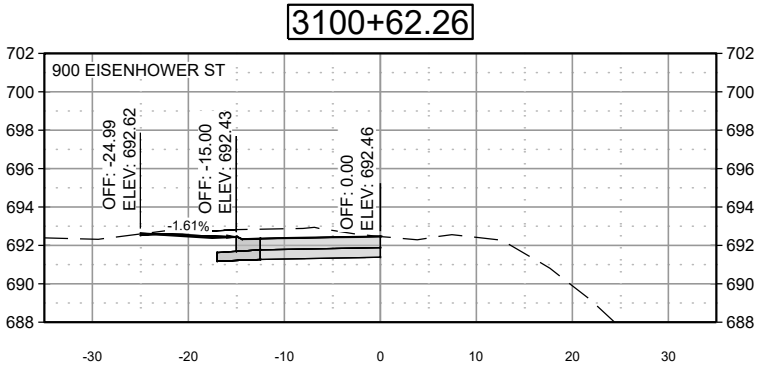
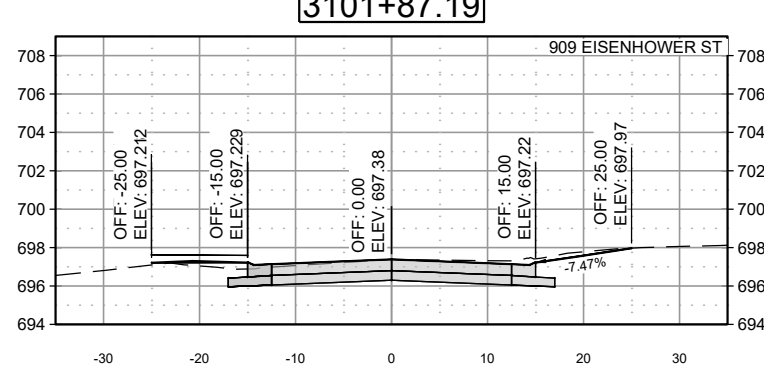
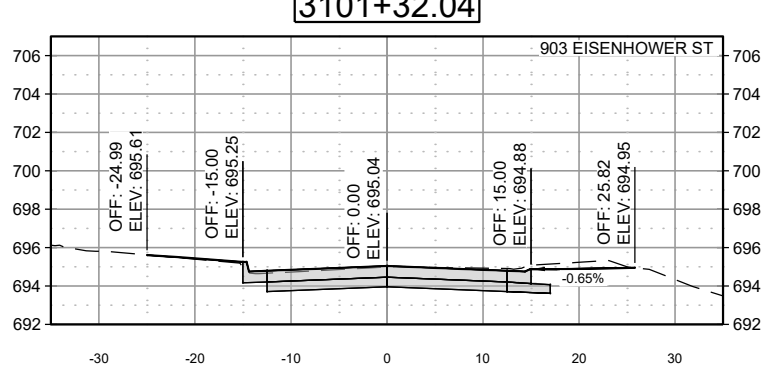
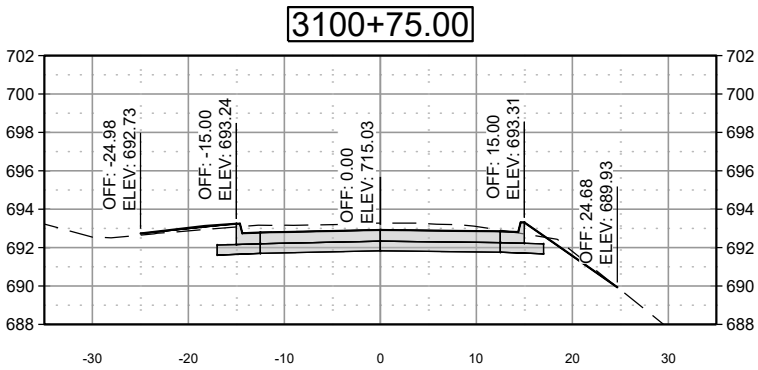
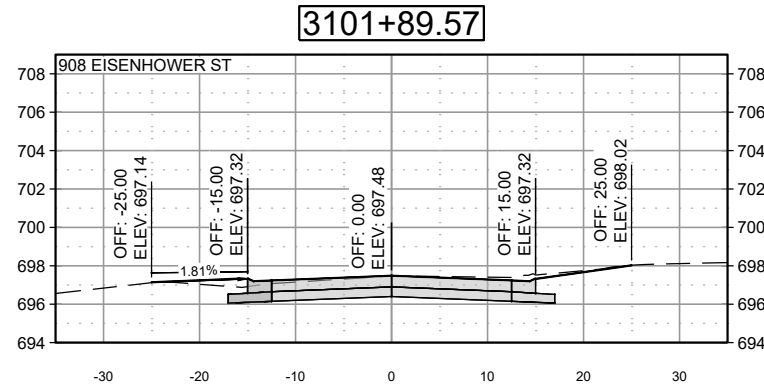
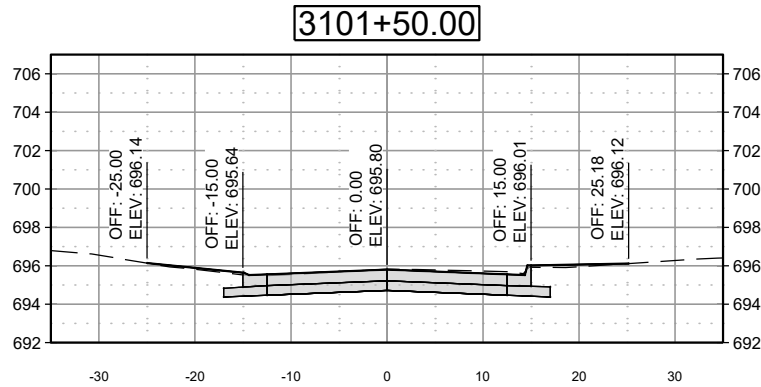
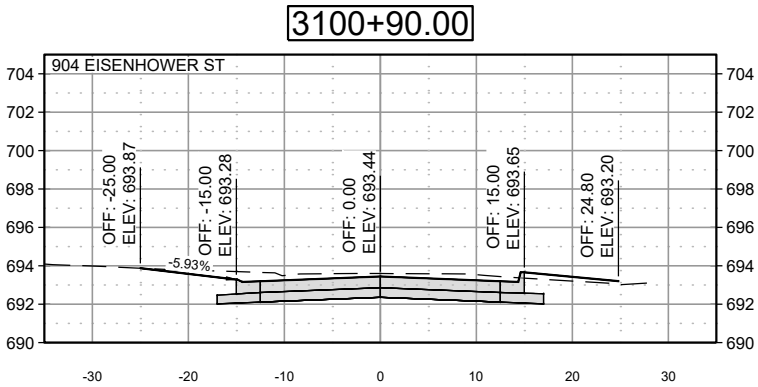
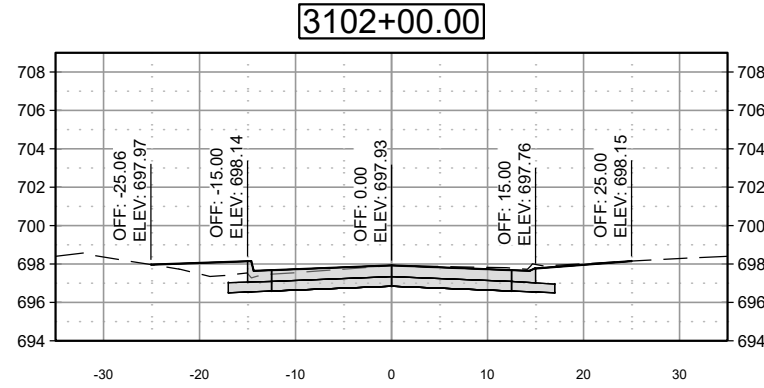
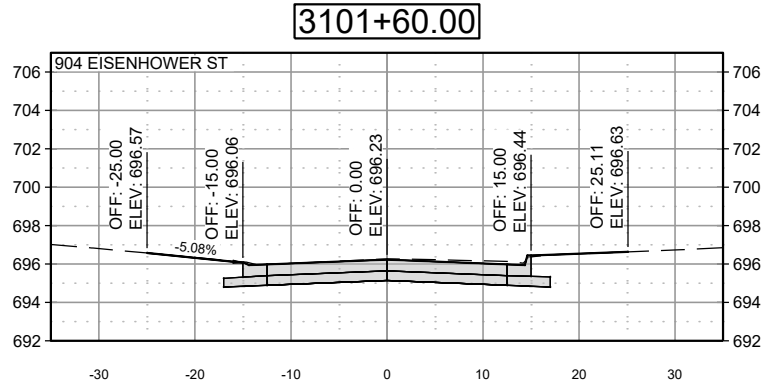
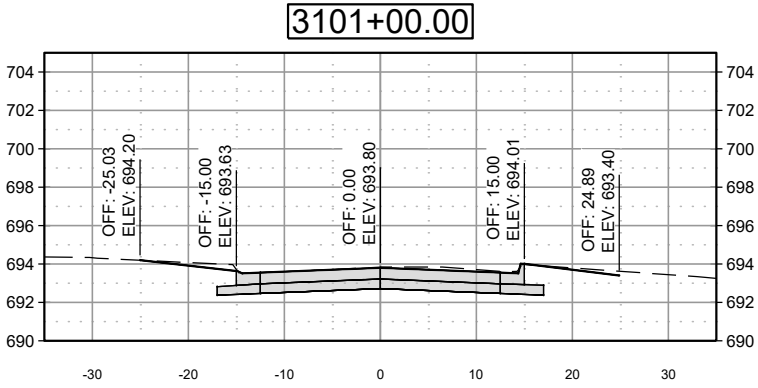
**PAVEMENT CROSS SECTIONS
LOGAN STREET - SHEET 3**

DESIGNED	PM JOHNSON
DRAWN	GM REEVES
CHECKED	ER SCHALLERT
APPROVED	KK HEIM
APPROVED	PM JOHNSON
DATE	MARCH 12, 2025

SCALE: 1" = 20'
NO. 17660.60.30
REV.
W.10
0



G
F
E
D
C
B
A
LOAD D3-R6



NOTES

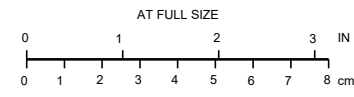
NO.	REVISIONS	DSGN	CHKD	APVD	DATE

225 Iowa Avenue, Muscatine, Iowa 52761-3764
www.stanleyconsultants.com

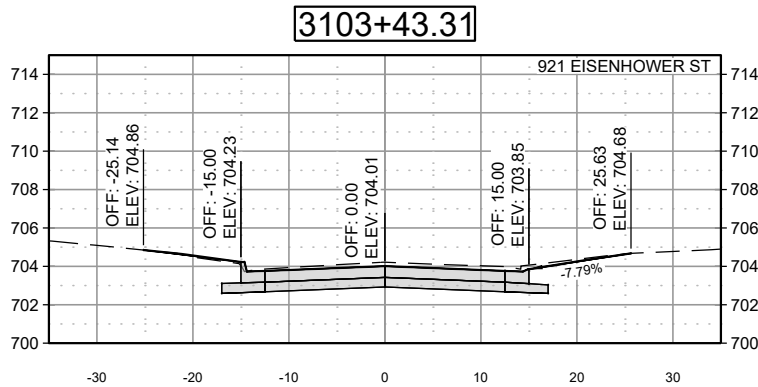
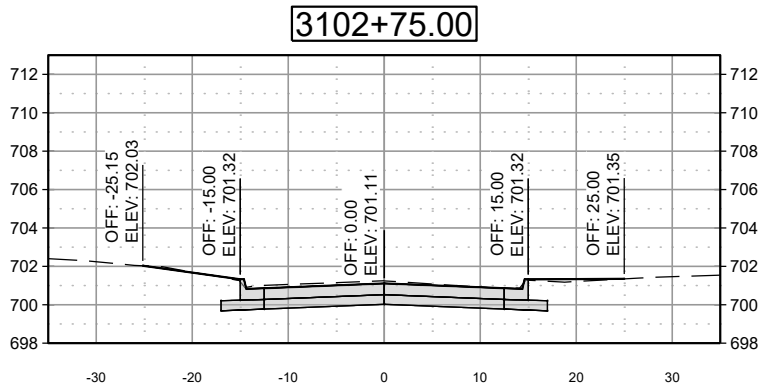
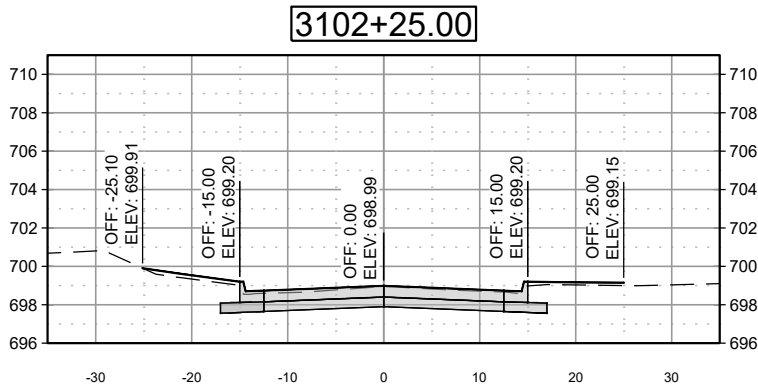
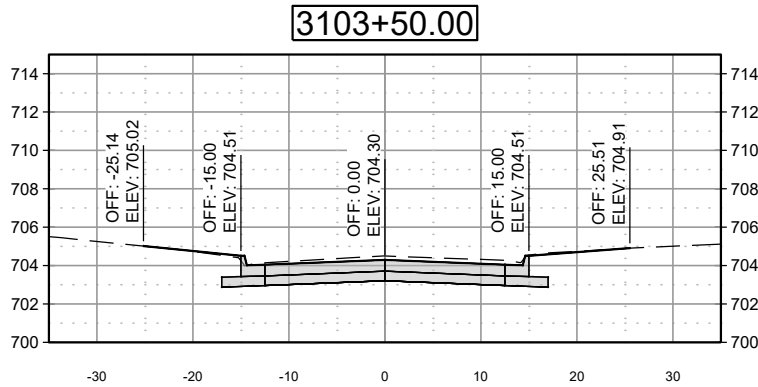
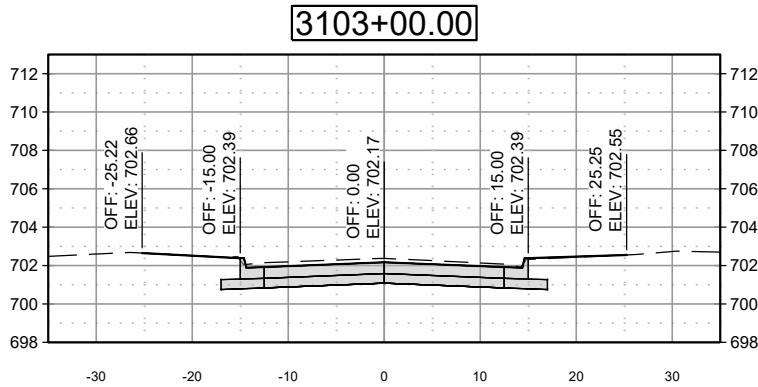
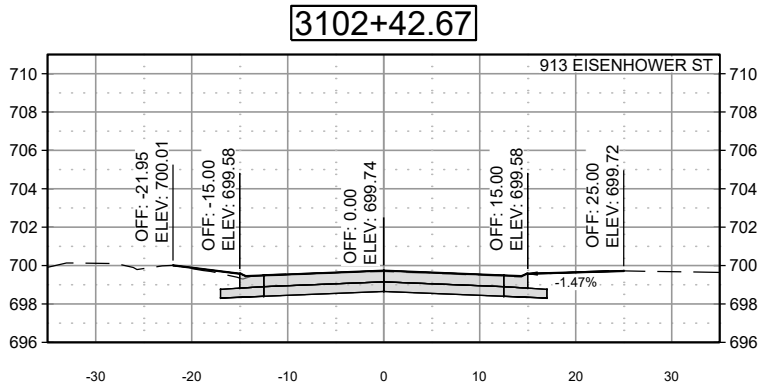
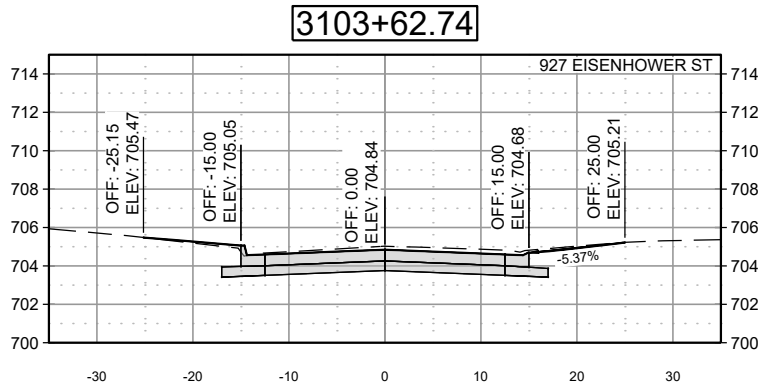
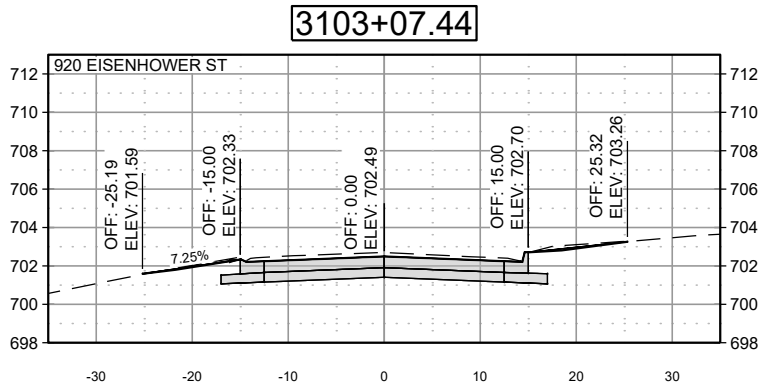
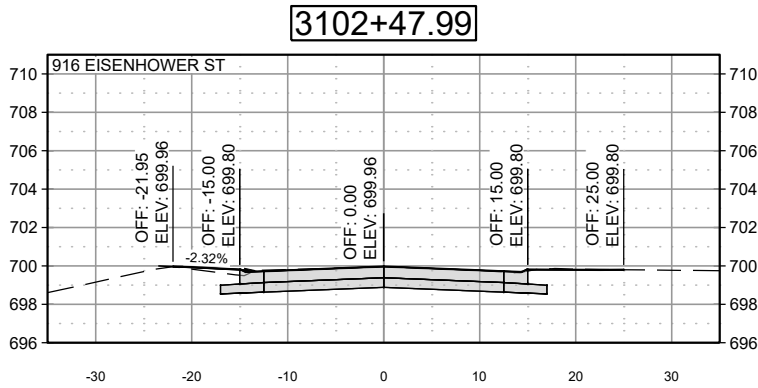
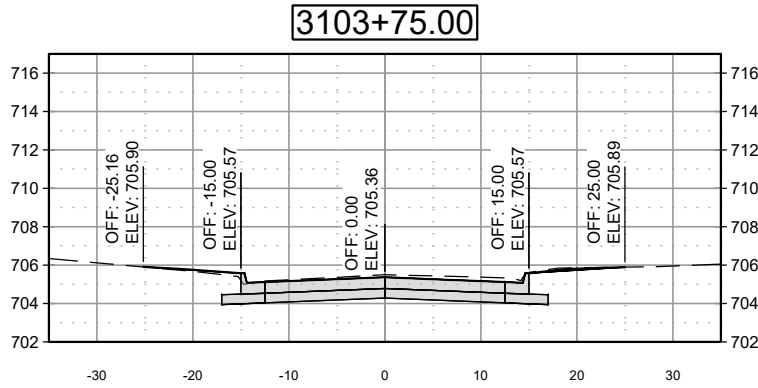
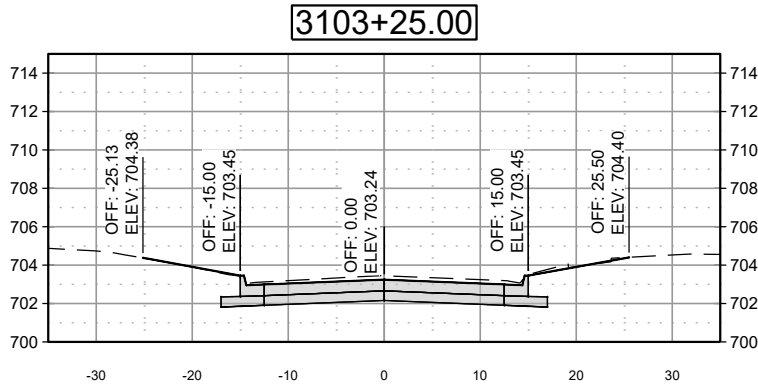
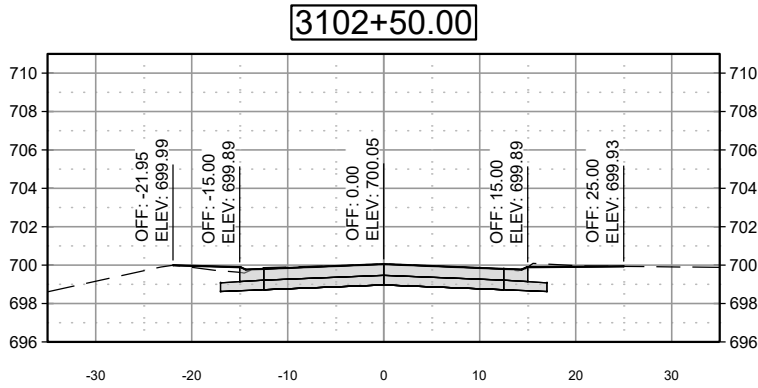
CITY OF MUSCATINE - PHASE 6D
WEST HILL AREA SANITARY AND STORM SEWER SEPARATION
MUSCATINE, IOWA

PAVEMENT CROSS SECTIONS
EISENHOWER STREET - SHEET 1

DESIGNED	PM JOHNSON	SCALE: 1" = 20'
DRAWN	GM REEVES	NO. 17660.60.30
CHECKED	ER SCHALLERT	REV.
APPROVED	KK HEIM	W.11
APPROVED	PM JOHNSON	0
DATE	MARCH 12, 2025	



G
F
E
D
C
B
A
LOAD D3-R6



NOTES

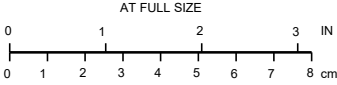
NO.	REVISIONS	DSGN	CHKD	APVD	DATE

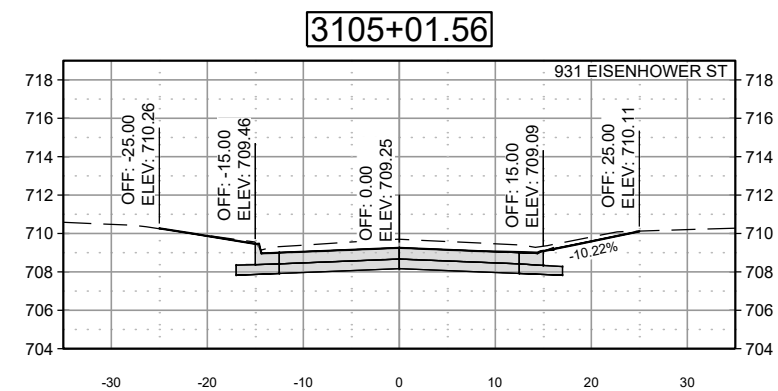
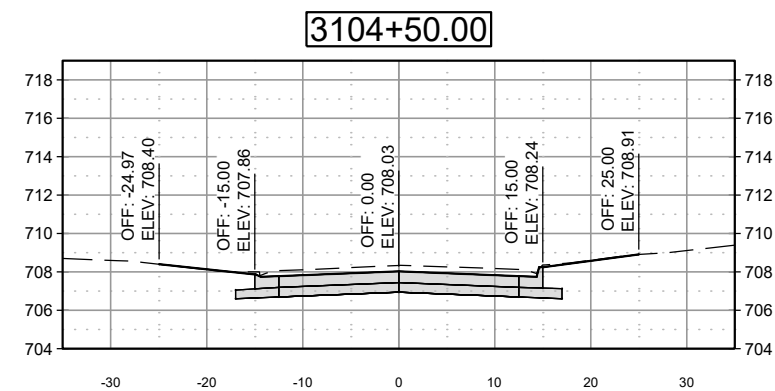
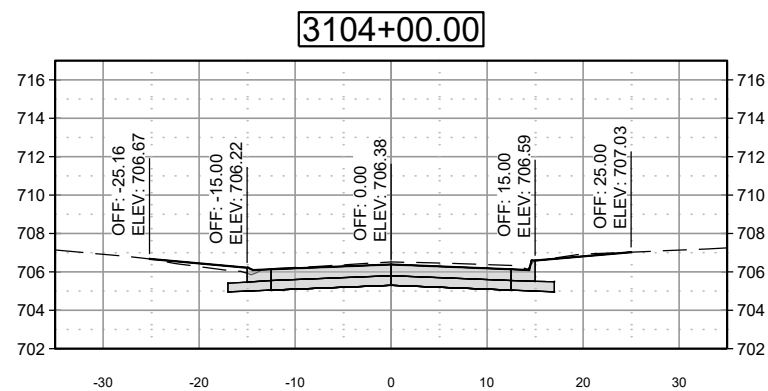
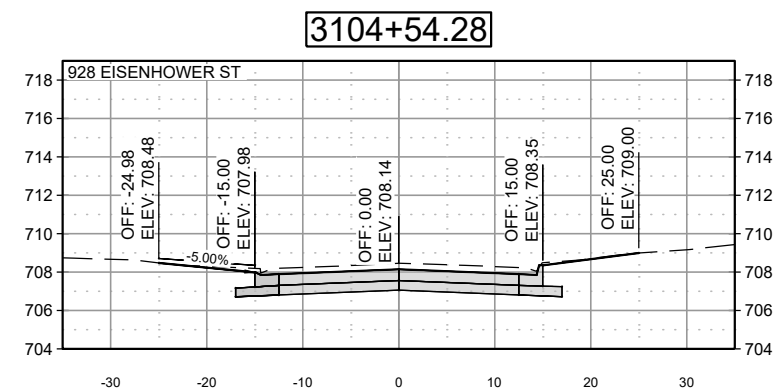
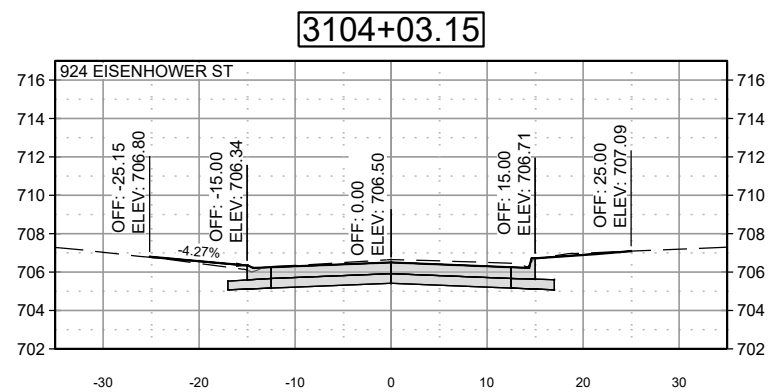
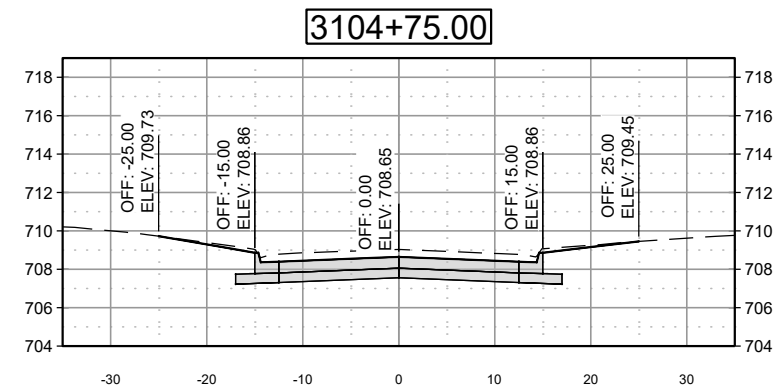
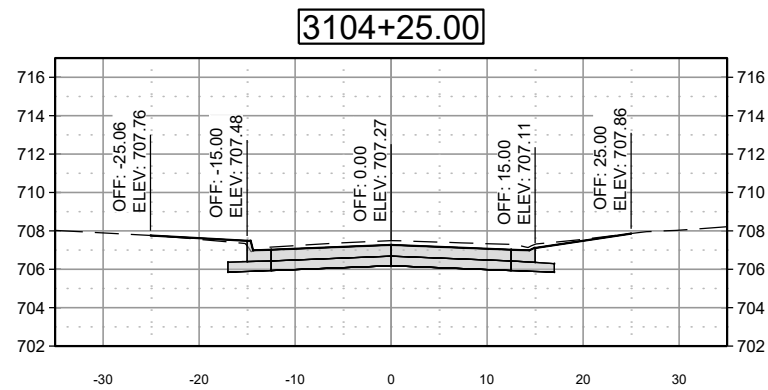
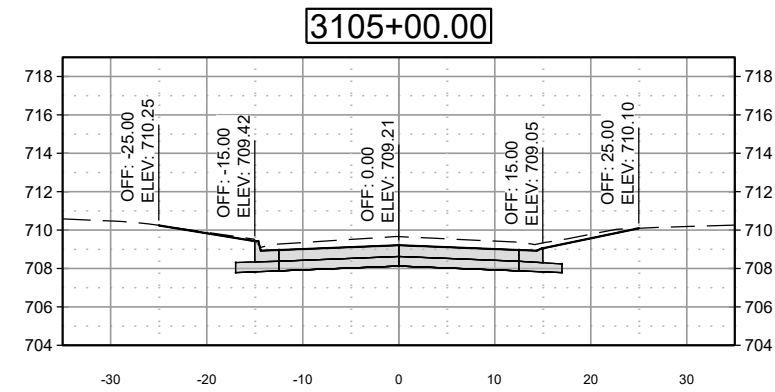
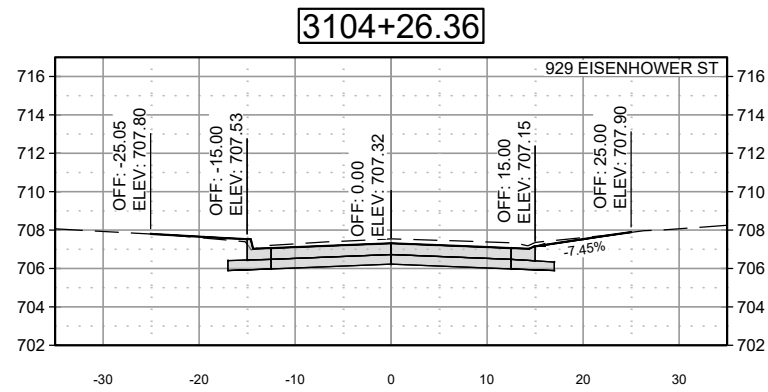

Stanley Consultants Inc.
225 Iowa Avenue, Muscatine, Iowa 52761-3764
www.stanleyconsultants.com

CITY OF MUSCATINE - PHASE 6D
WEST HILL AREA SANITARY AND STORM SEWER SEPARATION
MUSCATINE, IOWA

PAVEMENT CROSS SECTIONS
EISENHOWER STREET - SHEET 2

DESIGNED PM JOHNSON	SCALE: 1" = 20'	REV.
DRAWN GM REEVES	NO. 17660.60.30	
CHECKED ER SCHALLERT		
APPROVED KK HEIM		
APPROVED PM JOHNSON		
DATE MARCH 12, 2025	W.12	0





NOTES

NO.	REVISIONS	DSGN	CHKD	APVD	DATE



225 Iowa Avenue, Muscatine, Iowa 52761-3764
www.stanleyconsultants.com

CITY OF MUSCATINE - PHASE 6D
WEST HILL AREA SANITARY AND STORM SEWER SEPARATION
MUSCATINE, IOWA

PAVEMENT CROSS SECTIONS EISENHOWER STREET - SHEET 3

DESIGNED	PM JOHNSON	SCALE: 1" = 20'	
DRAWN	GM REEVES	NO. 17660.60.30	REV.
CHECKED	ER SCHALLERT		
APPROVED	KK HEIM		
APPROVED	PM JOHNSON	W.13	0
DATE	MARCH 12, 2025		

DESIGNED _____
DRAWN GM REEVES SCALE: 1" = 20'

CHECKED <u>ER SCHALLERT</u>	NO. 17660.60.30	REV.
-----------------------------	-----------------	------

APPROVED	KK HEIM		
APPROVED	PM JOHNSON	W/ 10	0

DATE MARCH 12, 2025 W.13 0

Page 247 of 104

SCALE: 1" = 20'

NO. 17660.60.30

N.13

1

AT FULL SIZE

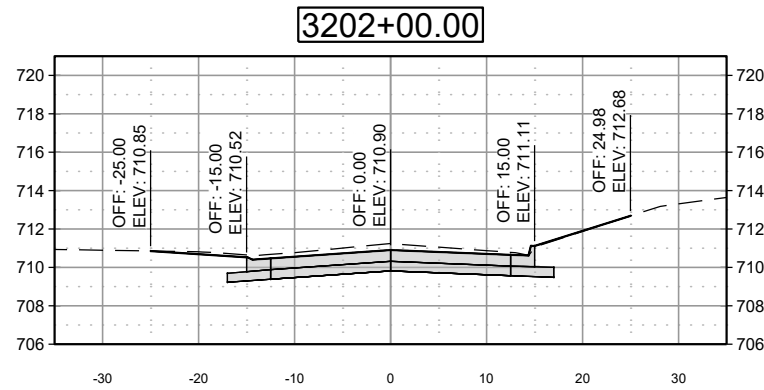
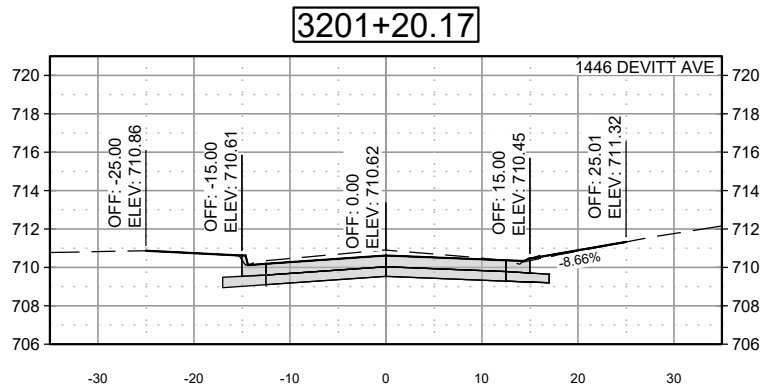
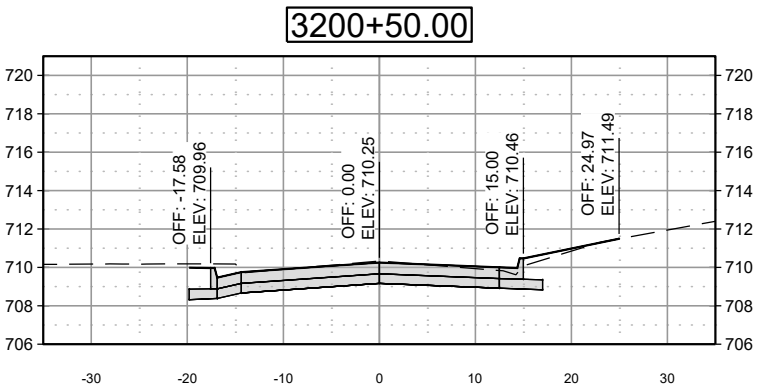
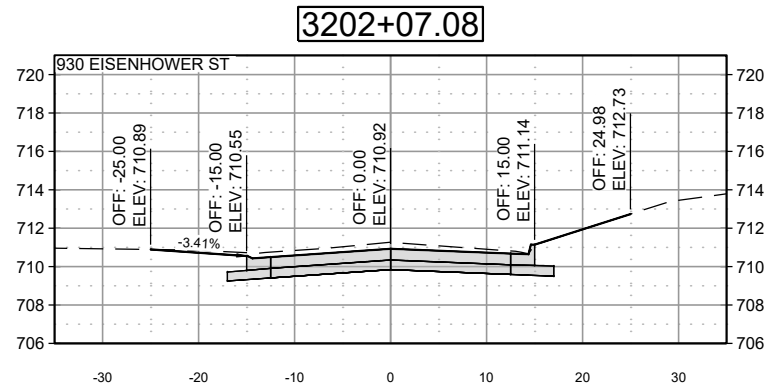
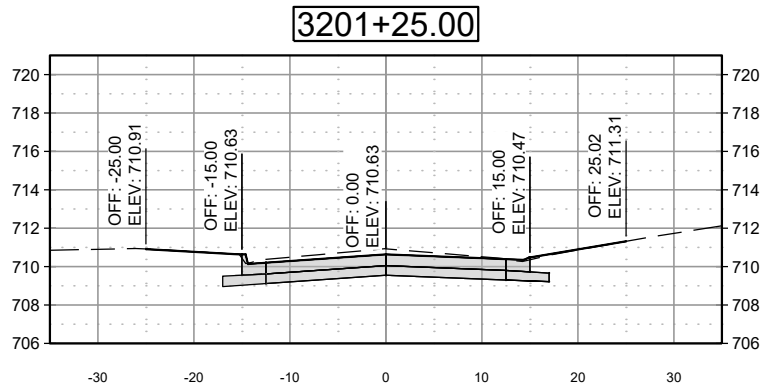
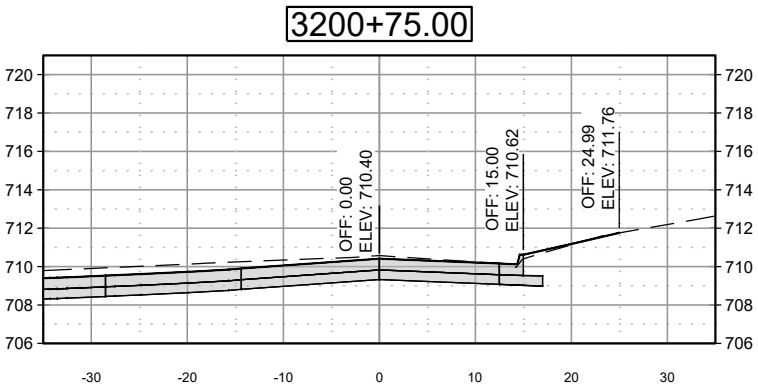
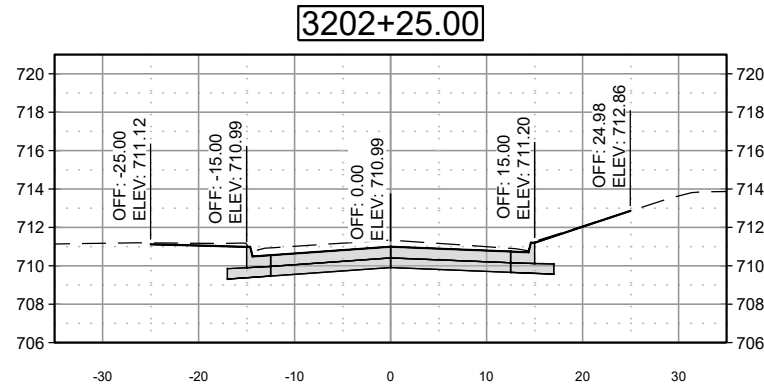
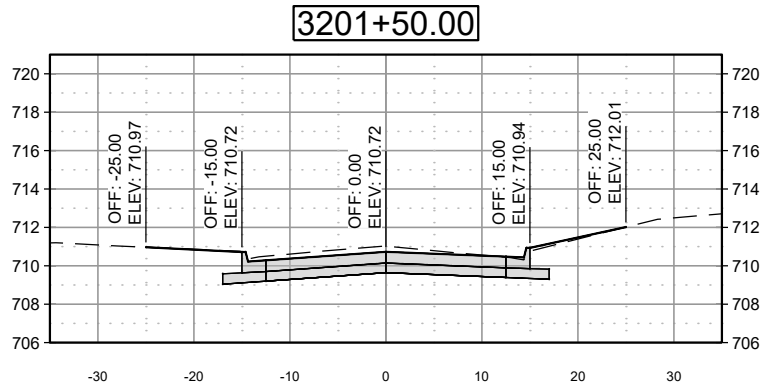
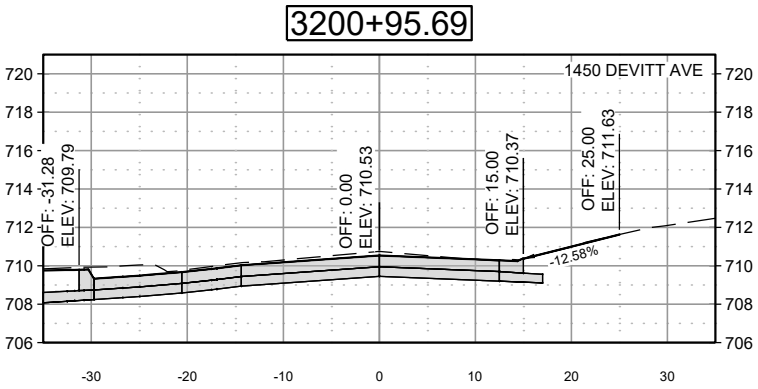
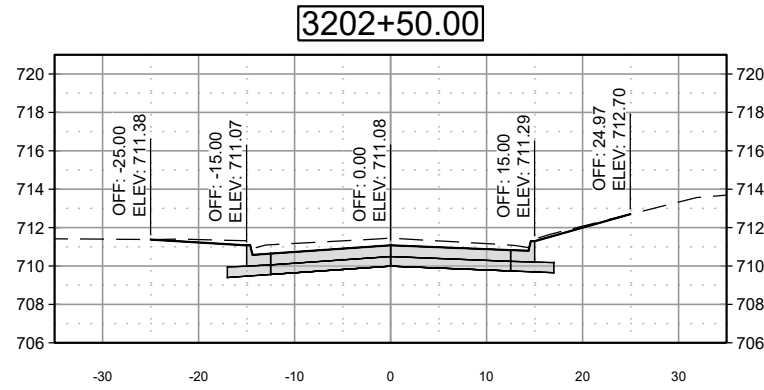
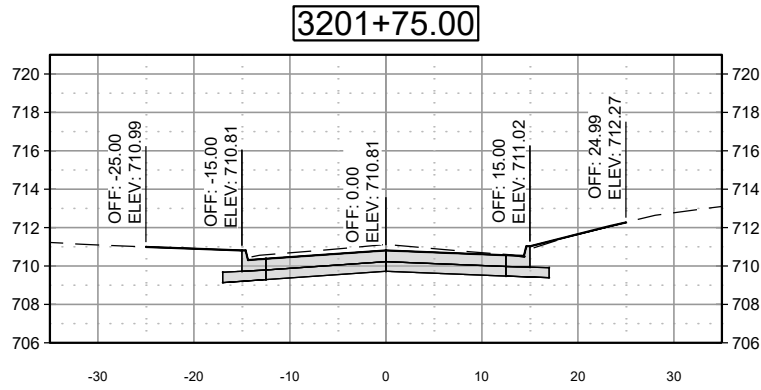
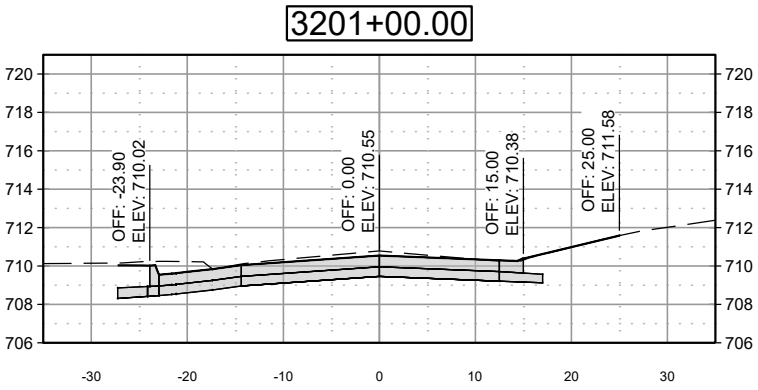
0 1 2 3 IN

0 1 2 3 4 5 6 7 8 cm

0 1 2 3 IN

A horizontal number line with tick marks at every integer from 0 to 10. The number 5 is marked with a vertical line and labeled '5' below it.

G
F
E
D
C
B
A
LOAD D3-R6



NOTES

NO.	REVISIONS	DSGN	CHKD	APVD	DATE

Stanley Consultants Inc.
225 Iowa Avenue, Muscatine, Iowa 52761-3764
www.stanleyconsultants.com

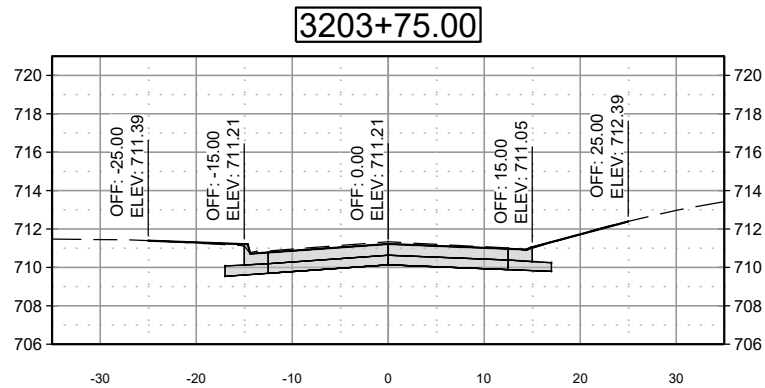
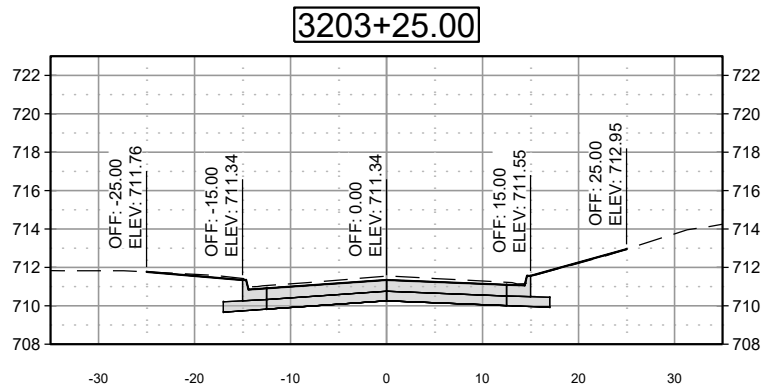
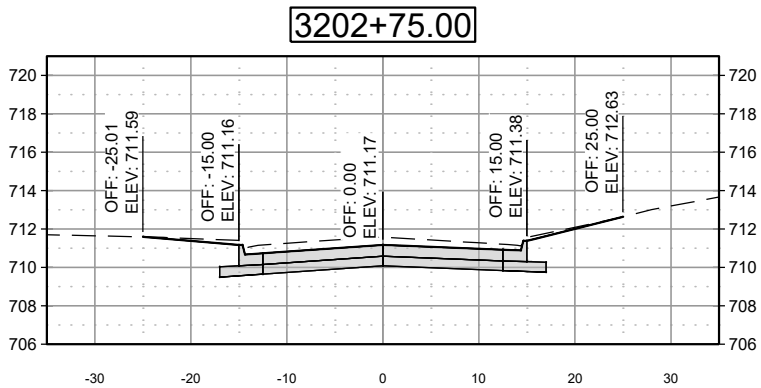
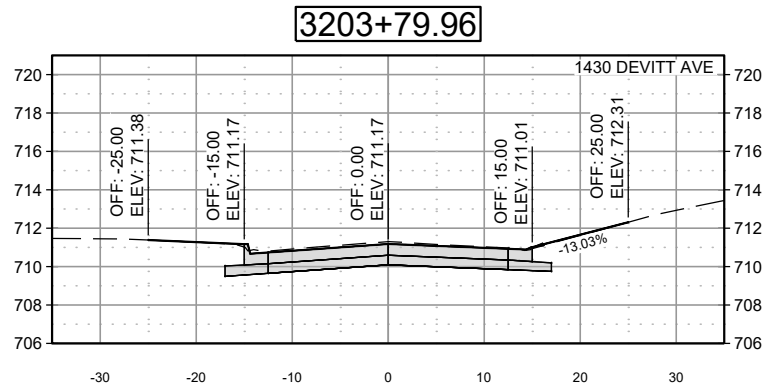
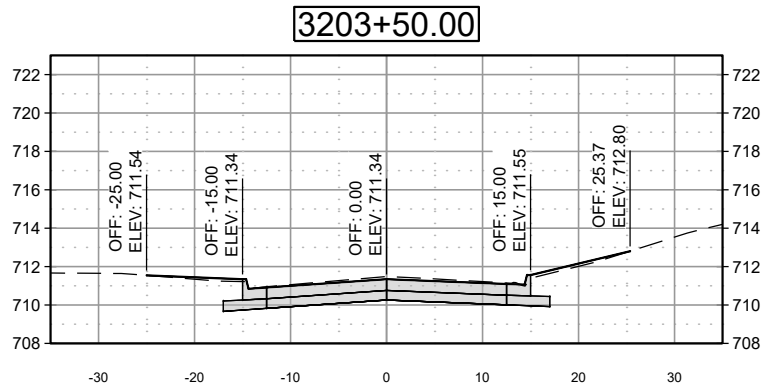
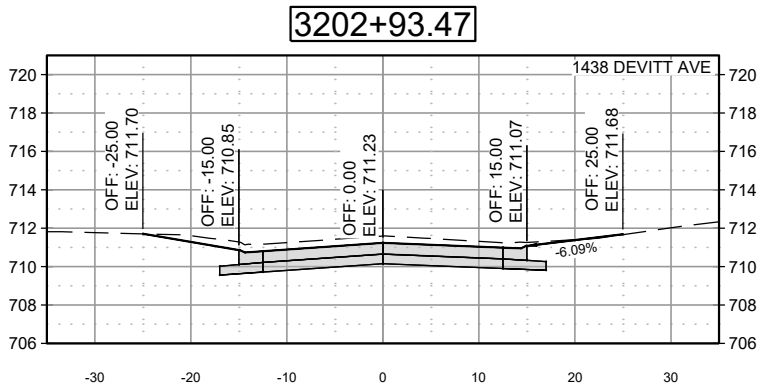
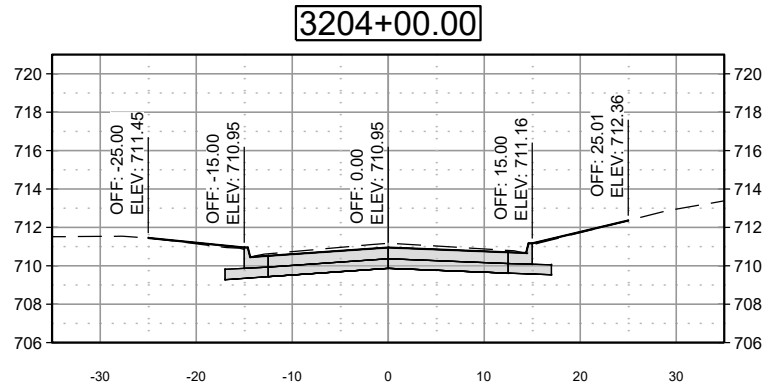
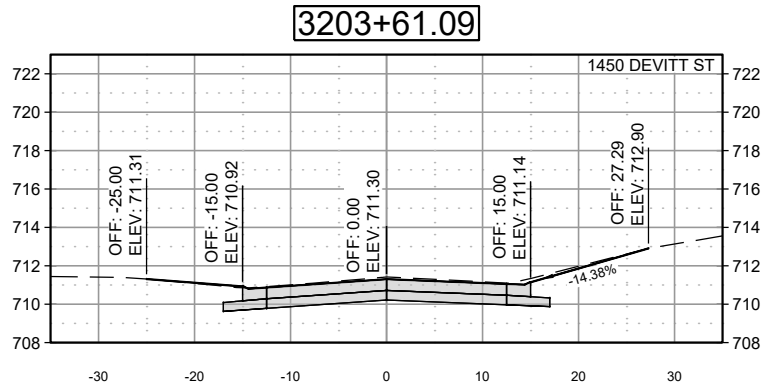
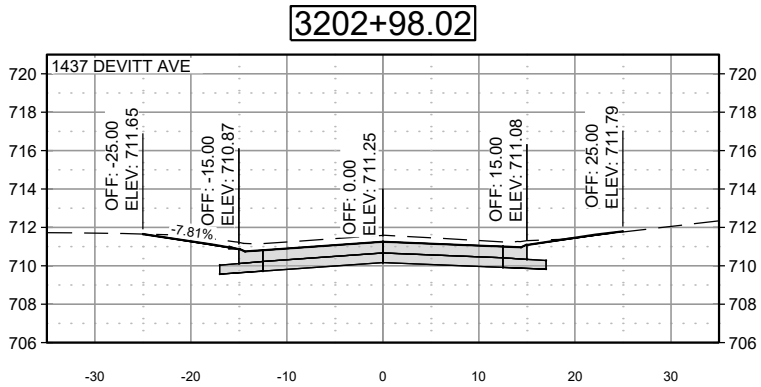
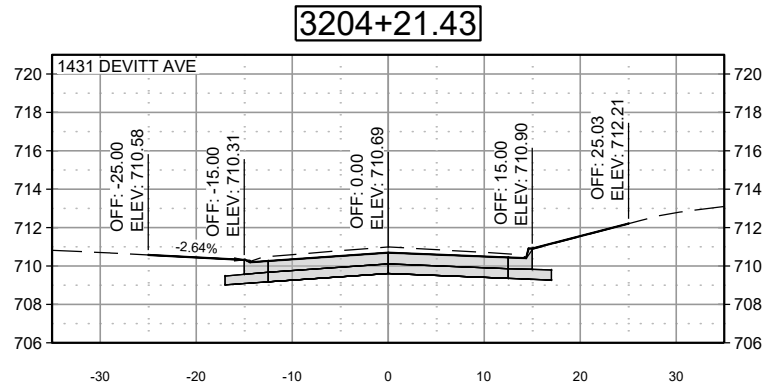
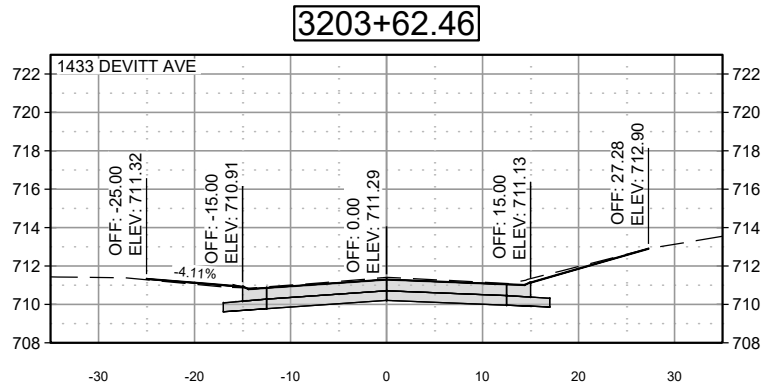
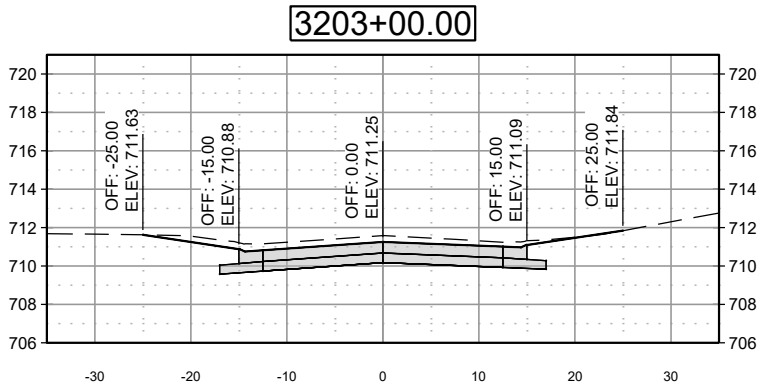
CITY OF MUSCATINE - PHASE 6D
WEST HILL AREA SANITARY AND STORM SEWER SEPARATION
MUSCATINE, IOWA

**PAVEMENT CROSS SECTIONS
DEVITT AVENUE - SHEET 1**

DESIGNED: PM JOHNSON	SCALE: 1" = 20'
DRAWN: GM REEVES	NO. 17660.60.30
CHECKED: ER SCHALLERT	REV.
APPROVED: KK HEIM	W.14
APPROVED: PM JOHNSON	0
DATE: MARCH 12, 2025	



G
F
E
D
C
B
A
LOAD D3-R6



NOTES

NO.	REVISIONS	DSGN	CHKD	APVD	DATE



Stanley Consultants Inc.

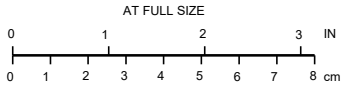
225 Iowa Avenue, Muscatine, Iowa 52761-3764
www.stanleyconsultants.com

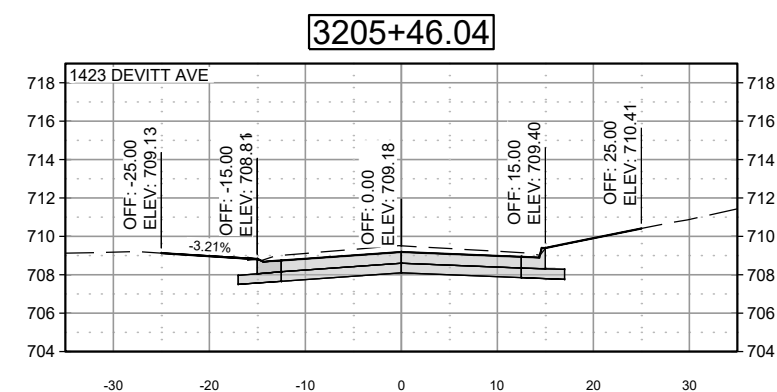
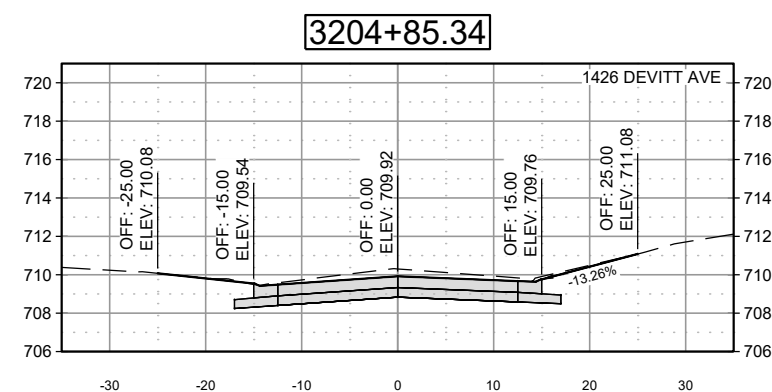
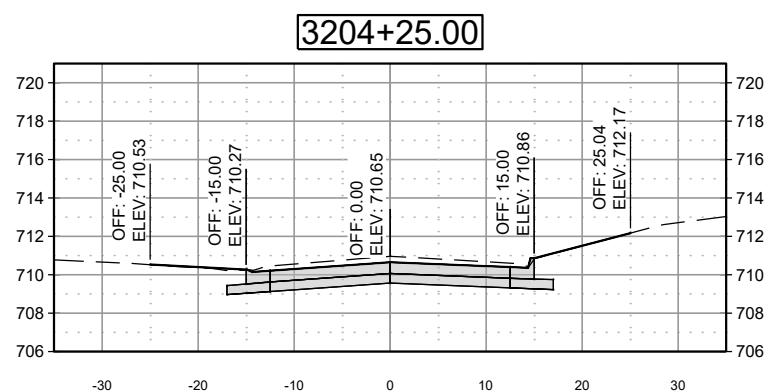
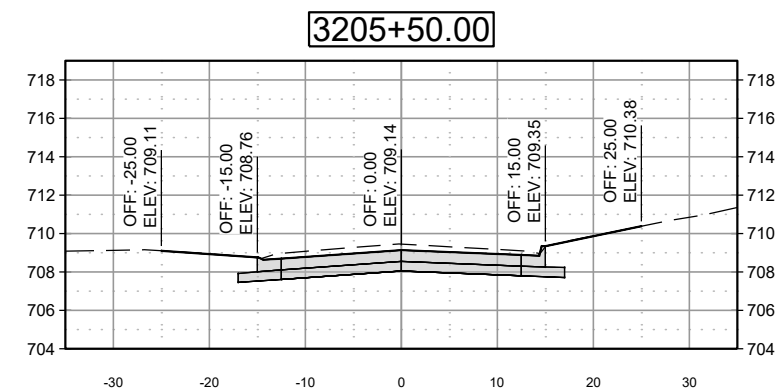
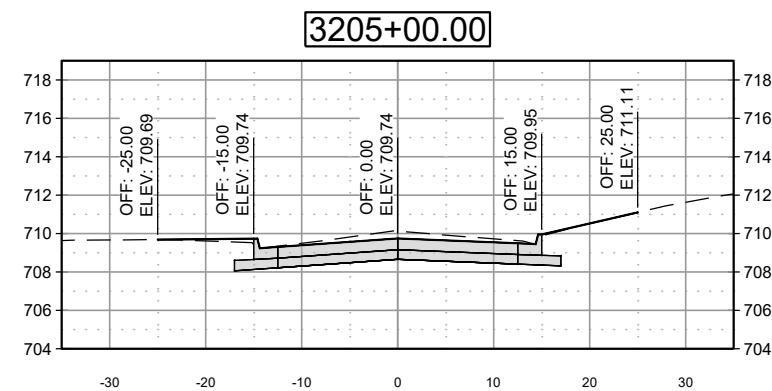
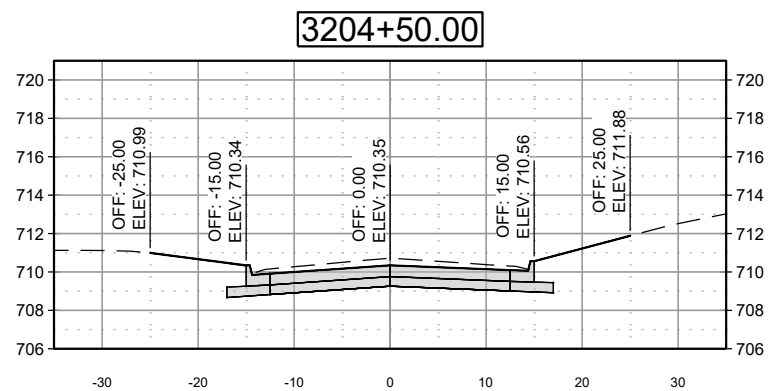
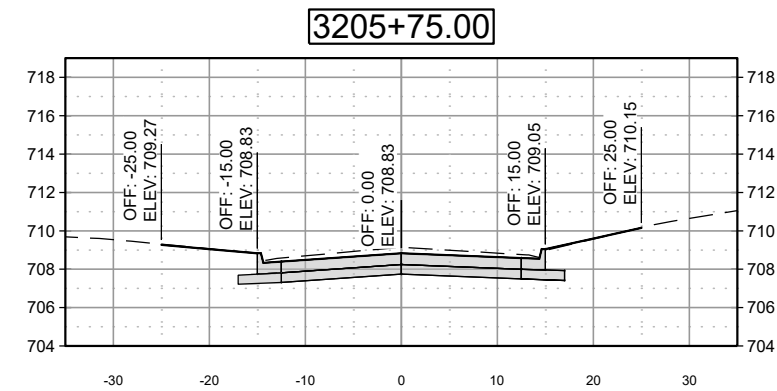
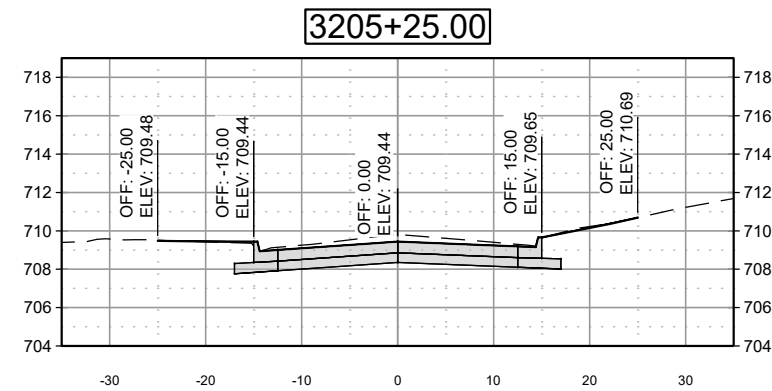
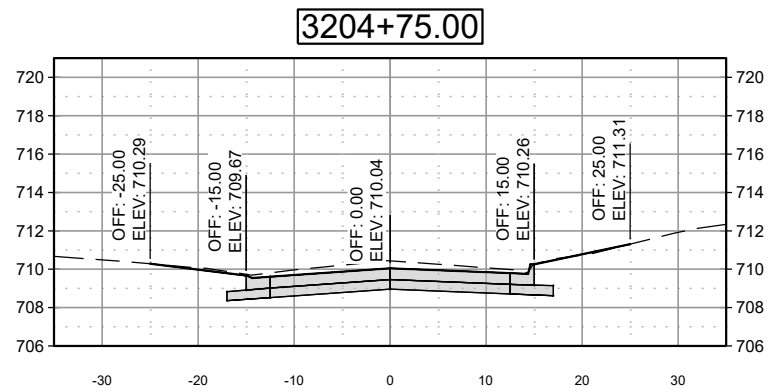
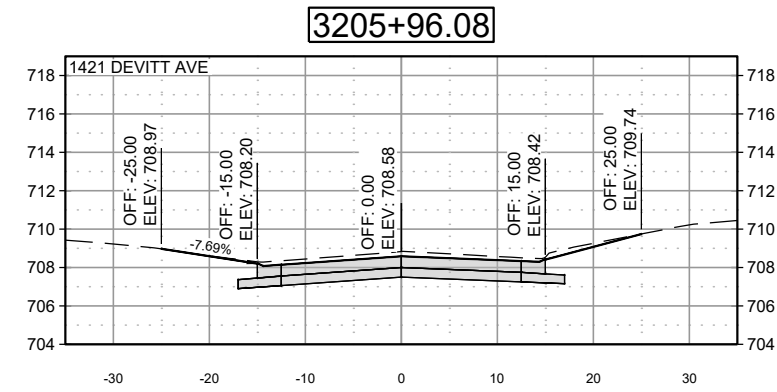
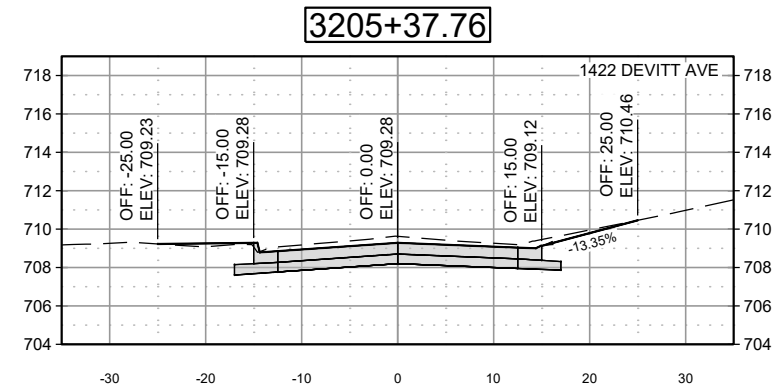
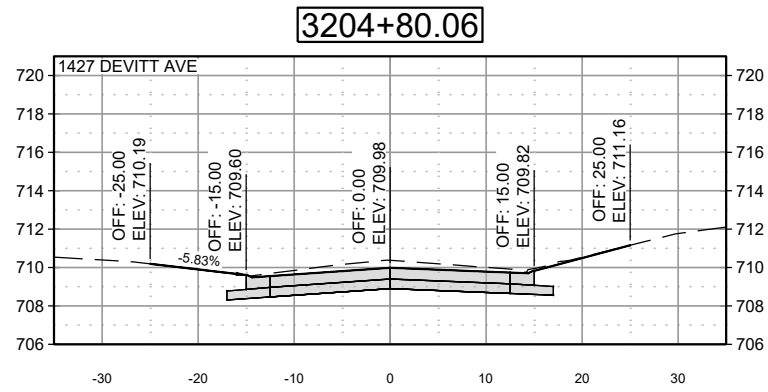
CITY OF MUSCATINE - PHASE 6D
WEST HILL AREA SANITARY AND STORM SEWER SEPARATION
MUSCATINE, IOWA

**PAVEMENT CROSS SECTIONS
DEVITT AVENUE - SHEET 2**

DESIGNED: PM JOHNSON	SCALE: 1" = 20'
DRAWN: GM REEVES	NO. 17660.60.30
CHECKED: ER SCHALLERT	REV.
APPROVED: KK HEIM	
APPROVED: PM JOHNSON	
DATE: MARCH 12, 2025	

W.15	0
------	---





NOTES

NO.	REVISIONS	DSGN	CHKD	APVD	DATE

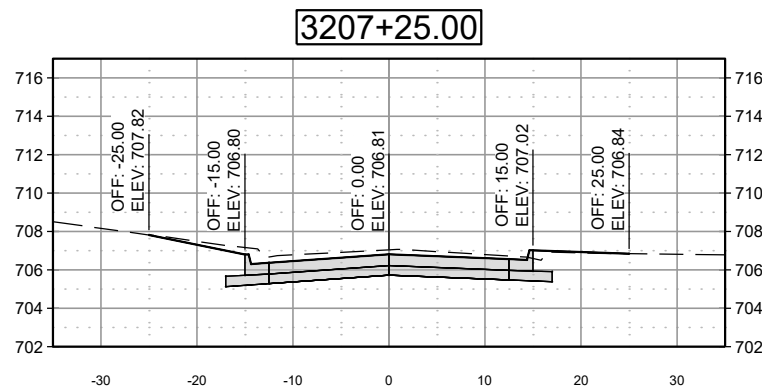
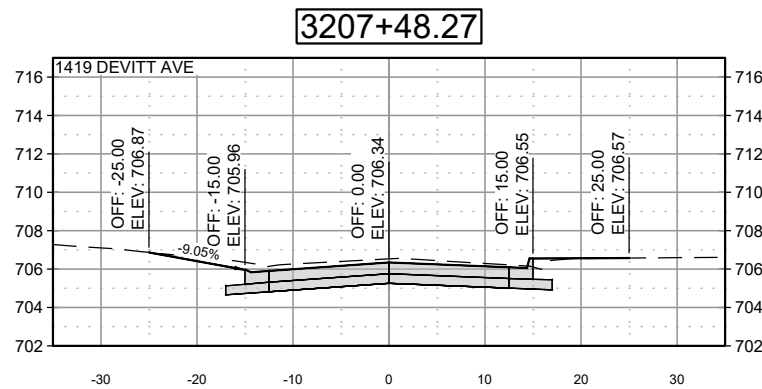
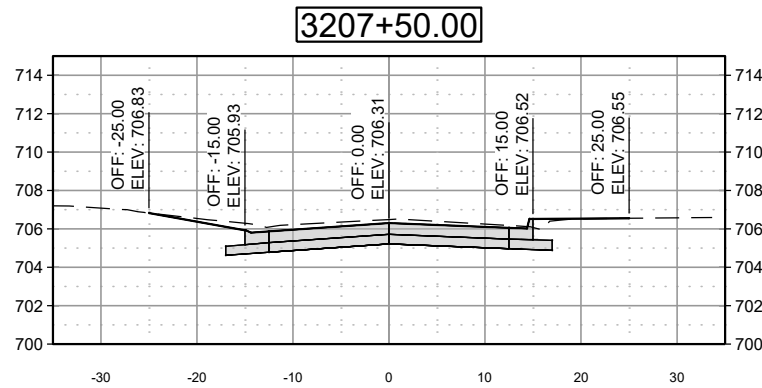
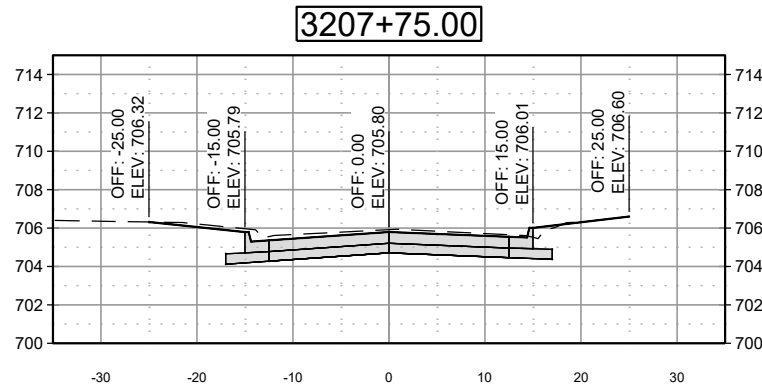
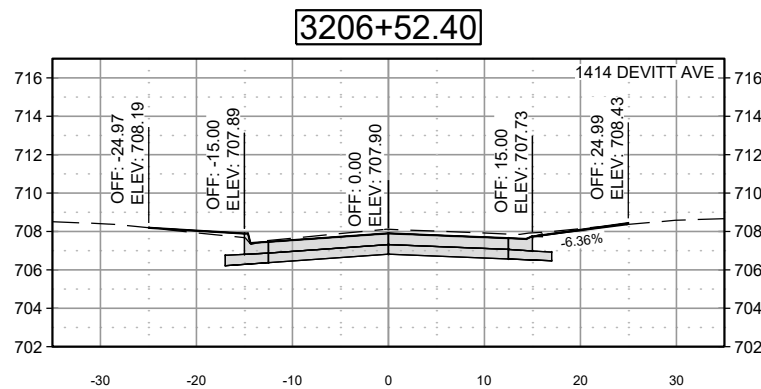
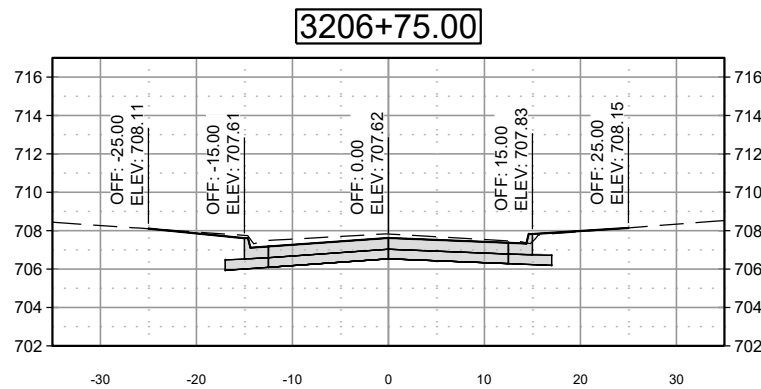
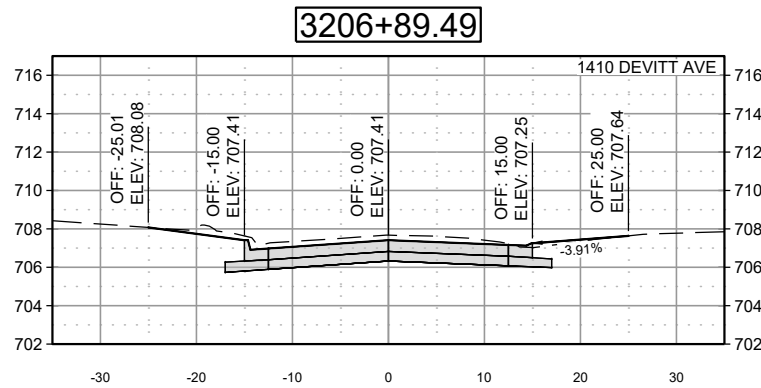
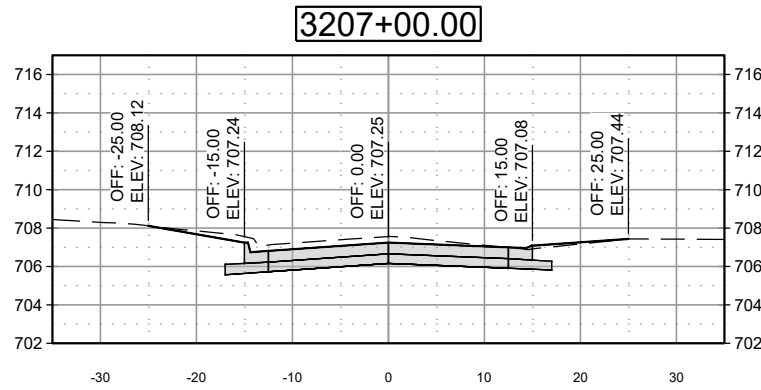
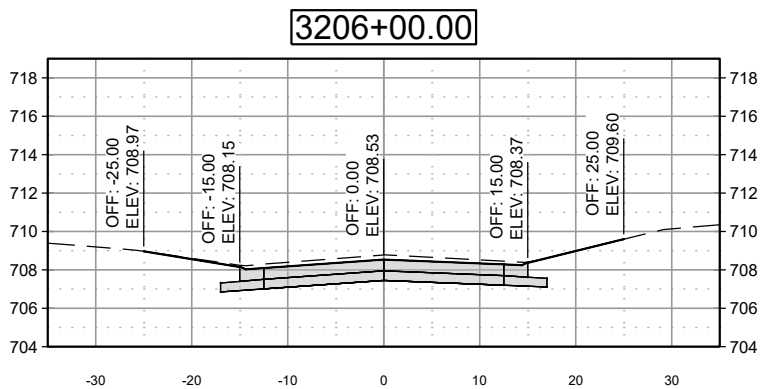
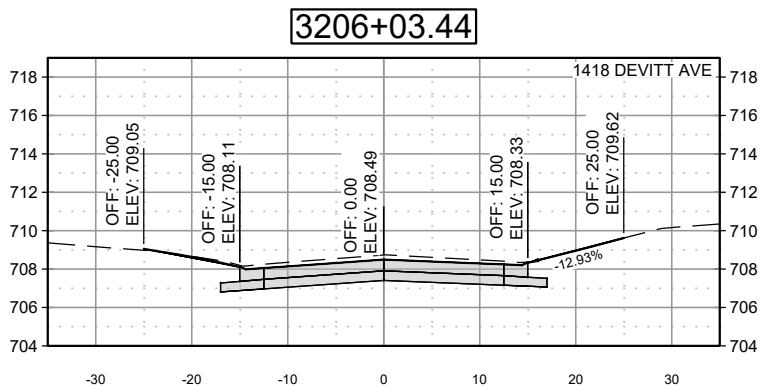
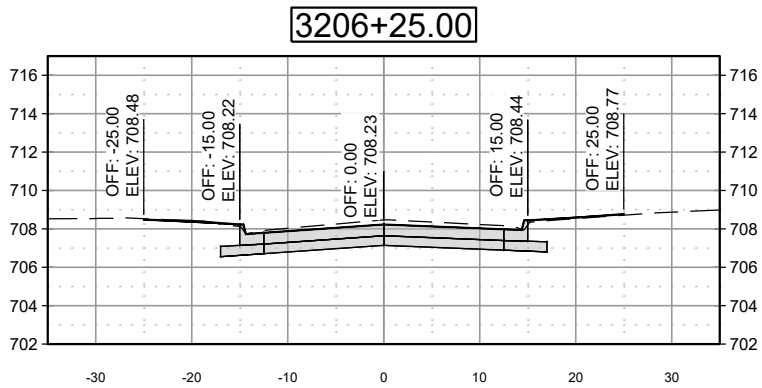
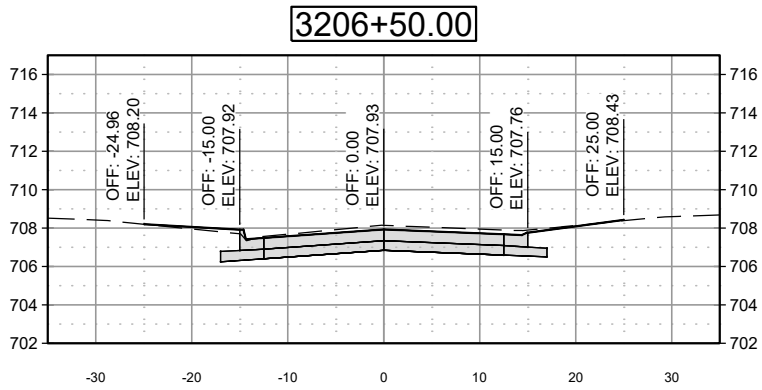


225 Iowa Avenue, Muscatine, Iowa 52761-3764
www.stanleyconsultants.com

PAVEMENT CROSS SECTIONS DEVITT AVENUE - SHEET 3

DESIGNED, <u>PM JOHNSON</u>	SCALE: 1" = 20'	
DRAWN <u>GM REEVES</u>	NO. 17660.60.30	REV.
CHECKED <u>ER SCHALLERT</u>		
APPROVED <u>KK HEIM</u>		
APPROVED <u>PM JOHNSON</u>		
DATE <u>MARCH 12, 2025</u>	W.16	0

G
F
E
D
C
B
A
LOAD D3-R6



NOTES

NO.	REVISIONS	DSGN	CHKD	APVD	DATE

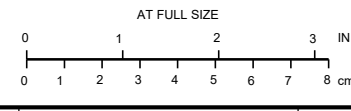
Stanley Consultants Inc.
225 Iowa Avenue, Muscatine, Iowa 52761-3764
www.stanleyconsultants.com

CITY OF MUSCATINE - PHASE 6D
WEST HILL AREA SANITARY AND STORM SEWER SEPARATION
MUSCATINE, IOWA

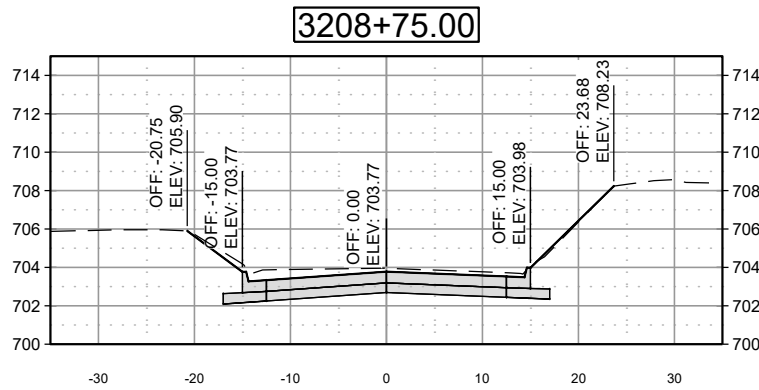
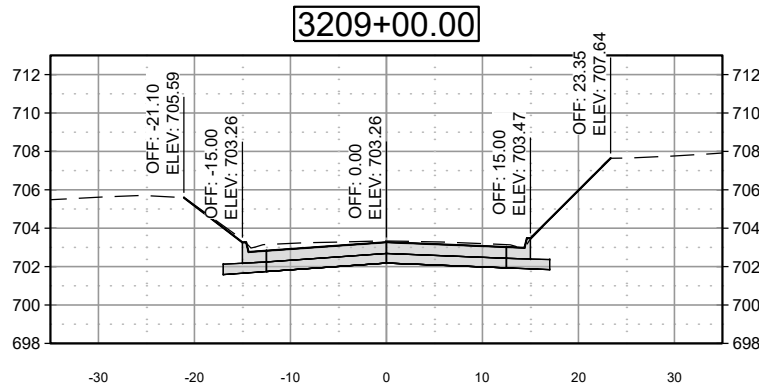
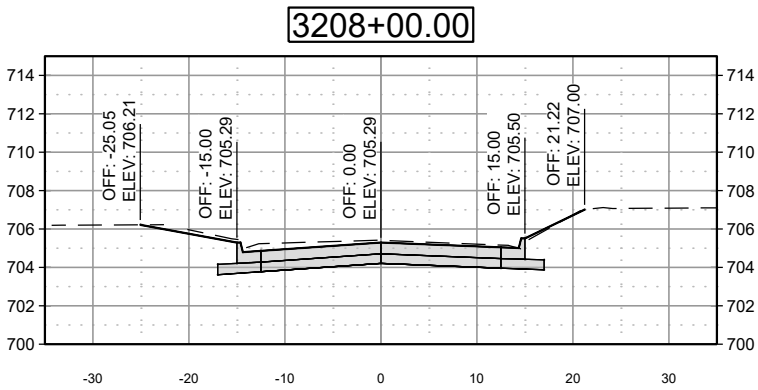
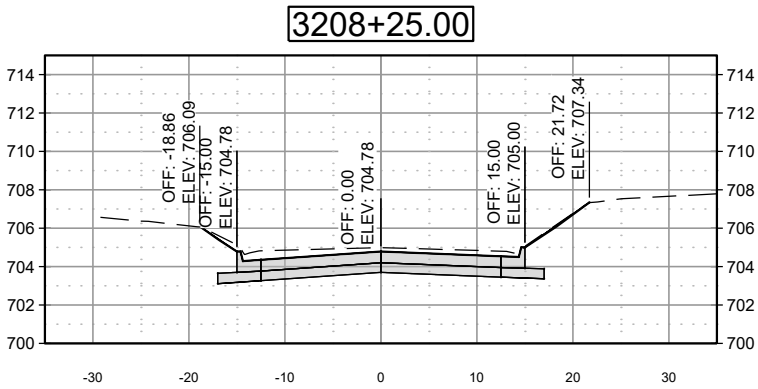
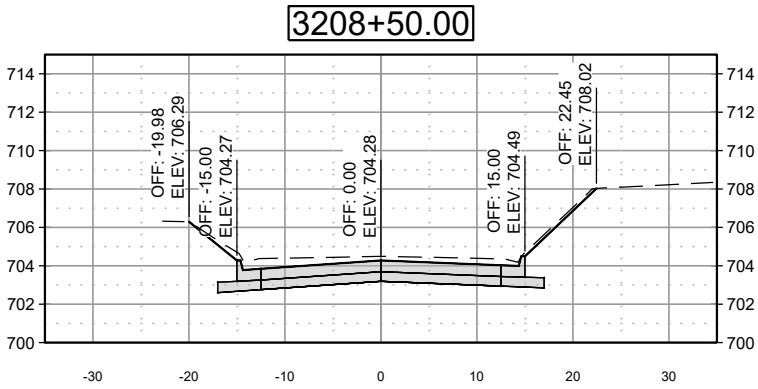
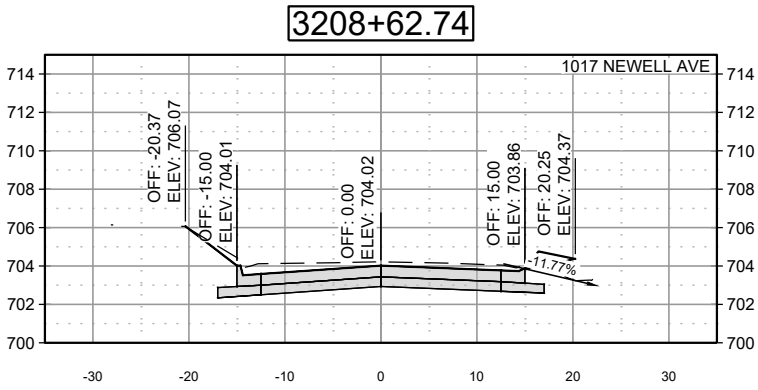
**PAVEMENT CROSS SECTIONS
DEVITT AVENUE - SHEET 4**

DESIGNED	PM JOHNSON	SCALE: 1" = 20'	REV.
DRAWN	GM REEVES	NO. 17660.60.30	
CHECKED	ER SCHALLERT		
APPROVED	KK HEIM		
DATE	MARCH 12, 2025		

W.17	0
------	---



G
F
E
D
C
B
A
LOAD D3-R6



NOTES

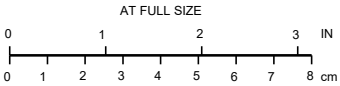
NO.	REVISIONS	DSGN	CHKD	APVD	DATE

Stanley Consultants Inc.
225 Iowa Avenue, Muscatine, Iowa 52761-3764
www.stanleyconsultants.com

CITY OF MUSCATINE - PHASE 6D
WEST HILL AREA SANITARY AND STORM SEWER SEPARATION
MUSCATINE, IOWA

**PAVEMENT CROSS SECTIONS
DEVITT AVENUE - SHEET 5**

DESIGNED: PM JOHNSON	SCALE: 1" = 20'	
DRAWN: GM REEVES	NO. 17660.60.30	REV.
CHECKED: ER SCHALLERT		
APPROVED: KK HEIM		
APPROVED: PM JOHNSON		
DATE: MARCH 12, 2025	W.18	0



Project Manual

for

West Hill Area Sanitary and Storm Sewer Separation Phase 6D

**City of Muscatine
Muscatine, Iowa**

**Final
March 2025**



Project Manual

for

West Hill Area Sanitary and Storm Sewer Separation Phase 6D

City of Muscatine Muscatine, Iowa

I hereby certify that this engineering document was prepared by me or under my direct personal supervision and that I am a duly licensed Professional Engineer under the laws of the State of Iowa.

Karmen K. Heim



(signature)

3/12/2025

(date)

Discipline: Civil Engineer, Iowa License No. P17381

License expires December 31, 2026.

Pages or sheets covered by this seal: As listed on Table of Contents



A Stanley Group Company
Engineering, Environmental and Construction Services - Worldwide

WEST HILL AREA
SANITARY AND STORM SEWER SEPARATION
PHASE 6D

CITY OF MUSCATINE
MUSCATINE, IOWA

PROCUREMENT AND CONTRACTING REQUIREMENTS GROUP

DIVISION 00 PROCUREMENT AND CONTRACTING REQUIREMENTS

Resp. Charge	Document	Title	Page
KKH	00 11 13	Notice to Bidders	1 to 2
KKH	00 21 13	Instructions to Bidders	1 to 10
KKH	00 41 13	Bid Form	1 to 5
KKH	00 43 13	Bid Bond	1 to 2
KKH	00 43 22	Unit Price Schedule	1 to 4
KKH	00 43 24	Iowa Bidder Status Form	1 to 2
KKH	00 52 13	Contract between Owner and Contractor	1 to 6
KKH	00 63 13	Performance and Payment Bond	1 to 2
	1010 – 1090	SUDAS General Provisions and Covenants	1 to 74
KKH	00 75 00	Special Provisions	1 to 15

SRF Required Front-End Specifications

- Attachment 1 - Certification of Non-Segregated Facilities Form
- Attachment 2 - Statement in Advertisement for Bids on Debarment and Suspension/Certification Regarding Debarment and Suspension Form
- Attachment 3 - Disadvantaged Business Enterprise Certification Form
- Attachment 4 - DBE Program Subcontractor Performance Form
- Attachment 5 - DBE Program Subcontractor Utilization Form
- Attachment 6 - DBE Program Subcontractor Participation Form
- Attachment 7 - Other Federal Requirements Language
 - A. Standard Equal Employment Opportunity Specifications
 - B. Federal Labor Standards Provisions (including Davis-Bacon prevailing wage rates)
 - C. Preservation of Open Competition and Government Neutrality
 - D. Historical and Archeological Finds
 - E. Prohibitions on Procurement from Violating Facilities
- Attachment 8 - Right of Entry and Records Retention
- Attachment 9 - Use of American Iron and Steel
- Attachment 10 – Prohibition on Certain Telecommunication and Video Surveillance Services or Equipment

Davis-Bacon Prevailing Wage Rates for Muscatine County
- Construction Types: Heavy and Highway

SPECIFICATIONS GROUP

GENERAL REQUIREMENTS SUBGROUP

Resp. Charge	Section	Title	Page
DIVISION 01 GENERAL REQUIREMENTS			
KKH	01 22 00	Unit Prices	1

Resp. Charge	Section	Title	Page
KKH	01 33 00	Submittal Procedures	1 to 6
		Submittal Transmittal Form	1
KKH	01 50 00	Temporary Facilities and Controls	1 to 6
KKH	01 57 14	SWPPP Owner – Certification	1
KKH	01 57 15	SWPPP – Contractor and Subcontractor Certification	1
KKH	01 57 16	SWPPP Training Log	1
KKH	01 57 17	Stormwater Construction Site Inspection Report	1 to 3
KKH	01 57 18	SWPPP Amendment Log	1
KKH	01 77 00	Closeout Procedures	1 to 4

2025 SUDAS STANDARD SPECIFICATIONS

The following SUDAS Standard Specifications and their requirements referenced are considered part of this project. All requirements of these sections are applicable unless otherwise noted in the contract documents. Sections are not included in the printed project manual.

DIVISION 1 GENERAL PROVISIONS AND COVENANTS

- 1010 Definitions
- 1020 Proposal Requirements and Conditions
- 1030 Approval for Award and Award of Contract
- 1040 Scope of Work
- 1050 Control of Work
- 1060 Control of Materials
- 1070 Legal Relations and Responsibility to the Public
- 1080 Prosecution and Progress
- 1090 Measurement and Payment

DIVISION 2 EARTHWORK

- 2010 Earthwork, Subgrade, and Subbase

DIVISION 3 TRENCH AND TRENCHLESS CONSTRUCTION

- 3010 Trench Excavation and Backfill
- 3020 Trenchless Construction (Boring, Jacking, and Tunneling)

DIVISION 4 SEWER AND DRAINS

- 4010 Sanitary Sewers
- 4020 Storm Sewers
- 4030 Pipe Culverts
- 4040 Subdrains and Footing Drain Collectors
- 4050 Pipe Rehabilitation
- 4060 Cleaning, Inspection, and Testing of Sewers

DIVISION 5 WATER MAIN AND APPURTENANCES

- 5010 Water Main and Appurtenances - Pipe and Fittings
- 5020 Valves, Fire Hydrants, and Appurtenances
- 5030 Testing and Disinfection

DIVISION 6 STRUCTURES FOR SANITARY AND STORM SEWERS

- 6010 Structures for Sanitary and Storm Sewers
- 6030 Cleaning, Inspection, and Testing of Structures

DIVISION 7 STREETS AND RELATED WORK

- 7010 Portland Cement Concrete Pavement
- 7020 Asphalt Pavement
- 7030 Sidewalks, Shared Use Paths, and Driveways
- 7040 Pavement Rehabilitation

DIVISION 8 TRAFFIC CONTROL

8020 Pavement Markings

8030 Temporary Traffic Control

DIVISION 9 SITE WORK AND LANDSCAPING

9010 Seeding

9040 Erosion and Sediment Control

9060 Chain Link Fence

9070 Landscaping Retaining Walls

9080 Concrete Steps, Handrails, and Safety Rail

DIVISION 11 MISCELLANEOUS

11,010 Construction Survey

11,020 Mobilization

11,030 Temporary Services During Construction

11,050 Concrete Washout

SUDAS Figures

SUDAS Figure No.	Figure Title
2010.102	DESIGNATIONS OF ROADWAY EARTHWORK ITEMS
3010.101	TRENCH BEDDING AND BACKFILL ZONES
3010.102	RIGID GRAVITY PIPE TRENCH BEDDING
3010.103	FLEXIBLE GRAVITY PIPE TRENCH BEDDING
3010.104	PRESSURE PIPE TRENCH BEDDING
4010.201	SANITARY SEWER SERVICE STUB
4010.203	SANITARY SEWER CLEANOUT
4030.222	CIRCULAR CONCRETE APRONS
4030.224	CONCRETE PIPE APRON GUARD
4040.231	SUBDRAINS
4040.233	SUBDRAIN OUTLETS
6010.301	CIRCULAR SANITARY SEWER MANHOLE
6010.303	SANITARY SEWER MANHOLE OVER EXISTING SEWER
6010.401	CIRCULAR STORM SEWER MANHOLE
6010.406	SHALLOW RECTANGULAR STORM SEWER MANHOLE
6010.501	SINGLE GRATE INTAKE
6010.502	CIRCULAR SINGLE GRATE INTAKE
6010.505	DOUBLE GRATE INTAKE
6010.507	SINGLE OPEN-THROAT CURB INTAKE, SMALL BOX
6010.509	DOUBLE OPEN-THROAT CURB INTAKE, SMALL BOX
6010.512	CIRCULAR AREA INTAKE
7010.101	JOINTS
7010.102	PCC CURB DETAILS
7010.103	MANHOLE BOXOUTS IN PCC PAVEMENT
7010.901	PCC PAVEMENT JOINTING
7010.904	TYPICAL JOINTING LAYOUT
7030.101	CONCRETE DRIVEWAY, TYPE A
7030.103	DRIVEWAY GRADING
7030.104	RIGHT-OF-WAY GRADING

SUDAS Figure No.	Figure Title
7030.201	CLASSES OF SIDEWALKS
7030.202	CURB DETAILS FOR CLASS A SIDEWALK
7030.204	GENERAL FEATURES OF AN ACCESSIBLE SIDEWALK
7030.205	GENERAL SIDEWALK AND CURB RAMP DETAILS
7030.206	CURB RAMPS OUTSIDE OF INTERSECTION RADIUS
7030.207	CURB RAMP FOR CLASS B OR C SIDEWALK
7030.208	ALTERNATIVE CURB RAMP FOR CLASS B OR C SIDEWALK
7030.209	CURB RAMPS FOR CLASS A SIDEWALK
7030.210	DETECTABLE WARNING PLACEMENT
7040.101	FULL DEPTH PCC PATCHES LESS THAN OR EQUAL TO 15' LONG
7040.102	FULL DEPTH PCC PATCHES GREATER THAN 15' LONG
8030.101	TEMPORARY TRAFFIC CONTROL GENERAL INFORMATION
8030.111	LANE CLOSEURE AT AN INTERSECTION
8030.116	STREET OR ROAD CLOSURE
8030.117	SIDEWALK DETOUR
8030.119	CLOSURE OF MARKED OR UNMARKED CROSSWALK
9040.102	FILTER BERM AND FILTER SOCK
9040.103	ROLLED EROSION CONTROL PRODUCT (RECP) INSTALLATION ON SLOPES
9040.105	WATTLE
9040.111	RIP RAP APRON FOR PIPE OUTLET INTO CHANNEL
9040.119	SILT FENCE
9040.120	STABILIZED CONSTRUCTION EXIT
9080.101	TYPE A CONCRETE STEPS WITH HANDRAIL
9080.102	TYPE B CONCRETE STEPS WITH HANDRAIL
11030.101	TEMPORARY MAILBOXES
11040.101	TEMPORARY GRANULAR SIDEWALK AND TEMPORARY RESIDENTIAL ACCESS
11040.102	TEMPORARY PEDESTRIAN CHANNELIZING DEVICE

Muscatine Power and Water Standard Specifications

Muscatine Power and Water (MPW) has adopted the 2023 Standard Specifications for Water Distribution System Improvements approved by the Board of Water, Electric and Communications Trustees of the City of Muscatine, Iowa. The specifications are used on MPW improvement projects. The Specifications are incorporated herein by reference and are included in this project manual.

Notice is hereby given that the City of Muscatine, will receive sealed Bids submitted only to the City's electronic bid submission website, IonWave (<https://muscatineiowa.ionwave.net>) and filed before April 8, 2025 at 2:00 pm, local time, for West Hill Area Sanitary and Storm Sewer Separation – Phase 6D, at which time Bids will be opened and tabulated. Bids will be acted upon at the regular council meeting on April 17, 2025, or at such later time and place as may then be fixed. Regular council meetings are held on the first and third Thursdays of the month. All attachments including the bid security shall be uploaded in PDF format to the "Response Attachments" section of the project's page found on the City of Muscatine's IonWave website. Attachments may be completed electronically or by hand and scanned into PDF format.

General summary of Work to be performed: Installation of sanitary and storm sewer to improve and separate existing West Hill combined sewer system. Work will be constructed under a single unit price Contract. The work is divided into multiple stages to be completed over two years 2025 and 2026, according to the Contract Times defined in the Contract.

Phase 6D work includes general construction of approximately 3,920' of new 8", 12", and 15" sanitary sewer on Hagerman Drive, Logan Street, and approximately 1,000' of cured in place lining of sewers on Devitt Avenue and Eisenhower Street. Storm sewer includes approximately 3,450' of new storm sewer, inlet piping and inlets which includes replacing a portion of the UWBS. Approximately 15' of trenchless sewer construction and 100' of water main relocation is included.

All sub-phases include the following work: manholes, sanitary service connections, new inlets, inlet piping, water services, full-width pavement removal and replacement, sidewalk construction, seeding, and other related work. Please note that granular pipe backfill material shall be used under the street and is included in with the pipe price along with trench spoil material removal to a contractor selected location.

Work shall be in accordance with the Bidding Documents, including the Project Manual and Drawings, which are on file at the Issuing Office of the Engineer, Stanley Consultants, Inc., Muscatine, Iowa, from Ms. Mandy Hoag at hoagmandy@stanleygroup.com, telephone 563-264-6657. Prospective Bidders may contact the Issuing Office Mondays through Fridays between the hours of 8 am and 5 pm to obtain copies of the Bidding Documents as described below. Drawings include two plan sets; Stanley Consultants' West Hill Area Sanitary and Storm Sewer Separation – Phase 6D set; and City/MPW West Hill Area Sewer Separation Phase 6D Water Main Project set bound together.

Printed copies of the Bidding Documents consisting of 1 Project Manual and 1 full-size set of Drawings may be obtained from the Issuing Office, during the hours indicated above and on demand only, upon deposit or payment in the amount of \$250 for each set. Printed copies of 1 Project Manual and 1 half-size set of drawings are available for deposit of \$125 for each set. Additional Bidding Documents may be obtained at the same cost but are nonrefundable. The deposit for 1 base set will be refunded to those Bidders who return the Bidding Documents to the Issuing Office in good condition (suitable for re-use) within 14 days after the award of the project. Checks for Bidding Documents shall be payable to Stanley Consultants, Inc. Credit card payment is not available. Alternatively, Bidding Documents are available in electronic format (PDF) for no charge. Upon request, electronic bidding documents may be downloaded from the Issuing Office using a secure file transfer email link. Bidding documents will also be available electronically on the City's IonWave website. Plan holder list from IonWave may not include those plan holders who request printed sets only.

Upon Issuing Office's receipt of payment, printed Bidding Documents will be shipped. The date that the Bidding Documents are transmitted by the Issuing Office will be considered the prospective Bidder's date of receipt of the Bidding Documents. Partial sets of Bidding Documents will not be available from the Issuing Office. Neither Owner nor Engineer will be responsible for full or partial sets of Bidding Documents, including Addenda if any, obtained from sources other than the Issuing Office or IonWave website.

A pre-bid conference will be held at 2:00 pm on March 31, 2025 at Council Chambers at Muscatine City Hall. Representatives of Owner and Engineer will be present to discuss the Project. Attendance at the pre-bid conference is highly encouraged but is not mandatory. Bidders are highly encouraged to view site conditions between Hagerman Drive and Eisenhower Street prior to submitting bids.

The City of Muscatine's work to be performed under this Contract is a project assisted under a program providing Federal financial assistance from State Revolving Loan Fund administered by the Iowa Department of Natural Resources. A notice to proceed will be issued pending Finding of No Significant Impact (FNSI) approval from the state.

Each Bid shall be accompanied, in a separate PDF file, by Bid security in an amount of not less than 5% of the Bid. Bid Bonds must be executed by corporations authorized to contract as Surety in the State of Iowa and in

a form described in the Contract Documents. Bid security shall be forfeited if the Bidder fails or refuses to sign and deliver a signed Agreement and furnish required contract security.

Each Bid shall be accompanied with an Iowa Bidder Status Form. Form is available within project manual. State of Iowa Code, Chapter 73, has provisions for preference of Iowa resident bidders against nonresident bidders if the nonresident state has resident bidder preference requirements. It is the responsibility of nonresident bidders to identify and conform to applicable preferences. Failure to submit a complete and accurate Bidder Status Form with the Bid may result in the bid being deemed nonresponsive and rejected.

Bidders will be required to certify that for all Work to be performed pursuant to the Contract Documents, at least the prevailing rate of wages as found and determined by the Davis-Bacon Act will be paid to all workers and employees employed and working on the Project. Copies of prevailing rates of wages to be paid for each job title and classification in construction work are included in the Contract Documents.

All Bids shall be submitted on forms provided with the Project Manual, to the City's electronic bid submission system on or before the time specified above. If you haven't already done so, you will need to register as a supplier at the City's IonWave website to submit a bid. All bids must be submitted electronically. No paper, emailed faxed, hand-delivered bids will be accepted. No physical bid opening will be held. All bids will be evaluated by the City's electronic bid submission system.

Upon notification of award, Successful Bidder shall furnish contract security in the form of performance, payment, and maintenance bonds described in the Contract Documents.

Performance of the Work will start within 10 calendar days after date of Notice to Proceed and shall be completed within the time stated in the Contract Documents.

The City reserves the right to defer acceptance of any Bid for a period not to exceed 35 calendar days after the date Bids are to be received.

The City reserves the right to consider factors such as the responsibility and responsiveness of Bidders, including the Bidder's experience, number of employees, and ability to finance the cost of the project in determining Bid selection.

The City reserves the right to reject any or all Bids, to waive informalities or technicalities in any Bid and to accept the Bid which it deems to be in the best interest of the City.

CITY OF MUSCATINE, IOWA

By Matt Mardesen
City Administrator

Date _____

1.01 DEFINED TERMS

- A. Terms used in these Instructions to Bidders have the meanings indicated in the Statewide Urban Design and Specifications (SUDAS) Division 1 General Provisions and Covenants and project specific Special Provisions. Refer to SUDAS Section 1010 – Definitions for abbreviations, definitions, and terms used in the Contract.

1.02 COPIES OF BIDDING DOCUMENTS

- A. Complete sets of the Bidding Documents may be obtained from the Issuing Office in the number and format stated in the Notice to Bidders.
- B. Complete sets of Bidding Documents shall be used in preparing Bids; neither Owner nor Engineer assumes any responsibility for errors or misinterpretations resulting from the use of incomplete sets of Bidding Documents.
- C. Owner and Engineer, in making copies of Bidding Documents available on the above terms, do so only for the purpose of obtaining Bids for the Work and do not authorize or confer a license for any other use.

1.03 QUALIFICATIONS OF BIDDERS

- A. To demonstrate Bidder's qualifications to perform the Work, after submitting its Bid and within 5 days of Owner's request, Bidder shall submit (a) written evidence establishing its qualifications such as financial data, previous experience, and present commitments, and (b) the following additional information:
 - 1. Evidence of Bidder's authority to do business in the state where the Project is located.
 - 2. Bidder's state or other contractor license number, if applicable.
 - 3. Subcontractor and Supplier qualification information; coordinate with provisions of Article Subcontractors, Suppliers, and Others in this Section.
 - 4. Other required information regarding qualifications.
 - 5. Reveal if you have been involved or are currently involved in litigation with the City of Muscatine.
 - 6. In the event a nonresident labor preference is applicable, the nonresident bidder shall submit the bidder's plan for conforming to the labor preference and supporting documentation.
- B. Bidder's failure to submit required qualification information within the times indicated may disqualify Bidder from receiving an award of the Contract.
- C. No requirement in this Article to submit information will prejudice the right of Owner to seek additional pertinent information regarding Bidder's qualifications.
- D. Bidder is advised to carefully review those portions of the Bid Form requiring Bidder's representations and certifications.
- E. Refer to SUDAS Section 1020, 1.01 for Qualifications of Bidders.

1.04 SITE AND OTHER AREAS; EXISTING SITE CONDITIONS; EXAMINATION OF SITE; OTHER WORK AT THE SITE

- A. The Site is identified in the Bidding Documents. By definition, the Site includes rights-of-way and other lands furnished by Owner for the use of the Contractor. Any additional lands required for temporary construction facilities, construction equipment, or storage of materials and equipment, and any access needed for such additional lands, are to be obtained and paid for by Contractor.

B. Existing site conditions:

1. Subsurface and Physical Conditions; Hazardous Environmental Conditions:
 - a. The Special Provisions identify:
 - 1) those reports known to Owner of explorations and tests of subsurface conditions at or adjacent to the Site.
 - 2) those drawings known to Owner of physical conditions relating to existing surface or subsurface structures at the Site (except Underground Facilities).
 - 3) reports and drawings known to Owner relating to Hazardous Environmental Conditions that have been identified at or adjacent to the Site.
 - 4) Technical Data contained in such reports and drawings.
 - b. Owner will provide electronic pdfs of material referenced in Special Provisions available to any Bidder on request. These reports and drawings are not part of the Contract Documents, but the Technical Data contained therein upon whose accuracy Bidder is entitled to rely, established in the Special Provisions. Bidder is responsible for any interpretation or conclusion Bidder draws from any Technical Data or any other data, interpretations, opinions, or information contained in such reports or shown or indicated in such drawings.
 - c. Technical data as defined in Special Provisions.
2. Underground Facilities: Information and data shown or indicated in the Bidding Documents with respect to existing Underground Facilities at or contiguous to the Site are set forth in the Contract Documents and are based upon information and data furnished to Owner and Engineer by owners of such Underground Facilities, including Owner, or others.
3. Adequacy of Data: Provisions concerning responsibilities for the adequacy of data furnished to prospective Bidders with respect to subsurface conditions, other physical conditions, and Underground Facilities, and possible changes in the Bidding Documents due to differing or unanticipated subsurface or physical conditions appear in SUDAS Standard Specifications Section 1040, 1.08, and 1.09.

C. Site visit and testing by bidders:

1. Bidder may conduct the Site visit during normal working hours, and shall not disturb any ongoing operations at the Site. Bidder is encouraged to visit private property area between Hagerman Drive and Eisenhower to observe proposed project area. Communicate plans to view private property area to City prior to visit.
2. Bidder may conduct any subsurface testing, or exhaustive investigations of Site conditions.
3. On request, and to the extent Owner has control over the Site, and schedule permitting, the Owner will provide Bidder access to the Site to conduct such additional examinations, investigations, explorations, tests, and studies as Bidder deems necessary for preparing and submitting a successful Bid. Owner will not have any obligation to grant such access if doing so is not practical because of existing operations, security or safety concerns, or restraints on Owner's authority regarding the Site.
4. Bidder shall comply with all applicable Laws and Regulations regarding excavation and location of utilities, obtain all permits, and comply with all terms and conditions established by Owner or by property owners or other entities controlling the Site with respect to schedule, access, existing operations, security, liability insurance, and applicable safety programs.
5. Bidder shall fill all holes and clean up and restore the Site to its former condition upon completion of such explorations, investigations, tests, and studies.

D. Other work at the Site: Refer to Special Provisions for the identification of the general nature of other work of which Owner is aware (if any) that is to be performed at the Site by Owner or others (such as utilities and other prime contractors) and relates to the Work contemplated by these Bidding Documents. If Owner is party to a written contract for such other work, then on request, Owner will provide to each Bidder access to examine such contracts (other than portions thereof related to price and other confidential matters), if any.

1.05 BIDDER'S REPRESENTATIONS

A. It is the responsibility of each Bidder before submitting a Bid to:

1. examine and carefully study the Bidding Documents, and any data and reference items identified in the Bidding Documents;

2. visit the Site, conduct a thorough, alert visual examination of the Site and adjacent areas, and become familiar with and satisfy itself as to the general, local, and Site conditions that may affect cost, progress, and performance of the Work;
3. become familiar with and satisfy itself as to all Laws and Regulations that may affect cost, progress, and performance of the Work;
4. carefully study all: (1) reports of explorations and tests of subsurface conditions at or adjacent to the Site and all drawings of physical conditions relating to existing surface or subsurface structures at the Site that have been identified in the Special Provisions, especially with respect to Technical Data in such reports and drawings, and (2) reports and drawings relating to Hazardous Environmental Conditions, if any, at or adjacent to the Site that have been identified in the Special Provisions, especially with respect to Technical Data in such reports and drawings;
5. consider the information known to Bidder itself; information commonly known to contractors doing business in the locality of the Site; information and observations obtained from visits to the Site; the Bidding Documents; and the Site-related reports and drawings identified in the Bidding Documents, with respect to the effect of such information, observations, and documents on (1) the cost, progress, and performance of the Work; (2) the means, methods, techniques, sequences, and procedures of construction to be employed by Bidder; and (3) Bidder's safety precautions and programs.
6. agree, based on the information and observations referred to in the preceding paragraph, that at the time of submitting its Bid no further examinations, investigations, explorations, tests, studies, or data are necessary for the determination of its Bid for performance of the Work at the price bid and within the times required, and in accordance with the other terms and conditions of the Bidding Documents;
7. become aware of the general nature of the work to be performed by Owner and others at the Site that relates to the Work as indicated in the Bidding Documents;
8. promptly give Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Bidder discovers in the Bidding Documents and confirm that the written resolution thereof by Engineer is acceptable to Bidder;
9. determine that the Bidding Documents are generally sufficient to indicate and convey understanding of all terms and conditions for the performance and furnishing of the Work; and
10. agree that the submission of a Bid will constitute an incontrovertible representation by Bidder that Bidder has complied with every requirement of this Article, that without exception the Bid and all prices in the Bid are premised upon performing and furnishing the Work required by the Bidding Documents.

1.06 PREBID CONFERENCE

- A. A prebid conference will be held at the time stated in the Notice to Bidders.
- B. Bidders are encouraged to attend and participate in the pre-bid conference. Engineer will transmit to all prospective Bidders of record such Addenda as Engineer considers necessary in response to questions arising at the conference. Oral statements may not be relied upon and will not be binding or legally effective.

1.07 INTERPRETATIONS AND ADDENDA

- A. All questions about the meaning or intent of the Bidding Documents are to be submitted to Design Engineer in writing.

Ms. Karmen K. Heim
Stanley Consultants, Inc.
Stanley Building
225 Iowa Avenue
Muscatine, Iowa 52761-3764
Phone: 563-264-6287
Email: heimkarmen@stanleygroup.com

- B. Interpretations or clarifications considered necessary by Engineer in response to such questions will be issued by Addenda delivered to all parties recorded by Engineer as having received the Bidding

Documents. Questions received less than 7 calendar days prior to the date for opening of Bids may not be answered. Only questions answered by Addenda will be binding. Oral and other interpretations or clarifications will be without legal effect.

- C. Addenda may be issued to clarify, correct, or change the Bidding Documents as deemed advisable by Owner or Engineer. Refer to SUDAS Section 1020, 1.05 and 1.06 regarding Interpretations and Addendums.

1.08 BID SECURITY

- A. A Bid must be accompanied by Bid security made payable to Owner in an amount of 5% of Bidder's maximum Bid price (determined by adding the base bid and all alternates) and in the form of a certified check, bank money order, or a Bid bond (on the form included in the Bidding Documents) issued by a surety meeting the requirements of SUDAS Standard Specifications Section 1070.
- B. The Bid security of the apparent Successful Bidder will be retained until Owner awards the contract to such Bidder, and such Bidder has executed the Contract Documents, furnished the required contract security, and met the other conditions of the Notice of Award, whereupon the Bid security will be released. If the Successful Bidder fails to execute and deliver the Contract Documents and furnish the required contract security within 15 days after the Notice of Award, Owner may consider Bidder to be in default, annul the Notice of Award, and the Bid security of that Bidder will be forfeited. Such forfeiture shall be Owner's exclusive remedy if Bidder defaults.
- C. The Bid security of other Bidders whom Owner believes to have a reasonable chance of receiving the award may be retained by Owner until the earlier of 7 days after the Effective Date of the Contract or 36 days after the Bid opening, whereupon Bid security furnished by such Bidders will be returned.
- D. Bid security of other Bidders whom Owner believes do not have a reasonable chance of receiving the award will be returned within 7 days after the Bid opening.
- E. Refer to SUDAS Section 1020, 1.12 for Bid Security submittal requirements.
- F. In the event a nonresident labor preference is applicable, the nonresident bidder shall submit the bidder's plan for conforming to the labor preference and supporting documentation.

1.09 IOWA BIDDER STATUS FORM

- A. Bidder Status Form is required by the Iowa Labor Commissioner, pursuant to the Iowa Administrative Code rule 875-156.2(1). Bidder shall complete and submit Bidder Status Form, signed by an authorized representative of the Bidder, with their Bid.
- B. Under Iowa Administrative Code rule 875-156.2(1), failure to provide the Bidder Status Form with the Bid may result in the bid being deemed nonresponsive and may result in the Bid being rejected.
- C. The Worksheet: Authorized to Transact Business from the Labor Commissioner is included in this project manual and may be used to assist Bidders in completing the Bidder Status Form.
- D. Refer to SUDAS Section 1020, 1.09 for submittal requirements of the Iowa Bidder Status Form.

1.10 CONTRACT TIMES

- A. The number of days within which, or the dates by which, Milestones are to be achieved, and the Work is to be substantially completed and ready for final payment are set forth in the Contract.
- B. Refer to SUDAS Section 1080, 1.02 for Completion Date contract requirements.

1.11 LIQUIDATED DAMAGES

- A. Provisions for liquidated damages, if any, for failure to timely attain a Milestone, Substantial Completion, or completion of the Work in readiness for final payment, are set forth in the Contract.
- B. Refer to SUDAS Section 1080, 1.12 for Liquidated Damages contract requirements.

1.12 SUBSTITUTE AND "OR-EQUAL" ITEMS

- A. The Contract for the Work, as awarded, will be on the basis of materials and equipment specified or described in the Bidding Documents without consideration during the bidding and Contract award process of possible substitute or "or-equal" items. In cases in which the Contract allows the Contractor to request that Engineer authorize the use of a substitute or "or-equal" item of material or equipment, application for such acceptance may not be made to and will not be considered by Engineer until after the Effective Date of the Contract.
- B. All prices that Bidder sets forth in its Bid shall be based on the presumption that the Contractor will furnish the materials and equipment specified or described in the Bidding Documents, as supplemented by Addenda. Any assumptions regarding the possibility of post-Bid approvals of "or-equal" or substitution requests are made at Bidder's sole risk.
- C. Refer to SUDAS Section 1060, 1.02 for requirements on Alternate Processes, Equipment, Or Materials

1.13 SUBCONTRACTORS, SUPPLIERS AND OTHERS

- A. A Bidder shall be prepared to retain specific Subcontractors, Suppliers, or other individuals or entities for the performance of the Work if required by the Bidding Documents (most commonly in the Specifications) to do so. If a prospective Bidder objects to retaining any such Subcontractor, Supplier, or other individual or entity, and the concern is not relieved by an Addendum, then the prospective Bidder should refrain from submitting a Bid.
- B. Subsequent to the submittal of the Bid, Owner may not require the Successful Bidder or Contractor to retain any Subcontractor, Supplier, or other individual or entity against which Contractor has reasonable objection.
- C. The apparent Successful Bidder, and any other Bidder so requested, shall within 5 days after Bid opening, submit to Owner a list of the Subcontractors or Suppliers.
- D. If requested by Owner, such list shall be accompanied by an experience statement with pertinent information regarding similar projects and other evidence of qualification for each such Subcontractor, Supplier, or other individual or entity. If Owner or Engineer, after due investigation, has reasonable objection to any proposed Subcontractor, Supplier, individual, or entity, Owner may, before the Notice of Award is given, request apparent Successful Bidder to submit an acceptable substitute, in which case apparent Successful Bidder shall submit a substitute, Bidder's Bid price will be increased (or decreased) by the difference in cost occasioned by such substitution, and Owner may consider such price adjustment in evaluating Bids and making the Contract award.
- E. If apparent Successful Bidder declines to make any such substitution, Owner may award the Contract to the next lowest Bidder that proposes to use acceptable Subcontractors, Suppliers, or other individuals or entities. Declining to make requested substitutions will constitute grounds for forfeiture of the Bid security of any Bidder. Any Subcontractor, Supplier, individual, or entity so listed and against which Owner or Engineer makes no written objection prior to the giving of the Notice of Award will be deemed acceptable to Owner and Engineer subject to subsequent revocation.

1.14 PREPARATION OF BID PROPOSAL

- A. Bid Form is included with the Bidding Documents.
 - 1. All blanks on the Bid Form shall be completed and the Bid Form signed. Erasures or alterations shall be initialed by the person signing the Bid Form. A Bid price shall be indicated for each section, Bid item, alternate, unit adjustment price item, and unit price item listed therein.
 - 2. If the Bid Form expressly indicates that submitting pricing on a specific alternate item is optional, and Bidder elects to not furnish pricing for such optional alternate item, then Bidder may enter the words "No Bid" or "Not Applicable."
 - 3. Bidders shall enter their bid within the City of Muscatine's IonWave bidding site (<https://muscatineiowa.ionwave.net>) which will match the Unit Price Schedule provided in Section 00 43 22. If Bidder notices a discrepancy the Bidder shall communicate to the City and Design Engineer immediately. All attachments and bid security shall be uploaded in PDF file format to the "Response Attachments" section of the bidding website. Attachments may be completed electronically, or by hand and scanned into a PDF file format, according to bidders preference. Verify you have uploaded all the required attachments prior to submitting your bid.
- B. Bid by a corporation shall be executed in the corporate name by a corporate officer (whose title must appear under the signature), accompanied by evidence of authority to sign. The corporate address and state of incorporation shall be shown.
- C. Bid by a limited liability company shall be executed in the name of the firm by a member or other authorized person and accompanied by evidence of authority to sign. The state of formation of the firm and the official address of the firm shall be shown.
- D. Bid by an individual shall show the Bidder's name and official address.
- E. Bid by a joint venture shall be executed by an authorized representative of each joint venturer in the manner indicated on the Bid Form. The official address of the joint venture shall be shown.
- F. All names shall be printed below the signatures. All forms requiring signatures shall be signed in ink, scanned and uploaded to the IonWave bidding site as an attachment.
- G. Bid shall contain an acknowledgment of receipt of all Addenda, the numbers of which shall be filled in on the Bid Form.
- H. Postal and e-mail addresses and telephone number for communications regarding the Bid shall be shown.
- I. Bid shall contain evidence of Bidder's authority and qualification to do business in the state where the Project is located, or Bidder shall covenant in writing to obtain such authority and qualification prior to award of the Contract and attach such covenant to the Bid. Bidder's state contractor license number, if any, shall also be shown on the Bid Form.
- J. Refer to SUDAS Section 1020 1.09 for Preparation of Proposal.

1.15 BASIS OF BID; COMPARISON OF BIDS

- A. Unit Price:
 - 1. Bidders shall submit a Bid on a unit price basis for each item of Work listed in Section 00 43 22 – Unit Price Schedule.
 - 2. The Bid Price for each unit price Bid item will be the product of the Estimated Quantity (which Owner or its representative has set forth in the Bid Form) for the item and the corresponding Bid Unit Price offered by the Bidder. The total of all unit price Bid items will be the sum of these Bid Prices; such total will be used by Owner for Bid comparison purposes. The final quantities and Contract Price will be determined in accordance with SUDAS Standard Specifications Section 1090.

3. Discrepancies between the multiplication of units of Work and unit prices will be resolved in favor of the unit prices. Discrepancies between the indicated sum of any column of figures and the correct sum thereof will be resolved in favor of the correct sum.

1.16 SUBMITTAL OF BID

- A. With each copy of the Bidding Documents, a Bidder is furnished a copy of the Bid Form, Unit Price Schedule, and the Bid Bond Form. The Bid Form is to be completed and submitted with the Bid security and the other documents required to be submitted under the terms of Article 8 of the Bid Form.
- B. A Bid shall be received no later than the date and time prescribed and at the place indicated in the Notice to Bidders and shall be plainly marked with the Project title (and, if applicable, the designated portion of the Project for which the Bid is submitted), the name and address of Bidder, and shall be accompanied by the Bid security and other required documents.
- C. Bids received after the date and time prescribed for the opening of bids, or not submitted in the designated manner, will not be accepted and will be returned to the Bidder unopened.
- D. Only bids submitted to the City's IonWave bidding site will be considered. Bids sent by mail, delivery system, faxed, hand-delivered, emailed or other electronic submittal means will not be considered.
- E. The final step of the online bid submission is a digital signature certifying all entries and response attachments to be correct. The signature must be by the same individual who is the Company Owner or an authorized Office of the Company. If an addendum which materially affects bid quantities is issued after your bid is submitted, your status will change from "Complete" to "Not Submitted". An addendum will not be issued less than 24 hours before the bid opening. The bidder is solely responsible for monitoring the status of their bid.

1.17 MODIFICATION AND WITHDRAWAL OF BID

- A. Bid may be withdrawn by an appropriate document duly executed in the same manner that a Bid must be executed and delivered to the place where Bids are to be submitted prior to the date and time for the opening of Bids. Upon receipt of such notice, the unopened Bid will be returned to the Bidder.
- B. If a Bidder wishes to modify its Bid prior to Bid opening, Bidder must withdraw its initial Bid in the manner specified in Paragraph A. and submit a new Bid prior to the date and time for the opening of Bids.
- C. If within 24 hours after Bids are opened, any Bidder files a duly signed written notice with Owner and promptly thereafter demonstrates to the reasonable satisfaction of Owner that there was a material and substantial mistake in the preparation of its Bid, that Bidder may withdraw its Bid, and the Bid security will be returned. Thereafter, if the Work is rebid, that Bidder will be disqualified from further bidding on the Work.
- D. Refer to SUDAS Section 1020, 1.13 for Withdrawal or Revision of the Proposal Prior to Opening of Proposals

1.18 OPENING OF BIDS

- A. Bids will be opened at the time and place indicated in the Notice to Bidders. An abstract of the amounts of the base Bids and major alternates, if any, will be made available to Bidders after the opening of Bids.
- B. Refer to SUDAS Section 1020, 1.14 Opening of Proposals.

1.19 BIDS TO REMAIN SUBJECT TO ACCEPTANCE

- A. Bids will remain subject to acceptance for the period of time stated in the Bid Form, but Owner may, in its sole discretion, release any Bid and return the Bid security prior to the end of this period.
- B. Refer to SUDAS Section 1020, 1.15 Limitation on Withdrawal of Proposals After Opening of Proposals.

1.20 EVALUATION OF BIDS AND AWARD OF CONTRACT

- A. Owner reserves the right to reject any or all Bids, including without limitation, nonconforming, nonresponsive, unbalanced, or conditional Bids. Owner will reject the Bid of any Bidder that Owner finds, after reasonable inquiry and evaluation, to not be responsible. If Bidder purports to add terms or conditions to its Bid, takes exception to any provision of the Bidding Documents, or attempts to alter the contents of the Contract Documents for purposes of the Bid, then the Owner will reject the Bid as nonresponsive; provided that Owner also reserves the right to waive all minor informalities not involving price, time, or changes in the Work.
- B. If Owner awards the contract for the Work, such award shall be to the responsible Bidder submitting the lowest responsive Bid.
- C. Evaluation of Bids:
 - 1. In evaluating Bids, Owner will consider whether or not the Bids comply with the prescribed requirements, and such alternates, unit prices, and other data, as may be requested in the Bid Form or prior to the Notice of Award.
 - 2. For the determination of the apparent low Bidder when unit price bids are submitted, Bids will be compared on the basis of the total of the products of the estimated quantity of each item and unit price Bid for that item, together with any lump sum items.
- D. In evaluating whether a Bidder is responsible, Owner will consider the qualifications of the Bidder and may consider the qualifications and experience of Subcontractors and suppliers proposed for those portions of the Work for which the identity of Subcontractors and suppliers must be submitted as provided in the Bidding Documents. Past project performance will be considered.
- E. Owner may conduct such investigations as Owner deems necessary to establish the responsibility, qualifications, and financial ability of Bidders and any proposed Subcontractors or suppliers.
- F. Refer to SUDAS Section 1030 Approval for Award and Award of Contract.

1.21 BONDS AND INSURANCE

- A. SUDAS Standard Specifications Section 1070, as may be modified by the Special Provisions, sets forth Owner's requirements as to performance and payment bonds, 2-year maintenance bond, and insurance. When the Successful Bidder delivers the Contract (executed by Successful Bidder) to Owner, it shall be accompanied by required bonds and insurance documentation.

1.22 SIGNING OF CONTRACT

- A. When Owner issues a Notice of Award to the Successful Bidder, it shall be accompanied by the unexecuted counterparts of the Contract along with the other Contract Documents as identified in the Contract.
- B. Within 15 days thereafter, Successful Bidder shall execute and deliver the required number of counterparts of the Contract (and any bonds and insurance documentation required to be delivered by the Contract Documents) to Owner.

- C. Within 10 days thereafter, Owner shall deliver one fully executed counterpart of the Contract to Successful Bidder, together with printed and electronic copies of the Contract Documents.

1.23 SALES AND USE TAXES

- A. Owner is exempt from Iowa state sales and use taxes on materials and equipment to be incorporated in the Work. Said taxes shall not be included in the Bid. Refer to SUDAS Standard Specifications Section 1020, 1.08 for additional information.
- B. Complete information on qualifying materials and supplies can be found at <https://tax.iowa.gov>, the Iowa Department of Revenue web site. Bids submitted for this Project should be submitted on this basis.

1.24 NON-SEGREGATED FACILITIES

- A. Bidders shall review the requirements of SRF Attachment 1 and submit a signed Certification of Non-Segregated Facilities.
- B. All subcontractors awarded subcontracts greater than \$10,000 must provide certification to the general contractor and certifications retained in their files.

1.25 DEBARMENT AND SUSPENSION

- A. Bidders and equipment suppliers who are listed on the U.S. General Services Administration Excluded Parties List will be prohibited from bidding.
- B. Refer to SRF Attachment 2. Bidders shall review, certify, and submit the completed form regarding debarment, suspension, and other responsibility matters.

1.26 DISADVANTAGED BUSINESS ENTERPRISE PROGRAM

- A. The project is subject to Iowa's Fair Share goals which aims at awarding work to small, minority, and women-owned businesses, collectively known as Disadvantaged Business Enterprises (DBEs).
- B. Bidders shall take affirmative action for DBE participation. Documentation of the efforts and proposed utilization of certified DBE's is required. Refer to SRF Attachments 3, 4, 5, and 6 for requirements.
- C. SRF Attachments 3 must be signed and submitted with bid. If the Bidder will be using DBE subcontractor (s), SRF Attachments 4 and 5 shall be submitted with the bid. SRF Attachment 6 is for voluntary use and not required to be submitted with the bid.

1.27 FEDERAL REQUIREMENTS

- A. The project is subject to the federal requirements as summarized in the SRF Attachment 7.
- B. Contractors shall abide by the Federal Equal Opportunity requirements.
- C. Contractors shall abide by the Federal Labor Standards Provisions (including Davis-Bacon prevailing wage rates).
- D. Project is subject to preservation of open competition and government neutrality toward government contractors' labor relations.
- E. If during the course of construction, evidence of deposits of historical or archeological interest are found, contractor shall cease operations affecting the find.
- F. Award of the project will be prohibited to persons or suppliers who have been convicted of violations of the Clean Air Act and the Clean Water Act.

1.28 RIGHT OF ENTRY AND RECORDS RETENTION

- A. Project is always subject to site inspections and project records and document audits from the Iowa Department of Natural Resources, the Iowa Finance Authority, the state auditor, and the US EPA.
- B. Refer to SRF Attachment 8 for requirements.

1.29 AMERICAN IRON AND STEEL

- A. Project is subject to American Iron and Steel provisions under the H.R. 3547 Consolidated Appropriations Act, 2014.
- B. All iron and steel products used in the project shall be produced in the United States.
- C. Contractor shall obtain certifications that products and materials used in the project are US made.
- D. Refer to SRF Attachment 9 for requirements and procedures for material certifications and waivers.

1.30 PROHIBITION ON CERTAIN TELECOMMUNICATIONS AND VIDEO SURVEILLANCE SERVICES OR EQUIPMENT.

- A. Bidder shall meet the terms and conditions of 2 CFR 200.216 which prohibit using loan funds on certain equipment, systems, or services.
- B. Bidder shall review, certify, and submit the signed form indicating their bid will meet the requirements listed on SRF Attachment 10.

END OF DOCUMENT

PROJECT AND CONTRACT IDENTIFICATION

This Bid pertains to Contract West Hill Area Sanitary and Storm Sewer Separation – Phase 6D for the City of Muscatine, Iowa.

ARTICLE 1 - BID RECIPIENT

- 1.01 This Bid is submitted to: CITY CLERK'S OFFICE
CITY PURCHASING AGENT
215 SYCAMORE STREET
MUSCATINE, IOWA 52761
- 1.02 The undersigned Bidder proposes and agrees, if this Bid is accepted, to enter into a Contract with Owner in the form included in the Bidding Documents to perform all Work as specified or indicated in the Bidding Documents for the prices and within the times indicated in this Bid and in accordance with the other terms and conditions of the Bidding Documents.

ARTICLE 2 - BIDDER'S ACKNOWLEDGEMENTS

- 2.01 Bidder accepts all of the terms and conditions of the Instructions to Bidders, including without limitation those dealing with the disposition of Bid security. This Bid will remain subject to acceptance for 35 days after the Bid opening, or for such longer period of time that Bidder may agree to in writing upon request of Owner.

ARTICLE 3 - BIDDER'S REPRESENTATIONS

- 3.01 In submitting this Bid, Bidder represents that:
- A. Bidder has examined and carefully studied the Bidding Documents, and any data and reference items identified in the Bidding Documents, and hereby acknowledges receipt of the following Addenda:
- | Addendum No. | Addendum Date |
|--------------|---------------|
| | |
| | |
| | |
| | |
- B. Bidder has visited the Site and become familiar with and is satisfied as to the general, local and Site conditions that may affect cost, progress, and performance of the Work.
- C. Bidder is familiar with and is satisfied as to all Laws and Regulations that may affect cost, progress and performance of the Work.
- D. Bidder has carefully studied all: (1) reports of explorations and tests of subsurface conditions at or adjacent to the Site and all drawings of physical conditions relating to existing surface or subsurface structures at the Site that have been identified in the Special Provisions, especially with respect to Technical Data in such reports and drawings, and (2) reports and drawings relating to Hazardous Environmental Conditions, if any, at or adjacent to the Site that have been identified in the Special Provisions, especially with respect to Technical Data in such reports and drawings.
- E. Bidder has considered the information known to Bidder itself; information commonly known to contractors doing business in the locality of the Site; information and observations obtained from visits to the Site; the Bidding Documents; and any Site-related reports and drawings identified in the Bidding Documents, with respect to the effect of such information, observations, and documents on (1) the cost, progress, and performance of the Work; (2) the means, methods, techniques, sequences, and procedures of construction to be employed by Bidder; and (3) Bidder's safety precautions and programs.
- F. Bidder agrees, based on the information and observations referred to in the preceding paragraph, that no further examinations, investigations, explorations, tests, studies, or data are necessary for the determination of this Bid for performance of the Work at the price bid and within the times required, and in accordance with the other terms and conditions of the Bidding Documents.

- G. Bidder is aware of the general nature of work to be performed by Owner and others at the Site that relates to the Work as indicated in the Bidding Documents.
- H. Bidder has given Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Bidder has discovered in the Bidding Documents, and confirms that the written resolution thereof by Engineer is acceptable to Bidder.
- I. Bidding Documents are generally sufficient to indicate and convey understanding of all terms and conditions for the performance and furnishing of the Work.
- J. Submission of this Bid constitutes an incontrovertible representation by Bidder that Bidder has complied with every requirement of this Article, and that without exception the Bid and all prices in the Bid are premised upon performing and furnishing the Work required by the Bidding Documents.

ARTICLE 4 - BIDDER'S CERTIFICATION

4.01 Bidder certifies that:

- A. This Bid is genuine and not made in the interest of or on behalf of any undisclosed individual or entity and is not submitted in conformity with any agreement or rules of any group, association, organization or corporation;
- B. Bidder has not directly or indirectly induced or solicited any other Bidder to submit a false or sham Bid;
- C. Bidder has not solicited or induced any individual or entity to refrain from bidding; and
- D. Bidder has not engaged in corrupt, fraudulent, collusive, or coercive practices in competing for the Contract. For the purposes of this Paragraph 4.01.D:
 - 1. "corrupt practice" means the offering, giving, receiving, or soliciting of anything of value likely to influence the action of a public official in the bidding process;
 - 2. "fraudulent practice" means an intentional misrepresentation of facts made (a) to influence the bidding process to the detriment of Owner, (b) to establish bid prices at artificial non-competitive levels, or (c) to deprive Owner of the benefits of free and open competition;
 - 3. "collusive practice" means a scheme or arrangement between two or more Bidders, with or without the knowledge of Owner, a purpose of which is to establish bid prices at artificial, noncompetitive levels; and
 - 4. "coercive practice" means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the bidding process or affect the execution of the Contract.

ARTICLE 5 - BASIS OF BID

- 5.01 Bidder will complete the Work in accordance with the Contract Documents for the price shown on Section 00 43 22 Unit Price Schedule.
- 5.02 Unit Price Bid: Bidder acknowledges that (1) each Bid Unit Price includes an amount considered by Bidder to be adequate to cover Contractor's overhead and profit for each separately identified item, and (2) estimated quantities are not guaranteed, and are solely for the purpose of comparison of Bids, and final payment for all unit price Bid items will be based on actual quantities, determined as provided in the Contract Documents.

ARTICLE 6 - TIME OF COMPLETION

- 6.01 Bidder agrees that the Work will be substantially complete and will be completed and ready for final payment in accordance with paragraph 1.08 of SUDAS Standard Specifications Section 1090 Measurement and Payment on or before the dates or within the number of calendar days indicated in the Contract.
- 6.02 Bidder accepts the provisions of the Contract as to liquidated damages in the event of failure to complete the Work within the Contract Times.

ARTICLE 7 - EXCEPTIONS AND CLARIFICATIONS

- 7.01 Attach a separate PDF file labeled "Exceptions and Clarifications" separate from the Bid, containing listing on Bidder's letterhead of all exceptions and clarifications to Contract Documents, referencing page number and paragraph of Contract Documents involved. If there are no exceptions or clarifications, include statement to such effect with the Bid. Excessive exceptions or clarifications may render Bid unresponsive. Bidder agrees to all provisions contained in Contract Documents unless specifically listed as an exception or clarification. If Bidder submits drawings, printed forms, standard statements, or other revisions which conflict with Contract Documents, the Contract Documents will prevail.

ARTICLE 8 - ATTACHMENTS TO THIS BID

- 8.01 The following documents are attached to and made a condition of this Bid:
- A. Statement of no Exceptions and Clarifications, if appropriate (submit with bid);
 - B. Exceptions and Clarifications to Contract Documents, if appropriate, (submit with bid as separate PDF file);
 - C. Required Bid security (submit with bid as separate PDF file);
 - D. Required Iowa Bidder Status Form (submit with bid as separate PDF file);
 - E. List of proposed Subcontractors and Suppliers; as requested after the bid.
 - F. Evidence of authority to do business in the state of the Project; or a written covenant to obtain such license within the time for acceptance of Bids;
 - G. Contractor's License No.: _____.
 - H. Evidence of Bidder's ability to obtain a State Contractor's License and a covenant by Bidder to obtain said license within the time for acceptance of Bids;
 - I. SRF Attachment 1 - Certification of Non-Segregated Facilities Form (submit with bid);
 - J. SRF Attachment 2 - Statement in Advertisement for Bids on Debarment and Suspension/Certification Regarding Debarment and Suspension Form (submit with bid);
 - K. SRF Attachment 3 - Disadvantaged Business Enterprise Certification Form (submit with bid);
 - L. SRF Attachment 4 - DBE Program Subcontractor Performance Form (submit with bid if using a DBE);
 - M. SRF Attachment 5 - DBE Program Subcontractor Utilization Form (submit with bid if using a DBE);
 - N. SRF Attachment 6 - DBE Program Subcontractor Participation Form (voluntary form, not required for bidding);
 - O. SRF Attachment 7 - Other Federal Requirements Language (incorporated by reference)
 - a. Standard Federal Equal Employment Opportunity Specifications
 - b. Federal Labor Standards Provisions (including Davis-Bacon prevailing wage rates)
 - c. Preservation of Open Competition and Government Neutrality
 - d. Historical and Archeological Finds
 - e. Prohibitions on Procurement from Violating Facilities
 - P. SRF Attachment 8 - Right of Entry and Records Retention (incorporated by reference);
 - Q. SRF Attachment 9 - Use of American Iron and Steel (incorporated by reference);
 - R. SRF Attachment 10 - Prohibition on Certain Telecommunications and Video Surveillance Services or Equipment (submit with bid)

ARTICLE 9 - DEFINED TERMS

- 9.01 The terms used in this Bid with initial capital letters have the meanings indicated in the Instructions to Bidders, the SUDAS General Provisions and Covenants, and the Special Provisions.

ARTICLE 10 - BID SUBMITTAL

Bidder: *(Indicate correct name of bidding entity)*

By: _____
(Signature)

(Printed Name)
(If Bidder is a corporation, a limited liability company, a partnership, or a joint venture, attach evidence of authority to sign.)

Attest: _____
(Signature)

(Printed Name)

Title: _____

Submittal Date: _____

Address for giving notices:

Telephone No. _____

Facsimile No. _____

Contact Name and email address: _____

Contractor's License Number: _____.

BID BOND

Any singular reference to Bidder, Surety, Owner or other party shall be considered plural where applicable.

BIDDER (*Name and Address*):

SURETY (*Name and Address of Principal Place of Business*):

OWNER (*Name and Address*):

BID

Bid Due Date:

Description (*Project Name and Include Location*):

BOND

Bond Number:

Date:

Penal sum	_____	\$	_____
	(Words)		(Figures)

Surety and Bidder, intending to be legally bound hereby, subject to the terms set forth below, do each cause this Bid Bond to be duly executed by an authorized officer, agent, or representative.

BIDDER**SURETY**

_____ (Seal)	_____ (Seal)
Bidder's Name and Corporate Seal	Surety's Name and Corporate Seal

By: _____
Signature

By: _____
Signature (Attach Power of Attorney)

Print Name

Print Name

Title

Title

Attest: _____
Signature

Attest: _____
Signature

Title

Title

Note: Above addresses are to be used for giving any required notice. Provide execution by any additional parties, such as joint venturers, if necessary.

1. Bidder and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors, and assigns to pay to Owner upon default of Bidder the penal sum set forth on the face of this Bond. Payment of the penal sum is the extent of Bidder's and Surety's liability. Recovery of such penal sum under the terms of this Bond shall be Owner's sole and exclusive remedy upon default of Bidder.
2. Default of Bidder shall occur upon the failure of Bidder to deliver within the time required by the Bidding Documents (or any extension thereof agreed to in writing by Owner) the executed Agreement required by the Bidding Documents and any performance and payment bonds required by the Bidding Documents.
3. This obligation shall be null and void if:
 - 3.1 Owner accepts Bidder's Bid and Bidder delivers within the time required by the Bidding Documents (or any extension thereof agreed to in writing by Owner) the executed Agreement required by the Bidding Documents and any performance and payment bonds required by the Bidding Documents, or
 - 3.2 All Bids are rejected by Owner, or
 - 3.3 Owner fails to issue a Notice of Award to Bidder within the time specified in the Bidding Documents (or any extension thereof agreed to in writing by Bidder and, if applicable, consented to by Surety when required by Paragraph 5 hereof).
4. Payment under this Bond will be due and payable upon default of Bidder and within 30 calendar days after receipt by Bidder and Surety of written notice of default from Owner, which notice will be given with reasonable promptness, identifying this Bond and the Project and including a statement of the amount due.
5. Surety waives notice of any and all defenses based on or arising out of any time extension to issue Notice of Award agreed to in writing by Owner and Bidder, provided that the total time for issuing Notice of Award including extensions shall not in the aggregate exceed 120 days from the Bid due date without Surety's written consent.
6. No suit or action shall be commenced under this Bond prior to 30 calendar days after the notice of default required in Paragraph 4 above is received by Bidder and Surety and in no case later than one year after the Bid due date.
7. Any suit or action under this Bond shall be commenced only in a court of competent jurisdiction located in the state in which the Project is located.
8. Notices required hereunder shall be in writing and sent to Bidder and Surety at their respective addresses shown on the face of this Bond. Such notices may be sent by personal delivery, commercial courier, or by United States Registered or Certified Mail, return receipt requested, postage pre-paid, and shall be deemed to be effective upon receipt by the party concerned.
9. Surety shall cause to be attached to this Bond a current and effective Power of Attorney evidencing the authority of the officer, agent, or representative who executed this Bond on behalf of Surety to execute, seal, and deliver such Bond and bind the Surety thereby.
10. This Bond is intended to conform to all applicable statutory requirements. Any applicable requirement of any applicable statute that has been omitted from this Bond shall be deemed to be included herein as if set forth at length. If any provision of this Bond conflicts with any applicable statute, then the provision of said statute shall govern and the remainder of this Bond that is not in conflict therewith shall continue in full force and effect.
11. The term "Bid" as used herein includes a Bid, offer, or proposal as applicable.

WEST HILL AREA - SANITARY AND STORM SEWER SEPARATION PHASE 6D					
MUSCATINE, IOWA					
No.	Description	Estimated Quantity	Unit	Bid Unit Price	Bid Price
1	CLEARING AND GRUBBING BY UNITS	195.1	UNIT		
2	GRUBBING BY LUMP SUM	1	LS		
3	TOPSOIL, ON-SITE TOPSOIL	1648	CY		
4	TOPSOIL, OFF-SITE TOPSOIL, CONTRACTOR PROVIDED	1344	CY		
5	TOP SOIL, OFF-SITE TOPSOIL, OWNER PROVIDED	149	CY		
6	CLASS 10 EXCAVATION	2181	CY		
7	CLASS 10 EXCAVATION, GRADING EARTHWORK	204	CY		
8	CLASS 13 EXCAVATION - DEBRIS REMOVAL AND DISPOSAL	120	TONS		
9	GRANULAR STABILIZATION, 12" GRANULAR SUBBASE	2764	SY		
10	SUBGRADE TREATMENT, GEOTEXTILE	2764	SY		
11	GRANULAR SUBBASE - 6" (UNDER ROADWAY PAVEMENT) (CONTRACTOR PROVIDED)	6634	SY		
12	GRANULAR SUBBASE - 6" (UNDER ROADWAY PAVEMENT) (CITY FURNISHED CRUSHED CONCRETE)	4423	SY		
13	SPECIAL BACKFILL - CONTRACTOR PROVIDED MATERIAL - 6" (UNDER DRIVEWAY/ALLEY)	1380	SY		
14	SPECIAL BACKFILL - CONTRACTOR PROVIDED MATERIAL - 4" (UNDER SIDEWALKS)	97	SY		
15	TEMPORARY GRANULAR SURFACE	491	TONS		
16	REMOVALS, PIPES	250	LF		
17	REMOVALS, PIPES, EXISTING UWBS	1234	LF		
18	FILLING AND PLUGGING OF PIPE	190	LF		
19	STEEL BEAM GUARDRAIL	54	LF		
20	TRENCH FOUNDATION (1-INCH CLEAN)	300	CY		
21	STABILIZED (FOUNDATION) MATERIALS	50	CY		
22	SHEETING LEFT IN PLACE	400	SF		
23	EXPLORATORY TRENCH AND TEST DIGS	100	LF		
24	VIBRATION MONITORING	1	LS	\$ 20,000	\$ 20,000
25	EXCAVATION PLAN	1	LS		
26	SANITARY SEWER SERVICE, 4" OR 6" PVC (ASTM D3034)	524	LF		
27	SANITARY SEWER SERVICE, 4" OR 6" PVC (ASTM D3034) OUTSIDE OF ROW	246	LF		
28	SANITARY SEWER SERVICE, TRENCHLESS	140	LF		
29	SANITARY SEWER, POLYVINYL CHLORIDE COMPOSITE PIPE (TRUSS TYPE PVC), 8"	362	LF		
30	SANITARY SEWER, POLYVINYL CHLORIDE COMPOSITE PIPE (TRUSS TYPE PVC), 12"	411	LF		
31	SANITARY SEWER, POLYVINYL CHLORIDE COMPOSITE PIPE (TRUSS TYPE PVC), 15"	3124	LF		
32	SANITARY SEWER, 18" PVC	23	LF		
33	SANITARY SEWER, 15" DIP	87	LF		
34	SANITARY SEWER, TRENCHLESS CONSTRUCTION, 12" SEWER	15	LF		
35	SANITARY SEWER, TRENCHLESS CONSTRUCTION, 15" SEWER	30	LF		
36	SANITARY SEWER SERVICE CONNECTIONS TO MAIN, (4" AND 6")	46	EA		
37	SANITARY SEWER CLEANOUT	1	EA		

WEST HILL AREA - SANITARY AND STORM SEWER SEPARATION PHASE 6D					
MUSCATINE, IOWA					
No.	Description	Estimated Quantity	Unit	Bid Unit Price	Bid Price
38	SANITARY SEWER INTERNAL HOME REPLUMBING	1	LS	\$80,000	\$80,000
39	SEWER, DIP, WATER MAIN MATERIAL, FOR CONFLICTS, 8"	30	LF		
40	SEWER, DIP, WATER MAIN MATERIAL, FOR CONFLICTS, 12"	30	LF		
41	SEWER, DIP, WATER MAIN MATERIAL, FOR CONFLICTS, 16"	30	LF		
42	SEWER, PVC, WATER MAIN MATERIAL, FOR CONFLICTS, 8"	30	LF		
43	SEWER, PVC, WATER MAIN MATERIAL, FOR CONFLICTS, 12"	30	LF		
44	SEWER, PVC, WATER MAIN MATERIAL, FOR CONFLICTS, 16"	30	LF		
45	STORM SEWER, 12", CLASS IV RCP	8	LF		
46	STORM SEWER, 15", CLASS IV RCP	380	LF		
47	STORM SEWER, 18", CLASS IV RCP	1152	LF		
48	STORM SEWER, 21", CLASS IV RCP	9	LF		
49	STORM SEWER, 24", CLASS IV RCP	267	LF		
50	STORM SEWER, 30", CLASS IV RCP	383	LF		
51	STORM SEWER, 48" ELLIPTICAL (38"HX60"W), CLASS IV RCP	1221	LF		
52	STORM SEWER INLET PIPING, 12" PVC (ASTM F949)	20	LF		
53	STORM SEWER INLET PIPING, 15" PVC (ASTM F949)	20	LF		
54	PIPE APRON, FOOTING, GUARD	5	EA		
55	TYPE 1 SUBDRAINS (LONGITUDINAL) CORRUGATED PE, 4"	5857	LF		
56	SUBDRAIN OUTLETS AND CONNECTIONS	15	EA		
57	PRE-REHABILITATION CLEANING AND INSPECTION, ALL DIAMETERS	994	LF		
58	CIPP MAIN LINING, 12"	594	LF		
59	CIPP MAIN LINING, 15"	400	LF		
60	BUILDING SANITARY SEWER SERVICE REINSTATEMENT	30	EA		
61	BYPASS PUMPING, HAGERMAN DR STORM	1	LS		
62	INTERNAL VIDEO INSPECTION (ALL SEWER)	7427	LF		
63	WATER SERVICE PIPE, COPPER, 1"	600	LF		
64	WATER SERVICE CORPORATION	15	EA		
65	WATER SERVICE CURB STOP AND BOX	15	EA		
66	FIRE HYDRANT ASSEMBLY	1	EA		
67	SANITARY MANHOLE, ECCENTRIC, SW-301, 5' DIAMETER (8' DEEP)	21	EA		
68	SANITARY MANHOLE, EXTRA DEPTH, 5' DIAMETER	59.9	LF		
69	SANITARY MANHOLE, SW-301 FLAT TOP, 5' DIAMETER	1	EA		
70	STORM MANHOLE, FLAT TOP, SW-401, 5' DIAMETER (UP TO 8' DEEP)	7	EA		
71	STORM MANHOLE, EXTRA DEPTH, 5' DIAMETER	10.7	LF		
72	STORM MANHOLE, SW-401, 8' DIAMETER	3	EA		
73	STORM MANHOLE, SW-401, 8' DIAMETER WITH 4' DIAMETER RISER	1	EA		

WEST HILL AREA - SANITARY AND STORM SEWER SEPARATION PHASE 6D					
MUSCATINE, IOWA					
No.	Description	Estimated Quantity	Unit	Bid Unit Price	Bid Price
74	MANHOLE REPLACEMENT RISER SECTIONS, 3' RISER	9.6	LF		
75	STORM MANHOLE, SW-406, SHALLOW RECTANGULAR (8'X8')	1	EA		
76	STORM INLET, SW-501	1	EA		
77	STORM INLET, SW-502, 5'	4	EA		
78	STORM INLET, SW-507	5	EA		
79	STORM INLET, SW-509	7	EA		
80	STORM INLET, SW-512, 24" DIAMETER, 604 TYPE 5	1	EA		
81	SANITARY INTERNAL DROP CONNECTION	3	EA		
82	REMOVE MANHOLE OR INTAKE	24	EA		
83	CURB OPENING CASTING	10	EA		
84	MANHOLE CASTING	1	EA		
85	PCC PAVEMENT, 7 INCH	9756	SY		
86	PCC PAVEMENT SAMPLES AND TESTING	1	LS		
87	ASPHALT PAVEMENT BY TON	75	TON		
88	REMOVAL OF DRIVEWAY/ALLEY	1312	SY		
89	REMOVAL OF SIDEWALK	92	SY		
90	REMOVAL OF CURB, LIMESTONE CURB	20	LF		
91	PCC SIDEWALK, 4-INCH	97	SY		
92	PCC SIDEWALK, 6-INCH	3	SY		
93	DETECTABLE WARNINGS	25	SF		
94	PAVED DRIVEWAYS, AND ALLEYS, PCC, 6-INCH	1380	SY		
95	MILLING	7587	SY		
96	PAVEMENT REMOVAL, CONCRETE	1770	SY		
97	SUBBASE MATERIAL REMOVAL AFTER MILLING	7587	SY		
98	PAINTED PAVEMENT MARKINGS, DURABLE	1.2	STA		
99	TEMPORARY TRAFFIC CONTROL	1	LS		
100	SPECIAL SIGNAGE	64	SF		
101	SEEDING, FERTILIZING & MULCHING FOR CONVENTIONAL SEEDING, RESIDENTIAL (TYPE 1)	1000	SF		
102	SEEDING, FERTILIZING, & MULCHING FOR HYDRAULIC SEEDING, RESIDENTIAL (TYPE 1)	80649	SF		
103	SEEDING, FERTILIZING, & MULCHING FOR HYDRAULIC SEEDING, NOT MOWED MIX (TYPE 2)	88966	SF		
104	PLANTS, LANDSCAPING BY AREA	406	SF		
105	SWPPP MANAGEMENT	1	LS		
106	FILTER SOCKS	5857	LF		
107	TEMPORARY ROLLED EROSION CONTROL PRODUCTS (RECP) TYPE 4.B (LONG TERM)	7125	SY		
108	RIPRAP, CLASS D AND E REVETMENT	10	TONS		
109	EROSION STONE	40	TONS		
110	SILT FENCE OR SILT FENCE DITCH CHECK	1670	LF		
111	STABILIZED CONSTRUCTION EXIT	9	EA		
112	EROSION CONTROL MULCHING, HYDROMULCHING	3.9	ACRE		
113	INLET PROTECTION DEVICE, DROP IN PROTECTION	10	EA		
114	INLET PROTECTION DEVICE, OPEN-THROAT CURB INTAKE SEDIMENT FILTER, EC-602	40	LF		
115	TURF REINFORCEMENT MESH (TEMPORARY)	4000	SF		

WEST HILL AREA - SANITARY AND STORM SEWER SEPARATION PHASE 6D					
MUSCATINE, IOWA					
No.	Description	Estimated Quantity	Unit	Bid Unit Price	Bid Price
116	REMOVAL AND REINSTALLATION OF EXISTING FENCE	165	LF		
117	RETAINING WALL, ALL TYPES	95	SF		
118	CONCRETE STEPS	70	SF		
119	HANDRAIL	30	LF		
120	CONSTRUCTION SURVEY	1	LS		
121	RECORD DRAWINGS	1	LS		
122	MOBILIZATION	1	LS		
123	MOBILIZATION, EROSION CONTROL	9	EA		
124	EXISTING CONDITIONS VIDEO RECORD	1	LS		
125	MAINTENANCE OF POSTAL SERVICE	1	LS		
126	MAINTENANCE OF SOLID WASTE COLLECTION	1	LS		
127	CONCRETE WASHOUT	1	LS		
201	WATER MAIN, TRENCHED, C-900 PVC, RESTRAINED JOINT 6"	97	LF		
202	FITTINGS, 90 DEGREE ELBOW, 6"	1	EA		
203	FITTINGS, 45 DEGREE ELBOW, 6"	7	EA		
204	FITTINGS, 90 DEGREE STREET ELBOW, 6"	1	EA		
205	WATER SERVICE ADJUSTMENT, COPPER, 3/4" (REF. NOTE 1)	2	EA		
206	WATER SERVICE ADJUSTMENT, COPPER, 1" (REF. NOTE 2)	1	EA		
207	WATER MAIN ABANDONMENT, CAP	85	LF		
208	TAPPING SLEEVE AND VALVE, 6"	2	EA		
209	CUT-IN-CONNECTION, 6"	2	EA		
210	TAPPING SLEEVE AND VALVE, 6"	2	EA		
TOTAL OF ALL BID ITEMS 1 - 210				\$	

Bidder Status Form

To be completed by all bidders

Part A

Please answer "Yes" or "No" for each of the following:

☐ Yes ☐ No

My company is authorized to transact business in Iowa.
(To help you determine if your company is authorized, please review the worksheet on the next page).

☐ Yes ☐ No

My company has an office to transact business in Iowa.

☐ Yes ☐ No

My company's office in Iowa is suitable for more than receiving mail, telephone calls, and email.

☐ Yes ☐ No

My company has been conducting business in Iowa for at least 3 years prior to the first request for bids on this project.

☐ Yes ☐ No

My company is not a subsidiary of another business entity or my company is a subsidiary of another business entity that would qualify as a resident bidder in Iowa.

If you answered "Yes" for each question above, your company qualifies as a resident bidder. Please complete Parts B and D of this form.

If you answered "No" to one or more questions above, your company is a nonresident bidder. Please complete Parts C and D of this form.

To be completed by resident bidders

Part B

My company has maintained offices in Iowa during the past 3 years at the following addresses:

Dates: _____ / _____ / _____ to _____ / _____ / _____

Address: _____

City, State, Zip: _____

Dates: _____ / _____ / _____ to _____ / _____ / _____

Address: _____

City, State, Zip: _____

Dates: _____ / _____ / _____ to _____ / _____ / _____

Address: _____

City, State, Zip: _____

You may attach additional sheet(s) if needed.

To be completed by non-resident bidders

Part C

1. Name of home state or foreign country reported to the Iowa Secretary of State:

2. Does your company's home state or foreign country offer preferences to resident bidders, resident labor force preferences or any other type of preference to bidders or laborers?

☐ Yes ☐ No

3. If you answered "Yes" to question 2, identify each preference offered by your company's home state or foreign country and the appropriate legal citation.

You may attach additional sheet(s) if needed.

To be completed by all bidders

Part D

I certify that the statements made on this document are true and complete to the best of my knowledge and I know that my failure to provide accurate and truthful information may be a reason to reject my bid.

Signed Name: _____

Signature: _____

Firm Name: _____

Date: _____

Email Address: _____

Phone Number: _____

Worksheet: Authorization to Transact Business

This worksheet may be used to help complete Part A of the Resident Bidder Status form. If at least one of the following describes your business, you are authorized to transact business in Iowa.

☐ Yes ☐ No

My business is currently registered as a contractor with the Iowa Division of Labor.

☐ Yes ☐ No

My business is a sole proprietorship and I am an Iowa resident for Iowa income tax purposes.

☐ Yes ☐ No

My business is a general partnership or joint venture. More than 50 percent of the general partners or joint venture parties are residents of Iowa for Iowa income tax purposes.

☐ Yes ☐ No

My business is an active corporation with the Iowa Secretary of State and has paid all fees required by the Secretary of State, has filed its most recent biennial report, and has not filed articles of dissolution.

☐ Yes ☐ No

My business is a corporation whose articles of incorporation are filed in a state other than Iowa, the corporation has received a certificate of authority from the Iowa secretary of state, has filed its most recent biennial report with the secretary of state, and has neither received a certificate of withdrawal from the secretary of state nor had its authority revoked.

☐ Yes ☐ No

My business is a limited liability partnership which has filed a statement of qualification in this state and the statement has not been canceled.

☐ Yes ☐ No

My business is a limited liability partnership which has filed a statement of qualification in a state other than Iowa, has filed a statement of foreign qualification in Iowa and a statement of cancellation has not been filed.

☐ Yes ☐ No

My business is a limited partnership or limited liability limited partnership which has filed a certificate of limited partnership in this state, and has not filed a statement of termination.

☐ Yes ☐ No

My business is a limited partnership or a limited liability limited partnership whose certificate of limited partnership is filed in a state other than Iowa, the limited partnership or limited liability limited partnership has received notification from the Iowa secretary of state that the application for certificate of authority has been approved and no notice of cancellation has been filed by the limited partnership or the limited liability limited partnership.

☐ Yes ☐ No

My business is a limited liability company whose certificate of organization is filed in Iowa and has not filed a statement of termination.

☐ Yes ☐ No

My business is a limited liability company whose certificate of organization is filed in a state other than Iowa, has received a certificate of authority to transact business in Iowa and the certificate has not been revoked or canceled.

THIS CONTRACT is by and between _____ (Owner) and _____ (Contractor).

Owner and Contractor hereby agree as follows:

ARTICLE 1 - WORK

1.1 Contractor shall complete all Work as specified or indicated in the Contract Documents. The Work is generally described as construction of sanitary and storm sewer to separate existing West Hill combined sewer system. Additional work includes general construction of full-width pavement replacement in the West Hill project area.

ARTICLE 2 - THE PROJECT

2.1 The Project for which Work under the Contract Documents may be the whole or only a part is generally described as West Hill Area Sanitary and Storm Sewer Separation – Phase 6D.

ARTICLE 3 - ENGINEER

3.1 The Project has been designed by Stanley Consultants, Inc. who is to assume all responsibilities, and have rights and authority assigned to Owner's Engineering Consultant or Engineer during design and bidding in completion of the Work in accordance with the Contract Documents.

3.2 The Owner will provide a representative to act as Owner's representative, assume all duties and responsibilities, and have the rights and authority assigned to Engineer during construction in the Contract Documents in connection with completion of the Work in accordance with the Contract Documents.

ARTICLE 4 - CONTRACT TIMES

4.1 *Time of the Essence.* All time limits for Milestones, if any, Substantial Completion, and completion and readiness for final payment as stated in the Contract Documents are of the essence of the Contract.

4.2 *Milestones.* Parts of the Work shall be substantially completed on or before the following Milestone(s):

- A. Milestone 1: All pipe and paving work on Hagerman Drive extending from Roscoe Avenue past the driveways for 522 and 523 Hagerman Drive. Substantial completion for this work shall be on or before August 1, 2025 and ready for payment in accordance with 1.08 of Section 1090 of SUDAS Standard Specifications.
- B. Milestone 2: All pipe, paving and restoration work on Hagerman Drive beyond Milestone 1 stopping point to the sewer tie-in location with the Upper West Branch Sewer (UWBS) at manhole ST 5. Substantial completion for this work shall be on or before November 28, 2025 and ready for payment in accordance with 1.08 Section 1090 of SUDAS Standard Specifications.
- C. Milestone 3: All piping in the ravine area between Hagerman Drive and Logan Street and Logan Street storm and sanitary work. Substantial completion for this work shall be on or before April 17, 2026 and ready for payment in accordance with 1.08 of Section 1090 of SUDAS Standard Specifications.
- D. Milestone 4: All remaining project work will be substantially completed on or before November 29, 2026 and completed and ready for final payment in accordance with paragraph 1.08 of Section 1090 of the 2025 SUDAS Standard Specifications on or before December 31, 2026.

4.3 *Liquidated Damages.* Contractor and Owner recognize that time is of the essence as stated in Paragraph 4.1 above and that Owner will suffer financial and other losses if the Work is not completed and Milestones not achieved within the times specified in Paragraph 4.2 A, 4.2B, 4.2C, and 4.2D above, plus any extensions thereof allowed in accordance with the Contract. The parties also recognize the delays, expense, and difficulties involved in proving in a legal or arbitration proceeding the actual loss suffered by Owner if the Work is not completed on time. Accordingly, instead of requiring any such proof, Owner and Contractor agree that as liquidated damages for delay (but not as a penalty):

- A. Substantial Completion: Contractor shall pay Owner \$500.00 for each calendar day that expires after the time (as duly adjusted pursuant to the Contract) specified in Paragraph 4.2 A, 4.2B, 4.2C, and 4.2D above for Substantial Completion until the Work is substantially complete.
- B. Completion of Remaining Work: After Substantial Completion, if Contractor shall neglect, refuse, or fail to complete the remaining Work within the Contract Time (as duly adjusted pursuant to the Contract) for completion and readiness for final payment, Contractor shall pay Owner \$300.00 for each calendar day that expires after such time until the Work is completed and ready for final payment.
- C. Liquidated damages for failing to timely attain Substantial Completion and final completion are not additive and will not be imposed concurrently.

4.4 After Contractor achieves Substantial Completion, if Contractor shall neglect, refuse, or fail to complete the remaining Work within the Contract Times, Contractor shall reimburse Owner for the actual costs reasonably incurred by Owner for engineering, construction observation, inspection, and administrative services needed after the time specified in Paragraph 4.2 for Work to be completed and ready for final payment (as duly adjusted pursuant to the Contract), until the Work is completed and ready for final payment.

ARTICLE 5 - CONTRACT PRICE

5.1 Owner shall pay Contractor for completion of the Work in accordance with the Contract Documents the amounts that follow, subject to adjustment under the Contract:

- A. For all Unit Price Work, an amount equal to the sum of the extended prices (established for each separately identified item of Unit Price Work by multiplying the unit price times the actual quantity of that item). The extended prices for Unit Price Work set forth as of the Effective Date of the Contract are based on estimated quantities. As provided in Paragraph 1.03 of SUDAS Section 1020 of SUDAS Standard Specifications, estimated quantities are not guaranteed, and determinations of actual quantities and classifications are to be made by Engineer.
- B. For all Work, at the prices stated in Document 00 43 22 - Unit Price Schedule, attached hereto as an exhibit.
- C. Total of Bid Prices for all Unit Price Work:

(words)
_____. (\$ _____).
(figures)

ARTICLE 6 - PAYMENT PROCEDURES

6.1 *Submittal and Processing of Payments.* Contractor shall submit Applications for Payment in accordance with Section 1090 of SUDAS Standard Specifications. Applications for Payment will be processed by Engineer as provided in the SUDAS Standard Specifications.

6.2 *Progress Payments; Retainage.* Owner shall make progress payments on account of the Contract Price on the basis of Contractor's Applications for Payment each month during performance of the Work as provided in Paragraph 6.2.A.1 below, provided that such Applications for Payment have been submitted in a timely manner and otherwise meet the requirements of the Contract. All such payments will be measured by the Schedule of Values established on the Unit Price Schedule based on the number of units completed.

- A. Prior to Substantial Completion, progress payments will be made in an amount equal to the percentage indicated below, but, in each case, less the aggregate of payments previously made and less such amounts as Owner may withhold, including but not limited to liquidated damages, in accordance with the Contract:
 - 1. 95% percent of Work completed (with the balance being retainage).

2. 95% of cost of materials and equipment not incorporated in the Work (with the balance being retainage).

- B. Upon Substantial Completion, Owner shall pay an amount sufficient to increase total payments to Contractor to 100% of the Work completed, less such amounts set off by Owner pursuant to Section 1090 of SUDAS Standard Specifications and less 200% of Engineer's estimate of the value of Work to be completed or corrected as shown on the punch list of items to be completed or corrected prior to final payment.

6.3 *Final Payment.* Upon final completion and acceptance of the Work in accordance with paragraph 1.08 of the Section 1090 Measurement and Payment of SUDAS Standard Specifications, Owner shall pay the remainder of the Contract Price as recommended by Engineer as provided in said paragraph 1.08.

ARTICLE 7 - INTEREST

- 7.1 All amounts not paid when due shall bear interest at the maximum rate allowed by law.

ARTICLE 8 - CONTRACTOR'S REPRESENTATIONS

- 8.1 In order to induce Owner to enter into this Contract, Contractor makes the following representations:
 - A. Contractor has examined and carefully studied the Contract Documents, and any data and reference items identified in the Contract Documents.
 - B. Contractor has visited the Site, conducted a thorough, alert visual examination of the Site and adjacent areas, and become familiar with and is satisfied as to the general, local, and Site conditions that may affect cost, progress, and performance of the Work.
 - C. Contractor is familiar with and is satisfied as to all Laws and Regulations that may affect cost, progress, and performance of the Work.
 - D. Contractor has carefully studied all: (1) reports of explorations and tests of subsurface conditions at or adjacent to the Site and all drawings of physical conditions relating to existing surface or subsurface structures at the Site that have been identified in the Special Provisions, especially with respect to Technical Data in such reports and drawings, and (2) reports and drawings relating to Hazardous Environmental Conditions, if any, at or adjacent to the Site that have been identified in the Special Provisions, especially with respect to Technical Data in such reports and drawings.
 - E. Contractor has considered the information known to Contractor itself; information commonly known to contractors doing business in the locality of the Site; information and observations obtained from visits to the Site; the Contract Documents; and the Site-related reports and drawings identified in the Contract Documents, with respect to the effect of such information, observations, and documents on (1) the cost, progress, and performance of the Work; (2) the means, methods, techniques, sequences, and procedures of construction to be employed by Contractor; and (3) Contractor's safety precautions and programs.
 - F. Based on the information and observations referred to in the preceding paragraph, Contractor agrees that no further examinations, investigations, explorations, tests, studies, or data are necessary for the performance of the Work at the Contract Price, within the Contract Times, and in accordance with the other terms and conditions of the Contract.
 - G. Contractor is aware of the general nature of work to be performed by Owner and others at the Site that relates to the Work as indicated in the Contract Documents.
 - H. Contractor has given Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Contractor has discovered in the Contract Documents, and the written resolution thereof by Engineer is acceptable to Contractor.
 - I. The Contract Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performance and furnishing of the Work.

- J. Contractor's entry into this Contract constitutes an incontrovertible representation by Contractor that without exception all prices in the Contract are premised upon performing and furnishing the Work required by the Contract Documents.

ARTICLE 9 - CONTRACT DOCUMENTS

9.1 *Contents:* The Contract Documents consist of the following:

- A. This Contract (pages 1 to , inclusive).
- B. Section 00 43 22 Unit Price Schedule
- C. Performance and Payment Bond (pages 1 to , inclusive).
- D. SUDAS General Provisions and Covenants (pages 1 to 74, inclusive).
- E. Special Provisions (pages 1 to , inclusive).
- F. SRF provisions and specifications (SRF Attachments 1 thru 10);
- G. Davis Bacon Wage Rates
- H. Specifications as listed in Project Manual table of contents.
- I. Drawings as listed on the Drawing Index Sheet.
- J. Addenda numbers to , inclusive.
- K. Exhibits to this Contract (enumerated as follows):
- L. The following which may be delivered or issued on or after the Effective Date of the Contract and are not attached hereto:
 - 1. Notice to Proceed.
 - 2. Instructions to Contractors.
 - 3. Change Orders.
 - 4. Field Orders.

9.2 The documents listed in paragraph 9.1 are attached to this Contract (except as expressly noted otherwise above).

9.3 There are no Contract Documents other than those listed above in this Article 9.

9.4 The Contract Documents may only be amended, modified, or supplemented as provided in the General Conditions.

ARTICLE 10 - MISCELLANEOUS

10.1 *Terms.* Terms used in this Contract will have the meanings indicated in the SUDAS General Provisions and Covenants and the Special Provisions.

10.2 *Assignment of Contract.* Unless expressly agreed to elsewhere in the Contract, no assignment by a party hereto of any rights under or interests in the Contract will be binding on another party hereto without the written consent of the party sought to be bound; and, specifically but without limitation, money that may become due and money that is due may not be assigned without such consent (except to the extent that the effect of this restriction may be limited by law), and unless specifically stated to the contrary in any written consent to an assignment, no assignment will release or discharge the assignor from any duty or responsibility under the Contract Documents.

10.3 *Successors and Assigns.* Owner and Contractor each binds itself, its successors, assigns, and legal representatives to the other party hereto, its successors, assigns, and legal representatives in respect to all covenants, agreements, and obligations contained in the Contract Documents.

10.4 *Severability.* Any provision or part of the Contract Documents held to be void or unenforceable under any Law or Regulation shall be deemed stricken, and all remaining provisions shall continue to be valid and binding upon Owner and Contractor, who agree that the Contract Documents shall be reformed to replace such stricken provision or part thereof with a valid and enforceable provision that comes as close as possible to expressing the intention of the stricken provision.

10.5 *Contractor's Certification.* Contractor certifies that it has not engaged in corrupt, fraudulent, collusive, or coercive practices in competing for or in executing the Contract. For the purposes of this Paragraph 10.5:

- A. "corrupt practice" means the offering, giving, receiving, or soliciting of any thing of value likely to influence the action of a public official in the bidding process or in the Contract execution;
- B. "fraudulent practice" means an intentional misrepresentation of facts made (a) to influence the bidding process or the execution of the Contract to the detriment of Owner, (b) to establish Bid or Contract prices at artificial non-competitive levels, or (c) to deprive Owner of the benefits of free and open competition;
- C. "collusive practice" means a scheme or arrangement between two or more Bidders, with or without the knowledge of Owner, a purpose of which is to establish Bid prices at artificial, non-competitive levels; and
- D. "coercive practice" means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the bidding process or affect the execution of the Contract.

10.6 *Other Provisions.* Owner stipulates that the General Conditions that are made a part of this Contract are based on 2025 SUDAS Standard Specifications – Division 1 General Provisions and Covenants for the Construction Contract, published by the Iowa Statewide Urban Design and Specifications (SUDAS) Program and Owner is the party that has furnished said General Conditions, and has plainly shown all modifications to the standard wording of such published document to the Contractor in the Special Provisions.

IN WITNESS WHEREOF, Owner and Contractor have signed this Contract. This Contract will be effective on _____, 2025 (which is the Effective Date of the Contract).

OWNER:

By: _____

Title: _____

Attest _____

Title: _____

Address for giving notices:

(If Owner is a corporation, attach evidence of authority to sign. If Owner is a public body, attach evidence of authority to sign and resolution or other documents authorizing execution of Owner-Contractor Contract.)

CONTRACTOR:

By: _____

Title: _____

(If Contractor is a corporation, a partnership, or a joint venture, attach evidence of authority to sign.)

Attest _____

Title: _____

Address for giving notices:

License No. _____
(Where applicable)

END OF DOCUMENT

PERFORMANCE AND PAYMENT BOND

KNOW ALL MEN BY THESE PRESENTS THAT, a Principal, hereinafter called the Contractor and

(Here insert the legal title of Surety)

as Surety, hereinafter called the Surety, are held and firmly bound unto City of Muscatine, Muscatine County, Iowa as Oblige, hereinafter called the Owner, in the amount of

DOLLARS (\$_____) for the payment whereof Contractor and Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, Contractor has by written agreement dated _____, 2025, entered into a Contract with Owner for

WEST HILL AREA SANITARY AND STORM SEWER SEPARATION– PHASE 6D
PROJECT

in accordance with drawings and specifications prepared by Stanley Consultants, Inc., Muscatine, Iowa, which Contract is by reference made a part hereof, and is hereinafter referred to as the Contract.

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION is such that, if Contractor shall promptly and faithfully perform said Contract, then the obligation of this bond shall be null and void; otherwise it shall remain in full force and effect.

A. The Surety hereby waives notice of any alteration by Owner to be, in default under the Contract, the Owner having performed Owner's obligations thereunder, the Surety may promptly remedy the default, or shall promptly:

1. Complete the Contract in accordance with its terms and conditions, or
2. Obtain a bid or bids for submission to Owner for completing the Contract in accordance with its terms and conditions, and upon determination by Owner and Surety of the lowest responsible bidder, arrange for a contract between such bidder and Owner, and make available as work progresses (even though there should be a default or a succession or defaults under the contract or contracts of completion arranged under this paragraph) sufficient funds to pay the cost of completion less the balance of the Contract Price; but not exceeding, including other costs and damages for which the Surety may be liable hereunder, the amount set forth in the first paragraph hereof. The term "Balance of the Contract Price", as used in this paragraph, shall mean the total amount payable by Owner to Contractor under the Contract and any amendments thereto, less the amount properly paid by Owner to

Contractor.

- B. The Contractor and his surety shall be obligated to remedy any defects in workmanship or materials that may develop in the improvements covered by this bond for a period of two (2) years from the date of acceptance of the improvements by the owner.
- C. Any suit under this bond must be instituted before the expiration of two (2) years from the date on which final payment under the contract falls due.
- D. No right of action shall accrue to or for the use of any person or corporation other than the Owner named herein or the heirs, executors, administrators or successors of Owner.

IT IS A FURTHER CONDITION OF THIS OBLIGATION that the principal and surety shall, in accordance with the provisions of Chapter 573 of the Code of Iowa, pay to all persons, firms or corporations having contracts directly with the principal or with subcontractors all just claims due them for labor performed or materials furnished in the performance of the contract on account of which this bond is given.

The provisions of Chapter 573, Code of Iowa, are a part of this bond to the same extent as if they were expressly set out herein.

SIGNED AND SEALED THIS _____ DAY OF _____, A.D. 2025.

IN THE PRESENCE OF:

PRINCIPAL

WITNESS

TITLE

SURETY

Table of Contents

Section 1010 - Definitions	Page No.
1.01 Description	1
1.02 Abbreviations	1
1.03 Definitions and Terms	2
Section 1020 - Proposal Requirements and Conditions	
1.01 Qualification of the Bidders	1
1.02 Contents of the Proposal Forms	1
1.03 Quantities and Unit Prices	1
1.04 Examination of the Contract Documents and Site of Work	2
1.05 Interpretation of the Contract Documents	2
1.06 Addendum	3
1.07 Preference for Labor and Materials	3
1.08 Taxes	3
1.09 Preparation of the Proposal	4
1.10 Bidders Certification	5
1.11 Irregular and Nonresponsive Proposals	5
1.12 Submission of the Proposal, Identity of Bidder, and Bid Security	6
1.13 Withdrawal or Revision of the Proposal Prior to Opening of Proposals	6
1.14 Opening of Proposals	7
1.15 Limitation on Withdrawal of Proposals After Opening of Proposals	7
Section 1030 - Approval for Award and Award of Contract	
1.01 Acceptance or Rejection of Proposals	1
1.02 Release of Bid Security	2
1.03 Award of Contract	2
Section 1040 - Scope of Work	
1.01 Intent of the Contract Documents	1
1.02 Correlation of the Contract Documents	1
1.03 Coordination of Specifications, Plans, and Special Provisions	1
1.04 Conformity with the Contract Documents	2

Section 1040 - Scope of Work (Continued)	Page No.
1.05 Plans	2
1.06 Increase or Decrease of Work	2
1.07 Change Orders	3
1.08 Site Conditions	3
1.09 Changed Site Conditions	4
1.10 Disputed Claims for Extra Compensation	4
1.11 Delays Caused by the Jurisdiction	6
1.12 Oral Agreements, Conversations, and Informal Communications	6
1.13 Errors or Omissions	6
Section 1050 - Control of Work	
1.01 Authority of the Engineer	1
1.02 Authority and Duties of the Engineer's Authorized Representative	1
1.03 Cooperation by the Contractor	2
1.04 Cooperation with Other Contractors	2
1.05 Shop Drawings, Certificates, and Equipment Lists	3
1.06 Conflict Avoidance	3
1.07 Examination of Materials and Work	3
1.08 Removal of Defective Work and Materials	4
1.09 Unauthorized Work	4
1.10 Line and Grade Stakes	4
1.11 Providing Job Site Utilities	5
1.12 Salvage	5
1.13 Protection of Water Quality and Wetlands	5
1.14 Final Inspection and Acceptance	5
1.15 Additional Contractor Responsibilities	6
Section 1060 - Control of Materials	
1.01 Materials Source of Supply and Quality Requirements	1
1.02 Alternate Processes, Equipment, or Materials and Other Substitutions	1
1.03 Samples and Testing	3
1.04 Storage of Materials	3

Section 1060 - Control of Materials (Continued)	Page No.
1.01 Unacceptable Materials	3
1.02 Materials Supplied by the Jurisdiction	3
1.03 Materials Supplied by the Contractor	3
Section 1070 - Legal Relations and Responsibility to the Public	
Part 1 - Legal Relations	
1.01 Municipal Regulations, State, and Federal Laws and Regulations	1
1.02 Governing Law	2
1.03 Permits and Licenses	2
1.04 Patents and Royalties	2
1.05 Use and Occupancy Prior to Completion of Contract	2
1.06 Contractor's Responsibility for the Work	2
1.07 Responsibility for Damage Claims	3
1.08 Personal Liability of Public Officials	3
1.09 Waiver of Legal Rights	3
1.10 Acceptance by the Jurisdiction - Not a Waiver of Contractor's Obligations or a Waiver of the Jurisdiction's Rights	3
1.11 Business Organization Requirements	4
1.12 Consent to Jurisdiction of Iowa District Court or Federal District Court in Iowa	5
1.13 Severability	5
Part 2 - Responsibilities to the Public	
2.01 Sanitation	6
2.02 Convenience and Safety	6
2.03 Work Area	7
2.04 Project Area for the Work	7
2.05 Explosives	8
2.06 Traffic Control	8
2.07 Protection of Aboveground and Underground Facilities	9
2.08 Protection of Property	9
2.09 Land Monuments	10

Section 1070 - Legal Relations and Responsibility to the Public (Continued)	Page No.
2.10 Dust Control	10
2.11 Environmental and Historic Items	10
2.12 Railroad Crossings	10
2.13 Borrow and Waste Sites	10
2.14 Maintaining Postal Service	11
2.15 Finishing and Cleanup Requirements	11
 Part 3 - Bonds and Insurance	
3.01 Performance, Payment, and Maintenance Bond	12
3.02 Insurance Requirements	12
3.03 Contractor's Indemnity - Contractual Liability Insurance	14
3.04 Contractor's Insurance for Other Losses; Waiver of Subrogation	15
3.05 Property Insurance	16
3.06 Endorsement Naming Jurisdiction as an Additional Insured / Cancellation and Material Change / Governmental Immunities Endorsement	18
3.07 Proof of Insurance	19
3.08 Notification in Event of Liability or Damage	20
3.09 Sample Insurance Forms - See www.iowasudas.org	20
 Section 1080 - Prosecution and Progress	
1.01 Subletting or Assignment of Contract	1
1.02 Contract Time	2
1.03 Work Progress and Schedule	3
1.04 Preconstruction Conference	3
1.05 Notice to Proceed	3
1.06 Weekly Record of Working Days	3
1.07 Work on Sundays or Legal Holidays	4
1.08 Temporary Suspension of Working Days	5
1.09 Extension of Time	5
1.10 Contractor's Employees, Methods, and Equipment	6
1.11 Contractor's Equipment Identification	7

Section 1080 - Prosecution and Progress (Continued)	Page No.
1.12 Liquidated Damages	7
1.13 Breach of Contract	8
1.14 Termination of Contractor's Responsibility	9
Section 1090 - Measurement and Payment	
1.01 Measurement	1
1.02 Scope of Payment	1
1.03 Lump Sum Breakdowns	1
1.04 Payment for Change Orders	1
1.05 Progress Payments	2
1.06 Payment of Retainage	2
1.07 Sales and Use Tax Statement	3
1.08 Acceptance and Final Payment	3

DEFINITIONS**1.01 DESCRIPTION**

Wherever the following definitions, terms, and abbreviations, or pronouns in place of them, are used in the plans, specifications, or other contract documents, the intent and meaning shall be interpreted as specified in this Section.

1.02 ABBREVIATIONS

Wherever in these specifications and contract documents the following abbreviations are used, they shall be understood to mean as follows: The serial designation of each reference shall be the latest year of adoption or revision, unless otherwise specified.

AAN - American Association of Nurserymen
AAR - Association of American Railroads
AASHTO (or AASHO) - American Association of State Highway and Transportation Officials
ACI - American Concrete Institute
AIA - American Institute of Architects
AMG - Automated Machine Guidance
ANSI - American National Standards Institute
API - American Petroleum Institute
APWA - American Public Works Association
ARA - American Railway Association
AREA - American Railway Engineering Association
ASA - America Standards Association
ASCE - American Society of Civil Engineers
ASLA - American Society of Landscape Architects
ASTM - American Society for Testing and Materials
AWPA - American Wood Preservers Association
AWS - American Welding Society
AWWA - American Water Works Association
BSC - Bituminous Seal Coat
CFR - Code of Federal Regulations
CLSM - Controlled Low Strength Material
CMP - Corrugated Metal Pipe
CPM - Critical Path Method
CRSI - Concrete Reinforcing Steel Institute
DIP - Ductile Iron Pipe
DNR - Department of Natural Resources
DOT - Department of Transportation
EEI - Edison Electric Institute
EPA - Environmental Protection Agency
FHWA - Federal Highway Administration
FSS - Federal Specification and Standards
ESAL - Equivalent Single Axle Load
GGBFS - Ground Granulated Blast Furnace Slag
GPS - Global Positioning System
GRI - Geosynthetic Research Institute
HDPE - High Density Polyethylene Pipe
HMA - Hot Mix Asphalt
IAC - Iowa Administrative Code
IEEE - Institute of Electrical and Electronics Engineers
IES - Illuminating Engineering Society
ICEA (or IPCEA) - Insulated Cable Engineers Association
IMSA - International Municipal Signal Association, Inc.
ISO - Insurance Services Office
ITE - Institute of Transportation Engineers
JMF - Job Mix Formula

1.02 ABBREVIATIONS (Continued)

MAPLE - Materials Approved Product List Enterprise
MGAL - 1,000 Gallons
MUTCD - Manual on Uniform Traffic Control Devices
NEC - National Electrical Code
NEMA - National Electrical Manufacturers Association
NFPA - National Fire Protection Association
NPDES - National Pollutant Discharge Elimination
NSF - National Sanitation Foundation
OSHA - Occupational Safety of Health Administration
PCC - Portland Cement Concrete
PLS - Pure Live Seed
PROWAG - Public Right-of-Way Accessibility Guidelines
PVC - Polyvinyl Chloride
RAP - Recycled Asphalt Pavement
RCAP - Reinforced Concrete Arch Pipe
RCP - Reinforced Concrete Pipe
SAE - Society of Automotive Engineers
SDR - Standard Dimension Ratio
SSPC - Steel Structures Painting Council
SUDAS - Statewide Urban Design and Specifications
SWPPP - Stormwater Pollution Prevention Plan
UL - Underwriters' Laboratories, Inc.
US - United States
USC - United States Code
VCP - Vitrified Clay Pipe

1.03 DEFINITIONS AND TERMS

ADDENDUM. A revision to the contract documents written and issued after the notice to bidders, and prior to the time for receipt of proposals. Changes reflected in the Addendum shall govern over all other contract documents.

ALLEY. See Street.

APPROVED EQUAL (EQUIVALENT). A product, process, equipment, or material that, upon approval of the Engineer, is determined to meet or exceed the requirements called for by the specifications. Upon approval, the item will be allowed in lieu of the specified material, process, equipment, or product.

AWARD. The acceptance of the proposal of the lowest responsive, responsible bidder for the work, which shall not be binding upon the Contracting Authority until the contract for the said work has been executed by the bidder and by the Contracting Authority and bond(s) has been provided by the bidder as required by law.

BID. A properly signed and guaranteed written offer of the bidder containing the bid amount to perform the work. Bid is the same as Proposal.

BID AMOUNT. The aggregate sum obtained by totaling the amounts arrived at by multiplying the quantity of each bid item, as shown in the bid or proposal, by the unit price specified in the proposal for that bid item, including lump sum bid items.

BID ITEM. A specifically described unit of work for which a price is provided in the proposal. A bid item may also be referred to as a contract item.

BID SECURITY. The security furnished by the bidder with its bid as guaranty that the bidder will execute the contract and furnish bond for the work if the proposal is accepted. For bids submitted to governmental entities, the bidder shall furnish bid security as defined in Iowa Code Chapter 26.

1.03 DEFINITIONS AND TERMS (Continued)

BIDDER. Any individual, firm, partnership, joint venture, corporation, or association licensed or otherwise authorized by law to do business where the work is located, which has submitted a proposal for the work, acting directly or through a duly authorized representative.

CALENDAR DAY. Every day shown on the calendar.

CHANGE ORDER. A written order to the Contractor signed and approved by the Contracting Authority, ordering a change in the work from that originally shown by the plans and specifications. Change orders duly signed and executed by the Contracting Authority and the Contractor shall constitute authorized modifications of the contract.

COMMENCEMENT OF WORK. Work will be considered commenced when the Contractor's operations are started on items of work covered by the contract documents, or when the Contractor notifies the Engineer, and the Engineer agrees, that the Contractor's equipment and personnel are available to the site but the operations are prevented by conditions outside the Contractor's control.

COMPETITIVE QUOTATION. A properly signed written offer of the Contractor according to Iowa Code Chapter 26.

CONTRACT. The written agreement, between the Contractor and the Contracting Authority, setting forth the terms and conditions under which the work is to be performed. The contract includes all contract documents.

CONTRACT AMOUNT. The bid amount plus approved change orders.

CONTRACT DOCUMENTS. The contract documents consist of the following: The notice to bidders and notice of public hearing; the instructions to bidders; special provisions; standard specifications; general supplemental specifications; supplemental specifications; plans; addenda; proposal; contract; performance, payment, and maintenance bond; insurance certificate(s); Notice to Proceed; and change orders. These documents form the agreement whereby the Contractor will furnish all labor, equipment, tools, and materials, and perform all work necessary to satisfactorily accomplish the proposed improvement. The contract documents are complementary and what is called for by one shall be as binding as if called for by all.

CONTRACTING AUTHORITY. The body, entity, board, commission, officer, or governmental entity having authority to award a contract.

CONTRACTOR. The individual, firm, partnership or corporation, and the heirs, executors, administrators, successors and assigns thereof, or the lawful agent of any such individual, firm, partnership, or corporation, or the surety thereof under the contract bond, constituting one of the principals to the contract and undertaking to perform the work herein specified. Where the pronoun "it" is used as referring to the word "Contractor" it shall mean the Contractor as defined above.

CONTROLLING ITEM OF WORK. The unique activity of a contract that will determine the duration of the construction period or if a working day is charged. The character of this work may change during the project. It is the work that could be in progress at any time that would have the greatest influence on the duration of the project.

CULVERT. A structure not classified as a bridge or storm sewer which provides an opening under a roadway or embankment, except that such term shall not include tiles crossing the road, or intakes thereto, where such tiles are part of a tile line or system designed to aid subsurface drainage.

1.03 DEFINITIONS AND TERMS (Continued)

DEPARTMENT OF TRANSPORTATION, (THE DEPARTMENT). The Department of Transportation, as defined in Iowa Code Chapter 307.

EMPLOYEE. Any person working on the project mentioned in the contract of which these specifications are a part, and who is under the direction or control, or receives compensation from, the Contractor or subcontractor.

ENGINEER. For publicly owned projects, the Engineer is a Professional Engineer licensed in the State of Iowa and is the authorized representative of the Contracting Authority. For privately contracted projects, with improvements that are to become publicly owned, the Engineer is the Professional Engineer licensed in the State of Iowa and is the authorized representative of the Jurisdiction ultimately accepting ownership of the improvement. For all other projects, the Engineer is the Professional Engineer licensed in the State of Iowa and is the owner's authorized representative. The Engineer may act directly or through duly authorized representatives.

EQUIPMENT. All machinery and equipment, together with the necessary supplies for upkeep and maintenance, and also tools and apparatus necessary for the proper construction and acceptable completion of the work.

EXTRA WORK. Work not provided for in the contract, as awarded, but deemed essential to the satisfactory completion of the contract and authorized by the Engineer. Extra work shall not include additional materials, equipment, and labor used due to natural variations in surface and subsurface conditions, except as specifically provided for elsewhere in the contract documents.

GENERAL SUPPLEMENTAL SPECIFICATIONS. Specifications approved by the Board of Directors for the Iowa SUDAS Corporation subsequent to publication of the latest edition of the SUDAS Standard Specifications. They involve changes in the SUDAS Standard Specifications and apply only when specified in the contract documents.

GOVERNMENTAL ENTITY. As defined in Iowa Code Chapter 26.

IMPROVEMENT. Shall mean any public improvements as defined in Iowa Code Chapter 26 and shall also include highway, bridge, or culvert projects.

INCIDENTAL ITEMS. Materials, equipment, or labor essential for the proper completion of the work that are not specified as bid items in the contract documents and the cost of which shall be included in other bid items.

INSPECTOR. The authorized representative of the Engineer assigned to make a detailed inspection of any or all portions of the work, or materials.

IOWA DEPARTMENT OF TRANSPORTATION (DOT) STANDARD SPECIFICATIONS. The Iowa Department of Transportation Standard Specifications for Highway and Bridge Construction and the General Supplemental Specifications effective at the date of publication of the Notice to Bidders unless a different effective date is identified in the contract documents.

JOINT VENTURE. The joining of two or more contractors for the purpose of combining equipment, personnel, and finances in order to submit a bid on a single project.

JURISDICTION. A governmental entity or the Iowa Department of Transportation, acting through its governing body, or through the authorized representatives of such governing body when so authorized.

JURISDICTIONAL ENGINEER. See Engineer.

1.03 DEFINITIONS AND TERMS (Continued)

LABORATORY. The testing laboratory of the Jurisdiction, or any other testing laboratory which may be designated by the Engineer.

LIQUIDATED DAMAGES. The dollar amount established by the Contracting Authority and set forth in the contract documents as compensation for the damage to the Contracting Authority, or public, for delay in completion of the work, to be paid to the Contracting Authority, or to be deducted from any payments due or to become due the Contractor.

LUMP SUM. Unit of measurement for a bid item where no direct measurement will be made. The bid item amount is complete payment for all work described in the contract documents and necessary to complete the work for that item. The estimated quantities of lump sum work shown in the contract documents are approximate.

MAPLE. Iowa DOT's materials approved product list enterprise. MAPLE contains a searchable database of most of the approved products, sources, producers, and suppliers of materials for Iowa highway projects. MAPLE may be searched by the brand/product name, producer, Iowa DOT Materials Instructional Memorandum (IM) number, or material name. New approvals are continually added as Iowa DOT approves them for use.

MATERIALS. Any substances specified for the use in the construction of the project and its appurtenances.

MATERIALS INSTRUCTIONAL MEMORANDUM (MATERIALS I.M.). This is an instruction prepared by the Iowa DOT's Construction and Materials Bureau. These may identify approved sources of various qualities or types of materials, sampling, testing, and approval procedures, and conditions for acceptance and use.

MEDIAN. The portion of a divided roadway separating the traveled ways for traffic.

MOBILIZATION. Mobilization shall consist of preparatory work and operations for all items under the contract, including, but not limited to, those necessary for the movement of personnel, equipment, supplies, and incidentals to the project site, and for the establishment of all offices, buildings, and other facilities, which must be performed or costs incurred prior to beginning work on the various items on the project site.

NOTICE OF PUBLIC HEARING. The public announcement or publication by the governmental entity, as required under Iowa Code Chapter 26, notifying the public of the time and place where any interested person may appear and file objections to the proposed plans, specifications, contract, or estimated cost of the improvement.

NOTICE TO BIDDERS. The public announcement, publication, or solicitation by the Contracting Authority, inviting bids for work to be performed or materials to be furnished as required by Iowa Code Chapter 26.

NOTICE TO PROCEED. A written notice to the Contractor issued by the Engineer stating the date, on or before which, the Contractor is to begin the work. The date set forth in this notice shall be considered as the official starting date.

PERFORMANCE, PAYMENT, AND MAINTENANCE BOND. The bond submitted by the designated low bidder, in the amount specified in the contract documents, for the faithful performance of the contract and the terms and conditions therein contained, for payment for all labor and materials provided, and for maintenance of improvements in good repair for the specified number of years from the time of acceptance of the improvements by the Jurisdiction.

1.03 DEFINITIONS AND TERMS (Continued)

PLANS. Plans are the official drawings, standard plans, profiles, typical cross-sections, and supplemental drawings or reproductions thereof, approved and furnished by the Jurisdiction, which show the location, character, dimensions, and details of the work. All such documents are to be considered as a part of the plans whether attached to the plans or separate.

PROFILE GRADE. The trace of a vertical plan intersecting the top surface of the proposed wearing surface, usually along the longitudinal center line of the roadbed. Profile grade means either elevation or gradient or such trace, according to the context.

PROJECT AREA. The area of the specified project limits shown on the plans, and any additional area which is necessary for the Contractor to place traffic control devices required by the contract documents or necessary to protect the work.

PROPOSAL. The proposal is a properly signed and guaranteed written offer of the bidder containing the bid amount to perform the work. Proposal is the same as Bid.

PROPOSAL FORM. A form provided by the Jurisdiction, to the bidder, containing a listing of the bid items and quantities, and locations to enter unit prices and the bid amount.

PROWAG. The July 26, 2011 "Proposed Accessibility Guidelines for Pedestrian Facilities in the Public Right-of-Way" was written by the US Access Board and is also known as the Public Right-of-Way Accessibility Guidelines or PROWAG.

RESIDENT BIDDER. A person or entity authorized to transact business in this state and having a place of business for transacting business within the state at which it is conducting and has conducted business for at least three years prior to the date of the first advertisement for the public improvement. If another state or foreign country has a more stringent definition of a resident bidder, the more stringent definition is applicable as to bidders from that state or foreign country.

RESPONSIVE, RESPONSIBLE BID. A bid submitted in accordance with the Notice to Bidders by a bidder that acknowledged all addenda, that responded to all proposal requirements, and that agreed to do everything required by the plans and specifications and other bid documents without any conditions, qualifications, or exclusions.

A bid submitted by a bidder that is capable of performing the work, possess the necessary financial and technical capability to perform the work, as well as the ability to complete the work in a timely and acceptable manner as demonstrated by past performance or other appropriate considerations, including but not limited to the ability to obtain and maintain insurance and bonding requirements.

RESPONSIVE, RESPONSIBLE BIDDER. A bidder that has submitted a bid that has been determined by the governmental entity to be both responsive and responsible.

RIGHT-OF-WAY. The land area of which the right to possession is secured or reserved by the Jurisdiction for the project, including permanent roadway easements.

ROAD. See Street.

ROADBED. The area of the roadway between the tops of foreslopes.

ROADWAY. The portion of the right-of-way designated or ordinarily used for vehicular travel.

SHOP DRAWINGS. Information and details for materials, products, or equipment to be supplied for the project, which are typically delivered to the project in an assembled or ready-to-use condition.

1.03 DEFINITIONS AND TERMS (Continued)

SHOULDER. That portion of the roadbed contiguous with the traveled way for accommodation of stopped vehicles, for emergency use, and for lateral support of base and surface courses.

SIDEWALK. That portion of the street primarily constructed for the use of pedestrians.

SLOPE. The inclination of a line or surface expressed as a ratio of horizontal distance to vertical distance.

SPECIAL PROVISIONS. Additions and revisions to the SUDAS Standard, General, and Supplemental Specifications covering conditions peculiar to an individual project. They only apply to a project when specified in the contract documents.

SPECIALTY ITEMS. Portions of work designated in the contract documents requiring equipment, skills, or crafts not ordinarily associated with the expertise of the Contractor or the major types of work covered by the contract; typically including, but not limited to, earthwork for building construction, electrical, mechanical, masonry, roofing, drywalling, floor covering, glass and glazing, painting, conveying systems, etc.

SPECIFICATIONS. The general term comprising all the written directions, provisions, and requirements including the SUDAS Standard Specifications and those added or adopted as Supplemental Specifications or Special Provisions all of which are necessary for the proper performance of the contract.

SPEED LIMIT. Refers to the legally established speed limit before construction and not the advisory speed during construction.

STANDARD ROAD PLAN. The Iowa Department of Transportation's manual of detailed drawings showing standardized design features, construction methods, and approved materials.

STATE. The State of Iowa acting through its authorized representatives.

STATION. One hundred linear feet.

STREET. A general term denoting public way for vehicular travel, including the entire area within the right-of-way.

SUBBASE. The layer or layers of specified or selected material of designed thickness upon which a base course or pavement is constructed.

SUBCONTRACTOR. The subcontractor is any individual, firm, partnership, joint venture, corporation, or association to whom the Contractor, with the written consent of the Jurisdiction, sublets a part of the work.

SUBGRADE. The top surfaced of a roadbed upon which the pavement structure and shoulders are constructed.

SUDAS STANDARD SPECIFICATIONS. The requirements contained herein applying to the contract, and pertaining to the method and manner of performing the work, or to the quantity and quality of the materials to be furnished under the contract. Previously referred to as the Iowa Statewide Urban Standard Specifications for Public Improvements.

SUPERINTENDENT. The Contractor's authorized representative in responsible charge of the work.

SUPPLEMENTAL CONTRACT (AGREEMENT). Written agreement between the Contractor and Contracting Authority modifying the original contract pursuant to the Iowa Code.

1.03 DEFINITIONS AND TERMS (Continued)

SUPPLEMENTAL SPECIFICATIONS. Specifications adopted by a Jurisdiction that involve changes to the SUDAS Standard Specifications. They only apply to a project when specified in the contract documents.

SURETY. The corporation, partnership, or individual, other than the Contractor, executing a bond furnished by the Contractor.

TARGET VALUE. When a target or target value is specified, a continuous and determined effort is expected to reach and maintain that value, as a goal.

UNAUTHORIZED WORK. Unauthorized work is work done contrary to, in addition to, or regardless of, the contract documents, or the instruction of the Engineer; work done without lines, grade, and/or cross-section stakes and grades shown on the plans or as given by the Engineer; or work done in deviation from the contract documents without written authority.

UTILITY. Includes all privately, publicly, municipally, or co-operatively owned structures and systems for supplying water, sewer, electric lights, street lights and traffic lights, gas, power, telegraph, telephone, communications, transit, pipelines, and the like.

UTILITY AGENCY. Means and includes (1) all franchised utilities having utility system facilities within the Jurisdiction, including but not limited to gas, electric, telephone, cable television, and communications; (2) communications systems licensed by the Jurisdiction; and (3) all governmental agencies owning or operating governmental utility systems, including but not limited to water, sewer, traffic control, and communications.

WORK. The work shall mean the furnishing of all labor, materials, equipment, and other incidentals necessary for construction of the improvement, successful completion of the contract, and the carrying out of all duties and obligations imposed by the Contract, including the submission of all necessary paperwork relating to payrolls, sales tax, warranties, owner's manuals, maintenance manuals, and the like.

WORKING DAY. Any calendar day, exclusive of Saturdays, Sundays, or a recognized legal holiday, on which weather or other conditions (not under control of the Contractor) will permit construction operations to proceed for not less than 3/4 of a normal work day in the performance of a controlling item of work.

END OF SECTION

PROPOSAL REQUIREMENTS AND CONDITIONS**1.01 QUALIFICATION OF THE BIDDERS**

- A. The Jurisdiction reserves the right to reject any bid that is not responsive to the proposal form or contract documents, or not submitted by a responsive, responsible bidder.
- B. Upon request of the Engineer, the apparent lowest responsive bidder, whose bid is under consideration for award of a contract, shall submit evidence of its financial resources, construction experience, and organization available for performance of the proposed work. A bidder's ability to promptly secure the required bonds and insurance coverages for the proposed work, as well as the bidder's demonstrated ability to continuously maintain insurance coverages on past projects, may be considered an indication of financial responsibility and the bidder's qualification as a responsive, responsible bidder.

1.02 CONTENTS OF THE PROPOSAL FORMS

- A. Each prospective bidder will be furnished with a proposal form showing the location and description of the proposed work, the approximate quantities of work to be performed for which bid prices are requested, and the completion provisions. The contract documents will contain any special provisions that shall apply to the work to be performed.
- B. The purpose of the contract documents is to require the furnishing of highest quality equipment, material, and workmanship, and best accepted construction practice. The Bidder is expected to base its bid on materials and equipment complying fully with the contract documents. Each bidder, in submitting its bid, acknowledges its willingness to comply with the terms of these contract documents.

1.03 QUANTITIES AND UNIT PRICES

- A. Bidders shall submit a lump sum bid or unit bid price, as required by the proposal for the work covered by the contract documents. Prices shall cover complete work and include all costs incidental thereto.
- B. When unit prices are requested in the proposal form, the quantities indicated on the proposal form are approximate only, and do not constitute a warranty or guarantee by the Jurisdiction as to the actual quantities involved in the work. Such quantities are to be used for the purpose of comparison of bids and determining the amount of bid security, contract, and performance, payment, and maintenance bond. In the event of discrepancies between unit prices and unit price extensions listed in a bidder's proposal, unit prices shall govern and unit price extensions shall be corrected, as necessary, for agreement with unit prices. The Jurisdiction expressly reserves the right to increase or decrease the quantities during construction as outlined in [Section 1040, 1.06 - Increase or Decrease of Work](#), and to make reasonable changes in design, provided such changes do not materially change the intent of the contract. The amount of work to be paid for shall be based upon the actual quantities performed.
- C. The proposal may have a lump sum item for mobilization. The bidder will indicate its bid price in dollars, and this will be the contract price for mobilization.
- D. Materials, equipment, or labor essential for the proper completion of the work that are not specified as bid items in the contract documents and are incidental, and the cost of which shall be included in other bid items.

1.04 EXAMINATION OF THE CONTRACT DOCUMENTS AND SITE OF WORK

- A. By submission of a proposal on the work, the bidder represents that it has carefully examined the site of the proposed work; the plans, specifications, and all other contract documents; and that the bidder is fully informed concerning the requirements of the contract, the physical conditions to be encountered in the work, and the character, quality, and the quantity of work to be performed, as well as materials to be furnished. The Contractor will not be entitled to additional compensation if it subsequently finds that conditions require methods or equipment other than that anticipated by the Contractor in making its proposal, except as provided in [Section 1040, 1.09 - Changed Site Conditions](#).
- B. The attention of the bidder is directed to the fact that contracts for work, other than the proposed work, may have been awarded or may be awarded in the future. Completion of the proposed work may be contingent upon certain work by others or covered by other contracts being performed on the project in advance of this work; likewise, completion of work by others or covered by other contracts may be dependent upon completion of the proposed work. The bidder is expected to become familiar with work already in progress or previously let on this project, the contract periods, the progress being made, and any other conditions regarding work that may affect the bid or the bidder's performance under this contract.
- C. The bidder on this work acknowledges the facts set out in the proceeding paragraph and agrees it is in the public interest to have the work of other contracts and agencies performed concurrently rather than consecutively. The bidder further agrees to cooperate and coordinate the work with other contractors or agencies to the mutual interest of all parties doing work on the project.
- D. By the submission of a bid on this work, the bidder acknowledges and agrees investigation and inquiry has been made regarding the contracts for work with which this work must be coordinated. In the event disputes arise between contractors or other agencies doing work on the project as to their mutual rights or obligations, the Engineer will define the rights of all interested parties regarding the work.
- E. The Jurisdiction does not warrant, impliedly or explicitly, the nature of the work, the conditions that will be encountered by the bidder, the adequacy of the contract documents for the Contractor to perform the work, or the conditions or structures to be encountered under any surface. Any such data supplied on the plans or other contract documents, or interpretation thereof by the Engineer, are merely for the convenience of the prospective bidders, who are to rely upon their own explorations of latent or subsurface site conditions, before completing and filing their proposal, except as provided in [Section 1040, 1.09 - Changed Site Conditions](#).

1.05 INTERPRETATION OF THE CONTRACT DOCUMENTS

If any prospective bidder is in doubt as to the true meaning of any parts of the contract documents, the bidder may request an interpretation from the Engineer. Any interpretation of the contract documents will be made only by an addendum duly mailed or delivered to each prospective bidder who received, or in the future requests, contract documents from the Jurisdiction.

1.06 ADDENDUM

Each bidder will receive a notice of addendum for any changes in the contract documents made prior to the time established for the receipt of bids. The notice will be delivered in the manner chosen by the Jurisdiction to the bidder's business address with an acknowledgement of receipt required. Acknowledgement of the receipt of the addendum will be as provided in the proposal form.

1.07 PREFERENCE FOR LABOR AND MATERIALS

- A. By virtue of statutory authority, preference will be given to products and provisions grown and coal produced within the State of Iowa, and to Iowa domestic labor, to the extent lawfully required under Iowa Code Chapter 73.
- B. Such preferences will not be given where funding requirements, federal or otherwise, prohibit the giving of such preferences.

1.08 TAXES

A. Sales Tax Exemption Certificate: The Jurisdiction, as a designated exempt entity awarding construction contracts, will issue Sales Tax Exemption Certificates to contractors and subcontractors allowing them to purchase, or withdraw from inventory, materials for the contract free from sales tax pursuant to Iowa Code Sections 423.2 and 423.45 and Iowa Administrative Code rule 701-219(423). This Sales Tax Exemption Certificate may also allow a manufacturer of building materials to consume materials in the performance of a construction contract without owing tax on the fabricated cost of those materials.

1. Upon award of contract, the Jurisdiction will register the contract, Contractor, and each subcontractor with the Iowa Department of Revenue and Finance; and distribute Sales Tax Exemption Certificates and authorization letters to the Contractor and each subcontractor duly approved by the Jurisdiction according to [Section 1080, 1.01 - Subletting or Assignment of Contract](#). These documents allow the Contractor and subcontractors to purchase materials for the contract free from sales tax. The Contractor and subcontractors may make copies of the Sales Tax Exemption Certificate and provide a copy to each supplier providing construction material. These Sales Tax Exemption Certificates and authorization letters are applicable only for the work under the contract.
2. At the time the Contractor requests permission to sublet according to [Section 1080, 1.01 - Subletting or Assignment of Contract](#), the Contractor shall provide a listing to the Jurisdiction identifying all subcontractors. For each subcontractor, include the Federal Employee Identification Number (FEIN), contact information, the name of a representative for the organization, a description of the work to be sublet, and the associated cost.
3. The Contractor and each subcontractor shall comply with said Iowa Code sales tax requirements, shall keep records identifying the materials and supplies purchased and verify they were used on the contract, and shall pay tax on any materials purchased tax-free and not used on the contract.

B. Alternate Sales and Use Tax: If the Jurisdiction, at its option, decides to utilize the sales and use tax option, it will so state by special provision and publication in the Notice of Hearing and Letting.

1. The bidders shall include in their proposals all amounts payable by the Contractor for taxes imposed by any taxing authority on the sale, purchase, or use of materials and equipment covered by the contract documents. All taxes of the foregoing description shall be paid by the Contractor.

1.08 TAXES (Continued)

2. After delivery of materials and equipment, the Contractor shall submit to the Jurisdiction a statement (on a current Iowa Department of Revenue form) of all taxes of the foregoing description paid on materials and equipment incorporated in the complete construction. If a Sales Tax Exemption Certificate is issued by the Jurisdiction according to [Section 1020, 1.08, A](#), no statement is required.
- C. Income Tax:** The bidder who is awarded the contract will be subject to payment of Iowa income tax on income from this work in amounts prescribed by law. If such bidder is a non-Iowa partnership, individual, or association, it shall furnish evidence, prior to execution of contract, that bond or securities have been posted with the State of Iowa Department of Revenue in the amount required by law and shall file a certificate issued by the Department, as provided in Iowa Code Section 422.17, releasing the Jurisdiction from withholding any and all sums required by the provision of Iowa Code Section 422.17.

1.09 PREPARATION OF THE PROPOSAL

- A. Proposal:** Proposals shall be legibly written in ink or typed on the forms provided by the Jurisdiction and shall be completely executed by the bidder with the requisite full signatures. The bidder must indicate in the proposal whether the proposal is submitted by an individual, partnership, joint venture, limited liability company, or a corporation. If the proposal is submitted by an artificial entity, it must be executed by an officer of such entity with authority to bind such bidder to perform the contract upon award. The business address of the bidder shall be typed or printed on the proposal. The Bidder Status Form is required by the Iowa Labor Commissioner, pursuant to Iowa Administrative Code rule 875-156.2(1). The bidder must complete the form and submit it with the proposal. Failure to provide the Bidder Status Form with the bid may result in the bid being deemed non-responsive and may result in the bid being rejected. If the bidder does not qualify as a resident bidder, the non-resident bidder shall specify on the Bidder Status Form whether any preference to resident bidders, including but not limited to any preference to bidders, the imposition of any type of labor force preference, or any other form of preferential treatment to bidders or laborers from that state or foreign country is in effect in the non-resident bidder's state or country of domicile at the time of a bid submittal.
- B. Unit Price Attachment:** The Engineer, at its option, may allow the bidder to submit a computer-generated attachment, hereinafter referred to as unit price attachment, in lieu of completing that portion of the proposal identifying the bid items, description, unit, quantity, and unit prices. If the Jurisdiction decides to allow this unit price attachment option, it will so state by special provision.
1. If a unit price attachment is submitted, it shall be attached to the proposal and shall include the following minimum information at the top of each page: project title, letting date, bidder's company name.
 2. The unit price attachment shall have the same columns as the proposal; e.g. item number, description, unit, quantity, unit price, bid amount, etc. for each item. The bid item numbers and order on the unit price attachment shall follow that of the proposal.
 3. The total amount bid shall be entered below the last bid item on the unit price attachment.
 4. The unit price attachment page and print size shall be approximately the same as the proposal. Solid lines for separating the columns and lines need not be printed. Pages should be numbered by page number of the total pages (e.g. Page 1 of 4).
 5. The bidder's company name, as well as the authorized person signature, name, and title, shall be in ink and shall follow the total amount bid; and shall be the same person that signs the proposal.

1.09 PREPARATION OF THE PROPOSAL (Continued)

6. In case of discrepancy in the item number, description, unit, or quantity between the unit price attachment and the proposal, the proposal shall govern. The unit price shown on the unit price attachment shall govern.
 7. The bidder is solely responsible for the content, completeness, and accuracy of all the information contained in the unit price attachment. If the information in the unit price attachment is incomplete, the bid must be considered incomplete and be rejected.
 8. When evaluating and tabulating the bids, the Jurisdiction shall utilize only the unit price as shown on the unit price attachment, and the item number, description, unit, and quantity as shown on the proposal.
- C. The bidder, as a business organization, shall comply with the requirements of [Section 1070, 1.11 - Business Organization Requirements](#).
- D. When unit prices are requested, they shall be submitted on each and every item of work included for which bids are requested. The format for unit prices will be in dollars and whole cents only. In case of discrepancy, the unit price figures shall govern.

1.10 BIDDERS CERTIFICATION

By the submission of its proposal, the bidder certifies its bid is genuine and is not made in the interest of, or on behalf of, any undisclosed person, firm, or corporation; the bidder has not directly or indirectly induced or solicited any other bidder to put in a false or sham bid; the bidder has not solicited or induced any person, firm, or corporation to refrain from bidding; and the bidder has not sought, by collusion or otherwise, to obtain for itself any advantage over any other bidder or over the Jurisdiction.

1.11 IRREGULAR AND NONRESPONSIVE PROPOSALS

- A. Proposals will be considered irregular and may be rejected for any unauthorized changes in the proposal form or for any of the following reasons:
1. If submitted on a form other than that furnished by the Jurisdiction, or if the form is altered or any part thereof is detached or missing;
 2. If the bidder submits an obviously unbalanced bid. An unbalanced bid shall be defined as a bid containing lump sum prices or unit bid prices that do not reflect reasonable actual costs plus a reasonable proportionate share of the bidder's anticipated profit, overhead costs, and other indirect costs to complete that item;
 3. If the proposal does not contain a unit price for each pay item listed, except in the case of authorized alternate pay items; or
 4. If the bidder submits more than one proposal for the same work under the same or different names.
- B. Proposals will be considered nonresponsive and shall be rejected for any of the following reasons:
1. If there are unauthorized additions, conditional or alternate bids, or irregularities of any kind that may tend to make the proposal incomplete, indefinite, or ambiguous as to its meaning;
 2. If the bidder adds any provisions reserving the right to accept or reject an award or to enter into contract pursuant to an award;

1.11 IRREGULAR AND NONRESPONSIVE PROPOSALS (Continued)

3. If a bid on one project is tied to a bid on any other project, except as specifically authorized on the proposal form by the Jurisdiction;
 4. If the bidder makes corrections or alterations to the unit prices it submits and such corrections or alterations are not initialed by the bidder. The Jurisdiction may require the bidder to identify any corrections or alteration so initialed;
 5. If the bidder makes any omission of prices on items shown on the proposal forms, or any addition in writing to the form of the bid, or any condition or limitation on its proposal.
- C. If the bidder notes a requirement in the contract documents it believes will require a conditioned or unsolicited alternate bid, it shall immediately notify the Engineer in writing identifying such requirement. If the Engineer finds that such a requirement does exist in the contract documents, the Jurisdiction will make corrections thereto by an addendum.
- D. Proposals will be evaluated by the Jurisdiction pursuant to the provisions of [Section 1030, 1.01 - Acceptance or Rejection of Proposals](#).

1.12 SUBMISSION OF THE PROPOSAL, IDENTITY OF BIDDER, AND BID SECURITY

- A. The proposal shall be sealed in an envelope, properly identified as the proposal with the project title and the name and address of the bidder, and deposited with the Jurisdiction at or before the time and at the place provided in the Notice to Bidders. It is the sole responsibility of the bidder to see its proposal is delivered to the Jurisdiction prior to the time for opening bids, along with the appropriate bid security sealed in the separate envelope identified as bid security and attached to the outside of the bid proposal envelope. Any proposal received after the scheduled time for the receiving of proposals will be returned to the bidder unopened and will not be considered. If the Jurisdiction provides envelopes for proposals and bid security, bidders shall be required to utilize such envelopes in the submission of their bids.
- B. A corporation, limited liability company, or limited partnership shall bid in the name under which it is registered with the Iowa Secretary of State. A partnership shall bid in the name under which it is registered with the County recorder. An individual operating under a trade name shall bid using the trade name registered with the County recorder if such registration is required. The bidder's exact name as registered, if required, shall appear as the "principal" on any bid bond and shall appear on any cashier's check or share draft submitted to fulfill the bid security requirement. A bidder's failure to satisfy these requirements may be grounds for rejection of the bidder's proposal.

1.13 WITHDRAWAL OR REVISION OF THE PROPOSAL PRIOR TO OPENING OF PROPOSALS

- A. A bidder may request, without prejudice, to withdraw its proposal after it has been deposited with the Jurisdiction, provided such request is made in writing to the Jurisdiction prior to the time set for receiving proposals.
- B. Modifications or corrections to proposals may be made on the withdrawn proposal, provided such modifications or corrections are initialed by the Bidder and are received by the Jurisdiction prior to the time set for receiving proposals. Modifications or corrections to a proposal will not be accepted if the modifications or corrections render the bid security inadequate or if not accompanied by sufficient additional bid security.
- C. If a bidder has requested in writing to withdraw its proposal, said bidder may submit a different proposal and bid security at that time or any time prior to the time set for receiving proposals.

1.14 OPENING OF PROPOSALS

At the time and place set forth in the notice to bidders, proposals will be opened and read aloud. Proposals will be rejected if not accompanied by a bid security submitted in a separate, marked envelope. Submittals that do not include acknowledgement of each addendum to the contract documents will be rejected, except in those instances, in the opinion of the Engineer, where the addendum not acknowledged by a bidder will have no effect on the bid amount. Bid openings will be open to the public.

1.15 LIMITATION ON WITHDRAWAL OF PROPOSALS AFTER OPENING OF PROPOSALS

- A. A bidder shall not withdraw its proposal for period of up to 60 calendar days after the date designated for opening of proposals, or such other period of time specified in the Notice. However, in those projects involving special assessments, and confirmation by the District Court, no bidder shall withdraw its proposal for a period of 30 calendar days after the confirmation of the assessments by the Court.
- B. In the event a bidder desires to withdraw its proposal, it shall make request therefore in writing to the Engineer stating the reasons for such withdrawal.
- C. If requested, the bid security of unsuccessful bidders shall be promptly returned as soon as the successful bidder is determined or within 30 days, whichever is sooner.

END OF SECTION

APPROVAL FOR AWARD AND AWARD OF CONTRACT**1.01 ACCEPTANCE OR REJECTION OF PROPOSALS**

- A. The Jurisdiction reserves the right to accept the proposal that, in its judgment, is the lowest responsive, responsible bid; to award the contract by sections, if so specified in special provisions; to reject any or all proposals; to reject irregular or nonresponsive proposals as defined in [Section 1020, 1.11 - Irregular and Nonresponsive Proposals](#); and to waive irregularities and/or technical deficiencies in the proposals to the extent allowed by law.
- B. An individual, firm, partnership, corporation, or any association under the same or different names shall not submit more than one proposal. When reasonable evidence exists that a bidder has submitted more than one proposal at any letting for the same work under the same or different names, said proposals may be rejected.
- C. Any or all proposals may be rejected if there is reason to believe collusion exists among bidders. Proposals received from participants in such collusion may not be considered for the same work if re-advertised.
- D. Proposals may be rejected if the apparent lowest responsive bidder has failed to promptly meet financial obligations undertaken in connection with other work under contract, or is in default on a previous contract, or has an unsatisfactory record of performance and cooperation on any such previous contract, or has failed to maintain satisfactory progress on work already under contract.
- E. In the event the bid specifies the use of materials, workmanship, methods, or equipment not in conformance with the contract documents, the bid will be rejected. In the event the bid was based on, but did not specify, the use of materials, workmanship, methods, or equipment not in conformance with the contract documents, the bidder will be held responsible for furnishing or using materials, workmanship, methods, and equipment in conformance with the contract documents at no change in the bid price.
- F. When a contract for a public improvement is to be awarded to the lowest responsible bidder, a resident bidder shall be allowed a preference as against a non-resident bidder from a state or foreign country if that state or foreign country gives or requires any preference to bidders from that state or foreign country, including but not limited to any preference to bidders, the imposition of any type of labor force preference, or any other form of preferential treatment to bidders or laborers from that state or foreign country. The preference allowed shall be equal to the preference given or required by the state or foreign country in which the non-resident bidder is a resident. In the instance of a resident labor force preference, a non-resident bidder shall apply the same resident labor force preference to a public improvement in this state as would be required in the construction of a public improvement by the state or foreign country in which the non-resident bidder is a resident. Application of the preference against a non-resident bidder shall be in accordance with the information filed with the proposal on the Bidder Status Form.
- G. Promptly after the proposals are opened and evaluated, the Jurisdiction shall give careful consideration to its needs, available funding, and other project considerations; and shall either designate the lowest responsive, responsible bidder and proceed with award of contract, or reject all bids and reconsider the project.

1.02 RELEASE OF BID SECURITY

- A. After the proposals are opened, verified, and duly considered, the Jurisdiction will promptly release the bid security of all except the lowest two bidders after the Jurisdiction's designation of the lowest responsive, responsible bidder. The bid security of the lowest two bidders will be promptly released after the Jurisdiction's approval of the contract executed by the lowest bidder. If all bids are rejected, all bid security will be promptly released.
- B. Bid security shall be released to bidders, either by making such bid security available for retrieval by bidders, or, if requested by a bidder, by mailing the bid security to the bidder.

1.03 AWARD OF CONTRACT

- A. **Contract Document Submittal:** Within 10 calendar days after notification by the Engineer, unless otherwise provided in the contract documents, the Contractor shall present the signed and executed contract documents, including contract, performance, payment, and maintenance bond; certificate of insurance; and all other items required by the contract documents. The performance, payment, and maintenance bond and insurance certificate shall meet the requirements of [Section 1070, Part 3 - Bonds and Insurance](#) as required by the Jurisdiction. The Jurisdiction will thereupon receive and file such documents and award the contract.
- B. **Deferred Award:** The Jurisdiction reserves the right to defer award of any contract for a period not to exceed 60 calendar days from the date of opening of proposals. No claims for compensable delay shall arise as the result of delay in the approval of award.
- C. **Failure to Execute the Contract:** It is agreed by the bidder that upon its failure to enter into the contract and furnish the necessary insurance certificate and performance, payment and maintenance bond within 10 calendar days after notification by the Jurisdiction, the amount of the bidder's bid security may at the Jurisdiction's option be forfeited and shall become the property of the Jurisdiction, to be retained not as a penalty, but as liquidated damages. The award of the contract may then, at the discretion of the Jurisdiction, be made to the next lowest responsive, responsible bidder, or the work may be re-advertised or may be constructed by the Jurisdiction in any legal manner.
- D. **Disclosure of Subcontractors:**
 - 1. The lowest responsive, responsible bidder shall be required to file a list of the names and subcontract amounts of all subcontractors who are expected to work on the project according to [Section 1080, 1.01 - Subletting or Assignment of Contract](#).
 - 2. If after award of the contract a subcontractor is replaced, or the subcontract price or the work under the subcontract is changed, the bidder shall disclose the name of the new subcontractor, the revised subcontract price, or the change in the scope of subcontract work.

If a new subcontractor is added after award of the contract, the Contractor shall disclose the name of the new subcontractor.

END OF SECTION

SCOPE OF WORK**1.01 INTENT OF THE CONTRACT DOCUMENTS**

- A. These SUDAS Standard Specifications have been prepared to provide construction utilizing the best general practices and construction methods, utilizing first quality materials and work. The Contractor shall be responsible for providing or undertaking all work, labor, materials, equipment, tools, transportation, supplies, and activities included in these specifications, unless the responsibility for undertaking or providing same is specifically assigned to an identified party other than the Contractor.
- B. The intent of the contract documents is to provide for the construction and completion in every detail of the work described or as may be amended. The Contractor shall furnish all labor, materials, equipment, tools, transportation, and supplies required to complete the work according to the plans, specifications, and terms of the contract documents. The apparent silence or omission of the contract documents as to any detail shall be regarded as meaning only the best general practice is to prevail and only first quality materials and work are to be used.
- C. To prepare the plans, specifications, and contract documents, the Engineer may have performed exploratory work to gain information relative to surface and subsurface conditions. This information, when shown in the contract documents, represents a summary of conditions as of the date the survey was made; it is only an approximate estimation of the site conditions made for the Jurisdiction to identify construction conditions and quantities and classes of work. The appearance of this information in the contract documents will not constitute a guarantee conditions other than those indicated will not be encountered at the time of construction. The Contractor's bid shall be prepared based upon its examination of the site and its exploratory work.
- D. Before making whatever additional investigations it feels are advisable, a bidder should contact the Engineer to determine available project area. If the Jurisdiction has not obtained right-of-entry for such investigation, the bidder shall be responsible to secure right-of-entry to any parcels where the Jurisdiction has not previously obtained right-of-entry before doing any investigation work. The bidder shall also be responsible for any traffic control necessary for any investigation work. The bidder shall further be responsible to obtain prior utility locates necessary to conduct such investigations.

1.02 CORRELATION OF THE CONTRACT DOCUMENTS

The plans and specifications are intended to supplement each other so any work shown on the plans and not mentioned in the specifications, or vice versa, shall be as binding and shall be completed the same as if that work was mentioned or shown on both and to the true intent and meaning of said plans and specifications.

1.03 COORDINATION OF SPECIFICATIONS, PLANS, AND SPECIAL PROVISIONS

- A. In case of any discrepancy between the various items included in the contract documents, the items shall prevail, or govern, in the following descending order:
 - 1. Change Orders
 - 2. Addenda
 - 3. Proposal and Contract
 - 4. Special Provisions
 - 5. Plans, including plan notes

1.03 COORDINATION OF SPECIFICATIONS, PLANS, AND SPECIAL PROVISIONS (Continued)

6. Supplemental Specifications (Jurisdictional document)
7. General Supplemental Specifications (SUDAS)
8. SUDAS Standard Specifications

In case of a discrepancy within any contract document, the following shall prevail, or govern, in descending order: written text, numerals, drawings.

- B. The Contractor shall not take advantage of any apparent error or omission in the plans or specifications or of any discrepancy between the plans or specifications.

1.04 CONFORMITY WITH THE CONTRACT DOCUMENTS

- A. **Reasonably Close Conformity:** All work performed and all materials furnished shall comply with the lines, grades, cross sections, dimensions, and material requirements, including tolerances, shown in the contract documents. Where tolerances are not specified, work shall comply with reasonable and customary manufacturing and industry standards. The Engineer may, in the Engineer's sole discretion, accept variations beyond such requirements or tolerances where they will not materially affect the value or utility of the work and interests of the Jurisdiction.
- B. **Defective Work:** Work not in reasonably close conformity with the contract documents, or requirements thereof that, in the sole discretion of the Engineer, has resulted in inferior or unsatisfactory work. Defective work shall be removed and replaced or otherwise corrected by and at the expense of the Contractor.
- C. **Deficient Work:** Work not in reasonably close conformity with the contract requirements but that, in the sole discretion of the Engineer, may be accepted and allowed to remain in place with a price adjustment and/or extended warranty period. In the event the Engineer agrees to accept deficient work with a price adjustment/extended warranty, the Engineer will document the basis of acceptance by contract modification making appropriate adjustments in the contract price for such work or materials.

1.05 PLANS

The final plans on file in the Jurisdiction show the location, typical construction details, and dimensions of the work contemplated. The work shall be performed in conformity therewith, except in case of error or unforeseen contingency.

Electronic support files, if available, will be provided prior to letting and are for information only. Should there be a discrepancy between an electronic support file and a contract document, the contract documents shall govern. No guarantee is made that the data systems used by the Engineer will be directly compatible with the systems the Contractor uses.

Electronic information shall not be considered a representation of actual conditions to be encountered during construction. Providing the Contractor this information does not relieve the Contractor from the responsibility of making an investigation of conditions to be encountered, including, but not limited to, site visits and basing the bid on information obtained from these investigations and professional interpretations and judgment. The Contractor assumes the risk of error if the information is used for any purposes for which the information was not intended. Assumptions the Contractor makes from this electronic information or manipulation of the electronic information is at their risk.

If changes are made during construction, regardless if the change is initiated by the Contracting Authority or Contractor, it shall be the Contractor's sole responsibility to update electronic files that they will use.

1.06 INCREASE OR DECREASE OF WORK

- A. The Jurisdiction reserves the right to make such alterations in the plans or in the quantities of work as may be considered necessary. Such alterations shall be in writing by the Engineer and shall not be considered as a waiver of any conditions of the contract documents or to invalidate any of the provisions thereof.
- B. Unless such alterations, increases, or decreases materially change the character of the work to be performed or the cost thereof, the altered work shall be paid for at the same unit prices as other parts of the work. Quantity changes amounting to 20% or less of the total bid for an item shall not affect the unit price of that item. If, however, the character of the work or the unit costs thereof are materially changed, due to unforeseen events, an allowance shall be made on such basis as may have been agreed to in advance of the performance of the work.
- C. Whenever materials have been delivered to the Contractor or to the work site and the bid item related to those materials is deleted, the Jurisdiction will determine one of the following:
 - 1. Pay invoiced cost for the materials, not to exceed 80% of the authorized amount for the bid item, plus 10% of the invoiced material cost as an overhead charge in addition to documented transportation costs to have the Contractor deliver the materials to the site designated by the Engineer
 - OR
 - 2. Pay the invoiced restocking fee (not to exceed 15% of the actual material cost), plus 10% of the restocking fee as an overhead charge, in addition to documented transportation costs incurred by the Contractor to return the materials.

1.07 CHANGE ORDERS

- A. **Oral Orders:** The Engineer shall have authority to give oral orders for minor or incidental changes in the work not involving extra cost and not inconsistent with the proposed purpose of the work.
- B. **Written Orders:** The Engineer may in his/her discretion, and subject to formal approval by the Jurisdiction, if required, issue written change orders changing the scope of the work and/or adjusting the amount to be paid to the Contractor for performing such work; however, the Engineer may, in case of emergency of endangering life or property, orally authorize such a change order without formal approval by the Jurisdiction. Each written change order for extra work shall be explicit in its instruction and shall be duly executed by the Jurisdiction. One copy of said change order shall be filed with the Contractor. Each change order shall stipulate the amount and method of payment.

1.08 SITE CONDITIONS

- A. The Contractor is required by [Section 1020, 1.04 - Examination of the Contract Documents and Site of Work](#) to make reasonable investigation and examination to determine latent and subsurface conditions at the site of the work prior to preparing its proposal. The Jurisdiction makes no guarantee of any conditions, latent or subsurface, at the site of the work. The Jurisdiction shall not be obligated to make any payments to the Contractor by reason of any latent or subsurface conditions.
- B. Failure of the Contractor in determining adverse site conditions prior to filing its proposal, or in any phase of its performance of the work, shall be grounds for refusal by the Jurisdiction to agree to pay for additional work by the contractor necessitated by such site conditions.

1.09 CHANGED SITE CONDITIONS**A. Latent or Subsurface Conditions:**

1. If the Contractor encounters latent or subsurface conditions differing materially from those indicated in the contract documents or from those ordinarily encountered in performing work of the character involved, and which the Contractor could not have discovered by a reasonable site investigation and examination of the type customarily undertaken by prudent and competent contractors, and if these unusual or changed conditions are considered by the Contractor as a basis for compensation in addition to the contract price, the Contractor shall promptly after discovery thereof notify the Engineer of its claim in writing. Before disturbing the site at which the latent or subsurface condition is alleged to exist, the Contractor shall give the Engineer the opportunity to inspect the same.
2. After inspection by the Engineer, the Jurisdiction may, in its discretion, authorize the Contractor to proceed with or abandon the work. The Contractor shall resume construction operations pending a decision regarding its claim by the Jurisdiction. Failure of the Contractor to give prompt written notice and to give the Engineer full opportunity to inspect the condition before disturbing the site shall be deemed a waiver by the Contractor of all claims for extra compensation arising out of the alleged condition.

B. Compensation:

1. If the Engineer determines the condition could not reasonably have been discovered, the Contractor is entitled to additional compensation by reason of increased expense caused by the condition, and said condition requires work not contemplated by the contract, a change order will be executed by the parties providing for additional compensation for such amount as the parties may agree upon.
2. If the Engineer determines the condition to be such as to justify an extension in contract time, such additional time will be granted according to [Section 1040, 1.11 - Delays Caused by the Jurisdiction](#) and [Section 1080, 1.09 - Extension of Time](#).

1.10 DISPUTED CLAIMS FOR EXTRA COMPENSATION**A. Basis of Claim for Extra Compensation:**

1. In any case where the Contractor believes extra compensation is due for work or material beyond the scope of the work under the contract and not ordered by the Engineer as extra work as defined herein, the Contractor shall notify the Engineer in writing of its intention to make claim for such extra compensation before beginning the work on which the claim is based. The Contractor shall not proceed with that work until the Contractor and the Jurisdiction have executed a change order with respect to extra compensation.
2. The Jurisdiction shall be responsible for damages attributable to the performance, nonperformance, or delay, of any other contractor, governmental agency, utility agency, firm, corporation, or individual authorized to do work on the project, only when such damages result from negligence on the part of the Jurisdiction, its Engineer, or any of its officers or employees.
3. In any case where the Contractor deems that extra compensation is due from the contracting authority as damages resulting from such performances, nonperformances, or delays, the Contractor shall notify the Engineer in writing at the time the delay occurs.

1.10 DISPUTED CLAIMS FOR EXTRA COMPENSATION (Continued)

4. In either case, if such notification is not given, or if after such notification is given, the Engineer is not allowed facilities for keeping strict account of actual costs as defined for force-account construction, the Contractor thereby agrees to waive the claim for extra compensation for such work. Such notice by the Contractor, and the fact the Engineer has kept account of the cost as aforesaid, shall not be construed as establishing the validity of the claim.
 5. The claim, when filed, shall be in writing and in sufficient detail to permit auditing and an evaluation by the Jurisdiction. The claim shall be supported by such documentary evidence as the claimant has available and shall be verified by affidavit of the claimant or other person having knowledge of the facts.
- B. Presentation and Consideration of Claim:** If the claimant wishes an opportunity to present its claim in person, the claim shall be accompanied by a written request to do so. Where the claimant asks an opportunity to present its claim in person, the Jurisdiction, within 30 calendar days of the filing of the claim, shall fix a time and place for a meeting between the claimant and the Jurisdiction or its designated representatives or representative. The Jurisdiction shall, within a reasonable time after the filing of the claim or the meeting above referred to, whichever is later, rule upon the validity of the claim and notify the claimant, in writing, of its ruling together with the reasons therefore. In case the claim is found to be just, in whole or in part, it shall be allowed and paid to the extent so found.
- C. Request for Arbitration:** In the event a Contractor's claim as outlined in the above procedure has been disallowed, in whole or in part, the Contractor may, within 30 calendar days from the date the ruling of the Jurisdiction is mailed, make a written request to the Jurisdiction that its claim or claims be submitted to a board of arbitration. The Jurisdiction shall decide if the matter is subject to arbitration and shall, within 30 calendar days of the receipt of the request for arbitration, grant or deny the request for arbitration. The Jurisdiction's decision shall be final.
- D. Board of Arbitration:**
1. The board of arbitration shall consist of three persons - one to be appointed by the Jurisdiction, one to be appointed by the Contractor, and the third to be appointed by the two arbitrators thus chosen.
 2. The arbitrators selected shall be persons experienced and familiar with construction or engineering practices in the general type of work involved in the contract, but shall not have been a regular employee or an individual retained by either party at the time the claim arose, or at the time of arbitration.
- E. Arbitration Proceedings:** The board of arbitration shall make its own rules of procedure and shall have authority to examine records kept by the Jurisdiction and the Contractor. If the desired records are not produced within 10 calendar days after they are requested, the board of arbitration shall proceed without them as best it may. Notification of arbitration proceedings shall be made by the arbitration board to both the Jurisdiction and the Contractor, and each shall have the opportunity to attend all sessions of the arbitration board. In determining the findings or award or both, a majority vote of the board shall govern. Copies of the findings or award or both, signed by the arbitrators, shall be filed with the Jurisdiction and the Contractor. A unanimous report or majority report may be used. The board of arbitration shall fix the cost of the proceedings, including a reasonable compensation to the arbitrators, and shall determine how the total cost shall be borne by the parties.

1.10 DISPUTED CLAIMS FOR EXTRA COMPENSATION (Continued)

F. Jurisdiction of Board of Arbitration: The board of arbitration shall have jurisdiction to pass upon questions involving compensation to the Contractor for work actually performed or materials furnished and upon claims for extra compensation that have not been allowed by the Jurisdiction. The board's jurisdiction shall not extend to a determination of quality of workmanship or materials furnished, or to an interpretation of the intent of the plans and specifications except as to matters of compensation. Jurisdiction of the board shall not extend to setting aside or modifying the terms or requirements of the contract.

G. Determination of Board of Arbitration Final: The findings or award, or both, of the arbitration board, if acceptable to both parties to the contract, may become a basis for final payment. If the findings of the arbitration board are unacceptable to either party to the contract, said findings may become the basis for further negotiation between the parties. In the event a solution agreeable to both parties has not been reached through the filing of a claim, through arbitration, or if arbitration has been denied, either party may resort to whatever other methods for resolving the claim are available to it. The Contractor shall not initiate any suit against the Jurisdiction for the adjudication of any claim until said claim has been first presented to the Jurisdiction, pursuant to this article, and either submitted to arbitration or a request for arbitration is denied.

1.11 DELAYS CAUSED BY THE JURISDICTION

If the Jurisdiction or its agents should cause a delay in any part of the work or in the final completion of the job, this fact shall not make void the provisions of the contract as to liquidated damages; but the Contractor will promptly be given such extension of time for the final completion of the job as the Jurisdiction may deem proper to compensate the Contractor for such delay.

1.12 ORAL AGREEMENTS, CONVERSATIONS, AND INFORMAL COMMUNICATIONS

No oral agreement or conversation made or had with any officer, agent, or employee of the Jurisdiction, and no informal written communication from any officer, agent, or employee of the Jurisdiction, occurring either before or after execution of the contract, shall affect or modify any of the terms or obligations contained in any of the contract documents. Such oral contact and such informal writings shall be considered as unofficial information and in no way binding upon the Jurisdiction.

1.13 ERRORS OR OMISSIONS

The Contractor shall examine the plans before beginning construction work. If errors or omissions are discovered in the plans, the Contractor shall call them to the attention of the Engineer before proceeding with the work. In no case shall the Contractor make the corrections therefore without written permission from the Jurisdiction. In case revised plans of a supplementary or explanatory nature are necessary or desirable for clarification, or to correct any errors or omissions, they will be furnished by the Jurisdiction from time to time as the work progresses.

END OF SECTION

CONTROL OF WORK**1.01 AUTHORITY OF THE ENGINEER**

- A. The work included in the contract is to be done to the complete satisfaction of the Engineer, and the decision of the Engineer as to the true construction and meaning of the contract documents, plans, specifications, estimates, and as to all questions arising as to proper performance of the work, shall be final, except as provided in [Section 1040, 1.10 - Disputed Claims for Extra Compensation](#).
- B. The Engineer shall determine the unit quantities and the classification of all work done and materials furnished under the provisions of the contract documents, and the Engineer's determination thereof shall be final except as provided in [Section 1040, 1.10 - Disputed Claims for Extra Compensation](#).
- C. The Engineer shall decide any and all questions that may arise regarding the quality or acceptability of materials furnished and work performed, the rate of progress of the work, including cleanup and restoration, acceptable fulfillment and performance of the contract on the part of the Contractor, and compensation. The decision of the Engineer in such matters shall be final except as provided in [Section 1040, 1.10 - Disputed Claims for Extra Compensation](#).
- D. Nothing contained in this section or in the contract documents shall be construed as requiring or permitting the Engineer to direct the means, methods, sequences, or procedures, including safety measures, of performing any work under the contract or contract documents, except to ensure the quality of work conforms to these specifications and other provisions of the contract documents and the contract will be completed as scheduled.

1.02 AUTHORITY AND DUTIES OF THE ENGINEER'S AUTHORIZED REPRESENTATIVE

- A. The Engineer may appoint a representative to monitor any or all materials used and work done. Such observation may extend to any or all parts of the work and to the preparation or manufacture of the materials to be used. The Engineer's authorized representative will not be authorized to revoke, alter, enlarge, or relax the provisions of these specifications. When placed on the work, the Engineer's authorized representative will keep the Engineer informed as to the progress and quality of the work and the manner in which it is being done.
- B. Results of tests and examinations may be available to the Contractor on an informational basis. Absence or presence of representative test data does not alter the Contractor's responsibility for compliance with the contract documents. The Engineer's authorized representative will call to the attention of the Contractor any lack of compliance with the contract documents. However, failure of the Engineer's authorized representative or the Engineer to call the attention of the Contractor to faulty work or to lack of compliance with the contract documents shall not constitute acceptance of such work.
- C. The Engineer's authorized representative will not be authorized to approve or accept any portion of the work or to issue instructions contrary to the contract documents. The Engineer's authorized representative will act under the authority of the Engineer to reject defective work or material, and to suspend any work that is not being properly performed, subject to the final decision of the Engineer.
- D. The Engineer's authorized representative will not act as supervisor or perform other duties for the Contractor, nor improperly interfere with management of the work. The Engineer's authorized representative will exercise such additional authority as may, from time to time, be delegated by the Engineer.

1.03 COOPERATION BY THE CONTRACTOR

- A. A set of approved plans, specifications, contract documents, and any special provisions and authorized alterations will be supplied to the Contractor, and the Contractor shall have them available on the job site at all times.
- B. A competent, authorized representative of the Contractor shall be present on the site of the work continually during its progress. This representative must be capable of reading and thoroughly understanding the contract documents and experienced in the type of work being performed. This representative shall supervise, direct, and control the Contractor's operations, personnel, and work, and oversee the Subcontractor's operations.
- C. The Contractor shall give the Engineer written notification of the name of the Superintendent. The Contractor or its Superintendent shall receive from the Engineer all explanations and directions necessary for the satisfactory prosecution and completion of the work.
- D. The Contractor shall not cause any unnecessary delay or hindrance to other contractors on the work and shall be required to cooperate with other contractors to the fullest extent.

1.04 COOPERATION WITH OTHER CONTRACTORS

- A. The Jurisdiction reserves the right to award other contracts in connection with this work and the total improvement. The Contractor is required to become fully informed of the conditions relating to construction and labor under which the work will be or is now being performed, and the Contractor shall employ, as far as possible, such methods and means in the carrying out of its work as will not cause any interruption or interference with any other contractor or agency. The Contractor shall give other contractors reasonable opportunity for the introduction and storage of their materials and the execution of their work, and shall properly integrate, incorporate, and/or coordinate its work with theirs.
- B. If any part of the Contractor's work depends for proper execution or results on the work of any other contractor, the Contractor shall inspect and promptly report to the Engineer any defect in such work by another contractor that renders it unsuitable for such proper execution and results. The Contractor's failure to inspect and report such defects shall constitute an acceptance of the other contractor's work as fit and proper for the integration or incorporation of its work, except as to defects that may develop in the other contractor's work after the execution of the Contractor's work.
- C. Wherever work being done by the Jurisdiction's forces or by other contractors is contiguous to work covered by the contract, the respective rights of the various interests involved shall be established by the Engineer, in order to secure the completion of the various portions of the work in general harmony.
- D. Unless otherwise specified in the contract documents, the Contractor shall give notice, as hereafter provided, to all utilities, public and private agencies, abutting property owners, and all others affected by its operations as to time for starting and for completion of its work, names of streets or locations of alleys closed, schedule of operations, and routes of detours where possible. Notification shall be made sufficiently ahead of time to provide proper re-routing of traffic and erecting of signs before the work is to begin.
- E. The Contractor shall properly coordinate and expedite its work in such a manner as to cause the least amount of conflict and interference between its operation and those of all others affected by its operations. Any or all damages or claims resulting from the improper or insufficient notification of all others affected by its operations shall be the responsibility of the Contractor.

1.05 SHOP DRAWINGS, CERTIFICATES, AND EQUIPMENT LISTS**A. Submission of Drawings:**

1. The Contractor shall submit to the Engineer all shop drawings and equipment drawings or lists as called for in the contract documents or as requested by the Engineer. Drawings and listings shall be complete and shall contain all required detail information conveyed according to the latest recommended standards for detailing.
2. The Contractor shall make any corrections required by the Engineer and submit the revised shop or equipment drawings or listings for review. After review by the Engineer, the shop or equipment drawings or listings will be so marked, dated, signed by the Engineer, and forwarded to the Contractor for reproduction and distribution.

B. Submission of Equipment Lists:

1. If requested in the contract documents, as soon as practicable after award of contract and before any items of material or equipment are purchased, the Contractor shall submit to the Engineer for review a complete list of the principal fixtures and equipment to be incorporated into the work.
2. The Contractor shall also submit applicable brochures, technical data, catalogs, cuts, diagrams, manufacturer's drawings and installation instructions, samples if required, and other descriptive data including the complete description, trade name, model number, type, size, and rating.

C. Engineer's Review:

1. Review by the Engineer shall not be construed as a complete check but will indicate only that the general method of construction and detail is satisfactory. The Engineer assumes no responsibility for errors in dimensions in the shop drawings and assumes the Contractor will use material complying with requirements of the contract documents or, where not specified, those of sound and reasonable quality, and will erect the subjects of such shop drawings according to recognized standards of first quality work or, when specified, according to standards of the contract documents.
2. Any work done or material ordered by the Contractor prior to review by the Engineer shall be at the Contractor's risk.

1.06 CONFLICT AVOIDANCE

- A. Expose possible conflicts, such as utility lines and drainage structures. Verify elevations of each and verify clearances for proposed construction.
- B. Complete elements of the work that can affect line and grade in advance of other open cut construction unless noted on the plans.
- C. See [Section 1040, 1.09 - Changed Site Conditions](#) if unknown or changed conditions are encountered.

1.07 EXAMINATION OF MATERIALS AND WORK

- A. The Contractor shall furnish the Engineer and its agents every reasonable opportunity to ascertain whether the work and materials are in reasonably close conformity with the contract documents. At any time before final acceptance of the work, at the request of the Engineer, the Contractor shall remove or uncover portions of the work for examination. After examination, the Contractor shall restore such portions of the work to the standards required by the contract documents.

1.07 EXAMINATION OF MATERIALS AND WORK (Continued)

- B. Should the work thus exposed and examined prove acceptable, the uncovering, removing, and replacing of such work shall be paid for as specified in [Section 1090, 1.04 - Payment for Change Orders](#). Should the work thus exposed and examined prove unacceptable, the uncovering, removing, and replacing of such work shall be at the Contractor's expense.

1.08 REMOVAL OF DEFECTIVE WORK AND MATERIALS

- A. Defective work or materials may be condemned by the Engineer any time before the final acceptance of the work. Notice of such condemnation shall be given in writing by the Engineer. Such condemned work shall be immediately corrected to the satisfaction of the Engineer. Failure or neglect on the part of the Engineer to condemn unsatisfactory material or reject inferior workmanship shall not release the Contractor, nor shall it be construed as an acceptance of such work, nor shall the final acceptance of such work bar the Jurisdiction from recovering damages on account thereof.
- B. Any defective work shall be removed and replaced at the Contractor's expense. Should the Contractor fail or refuse to remove defective work when so ordered by the Engineer, the Engineer shall have authority to order the Contractor to suspend further operations, and may withhold payment on estimates until such defective work has been removed and replaced according to the contract documents.
- C. Continued failure or refusal on the part of the Contractor to correct defective work promptly shall be sufficient cause for the Jurisdiction to declare the contract in default. No compensation will be paid to Contractor for defective work or materials, or for the satisfactory removal, correction, or disposal thereof.

1.09 UNAUTHORIZED WORK

- A. Unauthorized work is work done contrary to the work shown in the contract documents. The Jurisdiction will not pay for unauthorized work.
- B. Unauthorized work may be ordered to be removed and replaced immediately at the Contractor's expense.

1.10 LINE AND GRADE STAKES

- A. Minimum standards for construction survey provided by the Jurisdiction will meet the requirements of [Section 11,010](#). The Engineer will set the necessary stakes promptly upon notification by the Contractor that stakes are needed.
- B. The work shall be performed in strict conformity with the contract documents and to the lines and grades as fixed by the Engineer, and shall be according to such instructions as may be given by the Engineer. When such stakes or lines are given by the Engineer, the Jurisdiction will be responsible for the correctness thereof, and the Contractor will be responsible for their proper use, interpretation, and preservation.
- C. The Contractor shall protect and preserve in their original position all stakes, points, or marks set for the work by the Engineer. Where the Engineer shall consider such stakes, points, or marks to have been unnecessarily altered or destroyed, the Engineer may cause the expense of correcting or replacing them to be charged to the Contractor and the amount of such costs deducted from any monies due or which may become due to the Contractor under the contract.

1.11 PROVIDING JOB SITE UTILITIES

- A. The Contractor shall make all necessary arrangements for the provision to the job site of all required utilities for the project. The Contractor shall arrange its work so it will not be delayed because such regulations or requirements relating to the use of utilities. All costs for the provision of utilities to the job site shall be borne by the Contractor.
- B. Fire hydrants shall not be used by the Contractor or its subcontractors unless authorization for such use has been obtained from the appropriate water utility agency.

1.12 SALVAGE

- A. When the contract documents specify salvage of materials for the Jurisdiction as part of the work, the material to be salvaged shall be carefully salvaged and delivered to the designated location in the best condition and ready for storage. When the contract documents provide for salvage of such materials by the Contractor, the Contractor shall salvage such materials and promptly remove them from the site.
- B. The Contractor shall not allow inspection or sale of salvage materials to third parties at the site without written approval of the Jurisdiction.

1.13 PROTECTION OF WATER QUALITY AND WETLANDS

- A. The Contractor shall comply with the requirements of the Clean Water Act (33 U.S.C. 1344 and 33 CFR 323) and Executive Order 11990. When it becomes necessary for the Contractor to work in waters of the United States, the Contractor shall be aware that a Section 404 permit may be required.
- B. When required, the Contracting Authority will obtain a Section 404 permit for essential work on the right-of-way prior to the award of the contract. The Contractor shall adhere to the requirements of the permit. Activities occurring in or across waters of the United States not specifically reviewed and approved in the permit are not authorized. If the Contractor desires to use construction methods that are not specifically approved by the permit, the Contractor shall be responsible for obtaining approval in the form of a new Section 404 permit from the U.S. Army Corps of Engineers and possibly Iowa DNR. The Contractor shall not use construction methods that require additional mitigation by the Contracting Authority. The Contractor will not be granted additional compensation or contract time due to their request for a new permit. If, however, due to no fault of the Contractor, a Section 404 permit modification involving activities within the right-of-way is deemed necessary by the Engineer, additional contract time and/or compensation may be considered.

1.14 FINAL INSPECTION AND ACCEPTANCE

- A. As soon as practicable after the completion of the work, it will be inspected thoroughly by the Engineer. The Contractor will be notified when the inspection is to be made so it or its representative may be present.
- B. If the inspection reveals any defects in the work as contemplated by the specifications, such defects shall be repaired or unsatisfactory work shall be replaced, as the Engineer may direct, before final acceptance. The cost of all such repairs and replacement shall be borne by the Contractor, and no extension of the contract time shall be granted because of the time required to remedy such defects.
- C. When the work is found to be satisfactory, it will be accepted as provided in [Section 1090.1.08 - Acceptance and Final Payment](#). Such final acceptance will not be reopened after having once been made, except on evidence of collusion, fraud, or obvious error.

1.15 ADDITIONAL CONTRACTOR RESPONSIBILITIES

If a form of automated machine guidance (AMG) is used for grading or paving operations, the following is required:

- A. At least one week prior to the preconstruction meeting, submit to the Engineer for review a written AMG work plan which indicates the following:
 - Equipment type
 - Control software manufacturer and version
 - Proposed location of GPS base station for broadcasting differential correction data to rover units
 - Proposed locations where AMG will be utilized
- B. Provide Engineer with up to 8 hours of formal training on Contractor's AMG systems.
- C. For grading contracts, provide a rover for use by the Engineer.
- D. Check and recalibrate, if necessary, the AMG system at the beginning of each work day.
- E. Contractor will bear all costs associated with use of the AMG system, including but not limited to reconstruction of work that may be incurred due to errors in application of the AMG system. Correction of grade elevation errors and any associated quantity adjustments resulting from the Contractor's activities are to be done at no cost to the Contracting Authority.

END OF SECTION

CONTROL OF MATERIALS**1.01 MATERIALS SOURCE OF SUPPLY AND QUALITY REQUIREMENTS**

- A. Materials used in the work shall meet all quality requirements of the contract documents. In order to expedite inspection and testing of materials, the Contractor shall notify the Engineer in writing of the proposed sources of those materials requested by the Engineer promptly after being awarded the contract. Any material shall be produced with a reasonably uniform quality and within requirements specified; the producer shall perform quality control tests and evaluations the producer believes necessary to control the product adequately. All materials for use in the project are subject to inspection and tests at any time prior to being incorporated into the work.
- B. For the convenience of the Contractor, and when convenient to the Engineer, materials may be inspected at the site of production. Materials tested and found in compliance at the site of production may be later inspected for reasonably close conformity and normally will not be rejected except for obvious mistakes, contamination, quality change, or mishandling. To avoid later rejection, materials that usually show an extreme change in character or quality prior to or during the process of incorporation into the work should be produced to more rigid limits than those required by the specifications.
- C. At the option of the Engineer, approval of the source, or approval of materials at the source prior to delivery, may be required. If it is found after trial that sources of supply for previously approved materials do not produce specified products or when conditions are such that use of unfit materials can not be prevented except by extraordinary inspection methods, the Contractor shall furnish materials from other sources. Before delivery, and at any time during the process of preparation and use, materials shall be subject to the approval of the Engineer.
- D. Materials not previously inspected will be inspected at the project site. Acceptance at that time will be based on sampling and testing, producer's certifications, visual inspection, or any combination of these at the discretion of the Engineer.
- E. Use of materials on the basis of the producer's certification, quality control tests, and evaluations may be permitted or required. The Engineer may require specific data obtained by qualified persons and procedures be provided with the material, when delivered. Certified gradation testing by a certified aggregate technician will be required for all aggregates to be furnished by the Contractor, and shall be done according to the current [Iowa DOT Materials I.M. 209](#).

1.02 ALTERNATE PROCESSES, EQUIPMENT, OR MATERIALS AND OTHER SUBSTITUTIONS

- A. **General:** In order to establish a basis of quality for the work, performance, or economy of operation, certain processes, types of machinery and equipment, or kind of material may be referenced in the contract documents by designating a manufacturer by name and referring to its brand or model numbers. Such reference is not intended to foreclose other processes, equipment or materials that will in the sole discretion of the Engineer meet, or exceed, the designated standards. There may be instances where the Engineer will not consider alternate processes, equipment, or materials.
- B. **Consideration:**
 - 1. The Jurisdiction may consider alternate processes, equipment, or materials for those specified in the contract documents; however, it is only an indication that the Jurisdiction will not foreclose consideration of the bidder's/contractor's request, and is not an approval. Following are the steps for consideration of alternate processes, equipment, or materials:

**1.02 ALTERNATE PROCESSES, EQUIPMENT, OR MATERIALS AND OTHER SUBSTITUTIONS
(Continued)**

- a. If a bidder/contractor desires to use alternate processes, equipment, or materials, the bidder/contractor shall contact the Engineer to confirm the Jurisdiction would consider alternate processes, equipment, or materials for those as specified in the contract documents.
 - b. Support/requirements for submissions of alternatives:
 - 1) The Engineer will consider and evaluate other products, equipment, methods, and systems only when such items are accompanied by full and complete technical data, test data, code compliance, and other relevant information, including samples and finishes where appropriate.
 - 2) The bidder/contractor shall submit design information, material compatibility, performance, durability, laboratory tests, chemical analysis, color, manufacturer's specifications, and other relevant information as proof of quality and integrity when presenting proposed alternatives to the Engineer for consideration. The bidder/contractor must include the kind, quality, design, and performance of the proposed materials and equipment.
 - 3) If alternate methods are proposed, the contractor shall furnish complete engineering plans covering the proposed change.
 - 4) It is the sole responsibility of the proposer of any alternative product to have pre-qualified the product proposed for its intended use for compliance with all applicable codes within the Jurisdiction prior to submittal to the Engineer for consideration.
 - c. In making an alternative request, the contractor shall be responsible for all costs including reimbursing the Engineer for services furnished and any time required to review the proposed change.
 - d. If the bidder/contractor desires to use alternate processes, equipment, or materials for those as specified in the contract documents, the bidder/contractor shall secure the written approval of the Engineer before entering an order therefore.
 - e. Proposed alternative processes, equipment, or materials that will in the sole discretion of the Engineer meet, or exceed, the designated standards will be given written approval to be used on the project as an "Approved Equal" or "Equivalent" to the specified item.
 - f. If approval as an "Approved Equal" or "Equivalent" is given by the Engineer, such approval will be on the condition that the bidder/contractor shall be fully responsible for producing construction work in reasonably close conformity with contract requirements.
 - g. In order to ensure fair competitive bidding, it is critical that all bidders base their bids on providing the material, equipment or process (including those trade named) fully complying with the contract documents.
 - h. The contractor shall not be entitled to any additional compensation if the Engineer does not approve the contractor's request for alternate processes, equipment, or materials after the contract is awarded. The bidder/contractor is solely at risk until the Engineer issues written notification of "Approved Equal" or "Equivalent."
 - i. The Jurisdiction reserves the right to adjust the contract price when the cost of an "Approved Equal" or "Equivalent" is less than the cost of the specified item. The contractor shall estimate the net savings of the proposed alternate and if the Engineer approves the proposal, a change order may be processed to reduce the contract amount by up to 50% of the estimated net savings of the "Approved Equal" or "Equivalent."
2. If the contract documents state that the Jurisdiction will not consider alternate processes, equipment, or materials, the bidder/contractor shall not propose any alternates to those specified in the contract documents.

1.03 SAMPLES AND TESTING

- A. Each consignment of material shall be tested or inspected before being incorporated into the work and shall be approved by the Engineer in charge of the work before it is used. The Contractor shall allow such facilities for collecting and forwarding samples and subsequent testing as the Engineer may require.
- B. Samples shall be supplied to allow ample time for testing without delaying the work. No material for which samples are requested shall be used until the samples have been approved. If necessary, work will be delayed or suspended, at no cost to the Jurisdiction, to permit the completion of all specified tests and examinations. Tests made on the samples of materials utilized for improvements constructed under these specifications will be made by the Jurisdiction at no cost to the Contractor.
- C. All tests shall be made by the Jurisdiction testing laboratory, or at such independent testing laboratories as the Engineer shall approve. Except as otherwise specified, the testing of materials furnished for use under these specifications shall be done according to the methods described in the specific ASTM, AASHTO, AWWA, or other authorized specifications for each material. Results of all tests shall be submitted to the Engineer.

1.04 STORAGE OF MATERIALS

The Contractor shall be responsible for care and storage of materials delivered to the work site or purchased for use. Material delivered to the work site and damaged before actual incorporation in the work may be rejected by the Engineer even though it may have been previously acceptable. Stored materials shall be located to facilitate thorough inspections, to minimize environmental damage, and not interfere with operations.

1.05 UNACCEPTABLE MATERIALS

All materials not conforming to the requirements of the specifications at the time they are to be used shall be considered unacceptable, and all such materials will be rejected and shall be removed immediately from the work site unless otherwise instructed by the Engineer. No rejected material, the defects of which have been corrected, shall be used until approval has been given by the Engineer.

1.06 MATERIALS SUPPLIED BY THE JURISDICTION

When any materials are to be furnished by the Jurisdiction, the designation of such materials and the time of availability will be included in the contract documents.

1.07 MATERIALS SUPPLIED BY THE CONTRACTOR

- A. Unless otherwise stated in the contract documents, all materials and equipment needed for, or to become a part of, the work shall be furnished by the Contractor. The Contractor shall assume full responsibility for ordering materials and equipment of the quality specified and of the quantity necessary, and shall be responsible for payment of the purchase and/or delivery cost of such materials and equipment.
- B. All materials and equipment that become the property of the Jurisdiction as a part of the project shall be unused and newly produced or manufactured with original materials (as opposed to recycled or used materials), shall be state of the art for that material or equipment, and shall be properly stored to protect the integrity of the material and equipment. The Engineer may waive this provision and accept used or recycled material or equipment prior to submission of the bid. Such waiver must be in the form of an addendum.

END OF SECTION

LEGAL RELATIONS AND RESPONSIBILITY TO THE PUBLIC**PART 1 - LEGAL RELATIONS****1.01 MUNICIPAL REGULATIONS, STATE, AND FEDERAL LAWS AND REGULATIONS**

- A. The Contractor shall at all times observe and comply with all applicable Federal, State, County, or City laws, ordinances, orders, and regulations.
- B. References in these specifications to particular chapters or sections of the Iowa Code shall be to those chapters or sections as they appear in the current version of the Iowa Code. In the event such chapters or sections of the Iowa Code are subsequently amended, the specifications shall be deemed to refer to those chapters or sections as amended.
- C. During the performance of this contract, the contractor (for itself), its assignees, and successors in interest (hereinafter referred to as the "contractor") agrees as follows:
 - 1. Compliance with Regulations: The contractor shall comply with the Regulations relative to non-discrimination in Federally assisted programs of the DOT Title 49, Code of Federal Regulations, Part 21, as they may be amended from time to time, (hereinafter referred to as the Regulations), which are herein incorporated by reference and made a part of this contract.
 - 2. Nondiscrimination: The contractor, with regard to the work performed by it during the contract, shall not discriminate on the grounds of race, color, national origin, sex, age, or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment. The contractor shall not participate either directly or indirectly in the discrimination prohibited by section 21.5 of the Regulations, including employment practices when the contract covers a program set forth in Appendix B of the Regulations.
 - 3. Solicitations for Subcontracts, Including Procurement of Materials and Equipment: In all solicitations either by competitive bidding or negotiation made by the contractor for work to be performed under a subcontract, including procurement of materials or leases of equipment, each potential subcontractor or supplier shall be notified by the contractor of the contractor's obligations under this contract and the Regulations relative to non-discrimination on the grounds of race, color, national origin, sex, age, or disability.
 - 4. Information and Reports: The contractor shall provide all information and reports required by the Regulations or directives issued pursuant thereto, and shall allow access to its books, records, accounts, other sources of information, and its facilities as may be determined by the Contracting Authority, the Iowa DOT, or FHWA to be pertinent to ascertain compliance with such Regulations, orders and instructions. Where any information required of a contractor is in the exclusive possession of another who fails or refuses to furnish this information the contractor shall so certify to the Contracting Authority, the Iowa DOT, or the FHWA as appropriate, and shall set forth what efforts it has made to obtain the information.
 - 5. Sanctions for Noncompliance: In the event of the contractor's noncompliance with the nondiscrimination provisions of this contract, the Contracting Authority, the Iowa DOT, or the FHWA shall impose such contract sanctions as they may determine to be appropriate, including, but not limited to:
 - a. Withholding of payments to the contractor under the contract until the contractor complies, and/or
 - b. Cancellation, termination, or suspension of the contract, in whole or in part.

**1.01 MUNICIPAL REGULATIONS, STATE, AND FEDERAL LAWS AND REGULATIONS
(Continued)**

6. Incorporation of Provisions: The contractor shall include the provisions of paragraphs (1) through (6) in every subcontract, including procurement of materials and leases of equipment, unless exempt by the Regulations, or directives issued pursuant thereto. The contractor shall take such action with respect to any subcontract or procurement as the Contracting Authority, the Iowa DOT, or the FHWA may direct as a means of enforcing such provisions including sanctions for non-compliance: Provided, however, that, in the event a contractor becomes involved in, or is threatened with, litigation with a subcontractor or supplier as a result of such direction, the contractor may request the Contracting Authority or the Iowa DOT to enter into such litigation to protect the interests of the Contracting Authority or the Iowa DOT; and, in addition, the contractor may request the United States to enter into such litigation to protect the interests of the United States.

1.02 GOVERNING LAW

The law of the State of Iowa shall govern this contract and all subcontracts for materials and services entered into by the Contractor.

1.03 PERMITS AND LICENSES

The Contractor shall procure all necessary permits for the construction of the work and for temporary excavations, obstructions, enclosures, and street openings arising from the construction and completion of the work described in the contract documents. The cost for all required Jurisdictional permits and licenses will be waived by the Jurisdiction. The Contractor shall be responsible for all violations of the law for any cause in connection with the construction of the work or caused by the obstruction of roads, streets, highways, or sidewalks, and shall give all requisite notices to the Jurisdiction or other public authorities in connection therewith.

1.04 PATENTS AND ROYALTIES

The Contractor shall defend, indemnify, and save the Jurisdiction harmless against all claims arising from alleged infringements of patents and royalties covering tools, machinery, processes, appliances, devices, or materials used in connection with the work. Unit prices provided in the proposal shall include payment of all necessary royalties or licenses.

1.05 USE AND OCCUPANCY PRIOR TO COMPLETION OF CONTRACT

The Contractor shall complete any portion or portions of the work in such order and at such time as the Engineer may require. The Jurisdiction shall have the right to use any completed or partially completed portions of the work at any time, but such possession and use shall not be deemed an acceptance of the work so used or any part thereof. If such prior use increases the cost of or delays the work, the Contractor shall be entitled to such extra compensation or extension of time, or both, as the Engineer may determine appropriate. When improvements are released to the Jurisdiction for public use prior to final approval and acceptance, the Contractor will be relieved of the responsibility for damages due to the elements or due to ordinary public use, but only the released and used portion of the improvements. Such release by the Contractor to the Jurisdiction for public use shall be directed in writing by the Engineer.

1.06 CONTRACTOR'S RESPONSIBILITY FOR THE WORK

- A. Until the work is accepted by the Jurisdiction, it shall be in the custody of and under the charge, care, and control of the Contractor, who shall take every precaution against damage to the work by action of the elements or any other cause. The Contractor shall rebuild, repair, restore, and make good at its own expense, all damages to any portion of the work before acceptance thereof by the Jurisdiction. Issuance of any estimate or partial payment for work done will not be considered as final acceptance of any work completed.

1.06 CONTRACTOR'S RESPONSIBILITY FOR THE WORK (Continued)

- B. If the Contractor completes a unit or portion of the work, the Jurisdiction may at its discretion accept such work and the Contractor may be relieved of further responsibility for such unit or portion of the work. Such partial acceptance shall not void or alter any of the terms of the contract, nor shall it constitute final acceptance of the work as provided in [Section 1090, 1.08 - Acceptance and Final Payment](#).

1.07 RESPONSIBILITY FOR DAMAGE CLAIMS

The parties agree that it is their intent that there be no third-party beneficiaries to this contract. No provision of this contract or of any addendum, materials instructional memorandums, plans, proposal, special provision, developmental specification, supplemental specification, or general supplemental specification shall be construed as creating any third-party beneficiaries.

1.08 PERSONAL LIABILITY OF PUBLIC OFFICIALS

Neither the Engineer nor the Engineer's authorized representatives, agents, or assistants shall have any liability, either personally or as officials of the Jurisdiction, in carrying out any of the provisions of the Contract or in exercising any power or authority granted to them thereby. It being understood that in such matters they will act as the agents and representatives of the Jurisdiction.

1.09 WAIVER OF LEGAL RIGHTS

- A. The Jurisdiction shall not be precluded or estopped by any measurement, estimate, or certificate made either before or after the completion and acceptance of the work and payment therefore, from showing the true amount and character of the work performed and the materials furnished by the Contractor, or from showing that any such measurement, estimate, or certificate is untrue or incorrectly made, or from showing that the work or materials do not in fact conform to the contract documents.
- B. The Jurisdiction shall not be precluded or estopped, notwithstanding any such measurement, estimate, or certificate and payment in accordance therewith, from recovering from the Contractor and its surety such damages as it may sustain, and all outlay and expense it incurs, by reason of the Contractor's failure to comply with the terms of the Contract. Neither the acceptance by the Jurisdiction nor any of its representatives, nor any payment for acceptance of the whole or any part of the work, nor any extension of time, nor any possession taken by the Jurisdiction, shall operate as a waiver of any portion of the contract, or any powers herein reserved, or any right to damages herein provided. A waiver of any breach of the contract shall not be held to be a waiver of any other subsequent breach.
- C. The Contractor hereby waives any claims it may hereafter be entitled to assert against the Jurisdiction, its officers, agents, employees, or consultants, on its behalf or on behalf of its employees, agents, subcontractors, sub-subcontractors, and suppliers, for loss of or damage to personal property, tools, or equipment owned by it or its employees, agents, subcontractors, sub-subcontractors, and suppliers, which loss or damage is sustained on the Jurisdiction's project property, or which occurs during work on the project, and the Contractor agrees to assume liability or responsibility for such claims and to procure insurance to cover its exposure in that regard.

1.10 ACCEPTANCE BY THE JURISDICTION - NOT A WAIVER OF CONTRACTOR'S OBLIGATIONS OR A WAIVER OF THE JURISDICTION'S RIGHTS

- A. In various provisions of the contract documents, including these specifications, the Jurisdiction has reserved to itself or the Engineer the authority to test or inspect materials, equipment, or manufactured assemblies and to accept or reject those and other elements of the work.

1.10 ACCEPTANCE BY THE JURISDICTION - NOT A WAIVER OF CONTRACTOR'S OBLIGATIONS OR A WAIVER OF THE JURISDICTION'S RIGHTS (Continued)

- B. In various provisions of the contract documents, including these specifications, the Jurisdiction has reserved to itself or the Engineer the authority to require the Contractor's preparation of shop drawings for review and to accept or reject same. If unanticipated and either unusual or complex construction procedures or site conditions occur, the Engineer may require the Contractor to submit such shop drawings as, in the judgment of the Engineer, are necessary to satisfactorily complete the proposed construction.
- C. Acceptance or approval by the Engineer as therein provided shall not operate to relieve the Contractor of its obligation (1) to perform the work as required by the contract documents in a workmanlike manner and according to the standards for construction applicable to the type of work covered by this contract generally observed by contractors in this locale and (2) to provide materials and equipment meeting the quality requirements as provided in the contract documents. The Jurisdiction assumes no responsibility for errors in shop drawings and assumes the Contractor will use material complying with requirements of the contract documents or, where not specified, those of sound and reasonable quality, and will erect the subjects of such shop drawings according to recognized standards of first quality work or, when specified, according to standards of the contract documents.
- D. No such acceptance by the Jurisdiction shall constitute a waiver by the Jurisdiction of its right to subsequently reject defective work, materials, or equipment. Further, no such acceptance by the Jurisdiction or the Engineer shall be deemed a waiver by the Jurisdiction of its right to recover from the Contractor all losses, damages, outlay, or expense it incurs, which is attributable to such defective work, materials or equipment, or manufactured assemblies, nor shall such acceptance or approval be deemed a waiver of the Jurisdiction's right to indemnity from the Contractor for damage or injury to third parties occasioned by such defective work, materials, or equipment.

1.11 BUSINESS ORGANIZATION REQUIREMENTS

The bidder, or contractor, as a business organization shall comply with the following:

- A. A corporation, limited liability company, limited partnership, or other type of business organization governed under Iowa statutes must be registered with the Iowa Secretary of State, must use the name under which it is registered with the Iowa Secretary of State, must be authorized to do business in Iowa, and must be registered as a contractor with the Iowa Department of Labor.
- B. A partnership, sole proprietorship, company operating under a trade name, or other type of business organization not governed under Iowa statutes should be registered in the Office of the County Recorder where it is located or where the work is to be performed, must use the name under which it is registered, and must be registered as a contractor with the Iowa Department of Labor. Prior to entering into contract, the designated low bidder, if it is not required to be registered with the Iowa Secretary of State, shall provide to the Jurisdiction the name and address of its registered agent or lawful representative upon whom legal notices and processes may be served. The registered agent or lawful representative must be an Iowa resident, an Iowa profit or nonprofit corporation, or a foreign profit or nonprofit corporation qualified to do business in Iowa.
- C. A foreign business organization, organized under the laws of a state other than Iowa, shall file with the Engineer's documentation that it has complied with all the provisions of this section prior to entering into a contract.

1.11 BUSINESS ORGANIZATION REQUIREMENTS (Continued)

- D. If a bid is proposed to be submitted by two persons or entities as a joint venture, the names of the two persons or entities appearing on the documents must be followed by the notation – “a joint venture.” In that instance, the bid must also be signed by authorized agents of both entities, and the bid security must indicate that it “applies to and covers the proposal for construction of (Project Name) submitted by the (principal on bond) and (name of other company), submitted as a joint venture proposal.” A bid submitted by two persons or entities without any indication they are submitting it as a joint venture, without being signed by authorized representatives of both entities, and without bid security covering both entities as a joint venture, will be rejected.

1.12 CONSENT TO JURISDICTION OF IOWA DISTRICT COURT OR FEDERAL DISTRICT COURT IN IOWA

The Contractor agrees that any causes of action that accrue to it, or which by subrogation or assignment accrue to its sureties or insurers, arising out of or connected with this contract shall be brought in the Iowa District Court in and for the County where the Jurisdiction is located or in the United States District Court in and for the District where the Jurisdiction is located. Contractor further consents, on behalf of itself and its subrogees and assigns, to the jurisdiction of either the Iowa District Court in and for the County where the Jurisdiction is located or the United States District Court in and for the District where the Jurisdiction is located, as to any causes of action brought against it arising out of this contract or any work performed under it by Contractor or its subcontractors, and further agrees, on behalf of itself, its subrogees and assigns, to waive any and all objections to the jurisdiction of said court as to any such cause of action.

1.13 SEVERABILITY

It is the intent of the Jurisdiction and the Contractor that the lawful provisions of this contract shall be severable from any provisions of this contract that are hereafter declared to be illegal or void by a court of competent jurisdiction.

PART 2 - RESPONSIBILITIES TO THE PUBLIC**2.01 SANITATION**

The Contractor shall arrange for the necessary sanitary conveniences, properly secluded, for the workers on the project. These shall be maintained in a manner inoffensive to the public and in compliance with the local health regulations.

2.02 CONVENIENCE AND SAFETY

- A. Use of Streets:** The Contractor is granted the privilege of using Jurisdictional roads, streets, or highways, as shown on the plans, for the purpose of doing work specified in the contract, but is not granted exclusive use of such roads, streets, or highways.
- B. Protection of Workers and the Public:** The Contractor shall erect and maintain good and sufficient guards, barricades, and signals at or near the work according to the MUTCD and all applicable laws, regulations, and specifications. The Contractor shall, in all cases, maintain safe passageways at all road crossings, crosswalks, and street intersections and shall do all other things necessary to prevent an accident or loss of any kind.

After November 24, 2008, all personnel shall wear ANSI 107 Class 2 apparel at all times when exposed to traffic or construction equipment in the right-of-way.

- C. Convenience and Access:** The Contractor shall handle the work in a manner that will cause the least inconvenience and annoyance to the general public and to the property owners abutting the work area. The Contractor shall also provide access to the abutting property to the greatest extent practicable.
- D. Worker Safety:** The Contractor shall comply with all current and future federal and state OSHA requirements. Nothing in this contract or any action by the Jurisdiction shall be interpreted or construed as a waiver of OSHA requirements. It is the Contractor's obligation to follow OSHA requirements and standards at all times.

E. Project Area or Work Site Safety:

1. In accordance with Section 1070, 1.06, until the work is accepted by the Jurisdiction, the work shall be in the custody of and under the charge, care, and control of the Contractor. The Contractor is also responsible for the project area or work site. The Contractor is solely responsible for the safety of everyone on its work site.
2. The Contractor should have a safety program; however, the Contractor need not submit a safety program to the Jurisdiction, and the Jurisdiction will not review or approve the Contractor's safety program. The Jurisdiction assumes that the Contractor will maintain a safe worksite; however, the Jurisdiction's staff will not intrude in the Contractor's responsibility for safety issues.
3. The Engineer may assign some or all of the duties and responsibilities of the Engineer to an authorized representative for a given project. Nothing contained in this section or in the contract documents shall be construed as requiring or permitting the Engineer to direct the means, methods, sequences, or procedures, including safety measures, of performing any work under the contract or contract documents, except to assure that the quality of work conforms to these specifications and other provisions of the contract documents and that the contract will be completed as scheduled.

2.02 CONVENIENCE AND SAFETY (Continued)

4. The Engineer may appoint an authorized representative on the work site to monitor the materials used and the work done by the Contractor. The Engineer's authorized representative is not a safety inspector and is not responsible for monitoring, directing, or otherwise ensuring the safety of the Contractor, its subcontractors, its suppliers, or any others that may be on the work site.
5. Construction of the work included in the contract is by its nature dangerous work; and the Contractor is hereby notified that it is the Contractor's sole responsibility to provide as safe a working site as possible given the nature of the work. It is the Contractor's responsibility to notify and advise its employees, subcontractors, suppliers, and everyone on the worksite of the dangers associated with the work, and provide them with appropriate safety information to protect them from those dangers.

2.03 WORK AREA

- A. The Contractor shall confine its work to the Jurisdiction's premises, including construction easements and construction limit lines as shown in the contract documents and verified by the Engineer. The Contractor shall not enter upon or place materials on any private property for which the Jurisdiction has not obtained an easement for such use. The Contractor agrees to defend, indemnify, and hold the Jurisdiction harmless from all suits and actions of every kind and description resulting from the Contractor's use of private property. Before beginning construction, the Contractor shall check with the Engineer for any special instructions concerning easements.
- B. Temporary buildings, storage sheds, shops and office, etc., may be erected by the Contractor only with the prior approval of the Engineer and shall be built with labor and materials furnished by the Contractor without expense to the Jurisdiction. Such temporary buildings and utilities shall remain the property of the Contractor and shall be removed by the Contractor, at its expense, after the completion of the work.

2.04 PROJECT AREA FOR THE WORK

- A. **Acquisition:** Existing and proposed additional right-of-way or easements shown on the plans and/or in the contract documents will provide, without cost to the Contractor, adequate space for the performance of the work. If the contract documents do not contain a notice to the Contractor of non-acquired additional right of way or easements, as shown on the plans, and the Contractor provides documentation acceptable to the Engineer, compensation will be allowed for loss or damage occasioned by delays in securing said right-of-way or easements; and, if the need to acquire such additional right-of-way or easements is the sole and only cause of the impossibility of completing the work within the specified time, the Jurisdiction may grant an extension of time if requested by the Contractor. Before beginning construction, the Contractor shall obtain from the Engineer a list of any easements or right-of-way not acquired and any special instructions pertaining to properties affected by the work.
- B. **Location:** Property lines, limits of easements, and limits of construction permits are indicated on the plans, and it shall be the Contractor's responsibility to confine its construction activities within those limits.
- C. **Use:** The Contractor shall confine its equipment, storage of materials, and operation of work to the limits indicated by laws, ordinances, permits, or direction of the Engineer and shall not unreasonably encumber the premises with its materials.

No storage of flammable products or combustible materials shall be allowed below overhead portions of bridges, other highway structures, or existing overhead structures spanning or encroaching the public right-of-way or easements. When not in use, materials or products that present risk of fire hazards must be stored at least 15 feet from the footprint of overhead structural elements.

2.04 PROJECT AREA FOR THE WORK (Continued)

The Contractor shall comply with the Engineer's instructions regarding signs and advertisements.

D. Encroachments: Any damage resulting to persons or property from the Contractor's encroachment beyond the specified limits shall be the sole responsibility of the Contractor.

2.05 EXPLOSIVES

A. Use: The Contractor shall not blast any rock or other materials or allow the same to be done in prosecution of the work, unless it secures the Engineer's approval, proper insurance coverages, and a blasting permit when required.

B. Safety: The Contractor is solely responsible for all damage resulting from blasting operations performed by the Contractor or its agents. The Contractor shall use the utmost care to not endanger life or damage property; and whenever ordered by the Engineer, the number and size of the charges shall be reduced. Suitable coverages or mats shall be provided to confine all materials lifted by blasting within the limits of the excavation or trench. All explosives shall be stored in a secure manner and clearly marked according to all applicable laws and regulations.

C. Regulations: The Contractor shall abide by all existing Federal, State, and Local regulations regarding the use of explosives, including, but not limited to, Uniform Fire Code, Article 77, and National Fire Protection Association 495, Explosive Materials Code of the National Fire Codes.

2.06 TRAFFIC CONTROL**A. General:**

1. The Contractor shall maintain traffic and shall provide and maintain traffic control devices according to the contract documents. If there is no specific traffic control plan, then the Contractor's traffic control devices shall meet the requirements of and be placed according to the current edition of MUTCD.
2. During construction, areas to be maintained for traffic shall be kept clear of all hazardous materials, including but not limited to construction debris, dust, and mud.

B. Closing Streets to Traffic:

1. Upon the Engineer's approval, the Contractor may close streets or parts of streets to vehicular traffic as soon as the construction work is started; such streets or parts of streets shall remain closed as long as construction work or condition of the finished work requires. The Engineer will determine how many streets or parts of streets may be closed by the Contractor at one time, and may refuse to allow the closing of additional streets until some of the improvement is finished and opened to traffic.
2. The Contractor shall notify the Engineer 48 hours in advance (excluding weekends) of closing any roads, streets, or public thoroughfares. No road or street shall be closed without prior approval from the Engineer.
3. The Contractor shall not remove, relocate, or reset any permanent Jurisdictional traffic control devices unless authorized to do so by the Engineer or contract documents. If a sign must be removed or relocated for any phase of construction, the Contractor shall notify the Engineer of the necessity for removal. The Engineer shall arrange for the removal, relocation, or resetting of permanent traffic control devices by Jurisdictional personnel as needed to allow the work to proceed. If Jurisdictional personnel are not available, the authorized Jurisdictional representative may give authorization to the Contractor to remove, relocate, or reset the permanent traffic control devices.

2.06 TRAFFIC CONTROL (Continued)

4. In the event the Contractor removes or relocates a traffic control sign without prior notice to or authorization from the Engineer, the Contractor shall bear all responsibility and liability to any person sustaining bodily injury or property damage on account thereof.

2.07 PROTECTION OF ABOVEGROUND AND UNDERGROUND FACILITIES

- A. The Engineer has attempted to show on the plans all aboveground and underground facilities, including public and private utilities, which may be affected by the work. The location, depth, and size of each such facility shown on the plans is approximate only and is not guaranteed. Other underground facilities may exist and their location may not be presently known or identified. It is the Contractor's responsibility to determine the existence and exact location of all such facilities located within the construction area to avoid damage.
- B. Where existing facilities are shown in the contract documents or encountered within the construction area, it shall be the responsibility of the Contractor to notify the operators of those facilities prior to beginning any construction activities. The Contractor shall allow access to those facilities for necessary modification of services. The Contractor shall support, sustain, and protect existing pipes, conduits, poles, wires, and other apparatus located under, over, along, across, or adjacent to the work site. If such utilities are damaged through Contractor's negligence, they will be repaired by the agencies having control of same, but the cost of such repairs shall be paid by the Contractor.
- C. The Contractor shall, prior to commencing any excavation or other operation that may affect underground facilities, notify the "Iowa One Call" underground facility locate system, established pursuant to Iowa Code Chapter 480. The Contractor shall, if requested by the operator of an underground facility, assist in the location of its facilities; provided, however, the Jurisdiction shall not be responsible to the Contractor or to any operator of an underground facility for the cost of locating such facility, or for any damage to such facility that occurs in attempting to locate it, or for any damage to the facility occasioned by the Contractor's performance of work under the contract.
- D. Claims for additional compensation will not be allowed to the Contractor for any interference, delay, or additional work occasioned by the location or adjustment of aboveground or underground facilities, or connections thereto.

2.08 PROTECTION OF PROPERTY

- A. The Contractor shall continuously maintain adequate protection of all its work from damage and shall protect the Jurisdiction's property and adjacent private property from injury or loss arising in connection with the work. The Contractor shall repair or restore any such damage, injury, or loss to Jurisdiction property or adjacent private property.
- B. Protect existing facilities, trees, and shrubs to remain in place. Any damage to existing trees or shrubs, branches, and root systems to remain and to be protected shall be repaired and/or pruned by an experienced tree surgeon or arborist. Do not disturb soil within 10 feet of the drip line of trees without notifying the Engineer. The Contractor shall mark the 10 foot limit from the drip line.
- C. The Contractor shall continuously maintain its work area by undertaking mowing, weed control, and solid waste management in a manner matching the maintenance level of the area properties. Failure to do so within three working days after direction from the Engineer may cause the Jurisdiction to do the work and the cost thereof deducted from the Contractor's next payment.

2.09 LAND MONUMENTS

- A. The Contractor will be required to preserve all center stones, land monuments, or other property marks the Contractor may find in prosecuting the work. The Contractor shall notify the Engineer of the finding of any land monuments and shall not remove or disturb same until permission is given to do so, at which time the Contractor shall properly remove said landmarks under the direction of the Engineer.
- B. For every land monument lost or destroyed by the Contractor, the Contractor may be charged, and such amount shall be deducted from any monies due or may become due to the Contractor under the contract.

2.10 DUST CONTROL

During construction operations, the Contractor shall be responsible for the control of dust to a degree compatible with the area in which the construction is being performed and with existing environmental regulations. In the event the Contractor does not control dust as specified, the Jurisdiction reserves the right to order dust control to be performed by other forces and withhold the cost thereof from any monies due or may become due to the Contractor under the contract.

2.11 ENVIRONMENTAL AND HISTORIC ITEMS

If contaminated soils, historical artifacts, or other environmental or historic items are encountered, stop work and notify the Engineer.

2.12 RAILROAD CROSSINGS

The authority for performing work beneath, at grade, or over railroad tracks will have been previously secured by the Jurisdiction. It shall be the Contractor's responsibility to contact the railroad company officials prior to beginning the work on railroad property or easements. The Contractor shall perform the work without damage to the facilities and property of the railroad or its lessees, and in strict observance of requirements for the safety of the railroad property and operations. All such work will be subject to the inspection of the railroad's representative. The Contractor shall protect, indemnify, and hold the Jurisdiction harmless from any and all damages resulting from its operations on railroad property or easements or in the construction of railroad crossings according to Section 1070, Part 3 - Bonds and Insurance.

2.13 BORROW AND WASTE SITES

- A. Unless borrow or waste sites are designated on the plans or specified in the special provisions, the Contractor shall secure and operate such sites at its own expense.
- B. In all cases, borrow and waste sites shall be operated in such a manner as to meet Federal, State, and local safety, environmental, and health requirements. Site operations, or the result of such operation, that create a definite nuisance or result in damage to public or private property will not be permitted. In all cases, sites shall be approved by the Engineer before use.

2.14 MAINTAINING POSTAL SERVICE

- A. It shall be the Contractor's responsibility to contact the U.S. Postal Service to ascertain its requirements for the maintenance of postal service to residents or businesses in the vicinity of the work site according to the instructions of the Postal Service. The Contractor shall be responsible for mailboxes at temporary locations designated by the Postal Service, and at the completion of the work, the Contractor shall replace all mailboxes in locations and conditions satisfactory to the Postal Service.
- B. Not less than 24 hours prior to removing any mailbox, the Contractor shall notify each affected resident or business addressee in writing advising them of the move and the location of their temporary mailbox during construction.
- C. For each residential or business address affected by the work, the Contractor shall place a temporary mailbox at a location approved by the Postal Service. Temporary mailboxes shall be in place so postal service is maintained at all times. Any permanent mailbox that must be removed shall be stored on the property from which it is removed and at a sufficient distance from the work area to ensure it will not be damaged by construction activities.

2.15 FINISHING AND CLEANUP REQUIREMENTS

From time to time, as may be ordered by the Engineer, and immediately after completion of the improvement, the Contractor shall, at its expense, cleanup and remove all refuse and unused materials of any kind resulting from the work. Upon failure to do so within three working days after such request by the Engineer, the work may be done by the Jurisdiction and the cost thereof charged to the Contractor and deducted from its final payment. Upon completion of the work, the Contractor shall remove all its equipment and put the area of the work in a neat and clean condition and do all other cleaning necessary to complete the work in a workmanlike manner satisfactory to the Engineer.

PART 3 - BONDS AND INSURANCE**3.01 PERFORMANCE, PAYMENT, AND MAINTENANCE BOND**

- A. The lowest responsive, responsible bidder shall be required to file, before the contract is awarded, a surety bond for performance, payment, and/or maintenance on a form provided by the Jurisdiction and in penal sum equal to the total bid amount. Said bond shall be executed by a corporation authorized to contract as a surety in the state of Iowa. Said bond shall be filed in the specified number of copies as a part of the executed contract documents for the Jurisdiction's approval and award.
- B. Said bond shall provide that the Contractor shall well and satisfactorily perform and execute the work in all respects, according to the contract documents therefore, and according to the time and conditions of the contract documents, and also that the Contractor shall pay all debts incurred by it in the prosecution of such work, including those for labor and materials furnished. Said bond may also provide for the maintenance of the improvement for the number of years stipulated in the contract documents, and shall remain in full force for the entire maintenance period. Said bond shall in all cases comply with the laws of the State of Iowa and shall be subject to the approval of the Jurisdiction.
- C. Within the time period specified in the maintenance portion of the bond, the Contractor shall, as and when ordered by the Engineer, repair, replace, or rebuild such portions of the work found to be faulty because of materials or workmanship. After being notified of the need for repairs, the Contractor shall submit, within seven calendar days, a written report stating its intentions and schedule for completing the repairs for approval by the Engineer. If the Contractor fails to submit such written report or to make the repairs as approved by the Engineer, the Jurisdiction shall have the right to make such repairs and to collect from the Contractor or its surety all outlay and expense the Jurisdiction incurs in making the repair, and in attempting to enforce the terms of the contract and the bond against the Contractor and its surety.

3.02 INSURANCE REQUIREMENTS

- A. The Contractor shall purchase and maintain insurance to protect the Contractor and the Jurisdiction against all hazards herein enumerated throughout the duration of the contract. Said insurance shall be provided by an insurance company or companies, "admitted" or "non-admitted" to do business in the State of Iowa, having an A.M. Best rating of no less than "B+."
- B. "Insurance," "insurance policy," or "insurance contract" when used in these specifications shall have the same meaning as "insurance policy" and "insurance contract" under Iowa Code Section 507B.2. All insurance required by this section shall provide coverage on an occurrence basis, not on a claims-made basis, and the person or other entity shall provide evidence of such coverage through an "insurance policy," "contract of insurance," or "certificate of insurance" that clearly discloses on its face coverage on an occurrence basis. Insurance coverage required for hazardous materials abatement including removal of lead, asbestos, PCB's, or the like may be provided on a claims-made basis when it is demonstrated to the satisfaction of the Jurisdiction that occurrence coverage is not reasonably available.
- C. Except for workers compensation insurance, the Contractor shall purchase and maintain such insurance as will protect the Contractor and the Jurisdiction as set forth below, which may arise out of or result from the Contractor's operations under the contract, whether such operations be by the Contractor, its subcontractors or consultants, suppliers, third parties, or the agents, officers, or employees of any of them. In addition, the Contractor shall purchase and maintain workers compensation insurance to cover its employees.

3.02 INSURANCE REQUIREMENTS (Continued)

1. Workers Compensation: A standard Workers Compensation policy approved for use in the State of Iowa shall be issued with the following coverages.
 - a. Statutory Benefits covering all employees injured on the job by accident or disease as prescribed by Iowa Code Chapter 85.
 - b. Employers Liability insurance with the following limits:

Bodily injury by accident	\$500,000 each accident
Bodily injury by disease	\$500,000 each accident
Bodily injury by disease	\$500,000 policy limit

2. Commercial General Liability Insurance: No less comprehensive and no more restrictive than the coverage provided by a standard form Commercial General Liability Policy (ISO CG 0001 or its equivalent) with all standard exclusions with minimum limits shown below covering claims for damages because of bodily injury, personal injury, or damage to property that occur on the premises under contract or arise out of the operations in performance of the contract. Any additional exclusions shall be identified on the Certificate of Insurance and shall be subject to the review and approval of the Jurisdiction.

General Aggregate Limit	\$2,000,000
Products' Completed Operations Aggregate Limit	\$2,000,000
Personal and Advertising Injury Limit	\$1,000,000
Each Occurrence Limit	\$1,000,000
Fire Damage Limit (any one fire)	\$50,000
Medical Damage Limit (any one person)	\$5,000

This insurance must include the following features:

- a. Coverage for all premises and operations. The policy shall be endorsed to provide the Designated Construction Project(s) General Aggregate Limit Endorsement (ISO CG 2503 or its equivalent).
- b. Personal and advertising injury.
- c. Operations by independent contractors.
- d. Contractual liability coverage. If work to be performed by Contractor includes construction or demolition operations within 50 feet of any railroad property and affecting any railroad bridge or trestle, tracks, roadbeds, tunnel, underpass, or crossing, then such policy will include a Railroad's Contractual Liability Endorsement (ISO CG 2417 or its equivalent).
- e. Coverage for demolition of any building or structure, collapse, explosion, blasting, excavation, and damage to property below the surface of the ground (XCU coverage).
- f. Any fellow employee exclusions shall be deleted as it applies to managerial and supervisory employees.
- g. The policy shall not contain a total or absolute pollution exclusion. Coverage shall be provided for pollution exposures arising from products and completed operations.
- h. Products and completed operations shall be maintained for the duration of the work; and shall be further maintained for a minimum period of time after final acceptance and payment if required in the Special Provisions.
- i. Contractual liability coverage will also include contractually assumed defense costs in addition to policy limits.
- j. In lieu of including the Jurisdiction as an additional insured on the Contractor's Commercial General Liability Insurance, the Jurisdiction, at its option, may require the Contractor to provide an Owner's Protective Liability Policy by Special Provision, or may allow the Contractor to provide an Owner's Protective Liability Policy by Change Order. If an Owner's Protective Liability Policy is provided, the minimum coverage, limits, and exclusions shall be as shown above; and the Contractor's premium cost of obtaining such insurance shall be considered incidental to the work and shall not be subject to reimbursement by the Jurisdiction.

3.02 INSURANCE REQUIREMENTS (Continued)

3. Automobile Liability Insurance: Covers all owned, non-owned, hired, and leased vehicles with a minimum combined single limit of \$1,000,000 per accident covering claims for damages because of bodily injury, personal injury, or damage to property that arise out of operations in performance of the contract. The insurance must include contractual liability coverage. Any fellow employee exclusion shall be deleted. The policy shall provide Auto Cargo Pollution Endorsement (ISO CA 99 48 or its equivalent), if required in the special provisions.
4. Railroad Protective Liability: If required by the Jurisdiction by special provision, or by an affected railroad, the Contractor shall procure and maintain Railroad Protective Liability Insurance naming the railroad as the insured with minimum limit for bodily injury and property damage liability of \$2,000,000 per occurrence, \$6,000,000 aggregate, or with such other limits as the railroad shall require. The original of said policy shall be furnished to the railroad and a certified copy of said policy shall be furnished to the Jurisdiction prior to any construction or entry upon the railroad easement premises by the Contractor.
5. Umbrella/Excess Insurance: At the Contractor's option, the limits specified in Section 1070, 3.02, C, 1, 2, 3 may be satisfied with a combination of primary and Umbrella/Excess Insurance. At the Jurisdiction's option, the minimum insurance limits specified above may be increased by special provision. This increase may be satisfied with a combination of primary and Umbrella/Excess Insurance.
6. Additional Insured Endorsements: Except for Workers Compensation, the insurance specified shall:
 - a. Include the Jurisdiction as an additional insured, per Section 1070, 3.06, B; and
 - b. Be primary to and not in excess of or contributory with any other insurance available to the Jurisdiction.
7. Reference to ISO: Wherever the term "ISO" appears in these specifications, any subsequent equivalent ISO form or non-ISO equivalent form may be used.

3.03 CONTRACTOR'S INDEMNITY - CONTRACTUAL LIABILITY INSURANCE

- A. To the extent covered by the standard insurance forms listed in Section 1070, 3.02, the insurance shall include contractual liability insurance to cover all indemnification and hold harmless agreements and provisions in the contract documents, including the following provision.
- B. To the fullest extent permitted by law, the Contractor shall defend, indemnify, and hold harmless the Jurisdiction and its officers, agents, employees, and consultants from and against all claims, damages, losses, and expenses, including but not limited to, attorney's fees, arising out of or resulting from the performance or prosecution of the work by the Contractor, its subcontractors, agents, or employees; or arising from any neglect, default, or mismanagement or omissions by the Contractor, its subcontractors or consultants, suppliers, third parties, or the agents, officers, or employees of any of them in the performance of any duties imposed by the contract or by law; provided any such claim, damage, loss, or expense:
 1. is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property (other than the work itself) including economic damages and the loss of use resulting therefrom, and

3.03 CONTRACTOR'S INDEMNITY - CONTRACTUAL LIABILITY INSURANCE (Continued)

2. is caused in whole or in part by any act or omission of the Contractor, its subcontractors or consultants, suppliers, third parties, or the agents, officers, or employees of any of them, or anyone for whose acts any of them may be liable, regardless whether or not it is caused in part by a party indemnified hereunder.

Such obligation shall not be construed to negate, abridge, or otherwise reduce any other right or obligation of indemnity that would otherwise exist as to any party or person described in this subsection.

- C. In any and all claims against the Jurisdiction or the Engineer or any of their agents, officers, employees, or consultants by any employee of the Contractor, its subcontractors or consultants, suppliers, third parties, or the agents, officers, or employees of any of them, or anyone for whose acts any of them may be liable, the indemnification obligation under this subsection shall not be limited in any way by any limitation on the amount or type of damages, compensation, or benefits payable by or for the Contractor or any subcontractor under workers' compensation acts, disability benefit acts, or other employee benefit acts.
- D. The obligations of the Contractor under this subsection shall not extend to the liability of the Engineer, the Engineer's agents, employees, or consultants, arising out of:
 1. the preparation or approval of maps, drawings, opinions, reports, surveys, change orders, design standards, or specifications; or
 2. the giving of or the failure to give directions or instructions by the Engineer, the Engineer's agents, employees, or consultants.

provided the preparation or the giving or failure to give directions or instructions is the sole proximate cause of the injury or damage.

- E. If any litigation on account of such claims shall be commenced against the Jurisdiction, the Contractor, upon notice thereof from the Jurisdiction, shall defend the same at its sole cost and expense; and the record of any judgment rendered against the Jurisdiction on account of such claims for damages shall be conclusive as against said Contractor and entitle the Jurisdiction to recover the full amount thereof, with interest and cost, and attorney's fees incurred by said Jurisdiction, whether the Jurisdiction paid such amounts or not.

3.04 CONTRACTOR'S INSURANCE FOR OTHER LOSSES; WAIVER OF SUBROGATION

- A. The Contractor shall assume full responsibility for all loss or damage from any cause whatsoever to any tools owned by the mechanics; or any tools, machinery, equipment, or motor vehicles owned or rented by the Contractor, its subcontractors or consultants, suppliers, third parties, or the agents, officers, or employees of any of them; or to any shed or other temporary structures, scaffolding and stagings, protective fences, and bridges belonging to the contractor, its subcontractors or consultants, suppliers, third parties, or the agents, officers, or employees of any of them, not covered by the Jurisdiction's Builders Risk Insurance.
- B. Contractor shall cause each of its subcontractors, consultants, suppliers, third parties, or the agents of any of them, to carry insurance sufficient to cover all loss to such materials, tools, motor vehicles, and equipment. All insurance carried by the Contractor, or its subcontractors, consultants, suppliers, third parties or the agents of any of them, covering risk of loss or damage to materials, tools, motor vehicles, and equipment used in the performance of the Work, shall provide a waiver of subrogation against the Jurisdiction. To the extent that any subcontractors, consultants, suppliers, third parties or the agents of any of them, do not provide such coverages, any uninsured loss shall be the sole responsibility of the Contractor.

3.05 PROPERTY INSURANCE

- A. When stated in the special provisions, the Jurisdiction shall purchase and maintain property insurance, a.k.a. Builder's Risk Insurance, in the amount of the initial bid amount, or in an amount equal to the estimated value of actual building construction, whichever is less, as well as applicable modifications thereto for the entire work at the site on a replacement cost basis. Such property insurance shall be maintained, unless otherwise provided in the contract documents or otherwise agreed in writing by all persons and entities who are beneficiaries of such insurance, until final acceptance of the work by the Jurisdiction. The insurance shall include interests of the Jurisdiction, the Contractor, subcontractors, and sub-subcontractors in the work. This property insurance covering the work will have a deductible of \$5,000 for each occurrence, or as stated in the special provisions, which will be the responsibility of the Contractor.
- B. Property insurance shall be on an all-risk policy form and shall insure against the perils of fire and extended coverage and physical loss or damage including, without duplication of coverage, flood and earthquake, theft, vandalism, malicious mischief, collapse, falsework, temporary buildings and debris removal, including demolition occasioned by enforcement of any applicable legal requirements, and shall cover reasonable compensation for the Jurisdiction's services and expenses required as a result of such insured loss. Coverage for other perils shall not be required unless otherwise provided in the contract documents.
- C. Unless otherwise provided in the contract documents, this property insurance shall cover portions of the work stored off the site, after written approval of the Jurisdiction, at the value established in the approval, and portions of the work in transit. Coverage for work stored off the site and in transit will be not less than 10% of the policy amount.
- D. Boiler and Machinery Insurance: The Jurisdiction, at the Jurisdiction's option, may purchase and maintain Boiler and Machinery Insurance required by the contract documents or by law, which shall specifically cover such insured objects during installation and until final acceptance by the Jurisdiction; this insurance shall include interest of the Jurisdiction, Contractor, subcontractors, and sub-subcontractors in the work, and the Jurisdiction and Contractor shall be named insureds.
- E. Loss of Use Insurance: The Jurisdiction, at the Jurisdiction's option, may purchase and maintain insurance to insure the Jurisdiction against loss of use of the Jurisdiction's property due to fire or other hazards, however caused. In the event the Jurisdiction purchases such insurance, the Jurisdiction shall waive all rights of action against the Contractor for loss of use of the Jurisdiction's property, including consequential losses due to fire or other hazards, however caused.
- F. If the Contractor requests in writing that insurance for risks other than those described herein or for other special hazards be included in the property insurance policy, the Jurisdiction shall, if possible, include such insurance, and the cost thereof shall be charged to the Contractor by appropriate change order.
- G. If during the project construction period, the Jurisdiction insures properties, real or personal or both, adjoining or adjacent to the site by property insurance under policies separate from those insuring the project or if after final acceptance, property insurance is to be provided on the completed project through a policy or policies other than those insuring the project during the construction period, the Jurisdiction shall waive all rights according to the terms of Section 1070, 3.05, I, for damages caused by fire or other perils covered by this separate property insurance. All separate policies shall provide this waiver of subrogation by endorsement or otherwise.

3.05 PROPERTY INSURANCE (Continued)

- H. Before an exposure to loss may occur, the Jurisdiction shall file with the Contractor a copy of each policy that includes insurance coverages required by this section. Each policy shall contain all generally applicable conditions, definitions, exclusions, and endorsements related to this project. Each policy shall contain a provision that the policy will not be cancelled or allowed to expire until at least 30 calendar days prior written notice has been given to the Contractor.
- I. Waivers of Subrogation: The Jurisdiction and Contractor waive all rights against (1) each other and any of their subcontractors, sub-subcontractors, agents, and employees, each of the other, and (2) the Jurisdiction's consultants, separate contractors, if any, and any of their subcontractors, sub-subcontractors, agents, and employees, for damages caused by fire or other perils to the extent covered by property insurance obtained pursuant to this section or other property insurance applicable to the work, except such rights as they have to proceeds of such insurance held by the Jurisdiction as fiduciary. The Jurisdiction or Contractor, as appropriate, shall require of the Jurisdiction's consultants, separate contractors, if any, and the subcontractors, sub-subcontractors, agents, and employees of any of them, by appropriate agreements, written where legally required for validity, similar waivers each in favor of other parties enumerated herein. The policies shall provide such waivers of subrogation by endorsement or otherwise. A waiver of subrogation shall be effective as to a person or entity even though that person or entity would otherwise have a duty of indemnification, contractual or otherwise, did not pay the insurance premium directly or indirectly, and whether or not the person or entity had an insurable interest in the property damaged.
- J. A loss insured under the Jurisdiction's property insurance shall be adjusted by the Jurisdiction as fiduciary and made payable to the Jurisdiction as fiduciary for the insureds, as their interest may appear, subject to requirements of any applicable mortgagee clause and of Section 1070, 3.05, K. The Contractor shall pay subcontractors their shares of insurance proceeds received by the Contractor, and by appropriate agreements, written where legally required for validity, shall require subcontractors to make payments to their sub-subcontractors in a similar manner.
- K. The Jurisdiction as fiduciary shall have power to adjust and settle a loss with insurers unless one of the parties in interest shall object in writing within five calendar days after occurrence of loss to the Jurisdiction's exercise of this power; if such objection be made, arbitrators shall be chosen according to [Section 1040, 1.10, D](#), provided one arbitrator shall be appointed by the Jurisdiction, one by the party in interest making objection, and the third to be appointed by the two arbitrators thus chosen. Arbitration shall thereafter proceed as provided in [Section 1040, 1.10, E through G](#). The Jurisdiction as fiduciary shall, in that case, make settlement with insurers according to the direction of such arbitrators. If distribution of insurance proceeds by arbitration is required, the arbitrators will direct such distribution.
- L. Partial occupancy or use of the work shall not commence until the insurance company or companies provided property insurance have consented to such partial occupancy or use by endorsement or otherwise. The Jurisdiction and the Contractor shall take reasonable steps to obtain consent of the insurance company or companies and shall, without mutual written consent, take no action with respect to partial occupancy or use that would cause cancellation, lapse, or reduction of insurance.
- M. Installation Floater: Under contracts where the Jurisdiction does not provide Builders Risk Insurance, the Jurisdiction may by special provision require the Contractor to provide coverage under an "Installation Floater" covering all materials, fixtures, equipment, and supplies provided for the job. Such insurance shall be on an "all risk" form in an amount equal to the maximum value of such materials, equipment, or supplies covered on the job site, off-premises at any temporary storage location, or in transit. The Installation Floater covering the equipment shall have a maximum deductible no greater than \$5,000 for each occurrence, which will be the responsibility of the Contractor.

3.06 ENDORSEMENT NAMING JURISDICTION AS AN ADDITIONAL INSURED / CANCELLATION AND MATERIAL CHANGE / GOVERNMENTAL IMMUNITIES ENDORSEMENT

- A. All liability insurance policies the Contractor is required to provide pursuant to this Section 1070, Part 3 - Bonds and Insurance shall be by endorsement name and designate the Jurisdiction as an additional insured.

- B. The Additional Insured Endorsement shall include the following provisions:

The Jurisdiction, including all its elected and appointed officials, all its employees and volunteers, all its boards, commissions and/or authorities and their board members, employees, and volunteers, and all its officers, agents, and consultants, are named as Additional Insureds with respect to liability arising out of the Contractor's work and services performed for the Jurisdiction. This coverage shall be primary to the Additional Insureds, and not contributing with any other insurance or similar protection available to the Additional Insureds, whether other available coverage by primary, contributing, or excess.

The Additional Insured Endorsement shall be included on all Commercial General Liability, Automobile Liability, and Umbrella/Excess Insurance policies.

- C. The Cancellation and Material Change Endorsement shall include the following provisions:

Thirty calendar days advance written Notice of Cancellation, Non-Renewal or Reduction in Insurance coverage and/or Limits, and 10 calendar days written Notice of Non-payment of Premium, shall be sent to the Jurisdiction at the office and attention of the Certificate Holder. This endorsement supersedes the standard cancellation statement on the Certificate of Insurance to which this endorsement is attached.

This Cancellation and Material Change Endorsement shall be included on insurance policies required by the SUDAS Standard Specifications.

- D. All liability policies that include the Jurisdiction as an additional insured shall include a Governmental Immunities Endorsement, pursuant to Iowa Code Section 670.4, which endorsement shall include the following provisions:

1. Nonwaiver of Government Immunity: The insurance carrier expressly agrees and states the purchase of this policy and including the Jurisdiction as an Additional Insured does not waive any of the defenses of governmental immunity available to the Jurisdiction under Iowa Code Section 670.4 as it now exists and as it may be amended from time to time.
2. Claims Coverage: The insurance carrier further agrees this policy of insurance shall cover only those claims not subject to the defense of governmental immunity under Iowa Code Section 670.4 as it now exists and as it may be amended from time to time.
3. Assertion of Government Immunity: The Jurisdiction shall be responsible for asserting any defense of governmental immunity, and may do so at any time and shall do so upon the timely written request of the insurance carrier. Nothing contained in this endorsement shall prevent the carrier from asserting the defense of governmental immunity on behalf of the Jurisdiction.
4. Non-Denial of Coverage: The insurance carrier shall not deny coverage or deny any of the rights and benefits accruing to the Jurisdiction under this policy for reasons of governmental immunity unless and until a court of competent jurisdiction has ruled in favor of the defense(s) of governmental immunity asserted by the Jurisdiction.

3.06 ENDORSEMENT NAMING JURISDICTION AS AN ADDITIONAL INSURED / CANCELLATION AND MATERIAL CHANGE / GOVERNMENTAL IMMUNITIES ENDORSEMENT (Continued)

5. No Other Change in Policy: The insurance carrier and the Jurisdiction agree the above preservation of governmental immunities shall not otherwise change or alter the coverage available under the policy.

This Government Immunities Endorsement shall be included on all insurance policies that include the Jurisdiction as Additional Insured.

- E. All liability policies purchased in the Jurisdiction's name shall include a Governmental Immunities Endorsement, pursuant to Iowa Code Section 670.4, which endorsement shall include the following provisions:
 1. Nonwaiver of Government Immunity: The insurance carrier expressly agrees and states the purchase of this policy does not waive any of the defenses of governmental immunity available to the Jurisdiction under Iowa Code Section 670.4 as it now exists and as it may be amended from time to time.
 2. Claims Coverage: The insurance carrier further agrees this policy of insurance shall cover only those claims not subject to the defense of governmental immunity under Iowa Code Section 670.4 as it now exists and as it may be amended from time to time.
 3. Assertion of Government Immunity: The Jurisdiction shall be responsible for asserting any defense of governmental immunity, and may do so at any time and shall do so upon the timely written request of the insurance carrier. Nothing contained in this endorsement shall prevent the carrier from asserting the defense of governmental immunity on behalf of the Jurisdiction.
 4. Non-Denial of Coverage: The insurance carrier shall not deny coverage or deny any of the rights and benefits accruing to the Jurisdiction under this policy for reasons of governmental immunity unless and until a court of competent jurisdiction has ruled in favor of the defense(s) of governmental immunity asserted by the Jurisdiction.
 5. No Other Change in Policy: The insurance carrier and the Jurisdiction agrees that the above preservation of governmental immunities shall not otherwise change or alter the coverage available under this policy.

This Government Immunities Endorsement shall be included in all Insurance Policies in the Jurisdiction's name.

3.07 PROOF OF INSURANCE

- A. The Contractor shall, prior to the Jurisdiction's approval and execution of the Contract, provide to the Jurisdiction a certificate or certificates of insurance evidencing all required insurance coverages as required in this Section 1070, Part 3 – Bonds and Insurance, utilizing the ACORD certificate form, or equivalent, required by the Jurisdiction. The Certificate of Insurance requirement may be satisfied with a blanket certificate.
- B. The Description of Operations on the Certificate of Insurance for the work must state either:
 - 1) Blanket certificate of coverage of all work, services, or projects with the Jurisdiction, or 2) Identify the specific project by name and project number. The Contract will not be submitted for approval execution by the Jurisdiction until all certificates of insurance are correct and have received staff approval.
- C. The Cancellation statement on the Certificate of Insurance shall be superseded by the Cancellation and Material Changes Endorsement, which shall be attached to the certificate.

3.07 PROOF OF INSURANCE (Continued)

- D. All endorsements required for the work shall be attached to the appropriate Certificate or Certificates of Insurance and shall be, on the face thereof, listed by name.
- E. If an Owner's Protective Policy is provided, the policy with appropriate endorsements shall be submitted to the Jurisdiction. The Contract will not be submitted for approval and execution by the Jurisdiction until the Owner's Protective Policy and all certificates of insurance are correct and have received staff approval.

3.08 NOTIFICATION IN EVENT OF LIABILITY OR DAMAGE

- A. Upon the occurrence of any event, the liability for which is herein assumed by the Contractor, the Contractor agrees to forthwith notify the Jurisdiction in writing of such happening, which notice shall give the details as to the happening, the cause as far as can be ascertained, the estimate of loss or damage done, the names of witnesses, if any, and stating the amount of any claim.
- B. In the event the Jurisdiction has or obtains actual knowledge of any event that may result in a claim, the liability for which is herein assumed by the Contractor, the Jurisdiction agrees to notify the Contractor of such event within a reasonable period of time after acquiring knowledge thereof; provided however, the Jurisdiction shall have no duty to inspect the project to obtain knowledge of such events; and provided further the Jurisdiction's failure to so notify the Contractor shall not relieve the Contractor of any liability or obligation herein assumed by the Contractor.

3.09 SAMPLE INSURANCE FORMS

See the SUDAS website (www.iowasudas.org) for examples of standard insurance forms.

END OF SECTION

PROSECUTION AND PROGRESS**1.01 SUBLETTING OR ASSIGNMENT OF CONTRACT****A. Work by Contractor:**

1. The Contractor shall perform, with its own organization and forces, work amounting to no less than 30% of the total contract cost, except any items designated in the contract documents as "specialty items" may be performed by subcontract, and the cost of any such "specialty items" may be deducted from the total contract cost before computing the amount of work required to be performed by the Contractor with its own organization. Any items that have been selected as "specialty items" for the contract will be listed as such in the contract documents.
2. In order to meet this 30% requirement, the Contractor shall not purchase any materials for a subcontracted item, nor shall it place other contractor's employees on its payroll.
3. The Contractor shall not assign this Contract to another person, firm, or corporation without the prior consent of the Jurisdiction. The Jurisdiction may refuse to approve a proposed assignment of contract if such assignment would not be in the best interests of the Jurisdiction, or if such assignment would be contrary to law or public policy. An assignment of contract and all subcontracts shall be in writing.

B. Permission to Sublet:

1. The Contractor shall not sublet, assign, or otherwise dispose of any portion of the contract, except for the furnishing and transportation of materials, without a written "permission to sublet" order duly approved by the Jurisdiction.
2. Requests for permission to sublet, assign, or otherwise dispose of any portion of the contract shall be in writing and shall provide the name, address, telephone number, and representative of the organization that will perform the work, a description of the work to be sublet, and the associated cost. When requested by the Engineer, the Contractor shall provide a written report showing the organization that will perform the work is particularly experienced and equipped for such work.
3. Consent to sublet, assign, or otherwise dispose of any portion of the contract shall not be construed to relieve the Contractor of any responsibility for the fulfillment of the contract or in any way create any contractual relationship between the subcontractor and the Jurisdiction.

C. Subcontracts:

1. Upon request of the Engineer, the Contractor shall submit a copy of each subcontract agreement within 10 calendar days.
2. The Contractor shall be responsible to include all conditions and requirements of the contract documents in all its subcontracts and enforce said requirements with its subcontractors.

1.02 CONTRACT TIME

A. When a completion date is specified in the contract documents, the contract time shall be the time from the starting date stated in the Notice to Proceed to the date specified for completion as shown in the contract, both dates inclusive. When working days or calendar days are specified in the contract documents, the contract time shall be the time as calculated with the number of working days or calendar days as specified in the contract and the starting date in the Notice to Proceed. The contract time may be extended by the Jurisdiction as provided in these specifications, in which event the contract time includes the new extension of time. The Contractor acknowledges that if it fails to complete the contract in said time, liquidated damages will be assessed against it as specified in [Section 1080, 1.12 - Liquidated Damages](#).

1. Completion Date Contracts: The Contractor shall complete the contract on or before the completion date. Unless otherwise noted in the proposal form, the Contractor may commence work any time after receipt of the signed contract, specifications permitting and issuance of the Notice to Proceed. [Section 1080, 1.06](#) will not apply. Liquidated damages will be assessed according to [Section 1080, 1.12](#) for each calendar day beyond the completion date that the contract remains uncompleted.
2. Calendar Day Contracts: The Contractor shall complete the contract within the number of consecutive calendar days specified. The calendar day count will commence on the date specified by the Notice to Proceed. [Section 1080, 1.06](#) will not apply. Liquidated damages will be assessed according to [Section 1080, 1.12](#) for each calendar day beyond the specified number of calendar days that the contract remains uncompleted.
3. Working Day Contracts: The three types of start dates are as follows:
 - a. Specified Start Date: Working days will be charged to the Contractor starting on the specified start date, the date noted in the Notice to Proceed, or 14 calendar days after execution of the contract, whichever is later. Starting work prior to the specified start date will be considered upon request, and working days will be charged when work starts.
 - b. Approximate Start Date: It is expected the site will be available by the approximate start date. If it appears the site will not be available by the approximate start date, the Engineer will inform the Contractor of the delay and if possible the duration of the delay. The Contractor may commence work, weather and specifications permitting, any time after execution of the contract, after receipt of the Notice to Proceed, and on or after the approximate start date provided the site has become available. If work is started under these conditions, working days will be charged. Starting work before the approximate start date and before the site is available, will be considered only after the Contractor has submitted a signed waiver of any right to claim extra compensation for damages due to delays from any cause related to early commencement. If approved, working days will not be charged when working prior to the date of site availability. If the Contractor is working on the project when the site becomes available, working days will be first charged on the following day.
 - c. Late Start Date: Unless otherwise noted in the proposal form, the Contractor may commence work any time after receipt of the signed contract, receipt of the Notice to Proceed, and weather and specifications permitting. Working days will begin to be charged whenever the Contractor starts work. Charging of working days will begin on the late start date if the Contractor has not started work prior to this date.

If the Contractor wishes to start preliminary work prior to the late start date and move out intending to return at a later date to complete the project, the Contractor shall request approval from the Engineer for temporary suspension of work according to [Section 1080, 1.08](#). Approval of suspension of work in this circumstance will be based on if the project area is in a condition that is at least as safe as it was before the start of the work. The Engineer will submit in writing to the Contractor approval for suspension of work and a computed revised late start date. The revised late start date will be computed by adding the working days used for the preliminary work to the late start date listed on the proposal form. The charging of the remainder of the working days will resume on the revised late start date or when the Contractor recommences work if prior to the revised late start date.

1.02 CONTRACT TIME (Continued)

- B. Intermediate contract periods may be designated for completion of a specific item or certain portions of the contract. The contract period and the liquidated damages, if any, for each portion will be listed in the contract documents.

1.03 WORK PROGRESS AND SCHEDULE

- A. The progress of the work shall be at a rate sufficient to complete the contract within the time allowed. The Contractor's sequence of operations shall be such as to cause as little inconvenience to the general public as possible.
- B. After being awarded the contract, and if requested by the Engineer, the Contractor shall immediately prepare and submit to the Engineer for approval a progress schedule that will ensure the completion of the project within the time specified. Adequate equipment and forces shall be made available by the Contractor to start work immediately upon Notice to Proceed by the Engineer and to prosecute the work to completion according to schedule and within the time specified.
- C. If it appears the rate of progress is such that the contract will not be completed within the time allowed, or if the work is not being executed in a satisfactory and workmanlike manner, the Engineer may order the Contractor to take such steps as necessary to complete the contract within the period of time specified or to prosecute the work in a satisfactory manner. If the Contractor fails to comply with such order within two weeks after receipt of the order, the Jurisdiction will have the right to declare the contract in default.

1.04 PRECONSTRUCTION CONFERENCE

The Engineer may schedule and conduct a preconstruction conference. The Contractor and the intended subcontractors, if known, shall participate in this conference. The Engineer will invite representatives of railroads and utilities and others having responsibilities or interest in the work.

1.05 NOTICE TO PROCEED

- A. The return of the signed and executed contract to the Contractor shall serve as notice the contract bond is acceptable, the contract is in force, and the Contractor may complete arrangements for materials and other work according to the contract documents.
- B. The Contractor shall begin work as specified in the Notice to Proceed issued by the Engineer and shall prosecute the work vigorously and continuously to completion, except when it is physically impossible to do so due to weather conditions or other unavoidable handicaps. The necessity of discontinuing and resuming work on any portion of the contract shall be determined by the Engineer.
- C. The Jurisdiction may, if provided for in the contract documents, give a limited Notice to Proceed as to any portion of the work under the contract.

1.06 WEEKLY RECORD OF WORKING DAYS

- A. On contracts with completion provisions based upon working days, the Engineer will furnish the Contractor a weekly statement showing the number of working days charged to the Contractor for the preceding week, the number of working days specified for completion of the project, the number of working days remaining to complete the contract, and the revised date for completion.

1.06 WEEKLY RECORD OF WORKING DAYS (Continued)**B. Working days will be charged under the following circumstances:**

1. **Prior to Commencement of Work:** Beginning on the date designated in the Notice to Proceed, or beginning on the specified starting date or as soon thereafter as provided in the specifications, a working day will be charged for every calendar day other than Saturday, Sunday, or a recognized legal holiday. Working days will be charged for Saturdays if a mandatory six-day work week is specified in the contract documents.
2. **After Commencement of Work:** One full working day will be charged for any weekday, exclusive of Saturdays, Sundays, or a recognized legal holiday, when weather or other conditions (not under control of the Contractor) will permit construction operations to proceed for not less than 3/4 of a normal workday in the performance of a controlling item of work as determined by the Engineer. If such conditions allow operations to proceed for at least 1/2 but less than 3/4 of the normal working hours, one-half working day will be charged.

Working days will not be charged for Saturdays (unless a mandatory six-day work week is specified in the contract documents), Sundays, and recognized legal holidays the Contractor does not work. As an incentive to the Contractor to expedite the work, working days will not be charged for Saturdays the Contractor does work, unless a mandatory six-day work week is specified. Working days will be charged for Sundays and recognized legal holidays if the contractor does work on the controlling item or work requiring inspection.

When cure time of pavements and structural concrete is the controlling item of work, working days will be charged; this will not include Saturdays, Sundays, and recognized legal holidays according to the paragraph above.

Upon written notice to the Contractor, the Engineer may suspend charging of working days on substantially completed contracts for up to 30 calendar days when only cleanup of the project site or minor work items remain. If the designated time has expired and the remaining work items and site cleanup remain uncompleted, the Engineer may restart charging of working days effective at the end of the designated period by providing written notice to the Contractor.

- C. Any objection by the Contractor to such weekly determinations shall be deemed waived and shall not thereafter be made the basis of any claim, unless the Contractor shall, within seven calendar days after receipt of a weekly statement, file with the Engineer its written protest setting forth its objections and reasons. If the Contractor's objection to the working day count is made on the grounds it was unable to work due to causes beyond its control, the Contractor shall state its reasons in writing, furnish proof to establish its claim, and state the approximate number of calendar days it estimates it was delayed. The Engineer shall then determine the appropriate number of working days to be charged under the contract.

1.07 WORK ON SUNDAYS OR LEGAL HOLIDAYS

- A. Except when an accelerated work schedule is required in the contract documents, no work requiring inspection will be allowed on Sundays or holidays observed by the Jurisdiction except with permission of the Engineer. The Contractor should request a determination of the holidays observed by the Jurisdiction.
- B. Such work as may be required to properly maintain or protect completed or partially completed construction, or to maintain lights and barricades, will be permitted on Sundays or holidays without specific permission of the Engineer.

1.08 TEMPORARY SUSPENSION OF WORKING DAYS

When, in the judgment of the Engineer, unfavorable weather makes it impractical to secure acceptable results or other conditions warrant an order to suspend working days, the Engineer shall issue to the Contractor a written order to suspend working days wholly or on any part of the contract. When conditions are again favorable for prosecution of the working days, the Engineer shall issue to the Contractor a written order to resume the suspended working days. Orders to suspend working days will not be written for short intermittent shutdowns due to weather conditions. The Contractor shall take every precaution to prevent any damage or unreasonable deterioration of the work during the time of suspended operations.

1.09 EXTENSION OF TIME

- A. Allowances for Delays:** The Contractor expressly covenants and agrees that in undertaking to complete the work within the contract time, it has taken into consideration and made allowance for all delays and hindrances that would ordinarily be anticipated in performing such work.
- B. Request for Extension of Time:** Whenever the Contractor becomes aware of its inability to complete the work under the contract within the contract period, it shall request an extension in writing. Such request shall be submitted to the Engineer at least two weeks prior to the expiration of the contract time to allow for the Jurisdiction's action before termination. The submission or acceptance of a request for extension of time shall not guarantee such extension will be granted. The following items may be justification for extension of time:
- 1. Weather:** Extension of time due to adverse weather conditions at the site, so unusual or severe as not to be reasonably anticipated, as determined by the Engineer, may be requested. An average or usual number of inclement working days when work cannot proceed are to be anticipated during the construction period and are not to be considered as warranting extension of time.
 - 2. Other Contractors:** An extension of time may be requested for delays caused by the noncompletion of essential work of other contractors, provided such noncompletion is the sole and only cause of delay, and where the Contractor has available on the site of the work all equipment, material, and labor necessary to proceed with the work.
 - 3. Change Orders:** An extension of time may be requested for delays caused by the issuance of a change order, where the work occasioned by the change order is the sole and only cause of the impossibility to complete the work within the specified time.
 - 4. Work Stoppage:** An extension of time may be requested for delays caused by a general work stoppage in the area or a work stoppage affecting this project that is beyond the control of the Contractor, or where the Contractor has taken in good faith all steps made available to it by law to resolve the causes thereof and to terminate such work stoppage.
 - 5. Acts by U.S. Government:** An extension of time may be requested for delays caused by any act taken by the United States government that would affect fabrication or delivery of materials or equipment to the work site.
 - 6. Court Proceedings:** An extension of time may be requested for delays caused by any court proceedings.
 - 7. Other Delays:** An extension of time may be requested for other delays encountered by the Contractor beyond its control and impossible for the Contractor to complete the contract within the specified time.

1.09 EXTENSION OF TIME (Continued)

- C. Claims for Damages:** The Contractor shall have no claim for damages for any extensions or delays provided or mentioned in the preceding portions of this section; but the Contractor shall, in such cases, be allowed to petition for such extension of time as the Jurisdiction may grant in writing on account of such delay, provided, however, the claim for such extension of time is made by the Contractor in writing to the Jurisdiction immediately after any such delay occurs.
- D. Extension of Time Granted:** No extension of time shall be granted or recognized except as specifically approved by the Jurisdiction in writing to the Contractor. Oral representations or agreements by Jurisdiction agents or employees regarding time extension shall not be binding on the Jurisdiction.

1.10 CONTRACTOR'S EMPLOYEES, METHODS, AND EQUIPMENT**A. Superintendent:**

1. All work under the contract shall be performed under the continuous supervision of competent personnel, thoroughly experienced in the class of work specified.
2. Prior to beginning work, the Contractor shall give the Engineer, in writing, the name of the Contractor's official representative or superintendent for the project. The superintendent shall be capable of providing adequate supervision of the project and shall be responsible for receiving instructions, notices, and written orders from the Engineer. A change of the superintendent shall be reported to the Engineer in writing. Failure to provide adequate supervision of the project shall be grounds for the Engineer to require a change in supervision before allowing the work to proceed. The superintendent shall be responsible for reporting to the Engineer any inconsistencies, omissions, or lack of definite detail in the plans, special provisions, or contract documents that may be discovered.
3. The lack of proper supervision by the Contractor or by its supervisory personnel shall be just cause for termination of the contract.

B. Workers:

1. The Contractor shall employ competent and efficient workers for every kind of work. The Jurisdiction reserves the right to direct the suspension or discharge from the work any worker, employee, agent, overseer, foreman, or superintendent in the employ of the Contractor, who, in the opinion of the Engineer, shall be incompetent, negligent, unfaithful, insubordinate, or disorderly, and any such person shall immediately be suspended or discharged by the Contractor whenever so directed by the Engineer.
2. The Contractor shall not employ or hire any of the employees of the Jurisdiction without permission of the Engineer.

C. Methods and Equipment:

1. The methods and equipment used by the Contractor shall produce a satisfactory quality of work and shall be adequate to maintain the schedule of progress specified. Equipment used on any portion of the project shall be such, and its use so regulated, that no serious or irreparable damage to the roadway, adjacent property, or other streets or highways will result from its use. If damage does occur to the street or highway, suitable repairs shall be made at the Contractor's expense.

1.10 CONTRACTOR'S EMPLOYEES, METHODS, AND EQUIPMENT (Continued)

2. When the methods and equipment to be used by the Contractor in accomplishing the construction are not prescribed in the contract documents, the Contractor is free to use any methods or equipment that will accomplish the contract work in conformity with the requirements of the contract documents, as demonstrated to the satisfaction of the Engineer.
3. When the contract documents specify that the construction be performed by use of certain methods and equipment, such methods and equipment shall be used unless others are authorized by the Engineer.
4. If the Contractor desires to use a method or type of equipment other than specified in the contract documents, the Contractor may request authority from the Engineer to do so. The request shall be in writing and shall include a full description of the method and equipment proposed to be used and an explanation of the reasons for desiring to make the change. If approval is given, it will be on the condition that the Contractor shall be fully responsible for producing construction work in conformity with contract requirements.
5. If after trial use of the substituted methods or equipment, the Engineer determines the work produced does not meet the requirements of the contract documents, the Contractor shall discontinue use of the substitute method or equipment and shall complete the remaining construction with the specified methods and equipment. The Contractor shall remove the defective work and replace it with work of specified quality, or take such other corrective action as the Engineer may direct. No change will be made in basis of payment for the construction items involved, or in contract time, as a result of authorizing a change in methods or equipment under these provisions.

1.11 CONTRACTOR'S EQUIPMENT IDENTIFICATION

All vehicles and major construction equipment utilized on Jurisdiction's projects, with the exception of vehicles used for personal purposes and rented equipment bearing the name, address, and telephone number of the rental company, shall exhibit the Contractor's name in at least two locations on each piece of equipment. This identification can be either a decal or painted lettering of a type and size, and with a contrasting color, rendering it legible from a distance of no less than 50 feet.

1.12 LIQUIDATED DAMAGES

- A. Time is of the essence of the contract. As delay in the diligent prosecution of the work may inconvenience the public, obstruct traffic, interfere with business, and/or increase costs to the Jurisdiction such as engineering, administration, and inspection, it is important the work be prosecuted vigorously to completion. Should the Contractor, or in case of default the surety, fail to complete the work within the contract time plus such extensions of time as may be allowed by the Jurisdiction, a deduction at the liquidated damages rate specified in the contract will be made for each and every calendar day or working day, whichever is specified, that such contract remains uncompleted after expiration of the contract time. In either event, the Contractor or the Contractor's surety shall be responsible for all costs incident to the completion of the work, and shall be required to pay to the Jurisdiction the liquidated damages stipulated in the proposal form.
- B. The liquidated damages rate specified in the contract documents is hereby agreed upon as the true and actual damages due the Jurisdiction for loss to the Jurisdiction and to the public due to obstruction of traffic, interference with business, and/or increased costs to the Jurisdiction such as engineering, administration, and inspection after the expiration of the contract time, or extension thereof. Such liquidated damages may be deducted from any money due or to become due the Contractor under the contract, and the Contractor and its surety shall be liable for any liquidated damages in excess of the amount due the Contractor.

1.12 LIQUIDATED DAMAGES (Continued)

- C. Allowing the Contractor to continue and finish the work, or any part of it, after the expiration of the contract time or extension thereof shall in no way operate as a waiver on the part of the Jurisdiction of any of its rights or remedies under the contract, including its right to liquidated damages pursuant to this provision.

1.13 BREACH OF CONTRACT

- A. The Contractor's failure to perform in any of the following particulars shall constitute a breach of contract:
 - 1. Failure by the Contractor to begin work at the time specified;
 - 2. Failure by the Contractor to complete the work within the contract period or any extension thereof;
 - 3. Failure or refusal by the Contractor to comply with an order of the Engineer within a reasonable time;
 - 4. Contractor's persistent disregard of laws, ordinances, or instructions of the Engineer;
 - 5. Contractor's repeated failure to provide sufficient workers, equipment, or materials to ensure the proper and timely completion of the work;
 - 6. Failure or refusal by the Contractor to remove rejected materials;
 - 7. Failure or refusal by the Contractor to replace, perform anew, or correct any defective or unacceptable work;
 - 8. Contractor's discontinuance of the work without authorization by the Jurisdiction;
 - 9. Bankruptcy or insolvency of the Contractor, or the making of an assignment for the benefit of creditors by the Contractor; or
 - 10. Failure by the Contractor to carry on the work in an acceptable manner.

Upon Contractor's breach of the contract in any particular above, the Jurisdiction shall be entitled to give notice of default to the Contractor. The notice of default shall indicate how the contract has been breached and shall indicate what action the Contractor must take to cure such breach.

- B. If the Contractor or its surety does not, within the time for cure provided in the notice of default, take action to cure such breach, the Contractor shall, at the direction of the Engineer, relinquish possession and control of the work, and the Jurisdiction shall thereupon have full power and authority, without violating the contract or bond, to take over the completion of the work, to appropriate or use any or all materials and equipment at the site that may be suitable and acceptable, to enter into agreements with others for the completion of said contract according to the terms and provisions thereof, or to use such other methods as in the Jurisdiction's opinion may be required for the completion of said contract in an acceptable manner.

1.13 BREACH OF CONTRACT (Continued)

- C. The Contractor and its surety shall be liable for all outlay and expense incurred by the Jurisdiction, together with the costs of completing the work, and such costs may be deducted from any monies due or which may become due to the Contractor. In case the outlay and expense incurred by the Jurisdiction in completing the work is less than the sum that would have been payable under the contract if it had been completed by the Contractor, then the Contractor will be entitled to receive the difference. In case such outlay and expense exceeds the sum that would have been payable under the contract, then the Contractor and its surety shall be liable for and shall pay to the Jurisdiction the amount of said excess.
- D. Neither the Jurisdiction, nor any officer, agent, or employee thereof, shall be in any way liable or accountable to the Contractor or the Contractor's surety for the method by which the completion of said work, or any portion thereof, may be accomplished, or for the price paid therefore. Neither by taking over the work nor by declaring the contract in default shall the Jurisdiction forfeit the right to recover damages from the Contractor or the Contractor's surety for failure to complete the entire contract.
- E. The Contractor shall be liable for the Jurisdiction's attorney fees incurred as a result of the Contractor's breach of contract.

1.14 TERMINATION OF CONTRACTOR'S RESPONSIBILITY

The contract will be considered completed when the work has been accepted in writing by the Jurisdiction as provided in [Section 1090, 1.08 - Acceptance and Final Payment](#) hereof. Such final acceptance shall release the Contractor from all further obligation with respect thereto, except as to conditions and requirements as set forth in the bond and Jurisdiction's specifications regarding insurance.

END OF SECTION

MEASUREMENT AND PAYMENT**1.01 MEASUREMENT**

The determination of quantities of work performed under the contract will be made by the Engineer, based upon the lines and grades as shown on the plans and as given during the progress of the work or as evidenced by approved tickets for weight or liquid measure or by measurements made by the Engineer. All items will be computed in the units shown in the contract.

1.02 SCOPE OF PAYMENT

- A. The Contractor shall receive and accept the compensation provided in the contract at unit prices, if it be a unit price contract; or at the lump sum price, if it be a lump sum price contract, except as may be modified by change orders. The compensation provided for in the contract shall constitute full payment for furnishing all labor, equipment, tools, and materials and for performing all work contemplated and embraced under the contract; for all loss or damage arising out of the nature of the work or from the action of the elements; for all expenses incurred by, or in consequence of, the suspension or discontinuance of the said prosecution of the work or from any unforeseen difficulties or obstructions that may arise or be encountered during the prosecution of the work; and for all risks of every description connected with the prosecution of the work until the final acceptance of the work by the Jurisdiction.
- B. Neither the payment of any progress payment nor of any retained percentage shall relieve the Contractor of any obligation to make good any defective work or material. Payment will be made only for materials actually incorporated in the work, except as provided in [Section 1090, 1.05 - Progress Payments](#).
- C. The contract price for any item shall be full compensation for all labor, materials, supplies, equipment, tools, and all things of whatsoever nature required for the complete incorporation of the item into the work the same as though the item were to read "in place," unless the contract documents shall provide otherwise.

1.03 LUMP SUM BREAKDOWNS

- A. If the contract is based on a lump sum bid price, or contains one or more lump sum items for which progress payments are to be made, the Contractor shall prepare and submit a breakdown estimate covering each lump sum item to the Engineer for approval. The breakdown estimate shall show the estimated value of each kind or item of work. The sum of the lump sum items listed in the breakdown estimates shall equal the contract lump sum. Overhead and profit shall not be listed as separate items.
- B. The breakdown estimate shall be approved by the Engineer before any progress payments are prepared. An unbalanced breakdown estimate providing for overpayment to the Contractor for items of work to be performed first will not be approved but shall be revised by the Contractor and resubmitted until acceptable to the Engineer.

1.04 PAYMENT FOR CHANGE ORDERS

- A. The Contractor's claims for extra work will not be paid unless the extra work covered by such claims was authorized by a change order as specified in [Section 1040, 1.07 - Change Orders](#).
- B. Payment for extra work shall be made in one or more of the following ways as determined by the agreement between the parties to the contract prior to the starting of the work.

1.04 PAYMENT FOR CHANGE ORDERS (Continued)

1. Unit Prices: By unit prices contained in the Contractor's original proposal and incorporated in the construction contract, so far as the same may apply.
 2. Supplemental Schedule: By supplemental schedule of prices to include costs of all equipment, material, labor, supervision, management, insurance, overhead, and incidentals, said schedule to be submitted by the Contractor upon request of the Engineer and to be accepted by the Jurisdiction.
 3. Lump Sum: By an acceptable lump sum proposal from the Contractor.
- C. The percentage markup to be allowed to the Contractor for extra work performed by a subcontractor shall be in accordance with the following:
1. 10% of the first \$50,000 with a \$100 minimum.
 2. 5% of the portion over \$50,000.

1.05 PROGRESS PAYMENTS

- A. **Limits:** Progress payments made under the contract, unless provided otherwise by law, shall be made according to Iowa Code Chapter 573, and shall be made on the basis of monthly estimates of labor performed and material delivered and incorporated in to the work, as determined by the Engineer. Payment may be made for materials not incorporated into the project if they can be specifically identified and cost verified by invoice. Progress payment requests shall be accompanied by the documentation required in [Section 1090.1.07, B - Sales Tax and Use Tax](#).
- B. **Retainage:** The Jurisdiction shall retain from each monthly progress payment 5% of the amount determined to be due according to the estimate of the Engineer.
- C. **Quantities:** Quantities used for progress payments shall be considered as only approximate and provisional and shall be subject to recalculation, adjustment, and correction by the Engineer in subsequent partial payments and in the final payment. Inclusion of any quantities in a progress payment, or failure to disapprove the work at the time of any progress payment, shall not be construed as acceptance of the corresponding work or materials.

1.06 PAYMENT OF RETAINAGE

- A. Retained funds shall be retained by the Jurisdiction for a period of 30 calendar days after the completion and final acceptance of the improvement by the Jurisdiction. If at the end of the 30 calendar day period claims are on file as provided, the Jurisdiction shall continue to retain from the unpaid funds, a sum equal to double the total amount of all claims on file. The remaining balance of the unpaid fund, or if no claims are on file, the entire unpaid fund, shall be released and paid to the Contractor.
- B. The Jurisdiction, the Contractor, any claimant for labor or material who has filed a claim, or the surety on any bond given for the performance of the contract, may, at any time after the expiration of 30 calendar days, and not later than 60 calendar days, following the completion and final acceptance of said improvement, bring action in equity in the county where the improvement is located to adjudicate all rights to said fund, or to enforce liability on said bond, pursuant to Iowa Code Chapter 573. Upon written demand of the Contractor, served in the manner prescribed for original notices, on the person filing a claim, requiring the claimant to commence action in court to enforce the claim, an action shall be commenced within 30 calendar days, otherwise the retained and unpaid funds due the Contractor shall be released to the Contractor.

1.07 SALES AND USE TAX STATEMENT

- A. At the completion of the contract and before final payment can be made thereon, the Contractor and all subcontractors shall file with the Engineer in triplicate, with original signatures on all three sets, a statement under oath on forms provided by the Iowa Department of Revenue and Finance showing the data with reference to sales, use, and service taxes required by Iowa Code Section 423.4, as amended. On projects with a total contract cost greater than \$1 million or with supplies and materials in excess of 50% of the contract price and when directed by the Engineer, the Contractor shall submit with each progress pay estimate completed sales and use tax forms from the Iowa Department of Revenue listing all supplies and materials purchased since the previous progress payment.
- B. If a Sales Tax Exemption Certificate(s) is issued by the Jurisdiction according to [Section 1020, 1.08](#), no sales, use, or service statement is required.

1.08 ACCEPTANCE AND FINAL PAYMENT

- A. Final payment will be based on the actual final total amount of the work accomplished and finally accepted by the Jurisdiction under the contract. Under no circumstances or conditions will the Contractor be paid anything for anticipated profits for the work, nor will it be paid for any work not actually included in the improvement. The Jurisdiction will not give final acceptance of the work until the Contractor has submitted all documentation required by the contract documents.
- B. The Engineer shall, after determining the work has been finally and fully completed according to the contract documents, make a final estimate of the amount of work done and the value thereof.
- C. Final acceptance of construction shall be defined as final approval of the project only in the sense that it has been constructed, cleaned up, and completed in apparent substantial compliance with the contract documents. Said final acceptance is stipulated to mean a written acceptance by the Jurisdiction.
- D. It is mutually agreed between the parties to the contract that a certificate of completion of the project, submitted by the Engineer and approved by the Jurisdiction, shall constitute final acceptance of the work and materials included in the contract on the date of such approval, subject to the provision any such approval, acceptance, or payment as herein provided shall not constitute an acceptance of any unauthorized or defective work, or of any improper material.

END OF SECTION

These Special Provisions amend or supplement the 2025 SUDAS Standard Specifications. All provisions that are not so amended or supplemented remain in full force and effect.

A full copy of the 2025 SUDAS Specifications Manual and General Supplemental Specifications are available at the following web address: <https://www.iowasudas.org/manuals/specifications-manual/>. Specification Sections that apply directly to this project are listed in the Project Manual Table of Contents, referenced in the bid items by item code, estimate reference note description, or referenced on the drawings.

DIVISION 1 – GENERAL PROVISIONS AND COVENANTS

SUDAS Division 1 General Provisions and Covenants and the Project Manual's Bidding Requirements contain similar requirements. Additions made by Special Provisions or in project specific non-SUDAS documents or specifications sections shall govern over the standard language in SUDAS.

SECTION 1010 – DEFINITIONS

SP-1.03 Definitions and Terms

Add the following new paragraphs immediately after paragraph 1.03 of the General Provisions and Covenants to read as follows:

Agreement or Contract. The written instrument, executed by Owner and Contractor, that sets forth the Contract Price, and Contract Times, identifies the parties and the Engineer, and designates the specific items that are Contract Documents.

Bidding Documents. The Bidding Requirements, the proposed Contract Documents, and all Addenda.

Bidding Requirements. The Advertisement or Notice to Bidders, Instruction to Bidders, Bid Bond, or other Bid Security, if any, the Bid Form and the Bid with any attachments.

City. City of Muscatine or Owner.

Contract Documents. Those items so designated in the Agreement or Contract, and which together comprise the Contract.

Engineer. During design and bidding, the Engineer is the Owner's Engineering Consultant (Stanley Consultants) or Design Engineer responsible for the design. During construction, Engineer is the City Engineer responsible for administering the contract. Refer to Contract for definition of roles.

Instruction to Contractor (ITC) – Field Order. A written order issued by Engineer which requires minor changes in the work.

Issuing Office. The office from which the Bidding Documents are to be issued and where the bidding procedures are to be administered.

Jurisdictional Engineer, Jurisdiction, Jurisdictional Authority. Used in the SUDAS Standard Specifications shall mean the City of Muscatine.

Muscatine Power and Water (MPW). MPW is the owner of the City water and electrical systems. Legal name is Board of Water, Electric, and Communications Trustees of the City of Muscatine, Iowa.

Owner. City of Muscatine.

Request for Information (RFI). Contractor request for information to answer questions regarding conflicts or intent of the Contract Documents.

Technical Data. Those items expressly identified in Special Provisions with respect to subsurface or hazardous conditions at the site.

State Revolving Fund (SRF). Administered jointly thru the Iowa Department of Natural Resources (DNR) and the Iowa Finance Authority (IFA) SRF is a loan program for publicly owned water and wastewater utilities to finance infrastructure projects.

Substantial Completion. The time at which the Work (or a specified part thereof) has progressed to the point where, in the opinion of Engineer, the Work (or a specified part thereof) is sufficiently complete, in accordance with the Contract Documents, so that the Work (or a specified part thereof) can be utilized for the purposes for which it is intended. The terms “substantially complete” and “substantially completed” as applied to all or part of the Work refer to Substantial Completion thereof.

The following must be completed to achieve substantial completion unless otherwise noted:

- A. All utilities, sanitary sewer, storm sewer, manholes, inlets, inlet piping, sewer services, water main, water services, any relocated or repaired utilities are operational.
- B. Street pavement and curb and gutter is installed and streets are open for public use.
- C. Sidewalks are installed and available for public use.
- D. Driveways are installed and ready for residential use.

SECTION 01020 – PROPOSAL REQUIREMENTS AND CONDITIONS

Add the following under Section 01020 Proposal Requirements and Conditions

SUDAS Section 01020 Proposal Requirements and 00 21 13 Instructions to Bidders contain similar requirements. Requirements listed in the project specific Instruction to Bidders govern over standard SUDAS Specifications requirements.

SP-1.04 EXAMINATION OF THE CONTRACT DOCUMENTS AND SITE OF WORK

Add the following new paragraph(s) immediately after paragraph 1.04.E:

- F. No reports of explorations and tests of subsurface conditions at or adjacent to the Site are known to the owner.
- G. No reports or drawings related to Hazardous Environmental Conditions at the Site are known to the Owner.
- H. Included as part of the contract is a set of water main improvement drawings produced by MPW and the City.

SP-1.09 Preparation of the Proposal

Amend the paragraph under 1.09B with the following sentence. Bids shall be submitted using the City of Muscatine’s IonWave bidding website utilizing the unit price schedule interface on the site.

SP-1.14 Opening of Proposals

Amend the paragraph under 1.14 noting that no physical bid opening will be held. All bids will be evaluated by the City’s electronic bid submission system.

SP-1.15 LIMITATION ON WITHDRAWAL OF PROPOSALS AFTER OPENING OF PROPOSAL

Add the following new article immediately after article 1.15:

1.16 COMPLIANCE WITH STATE REVOLVING FUND REQUIREMENTS.

- A. Bidders must review the SRF Required Front End Specification document included in the project manual and submit the required materials outlined in Attachments 1 thru 10.
- B. See Document 00 21 13 Instructions to Bidders for a brief outline of bidding requirements.

SECTION 1030 – APPROVAL FOR AWARD AND AWARD OF CONTRACT

SP-1.03 Award of Contract

Add the following new paragraph(s) immediately after paragraph 1.03.D:

- E. After Notice of Award, Contractor may obtain if requested, at no charge, up to 3 printed or hard copies of the Drawings and Project Manual and one set in electronic format. Additional copies will be furnished upon request at the cost of reproduction plus handling charge.

SECTION 1040 – SCOPE OF WORK

SC-1.06 Increase or Decrease of Work

Add the following sentence immediately after paragraph 1.06.B:

- B. Quantity changes amounting to more than a 20% change to the total bid for an item and materially change the character of the work, shall be subject to unit price reevaluation to increase or decrease the unit price.

SC-1.07 Change Orders

Add the following new paragraph(s) immediately after paragraph 1.07.B:

- C. Change Procedures
 - 1. Submittals: Submit name of individual authorized to receive change documents, and be responsible for informing others in Contractor's employ or Subcontractors of changes to Work.
 - 2. Engineer will advise of minor changes in Work not involving an adjustment to Contract Price or Contract Time by issuing supplemental instructions on Engineer's Instruction to Contractor (ITC) Form.
 - 3. Engineer may issue a proposal request notice of change which includes detailed description of proposed change with supplementary or revised Drawings and Specifications, change in Contract Time for executing change with a stipulation of any overtime work required and period of time during which requested price will be considered valid. Contractor will prepare and submit an estimate within 10 days.
 - 4. Contractor may propose changes by submitting a request for change to Engineer, describing proposed change and its full effect on Work. Include a statement describing reason for change, and effect on Contract Price and Contract Time with full documentation and a statement describing effect on Work by separate or other contractors. Document any requested substitutions in accordance with Substitution Request procedures.
 - 5. Change orders will be prepared according to SUDAS Section 1040, 1.07.
- D. During the performance of the Work, Contractor and Owner shall submit to the Design Engineer all matters in question concerning the requirements of the Contract Documents. These requests are called Request For Information (RFI). Design Engineer with reasonable promptness will issue a written clarification on the issue submitted. Engineer's written clarification, interpretation, or decision will be final unless Contractor appeals it by submitting a Change Proposal.
- E. Contractor shall submit a change proposal request or change order request to Engineer to request an adjustment in Contract Times or Contract Price. Request shall include an explanation of the reason of the request with supporting data.

SP-1.13 Errors or Omissions

Add the following new article immediately after article 1.13:

1.14 CONSTRUCTION CONSTRAINTS:

- A. Work shall be constructed within contract times defined in Agreement.
- B. Use temporary sewage bypass pumping and temporary gravity connections as needed to construct sewer. Costs for temporary pumping and temporary gravity connections shall be incidental to pipe installation and will not be paid for separately unless otherwise specifically identified in the contract.
- C. No new construction areas shall be initiated in October and no road surfaces shall be left unpaved through winter unless authorized in advance in writing by City and/or Design Engineer.
- D. Maximum length of construction area that is allowed with no permanent pavement is defined in the construction staging drawings.
- E. At no time during construction shall work two blocks (more than 800') and two intersections be closed to traffic at any one time. Limit shall include backfill up to grade. Any exceptions to this must be approved by the City.
- F. Install temporary driving surface at intersections preceding and following active trench construction to maintain cross traffic every 2 blocks. Costs for temporary gravel surfacing for intersections are paid for as a separate bid item.
- G. See J sheets for phasing constraints and staging plans.

SECTION 1050 – CONTROL OF WORK

SP-1.05 Shop Drawings, Certificates, and Equipment Lists

Add the following new subparagraph immediately after paragraph 1.05 A. 2.:

- 3. See project manual Section 01 33 00 Submittal Procedures for contract requirements for shop drawings submittal procedures.

SP-1.08 Removal of Defective Work and Materials

Add the following new paragraph(s) immediately after paragraph 1.08.C:

- D. If, instead of requiring correction or removal and replacement of defective Work, Owner prefers to accept it, Owner may do so (subject, if such acceptance occurs prior to final payment, to Engineer's confirmation that such acceptance is in general accord with the design intent and applicable engineering principles, and will not endanger public safety). Contractor shall pay all claims, costs, losses, and damages attributable to Owner's evaluation of and determination to accept such defective Work (such costs to be approved by Engineer as to reasonableness), and for the diminished value of the Work to the extent not otherwise paid by Contractor. If any such acceptance occurs prior to final payment, the necessary revisions in the Contract Documents with respect to the Work shall be incorporated in a Change Order. If the parties are unable to agree as to the decrease in the Contract Price, reflecting the diminished value of Work so accepted, then Owner may impose a reasonable set-off against payments. If the acceptance of defective Work occurs after final payment, Contractor shall pay an appropriate amount to Owner.
- E. If Contractor fails within a reasonable time after written notice from Engineer to correct defective Work, or to remove and replace rejected Work as required by Engineer, or if Contractor fails to perform the Work in accordance with the Contract Documents, or if Contractor fails to comply with any other provision of the Contract Documents, then Owner may, after seven days written notice to Contractor, correct or remedy any such deficiency.
- F. All claims, costs, losses, and damages incurred or sustained by Owner in exercising the rights and remedies under this Paragraph 1.08 will be charged against Contractor as set-

offs against payments due. Such claims, costs, losses and damages will include but not be limited to all costs of repair, or replacement of work of others destroyed or damaged by correction, removal, or replacement of Contractor's defective Work.

SP-1.10 LINE AND GRADE STAKES

Delete subparagraph 1.10.A., B., and C. in its entirety and insert the following new paragraph in its place:

- A. The Contractor will employ a Land Surveyor to perform construction staking and record drawing production. Contractor shall coordinate day to day construction needs directly with Land Surveyor. Refer to SUDAS Section 11,010 and Special Provisions 1.16 Field Engineering under Section 1050 for requirements.
- B. The work shall be performed in strict conformity with the contract documents. Contractor's licensed land surveyor is responsible for staking the points, lines, and grades as shown in the contract documents. Contractor is responsible for proper use, interpretation, and preservation of field staking.
- C. Contractor is responsible for protecting and preserving all stakes, points, or marks set for the work by Contractor's hired land surveyor and those established by the Design Engineer's land surveyor. If stakes, points, or marks have been altered or destroyed, Contractor is responsible for correcting and replacing the stakes at their costs.

SP-1.15 Additional Contractor Responsibilities

Add the following new article immediately after article 1.15:

1.16 FIELD ENGINEERING

- A. The Contractor will employ a Land Surveyor licensed in the State of Iowa for this project. The Land Surveyor will perform construction staking and record drawing production based on field measurements and Contractor and Owner records. The Contractor shall coordinate day to day construction needs directly with the Land Surveyor.
- B. Contractor shall be responsible for the cost of construction staking beyond the initial staking.
- C. Contractor shall locate and protect survey control and reference points. Promptly notify Engineer of any discrepancies discovered.
- D. Control datum for survey is that shown on Drawings.
- E. Verify set-backs and easements; confirm drawing dimensions and elevations.
- F. Provide field services to establish elevations, lines, and levels, utilizing proven and recognized engineering survey practices.
- G. For use in record drawing production, verify and certify that the elevations and locations of the Work are in conformance with the Contract Documents.
- H. Maintain a complete and accurate log of control and survey work as it progresses.
- I. Protect survey control points prior to starting site work; preserve permanent reference points during construction.
- J. Promptly report to Engineer the loss or destruction of any reference point or relocation required because of changes in grades or other reasons.
- K. Replace dislocated survey control points and property pins caused by construction activities. Replace based on original survey control. Make no changes without prior written notice to Engineer.

SECTION 1060 – CONTROL OF MATERIALS

SP – 1.02 Alternate Processes, Equipment, or Materials

Add the following new paragraph(s) immediately after paragraph 1.02.B.2:

3. For period of 30 days after effective date of Contract, Engineer will consider formal requests from Contractor for substitution of products in place of those specified. After end of that period, requests will be considered only in case of product unavailability or other conditions beyond control of Contractor.
4. Substitutions will not be considered for acceptance when:
 - a. They are indicated or implied on Shop Drawings.
 - b. They are requested directly by Subcontractor or supplier.
 - c. Acceptance will require substantial revision of Contract Documents.
5. Substitute products, "Or Equal" items, shall not be ordered or installed without written notification from Owner's Engineering Consultant and Owner's acceptance. Engineer will advise Contractor in writing of any negative determination.

SP-1.03 Samples and Testing

Change the first sentence of paragraph C. to read:

- C. All sampling and testing shall be performed by an independent testing laboratory at Contractor's cost. Laboratory shall be approved by Engineer.

SP-1.04 Storage of Materials

Add the following new subparagraph immediately after the paragraph in:

Storage of construction materials shall only be on streets and areas that are intended to be reconstructed for this Project. Coordinate use of premises under direction of Owner. Contractor shall confine construction equipment, storage of materials and equipment and operations of workers to areas permitted by law, ordinances, permits, or requirements of Contract Documents, and shall not unreasonably encumber premises with construction equipment or other material or equipment.

SECTION 1070 – LEGAL RELATIONS AND RESPONSIBILITY TO THE PUBLIC

SP-1.01 Municipal Regulations, State, and Federal Laws and Regulations

Add the following new subparagraph immediately after subparagraph 1.01 C. 7.

7. Selected Contractor must comply with all the contract requirements outlined in the document SRF Required Front End Specifications within Attachments 1 thru 10. Contractor will be required to provide documentation as listed in the Attachments 1 thru 10. Failure to provide documentation or compiling to contract SRF requirements may delay payment or result in termination of the contract.

SP-2.11 Environmental and Historic Items

Add the following new sentence immediately after sentence within 2.11.

Papoose Creek Sewer (PCS) and the Upper West Branch Sewer (UWBS) will not be impacted by this project. If these sewers are disturbed unexpectedly during construction, work will cease and the Iowa State Historical Preservation Office (SHPO) will be contacted immediately (515-348-6285). Replacement of UWBS on Hagerman Drive as shown are cleared with SHPO and do not require notification.

SP-2.13 Borrow and Waste Sites

Delete the last sentence under paragraph 2.13 B.

SP-3.01 Performance, Payment, and Maintenance Bond

Add the following new subparagraph(s) immediately after subparagraph 3.01.C.:

1. Contractor shall furnish a maintenance bond, subject to the Owner's approval, guaranteeing to keep all work constructed under this contract in good repair for a period of two (2) years from date of final acceptance. Good repair shall be construed to mean free from any functional or structural deterioration, except that caused from ordinarily reasonable use and acts of God, which appreciably reduces the effectiveness of the improvement for the purpose intended or any serious departure from the standards or original construction.
2. If, in the opinion of the Owner, such deterioration takes place, they shall so notify the Contractor by registered letter to the address given in the Contractor's proposal and send a copy of such notice to the bonding company, which notice is mutually agreed to be sufficient and adequate. If the Contractor shall not proceed to remedy such defects as are called to his attention in the notice within ten (10) days, the City shall cause the repairs to be made as it deems best, and the entire cost thereof shall be paid by the Contractor or his sureties.

SP-3.02 Insurance Requirements

Supplement or replace insurance requirements as follows.

The Contractor shall purchase and maintain throughout the construction period, insurance in the following minimum requirements, and the coverage must be written in a company that has a Best's rating of B+ or better: Reference SUDAS Section 3.02 A, B, and C.

1. Worker's compensation insurance including Employer's Liability and Occupation disease covering all Iowa employees for statutory Iowa benefits who perform any of the obligations assumed by the Contractor under the contract. The policy will contain broad form all states endorsement. Reference SUDAS Section 3.02 1. for limits.

Delete subparagraph 3.02.C.2. in its entirety and insert the following in its place:

2. Comprehensive General Liability, including independent contractors, completed operations and products, contractual liability, broad form property damage, personal injury, and X, C, and U coverage; coverages must meet the following limits. Deductibles on bodily injury are not acceptable:

Coverage	Minimum Limits
Bodily Injury or Death	\$1,000,000 each occurrence \$5,000,000 aggregate
Property Damage	\$1,000,000 each occurrence
Combined Single Limit	\$1,000,000 each occurrence
Umbrella Liability Coverage	\$5,000,000

Delete subparagraph 3.02.C.3. in its entirety and insert the following in its place:

3. Comprehensive General Automobile liability insurance on all self-propelled vehicles not covered under general liability and used in connection with the Contract, whether owner, non-owner, or hired:

Coverage	Minimum Limits
Bodily Injury or Death	\$1,000,000 each occurrence
Property Damage	\$1,000,000 each occurrence
Option - Combined Single Limit	\$1,000,000 each occurrence

Add the following new subparagraph(s) immediately after paragraph 3.02.C.7:

8. Owner shall have the right at any time to require public liability insurance and property damage liability insurance greater than those required in the above paragraphs. In any

such event, the additional premium or premiums payable solely as the result of such additional insurance shall be added to the bid price.

9. Any reductions in limits or coverages or exceptions to the insurance requirements can be made if requested in writing and mutually agreed to.
10. Contractor shall furnish to the Owner and additional insureds, Certificates of Insurance evidencing compliance with the foregoing requirements before commencing any operations under this contract. Certificates shall contain a provision that the coverage afforded under the policies will not be canceled or materially changed until at least thirty (30) days prior written notice has been given to the Owner.
11. Additional Insureds: Stanley Consultants, Inc.; City of Muscatine; shall be specifically named on policy as additional insureds by endorsement, including completed operations.

SECTION 1080 – PROSECUTION AND PROGRESS

SP-1.03 WORK PROGRESS AND SCHEDULE

Add the following new paragraph(s) immediately after paragraph 1.03.C:

D. CONSTRUCTION PROGRESS DOCUMENTATION

1. Construction progress schedules:
 - a. Submit preliminary Schedule to City within 15 days after date of Owner-Contractor Agreement for coordination with Owner's requirements. After review, submit detailed schedules within 15 days.
 - 1) Submit revised Progress Schedules with each staging change or significant update to schedule.
 - 2) Distribute copies of reviewed schedules to Project site file, subcontractors, suppliers, and other concerned parties.
 - 3) Instruct recipients to promptly report, in writing, problems anticipated by projections indicated in schedules.
2. Form of schedules:
 - a. Prepare schedules in form of horizontal bar chart.
 - 1) Provide separate horizontal bar for each trade or operation.
 - 2) Horizontal time scale: Identify first work day of each week.
 - 3) Scale and spacing: To allow space for notations and future revisions.
 - b. Format of listings: Chronological order of start of each item of Work.
 - c. Identification of listings: By major Specification Section numbers.
3. Construction progress schedule shall show:
 - a. Complete sequence of construction by activity.
 - b. Dates for beginning, and completion of, each major element of construction specifically listing:
 - c. percentage of completion for each item, as of first day of each month.
4. Submittal schedule shall show dates for Contractor's submittals.
5. Prepare and submit sub-schedules for each separate stage of Work as shown on J sheets.
6. Provide sub-schedules to define critical portions of prime schedules.
7. Progress revisions:
 - a. Indicate progress of each activity to date of submission.
 - b. Show changes occurring since previous submission of schedule:
 - 1) Major changes in scope.
 - 2) Activities modified since previous submission.
 - 3) Revised projections of progress and completion.
 - 4) Other identifiable changes.

- c. Provide narrative report as needed to define:
 - 1) Problem areas, anticipated delays, and impact on schedule.
 - 2) Corrective action recommended, and its effect.
 - 3) Effect of changes on schedules of other prime contractors.
8. Distribution copies of reviewed schedules to:
 - a. Job site file.
 - b. Subcontractors.
 - c. Other concerned parties.
9. Instruct recipients to report promptly to Contractor, in writing, any problems anticipated by projects shown in schedules.

SP-1.14 Termination of Contractor's Responsibility

Add the following new paragraph at the end of article 1.14:

1.14 TERMINATION OF PUBLIC IMPROVEMENTS CONTRACT

Provisions contained in Chapter 573A Code of Iowa providing for the termination of contracts in construction of public improvements when construction is stopped because of national emergency shall apply to and be a part of this contract and binding on all parties including subcontractors and sureties upon any bond given or filed in connection therewith

SECTION 3010 – TRENCH EXCAVATION AND BACKFILL

SP-1.07 SPECIAL REQUIREMENTS

Delete article 1.07 in its entirety and insert the following new paragraphs in its place.

- A. Schedule Work to keep streets, sidewalks, and utilities in usable condition; avoid property owner inconvenience.
- B. Do not trespass on private property. Maintain construction operations on existing right-of-way or easements provided for the project.
- C. Maintain suitable means of access for property owners abutting streets and highways involved in construction, except as specifically permitted otherwise by Owner.
- D. Suitable access shall mean a roadway of sufficient width, free from ruts, potholes, and mud holes, and capable of carrying a passenger car without damage to car in all weather conditions.
- E. When access must be denied due to construction, provide suitable access within 24 hours after responsible construction is completed.
- F. Whenever construction is stopped due to inclement weather, weekends, holidays, or other reasons, suitable access shall be provided for property owners.
- G. Rock trench excavation is not anticipated.
- H. Section 3010 1.08 A. 6. indicates all dewatering activities are incidental.

SP-3.01 TRENCH EXCAVATION

Add the following new subparagraph immediately after subparagraph 3.01.D.4:

5. Place unsuitable trench excavated material directly on trucks and haul away. No spoil banks permitted. Contractor to dispose of unsuitable job-excavated material at site determined by the contractor.

Add the following new paragraph immediately after paragraph 3.01.D:

- E. Obtain from utility company's locations of buried utilities shown on Drawings. Pothole as needed to confirm location and elevation.
- F. Some utility house services may be shown on drawings, but no attempt has been made to locate and show all services. Obtain locations of house services from utility companies.
- G. Make arrangements with utility companies to temporarily support, brace or remove utility poles either adjacent to or in trench excavation at no additional cost to Owner.
- H. MPW utility poles that require removal and relocation due to construction shall be coordinated with Muscatine Power and Water (MPW). MPW relocation costs will be billed directly to the Owner for previously approved locations.
- I. Utility mains shown on Drawings, in conflict with new facilities: Perform relocation or make arrangements with utility to perform Work at no additional cost to Owner.
- J. Utility mains not shown on Drawings, in conflict with trench excavation or new facilities notify Engineer immediately to discuss utility conflict solutions. Relocation shall be authorized by Engineer.

SP-3.03 TRENCH PROTECTION

Add the following new paragraph immediately after paragraph 3.03.B:

- C. Slope walls of trench or provide trench shoring as required to comply with OSHA and safety requirements; maintain walls of excavation vertical below top of pipe.

SP-3.06 TRENCH COMPACTION TESTING

Add the following new article(s) immediately after article 3.06:

3.07 REPAIR AND RESTORATION

- A. Repair, at no additional cost to Owner, existing fences, culverts, and drain tile disturbed by construction.
- B. Remove, salvage, store and re-install mailboxes, parking meters, impacted by construction, at no additional cost to owner.
- C. All existing permanent street signage shall be delivered to Public Works facility immediately upon removal.
- D. Maintain proper restored surface grades and elevations throughout 2-year maintenance warranty period following final closeout. If settlement of surface grading or differential settlement of pavement and manhole boxouts occur that causes surface to be at elevations other than design indicates, repair and restore immediately.
- E. Contractor fully responsible for liaison with utility companies and for repairing, at no expense to Owner, utilities damaged by Contractor. In event of break in existing water main, gas main, sewer, or electric or communication cable, immediately notify responsible official of organization operating utility affected.
- F. Restore obstructions removed to accommodate equipment or to facilitate excavation.

3.08 CLEANUP

- A. Remove waste material promptly as it is generated by construction operations; do not permit to accumulate. Cleanup each portion of construction as it is completed.

- B. Cleanup operations in public right-of-way shall be kept within 400' (120 m) of construction operations.
- C. Cleanup and remove rubbish, debris, and surplus material.
- D. Grade disposal areas periodically to reasonably neat surface to provide for drainage and access by others.
- E. Leave Site in neat condition.
- F. Reopen to traffic as soon as practicable. See J sheets and Sections 01 50 00 and 00 75 00 for traffic constraints.

3.09 MANAGEMENT OF CONTAMINATED SOILS AND GROUNDWATER

- A. No specific areas of potential contamination have been identified on Drawings. Process identified below is to be used in event contamination is discovered during construction process.
- B. Comply with local, state, and federal standards for worker protection and equipment decontamination. Submit a Site Health and Safety Plan to Owner detailing any protective measures and decontamination practices that will be utilized for dealing with contamination.
- C. Excavation within area of potential contamination shall be continuously monitored by qualified personnel using a photoionization detector (PID) for screening purposes.
- D. If no contamination is encountered, excavated material may be disposed in same manner as other excavated material.
- E. Soil exceeding 10 ppm organic vapors, or where a petroleum odor is present, will be considered potentially contaminated and shall be hauled to a stockpile site at Muscatine Solid Waste Transfer Station on Houser Street. Stockpile shall be designed as follows:
 - 1. Flat cleared area.
 - 2. Place 20 mil thick polyethylene sheeting beneath all stockpiled soil. Sheeting shall be seamless throughout.
 - 3. Stockpile shall be kept covered with more sheeting when not in use. Anchor sheeting cover to keep it in place.
 - 4. Place low earthen berm beneath bottom sheeting on all sides of stockpile to prevent liquid runoff from entering or exiting stockpile.
- F. Test soils in stockpile after work has been completed in contaminated area by compositing 10, approximately 1 oz samples into 1 sample to be used for laboratory analysis.
 - 1. Test sample for total extractable hydrocarbons (THE) by Iowa Method OA-2, polynuclear aromatic hydrocarbons (PAHs) by Method 8270 and toxic characteristic leaching procedure (TCLP) Resource Conservation and Recovery Act (RCRA) metals by SW846 Methods 1311 and 6010/7471.
 - 2. Analyze sample for benzene, toluene, ethylbenzene, and xylenes (BTEX) by Iowa Method OA-1.
 - 3. If laboratory testing finds no contamination, or contamination levels below statewide soil standards, haul stockpiled soils to normal disposal area.
 - 4. If laboratory testing identifies contamination above statewide standards, contact Muscatine County Landfill with results from testing specified above and paint filter

methods. If landfill is willing to accept this material, haul stockpiled soils to landfill. If landfill declines to accept stockpiled soils, contact Owner's Representative.

- G. Discharge groundwater encountered in excavation to storm sewer unless water has a noticeable petroleum odor or a petroleum surface "sheen." If an odor or sheen is present, discharge to sanitary sewer.
- H. Discharge groundwater encountered in excavation to storm sewer unless water has a noticeable petroleum odor or a petroleum surface "sheen." If an odor or sheen is present, discharge to sanitary sewer.

3.10 VIBRATION MONITORING

- A. Contractor is responsible for protecting existing structures and utilities from damage during construction operations. Specific properties do not require protection from construction vibration impacts. Vibration monitoring is not required by the Contractor. If conditions change requiring vibration monitoring, utilize requirements outlined below. Vibration monitoring can be used at City or Contractor discretion.
- B. Contractor to hire or provide a qualified vibration specialist to monitor and install and maintain vibration monitors. Specialist shall provide reports and logs to Contractor and City. Real-time monitoring shall be provided to alert the contractor immediately if the vibration threshold is exceeded. Contractor shall be able to provide updates to the City daily about vibration measurements.
- C. Contractor to submit detailed vibration monitoring plan prior to commencing work. The plan shall include the construction methods and equipment chosen to achieve low project vibration levels and alternate construction methods and equipment that will be used if the Peak Particle Velocity (PPV) threshold is reached or exceeded.
- D. Monitors will be placed along the corridor near properties anticipated to experience the highest impact. Locations will be determined by the City. Additional vibration monitoring by the Contractor at other locations is encouraged, but not required.
- E. Contractor will be notified when vibration exceeds a PPV level of 0.5 inches per second as measured at or in very close proximity to the monitored structure. Contractor is to change work methods to reduce vibrations when so notified.
- F. Vibration monitoring logs shall include maximum peak particle velocity recorded, frequency, type, and location of monitoring equipment, location of vibration producing event.
- G. Exterior building visual condition survey before, during and after construction will be performed and coordinated between the City and the property owners. City shall encourage property owners to provide interior structure pictures prior to construction beginning.
- H. Contractor shall be responsible for any damage caused by construction operations.

SECTION 4010 – SANITARY SEWERS

SP-1.03 SUBMITTALS

Delete paragraph in its entirety and insert the following in its place:

- A. Submit data and certificates from manufacture showing evidence that products comply with standards listed for pipe, pipe joints, gaskets, frames, lids, gratings and appurtenances.

- B. Provide evidence that components, materials, and treatment chemicals that come into contact with potable water shall be certified for conformance to ANSI/NSF Standard 60 or 61, as applicable.

SECTION 4020 – STORM SEWERS

SP-1.03 SUBMITTALS

Delete paragraph in its entirety and insert the following in its place:

- A. Submit data and certificates from manufacture showing evidence that products comply with standards listed for pipe, pipe joints, gaskets, frames, lids, gratings and appurtenances.
- B. Provide evidence that components, materials, and treatment chemicals that come into contact with potable water shall be certified for conformance to ANSI/NSF Standard 60 or 61, as applicable.

SECTION 4060 – CLEANING, INSPECTION, AND TESTING OF SEWERS

SP-1.03 SUBMITTALS

Delete paragraph in its entirety and insert the following:

- A. Provide test reports to Engineer.

SP-3.03 SANITARY SEWER LEAKAGE TESTING

Add the following sentence to the end of the paragraph

IDNR indicates replacement of existing sewers which have service connections immediately connected are exempted from leakage testing requirements.

SECTION 5010 – PIPE AND FITTINGS

SP-1.07 SPECIAL REQUIREMENTS

Delete paragraph in its entirety and insert the following:

- A. Notify local utility, Muscatine Power and Water (MPW), prior to relocating any water mains. Relocations shall only be performed in presence of local utility inspector.
- B. Local utility will perform main shutdown and notify Contractor when complete. Provide material and perform relocation under supervision of local utility inspector. Provide temporary service or make other arrangements with affected property owners for scheduled shutdown of utilities for period of longer than 4 hours.

SECTION 6030 – CLEANING, INSPECTION, AND TESTING OF STRUCTURES

SP-1.03 SUBMITTAL

Delete paragraph in its entirety and insert the following:

- A. Provide test reports to Engineer.

SP-3.04 SANITARY SEWER MANHOLE TESTING

Add the following new paragraph(s) immediately after subparagraph 3.04.A.2:

- 3. IDNR indicates replacement of existing sewers (and manholes) which have service connections immediately connected are exempted from leakage testing requirements.

SECTION 11,020 – MOBILIZATION

SP-3.01 EXISTING CONDITIONS VIDEO RECORD

Add the following new paragraph(s):

3.01 EXISTING CONDITIONS VIDEO RECORD

- A. Prior to construction, perform video recording along route of new sanitary and storm sewers. Recording shall document significant features that may be affected by construction activity. Video shall include but is not limited to adjacent building foundations, adjacent sidewalk conditions, locations of parking spots and meters, condition of existing driveways and retaining walls, and condition of existing pavement at the tie in point and 50' back from tie in points.
- B. Provide labor, equipment, and materials for televising and complete video documentation of route of sewers.
- C. Viewing shall be in upstream direction along sewer routes. Recording shall be consecutive and continuous along sewer route.
- D. Personnel and equipment:
 - 1. Furnish equipment, supplies, and materials necessary to complete Work as specified.
 - 2. Equipment not giving proper results shall be replaced.
- E. Video camera and other components shall provide clean, clear, and sharp color picture.
- F. Video recording:
 - 1. Provide complete color video recording of areas along route of new sewers. Video recording shall be provided to the City on a flash drive or on a secure file transfer site. Video may need to be divided into multiple smaller files rather than one large file for ease of file transfers.
 - 2. Produce video recordings of sufficient quality to allow proper in-house viewing with minimum of distortion; no image tearing.
 - 3. Provide voice narration on video recording to document following information:
 - a. Name of city, street, and date upon which video inspection was made.
 - b. Description of special features, i.e. cracked pavements, special landscaping, etc.
 - c. Stop camera at special features for minimum of 10 seconds to allow for photographic documentation.
 - d. Deliver video recording to City for permanent records.
 - e. Label each recording to identify sewer and limits of coverage.
- G. Recording procedure:
 - 1. Camera shall be moved at uniform rate consistent with amount of detail being recorded.
 - 2. Take necessary steps and adopt procedures to ensure optimum viewing conditions.

ADD THE FOLLOWING SPECIFICATIONS TO THE PROJECT IN ADDITION TO THE SUDAS SPECIFICATIONS:

- SECTION 01 22 00 – UNIT PRICES
- SECTION 01 33 00 – SUBMITTAL PROCEDURES
- SECTION 01 50 00 – TEMPORARY FACILITIES AND CONTROLS
- SECTION 01 57 14 – SWPPP – OWNER CERTIFICATION
- SECTION 01 57 15 – SWPPP – CONTRACTOR AND SUBCONTRACTOR CERTIFICATION
- SECTION 01 57 16 – SWPPP – TRAINING LOG
- SECTION 01 57 17 – SWPPP – STORMWATER CONSTRUCTION SITE INSPECTION REPORT
- SECTION 01 57 18 – SWPPP – SWPPP AMENDMENT LOG
- SECTION 01 77 00 – CLOSEOUT PROCEDURES

SRF Required Front-End Specifications



Attachment 1: Certification of Non-Segregated Facilities Form *(to be completed and signed by Prime Contractor and submitted with the bid)*

Attachment 2: Statement in Advertisement for Bids on Debarment and Suspension/Certification Regarding Debarment and Suspension Form *(to be completed and signed by Prime Contractor and submitted with the bid)*

Attachment 3: Disadvantaged Business Enterprise Certification Form *(to be completed and signed by Prime Contractor and submitted with the bid)*

Attachment 4: DBE Program Subcontractor Performance Form *(to be completed and signed by Prime and DBE Subcontractor for each subcontract and submitted with the bid)*

***If no DBE was chosen by the Prime Contractor to be utilized for this project, then this form is not required to be submitted.**

Attachment 5: DBE Program Subcontractor Utilization Form *(to be completed and signed by Prime and DBE Subcontractor for each subcontract and submitted with the bid)*

*** If no DBE was chosen by the Prime Contractor to be utilized for this project, then this form is not required to be submitted.**

Attachment 6: DBE Program Subcontractor Participation Form *(for voluntary use of DBEs)*

Attachment 7: Other Federal Requirements Language

- A. Standard Equal Employment Opportunity Specifications
- B. Federal Labor Standards Provisions *(including Davis-Bacon prevailing wage rates**)*
- C. Preservation of Open Competition and Government Neutrality
- D. Historical and Archeological Finds
- E. Prohibitions on Procurement from Violating Facilities

Attachment 8: Right of Entry and Records Retention

Attachment 9: American Iron and Steel Requirements

Attachment 10: Prohibition on Certain Telecommunications and Video Surveillance Services or Equipment *(to be completed and signed by Prime Contractor and submitted with the bid)*

Attachment 1
SRF Required Front-End Specifications

(This form must be completed and signed by Prime Contractor and submitted with the bid.)

U.S. Environmental Protection Agency
Certification of Non-Segregated Facilities

(Applicable to contracts, subcontracts, and agreements with applicants who are themselves performing federally assisted construction contracts, exceeding \$10,000 which are not exempt from the provisions of the Equal Opportunity clause.)

By the submission of this bid, the bidder, offeror, applicant, or subcontractor certifies that he does not maintain or provide for his employees any segregated facilities at any of his establishments, and that he does not permit his employees to perform their services at any location, under his control, where segregated facilities are maintained. He certifies further that he will not maintain or provide for his employees any segregated facilities at any of his establishments, and that he will not permit his employees to perform their services at any location, under his control, where segregated facilities are maintained. The bidder, offeror, applicant, or subcontractor agrees that a breach of this certification is a violation of the Equal Opportunity clause in this contract. As used in this certification, the term "segregated facilities" means any waiting rooms, work areas, restrooms and washrooms, restaurants and other eating areas, time clocks, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees which are segregated by explicit directive or are in fact segregated on the basis of race, creed, color, or national origin, because of habit, local custom, or otherwise. He further agrees that (except where he has obtained identical certifications from proposed subcontractors for specific time periods) he will obtain identical certifications from proposed subcontractors prior to the award of subcontracts exceeding \$10,000 which are not exempt from the provisions of the Equal Opportunity clause; that he will retain such certifications in his files; and that he will forward the following notice to such proposed subcontractors (except where the proposed subcontractors have submitted identical certifications for specific time periods):

**NOTICE TO PROSPECTIVE SUBCONTRACTORS OF REQUIREMENT FOR
CERTIFICATIONS OF NON-SEGREGATED FACILITIES**

A Certification of Non-segregated Facilities, as required by the May 9, 1967, order (33 F.R. 7808, May 28, 1968) on Elimination of Segregated Facilities, by the Secretary of Labor, must be submitted prior to the award of a subcontract exceeding \$10,000 which is not exempt from the provisions of the Equal Opportunity clause. The certification may be submitted either for each subcontract or for all subcontracts during a period (i.e., quarterly, semiannually, or annually).

Signature

Date

Printed Name

Title

NOTE: The penalty for making false statements in offers is prescribed in 18 U.S.C. 1001.

EPA-7 5720-4.2

Attachment 2
SRF Required Front-End Specifications

(This form must be completed and signed by the Prime Contractor and submitted with the bid.)

Debarments and Suspensions

Any bidder or equipment supplier whose firm or affiliate is listed in on the U.S. General Services Administration Excluded Parties List will be prohibited from the bidding process. The excluded parties records search engine is located at the System for Award Management (SAM) website: <https://sam.gov>. Pursuant to 2 CFR Part 180, as supplemented by 2 CFR 1532, any entity submitting a bid while the SAM website lists that entity as having an active exclusion will be determined by the DNR to be a non-responsive bidder and will not be able to receive SRF funding.

United States Environmental Protection Agency Washington, DC 20460

**Certification Regarding Debarment, Suspension,
and Other Responsibility Matters**

The prospective participant certifies to the best of its knowledge and belief that it and the principals:

- (a) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;
- (b) Have not within a three year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State, or local) transaction or contract under a public transaction: violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
- (c) Are not presently indicted or otherwise criminally or civilly charged by a government entity (Federal, State, or local) with commission of any of the offenses enumerated in paragraph (1) (b) of this certification; and
- (d) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State, or local) terminated for cause or default.

I understand that a false statement on this certification may be grounds for rejection of this proposal or termination of the award. In addition, under 18 U SC Sec. 10 01, a false statement may result in a fine of up to \$10,000 or imprisonment for up to 5 years, or both.

Signature of Authorized Representative

Date

Printed Name

Title

☐ I am unable to certify to the above statements. My explanation is attached.

Attachment 3
SRF Required Front-End Specifications

(This form must be completed and signed by Prime Contractor and submitted with the bid.)

Disadvantaged Business Enterprise (DBE) Solicitation

It is EPA's policy that recipients of EPA financial assistance through the State Revolving Fund programs award a "fair share" of subagreements to small, minority and women-owned businesses, collectively known as Disadvantaged Business Enterprises (DBEs). Iowa's Fair Share goals are:

	Minority-Owned Business Enterprise (MBE) Goal	Women-Owned Business Enterprise (WBE) Goal
Construction	1.7%	2.2%
Supplies	0.6%	5.6%
Services	2.5%	11.3%
Goods/Equipment	2.5%	10.4%
Average	1.8%	7.4%

Only work performed by certified DBEs can be counted toward the goals. In Iowa, DBEs must be certified through the Iowa Department of Transportation (IDOT). Information on certification requirements and a list of certified DBEs is on the IDOT website at <https://secure.iowadot.gov/DBE/Home/Index/>.

Prime contractors' DBE requirements for SRF projects include:

- Taking affirmative steps for DBE participation
- Documenting the efforts and the proposed utilization of certified DBEs

PROJECT INFORMATION

SRF Applicant: _____ Bidder: _____

Address: _____

City: _____ State: _____ Zip: _____

Contact Person: _____

Phone Number: _____ Email: _____

Check if Prime Contractor is: ☐ Minority-Owned ☐ Women-Owned

1. Do you agree to use the good faith efforts checklist to ensure the DBEs have the opportunity to compete for procurements funded by EPA financial assistance funds?

☐ Yes ☐ No

2. At this point in time, has the prime contractor begun to solicit work opportunities to subcontractors for this project?

☐ Yes ☐ No ☐ N/A

3. If yes, was a DBE chosen by the prime contractor to be utilized for this project?

☐ Yes ☐ No

Signature: _____

GOOD FAITH EFFORTS CHECKLIST

Please complete the checklist to determine if you have complied with the requirement to make good faith efforts to ensure that certified DBEs have the opportunity to compete for procurements funded by EPA financial assistance funds. Bidders/offers must make good faith efforts prior to submission of bids/proposals.

1. Did you ensure that DBEs are made aware of contracting opportunities to the fullest extent practicable through outreach and recruitment activities?
☐ Yes ☐ No
2. Did you make information on forthcoming opportunities available to DBEs and arrange time frames for contracts and establish delivery schedules, where the requirements permit, in a way that encourages and facilitates participation by DBEs in the competitive process? This includes, whenever possible, posting solicitation for bids or proposals for a minimum of 30 calendar days before the bid or proposal closing date.
☐ Yes ☐ No
3. Did you consider in the contracting process whether firms competing for large contracts could subcontract with DBEs? This will include dividing total requirements, when economically feasible, into smaller tasks or quantities to permit maximum participation by DBEs in the competitive process.
☐ Yes ☐ No
4. Did you encourage contracting with a consortium of DBEs when a contract is too large for one of these firms to handle individually?
☐ Yes ☐ No
5. Did you use the services of the Small Business Administration and the Minority Business Development Agency of the Department of Commerce to identify potential subcontractors?
☐ Yes ☐ No
6. List the potential DBE subcontractors that were contacted. Only list those that are certified through the Iowa Department of Transportation.

Name	How Contacted (e.g. letter, phone call, fax, e-mail)	Response (e.g. did not respond, not interested, not competitive)

PROPOSED UTILIZATION OF DBE SUBCONTRACTORS

Please include Attachments 4 and 5 to document the proposed utilization of certified DBE subcontractors.

CONTRACT ADMINISTRATION PROVISIONS

Several contract provisions are required to prevent unfair practices that adversely affect DBEs. These include:

1. Prime Contractor must pay its Subcontractor for satisfactory performance no more than 30 days from the Prime Contractor's receipt of payment from the SRF loan recipient.

2. Prime Contractor must notify the SRF loan recipient in writing prior to termination of a DBE subcontractor for convenience.
3. Prime Contractor must employ the six Good Faith Efforts to solicit a replacement subcontractor if a DBE subcontractor fails to complete work under a subcontract for any reason.

Attachment 4
SRF Required Front-End Specifications

(This form must be completed and signed by Prime and DBE Subcontractor for each subcontract and submitted with the bid.)

* If no DBE was chosen by the Prime Contractor to be utilized for this project, then this form is not required to be submitted.

Disadvantaged Business Enterprise Program
DBE Subcontractor Performance Form

This form is intended to capture the DBE¹ subcontractor's² description of work to be performed and the price of the work submitted to the prime contractor. An EPA Financial Assistance Agreement recipient must require its prime contractor to have its DBE subcontractors complete this form and include all completed forms in the prime contractor's bid or proposal package.

Subcontractor Name: _____

Project Name: _____

Bid/Proposal No.: _____ Assistance Agreement ID No. (if known): _____

Point of Contact: _____

Address: _____

Telephone No.: _____ Email: _____

Prime Contractor Name: _____

Issuing/Funding Entity: _____

Contract Item Number	Description of Work Submitted to the Prime Contractor Involving Construction, Services, Equipment or Supplies	Price of Work Submitted to the Prime Contractor

DBE Certified by ☐ DOT ☐ SBA ☐ Other: _____

Meets/exceeds EPA certification standards? ☐ Yes ☐ No ☐ Unknown

¹A DBE is a Disadvantaged, Minority, or Woman Business Enterprise that has been certified by an entity from which EPA accepts certification as described in 40 CFR 33.204-33.205 or certified by EPA. EPA accepts certifications from entities that meet or exceed EPA certification standards as described in 40 CFR 33.202.

²Subcontractor is defined as a company, firm, joint venture, or individual who enters into an agreement with a contractor to provide services pursuant to an EPA award of financial assistance.

IA SRF6100-3

I certify under penalty of perjury that the forgoing statements are true and correct. Signing this form does not signify a commitment to utilize the subcontractors above. I am aware of that in the event of a replacement of a subcontractor, I will adhere to the replacement requirements set forth in 40 CFR Part 33 Section 33.302 (c).

Prime Contractor Signature

Print Name

Title

Date

Subcontractor Signature

Print Name

Title

Date

IA SRF6100-3

Attachment 5
SRF Required Front-End Specifications

(This form must be completed and signed by Prime Contractor and submitted with the bid if utilizing DBE subcontractors.)
* If no DBE was chosen by the Prime Contractor to be utilized for this project, then this form is not required to be submitted.

Disadvantaged Business Enterprise Program
DBE Subcontractor Utilization Form

This form is intended to capture the prime contractor's actual and/or intended use of identified certified DBE¹ subcontractors² and the estimated dollar amount of each subcontract. An EPA Financial Assistance Agreement Recipient must require its prime contractors to complete this form and include it in the bid or proposal package. Prime contractors should also maintain a copy of this form on file.

Prime Contractor Name: _____

Project Name: _____

Bid/Proposal No.: _____ Assistance Agreement ID No. (if known): _____

Point of Contact: _____

Address: _____

Telephone No.: _____ Email: _____

Issuing/Funding Entity: _____

I have identified potential DBE certified subcontractors ☐ Yes ☐ No

If yes, complete the table below. If no, explain: _____

Subcontractor Name/ Company Name	Company Address/Phone/Email	Estimated Dollar Amount	Currently DBE Certified?
			☐ Yes ☐ No
			☐ Yes ☐ No
			☐ Yes ☐ No
			☐ Yes ☐ No
			☐ Yes ☐ No

¹A DBE is a Disadvantaged, Minority, or Woman Business Enterprise that has been certified by an entity from which EPA accepts certification as described in 40 CFR 33.204-33.205 or certified by EPA. EPA accepts certifications from entities that meet or exceed EPA certification standards as described in 40 CFR 33.202.

²Subcontractor is defined as a company, firm, joint venture, or individual who enters into an agreement with a contractor to provide services pursuant to an EPA award of financial assistance.

IA SRF6100-4

I certify under penalty of perjury that the forgoing statements are true and correct. Signing this form does not signify a commitment to utilize the subcontractors above. I am aware of that in the event of a replacement of a subcontractor, I will adhere to the replacement requirements set forth in 40 CFR Part 33 Section 33.302 (c).

Prime Contractor Signature

Print Name

Title

Date

IA SRF6100-4

Attachment 6
SRF Required Front-End Specifications
(This form is for the voluntary use of DBE Subcontractors.)

Disadvantaged Business Enterprise Program
DBE Subcontractor Participation Form

An EPA Financial Assistance Agreement Recipient must require its prime contractors to provide this form to its DBE subcontractors. **The use of this form by DBE subcontractors is voluntary and is not required for bidding.** This form gives a DBE¹ subcontractor² the opportunity to describe work received and/or report any concerns regarding the EPA-funded project (e.g. in areas such as termination by prime contractor, late payments, etc.). The DBE subcontractor can, as an option, complete and submit this form to the EPA DBE Coordinator at any time during the project period of performance.

Subcontractor Name: _____

Project Name: _____

Bid/Proposal No.: _____ Assistance Agreement ID No. (if known): _____

Point of Contact: _____

Address: _____

Telephone No.: _____ Email: _____

Prime Contractor Name: _____

Issuing/Funding Entity: _____

Contract Item Number	Description of Work Submitted to the Prime Contractor Involving Construction, Services, Equipment or Supplies	Price of Work Submitted to the Prime Contractor

¹A DBE is a Disadvantaged, Minority, or Woman Business Enterprise that has been certified by an entity from which EPA accepts certification as described in 40 CFR 33.204-33.205 or certified by EPA. EPA accepts certifications from entities that meet or exceed EPA certification standards as described in 40 CFR 33.202.

²Subcontractor is defined as a company, firm, joint venture, or individual who enters into an agreement with a contractor to provide services pursuant to an EPA award of financial assistance.

IA SRF6100-2

Please use the space below to report any concerns regarding the above EPA-funded project:

Subcontractor Signature

Print Name

Title

Date

Return to: Regional Coordinator, Small Business Utilization, U.S. Environmental Protection Agency, Region 7, 11201
Renner Blvd, Lenexa KS 66219

IA SRF6100-2

Attachment 7
SRF Required Front-End Specifications

Other Federal Requirements Language

A. Standard Federal Equal Employment Opportunity Construction Contract Specifications (Executive Order 11246)

1. As used in these specifications:
 - a. "Covered area" means the geographical area described in the solicitation from which this contract resulted;
 - b. "Director" means Director, Office of Federal Contract Compliance Programs, United States Department of Labor, or any person to whom the Director delegates authority;
 - c. "Employer identification number" means the Federal Social Security number used on the Employer's Quarterly Federal Tax Return, U.S. Treasury Department Form 941.
 - d. "Minority" includes:
 - i. Black (all persons having origin in any of the Black African racial groups not of Hispanic origin);
 - ii. Hispanic (all persons of Mexican, Puerto Rican, Cuban, Central or South American or other Spanish Culture or origin, regardless of race);
 - iii. Asian and Pacific Islander (all persons having origins in any of the original peoples of the Far East, Southeast Asia, the Indian Sub-continent, or the Pacific Islands); and
 - iv. American Indian or Alaskan Native (all persons having origins in any of the original peoples of North America and maintaining identifiable tribal affiliations through membership and participation or community identification).
2. Whenever the Contractor, or any Subcontractor at any tier subcontracts a portion of the work involving any construction trade, it shall physically include in each subcontract in excess of \$10,000 the provisions of these specifications and the Notice which contains the applicable goals for minority and female participation and which is set forth in the solicitations from which this contract resulted.
3. If the Contractor is participating (pursuant to 41 CFR 6-4.5) in a Hometown Plan approved by the U.S. Department of Labor in the covered area either individually or through an association, its affirmative action obligations on all work in the Plan area (including goals and timetables) shall be in accordance with that Plan for those trades which have unions participating in the Plan. Contractors must be able to demonstrate their participation in and compliance with the provisions of any such Hometown Plan. Each Contractor or Subcontractor participating in an approved Plan is individually required to comply with its obligations under the EEO clause, and to make a good faith effort to achieve each goal under the Plan in each trade in which it has employees. The overall good faith performance by other Contractors or Subcontractors toward a goal in an approved Plan does not excuse any covered Contractor's or Subcontractor's failure to take good faith efforts to achieve the Plan goals and timetables.
4. The Contractor shall implement the specific affirmative action standards provided in paragraphs 7a through p of these specifications. The goals set forth in the solicitation from which this contract resulted are expressed as percentages of the total hours of employment and training of minority and female utilization the Contractor should reasonably be able to achieve in each construction trade in which it has employee in the covered area. Covered construction contractors performing construction work in geographical areas where they do not have a Federal or federally assisted construction contract shall apply the minority and female goals established for the geographical area where the work is being performed. Goals are published periodically in the Federal Register in notice form, and such notices may be obtained from any Office of Federal Contract Compliance Programs office or from Federal procurement contracting officers. The Contractor is expected to make substantially uniform progress in meeting its goals in each craft during the period specified.

5. Neither the provisions of any collective bargaining agreement, nor the failure by a union with whom the Contractor has a collective bargaining agreement, to refer either minorities or women shall excuse the Contractor's obligations under these specifications, Executive Order 11246, or the regulations promulgated pursuant thereto.
6. In order for the nonworking training hours of apprentices and trainees to be counted in meeting the goals, such apprentices and trainees must be employed by the Contractor during the training period, and the Contractor must have made a commitment to employ the apprentices and trainees at the completion of their training, subject to the availability of employment opportunities. Trainees must be trained pursuant to training programs approved by the U.S. Department of Labor.
7. The Contractor shall take specific affirmative actions to ensure equal employment opportunity. The evaluation of the Contractor's compliance with these specifications shall be based upon its effort to achieve maximum results from its actions. The Contractor shall document these efforts fully, and shall implement affirmative action steps at least as extensive as the following:
 - a. Ensure and maintain a working environment free of harassment, intimidation, and coercion at all sites, and in all facilities at which the Contractor employees are assigned to work. The Contractor, where possible will assign two or more women to each construction project. The Contractor shall specifically ensure that all foremen, superintendents, and other on-site supervisory personnel are aware of and carry out the Contractor's obligation to maintain such a working environment, with specific attention to minority or female individuals working at such sites or in such facilities.
 - b. Establish and maintain a current list of minority and female recruitment sources, provide written notification to minority and female recruitment sources and to community organizations when the Contractor or its unions have employment opportunities available and maintain a record of the organizations' responses.
 - c. Maintain a current file of the names, addresses and telephone numbers of each minority and female off-the-street applicant and minority or female referral from a union, a recruitment source or community organization and of what action was taken with respect to each such individual. If such individual was sent to the union hiring hall for referral and was not referred back to the Contractor by the union or, if referred, not employed by the Contractor, this shall be documented in the file with the reason therefore, along with whatever additional actions the Contractor may have taken.
 - d. Provide immediate written notification to the Director when the union or unions with which the Contractor has a collective bargaining agreement has not referred to the Contractor a minority person or woman sent by the Contractor, or when the Contractor has other information that the union referral process has impeded the Contractor's effort, to meet its obligations.
 - e. Develop on-the-job training opportunities and/or participate in training programs for the area which expressly include minorities and women, including upgrading programs and apprenticeship and trainee programs relevant to the Contractor's employment needs, especially those programs funded or approved by the Department of Labor. The Contractor shall provide notice of these programs to the source complied under 7b above.
 - f. Disseminate the Contractor's EEO policy by providing notice of the policy to unions and training programs and requesting their cooperation in assisting the Contractor in meeting its EEO obligations; by including it in any policy manual and collective bargaining agreement; by publicizing it in the company newspaper, annual report, etc.; by specific review of the policy with all management personnel and with all minority and female employees at least once a year; and by posting the company EEO policy on bulletin boards accessible to all employees at each location where construction work is performed.
 - g. Review, at least annually, the company's EEO policy and affirmative action obligations under these specifications with all employees having any responsibility for hiring, assignment, layoff, termination or other employment decisions including specific review of these items with onsite supervisory personnel such as Superintendents, General Foremen, etc., prior to the initiation of construction work at any job site. A written record shall be made and maintained identifying the time and place of these meetings, persons attending, subject matter discussed, and disposition of the subject matter.
 - h. Disseminate the Contractor's EEO policy externally by including it in any advertising in the news media, specifically including minority and female news media, and providing written notification to and discussing the

Contractor's EEO policy with other Contractors and Subcontractors with whom the Contractor does or anticipates doing business.

- i. Direct its recruitment efforts, both oral and written, to minority, female and community organizations, to schools with minority and female students and to minority and female recruitment and training organizations serving the Contractor's recruitment area and employment needs. Not later than one month prior to the date for the acceptance of applications for apprenticeship or other training by any recruitment source, the Contractor shall send written notification to organizations such as the above, describing the openings, screening procedures, and test to be used in the selection process.
 - j. Encourage present minority and female employees to recruit other minority persons and women and, where reasonable, provide after school, summer and vacation employment to minority and female youth both on the site and in other areas of a Contractor's workforce.
 - k. Validate all tests and other selection requirements where there is an obligation to do so under 41 CFR Part 60-3.
 - l. Conduct, at least annually, an inventory and evaluation at least of all minority and female personnel for promotional opportunities and encourage these employees to seek or to prepare for, through appropriate training, etc., such opportunities.
 - m. Ensure that seniority practices, job classifications work assignments and other personnel practices, do not have a discriminatory effect by continually monitoring all personnel and employment related activities to ensure that the EEO policy and the Contractor's obligations under these specifications are being carried out.
 - n. Ensure that all facilities and company activities are nonsegregated except that separate or single-user toilet and necessary changing facilities shall be provided to assure privacy between the sexes.
 - o. Document and maintain a record of all solicitations of offers for subcontracts from minority and female construction contractors and suppliers, including circulation of solicitations to minority and female contractor associations and other business associations.
 - p. Conduct a review, at least annually, of all supervisors' adherence to and performance under the Contractor's EEO policies and affirmative action obligations.
8. Contractors are encouraged to participate in voluntary associations which assist in fulfilling one or more of their affirmative action obligations (7a through p). The efforts of a contractor association, joint contractor-union, contractor-community, or other similar group of which the contractor is a member and participant, may be asserted as fulfilling any one or more of its obligations under 7a through p of these Specifications provided that the contractor actively participates in the group, makes every effort to assure that the group has a positive impact on the employment of minorities and women in the industry, ensures that the concrete benefits of the program are reflected in the Contractor's minority and female workforce participation, makes a good faith effort to meet its individual goals and timetables, and can provide access to documentation which demonstrates the effectiveness of actions taken on behalf of the Contractor. The obligation to comply, however, is the Contractor's and failure of such a group to fulfill an obligation shall not be a defense for the Contractor's noncompliance.
9. A single goal for minorities and a separate single goal for women have been established. The Contractor, however, is required to provide equal employment opportunity and to take affirmative action for all minority groups, both male and female, and all women, both minority and non-minority. Consequently, the Contractor may be in violation of the Executive Order if a particular group is employed in a substantially disparate manner (for example, even though the Contractor has achieved its goals for women generally, the Contractor may be in violation of the Executive Order if a specific minority group of women is underutilized).
10. The Contractor shall not use the goals and timetable or affirmative action standards to discriminate against any person because of race, color, religion, sex, or national origin.
11. The Contractor shall not enter into any Subcontract with any person or firm debarred from Government contracts pursuant to Executive Order 11246.

12. The Contractor shall carry out such sanctions and penalties for violation of these specifications and of the Equal Opportunity Clause, including suspension, termination and cancellation of existing subcontracts as may be imposed or ordered pursuant to Executive Order 11246, as amended, and its implementing regulations, by the Office of Federal Contract Compliance Programs. Any Contractor who fails to carry out such sanctions and penalties shall be in violation of these specifications and Executive Order 11246, as amended.
13. The Contractor, in fulfilling its obligations under these specifications, shall implement specific affirmative action steps at least as extensive as those standards prescribed in paragraph 7 of these specifications so as to achieve maximum results from its efforts to ensure equal employment opportunity. If the Contractor fails to comply with the requirements of the Executive Order, the implementing regulations, or these specifications, the Director shall proceed in accordance with 41 CFR 60-4.8.
14. The Contractor shall designate a responsible official to monitor all employment related activity to ensure that the company EEO policy is being carried out, to submit reports relating to the provisions hereof as may be required by the Government and to keep records. Records shall at least include for each employee the name, address, telephone numbers, construction trade, union affiliation if any, employee identification number when assigned, social security number, race, sex, status (e.g., mechanic, apprentice, trainee, helper, or laborer), dates of changes in status, hours worked per week in the indicated trade, rate of pay, and locations at which the work was performed. Records shall be maintained in an easily understandable and retrievable form; however, to the degree that existing records satisfy this requirement, contractors shall not be required to maintain separate records.
15. Nothing herein provided shall be construed as a limitation upon the application of other laws which establish different standards of compliance or upon the application of requirements for the hiring of local or other area residents (e.g., those under the Public Works Employment Act of 1977 and the Community Development Block Grant Program).

Federal Register, Vol. 43, No. 68 - Friday, April 7, 1978 (Corrected May 5, 1978).

Effective Date: May 8, 1978

Federal Register, Vol. 45, No. 194. Paragraph 4, revised October 3, 1980

Effective Date: September 30, 1980

APPENDICES A and B-80
Notice of Requirement for Affirmative Action to Ensure Equal Employment Opportunity
(Executive Order 11246)

1. The Offeror's or Bidder's attention is called to the "Equal Opportunity Clause" and the "Standard Federal Equal Employment Specifications" set forth herein.
2. The goals and timetables for minority and female participation, expressed in percentage terms for the Contractor's aggregate workforce in each trade on all construction work in the covered area, are as follows:

(See Appendix B-80 and Appendix A Below)

These goals are applicable to all the Contractor's construction work (whether or not it is Federal or federally assisted) performed in the covered area. If the contractor performs construction work in a geographical area located outside of the covered area, it shall apply the goals established for such geographical area where the work is actually performed. With regard to this second area, the contractor also is subject to the goals for both its federally involved and non-federally involved construction.

The Contractor's compliance with the Executive Order and in the regulations in 41 CFR Part 60 - 4 shall be based on its implementation of the Equal Opportunity Clause, specific affirmative action obligations required by the specifications set

3. The Contractor shall provide written notification to the Director of the Office of Federal Contract Compliance Programs within 10 working days of award of any construction subcontract in excess of \$10,000 at any tier for construction work under the contract resulting from this solicitation. The notification shall list the name, address and telephone number of the subcontractor, employer Identification number of the subcontractor, estimated dollar amount of the subcontract, and the geographical area in which the subcontract is to be performed.
4. As used in this Notice, and in the contract resulting from this solicitation, the “covered area” is (State of Iowa).

IA Allamakee, IA Clayton, IA Delaware, IA Jackson IA Winneshiek

099 Davenport Rock Island Moline, IA-IL:

SMSA Counties:

1960 Davenport Rock Island Moline, IA-IL4.6

IL Henry, IL Rock Island Moline, IA Scott

Non-SMA Counties 3.4

IL Carroll, IL Hancock, IL Henderson, IL Mercer, IL Whiteside, IA Clinton, IA Des Moines, IA Henry, IA Lee, IA Louisa, IA
Muscatine, MO Clark

100 Cedar Rapids, IA:

SMSA Counties:

1360 Cedar Rapids, IA 1.7

IA Linn

Non-SMSA Counties 1.5

IA Benton, IA Cedar, IA Iowa, IA Johnson, IA Jones, IA Washington

101 Waterloo, IA:

SMSA Counties:

8920 Waterloo-Cedar Falls, IA.....4.7

IA Black Hawk

Non-SMSA Counties 2.0

IA Bremer, IA Buchanan, IA Butler, IA Cerro Gordo, IA Chickasaw, IA Fayette, IA Floyd, IA Franklin, IA Grundy, IA
Hancock, IA Hardin, IA Howard, IA Mitchell, IA Winnebago, IA Worth

102 Fort Dodge, IA:

Non-SMSA Counties 0.4

IA Buena Vista, IA Calhoun, IA Carroll, IA Clay, IA Dickinson, IA Emmet, IA Greene, IA Hamilton, IA Humboldt, IA
Kossuth, IA Palo Alto, IA Pocahontas, IA Sac, IA Webster, IA Wright

103 Sioux City, IA:

SMSA Counties:

7720 Sioux City, IA-NE 1.9

IA Woodbury, NE Dakota

Non-SMSA Counties 1.2

IA Cherokee, IA Crawford, IA Ida, IA Monona, IA O'Brien, IA Plymouth, IA Sioux, NE Antelope, NE Cedar, NE Cuming,
NE Dixon, NE Knox, NE Madison, NE Pierce, NE Stanton, NE Thurston, NE Wayne, SD Bon Homme, SD Clay, SD Union,
SD Yankton

104 Des Moines, IA:

SMSA Counties:

2120 Des Moines, IA4.5

IA Polk, IA Warren

Non SMSA Counties: 2.4

IA Adair, IA Appanoose, IA Boone, IA Clarke, IA Dallas, IA Davis, IA Decatur, IA Guthrie, IA Jasper, IA Jefferson, IA
Keokuk, IA Lucas, IA Madison, IA Mahaska, IA Marion, IA Marshall, IA Monroe, IA Poweshiek, IA Ringgold, IA Story, IA
Tama, IA Union, IA Van Buren, IA Wapello, IA Wayne

143 Omaha, NE:

SMSA Counties:

5920 Omaha, NE-IA.....7.6

IA Pottawattamie, NE Douglas, NE Sarpy

Non-SMSA Counties5.3

IA Adams, IA Audubon, IA Cass, IA Fremont, IA Harrison, IA Mills, IA Montgomery, IA Page, IA Shelby, IA Taylor, NE Burt, NE Cass, NE Colfax, NE Dodge, NE Platte, NE Saunders, NE Washington

Published, Federal Register October 3, 1980

B. Federal Labor Standards Provisions (including Davis-Bacon prevailing wage rates) Applicability

The Project or Program to which the construction work covered by this contract pertains is being assisted by the United States of America and the following Federal Labor Standards Provisions are included in this Contract pursuant to the provisions applicable to such Federal assistance.

(1) Minimum wages.

- (i) All laborers and mechanics employed or working upon the site of the work will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics. Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph (a)(1)(iv) of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in Sec. 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided that the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under paragraph (a)(1)(ii) of this section) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.
- (ii) (A) The contracting officer shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The contracting officer shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:
 - (1) The work to be performed by the classification requested is not performed by a classification in the wage determination; and
 - (2) The classification is utilized in the area by the construction industry; and
 - (3) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.
- (B) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, DC 20210. The Administrator, or an authorized

representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

- (C) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Administrator for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.
 - (D) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs (a)(1)(ii) (B) or (C) of this section, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.
 - (iii) Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.
 - (iv) If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, Provided that the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.
- (2) Withholding. The EPA shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld from the contractor under this contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the contract, the EPA may, after written notice to the contractor, sponsor, applicant, or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.
- (3) Payrolls and basic records.
- (i) Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.
 - (ii) (A) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the (write in name of appropriate federal agency) if the agency is a party to the contract, but if the agency is not such a party, the contractor will submit the payrolls to the applicant, sponsor, or owner, as

the case may be, for transmission to the (write in name of agency). The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g., the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division Web site at <http://www.dol.gov/whd/programs/dbra/forms.htm> or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to the (write in name of appropriate federal agency) if the agency is a party to the contract, but if the agency is not such a party, the contractor will submit them to the applicant, sponsor, or owner, as the case may be, for transmission to the (write in name of agency), the contractor, or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the sponsoring government agency (or the applicant, sponsor, or owner).

(B) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

- (1) That the payroll for the payroll period contains the information required to be provided under Sec. 5.5 (a)(3)(ii) of Regulations, 29 CFR part 5, the appropriate information is being maintained under Sec. 5.5 (a)(3)(i) of Regulations, 29 CFR part 5, and that such information is correct and complete;
- (2) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in Regulations, 29 CFR part 3;
- (3) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

(C) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph (a)(3)(ii)(B) of this section.

(D) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under section 1001 of title 18 and section 231 of title 31 of the United States Code.

(iii) The contractor or subcontractor shall make the records required under paragraph (a)(3)(i) of this section available for inspection, copying, or transcription by authorized representatives of the EPA or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the Federal agency may, after written notice to the contractor, sponsor, applicant, or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

(4) Apprentices and trainees

(i) Apprentices. Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of Apprenticeship Training, Employer and Labor Services or a State Apprenticeship Agency (where

appropriate) to be eligible for probationary employment as an apprentice. The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed. Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination. In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

- (ii) Trainees. Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration. The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.
 - (iii) Equal employment opportunity. The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30.
- (5) Compliance with Copeland Act requirements. The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract.
 - (6) Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses contained in 29 CFR 5.5(a)(1) through (10) and such other clauses as the (write in the name of the Federal agency) may by appropriate instructions require, and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR 5.5.
 - (7) Contract termination: debarment. A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

- (8) Compliance with Davis-Bacon and Related Act requirements. All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract.
- (9) Disputes concerning labor standards. Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (and any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.
- (10) Certification of eligibility.
- (i) By entering into this contract, the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).
 - (ii) No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).
 - (iii) The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.
- (b) Contract Work Hours and Safety Standards Act. The Agency Head shall cause or require the contracting officer to insert the following clauses set forth in paragraphs (b)(1), (2), (3), and (4) of this section in full in any contract in an amount in excess of \$100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses shall be inserted in addition to the clauses required by Sec. 5.5(a) or 4.6 of part 4 of this title. As used in this paragraph, the terms laborers and mechanics include watchmen and guards.
- (1) Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.
 - (2) Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph (b)(1) of this section the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (b)(1) of this section, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (b)(1) of this section.
 - (3) Withholding for unpaid wages and liquidated damages. The loan recipient shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (b)(2) of this section.
 - (4) Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (b)(1) through (4) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (b)(1) through (4) of this section.
- (c) In addition to the clauses contained in paragraph (b), in any contract subject only to the Contract Work Hours and Safety Standards Act and not to any of the other statutes cited in Sec. 5.1, the Agency Head shall cause

or require the contracting officer to insert a clause requiring that the contractor or subcontractor shall maintain payrolls and basic payroll records during the course of the work and shall preserve them for a period of three years from the completion of the contract for all laborers and mechanics, including guards and watchmen, working on the contract. Such records shall contain the name and address of each such employee, social security number, correct classifications, hourly rates of wages paid, daily and weekly number of hours worked, deductions made, and actual wages paid. Further, the Agency Head shall cause or require the contracting officer to insert in any such contract a clause providing that the records to be maintained under this paragraph shall be made available by the contractor or subcontractor for inspection, copying, or transcription by authorized representatives of the EPA and the Department of Labor, and the contractor or subcontractor will permit such representatives to interview employees during working hours on the job.

C. Preservation of Open Competition and Government Neutrality Towards Government Contractors' Labor Relations on Federal and Federally Funded Construction Projects (Executive Order 13202, as amended by Executive Order 13208)

Executive Order 13202, signed February 17, 2001 and amended April 4, 2001, requires all executive agencies that issue grants to ensure Government neutrality toward contractors' labor relations. This applies to recipients of SRF assistance. The Executive Order prohibits discrimination against contractors and their employees in construction contracts based upon labor affiliation or lack thereof.

SRF assistance recipients and any construction managers acting on their behalf must ensure that bidding specifications, project agreements, and other controlling documents do not require, prohibit, or otherwise discriminate, with respect to labor affiliation or lack thereof.

D. Historical and Archeological Finds

If, during the course of construction, evidence of deposits of historical or archeological interest is found, the contractor shall cease operations affecting the find. The owner shall then notify the State Revolving Fund Environmental Review Specialist, who shall in turn notify the State Historic Preservation Office. The SRF shall consult with the SHPO and other interested parties to determine the proper course of action regarding the discovery. No further disturbance of the deposits shall ensue until the SRF Environmental Review Specialist determines that the project activities in that area may proceed. Compensation to the contractor, if any, for lost time or changes in construction to avoid the find, shall be determined in accordance with changed conditions or change order provisions of the specifications.

Authority for this derives from the National Historic Preservation Act (16 U.S.C. §§ 470 *et seq.*) and 36 CFR Part 800. If human remains are discovered then state law also applies IC 263B.

E. Prohibitions on Procurement from Violating Facilities (Section 306, Clean Air Act; Section 508, Clean Water Act; Executive Order 11738)

Both the Clean Water Act and the Clean Air Act prohibit federal agencies from extending assistance by way of loans or contracts to persons who have been convicted of violations of either law. Executive Order 11738 was issued to coordinate enforcement by the U.S. Environmental Protection Agency, which shall designate facilities which have given rise to a conviction for an offense under the criminal provisions of the Clean Air Act and the Clean Water Act.

The Executive Order also prohibits agencies from extending assistance to facilities that are not in compliance with either Act.

SRF assistance recipients may not procure goods, services, or materials from suppliers listed by the EPA as violators.

The Excluded Parties Listing search engine is located at the System for Award Management (SAM) website:
<https://sam.gov>.

Attachment 8

SRF Required Front-End Specifications

Right of Entry and Records Retention

The recipient shall provide access at all times for the Department of Natural Resources, the Iowa Finance Authority, the state auditor, and the U.S. EPA Office of the Inspector General to all project records and documents for inspection and audit purposes for a period of three years after the date of last loan payment. The same access to the project site(s) shall be provided for inspection purposes.

567 Iowa Administrative Code paragraph 92.8 (2).e. State inspections. Personnel of the department shall have the right to examine all construction aspects of the project, including materials and equipment delivered and stored on site for use on the project.

Attachment 9

SRF Required Front-End Specifications

“American Iron and Steel” Requirements

H.R. 3547, the “Consolidated Appropriations Act, 2014,” enacted January 17, 2014 by the U.S. Congress, includes “American Iron and Steel” provisions that require Clean Water and Drinking Water State Revolving Fund assistance recipients of these funds to use iron and steel produced in the United States.

H.R. 3547 includes the following language in Division G, Title IV, under the heading, “Use of American Iron and Steel”:

Sec. 436. (a)(1) None of the funds made available by a State water pollution control revolving fund as authorized by title VI of the Federal Water Pollution Control Act (33 U.S.C. 1381 et seq.) or made available by a drinking water treatment revolving loan fund as authorized by section 1452 of the Safe Drinking Water Act (42 U.S.C. 300j-12) shall be used for a project for the construction, alteration, maintenance, or repair of a public water system or treatment works unless all of the iron and steel products used in the project are produced in the United States.

(2) In this section, the term “iron and steel products” means the following products made primarily of iron and steel: lined or unlined pipes and fittings, manhole covers and other municipal castings, hydrants, tanks, flanges, pipe clamps and restraints, valves, structural steel, reinforced precast concrete, and construction materials.

(b) Subsection (a) shall not apply in any case or category of cases in which the Administrator of the Environmental Protection Agency (in this section referred to as the “Administrator”) find that—

- 1) Applying subsection (a) would be inconsistent with the public interest;
- 2) Iron and steel products are not produced in the United States in sufficient and reasonably available quantities and of a satisfactory quantity; or
- 3) Inclusion of iron and steel products produced in the United States will increase the cost of the overall project by more than 25 percent.

(c) If the Administrator receives a request for a waiver under this section, the Administrator shall make available to the public on an informal basis a copy of the request and information available to the Administrator concerning the request, and shall allow for informal public input on the request for at least 15 days prior to making a finding based on the request. The Administrator shall make the request and accompanying information available by electronic means, including on the official public Internet Web site of the Environmental Protection Agency.

The final guidance and any published waivers are found at: <https://www.epa.gov/cwsrf/state-revolving-fund-american-iron-and-steel-ais-requirement>. In particular the contractor should pay attention to the guidance for documentation of

compliance. There is also a waiver for incidental items; in order to qualify for this waiver the total materials and costs for the project must be tracked and incidental items identified.

Sample “American Iron and Steel” Contract Language

In order to fulfill the requirements, the assistance recipient must in good faith design the project and solicit bids for construction with U.S.-made iron and steel. The following information will be included in any contracts resulting from this request for bids:

The Contractor acknowledges to and for the benefit of the City of _____ (“Purchaser”) and the State of Iowa (the “State”) that it understands the goods and services under this Agreement are being funded with monies made available by the Clean Water State Revolving Fund and/or Drinking Water State Revolving Fund and such law contains provisions commonly known as “American Iron and Steel;” that requires all of the iron and steel products used in the project to be produced in the United States (“American Iron and Steel Requirement”) including iron and steel products provided by the Contractor pursuant to this Agreement.

The Contractor hereby represents and warrants to and for the benefit of the Purchaser and the State that (a) the Contractor has reviewed and understands the American Iron and Steel Requirement, (b) all of the iron and steel products used in the project will be and/or have been produced in the United States in a manner that complies with the American Iron and Steel Requirement, unless a waiver of the requirement is approved, and (c) the Contractor will provide any further verified information, certification or assurance of compliance with this paragraph, or information necessary to support a waiver of the American Iron and Steel Requirement, as may be requested by the Purchaser or the State.

Notwithstanding any other provision of this Agreement, any failure to comply with this paragraph by the Contractor shall permit the Purchaser or State to recover as damages against the Contractor any loss, expense, or cost (including without limitation attorney’s fees) incurred by the Purchaser or State resulting from any such failure (including without limitation any impairment or loss of funding, whether in whole or in part, from the State or any damages owed to the State by the Purchaser). While the Contractor has no direct contractual privity with the State, as a lender to the Purchaser for the funding of its project, the Purchaser and the Contractor agree that the State is a third-party beneficiary and neither this paragraph (nor any other provision of this Agreement necessary to give this paragraph force or effect) shall be amended or waived without the prior written consent of the State.

Sample Certifications

As indicated in the contract language, it will be the responsibility of the Contractor to obtain certifications that the products and materials used in the project are U.S.-made. EPA recommends the use of a step certification process for documenting compliance with AIS requirements, similar to one used by the Federal Highway Administration. Step certification creates a paper trail which documents the location of the manufacturing process involved with the production of steel and iron materials. Each handler (supplier, fabricator, manufacturer, processor, coater, etc.) of the iron and steel products certifies that their step in the process was domestically performed.

The following information is provided as a sample letter of step certification for AIS compliance. Documentation must be provided on company letterhead. In this example, there may be multiple letters from different manufacturers if one manufacturer did not perform all of the steps.

Date

Company Name

Company Address

City, State Zip

Subject: American Iron and Steel Step Certification for Project (XXXXXXXXXX)

I, (company representative), certify that the (melting, bending, coating, galvanizing, cutting, etc.) process for (manufacturing or fabricating) the following products and/or materials shipped or provided for the subject project is in full compliance with the American Iron and Steel requirement as mandated in EPA's State Revolving Fund Programs.

Item, Products and/or Materials:

1. Xxx

2. Xxx

3. Xxx

Such process took place at the following location:

If any of the above compliance statements change while providing material to this project we will immediately notify the prime contractor and the engineer.

Signed by company representative

Alternatively, the final manufacturer that delivers the iron or steel product to the worksite, vendor, or contractor, may provide a certification asserting that all manufacturing processes occurred in the US and providing detailed information on the steps involved.

The following is a template for this type of final certification.



Template American Iron and Steel Certification Letter



On Manufacturer's Letterhead

IRON & STEEL, INC.
1959 Steel Drive
Ironville, OH 12345

MATERIAL CERTIFICATION

April 30, 2015

RE: Job Name: Waterprojectville, Iowa – 2015 State Revolving Fund Water
Infrastructure Project
SRF Project Number: CS1920999 01

References the SRF Project

I certify that the processes for manufacturing or fabricating the following products and/or materials provided for the subject project took place at the following U.S. locations:

Quantity	Description	Manufacturing Processes	Location Where Processes Occurred
3 count	AB123456 4" Gate Valve	Melting, poured, machined	Ironville, OH
60 count	XY654321 Reinforced Concrete Manhole	Melted, rolled, fabricated	Steel City, LA
60 count	XZ123456 Manhole Cover	Melted, cast, finished	Stainless, MS
1200 linear feet	AB654321 4" Ductile Iron Water Pipe	Melted, rolled, finished	Pipetown, CA

I further certify that the products and/or materials are in full compliance with the American Iron and Steel requirements as mandated in the U.S. Environmental Protection Agency's State Revolving Fund programs. If any of the above compliance statements change while providing material to this project we will immediately notify the supplier, prime contractor, consulting engineer, or project owner.

Specifies the Products and Quantities

On behalf of IRON & STEEL, INC.,

Signature of
Manufacturer's
Representative

Jane Smith
Jane Smith
Product Quality Manager

Specifies the Manufacturing Processes and the U.S. Locations Where They Were Performed

Covered and Non-Covered Items

The EPA issued a waiver for De Minimis incidental components of eligible water and wastewater infrastructure projects. Funds used for such De Minimis incidental components cumulatively may comprise no more than a total of 5% of the total cost of the materials used in and incorporated into a project. The cost of an individual incidental item may not exceed 1% of the total cost of the materials used in and incorporated into a project.

De Minimis incidental items include miscellaneous, generally low-cost components that are essential for, but incidental to, the construction and are incorporated into the physical structure of the project. For many of these incidental components, the country of manufacture and the availability of alternatives are not readily or reasonably identifiable prior to procurement in the normal course of business. For others, the country of manufacture may be known but the miscellaneous character in conjunction with the low cost, individually and (in total) as typically procured in bulk, mark them as properly incidental.

Examples of incidental components could include small washers, screws, fasteners (i.e., nuts and bolts), miscellaneous wire, corner bead, ancillary tube, etc. Examples of items that are clearly not incidental include significant process fittings (i.e., tees, elbows, flanges, and brackets), distribution system fittings and valves, force main valves, pipes, treatment and storage tanks, large structural supports, etc.

In consultation with their contractors, assistance recipients should determine the items to be covered by this waiver, and must retain relevant documentation (i.e. invoices) as to those items. Assistance recipients must summarize in reports to the State of Iowa the types and/or categories of items to which this waiver is applied, the total cost of incidental components for each type or category, and the calculations by which they determined the total cost of materials used in and incorporated into the project.

The successful bidder will fill out the materials spreadsheet (shown below) and submit it to the assistance recipient to indicate iron and steel items proposed to be procured for the project.

American Iron and Steel Materials Spreadsheet – to be Submitted by Successful Bidder
Iowa Department of Natural Resources - January 2021
Based on EPA Memorandum (4/15/2014): De Minimis Waiver of Section 436 of P.L. 113-76, Consolidated Appropriation Acts (CAA), 2014

Project:

Bidder: Date:

*Covered Product Categories include: Lined or unlined pipes or fittings; manhole covers; municipal castings; pipe clamps and restraints; valves; structural steel; hydrants, tanks; flanges; reinforced precast concrete; construction materials.

**Incidental items are miscellaneous, generally low-cost items, often procured in bulk, such as washers, screws, fasteners, small amounts of wire, etc.

	Covered Products Category*	Description of Covered Products	Documentation Will be Obtained	Item is Incidental and will be claimed under De Minimis Waiver**	Bid Amount Covered Products	Bid Amount Incidentals
1	Choose an item.					
2	Choose an item.					
3	Choose an item.					
4	Choose an item.					
5	Choose an item.					

At the end of construction, the contractor will submit a final list showing covered items being claimed as incidental components under the De Minimis Waiver. Assistance recipients will complete a De Minimis Waiver Incidental Components List for the entire project to demonstrate compliance with the De Minimis Waiver cost requirements outlined above.

American Iron and Steel - De Minimis Waiver Incidental Components List

Iowa Department of Natural Resources – January 2021

Based on EPA Memorandum (4/15/2014): De Minimis Waiver of Section 436 of P.L. 113-76, Consolidated Appropriation Acts (CAA), 2014

This form is to be used by the State Revolving Fund (SRF) applicant to identify all non-domestic iron and steel incidental components permanently incorporated into an SRF project that meet the requirements of the public interest De Minimis Waiver. This form can also be used by individual contractors to submit their final incidental components list to the SRF applicant.

SRF Applicant:			
SRF Project #:		Submitted By:	
Date:		Individual Contractor De Minimis List	Final De Minimis List for SRF Project
Total Materials Cost:		Total amount claimed as De Minimis Incidental Components:	Percent: (must be 5% or less of total materials cost)

	Contractor Name	Covered Products	Description of Covered Products (list each item type separately)	Date Purchased	Individual Item/Unit Cost	Quantity Claimed as Incidental	Dollar Amount Incidental Components
Example	JB Construction	Construction materials	Steel Doors	1-21-2020	\$500	5	\$2500
1		Choose an item.					
2		Choose an item.					
3		Choose an item.					

These documents are available online at <http://www.iowasrf.com/documents-and-guides/>

Attachment 10
SRF Required Front-End Specifications

(This form must be completed and signed by Prime Contractor and submitted with the bid.)

**PROHIBITION ON CERTAIN TELECOMMUNICATIONS AND VIDEO SURVEILLANCE
SERVICES OR EQUIPMENT**

This term and condition implements 2 CFR 200.216 and is effective for obligations and expenditures of EPA financial assistance funding on or after 8/13/2020. EPA recipients and subrecipients, including borrowers under EPA funded revolving loan fund programs, are prohibited from obligating or expending loan or grant funds to:

- (a) Procure or obtain, extend or renew a contract to procure or obtain;
- (b) Enter into a contract (or extend or renew a contract) to procure; or
- (c) Obtain the equipment, services, or systems that use “covered telecommunications equipment or services”

identified in the regulation as a substantial or essential component of any system, or as critical technology as part of any system.

Certain equipment, systems, or services, including equipment, systems, or services produced or provided by entities subject to the prohibition are recorded in the System for Award Management exclusion list, website: <https://sam.gov>.

- (1) As described in Public Law 115-232, section 889, covered telecommunications equipment or services includes:
 - (i) Telecommunications equipment produced by Huawei Technologies Company or ZTE Corporation (or any subsidiary or affiliate of such entities).
 - (ii) For the purpose of public safety, security of government facilities, physical security surveillance of critical infrastructure, and other national security purposes, video surveillance and telecommunications equipment produced by Hytera Communications Corporation, Hangzhou Hikvision Digital Technology Company, or Dahua Technology Company (or any subsidiary or affiliate of such entities).
 - (iii) Telecommunications or video surveillance services provided by such entities or using such equipment.
 - (iv) Telecommunications or video surveillance equipment or services produced or provided by an entity that the Secretary of Defense, in consultation with the Director of the National Intelligence or the Director of the Federal Bureau of Investigation, reasonably believes to be an entity owned or controlled by, or otherwise connected to, the government of a covered foreign country.
- (2) Consistent with 2 CFR 200.471, costs incurred for telecommunications and video surveillance services or equipment such as phones, internet, video surveillance, and cloud servers are allowable except for the following circumstances:
 - (i) Obligating or expending EPA funds for covered telecommunications and video surveillance services or equipment or services to procure (enter into, renew or extend contracts) or obtain the equipment, services, or systems as described in 2 CFR 200.216.

I understand the above prohibitions and certify that the project will be in compliance with all the requirements.

Signature

Date

Printed Name

Title

Davis-Bacon Prevailing Wage Rates for Muscatine County, Iowa

Construction Types: Heavy and Highway

Date: 01-03-2025

General Decision Number: IA20250081

Source:

<https://SAM.gov>

Superseded General Decision Number: IA20240081

State: Iowa

Construction Types: Heavy and Highway

Counties: Adair, Adams, Allamakee, Appanoose, Audubon, Benton, Black Hawk, Boone, Bremer, Buchanan, Buena Vista, Butler, Calhoun, Carroll, Cass, Cedar, Cerro Gordo, Cherokee, Chickasaw, Clarke, Clay, Clayton, Clinton, Crawford, Dallas, Davis, Decatur, Delaware, Des Moines, Dickinson, Dubuque, Emmet, Fayette, Floyd, Franklin, Fremont, Greene, Grundy, Guthrie, Hamilton, Hancock, Hardin, Harrison, Henry, Howard, Humboldt, Ida, Iowa, Jackson, Jasper, Jefferson, Johnson, Jones, Keokuk, Kossuth, Lee, Linn, Louisa, Lucas, Lyon, Madison, Mahaska, Marion, Marshall, Mills, Mitchell, Monona, Monroe, Montgomery, Muscatine, O'Brien, Osceola, Page, Palo Alto, Plymouth, Pocahontas, Polk, Pottawattamie, Poweshiek, Ringgold, Sac, Shelby, Sioux, Story, Tama, Taylor, Union, Van Buren, Wapello, Warren, Washington, Wayne, Webster, Winnebago, Winneshiek, Woodbury, Worth and Wright Counties in Iowa.

HIGHWAY CONSTRUCTION PROJECTS and HEAVY CONSTRUCTION PROJECTS

Note: Contracts subject to the Davis-Bacon Act are generally required to pay at least the applicable minimum wage rate required under Executive Order 14026 or Executive Order 13658. Please note that these Executive Orders apply to covered contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but do not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(1).

If the contract is entered into on or after January 30, 2022, or the contract is renewed or extended (e.g., an option is exercised) on or after January 30, 2022:	◆ Executive Order 14026 generally applies to the contract. ◆ The contractor must pay all covered workers at least \$17.75 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in 2025.
If the contract was awarded on or between January 1, 2015 and January 29, 2022, and the contract is not renewed or extended on or after January 30, 2022:	◆ Executive Order 13658 generally applies to the contract. ◆ The contractor must pay all covered workers at least \$13.30 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours performing on that contract in 2025.

The applicable Executive Order minimum wage rate will be adjusted annually. If this contract is covered by one of the

Executive Orders and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the contractor must still submit a conformance request.

Additional information on contractor requirements and worker protections under the Executive Orders is available at <http://www.dol.gov/whd/govcontracts>.

Modification Number Publication Date
0 01/03/2025

SUIA2023-001 02/01/2023

	Rates	Fringes
BRICKLAYER (BRICKLAYER/STONE MASON)		
ZONE 1.....	\$ 34.00	17.62
ZONE 2.....	\$ 34.00	17.62
ZONE 3.....	\$ 34.00	17.62
ZONE 4.....	\$ 32.75	16.09
ZONE 5.....	\$ 29.65	16.09
Carpenter & Piledrivermen		
ZONE 1.....	\$ 31.27	15.83
ZONE 2.....	\$ 29.80	15.98
ZONE 3.....	\$ 29.68	15.98
ZONE 4.....	\$ 29.20	13.30
ZONE 5**.....	\$ 28.15	11.70
CONCRETE FINISHER		
ZONE 1.....	\$ 29.55	13.10
ZONE 2.....	\$ 29.55	13.10
ZONE 3.....	\$ 29.55	13.10
ZONE 4.....	\$ 27.70	9.20
ZONE 5.....	\$ 26.65	9.20
ELECTRICIAN (STREET AND HIGHWAY LIGHTING AND TRAFFIC SIGNALS)		
ZONE 1, 2, AND 3.....	\$ 36.40	14.80
ZONE 4.....	\$ 35.10	13.80
ZONE 5.....	\$ 33.45	13.05
IRONWORKER (SETTING OF STRUCTURAL STEEL)		
ZONE 1.....	\$ 32.25	14.85
ZONE 2.....	\$ 30.16	15.30
ZONE 3.....	\$ 30.16	15.45
ZONE 4.....	\$ 28.00	14.50
ZONE 5**.....	\$ 26.15	13.70
LABORER		
ZONE 1, 2 AND 3		
GROUP A.....	\$ 24.82	12.01
GROUP AA.....	\$ 27.20	12.01
GROUP B.....	\$ 22.97	12.01
GROUP C.....	\$ 19.89	12.01
ZONE 4		
GROUP A.....	\$ 23.12	11.32
GROUP AA.....	\$ 25.12	11.32
GROUP B.....	\$ 21.55	11.32
GROUP C.....	\$ 18.92	11.32

ZONE 5		
GROUP A.....	\$ 23.52	9.87
GROUP AA.....	\$ 25.52	9.87
GROUP B.....	\$ 20.78	9.87
GROUP C.....	\$ 19.93	9.87

POWER EQUIPMENT OPERATOR

ZONE 1		
GROUP A.....	\$ 35.50	16.50
GROUP B.....	\$ 33.95	16.50
GROUP C.....	\$ 31.45	16.50
GROUP D.....	\$ 31.45	16.50
ZONE 2		
GROUP A.....	\$ 35.30	16.50
GROUP B.....	\$ 33.70	16.50
GROUP C.....	\$ 31.15	16.50
GROUP D.....	\$ 31.15	16.50
ZONE 3		
GROUP A.....	\$ 32.50	28.20
GROUP B.....	\$ 30.70	28.20
GROUP C.....	\$ 29.70	28.20
GROUP D.....	\$ 29.70	28.20
ZONE 4		
GROUP A.....	\$ 32.85	16.95
GROUP B.....	\$ 31.71	16.95
GROUP C.....	\$ 29.63	16.95
GROUP D.....	\$ 29.63	16.95
ZONE 5		
GROUP A.....	\$ 30.87	13.25
GROUP B.....	\$ 29.83	13.25
GROUP C.....	\$ 28.10	13.25
GROUP D.....	\$ 27.10	13.25

TRUCK DRIVER (AND PAVEMENT MARKING DRIVER/SWITCHPERSON)

ZONE 1.....	\$ 26.26	12.59
ZONE 2		
.....	\$ 26.26	12.59
ZONE 3.....	\$ 26.26	12.59
ZONE 4.....	\$ 26.26	9.04
ZONE 5		
.....	\$ 24.50	9.04

ZONE DEFINITIONS

- ZONE 1 The Counties of Polk, Warren, and Dallas for all Crafts, and Linn County Carpenters only.
- ZONE 2 The Counties of Dubuque for all Crafts and Linn County for all Crafts except Carpenters.
- ZONE 3 The Cities of Burlington (including West Burlington), Clinton, Fort Madison, Keokuk, and Middleton (including the Iowa Army Ammunition Plant) and Muscatine (and abutting municipalities of any such cities).
- ZONE 4 Story, Black Hawk, Cedar, Jasper, Jones, Jackson, Louisa, Madison, and Marion Counties; Clinton County (except the City of Clinton), Johnson County, Muscatine County (except the City of Muscatine), the City of Council Bluffs, Lee County and Des Moines County.
- ZONE 5 All areas of the state not listed above.

LABORER CLASSIFICATIONS - ALL ZONES

GROUP AA - Skilled pipelayer (sewer, water, and conduits) and tunnel laborers; asbestos abatement worker

GROUP A - Carpenter tender on bridges and box culverts; CCTV* sewer inspection operator; curb machine (without a seat);

deck hand; diamond & core drills; drill operator on air tracs, wagon drills, and similar drills; form setter/stringman on paving work; gunnite nozzleman; joint sealer kettleman; laser operator; mason tender (brick/stone), powderman tender; powderman/blaster; sign erector; saw operator; {(Zones 4 and 5) Skilled pipelayer (sewer, water, and conduits); tunnel laborer; asbestos abatement worker}. *new labor classification (CCTV: closed circuit television)

GROUP B - Air, gas, electric tool operator; barco hammer; carpenter tender; caulker; chain sawman; compressor (under 400 cfm); concrete finisher tender; concrete processing materials and monitors; cutting torch on demolition; drill tender; dumpmen; electric drills; fence erectors; form line expansion joint assembler; form tamper; general laborer; grade checker; handling and placing metal mesh, dowel bars, reinforcing bars and chairs; hot asphalt laborer; installing temporary traffic control devices; jackhammerman; mechanical grouter; painter (all except stripers); paving breaker; planting trees, shrubs and flowers; power broom (not self-propelled); power buggyman; rakers; rodman (tying reinforcing steel); sandblaster; seeding and mulching; sewer utility topman/bottom man; spaders; stressor or stretcherman on pre or post tensioned concrete; stringman on re/surfacing/no grade control; swinging stage, tagline, or block and tackle; tampers; timberman; tool room men and checkers; tree climber; tree groundman; underpinning and shoring caissons over twelve feet deep; vibrators; walk behind trencher; walk behind paint stripers; walk behind vibrating compactor; water pumps (under three inch); work from bosun chair.

GROUP C - Scale weigh person; traffic control/flagger, surveillance or monitor; water carrier.

POWER EQUIPMENT OPERATOR CLASSIFICATIONS - ALL ZONES

GROUP A - All terrain (off road) forklift; asphalt breakdown roller (vibratory); asphalt laydown machine; asphalt plant; asphalt screed; bulldozer (finish); central mix plant; concrete pump; crane; crawler tractor pulling scraper; directional drill (60,000 (lbs) pullback and above); dragline and power shovel; dredge engineer; excavator (over 1 cu. yd.); front end loader (4 cy and over); horizontal boring machine; master mechanic; milling machine (over 350 hp); motor grader (finish); push cat; rubber tired backhoe (over 1 cu. yd.); scraper (12 cu. yd. and over or finish); Self-propelled rotary mixer/road reclaimer; sidebroom tractor; slipform portland concrete paver; tow or push boat; trenching machine (Cleveland 80 or similar)

GROUP B - Articulated off road hauler, asphalt heater/planer; asphalt material transfer vehicle; asphalt roller; belt loader or similar loader; bulldozer (rough); churn or rotary drill; concrete curb machine; crawler tractor pulling ripper, disk or roller; deck hand/oiler; directional drill (less than 60,000 (lbs) pullback); distributor; excavator (1/2 cu. yd. and under); form riding concrete paver; front end loader (2 to less than 4 cu. yd.); group equipment greaser; mechanic; milling machine (350 hp. and less); paving breaker; portland concrete dry batch plant; rubber tired backhoe (1/2 cu. yd. and under); scraper (under 12 cu. yd.); screening, washing and crushing plant (mobile, portable or stationary); shoulder machine; skid loader (1 cu. yd. and over); subgrader or trimmer;

trenching machine; water wagon on compaction.

GROUP C - Boom & winch truck; concrete spreader/belt placer; deep wells for dewatering; farm type tractor (over 75 hp.) pulling disc or roller; forklift; front end loader (under 2 cu. yd.); motor grader (rough); pile hammer power unit; pump (greater than three inch diameter); pumps on well points; safety boat; self-propelled roller (other than asphalt); self-propelled sand blaster or shot blaster, water blaster or striping grinder/remover; skid loader (under 1 cu. yd.); truck mounted post driver.

GROUP D - Boiler; compressor; cure and texture machine; dow box; farm type or utility tractor (under 75 hp.) pulling disk, roller or other attachments; group greaser tender; light plants; mechanic tender; mechanical broom; mechanical heaters; oiler; pumps (under three inch diameter); tree chipping machine; truck crane driver/oiler.

**** CARPENTERS AND PILEDRIVERMEN, or IRONWORKERS (ZONE 5)**
Setting of structural steel; any welding incidental to bridge or culvert construction; setting concrete beams.

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

=====

Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at <https://www.dol.gov/agencies/whd/government-contracts>.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (iii)).

The body of each wage determination lists the classifications and wage rates that have been found to be prevailing for the type(s) of construction and geographic area covered by the wage determination. The classifications are listed in alphabetical order under rate identifiers indicating whether the particular rate is a union rate (current union negotiated rate), a survey rate, a weighted union average rate, a state adopted rate, or a supplemental classification rate.

Union Rate Identifiers

A four-letter identifier beginning with characters other than ""SU"", ""UAVG"", ?SA?, or ?SC? denotes that a union rate was prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2024. PLUM is an identifier of the union whose collectively bargained rate prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. The date, 07/01/2024 in the example, is the effective date of the most current negotiated rate.

Union prevailing wage rates are updated to reflect all changes over time that are reported to WHD in the rates in the collective bargaining agreement (CBA) governing the classification.

Union Average Rate Identifiers

The UAVG identifier indicates that no single rate prevailed for those classifications, but that 100% of the data reported for the classifications reflected union rates. EXAMPLE: UAVG-OH-0010 01/01/2024. UAVG indicates that the rate is a weighted union average rate. OH indicates the State of Ohio. The next number, 0010 in the example, is an internal number used in producing the wage determination. The date, 01/01/2024 in the example, indicates the date the wage determination was updated to reflect the most current union average rate.

A UAVG rate will be updated once a year, usually in January, to reflect a weighted average of the current rates in the collective bargaining agreements on which the rate is based.

Survey Rate Identifiers

The ""SU"" identifier indicates that either a single non-union rate prevailed (as defined in 29 CFR 1.2) for this classification in the survey or that the rate was derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As a weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SUFL2022-007 6/27/2024. SU indicates the rate is a single non-union prevailing rate or a weighted average of survey data for that classification. FL indicates the State of Florida. 2022 is the year of the survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. The date, 6/27/2024 in the example, indicates the survey completion date for the classifications and rates under that identifier.

?SU? wage rates typically remain in effect until a new survey is conducted. However, the Wage and Hour Division (WHD) has the discretion to update such rates under 29 CFR 1.6(c)(1).

State Adopted Rate Identifiers

The ""SA"" identifier indicates that the classifications and prevailing wage rates set by a state (or local) government were adopted under 29 C.F.R 1.3(g)-(h). Example: SAME2023-007 01/03/2024. SA reflects that the rates are state adopted. ME

refers to the State of Maine. 2023 is the year during which the state completed the survey on which the listed classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. The date, 01/03/2024 in the example, reflects the date on which the classifications and rates under the ?SA? identifier took effect under state law in the state from which the rates were adopted.

WAGE DETERMINATION APPEALS PROCESS

1) Has there been an initial decision in the matter? This can be:

- a) a survey underlying a wage determination
- b) an existing published wage determination
- c) an initial WHD letter setting forth a position on a wage determination matter
- d) an initial conformance (additional classification and rate) determination

On survey related matters, initial contact, including requests for summaries of surveys, should be directed to the WHD Branch of Wage Surveys. Requests can be submitted via email to davisbaconinfo@dol.gov or by mail to:

Branch of Wage Surveys
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

Regarding any other wage determination matter such as conformance decisions, requests for initial decisions should be directed to the WHD Branch of Construction Wage Determinations. Requests can be submitted via email to BCWD-Office@dol.gov or by mail to:

Branch of Construction Wage Determinations
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

2) If an initial decision has been issued, then any interested party (those affected by the action) that disagrees with the decision can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Requests for review and reconsideration can be submitted via email to dba.reconsideration@dol.gov or by mail to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative

Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210.

=====

END OF GENERAL DECISION"

PART 1 GENERAL

1.01 UNIT PRICE REQUIREMENTS

- A. Items of Work described herein are specifically listed in the Contract for separate measurement and payment.
- B. No other items of Work required by Contract Documents shall be measured or paid for as a separate item but shall be included as part of listed unit price item to which Work pertains. Failure to list all such related Work in the following descriptions of unit price items shall not invalidate this stipulation.
- C. Take measurements, compute quantities, and submit to City Engineer. City Engineer will verify measurements and quantities.
- D. The unit item code (XXXX-X-X) refers to the following:
 - 1. First four numbers: SUDAS Standard Specifications Section number.
 - 2. Second letter and number: Pay item category within SUDAS Specifications Section under article 1.08 Measurement and Payment.
 - 3. Note, the second number may not be present for every item.
- E. All the listed requirements within the referenced SUDAS Standard Specifications Sections are applicable in their entirety unless otherwise noted in the contract documents.

1.02 DESCRIPTION OF UNIT PRICE ITEMS (ESTIMATE REFERENCE NOTES)

- A. See C sheets for Estimate Reference Notes

PART 2 PRODUCTS

NOT USED

PART 3 EXECUTION

NOT USED

END OF SECTION

PART 1 GENERAL

1.01 SUBMITTAL PROCEDURES

- A. Submit electronically when required by Specification Sections. Contact City Resident Project Representative (Engineer), for submittal instructions. Shop drawing submittals shall be provided to Owner's Engineering Consultant (Design Engineer).
 - 1. Ms. Karmen K Heim with Stanley Consultants, Inc. heimkarmen@stanleygroup.com
- B. Definition of Engineer for shop drawings submittal review applies to Design Engineer or Owner's Engineering Consultant unless otherwise instructed.
- C. Engineer will make internal distribution to the Owner and other interested parties.
- D. Submittals shall be in English language.
- E. Weights, measures, and units shall be English units with SI metric values following in parenthesis.
- F. Graphics symbols for electrical and electronic diagrams shall conform to ANSI Y32.2/IEEE 315/CSA Z99.
- G. Refer to SUDAS specifications Section 1050 1.05, and Section 1070 1.10 for shop drawing requirements.

1.02 CONTRACTOR RESPONSIBILITIES

- A. Review submittals prior to submission.
- B. Determine and verify:
 - 1. Field measurements.
 - 2. Field construction criteria.
 - 3. Catalog numbers and similar data.
 - 4. Conformance to Specifications.
- C. Coordinate each submittal with other submittals and with requirements of Work and of Contract Documents.
- D. Notify Engineer in writing, at time of submission, of any deviations in submittals from requirements of Contract Documents. Any such deviations permitted by Engineer will require modifications of Contract Documents.
- E. Provide space on Shop Drawings for Contractor and Engineer stamps.
- F. When Shop Drawings are revised for resubmission, identify all changes made since previous submission.
- G. Submittals containing language imposing duties on others (such as verification of dimensions or supply of related information) inconsistent with contract language shall be null and void.
- H. Submittals shall not be used as media for inquiries for information or for verification of information that must be supplied by others to Contractor. Inquiries or verification of information shall be made by separate Contractor submittal using Request for Information (RFI) process.
- I. Begin no fabrication or Work which requires submittal review until return of submittals by Engineer with stamp, as either "Reviewed", "Reviewed as Noted", or "Reviewed as Noted-Resubmit."

- J. Distribute copies of reviewed submittals that carry Engineer stamp as either "Reviewed" or "Reviewed as Noted" as appropriate. Instruct parties to promptly report any inability to comply with requirements.
- K. Submittals not requested will not be recognized or processed.

1.03 ENGINEER DUTIES

- A. Review required submittals with reasonable promptness and in accord with schedule, only for general conformance to design concept of Project and compliance with information given in Contract Documents. Review shall not extend to means, methods, sequences, techniques, or procedures of construction or to safety precautions or program incident thereto. Review of a separate item as such will not indicate approval of assembly in which item functions.
- B. Affix stamp and initials or signature, and indicate requirements for resubmittal, or review of submittal. Engineer's action on submittals is classified as follows:
 - 1. Reviewed: Submittal has been reviewed and appears to be in conformance to design concept of Project and Contract Documents. Contractor may proceed with fabrication of work in submittal.
 - 2. Reviewed As Noted: Submittal has been reviewed and appears to be in conformance to design concept of Project and Contract Documents, except as noted by reviewer. Contractor may proceed with fabrication of work in submittal with modifications and corrections as indicated by reviewer.
 - 3. Reviewed As Noted-Resubmit: Submittal has been reviewed and appears to be in conformance to design concept of Project and Contract Documents, except as noted by reviewer. Contractor may proceed with fabrication of work in submittal with modifications and corrections as indicated by reviewer. Contractor shall make any corrections indicated by reviewer and resubmit for review.
 - 4. Resubmit: Submittal has been reviewed and appears not to be in conformance to design concept of Project or with Contract Documents. Contractor shall not proceed with fabrication of work in submittal, but instead shall make any corrections required by reviewer and resubmit for review.
 - 5. Returned without Review: Submittal is being returned without having been reviewed because: 1) not required by Contract Documents; 2) grossly incomplete; 3) indicates no attempt at conformance to Contract Documents; 4) cannot be reproduced; 5) lacks Contractor's completed approval stamp; or 6) lacks design professional's seal when required by law or Contract Documents. If submittal is required by Contract Documents, Contractor shall not proceed with Work as detailed in submittal, but instead shall correct defects and resubmit for review.
 - 6. For Information Only: Submittal has not been reviewed but is being retained for informational purposes only.
 - 7. Void: Submittal is voided because it is no longer required or has been superseded by another submittal.
- C. Return one electronic copy of submittals to Contractor. Contractor shall make additional distribution as required.
- D. Review of submittals shall not relieve Contractor from responsibility for any variation from Contract Documents unless Contractor has, in writing, called Engineer's attention to such variation at time of submission, and Engineer has given written concurrence pursuant to Contract Documents to specific variation, nor shall any concurrence by Engineer or other reviewer relieve Contractor from responsibility for errors or omissions in submittals.

1.04 SHOP DRAWINGS SUBMITTALS

- A. Submit for review for limited purpose of checking for conformance to information given and design concept expressed in Contract Documents. Produce copies and distribute in accordance with article "Submittal Procedures" and for record documents purposes as described in Section 01 77 00.
- B. Designate in construction schedule, or in separate coordinated submittal schedule, dates for submission and dates that reviewed submittals will be needed.

- C. Make submittals promptly in accordance with approved schedule, and in such sequence as to cause no delay in Work or in work of other contractors.
- D. Present in clear and thorough manner, complete with respect to dimensions, design criteria, materials of construction, and like information to enable review of information as required.
- E. Details shall be identified by reference to sheet and detail, schedule or room numbers shown on Drawings.
- F. Indicate special utility and electrical characteristics, utility connection requirements, and location of utility outlets for service for functional equipment and appliances.
- G. Schedule submittals to expedite Project. Coordinate submission of related items.
- H. For each submittal for review, allow a minimum of 15 days to complete review process.
- I. Identify variations from Contract Documents and product or system limitations which may be detrimental to successful performance of completed Work.
- J. Shop Drawings shall be submitted in electronic format.
 - 1. Submit electronic copy to Engineer. Specific instructions will be provided after award.
 - 2. Submittal Transmittal form (see pdf attached) shall be provided in Word format for each submittal. MSWord template will be provided after award.
 - 3. Text documents shall be submitted in .pdf format except for the shop drawing Transmittal Form.
 - 4. Drawings shall be submitted in .pdf or .tif format.
 - 5. Electronic submittal shall be suitable for reproduction in black and white.
 - 6. Samples may be submitted to Engineer.
- K. Submittals shall contain:
 - 1. Date of submission and dates of any previous submissions.
 - 2. Project title and number.
 - 3. Contract identification.
 - 4. Names of:
 - a. Contractor.
 - b. Supplier.
 - c. Manufacturer.
 - 5. Identification of product, with Specification section number and article number.
 - 6. Field dimensions, clearly identified as such.
 - 7. Relation to adjacent or critical features of Work or materials.
 - 8. Applicable standards, such as ASTM or Federal Specification numbers.
 - 9. Identification of deviations from Contract Documents.
 - 10. Identification of revisions on resubmittals.
 - 11. An 8" x 3" blank space for Contractor and reviewer stamps.
 - 12. Indication of Contractor's approval, initialed or signed, with wording substantially as follows:

"Contractor represents to Owner and Engineer that Contractor has either determined and verified all quantities, dimensions, field construction criteria, materials, catalog numbers, and similar data, or assumes full responsibility for doing so and has reviewed or coordinated each submittal with requirements of Work and Contract Documents."
 - 13. If Contract Documents include performance specifications stating required results which can be verified as meeting stipulated criteria, so that further design by Contractor prior to fabrication is necessary, Submittal depicting such design must be prepared under seal of professional engineer licensed in appropriate state and Submittal shall be signed and sealed in accordance with applicable regulations and with following certification statement:

"I hereby certify that this engineering document was prepared by me or under my direct personal supervision, that I am a duly licensed professional engineer under

laws of state of Iowa and I accept responsibility for adequacy of this document to meet criteria stipulated in Contract Documents."

- L. Product Data:
 - 1. Mark each copy to identify applicable products, models, options, and other data. Supplement manufacturers' standard data to provide information specific to this Project.
 - 2. Indicate product utility and electrical characteristics, utility connection requirements, and location of utility outlets for service for functional equipment and appliances.
- M. Design data:
 - 1. Submit for Engineer's knowledge as contract administrator or for Owner.
 - 2. Submit for information for limited purpose of assessing conformance with information given and design concept expressed in Contract Documents.
- N. Test reports:
 - 1. Submit for Engineer's knowledge as contract administrator or for Owner.
 - 2. Submit test reports for information for limited purpose of assessing conformance with information given and design concept expressed in Contract Documents.
- O. Certificates:
 - 1. When specified in individual specification sections, submit certification by manufacturer, installation/application subcontractor.
 - 2. Indicate material or product conforms to or exceeds specified requirements. Submit supporting reference data, affidavits, and certifications as appropriate.
 - 3. Certificates may be recent or previous test results on material or product, but must be acceptable to reviewer.
- P. Manufacturer's instructions:
 - 1. When specified in individual specification sections, submit printed instructions for delivery, storage, assembly, installation, start-up, adjusting, and finishing, to Engineer for delivery to Owner in quantities specified for Product Data.
 - 2. Indicate special procedures, perimeter conditions requiring special attention, and special environmental criteria required for application or installation.
- Q. Manufacturer's field reports:
 - 1. Submit report within 30 days of observation for information.
 - 2. Submit for information for limited purpose of assessing conformance with information given and design concept expressed in Contract Documents.
- R. Operations and maintenance manuals:
 - 1. Designate in construction schedule, or in separate coordinated schedule, dates for submission and dates that reviewed operations and maintenance manuals will be needed.
 - 2. Operations and maintenance manuals shall be presented in clear and thorough manner, complete with respect to dimensions, design criteria, materials of construction, and like information to enable reviewer to review information as required. Details shall be identified by reference to sheet and detail, schedule or room numbers shown on Drawings.

1.05 RESUBMISSION REQUIREMENTS

- A. Make any corrections or changes in submittals required by Engineer and resubmit until stamped as either "Reviewed," "Reviewed as Noted," or "For Information Only."
- B. Text and depictions changed on Submittal shall be back-circled (clouded).
- C. Engineer will assume that portions of Submittal not back-circled have not been changed by Contractor from previous submission.
- D. Indicate revision number and date in document revision block.

1.06 DISTRIBUTION

- A. Distribute reproductions of Shop Drawings which carry Engineer stamp as either "Reviewed" or "Reviewed as Noted" to:
 - 1. Job site file.
 - 2. Record Documents file.
 - 3. Other affected contractors.
 - 4. Subcontractors.
 - 5. Supplier or fabricator.
- B. Distribute Samples which carry Engineer stamp as either "Reviewed" or "Reviewed as Noted" as directed by Engineer.

1.07 PHOTOGRAPHIC DOCUMENTATION

- A. At Contractor's option, provide photographs of Site and construction throughout progress of Work in a format acceptable to Engineer.
- B. At Contractor's option, submit photographs with Application for Payment demonstrating completion of pay items.
- C. Deliver digital files to Owner with Project Record Documents. Catalog and index in chronological sequence; provide typed table of contents.

1.08 VIDEO DOCUMENTATION OF EXISTING CONDITIONS

- A. Prior to construction, perform video recording along route of new sanitary and storm sewers, new pavement, driveway, and sidewalks, and haul routes. Recording shall document significant features that may be affected by construction activity.
- B. See Special Provisions section 00 75 00 for requirements.

1.09 SUBMITTAL TRANSMITTAL FORM PROCEDURES

- A. Submittals shall be accompanied by completed copies of Submittal Transmittal form, bound herein. An electronic version of transmittal form is available and may be obtained from Engineer. Reproduce additional copies required.
- B. Submit copies of transmittal form for initial submittals and resubmittals. Sequentially number transmittal form. Revise submittals with original number and sequential alphabetic suffix.
- C. Prior to submittal, complete information under heading "Contractor's Transmittal."
- D. Engineer will complete information under "Reviewer's Action."
- E. Do not include submittals for more than one section of Specifications on Submittal Transmittal form.
- F. Minimize file size of submittal shall be 10 MB or less. Submit shop drawings in small logical batches rather than large batches that require the Engineering reviewer to organize. Submittals should be organized by Contractor and their subcontractors or suppliers.
- G. Identify project title, location, and number and contract title and number.
- H. Identify preparer name and, submittal number, including preparer's submittal revision number.
- I. A brief description under "Title" should clearly identify specific application of equipment or material covered by Submittal, utilizing where possible same title used in Drawings and Specifications.

- J. Identify Specification Section number.
- K. Apply Contractor's stamp, signed or initialed certifying that review, approval, verification of products required, field dimensions, adjacent construction Work, and coordination of information is in accordance with requirements of Work and Contract Documents.

PART 2 PRODUCTS

NOT USED

PART 3 EXECUTION

NOT USED

END OF SECTION

Transmittal No. _____ Project No. 17660.60.30 Contract No. 6D Date Received _____ Date Distributed _____ Project Location City of Muscatine, IA Contract Title West Hill Area – Sanitary and Storm Sewer Separation – Phase 6D Project Title _____										
CONTRACTOR'S TRANSMITTAL					ENGINEER'S/ARCHITECT'S ACTION					
					STATUS ABBREVIATIONS R - Reviewed RN - Reviewed as Noted RNR - Reviewed as Noted Resubmit RS - Resubmit RET - Returned Without Review FIO - For Information Only V - Void					
Preparer		Preparer Submittal No.		Rev No.	Title			Section	Dwg No.	Status
CONTRACTOR's Remarks					ENGINEER'S/ARCHITECT'S Remarks					
Address										
By					By					
Date					Date					
Action of any kind on drawings by ENGINEER/ARCHITECT does not relieve CONTRACTOR from responsibility for errors, correctness of details, or conformance to the Contract.					 Stanley Consultants					

PART 1 GENERAL

1.01 TEMPORARY ELECTRICITY

- A. Provide and pay for power service required from as needed for construction operation. Contractor is responsible for making arrangements with local electric utility if a source of power is needed.

1.02 TEMPORARY WATER SERVICE

- A. Provide and pay for suitable quality water service as needed to maintain specified conditions for construction operations.

1.03 TEMPORARY SANITARY FACILITIES

- A. Provide and maintain required facilities and enclosures. Provide at time of project mobilization.
- B. At end of construction, remove enclosure and return site to original condition.
- C. See SUDAS 1070, 2.01 for worker sanitary conveniences.

1.04 MAINTENANCE OF SERVICES

- A. See SUDAS Section 1070, 2.14 and Section 11,030 for maintaining postal service and solid waste collection during construction.

1.05 FIELD OFFICES AND SHEDS

- A. If Contractor requires a field office or shed, coordinate location with Owner.

1.06 VEHICULAR ACCESS

- A. Extend and relocate as Work progress requires, provide detours as necessary for unimpeded traffic flow. Location as approved by Owner.
- B. Provide unimpeded access for emergency vehicles. Maintain 20' (6 m) width driveways with turning space between and around combustible materials.
- C. Provide and maintain access to fire hydrants and control valves free of obstructions.
- D. Provide means of removing mud from vehicle wheels before entering streets.
- E. Existing on-site roads may be used for construction traffic.

1.07 CONSTRUCTION PARKING

- A. Arrange for temporary surface parking areas to accommodate construction personnel. Locate as approved by Owner.
- B. When site space is not adequate, provide additional off-site parking.
- C. Use of existing on-site streets and driveways used for construction traffic is not permitted. Tracked vehicles not allowed on paved areas.
- D. Use of existing parking facilities used by construction personnel is not permitted.
- E. Do not allow heavy vehicles or construction equipment in parking areas.

- F. Do not allow vehicle parking on existing pavement.
- G. Permanent pavements and parking facilities:
 - 1. Prior to Substantial Completion the base for permanent roads and parking areas may be used for construction traffic.
 - 2. Avoid traffic loading beyond paving design capacity. Tracked vehicles not allowed.
- H. Maintenance:
 - 1. Maintain traffic and parking areas in a sound condition free of excavated material, construction equipment, products, mud, snow, and ice.
 - 2. Maintain existing and permanent paved areas used for construction; promptly repair breaks, potholes, low areas, standing water, and other deficiencies, to maintain paving and drainage in original, or specified, condition.
- I. Removal, repair:
 - 1. Remove temporary materials and construction when permanent paving is usable.
 - 2. Repair existing and permanent facilities damaged by use, to original or condition.
- J. Mud from site vehicles: Provide means of removing mud from vehicle wheels before entering streets.

1.08 PROGRESS CLEANING AND WASTE REMOVAL

- A. Maintain areas free of waste materials, debris, and rubbish. Maintain site in a clean and orderly condition.
- B. Collect and remove waste materials, debris, and rubbish from site weekly and dispose off-site.

1.09 PROJECT IDENTIFICATION

- A. Project identification sign:
 - 1. Provided by Contractor for project use.
 - 2. Two printed signs of size, construction, and design as shown on Drawings.
 - 3. Size lettering to provide legibility from at least 30' (9 m) distance.
 - 4. Content:
 - a. Project title, logo and name of Owner as indicated on Contract Documents.
 - b. Company names of Engineer
 - c. Name of prime Contractor.
 - 5. Graphic design, logo, name, and byline colors, style of lettering: As shown on Drawings.
 - 6. Lettering: Series C of Standard Alphabet for Highway Signs, Public Roads Administration, Federal Works Agency.
 - 7. Obtain approval from Owner for final approval of sign content.
- B. Design sign and structure to withstand 60 miles/hr (100 km/hr) wind velocity.
- C. Sign printer: Experienced as a professional sign printer for minimum 3 years.
- D. Finishes, printed: Adequate to withstand weathering, fading, and chipping for duration of construction.
- E. Show content, layout, lettering, color.
- F. Sign materials:
 - 1. Structure and framing: Use new structurally adequate materials
 - 2. Sign surfaces: Exterior grade plywood with medium density overlay, minimum 3/4" (19 mm) thick, standard large sizes to minimize joints.
 - 3. Rough hardware: Galvanized.
 - 4. Paints and primers: As shown on Drawings.

- G. Installation:
 - 1. Install project identification sign prior to mobilizing to Project site.
 - 2. Erect at location determined by the Owner.
 - 3. Erect supports and framing on secure foundation, rigidly braced and framed to resist wind loadings.
 - 4. Install sign surface plumb and level, with butt joints. Anchor securely.
 - 5. Paint exposed surfaces of sign, supports, and framing.
- H. Maintenance: Maintain signs and supports clean, repair deterioration and damage.
- I. Removal: Remove signs, framing, supports, and foundations at completion of Project and restore area.
- J. Refer to detail on A.02 drawings for project sign requirements.

1.10 TRAFFIC REGULATION

- A. Reference SUDAS Section 1070, 2.06 and to SUDAS Section 8030 for additional traffic control requirements and J series drawings.
- B. Quality assurance:
 - 1. IDOT Standard Specifications.
 - 2. U. S. Department of Transportation Federal Highway Administration "Manual on Uniform Traffic Control Devices for Streets and Highways," current edition, as amended.
- C. Traffic control devices may be new or used but shall meet standards of IDOT Standard Specification.
- D. Portable generators shall not be used to power traffic control devices within 300' of residential dwellings, including apartments, between hours of 10:00 pm and 7:00 am.
- E. Owner will furnish "NO PARKING" signs to facilitate removal of parked cars ahead of scheduled work. Contractor responsible for installation and maintenance of signs 48 hours in advance of when cars must be removed. Contractor shall contact the City's Roadway Maintenance Supervisor, City of Muscatine Public Works Department (563-263-8933) prior to installation of "NO PARKING" signs.
- F. Monitor condition of traffic control facilities at all times, including non-work hours. Repair or replace as necessary.
- G. Signs, signals, and devices:
 - 1. Post-mounted and-wall mounted traffic control and informational signs: At approaches to site and on site, install at crossroads, detours, parking areas, and elsewhere as needed to direct construction and affected public traffic.
 - 2. Traffic cones and drums, flares and lights: As approved by local jurisdictions.
 - 3. Flagger equipment: As required by local jurisdictions.
 - 4. Relocate as Work progresses, to maintain effective traffic control.
- H. Flaggers: Provide trained and equipped flaggers to regulate traffic when construction operations or traffic encroach on public traffic lanes.
- I. Flares and lights: Use flares and lights during hours of low visibility to delineate traffic lanes and to guide traffic.
- J. Haul routes:
 - 1. Consult with authority having jurisdiction, establish public thoroughfares to be used for haul routes and site access. Determine haul roads with approval of agency having jurisdiction over proposed roadway.
 - 2. Confine construction traffic to designated haul routes.

3. Provide traffic control at critical areas of haul routes to regulate traffic, to minimize interference with public traffic.
4. Make condition survey of haul roads prior to use and document with necessary photographs and written descriptions. Refer to Special Provisions for details on Existing Conditions Video Record.
5. Keep reasonably free from dirt, dust, mud, and other debris from construction operations.
6. Clean a minimum of twice a week.
7. Repair damaged haul routes to match existing conditions before use.

K. Removal:

1. Remove equipment and devices when no longer required.
2. Repair damage caused by installation.
3. Remove post settings to a depth of 2' (600 mm).

1.11 BARRIERS

- A. Provide barriers to prevent unauthorized entry to construction areas and to protect existing facilities and adjacent properties from damage from construction operations.
- B. Provide barricades and covered walkways required by governing authorities for public rights-of-way.
- C. Provide protection for plants designated to remain. Replace damaged plants.
- D. Protect non-owned vehicular traffic, stored materials, site, and structures from damage.

1.12 ENCLOSURES AND FENCING

- A. Construction: Plastic construction netting.
- B. Provide a minimum of 4' (1.2 m) high fence around open excavations and areas of work that require protection.
- C. Maintain protective construction fencing of open excavations at the end of workday and during periods of no construction activity.

1.13 SECURITY

- A. Security program:
 1. Protect Work existing premises and Owner's operations from theft, vandalism, and unauthorized entry.
 2. Initiate program in coordination with Owner's existing security system at project mobilization.
 3. Maintain program throughout construction period until Owner acceptance precludes the need for Contractor security.
- B. Entry control:
 1. Restrict entrance of persons and vehicles into Project site
 2. Allow entrance only to authorized persons with proper identification.
 3. Owner and Contractor shall control entrance of persons and vehicles related to Owner's operations.

1.14 WATER CONTROL

- A. Grade site to drain. Maintain excavations free of water. Provide, operate, and maintain pumping equipment.
- B. Protect site from puddling or running water. Provide water barriers as required to protect site from soil erosion.

1.15 DUST CONTROL

- A. Execute Work by methods to minimize raising dust from construction operations.
- B. Provide positive means to prevent air-borne dust from dispersing into atmosphere.
- C. Refer to SUDAS Section 1070, 2.10 and Section 9040 for Dust Control.

1.16 EROSION AND SEDIMENT CONTROL

- A. Plan and execute construction by methods to control surface drainage from cuts and fills, from borrow and waste disposal areas. Prevent erosion and sedimentation.
- B. Minimize amount of bare soil exposed at one time.
- C. Provide temporary measures such as berms, dikes, and drains, to prevent water flow.
- D. Construct fill and waste areas by selective placement to avoid erosive surface silts or clays.
- E. Inspect project site weekly to detect evidence of erosion and sedimentation; promptly apply corrective measures.
- F. Provide methods, means and measures to minimize erosion and sedimentation of soils disturbed resulting from the project construction activities. See Storm Water Pollution Prevention Plan (SWPPP) (Sheet CE.01), and erosion control plans (RR Sheets) and SUDAS Section 9040 for erosion control requirements.
- G. Utilize SWPPP forms for contractor and subcontractor certification, contractor training log, site inspection report, and SWPPP amendment log. Example forms are provided in Project Manual.

1.17 NOISE CONTROL

- A. Provide methods, means, and facilities to minimize noise produced by construction operations.

1.18 PEST CONTROL

- A. Provide methods, means, and facilities to prevent pests and insects from damaging the Work.

1.19 POLLUTION CONTROL

- A. Provide methods, means, and facilities to prevent contamination of soil, water, and atmosphere from discharge of noxious, toxic substances, and pollutants produced by construction operations.

1.20 RODENT CONTROL

- A. Provide methods, means, and facilities to prevent rodents from accessing or invading premises.

1.21 REMOVAL OF UTILITIES, FACILITIES, AND CONTROLS

- A. Remove temporary utilities, equipment, facilities, materials, prior to Substantial Completion inspection.
- B. Remove underground installations to a minimum depth of 2' (600 mm). Grade site as indicated.
- C. Clean and repair damage caused by installation or use of temporary work.

- D. Restore existing and permanent facilities used during construction to original condition. Restore permanent facilities used during construction to specified condition.

PART 2 PRODUCTS

NOT USED

PART 3 EXECUTION

NOT USED

END OF SECTION

WEST HILL AREA
SANITARY AND STORM SEWER SEPARATION
PHASE 6D

MUSCATINE, IOWA

Owner Certification Statement – Storm Water Pollution Prevention Plan

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

SIGNATURE (City of Muscatine Representative)

DATE

NAME (City of Muscatine Representative)

TITLE

City of Muscatine, Iowa
NAME

TELEPHONE NO.

COMPANY ADDRESS

SITE ADDRESS

KEEP A COPY OF THIS SIGNED CERTIFICATION WITH THE STORM WATER POLLUTION PREVENTION PLAN.

WEST HILL AREA
SANITARY AND STORM SEWER SEPARATION
PHASE 6D

MUSCATINE, IOWA

Certification Statement

I certify under penalty of law that I understand the terms and conditions of the General National Pollutant Discharge Elimination System (NPDES) permit that authorizes the storm water discharges associated with industrial activity from the construction site as part of this certification. Further, by my signature, I understand that I am becoming a co-permittee, along with the Owner and other contractors and subcontractors signing such certifications, to the Iowa Department of Natural Resources NPDES General Permit No. 2 for "Storm Water Discharge Associated with Industrial Activity for Construction Activities" at the identified site. As a co-permittee, I understand that I, and my company, are legally required under the Clean Water Act and the Code of Iowa, to ensure compliance with the terms and conditions of the Storm Water Pollution Prevention Plan developed under this NPDES permit and the terms of the NPDES permit.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

SIGNATURE

DATE

NAME

TITLE

COMPANY NAME

TELEPHONE NO.

COMPANY ADDRESS

SITE ADDRESS

KEEP A COPY OF THIS SIGNED CERTIFICATION WITH THE STORM WATER POLLUTION PREVENTION PLAN. FORWARD A COPY TO THE OWNER.

SWPPP TRAINING LOG

Project Name _____
Project Number _____

[illegible]

Stormwater Construction Site Inspection Report

General Information			
Project Name			
NPDES Tracking No.		Location	
Date of Inspection		Start/End Time	
Inspector's Name(s)			
Inspector's Title(s)			
Inspector's Contact Information			
Inspector's Qualifications			
Describe present phase of construction			
Type of Inspection: ☐ Regular ☐ Pre-storm event ☐ During storm event ☐ Post-storm event			
Weather Information			
Has there been a storm event since the last inspection? ☐ Yes ☐ No If yes, provide: Storm Start Date & Time: Storm Duration (hrs): Approximate Amount of Precipitation (in):			
Weather at time of this inspection? ☐ Clear ☐ Cloudy ☐ Rain ☐ Sleet ☐ Fog ☐ Snowing ☐ High Winds ☐ Other: Temperature:			
Have any discharges occurred since the last inspection? ☐ Yes ☐ No If yes, describe:			
Are there any discharges at the time of inspection? ☐ Yes ☐ No If yes, describe:			

Site-specific BMPs

- Number the structural and non-structural BMPs identified in your SWPPP on your site map and list them below (add as many BMPs as necessary). Carry a copy of the numbered site map with you during your inspections. This list will ensure that you are inspecting all required BMPs at your site.
- Describe corrective actions initiated, date completed, and note the person that completed the work in the Corrective Action Log.

	BMP	BMP Installed?	BMP Maintenance Required?	Corrective Action Needed and Notes
1		☐ Yes ☐ No	☐ Yes ☐ No	
2		☐ Yes ☐ No	☐ Yes ☐ No	
3		☐ Yes ☐ No	☐ Yes ☐ No	
4		☐ Yes ☐ No	☐ Yes ☐ No	
5		☐ Yes ☐ No	☐ Yes ☐ No	
6		☐ Yes ☐ No	☐ Yes ☐ No	
7		☐ Yes ☐ No	☐ Yes ☐ No	
8		☐ Yes ☐ No	☐ Yes ☐ No	
9		☐ Yes ☐ No	☐ Yes ☐ No	
10		☐ Yes ☐ No	☐ Yes ☐ No	
11		☐ Yes ☐ No	☐ Yes ☐ No	
12		☐ Yes ☐ No	☐ Yes ☐ No	

	BMP	BMP Installed?	BMP Maintenance Required?	Corrective Action Needed and Notes
13		☐ Yes ☐ No	☐ Yes ☐ No	
14		☐ Yes ☐ No	☐ Yes ☐ No	
15		☐ Yes ☐ No	☐ Yes ☐ No	
16		☐ Yes ☐ No	☐ Yes ☐ No	
17		☐ Yes ☐ No	☐ Yes ☐ No	
18		☐ Yes ☐ No	☐ Yes ☐ No	
19		☐ Yes ☐ No	☐ Yes ☐ No	
20		☐ Yes ☐ No	☐ Yes ☐ No	

Overall Site Issues

Below are some general site issues that should be assessed during inspections. Customize this list as needed for conditions at your site.

	BMP/activity	Implemented?	Maintenance Required?	Corrective Action Needed and Notes
1	Are all slopes and disturbed areas not actively being worked properly stabilized?	☐ Yes ☐ No	☐ Yes ☐ No	
2	Are natural resource areas (e.g., streams, wetlands, mature trees, etc.) protected with barriers or similar BMPs?	☐ Yes ☐ No	☐ Yes ☐ No	
3	Are perimeter controls and sediment barriers adequately installed (keyed into substrate) and maintained?	☐ Yes ☐ No	☐ Yes ☐ No	
4	Are discharge points and receiving waters free of any sediment deposits?	☐ Yes ☐ No	☐ Yes ☐ No	
5	Are storm drain inlets properly protected?	☐ Yes ☐ No	☐ Yes ☐ No	
6	Is the construction exit preventing sediment from being tracked into the street?	☐ Yes ☐ No	☐ Yes ☐ No	
7	Is trash/litter from work areas collected and placed in covered dumpsters?	☐ Yes ☐ No	☐ Yes ☐ No	
8	Are washout facilities (e.g., paint, stucco, concrete) available, clearly marked, and maintained?	☐ Yes ☐ No	☐ Yes ☐ No	

	BMP/activity	Implemented?	Maintenance Required?	Corrective Action Needed and Notes
9	Are vehicle and equipment fueling, cleaning, and maintenance areas free of spills, leaks, or any other deleterious material?	☐ Yes ☐ No	☐ Yes ☐ No	
10	Are materials that are potential stormwater contaminants stored inside or under cover?	☐ Yes ☐ No	☐ Yes ☐ No	
11	Are non-stormwater discharges (e.g., wash water, dewatering) properly controlled?	☐ Yes ☐ No	☐ Yes ☐ No	
12	(Other)	☐ Yes ☐ No	☐ Yes ☐ No	

Non-Compliance

Describe any incidents of non-compliance not described above:

CERTIFICATION STATEMENT

“I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.”

Print name and title: _____

Signature: _____ Date: _____

Stormwater Discharge from Construction Activities

SWPPP Amendment Log

Project Name: _____

Project Number: _____

Amendment No.	Date	Brief Description of Amendment	Prepared By

The Amendment Log should include additions of new BMPs, replacement of failed BMPs, significant changes in the activities or timing on the project, changes in personnel, updates to site maps, etc.

SWPPP is a living document – all changes and amendments are required by EPA to be documented.

PART 1 GENERAL

1.01 SUBSTANTIAL COMPLETION

- A. When the Contractor considers the Work or designated portion thereof is substantially complete, submit written notice, with list of items to be completed or corrected.
- B. Within reasonable time, Engineer will inspect to determine status of completion. Duties and responsibilities assigned to the Engineer during construction, as defined in the Contract, are the responsibility of the Owner or Owner's Representative.
- C. Should Engineer determine that Work is not substantially complete, it will promptly notify Contractor in writing, giving reasons therefor.
- D. Contractor shall remedy deficiencies, and send second written notice of substantial completion, and Engineer will reinspect Work.
- E. When Engineer determines that Work is substantially complete, it will prepare Certificate of Substantial Completion.

1.02 FINAL COMPLETION

- A. When the Contractor considers the Work is complete, it shall submit written certification that:
 - 1. Contract Documents have been reviewed.
 - 2. Work has been inspected for compliance with Contract Documents.
 - 3. Work has been completed in accordance with Contract Documents, and deficiencies listed with Certificate of Substantial Completion have been corrected.
 - 4. Equipment and systems have been tested in presence of Owner's representative and are operational.
 - 5. Work is complete and ready for final inspection.
- B. Engineer will inspect to verify status of completion with reasonable promptness.
- C. Should Engineer consider that Work is incomplete or defective, it will promptly notify Contractor in writing, listing incomplete or defective Work.
- D. Contractor shall take immediate steps to remedy deficiencies and send second written certification that Work is complete, and Engineer will reinspect Work.
- E. When Engineer finds Work is acceptable, it will consider closeout submittals.

1.03 REINSPECTION FEES

- A. Should Engineer perform reinspections due to failure of Work to comply with claims made by Contractor, Owner will compensate Engineer for such additional services and deduct amount of such compensation from final payment to Contractor.

1.04 CLOSEOUT SUBMITTALS

- A. Evidence of compliance with requirements of governing authorities:
- B. Project record documents: In accordance with Article 1.05.
- C. Warranties and Bonds: In accordance with Article 1.06.

- D. Evidence of payment and release of liens: In lieu of releases or waivers of Liens, if approved by Owner, Contractor may furnish receipts or releases in full and an affidavit of Contractor demonstrating subcontractors and suppliers have been paid.
- E. Consent of Surety to final payment.
- F. Certificates of insurance for products and completed operations.

1.05 PROJECT RECORD DOCUMENTS

- A. Contractor shall maintain on site one set of the following record documents; record actual revisions to the Work:
 - 1. Drawings.
 - 2. Specifications.
 - 3. Addenda.
 - 4. Change Orders and other modifications to the Contract.
 - 5. Reviewed Shop Drawings, Product Data, and Samples.
 - 6. Manufacturer's instruction for assembly, installation, and adjusting.
- B. Ensure entries are complete and accurate, enabling future reference by Owner.
- C. Store record documents separate from documents used for construction.
- D. Record information concurrent with construction progress, not less than weekly.
- E. Specifications: Legibly mark and record at each product section description of actual products installed, including the following:
 - 1. Manufacturer's name and product model and number.
 - 2. Product substitutions or alternates utilized.
 - 3. Changes made by Addenda and modifications.
- F. Record Drawings: Legibly mark each item to record actual construction including:
 - 1. Size, type, measured horizontal and vertical locations of all underground utilities and appurtenances encountered in excavations, referenced to permanent surface improvements.
 - 2. Field changes of dimension and detail.
 - 3. Details not on original Contract Drawings.
 - 4. Rim elevations of all manholes and inlets and invert elevations on all pipes entering or exiting all new or modified manholes and inlets.
 - 5. Coordinates for location of all new or modified manholes.
 - 6. Station, size, depth, and location of all sanitary services connected to new sanitary sewers.
 - 7. Station, size, depth, and location of all storm sewers connected to new storm sewers.
 - 8. Information provided shall be compatible with City of Muscatine datum and Muscatine Area Geographic Information Consortium (MAGIC).
 - 9. Drawings will be electronically prepared by licensed land surveyor. Contractor shall coordinate directly with land surveyor on Record Drawing production and data collection.
 - 10. Provide one electronic copy of Record Drawings to Owner
- G. Submit documents to Engineer prior to substantial completion.
- H. Failure to keep record drawings up-to-date as the construction progresses shall be grounds for denial of payment.

1.06 PRODUCT WARRANTIES AND PRODUCT BONDS

- A. Obtain warranties and bonds executed in duplicate by responsible subcontractors, suppliers, and manufacturers, within ten days after completion of the applicable item of work.

- B. Execute and assemble transferable warranty documents and bonds from subcontractors, suppliers, and manufacturers.
- C. Verify that documents are in proper form, contain full information, and are notarized.
- D. Co-execute submittals when required.
- E. Provide Table of Contents and assemble in 3-D side ring binder with durable cover.
- F. Submit prior to final Application for Payment.
- G. Time of Submittals:
 - 1. For equipment or component parts of equipment put into service during construction with Owner's permission, submit documents within 10 days after acceptance.
 - 2. Make other submittals within 10 days after Date of Substantial Completion, prior to final Application for Payment.
 - 3. For items of Work for which acceptance is delayed beyond Date of Substantial Completion, submit within 10 days after acceptance, listing the date of acceptance as the beginning of the warranty or bond period.

1.07 ADJUSTMENT OF ACCOUNTS

- A. Submit final statement of accounting, reflecting adjustments to Contract Price:
- B. Original Contract Price.
- C. Additions and deductions resulting from:
 - 1. Previous Change Orders.
 - 2. Allowances.
 - 3. Unit prices.
 - 4. Deductions for uncorrected Work.
 - 5. Penalties and bonuses.
 - 6. Deductions for liquidated damages.
 - 7. Deductions for reinspection payments.
 - 8. Other adjustments.
- D. Total Contract Price, as adjusted.
- E. Previous payments.
- F. Sum remaining due.
- G. Engineer will issue final Change Order, reflecting approved adjustments to Contract Price not previously made by Change Orders.

1.08 APPLICATION FOR FINAL PAYMENT

- A. Submit Application for Final Payment in accordance with procedures and requirements in conditions of Contract.

PART 2 PRODUCTS

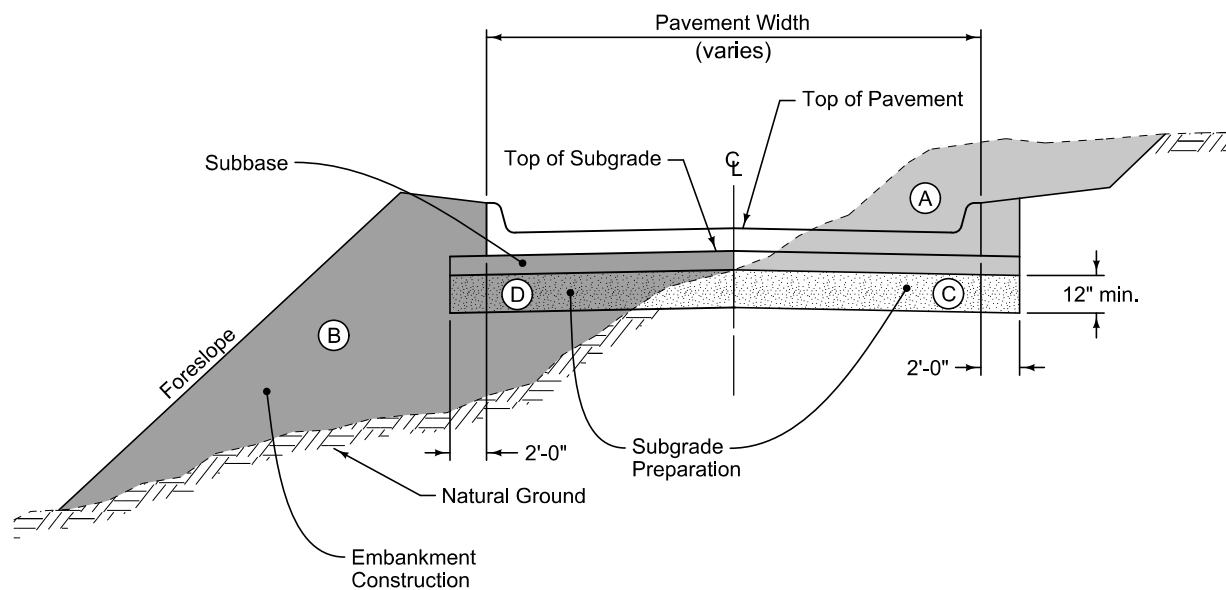
NOT USED

PART 3 EXECUTION

NOT USED

END OF SECTION

West Hill Area – Sanitary and Storm Sewer Separation – Phase 6D
Applicable SUDAS Details



- ① Embankment Construction: Compact with moisture and density control unless Type A Compaction is specified. Comply with Section 2010, 3.04.
- ② Subgrade Preparation: Construct subgrade according to Section 2010, 3.06.
- ③ Subbase Construction: Construct subbase according to Section 2010, 3.08.

Key

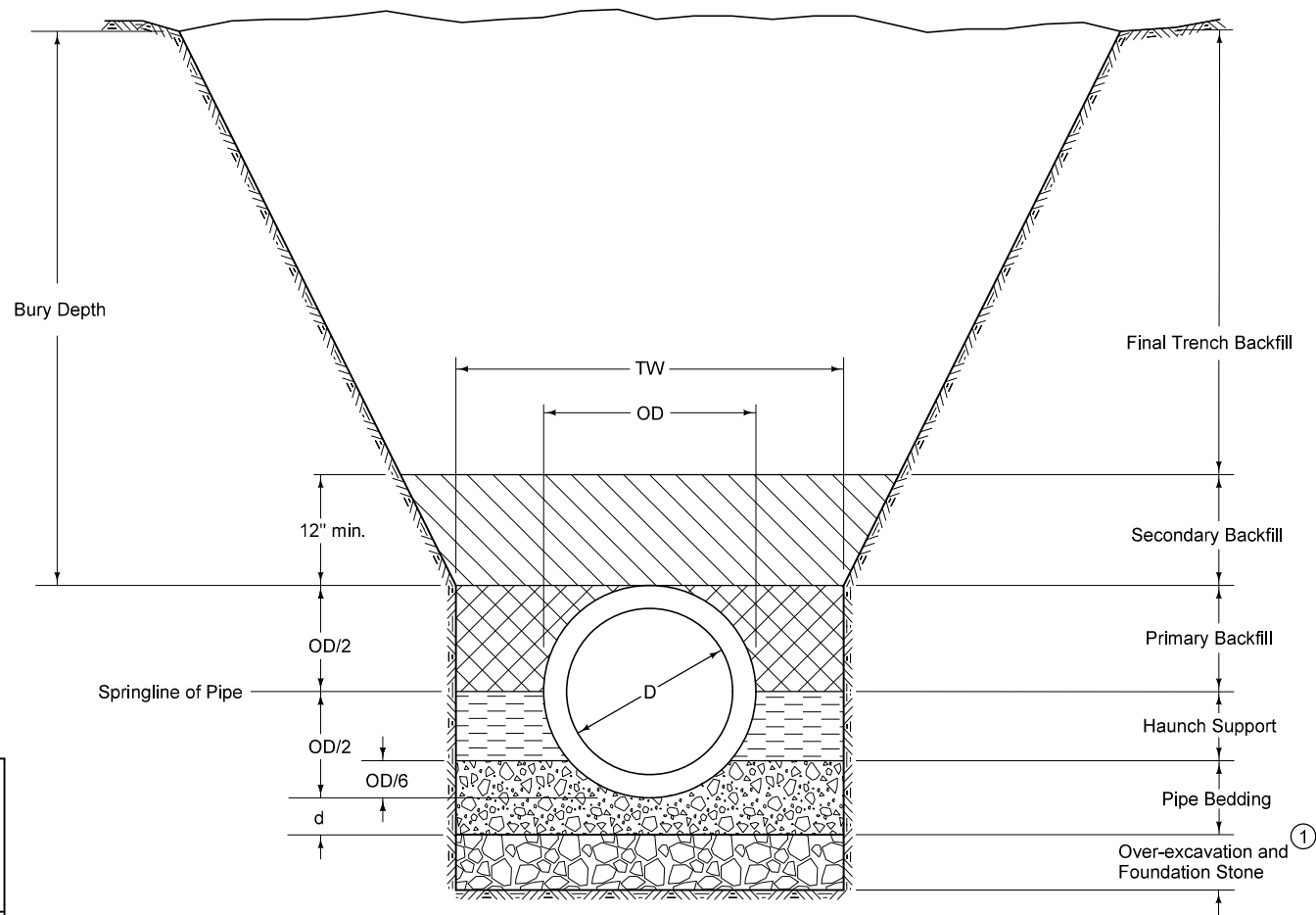
	Excavation
	Fill
	Subgrade preparation

Type of Work	Area	Payment Method
Excavation	Ⓐ	Excavation
Fill	Ⓑ	Included in Excavation or Borrow
Subgrade Preparation	Ⓒ & Ⓓ	Subgrade Preparation

	REVISION 1 10-21-14	
	2010.102	
	SHEET 1 of 1	
SUDAS Standard Specifications		
DESIGNATION OF ROADWAY EARTHWORK ITEMS		

Refer to the contract documents for specific material and placement requirements.

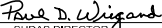
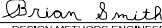
- ① Required only when specified in the contract documents or when directed by the Engineer.

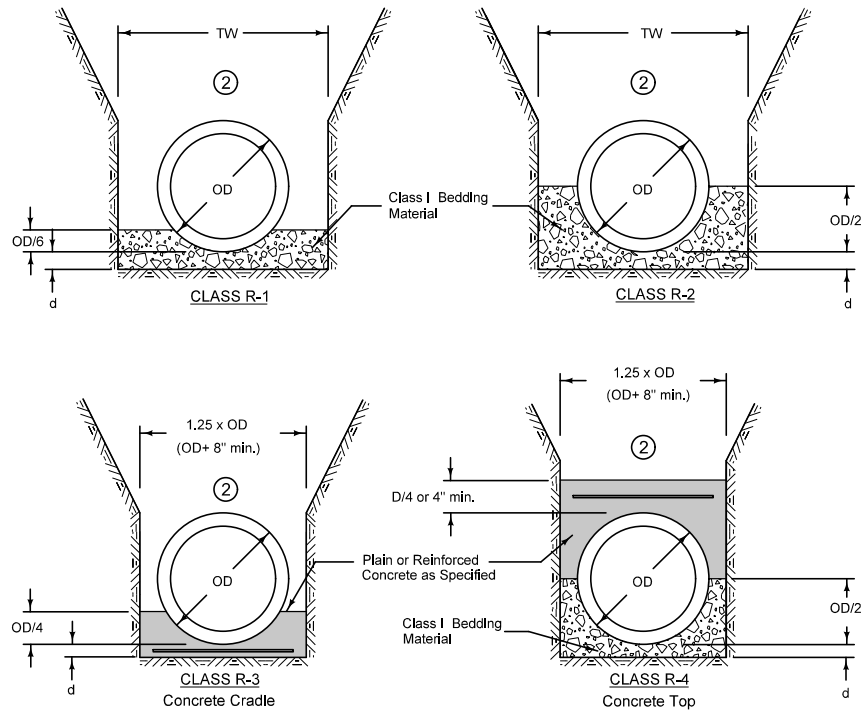


Key

- OD = Outside diameter of pipe
- D = Inside diameter of pipe
- TW = Trench width at top of pipe
- d = Depth of bedding material below pipe

FIGURE 3010.101 SHEET 1 OF 1

 SUDAS	 IOWADOT	REVISION	
		1	04-17-18
FIGURE 3010.101	STANDARD ROAD PLAN	SW-101	
		SHEET 1 of 1	
REVISIONS: Replaced Iowa DOT and SUDAS logos.			
 SUDAS DIRECTOR		 DESIGN METHODS ENGINEER	
TRENCH BEDDING AND BACKFILL ZONES			

RCP AND VCP CIRCULAR PIPE BEDDING ^①

Refer to sheet 2 for bury depth restrictions.

- ① Use Bedding Class R-1 or R-2 unless specified otherwise.
- ② Place remainder of bedding and backfill materials as specified in the contract documents.

Key

- OD = Outside diameter of pipe
- OS = Outside span of pipe
- TW = Trench width at top of pipe:
Min. = OD+18 inches
Max. = $1.25 \times OD + 12$ inches OR
54 inches (whichever is greater)
- d = Depth of bedding material below pipe:
OD/8 or OS/8, OR 4 inches
(whichever is greater)

REINFORCED CONCRETE ARCH AND ELLIPTICAL PIPE BEDDING

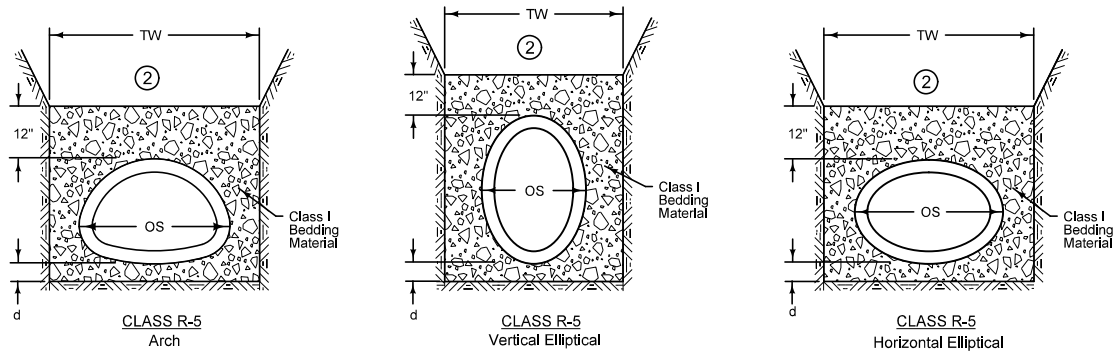


FIGURE 3010.102 SHEET 1 OF 2

SUDAS	IOWADOT	REVISION
		4 04-20-21
		SW-102
FIGURE 3010.102	STANDARD ROAD PLAN	SHEET 1 of 2
REVISIONS: Added note DO NOT USE ON PRIMARY ROADWAYS.		
Paul D. Weigand SUDAS DIRECTOR		
David M. Miller DESIGN METHODS ENGINEER		
RIGID GRAVITY PIPE TRENCH BEDDING		

ALLOWABLE BURY DEPTH

CLASS III RCP

Pipe Diameter (in)	Class R-1 Bedding	Class R-2 Bedding	Class R-3 & R-4 Bedding		
			No Steel	As=0.4%	As=1.0%
12	7'	10'	15'	19'	27'
15	8'	10'	16'	19'	27'
18	8'	11'	16'	20'	40'
21	8'	11'	18'	26'	40'
24	8'	12'	23'	36'	40'
27	10'	15'	30'	40'	40'
30	11'	15'	29'	40'	40'
33	11'	15'	28'	40'	40'
36	11'	15'	27'	40'	40'
42	11'	15'	26'	38'	40'
48	11'	15'	26'	36'	40'
54	11'	15'	25'	34'	40'
60	11'	15'	25'	33'	40'
66	11'	15'	24'	32'	40'
72	11'	15'	24'	32'	40'

As = Area of Steel Reinforcing

CLASS IV RCP

Pipe Diameter (in)	Class R-1 Bedding	Class R-2 Bedding	Class R-3 & R-4 Bedding		
			No Steel	As=0.4%	As=1.0%
12	12'	15'	23'	28'	40'
15	12'	16'	23'	30'	40'
18	13'	16'	29'	40'	40'
21	13'	18'	40'	40'	40'
24	16'	23'	40'	40'	40'
27	19'	30'	40'	40'	40'
30	19'	29'	40'	40'	40'
33	19'	28'	40'	40'	40'
36	19'	28'	40'	40'	40'
42	18'	27'	40'	40'	40'
48	18'	26'	40'	40'	40'
54	18'	25'	40'	40'	40'
60	18'	25'	40'	40'	40'
66	18'	25'	40'	40'	40'
72	18'	24'	40'	40'	40'

As = Area of Steel Reinforcing

CLASS V RCP

Pipe Diameter (in)	Class R-1 Bedding	Class R-2 Bedding	Class R-3 & R-4 Bedding		
			No Steel	As=0.4%	As=1.0%
12	18'	23'	35'	40'	40'
15	19'	24'	40'	40'	40'
18	19'	30'	40'	40'	40'
21	25'	40'	40'	40'	40'
24	34'	40'	40'	40'	40'
27	40'	40'	40'	40'	40'
30	40'	40'	40'	40'	40'
33	40'	40'	40'	40'	40'
36	40'	40'	40'	40'	40'
42	37'	40'	40'	40'	40'
48	35'	40'	40'	40'	40'
54	33'	40'	40'	40'	40'
60	32'	40'	40'	40'	40'
66	31'	40'	40'	40'	40'
72	31'	40'	40'	40'	40'

As = Area of Steel Reinforcing

EXTRA STRENGTH VCP

Pipe Dia. (in)	Bedding Class				
	R-1	R-2	R-3 & R-4		
			No Steel	As=0.4%	As=1.0%
6	25'	30'	30'	30'	30'
8	20'	26'	30'	30'	30'
10	18'	23'	30'	30'	30'
12	16'	20'	30'	30'	30'
15	15'	19'	28'	30'	30'
18	14'	18'	30'	30'	30'
21	15'	22'	30'	30'	30'
24	18'	28'	30'	30'	30'
27	20'	30'	30'	30'	30'
30	19'	29'	30'	30'	30'
33	20'	30'	30'	30'	30'
36	20'	30'	30'	30'	30'
39	19'	29'	30'	30'	30'
42	18'	26'	30'	30'	30'

As = Area of Steel Reinforcing

CONCRETE ARCH PIPE

Pipe Size (in x in)	Equiv. Dia. (in)	Pipe Class	
		A-III	A-IV
18 x 11	15	6'	11'
22 x 13	18	6'	11'
26 x 15	21	6'	13'
29 x 18	24	7'	15'
36 x 22	30	8'	15'
44 x 27	36	8'	14'
51 x 31	42	8'	15'
58 x 36	48	8'	15'
65 x 40	54	8'	15'
73 x 45	60	8'	14'
88 x 54	72	9'	14'

Based on Class R-5 bedding

HORIZONTAL ELLIPTICAL RCP

Pipe Size (in x in)	Equiv. Dia. (in)	Pipe Class	
		HE-III	HE-IV
14 x 23	18	12'	22'
19 x 30	24	15'	29'
22 x 34	27	15'	28'
24 x 38	30	15'	27'
27 x 42	33	15'	27'
29 x 45	36	15'	26'
32 x 49	39	15'	26'
34 x 54	42	15'	25'
38 x 60	48	15'	25'
43 x 68	54	15'	24'
48 x 76	60	15'	24'
53 x 83	66	15'	24'
58 x 91	72	15'	24'
63 x 98	78	15'	23'
68 x 106	84	15'	23'

Based on Class R-5 bedding

VERTICAL ELLIPTICAL RCP

Pipe Size (in x in)	Equiv. Dia. (in)	Pipe Class			
		VE-III	VE-IV	VE-V	VE-VI
23 x 14	18	10'	15'	22'	33'
30 x 19	24	10'	16'	34'	40'
34 x 22	27	11'	20'	40'	40'
38 x 24	30	12'	23'	40'	40'
42 x 27	33	15'	30'	40'	40'
45 x 29	36	15'	29'	40'	40'
49 x 32	39	15'	29'	40'	40'
54 x 34	42	15'	28'	40'	40'
60 x 38	48	15'	27'	40'	40'
68 x 43	54	15'	27'	40'	40'
76 x 48	60	15'	26'	40'	40'
83 x 53	66	15'	25'	40'	40'
91 x 58	72	15'	25'	40'	40'
98 x 63	78	15'	25'	40'	40'
106 x 68	84	15'	24'	40'	40'

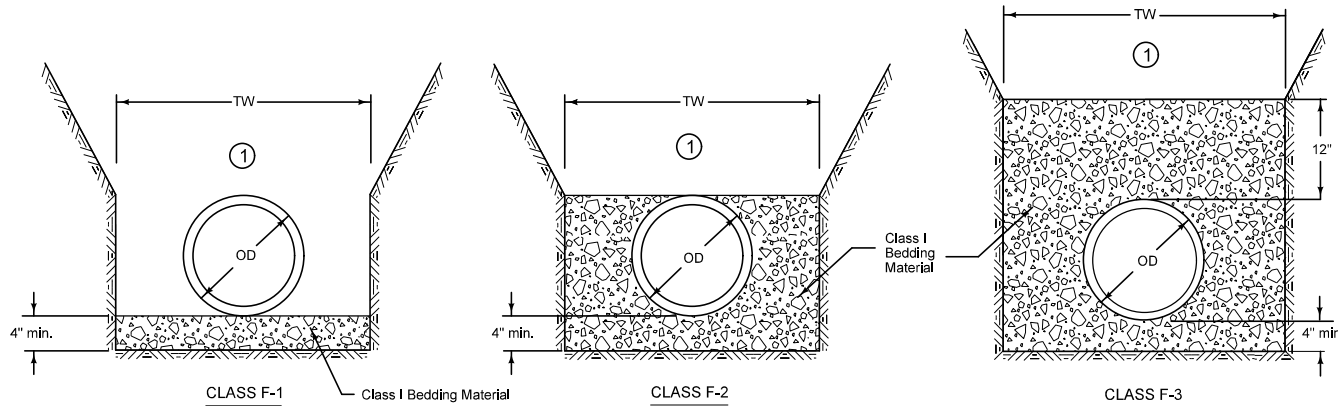
Based on Class R-5 bedding

FIGURE 3010.102 SHEET 2 OF 2

 SUDAS	 IOWADOT	REVISION	
		4	04-20-21
		FIGURE 3010.102	
STANDARD ROAD PLAN		SW-102	
		SHEET 2 of 2	
REVISIONS: Added note DO NOT USE ON PRIMARY ROADWAYS.			
 SUDAS DIRECTOR		 DESIGN METHODS ENGINEER	
RIGID GRAVITY PIPE TRENCH BEDDING			

DO NOT USE ON PRIMARY ROADWAYS

BEDDING CLASSES



- Place remainder of bedding and backfill materials as specified in the contract documents.
- Minimum depth of bury 12 inches or as specified by the manufacturer.

ALLOWABLE BEDDING CLASSES

PIPE MATERIAL	STORM SEWER	SANITARY SEWER
Ductile Iron	F-1, F-2, F-3	F-1, F-2, F-3
HDPE	F-2, F-3	Not allowed
Polypropylene	F-2, F-3	F-3
PVC	F-2, F-3	F-3

Key

OD = Outside diameter of pipe

TW = Trench width at top of pipe:
Min. = OD+18 Inches OR 1.25xOD+12 Inches
(whichever is greater)

ALLOWABLE BURY DEPTH

PVC PIPE

Pipe Diameter (in)	ASTM D 3034			ASTM F 679	ASTM F 949	ASTM F 1803	ASTM D 2680
	Solid Wall			Solid Wall	Corrug. Exterior	Closed Profile	Composite (Truss Type)
	SDR 23.5	SDR 26	SDR 35				
8	30'	28'	24'	---	24'	---	32'
10	30'	28'	24'	---	24'	---	32'
12	30'	28'	24'	---	24'	---	32'
15	30'	28'	24'	---	24'	---	32'
18	---	---	---	24'	24'	---	---
21	---	---	---	24'	24'	24'	---
24	---	---	---	24'	24'	24'	---
27	---	---	---	24'	---	24'	---
30	---	---	---	24'	24'	24'	---
33	---	---	---	24'	---	---	---
36	---	---	---	24'	24'	24'	---
42	---	---	---	24'	---	24'	---
48	---	---	---	24'	---	24'	---
54	---	---	---	---	---	24'	---
60	---	---	---	---	---	24'	---

DUCTILE IRON, AWWA C151, CLASS 52

Pipe Diameter (in)	Class F-1 Bedding	Class F-2 Bedding	Class F-3 Bedding
4	40'	40'	40'
6	40'	40'	40'
8	40'	40'	40'
10	40'	40'	40'
12	37'	40'	40'
14	31'	40'	40'
16	28'	37'	40'
18	25'	34'	40'
20	23'	32'	40'
24	20'	29'	38'
30	18'	23'	31'
36	18'	22'	30'
42	17'	21'	29'
48	16'	19'	27'
54	16'	19'	27'

HDPE PIPE

Pipe Diameter (in)	AASHTO M 294
12	8'
15	9'
18	9'
24	9'
30	9'
36	9'
42	8'
48	8'
54	8'
60	8'

POLYPROPYLENE PIPE

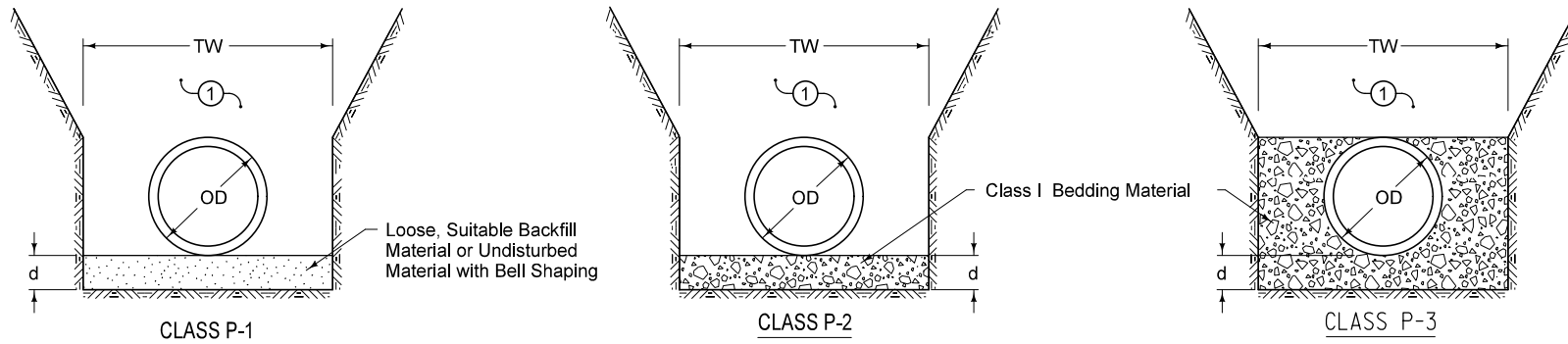
Pipe Diameter (in)	ASTM F 2764
12	24'
15	25'
18	22'
24	20'
30	22'
36	21'
42	22'
48	23'
54	21'
60	21'

FIGURE 3010.103 SHEET 1 OF 1

		REVISION
		4 04-20-21
FIGURE 3010.103	STANDARD ROAD PLAN	SW-103
		SHEET 1 of 1
REVISIONS: Added note DO NOT USE ON PRIMARY ROADWAYS.		
SUDAS DIRECTOR DESIGN METHODS ENGINEER		
FLEXIBLE GRAVITY PIPE TRENCH BEDDING		

DO NOT USE ON PRIMARY ROADWAYS

BEDDING CLASSES



ALLOWABLE BURY DEPTH

DUCTILE IRON, AWWA C151, CLASS 52

Pipe Diameter (inches)	Class P-1 Bedding	Class P-2 Bedding	Class P-3 Bedding
4	40'	40'	40'
6	40'	40'	40'
8	40'	40'	40'
10	36'	40'	40'
12	31'	40'	40'
14	26'	40'	40'
16	23'	37'	40'
18	20'	34'	40'
20	18'	32'	40'
24	16'	29'	38'
30	13'	23'	31'
36	13'	22'	30'
42	13'	21'	29'
48	13'	19'	27'
54	13'	19'	27'

PVC, AWWA C900, DR18

Pipe Diameter (inches)	Class P-1 Bedding	Class P-2 Bedding	Class P-3 Bedding
4	19'	23'	40'
6	19'	23'	40'
8	19'	23'	40'
10	19'	23'	40'
12	19'	23'	40'
14	19'	23'	40'
16	19'	23'	40'
18	19'	23'	40'
20	19'	23'	40'
24	19'	23'	40'

- ① Place remainder of bedding and backfill material as specified in the contract documents.

Key

- OD = Outside diameter of pipe
- TW = Trench width at top of pipe:
Min. = OD+18 inches OR 1.25xOD+12 inches
(whichever is greater)
- d = Depth of bedding material below pipe:
Min. = OD/8 OR 4 inches
(whichever is greater)

SUDAS	IOWADOT	REVISION
		3 04-20-21
FIGURE 3010.104	STANDARD ROAD PLAN	SW-104
		SHEET 1 of 1
REVISIONS: Added note DO NOT USE ON PRIMARY ROADWAYS.		
Paul D. Wiegand SUDAS DIRECTOR		
Stuart M. Nadeau DESIGN METHODS ENGINEER		
PRESSURE PIPE TRENCH BEDDING		

- ① Place bedding and backfill material as required for sewer main.
- ② Service Line Slope:
4 inch: 2% to 5%
6 inch and greater: 1% to 5%

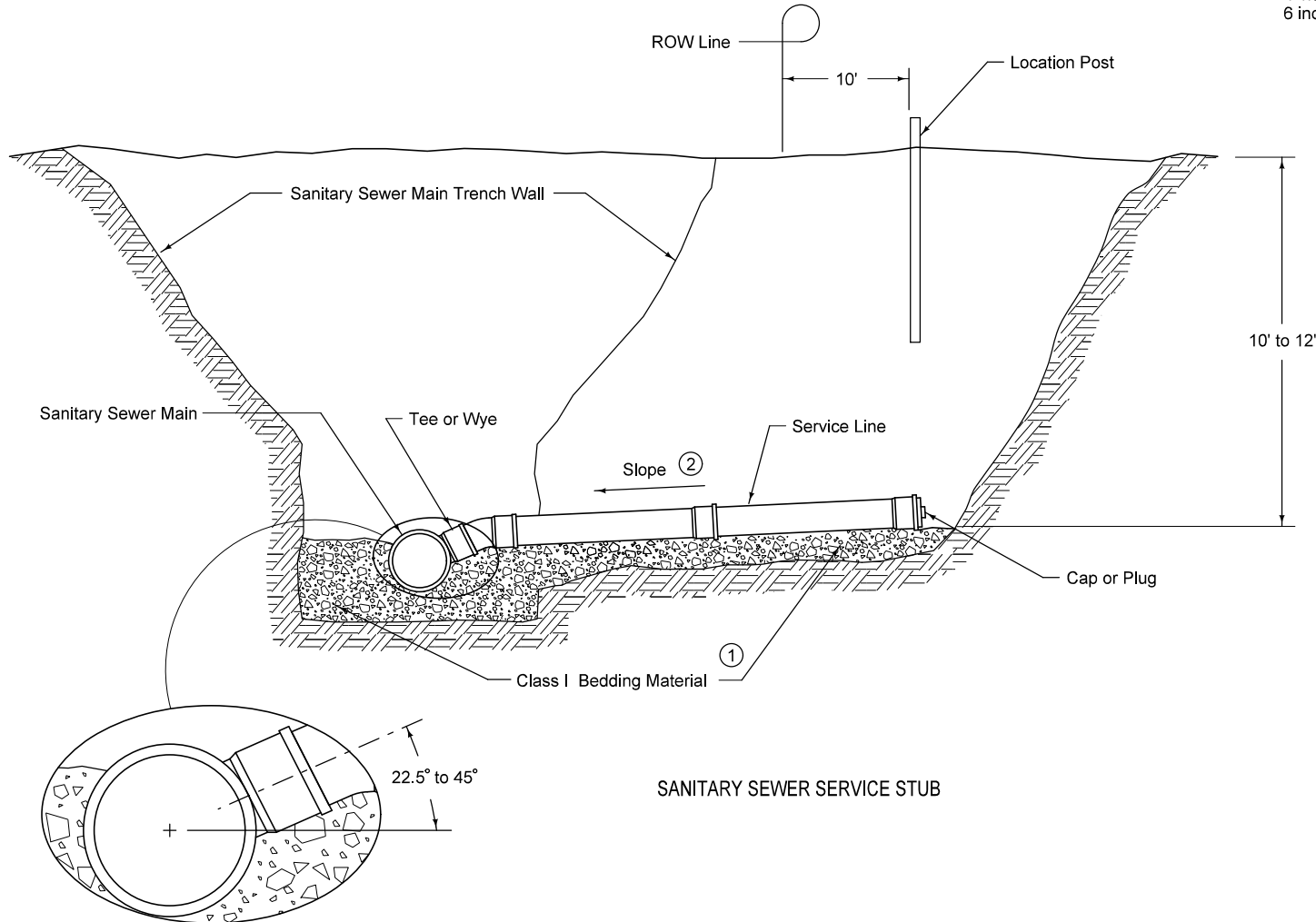
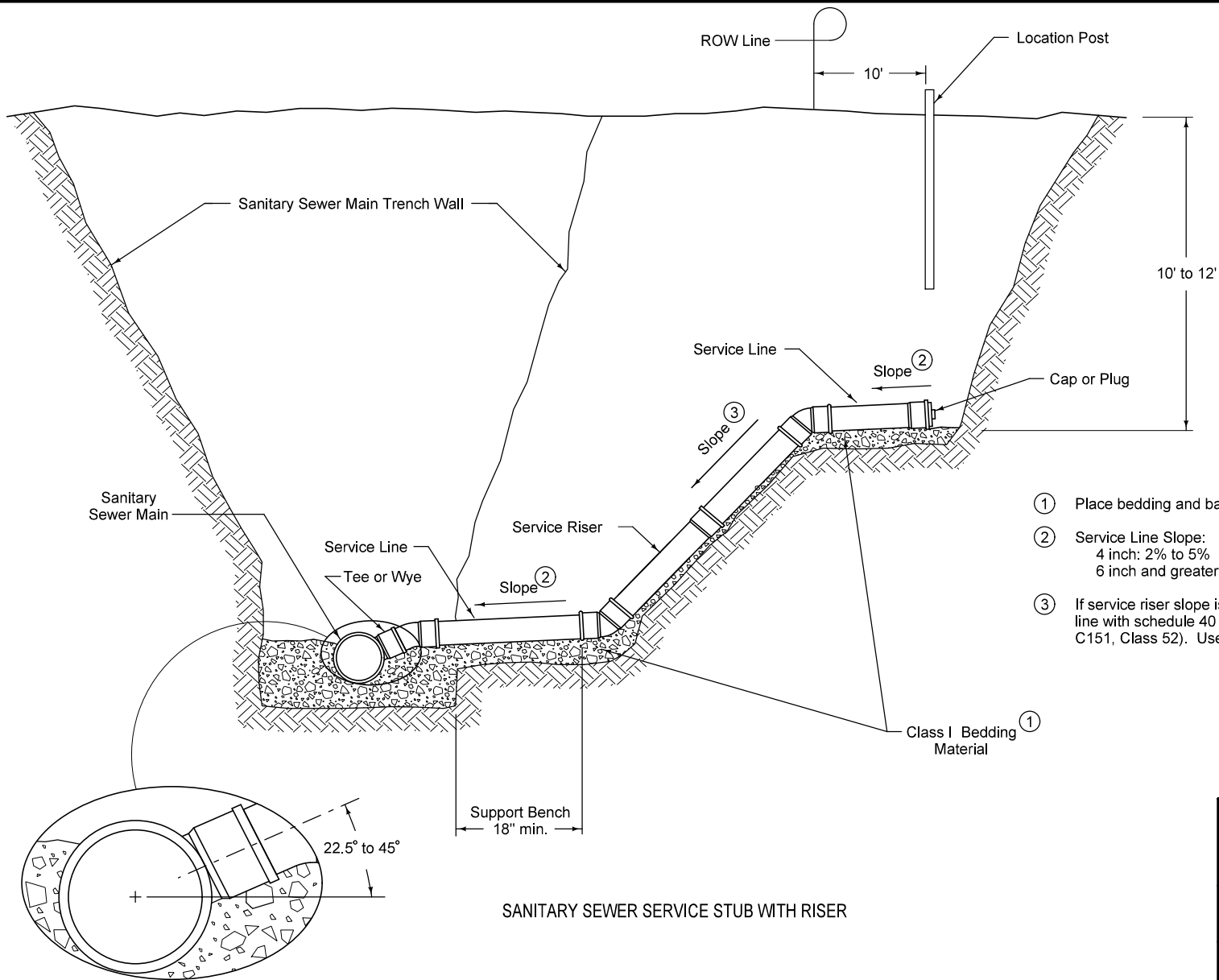


FIGURE 4010.201 SHEET 1 OF 2

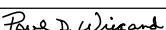
SUDAS	IOWADOT	REVISION
		2 04-21-20
FIGURE 4010.201	STANDARD ROAD PLAN	SW-201
REVISIONS: Changed 1 to 1 on Bedding Material.		SHEET 1 of 2
Paul D. Weigand SUDAS DIRECTOR		Stuart M. Nelson DESIGN METHODS ENGINEER
SANITARY SEWER SERVICE STUB		

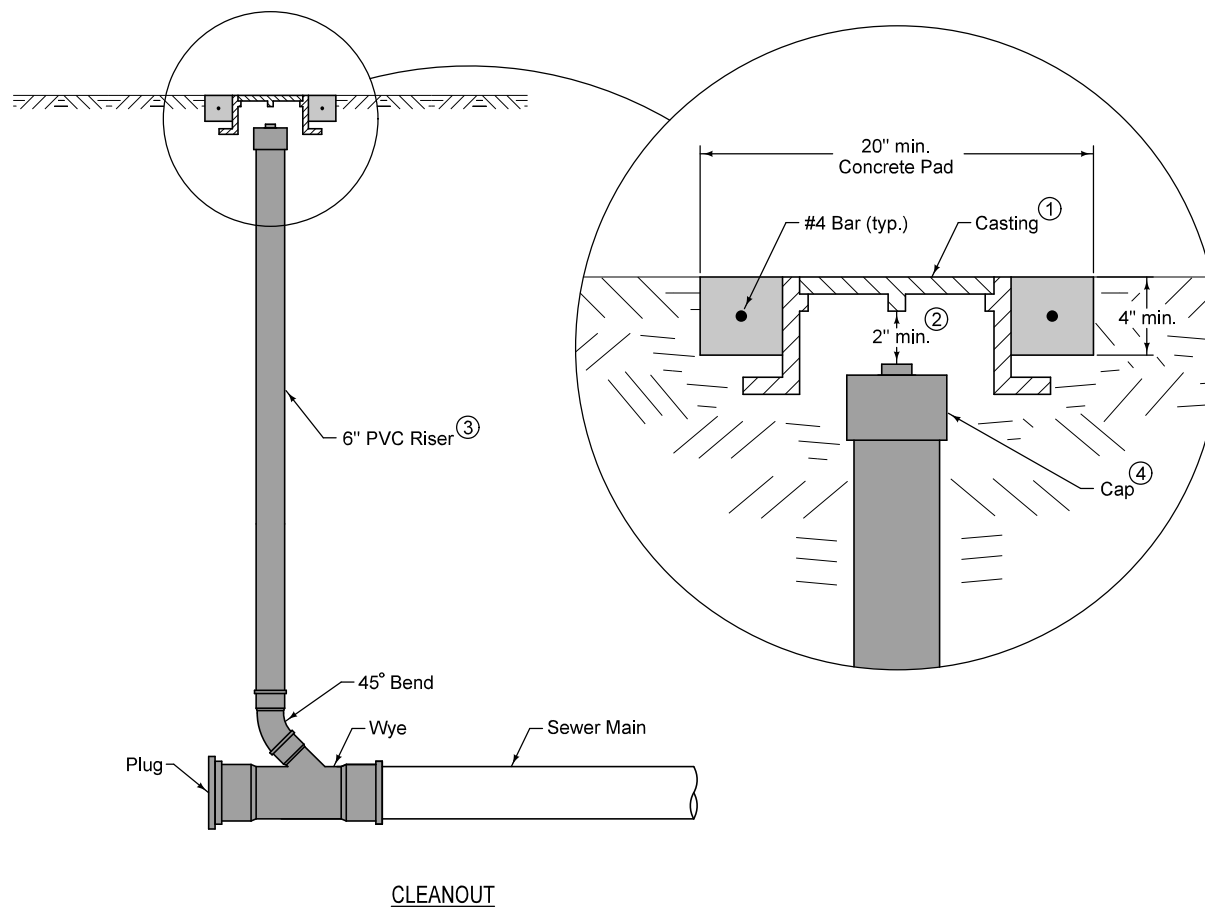


- ① Place bedding and backfill material as required for sewer main.
- ② Service Line Slope:
4 inch: 2% to 5%
6 inch and greater: 1% to 5%
- ③ If service riser slope is steeper than 1:1, construct riser of entire service line with schedule 40 PVC (ASTM D 1785) or ductile iron (AWWA C151, Class 52). Use single length of pipe for riser, if possible.

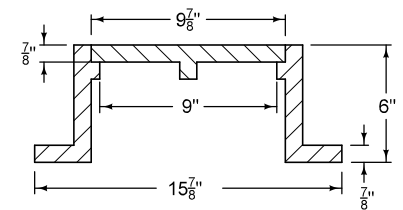
SANITARY SEWER SERVICE STUB WITH RISER

FIGURE 4010.201 SHEET 2 OF 2

 SUDAS	 IOWADOT	REVISION	
		2	04-21-21
FIGURE 4010.201	STANDARD ROAD PLAN	SW-201	
		SHEET 2 of 2	
REVISIONS: Changed 1 to 1 on Bedding Material			
 SUDAS DIRECTOR		 DESIGN METHODS ENGINEER	
SANITARY SEWER SERVICE STUB			

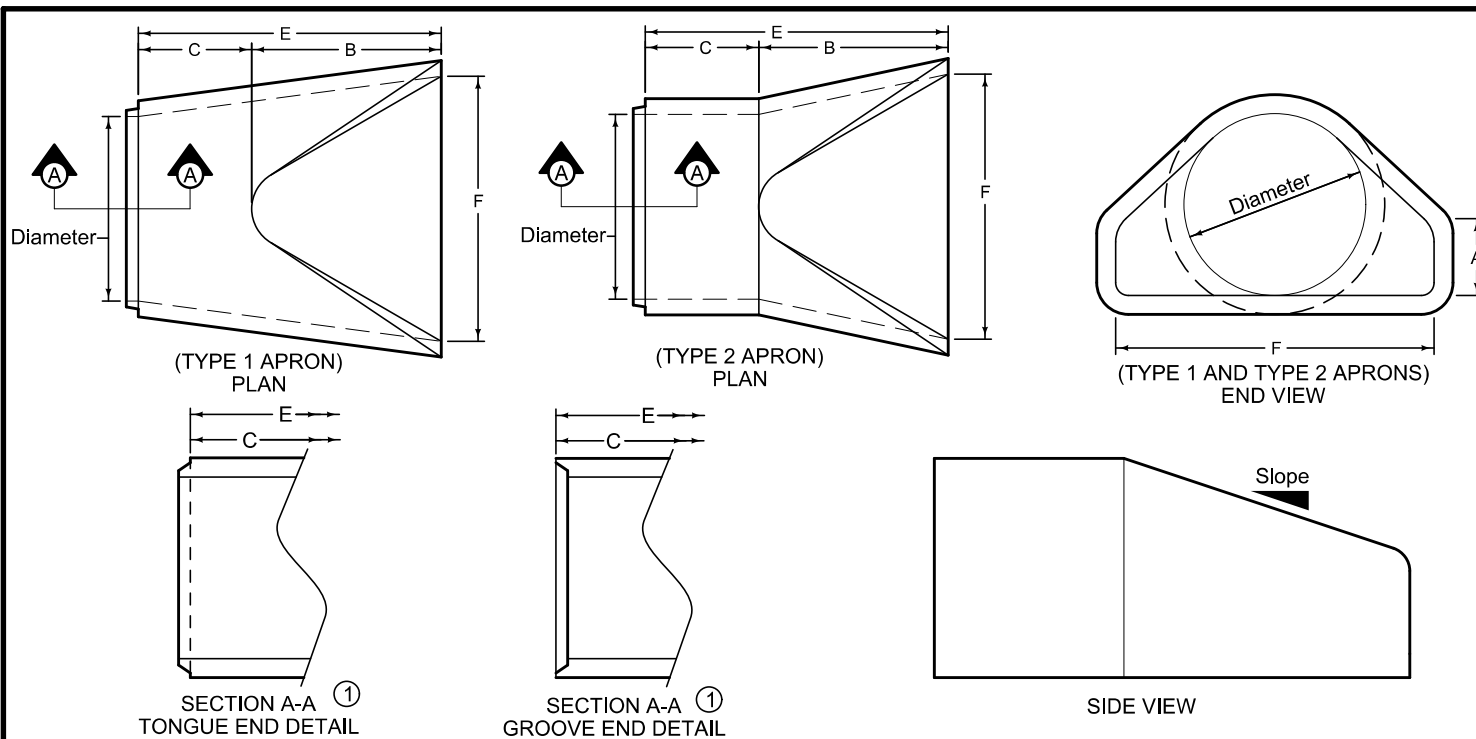


- ① Standard duty casting complying with AASHTO M 306. Mark lid with "Sanitary" or "Sanitary C.O."
- ② Do not allow casting to bear on top of riser pipe.
- ③ 6 inch PVC Service Pipe
- ④ Threaded PVC cap or iron body ferrule with brass screw plug



CASTING ①
(Dimensions are nominal)

 SUDAS	 IOWADOT	REVISION	
		1	04-17-18
FIGURE 4010.203	STANDARD ROAD PLAN	SW-203	
		SHEET 1 of 1	
REVISIONS: Replaced Iowa DOT and SUDAS logos.			
 SUDAS DIRECTOR		 DESIGN METHODS ENGINEER	
SANITARY SEWER CLEANOUT			



Dimension 'E' shown is the minimum and is considered the design length. Adjust for any difference between the actual length of concrete apron installed and the length indicated below for the length of concrete culvert pipe furnished.

- ① Tongue end used on inlet end section. Groove end used on outlet end section.

TYPE 1 APRONS						
DIAM.	SLOPE	A	B	MINIMUM		F
				C	E	
12"	2.4:1	4"	2'-0"	4'- $\frac{7}{8}$ "	6'- $\frac{7}{8}$ "	2'-0"
15"	2.4:1	6"	2'-3"	3'-10"	6'-1"	2'-6"
18"	2.3:1	9"	2'-3"	3'-10"	6'-1"	3'-0"
21"	2.4:1	9"	3'-0"	3'-1 $\frac{1}{2}$ "	6'-1 $\frac{1}{2}$ "	3'-5"
24"	2.5:1	9 $\frac{1}{2}$ "	3'-7 $\frac{1}{2}$ "	2'-6"	6'-1 $\frac{1}{2}$ "	4'-0"
27"	2.5:1	10 $\frac{1}{2}$ "	4'-1"	2'-0"	6'-1 $\frac{1}{2}$ "	4'-4"
30"	2.5:1	12"	4'-6"	1'-7 $\frac{3}{4}$ "	6'-1 $\frac{3}{4}$ "	5'-0"
36"	2.5:1	15"	5'-3"	2'-9"	8'-0"	6'-0"
42"	2.5:1	21"	5'-3"	2'-9"	8'-0"	6'-6"
48"	2.5:1	24"	6'-0"	2'-0"	8'-0"	7'-0"
54"	1.8:1	27"	5'-0"	3'-0"	8'-0"	7'-6"
60"	1.6:1	29 $\frac{1}{2}$ "	5'-0"	3'-0"	8'-0"	8'-0"
66"	1.7:1	30"	6'-0"	2'-3"	8'-3"	8'-0"
72"	1.6:1	30"	6'-6"	1'-9"	8'-3"	9'-0"
78"	1.8:1	36"	7'-6"	1'-9"	9'-3"	9'-6"
84"	1.3:1	29 $\frac{1}{2}$ "	6'-9"	2'-6 $\frac{1}{2}$ "	9'-3 $\frac{1}{2}$ "	10'-0"

TYPE 2 APRONS						
DIAM.	SLOPE	A	B	MINIMUM		F
				C	E	
12"	2.4:1	4"	2'-0"	4'- $\frac{7}{8}$ "	6'- $\frac{7}{8}$ "	2'-0"
15"	2.4:1	6"	2'-3"	3'-10"	6'-1"	2'-6"
18"	2.3:1	9"	2'-3"	3'-10"	6'-1"	3'-0"
21"	2.4:1	9"	3'-0"	3'-1 $\frac{1}{2}$ "	6'-1 $\frac{1}{2}$ "	3'-5"
24"	2.5:1	9 $\frac{1}{2}$ "	3'-7 $\frac{1}{2}$ "	2'-6"	6'-1 $\frac{1}{2}$ "	4'-0"
27"	2.5:1	10 $\frac{1}{2}$ "	4'-1"	2'-0"	6'-1 $\frac{1}{2}$ "	4'-4"
30"	2.5:1	12"	4'-6"	1'-7 $\frac{3}{4}$ "	6'-1 $\frac{3}{4}$ "	5'-0"
36"	2.5:1	15"	5'-3"	2'-9"	8'-0"	6'-0"
42"	2.5:1	21"	5'-3"	2'-9"	8'-0"	6'-6"
48"	2.5:1	24"	6'-0"	2'-0"	8'-0"	7'-0"
54"	1.9:1	24 $\frac{1}{2}$ "	5'-5"	2'-7"	8'-0"	7'-6"
60"	1.4:1	24 $\frac{1}{2}$ "	5'-0"	3'-0"	8'-0"	8'-0"
66"	1.7:1	30"	6'-0"	2'-3"	8'-3"	8'-0"
72"	1.4:1	24"	6'-6"	1'-9"	8'-3"	9'-0"
78"	1.8:1	36"	7'-6"	1'-9"	9'-3"	9'-6"
84"	1.5:1	23 $\frac{1}{2}$ "	7'-6 $\frac{1}{2}$ "	1'-9"	9'-3 $\frac{1}{2}$ "	10'-0"



REVISION

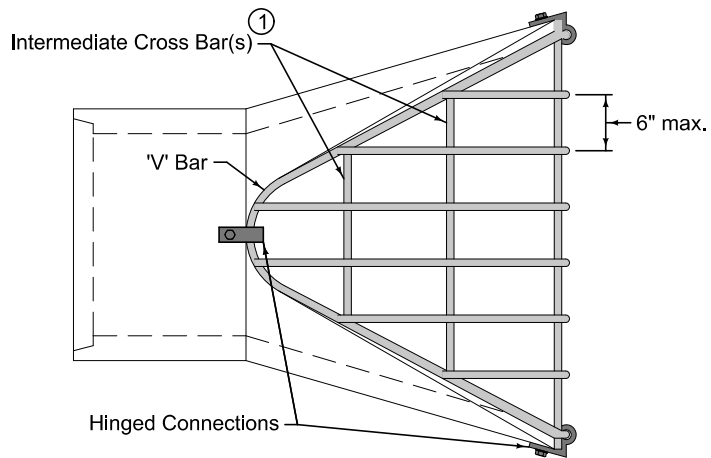
New 10-18-16

4030.222

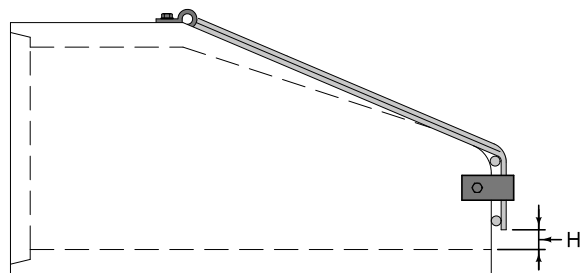
SHEET 1 of 1

SUDAS Standard Specifications

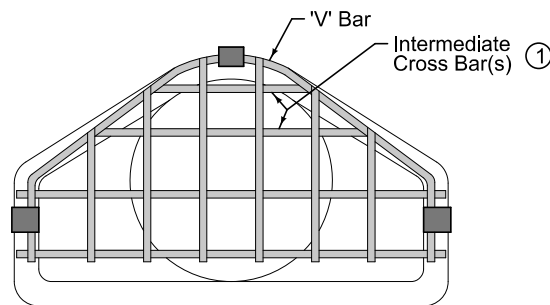
CIRCULAR CONCRETE APRONS



PLAN



PROFILE



FRONT

Provide guard dimensions to fit with type of apron provided. Ensure 'V' Bar completely rests on apron.

- ① All guards must include at least one intermediate cross bar. If pipe diameter, or equivalent diameter, is 60 inches or greater, use two intermediate cross bars equally spaced.

ROUND		ARCH		ELLIPTICAL	
PIPE SIZE	H	EQUIVALENT DIAMETER	H	EQUIVALENT DIAMETER	H
12"	2 $\frac{1}{2}$ "	18" to 24"	4"	18"	3"
15"	3"	30" to 36"	5"	24"	4"
18" - 24"	4"	42" to 54"	6"	30" to 36"	5"
27" - 36"	5"	60" to 72"	7"	42" to 54"	6"
42" - 54"	6"			60"	7"
60" - 72"	7"				
78" - 90"	8"				

BAR SIZES				
	PIPE SIZE (DIA. or EQUIV.)	HOLE DIA. REQ'D.	BOLT DIA.	BAR SIZE
ROUND	12" - 24"	$\frac{3}{4}$ "	$\frac{3}{8}$ "	$\frac{3}{4}$ "
	27" - 48"	$\frac{7}{8}$ "	$\frac{3}{8}$ "	1"
	54" - 90"	$\frac{1}{8}$ "	1"	$\frac{1}{4}$ "
ARCH	up to 24" eq.	$\frac{3}{4}$ "	$\frac{3}{8}$ "	$\frac{3}{4}$ "
	30" to 48"	$\frac{7}{8}$ "	$\frac{3}{8}$ "	1"
	54" to 72"	$\frac{1}{8}$ "	1"	$\frac{1}{4}$ "
ELLIPTICAL	up to 24" eq.	$\frac{3}{4}$ "	$\frac{3}{8}$ "	$\frac{3}{4}$ "
	30" to 48"	$\frac{7}{8}$ "	$\frac{3}{8}$ "	1"
	54" to 60"	$\frac{1}{8}$ "	1"	$\frac{1}{4}$ "
BOLT LENGTH = PIPE WALL THICKNESS + 2 $\frac{1}{2}$ "				



REVISION

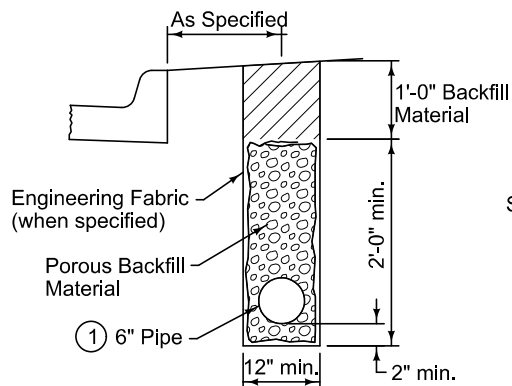
New 10-18-16

4030.224

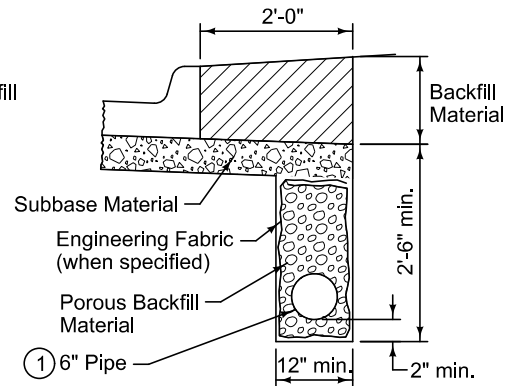
SHEET 1 of 1

SUDAS Standard Specifications

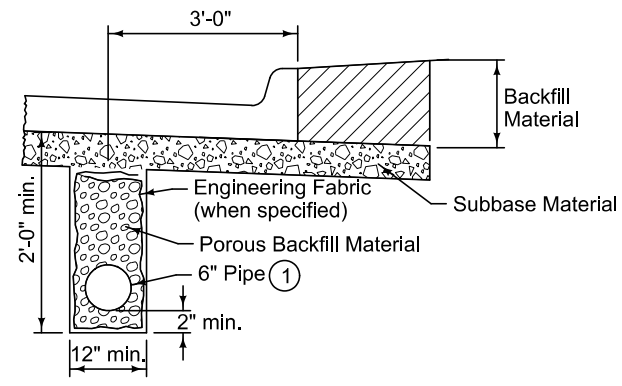
CONCRETE PIPE APRON GUARD



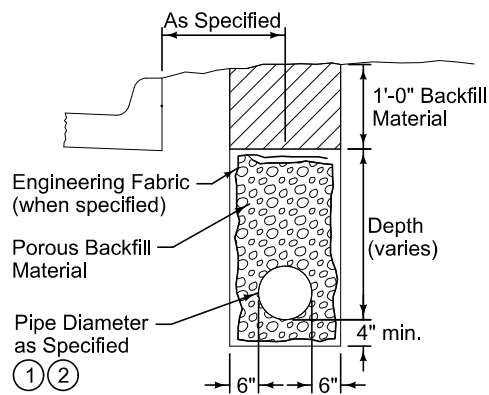
CASE A
TYPE 1



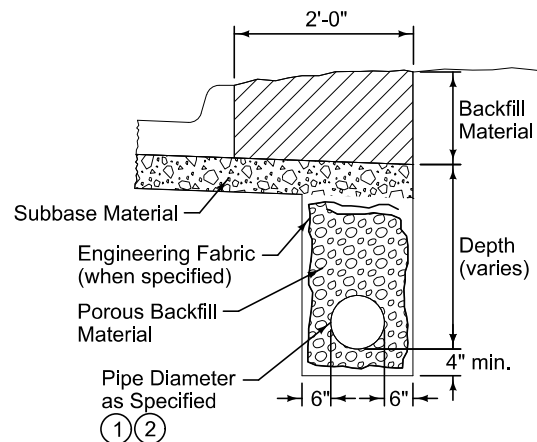
CASE B
TYPE 1



CASE C
TYPE 1



CASE D
TYPE 2

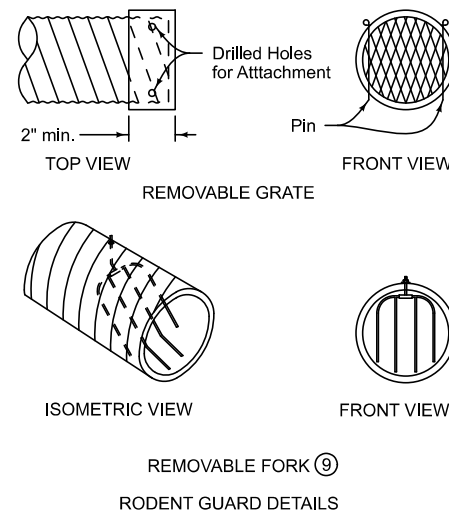
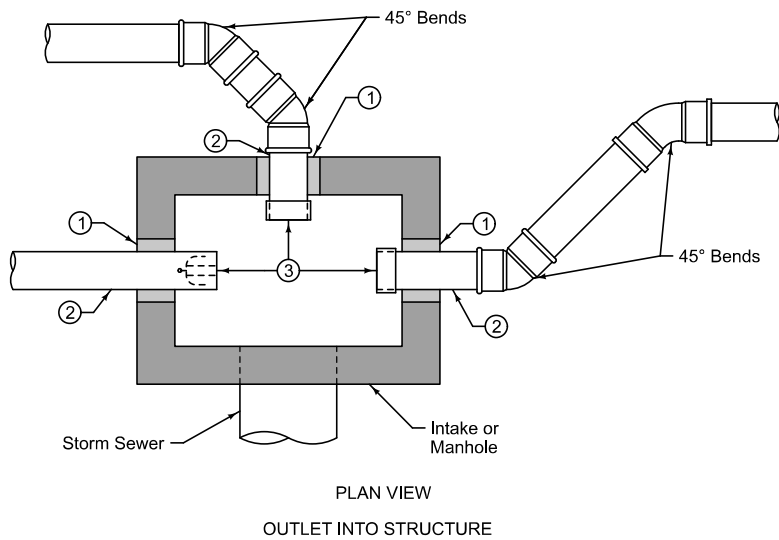


CASE E
TYPE 2

Type 1 installation is for longitudinal subdrain only. Type 2 installation is for combination subdrain/footing drain collectors.

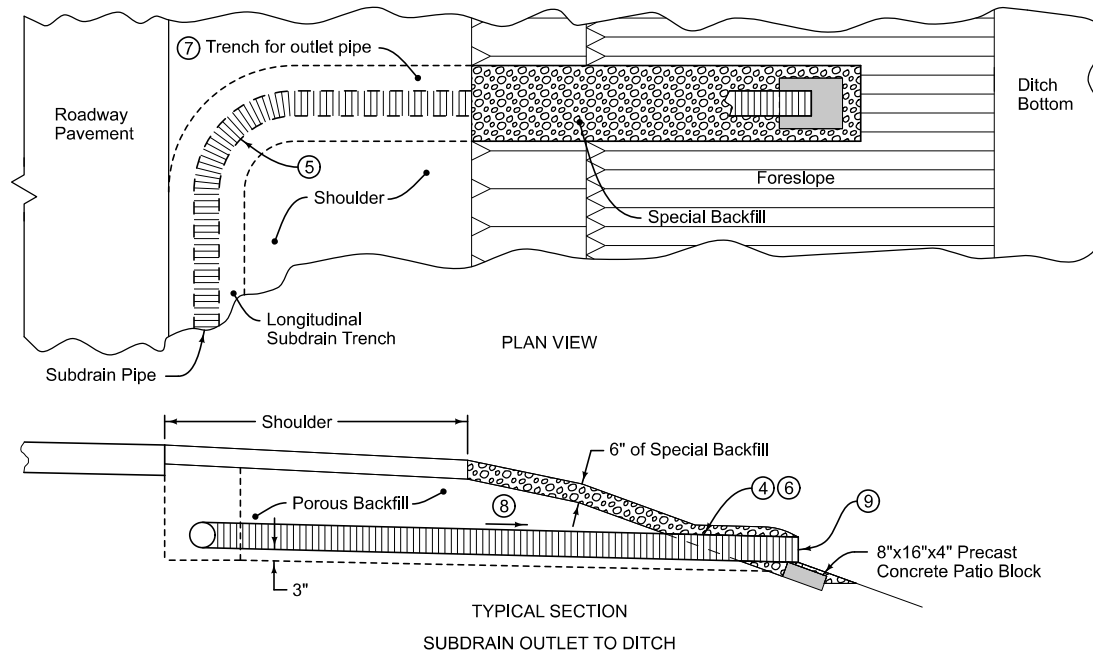
- ① Place perforations down for all installations.
- ② When concrete pipe is specified, wrap pipe joints with engineering fabric. Do not apply joint sealant. Comply with Figure 4020.211

	REVISION	
	1	10-21-14
	4040.231	
	SHEET 1 of 1	
SUDAS Standard Specifications		
SUBDRAINS		



Transverse and backslope subdrains require only single outlets. Install double outlet pipes on all longitudinal subdrain systems, except at the beginning and end of the system. At these locations, install a single outlet pipe.

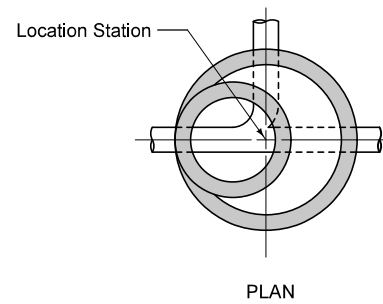
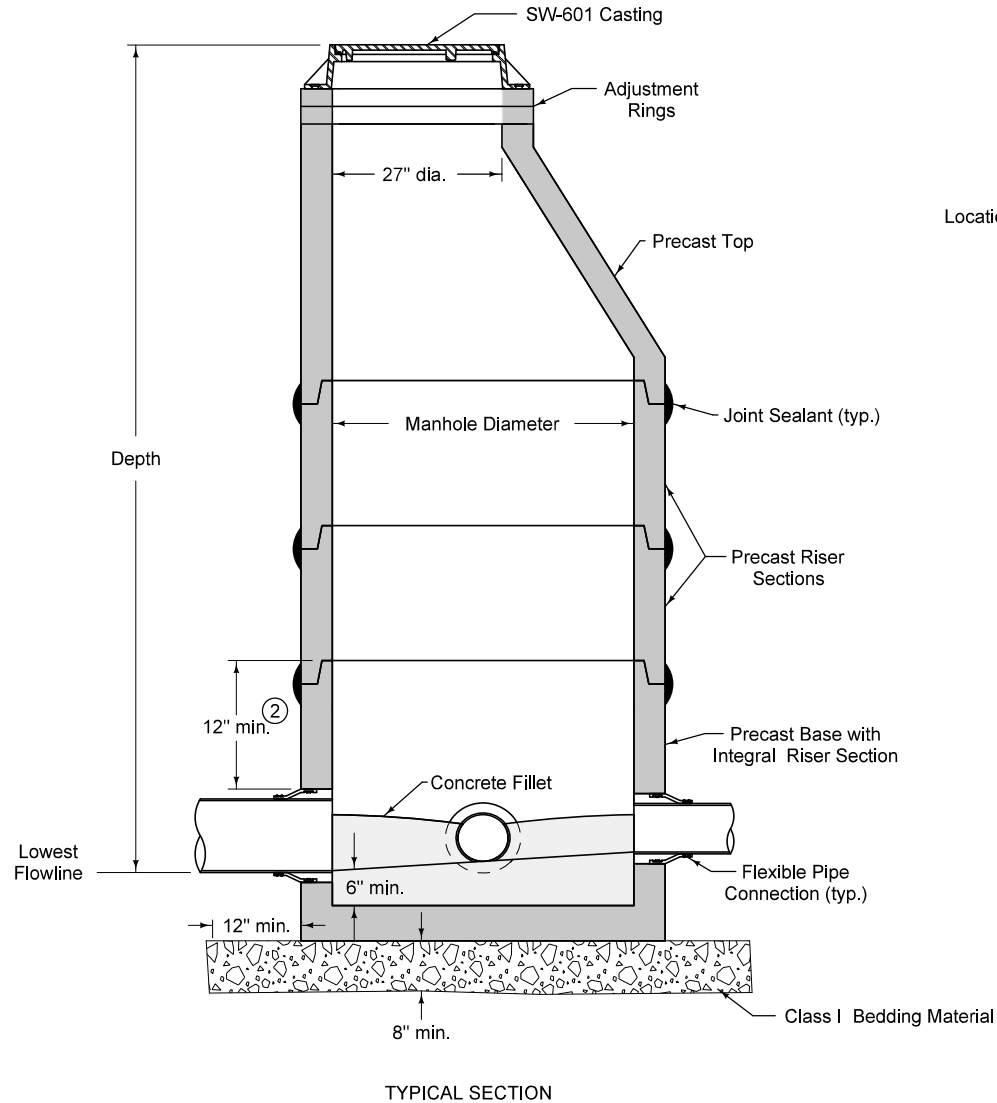
- ① Fill annular space with non-shrink grout.
- ② Outlets through intake walls to be CMP; corrugated, double-walled HDPE; or PVC.
- ③ Extend outlet pipe into structure as required to install removable rodent guard.
- ④ Construct subdrain outlet to ditch with the same type and size of pipe as used for the subdrain.
- ⑤ Provide a minimum 1 foot radius for all bends or use two 45° fittings
- ⑥ If a CMP outlet is specified in the contract documents, construct the final 10 to 12 feet of the subdrain outlet to ditch with CMP 2 inches larger than the subdrain pipe. Connect pipes with a manufactured coupler or concrete collar.
- ⑦ Provide a minimum trench width of 12 inches for a single outlet and 24 inches for a double outlet.
- ⑧ Provide a 6 inch minimum drop in elevation between longitudinal subdrain and outlet.
- ⑨ For subdrain outlet to ditch, only use fork type rodent guard.



If manhole depth exceeds 20 feet, install steps.

Install infiltration barrier.

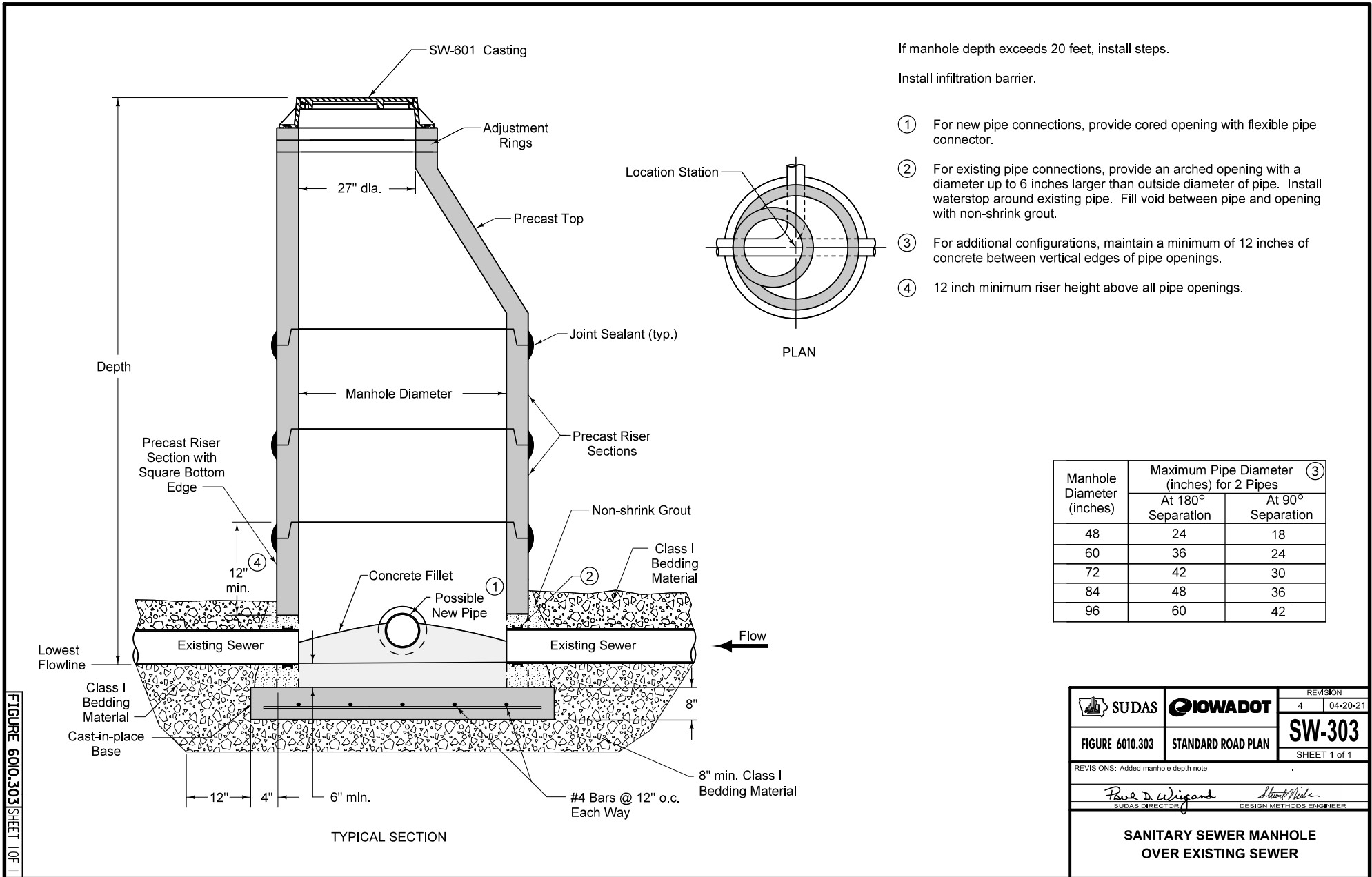
- ① For additional configurations, maintain a minimum of 12 inches of concrete between vertical edges of pipe openings.
- ② 12 inch minimum riser height above all pipe openings.

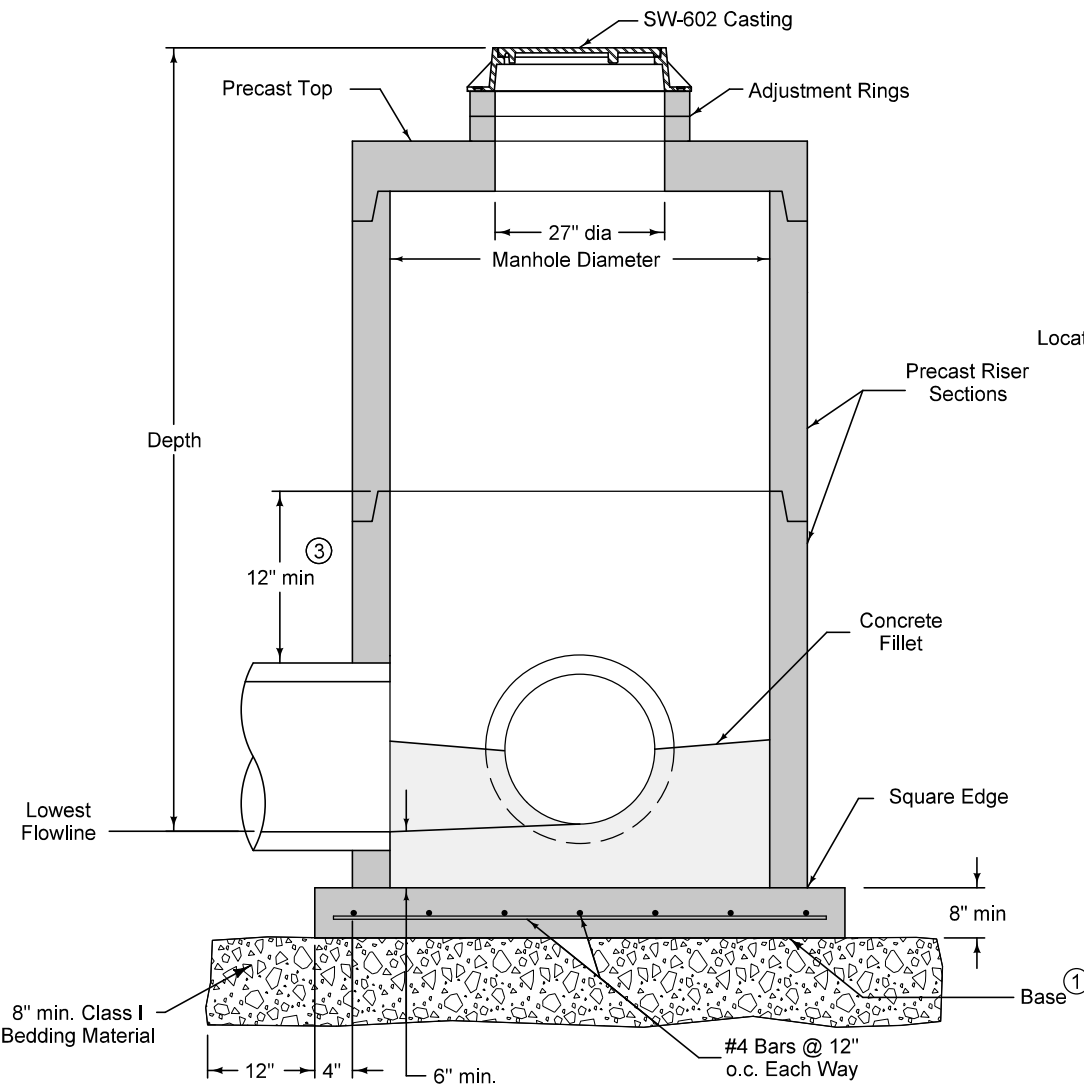


Manhole Diameter (inches)	Maximum Pipe Diameter (inches) for 2 Pipes ①	
	At 180° Separation	At 90° Separation
48	24	18
60	36	24
72	42	30
84	48	36
96	60	42

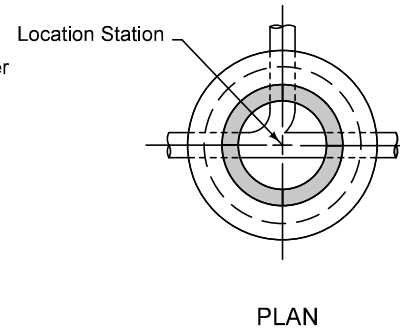
SUDAS	IOWADOT	REVISION
		4 04-20-21
FIGURE 6010.301	STANDARD ROAD PLAN	SW-301
		SHEET 1 of 1
REVISIONS: Added manhole depth note and infiltration barrier note.		
 SUDAS DIRECTOR DESIGN METHODS ENGINEER		
CIRCULAR SANITARY SEWER MANHOLE		

FIGURE 6010.301 SHEET 1 OF 1





TYPICAL SECTION



PLAN

If manhole depth exceeds 20 feet, install steps.

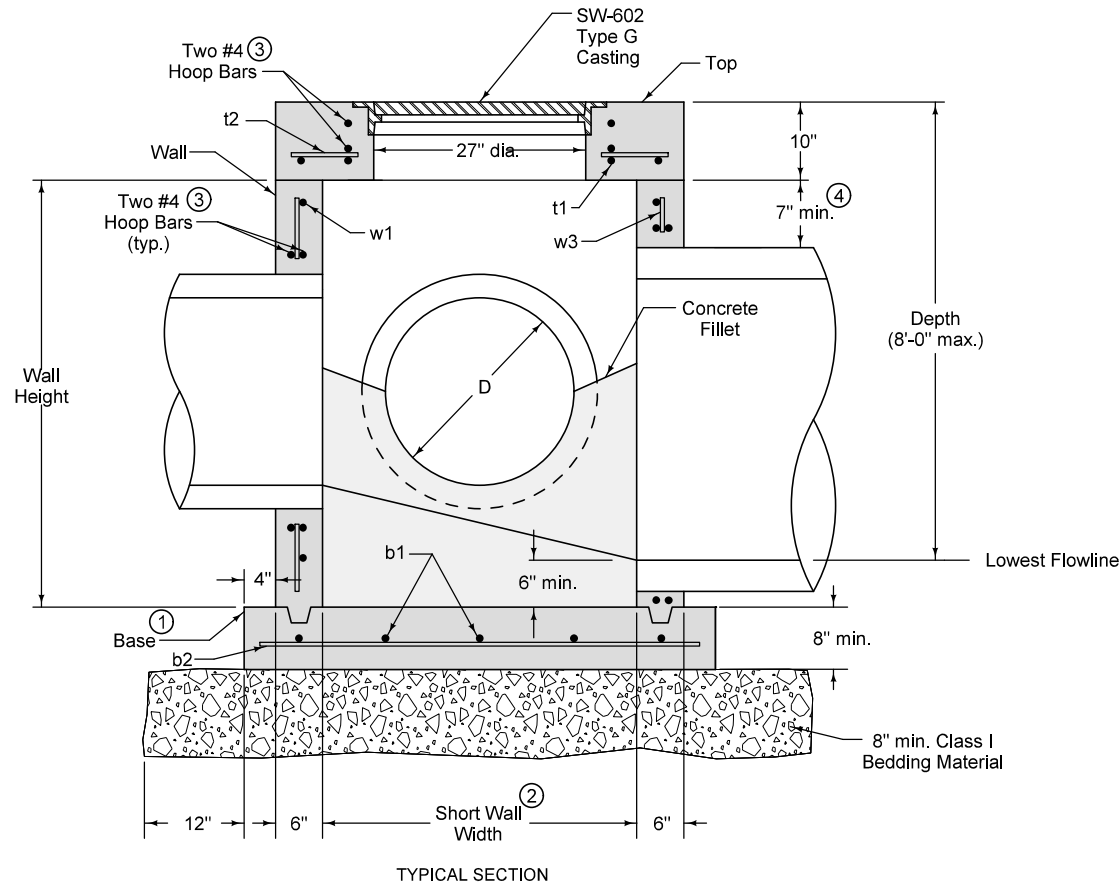
- ① Cast-in-place base shown. If base is precast integral with bottom riser, the footprint of the base is not required to extend beyond the outer edge of the riser.
- ② For additional configurations, maintain a minimum of 12 inches of concrete between vertical edges of pipe openings.
- ③ 12 inch minimum riser height above all pipe openings.

Manhole Diameter (inches)	Maximum Pipe Diameter ^② (inches) for 2 Pipes	
	At 180° Separation	At 90° Separation
48	24	18
60	36	24
72	42	30
84	48	36
96	60	42

FIGURE 6010.401 SHEET 1 OF 1

SUDAS	IOWADOT	REVISION
		3 04-20-21
FIGURE 6010.401	STANDARD ROAD PLAN	SW-401
		SHEET 1 of 1
REVISIONS: Added manhole depth note.		
Paul D. Wigand SUDAS DIRECTOR		
Stuart Miller DESIGN METHODS ENGINEER		
CIRCULAR STORM SEWER MANHOLE		

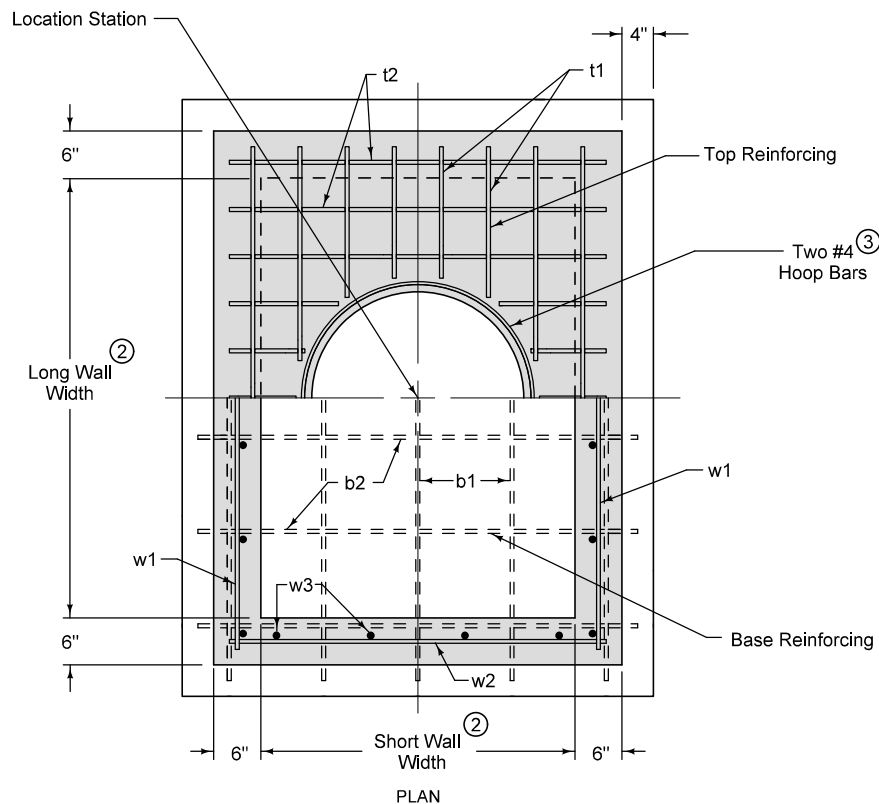
Adjacent walls may have different widths based upon pipe configuration, but structure must be rectangular.



- ① Cast-in-place base shown. If base is precast integral with walls, the footprint of the base is not required to extend beyond the outer edge of the walls.
- ② Wall widths vary with pipe diameter and range from 40 inches minimum to 77 inches maximum. Provide 6 inches of wall width (minimum) each side of pipe opening.
- ③ Provide two #4 hoop bars at top opening and at all pipe openings.
- ④ 7 inch minimum wall height above all pipes.

FIGURE 6010.406 SHEET 1 OF 2

 SUDAS	 IOWADOT	REVISION	
		2	04-21-20
FIGURE 6010.406			
STANDARD ROAD PLAN			
SW-406			
SHEET 1 of 2			
REVISIONS: Added Class I Bedding Material.			
 SUDAS DIRECTOR		 DESIGN METHODS ENGINEER	
SHALLOW RECTANGULAR STORM SEWER MANHOLE			



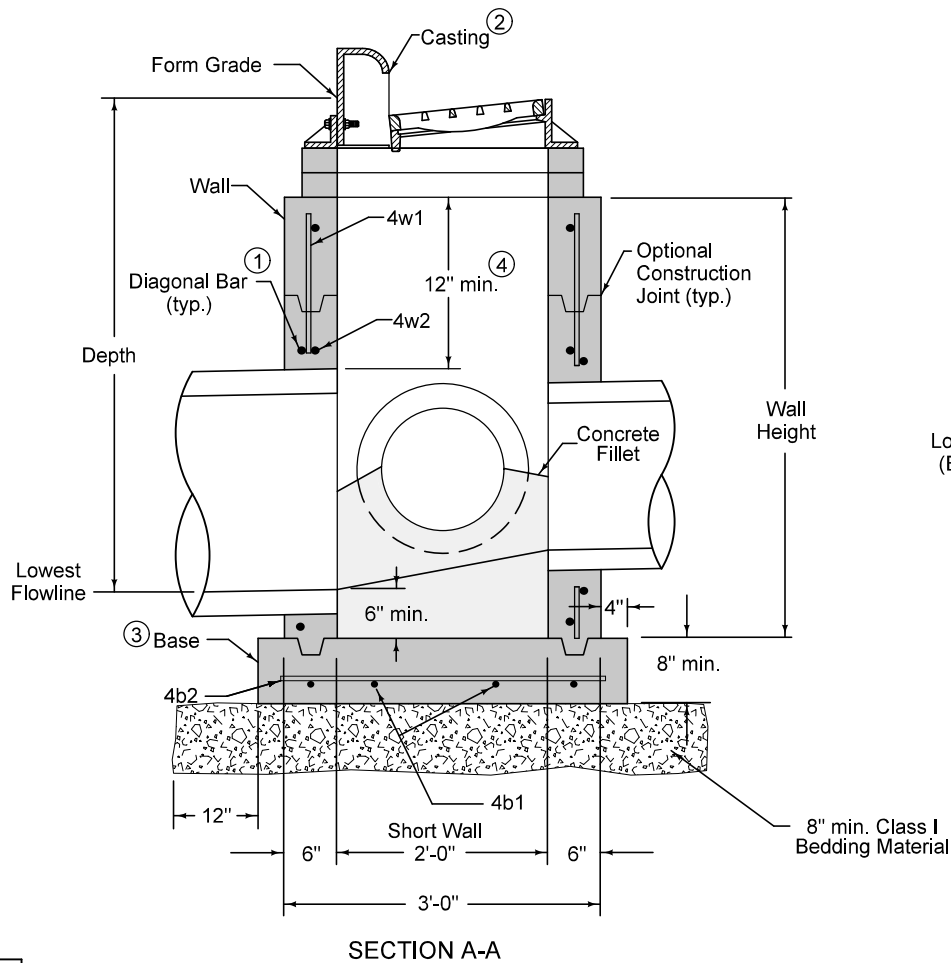
- ② Wall widths vary with pipe diameter and range from 40 inches minimum to 77 inches maximum. Provide 6 inches of wall width (minimum) each side of pipe opening.
- ③ Provide two #4 hoop bars at top opening and at all pipe openings.

REINFORCING BAR LIST					
Mark	Size	Location	Shape	Length	Spacing
t1	See Table	Top	—	Long Wall plus 8"	6"
t2	See Table	Top	—	Short Wall plus 8"	6"
b1	See Table	Base	—	Long Wall plus 14"	12"
b2	See Table	Base	—	Short Wall plus 14"	12"
w1	See Table	Walls	—	Long Wall plus 8"	12"
w2	See Table	Walls	—	Short Wall plus 8"	12"
w3	See Table	Walls	—	Wall Height minus 4"	12"

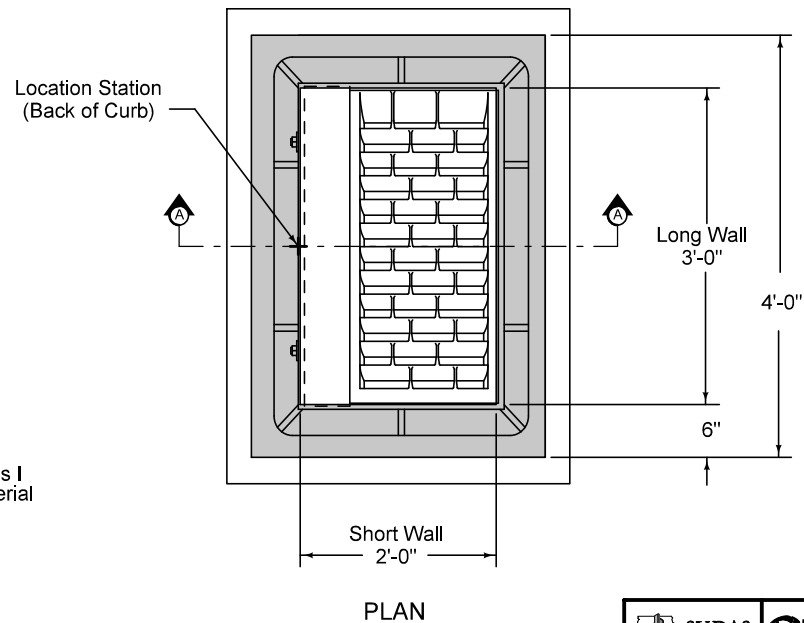
*Place a minimum of one w1 bar above each pipe opening

Diameter of Largest Pipe, D	Minimum Bar Size
48" or 54"	6
33" to 42"	5
30" or smaller	4

SUDAS	IOWADOT	REVISION
		2 04-21-20
FIGURE 6010.406	STANDARD ROAD PLAN	SW-406
		SHEET 2 of 2
REVISIONS: Added Class I Bedding Material.		
 SUDAS DIRECTOR DESIGN METHODS ENGINEER		
SHALLOW RECTANGULAR STORM SEWER MANHOLE		



REINFORCING BAR LIST						
Mark	Size	Location	Shape	Length	Count	Spacing
4w1	4	Walls	—	Wall Height minus 4"	14	12"
4w2	4	Long Walls	—	3'-8"	Varies	12"
4w3	4	Short Walls	—	2'-8"	Varies	12"
4b1	4	Base	—	4'-2"	4	10"
4b2	4	Base	—	3'-2"	5	10"

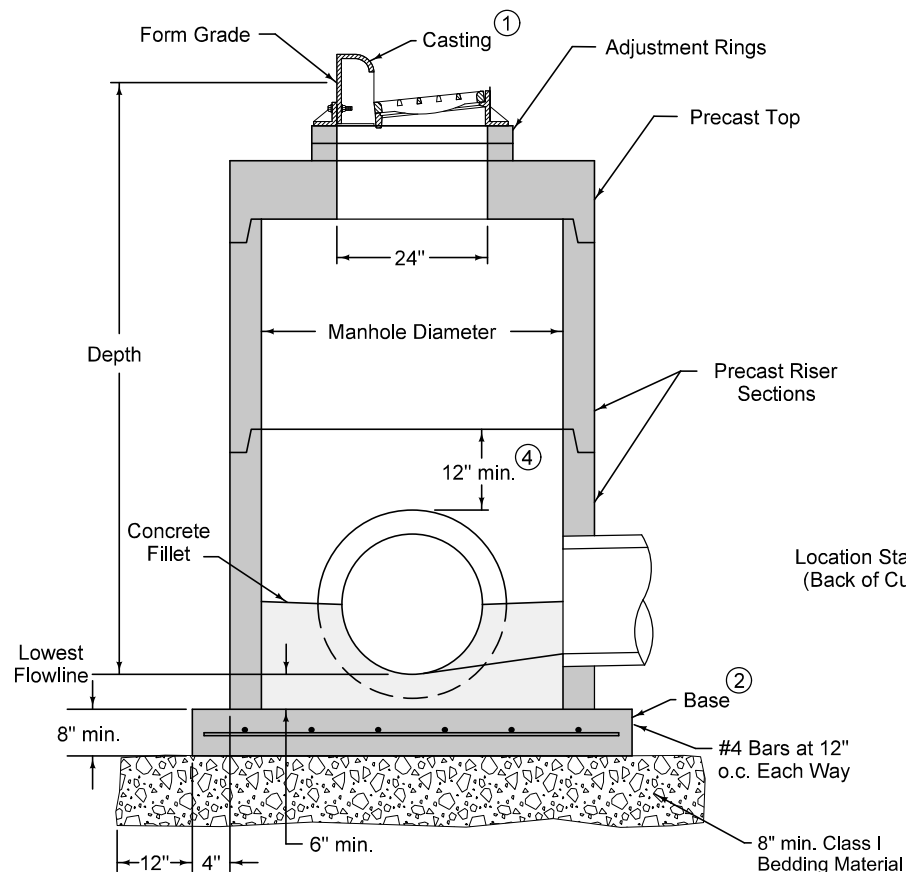


MAXIMUM PIPE DIAMETERS		
Pipe Location	Precast Structure	Cast-in-place Structure
Short Wall	15"	18"
Long Wall	24"	30"

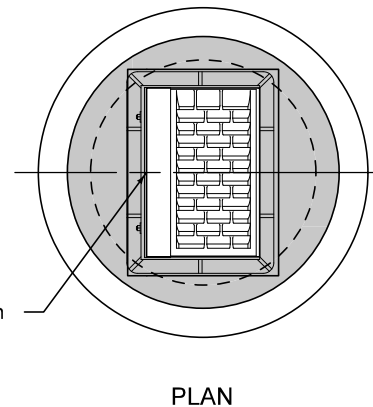
Refer to SW-514 for boxout details.

- ① Install four #4 diagonal bars at all pipe openings.
- ② SW-603 Type R unless Type Q is specified in the contract documents.
- ③ Cast-in-place base shown. If base is precast integral with walls, the footprint of the base is not required to extend beyond the outer edge of the walls.
- ④ 12 inch minimum wall height above all pipes.

		REVISION
		3 04-21-20
FIGURE 6010.501	STANDARD ROAD PLAN	SW-501
REVISIONS: Added Class I Bedding Material.		SHEET 1 of 1
SUDAS DIRECTOR		DESIGN METHODS ENGINEER
SINGLE GRATE INTAKE		



TYPICAL SECTION



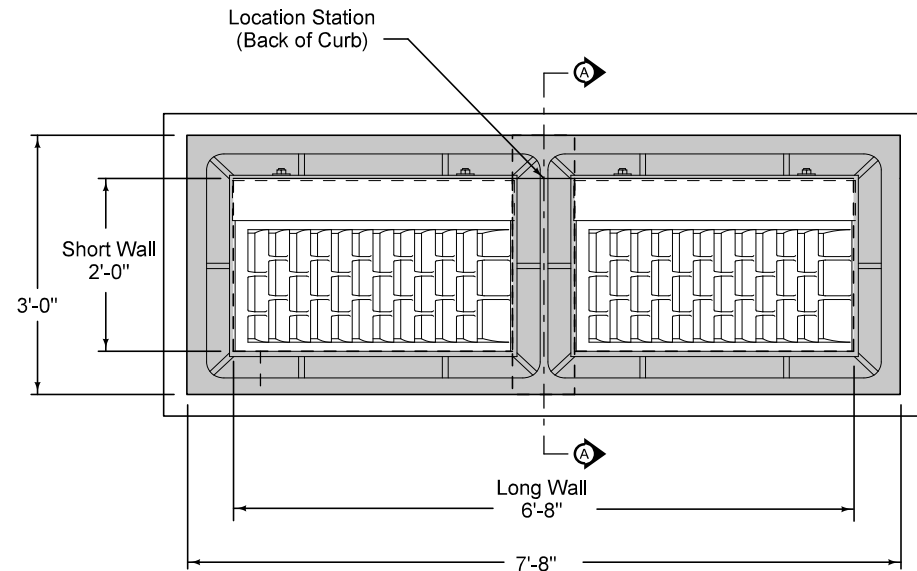
Refer to SW-514 for boxout details.

- ① SW-603 Type R unless Type Q is specified in the contract documents.
- ② Cast-in-place base shown. Base may be square. If base is precast integral with walls, the footprint of the base is not required to extend beyond the outer edge of the walls.
- ③ For additional configurations, maintain a minimum of 12 inches of concrete between vertical edges of pipe openings.
- ④ 12 inch minimum riser height above all pipes.

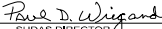
Manhole Diameter (inches)	Maximum Pipe Diameter (inches) for 2 Pipes ③	
	at 180° Separation	at 90° Separation
48	24	18
60	36	24
72	42	30
84	48	36
96	60	42

SUDAS	IOWADOT	REVISION	
		1	04-21-20
FIGURE 6010.502	STANDARD ROAD PLAN	SW-502	
		SHEET 1 of 1	
REVISIONS: Added Class I Bedding Material.			
Paul D. Wiegand SUDAS DIRECTOR		Stuart Miller DESIGN METHODS ENGINEER	
CIRCULAR SINGLE GRATE INTAKE			

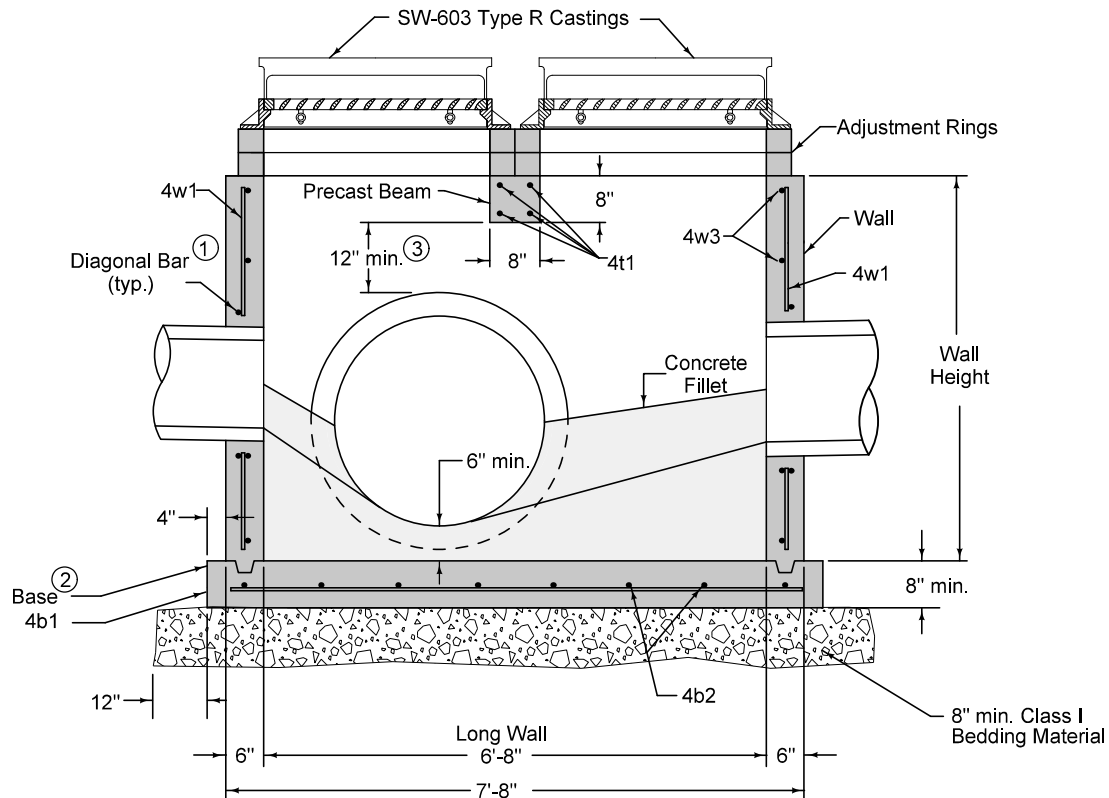
- ① Install four #4 diagonal bars at all pipe openings.
- ② Cast-in-place base shown. If base is precast integral with walls, the footprint of the base is not required to extend beyond the outer edge of the walls.
- ③ 12 inch minimum wall height above all pipes.



PLAN

 SUDAS	 IOWA DOT	REVISION 3 04-21-20
		SW-505
		SHEET 1 of 2
FIGURE 6010.505	STANDARD ROAD PLAN	
REVISIONS: Added Class I Bedding Material.		
 SUDAS DIRECTOR		 DESIGN METHODS ENGINEER
DOUBLE GRATE INTAKE		

- ① Install four #4 diagonal bars at all pipe openings.
- ② Cast-in-place base shown. If base is precast integral with walls, the footprint of the base is not required to extend beyond the outer edge of the walls.
- ③ 12 inch minimum wall height above all pipes.



TYPICAL SECTION

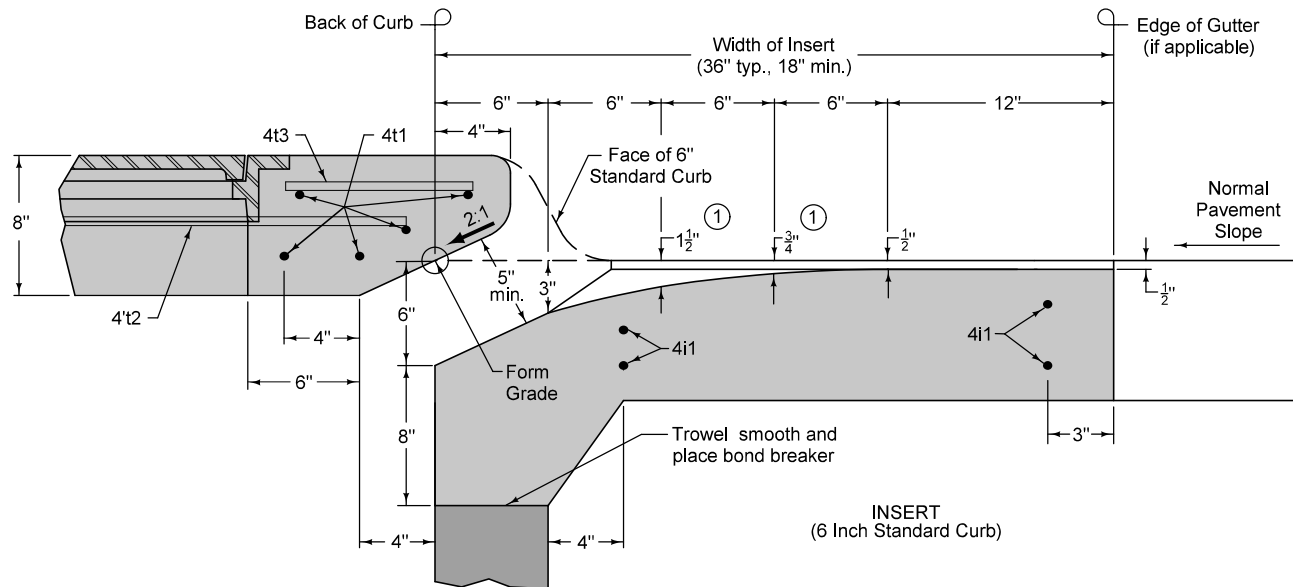
REINFORCING BAR LIST

Mark	Size	Location	Shape	Count	Length	Spacing
4t1	4	Beam	—	4	2'-8"	4"
4b1	4	Base	—	4	7'-10"	10"
4b2	4	Base	—	8	3'-2"	12"
4w1	4	Walls	—	20	Wall Height minus 4"	12"
4w2	4	Long Walls	—	Varies	7'-4"	12"
4w3	4	Short Walls	—	Varies	2'-8"	12"

MAXIMUM PIPE DIAMETERS

Pipe Location	Precast Structure	Cast-in-place Structure
Short Wall	15"	18"
Long Wall	60"	66"

SUDAS	IOWADOT	REVISION	
		3	04-21-20
FIGURE 6010.505	STANDARD ROAD PLAN	SW-505	
		SHEET 2 of 2	
REVISIONS: Added Class I Bedding Material.			
Paul D. Wiegand SUDAS DIRECTOR		Shawn Miller DESIGN METHODS ENGINEER	
DOUBLE GRATE INTAKE			



- ① Insert shaping may be modified for insert widths less than 36 inches. For an 18 inch insert, reduce dimensions indicated by 1/2 inch.

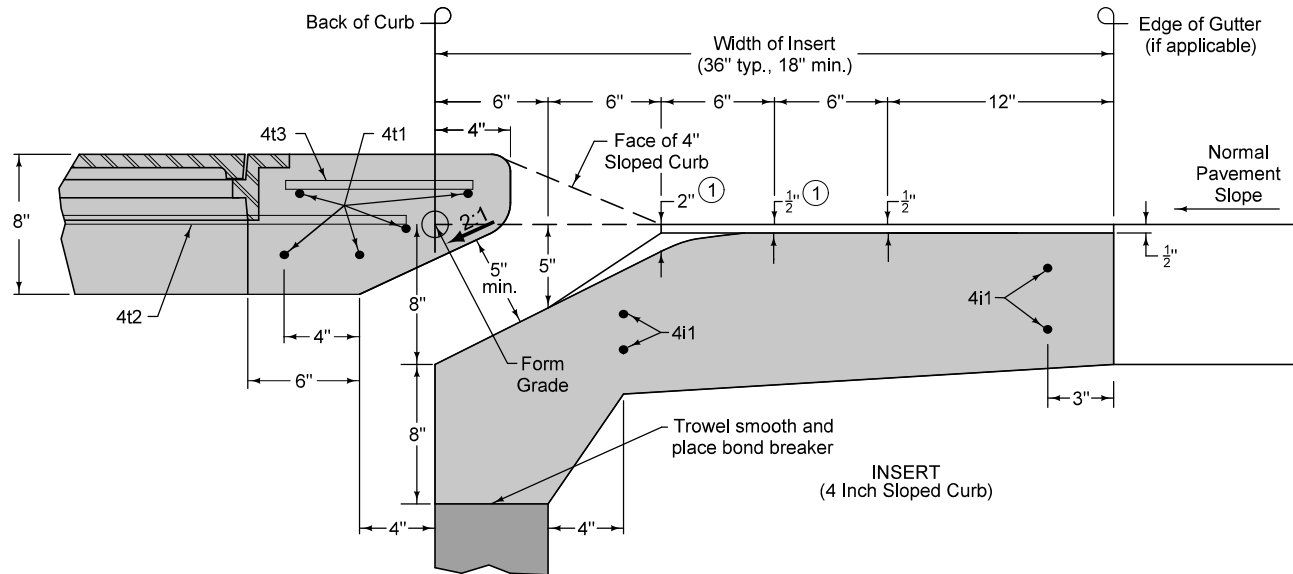
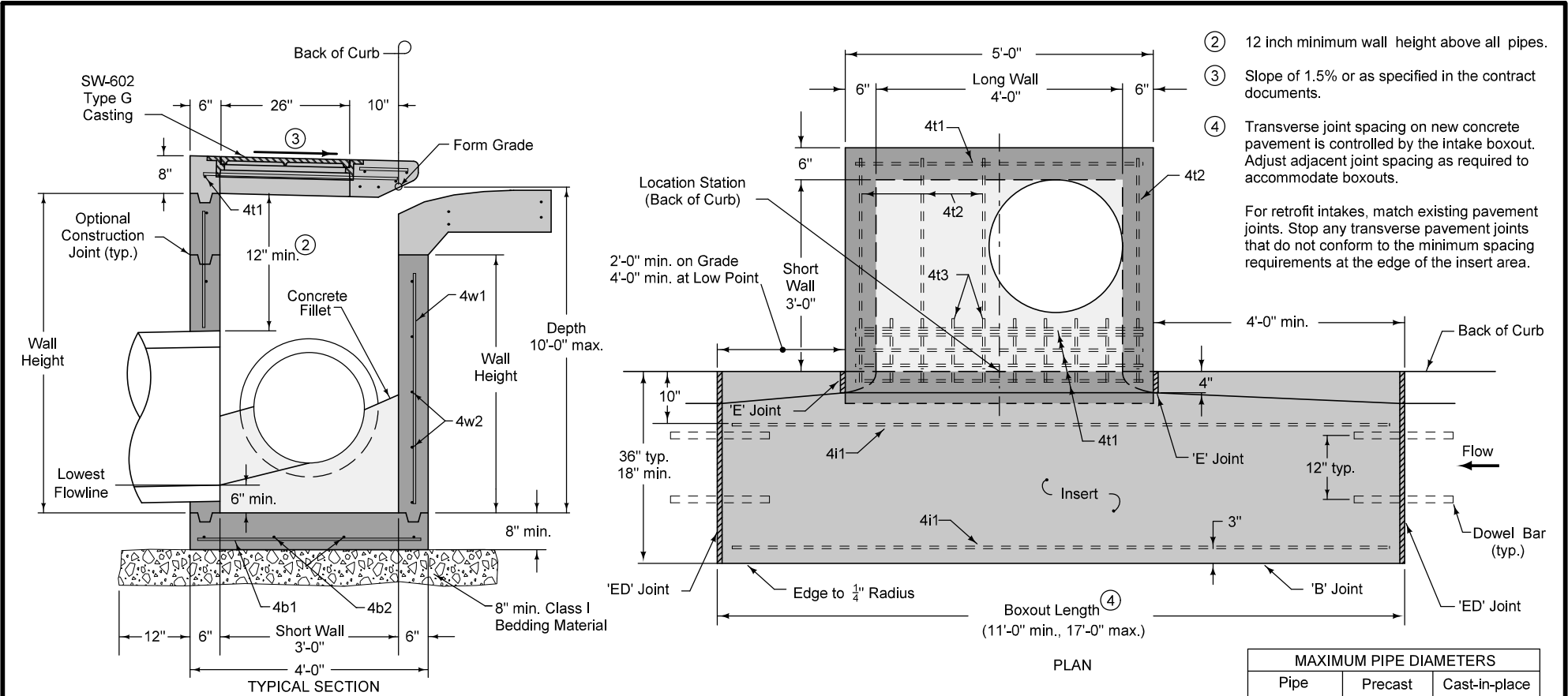


FIGURE 6010.507 SHEET 1 OF 2

 SUDAS	 IOWADOT	REVISION	
		4	04-21-20
		FIGURE 6010.507	
		STANDARD ROAD PLAN	
		SW-507	
		SHEET 1 of 2	
REVISIONS: Added Class I Bedding Material and changed maximum box out length to 17'.			
 SUDAS DIRECTOR		 DESIGN METHODS ENGINEER	
SINGLE OPEN-THROAT CURB INTAKE, SMALL BOX			



REINFORCING BAR LIST						
Mark	Size	Location	Shape	Count	Length	Spacing
4t1	4	Top	—	6	4'-8"	See Insert
4t2	4	Top	—	4	3'-6"	12"
4t3	4	Top	—	10	10"	6"
4b1	4	Base	—	6	3'-6"	1 1"
4b2	4	Base	—	5	4'-6"	10"
4i1	4	Insert	—	4	Boxout Length minus 8"	See Plan
4w1	4	Walls	—	14	Wall Height minus 4"	14"
4w2	4	Long Walls	—	Varies	4'-8"	12"
4w3	4	Short Walls	—	Varies	3'-8"	12"

MAXIMUM PIPE DIAMETERS		
Pipe Location	Precast Structure	Cast-in-place Structure
Short Wall	24"	30"
Long Wall	30"	36"

FIGURE 6010.507

STANDARD ROAD PLAN

REVISIONS: Added Class I Bedding Material and changed maximum box out length to 17'.

Paul D. Wiegand

SUDAS DIRECTOR

Shawn Miller

DESIGN METHODS ENGINEER

REVISION

4

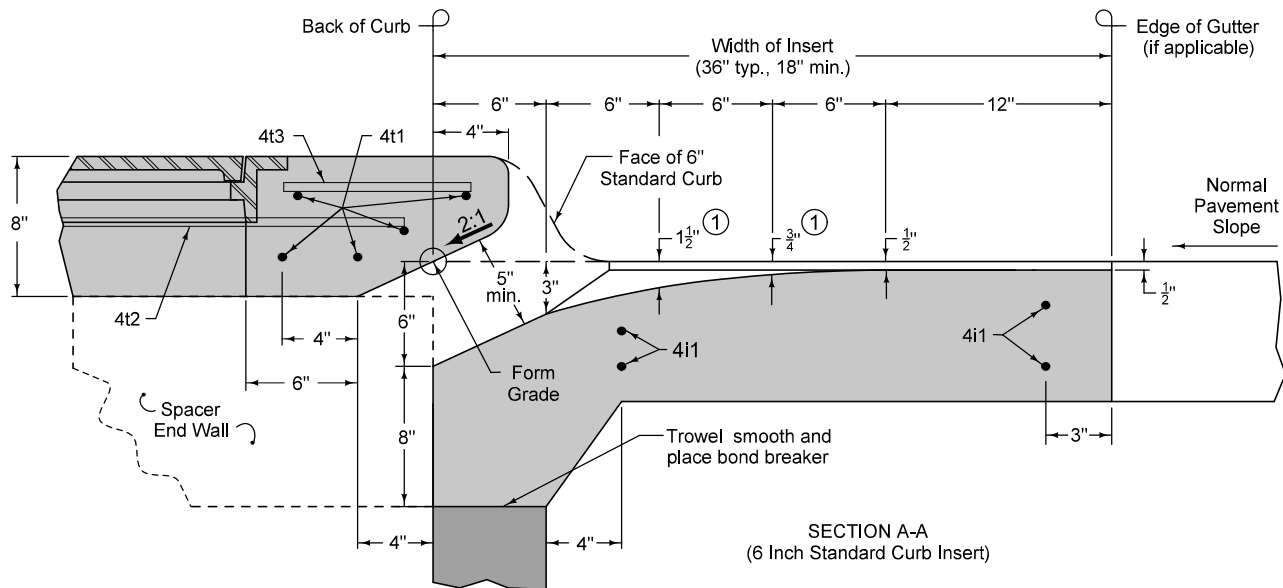
04-21-20

SW-507

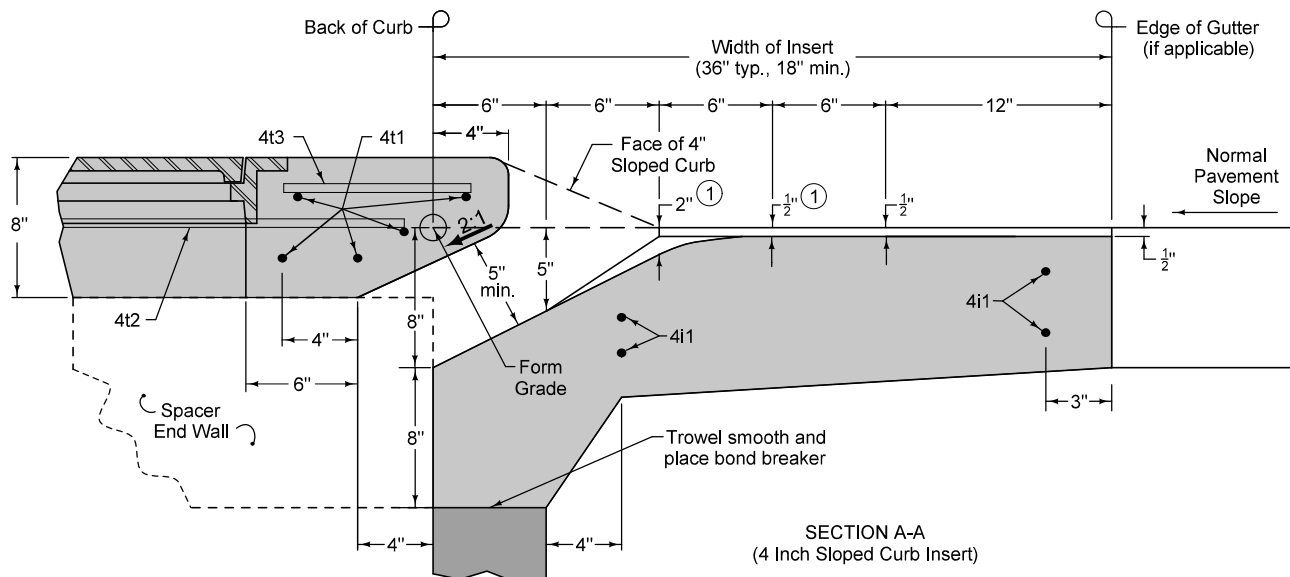
SHEET 2 of 2

SINGLE OPEN-THROAT CURB INTAKE, SMALL BOX

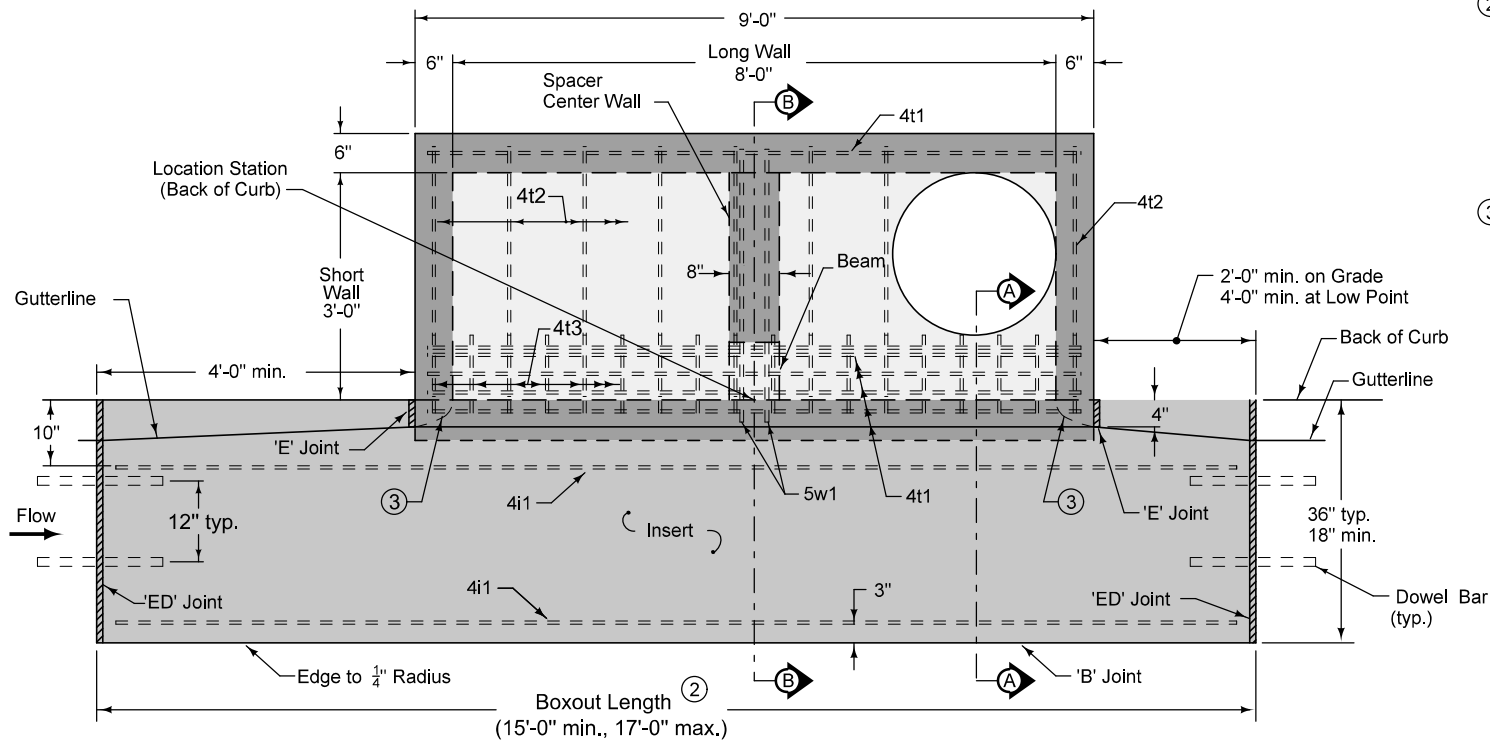
FIGURE 6010.507 SHEET 2 OF 2



① Insert shaping may be modified for insert widths less than 36 inches. For an 18 inch insert, reduce dimensions indicated by 1/4 inch.



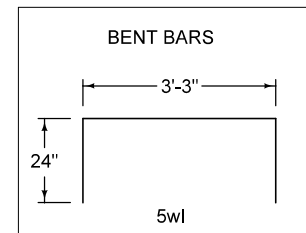
 SUDAS	 IOWADOT	REVISION	
		6	04-21-20
FIGURE 6010.509	STANDARD ROAD PLAN	SW-509	
		SHEET 1 of 3	
REVISIONS: Added Class I Bedding Material and changed maximum box out length to 17'.			
 SUDAS DIRECTOR		 DESIGN METHODS ENGINEER	
DOUBLE OPEN-THROAT CURB INTAKE, SMALL BOX			



PLAN

REINFORCING BAR LIST

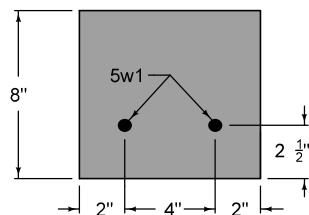
Mark	Size	Location	Shape	Count	Length	Spacing
4b1	4	Base	—	9	3'-6"	12"
4b2	4	Base	—	5	8'-6"	10"
4i1	4	Insert	—	4	Boxout Length minus 8"	See Insert
4t1	4	Top	—	6	8'-6"	See Plan
4t2	4	Top	—	8	3'-6"	12"
4t3	4	Top	—	18	10"	6"
4w1	4	Walls	—	22	Wall Height minus 4"	13"
4w2	4	Long Walls	—	Varies	4'-8"	12"
4w3	4	Short Walls	—	Varies	3'-8"	12"
5w1	5	Beam	⌈	2	7'-3"	4"



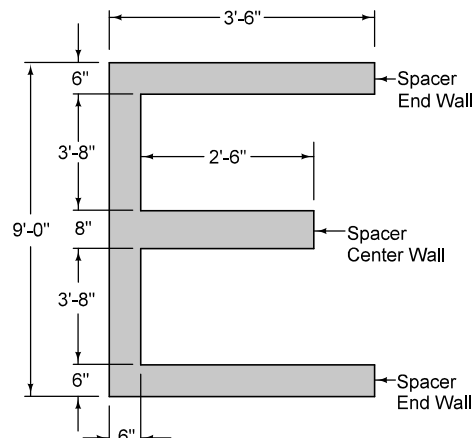
- ② Transverse joint spacing on new concrete pavement is controlled by the intake boxout. Adjust adjacent joint spacing as required to accommodate boxouts.
- For retrofit intakes, match existing pavement joints. Stop any transverse pavement joints that do not conform to the minimum spacing requirements at the edge of the insert area.
- ③ Rounded shaping at inlet.

FIGURE 6010.509 SHEET 2 OF 3

SUDAS	IOWADOT	REVISION
		6 04-21-20
FIGURE 6010.509	STANDARD ROAD PLAN	SW-509
		SHEET 2 of 3
REVISIONS: Added Class I Bedding Material and changed maximum box out length to 17'.		
Paul D. Wiegand SUDAS DIRECTOR		[Signature] DESIGN METHODS ENGINEER
DOUBLE OPEN-THROAT CURB INTAKE, SMALL BOX		



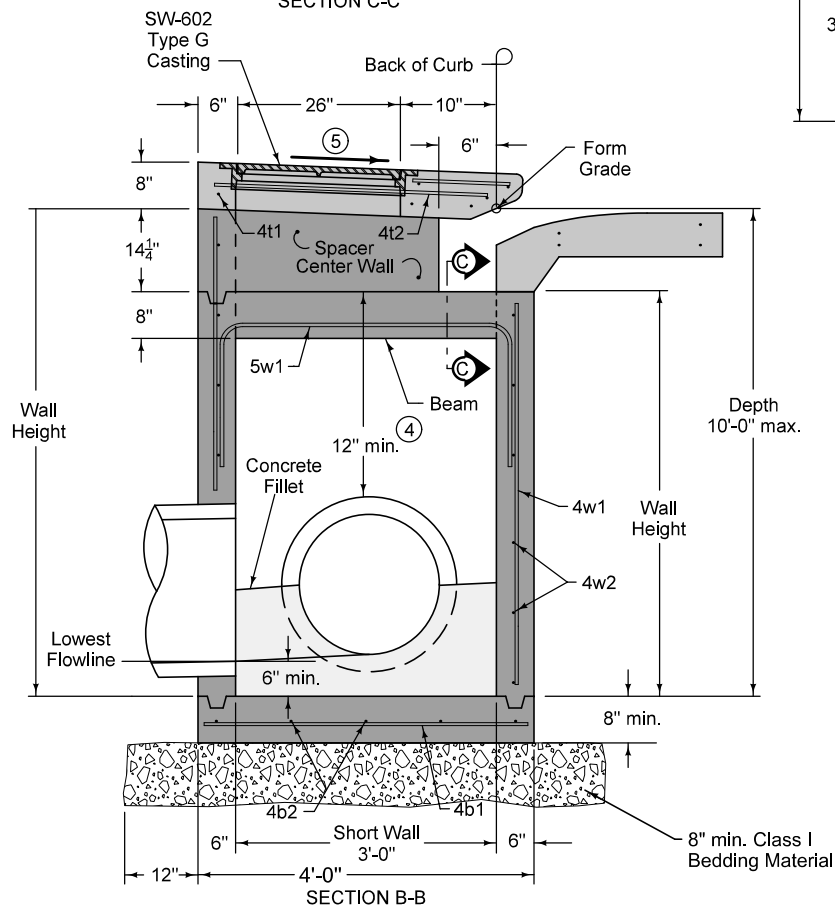
SECTION C-C



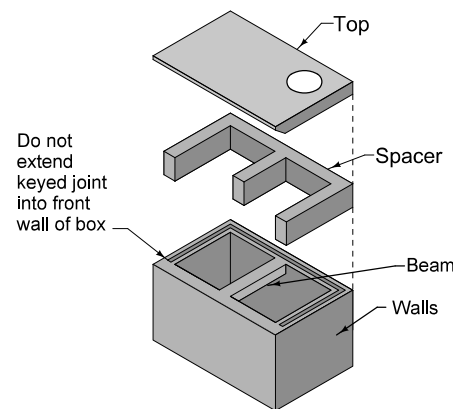
PLAN (SPACER)

- ④ 12 inch minimum wall height above all pipes.
- ⑤ Slope of 1.5% or as specified in the contract documents.

MAXIMUM PIPE DIAMETERS		
Pipe Location	Precast Structure	Cast-in-place Structure
Short Wall	24"	30"
Long Wall	60"	66"

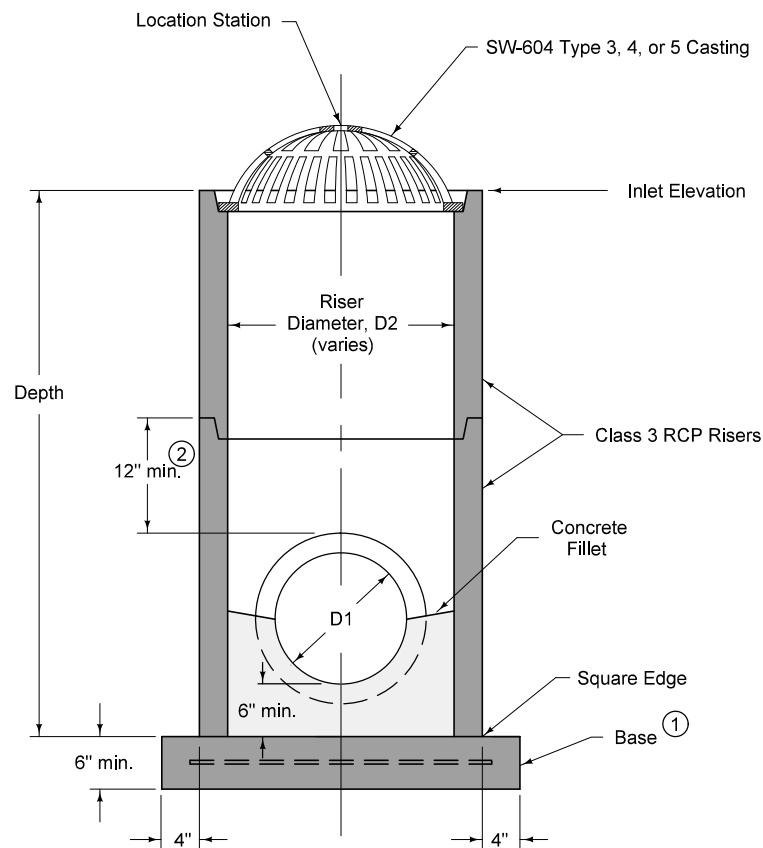


SECTION B-B



ISOMETRIC
(Refer to SECTION B-B for alignment of Top with Spacer)

SUDAS	IOWADOT	REVISION	
		6	04-21-20
FIGURE 6010.509	STANDARD ROAD PLAN	SW-509	
		SHEET 3 of 3	
REVISIONS: Added Class I Bedding Material and changed maximum box out length to 17'.			
<i>Paul D. Weigand</i> SUDAS DIRECTOR		<i>Steve Miller</i> DESIGN METHODS ENGINEER	
DOUBLE OPEN-THROAT CURB INTAKE, SMALL BOX			



TYPICAL SECTION

CASE 1

① Precast (shown) or cast-in-place base:

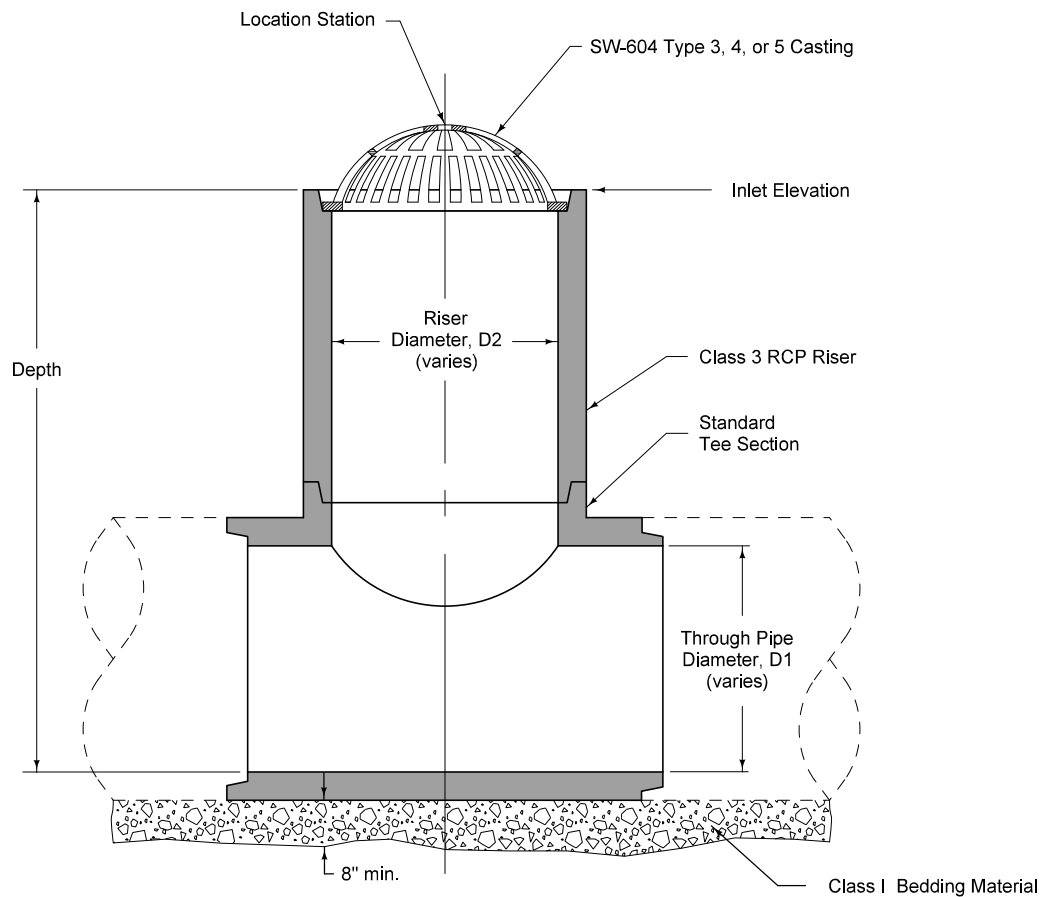
- Precast: 6 inch thick concrete with #6 welded wire mesh on 4 inch centers (WWF 4" x 4"). Center mesh vertically within base.
- Cast-in-place: 8 inch thick non-reinforced concrete.

② 12 inch minimum riser height above all pipes.

INTAKE SIZE - CASE 1	
Outlet Pipe Diameter, D1	Minimum Riser Diameter, D2
12"	18"
15"	24"
18"	24"
21"	30"
24"	30"
27"	36"

SUDAS	IOWADOT	REVISION
		4 04-21-20
FIGURE 6010.512	STANDARD ROAD PLAN	SW-512
		SHEET 1 of 2
REVISIONS: Changed 1 to I on Bedding Material.		
Paul D. Weigand SUDAS DIRECTOR		Stuart Miller DESIGN METHODS ENGINEER
CIRCULAR AREA INTAKE		

- ③ Minimum riser diameter is 18 inches.

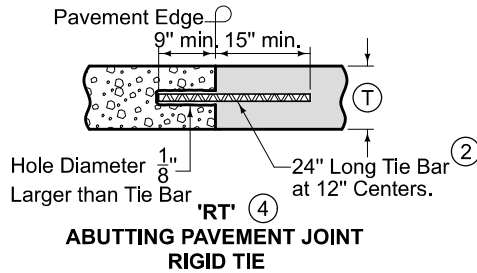
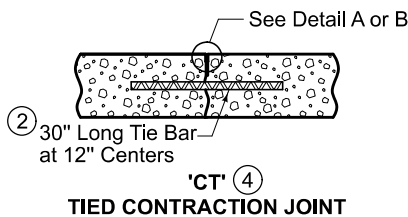
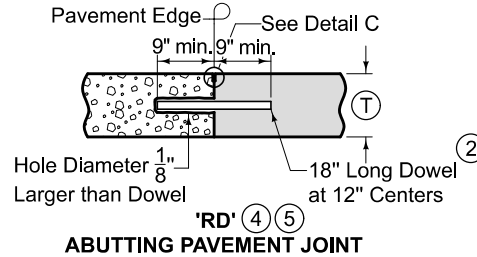
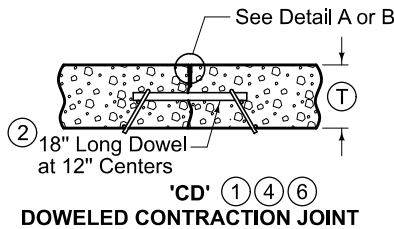
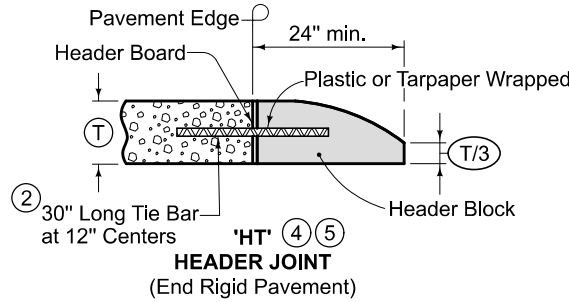
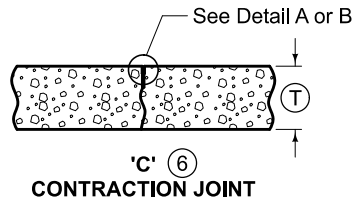
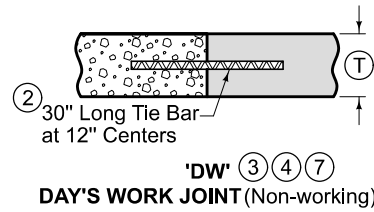
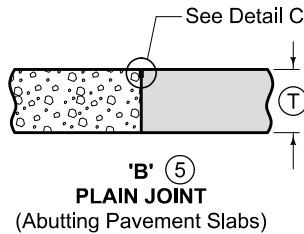


TYPICAL SECTION

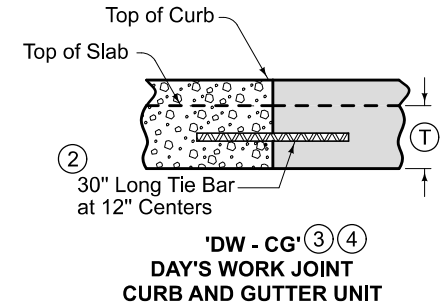
CASE 2

INTAKE SIZE - CASE 2	
Through Pipe Diameter, D1	Maximum Riser Diameter, D2 ③
18"	18"
21"	18"
24"	24"
27"	24"
30"	30"
36" or more	36"

SUDAS	IOWADOT	REVISION
		4 04-21-20
FIGURE 6010.512	STANDARD ROAD PLAN	SW-512
REVISIONS: Changed 1 to 1 on Bedding Material		SHEET 2 of 2
Paul D. Weigand SUDAS DIRECTOR		Stuart M. Nelson DESIGN METHODS ENGINEER
CIRCULAR AREA INTAKE		



- ① See dowel assemblies for fabrication details.
- ② See Bar Size Table for Contraction Joints on Sheet 2.
- ③ Locate 'DW' joint at a mid-panel location between future 'C' or 'CD' joints. Place no closer than 5 feet to a 'C' or 'CD' joint.
- ④ Place bars within the limits shown under dowel assemblies.
- ⑤ Edge with 1/8 inch tool for length of joint. For HT joint, remove header block and board when second slab is placed.
- ⑥ Unless specified otherwise, use 'CD' transverse contraction joints in mainline pavement when T is greater or equal to 8 inches. Use 'C' joints when T is less than 8 inches.
- ⑦ 'RT' joint may be used in lieu of 'DW' joint at the end of the days work. Remove any pavement damaged due to the drilling at no additional cost to the Contracting Authority.

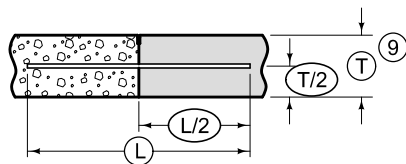


LEGEND	
	Existing Pavement
	Proposed Pavement

	SUDAS	IOWA DOT	REVISION	
			12	04-15-25
FIGURE 7010.101	STANDARD ROAD PLAN		PV-101	
		SHEET 1 of 8		
REVISIONS: Added oval dowel bars, Added BT-6 joint				
				
SUDAS DIRECTOR		DESIGN METHODS ENGINEER		

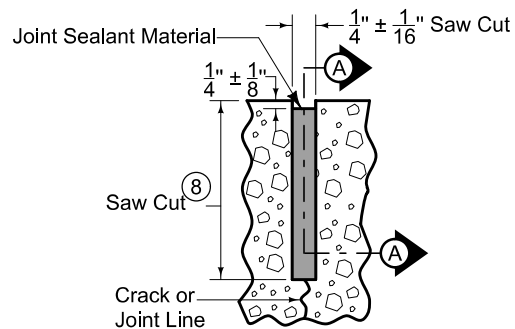
JOINTS

TRANSVERSE CONTRACTION



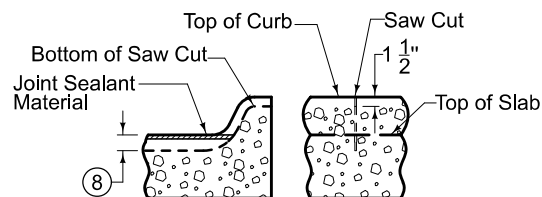
BAR PLACEMENT

(Applies to all joints unless otherwise detailed.)



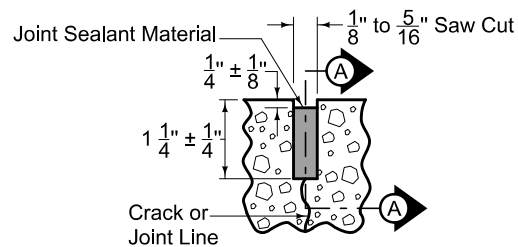
DETAIL A

(Saw cut formed by conventional concrete sawing equipment.)



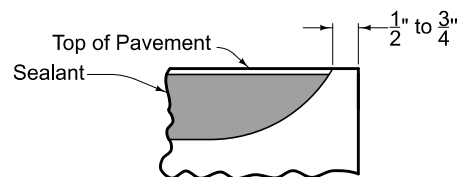
'C' JOINT IN CURB

(Match 'CT', 'CD', or 'C' joint in pavement.)



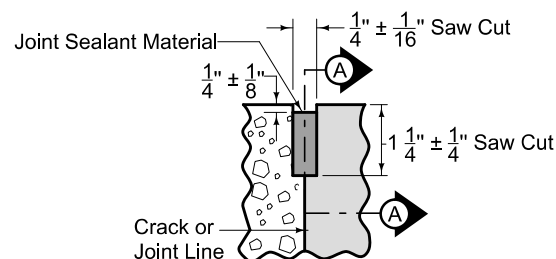
DETAIL B

(Saw cut formed by approved early concrete sawing equipment.)



SECTION A-A

(Detail at Edge of Pavement)



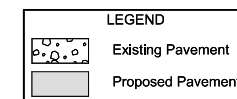
DETAIL C

- ⑧ Saw 'CD' joint to a depth of $T/3 \pm 1/4"$; saw 'C' joint to a depth of $T/4 \pm 1/4"$.
- ⑨ When tying into old pavement, $\textcircled{T}$ represents the depth of sound PCC.

BAR SIZE TABLE FOR CONTRACTION JOINTS

$\textcircled{T}$	Solid Dowel Diameter	Tubular Dowel Diameter	Elliptical	Tie Bar Size
< 8"	3" 4	7" 8	N/A	#6
≥ 8" but < 10"	1 1/4"	1 3/8"	Small	#10
≥ 10"	1 1/2"	1 5/8"	Medium	#11

Tubular and Elliptical Dowel Bars will not be allowed for RD joints.



 SUDAS	IOWA DOT	REVISION	
		12	04-15-25
FIGURE 7010.101	STANDARD ROAD PLAN	PV-101	
		SHEET 2 of 8	

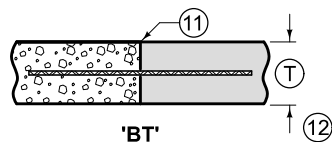
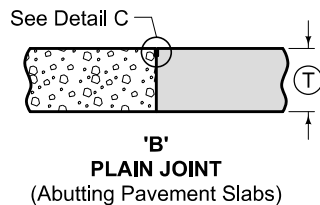
REVISIONS: Added oval dowel bars, Added BT-6 joint

JDPL
SUDAS DIRECTOR

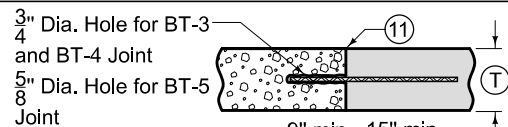
Shant Nade
DESIGN METHODS ENGINEER

JOINTS

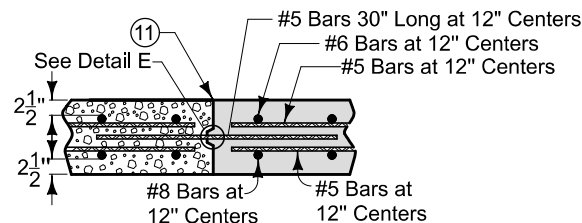
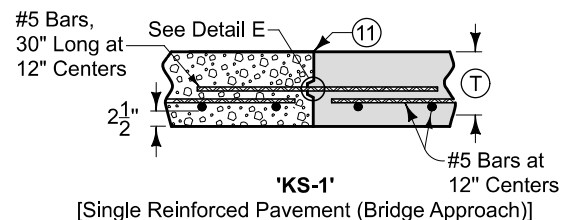
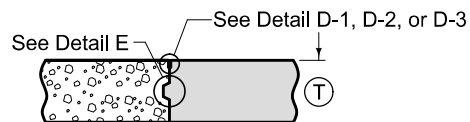
TRANSVERSE CONTRACTION



(T)	Joint	Bars	Bar Length and Spacing
< 8"	'BT-1'	#4	36" Long at 30" Centers
		#5	30" Long at 30" Centers
≥ 8"	'BT-2'	#5	36" Long at 30" Centers
	'BT-6'	#5	36" Long at 15" Centers



(T)	Joint	Bars	Bar Length and Spacing
< 8"	'BT-5'	#4	24" Long at 30" Centers
≥ 8"	'BT-3'	#5	24" Long at 30" Centers
	'BT-4'	#5	24" Long at 15" Centers

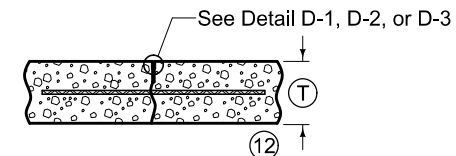


(T)	Joint	Bars	Bar Length and Spacing
< 8"	'KT-1'	#4	30" Long at 30" Centers
≥ 8"	'KT-2'	#5	30" Long at 30" Centers
	'KT-3'	#5	30" Long at 15" Centers

LONGITUDINAL CONTRACTION

- ⑩ Bar supports may be necessary for fixed form paving to ensure the bar remains in a horizontal position in the plastic concrete.
- ⑪ Sawing or sealing of joint not required.
- ⑫ The following joints are interchangeable, subject to the pouring sequence:
'L-1', 'BT-1', and 'KT-1'
'L-2', 'BT-2', and 'KT-2'
'L-3', 'BT-6', and 'KT-3'

KT joints should not be used when DOT is contracting authority.



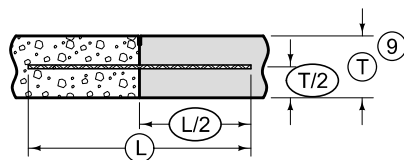
(T)	Joint	Bars	Bar Length and Spacing
< 8"	'L-1'	#4	36" Long at 30" Centers
≥ 8"	'L-2'	#5	36" Long at 30" Centers
	'L-3'	#5	36" Long at 15" Centers

LEGEND	
	Existing Pavement
	Proposed Pavement

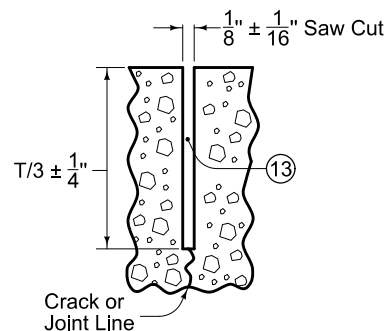
SUDAS		IOWA DOT		REVISION	
FIGURE 7010.101		STANDARD ROAD PLAN		12	04-15-25
				PV-101	
				SHEET 3 of 8	

REVISIONS: Added oval dowel bars, Added BT-6 joint	
SUDAS DIRECTOR	DESIGN METHODS ENGINEER

JOINTS

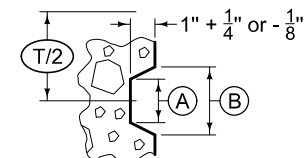


TIE BAR PLACEMENT
(Applies to all joints unless otherwise detailed.)



DETAIL D-1
(Required when specified in the contract documents.)

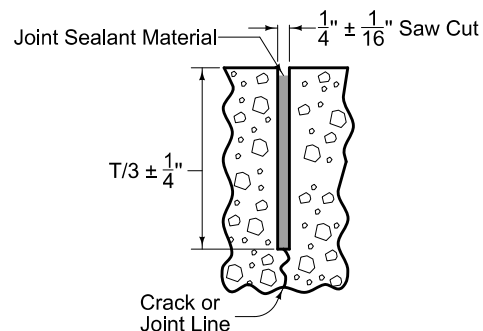
- (9) When tying into old pavement, (T) represents the depth of sound PCC.
- (13) Sealant or cleaning not required.



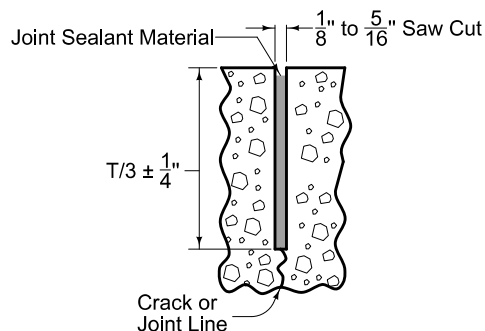
DETAIL E

KEYWAY DIMENSIONS

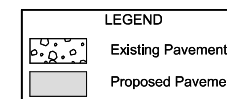
Keyway Type	Pavement Thickness (T)	(A)	(B)
Standard	8" or greater	1 3/4"	2 3/4"
Narrow	Less than 8"	1"	2"



DETAIL D-2
(Required when the Department of Transportation is not the Contracting Authority, or when specified in the contract documents)



DETAIL D-3
(Required when the Department of Transportation is the Contracting Authority, or when specified in the contract documents)



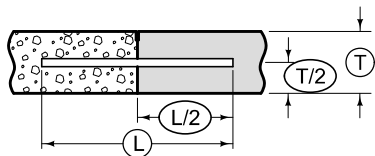
SUDAS	IOWA DOT	REVISION
		12 04-15-25
FIGURE 7010.101	STANDARD ROAD PLAN	PV-101
		SHEET 4 of 8

REVISIONS: Added oval dowel bars, Added BT-6 joint

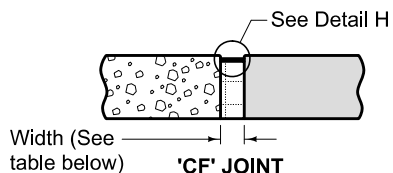
SUDAS DIRECTOR
 DESIGN METHODS ENGINEER

JOINTS

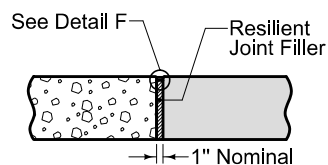
LONGITUDINAL CONTRACTION



DOWEL PLACEMENT
(Applies to all joints unless otherwise detailed.)



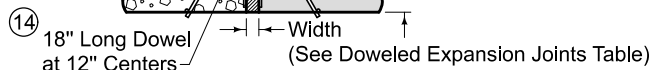
TYPE	WIDTH
CF-1	2"
CF-2	2 1/2"
CF-3	3"
CF-4	3 1/2"



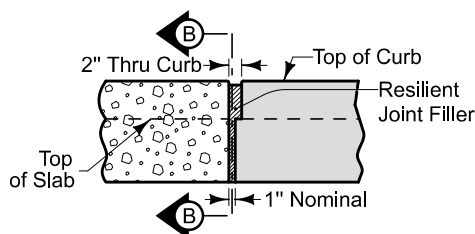
'E' 1" EXPANSION JOINT

Detail F or Detail G (See Bar Size Table for Doweled Expansion Joints)

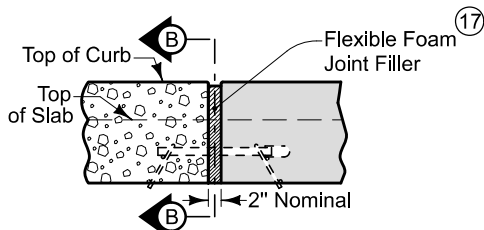
Joint Filler Material (17) (See Bar Size Table for Doweled Expansion Joints)



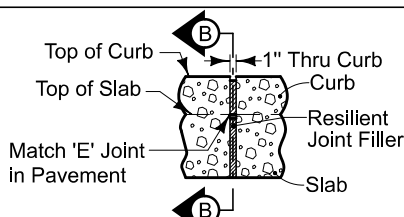
'ED', 'EE', 'EF' (16) DOWELED EXPANSION JOINT



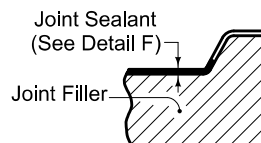
'E' JOINT IN CURB
(View at Back of Curb)



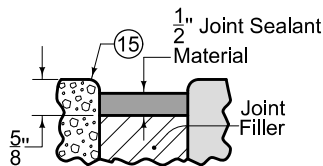
'EE' JOINT IN CURB
(View at Back of Curb)



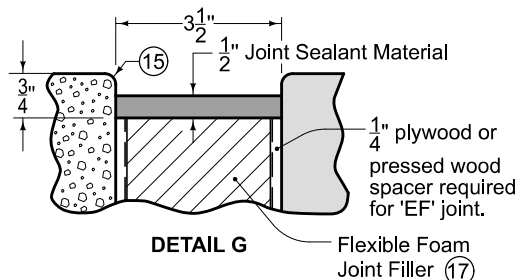
'ES' JOINT IN CURB
(View at Back of Curb)



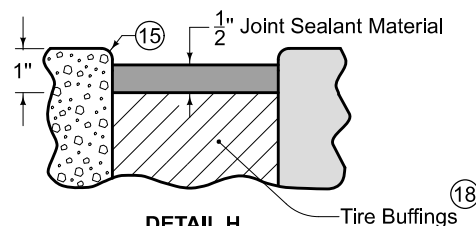
SECTION B-B



DETAIL F



DETAIL G



DETAIL H

EXPANSION

- (14) See Bar Size Table for Doweled Expansion Joints.
- (15) Edge with 1/4 inch tool for length of joint indicated if formed; edging not required when cut with diamond blade saw.
- (16) See Dowel Assemblies for fabrication details and placement limits. Coat the free end of dowel bar to prevent bond with pavement. At intake locations, dowel bars may be cast-in-place.
- (17) Predrill or preform holes in joint material for appropriate dowel size.
- (18) Compact tire buffings by spading with a square-nose shovel.

DOWELED EXPANSION JOINTS

TYPE	WIDTH	FILLER MATERIAL (17)
ED	1"	Resilient (Detail F)
EE	2"	Flexible Foam (Detail F)
EF	3 1/2"	Flexible Foam (Detail G)

BAR SIZE TABLE FOR DOWELED EXPANSION JOINTS

(T)	< 8"	≥ 8" but < 10"	≥ 10"
Dowel Diameter	3/4"	1 1/4"	1 1/2"

Tubular, GFRP, and Elliptical Dowel Bars will not be allowed for expansion joints.

LEGEND

	Existing Pavement
	Proposed Pavement

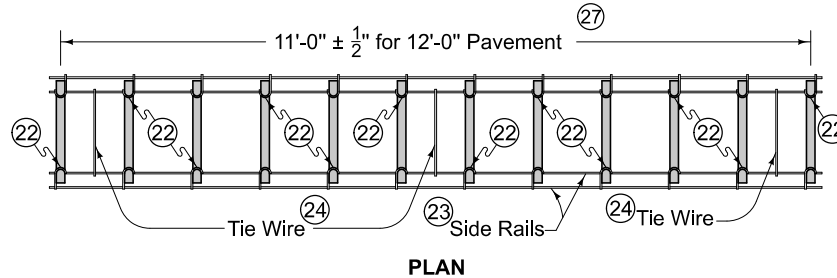
		REVISION
		12 04-15-25
FIGURE 7010.101	STANDARD ROAD PLAN	PV-101
		SHEET 5 of 8

REVISIONS: Added ovel dowel bars, Added BT-6 joint

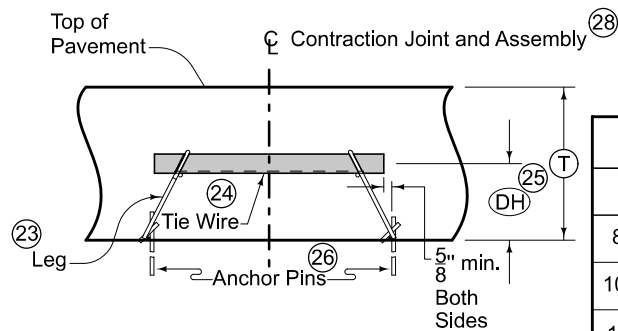
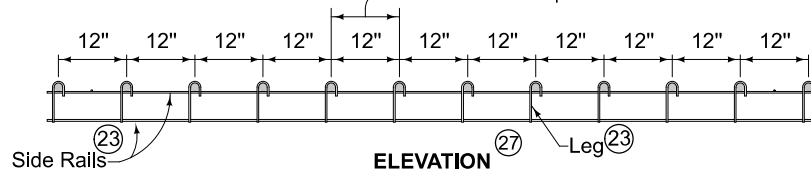
J.P. SUDAS SUDAS DIRECTOR *Shawn M. Nelson* DESIGN METHODS ENGINEER

JOINTS

CONTRACTION JOINTS



Spaces between dowel bars are nominal dimensions with a $\frac{1}{4}$ " allowable tolerance.



DOWEL ASSEMBLIES

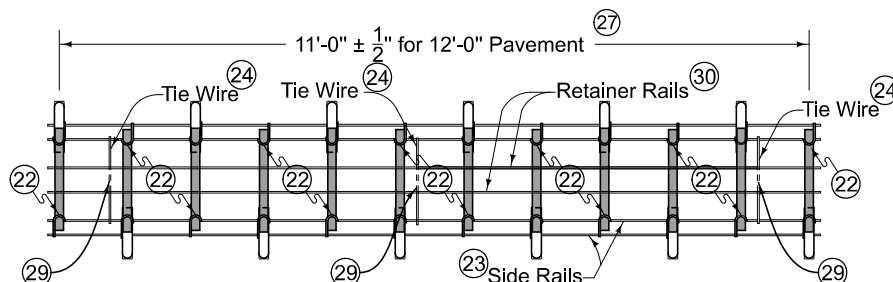
DOWEL HEIGHT AND DIAMETER FOR DOWELED CONTRACTION JOINTS				
(T)	(DH) (25)	Diameter (Solid)	Diameter (Tubular)	Elliptical
8" to 9 $\frac{1}{2}$ "	4 $\frac{1}{4}$ "	1 $\frac{1}{4}$ "	1 $\frac{3}{8}$ "	Small
10" to 11 $\frac{1}{2}$ "	5 $\frac{1}{4}$ "	1 $\frac{1}{2}$ "	1 $\frac{5}{8}$ "	Medium
12" to 13"	6 $\frac{1}{4}$ "	1 $\frac{1}{2}$ "	1 $\frac{5}{8}$ "	Medium

Tubular, Elliptical Dowel Bars will not be allowed for RD joints.

- (19) Use 18 inch long dowel bars with a tolerance of $\pm \frac{1}{8}$ inch. Ensure the centerlines of individual dowels are parallel to the other dowels in the assembly within $\pm \frac{1}{8}$ inch.
- (20) Use wires with a minimum tensile strength of 50 ksi.
- (21) Details apply to both transverse contraction and expansion joints.
- (22) Weld alternately throughout.
- (23) 0.306 inch diameter wire. Wire sizes shown are the minimum required.
- (24) Maximum 0.177 inch diameter wire, welded or friction fit to upper side rail, both sides.
- (25) Measured from the centerline of dowel bar to bottom of lower side rail + $\frac{1}{4}$ inch.
- (26) Per lane width, install a minimum of 8 anchor pins evenly spaced (4 per side), to prevent movement of assembly during construction. Anchor assemblies placed on pavement or PCC base with devices approved by the Engineer.
- (27) If dowel basket assemblies are required for curbed pavements, the assembly length is based on the jointing layout. See PV-101, sheet 8.
- (28) Ensure dowel basket assembly centerline is within 2 inches of the intended joint location longitudinally and has no more than $\frac{1}{4}$ inch horizontal skew from end of basket to end of basket.

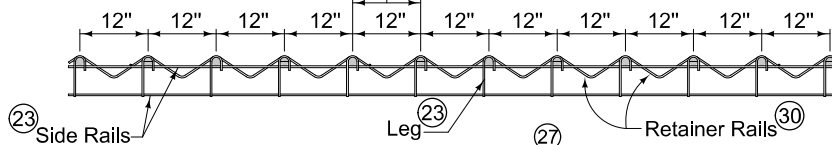
SUDAS	IOWA DOT	REVISION	
		12	04-15-25
FIGURE 7010.101	STANDARD ROAD PLAN	PV-101	
		SHEET 6 of 8	
REVISIONS: Added oval dowel bars, Added BT-6 joint			
SUDAS DIRECTOR		DESIGN METHODS ENGINEER	
JOINTS			

EXPANSION JOINTS

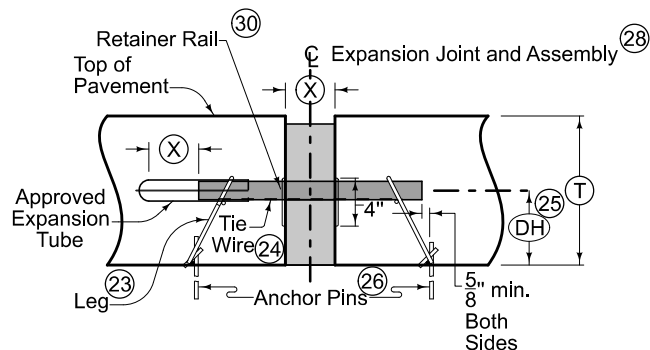


PLAN

Spaces between dowel bars are nominal dimensions with a $\frac{1}{4}$ " allowable tolerance.



ELEVATION



SECTION THRU EXPANSION JOINT

JOINT OPENING AND EXPANSION TUBE EXTENSION		
Joint Type	(X)	Minimum Tube Length
"ED"	1"	6"
"EE"	2"	7"
"EF"	3 $\frac{1}{2}$ "	9"

DOWEL HEIGHT AND DIAMETER FOR DOWELED EXPANSION JOINTS

(T)	(DH) (25)	Diameter
8" to 9 $\frac{1}{2}$ "	4 $\frac{1}{4}$ "	1 $\frac{1}{4}$ "
10" to 11 $\frac{1}{2}$ "	5 $\frac{1}{4}$ "	1 $\frac{1}{2}$ "
12" to 13"	6 $\frac{1}{4}$ "	1 $\frac{1}{2}$ "

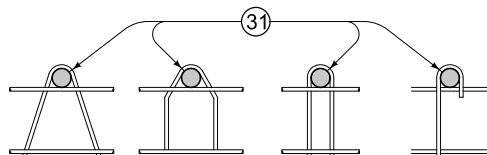
Tubular, GFRP, and Elliptical Dowel Bars will not be allowed for expansion joints.

DOWEL ASSEMBLIES

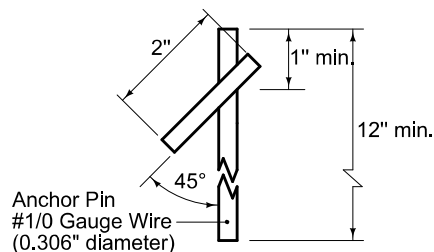
(19) (20) (21)

- (19) Use 18 inch long dowel bars with a tolerance of $\pm 1/8$ inch. Ensure the centerlines of individual dowels are parallel to the other dowels in the assembly within $\pm 1/8$ inch.
- (20) Use wires with a minimum tensile strength of 50 ksi.
- (21) Details apply to both transverse contraction and expansion joints.
- (22) Weld alternately throughout.
- (23) 0.306 inch diameter wire. Wire sizes shown are the minimum required.
- (24) Maximum 0.177 inch diameter wire, welded or friction fit to upper side rail, both sides.
- (25) Measured from the centerline of dowel bar to bottom of lower side rail + $1/4$ inch.
- (26) Per lane width, install a minimum of 8 anchor pins evenly spaced (4 per side), to prevent movement of assembly during construction. Anchor assemblies placed on pavement or PCC base with devices approved by the Engineer.
- (27) If dowel basket assemblies are required for curbed pavements, the assembly length is based on the jointing layout. See PV-101, sheet 8.
- (28) Ensure dowel basket assembly centerline is within 2 inches of the intended joint location longitudinally and has no more than $1/4$ inch horizontal skew from end of basket to end of basket.
- (29) Clip and remove center portion of tie during field assembly.
- (30) $1/4$ inch diameter wire.

SUDAS	IOWA DOT	REVISION
		12 04-15-25
FIGURE 7010.101	STANDARD ROAD PLAN	PV-101
		SHEET 7 of 8
REVISIONS: Added oval dowel bars, Added BT-6 joint		
 SUDAS DIRECTOR		 DESIGN METHODS ENGINEER
JOINTS		

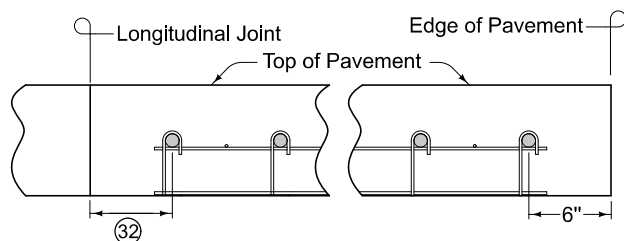


OPTIONAL LEG SHAPES

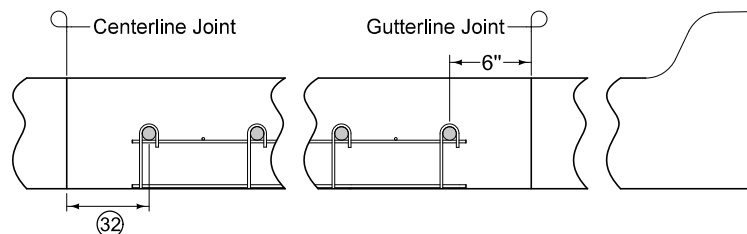


ANCHOR PIN

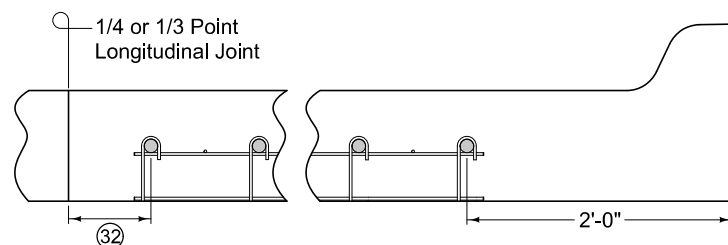
- ①9 Use 18 inch long dowel bars with a tolerance of $\pm 1/8$ inch. Ensure the centerlines of individual dowels are parallel to the other dowels in the assembly within $\pm 1/8$ inch.
- ②0 Use wires with a minimum tensile strength of 50 ksi.
- ②1 Details apply to both transverse contraction and expansion joints.
- ③1 Diameter of bend around dowel is dowel diameter + $1/8$ to $3/16$ inches.
- ③2 For uniform lane widths: 3 to 6 inches. For taper and variable width pavements: 3 to 12 inches.



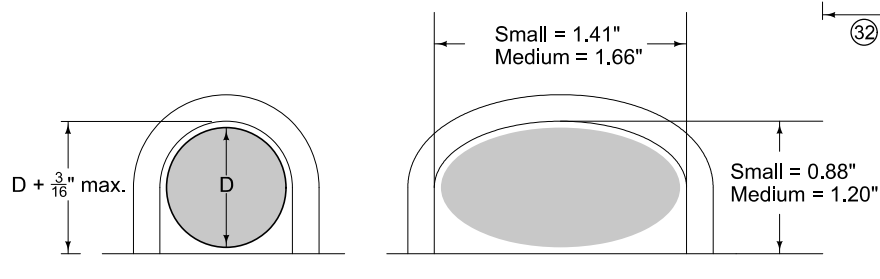
PLACEMENT LIMITS
(Rural Section)



PLACEMENT LIMITS
(Curb and Gutter - Gutterline Jointing)



PLACEMENT LIMITS
(Curb and Gutter - 1/4 or 1/3 Point Jointing)

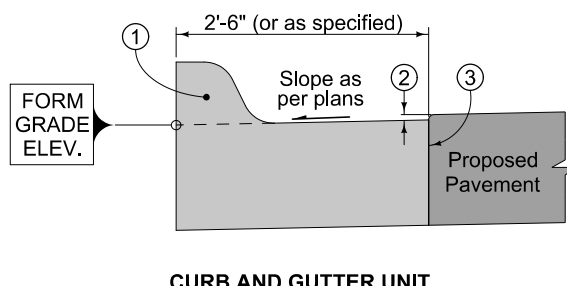
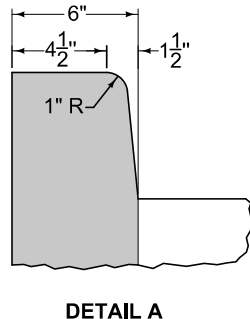
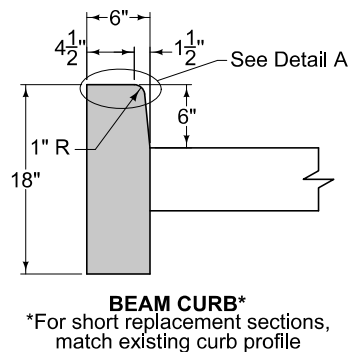
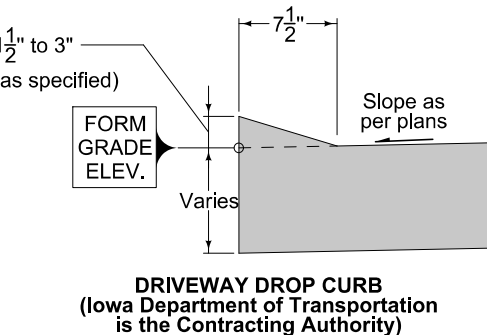
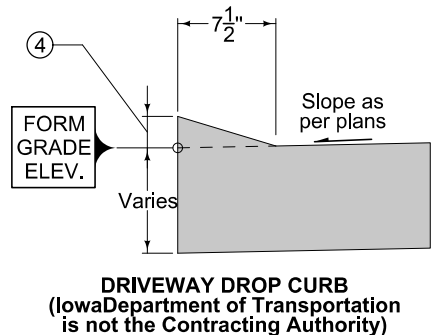
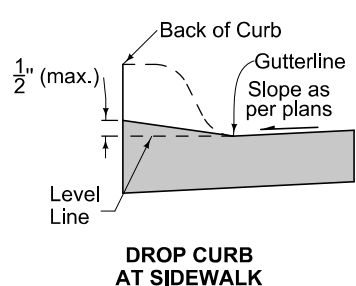
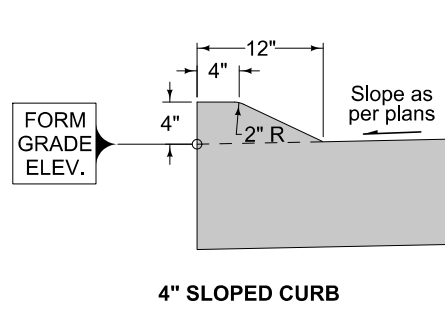
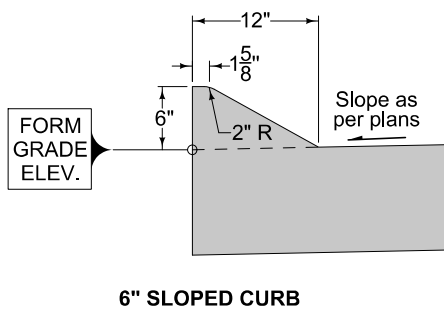
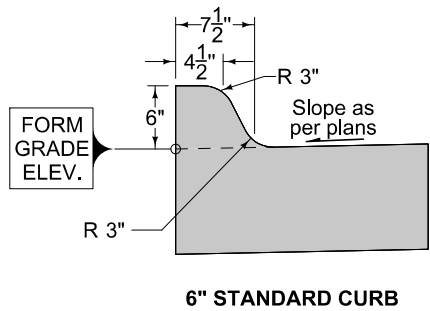


BEND AROUND DOWEL ③1

DOWEL ASSEMBLIES ①9 ②0 ②1

 SUDAS	 IOWA DOT	REVISION	
		12	04-15-25
		PV-101	
		SHEET 8 of 8	
FIGURE 7010.101	STANDARD ROAD PLAN		
REVISIONS: Added oval dowel bars, Added BT-6 joint			
 SUDAS DIRECTOR		 DESIGN METHODS ENGINEER	
JOINTS			

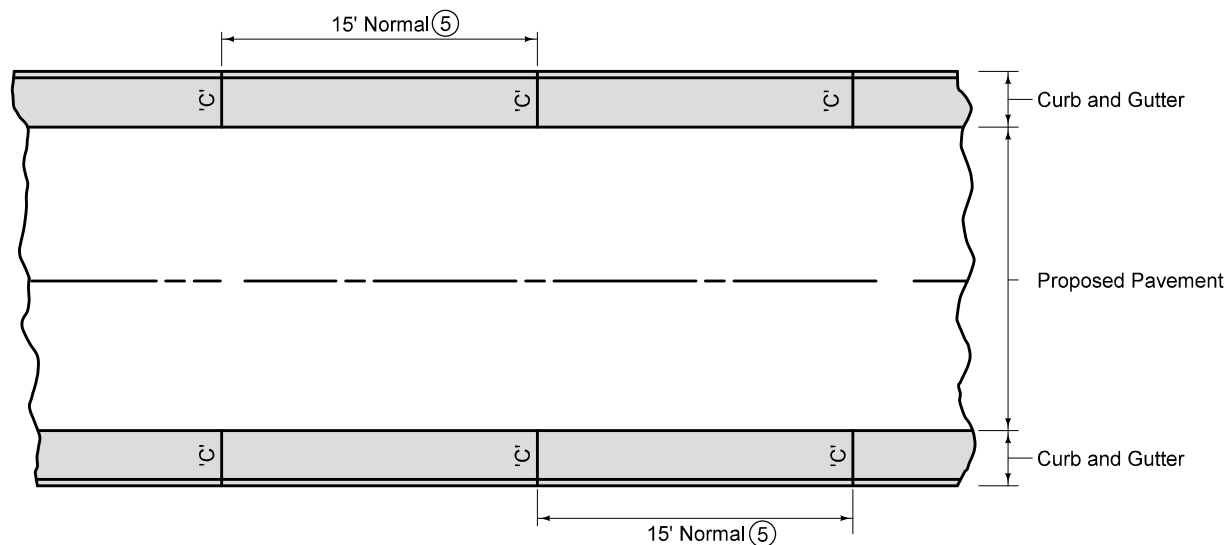
FIGURE 7010.102 SHEET 1 OF 2



For joint details, see PV-101.

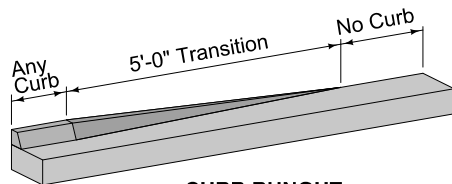
- ① 6 inch Standard Curb, 6 inch Sloped Curb, or 4 inch Sloped Curb as specified.
- ② 1/8 inch if Proposed Pavement is HMA. No elevation difference if Proposed Pavement is PCC.
- ③ 'BT', 'KT', or 'L' joint if Proposed Pavement is PCC. 'B' joint if Proposed Pavement is HMA.
- ④ 0 to 2 inches for residential entrances. 1 1/2 to 3 inches for industrial or commercial entrances.

		REVISION
		5 04-21-20
		PV-102
FIGURE 7010.102 STANDARD ROAD PLAN		SHEET 1 of 2
REVISIONS: Split DRIVEWAY DROP CURB detail into two details. Added new circle note 4 on Sheet 1. Renumbered circle note on Sheet 5.		
SUDAS DIRECTOR		DESIGN METHODS ENGINEER
PCC CURB DETAILS		

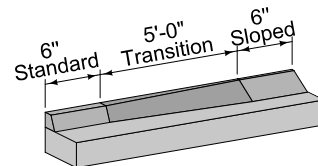


JOINTING DIAGRAM FOR CURB AND GUTTER UNIT

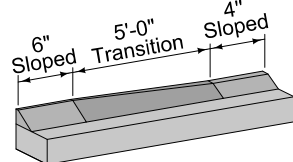
⑤ If proposed pavement is PCC, match joint spacing for proposed pavement. Place 'E' joints in curb and gutter section where expansion joints are to be placed in proposed pavement.



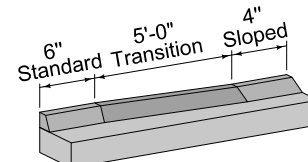
CURB RUNOUT FOR ALL CURBS



CURB TRANSITION FROM 6" STANDARD TO 6" SLOPED



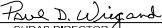
CURB TRANSITION FROM 6" SLOPED TO 4" SLOPED

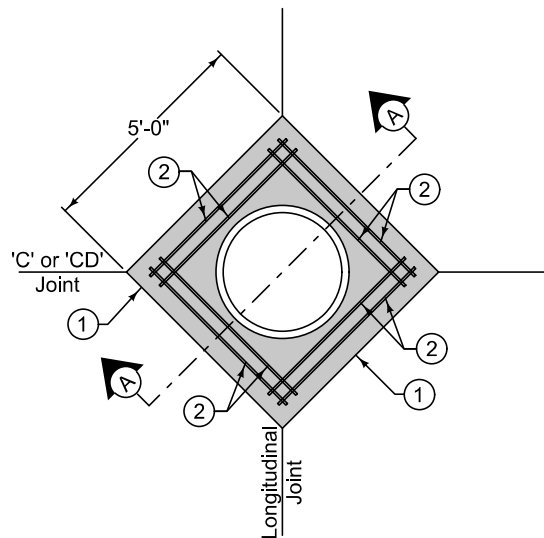


CURB TRANSITION FROM 6" STANDARD TO 4" SLOPED

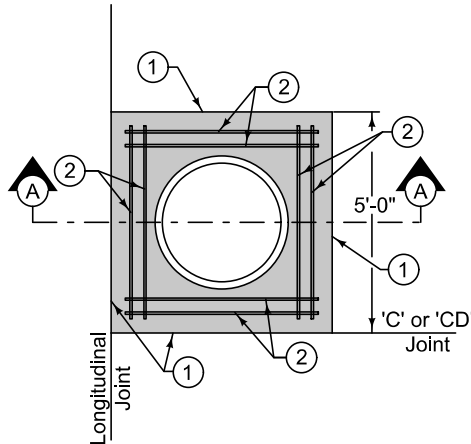
FIGURE 7010.102

SHEET 2 OF 2

 SUDAS		REVISION	
		5	04-21-20
		PV-102	
FIGURE 7010.102	STANDARD ROAD PLAN	SHEET 2 of 2	
REVISIONS: Split DRIVEWAY DROP CURB detail into two details. Added new circle note 4 on Sheet 1. Renumbered circle note on Sheet 5.			
			
SUDAS DIRECTOR		DESIGN METHODS ENGINEER	
PCC CURB DETAILS			



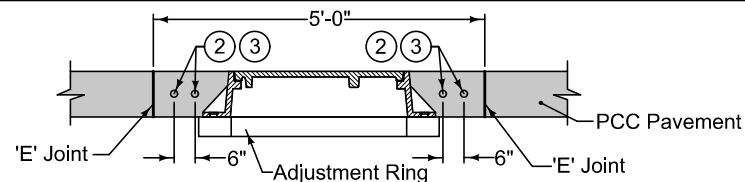
AT JOINT INTERSECTION



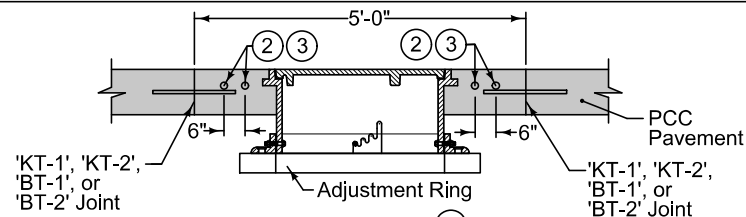
OFFSET AT JOINT INTERSECTION

Construct boxout with Class C concrete or match pavement class. Minimum 2 inches clear on reinforcement. Minimum 12 inches of concrete between outside of casting and nearest joint. Center casting within boxout area if possible.

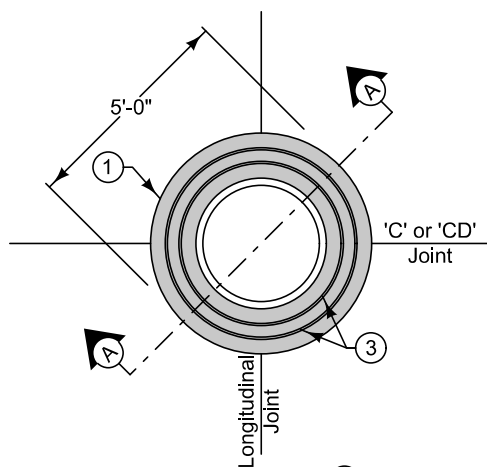
- ① 'KT-1', 'KT-2', 'BT-1', or 'BT-2' joint if three-piece floating casting (SW 601 Type B and D or SW-602 Type F) is used. 'E' joint if two-piece fixed casting (SW 601 Type A and C or SW-602 Type E) is used.
- ② 4 foot 8 inch (typ.) #4 bar. Place at mid-slab.
- ③ #4 hoops (variable length). Place at mid-slab.
- ④ No boxout is required for three-piece floating castings (SW 601 Type B and D or SW-602 Type F). If a boxout is used with a three-piece casting, construct as detailed in Section A-A for three-piece floating casting.
- ⑤ If a circular boxout is cut and extracted after PCC construction, a 'B' joint may be substituted for the 'E' joint if approved by the Engineer.



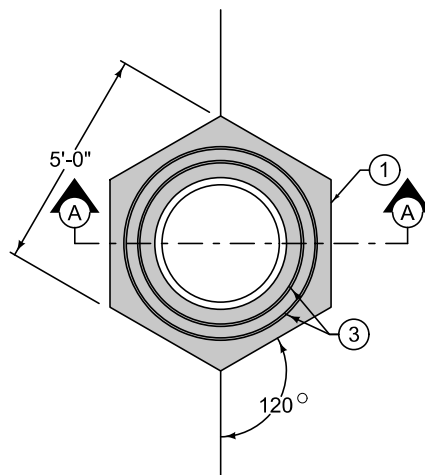
SECTION A-A
(For two-piece fixed casting)



SECTION A-A ④
(For three-piece floating casting)



CIRCULAR

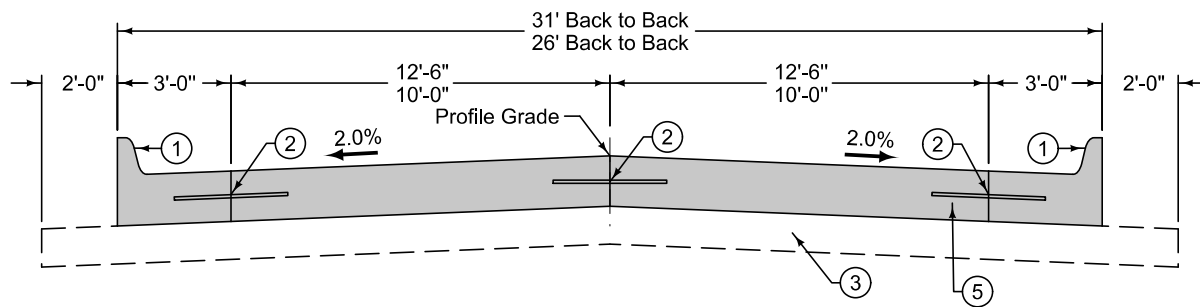
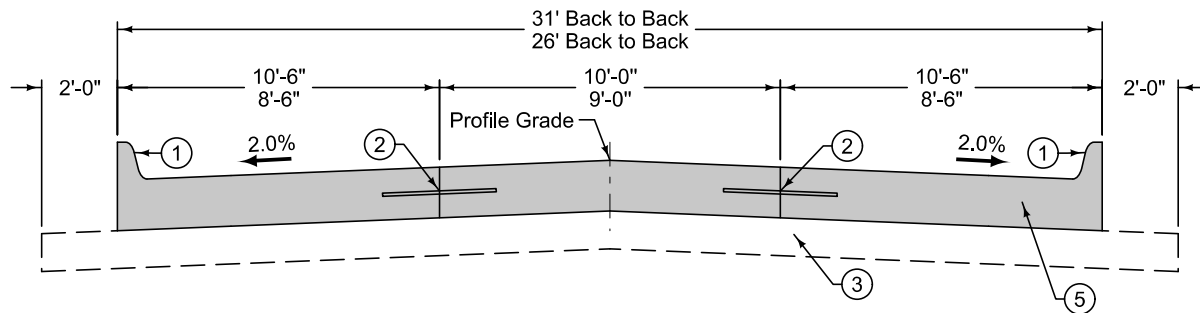
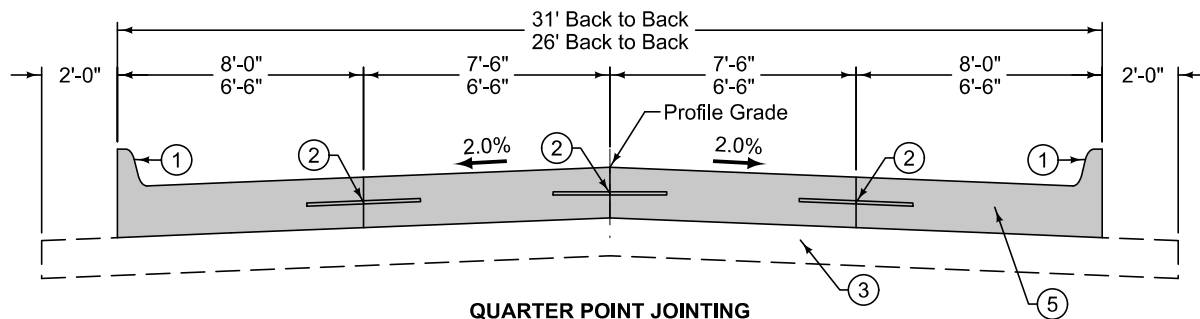


AT A SINGLE JOINT

 SUDAS	 IOWADOT	REVISION	
		2	04-19-22
FIGURE 7010.103	STANDARD ROAD PLAN	PV-103	
		SHEET 1 of 1	

REVISIONS: Added note 5.	
Paul D. Weigand SUDAS DIRECTOR	Steve Miller DESIGN METHODS ENGINEER

MANHOLE BOXOUTS IN
PCC PAVEMENT



- ① 6 inch standard curb.
- ② BT, KT, or L joint depending on pavement thickness and construction staging.
- ③ Subbase or subgrade as specified.
- ④ Unless otherwise specified in the contract documents.
- ⑤ No dowels within 24" of the back of curb. With gutterline joint, place first dowel 6 inches from the joint. See Figure 7010.101, Sheet 8.

TRANSVERSE JOINT REQUIREMENTS ④		
Pavement Thickness	Transverse Joint Type	Transverse Joint Spacing
6"	C	12'
7"	C	15'
8"	CD ⑤	15'
9"	CD ⑤	15'
≥10"	CD ⑤	17'

SUDAS

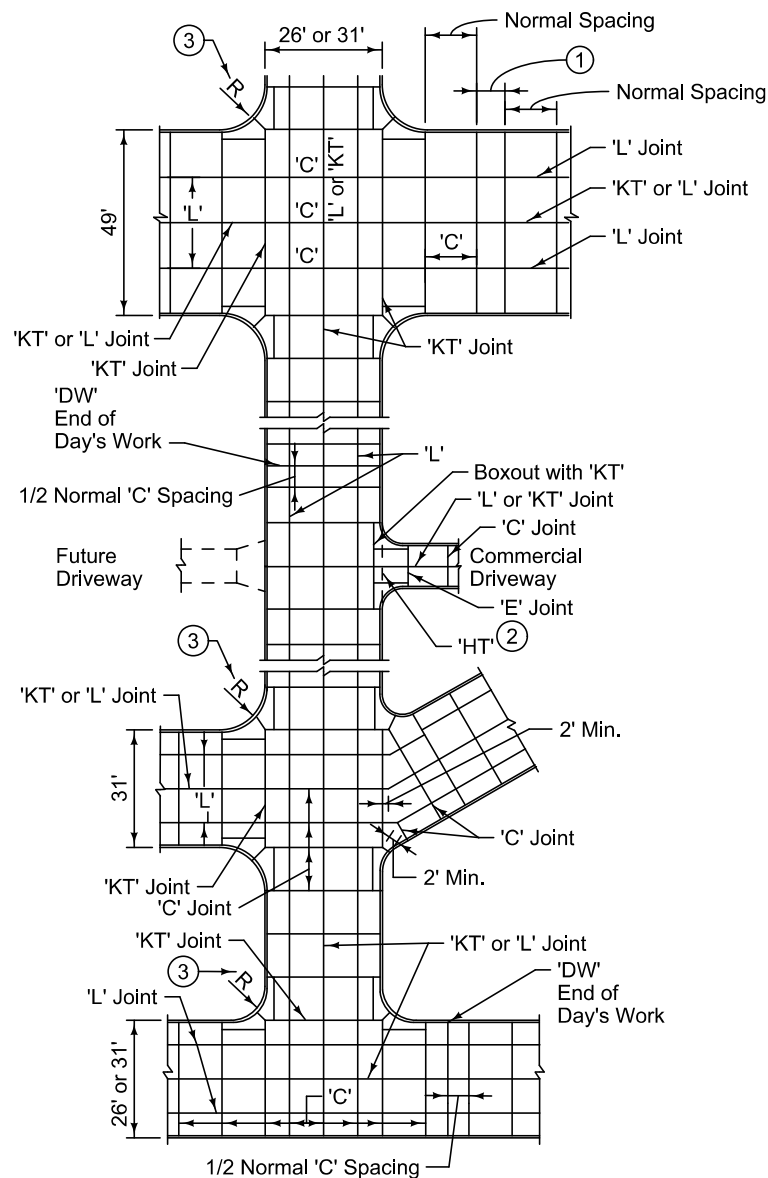
2022 Edition

7010.901

SHEET 1 of 1

SUDAS Standard Specifications

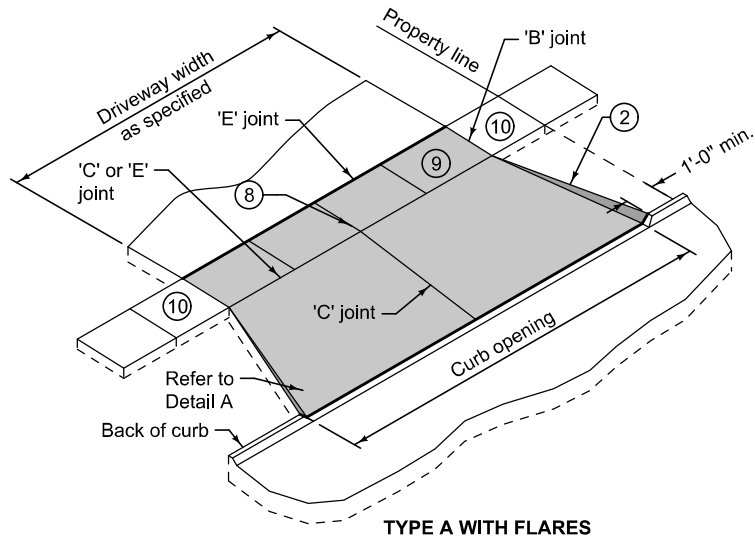
PCC PAVEMENT JOINTING



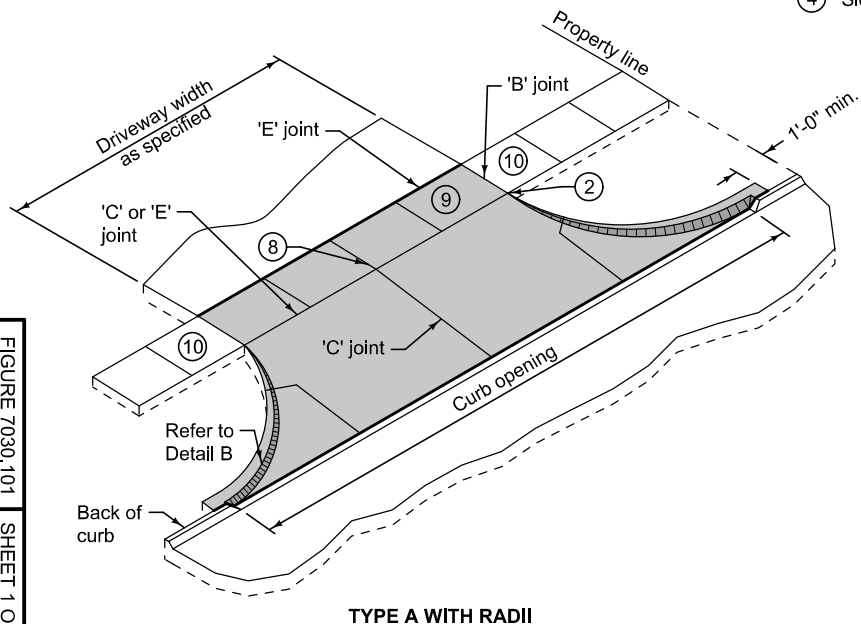
Refer to Figure 7010.901 for maximum transverse joint spacing.

Where new and existing pavements meet, and no existing dowels, tie bars, or keyed joints are present, provide a 'BT', 'RT', or 'RD' joint.

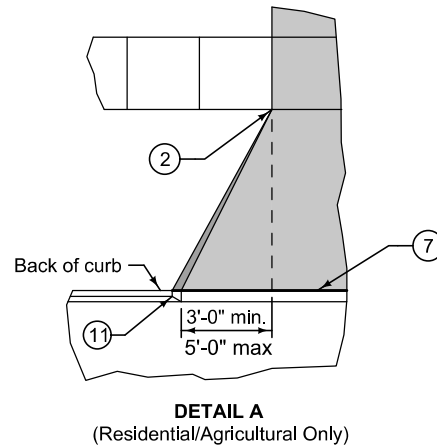
- ① Shorten jointing pattern on either side of openings to allow joints to intersect round castings and fall at the edges of intake boxouts.
- ② Where pavement abuts an unimproved street, terminate with a type 'HT' joint.
- ③ When radius exceed 20 feet, add one additional 'C' joint at radius intersections.



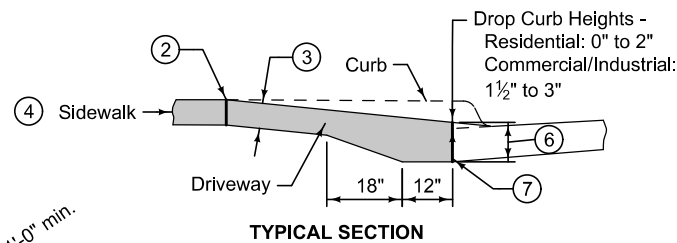
TYPE A WITH FLARES



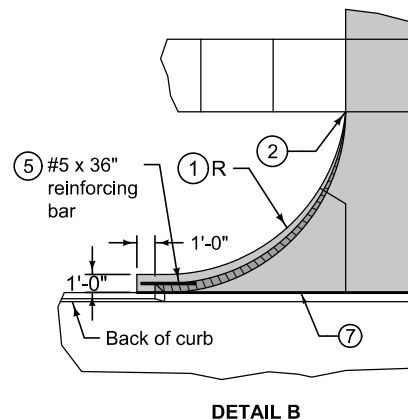
TYPE A WITH RADII



DETAIL A
(Residential/Agricultural Only)

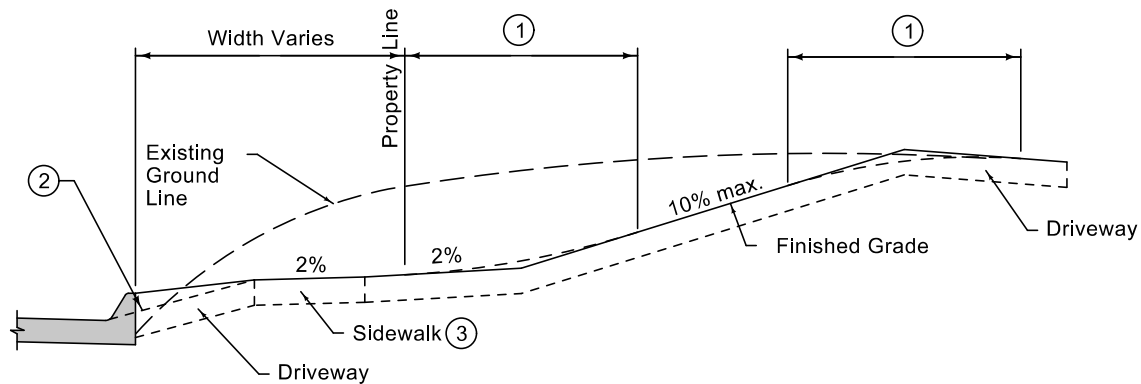


TYPICAL SECTION

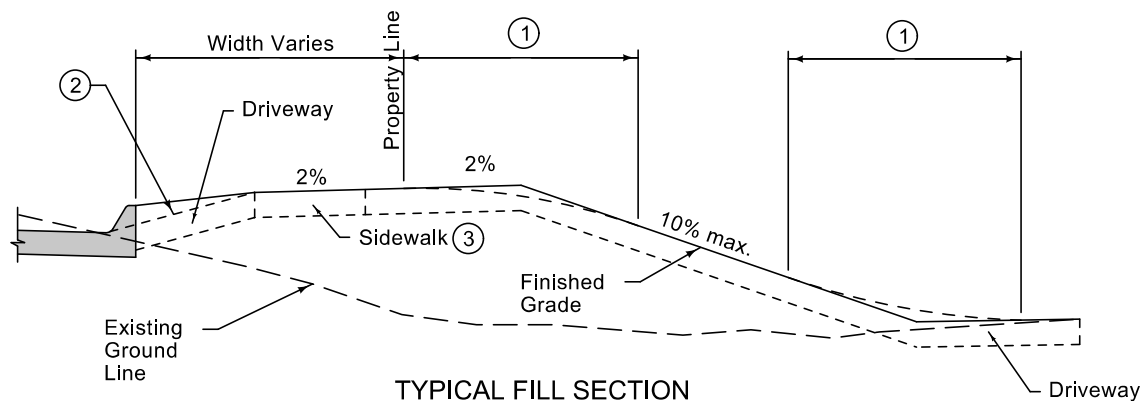


DETAIL B

- ① Driveway radius (R).
Residential: 10 foot minimum, 15 foot maximum.
Commercial and industrial: As specified in the contract documents.
- ② Transition the curb height to 0 inches at end of taper/radius or at the front edge of sidewalk. Do not extend raised curb across sidewalk.
- ③ Pavement thickness.
Residential: 6 inches minimum.
Commercial and industrial: 7 inches minimum.
- ④ Sidewalk thickness through driveway to match thickness of driveway.
- ⑤ Center reinforcing bar vertically in the pavement.
- ⑥ Match thickness of adjacent roadway, 8 inches minimum.
- ⑦ Provide 'E' joint at back of curb unless 'B' joint is specified.
- ⑧ For alleys, invert the pavement crown 2% toward center of alley.
- ⑨ Target cross slope of 1.5% with a maximum cross slope of 2.0%. If specified in the contract documents, construct the sidewalk through the driveway 5 feet wide to serve as a passing space.
- ⑩ If cross slope of adjacent sidewalk panel exceeds 2.0%, remove and replace to transition from existing sidewalk to sidewalk through driveway. If elevation change requires a curb ramp, comply with Figure 7030.205; verify need for detectable warning panel with Engineer.
- ⑪ Transition street curb at minimum 1:1 slope to meet driveway curb.



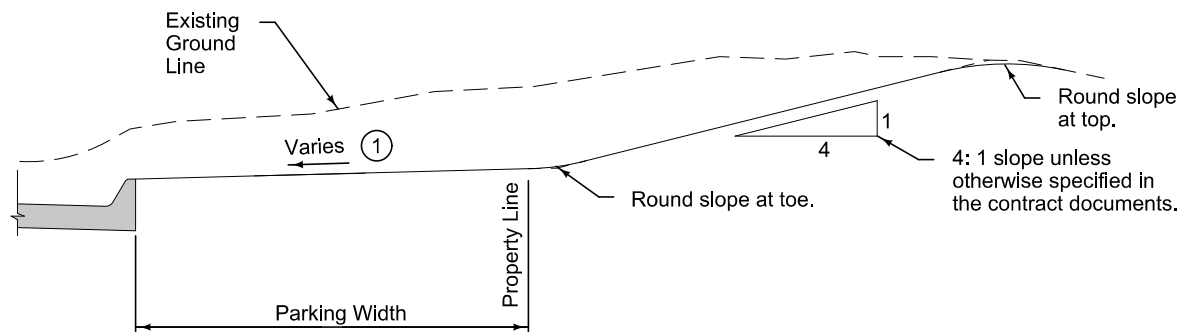
TYPICAL CUT SECTION



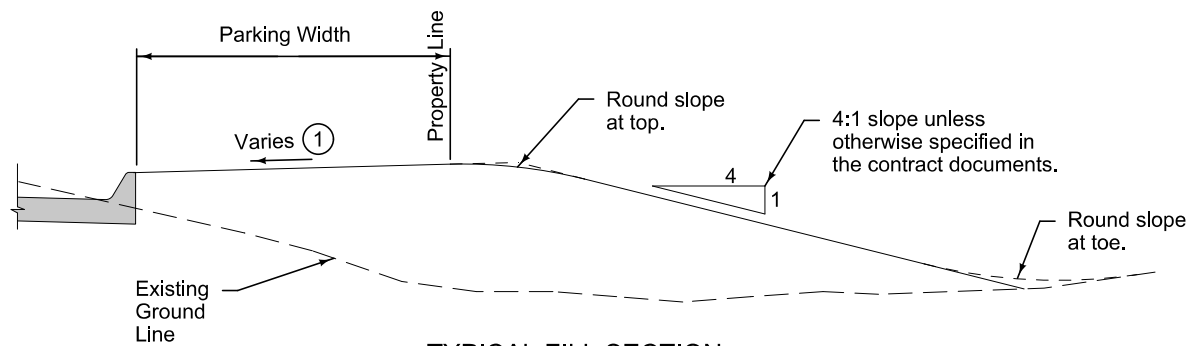
TYPICAL FILL SECTION

- ① 10 foot vertical curve required for 5% or greater change in grade.
- ② Slope varies. See contract documents.
- ③ Target cross slope of 1.5% with a maximum cross slope of 2.0%.

	REVISION 2 10-20-15	
	SUDAS 7030.103	
	SHEET 1 of 1	
SUDAS Standard Specifications		
DRIVEWAY GRADING		



TYPICAL CUT SECTION

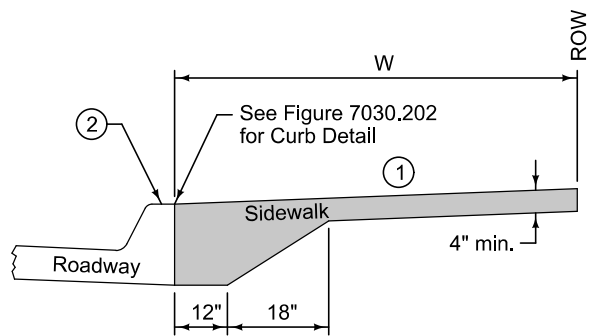


TYPICAL FILL SECTION

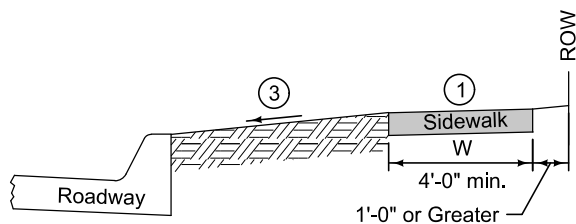
- ① Parking Slope:
If parking width is less than 10 feet wide, slope at 1/4 inch per foot.

If parking width is 10 feet wide and greater, slope at 1/2 inch per foot.

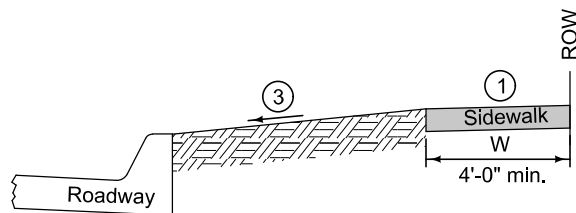
	REVISION	
	1	10-21-14
	7030.104 SHEET 1 of 1	
SUDAS Standard Specifications		
RIGHT-OF-WAY GRADING		



CLASS A SIDEWALK
(Sidewalk extends from back of curb to ROW)



CLASS B SIDEWALK



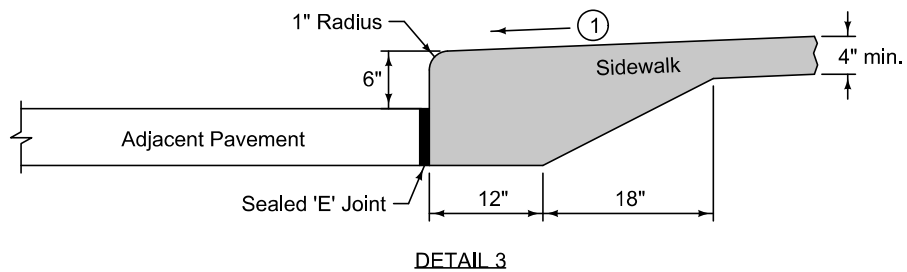
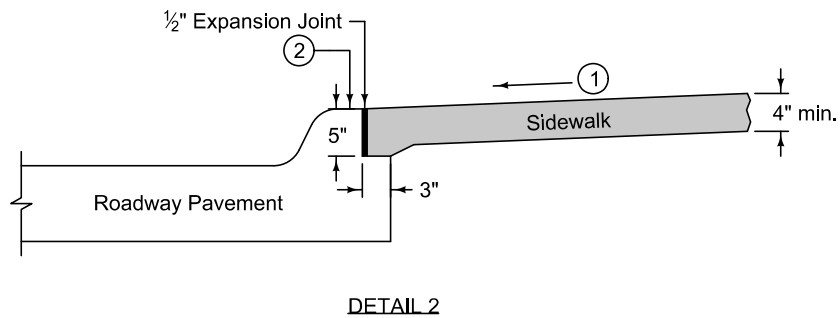
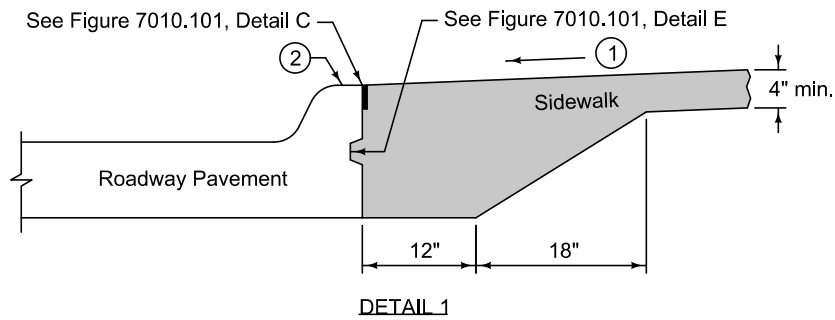
CLASS C SIDEWALK

- ① Target cross slope of 1.5% with a maximum cross slope of 2.0% (including sidewalk through driveway).
- ② Ensure top of curb slopes to street for drainage.
- ③ Parking Slopes:
If parking width is less than 10 feet wide, slope at $\frac{1}{4}$ inch per foot.
If parking width is 10 feet wide and greater, slope at $\frac{1}{2}$ inch per foot.

Special grade may be specified in the contract documents.

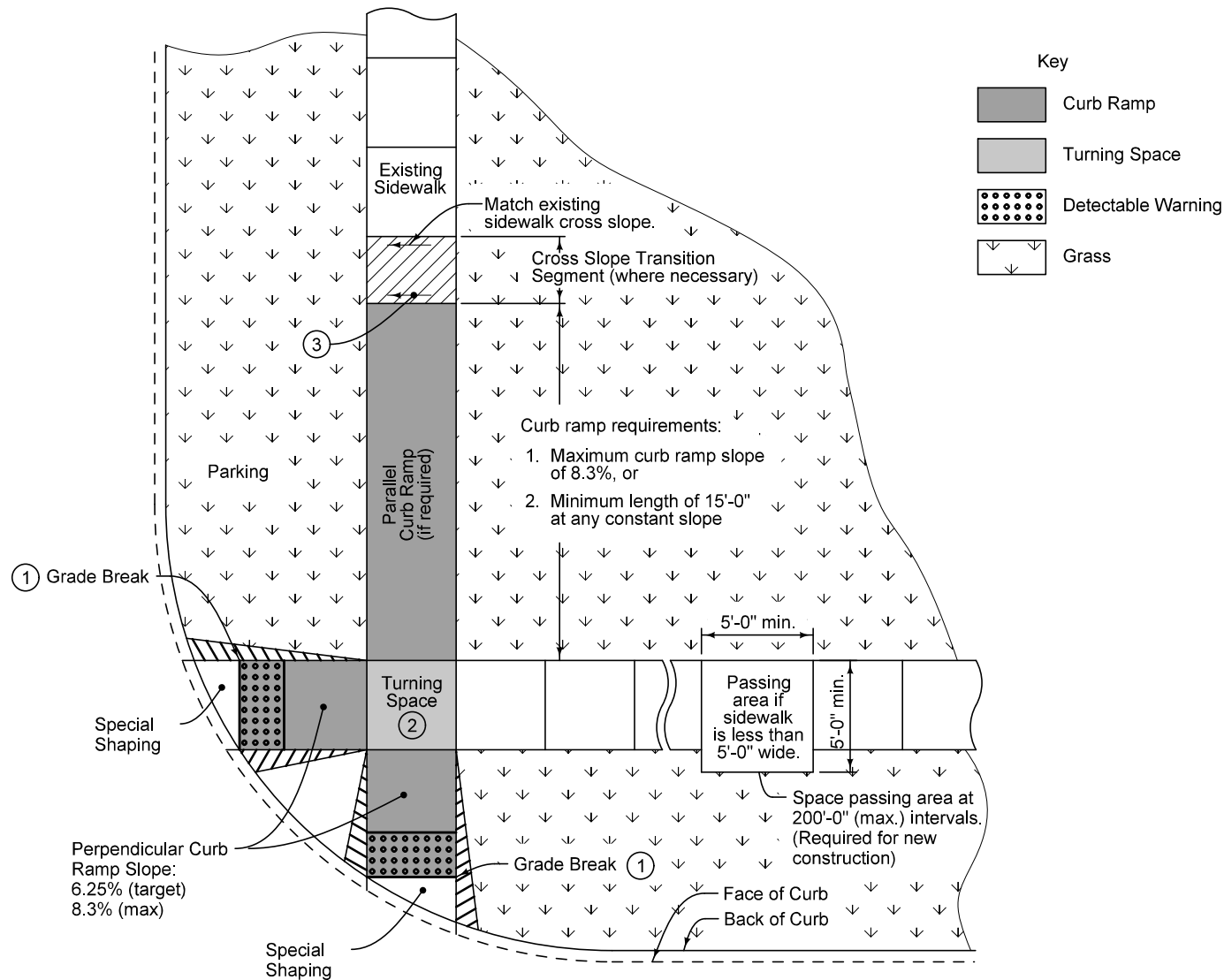
W = Sidewalk width as specified in the contract documents.

	REVISION	
	3	2022 Edition
	7030.201	
	SHEET 1 of 1	
SUDAS Standard Specifications		
CLASSES OF SIDEWALKS		



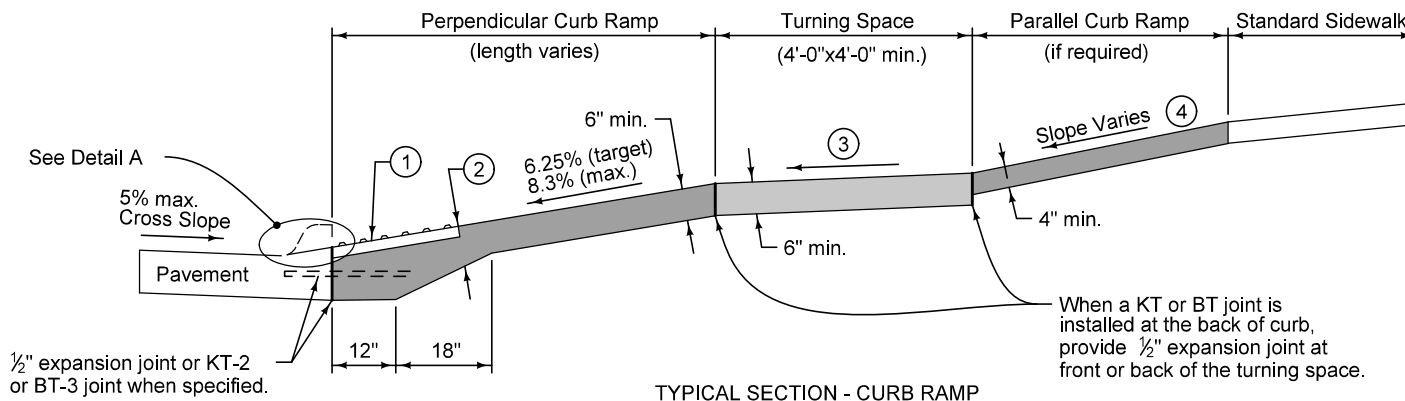
For new sidewalk with new curb and gutter, comply with Detail 1 or Detail 2. Comply with Detail 3 for new sidewalk adjacent to existing pavement or when specified in the contract documents.

- ① Target cross slope of 1.5% with a maximum cross slope of 2.0%.
- ② Ensure top of curb slopes to street for drainage.



- ① Match pedestrian street crossing slope, or flatter.
- ② Minimum 4 feet by 4 feet. Target cross slope of 1.5% with a maximum cross slope of 2.0%.
- ③ Target cross slope of 1.5% with a maximum cross slope of 2.0%.

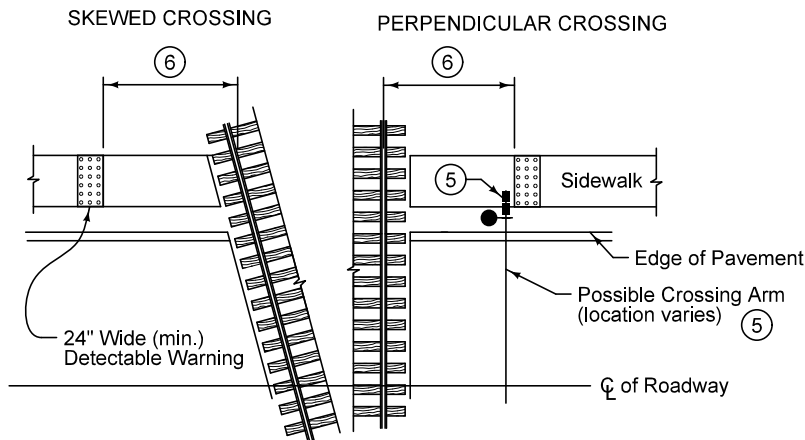
	REVISION	
	3	10-20-15
	7030.204 SHEET 1 of 1	
SUDAS Standard Specifications		
GENERAL FEATURES OF AN ACCESSIBLE SIDEWALK		



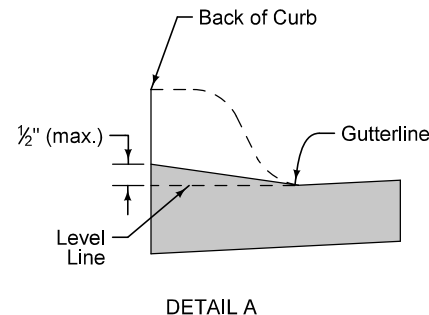
TYPICAL SECTION - CURB RAMP

Key

-  Curb Ramp
-  Turning Space
-  Detectable warning



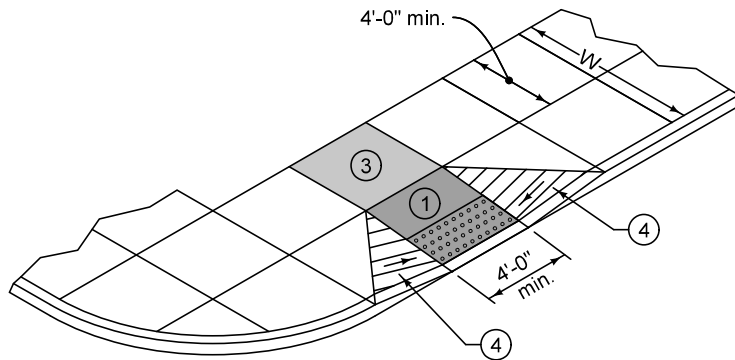
DETECTABLE WARNING LOCATION AT RAILROAD CROSSING



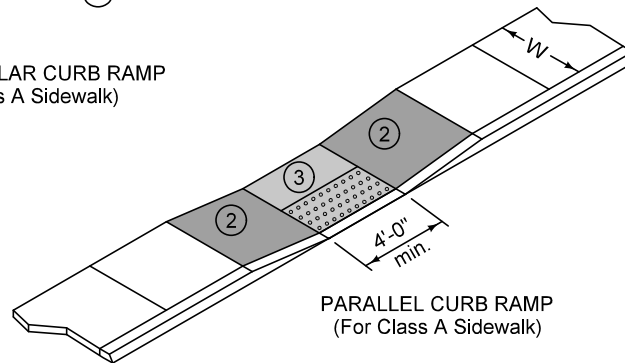
- ① Provide a minimum 2 foot width of detectable warning surfaces in the direction of pedestrian travel across the full width of the curb ramp or turning space, exclusive of curbs or flares.
- ② Provide a minimum of 6 inches of concrete below the detectable warning panel.
- ③ Minimum 4 feet by 4 feet. Target cross slope of 1.5% with a maximum cross slope of 2.0%.
- ④ If normal sidewalk elevation cannot be achieved with the perpendicular ramp between the street and landing due to limited ramp length, provide a parallel ramp to make up the elevation difference between the landing and the standard sidewalk.

The length of the parallel ramp is not required to exceed 15 feet, regardless of the resulting slope. Do not exceed 8.3% slope for parallel ramps shorter than 15 feet.
- ⑤ If crossing gate conflicts with location of detectable warning or if pedestrian crossing gate is provided, place detectable warning panel in advance of the crossing gate.
- ⑥ Locate front edge of detectable warning panel 12 to 15 feet from centerline of nearest rail. Orient truncated domes parallel to the direction of pedestrian travel.

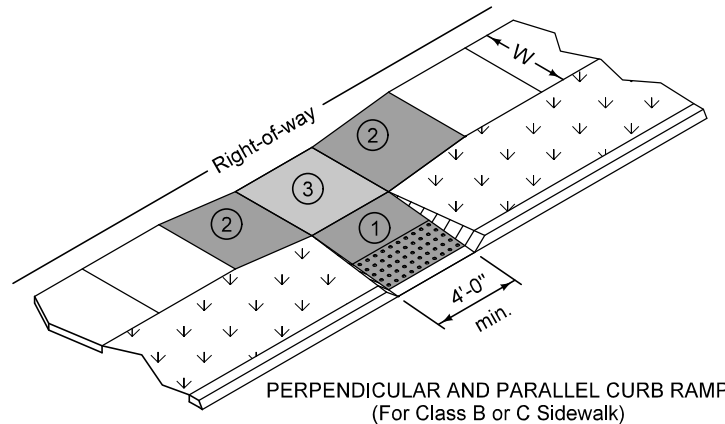
	REVISION	
	1	10-20-15
	7030.205 SHEET 1 of 1	
SUDAS Standard Specifications		
GENERAL SIDEWALK AND CURB RAMP DETAILS		



PERPENDICULAR CURB RAMP
(For Class A Sidewalk)



PARALLEL CURB RAMP
(For Class A Sidewalk)



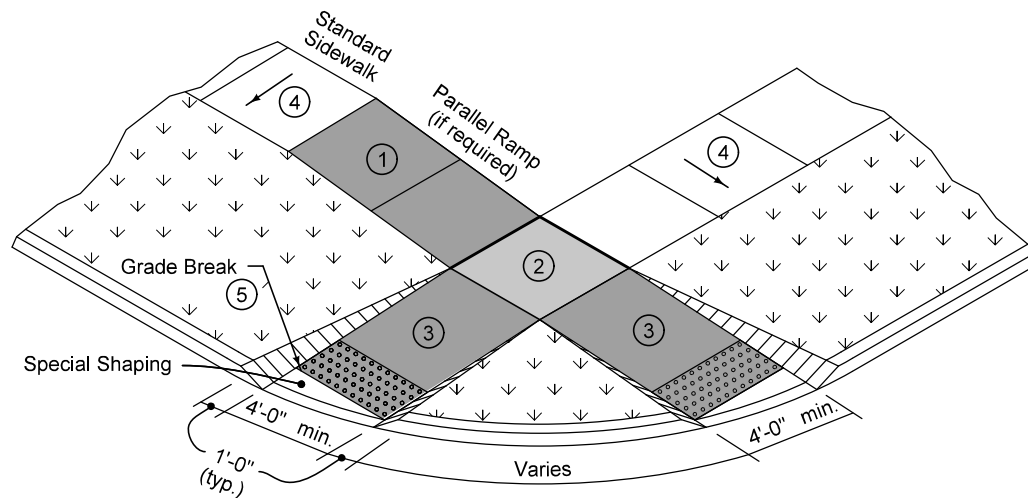
PERPENDICULAR AND PARALLEL CURB RAMP
(For Class B or C Sidewalk)

Key

-  Curb Ramp
-  Turning Space
-  Detectable Warning

- ① Perpendicular Curb Ramp: Target running slope of 6.25% with maximum running slope of 8.3%. Match pedestrian street crossing cross slope at back of curb. At mid-block crossings, cross slope may exceed 2.0% to match roadway grade.
- ② Parallel Curb Ramp: Target cross slope of 1.5% with a maximum cross slope of 2.0%. The length of the parallel ramp is not required to exceed 15 feet, regardless of resulting slope. Do not exceed 8.3% slope for parallel ramps shorter than 15 feet.
- ③ Turning Space: Target slope of 1.5%, with a maximum slope perpendicular to the travel directions of 2.0%. At mid-block crossings, cross slope of landing may exceed 2.0% to match roadway grade. Minimum 4 feet by 4 feet.
- ④ Flare (10:1 max.) required if ramp is contiguous with sidewalk.

	REVISION
	New 10-16-12
	7030.206
SHEET 1 of 1	
SUDAS Standard Specifications	
CURB RAMPS OUTSIDE OF INTERSECTION RADIUS	

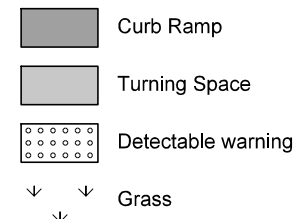


- ① Parallel Curb Ramp: If normal sidewalk elevation cannot be achieved with the perpendicular ramp between the street and landing due to limited ramp length, provide a parallel ramp to make up the elevation difference between the landing and the standard sidewalk.

The length of the parallel ramp is not required to exceed 15 feet, regardless of the resulting slope. Do not exceed 8.3% slope for parallel ramps shorter than 15 feet.

- ② Turning Space: Target slope of 1.5% with maximum slope perpendicular to the travel directions of 2.0%. Minimum 4 feet by 4 feet.
- ③ Perpendicular Curb Ramp: Target running slope of 6.25% with maximum running slope of 8.3%.
- ④ Target cross slope of 1.5% with a maximum cross slope of 2.0%.
- ⑤ Match pedestrian street crossing cross slope or flatter.

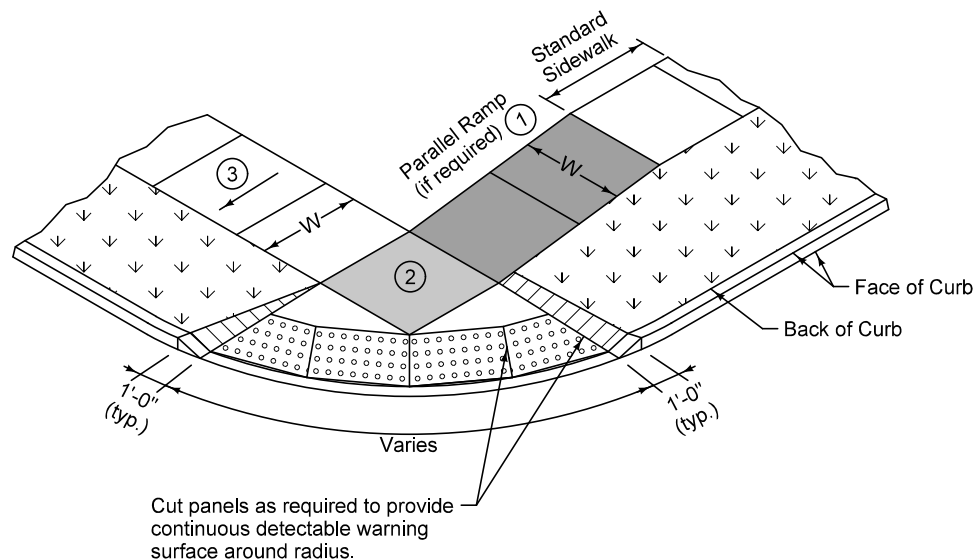
Key



REVISION	
New	10-16-12
SUDAS	
7030.207	
SHEET 1 of 1	

SUDAS Standard Specifications

CURB RAMP FOR
CLASS B OR C SIDEWALK



- ① Parallel Curb Ramp: If normal sidewalk elevation cannot be achieved with the perpendicular ramp between the street and landing due to limited ramp length, provide a parallel ramp to make up the elevation difference between the landing and the standard sidewalk.

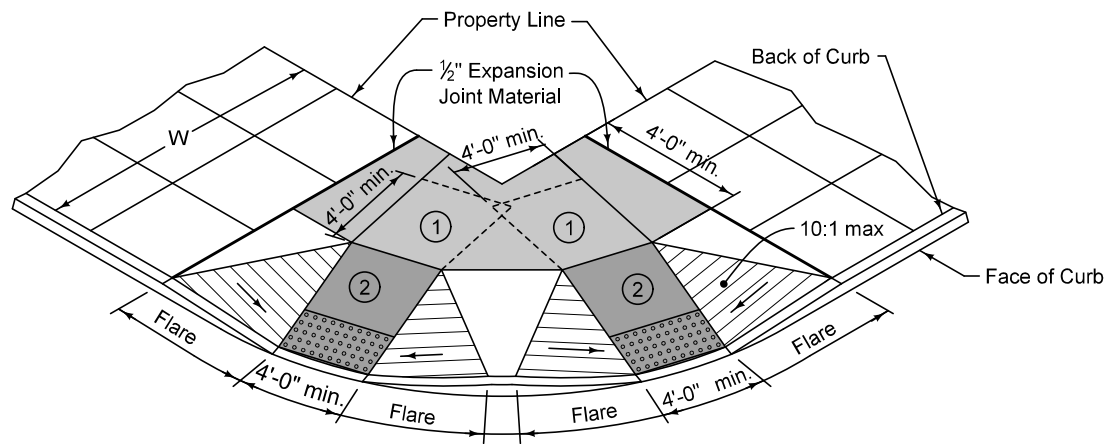
The length of the parallel ramp is not required to exceed 15 feet, regardless of the resulting slope. Do not exceed 8.3% slope for parallel ramps shorter than 15 feet.

- ② Turning Space: Target slope of 1.5% with maximum slope perpendicular to the direction of travel of 2.0%. Minimum 4 feet by 4 feet.
- ③ Target cross slope of 1.5% with a maximum cross slope of 2.0%.

Key

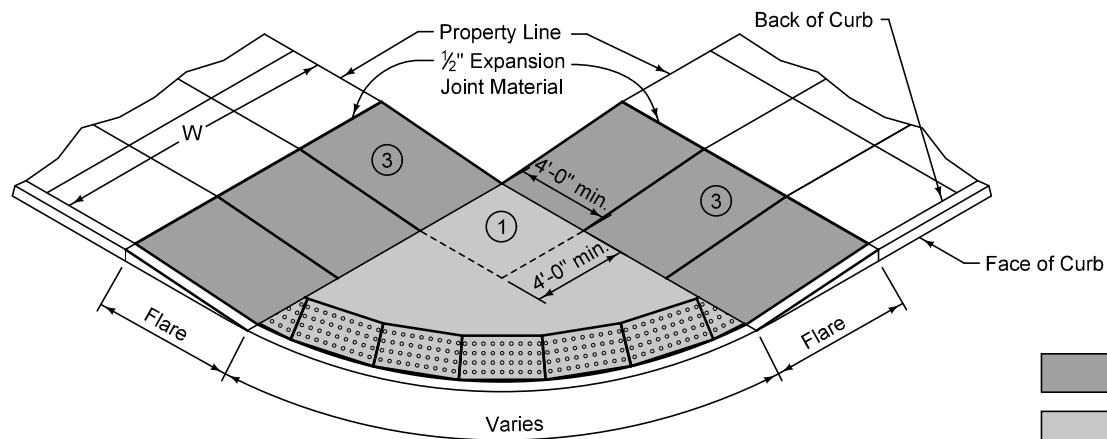
	Curb Ramp
	Turning Space
	Detectable warning
	Grass

	SUDAS 7030.208 SHEET 1 of 1
	SUDAS Standard Specifications
	ALTERNATIVE CURB RAMP FOR CLASS B OR C SIDEWALK

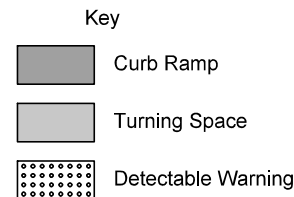


CLASS A SIDEWALK CURB RAMP

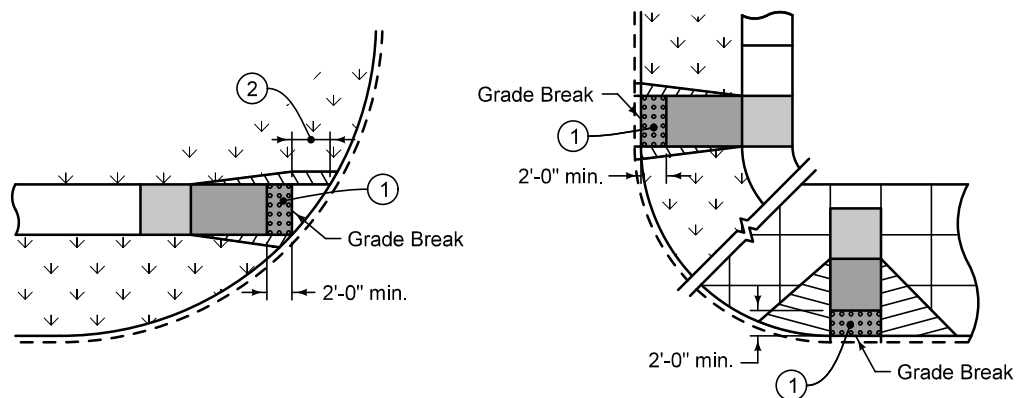
- ① Turning Space: Target slope of 1.5% with maximum slope perpendicular to the travel direction of 2.0%. Minimum 4 feet by 4 feet (turning spaces may overlap).
- ② Perpendicular Curb Ramp: Target running slope of 6.25% with maximum running slope of 8.3%.
- ③ Parallel Curb Ramp: Target running slope of 6.25% with maximum running slope of 8.3%. The length of the parallel ramp is not required to exceed 15 feet, regardless of the resulting slope. Do not exceed 8.3% for parallel ramps shorter than 15 feet.



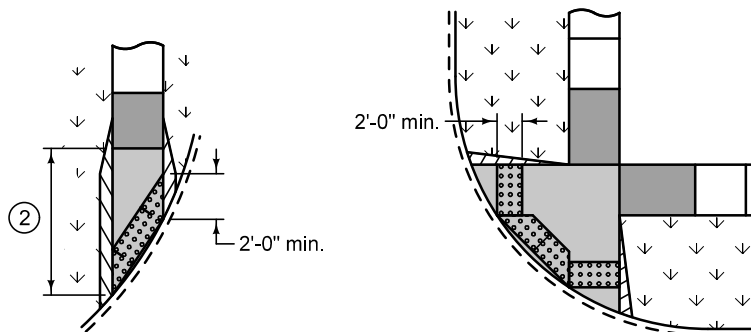
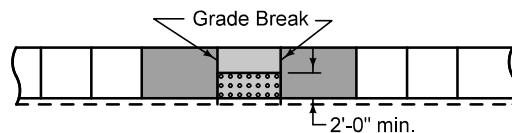
CLASS A SIDEWALK CURB RAMP ALTERNATIVE



	REVISION
	New 10-16-12
	7030.209
SHEET 1 of 1	
SUDAS Standard Specifications	
CURB RAMPS FOR CLASS A SIDEWALK	



PERPENDICULAR RAMPS



PARALLEL RAMPS

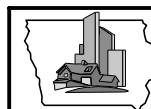
Provide a minimum 2 foot width of detectable warning surfaces in the direction of pedestrian travel across the full width of the curb ramp or turning space, exclusive of curbs or flares.

- ① When detectable warning is located on curb ramp surface, orient domes in the direction of pedestrian travel.
- ② When the distance between the grade break and the back of curb is less than 5 feet, place detectable warning surface at the bottom of the curb ramp.

Where one corner of the curb ramp is more than 5 feet from the back of curb, construct curb ramp as a parallel curb ramp. Move grade break back as required to place detectable warning on turning space at the back of curb.

Key

-  Curb Ramp
-  Turning Space
-  Detectable Warning



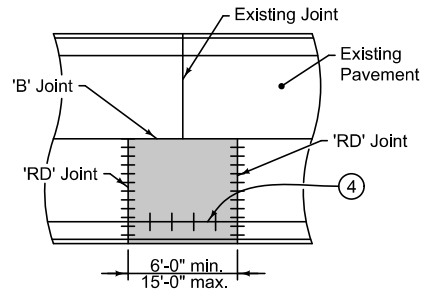
SUDAS

REVISION	
New	10-16-12
7030.210	
SHEET 1 of 1	

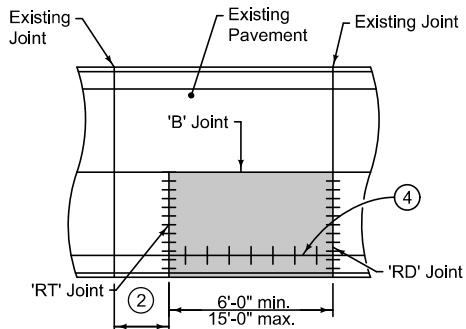
SUDAS Standard Specifications

DETECTABLE WARNING
PLACEMENT

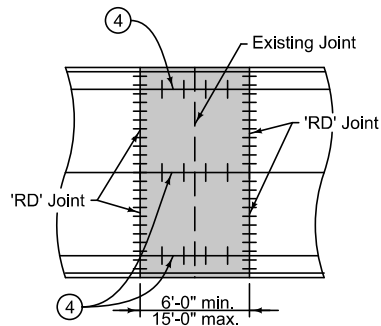
GUTTERLINE JOINTING



**ONE PANEL WIDTH PATCH
WITH OPPOSING JOINT**

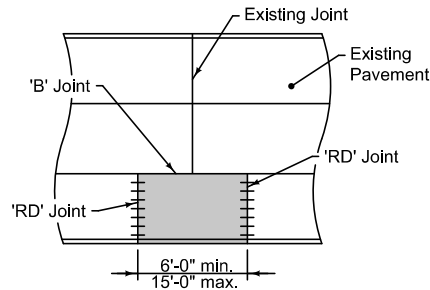


**ONE PANEL WIDTH PATCH
NO OPPOSING JOINT**

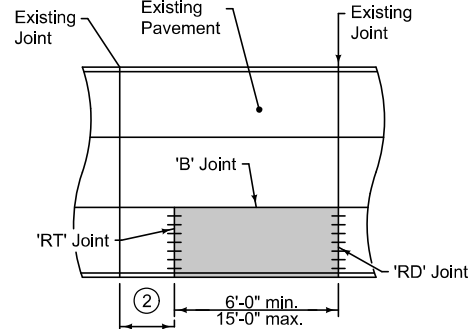


**FULL ROADWAY
WIDTH PATCH**

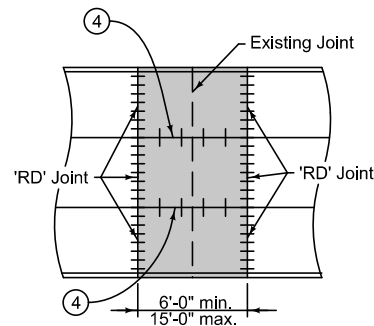
THIRD POINT JOINTING



**OUTSIDE PANEL PATCH
WITH OPPOSING JOINT**

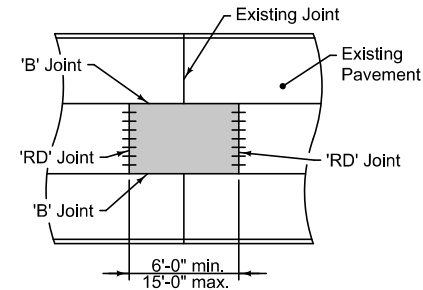


**OUTSIDE PANEL PATCH
NO OPPOSING JOINT**

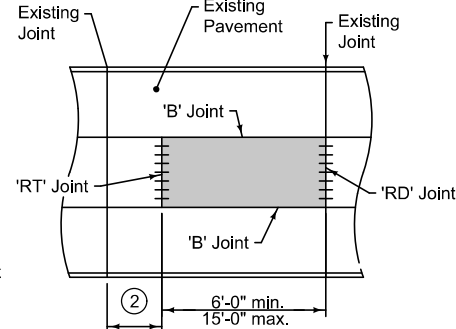


**FULL ROADWAY
WIDTH PATCH**

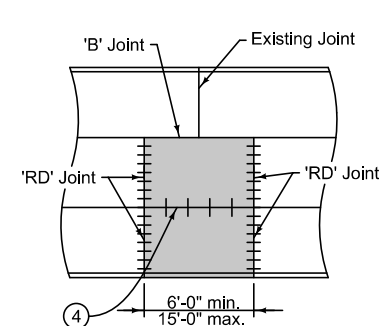
①



**CENTER PANEL PATCH
WITH OPPOSING JOINTS**



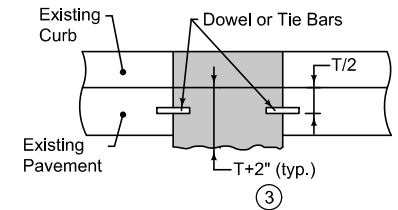
**CENTER PANEL PATCH
NO OPPOSING JOINT**



**ADJACENT PANELS
PATCH**

- ① Patches on roadways with quarter point jointing will be similar to third point jointing details.
- ② Minimum distance between existing joint and patch is 6 feet. If distance is less than 6 feet, extend patch to existing joint.
- ③ If subgrade or subbase material is required below patch, bring material to a level 2 inches below bottom of existing pavement.
- ④ BT, KT, or L joint depending on pavement thickness and pouring sequence.

LONGITUDINAL SECTION THRU PCC PATCH

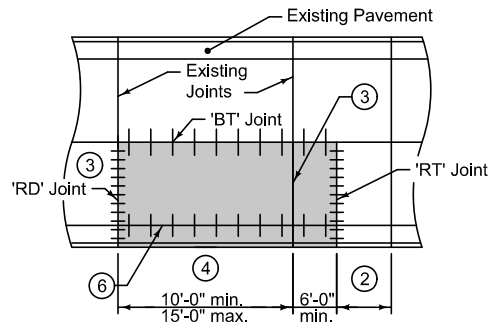


REVISION	
3	2021 Edition
SUDAS 7040.101	
SHEET 1 of 1	

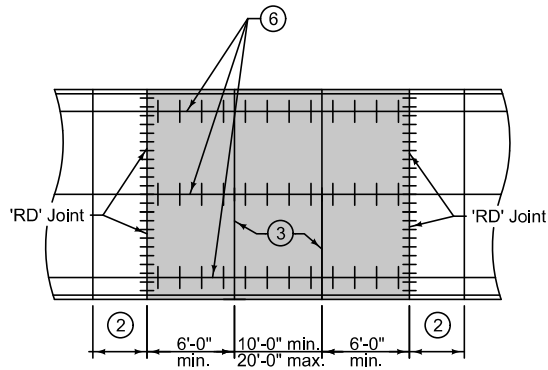
SUDAS Standard Specifications

FULL DEPTH PCC PATCHES
LESS THAN OR EQUAL TO 15' LONG

GUTTERLINE JOINTING

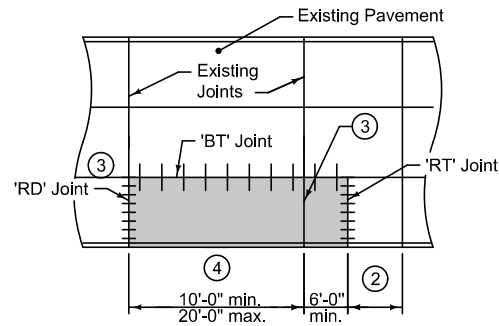


ONE PANEL WIDTH PATCH

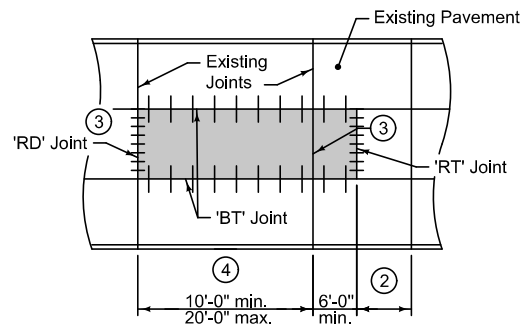


FULL ROADWAY
WIDTH PATCH

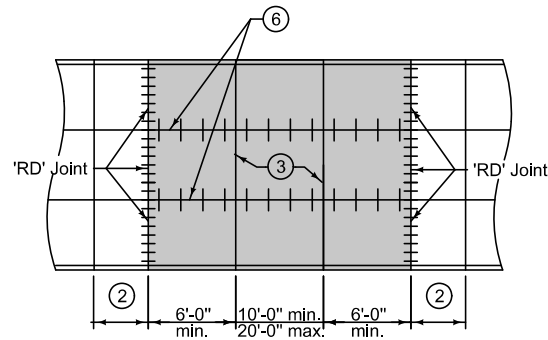
THIRD POINT JOINTING ①



OUTSIDE PANEL PATCH



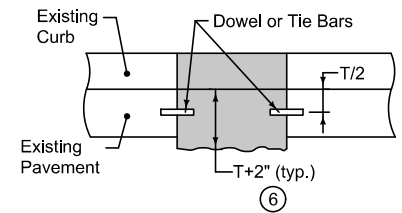
CENTER PANEL PATCH

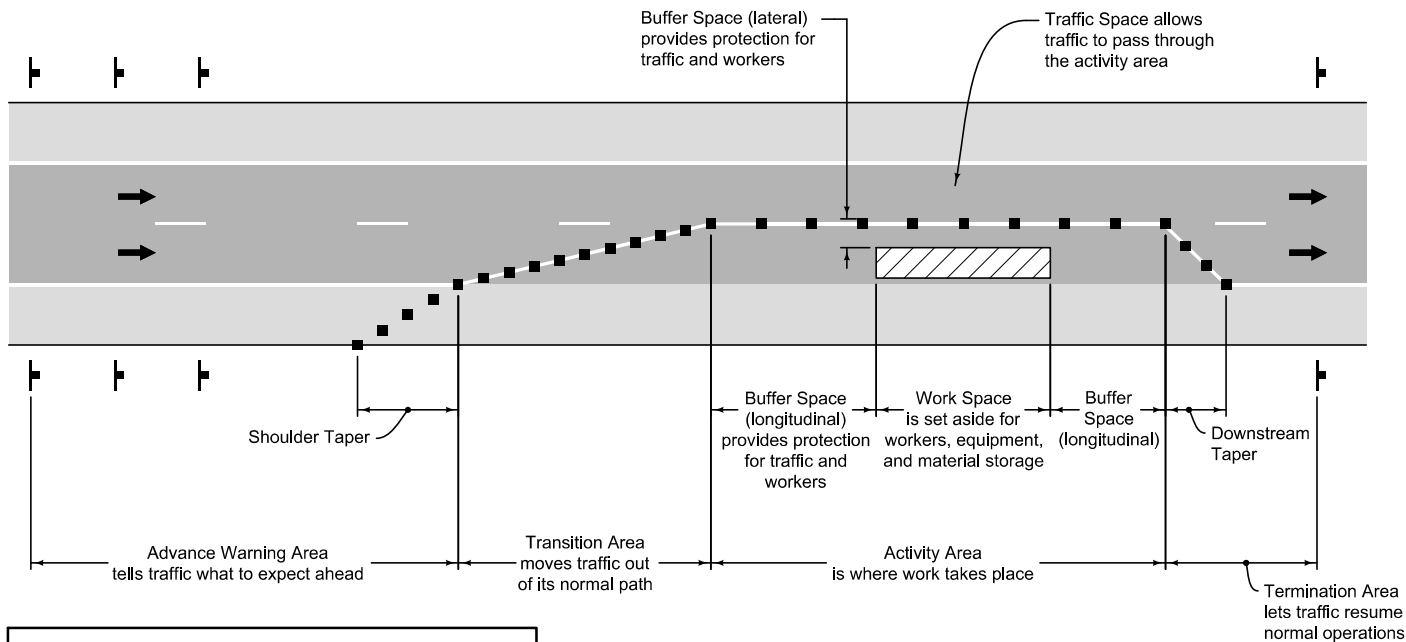


FULL ROADWAY
WIDTH PATCH

- ① Patches on roadways with quarter point jointing will be similar to third point jointing details.
- ② Minimum distance between existing joint and patch is 6 feet. If distance is less than 6 feet, extend patch to existing joint.
- ③ Match existing joint type and locations. If specified, replace existing 'C' joints with 'CD' joints.
- ④ If existing joint spacing is greater than 20 feet, add a 'CT' joint at mid-panel.
- ⑤ If subgrade or subbase material is required below patch, bring material to a level 2 inches below bottom of existing pavement.
- ⑥ BT, KT, or L joint depending on pavement thickness and pouring sequence

LONGITUDINAL SECTION THRU PCC PATCH





It may be necessary to combine two or more examples to adequately address the traffic control needed.

Utilize vehicle warning lights (amber, high-intensity rotating, flashing, oscillating, or strobe light) on all shadow and work vehicles.

Vehicle hazard lights may be used to supplement warning lights. Do not use hazard lights alone.

Flags may be used to call attention to the advanced warning signs.

If a closure extends overnight, utilize channelizing devices with retroreflective sheeting.

Speed limit refers to the legally established and signed speed limit.

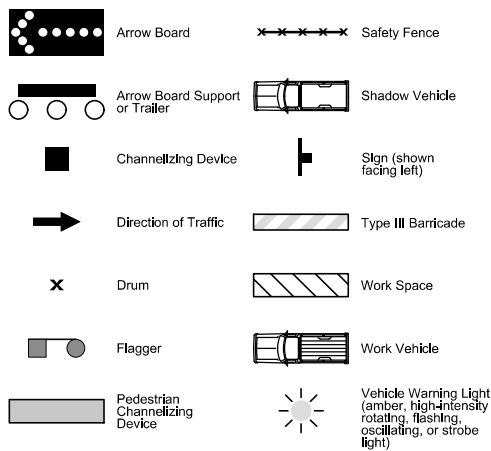
If an arrow board is used on 2-lane roads, operate only in the caution mode.

Adjust the position of warning signs and channelizing devices for available sight distance.

Do not install temporary traffic control devices until work is ready to begin, and remove or cover all signs and devices promptly when they are not needed.

The END WORK (G20-2) signs shown on all figures are optional.

Key*



*Applies to all Section 8030 figures

Distance Between Signs

Speed Limit (mph)	A
20-25	100
30-40	250
45-50	350
55	500

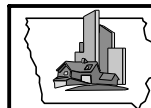
Channelizing Device Spacing

Speed Limit (mph)	Taper (ft)	Buffer (ft)	Work Space (ft)
20	20	40	40
25	25	50	50
30	30	60	60
35	35	70	70
40	40	80	80
45	45	90	90
50	50	100	100
55	55	110	110

Merging Taper Lengths for Lane Closure*

Speed Limit (mph)	Taper Length (L) (ft)	Number of Devices
20	80	5
25	125	6
30	180	7
35	245	8
40	320	9
45	540	13
50	600	13
55	660	13

*Values shown are for a 12 foot shift. Table does not apply to one-lane, two-way (flagger) tapers

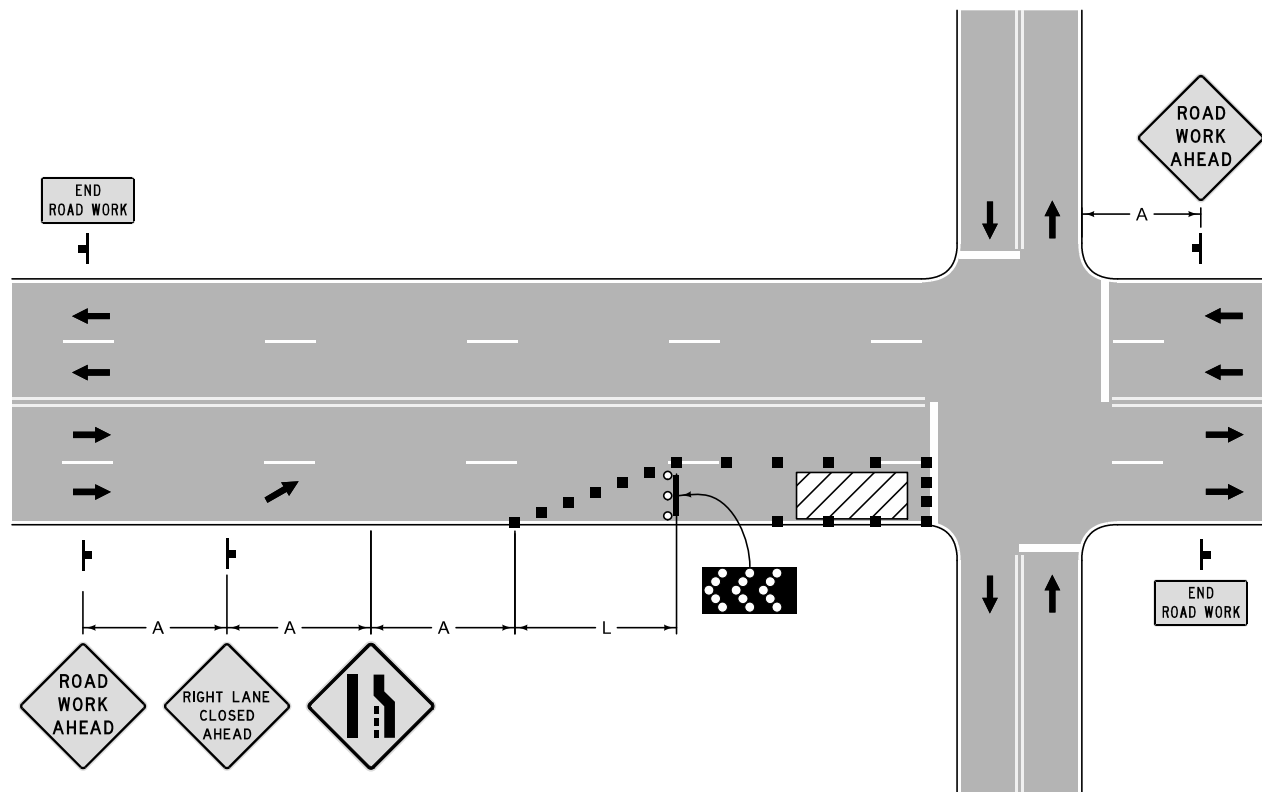


SUDAS

REVISION	
New	10-17-17
8030.101	
SHEET 1 of 1	

SUDAS Standard Specifications

TEMPORARY TRAFFIC CONTROL
GENERAL INFORMATION



Place arrow board within the closed lane behind the channelizing devices and as close to the beginning of the taper as practical, while keeping it on the paved surface.

If the work area extends across the crosswalk, the crosswalk should be closed using appropriate information and devices.

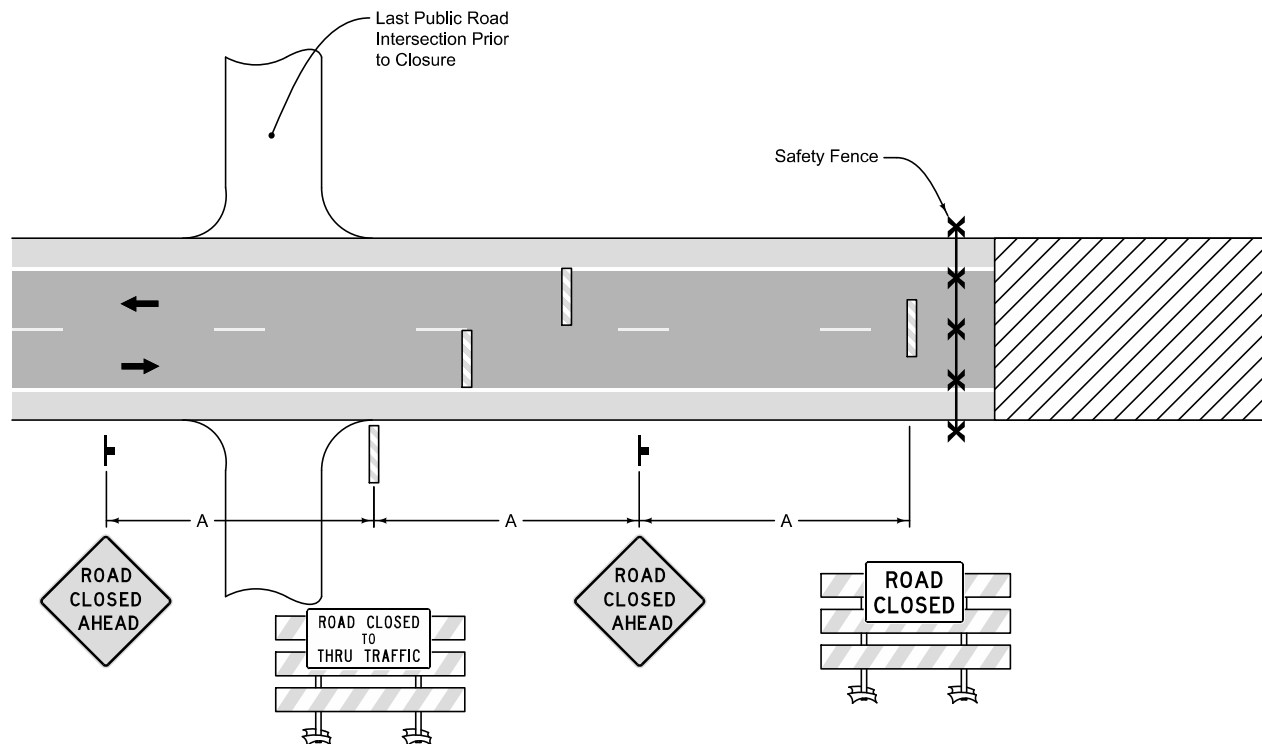
For traffic signal maintenance, consider using law enforcement and/or a shadow vehicle.

For intersection approaches reduced to a single lane, left-turning movements may be prohibited to maintain capacity for through motor vehicle traffic.

Right lane closure shown; for left lane closure, modify sign messages and arrow board.

Refer to Figure 8030.101 for symbol key and sign spacing.

 SUDAS	REVISION
	New 10-17-17
	8030.111
SHEET 1 of 1	
SUDAS Standard Specifications	
LANE CLOSURE AT AN INTERSECTION	



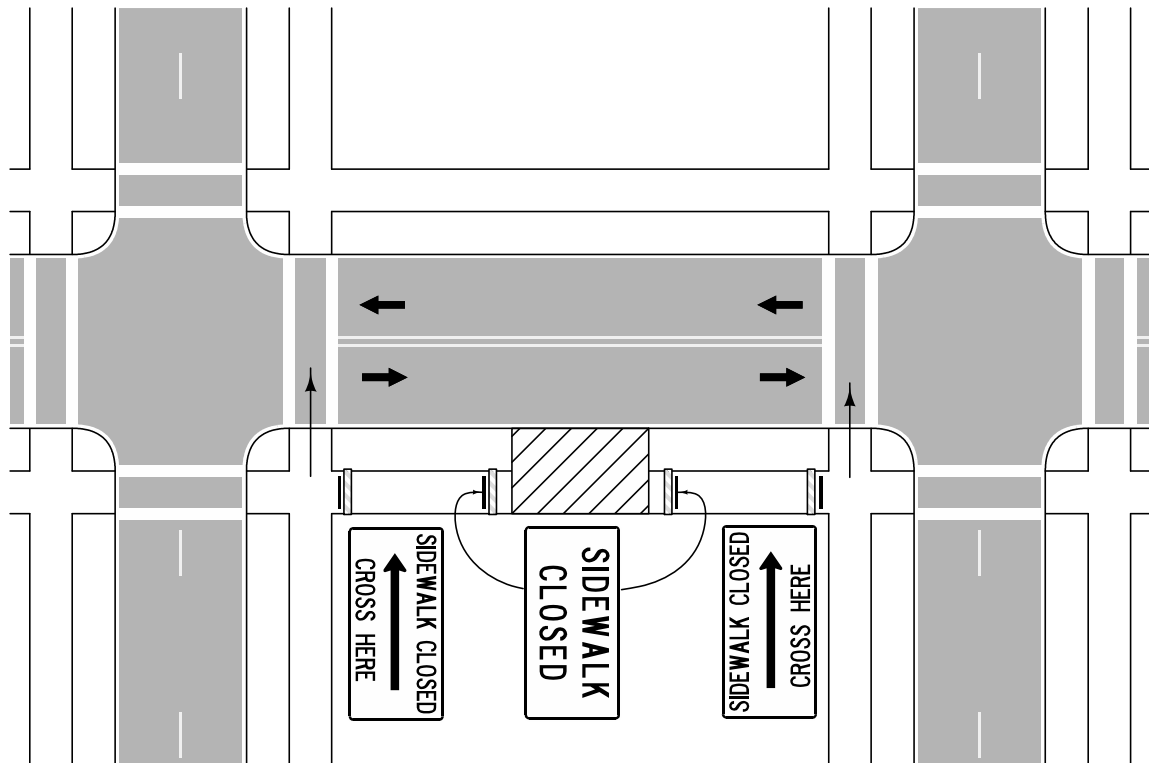
When distance "A" is less than 500 feet, place the barricade with the ROAD CLOSED TO THRU TRAFFIC sign in the middle of the traffic lane approaching the work area. The barricade may be omitted if the distance to the work area is less than 250 feet.

Maintain safety fence closures to prevent unauthorized vehicles from passing through.

Place staggered Type III barricades in the roadway after the last public road intersection prior to the closure.

If local traffic is allowed to pass a Type III barricade, retroreflective sheeting is required on both sides of the barricade.

Refer to Figure 8030.101 for symbol key and sign spacing.



Use when crosswalks, sidewalks, or other pedestrian facilities are closed or relocated. Ensure temporary facilities are detectable and include accessibility features consistent with the features present in the existing pedestrian facility.

Signs such as KEEP RIGHT (LEFT) may be placed to guide or direct pedestrians.

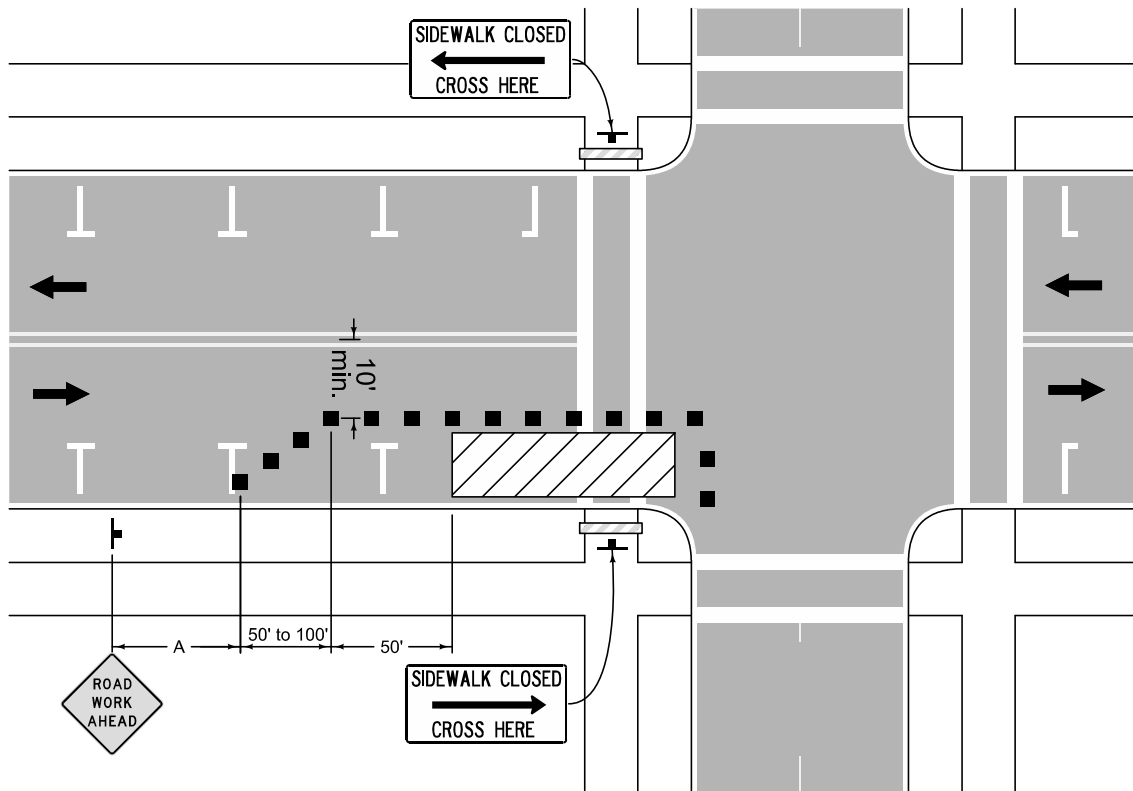
Provide continuous barriers or fencing complying with the requirements of PROWAG to secure work areas from pedestrians.

When required in the contract documents, provide auxiliary lighting or audible information devices to assist pedestrians with visual disabilities.

Only the temporary traffic control devices related to pedestrians are shown. Other devices related to control of vehicular traffic may be necessary.

Refer to Figure 8030.101 for symbol key and sign spacing.

	REVISION	
	New	10-17-17
	8030.117 SHEET 1 of 1	
SUDAS Standard Specifications		
SIDEWALK DETOUR		

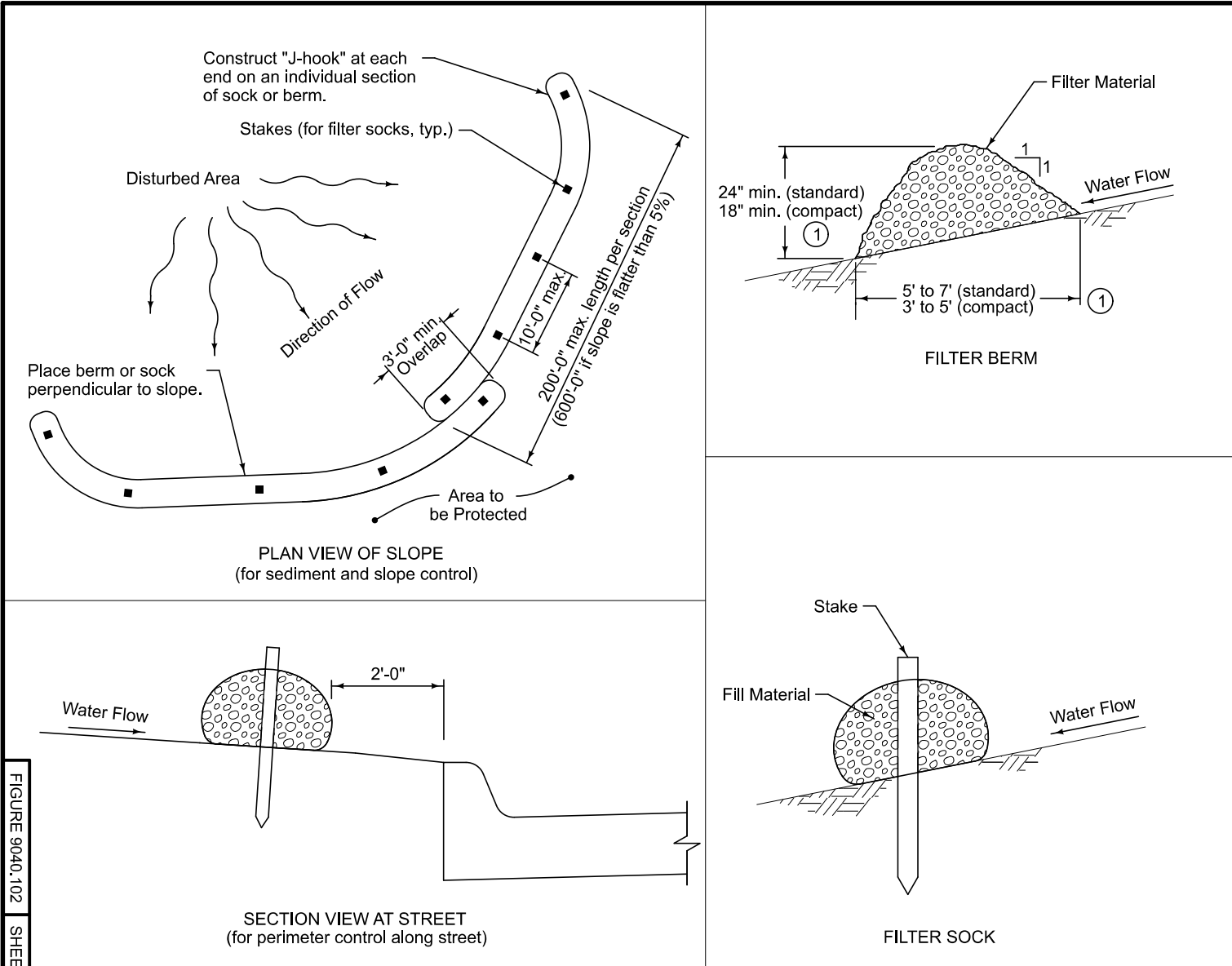


Use when work activities close crosswalk or reduce width to less than 4 feet. Ensure temporary facilities are detectable and include accessibility features consistent with the features present in the existing pedestrian facility.

When required in the contract documents, provide auxiliary lighting or audible information devices to assist pedestrians with visual disabilities.

Refer to Figure 8030.101 for symbol key and sign spacing.

	REVISION
	New 10-17-17
	8030.119
SHEET 1 of 1	
SUDAS Standard Specifications	
CLOSURE OF MARKED OR UNMARKED CROSSWALK	



TYPICAL PLACEMENT OF BERM OR SOCK

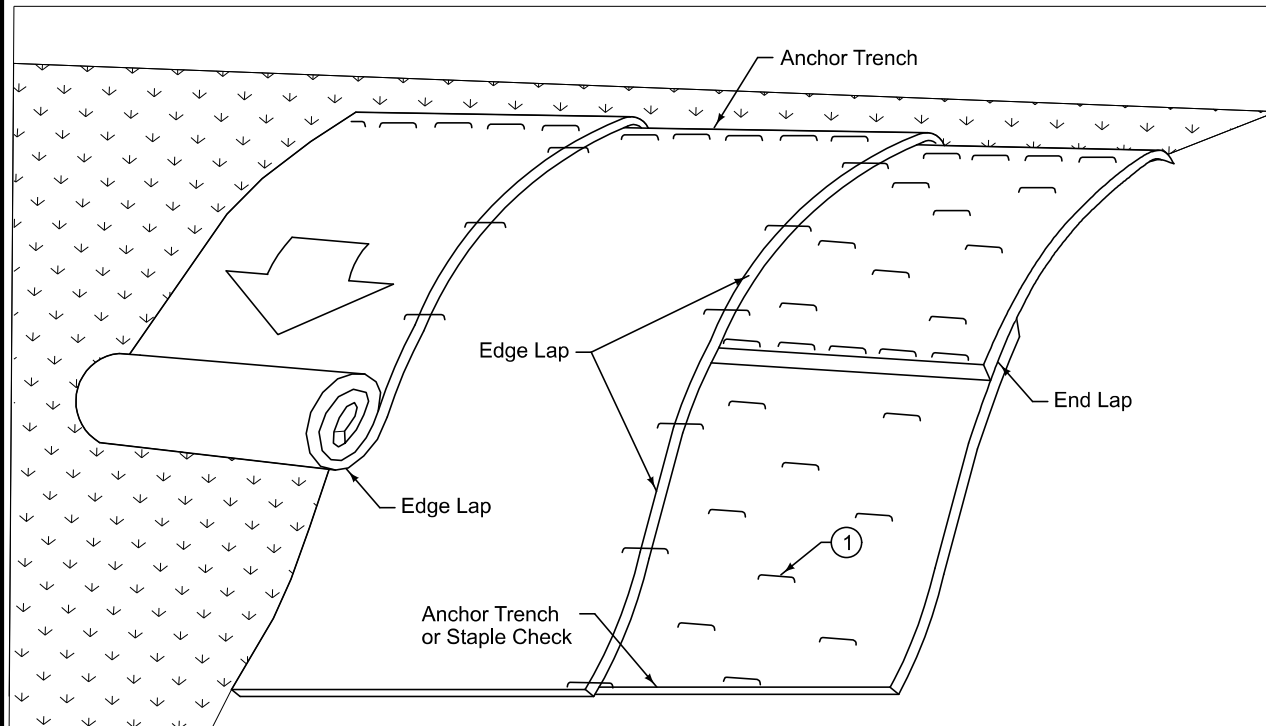
Berm shown is typical for slopes flatter than 3:1. For steeper slopes, increase berm size as directed by the Engineer.

Place berm in uncompacted windrow perpendicular to the slope at locations specified in the contract documents.

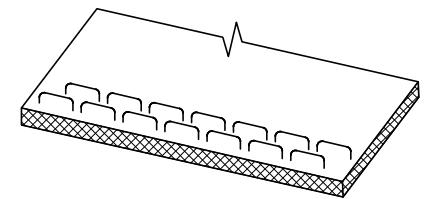
Filter sock diameter as specified in the contract documents.

① Filter berm size (standard or compact) as specified in the contract documents.

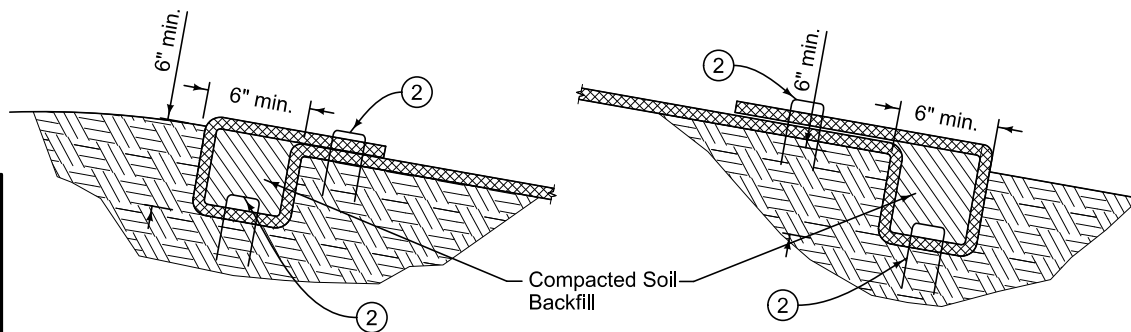
 SUDAS	REVISION
	5 2025 Edition
	9040.102
SHEET 1 of 1	
SUDAS Standard Specifications	
FILTER BERM AND FILTER SOCK	



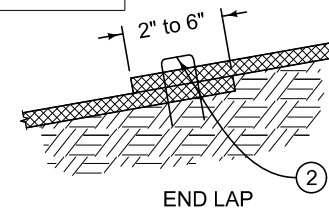
- ① Secure blanket to ground according to manufacturer's recommended anchoring pattern and anchor density (minimum 1.3 anchors per square yard).
- ② Install staples at 1 foot on center.



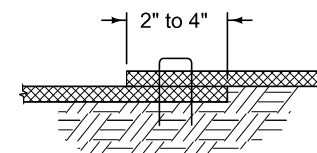
STAPLE CHECK
(Two rows of staples at 4" on center and staggered 4" apart)



UPSLOPE AND TERMINAL END ANCHOR TRENCH



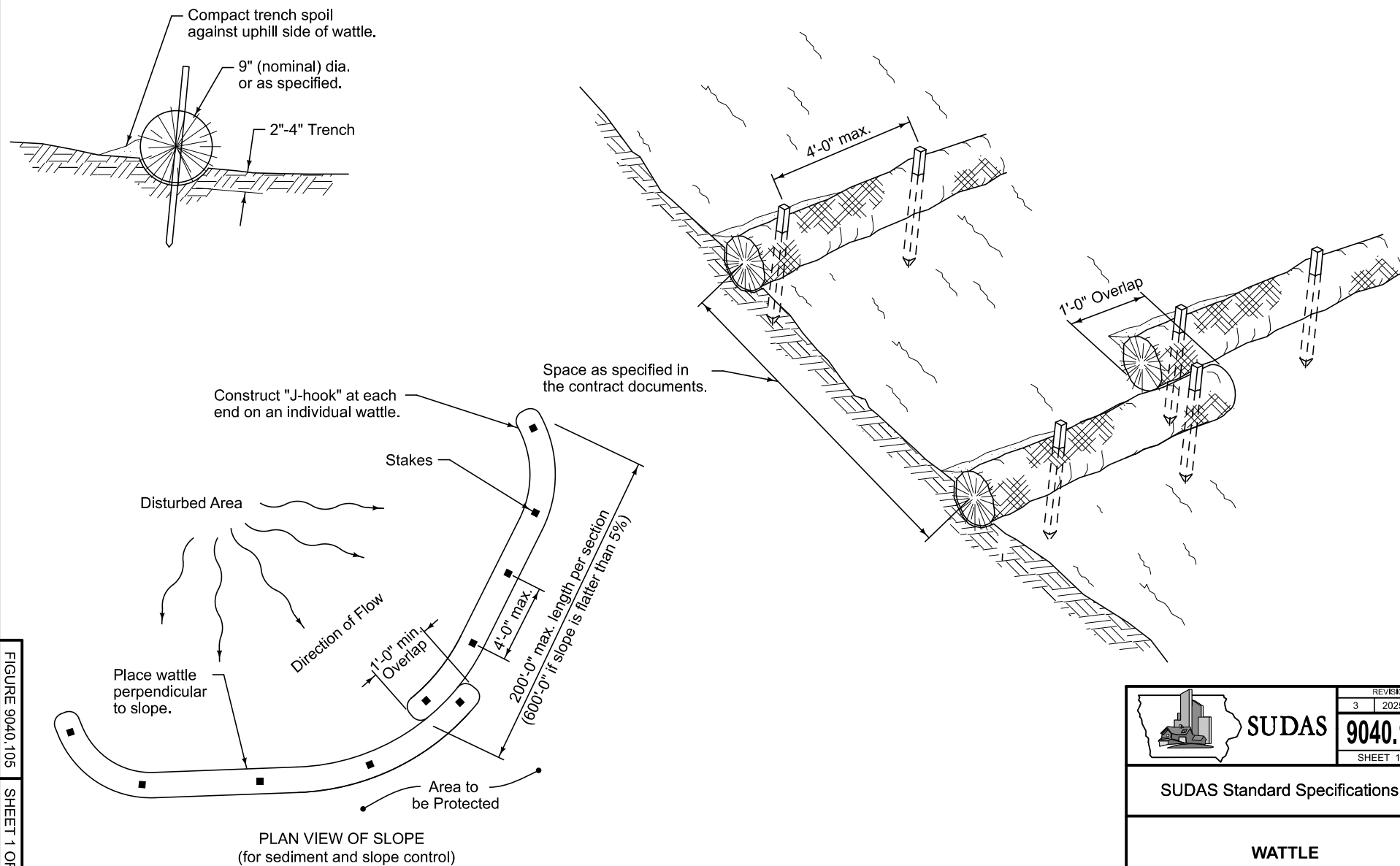
END LAP



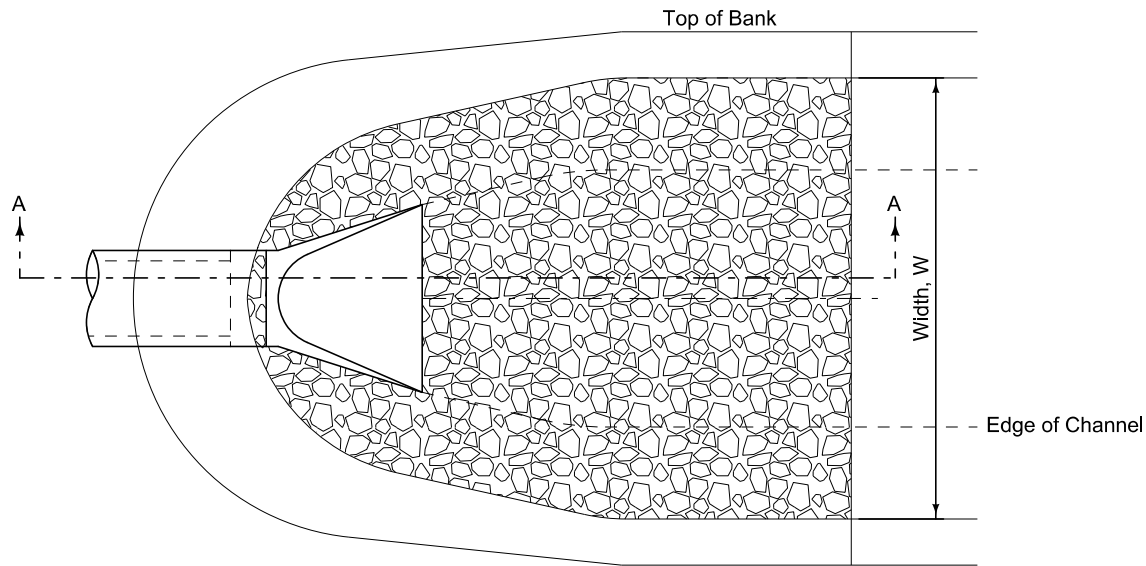
EDGE LAP
(4'-0" min. anchor spacing)

FIGURE 9040.103
SHEET 1 OF 1

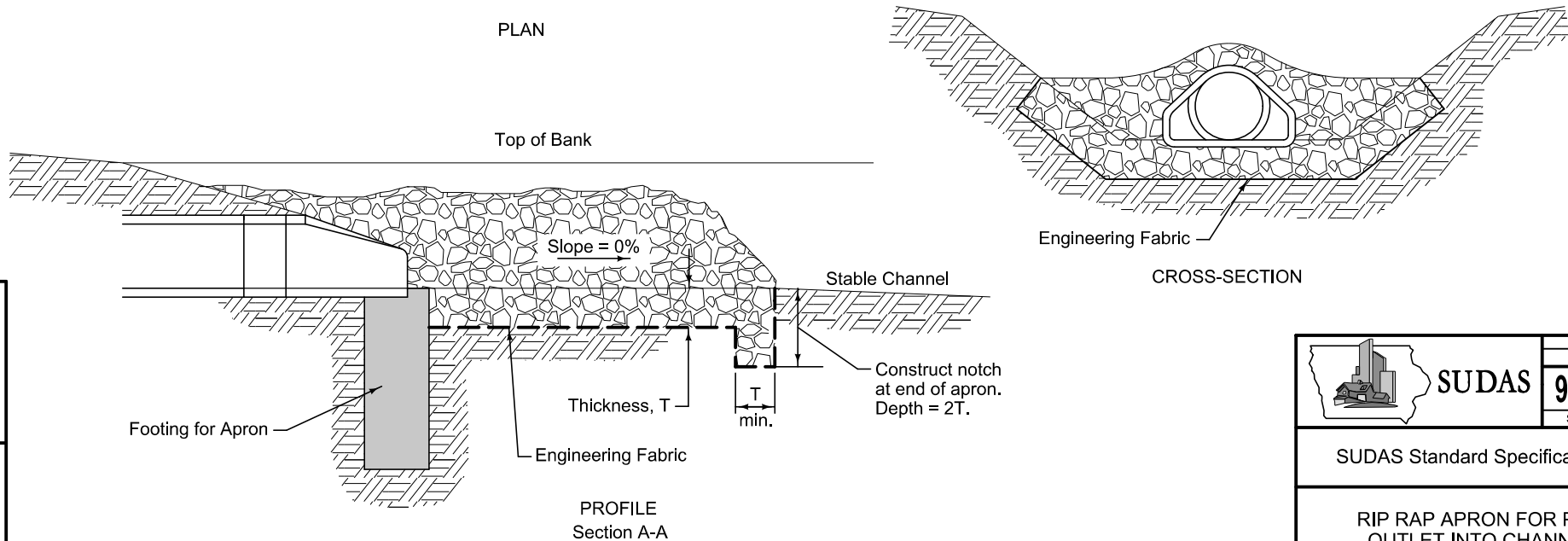
	SUDAS Standard Specifications	REVISION 3 2025 Edition
	9040.103	
	SHEET 1 of 1	
SUDAS Standard Specifications		
ROLLED EROSION CONTROL PRODUCT (RECP) INSTALLATION ON SLOPES		



	REVISION		
	3	2025 Edition	
	SUDAS		
	9040.105		
		SHEET 1 of 1	
SUDAS Standard Specifications			
WATTLE			



PLAN



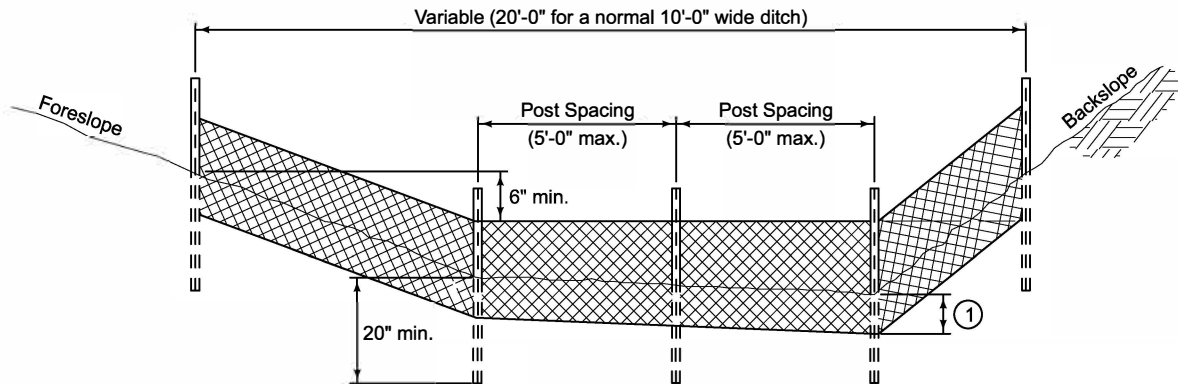
CROSS-SECTION

PROFILE
Section A-A

	REVISION	
	3	10-21-14
	9040.111	
	SHEET 1 of 1	

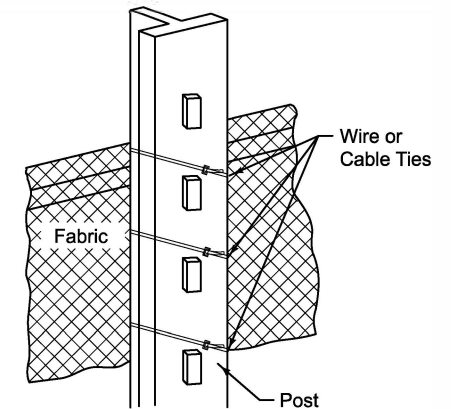
SUDAS Standard Specifications

RIP RAP APRON FOR PIPE OUTLET INTO CHANNEL

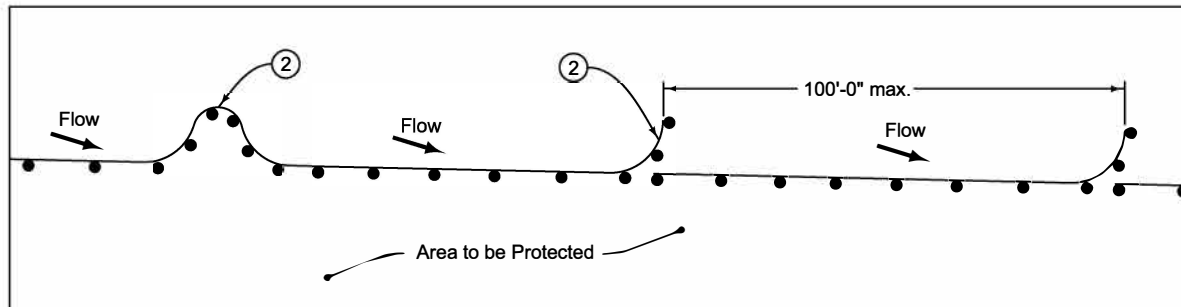


TYPICAL SILT FENCE DITCH CHECK

- ① Insert 12 inches of fabric a minimum of 6 inches deep (fabric may be folded below the ground line).
- ② Install silt fence for perimeter control with a maximum run length of 100 feet. At the downstream end of each run, turn the silt fence up the slope for 20 feet as shown to construct a 'J-Hook' to contain runoff. At the contractor's option, the silt fence may terminate and restart at the J-hook or may be installed continuously through the J-hook.

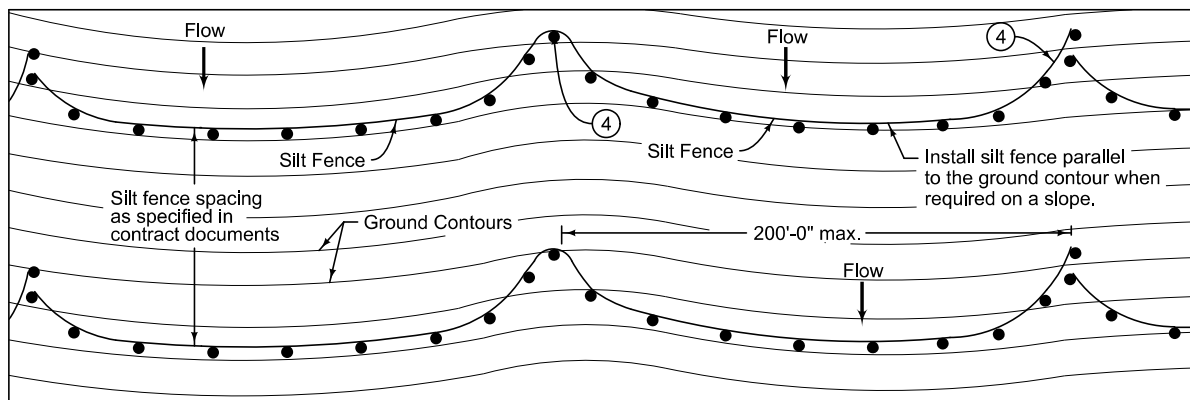


ATTACHMENT TO POST



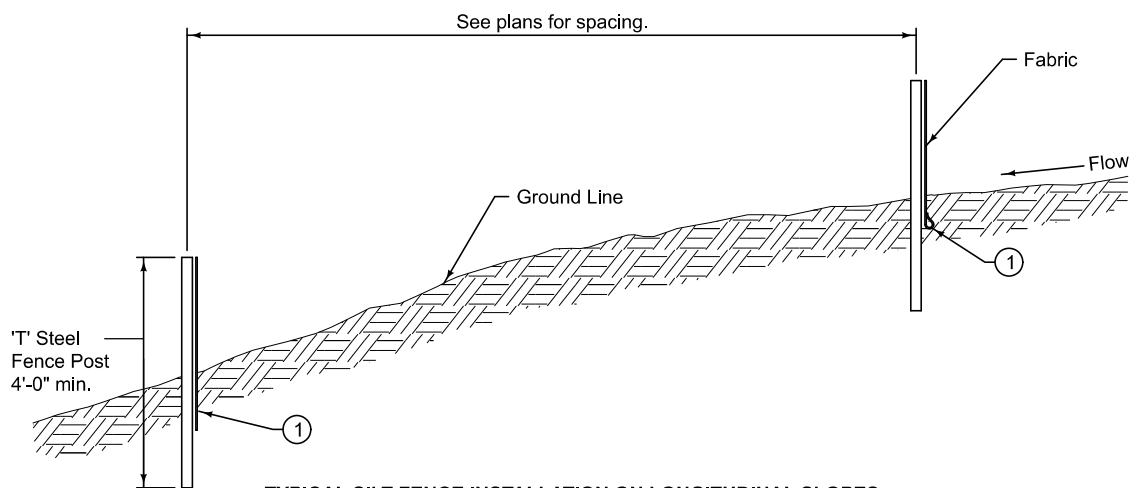
TYPICAL SILT FENCE INSTALLATION FOR PERIMETER CONTROL

	REVISION	
	3	2025 Edition
	9040.119	
	SHEET 1 of 2	
SUDAS Standard Specifications		
SILT FENCE		

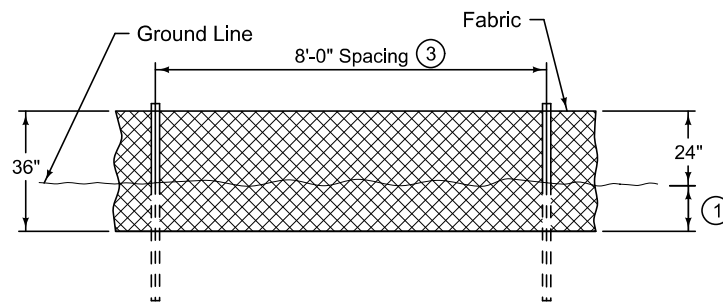


TYPICAL SILT FENCE INSTALLATION ON LONGITUDINAL SLOPES
(Plan View)

- ① Insert 12 inches of fabric a minimum of 6 inches deep (fabric may be folded below the ground line).
- ③ Reduce post spacing to 5 feet at water concentration areas, or as required to adequately support fence.
- ④ Place silt fence continuously along a constant elevation for a maximum run of 200 feet. At the end of each run, construct a 'J-Hook' to contain runoff by turning the silt fence up the slope for a length of 20 feet as shown. At the contractor's option, the silt fence may terminate and restart at the J-hook or may be installed continuously through the J-hook.

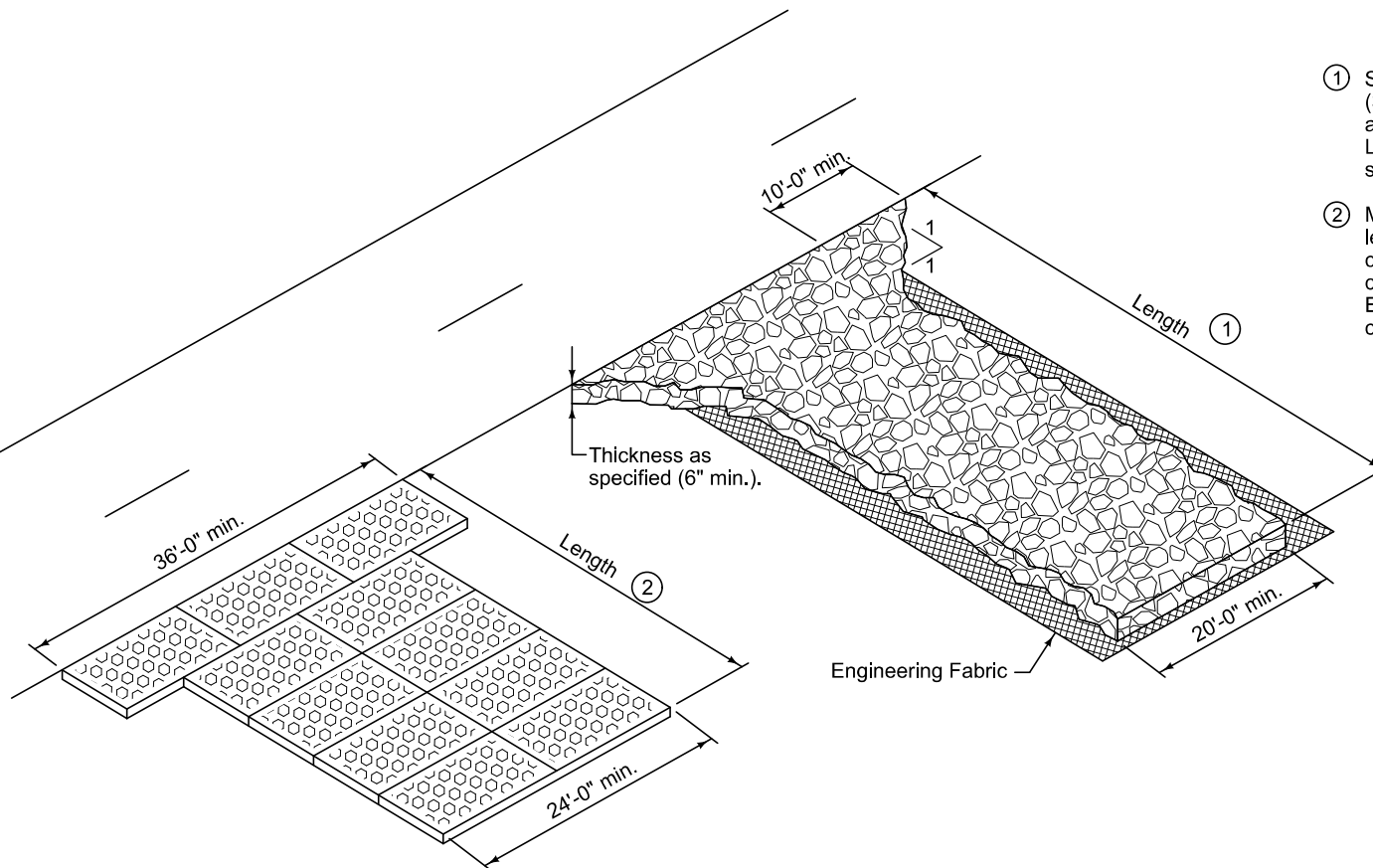


TYPICAL SILT FENCE INSTALLATION ON LONGITUDINAL SLOPES
(Profile View)



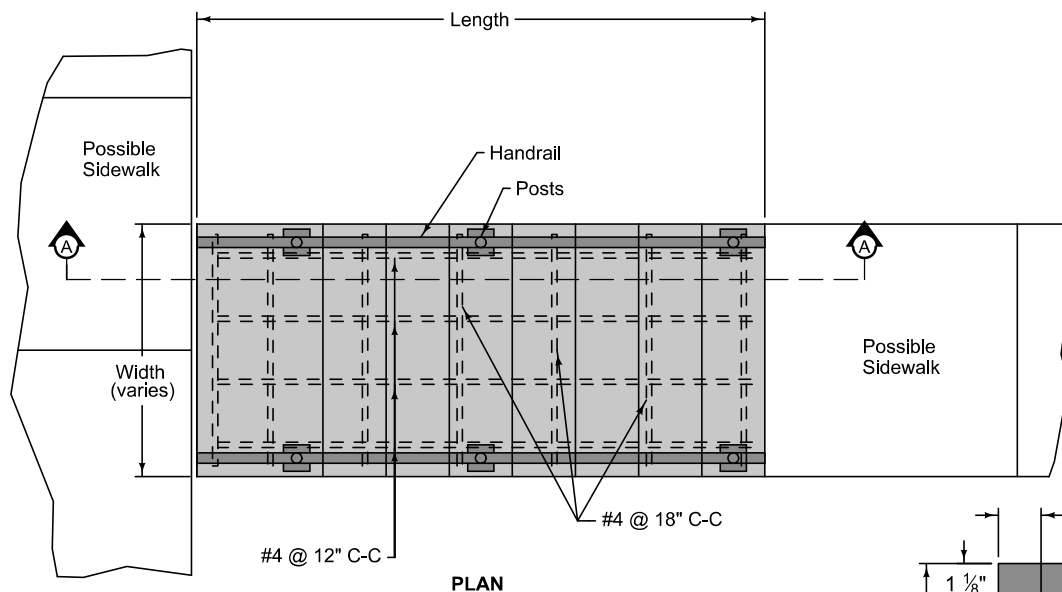
DETAILS OF SILT FENCE ON LONGITUDINAL SLOPES

	SUDAS 9040.119 SHEET 2 of 2	REVISION 3 2025 Edition
	SUDAS Standard Specifications	
	SILT FENCE	

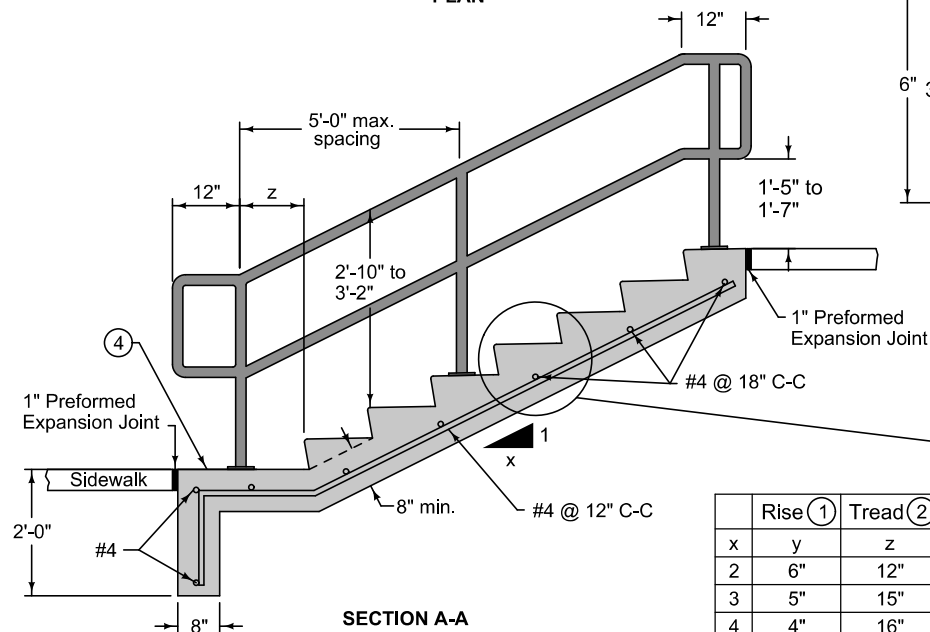


- ① Stone Exit: 50 foot minimum length (30 foot for single family residential), or as specified in the contract documents. Length of exit may be increased if sediment track-out occurs.
- ② Manufactured Track-Out Pad: Minimum length of 35 feet or 3 times the circumference of the largest tire that will cross its path (whichever is larger). Extend length if adequate track out control is not achieved.

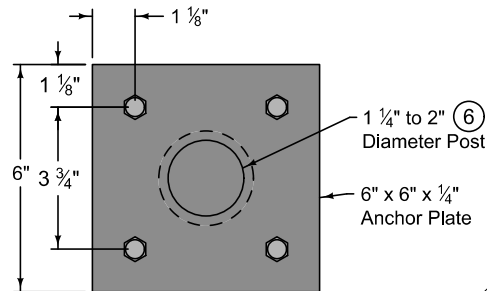
	REVISION	
	3	2025 Edition
	9040.120	
	SHEET 1 of 1	
SUDAS Standard Specifications		
STABILIZED CONSTRUCTION EXIT		



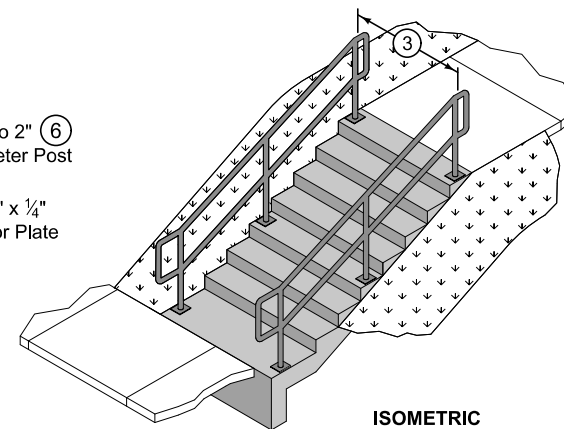
PLAN



SECTION A-A



ANCHOR PLATE DETAIL



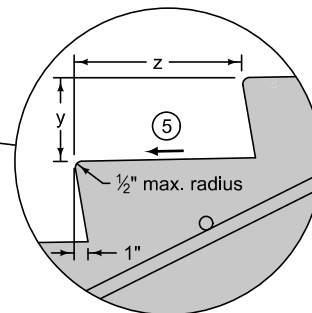
ISOMETRIC

Provide a minimum of 2 inches of cover for all reinforcing.

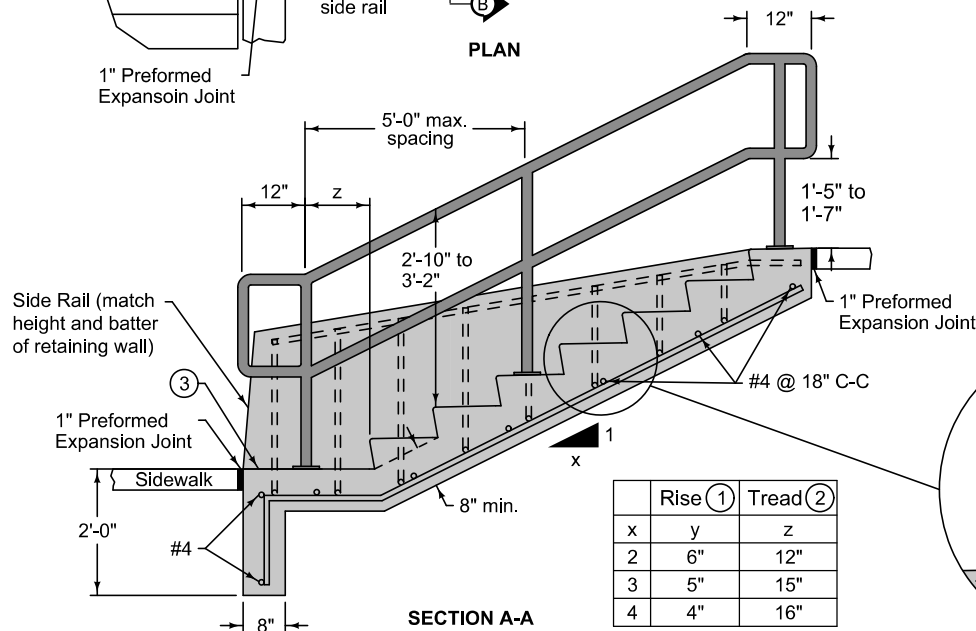
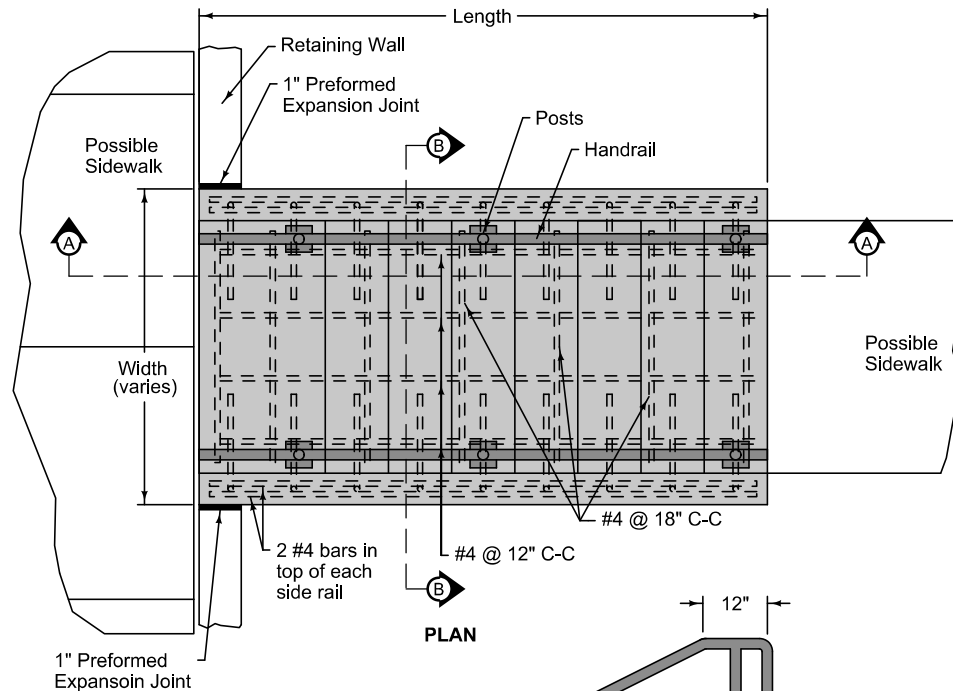
Ensure all risers are an equal height and all treads are an equal depth within a flight of stairs.

- ① Minimum riser height is 4 inches. Maximum riser height is 7 inches.
- ② Minimum tread depth is 11 inches.
- ③ Match existing sidewalk width.
- ④ Construct cross slope of landing to match adjacent sidewalk.
- ⑤ Slope tread 1% minimum to 2% maximum in any direction.
- ⑥ Weld post to anchor plate with 1/4 inch weld. Grind weld to provide smooth surface, free of burrs.

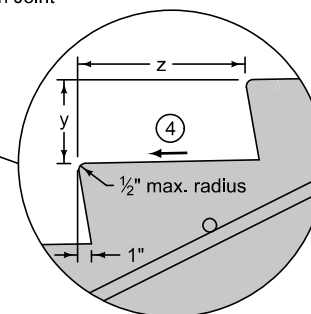
	Rise ①	Tread ②
x	y	z
2	6"	12"
3	5"	15"
4	4"	16"



	REVISION 2 10-16-18
	9080.101
	SHEET 1 of 1
SUDAS Standard Specifications	
TYPE A CONCRETE STEPS WITH HANDRAIL	



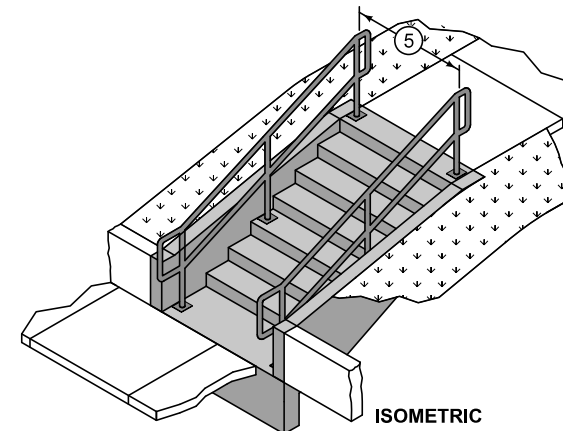
	Rise ①	Tread ②
x	y	z
2	6"	12"
3	5"	15"
4	4"	16"



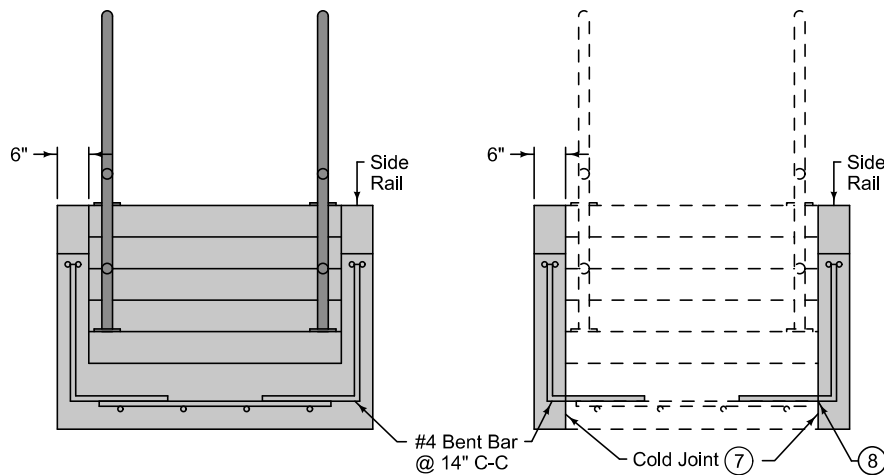
Provide a minimum of 2 inches of cover for all reinforcing.

Ensure all risers are an equal height and all treads are an equal depth within a flight of stairs.

- ① Minimum riser height is 4 inches. Maximum riser height is 7 inches.
- ② Minimum tread depth is 11 inches.
- ③ Construct cross slope of landing to match adjacent sidewalk.
- ④ Slope tread 1% minimum to 2% maximum in any direction.
- ⑤ Match existing sidewalk width.

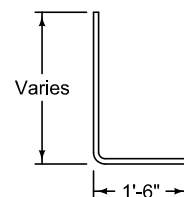


	REVISION	
	1	2022 Edition
	SUDAS 9080.102 SHEET 1 of 2	
SUDAS Standard Specifications		
TYPE B CONCRETE STEPS WITH HANDRAIL		



SECTION B-B
(Side Rails and Stairs Formed and
Constructed Monolithically)

ALTERNATE SECTION B-B
(Side Rails and Stairs Formed
and Constructed Separately)

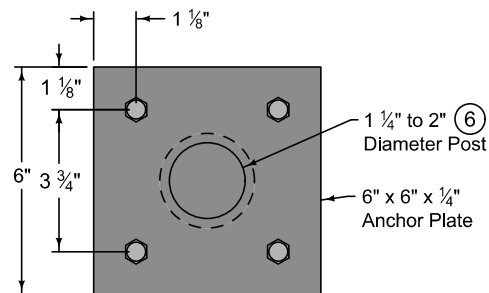


BENT BAR

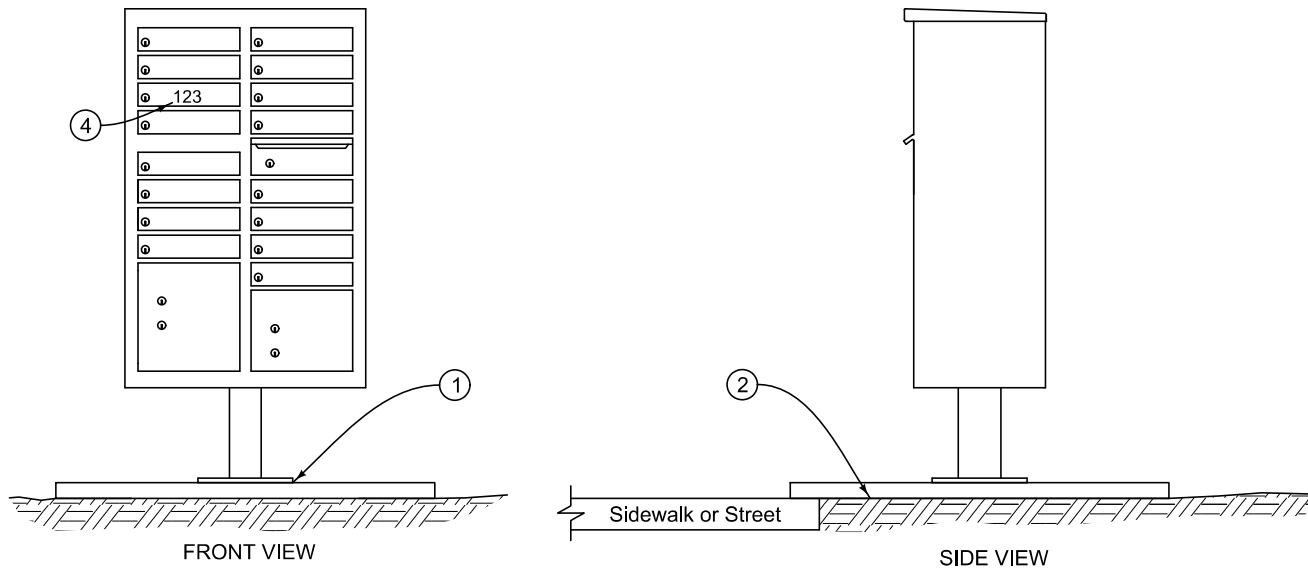
Provide a minimum of 2 inches of cover for all reinforcing.

Ensure all risers are an equal height and all treads are an equal depth within a flight of stairs.

- ⑥ Weld post to anchor plate with 1/4 inch weld. Grind weld to provide smooth surface, free of burrs.
- ⑦ Upon approval of Engineer, side rails may be formed and constructed separately from the stairs. Seal the cold joint between the side rail and stairs according to Section 7010.
- ⑧ If side rails and stairs are constructed separately, dowel bar substitutes may be used for the bent bars connections between the side rails and the stairs.

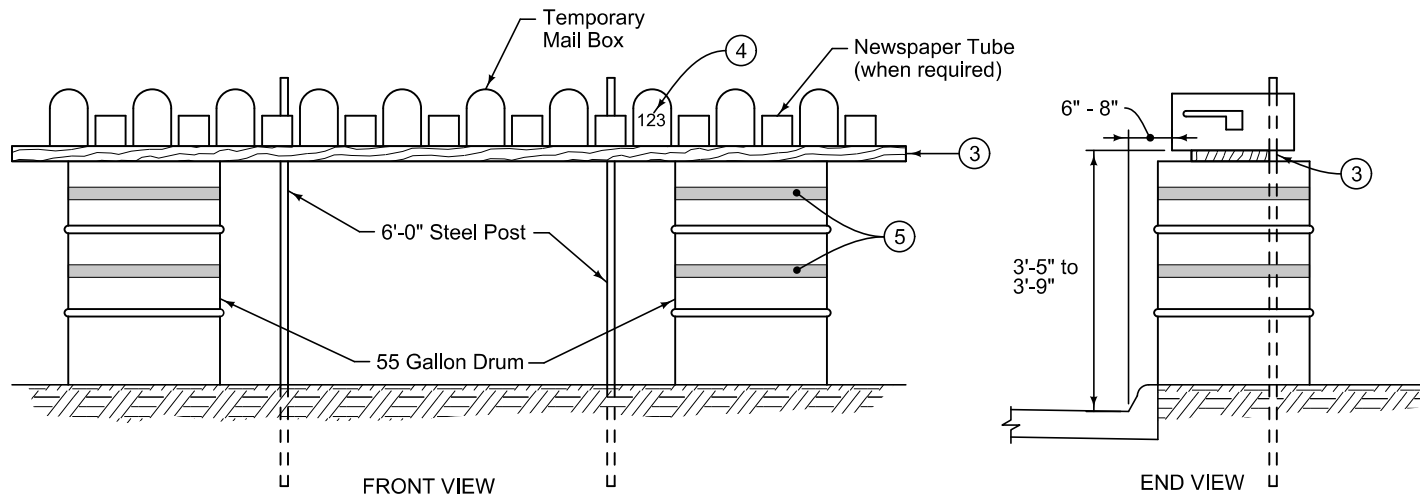


ANCHOR PLATE DETAIL



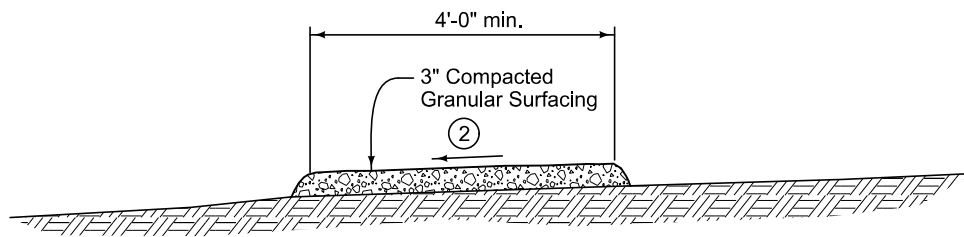
TEMPORARY CLUSTER BOX UNIT

- ① Attach cluster box unit to a stable skid or anchor plate.
- ② Set cluster box on firm and level ground adjacent to sidewalk or street paving. Provide anchorage as needed to prevent overturning.
- ③ Provide a 2 inch x 12 inch plank with length as required. Firmly attach mailboxes and newspaper tubes to plank. Secure plank to steel posts for lateral support.
- ④ Label each mailbox with property address.
- ⑤ Attach two bands of 2 inch wide reflectorized tape to each barrel.

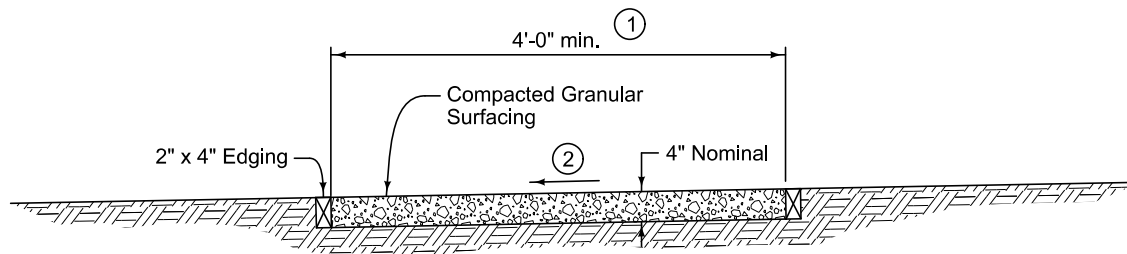


TEMPORARY GROUP MAILBOX

	REVISION
	1 10-18-16
	11030.101
SHEET 1 of 1	
SUDAS Standard Specifications	
TEMPORARY MAILBOXES	



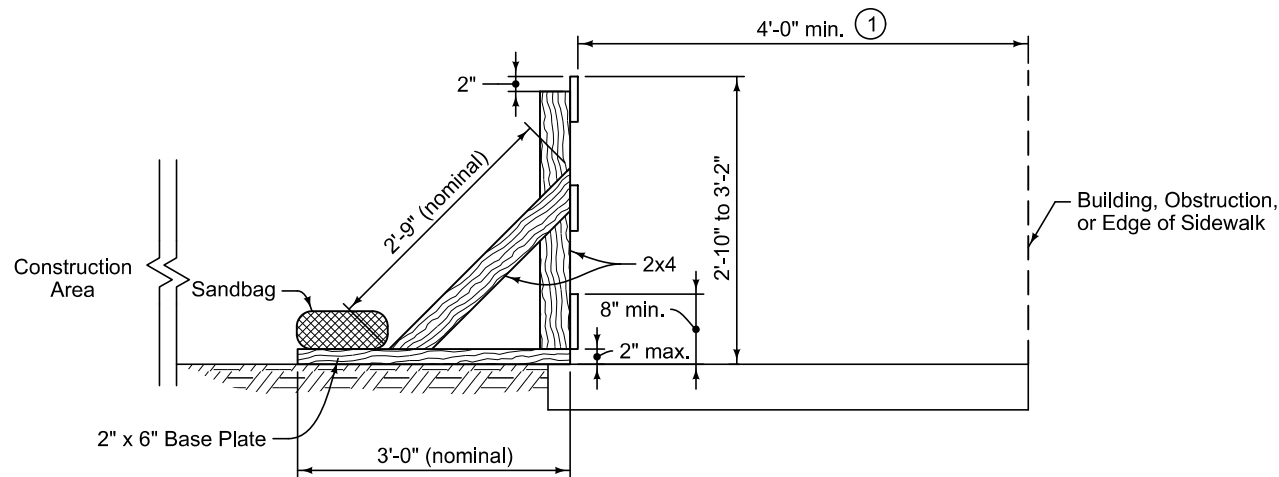
TEMPORARY RESIDENTIAL ACCESS



TEMPORARY GRANULAR SIDEWALK

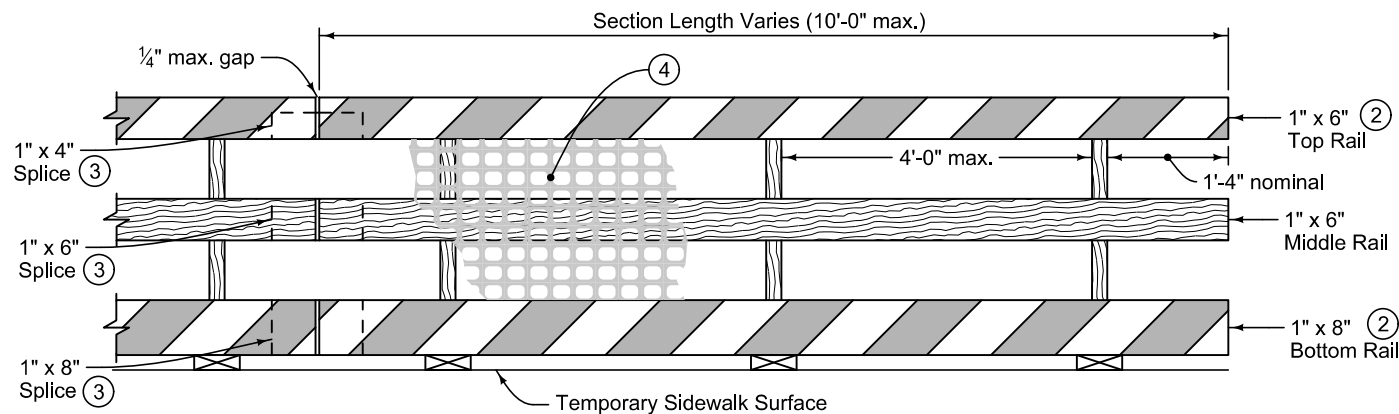
- ① If sidewalk width is less than 5 feet, provide 5 foot long by 5 foot wide passing spaces at 200 foot intervals.
- ② Target cross slope of 1.5% with a maximum cross slope of 2%.

	REVISION	
	1	10-18-16
	11040.101 SHEET 1 of 1	
SUDAS Standard Specifications		
TEMPORARY GRANULAR SIDEWALK AND TEMPORARY RESIDENTIAL ACCESS		



END VIEW

- ① If sidewalk width is less than 5 feet, provide 5 foot long by 5 foot wide passing spaces at 200 foot intervals.
- ② Provide non-reflective orange and white sheeting on top and bottom rails.
- ③ Attach 12 inch long splice boards on the back side of rails at joints between sections.
- ④ When specified in the contract documents, install orange construction safety fence between the top of the bottom rail and the bottom of the top rail.



FRONT VIEW

	REVISION	
	1	10-18-16
	11040.102	
	SHEET 1 of 1	
SUDAS Standard Specifications		
TEMPORARY PEDESTRIAN CHANNELIZING DEVICE		

MUSCATINE POWER AND WATER

STANDARD SPECIFICATIONS

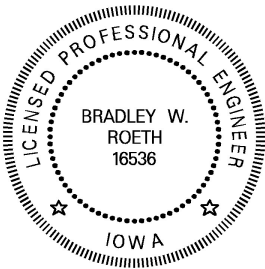
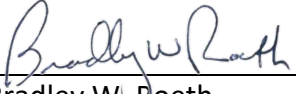
FOR

WATER DISTRIBUTION SYSTEM IMPROVEMENTS

Board of Water, Electric, and Communications Trustees

of the City of Muscatine, Iowa

2023

	I hereby certify that this engineering document was prepared by me or under my direct personal supervision and that I am a duly licensed Professional Engineer under the laws of the State of Iowa.  <u>Bradley W. Roeth</u> <u>11/29/2023</u> Date License Number: <u>16536</u> My license renewal date is December 31, 2024 Pages or sheets covered by this seal: Specification
---	--

MUSCATINE POWER AND WATER

3205 CEDAR STREET

MUSCATINE, IA 52761

NOVEMBER 2023

TABLE OF CONTENTS

1.1	GENERAL REQUIREMENTS	1
1.2	DESIGN STANDARDS	1
1.3	PERMITS	2
1.4	CODES AND STANDARDS	2
1.5	MATERIALS.....	3
1.6	SUBMITTALS.....	9
1.7	TRAFFIC CONTROL.....	10
1.8	INSPECTION AND TESTING.....	10
1.9	LOCATING BURIED UTILITIES.....	13
1.10	PROTECTION OF EXISTING FACILITIES.....	13
1.11	WORK BY MPW AND COORDINATION WITH MPW	14
1.12	TRENCH EXCAVATION	14
1.13	BACKFILL AND COMPACTION.....	16
1.14	PIPE AND MATERIAL HANDLING AND STORAGE	16
1.15	PIPE INSTALLATION	17
1.16	TRACER WIRE INSTALLATION.....	20
1.17	HORIZONTAL AND VERTICAL SEPARATIONS.....	20
1.18	CONNECTIONS TO EXISTING WATER MAINS	23
1.19	GATE VALVES AND FITTINGS.....	23
1.20	TAPPING VALVES AND SLEEVES	24
1.21	FIRE HYDRANTS.....	24
1.22	THRUST RESTRAINT/BLOCKING	24
1.23	SURFACE RESTORATION.....	26
1.24	CLEAN UP	26
	ATTACHMENTS.....	26

1.1 GENERAL REQUIREMENTS

- A. Standard Specification covers construction, connections to, and repairs made on Muscatine Power and Water's (MPW) water distribution system.
- B. Standard Specification is intended to cover installations by both MPW in-house personnel and outside contractors and serve as a guide for design of water main improvements for MPW's water system.
- C. Questions regarding interpretation or changes to the Standard Specifications should be directed to Manager, Water and Utility Services or MPW's Project Leader at Muscatine Power and Water, 3205 Cedar Street, Muscatine, Iowa 52761.
- D. Standard Specification is on file at the offices of the Iowa Department of Natural Resources (IDNR) in Des Moines, Iowa.
- E. Any exceptions or modifications to Standard Specifications for specific projects shall be made in writing. Should these specifications contained herein conflict with SUDAS, then this specification shall be the prevailing standard/specification.
- F. Unforeseen circumstances or conditions encountered during construction must be reported to MPW Manager, Water and Utility Services or MPW's Project Leader immediately.
- G. No water main extensions or services tapped from MPW owned facilities will be permitted without prior approval by MPW.

1.2 DESIGN STANDARDS

- A. Fire Protection: Water distribution system shall be designed in accordance with the grading schedule for Municipal Fire Protection recommended fire flows by the Insurance Service Offices and 10 States Standards. Fire protection shall be as shown on Insurance Services Office Table 5 (see Table 1 below).

Table 1. Insurance Services Office Table 5

Location or Type	Domestic Flow	Fire
Residential:		
1. Single Family-Detached	100 gpcd	1,500 gpm
2. Single Family-Attached (Townhome)-with approved firewall	100 gpcd	2,000 gpm
3. Multifamily	100 gpcd	3,000 gpm
Office	50 gpcd	3,000 gpm
Commercial	60 gal/ emp/shift	6,000 gpm
Industrial	75 gal/ person/shift	6,000 gpm

Flow shall be calculated using a "C" factor of 100, ignoring fittings, and with a minimum residual pressure of twenty (20) psi.

- B. Hydrant Location: Hydrants shall be spaced not more than 400 feet apart in single family residential districts and no more than 300 feet or about one city block apart in other districts. Spacing may vary slightly to allow placement of fire hydrants on extensions of property lines.
- C. Valve Spacing: Valves shall be installed so that not over 800 feet of water main, with services, will be shut off at any time. Transmission mains with no services shall have valves located so that not over 1200 feet of main will be shut off at any time.
- D. Bury Depth: All waterlines shall be buried with a 5'-0" bury depth to the top of pipe unless otherwise designed and approved by MPW. Where conflicts occur with other utilities not identified on the plans Contractor shall obtain approval from MPW for recommended bury depth.

1.3 PERMITS

- A. Plans for water main extensions or modifications prepared by engineering personnel other than MPW's shall be submitted to MPW for design review, approval, and IDNR permitting before the work is bid.
- B. Permits for utilizing or crossing IDOT, County, Railroad, and other utilities' right of way/easements will be acquired by MPW unless otherwise noted in the Water Main Extension Agreement or the Detailed Specifications for the Project.
- C. Contractor shall obtain Street Excavation Permits and Street Closure Permits from the City of Muscatine's Building and Zoning Department at Muscatine's City Hall located at 215 Sycamore Street, Muscatine, Iowa 52761.
- D. Storm water permitting will be acquired by contractor unless otherwise noted in the Water Main Extension Agreement or the Detailed Specifications for the Project. Costs of compliance with requirements of storm water permit will be handled by contractor unless otherwise outlined in the Water Main Extension Agreement or in the Detailed Specifications for the Project.

1.4 CODES AND STANDARDS

- A. In the event of a conflict between codes and standards, the one establishing the more stringent requirements shall be followed (10 States, AWWA, or SUDAS (current year)).
- B. The following standards and specifications are used in or referred to in this Standard Specification:
1. American Water Works Association (AWWA).
 2. 10 States Standards (above all for fire flow and design).

3. SUDAS (current year)
4. Occupational Safety and Health Act of 1970, as amended (OSHA).
5. American National Standards Institute (ANSI).
6. Iowa Department of Health.
7. Iowa Department of Transportation (IDOT).
8. Iowa Department of Natural Resources (IDNR).
9. American Society for Testing and Materials (ASTM).
10. City of Muscatine, Iowa, Codes and Standards.
11. Muscatine Power and Water's rules and regulations as outlined in WATER CUSTOMER SERVICE HANDBOOK.
12. Muscatine Power and Water's current "Backflow Prevention Policy".
13. Steel Structures Painting Council (SSPC).

C. The most current versions or updates of the above specifications are to be used unless otherwise noted in the Detailed Specifications for the Project.

D. Copies of all codes and standards referenced in these Standard Specifications are on file for review at the offices of Muscatine Power and Water, 3205 Cedar Street, Muscatine, Iowa 52761.

1.5 MATERIALS

A. Pipe Types: Pipe, joints and couplings (as applicable) shall be legibly and permanently marked with critical information including: nominal pipe size, pressure class, dimensions, applicable conformance standards (e.g. ANSI / AWWA / ASTM), manufacturer's name, production record code, seal or mark of testing agency verifying suitability of pipe material for potable water service and for use in fire protection systems (e.g. UL / FM / NSF, as applicable).

All water main distribution pipe shall be 6 inches in diameter or larger. Where the distribution system is significantly looped then 6-inch diameter pipe is the minimum standard in residential areas. For dead end water mains 8-inch diameter is the minimum acceptable pipe diameter in residential areas. Where fire flows larger than 1,500 gpm then larger pipe diameter will be required and shall be specified on the plans.

1. Ductile iron water main pipe (DIP). DIP pipe shall be used for all pipes larger than 12 inches in diameter unless alternate materials are shown on the Drawings. DIP pipe may be used for pipe 12-inches in diameter and smaller. DIP shall conform to ANSI/AWWA C151/A21.51. Pipe shall be cement-mortar lined in accordance with ANSI/AWWA C104/A21.4.53. Thickness design of pipe shall conform to ANSI/AWWA C150/A21.51. Pipe shall be manufactured with a bituminous coal tar base exterior coating system not less than 1 mil thick in accordance with AWWA C-151/ANSI A-21.4.

Nitrile gaskets shall be provided for water main construction unless noted and approved by MPW. No exceptions are allowed where it is determined that hydrocarbon contamination is present.

All pipe and pipe joints shall be push-on, restrained or mechanical as required by the design and shall conform to ANSI/AWWA C111/A21.11 unless otherwise designed and approved by MPW. Pipe shall be minimum Class 52 unless specified otherwise on the Plans or in the Detailed Specifications for the Project.

2. Polyvinyl Chloride Pipe (PVC): PVC may be used for all pipe 12-inches in diameter and smaller, in accordance with the Project Documents. All pipe shall be manufactured in accordance with AWWA C900. Pipe joints shall be bell-and-spigot, push-on type with integral elastomeric gasket, in conformance with ASTM D3139 and ASTM F477. Pipe minimum wall thickness shall be DR18.

Pipe shall be homogeneous throughout and free of visible cracks, holes, foreign material blisters, and other visible deleterious faults. Pipe shall be manufactured from rigid polyvinyl chloride compound with cell classification 12454-B as defined in ASTM D-1784. Normal laying length is 20 feet.

PVC pipe shall not be permitted in identified LUST sites where possible hydrocarbon contamination may occur.

3. Restrained Joint Polyvinyl Chloride Pipe (RJ-PVC). RJ-PVC may be used for pipe 12-inches in diameter and smaller, in accordance with the Project Documents and as approved by the Engineer. All pipe shall be manufactured in accordance with AWWA C900. Pipe joints shall be non-metallic mechanically restrained elastomeric bell-and-spigot joints of either coupled or integral bell type in conformance with ASTM F-477 and AWWA C-900. Pipe minimum wall thickness shall be DR18.

Pipe shall be homogeneous throughout and free of visible cracks, holes, foreign material blisters, and other visible deleterious faults. Pipe shall be manufactured from rigid polyvinyl chloride compound with cell classification 12454-B as defined in ASTM D-1784. Normal laying length is 20 feet.

RJ-PVC pipe shall not be permitted in identified LUST sites where possible hydrocarbon contamination may occur.

4. High Density Polyethylene water main pipe (HDPE): High density polyethylene (HDPE) pipe and fittings shall conform to ANSI/AWWA C906-15. Any deviations in material or workmanship including fusing shall be rejected if it does not conform with C906-15.

HDPE pipe shall be ductile iron pipe size with black with two blue stripes. Wall thickness shall be DR11 unless specified differently on the plans. HDPE pipe will be permitted on a case-by-case basis to be approved by MPW. HDPE shall not be permitted in identified LUST sites where possible hydrocarbon contamination may occur.

5. Mechanical Joint Restrained Joints: Full body style, ductile iron radial type bolt retainer glands for mechanical joint applications design for respective pipe material being used and for MJ fittings and valves. Split-ring retainer glands will not be permitted on new construction except under special circumstances. All glands shall be of uniform thickness and utilize a standard MJ gasket and match standard MJ bold circle, using 304/316 SS bolts and nuts (Teflon coated) required for installation.

Acceptable mechanical joint restraint styles include EBAA IRON INC. 1100, 1100SD, or 1100HD Series MEGALUG Mechanical Joint Restraints.

6. Other Restraints: Tie rod system or assembly is subject to MPW's approval. Tie rods shall be no less than 3/4-inch diameter threaded steel coated with two coats of coal tar epoxy paint or approved spray on bituminous automotive undercoating material.

7. Casing Pipe: Steel casing for bored and jacked steel casings shall conform to SUDAS 3020, with a minimum 3/8" thickness, except as noted below.

a) Casing Spacers: Casing spacers shall be specifically manufactured for installation of ductile iron water main in steel casings. Spacers shall be able to remain securely fastened to the water main during installation of water main in the casing. Choice of casing spacers is subject to MPW's approval. Preferred supplier: Powerseal Model 4810.

b) End Seals: End seals for steel casings shall be rubber, HDPE or neoprene wrap around type with stainless steel bands manufactured for that specific purpose and sized accordingly. Choice of end seals is subject to MPW's approval. Preferred supplier: Powerseal end seals.

B. Pipe Fittings: Ductile iron fittings shall conform to ANSI/AWWA C110/A21.10 (full-body) and ANSI/AWWA C153/A21.53 (compact). Fittings shall be cement-mortar lined in accordance with ANSI/AWWA C104/A21.4.95. For pipes with a nominal diameter 4 inches and larger fittings shall be mechanical joint or as specified by the specific Plans for the Project. Bolts, nuts, and washers shall be stainless steel or high strength low alloy Cor-ten Blue.

HDPE pipe fittings for new construction shall conform to ANSI/AWWA C906-15 and be heat fused. When restrained mechanical joints are specified for HDPE pipe Mueller AquaGrip or Engineer approved equal shall be provided.

C. Tapping Sleeves: Tapping sleeves for ductile iron or PVC water main pipe taps shall be stainless steel per ASTM A-240, fully enclosed tapping sleeve, full wrap gasket, full flange, and stainless-steel bolts and nuts with 3/4-inch NPT test plug with stainless plug. Approved tapping sleeve styles include JCM-432, Ford-FTSS, Mueller-H-304 or approved equal with nitrile gasket.

D. Valves and Valve Boxes:

1. Gate Valves: All gate valves shall conform to AWWA C509. Acceptable manufacturer is Mueller. Gate valves shall meet the following specific requirements: Resilient seated wedge type. Manufacturer-tested to 500 psig, 250 psig working pressure, turn clockwise (right) to open, epoxy coated (triple dipped). Stainless steel bolts in the bonnet, bi-directional flows and flat bottom for handling, brass trim, triple O-ring seal on stem and O-ring seal on bonnet with the top two replacements with valve open, non-rising stem with 2-inch square wrench nut with notification washers made from polymer, all bolts to be stainless steel.

2. Butterfly Valves: Butterfly valves shall only be used in special circumstances and shall conform to AWWA C504. Butterfly valves shall meet the following specific requirements: Steel adjusting packing, stainless shaft. stem with 2-inch square wrench nut, turn clockwise (right) to open, epoxy coated, all bolts to be stainless steel, domestic preferred.

3. Tapping Valves: Tapping valves shall be fully open style to accommodate MPW's tapping machine (MJ to mechanical joint). Tapping valves can be MJ x MJ if using the Ford FTSS sleeve with MJ outlet. Approved application is MJ x MJ gate valve with the Ford FTSS sleeve with MJ outlet.

4. Valve Boxes: Valve Boxes shall be domestic only, heavy duty, Tyler 664S or East Jordan with centering ring or approved equal. Cover shall have the word "WATER" cast into the cover. Provide 5'-0" standard length unless specified otherwise.

5. Extension Stems: Extension stems shall be provided for buried valves when the operating nut is more than 5'-6" below finished grade. Each extension stem for a buried valve shall extend to between 5'-0" and 5'-6" of the ground surface, no exceptions will be allowed, and shall be provided with spacers, which center the stem in the valve box, and shall be equipped with a 2-inch wrench nut painted red.

E. Fire Hydrants: Fire hydrants shall conform to AWWA C502. All hydrants shall be Mueller Super Centurion or Waterous Pacer meeting the following specific requirements: 6-inch mechanical joint connection, direction to OPEN shall be clockwise (right), nozzles: two 2-1/2-inch hose nozzles, one 4-1/2-inch pumper nozzle, nozzles to be National Standard Thread (NST) style, O-ring packing nitrile, suitable for 5'-0" depth of cover unless specified otherwise on Plans. Valve opening of 4-1/2 inch, automatic drain valve to drain hydrant barrel when main valve is closed. Operating nut shall be National Standard 1 inch square, oversized mechanical joint shoe, epoxy coated bowl. All underground parts shall be constructed of ductile iron with Stainless steel bolts. Shall include 1" washed rock around the drips in the hydrant.

Exposed hydrant body shall be factory primed painted white and buried portion shall have top coats black.

F. Tracer Wire: All tracer wire components for water main pipe shall be Copperhead brand, blue polyethylene jacketed direct bury type.

1. Open-Cut Installation: use number 12 superflex part number\1230B-SF-500', 1,000', 2,500' with a 45 mil coating.

2. Horizontal Directional Drill Installation: #12 ccs Extra high strength – Blue – "Soloshot" – for HDD, part number 1245B-EHS-500', 1,000', 2,500' with a 45 mil coating.

Tracer wire splices shall be Copperhead Industries LLC tracer wire. Dry-con connectors – 3WB-01-Blue, 3-way direct bury lug connector. Snake Pit Trace Wire Boxes – RP14*TP for roadway, LD14*TP – Adjustable for light duty. Copperhead 1 lb. magnesium anode used on dead-end trace wires. Cobra Test Station for service ends, T3-B75, Blue or approved equal for all Tracer wire parts.

G. Gravel Backfill: Gravel for drainage shall be clean washed gravel 3/4 inch to 1-inch size without fines or standard washed pea gravel.

H. Corrosion Protection: All ductile iron pipe, fittings and buried hydrant barrels shall be protected from corrosive soils by wrapping with NLT 10-mil thick polyethylene tubing or sheeting conforming to ANSI/AWWA C105/A21.5. The poly-wrap shall be secured around the pipe with 2-inch wide by 10-mil thick tape supplied by the poly-wrap manufacturer.

I. Insulation: Insulation shall be required where water main pipe is within 4 feet of the ground elevation. Above ground: insulation shall be Pittsburgh Corning Foamglas with Pitwrap. Insulation thickness shall be as shown on the Plans, no less than 5 inches thick. Bells will be covered. Below ground: rigid insulation, minimum 2" thick.

J. Services: All new water service piping shall have a minimum 1" nominal diameter from the main to the service meter. During water main replacement projects all services shall be replaced to the meter with approved pipe material if the existing service line is not approved service line material.

Service lines 2 inches in diameter and smaller, but no less than 1" shall be Type K (heavy), soft annealed, seamless copper. Connections to existing service lines (where required) shall be 3 piece compression type, Mueller 110 Conductive Compression Connection. If the main is wrapped with poly-wrap, the service should also be wrapped 3-4 feet from the main. HDPE service lines must be approved before construction.

Tapping pipe saddles shall be as follows:

1. Service Saddle for DIP: Tapping ductile iron or cast iron pipe for 1-1/2 inch and 2 inch sizes shall be JCM 406, ROMAC Style 202NS, Smith Blair 317, Mueller DR2S or Ford FC202 service saddles, nylon or thick epoxy coated with stainless steel straps for use on ductile iron or cast iron pipe. Torque to manufacturer's specifications.
2. Service Saddle for HDPE: Tapping HDPE pipe for 1-1/2 inch or 2 inch sizes shall be JCM 406 or ROMAC 202N-H, nylon or plastic coated with stainless steel straps for use on HDPE pipe and should be supplied with concave or spring washers. Fused saddles can be Integrity of Fischer Brand electrofusion branch saddles.

Corporation and curb stops shall be as follows:

3. Corporation: Mueller No. B-25008, 1" brass. Corporations are provided by MPW unless otherwise specified in Detailed Specifications for Project. Lead free brass.
4. Curb Stops: Lead free brass Mueller H-10314 curb stop valve, Mueller or AY McDonald boxes and valve with 5' long curb box, extension type – arch pattern base, one piece lid with rod, upper section lid to be two-hole style.

K. Backflow Prevention: Backflow prevention devices shall conform to requirements of MPW's current "Backflow Prevention Policy" and MPW's current "Customer Service Handbook". Check with MPW's Metering Department for latest updates of both documents.

L. Concrete: Concrete shall be air entrained with a minimum 28-day compressive strength of 4000 psi. In instances where high early strength is desirable as in cases where it is desirable to open roadways sooner to traffic or to shorten maintenance time for traffic control signage and barricades for street cuts, IDOT C-4 or M-4 mix shall be used. For thrust blocks, a minimum of 24 hours for cure time on M-4 is required prior to pressure testing.

M. Seeding, Fertilizer and Mulch: The rates of seed, fertilizer, and water applications required by this Subsection M are minimums, and the Contractor shall be solely responsible for the establishment of 70% grass coverage of all unpaved or otherwise uncovered areas of soil within the limits of the Project or disturbed soil by the Contractor. Additional labor, materials, equipment and incidentals to establish the 70% coverage shall be subsidiary to the pay items "Seeding and Fertilizing".

All areas which have been disturbed by the Contractor during construction shall be graded and shaped to the grades shown on the Drawings, and shall be finished with 6 inches of topsoil provided by the Contractor and approved by the Engineer. Topsoil may be either material selected from the site or imported material. shall be the following:

1. Fertilizer: Fertilizer to be seed starter 13-13-13 or 15-15-15. Fertilizer is to be applied at a rate of 50 pounds per 4000 square feet.
2. Seed: Seed mix to be equal parts Kentucky Bluegrass, Fescue and perennial rye. Seed mix is to be applied at rate of 5 pounds per 1000 square feet.
3. Mulch: Mulch to be clean straw pinned in place over all seeded areas. Straw mulch is to be applied at rate of one 40 pound bale per 600 square feet.

An equivalent hydro seeding application may also be considered.

1.6 SUBMITTALS

- A. All shop drawing submittals shall include a standard transmittal form.
- B. Shop drawing submittals shall be in PDF format for all submittal items required in the Detailed Specifications for the Project.
- C. Contractor shall submit manufacturer's catalog data for all items to be used in constructing the Project, one electronic Adobe .pdf file.
- D. Contractor shall submit certificates from manufacturers evidencing compliance with standards listed in this Standard Specification and as listed in the Detailed Specifications for the Project.

1.7 TRAFFIC CONTROL

- A. Traffic control shall be coordinated with City of Muscatine Police and Engineering Departments or the Iowa Department of Transportation as appropriate.
- B. Traffic control shall meet the requirements of IDOT "Work Zone Safety Guidelines for Utilities", current edition and MUTCD.

1.8 INSPECTION AND TESTING

- A. Construction Inspection: Construction will be inspected by MPW's Project Leader or other designated representative. No pipe or appurtenances shall be buried prior to final approval by MPW or MPW Representative. All change orders must be processed in writing through the Project Leader.
- B. Compaction Testing: In place density testing for compaction shall be conducted for water main installation under a roadway. If the water main installation is installed during a road improvement project the compaction testing may be completed by another Contractor. Compaction testing is not required when the water main is installed 10' or more outside of the roadway unless stated otherwise on the Plans or in the Detailed Specifications for the Project. In the event of a disagreement as to whether the compaction requirements have been met when no testing is required, the Contractor shall enlist the services of an MPW-approved independent soil testing company to make field tests as necessary to establish compliance with this Standard Specification. Contractor shall pay costs of all failing tests and MPW shall pay costs of all passing tests. Costs of laboratory determinations will be divided between Contractor and MPW based on percentage of field tests each is responsible to pay for. Moisture density testing shall conform to ASTM D1557. Field density tests, when required, shall be performed as directed by MPW's Project Leader. A minimum of one test shall be taken every 300 feet along the trench for each 8-inch lift or layer of backfill material. Field density tests shall conform to ASTM D1556.
- C. Concrete Testing: One set of four concrete test cylinders shall be taken for each concrete pour. Cylinders will be retained by MPW and broken if a question arises as to the strength of the concrete provided. Each cylinder shall be provided with a tag giving the date, time, location and strength requirements specified for the Project. Tag to be taped to each cylinder with several wraps of fiber packing tape.
- D. Material Inspection: All pipe and appurtenances are subject to inspection by MPW at the point of delivery. Material found to be defective due to manufacture or damaged in shipment shall be rejected or recorded on the bill of lading and removed from the job site. MPW may perform tests as specified in the applicable AWWA standard to ensure conformance with the standard. In case of failure of the pipe or appurtenance to comply with such Specifications, responsibility for replacement of the defective materials becomes that of the Contractor.

E. Filling and Flushing: Pipe and appurtenances to be tested shall be filled slowly with potable water. After filling, lines shall be flushed at blow-offs and dead-ends at a minimum velocity of 3.0 feet per second in the pipeline to be tested (refer to AWWA C651-14 Table 3 for required flow and openings). Flushing shall be carried out until turbidity-free (< 5 NTU or system ambient values) water is obtained from all points along the main. Certain contaminants resist flushing at any feasible velocity and pigging of the main may be required. A special pipeline pig may be required when the required flushing velocity cannot be achieved or when needed to conserve water during water use restriction period or to remove cake deposits or to prevent erosion damage, nuisance or traffic interruption, as directed by the Engineer.

F. Pressure and Leakage Testing: Pressure test after initial flushing of line and before bacteriological testing has commenced. An MPW's Representative shall be present at the beginning and end of each pressure test. MPW shall be notified of the time of the test a minimum of 24 hours prior to the test. MPW's Representative shall record the test pressure at 30-minute intervals. The duration of the pressure test shall be a minimum of two hours and cannot commence until MPW's Representative records the initial test pressure. The pipeline shall be allowed to stabilize at the test pressure before conducting the hydrostatic test.

1. Before applying the specified test pressure, air shall be expelled completely from the pipe, valves, and hydrants. After all the air has been expelled, all corporation cocks shall be closed and the test pressure applied. At the conclusion of the pressure test, the corporation cocks shall be removed and plugged or left in place as directed by MPW.
2. All exposed pipe, fittings, valves, hydrants, and joints shall be examined carefully during the test. Any damaged or defective pipe, fittings, valves, hydrants, or joints that are discovered during the pressure test shall be repaired or replaced with sound material, and the test shall be repeated until line passes test to MPW's satisfaction.
3. All make up water and make up water containers and pumps shall be cleaned and disinfected with a 6 to 8% chlorine bleach solution.
4. When hydrants are in the test section, the test shall be made against the auxiliary valves of the hydrant.
5. The contractor may be responsible for disinfection of the water main on a case by case basis.

Pressure testing shall be conducted through MPW installed corporations and not through fire hydrants.

The pressure test shall consist of holding a minimum hydrostatic pressure of 150 pounds per square inch for a period of two hours at the lowest elevation of the test section. Test pressure shall not exceed pipe, thrust-restraint, or appurtenances' design pressure at the lowest section of pipeline being tested.

Water mains shall be pressure tested at valved sections, not exceeding 1200 feet in total length. Valves shall not be operated in either direction at differential pressures exceeding the rated valve working pressure.

A two pound test gauge with a minimum capacity of 160 pounds will be required. The test shall conform to the applicable sections of AWWA C-600, AWWA C-605 or AWWA C-906. The hydrostatic test pressure shall not vary by more than +/- 5.0 psig for the duration of the test period. The test pressure shall be maintained within this tolerance by adding make-up water through a metered pressure test pump into the pipeline test segment. The meter on the pressure test pump shall be capable of reading to the nearest 0.10 gallon increment. All make-up water added shall be accurately measured in gallons (and fractions thereof) by suitable methods. The total make-up water added during and at the conclusion of the test period to reach the required test pressure shall not exceed the calculated leakage allowance for the pipeline segment being hydrostatically test as outlined in sections AWWA C-600, AWWA C-605 or ASTM F2164.

CAUTION: Pressurize HDPE pipe in accordance with manufacturer's recommendations. Pressurizing HDPE pipe for testing or placing into service requires additional precautions: Leaks at pressurized fusion joints may immediately precede catastrophic and sudden pipe separation and result in violent and dangerous movement of piping or attached parts and cause a sudden release of piping contents under pressure. Never approach or attempt to repair or stop leaks while pipe is pressurized. Always depressurize pipe before making corrections. Faulty fusion joints cannot be repaired. They must be cut out and rejoined using proper heat fusion procedures.

G. Tracer Wire Inspection: Tracer wires will be tested by MPW for continuity shortly after pressure testing has been completed.

H. Disinfection: At a minimum the standards set forth in AWWA C651 shall be followed excluding the use of calcium hypochlorite granular tablets. Preferred disinfection method is the continuous-feed method for new waterline construction.

A more specific description of the process follows:

Once the pipe section has been slowly filled, the bacterial/disinfection test will be officially started. The test requires the pipe to stand for 24 hours undisturbed after the initial chlorination testing confirms that a minimum of 25 ppm available chlorine is present when using the continuous-feed method. If less than 25 ppm of chlorine is available at initial filling, the test will be considered invalid and pipe must be rechlorinated. After 24 hours the residual will be checked to confirm that not less than 10 ppm of chlorine is available. If confirmed, the pipe can be flushed until the available chlorine is equal to the normal distribution levels and a sample for analysis will be drawn. The pipe shall be isolated again for 24 hours. After 24 hours, the water will be tested a second time to confirm not less than 0.3 ppm of chlorine remains in the main. If confirmed a second sample will be drawn for bacteriological analysis. Failure of any of the above test results will require re-chlorination to the minimum 25 ppm and repeat bacteria testing. All chlorinated water needs to be de-chlorinated by an approved method before it is released to the environment.

The contractor may be responsible for de-chlorination of the water main from high test chlorination on a case by case basis.

I. Bacteriological Testing: MPW will take two bacteriological samples 24-hours apart for in-house analysis after disinfection for each sample location as required in AWWA C651. Contractor shall assist MPW in collecting samples as required. MPW will not place installation into operation until test results from water samples taken test out satisfactory. One set of bacteriological tests shall be collected from every 1,200 foot section of new water main, plus one set from the end of the line and at least one set from each branch.

For any failed bac-t test, the IDNR must be notified by MPW lab staff.

All pressure testing and bacteriological tests shall be completed prior to the installation of service lines.

1.9 LOCATING BURIED UTILITIES

A. Contractor shall contact the Iowa One-Call system at 1-800-292-8989 for locations prior to doing any excavating (48 hour notice required).

B. All utility crossing shall be exposed by pot-holing or day-lighting prior to crossing with underground drilling equipment, HDD, moles, etc.

1.10 PROTECTION OF EXISTING FACILITIES

A. Contractor shall exercise care to assure that all private and publicly owned facilities, buildings, poles, wires, walkways, roadways, and other items near the construction area and not shown as removal items on the Plans are protected so they are not damaged or destroyed.

B. Contractor shall repair or replace all damaged items.

1.11 WORK BY MPW AND COORDINATION WITH MPW

A. Contractor shall coordinate activities with MPW so that disturbances to normal utility water system operations are minimized. Contractor shall provide a minimum 24-hour notice to MPW to allow adequate scheduling of men and equipment. Contractor shall assume all responsibility for costs incurred due to the lack of 24-hour notice to MPW. MPW must be notified at least 3 working days before a scheduled water outage to allow time for customer notification.

B. Operation of all valves and hydrants during charging of main, pressure testing, disinfection and bacteria testing shall be by MPW unless MPW specifically directs otherwise.

C. MPW will provide tapping and corporations up to 2-inch size required for blowing off air and making pressure tests to line segments installed. On contracts for developers, costs for this work are to be paid by the developer. On in house contracts let by MPW, costs for this work will be paid by MPW and not billed to contractor.

D. Tapping of existing water mains with taps of up to 12-inch size will be done by MPW unless otherwise noted in Detailed Specifications for the Project. On contracts for developers, costs for this work are to be paid by the developer. On in house contracts let by MPW, costs for this work will be paid by MPW and not billed to contractor.

E. MPW will hold electrical poles where necessary for construction if construction is within MPW's electrical service area. Contractor shall provide a minimum 24-hour notice to MPW to allow adequate scheduling of men and equipment. On projects contracted by Muscatine Power and Water there will be no charge to Contractor for this service. On all other projects, Contractor will be billed for this service. Contractor will be responsible for the coordination and fees charged by utilities for this service outside MPW's electrical service area.

1.12 TRENCH EXCAVATION

A. Trench excavations shall be in compliance with 29 CFR Part 1926 OCCUPATIONAL SAFETY AND HEALTH STANDARDS-EXCAVATIONS.

B. Sheet piling, shoring, bracing, and trench boxes shall be of an OSHA approved design and certified in accordance with current OSHA rules and regulations. Sheet piling and shoring materials shall be removed in a manner that avoids damage or disturbance to the work completed or adjacent structures or pavements. Trench boxes shall be lifted prior to moving forward to prevent displacement of pipe in place.

C. Compact light weight trench boxes or shoring shall be required in front yard stop box replacements for contractor's safety and to minimize disturbances to lawn, sidewalk and parking areas.

D. Excavation depth to provide a minimum 5'-0" cover over top of pipe.

E. Trench width shall be ample to permit the pipe to be laid and joined properly but should be no more than 12 inches on either side of the pipe. Keep walls of trench vertical below top of pipe.

F. Level trench bottom to provide uniform bearing and support for full length of the pipe barrel. Provide bell holes for each pipe joint. Stones found in the trench shall be removed for a depth of at least 6 inches below bottom of pipe.

G. If soft, spongy, or otherwise unsuitable materials are encountered which do not provide suitable bedding or support for the pipe, Contractor shall notify MPW's Project Leader or designated representative immediately.

If removal of unsuitable material is authorized, contractor is responsible for removal of material.

Contractor shall replace unsuitable materials with MPW approved crushed stone, sand, or manufactured sand as appropriate. New materials shall be placed and compacted in accordance with backfill portion of this Standard Specification.

H. All pipe installations shall be conducted only in dry materials. Contractor shall take such steps as are necessary to prevent surface and ground water from flowing into the excavation. Remove all accumulated water by pumping or dipping with equipment bucket.

I. Dewatering systems, if required, shall be subject to MPW's approval and shall remain in place until construction work and testing have been completed.

J. Removal of pavement and road surfaces shall be a part of the trench excavation. Pavement removal shall conform to City of Muscatine Public Works requirements. MPW requires concrete removal to be accomplished using a hydraulic system such as a jack hammer on a backhoe attachment.

1.13 BACKFILL AND COMPACTION

- A. Backfill shall not proceed until water main installation, thrust blocking, or thrust restraints have been inspected and approved by MPW's Project Leader or designated representative.
- B. Backfill materials shall be suitable soils from trench excavation or from a borrow area approved by MPW's Project Leader. Suitable materials shall be free of debris, small stones, rock, roots, lumps, frozen materials or any other items that will prevent placing and compacting the material to the density required.
- C. Backfill under or within 10 feet of the edge of roadways or parking areas shall be manufactured sand compacted in accordance with this Standard Specification.
- D. Backfill materials shall be approved by MPW's Project Leader prior to placement.
- E. Backfill shall be placed on both sides of pipe simultaneously to prevent displacement. Place backfill in successive horizontal lifts of not more than 8 inches loose depth. This depth may be adjusted if it can be shown that required compaction can be achieved utilizing a different layer thickness. Backfill shall be placed and compacted using equipment 18 inches above top of pipe. Refer to Attachment 5 for more details.
- F. Place material at proper moisture content for obtaining specified density.
- G. Compaction requirements are as follows:
 - 1. Areas beneath or within 10 feet of edge of roadways or parking areas shall be compacted to 95 percent of maximum dry density as determined by ASTM D1557.
 - 2. All other areas shall be compacted to 90 percent of maximum dry density as determined by ASTM D1557.
 - 3. Method of compaction is subject to MPW's approval.
- H. "Flooding" or "jetting" of backfill trench is not an acceptable compaction method or process and will not be approved.

1.14 PIPE AND MATERIAL HANDLING AND STORAGE

- A. All pipe, fittings, valves, hydrants, and accessories shall be loaded and unloaded by lifting with hoists or skidding in order to avoid shock or damage. Under no circumstances shall materials be dropped. Pipe handled on skid ways shall not be rolled or skidded against pipe on the ground.
- B. Slings, hooks, or pipe tongs shall be used in such a manner as to prevent damage to the exterior surface or internal lining of the pipe.

C. Stored materials shall be kept safe from damage. The interior of all stored and placed pipe, fittings, and other appurtenances shall be kept free from dirt or foreign matter at all times by use of tight-fitting end plugs or sturdy durable plastic bags or other MPW approved means. Pipe and fittings contaminated with mud and surface water shall be removed from the site and not used in construction unless thoroughly cleaned by the Contractor and inspected and approved by MPW. Valves and hydrants shall be drained and stored in a manner that will protect them from damage by freezing.

D. Gaskets for mechanical and push-on joints shall be stored in a cool location, out of direct sunlight. Gaskets shall not come in contact with petroleum products. Gaskets shall be used on a first-in, first-out basis.

E. Mechanical-joint bolts shall be handled and stored in a dry location in a manner that will ensure proper use with respect to types and sizes.

F. Staging will not occur prior to one week of construction and placed in a neat and orderly fashion.

1.15 PIPE INSTALLATION

A. Ductile iron pipe installation shall conform to the requirements of ANSI/AWWA C600. PVC pipe installation shall conform to the requirement of AWWA C605. HDPE installation shall conform to the requirement of AWWA M55.

B. Proper implements, tools, and facilities shall be provided and used for the safe and convenient performance of the work. All pipe, fittings, valves, and hydrants shall be lowered carefully into the trench by means of suitable tools, rigging and equipment, in such a manner as to prevent damage to water main materials and protective coatings and linings. Under no circumstances shall water main materials be dropped or dumped into the trench. The trench shall be dewatered prior to installation of the pipe.

C. All pipe, fittings, valves, hydrants, and other appurtenances shall be examined carefully for damage and other defects immediately before installation. Defective materials shall be marked and held for inspection by MPW, who may prescribe corrective repairs or reject the materials.

D. All lumps, blisters, and excess coating shall be removed from the socket and plain ends of each pipe, and the outside of the plain end and the inside of the bell shall be wiped clean and dry and be free from dirt, sand, grit, or any foreign materials before the pipe is laid.

E. Foreign material shall be prevented from entering the pipe while it is being placed in the trench. No debris, tools, clothing, or other materials shall be placed in the pipe at any time.

- F. As each length of pipe is placed in the trench, the joint shall be assembled and the pipe brought to correct line and grade. The pipe shall be secured in place with approved backfill material. Lay pipe in dry bedding material.
- G. At all times when pipe-laying is not in progress, the open ends of pipe shall be closed by a watertight plug or other means approved by MPW. When practical, the plug shall remain in place until the trench is pumped completely dry. Care must be taken to prevent pipe flotation, should the trench fill with water.
- H. Cutting pipe for insertion of valves, fittings, or closure pieces shall be done in conformance with all safety recommendations of the manufacturer of the cutting equipment. Cutting shall be done in a safe, workmanlike manner without creating damage to the pipe or cement-mortar lining. All PPE shall be used while cutting, including safety glasses and a shield. Pipe may be cut using a hydraulic squeeze cutter, abrasive pipe saw, rotary wheel cutter or guillotine pipe saw. Cut ends and rough edges shall be ground smooth, and for push-on joint connections, the cut end shall be beveled by methods recommended by the manufacturer and approved by MPW.
- I. For installations requiring polyethylene encasement for ductile-iron pipe, the encasement shall be installed in accordance with ANSI/AWWA C105/A21.5 and recommendations of DUCTILE IRON PIPE RESEARCH ASSOCIATION INSTALLATION GUIDE FOR DUCTILE IRON PIPE. This includes overlapping and the correct tape to be used on the joints. Use 10 mil blue or black polywrap pipe sleeve from AA Thread or equivalent. Use 10 mil PVC tape to bind ends with 1 ½' overlap. On mechanical or open joints with couplings, use cross laminated HDPE joint wrap, 10 mil XLAM HDPE joint wrap.
- J. Pipe which is damaged or unsound will be rejected and marked. Sound pipe before installation to detect cracks.
- K. Use suitable fittings where grades or alignments require offsets greater than manufacturer's recommended joint deflections.
- L. Follow manufacturer's recommended installation and assembly practices.
- M. CAUTION: Pressurizing HDPE pipe for testing or placing into service requires additional precautions: Leaks at pressurized fusion joints may immediately precede catastrophic and sudden pipe separation and result in violent and dangerous movement of piping or attached parts and cause a sudden release of piping contents under pressure. Never approach or attempt to repair or stop leaks while pipe is pressurized. Always depressurize pipe before making corrections. Faulty fusion joints cannot be repaired. They must be cut out and rejoined using proper heat fusion procedures.

N. TRENCHLESS INSTALLATION

1. General: Select a method of installation that is appropriate for the soil conditions anticipated and will 1) allow the pipe to be installed to the desired line and grade within the specified tolerances; 2) prevent heaving or settlement of the ground surface or damage to nearby facilities; and 3) prevent damage to the carrier pipe and any lining materials within the carrier pipe.
2. Installation Method: Horizontal directional drilling (HDD) shall be the primary method for installing pipe with trenchless technology. HDD installs pipe from a surface-launched drilling rig. A pilot bore is formed and then enlarged by back reaming and removing the spoil material. The pipe is then pulled in place. Other methods may be allowed with the Engineer's approval.
3. Line and Grade: Install pipe at line and grade that will allow the carrier pipe to be installed at its true starting elevation and grade within the specified maximum alignment deviation of the pipe centerline. When no deviation tolerances are specified in the contract documents, apply the following maximum deviations to the carrier pipe.
4. Pressurized Pipe: Tolerances for installation of pressurized water main pipe shall include horizontally accuracy of ± 2.0 feet, vertical accuracy ± 1.0 foot, while maintaining the minimum depth specified in the contract documents. Greater deviation or interference with other identified facilities may be cause for rejection.
5. Deviation from Line and Grade: Installations deviating from the specified tolerances that cannot be adjusted to conform to the specified tolerances may be rejected by the Engineer. If nonconforming installation is not rejected, provide all additional fittings, manholes, or appurtenances needed to accommodate horizontal or vertical misalignment, at no additional cost to MPW. Abandon rejected installation and place special fill materials, at no additional cost to MPW. Replace abandoned installations, including all additional fittings, manholes, or appurtenances required to replace rejected installations.
6. Casing Pipe or Un-cased Carrier Pipe Installation: Install pipe by approved methods. Use a jacking collar, timbers, and other means as necessary to protect the driven end of the pipe from damage. Do not exceed the compressive or tensile strength capacity of the pipe during pushing or pulling operations. Fully support bore hole at all times to prevent collapse. Insert pipe as soil is removed, or support bore with drilling fluid. Fully weld all casing pipe joints. Use an interlocking connection system when approved by the Engineer. Fill space between the inside of the bore hole and the outside of the pipe with special fill material if the space is greater than 1 inch.

7. Pit Restoration: Remove installation equipment and unused materials from the launching and receiving pits. When the carrier pipe extends beyond the limits of trenchless installation and into the bore pit, place bedding and backfill material according to this Section. Place suitable backfill material in the pit. Apply the testing requirements of this Section. Restore the site to original condition or better.

1.16 TRACER WIRE INSTALLATION

- A. Copperhead tracer wire shall be installed on top of water main once backfill has been brought up to top of pipe.
- B. Tracer wires will be tested for continuity before final acceptance of the Project. Wires without continuity shall be repaired or reinstalled by Contractor.
- C. Tracer wire shall be brought up to ground level at all valve boxes and installed in a separate tracer wire box. At all dead ends and valve/hydrants, a tracer wire anode will be installed. See the tracer wire specification drawings in Attachment 4 for more detail.
- D. Tracer wire access boxes will be placed at a maximum distance of 500'.

1.17 HORIZONTAL AND VERTICAL SEPARATIONS

A. Horizontal Separation of Gravity Sanitary and Combined Sewers from Water Mains:

- 1. Separate gravity sanitary and combined sewer mains from water mains by a horizontal distance of at least 10 feet unless: (a) the top of a sewer main is at least 18 inches below the bottom of the water main, and (b) the sewer is placed in a separate trench or in the same trench on a bench of undisturbed earth at a minimum horizontal separation of 3 feet from the water main.
- 2. When it is impossible to obtain the required horizontal clearance of 3 feet and a vertical clearance of 18 inches between sewers and water mains, provide a linear separation of at least 2 feet and one of the following: (a) construct sanitary and combined sewers of water main materials meeting the requirements of SUDAS Section 5010, 2.01, or (b) enclose the water main in a watertight casing pipe with an evenly spaced annular gap and watertight end seals.

B. Horizontal Separation of Gravity Storm Sewers from Water Mains:

- 1. Separate gravity storm sewers and water mains by a horizontal distance of at least 10 feet unless it is impossible to do so.

2. When impossible to maintain a 10 feet horizontal separation, maintain a minimum separation of 3 feet and utilize one of the following within 10 feet measured edge-to-edge: (a) construct the water main of ductile iron pipe with gaskets impermeable to hydrocarbons, (b) enclose the water main in a watertight casing pipe with evenly spaced annular gap and watertight end seals, (c) construct storm sewer pipe of water main materials, or (d) construct storm sewers of reinforced concrete pipe with gaskets manufactured according to ASTM C 443.

C. Horizontal Separation of Water Mains from Sanitary and Combined Sewer Manholes: Ensure water pipes do not pass through or come in contact with any part of a sanitary or combined sewer manhole. Maintain a minimum horizontal separation of 3 feet.

D. Separation of Sewer Force Mains from Water Mains: Separate sewer force mains and water mains by a horizontal distance of at least 10 feet unless:

1. The force main is constructed of water main materials meeting a minimum pressure rating of 150 psi and the requirements of SUDAS Section 5010, 2.01 and,
2. The sewer force main is laid at least 4 linear feet from the water main.

E. Vertical Separation of Sanitary or Combined Sewer and Water Main Crossovers:

1. Vertically separate sanitary and combined sewers crossing under water main by at least 18 inches when measured from the top of the sewer to the bottom of the water main. If physical conditions prohibit the separation, do not place the sewer closer than 6 inches below a water main or 18 inches above a water main. Maintain the maximum feasible separation distance in all cases. The sewer and water pipes must be adequately supported and have watertight joints. Use a low permeability soil for backfill material within 10 feet of the point of crossing.
2. Where the sanitary sewer crosses over or less than 18 inches below a water main, utilize one of the following within 10 feet measured edge-to-edge horizontally, centered on the crossing: (a) construct sanitary and combined sewers of water main material meeting the requirements of SUDAS Section 5010, 2.01. or (b) enclose the water main in a watertight casing pipe with an evenly spaced annular gap and watertight end seals.

F. Vertical Separation of Storm Sewer and Water Main Crossovers:

1. Vertically separate storm sewers crossing from water mains by at least 18 inches measured between the outside edges of the water main and storm sewer. Maintain the maximum feasible separation distance in all cases. The sewer and water pipes must be adequately supported and have watertight joints. Use a low permeability soil for backfill material within 10 feet of the point of crossing.
2. When impossible to maintain an 18 inch vertical separation when the water main crosses over the storm sewer, maintain a minimum vertical separation of 6 inches and utilize one of the following within 10 feet measured edge-to-edge centered on the crossing: (a) construct the water main of ductile iron pipe with gaskets impermeable to hydrocarbons, (b) enclose the water main in a watertight casing pipe with evenly spaced annular gap and watertight end seals, (c) construct storm sewer pipe of water main materials, or (d) construct storm sewers of reinforced concrete pipe with gaskets manufactured according to ASTM C 443.

G. Surface Water Crossings: Comply with the Recommended Standards for Water Works, 2007 Edition, section 3.07 CONFLICTS (Section from SUDAS)

1. Above-water Crossings: Ensure the pipe is adequately supported and anchored; protected from vandalism, damage, and freezing; and accessible for repair or replacement.
2. Underwater Crossings: Provide a minimum cover of 5 feet over the pipe unless otherwise specified in the contract documents. When crossing water courses that are greater than 15 feet in width, provide the following: (a) pipe with flexible, restrained, or welded watertight joints, (b) valves at both ends of water crossings so the section can be isolated for testing or repair; ensure the valves are easily accessible and not subject to flooding, and (c) permanent taps or other provisions to allow insertion of a small meter to determine leakage and obtain water samples on each side of the valve closest to the supply source.

H. Should physical conditions exist such that exceptions to above separations are required, Contractor shall obtain MPW's Project Leader's assistance for details which will provide protection equal to that provided by above items. When it is impossible to obtain the minimum specified separation distances, the IDNR must specifically approve any variance from the requirements.

1.18 CONNECTIONS TO EXISTING WATER MAINS

- A. Existing water mains shall remain in service during installation of new water main. Length of time for tie-in shall be kept to a minimum. Coordinate tie-in with MPW.
- B. Uncover existing mains, to which connections are to be made, a sufficient time ahead of pipe laying operations to verify fittings required.
- C. Clean and disinfect existing main and inside of fittings and valves in accordance with Disinfection and De-chlorination section of this Standard Specification.
- D. In general, a 6' by 8' hole will be required for MPW to make a safe tapping connection. If a tap larger than 4" is being made, 6' of clearance is needed from the face of the tapping valve. The side of the pipe that is being tapped needs to be excavated lower so water does not come up on to the pipe or contaminate the tapping machine. Any excavation over 5' deep requires trench protection.

1.19 GATE VALVES AND FITTINGS

- A. Prior to installation, valves shall be inspected for direction of opening, number of turns to open, freedom of operation, tightness of pressure-containing bolting and test plugs, cleanliness of valve ports and seating surfaces, handling damage, and cracks. Defective valves shall be corrected or held for inspection by MPW. Valves shall be closed before being installed.

Valves, fittings, plugs, and caps shall be set and joined to the pipe in the manner specified for all valves for cleaning, laying, and joining pipe. Valves 12 inches and larger should be provided with special support, such as crushed stone or concrete blocks so that the pipe will not be required to support the weight of the valve. Valves shall be installed in the closed position.
- B. Install valves with stems vertical, except where shown otherwise on plans.
- C. Tighten valve glands on new and existing valves as work is installed; replace O-rings if required and retighten glands after valves are placed in operation and brought up to operating pressure. Replace any O-rings which are deteriorated or in unsatisfactory condition.
- D. A valve box shall be provided for every valve. The valve box shall not transmit shock or stress to the valve. Valve box shall be centered over the operating nut of the valve using one standard centering ring manufactured for that purpose. The box cover shall be flush with the surface of the finished area unless otherwise directed by MPW.
- E. In no case shall valves be used to bring misaligned pipe into alignment during installation. Pipe shall be supported in such a manner as to prevent stress on the valve.
- F. If valves are going to be deeper than 5' from ground surface, MPW requires an valve nut extension. If deeper than 8', a solid valve box will be required.

1.20 TAPPING VALVES AND SLEEVES

- A. Conform to requirements for gate valves and fittings listed above.
- B. Follow manufacturer's recommended assembly and installation practices.
- C. All valves and sleeves will be blocked for support.

1.21 FIRE HYDRANTS

- A. Prior to installation, all hydrants shall be inspected for direction of opening, nozzle threading, operating-nut and cap-nut dimensions, tightness of pressure-containing bolting, cleanliness of inlet elbow, handling damage, and cracks. Defective hydrants shall be replaced or held for inspection by MPW.
- B. All hydrants shall be set plumb and shall have their nozzles parallel with or at right angles to the curb, with steamer (largest) nozzle facing the curb.
- C. Hydrants shall be set to the established grade and set to the bury line marked on the hydrant so the breakaway will work correctly.
- D. Hydrant drains shall not be connected to, or located within 10 feet of, sanitary sewers and storm drains.
- E. All fire hydrants shall be independently valved. Refer to Attachment 2 for plan layout of valving and pipe.
- F. Flush hydrants will be used at the discretion of the Utility.
- G. Hydrants must meet new specifications for lead free brass.
- H. Hydrants need to be blocked with hard blocks and shims. Pour concrete only if poor soils are in the area. Refer to Attachment 1 for more details.

1.22 THRUST RESTRAINT/BLOCKING

- A. Thrust blocking: Provide cast-in-placed concrete thrust blocks where buried piping changes direction, changes size, and at dead ends, unless otherwise noted on the Plans or approved by the Engineer. Concrete shall have a minimum compressive strength of 4000 psi in 28 days. Allow concrete adequate time to reach a compressive strength of 3000 psi prior to pressure testing. Concrete thrust blocks shall be cast against undisturbed vertical edge of trench for bearing, the bearing surface of thrust block shall be symmetrical vertically and horizontally with respect to line of force of pipe or joint, thrust blocks at dead ends, at plugs and at caps shall be removable so that lines may be easily extended after testing and a period

of normal service, and thrust blocks at fittings shall be placed in such a manner as to permit tightening of mechanical joint bolts after placement of thrust block.

Thrust blocks shall be subject to inspection and approval of MPW's Project Leader prior to water main testing.

B. Tie rods: Tie rods and fittings shall be suitable for use with mechanical joint fittings. Coat tie rods and fittings with 2 coats of coal tar paint or spray on bituminous automotive undercoating material after installation. Tie-rod assemblies and systems are subject to MPW's approval.

C. Thrust restraint: Mechanical joint restraints for push on or mechanical joints may be used instead of concrete blocking when indicated on the Plans or in the Detailed Specifications for the Project. The preferred method is to use joint restraints (i.e. Megalugs) in addition to concrete blocking or poured kickers.

D. A detail drawing showing typical thrust block installations is found in Attachment 3 at the end of these specifications. Thrust blocking from pipe sizes greater than 20-inches will be as shown on the Plans or in Detailed Specifications for the Project.

Sizes of thrust blocks in square feet of bearing area for water mains based on soil bearing capacity of 2000 pounds per square foot are listed in the table below:

Table 2 - Bearing Area of thrust Blocks in Square Feet

Pipe Size (Inches)	90° Bend	45° Bend	22-1/2° Bend	11-1/4° Bend	Dead End or Tee
4	3	2	2	1	2
6	6	3	2	1	4
8	10	5	3	2	7
10	14	8	4	2	10
12	20	11	6	3	14
14	26	14	8	4	19
16	34	19	10	5	24
18	40	22	11	6	28
20	52	28	15	7	37

1.23 SURFACE RESTORATION

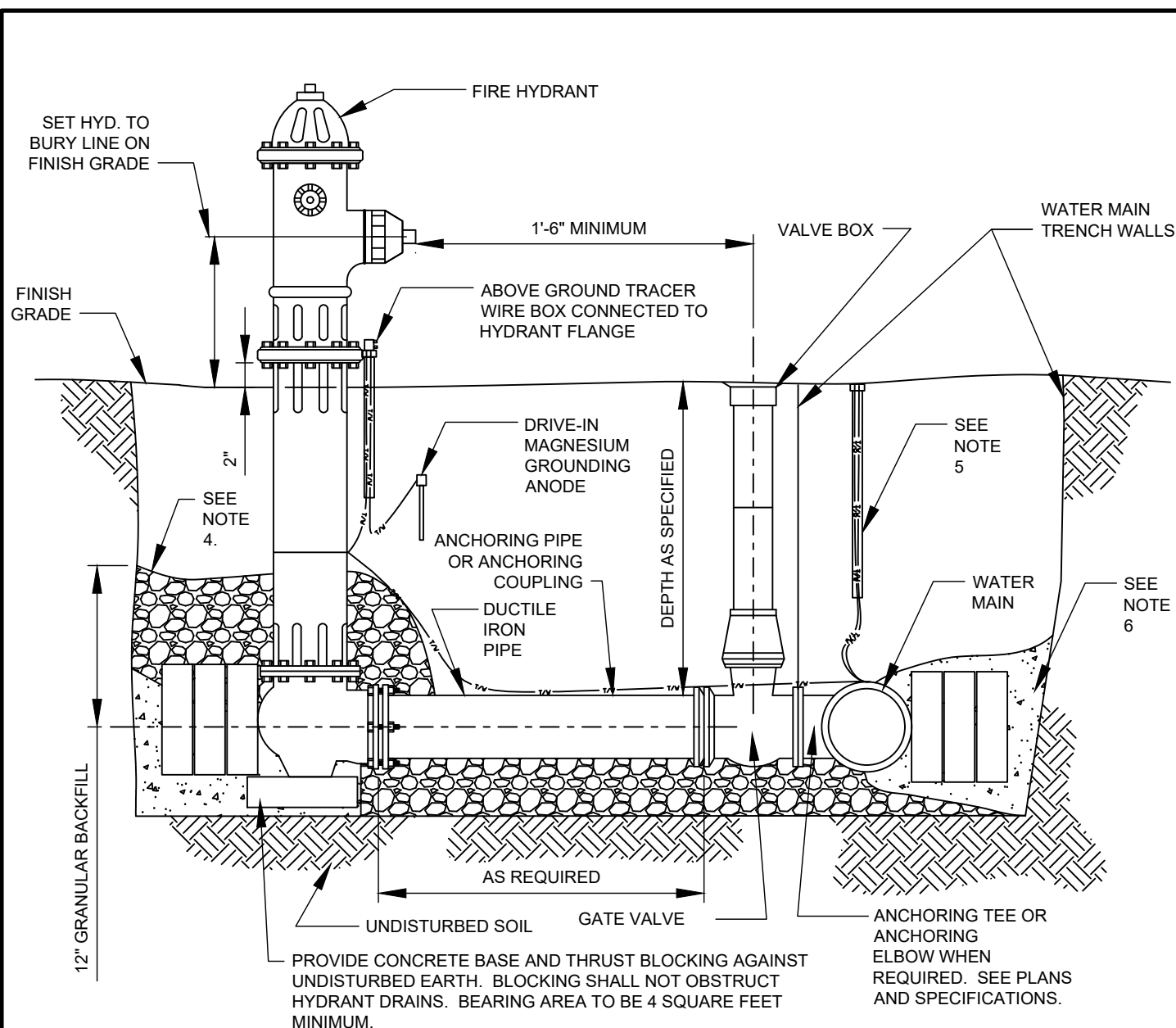
- A. Reopen backfilled areas to traffic or former use as soon as possible. Refer to Attachment 6 and 7 for typical trench and roadway repairs.
- B. Fill all depressions and grade disturbed areas to provide smooth uniformly sloping surfaces with positive drainage.
- C. Seeding details are noted in Section 1.5.M
- D. Agricultural areas shall have topsoil stripped back to a depth of 12 inches. Topsoil shall be kept separate from other excavated materials and spread back over disturbed areas after water main installation and backfill operations have been completed.
- E. Apply fertilizer, seeding and mulch at rates provided for in Materials portion of this Standard Specification.

1.24 CLEAN UP

- A. Contractor shall keep site clean and orderly. Contractor shall remove all brush, rubbish, rocks, spoil and other waste materials off site for disposal. MPW reserves the right to instruct the contractor on clean-up timelines. Excess materials from all demolitions and excavations shall be disposed of offsite by Contractor, at Contractor's expense, unless otherwise shown on Plans or described in Detailed Specifications for the Project. Leave site generally as it was prior to construction. Site shall be picked up, raked and left in a finished, smooth, clean, seeded and mulched condition.

ATTACHMENTS

1. Hydrant Installation Detail Elevation – AWD0212A
2. Hydrant Installation Detail Plan – AWD0212B
3. Thrust Block Details – AWD0212C
4. Tracer Wire Installation Plan – AWD0212D
5. Trench Detail – AWD0212E



NOTES:

1. ALTERNATE MECHANICAL JOINT RESTRAINT SYSTEMS ARE SUBJECT TO OWNER'S APPROVAL.
2. APPLY POLYETHYLENE ENCASEMENT ON PIPE, VALVE, VALVE BOX FIRE HYDRANT AND FITTINGS AS SPECIFIED.
3. HYDRANT STEAMER NOZZLE TO BE TURNED TOWARDS STREET UNLESS SPECIFIED OTHERWISE.
4. INSTALL LAYER OF FILTER FABRIC OR 4 MIL PLASTIC FILM BARRIER OVER DRAIN FIELD. DRAIN FIELD COMPRISED OF 1/2 CU. YD. MINIMUM OF 1" WASHED GRAVEL.
5. USE SNAKEPIT TRACER WIRE BOXES ON WATERMAIN AS SPECIFIED IN PLANS.
6. USE CONCRETE BLOCKS IF SOIL IS LOAD BEARING, OTHERWISE, USE POURED CONCRETE THRUST BLOCK AS SPECIFIED IN PLANS.

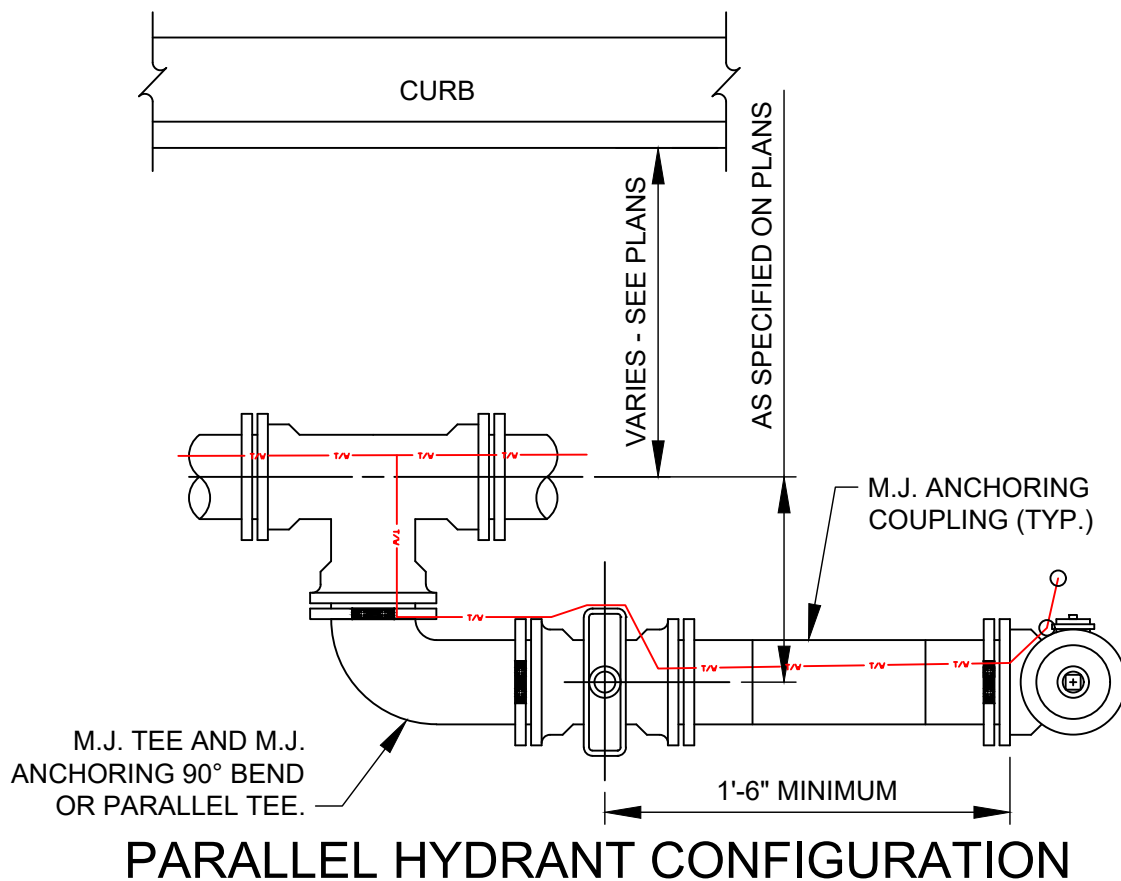
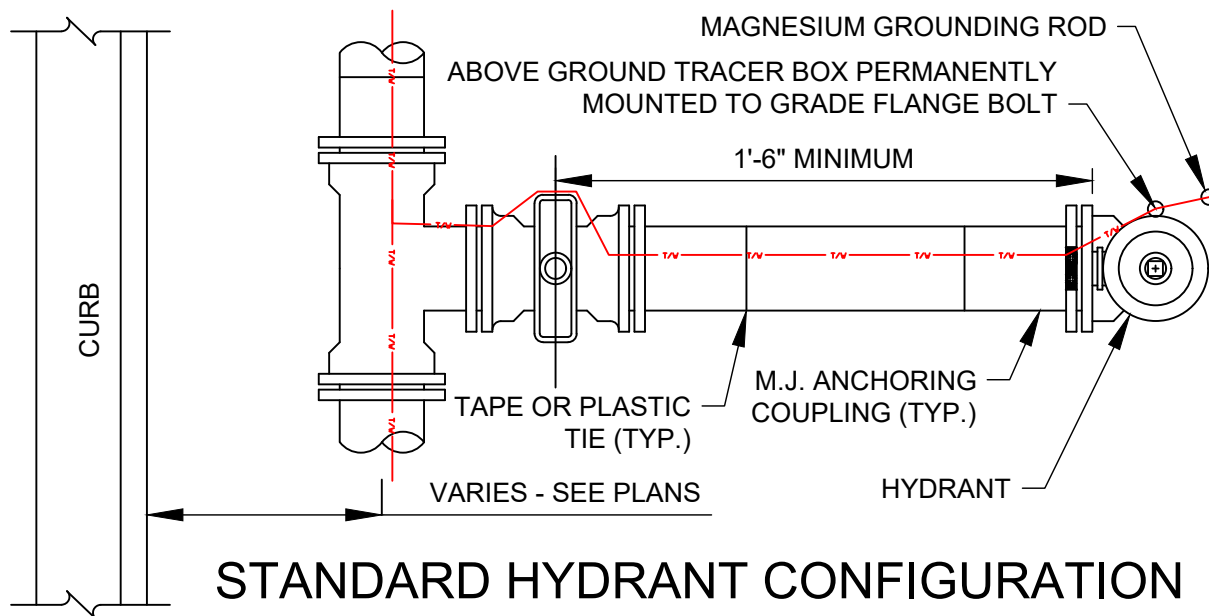
DRAWN BY S. WIESKAMP	DATE 11/30/04
APPROVED BY A. GROSS	DATE 2-18-15
REVISED BY A. HANEY	DATE 2-12-15
SCALE NONE	

HYDRANT INSTALLATION DETAIL ELEVATION



MUSCATINE POWER & WATER

FILE No.	142
DRAWING No.	AWD0212A



DRAWN BY S. WIESKAMP	DATE 11/30/04
APPROVED BY A. GROSS	DATE 2/17/15
REVISED BY A. HANEY	DATE 2/17/15
SCALE NONE	

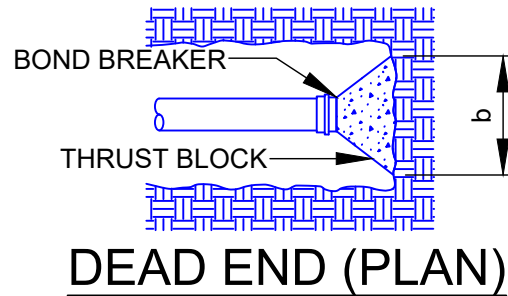
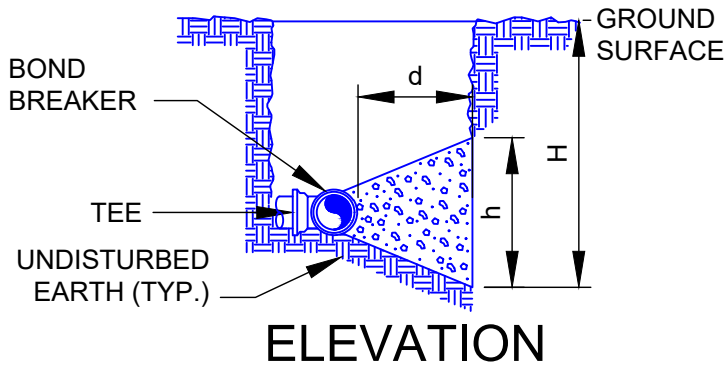
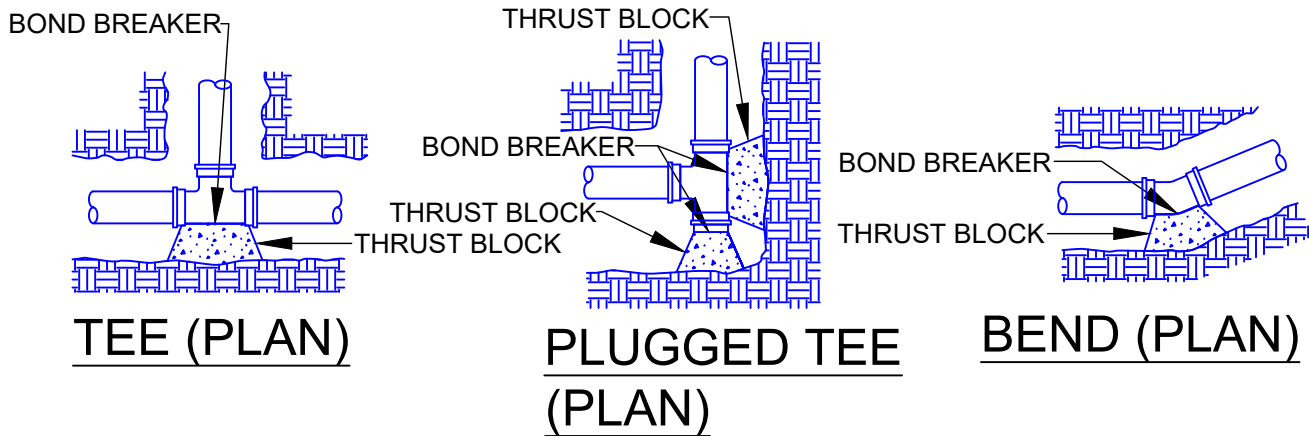
HYDRANT INSTALLATION DETAIL PLAN



MUSCATINE POWER & WATER

FILE No. **142**

DRAWING No. **AWD0212B**



NOTES:

- 1) BEARING SURFACE SHOULD, WHERE POSSIBLE, BE PLACED AGAINST UNDISTURBED SOIL. WHERE IT IS NOT POSSIBLE, THE FILL BETWEEN THE BEARING SURFACE AND UNDISTURBED SOIL MUST BE COMPACTED TO AT LEAST 90% STANDARD PROCTOR DENSITY, VERIFIED BY IN PLACE DENSITY TESTING.
- 2) BLOCK HEIGHT (h) SHOULD BE EQUAL TO OR LESS THAN ONE-HALF THE TOTAL DEPTH TO THE BOTTOM OF THE BLOCK, (H), BUT NOT LESS THAN THE PIPE DIAMETER.
- 3) BLOCK HEIGHT (h) SHOULD BE CHOSEN SUCH THAT THE CALCULATED BLOCK WIDTH (b) VARIES BETWEEN ONE AND TWO TIMES THE HEIGHT.
- 4) DO NOT ALLOW CONCRETE TO DIRECTLY CONTACT JOINTS OR FITTING BOLTS, PROTECT JOINTS AND BOLTS WITH POLYETHYLENE ENCASEMENT.
- 5) BLOCK DEPTH (d) SHALL BE AT LEAST $\frac{1}{2}$ BLOCK HEIGHT (H).

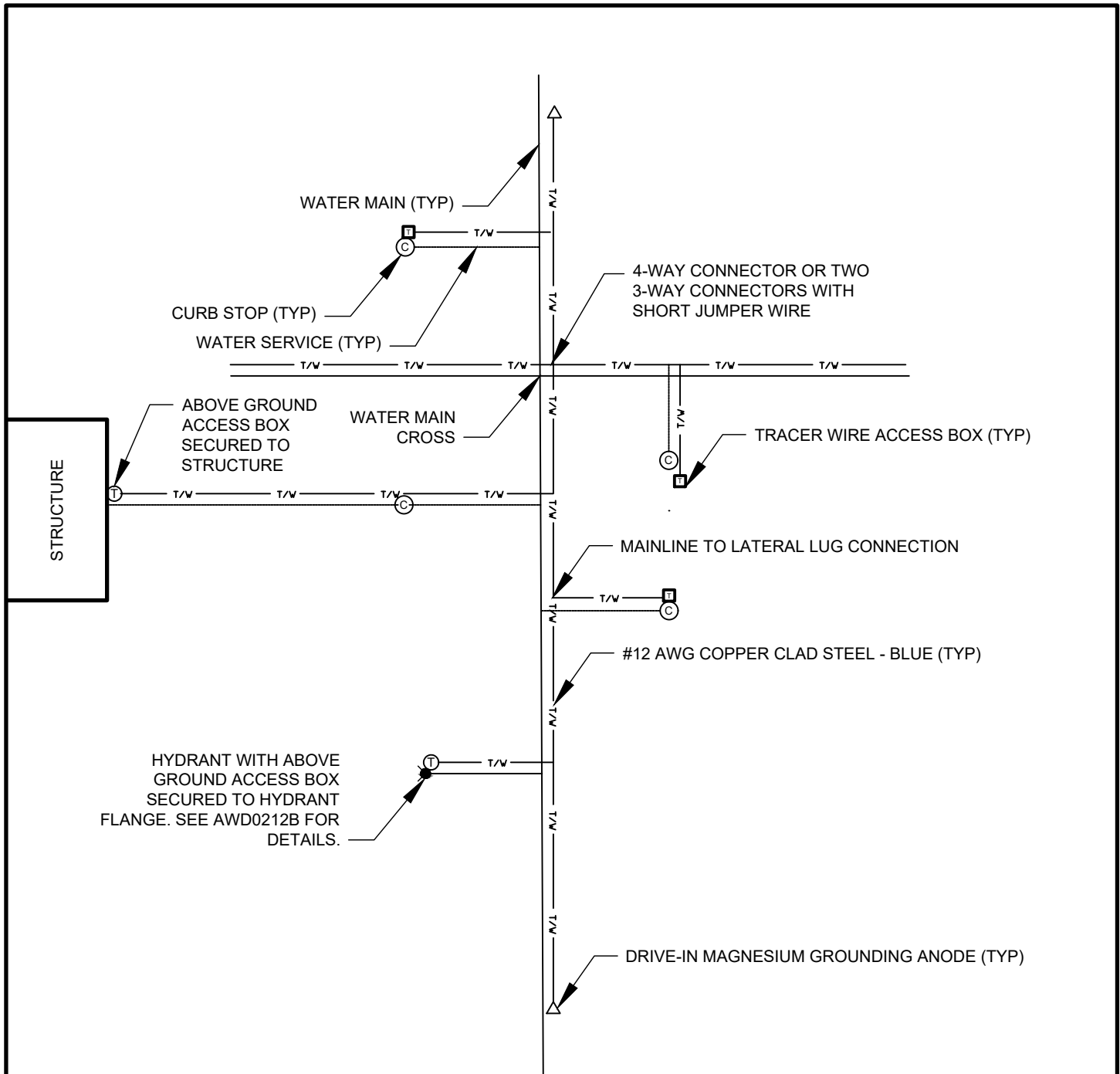
DRAWN BY S. WIESKAMP	DATE 12/02/04
APPROVED BY Gerald R. Peterson	DATE 01/13/05
REVISED BY E.B.GLENNEY	DATE 3-28-08
SCALE NONE	



MUSCATINE POWER & WATER

THRUST BLOCK DETAILS

FILE No.	142
DRAWING No.	AWD0212C



NOTES

1. TRACER WIRE SHOWN OFFSET FROM PIPE FOR CLARITY. WIRE SHALL BE INSTALLED ON TOP OF PIPE AND FASTENED TO THE PIPE WITH TAPE OR PLASTIC TIES AT 5' INTERVALS.

DRAWN BY A. HANEY	DATE 2/10/15
APPROVED BY A. GROSS	DATE 2/18/15
REVISED BY A. HANEY	DATE 2/10/15
SCALE NONE	

TRACER WIRE INSTALLATION PLAN

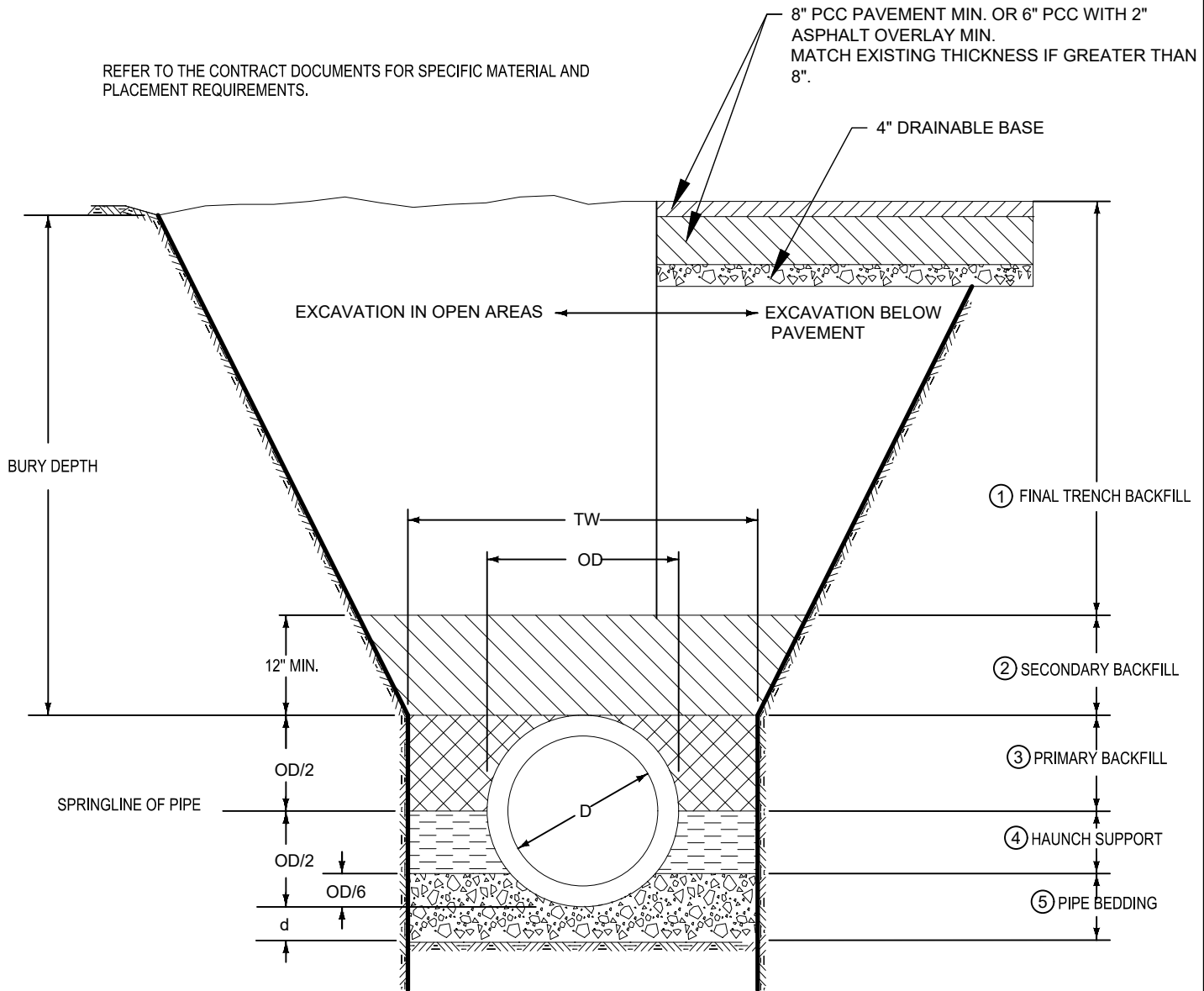


MUSCATINE POWER & WATER

FILE No. 142

DRAWING No. AWD0212D

REFER TO THE CONTRACT DOCUMENTS FOR SPECIFIC MATERIAL AND PLACEMENT REQUIREMENTS.



① BACKFILL SHALL BE CLEAN SAND OR MANUFACTURED SAND WITHIN 10 FT. OF PAVEMENT.

②③④ BACKFILL SHALL BE CLEAN SAND OR MANUFACTURED SAND REGARDLESS OF LOCATION.

⑤ IF ROCKS OR UNSUITABLE SOILS ARE ENCOUNTERED, OVER EXCAVATE AND REPLACE WITH COMPACTED ROCK OR MANUFACTURED SAND; OTHERWISE PIPE CAN BE BEDDED ON NATIVE MATERIALS.

Key

OD = OUTSIDE DIAMETER OF PIPE

D = INSIDE DIAMETER OF PIPE

TW = TRENCH WIDTH AT TOP OF PIPE, MAX IS OD + 12" EACH SIDE

d = DEPTH OF BEDDING MATERIAL BELOW PIPE, 6"

DRAWN BY A. HANEY	DATE 5-22-15
APPROVED BY AHREN GROSS	DATE 5-28-15
REVISED BY	DATE

SCALE
NONE



MUSCATINE POWER & WATER

TRENCH DETAIL

FILE No. **142**

DRAWING No.
AWD0212E



City of Muscatine

ITEM NUMBER

AGENDA ITEM SUMMARY

DATE: 3/20/2025

STAFF

Kevin Coon, City Engineer
Brian Stineman, Public Works Director

SUBJECT

Public Hearing for Review of the Plans and Specifications for the Fulliam Avenue Reconstruction Phase 3 Project.

EXECUTIVE SUMMARY

STAFF RECOMMENDATION

BACKGROUND/DISCUSSION

This is for the third and final phase of the Fulliam Avenue Reconstruction Project.

CITY FINANCIAL IMPACT

ATTACHMENTS

1. Fulliam Ave Phase 3 Project Manual Final (IonWave)
2. Fulliam Ave Reconstruction - Phase 3 Plans 03.13.2025

PROJECT MANUAL

Fulliam Ave Reconstruction - Phase 3

City of Muscatine

Muscatine, Iowa

March, 2025

BMI Project No. 0G1.133022

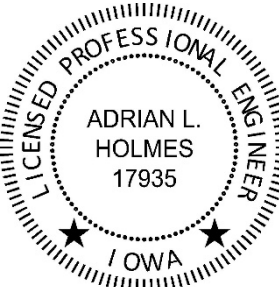


Real People. Real Solutions.

Bolton-Menk.com

SECTION 00005 - CERTIFICATION PAGE

PROJECT MANUAL
FOR
FULLIAM AVE RECONSTRUCTION - PHASE 3
CITY OF MUSCATINE
MUSCATINE, IOWA
MARCH, 2025
BMI PROJECT NO. 0G1.133022

	I hereby certify that this engineering document was prepared by me or under my direct personal supervision and that I am a duly licensed Professional Engineer under the laws of the State of Iowa.  Date: <u>March 12, 2025</u> Adrian L. Holmes, P.E. License No. 17935 My renewal date is December 31, 2025 Pages or sheets covered by this seal: <u>ALL</u>
---	--

SECTION 00010 - TABLE OF CONTENTS

Fulliam Ave Reconstruction - Phase 3
City of Muscatine

CONTRACT DOCUMENTS:

PROJECT MANUAL:

Introductory Information, Bidding Requirements, Contract Forms and Conditions of Contract

00005 - CERTIFICATION PAGE
00010 - TABLE OF CONTENTS
00100 - NOTICE TO BIDDERS
00110 - NOTICE OF PUBLIC HEARING
00200 - INSTRUCTIONS TO BIDDERS
00410 - PROPOSAL
00420 - BID BOND
00500 - CONTRACT
00610 - PERFORMANCE, PAYMENT AND MAINTENANCE BOND
00800 - SPECIAL PROVISIONS

DRAWINGS (UNDER SEPARATE COVER):

23 sheets numbered A.01 through W.02, inclusive, dated March 12, 2025, and with each sheet bearing the following general title:

Fulliam Ave Reconstruction - Phase 3
City of Muscatine, Iowa

**This project is based on
SUDAS STANDARD SPECIFICATIONS, 2025 EDITION
unless modified herein.**

*******END OF SECTION*******

SECTION 00100 - NOTICE TO BIDDERS

Fulliam Ave Reconstruction - Phase 3
City of Muscatine
Muscatine, Iowa

Time and Place for Filing Sealed Proposals. Bids shall be submitted to the City's IonWave website (<http://muscatineiowa.ionwave.net>) for the work comprising the repair or improvement as stated below and must be filed before 2:00 P.M. on April 24, 2025. Attachments and bid security shall be uploaded in a PDF format to the "Response Attachments" section of the project's page found on the City of Muscatine's IonWave website. Attachments may be completed electronically, or completed by hand and scanned into a PDF format, according to the bidder's preference.

Time and Place Sealed Proposals Will be Opened and Considered. Sealed proposals will be opened and bids tabulated at 2:00 P.M. on April 24, 2025, in the office of the City Finance Director, City of Muscatine, 215 Sycamore Street, Muscatine, Iowa 52761 with the results being reported to the City Council, City of Muscatine at its meeting at 6:00 P.M. on May 1, 2025 at which time the City Council may take action on the proposals submitted or at such time as may then be fixed. The City of Muscatine, City Council reserves the right to reject any or all bids, to waive informalities or technicalities in any bid, and to enter into such contract, or contracts, as it shall deem to be to the best interest of the City of Muscatine.

Time for Commencement and Completion of Work. Work on the improvement shall commence upon approval of the contract by the City Council, as stated in the Notice to Proceed. No road closures shall be allowed prior to June 2, 2025. All work under the contract must be substantially complete on or before August 8, 2025 and completed and ready for final payment in accordance with General Conditions on or before August 29, 2025. Liquidated damages are as set forth in Section 00500 – Contract.

Bid Security. Each Bidder shall accompany its bid with bid security, as defined in Iowa Code Section 26.8, as security that the successful Bidder will enter into a contract for the work bid upon. The Bidder's security shall be in an amount equal to 5 percent of the total amount of the bid. The bid shall contain no condition except as provided in the specifications. If the Bidder fails to execute the contract and to furnish an acceptable Performance, Payment, and Maintenance Bond or provide a Certificate of Insurance within ten (10) days after acceptance of the bid by the City, the bid security may be forfeited or cashed by the City as liquidated damages.

Contract Documents. Copies of the project documents are available for a price of \$25.00 per set. This fee is refundable, provided the plans and specifications are returned complete and in reusable condition, and they are returned within fourteen (14) calendar days after the award of the project. Please make your check payable to Bolton & Menk, Inc. and send it to 401 1st Street SE, Suite 201, Cedar Rapids, IA 52401. Complete digital project bidding documents are available at <http://muscatineiowa.ionwave.net>, at no cost.

Preference of Products and Labor. By virtue of statutory authority, a preference will be given to products and provisions grown and coal produced within the State of Iowa, to the extent lawfully required under Iowa statutes.

Sales Tax Exemption Certificates. The Bidder shall not include sales tax in the bid. The City of Muscatine will distribute tax exemption certificates and authorization letters to the contractor and all subcontractors who are identified. The contractor and subcontractor may make copies of the tax exemption certificates and provide a copy to each supplier providing construction materials. These tax exemption certificates and authorization letters are applicable only for this specific project under the contract.

PROJECT DESCRIPTION: This project consists of reconstruction of approximately 700 feet of the Fulliam Avenue roadway from 100 feet east of the Houser Street centerline, sidewalk improvements to meet accessibility standards and storm sewer improvements

The Notice is given by order of the City Council of the City of Muscatine.

Cinda Hilger
City Clerk

SECTION 00110 - NOTICE OF PUBLIC HEARING

Fulliam Ave Reconstruction - Phase 3
City of Muscatine
Muscatine, Iowa

Public Hearing on Proposed Contract Documents and Estimated Costs for Repair or Improvement. A public hearing will be held by the City of Muscatine on the proposed contract documents (plans, specifications and form of contract) and estimated cost for the improvement at its meeting at 6:00 P.M. on March 20, 2025, at City Hall, 215 Sycamore Street, Muscatine, Iowa 52761.

PROJECT DESCRIPTION: This project consists of reconstruction of approximately 700 feet of the Fulliam Avenue roadway from 100 feet east of the Houser Street centerline, sidewalk improvements to meet accessibility standards and storm sewer improvements

At said hearing, the City Council will consider the plans, specifications, proposed form of contract, and estimated total cost for the project, the same now being on file in the office of the City Clerk, City Hall, 215 Sycamore Street, Muscatine, Iowa 52761, reference to which is made for a more detailed and complete description of the proposed improvements, and at said time and place the said City Council will also receive and consider any objections to said plans, specifications, estimate of cost, and form of contract made by any interested party.

SECTION 00200 - INSTRUCTIONS TO BIDDERS

Fulliam Ave Reconstruction - Phase 3
City of Muscatine
Muscatine, Iowa

The work comprising the above referenced project shall be constructed in accordance with the SUDAS Standard Specifications, 2025 Edition, and as further modified by the special provisions included in the contract documents. The terms used in the contract version of the documents are defined in said standard specifications. Before submitting a bid, please review the requirements of Division One, General Provisions and Covenants. Please be certain that all documents have been completed properly, as failure to complete and sign all documents and to comply with the requirements listed below can cause a submitted bid not to be read.

ARTICLE 1—BID SECURITY

- 1.01 The bid security must be in the minimum amount of 5% of the total bid amount including all add alternates (do not deduct the amount of deduct alternates).
- 1.02 Bid security other than said bid bond shall be in accordance with Chapter 26 of the Iowa Code.
- 1.03 Bid security shall be in the form of a cashier's check or certified check drawn on a state chartered or federally chartered bank; or a certified share draft drawn on a state chartered or federally chartered credit union; or a bidder's bond with corporate surety satisfactory to the City of Muscatine, hereinafter called the "Jurisdiction".
- 1.04 The bid bond must be submitted on the Bid Bond form that can be uploaded from the "Response Attachments" tab in IonWave as no other bid bond forms are acceptable. All signatures on the bid bond must be original signatures in ink; electronic, copies, or facsimile (fax) of any signature on the bid bond is not acceptable.

ARTICLE 2—SUBMISSION OF THE PROPOSAL AND IDENTITY OF BIDDERS

- 2.01 All bids shall be submitted through the <http://muscatineiowa.ionwave.net> website. Mailed, hand-delivered, emailed or faxed submissions will **not** be accepted.
- 2.02 Each bidder shall upload one copy of the bid documents, including the Bid Form Attachments and Bid Bond or bid security.
 - A. PROPOSAL – Complete each of the following parts:
 - Part B – Acknowledgment of Addenda, if any have been issued;
 - Part C – Bid Items, Quantities and Prices
 - Part F – Additional Requirements;
 - Part G – Identity of Bidder;
- 2.03 Attachments and bid security shall be uploaded in a PDF format to the "Response Attachments" section of the project's page found on the <http://muscatineiowa.ionwave.net> website. Attachments may be completed electronically, or completed by hand and scanned into a PDF format, according to the bidder's preference. Verify you have uploaded the correct documents before submitting your bid.
- 2.04 Documents must be submitted as printed. No alterations, additions, or deletions are permitted. If the Bidder notes a requirement in the contract documents which the Bidder believes will require a conditioned or unsolicited alternate bid, the Bidder must immediately notify the Engineer in writing. The Engineer will issue any necessary interpretation by an addendum.
- 2.05 Division 1 - General Provisions and Covenants of the 2025 SUDAS Standard Specifications is modified as follows:
 - A. Section 1020.1.09B, Unit Price Attachment.

A computer-generated unit price attachment may be submitted by the Bidder as specified by this section.

- 2.06 The Bidder Status Form is required by the Iowa Labor Commissioner, pursuant to the Iowa Administrative Code rule 875-156.2(1). The bidder must complete and submit the Bidder Status Form signed by an authorized representative of the bidder, with their bid proposal. Under Iowa Administrative Code rule 875-156.2(1), failure to provide the Bidder Status Form with the bid may result in the bid being deemed non-responsive and may result in the bid being rejected. The Worksheet: Authorized to Transact Business from the Labor Commissioner is included and can be used to assist bidders in completing the Bidder Status Form. This form may be signed digitally, or by hand, and scanned into a PDF format.
- 2.07 The final step of the online submission is a digital signature certifying all entries and response attachments to be correct. The signature must be by the same individual who is the Company Owner or an authorized Officer of the Company. If an addendum which materially affects bid quantities is issued after your bid is submitted, your status will change from "Complete" to "Not Submitted." An addendum will not be issued less than 24 hours before the bid opening. The bidder is solely responsible for monitoring the status of their bid.

ARTICLE 3—PROSECUTION AND PROGRESS OF THE WORK

- 3.01 The work is located in the City of Muscatine.
- Work on the improvement shall commence upon approval of the contract by the City Council and as stated in the Notice to Proceed. All work under the contract must be completed as stated in Section 00500 - Contract. Liquidated damages will be assessed as detailed in Section 00500 - Contract.
- 3.02 Community Events.
- Successful Bidder will be required to coordinate with the Jurisdiction and accommodate the Jurisdiction's requirements for the following list of events:
- None
- 3.03 Each successful Bidder will be required to furnish a corporate surety bond in an amount equal to 100% of its contract price. Said bond shall be issued by a responsible surety approved by City of Muscatine and shall guarantee the faithful performance of the contract, the terms and conditions therein contained, the prompt payment of all material and labor, protect and save harmless the City of Muscatine from claims and damages of any kind caused by the operations of the contract, and shall also guarantee the maintenance of the improvement caused by failures in materials and construction for a period of 2 years from and after acceptance of the work.
- 3.04 The City of Muscatine, in accordance with Title VI of the Civil Rights Act of 1964, 78 Stat. 252, 42U.S.C. 2000d to 2000d-4 and Title 49 Code of Federal Regulations, Department of Transportation, Subtitle A, Office of the Secretary, Part 21, Nondiscrimination in Federally-Assisted programs of the Department of Transportation issued pursuant to such Act, hereby notifies all Bidders that it will affirmatively ensure that with any contract entered into pursuant to this advertisement, minority business enterprises will be afforded full opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, or national origin in consideration for an award.

ARTICLE 4—PREFERENCE OF PRODUCTS AND LABOR

- 4.01 In accordance with Iowa statutes, a resident bidder shall be allowed preference against a nonresident bidder from a state or foreign country provided that state or foreign country gives or requires any preference to bidders from that state or foreign country. This includes, but is not limited to any preference to bidders, the imposition of any type of labor force preference, or any other form of preferential treatment to bidders or laborers from that state or foreign country. The preference allowed shall be equal to the preference given or required by the state or foreign country in which the nonresident bidder is a resident. In the instance of a resident labor force preference, a nonresident bidder shall apply the same resident labor force preference to a public improvement in this state as would be required in the construction of a public improvement by the state or foreign country in which the nonresident bidder is a resident. If it is determined that this may cause denial of federal funds which would otherwise be available or would otherwise be inconsistent with requirements of any federal law or regulation, this resident bidder preference

shall be suspended, but only to the extent necessary to prevent denial of the funds or to eliminate the inconsistency with federal requirements.

ARTICLE 5—TAXES

- 5.01 The City will issue a sales tax exemption certificate and authorization letters to the contractor and all subcontractors for all materials purchased on the project. Tax exemption certificates are applicable only for the specific project for which the tax exemption certificate is issued.
- 5.02 The contractor shall provide a listing to the City identifying all appropriate subcontractors qualified for use of the tax exemption certificate. The contractor and subcontractors may make copies of the certificate and provide to each supplier providing construction material.
- 5.03 Income Tax:
 - A. Successful Bidder is subject to payment of Iowa income tax on income from this work in amounts prescribed by law.
 - B. If successful Bidder is a non-Iowa partnership, individual, or association, Bidder shall furnish evidence prior to execution of contract that bond or securities have been posted with the Iowa Department of Revenue in the amount required by law.

******END OF SECTION******

SECTION 00410 - PROPOSAL

Fulliam Ave Reconstruction - Phase 3
City of Muscatine
Muscatine, Iowa

PROPOSAL: PART A – SCOPE

The City of Muscatine, hereinafter called the “Jurisdiction”, has need of a qualified contractor to complete the work comprising of the below referenced repair or improvement. The undersigned Bidder hereby proposes to complete the work comprising of the below referenced repair or improvement as specified in the contract documents, which are officially on file with the Jurisdiction, in the office of the Mayor, at the prices hereinafter provided in Part C of the Proposal, for the improvements on the Fulliam Ave Reconstruction - Phase 3.

PROPOSAL: PART B – ACKNOWLEDGMENT OF ADDENDA

The Bidder hereby acknowledges that all addenda become a part of the contract documents when issued and that each such addendum has been received and utilized in the preparation of this bid. The Bidder hereby acknowledges receipt of the following addenda by inserting the number of each addendum in the blanks below:

ADDENDUM NUMBER _____

ADDENDUM NUMBER _____

ADDENDUM NUMBER _____

ADDENDUM NUMBER _____

and certifies that said addenda were utilized in the preparation of this bid.

PROPOSAL: PART C – BID ITEMS AND QUANTITIES

UNIT PRICE CONTRACTS: The Bidder must provide the Unit Bid Price, the Total Bid Price, any Alternate Prices, and the Total Construction Costs on the Proposal Attachment: Part C – Bid Items and Quantities. In case of discrepancy, the Unit Bid Price governs. The quantities shown on the Proposal Attachment: Part C – Bid Items and Quantities are approximate only, but are considered sufficiently adequate for the purpose of comparing bids.

SEE INCLUDED PROPOSAL ATTACHMENT

PROPOSAL: PART D – GENERAL

The Bidder hereby acknowledges that the Jurisdiction, in advertising for public bids for this project reserves the right to:

1. Reject any or all bids. Award of the contract, if any, to be to the lowest responsible, responsive Bidder; and
2. Reject any or all alternates in determining the items to be included in the contract. Designation of the lowest responsible, responsive Bidder to be based on comparison of the total bid only, not including any alternates; and
3. Make such alterations in the contract documents or in the proposal quantities as it determines necessary in accordance with the contract documents after execution of the contract. Such alterations shall not be

considered a waiver of any conditions of the contract documents, and shall not invalidate any of the provisions thereof; and

The Bidder hereby agrees to:

1. Enter into a contract, if this proposal is selected, in the form approved by the Jurisdiction, provide proof of registration with the Iowa Division of Labor in accordance with Chapter 91C of the Iowa Code, and furnish a performance, maintenance, and payment bond; and
2. Forfeit bid security, not as a penalty but as liquidated damages, upon failure to enter into such contract and/or to furnish said bond; and
3. Commence the work upon written Notice to Proceed; and
4. Complete the work in accordance with the completion dates defined in Section 00500 – Contract; and
5. Pay liquidated damages for noncompliance with said completion provisions at the rate detailed in Section 00500 – Contract for each calendar day thereafter that the work remains incomplete.

PROPOSAL: PART E – NON-COLLUSION AFFIDAVIT

The Bidder hereby certifies:

1. That this proposal is not affected by, contingent on, or dependent on any other proposal submitted for any improvement with the Jurisdiction; and
2. That no individual employed by the Bidder has employed any person to solicit or procure the work on this project, nor will any employee of the Bidder make any payment or agreement for payment of any compensation in connection with the procurement of this project; and
3. That no part of the bid price received by the Bidder was or will be paid to any person, corporation, firm, association, or other organization for soliciting the bid, other than the payment of their normal compensation to persons regularly employed by the Bidder whose services in connection with the construction of the project were in the regular course of their duties for the Bidder; and
4. That this proposal is genuine and not collusive or sham; that the Bidder has not colluded, conspired, connived, or agreed, directly or indirectly, with any Bidder or person, to submit a sham bid or to refrain from bidding; and
5. That the bid has not in any manner, directly or indirectly, sought, by agreement or collusion, or communication or conference, with any person, to fix the bid price of the Bidder or of any other Bidder; and
6. That all statements in this proposal are true; and
7. That the individual(s) executing this proposal have the authority to execute this proposal on behalf of the Bidder.

PROPOSAL: PART F – ADDITIONAL REQUIREMENTS

The Bidder hereby agrees to comply with the additional requirements listed below which are included in this proposal and identified as proposal attachments:

ITEM NO.	DESCRIPTION OF ATTACHMENT
1.	None

PROPOSAL: PART G - IDENTITY OF BIDDER

The Bidder shall indicate whether the bid is submitted by a/an:

☐ Individual, Sole Proprietorship	_____
	Bidder
☐ Partnership	_____
	Signature
☐ Corporation	_____
	Name (Print/Type)
☐ Limited Liability Company	_____
	Title
☐ Joint-Venture; all parties must join-in and execute all documents	_____
	Street Address
☐ Other	_____
	City, State, Zip Code

	Telephone Number

The Bidder shall enter its Public Registration Number	E-Mail Address
_____ - _____	
issued by the Iowa Commissioner of Labor Pursuant Section 91C.5 of the Iowa Code.	Type or print the name and title of the company's owner, president, CEO, etc. if a different person than entered above.
Failure to provide said Registration Number shall result in the bid being read under advisement. A contract will not be executed until the contractor is registered.	_____
	Name

	Title

NOTE: The signature on this proposal must be an original signature in ink; copies, facsimiles, or electronic signatures will not be accepted.

All bidders must submit the following completed form to the governmental body requesting bids per 875 Iowa Administrative Code Chapter 156.

BIDDER STATUS FORM

To be completed by all bidders.

Part A

Please answer "Yes" or "No" for each of the following:

- ☐ Yes ☐ No My company is authorized to transact business in Iowa.
(To help you determine if your company is authorized, please review the worksheet on the next page).
- ☐ Yes ☐ No My company has an office to transact business in Iowa.
- ☐ Yes ☐ No My company's office in Iowa is suitable for more than receiving mail, telephone calls, and e-mail.
- ☐ Yes ☐ No My company has been conducting business in Iowa for at least 3 years prior to the first request for bids on this project.
- ☐ Yes ☐ No My company is not a subsidiary of another business entity or my company is a subsidiary of another business entity that would qualify as a resident bidder in Iowa.
- If you answered "Yes" for each question above, your company qualifies as a resident bidder. Please complete Parts B and D of this form.
- If you answered "No" to one or more questions above, your company is a non-resident bidder. Please complete Parts C and D of this form.

To be completed by resident bidders.

Part B

My company has maintained offices in Iowa during the past 3 years at the following addresses:

Dates: _____ to _____ Address: _____
(mm/dd/yyyy) City, State, Zip: _____

Dates: _____ to _____ Address: _____
(mm/dd/yyyy) City, State, Zip: _____

Dates: _____ to _____ Address: _____
(mm/dd/yyyy) City, State, Zip: _____

You may attach additional sheet(s) if needed.

To be completed by non-resident bidders.

Part C

- Name of home state or foreign country reported to the Iowa Secretary of State: _____
- Does your company's home state or foreign country offer preferences to bidders who are residents? ☐ Yes ☐ No
- If you answered "Yes" to question 2, identify each preference offered by your company's home state or foreign country and the appropriate legal citation.

You may attach additional sheet(s) if needed.

To be completed by all bidders.

Part D

I certify that the statements made on this document are true and complete to the best of my knowledge and I know that my failure to provide accurate and truthful information may be reason to reject my bid.

Firm Name: _____

Signature: _____ Date: _____

WORKSHEET: AUTHORIZATION TO TRANSACT BUSINESS

This worksheet may be used to help complete Part A of the Resident Bidder Status form. If at least one of the following describes your business, you are authorized to transact business in Iowa.

- ☐ Yes ☐ No My business is currently registered as a contractor with the Iowa Division of Labor.
- ☐ Yes ☐ No My business is a sole proprietorship and I am an Iowa resident for Iowa income tax purposes.
- ☐ Yes ☐ No My business is a general partnership or joint venture. More than 50 percent of the general partners or joint venture parties are residents of Iowa for Iowa income tax purposes.
- ☐ Yes ☐ No My business is an active corporation with the Iowa Secretary of State and has paid all fees required by the Secretary of State, has filed its most recent biennial report, and has not filed articles of dissolution.
- ☐ Yes ☐ No My business is a corporation whose articles of incorporation are filed in a state other than Iowa, the corporation has received a certificate of authority from the Iowa Secretary of State, has filed its most recent biennial report with the Secretary of State, and has neither received a certificate of withdrawal from the Secretary of state nor had its authority revoked.
- ☐ Yes ☐ No My business is a limited liability partnership which has filed a statement of qualification in this state and the statement has not been canceled.
- ☐ Yes ☐ No My business is a limited liability partnership which has filed a statement of qualification in a state other than Iowa, has filed a statement of foreign qualification in Iowa and a statement of cancellation has not been filed.
- ☐ Yes ☐ No My business is a limited partnership or limited liability limited partnership which has filed a certificate of limited partnership in this state and has not filed a statement of termination.
- ☐ Yes ☐ No My business is a limited partnership or a limited liability limited partnership whose certificate of limited partnership is filed in a state other than Iowa, the limited partnership or limited liability limited partnership has received notification from the Iowa Secretary of state that the application for certificate of authority has been approved and no notice of cancellation has been filed by the limited partnership or the limited liability limited partnership.
- ☐ Yes ☐ No My business is a limited liability company whose certificate of organization is filed in Iowa and has not filed a statement of termination.
- ☐ Yes ☐ No My business is a limited liability company whose certificate of organization is filed in a state other than Iowa, has received a certificate of authority to transact business in Iowa and the certificate has not been revoked or canceled.

PROPOSAL ATTACHMENT: PART C – BID ITEMS AND QUANTITIES

Fulliam Ave Reconstruction - Phase 3
City of Muscatine
Muscatine, Iowa

This is a UNIT BID PRICE CONTRACT. The Bidder must provide the Unit Bid Price, the Total Bid Price, and the Total Construction Costs on the Proposal Attachment: Part C – Bid Items and Quantities. In case of discrepancy, the Unit Bid Price governs. The quantities shown on the Proposal Attachment: Part C – Bid Items and Quantities are approximate only, but are considered sufficiently adequate for the purpose of comparing bids.

ESTIMATED PROJECT QUANTITIES						
Item No.	Item Code	Item	Unit	Quantity	Unit Price	Total
1	2010-C	CLEARING AND GRUBBING	LS	1	\$	\$
2	2010-D-1	TOPSOIL, ON-SITE	CY	175	\$	\$
3	2010-D-3	TOPSOIL, OFF-SITE	CY	75	\$	\$
4	2010-E	EXCAVATION, CLASS 10	CY	776	\$	\$
5	2010-G	SUBGRADE PREPARATION	SY	2,902	\$	\$
6	2010-I	SUBGRADE TREATMENT, GEOGRID, TYPE 1	SY	2,902	\$	\$
7	2010-J	SUBBASE, MODIFIED, 12-INCH	SY	2,902	\$	\$
8	2010-M	SUBGRADE COMPACTION TESTING	LS	1	\$	\$
9	4020-A-1	STORM SEWER, TRENCHED, RCP, 15-INCH	LF	108	\$	\$
10	4020-A-1	STORM SEWER, TRENCHED, RCP, 18-INCH	LF	345	\$	\$
11	4020-D	REMOVAL OF STORM SEWER, LESS THAN OR EQUAL TO 36-INCH DIA.	LF	52	\$	\$
12	4040-A	SUBDRAIN, CASE B, TYPE 1, 6-INCH	LF	858	\$	\$
13	4040-C	SUBDRAIN CLEANOUT, TYPE B	EA	2	\$	\$
14	4040-D-1	SUBDRAIN OUTLETS AND CONNECTIONS, 6-INCH	EA	8	\$	\$
15	5010-D	WATER SERVICE STUB, TRENCHED, COPPER, 3/4-INCH	EA	5	\$	\$
16	5020-F	VALVE BOX ADJUSTMENT, MINOR	EA	1	\$	\$
17	5020-I	FIRE HYDRANT ADJUSTMENT	EA	1	\$	\$
18	6010-A	STORM MANHOLE, SW-401, 48-INCH	EA	1	\$	\$
19	6010-B	INTAKE, SW-507	EA	1	\$	\$
20	6010-B	INTAKE, MODIFIED SW-509	EA	1	\$	\$
21	6010-B	INTAKE, SW-509	EA	4	\$	\$
22	6010-E-1	MANHOLE ADJUSTMENT, MINOR	EA	1	\$	\$
23	6010-H	REMOVE INTAKE	EA	2	\$	\$
24	7010-A	PAVEMENT, PCC, 8-INCH	SY	2,588	\$	\$
25	7010-I	PCC PAVEMENT SAMPLES AND TESTING	LS	1	\$	\$
26	7030-A-1	REMOVAL OF SIDEWALK	SY	145	\$	\$
27	7030-A-3	REMOVAL OF DRIVEWAY	SY	293	\$	\$
28	7030-E	SIDEWALK, PCC, 5-INCH	SY	141	\$	\$
29	7030-H-1	DRIVEWAY, PAVED, PCC, 6-INCH	SY	304	\$	\$
30	7040-H	PAVEMENT REMOVAL	SY	2,605	\$	\$

Item No.	Item Code	Item	Unit	Quantity	Unit Price	Total
31	8030-A	TEMPORARY TRAFFIC CONTROL	LS	1	\$	\$
32	8040-I	REMOVE AND REINSTALL TRAFFIC SIGNS	EA	2	\$	\$
33	9020-A	SOD	SY	1,022	\$	\$
34	9040-D-1	FILTER SOCK, COMPOST, 12-INCH	LF	1,157	\$	\$
35	9040-D-2	FILTER SOCKS, REMOVAL	LF	1,157	\$	\$
36	9040-T-1	INLET PROTECTION DEVICE	EA	6	\$	\$
37	9040-T-2	INLET PROTECTION DEVICE, MAINTENANCE	EA	18	\$	\$
38	11010-A	CONSTRUCTION SURVEY	LS	1	\$	\$
39	11020-A	MOBILIZATION	LS	1	\$	\$
40	11030-A	MAINTENANCE OF POSTAL SERVICE	LS	1	\$	\$
41	11030-B	MAINTENANCE OF SOLID WASTE COLLECTION	LS	1	\$	\$
42	11050-A	CONCRETE WASHOUT	LS	1	\$	\$
TOTAL					\$	

NOTE: IT IS UNDERSTOOD THAT THE ABOVE QUANTITIES ARE ESTIMATED FOR THE PURPOSE OF THIS BID. ALL QUANTITIES ARE SUBJECT TO REVISION BY THE JURISDICTION AS NOTED IN SECTION 00500 - "CONTRACT" OF THIS PROJECT MANUAL.

Bidder Name

THIS PAGE INTENTIONALLY LEFT BLANK.

SECTION 00420 - BID BOND

Fulliam Ave Reconstruction - Phase 3
City of Muscatine
Muscatine, Iowa

KNOW ALL BY THESE PRESENTS:

That we, _____, as Principal, and
_____, as Surety, are held and firmly bound unto,
City of Muscatine as Obligee, (hereinafter referred to as "the Jurisdiction"), in the penal sum of _____
_____ dollars (\$_____), lawful money of the United States,
for which payment said Principal and Surety bind themselves, their heirs, executors, administrators, successors, and assigns
jointly and severally, firmly by these presents.

The condition of the above obligation is such that whereas the Principal has submitted to the Jurisdiction a certain proposal,
in a separate envelope, and hereby made a part hereof, to enter into a contract in writing, for the following project:

Project Title: Fulliam Ave Reconstruction - Phase 3

Project Description: This project consists of reconstruction of approximately 700 feet of the Fulliam Avenue roadway from
100 feet east of the Houser Street centerline, sidewalk improvements to meet accessibility standards and storm sewer
improvements

The Surety hereby stipulates and agrees that the obligations of said Surety and its bond shall be in no way impaired or affected
by any extension of the time within which the Jurisdiction may accept such bid or execute such Contract; and said Surety does
hereby waive notice of any such extension.

In the event that any actions or proceedings are initiated with respect to this Bond, the parties agree that the venue thereof
shall be Muscatine County, State of Iowa. If legal action is required by the Jurisdiction against the Surety or Principal to
enforce the provisions of the bond or to collect the monetary obligation incurring to the benefit of the Jurisdiction, the Surety
or Principal agrees to pay the Jurisdiction all damages, costs, and attorney fees incurred by enforcing any of the provisions of
this Bond. All rights, powers, and remedies of the Jurisdiction hereunder shall be cumulative and not alternative and shall be
in addition to all rights, powers, and remedies given to the Jurisdiction, by law. The Jurisdiction may proceed against Surety
for any amount guaranteed hereunder whether action is brought against Principal or whether Principal is joined in any such
action or actions or not.

NOW, THEREFORE, if said proposal by the Principal be accepted, and the Principal shall enter into a contract with Jurisdiction
in accordance with the terms of such proposal, including the provision of insurance and of a bond as may be specified in the
contract documents, with good and sufficient surety for the faithful performance of such contract, for the prompt payment
of labor and material furnished in the prosecution thereof, and for the maintenance of said improvements as may be required
therein, then this obligation shall become null and void; otherwise, the Principal shall pay to the Jurisdiction the full amount
of the bid bond, together with court costs, attorney's fees, and any other expense of recovery.

Signed and sealed this _____ day of _____, 2025.

SURETY:

PRINCIPAL:

Surety Company

Bidder

By:

Signature Attorney-in-Fact/Officer

By:

Signature

Name of Attorney-in-Fact/Officer

Name (Print/Type)

Company Name

Title

Company Address

Address

City, State, Zip Code

City, State, Zip Code

Company Telephone Number

Telephone Number

Company E-Mail

E-Mail

NOTE: All signatures on this bid bond must be original signatures in ink; electronic, copies or facsimile of any signature will not be accepted. This bond must be sealed with the Surety's raised, embossing seal or official adhesive seal. The Certificate or Power of Attorney accompanying this bond must be valid on its face and sealed with the Surety's raised, embossing seal or official adhesive seal.

SECTION 00500 - CONTRACT

Fulliam Ave Reconstruction - Phase 3
City of Muscatine
Muscatine, Iowa

THIS CONTRACT, made and entered into this _____ day of _____, 2025, by and between the City of Muscatine hereinafter called the "Jurisdiction", and _____, hereinafter called the "Contractor".

WITNESSETH:

The Contractor hereby agrees to complete the work comprising the Fulliam Ave Reconstruction - Phase 3 as specified in the contract documents, which are officially on file with the Jurisdiction, in the office of the City Clerk, City of Muscatine, 215 Sycamore Street, Muscatine, Iowa. This Contract includes all such contract documents. All work under this Contract shall be constructed in accordance with the SUDAS Standard Specifications, 2025 Edition and as further modified by the Special Provisions, Technical Specifications and Supplemental Specifications included in said contract documents and the Contract Attachment which is attached hereto. The Contractor further agrees to complete the work in strict accordance with said contract documents, and to guarantee the work as required by law for the time required in said contract documents after its acceptance by the Jurisdiction.

This Contract is awarded and executed for completion of the work specified in the contract documents for the bid prices shown on the Contract Attachment: Bid Items and Quantities which were proposed by the Contractor in its Proposal submitted in accordance with the Notice to Bidders and Notice of Public Hearing for the following project:

Project Title: Fulliam Ave Reconstruction - Phase 3

Project Description: This project consists of reconstruction of approximately 700 feet of the Fulliam Avenue roadway from 100 feet east of the Houser Street centerline, sidewalk improvements to meet accessibility standards and storm sewer improvements

The Contractor agrees to perform said work for and in consideration of the Jurisdiction's payment of the bid amount of _____ dollars (\$ _____), which amount shall constitute the required amount of the Performance, Payment and Maintenance Bond. The Contractor hereby agrees to commence work as stated in the written Notice to Proceed; and substantially complete the work in accordance with the following contract provisions:

CONTRACT PROVISIONS

A. Completion Date: Date

1. The work will be substantially completed on or before 8/8/2025, and completed and ready for final payment in accordance with General Conditions on or before 8/29/2025.
2. Pay liquidated damages for noncompliance with said substantial completion provisions in the amount of Two Thousand Dollars (\$2,000.00) for each calendar day the work remains incomplete.
3. After Substantial Completion, if Contractor shall neglect, refuse, or fail to complete the remaining Work within the Contract Times (as duly adjusted pursuant to the Contract) for completion and readiness for final payment, Contractor shall pay Jurisdiction Three Hundred and Fifty Dollars (\$350.00) for each calendar day that expires after such time until the Work is completed and ready for final payment.

4. Liquidated damages for failing to timely attain Substantial Completion and Final Completion are not additive and will not be imposed concurrently.
- C. Maintenance Bond & Warranty
1. To remedy any and all defects that may develop in or result from work to be performed under the Contract within the City of Muscatine, from the date of acceptance of the work under the Contract, by reason of defects in workmanship or materials used in construction of said work.
 2. Shall also guarantee the maintenance of the improvement caused by failures in materials and construction for a period of 2 years from and after acceptance of the work.
- D. Bid Quantity Revisions
1. All quantities are estimates and subject to revision by the Jurisdiction.
 2. Quantity changes that do not materially change the character of the work to be performed and amount to less than Twenty (20) percent of a given bid item or less than Five (5) percent of the total contract amount shall not affect the unit price bid.

IN WITNESS WHEREOF, the Parties hereto have executed this instrument, in triplicate on the date first shown written.

JURISDICTION: City of Muscatine

By: _____
Brad Bark, Mayor

ATTEST:

By: _____
Cinda Hilger, City Clerk

CONTRACTOR:

Company Name

Signature

Name (Print/Type)

Title

Street Address

City, State, Zip Code

Telephone

E-Mail

CONTRACTOR PUBLIC REGISTRATION INFORMATION to be Provided By:

1. All Contractors: The Contractor shall enter its Public Registration No. _____ issued by the Iowa Commissioner of Labor pursuant to Section 91C.5 of the Iowa Code.

2. Out-of-State Contractors:

A. Pursuant to Section 91C.7 of the Iowa Code, an out-of-state contractor, before commencing a contract in excess of five thousand dollars in value in Iowa, shall file a bond with the division of labor services of the department of workforce development. The Contractor should contact 515-242-5871 for further information. Prior to contract execution, the Jurisdictional Engineer may forward a copy of this contract to the Iowa Department of Workforce Development as notification of pending construction work. It is the Contractor's responsibility to comply with said Section 91C.7 before commencing this work.

B. Prior to entering into contract, the designated low bidder, if it is a corporation organized under the laws of a state other than Iowa, shall file with the Jurisdictional Engineer a certificate from the Secretary of the State of Iowa showing that it has complied with all the provisions of Chapter 490 of the Code of Iowa, as amended, governing foreign corporations. For further information contact the Iowa Secretary of State Office at 515-281-5204.

Bond No. _____

Name of Surety _____

NOTE: All signatures on this contract must be original signatures in ink; electronic, copies or facsimile of any signature will not be accepted.

CORPORATE ACKNOWLEDGMENT

State of _____)
) SS
_____ County)

On this _____ day of _____, 20_____, before me, the undersigned, a Notary Public in and for the State of _____, personally appeared _____ and _____, to me known, who, being by me duly sworn, did say that they are the _____, and _____, respectively, of the corporation executing the foregoing instrument; that (no seal has been procured by) (the seal affixed thereto is the seal of) the corporation; that said instrument was signed (and sealed) on behalf of the corporation by authority of the Board of Directors; that _____ and _____ acknowledged the execution of the instrument to be the voluntary act and deed of the corporation, by it and by them voluntarily executed.

Notary Public in and for the State of _____

My commission expires _____, 20_____

PARTNERSHIP ACKNOWLEDGMENT

State of _____)
) SS
_____ County)

On this _____ day of _____, 20_____, before me, the undersigned, a Notary Public in and for the State of _____, personally appeared _____ to me personally known, who being by me duly sworn, did say that the person is one of the partners of _____, a partnership, and that the instrument was signed on behalf of the partnership by authority of the partners and the partner acknowledged the execution of the instrument to be the voluntary act and deed of the partnership by it and by the partner voluntarily executed.

Notary Public in and for the State of _____
My commission expires _____, 20_____

INDIVIDUAL ACKNOWLEDGMENT

State of _____)
) SS
_____ County)

On this _____ day of _____, 20_____, before me, the undersigned, a Notary Public in and for the State of _____, personally appeared _____ and _____, to me known to be the identical person(s) named in and who executed the foregoing instrument, and acknowledged that (he) (she) (they) executed the instrument as (his) (her) (their) voluntary act and deed.

Notary Public in and for the State of _____
My commission expires _____, 20_____

LIMITED LIABILITY COMPANY ACKNOWLEDGMENT

State of _____)
) SS
_____ County)

On this _____ day of _____, 20_____, before me a Notary Public in and for said State, personally appeared _____, to me personally known, who being by me duly sworn did say that person is _____ of said _____, that (the seal affixed to said instrument is the seal of said _____ OR no seal has been procured by the said) _____, and that said instrument was signed and sealed on behalf of the said _____, by authority of its managers and the said _____ acknowledged the execution of said instrument to be the voluntary act and deed of said _____, by it voluntarily executed.

Notary Public in and for the State of _____
My commission expires _____, 20_____

CONTRACT ATTACHMENT: ITEM 1: GENERAL – NONE

CONTRACT ATTACHMENT: ITEM 2: BID ITEMS AND QUANTITIES

THIS CONTRACT IS AWARDED AND EXECUTED FOR COMPLETION OF THE WORK SPECIFIED IN THE CONTRACT DOCUMENTS FOR THE BID PRICES TABULATED BELOW AS PROPOSED BY THE CONTRACTOR IN ITS PROPOSAL SUBMITTED IN ACCORDANCE WITH NOTICE TO BIDDERS AND NOTICE OF PUBLIC HEARING. ALL QUANTITIES ARE SUBJECT TO REVISION BY THE JURISDICTION. THE JURISDICTION RESERVES THE RIGHT TO ADJUST QUANTITIES AS NECESSARY TO MAXIMIZE FUNDS BUDGETED FOR THIS PROJECT AS NOTED IN SECTION 00500 – CONTRACT.

ESTIMATED PROJECT QUANTITIES						
Item No.	Item Code	Item	Unit	Quantity	Unit Price	Total
1	2010-C	CLEARING AND GRUBBING	LS	1	\$	\$
2	2010-D-1	TOPSOIL, ON-SITE	CY	175	\$	\$
3	2010-D-3	TOPSOIL, OFF-SITE	CY	75	\$	\$
4	2010-E	EXCAVATION, CLASS 10	CY	776	\$	\$
5	2010-G	SUBGRADE PREPARATION	SY	2,902	\$	\$
6	2010-I	SUBGRADE TREATMENT, GEOGRID, TYPE 1	SY	2,902	\$	\$
7	2010-J	SUBBASE, MODIFIED, 12-INCH	SY	2,902	\$	\$
8	2010-M	SUBGRADE COMPACTION TESTING	LS	1	\$	\$
9	4020-A-1	STORM SEWER, TRENCHED, RCP, 15-INCH	LF	108	\$	\$
10	4020-A-1	STORM SEWER, TRENCHED, RCP, 18-INCH	LF	345	\$	\$
11	4020-D	REMOVAL OF STORM SEWER, LESS THAN OR EQUAL TO 36-INCH DIA.	LF	52	\$	\$
12	4040-A	SUBDRAIN, CASE B, TYPE 1, 6-INCH	LF	858	\$	\$
13	4040-C	SUBDRAIN CLEANOUT, TYPE B	EA	2	\$	\$
14	4040-D-1	SUBDRAIN OUTLETS AND CONNECTIONS, 6-INCH	EA	8	\$	\$
15	5010-D	WATER SERVICE STUB, TRENCHED, COPPER, 3/4-INCH	EA	5	\$	\$
16	5020-F	VALVE BOX ADJUSTMENT, MINOR	EA	1	\$	\$
17	5020-I	FIRE HYDRANT ADJUSTMENT	EA	1	\$	\$
18	6010-A	STORM MANHOLE, SW-401, 48-INCH	EA	1	\$	\$
19	6010-B	INTAKE, SW-507	EA	1	\$	\$
20	6010-B	INTAKE, MODIFIED SW-509	EA	1	\$	\$
21	6010-B	INTAKE, SW-509	EA	4	\$	\$
22	6010-E-1	MANHOLE ADJUSTMENT, MINOR	EA	1	\$	\$
23	6010-H	REMOVE INTAKE	EA	2	\$	\$
24	7010-A	PAVEMENT, PCC, 8-INCH	SY	2,588	\$	\$
25	7010-I	PCC PAVEMENT SAMPLES AND TESTING	LS	1	\$	\$
26	7030-A-1	REMOVAL OF SIDEWALK	SY	145	\$	\$
27	7030-A-3	REMOVAL OF DRIVEWAY	SY	293	\$	\$
28	7030-E	SIDEWALK, PCC, 5-INCH	SY	141	\$	\$
29	7030-H-1	DRIVEWAY, PAVED, PCC, 6-INCH	SY	304	\$	\$
30	7040-H	PAVEMENT REMOVAL	SY	2,605	\$	\$
31	8030-A	TEMPORARY TRAFFIC CONTROL	LS	1	\$	\$
32	8040-I	REMOVE AND REINSTALL TRAFFIC SIGNS	EA	2	\$	\$

Item No.	Item Code	Item	Unit		Item No.	Item Code
33	9020-A	SOD	SY	1,022	\$	\$
34	9040-D-1	FILTER SOCK, COMPOST, 12-INCH	LF	1,157	\$	\$
35	9040-D-2	FILTER SOCKS, REMOVAL	LF	1,157	\$	\$
36	9040-T-1	INLET PROTECTION DEVICE	EA	6	\$	\$
37	9040-T-2	INLET PROTECTION DEVICE, MAINTENANCE	EA	18	\$	\$
38	11010-A	CONSTRUCTION SURVEY	LS	1	\$	\$
39	11020-A	MOBILIZATION	LS	1	\$	\$
40	11030-A	MAINTENANCE OF POSTAL SERVICE	LS	1	\$	\$
41	11030-B	MAINTENANCE OF SOLID WASTE COLLECTION	LS	1	\$	\$
42	11050-A	CONCRETE WASHOUT	LS	1	\$	\$
TOTAL					\$	

THIS PAGE INTENTIONALLY LEFT BLANK.

SECTION 00610 - PERFORMANCE, PAYMENT AND MAINTENANCE BOND

Fulliam Ave Reconstruction - Phase 3
City of Muscatine
Muscatine, Iowa

KNOW ALL BY THESE PRESENTS:

That we, _____, as Principal (hereinafter the
"Contractor" or "Principal") and _____, as Surety are held and firmly bound
unto _____, as Oblige (hereinafter referred to as "the Jurisdiction"),
and to all persons who may be injured by any breach of any of the conditions of this Bond in the penal sum of
_____ DOLLARS (\$ _____),
lawful money of the United States, for the payment of which sum, well and truly to be made, we bind ourselves, our heirs,
legal representatives and assigns, jointly or severally, firmly by these presents.

The conditions of the above obligations are such that whereas said Contractor entered into a contract with the Jurisdiction,
bearing date the _____ day of _____, _____, hereinafter the "Contract" wherein said Contractor
undertakes and agrees to construct the Fulliam Ave Reconstruction - Phase 3, Muscatine, Iowa.

Project Description: This project consists of reconstruction of approximately 700 feet of the Fulliam Avenue roadway from
100 feet east of the Houser Street centerline, sidewalk improvements to meet accessibility standards and storm sewer
improvements

And to faithfully perform all the terms and requirements of said Contract within the time therein specified, in a good and
workmanlike manner, and in accordance with the Contract documents. Provided, however, that one year after the date of
acceptance as complete of the work under the above referenced Contract, the maintenance portion of this Bond shall
continue in force for the stated maintenance period.

It is expressly understood and agreed by the Contractor and Surety in this Bond that the following provisions are a part of
this Bond and are binding upon said Contractor and Surety, to-wit:

PERFORMANCE: The Contractor shall well and faithfully observe, perform, fulfill, and abide by each and every covenant,
condition, and part of said Contract and Contract Documents, by reference made a part hereof, for the above referenced
improvements and shall indemnify and save harmless the Jurisdiction from all outlay and expense incurred by the Jurisdiction
by reason of the Contractor's default of failure to perform as required. The Contractor shall also be responsible for the default
or failure to perform as required under the Contract and Contract Documents by all its subcontractors, suppliers, agents, or
employees furnishing materials or providing labor in the performance of the Contract.

PAYMENT: The Contractor and the Surety on this Bond are hereby agreed to pay all just claims submitted by persons, firms,
subcontractors, and corporations furnishing materials for or performing labor in the performance of the Contract on account
of which this Bond is given, including but not limited to claims for all amounts due for labor, materials, lubricants, oil, gasoline,
repairs on machinery, equipment and tools, consumed or used by the Contractor or any subcontractor, wherein the same
are not satisfied out of the portion of the contract price which the Jurisdiction is required to retain until completion of the
improvement, but the Contractor and Surety shall not be liable to said persons, firms, or corporations unless the claims of
said claimants against said portion of the contract price shall have been established as provided by law. The Contractor and
Surety hereby bind themselves to the obligations and conditions set forth in Chapter 573, Code of Iowa, which by this
reference is made a part hereof as though fully set out herein.

MAINTENANCE: The Contractor and the Surety on this Bond hereby agree, at their own expense:

To remedy any and all defects that may develop in or result from work to be performed under the Contract as detailed in Section 00500 - Contract, from the date of acceptance of the work under the Contract, by reason of defects in workmanship or materials used in construction of said work;

To keep all work in continuous good repair; and

To pay the Jurisdiction's reasonable costs of monitoring and inspection to assure that any defects are remedied and to repay the Jurisdiction all outlay and expense incurred as a result of Contractor's and Surety's failure to remedy any defect as required by this section.

Maintenance Bond requirements shall not apply to the following: work that is not permanently incorporated into the project; pavement markings, seeding, sodding, and plant material and planting.

Contractor's and Surety's agreement herein made extends to defects in workmanship or materials not discovered or known to the Jurisdiction at the time such work was accepted.

GENERAL: Every Surety on this Bond shall be deemed and held bound, any contract to the contrary notwithstanding, to the following provisions:

To consent without notice to any extension of time to the Contractor in which to perform the Contract;

To consent without notice to any change in the Contract or Contract Documents, which thereby increases the total contract price and the penal sum of this Bond, provided that all such changes do not, in the aggregate, involve an increase of more than twenty percent of the total contract price, and that this Bond shall then be released as to such excess increase; and

To consent without notice that this Bond shall remain in full force and effect until the Contract is completed, whether completed within the specified contract period, within an extension thereof, or within a period of time after the contract period has elapsed and the liquidated damage penalty is being charged against the Contractor.

The Contractor and every Surety on the Bond shall be deemed and held bound, any contract to the contrary notwithstanding, to the following provisions:

That no provision of this Bond or of any other contract shall be valid which limits to less than five years after the acceptance of the work under the Contract the right to sue on this Bond.

That as used herein, the phrase "all outlay and expense" is not to be limited in any way, but shall include the actual and reasonable costs and expenses incurred by the Jurisdiction including interest, benefits and overhead where applicable. Accordingly, "all outlay and expense" would include but not be limited to all contract or employee expense, all equipment usage or rental, materials, testing, outside experts, attorney's fees (including overhead expenses of the Jurisdiction's staff attorneys), and all costs and expenses of litigation as they are incurred by the Jurisdiction. It is intended the Contractor and Surety will defend and indemnify the Jurisdiction on all claims made against the Jurisdiction on account of Contractor's failure to perform as required in the Contract and Contract Documents, that all agreements and promises set forth in the Contract and Contract Documents, in approved change orders, and in this Bond will be fulfilled, and that the Jurisdiction will be fully indemnified so that it will be put into the position it would have been in had the Contract been performed in the first instance as required.

In the event the Jurisdiction incurs any "outlay and expense" in defending itself with respect to any claim as to which the Contractor or Surety should have provided the defense, or in the enforcement of the promises given by the Contractor in the Contract, Contract Documents, or approved change orders, or in the enforcement of the promises given by the Contractor and Surety in this Bond, the Contractor and Surety agree that they will make the Jurisdiction whole for all such outlay and expense, provided that the Surety's obligation under this Bond shall not exceed 125% of the penal sum of this Bond.

In the event that any actions or proceedings are initiated with respect to this Bond, the parties agree that the venue thereof shall be Muscatine County, State of Iowa. If legal action is required by the Jurisdiction to enforce the provisions of this Bond or to collect the monetary obligation incurring to the benefit of the Jurisdiction, the Contractor and the Surety agree, jointly and severally, to pay the Jurisdiction all outlay and expense incurred therefor by the Jurisdiction. All rights, powers, and remedies of the Jurisdiction hereunder shall be cumulative and not alternative and shall be in addition to all rights, powers and remedies given to the Jurisdiction, by law. The Jurisdiction may proceed against surety for any amount guaranteed hereunder whether action is brought against the Contractor or whether Contractor is joined in any such action(s).

NOW THEREFORE, the condition of this obligation is such that if said Principal shall faithfully perform all the promises of the Principal, as set forth and provided in the Contract, in the Contract Documents, and in this Bond, then this obligation shall be null and void, otherwise it shall remain in full force and effect.

When a work, term, or phrase is used in this Bond, it shall be interpreted or construed first as defined in this Bond, the Contract, or the Contract Documents; second, if not defined in the Bond, Contract, or Contract Documents, it shall be interpreted or construed as defined in applicable provisions of the Iowa Code; third, if not defined in the Iowa Code, it shall be interpreted or construed according to its generally accepted meaning in the construction industry; and fourth, if it has no generally accepted meaning in the construction industry, it shall be interpreted or construed according to its common or customary usage.

Failure to specify or particularize shall not exclude terms or provisions not mentioned and shall not limit liability hereunder. The Contract and Contract Documents are hereby made a part of this Bond.

(CON'T – PERFORMANCE, PAYMENT AND MAINTENANCE BOND)

Witness our hands, in triplicate, this _____ day of _____, 2025.

SURETY:

PRINCIPAL:

By: _____
Surety Company

By: _____
Signature of Attorney-in-Fact/Officer

Name of Attorney-in-Fact/Officer

Company Name

Company Address

City, State, Zip Code

Company Telephone Number

Company E-Mail

Bidder

By: _____
Signature

Name (Print/Type)

Title

Address

City, State, Zip Code

Telephone Number

E-Mail

NOTE:

1. All signatures on this Performance, Maintenance & Payment Bond must be original signatures in ink; electronic, copies, or facsimile of any signature will not be accepted.
2. This Bond must be sealed with the Surety's raised, embossing seal or official adhesive seal.
3. The Certificate or Power of Attorney accompanying this Bond must be valid on its face and sealed with the Surety's raised, embossing seal or official adhesive seal.
4. The name and signature of the Surety's Attorney-in-Fact/Officer entered on this Bond must be exactly as listed on the Certificate or Power of Attorney accompanying this Bond.

SECTION 00800 - SPECIAL PROVISIONS

FOR

Fulliam Ave Reconstruction - Phase 3
City of Muscatine
Muscatine, Iowa

TABLE OF CONTENTS

1)	<u>CONTRACT PROVISIONS</u>
2)	<u>DEFINITION AND INTENT</u>
3)	<u>GENERAL PROVISIONS AND COVENANTS</u>
4)	<u>WORK REQUIRED</u>
5)	<u>PLANS AND SPECIFICATIONS</u>
6)	<u>SUBMITTALS</u>
7)	<u>STANDARDS AND CODES</u>
8)	<u>EMPLOYMENT PRACTICES</u>
9)	<u>RESPONSIBILITY OF CONTRACTOR</u>
10)	<u>WORK HOURS/COMMUNITY EVENTS</u>
11)	<u>CONSTRUCTION FACILITIES</u>
12)	<u>PROJECT SUPERVISION</u>
13)	<u>COORDINATION WITH OTHERS</u>
14)	<u>CONSTRUCTION GENERAL</u>
15)	<u>CONSTRUCTION LIMITS</u>
16)	<u>CONSTRUCTION SCHEDULE</u>
17)	<u>CONSTRUCTION PHASING</u>
18)	<u>CONSTRUCTION STAKING</u>
19)	<u>CONSTRUCTION SURVEY DOCUMENTATION & RESPONSIBILITIES OF ENGINEER AND CONTRACTOR</u>
20)	<u>MATERIALS TESTS</u>
21)	<u>SOIL BORINGS</u>
22)	<u>EXISTING UTILITIES</u>
23)	<u>SALVAGE OF MATERIALS / DISPOSAL</u>
24)	<u>TRAFFIC CONTROL</u>
25)	<u>TEMPORARY FENCES</u>
26)	<u>EROSION CONTROL</u>
27)	<u>DEWATERING</u>
28)	<u>READY MIX CONCRETE USED ON PAVING PROJECTS</u>
29)	<u>INCIDENTAL CONTRACT ITEMS</u>

1) CONTRACT PROVISIONS

a) Completion Date

- i) All work under the Contract must be completed as detailed in Section 00500 – Contract.

b) Liquidated Damage

- i) Damages in the amount as detailed in Section 00500 – Contract will be assessed for each calendar day the work remains incomplete.

c) Maintenance Bond & Warranty

- i) To remedy any and all defects as detailed in Section 00500 – Contract.

d) Bid Quantity Revisions

- i) All quantities are estimates and subject to revision by the Jurisdiction.
- ii) Quantity changes that do not materially change the character of the work to be performed and amount to less than Twenty (20) percent of a given bid item or less than Five (5) percent of the total contract amount shall not affect the unit price bid.

2) DEFINITION AND INTENT

a) The Specifications that apply to the materials and construction practices for this project are defined as follows:

- i) The 2025 Edition of the SUDAS Standard Specifications, except as modified by these Special Provisions to the Technical Specifications.
- ii) Omissions of words or phrases such as “the Contractor shall”, “in accordance with”, “shall be”, “as noted on the Plans”, “according to the Plans”, “a”, “an”, “the” and “all” are unintentional; supply omitted words or phrases by inference.
- iii) “Final Acceptance” and “Final Completion” shall mean final approval of the project as defined in SUDAS 1090, 1.08, C.
- iv) “Owner”, “Jurisdiction” and “City” shall mean the City of Muscatine, acting through the City Council.
- v) “Person” shall mean any individual, partnership, limited partnership, joint venture, society, association, joint stock company, corporation, limited liability company, estate, receiver, trustee, assignee, or referee, whether appointed by a court or otherwise, and any combination of individuals.
- vi) “Engineer” shall mean the Engineer of Record.
- vii) The intent of the Technical Specifications is to describe the construction desired, performance requirements, and standards of materials and construction.
- viii) “Standard Drawings” shall mean the Figures bound within the SUDAS Standard Specifications and/or the Typical Drawings bound within the Plans.
- ix) “Substantial Completion” shall be as defined by the Iowa Administrative Code Chapter 573.28.
- x) “Work” shall mean the work to be done and the equipment, supplies, and materials to be furnished under the Contract unless some other meaning is indicated by the context.
- xi) “Or equal” shall follow manufacturers names used to establish standards and, if not stated, is implied.

b) Engineer: Bolton & Menk, Inc., 401 1st Street, Suite 201, Cedar Rapids, IA 52401.

3) GENERAL PROVISIONS AND COVENANTS

a) Division 1 of the General Provisions and Covenants of the 2025 Edition SUDAS Standard Specifications is modified as follows:

- i) Section 1020.1.09B, Unit Price Attachment.

- (a) A computer-generated unit price attachment may be submitted by the Bidder as specified by this Section.
 - ii) Section 1050, 1.05 - Shop Drawings, Certificates, and Equipment Lists
 - (a) Electronic submittal of shop drawings will be allowed.
 - (b) If hardcopy submittals are used, the Contractor shall submit a minimum of three (3) copies plus any additional required by the Contractor.
 - iii) Section 1050, 1.15 – Additional Contractor Responsibilities
 - (a) No Changes.
- 4) WORK REQUIRED
- a) Work under this Contract includes all materials, equipment, transportation, traffic control, and associated work for the construction of the Fulliam Ave Reconstruction - Phase 3 as described in the Official Publication.
- 5) PLANS AND SPECIFICATIONS
- a) The Jurisdiction will furnish five (5) sets of plans and specifications to the Contractor after award of the Contract. The Contractor shall compensate the Jurisdiction for printing costs for additional copies required.
 - b) Contractor shall provide one set of plans and specifications for each foreman and superintendent in charge of each crew on the job.
- 6) SUBMITTALS
- a) Contractor shall provide a construction schedule showing dates of starting and completing various portions of work. Schedule shall be updated as needed or as requested by Engineer due to changes in progress of construction from original schedule. Updates shall be completed within one week of request.
 - b) Contractor shall submit the following information for Engineer's review. Three (3) copies plus any additional copies required by Contractor shall be submitted to the Engineer at the preconstruction conference or at least 14 days prior to utilization of the particular item on this project.
 - i) Testing reports.
 - ii) Manufacturer's data for materials that are to be permanently incorporated into the project.
 - iii) Details of proposed methods of any special construction required.
 - iv) Purchase orders and subcontracts without prices.
 - v) Traffic control and staging plan.
 - vi) Such other information as the Engineer may request to ensure compliance with contract documents.
 - vii) List of Subcontractors and Suppliers.
- 7) STANDARDS AND CODES
- a) Construct improvements with best present day construction practices and equipment.
 - b) Conform with and test in accordance with applicable sections of the following standards and codes.
 - i) American Association of State Highway and Transportation Officials (AASHTO).
 - ii) American Society for Testing and Materials (ASTM).
 - iii) Iowa Department of Transportation Standard Specifications (Iowa DOT).
 - iv) American National Standards Institute (ANSI).
 - v) American Water Works Association (AWWA).
 - vi) American Welding Society (AWS).

- vii) Federal Specifications (FS).
- viii) Iowa Occupational Safety and Health Act of 1972 (IOSHA).
- ix) Manual of Accident Prevention in Construction by Associated General Contractors of America, Inc. (AGC).
- x) Standards and Codes of the State of Iowa and the ordinances of the Jurisdiction.
- xi) Other standards and codes which may be applicable to acceptable standards of the industry for equipment, materials and installation under the Contract.

8) EMPLOYMENT PRACTICES

- a) Neither the Contractor nor the Contractor's subcontractors shall employ any person whose physical or mental condition is such that their employment will endanger the health and safety of anyone employed on the Project.
- b) The Contractor shall not commit any of the following employment practices and agrees to include the following clauses in any subcontracts:
 - i) To discharge from employment or refuse to hire any individual because of sex, race, color, religion, national origin, sexual orientation, marital status, age, or disability unless such disability is related to job performance of such person or employee.
 - ii) To discriminate against any individual in terms, conditions, or privileges or employment because of sex, race, color, religion, national origin, sexual orientation, marital status, age, or disability unless such disability is related to job performance of such person or employee.

9) RESPONSIBILITY OF CONTRACTOR

- a) Contractor shall provide supervision of the work.
- b) Contractor shall provide protection of all property from injury or loss resulting from construction operations.
- c) Contractor shall replace or repair objects sustaining any such damage, injury, or loss, to the satisfaction of the Jurisdiction and Engineer.
- d) Contractor shall cooperate with Jurisdiction, Engineer, and representatives of utilities in locating underground utility lines and structures. Incorrect, inaccurate, or inadequate information concerning location of utilities or structures shall not relieve the Contractor of responsibility for damage thereto caused by construction operations.
- e) Contractor shall keep cleanup current with construction operations.
- f) Contractor shall comply with all Federal, State of Iowa, and local laws and ordinances.

10) WORK HOURS/COMMUNITY EVENTS

- a) The Contractor will be required to limit work hours on the Project from 7:00 a.m. to 7:00 p.m., Monday through Saturday, unless otherwise directed by the Engineer.
- b) The following Community Events are scheduled. Contractor is required to coordinate with the Jurisdiction as needed to allow use of public property as necessary for the event(s). If Contract continues for multiple years, event is still in force even though dates and locations may change.
 - i) None.

11) CONSTRUCTION FACILITIES

- a) Contractor shall provide telephone numbers where Contractor's representative can be reached during work days and on nights and weekends in event of emergency.
- b) Contractor shall provide and maintain suitable sanitary facilities for construction personnel for duration of work; remove upon completion of work.
- c) Contractor shall not store construction equipment, employee vehicles, or materials on streets open to traffic.

- d) Contractor shall provide suitable storage facilities necessary for proper storage of materials and equipment. Location for storage of equipment by Contractor is subject to approval of the Engineer.
- e) Contractor will be required to make arrangements for all services required during the construction period and pay for such services at no additional cost to the Jurisdiction.

12) PROJECT SUPERVISION

- a) The Contractor shall be represented in person at the construction site at all times that construction operations are proceeding. Representation constitutes a qualified superintendent or other designated, qualified representative capable of providing adequate supervision. The representative must be duly authorized to receive and execute instructions, notices, and written orders from the Engineer.
- b) Resolution of issues that arise during construction relating to traffic control, construction staging, etc. is the responsibility of the Contractor.
- c) Weekly progress meetings, if specified at the preconstruction conference, may be held at the project site to review project schedules, coordinate activities, resolve conflicts, and coordinate the construction work. The day and time for this meeting will be set at the preconstruction conference. The Contractor shall provide qualified representation at each meeting.
- d) Refer to Division 1 – General Provisions and Covenants, Section 1080 – Contractual Provisions, Part 1 – Prosecution and Progress of the Work, Section 1.10 Contractors Employees, Methods and Equipment for additional requirements.
- e) Contractor shall provide supervision of all sub-contractors and their personnel while on the site.

13) COORDINATION WITH OTHERS

- a) Contractor shall cooperate and coordinate construction with the Jurisdiction, utility companies, affected property owners, and other contractors working in the vicinity of this project.
- b) It is the Contractor's responsibility to schedule and coordinate work to minimize construction delays and conflicts.
- c) Contractor shall cooperate and coordinate with property owners prior to beginning work that will affect their parcel.

14) CONSTRUCTION GENERAL

- a) Procedures outlined herein are not intended to fully cover all special construction procedures but are offered as an aid to the Contractor in planning work.
- b) Contractor shall cooperate with the City of Muscatine, Iowa and the Engineer to minimize inconvenience to property owners, other jurisdictions and motorists and to prevent delays in construction and interruption to continuous operation of utility services and site access.
- c) The Contractor is expected to provide adequate personnel and equipment to perform work within the specified time of construction.
- d) Contractor shall install and maintain orange safety fence around all open trenches or open structures when left unattended.
- e) Contractor shall complete surface restoration and cleanup activities as construction progresses.

15) CONSTRUCTION LIMITS

- a) Contractor shall confine the construction operations within the construction limits shown on the plans.
- b) Contractor shall not store equipment, vehicles, or materials within the right-of-way of any streets open to traffic or on temporary access roads at any time.
- c) Areas disturbed outside of construction limits shall be restored at the contractor's expense to the satisfaction of the Jurisdiction.
- d) Contractor shall protect trees, fences and landscaping within the construction limits not marked for removal.

- e) All work on this project will be within City Right-of-Way, Easements or Public Property.

16) CONSTRUCTION SCHEDULE

- a) The Contractor will prepare and submit to the Engineer a project schedule that will assure the completion of the project within the time specified within the Contract.
- b) Adequate equipment and forces shall be made available by the Contractor to start work immediately upon receipt of the Notice to Proceed.
- c) Contractor shall submit a construction schedule at the preconstruction conference.
- d) Contractor shall periodically update the construction schedule as needed due to changes in progress of construction from the original schedule or as requested by the Engineer. Updates shall be completed within one week of request.
- e) The Contractor shall be required to meet the final completion date as specified in Section 00500 – Contract.
- f) Contractor shall notify the Jurisdiction and property owners at least 48 hours prior to any street closures.
 - i) Notification shall be provided by written notice placed on the front door. The following items shall be included within the notice:
 - (a) The street name, location and proposed date of street closure.
 - (b) The estimated schedule for completion of work.
 - (c) The estimated date for reopening of the street.
 - (d) Procedure for garbage collection recycling and postal service.

17) CONSTRUCTION PHASING

- a) Contractor shall refer to construction staging and traffic control plans when included in construction plans.
- b) Contractor shall include construction phasing on the required construction schedule submittal.

18) CONSTRUCTION SURVEY DOCUMENTATION & RESPONSIBILITIES OF ENGINEER AND CONTRACTOR

- a) The Contractor shall maintain at the construction site one complete set of drawings suitably marked to show all deviations from the original set of drawings and other information as specified. Supplementary sketches shall be included, if necessary, to clearly indicate all work as constructed.
- b) All manholes and valves shall be located with tie-off dimensions to known items on the plans or in the field to enable the Contractor or City personnel to locate these structures for adjustment.
- c) Survey work documentation shall be a combination of digital and hard copy format and is the property of the Engineer.
- d) Tie-ins with existing pavements and utilities shall be verified for correctness of alignment and elevation prior to construction staking. Any discrepancies discovered during this verification process will be brought to the attention of the Engineer for review and assistance with resolution prior to staking.
- e) When survey work is done under traffic conditions, the traffic control shall be in place prior to commencement of survey work.
- f) The Engineer will have a representative at the preconstruction conference to discuss construction staking.
- g) The Jurisdiction and Engineer will not be responsible for delays due to lack of grade or line stakes unless the Contractor has given the Engineer a 48 hour, working day, notice that such stakes will be needed and the Contractor's work is being conducted in a satisfactory manner and at the specified rate of progress.

19) MATERIALS TESTS

- a) Testing shall follow the requirements of the SUDAS Standards Specifications. Contractor specified testing shall be completed by an independent testing laboratory retained by the Contractor and approved by the Engineer.

Required testing not specified as Contractor or Supplier responsibility will be completed by an independent testing laboratory retained by the Jurisdiction or the Engineer.

- b) The Contractor shall coordinate all material testing with the Engineer.
- c) The Contractor shall not deliver materials to the project site until laboratory tests and/or certifications have been furnished which verify compliance of materials with specifications.
- d) Contractor shall provide gradation and materials certifications for all granular materials. Certify that sources of Portland Cement and aggregate sources are Iowa DOT approved.

20) SOIL BORINGS

- a) None.

21) EXISTING UTILITIES

- a) Location of utility lines, mains, cables and appurtenances shown on plans are from information provided by utility companies and records of the Jurisdiction.
- b) Prior to construction, Contractor shall contact all utility companies and have all utility lines and services located. The Contractor is responsible for excavating and exposing underground utilities in order to confirm their locations ahead of the work.
- c) The Contractor is solely responsible for damage to utilities or private or public property due to utility disruption.
- d) The Contractor shall notify utility company immediately if utility infrastructure is damaged during construction.
- e) The Contractor shall support and protect all utilities that are not moved.
- f) Utility services are not generally shown on plans; protect and maintain services during construction. Notify Jurisdiction and affected property Jurisdictions 48 hours prior to any planned utility service interruptions.
- g) If private utility work occurs within/adjacent to the site during the construction period, Contractor shall coordinate work schedules with the Engineer.
- h) Existing utilities shall remain in substantially continuous operation during construction. Contractor shall select the order and methods of construction that will not interfere with the operation of the utility systems. Interrupt utility services only with approval of Jurisdiction and Engineer.
- i) No claims for additional compensation or time extensions will be allowed to the Contractor for interference or delay caused by utility companies.

22) SALVAGE OF MATERIALS / DISPOSAL

- a) The Contractor shall remove from the project site and dispose of trees, shrubs, vegetation, excess soil excavation, rubbish, concrete, granular materials and other materials encountered as shown on plans and as specified. Excess soil excavation not designated for waste locations shall be disposed of as directed by the Engineer.
- b) The City of Muscatine, Iowa retains first right of refusal for retaining any existing materials removed by the construction.
- c) The Contractor shall dispose of materials in accordance with applicable laws and ordinances. Disposal sites are subject to the review and approval of the Engineer.
- d) Burning of brush and other debris is not permitted. Contractor is responsible for selecting disposal location off site.
- e) The Contractor shall dispose of broken concrete, asphalt, granular material, rubble and excess or unsuitable excavated material. Contractor is responsible for selecting disposal location off site.
- f) The Contractor shall cooperate with all applicable City, State and Federal agencies concerning disposal of materials.

- g) The Contractor shall carefully remove, in a manner to prevent damage, all materials and equipment specified or indicated as salvage. The Contractor shall protect and store items specified.
- h) Any items damaged in removal, storage or handling through carelessness or improper procedures shall be replaced by the Contractor in kind with new items.

23) TRAFFIC CONTROL

- a) The Contractor shall provide sufficient surveillance of the traffic control devices to ensure compliance during the entire construction period. The Contractor shall furnish names, addresses, and phone numbers of at least two (2) local individuals capable of immediate response who will be responsible for the site security and traffic control devices to:
 - i) The Engineer;
 - ii) The Jurisdiction; and
 - iii) Local Law Enforcement Agencies.
- b) The Contractor shall schedule the work to cooperate fully with business property owners and occupants abutting the project to minimize the time of restricted access to their property during the construction period.
- c) The Contractor shall notify the City and property owners at least 48 hours prior to any street closures.
 - i) Notification shall be provided by written notice delivered to the business. The following items shall be included within the notice:
 - (1) The street name, location and proposed date of street closure;
 - (2) The estimated schedule for completion of work;
 - (3) The estimated date for reopening of the street; and
 - (4) Procedure for garbage collection/recycling and postal service.
 - ii) Contractor shall accommodate and maintain safe access to homes for property owners. Access to homes shall be considered incidental to the project.
- d) The cost of maintaining vehicular and pedestrian traffic on temporary surfaced drives and walkways, including the eventual removal of the temporary surfacing material, shall be considered incidental to traffic control.
- e) In the event that any of the above right-of-way require traffic to be detoured around the construction zone, the Contractor shall prepare the detour route with the appropriate Agency representatives. The Contractor shall provide and maintain all signing and other traffic control required. The affected Agency shall be notified by the Contractor before re-routing traffic. Dust control and road maintenance of the by-pass route shall be the Contractor's responsibility.
- f) Contractor shall furnish, erect and maintain traffic control devices as specified in the construction drawings and directed by the Engineer including signs, barrels, cones and barricades to direct traffic and separate traffic from work areas. Traffic control shall be in place prior to the closing of any streets.
- g) Contractor shall provide traffic control devices in accordance with the Iowa DOT Standard Specification, Section 2528, Traffic Control, and the latest edition of the Manual on Uniform Traffic Control Devices (MUTCD).
- h) Adjustments to the traffic control or the addition of flaggers will be required if, in the opinion of the Engineer, undue traffic congestion occurs.
- i) Contractor shall provide continuous access for police, fire and other emergency vehicles.
- j) Contractor shall notify the Engineer in writing at least 72 hours prior to the start of any construction operation that will necessitate land closure or internal traffic control signing.

24) TEMPORARY FENCES

- a) Contractor shall install temporary fencing around open excavations or material storage areas and as directed by Engineer to prevent access of unauthorized persons to construction areas.
- b) Contractor shall provide orange plastic mesh safety fence with a nominal height of 48". Support fence securely on driven posts in vertical position without sagging.
 - i) Refer to Iowa DOT Section 4188.03 for fence materials.
- c) Temporary fencing installed around open excavations or material storage areas is incidental to construction and will not be measured for payment.
- d) Contractor shall remove temporary fencing upon completion of construction.

25) EROSION CONTROL (No Permit)

- a) A SWPPP Plan and NPDES Permit are not required for this project. Contractor shall still be responsible to protect against erosion and dust pollution on this project site and any off-site deposit or borrow area used for this project.
- b) Protect adjoining property including public sanitary and storm sewer systems and streets from any damage resulting from movement of earth or other debris from project site. Repair any damage immediately.
- c) Prevent accumulation of earth or debris on adjoining public or private property from project site. Remove any accumulation of earth or debris immediately. Prevent repetition of any instance where earth or debris moves from project site to adjoining public or private property.
- d) Provide erosion control measures necessary to protect against siltation and erosion from the flow of storm water. Maintain continuous operation of the storm sewer system throughout the construction period.
- e) Contractor shall use silt fence and similar Best Management Practices (BMP) at all drainage courses, swales and storm sewer system inlets/outlets to protect against siltation and erosion as shown in the construction drawings or directed by the Engineer.
- f) Erosion protection measures, other than those specified as unit price pay items are incidental.
- g) The Contractor will be fully liable for all damages to public and private property caused by their action or inaction in providing for handling of storm water flow during construction.
- h) After the detention basin construction is completed, the Contractor is required to immediately seed and mulch these locations.
- i) As construction progresses, sodding, seeding and mulching is required in those segments of the corridor that become available to do so. The Contractor shall not wait until all grading and paving operations are completed before commencing final surface restoration.
- j) The Contractor shall anticipate multiple mobilizations to complete seeding, sodding, mulching and surface restoration operations as areas of the project corridor become available to do so.

26) DEWATERING

- a) Contractor shall perform all construction work in dry conditions.
- b) All costs associated with dewatering activities shall be incidental to the project.
- c) Contractor shall submit dewatering methods to the Engineer for review. Obtain the Engineer's approval on methods prior to construction.
- d) Groundwater levels are subject to variation. No additional compensation will be permitted due to high groundwater conditions.
- e) Should cohesive soils with no wet sand seams or layers be encountered, it may be possible to control water seepage by draining groundwater to temporary construction sumps and pumping it outside the perimeter of the excavation.
- f) The Contractor shall not pump water from open excavation in sand and gravel below the natural ground water level.

- g) Contractor shall maintain water levels 2 feet or more below the bottom of excavations in saturated cohesionless (sand and/or gravel) soils to prevent upward seepage, which could reduce subgrade support.
 - i) A dewatering system (well points or shallow wells) shall be installed when working in cohesionless soils.
 - ii) Costs of installing and operating dewatering system are incidental, unless specified otherwise.
- h) Contractor shall provide means for conveying surface water encountered during construction.
 - i) Surface water shall be prevented from flowing into excavation and accumulated water shall be removed.
 - ii) Surface water and storm sewer flows shall be diverted around areas of construction.
 - iii) Sanitary sewers shall not be used for the disposal of dewatering or trench water.
- i) Contractor shall backfill pipe and structures prior to stopping dewatering operations. Contractor shall not lay pipe or construct concrete structures on excessively wet soils.
- j) Costs of conveying both surface water and groundwater are incidental.

27) READY MIX CONCRETE USED ON PAVING PROJECTS

- a) Contractor will be required to provide plant/truck batch tickets as detailed in the Iowa DOT Construction Manual, Chapter 9, Section 9.03.
- b) Contractor shall be required to provide a batch ticket for each delivered load to the Engineer or their field staff at the time of delivery on site.

28) INCIDENTAL CONTRACT ITEMS

- a) The furnishing and installing of specific items and/or the performance of work under certain circumstances shall not be individually paid in the absence of a specific bid item for the work. These costs shall be included in the Unit Price Bid for the individual items associated with the stated specific item or work effort. Such items of work include, but are not limited to:

- Concrete header removal
- Connections to existing storm sewer structures and pipes unless specified for separate payment
- Construction and removal of temporary access roads
- Construction fencing
- Construction staging and phasing
- Coordination and cooperation with affected property owners
- Coordination and cooperation with the City of Muscatine
- Coordination and cooperation with other contractors
- Coordination and cooperation with other projects in the area
- Coordination and cooperation with utility companies
- Dewatering and handling storm water flow during construction
- Dust control measures
- Engineering fabric
- Excavation, verification and protection of existing utilities
- Field and wood fence removal
- Field testing
- Finish grading
- Full depth saw-cutting of existing pavement
- Grading for storm sewer outlets
- Granular backfill and bedding for storm and sanitary sewer installation
- Granular surfacing removal
- Maintenance and watering for seeding and sodding
- Maintenance of erosion control measures, including silt removal
- Material testing
- Monitoring weather conditions

Mowing
Overhaul
Pipe and structure bedding material
Porous backfill for subdrain
Proof rolling
Protection of existing hydrant(s) and valve(s)
Protection of existing trees and plantings not shown as removals
Protection of existing utilities and light poles
Removing and reinstalling existing signs
Reseeding
Site cleanup/restoration
Temporary safety closures
Temporary sheeting and shoring
Water valve removal
Working backfill to reduce moisture content
Working subgrade to achieve acceptable moisture content
Wrapping of storm sewer pipe joints

******END OF SECTION******

GOVERNING SPECIFICATIONS

THE 2025 EDITION OF THE "IOWA STATEWIDE URBAN SPECIFICATIONS FOR PUBLIC IMPROVEMENTS" INCLUDING SUPPLEMENTAL SPECIFICATIONS.

MUTCD 2024 AS ADOPTED BY IOWA DEPARTMENT OF TRANSPORTATION.

ALL APPLICABLE FEDERAL, STATE, AND LOCAL LAWS AND ORDINANCES WILL BE COMPLIED WITHIN THE CONSTRUCTION OF THIS PROJECT.

NOTE: EXISTING UTILITY INFORMATION SHOWN ON THIS PLAN HAS BEEN PROVIDED BY THE UTILITY OWNER. THE CONTRACTOR SHALL FIELD VERIFY EXACT LOCATIONS PRIOR TO COMMENCING CONSTRUCTION AS REQUIRED BY STATE LAW. NOTIFY IOWA ONE CALL 1-800-292-8989 OR 811

THE SUBSURFACE UTILITY INFORMATION IN THIS PLAN IS UTILITY QUALITY LEVEL D UNLESS OTHERWISE NOTED. THIS UTILITY LEVEL WAS DETERMINED ACCORDING TO THE GUIDELINES OF CI/ASCE 38-02, ENTITLED "STANDARD GUIDELINES FOR THE COLLECTION AND DEPICTION OF EXISTING SUBSURFACE UTILITY DATA."



RESOURCE LIST

CITY OF MUSCATINE, IOWA

Mayor:
Dr. Brad Bark

City Council Members:
Don Lampe
Jeff Osborne
Peggy Gordon
Nadine Brockert
John Jindrich
Angela Lewis
Matt Conard

Public Works Director:
Brian Stineman

City Engineer:
Kevin Coon

Utility Contacts

City of Muscatine Storm/Sewer:
Matt Chandler
1459 Washington St
Muscatine, IA 52761
(563) 260-8838

Muscatine Power & Water:
Andy Haney
3205 Cedar St
Muscatine, IA 52761
(563) 260-7458

Alliant Energy:
John Carney
215 Oak St
Muscatine, IA 52761
(563) 288-3322

CenturyLink:
Tom Sturmer
3908 Utica Ridge Rd
Bettendorf, IA 52722
(303) 664-8090

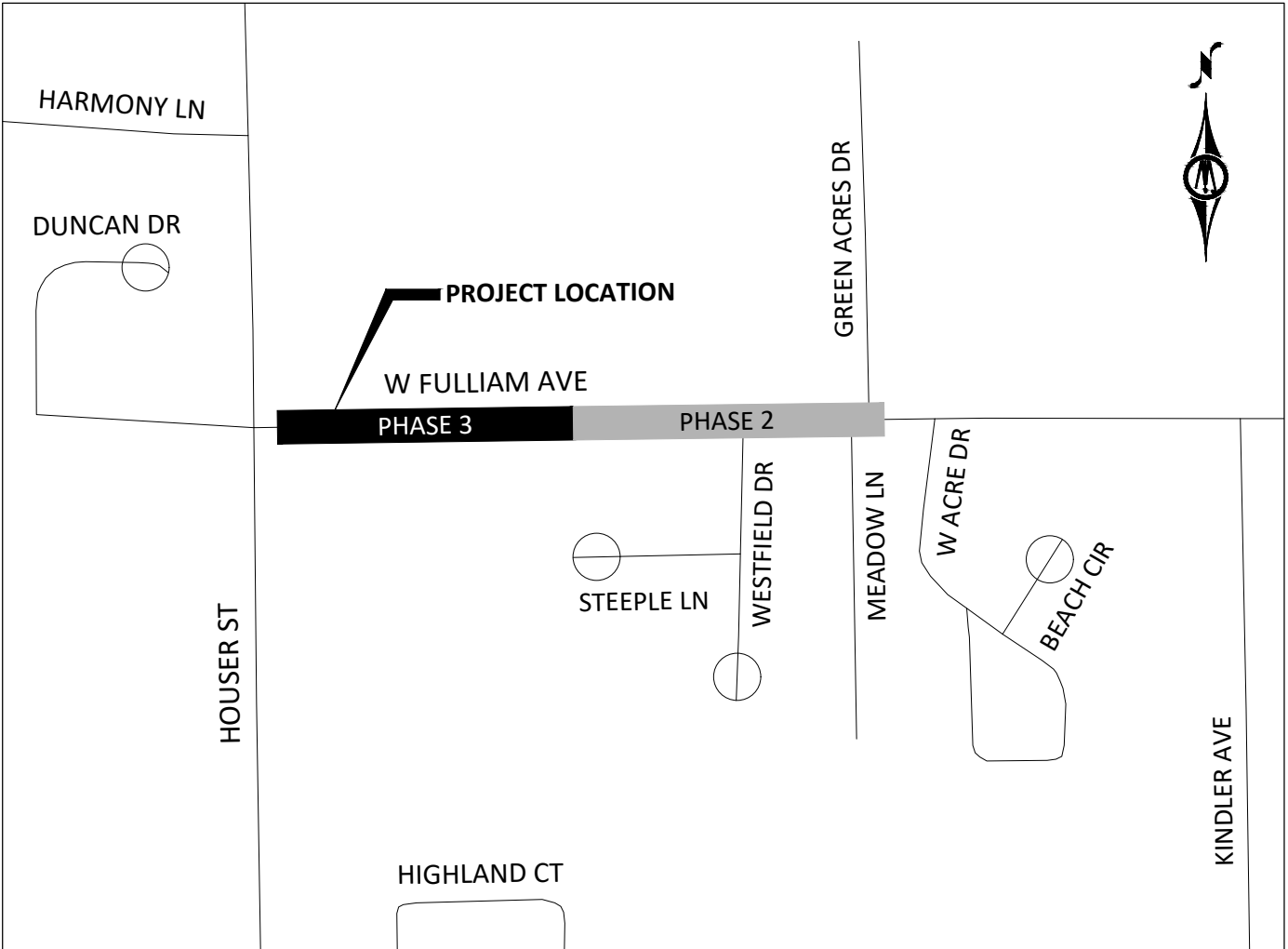
Windstream:
Joe Green
1450 N Center Point Rd
Hiawatha, IA 52233
(319) 790-7510

CITY OF MUSCATINE, IOWA
CONSTRUCTION PLANS FOR

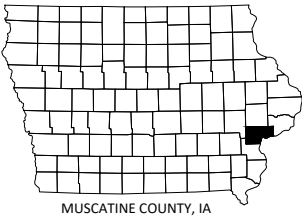
FULLIAM AVE RECONSTRUCTION - PHASE 3

CONTRACT NUMBER: 133022

LETTING DATE: MAY 1ST, 2025



MAP OF A PORTION OF THE
CITY OF MUSCATINE, IOWA
MUSCATINE COUNTY, IA



SHEET NUMBER	SHEET TITLE
A.01	TITLE SHEET
A.02	LEGEND
B.01	TYPICAL SECTIONS
C.01	ESTIMATED PROJECT QUANTITIES
C.02	ESTIMATE REFERENCE INFORMATION
C.03	TABULATIONS
D.01	PLAN & PROFILE - MAINLINE
D.02	PLAN & PROFILE - MAINLINE
G.01	REFERENCES & BENCHMARKS
H.01	EASEMENTS & RIGHT-OF-WAY
H.02	EASEMENTS & RIGHT-OF-WAY
J.01	STAGING & TRAFFIC CONTROL - NOTES & LEGEND
J.02	STAGING & TRAFFIC CONTROL - TEMPORARY SIGNAGE
J.03	STAGING & TRAFFIC CONTROL - LAYOUT
L.01	GEOMETRICS & JOINTING
L.02	GEOMETRICS & JOINTING
M.01	STORM SEWER - PLAN & PROFILE
M.02	STORM SEWER - PLAN & PROFILE
Q.01	REMOVALS PLAN
R.01	EROSION & SEDIMENT CONTROL
R.02	EROSION & SEDIMENT CONTROL
W.01	MAINLINE CROSS-SECTIONS
W.02	MAINLINE CROSS-SECTIONS
THIS PLAN SET CONTAINS <u>23</u> SHEETS.	

I HEREBY CERTIFY THAT THIS ENGINEERING DOCUMENT WAS PREPARED BY ME OR UNDER MY DIRECT PERSONAL SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF IOWA.

Adrian L. Holmes, P.E.

LICENSE NUMBER: #17935 DATE: March 12, 2025

MY LICENSE RENEWAL DATE IS 12/31/2025

PAGES OR SHEETS COVERED BY THIS SEAL:

ALL SHEETS

© Bolton & Menk, Inc. 2025. All Rights Reserved. MUSCATINE_C14103133022_CADD/PHASE 1A133022A01_P3.dwg 3/13/2025 1:31:09 PM



BOLTON & MENK

401 1ST ST SE, SUITE 201
CEDAR RAPIDS, IOWA 52401
Phone: (319) 362-3219
Email: CedarRapids@bolton-menk.com
www.bolton-menk.com

DESIGNED	RCK	NO.	0	ISSUED FOR	BID	DATE	3/13/2025
DRAWN	RCK						
CHECKED	ALH						
CLIENT PROJ. NO.	133022						

CITY OF MUSCATINE, IOWA
FULLIAM AVE RECONSTRUCTION - PHASE 3
TITLE SHEET

SHEET

A.01

© Bolton & Menk, Inc. 2025. All Rights Reserved.
MUSCATINE_C11AUG133022A_CADD3D.PDF (IN133022A01_P3.dwg 3/13/2025 1:31:11 PM)

EXISTING TOPOGRAPHIC SYMBOLS

	ACCESS GRATE		REGULATION STATION GAS
	AIR CONDITION UNIT		SATELLITE DISH
	ANTENNA		SIGN TRAFFIC
	AUTO SPRINKLER CONNECTION		SIGNAL CONTROL CABINET
	BARRICADE PERMANENT		SOIL BORING
	BASKETBALL POST		SIREN
	BENCH		TELEPHONE BOOTH
	BIRD FEEDER		TILE INLET
	BOLLARD		TILE OUTLET
	BUSH		TILE RISER
	CATCH BASIN RECTANGULAR CASTING		TRANSFORMER-ELECTRIC
	CATCH BASIN CIRCULAR CASTING		TREE-CONIFEROUS
	CURB STOP		TREE-DEAD
	CLEAN OUT		TREE-DECIDUOUS
	CULVERT END		TREE STUMP
	DRINKING FOUNTAIN		TRAFFIC ARM BARRIER
	DOWN SPOUT		TRAFFIC SIGNAL
	ELECTRIC CAR CHARGE STATION		TRASH CAN
	FILL PIPE		UTILITY MARKER
	FIRE HYDRANT		VALVE
	FLAG POLE		VALVE POST INDICATOR
	FLARED END / APRON		VALVE VAULT
	FUEL PUMP		VAULT
	GRILL		VENT PIPE
	GUY WIRE ANCHOR		WATER SPIGOT
	HANDHOLE		WELL
	HANDICAP SPACE		WETLAND DELINEATED MARKER
	IRRIGATION SPRINKLER HEAD		WETLAND
	IRRIGATION VALVE BOX		WET WELL
	LIFT STATION CONTROL PANEL		YARD HYDRANT
	LIFT STATION		
	LIGHT POLE		
	MAILBOX		
	MANHOLE-COMMUNICATION		
	MANHOLE-ELECTRIC		
	MANHOLE-GAS		
	MANHOLE-HEAT		
	MANHOLE-RECLAIMED WATER		
	MANHOLE-SANITARY SEWER		
	MANHOLE-STORM SEWER		
	MANHOLE-UTILITY		
	MANHOLE-WATER		
	METER		
	DRIVE-THRU MICROPHONE		
	PARKING METER		
	PAVEMENT MARKING		
	PEDESTAL-COMMUNICATION		
	PEDESTAL-ELECTRIC		
	PEDESTRIAN PUSH BUTTON		
	PICNIC TABLE		
	POLE-UTILITY		
	POST		
	RAILROAD SIGNAL POLE		

PROPOSED TOPOGRAPHIC SYMBOLS

	CLEANOUT
	MANHOLE
	LIFT STATION
	STORM SEWER CIRCULAR CASTING
	STORM SEWER RECTANGULAR CASTING
	STORM SEWER FLARED END / APRON
	STORM SEWER OUTLET STRUCTURE
	STORM SEWER OVERFLOW STRUCTURE
	CURB BOX
	FIRE HYDRANT
	WATER VALVE
	WATER REDUCER
	WATER BEND
	WATER TEE
	WATER CROSS
	WATER SLEEVE
	WATER CAP / PLUG
	RIP RAP
	DRAINAGE FLOW
	TRAFFIC SIGNS

SURVEY SYMBOLS

	BENCHMARK LOCATION		CAST IRON MONUMENT
	CONTROL POINT		STONE MONUMENT
	MONUMENT FOUND		

EXISTING TOPOGRAPHIC LINES

	RETAINING WALL
	FENCE
	FENCE-DECORATIVE
	GUARD RAIL
	TREE LINE
	BUSH LINE

SURVEY LINES

	CONTROLLED ACCESS
	BOUNDARY
	CENTERLINE
	EXISTING EASEMENT LINE
	PROPOSED EASEMENT LINE
	EXISTING LOT LINE
	PROPOSED LOT LINE
	EXISTING RIGHT-OF-WAY
	PROPOSED RIGHT-OF-WAY
	SETBACK LINE
	SECTION LINE
	QUARTER LINE
	SIXTEENTH LINE
	TEMPORARY EASEMENT

EXISTING UTILITY LINES

	FORCEMAIN
	SANITARY SEWER
	SANITARY SERVICE
	STORM SEWER
	STORM SEWER DRAIN TILE
	WATERMAIN
	WATER SERVICE
	RECLAIMED WATER

PROPOSED UTILITY LINES

	FORCEMAIN
	SANITARY SEWER
	SANITARY SERVICE
	STORM SEWER
	STORM SEWER DRAIN TILE
	WATERMAIN
	WATER SERVICE
	PIPE CASING
	TRENCHLESS PIPE (PLAN VIEW)
	TRENCHLESS PIPE (PROFILE VIEW)

GRADING INFORMATION

	EXISTING CONTOUR MINOR
	EXISTING CONTOUR MAJOR
	PROPOSED CONTOUR MINOR
	PROPOSED CONTOUR MAJOR
	PROPOSED GRADING LIMITS / SLOPE LIMITS
	PROJECT LIMITS
	PROPOSED SPOT ELEVATION
	RISE:RUN (SLOPE)

HATCH PATTERNS

	BITUMINOUS		GRAVEL
	CONCRETE		

EXISTING PRIVATE UTILITY LINES

NOTE:
EXISTING UTILITY INFORMATION SHOWN ON THIS PLAN HAS BEEN PROVIDED BY THE UTILITY OWNER. THE CONTRACTOR SHALL FIELD VERIFY EXACT LOCATIONS PRIOR TO COMMENCING CONSTRUCTION AS REQUIRED BY STATE LAW. NOTIFY GOPHER STATE ONE CALL, 1-800-252-1166 OR 651-454-0002.

THE SUBSURFACE UTILITY INFORMATION IN THIS PLAN IS UTILITY QUALITY LEVEL D UNLESS OTHERWISE NOTED. THIS UTILITY LEVEL WAS DETERMINED ACCORDING TO THE GUIDELINES OF CI/ASCE 38-22, ENTITLED "STANDARD GUIDELINE FOR INVESTIGATING AND DOCUMENTING EXISTING UTILITIES".

	UNDERGROUND FIBER OPTIC
	UNDERGROUND ELECTRIC
	UNDERGROUND GAS
	UNDERGROUND COMMUNICATION
	OVERHEAD ELECTRIC
	OVERHEAD COMMUNICATION
	OVERHEAD UTILITY

UTILITIES IDENTIFIED WITH A QUALITY LEVEL :

LINE TYPES FOLLOW THE FORMAT: UTILITY TYPE - QUALITY LEVEL
EXAMPLE: G-A G-A UNDERGROUND GAS, QUALITY LEVEL A
UTILITY QUALITY LEVEL (A,B,C,D) DEFINITIONS CAN BE FOUND IN CI/ASCE 38-22.

UTILITY QUALITY LEVELS:

QUALITY LEVEL D: PROVIDES THE MOST BASIC LEVEL OF INFORMATION. IT INVOLVES COLLECTING DATA FROM EXISTING UTILITY RECORDS. RECORDS MAY INCLUDE AS-BUILT DRAWINGS, DISTRIBUTION AND SERVICES MAPS, EXISTING GEOGRAPHIC INFORMATION SYSTEM DATABASES, CONSTRUCTION PLANS, ETC.

QUALITY LEVEL C: INVOLVES SURVEYING VISIBLE SUBSURFACE UTILITY STRUCTURES SUCH AS MANHOLES, HAND-HOLES, UTILITY VALVES AND METERS, FIRE HYDRANTS, PEDESTALS AND UTILITY MARKERS, AND THEN CORRELATING THE INFORMATION WITH EXISTING UTILITY RECORDS TO CREATE COMPOSITE DRAWINGS. INCLUDES QUALITY LEVEL D ACTIVITIES.

QUALITY LEVEL B: INVOLVES DESIGNATING THE HORIZONTAL POSITION OF SUBSURFACE UTILITIES THROUGH SURFACE DETECTION METHODS AND COLLECTING THE INFORMATION THROUGH A SURVEY METHOD. INCLUDES QUALITY LEVEL C AND D TASKS.

QUALITY LEVEL A: PROVIDES THE HIGHEST LEVEL OF ACCURACY. IT INVOLVES LOCATING OR POTHOLING UTILITIES AS WELL AS ACTIVITIES IN QUALITY LEVELS B, C, AND D. THE LOCATED FACILITY INFORMATION IS SURVEYED AND MAPPED AND THE DATA PROVIDES PRECISE PLAN AND PROFILE INFORMATION.

ABBREVIATIONS

A	ALGEBRAIC DIFFERENCE	GRAV	GRAVEL	RSC	RIGID STEEL CONDUIT
ADJ	ADJUST	GU	GUTTER	RT	RIGHT
ALT	ALTERNATE	GV	GATE VALVE	SAN	SANITARY SEWER
B-B	BACK TO BACK	HDPE	HIGH DENSITY POLYETHYLENE	SCH	SCHEDULE
BIT	BITUMINOUS	HH	HANDHOLE	SERV	SERVICE
BLDG	BUILDING	HP	HIGH POINT	SHLD	SHOULDER
BMP	BEST MANAGEMENT PRACTICE	HWL	HIGH WATER LEVEL	STA	STATION
BR	BEGIN RADIUS	HYD	HYDRANT	STD	STANDARD
BV	BUTTERFLY VALVE	I	INVERT	STM	STORM SEWER
CB	CATCH BASIN	K	CURVE COEFFICIENT	TC	TOP OF CURB
C&G	CURB AND GUTTER	L	LENGTH	TE	TEMPORARY EASEMENT
CIP	CAST IRON PIPE	LO	LOWEST OPENING	TEMP	TEMPORARY
CIPP	CURED-IN-PLACE PIPE	LP	LOW POINT	TNH	TOP NUT HYDRANT
CL	CENTER LINE	LT	LEFT	TP	TOP OF PIPE
CL	CLASS	MAX	MAXIMUM	TYP	TYPICAL
CLVT	CULVERT	MH	MANHOLE	VCP	VITRIFIED CLAY PIPE
CMP	CORRUGATED METAL PIPE	MIN	MINIMUM	VERT	VERTICAL
C.O.	CHANGE ORDER	MR	MID RADIUS	VPC	VERTICAL POINT OF CURVE
COMM	COMMUNICATION	NIC	NOT IN CONTRACT	VPI	VERTICAL POINT OF INTERSECTION
CON	CONCRETE	NMC	NON-METALLIC CONDUIT	VPT	VERTICAL POINT OF TANGENT
CSP	CORRUGATED STEEL PIPE	NTS	NOT TO SCALE	WM	WATERMAIN
DIA	DIAMETER	NWL	NORMAL WATER LEVEL		
DIP	DUCTILE IRON PIPE	OHW	ORDINARY HIGH WATER LEVEL		
DWY	DRIVEWAY	PC	POINT OF CURVE	AC	ACRES
E	EXTERNAL CURVE DISTANCE	PCC	POINT OF COMPOUND CURVE	CF	CUBIC FEET
ELEC	ELECTRIC	PE	PERMANENT EASEMENT	CV	COMPACTED VOLUME
ELEV	ELEVATION	PED	PEDESTRIAN, PEDESTAL	CY	CUBIC YARD
EOF	EMERGENCY OVERFLOW	PERF	PERFORATED PIPE	EA	EACH
ER	END RADIUS	PERM	PERMANENT	EV	EXCAVATED VOLUME
ESMT	EASEMENT	PI	POINT OF INTERSECTION	LB	POUND
EX	EXISTING	PL	PROPERTY LINE	LF	LINEAR FEET
FES	FLARED END SECTION	PRC	POINT OF REVERSE CURVE	LS	LUMP SUM
F-F	FACE TO FACE	PT	POINT OF TANGENT	LV	LOOSE VOLUME
FF	FINISHED FLOOR	PVC	POLYVINYL CHLORIDE PIPE	SF	SQUARE FEET
F&I	FURNISH AND INSTALL	PVMT	PAVEMENT	SV	STOCKPILE VOLUME
FM	FORCEMAIN	R	RADIUS	SY	SQUARE YARD
FO	FIBER OPTIC	R/W	RIGHT-OF-WAY		
F.O.	FIELD ORDER	RCP	REINFORCED CONCRETE PIPE		
GRAN	GRANULAR	RET	RETAINING		



**BOLTON
& MENK**

401 1ST ST SE, SUITE 201
CEDAR RAPIDS, IOWA 52401
Phone: (319) 362-3219
Email: CedarRapids@bolton-menk.com
www.bolton-menk.com

DESIGNED	RCK	NO.	0	ISSUED FOR	BID	DATE	3/13/2025
DRAWN	RCK						
CHECKED	ALH						
CLIENT PROJ. NO.	133022						

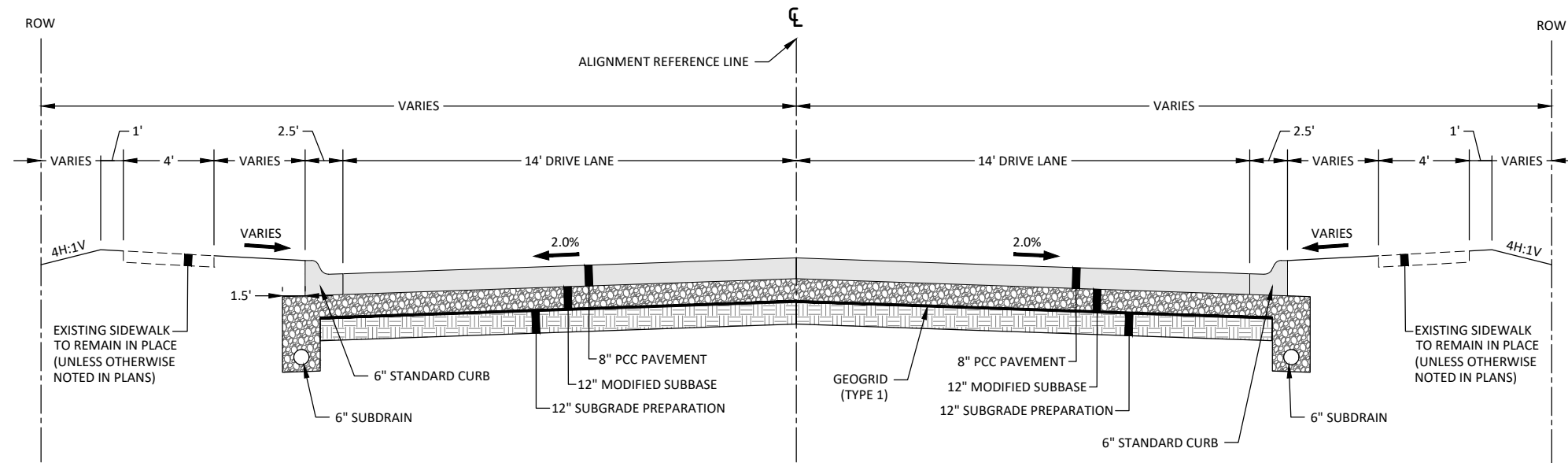
CITY OF MUSCATINE, IOWA

FULLIAM AVE RECONSTRUCTION - PHASE 3

LEGEND

SHEET

A.02



1
B.01

PROPOSED FULLIAM AVE

NOT TO SCALE

© Bolton & Menk, Inc. 2024. All Rights Reserved.
MUSCATINE_CIVIL_133022_CADD_PHASE 3.dwg 3/13/2025 1:31:16 PM



**BOLTON
& MENK**

401 1ST ST SE, SUITE 201
CEDAR RAPIDS, IOWA 52401
Phone: (319) 362-3219
Email: CedarRapids@bolton-menk.com
www.bolton-menk.com

DESIGNED	NO.	ISSUED FOR	DATE
RCK	0	BID	3/13/2025
DRAWN			
RCK			
CHECKED			
ALH			
CLIENT PROJ. NO.			
133022			

CITY OF MUSCATINE, IOWA
FULLIAM AVE RECONSTRUCTION - PHASE 3

TYPICAL SECTIONS

SHEET

B.01

© Bolton & Menk, Inc. 2025. All Rights Reserved
M:\MUSCATINE_GA\103133022\CADD\PHASE III\13022C01_P3.dwg 3/13/2025 1:31:21 PM

	ESTIMATED PROJECT QUANTITIES				
ITEM NO.	ITEM CODE	ITEM	UNIT	QUANTITY	AS BUILT QUANT.
1	2010-C	CLEARING AND GRUBBING	LS	1	
2	2010-D-1	TOPSOIL, ON-SITE	CY	175	
3	2010-D-3	TOPSOIL, OFF-SITE	CY	75	
4	2010-E	EXCAVATION, CLASS 10	CY	776	
5	2010-G	SUBGRADE PREPARATION	SY	2902	
6	2010-I	SUBGRADE TREATMENT, GEOGRID, TYPE 1	SY	2902	
7	2010-J	SUBBASE, MODIFIED, 12-INCH	SY	2902	
8	2010-M	SUBGRADE COMPACTION TESTING	LS	1	
9	4020-A-1	STORM SEWER, TRENCHED, RCP, 15-INCH	LF	108	
10	4020-A-1	STORM SEWER, TRENCHED, RCP, 18-INCH	LF	345	
11	4020-D	REMOVAL OF STORM SEWER, LESS THAN OR EQUAL TO 36-INCH DIA.	LF	52	
12	4040-A	SUBDRAIN, CASE B, TYPE 1, 6-INCH	LF	858	
13	4040-C	SUBDRAIN CLEANOUT, TYPE B	EA	2	
14	4040-D-1	SUBDRAIN OUTLETS AND CONNECTIONS, 6-INCH	EA	8	
15	5010-D	WATER SERVICE STUB, TRENCHED, COPPER, 3/4-INCH	EA	5	
16	5020-F	VALVE BOX ADJUSTMENT, MINOR	EA	1	
17	5020-I	FIRE HYDRANT ADJUSTMENT	EA	1	
18	6010-A	STORM MANHOLE, SW-401, 48-INCH	EA	1	
19	6010-B	INTAKE, SW-507	EA	1	
20	6010-B	INTAKE, MODIFIED SW-509	EA	1	
21	6010-B	INTAKE, SW-509	EA	4	
22	6010-E-1	MANHOLE ADJUSTMENT, MINOR	EA	1	
23	6010-H	REMOVE INTAKE	EA	2	
24	7010-A	PAVEMENT, PCC, 8-INCH	SY	2588	
25	7010-I	PCC PAVEMENT SAMPLES AND TESTING	LS	1	
26	7030-A-1	REMOVAL OF SIDEWALK	SY	145	
27	7030-A-3	REMOVAL OF DRIVEWAY	SY	293	
28	7030-E	SIDEWALK, PCC, 5-INCH	SY	141	
29	7030-H-1	DRIVEWAY, PAVED, PCC, 6-INCH	SY	304	
30	7040-H	PAVEMENT REMOVAL	SY	2605	
31	8030-A	TEMPORARY TRAFFIC CONTROL	LS	1	
32	8040-I	REMOVE AND REINSTALL TRAFFIC SIGNS	EA	2	
33	9020-A	SOD	SY	1022	
34	9040-D-1	FILTER SOCK, COMPOST, 12-INCH	LF	1157	
35	9040-D-2	FILTER SOCKS, REMOVAL	LF	1157	
36	9040-T-1	INLET PROTECTION DEVICE	EA	6	
37	9040-T-2	INLET PROTECTION DEVICE, MAINTENANCE	EA	18	
38	11010-A	CONSTRUCTION SURVEY	LS	1	
39	11020-A	MOBILIZATION	LS	1	
40	11030-A	MAINTENANCE OF POSTAL SERVICE	LS	1	
41	11030-B	MAINTENANCE OF SOLID WASTE COLLECTION	LS	1	
42	11050-A	CONCRETE WASHOUT	LS	1	



**BOLTON
& MENK**

401 1ST ST SE, SUITE 201
CEDAR RAPIDS, IOWA 52401
Phone: (319) 362-3219
Email: CedarRapids@bolton-menk.com
www.bolton-menk.com

DESIGNED	RCK	NO.	ISSUED FOR	DATE
DRAWN	RCK	0	BID	3/13/2025
CHECKED	ALH			
CLIENT PROJ. NO.	133022			

CITY OF MUSCATINE, IOWA
FULLIAM AVE RECONSTRUCTION - PHASE 3
ESTIMATED PROJECT QUANTITIES

SHEET

C.01

© Bolton & Menk, Inc. 2025. All Rights Reserved.
MUSCATINE, IOWA 52401 133022 CADD SHEET 11/13/2025 1:31:21 PM

ESTIMATE REFERENCE INFORMATION		
ITEM NO.	ITEM CODE	DESCRIPTION
1	2010-C	CLEARING AND GRUBBING ITEM INCLUDES REMOVAL OF ALL VEGETATIVE MATERIALS WITHIN THE PROJECT LIMITS. AREAS OF REMOVAL ARE SHOWN, BUT NOT LIMITED TO THOSE NOTED ON THE 'Q' SHEETS. PRESERVE ALL TREES NOT MARKED FOR REMOVAL. ITEM INCLUDES SALVAGING OF PRIVATE LANDSCAPING MATERIALS WITHIN THE PROJECT LIMITS TO PROPERTY OWNERS, COST INCIDENTAL.
2	2010-D-1	TOPSOIL, ON-SITE QUANTITY OF ON-SITE TOPSOIL IS BASED ON STRIPPING 6-INCH DEPTH.
3	2010-D-3	TOPSOIL, OFF-SITE TOPSOIL SHALL BE PLACED AT ALL LOCATIONS TO BE SODDED AT A MINIMUM DEPTH OF 8 INCHES. REFER TO 'R' SHEETS FOR LOCATIONS. ITEM SHALL BE USED TO SUPPLEMENT ON-SITE TOPSOIL AS DIRECTED BY THE ENGINEER.
4	2010-E	EXCAVATION, CLASS 10 ESTIMATED RAW CUT VOLUME = 775.98 CY ESTIMATED RAW FILL VOLUME = 126.2 CY MISCELLANEOUS ITEMS CALLED OUT ON THE 'Q' SHEETS FOR REMOVAL WHICH DO NOT HAVE THEIR OWN BID ITEM SHALL BE INCIDENTAL TO THIS ITEM.
5	2010-G	SUBGRADE PREPARATION SEE 'B' SHEETS FOR TYPICAL SECTIONS.
6	2010-I	SUBGRADE TREATMENT, GEOGRID, TYPE 1 SEE 'B' SHEETS FOR TYPICAL SECTIONS. ITEM IS FOR GEOGRID PLACED BETWEEN ROADWAY SUBBASE AND SUBGRADE.
7	2010-J	SUBBASE, MODIFIED, 12-INCH REFER TO TYPICAL SECTIONS ON 'B' SHEETS.
8	2010-M	SUBGRADE COMPACTION TESTING THE CONTRACTOR SHALL BE RESPONSIBLE FOR COMPACTION TESTING. TESTING SHALL BE PERFORMED BY AN INDEPENDENT TESTING LABORATORY HIRED BY THE CONTRACTOR AND APPROVED BY OWNER AND ENGINEER.
9	4020-A-1	STORM SEWER, TRENCHED, RCP, 15-INCH REFER TO 'M' SHEETS FOR LOCATIONS AND 'C' SHEETS FOR TABULATION. INSTALL WITH R-2 BEDDING. BACKFILL WITH CLASS I MATERIAL EXCEPT WITHIN 10 FEET OF WATER MAIN CROSSOVER WHERE BACKFILL MATERIAL SHALL BE LOW PERMEABILITY SOIL. INSTALL PIPE WITH GASKETED JOINTS WITHIN 10 FEET OF WATER MAIN CROSSOVER. PROVIDE NON-GASKETED FABRIC WRAPPED JOINTS ELSEWHERE. BEDDING AND BACKFILL SHALL BE INCIDENTAL TO THIS ITEM. DISPOSAL OF EXCAVATED TRENCH MATERIAL SHALL BE INCIDENTAL. SUITABLE MATERIAL MAY BE USED ON SITE AS FILL.
10	4020-A-1	STORM SEWER, TRENCHED, RCP, 18-INCH REFER TO 'M' SHEETS FOR LOCATIONS AND 'C' SHEETS FOR TABULATION. INSTALL WITH R-2 BEDDING. BACKFILL WITH CLASS I MATERIAL EXCEPT WITHIN 10 FEET OF WATER MAIN CROSSOVER WHERE BACKFILL MATERIAL SHALL BE LOW PERMEABILITY SOIL. INSTALL PIPE WITH GASKETED JOINTS WITHIN 10 FEET OF WATER MAIN CROSSOVER. PROVIDE NON-GASKETED FABRIC WRAPPED JOINTS ELSEWHERE. BEDDING AND BACKFILL SHALL BE INCIDENTAL TO THIS ITEM. DISPOSAL OF EXCAVATED TRENCH MATERIAL SHALL BE INCIDENTAL. SUITABLE MATERIAL MAY BE USED ON SITE AS FILL.
11	4020-D	REMOVAL OF STORM SEWER, LESS THAN OR EQUAL TO 36-INCH DIA. SEE 'Q' SHEETS FOR LOCATIONS AND 'C' SHEETS FOR TABULATION.
12	4040-A	SUBDRAIN, CASE B, TYPE 1, 6-INCH REFER TO 'M' SHEETS FOR LOCATIONS AND 'C' SHEETS FOR TABULATION.
13	4040-C	SUBDRAIN CLEANOUT, TYPE B REFER TO 'M' SHEETS FOR LOCATIONS AND 'C' SHEETS FOR TABULATION.
14	4040-D-1	SUBDRAIN OUTLETS AND CONNECTIONS, 6-INCH REFER TO 'M' SHEETS FOR LOCATIONS AND 'C' SHEETS FOR TABULATION.
15	5010-D	WATER SERVICE STUB, TRENCHED, COPPER, 3/4-INCH THIS ITEM IS FOR REPLACEMENT OF WATER SERVICES IN CONFLICT WITH NEW STORM SEWER. ALL SERVICES SHALL BE TYPE K, SOFT ANNEALED, SEAMLESS COPPER. CONNECTIONS TO EXISTING SERVICE LINES WHERE REQUIRED SHALL BE 3-PIECE COMPRESSION TYPE, MUELLER 110 CONDUCTIVE COMPRESSION CONNECTION. REFER TO 'M' SHEETS FOR LOCATIONS. REMOVAL OF EXISTING WATER SERVICE SHALL BE INCIDENTAL.
16	5020-F	VALVE BOX ADJUSTMENT, MINOR REFER TO 'Q' SHEETS FOR LOCATIONS AND 'C' SHEETS FOR TABULATION.
17	5020-I	FIRE HYDRANT ADJUSTMENT REFER TO 'Q' SHEETS FOR LOCATIONS AND 'C' SHEETS FOR TABULATION.
18	6010-A	STORM MANHOLE, SW-401, 48-INCH REFER TO 'M' SHEETS FOR LOCATIONS AND 'C' SHEETS FOR TABULATION.
19	6010-B	INTAKE, SW-507 REFER TO 'M' SHEETS FOR LOCATIONS AND 'C' SHEETS FOR TABULATION.

20	6010-B	INTAKE, MODIFIED SW-509 THIS ITEM IS FOR INT - 02. REFER TO 'M' SHEETS FOR LOCATIONS AND 'C' SHEETS FOR TABULATION. SEE NOTE IN TABULATION FOR MODIFICATION.
21	6010-B	INTAKE, SW-509 REFER TO 'M' SHEETS FOR LOCATIONS AND 'C' SHEETS FOR TABULATION.
22	6010-E-1	MANHOLE ADJUSTMENT, MINOR SEE 'Q' SHEETS FOR LOCATIONS AND 'C' SHEETS FOR TABULATION.
23	6010-H	REMOVE INTAKE SEE 'Q' SHEETS FOR LOCATIONS AND 'C' SHEETS FOR TABULATION.
24	7010-A	PAVEMENT, PCC, 8-INCH REFER TO 'B' SHEETS FOR TYPICAL SECTIONS, 'D' AND 'E' SHEETS FOR LOCATIONS, AND 'C' SHEETS FOR TABULATION. IOWA DOT C-3 OR C-4 MIX SHALL BE USED FOR THIS ITEM.
25	7010-I	PCC PAVEMENT SAMPLES AND TESTING
26	7030-A-1	REMOVAL OF SIDEWALK SEE 'Q' SHEETS FOR LOCATIONS AND 'C' SHEETS FOR TABULATION.
27	7030-A-3	REMOVAL OF DRIVEWAY SEE 'Q' SHEETS FOR LOCATIONS AND 'C' SHEETS FOR TABULATION.
28	7030-E	SIDEWALK, PCC, 5-INCH THIS ITEM IS FOR ALL SIDEWALK EXCEPT CURB RAMPS. REFER TO 'D' SHEETS FOR LOCATIONS AND 'C' SHEETS FOR TABULATION. IOWA DOT C-3 OR C-4 SHALL BE USED FOR THIS ITEM.
29	7030-H-1	DRIVEWAY, PAVED, PCC, 6-INCH CONTRACTOR TO MAINTAIN POSTAL SERVICE AT ALL TIMES DURING CONSTRUCTION. THERE MAY BE TIMES DURING CONSTRUCTION WHERE THE POSTAL SERVICE OR OTHER DELI+C53+C4053
30	7040-H	PAVEMENT REMOVAL SEE 'Q' SHEETS FOR LOCATIONS AND 'C' SHEETS FOR TABULATION. REMOVAL OF EXISTING SUBDRAIN AND FULL-DEPTH SAW CUTS SHALL BE INCIDENTAL TO THIS ITEM.
31	8030-A	TEMPORARY TRAFFIC CONTROL REFER TO 'J' SHEETS FOR TRAFFIC CONTROL REQUIREMENTS. TRAFFIC CONTROL SHALL BE COORDINATED WITH CITY OF MUSCATINE POLICE AND ENGINEERING DEPARTMENTS.
32	8040-I	REMOVE AND REINSTALL TRAFFIC SIGNS THIS ITEM SHALL INCLUDE ALL MATERIALS, LABOR AND EQUIPMENT TO REMOVE THE EXISTING SIGNS, SALVAGE MATERIALS, STOCKPILE AND REINSTALL AT THE SPECIFIED LOCATIONS. DAMAGE TO EXISTING MATERIALS SHALL BE REPLACED TO THE SATISFACTION OF THE OWNER AND AT NO ADDITIONAL EXPENSE TO THE OWNER. REFER TO 'Q' SHEETS FOR LOCATIONS.
33	9020-A	SOD SOD SHALL BE LAWN GRASS. REFER TO 'R' SHEETS FOR LOCATIONS.
34	9040-D-1	FILTER SOCK, COMPOST, 12-INCH REFER TO 'R' SHEETS FOR LOCATIONS.
35	9040-D-2	FILTER SOCKS, REMOVAL REFER TO 'R' SHEETS FOR LOCATIONS.
36	9040-T-1	INLET PROTECTION DEVICE REFER TO 'R' SHEETS FOR LOCATIONS.
37	9040-T-2	INLET PROTECTION DEVICE, MAINTENANCE REFER TO 'R' SHEETS FOR LOCATIONS.
38	11010-A	CONSTRUCTION SURVEY
		REFER TO 'G' SHEETS FOR CONTROL POINT AND BENCHMARK LOCATIONS.
39	11020-A	MOBILIZATION
		THIS ITEM IS FOR ALL PREPARATORY WORK AND COST INCURRED BEFORE AND DURING THE WORK ON THE PROJECT. THIS ITEM SHALL INCLUDE THE COSTS FOR ANY STAGED CONSTRUCTION AND EQUIPMENT SET UP TO COMPLETE THE WORK. NO CHANGE IN CONTRACT PRICE WILL BE MADE FOR ANY COMBINATION OF ALTERNATIVES ADDED TO THE CONTRACT. MISCELLANEOUS MINOR WORK ITEMS WITH NO BID ITEM IN THE PLANS AND WHICH HAVE NO STANDARD BID ITEM SHALL BE INCIDENTAL TO THIS ITEM. THIS ITEM SHALL INCLUDE SHUT DOWN OF CONTROLLING OPERATIONS FOR PRIVATE UTILITY RELOCATIONS. REFER TO SHEET J.01 FOR INFORMATION REGARDING PRIVATE UTILITY RELOCATION.

40	11030-A	MAINTENANCE OF POSTAL SERVICE CONTRACTOR TO MAINTAIN POSTAL SERVICE AT ALL TIMES DURING CONSTRUCTION. THERE MAY BE TIMES DURING CONSTRUCTION WHERE THE POSTAL SERVICE OR OTHER DELIVERY SERVICES MAY NOT HAVE ACCESS TO MAIL FACILITIES AT WHICH THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE TEMPORARY ACCESS TO THOSE FACILITIES. TEMPORARY MAILBOX RELOCATION AND REINSTALLATION OR THE ESTABLISHMENT OF A TEMPORARY MAIL DROP BOX OR A COMBINATION OF THESE ITEMS SHALL BE INCLUDED IN THIS ITEM. REMOVAL AND REINSTALLATION OF MAILBOXES SHALL BE INCIDENTAL TO THIS ITEM. THIS INCLUDES MATERIALS AND LABOR TO REPLACE ANY MATERIALS DAMAGED IF NECESSARY.
41	11030-B	MAINTENANCE OF SOLID WASTE COLLECTION CONTRACTOR TO MAINTAIN SOLID WASTE COLLECTION AT ALL TIMES DURING CONSTRUCTION. THERE MAY BE TIMES DURING CONSTRUCTION WHERE THE SOLID WASTE COLLECTION AGENCIES MAY NOT HAVE ACCESS TO SOLID WASTE RECEPTACLES OR FACILITIES AT WHICH THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE TEMPORARY ACCESS TO THOSE RECEPTACLES OR FACILITIES. THE ESTABLISHMENT OF A TEMPORARY TRASH PICKUP AREA SHALL BE COORDINATED WITH THE SOLID WASTE COLLECTION AGENCY PRIOR TO THE ESTABLISHMENT OF THE TEMPORARY AREA AND SHALL BE INCLUDED IN THIS ITEM.
42	11050-A	CONCRETE WASHOUT THIS ITEM INCLUDES THE FURNISHING AND PERIODICAL CLEANOUT AND MAINTENANCE OF THE WASHOUT AREA AS DIRECTED BY THE ENGINEER.

© Bolton & Menk, Inc. 2025. All Rights Reserved.
MUSCATINE_CIVIL0313022_CDD\PHASE III\13022C01_P3.dwg 3/13/2025 1:31:22 PM

ADJUSTMENT OF FIXTURES					
Location Station	Offset	Type of Fixture	Adjustment	Elevation	
				Existing	Proposed
104+15.48	3.37	Sanitary Manhole	Minor	714.03	714.30
105+24.32	-19.31	Fire Hydrant Assembly	Minor	715.62	715.74
105+29.55	-16.32	Valve Box	Minor	715.16	715.40

REMOVAL OF DRIVEWAY					
Alignment	Begin Station	Offset	End Station	Offset	Area
					SY
Fulliam Ave - Centerline	101+72.22	16.46	101+93.27	-16.59	15.4
Fulliam Ave - Centerline	101+80.97	-16.50	102+09.97	-16.50	23.1
Fulliam Ave - Centerline	102+09.97	-16.50	102+13.97	-16.50	6.5
Fulliam Ave - Centerline	102+13.97	-16.50	102+41.97	-16.50	23.9
Fulliam Ave - Centerline	102+92.25	16.50	103+18.16	16.44	20.0
Fulliam Ave - Centerline	103+42.15	-16.67	103+60.44	-16.78	15.5
Fulliam Ave - Centerline	103+61.16	16.42	103+91.21	16.46	25.2
Fulliam Ave - Centerline	103+75.28	-16.65	104+03.11	-16.62	24.4
Fulliam Ave - Centerline	104+04.66	16.54	104+27.23	16.54	17.4
Fulliam Ave - Centerline	104+51.94	-16.72	104+69.79	-16.80	15.0
Fulliam Ave - Centerline	104+80.76	16.49	105+02.64	16.41	17.2
Fulliam Ave - Centerline	105+28.77	-16.74	105+47.53	-16.73	15.5
Fulliam Ave - Centerline	105+55.71	16.45	105+91.43	16.52	28.6
Fulliam Ave - Centerline	106+63.25	16.63	106+84.68	16.47	16.5
Fulliam Ave - Centerline	107+35.05	16.50	107+69.30	16.50	28.4
			TOTAL		292.6

REMOVAL OF SIDEWALK					
Alignment	Begin Station	Side	End Station	Side	Area
					SY
Fulliam Ave - Centerline	102+69.41	RT	103+40.63	RT	30.9
Fulliam Ave - Centerline	103+89.08	RT	104+36.14	RT	20.1
Fulliam Ave - Centerline	105+19.10	LT	105+51.80	RT	14.8
Fulliam Ave - Centerline	105+79.92	LT	106+29.42	LT	29.2
Fulliam Ave - Centerline	105+87.41	RT	106+14.25	RT	11.9
Fulliam Ave - Centerline	106+76.79	LT	106+88.44	LT	5.3
Fulliam Ave - Centerline	107+01.70	RT	107+35.18	RT	15.7
Fulliam Ave - Centerline	107+37.25	RT	107+75.51	RT	16.4
			TOTAL		144.4

REMOVAL OF STORM STRUCTURES			
Alignment	Station	Offset	Type
Fulliam Ave - Centerline	101+30.61	-17.63	Intake
Fulliam Ave - Centerline	101+30.51	18.43	Intake

LIST OF SUBDRAIN WORK						
Alignment	Section Start		Section End		Length	Remarks
	Station	Offset	Station	Offset		
Fulliam Ave - Centerline	101+29.50	-18.00	102+55.22	-18.00	132.7	INT-01 to INT-03
Fulliam Ave - Centerline	102+64.22	-18.00	104+35.11	-18.00	170.9	INT-03 to INT-05
Fulliam Ave - Centerline	104+44.11	-18.00	106+12.05	-18.00	168.0	INT-05 to new Cleanout
Fulliam Ave - Centerline	106+14.87	-18.00	107+23.61	-18.00	108.7	New Cleanout to Ex- Cleanout
Fulliam Ave - Centerline	104+44.10	18.00	106+12.12	18.00	168.1	INT-06 to new Cleanout
Fulliam Ave - Centerline	106+14.898	18.00	107+23.61	18.00	108.7	New Cleanout to Ex-Cleanout
			TOTAL		857.1	

SUBDRAIN CLEANOUTS		
Alignment	Station	Offset
Fulliam Ave - Centerline	106+13.49	-18.00
Fulliam Ave - Centerline	106+13.51	18.00

STORM SEWER ABANDONMENT OR REMOVAL						
Alignment	Pipe Section Start		Pipe Section End		Abandon	Removal
	Station	Offset	Station	Offset	LF	LF
Fulliam Ave - Centerline	100+94.31	18.36	101+30.51	18.43		36.0
Fulliam Ave - Centerline	101+30.61	-17.53	101+30.51	18.43		36.0
			TOTAL		0.0	72.0

REMOVAL & REINSTALLATION OF MAILBOX		
Alignment	Station	Offset
Fulliam Ave - Centerline	101+79.41	-16.66
Fulliam Ave - Centerline	101+97.85	15.94
Fulliam Ave - Centerline	102+45.43	-17.17
Fulliam Ave - Centerline	102+90.28	16.3
Fulliam Ave - Centerline	103+39.02	-16.09
Fulliam Ave - Centerline	103+59.64	16.96
Fulliam Ave - Centerline	104+04.77	-16.17
Fulliam Ave - Centerline	104+33.65	16.44
Fulliam Ave - Centerline	104+71.07	-16.99
Fulliam Ave - Centerline	105+04.20	16.02
Fulliam Ave - Centerline	105+48.90	-16.27
Fulliam Ave - Centerline	105+55.68	16.46
Fulliam Ave - Centerline	106+62.37	16.14
Fulliam Ave - Centerline	107+70.35	17.08

STORM SEWER PIPES						
SIZE	UPSTREAM STRUCTURE	UPSTREAM INVERT	DOWNSTREAM STRUCTURE	DOWNSTREAM INVERT	LENGTH LF	SLOPE
15" RCP	INT - 01	707.99	INT - 02	707.91	36.0	0.24%
18" RCP	INT - 02	707.71	MH - 01	707.61	25.8	0.39%
15" RCP	INT - 03	708.89	INT - 04	708.73	36.0	0.46%
18" RCP	INT - 04	708.35	INT - 02	707.81	139.7	0.39%
18" RCP	INT - 06	709.17	INT - 04	708.45	179.9	0.40%
15" RCP	INT - 05	710.04	INT - 06	709.71	36.0	0.92%

TOTALS	
SIZE	LENGTH
15" RCP	108
18" RCP	345

STORM SEWER STRUCTURES					
NAME	STRUCTURE TYPE	STATION	OFFSET	ELEVATION	REMARKS
INT - 01	SW-507 (On Sag)	101+20.00	-16.50	FG = 711.07	
INT - 02	MODIFIED SW-509 (On Sag)	101+20.00	16.50	FG = 711.07	2 ADDITIONAL #5 BARS ABOVE ALL PIPE OPENINGS
INT - 03	SW-509	102+59.72	-16.50	FG = 712.30	
INT - 04	SW-509	102+59.72	16.50	FG = 712.30	
INT - 05	SW-509	104+39.61	-16.50	FG = 714.30	
INT - 06	SW-509	104+39.59	16.50	FG = 714.30	
MH - 01	SW-401 (48in)	100+94.31	18.36	R = 711.73	

SIDEWALKS								
Intersection/ Road	Quadrant/ Side	Reference Alignment	Station to Station		Width	5" PCC Sidewalk	6" PCC Sidewalk	Detectable Warning
					FT	Area SY	Area SY	Area SF
W Fulliam Ave	RT	Fulliam Ave - Centerline	102+69.41	103+40.63	4.0	30.9		
W Fulliam Ave	RT	Fulliam Ave - Centerline	103+89.17	104+36.14	4.0	20.1		
W Fulliam Ave	LT	Fulliam Ave - Centerline	105+19.09	105+51.77	4.0	14.5		
W Fulliam Ave	LT	Fulliam Ave - Centerline	105+79.82	106+29.43	4.0	25.3		
W Fulliam Ave	RT	Fulliam Ave - Centerline	105+87.41	106+14.25	4.0	11.9		
W Fulliam Ave	LT	Fulliam Ave - Centerline	106+76.78	106+88.47	4.0	5.3		
W Fulliam Ave	RT	Fulliam Ave - Centerline	107+01.74	107+75.52	4.0	32.4		
					TOTAL	140.3	0.0	0.0

PCC DRIVEWAY					
Alignment	Begin Station	Offset	End Station	Offset	Area
					SY
Fulliam Ave - Centerline	101+73.14	16.5	101+93.14	16.5	15.0
Fulliam Ave - Centerline	101+80.97	-16.5	102+09.97	-16.5	25.3
Fulliam Ave - Centerline	102+09.97	-16.5	102+13.97	-16.5	6.8
Fulliam Ave - Centerline	102+13.97	-16.5	102+41.97	-16.5	24.3
Fulliam Ave - Centerline	102+92.43	16.5	103+18.43	16.5	20.2
Fulliam Ave - Centerline	103+40.89	-16.5	103+61.39	-16.5	17.3
Fulliam Ave - Centerline	103+59.97	16.5	103+92.17	16.5	26.0
Fulliam Ave - Centerline	103+73.51	-16.5	104+03.51	-16.5	26.1
Fulliam Ave - Centerline	104+04.97	16.5	104+27.97	16.5	18.0
Fulliam Ave - Centerline	104+50.91	-16.5	104+70.97	-16.5	16.8
Fulliam Ave - Centerline	104+80.52	16.5	105+03.82	16.5	17.9
Fulliam Ave - Centerline	105+27.82	-16.5	105+48.32	-16.5	17.1
Fulliam Ave - Centerline	105+55.41	16.5	105+91.41	16.5	28.8
Fulliam Ave - Centerline	106+63.33	16.5	106+85.33	16.5	16.9
Fulliam Ave - Centerline	107+34.74	16.5	107+68.74	16.5	27.6
			TOTAL		304.0

FILTER SOCK					
Alignment	Location				Length
	Start Station	Offset	End Station	Offset	FT
Fullaim Ave - Centerline	100+94.20	-17.7	101+17.49	-17.78	23.4
Fullaim Ave - Centerline	101+22.53	-18	101+83.05	-24.99	65.4
Fullaim Ave - Centerline	100+96.81	18.33	101+15.30	18.05	18.7
Fullaim Ave - Centerline	101+24.50	18.08	101+75.18	24.57	55.5
Fullaim Ave - Centerline	102+40.11	-25.38	102+55.22	-17.36	20.7
Fullaim Ave - Centerline	102+64.22	-17.4	103+42.89	-24.95	83.7
Fullaim Ave - Centerline	103+59.41	-25.39	103+75.41	-24.92	26.8
Fullaim Ave - Centerline	104+01.56	-25.05	104+34.75	-17.98	38.7
Fullaim Ave - Centerline	104+44.73	-17.63	104+52.89	-25.19	13.8
Fullaim Ave - Centerline	104+69.00	-258.44	105+29.47	-24.31	70.6
Fullaim Ave - Centerline	105+46.27	-24.84	107+99.60	-17.88	258.7
Fullaim Ave - Centerline	107+67.05	24.05	108+00.15	17.6	37.2
Fullaim Ave - Centerline	106+83.84	24.54	107+36.25	23.82	61.6
Fullaim Ave - Centerline	105+89.90	24.6	106+65.32	24.51	84.6
Fullaim Ave - Centerline	105+01.92	24.41	105+57.84	24.47	64.5
Fullaim Ave - Centerline	104+44.10	17.62	104+82.76	24.33	43.3
Fullaim Ave - Centerline	104+26.32	24.19	104+35.10	17.65	13.0
Fullaim Ave - Centerline	103+89.85	24.23	104+07.29	24.36	26.8
Fullaim Ave - Centerline	101+91.25	24.88	102+54.90	17.29	69.0
Fullaim Ave - Centerline	102+64.71	17.32	102+94.00	23.57	27.0
Fullaim Ave - Centerline	103+16.95	23.93	103+61.98	24.7	54.2
			TOTAL		1157.0

INLET PROTECTION DEVICE					
Alignment	Location		Installation	Maintenance	Removal
	Station	Offset	EACH	EACH	EACH
Fulliam Ave - Centerline	101+20.00	-16.50	1	3	1
Fulliam Ave - Centerline	101+20.00	16.50	1	3	1
Fulliam Ave - Centerline	102+59.72	-16.50	1	3	1
Fulliam Ave - Centerline	102+59.72	16.50	1	3	1
Fulliam Ave - Centerline	104+39.61	-16.50	1	3	1
Fulliam Ave - Centerline	104+39.59	16.50	1	3	1
		TOTAL	6	18	6



**BOLTON
& MENK**

401 1ST ST SE, SUITE 201
CEDAR RAPIDS, IOWA 52401
Phone: (319) 362-3219
Email: CedarRapids@bolton-menk.com
www.bolton-menk.com

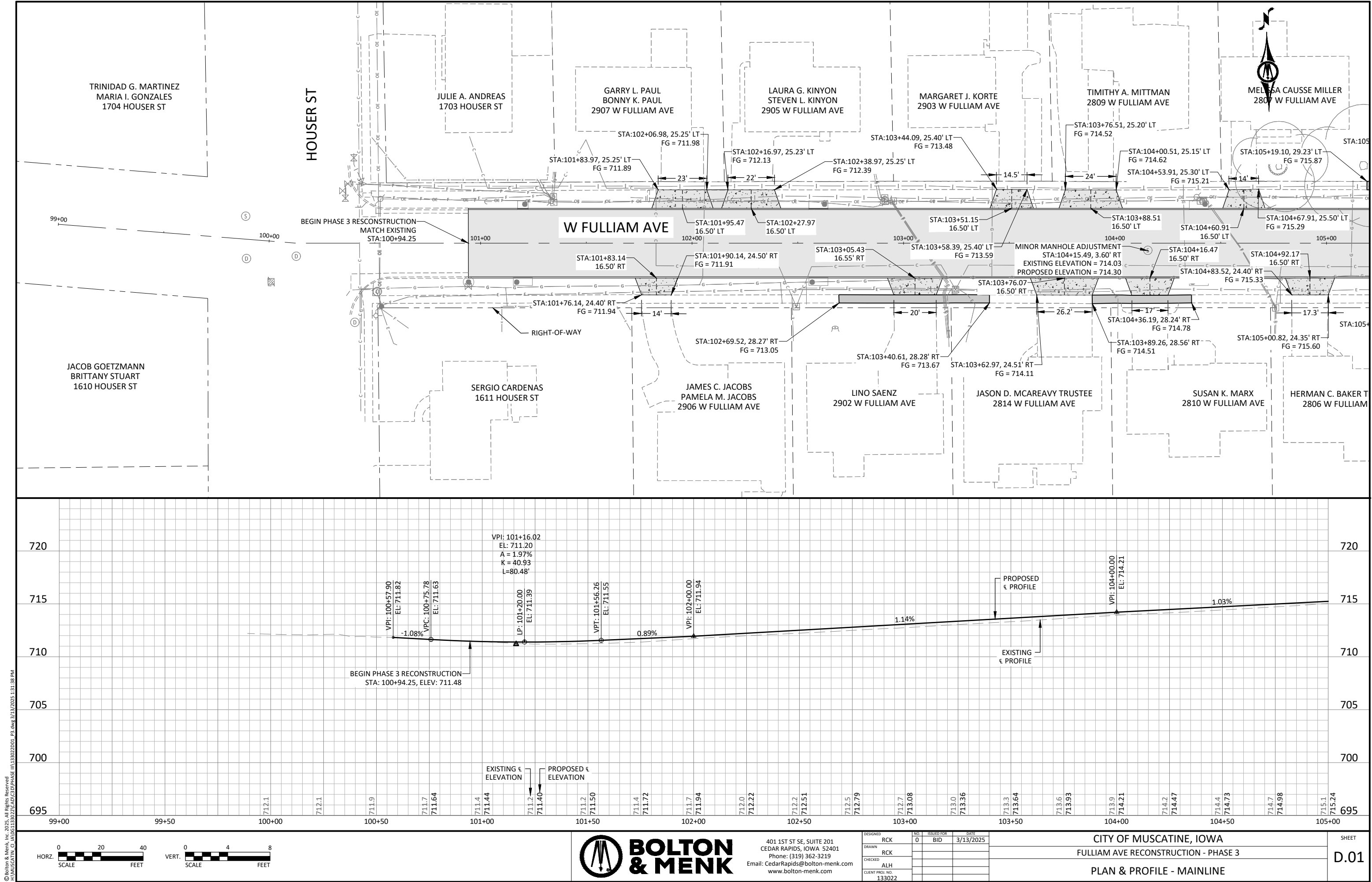
DESIGNED	NO.	ISSUED FOR	DATE
RCK	0	BID	3/13/2025
DRAWN			
RCK			
CHECKED			
ALH			
CLIENT PROJ. NO.			
133022			

CITY OF MUSCATINE, IOWA
FULLIAM AVE RECONSTRUCTION - PHASE 3

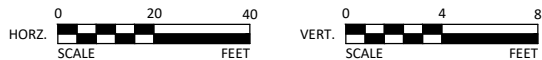
TABULATIONS

SHEET

C.03



© Bolton & Menk, Inc. 2025. All Rights Reserved.
MUSCATINE, IOWA 52401
3/13/2025 1:31:38 PM

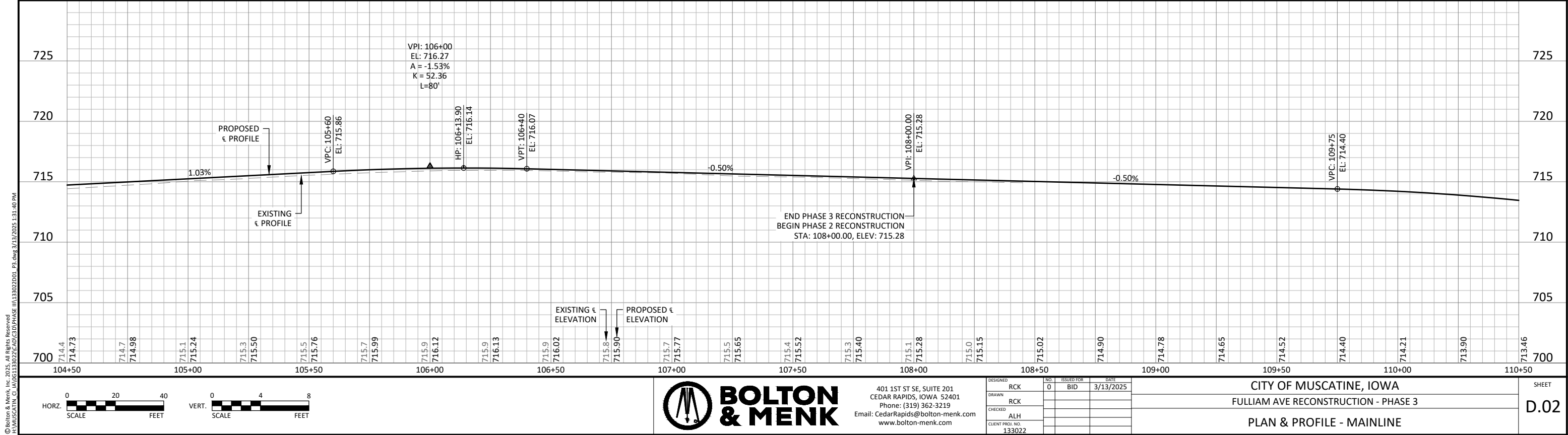
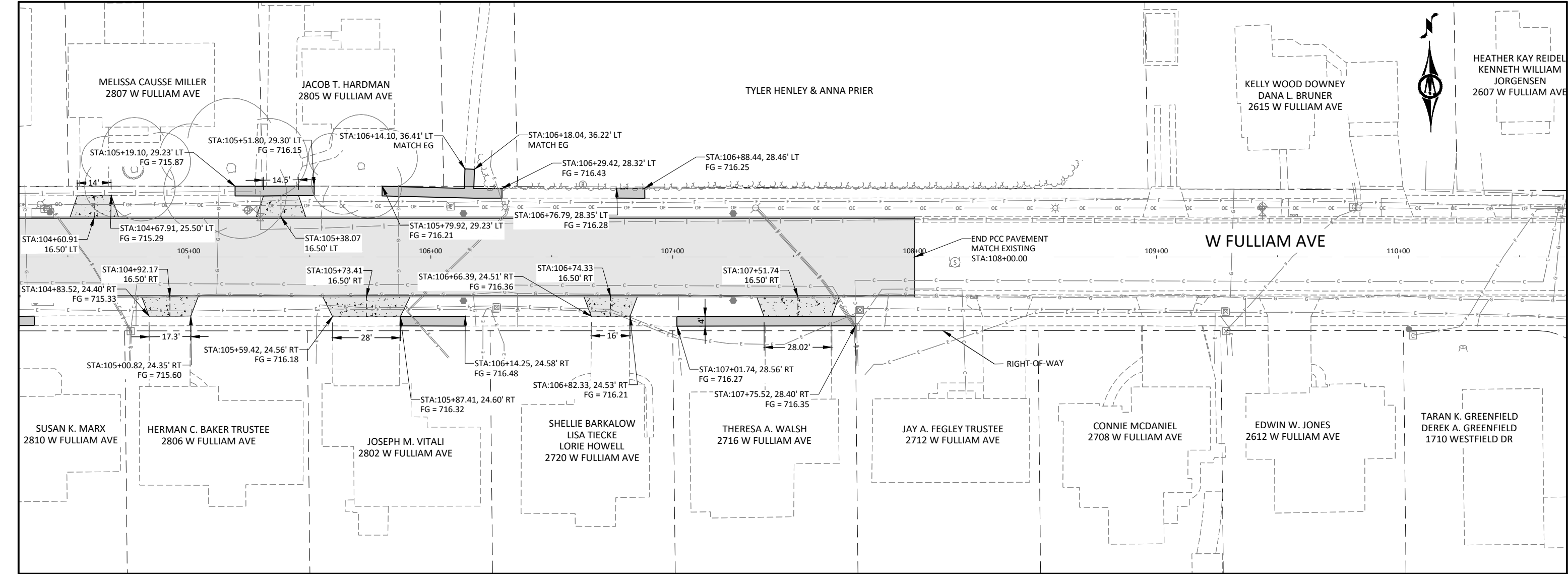


401 1ST ST SE, SUITE 201
CEDAR RAPIDS, IOWA 52401
Phone: (319) 362-3219
Email: CedarRapids@bolton-menk.com
www.bolton-menk.com

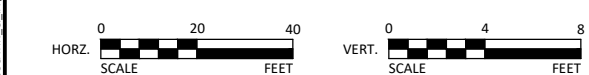
DESIGNED	NO.	ISSUED FOR	DATE
RCK	0	BID	3/13/2025
DRAWN			
RCK			
CHECKED			
ALH			
CLIENT PROJ. NO.			
133022			

CITY OF MUSCATINE, IOWA
FULLIAM AVE RECONSTRUCTION - PHASE 3
PLAN & PROFILE - MAINLINE

SHEET
D.01



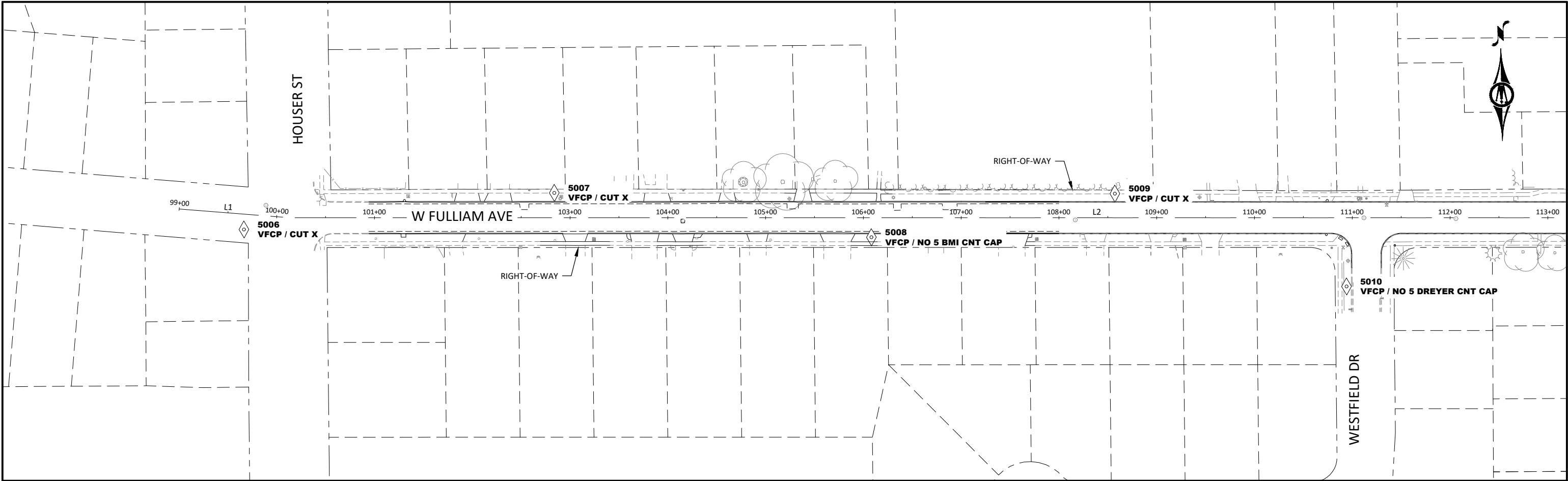
© Bolton & Menk, Inc. 2025. All Rights Reserved. MUSCATINE, IOWA 52401. DATE: 3/13/2025. TIME: 1:40 PM.



401 1ST ST SE, SUITE 201
CEDAR RAPIDS, IOWA 52401
Phone: (319) 362-3219
Email: CedarRapids@bolton-menk.com
www.bolton-menk.com

DESIGNED	RCK	NO.	0	ISSUED FOR	BID	DATE	3/13/2025
DRAWN	RCK						
CHECKED	ALH						
CLIENT PROJ. NO.	133022						

CITY OF MUSCATINE, IOWA		SHEET D.02
FULLIAM AVE RECONSTRUCTION - PHASE 3		
PLAN & PROFILE - MAINLINE		



FULLIAM AVE - CENTERLINE											
NUMBER	START STATION	END STATION	LENGTH	DELTA	RADIUS	CHORD	START N	START E	END N	END E	LINE / CHORD DIRECTION
L1	99+00	100+13	113.00				6630417.54	24546662.40	6630406.68	24546774.88	S84° 28' 52"E
L2	100+13	124+00	2387.00				6630406.68	24546774.88	6630365.63	24549161.52	S89° 00' 53"E

SURVEY CONTROL POINT DATA				
POINT NUMBER	RAW DESCRIPTION	ELEVATION	NORTHING	EASTING
5006	VFCP / CUT X	711.965'	6630395.44	24546728.20
5007	VFCP / CUT X	713.000'	6630427.38	24547046.21
5008	VFCP / NO 5 BMI CNT CAP	716.245'	6630376.48	24547369.65
5009	VFCP / CUT X	715.390'	6630416.80	24547619.38
5010	VFCP / NO 5 DREYER CNT CAP	713.250'	6630317.78	24547854.65

© Bolton & Menk, Inc. 2025. All Rights Reserved.
MUSCATINE, IOWA 52401 133022 CAD 3/13/2025 1:31:48 PM



**BOLTON
& MENK**

401 1ST ST SE, SUITE 201
CEDAR RAPIDS, IOWA 52401
Phone: (319) 362-3219
Email: CedarRapids@bolton-menk.com
www.bolton-menk.com

DESIGNED	RCK	NO.	ISSUED FOR	DATE
DRAWN	RCK	0	BID	3/13/2025
CHECKED	ALH			
CLIENT PROJ. NO.	133022			

CITY OF MUSCATINE, IOWA
FULLIAM AVE RECONSTRUCTION - PHASE 3
REFERENCES & BENCHMARKS

SHEET

G.01

© Bolton & Menk, Inc. 2025. All Rights Reserved
MUSCATINE, IOWA 52401 133022 CADD SHEET J.01 3/13/2025 1:32:12 PM

NOTES

GENERAL INFORMATION

1. THE ITEM "TEMPORARY TRAFFIC CONTROL" COVERS ALL DEVICES SHOWN ON THE PLAN SHEETS AND OTHER SETUPS REQUIRED BY THE CONTRACTOR'S OPERATIONS. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING ACTUAL QUANTITIES NEEDED FOR THE PROJECT.
2. FIELD CONDITIONS MAY REQUIRE MODIFICATIONS OF THIS LAYOUT AS DEEMED NECESSARY BY THE ENGINEER.
3. ALL DISTANCES ARE APPROXIMATE, UNLESS OTHERWISE NOTED.
4. SIGN PLACEMENTS SHALL NOT OBSTRUCT EXISTING SIGNS.
5. THE CONTRACTOR IS RESPONSIBLE FOR PROTECTING ALL WORK AREAS NEAR TRAFFIC IN ACCORDANCE WITH THE MUTCD.
6. THE REMOVAL OF TEMPORARY TRAFFIC CONTROL SHALL BE INCIDENTAL.
7. ALL PLAN SHEETS ARE TO SCALE UNLESS OTHERWISE NOTED WITH DISTANCES SPECIFIED.
8. CONTRACTOR SHALL FURNISH THE CITY WITH NAMES AND TELEPHONE NUMBERS OF INDIVIDUALS RESPONSIBLE FOR THE MAINTENANCE OF TRAFFIC CONTROL DEVICES AND SIGNING. THE INDIVIDUAL(S) SHALL BE AVAILABLE FOR CORRECTIVE ACTION 24 HOURS A DAY, 7 DAYS A WEEK.
9. TRAFFIC CONTROL SHALL COMPLY WITH IOWA DOT STANDARD ROAD PLAN TC-252
10. NO ROAD CLOSURE ALLOWED PRIOR TO JUNE 2ND, 2025.

CONSTRUCTION INFORMATION SIGNING

1. THE CONTRACTOR SHALL PLACE THE PDMS SIGNS 5 WORKING DAYS IN ADVANCE OF ROAD CLOSURE, PRIOR TO THE BEGINNING OF EACH STAGE, AND PRIOR TO ANY CHANGE IN TRAFFIC CONTROL. NO ROAD CLOSURES WILL BE ALLOWED PRIOR TO JUNE 2ND, 2025.

PRIVATE UTILITY RELOCATIONS WITHIN PROJECT SITE

PRIVATE UTILITY RELOCATIONS WILL BE REQUIRED WITHIN THE PROJECT SITE DURING THE CONSTRUCTION PERIOD. THE WORKING DAYS ALLOTTED IN THE CONTRACT SHALL INCLUDE 10 WORKING DAYS OF SHUT DOWN OF CONTRACTOR'S CONTROLLING OPERATIONS. SHUT DOWN OF CONTROLLING OPERATION FOR 10 NON-CONSECUTIVE WORKING DAYS SHALL BE INCLUDED IN THE PRICE BID FOR MOBILIZATION. CONTRACTOR WILL NOT BE ALLOWED TO CHARGE UTILITIES SEPARATELY FROM THE CONTRACT FOR SHUT DOWN, EQUIPMENT IDLE TIME, DEMOBILIZATION, OR MOBILIZATION FOR THESE 10 WORKING DAYS.

PRIVATE UTILITY RELOCATIONS INCLUDE BUT ARE NOT LIMITED TO THE FOLLOWING:

- ALLIANT ENERGY UNDERGROUND GAS LINE IN CONFLICT WITH THE FOLLOWING STORM STRUCTURES:

••

INT - 02, INT - 04, INT - 06, AND MH - 01
- LUMEN UNDERGROUND FIBER OPTIC LINE IN CONFLICT WITH THE FOLLOWING STORM STRUCTURES:

••

INT-01
- MUSCATINE POWER AND WATER PEDESTAL IN CONFLICT WITH THE FOLLOW STORM STRUCTURES:

••

INT - 05
- MUSCATINE POWER AND WATER FIBER OPTIC LINE IN CONFLICT WITH THE FOLLOWING STORM STRUCTURES:

••

INT-03 AND INT-05

TRAFFIC CONTROL INDEX

SHEET	DESCRIPTION
J.01	STAGING & TRAFFIC CONTROL - NOTES & LEGEND
J.02	STAGING & TRAFFIC CONTROL - TEMPORARY SIGNAGE
J.03	STAGING & TRAFFIC CONTROL - LAYOUT

TRAFFIC CONTROL DEVICES & SYMBOLS LEGEND

SYMBOL	DESCRIPTION
	CONSTRUCTION AREA
	DETOUR ROUTE
	TRAFFIC CONTROL SIGN (SHOWN FACING RIGHT)
	TYPE III BARRICADE = 



**BOLTON
& MENK**

401 1ST ST SE, SUITE 201
CEDAR RAPIDS, IOWA 52401
Phone: (319) 362-3219
Email: CedarRapids@bolton-menk.com
www.bolton-menk.com

DESIGNED	RCK	NO.	0	ISSUED FOR	BID	DATE	3/13/2025
DRAWN	RCK						
CHECKED	ALH						
CLIENT PROJ. NO.	133022						

CITY OF MUSCATINE, IOWA

FULLIAM AVE RECONSTRUCTION - PHASE 3

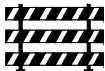
STAGING & TRAFFIC CONTROL - NOTES & LEGEND

SHEET

J.01

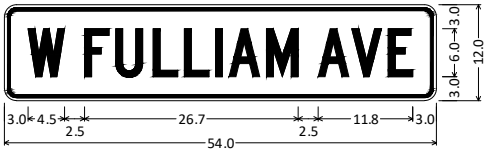
© Bolton & Menk, Inc. 2025. All Rights Reserved
MUSCATINE, IOWA 52401 133022 PHASE III 3/13/2025 1:32:13 PM

"W" SERIES			
SIGN	SIGN NO.	COLOR	SIZE
	W20-2	BLACK ON ORANGE	48" x 48"
	W20-3	BLACK ON ORANGE	48" x 48"

"T" SERIES			
SIGN	SIGN NO.	COLOR	SIZE
	T3L	ORANGE ON WHITE	6' MINIMUM
	T3R	ORANGE ON WHITE	6' MINIMUM

"R" SERIES			
SIGN	SIGN NO.	COLOR	SIZE
	R11-2	BLACK ON WHITE	48" x 30"
	R11-4	BLACK ON WHITE	60" x 30"

"M" SERIES			
SIGN	SIGN NO.	COLOR	SIZE
	M3-2	BLACK ON WHITE	24" x 12"
	M3-4	BLACK ON WHITE	24" x 12"
	M4-8	BLACK ON ORANGE	24" x 12"
	M4-8a	BLACK ON ORANGE	24" x 18"
	M5-1 (L)	BLACK ON WHITE	21" x 15"
	M5-1 (R)	BLACK ON WHITE	21" x 15"
	M5-3	BLACK ON WHITE	21" x 15"
	M6-1 (L)	BLACK ON WHITE	21" x 15"
	M6-1 (R)	BLACK ON WHITE	21" x 15"
	M6-3	BLACK ON WHITE	21" x 15"



1.5" Radius, 0.4" Border, 0.4" Indent, Black on Orange;
"W", C 2K; "FULLIAM", C 2K; "AVE", C 2K;

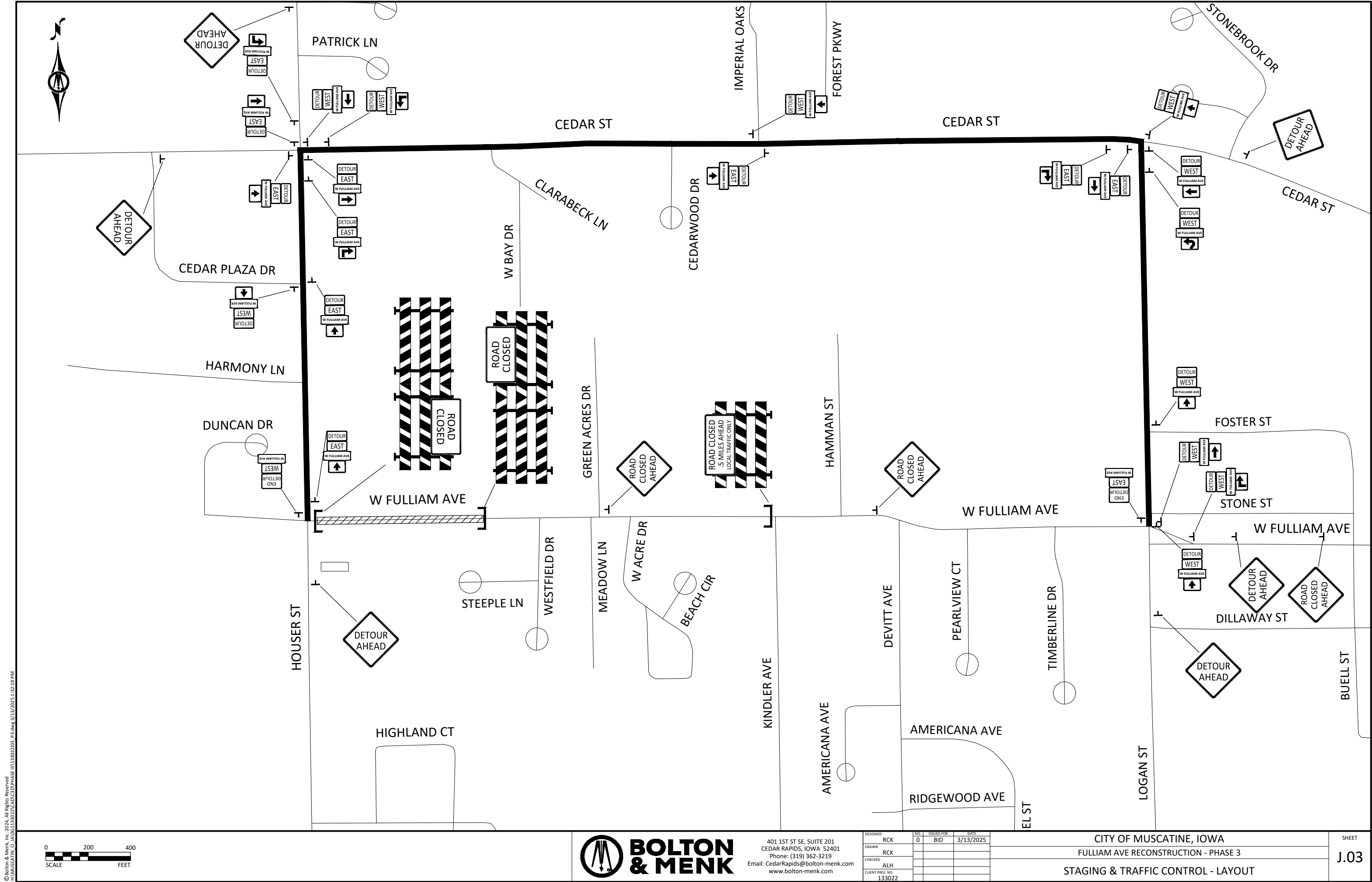
DESIGNED	RCK	NO.	0	ISSUED FOR	BID	DATE	3/13/2025
DRAWN	RCK						
CHECKED	ALH						
CLIENT PROJ. NO.	133022						

CITY OF MUSCATINE, IOWA	
FULLIAM AVE RECONSTRUCTION - PHASE 3	
STAGING & TRAFFIC CONTROL - TEMPORARY SIGNAGE	

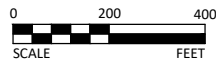


**BOLTON
& MENK**

401 1ST ST SE, SUITE 201
CEDAR RAPIDS, IOWA 52401
Phone: (319) 362-3219
Email: CedarRapids@bolton-menk.com
www.bolton-menk.com



© Bolton & Menk, Inc. 2024. All Rights Reserved.
M:\MUSCATINE_GA\106133022\106133022-CD\CD\PHASE 3\3.dwg 3/13/2025 1:32:10 PM



**BOLTON
& MENK**

401 1ST ST SE, SUITE 201
CEDAR RAPIDS, IOWA 52401
Phone: (319) 362-3219
Email: CedarRapids@bolton-menk.com
www.bolton-menk.com

DESIGNED	RCK	NO.	ISSUED FOR	DATE
DRAWN	RCK	0	BID	3/13/2025
CHECKED	ALH			
CLIENT PROJ. NO.	133022			

CITY OF MUSCATINE, IOWA
FULLIAM AVE RECONSTRUCTION - PHASE 3
STAGING & TRAFFIC CONTROL - LAYOUT

SHEET

J.03

© Bolton & Menk, Inc. 2025. All Rights Reserved.
MUSCATINE, IOWA 52401 133022 CAD 3/13/2025 1:32:33 PM



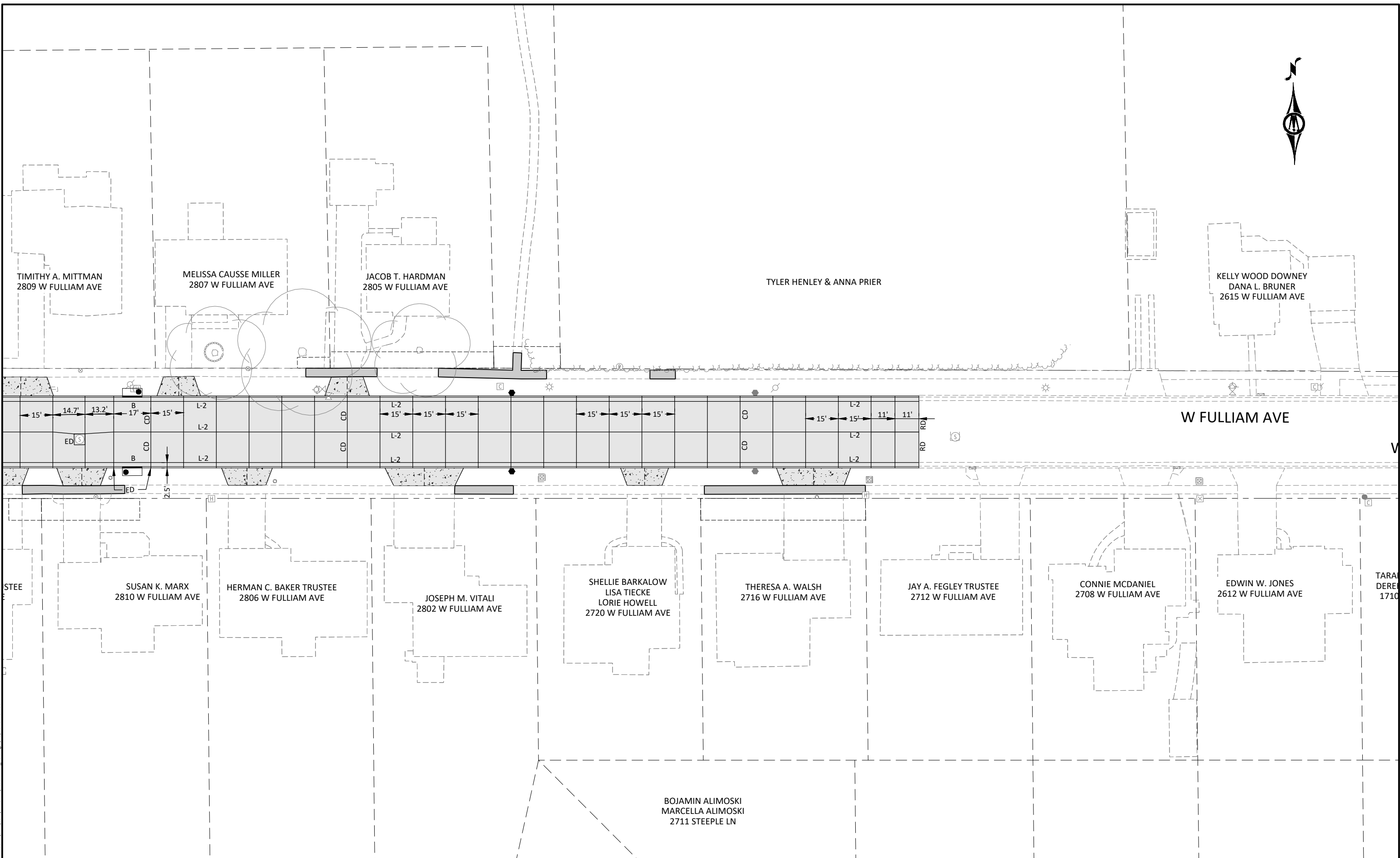
401 1ST ST SE, SUITE 201
CEDAR RAPIDS, IOWA 52401
Phone: (319) 362-3219
Email: CedarRapids@bolton-menk.com
www.bolton-menk.com

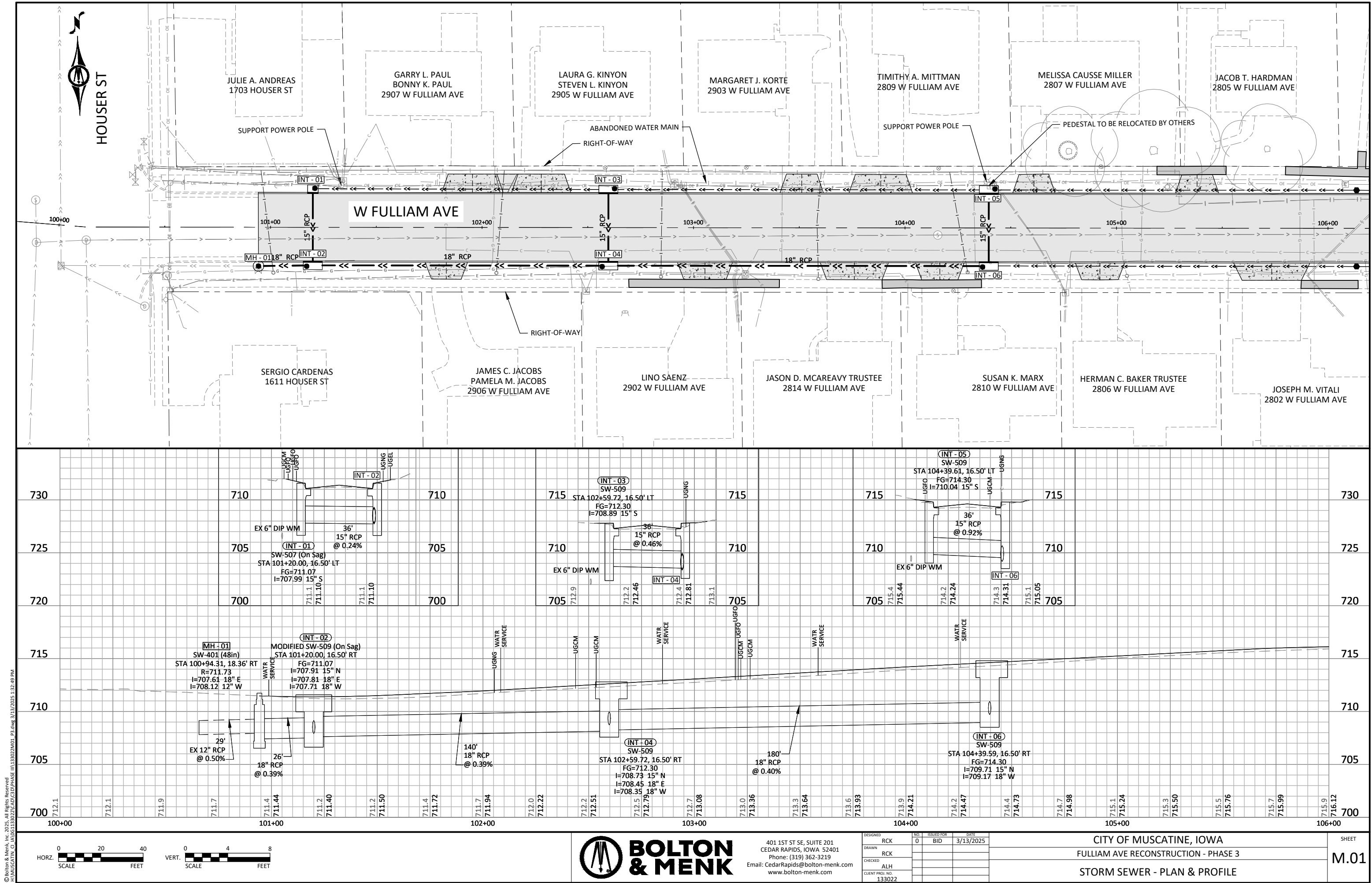
DESIGNED	NO.	ISSUED FOR	DATE
RCK	0	BID	3/13/2025
DRAWN			
CHECKED			
ALH			
CLIENT PROJ. NO.	133022		

CITY OF MUSCATINE, IOWA
FULLIAM AVE RECONSTRUCTION - PHASE 3
GEOMETRICS & JOINTING

SHEET

L.01





© Bolton & Menk, Inc. 2025. All Rights Reserved.
MUSCATINE_G:\MUSCATINE\CD\DWG\PHASE 3\13022401_P3.dwg 3/13/2025 1:32:45 PM

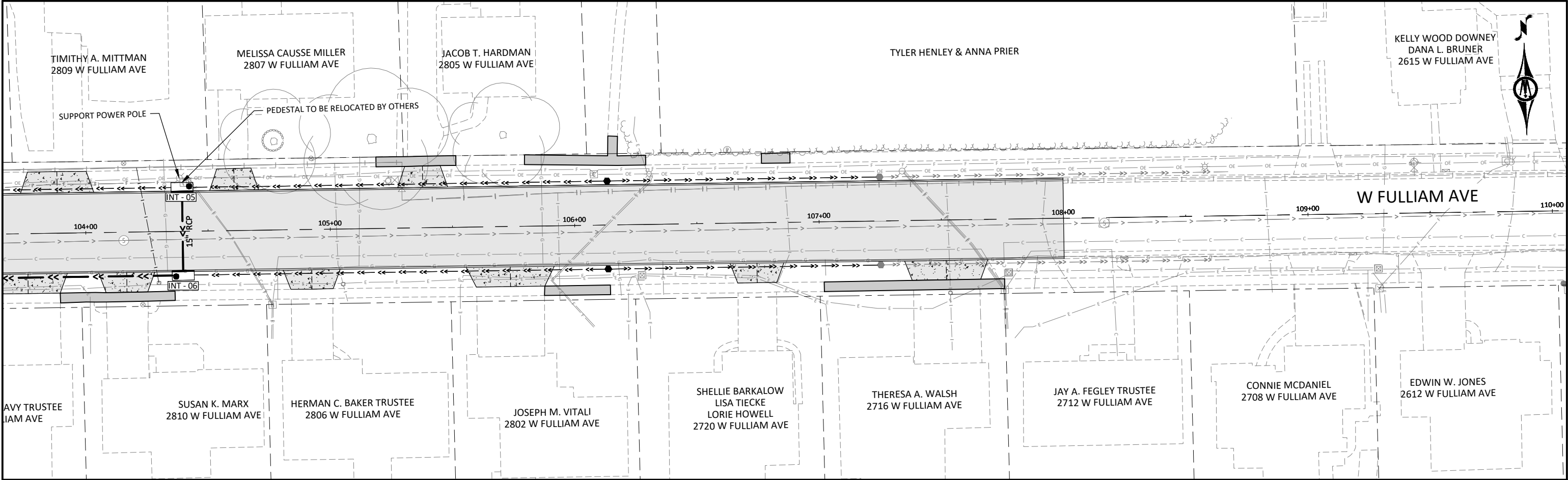


401 1ST ST SE, SUITE 201
CEDAR RAPIDS, IOWA 52401
Phone: (319) 362-3219
Email: CedarRapids@bolton-menk.com
www.bolton-menk.com

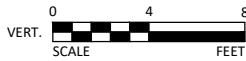
DESIGNED	NO.	ISSUED FOR	DATE
RCK	0	BID	3/13/2025
DRAWN			
RCK			
CHECKED			
ALH			
CLIENT PROJ. NO.			
133022			

CITY OF MUSCATINE, IOWA
FULLIAM AVE RECONSTRUCTION - PHASE 3
STORM SEWER - PLAN & PROFILE

SHEET
M.01



© Bolton & Menk, Inc. 2025. All Rights Reserved
MUSCATINE, IOWA 52401
133022
CADD
3/13/2025 1:32:51 PM



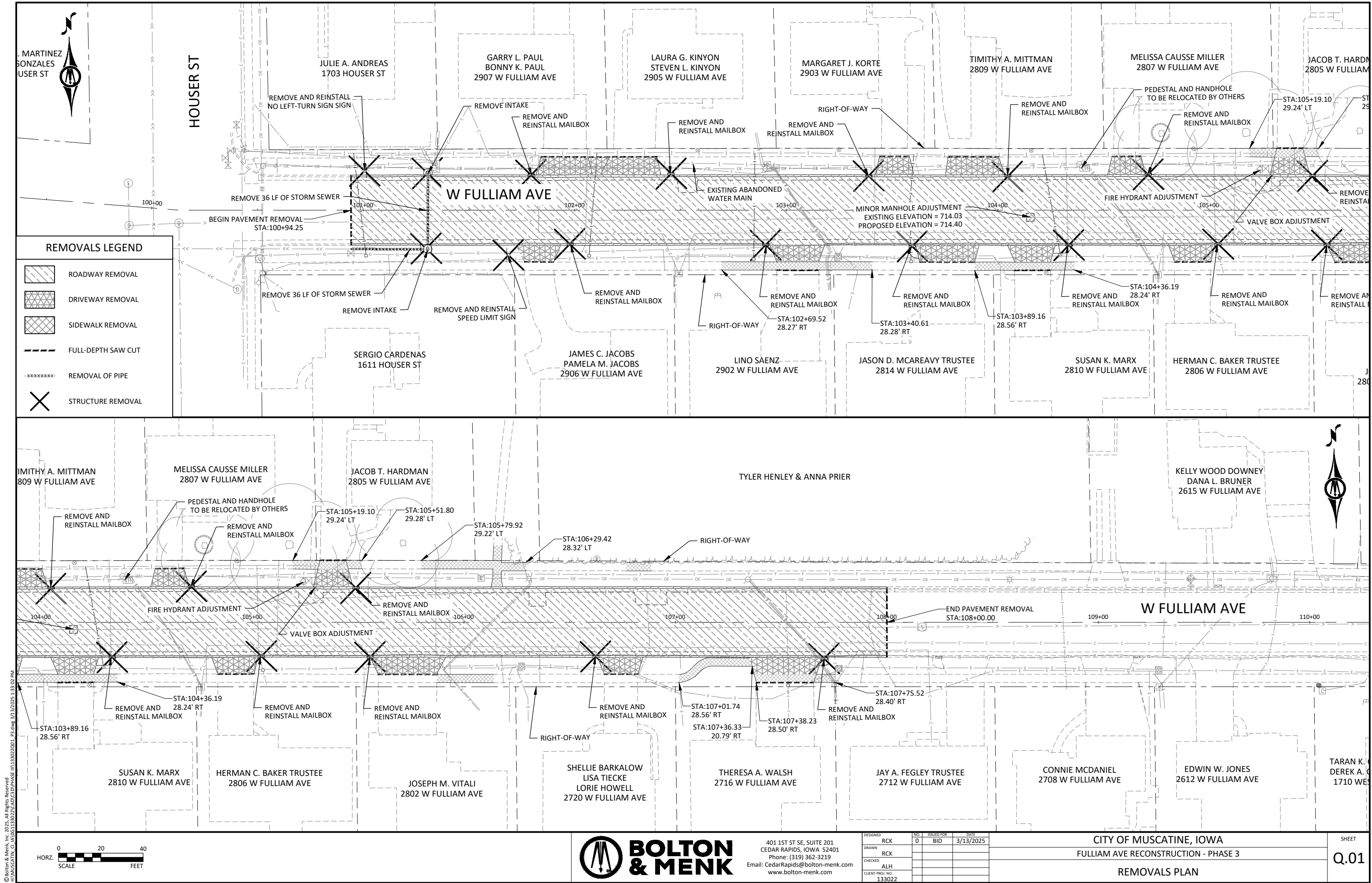
401 1ST ST SE, SUITE 201
CEDAR RAPIDS, IOWA 52401
Phone: (319) 362-3219
Email: CedarRapids@bolton-menk.com
www.bolton-menk.com

DESIGNED	NO.	ISSUED FOR	DATE
RCK	0	BID	3/13/2025
DRAWN			
RCK			
CHECKED			
ALH			
CLIENT PROJ. NO.			
133022			

CITY OF MUSCATINE, IOWA
FULLIAM AVE RECONSTRUCTION - PHASE 3
STORM SEWER - PLAN & PROFILE

SHEET

M.02



© Bolton & Menk, Inc. 2025. All Rights Reserved.
MUSCATINE, IOWA 52401
P3.dwg 3/13/2025 1:30:02 PM



401 1ST ST SE, SUITE 201
CEDAR RAPIDS, IOWA 52401
Phone: (319) 362-3219
Email: CedarRapids@bolton-menk.com
www.bolton-menk.com

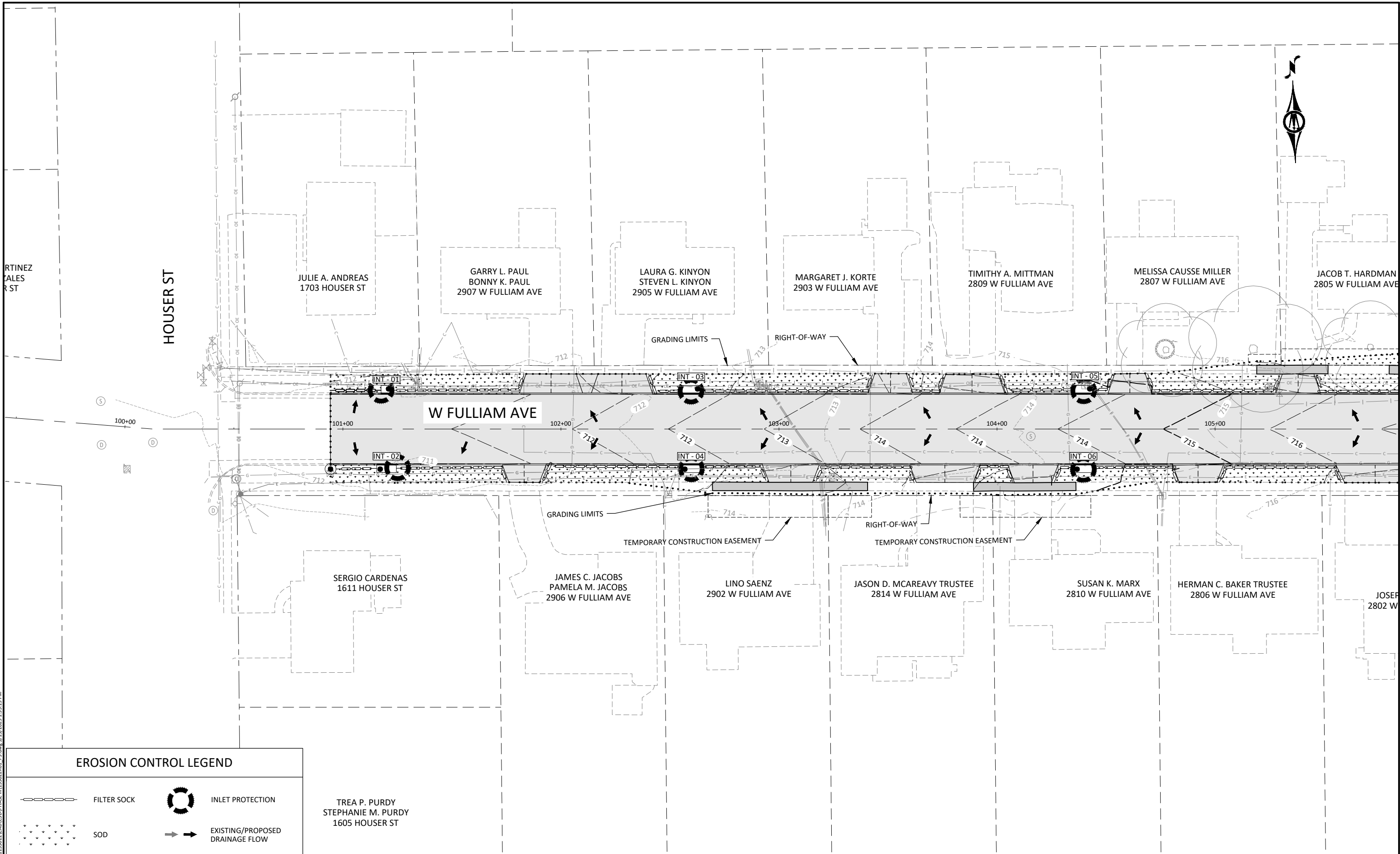
DESIGNED	NO.	ISSUED FOR	DATE
RCK	0	BID	3/13/2025
DRAWN			
RCK			
CHECKED			
ALH			
CLIENT PROJ. NO.			
133022			

CITY OF MUSCATINE, IOWA
FULLIAM AVE RECONSTRUCTION - PHASE 3

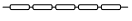
REMOVALS PLAN

SHEET
Q.01

© Bolton & Menk, Inc. 2025. All Rights Reserved.
MUSCATINE, IOWA 52401 133022-0001.DWG 3/13/2025 1:31:19 PM



EROSION CONTROL LEGEND



FILTER SOCK



SOD



INLET PROTECTION



EXISTING/PROPOSED DRAINAGE FLOW

TREA P. PURDY
STEPHANIE M. PURDY
1605 HOUSER ST

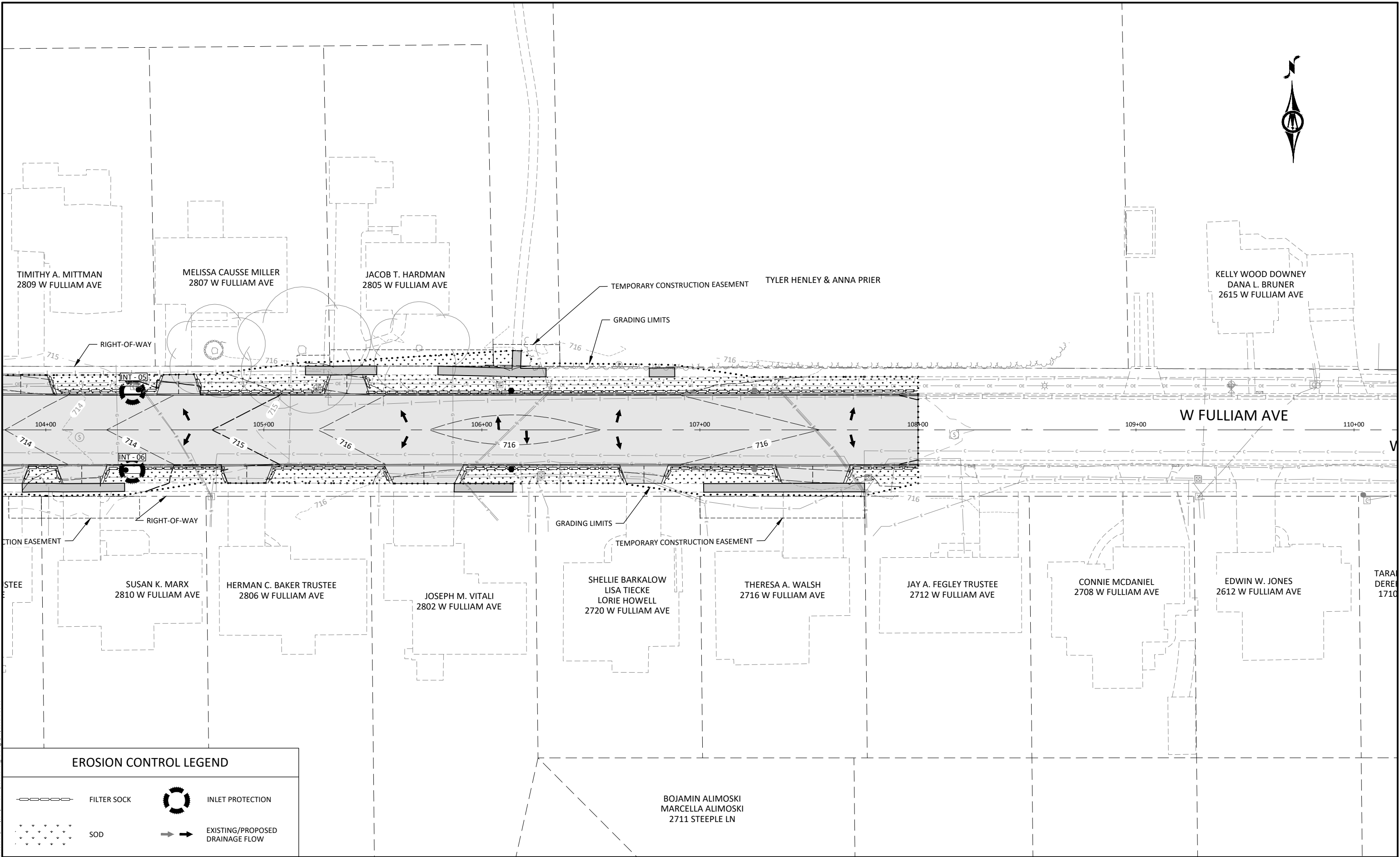


401 1ST ST SE, SUITE 201
CEDAR RAPIDS, IOWA 52401
Phone: (319) 362-3219
Email: CedarRapids@bolton-menk.com
www.bolton-menk.com

DESIGNED	NO.	ISSUED FOR	DATE
RCK	0	BID	3/13/2025
DRAWN			
CHECKED			
ALH			
CLIENT PROJ. NO.			
133022			

CITY OF MUSCATINE, IOWA	SHEET R.01
FULLIAM AVE RECONSTRUCTION - PHASE 3	
EROSION & SEDIMENT CONTROL	

© Bolton & Menk, Inc. 2025. All Rights Reserved.
MUSCATINE, IOWA 52401
133022



EROSION CONTROL LEGEND

FILTER SOCK

SOD

INLET PROTECTION

EXISTING/PROPOSED DRAINAGE FLOW

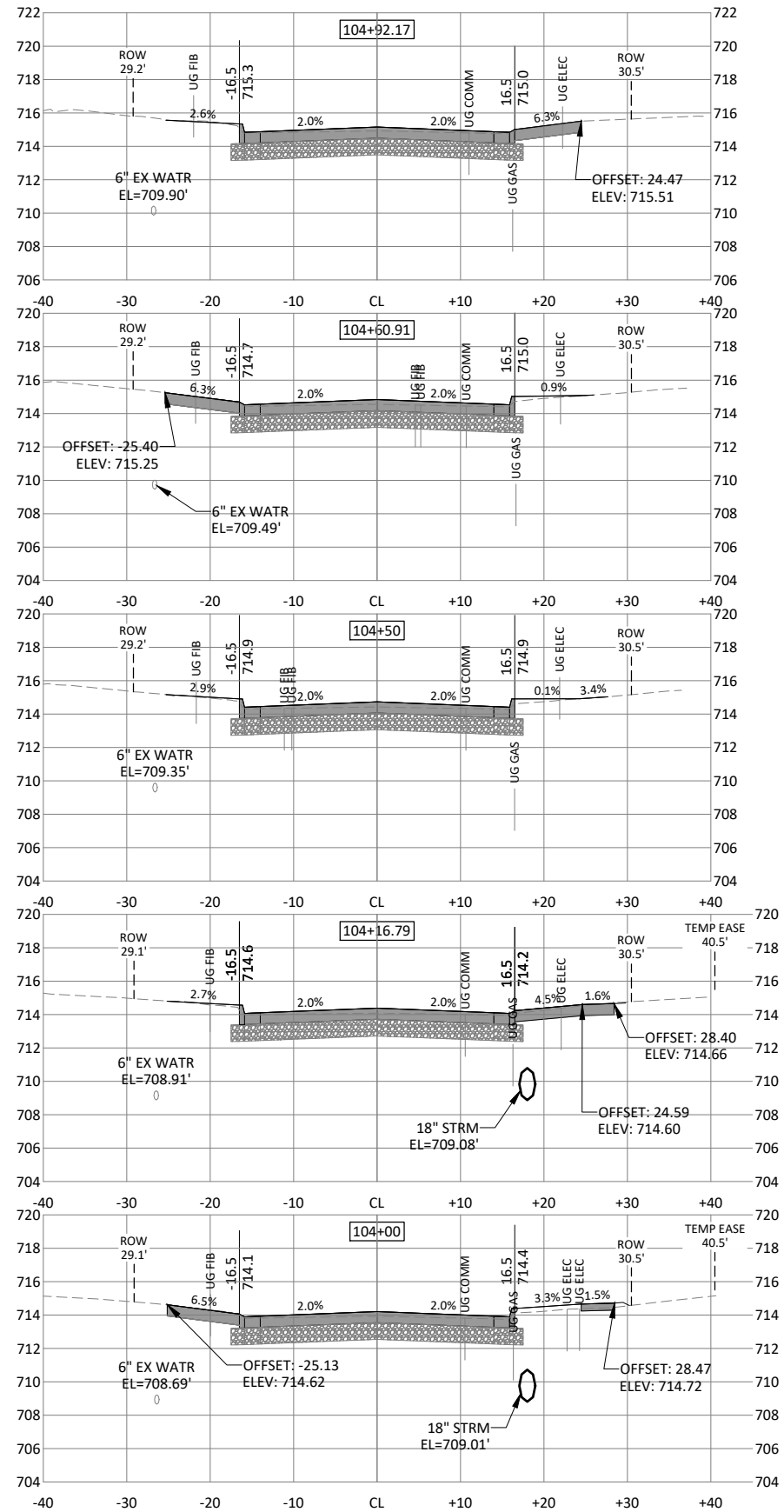
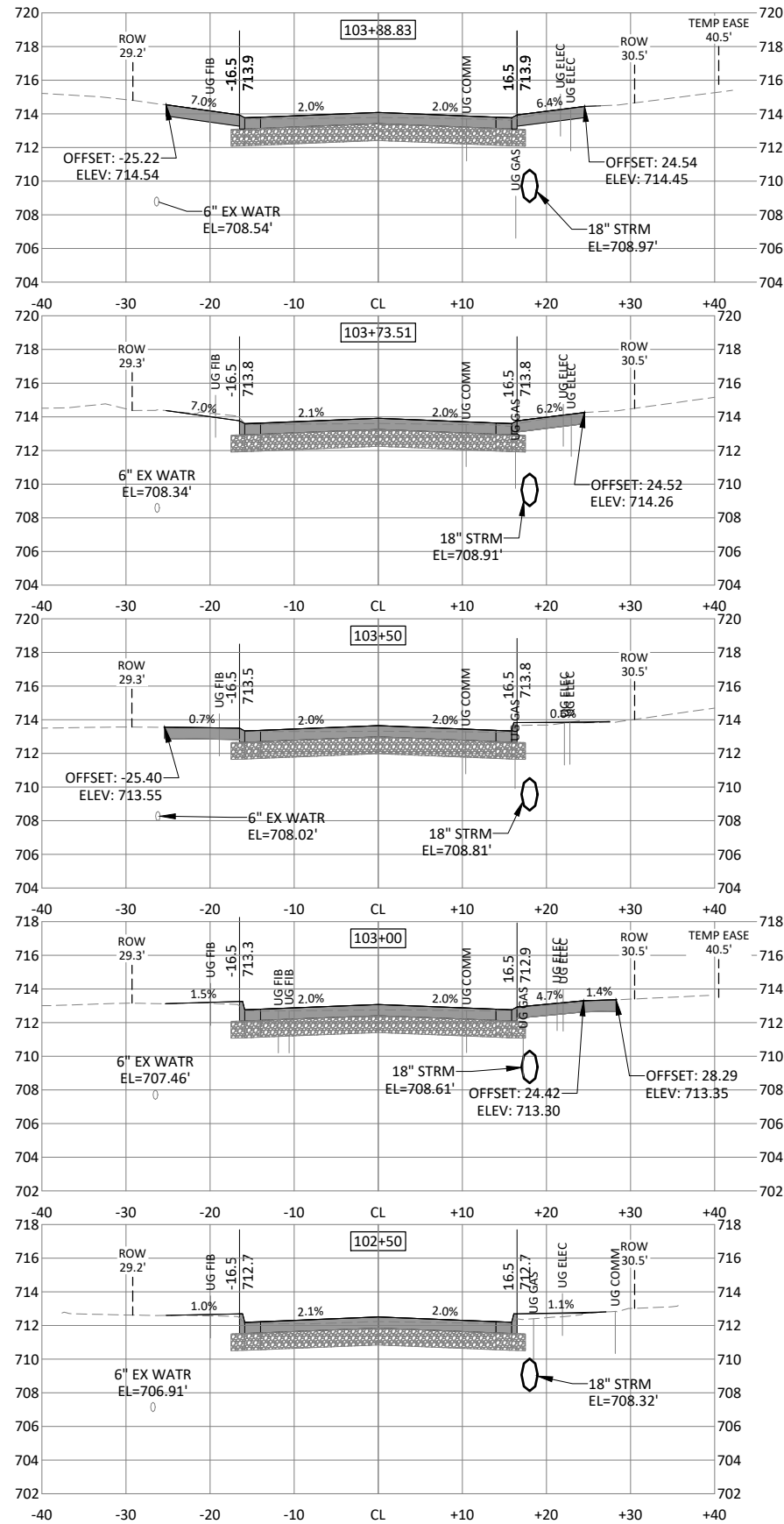
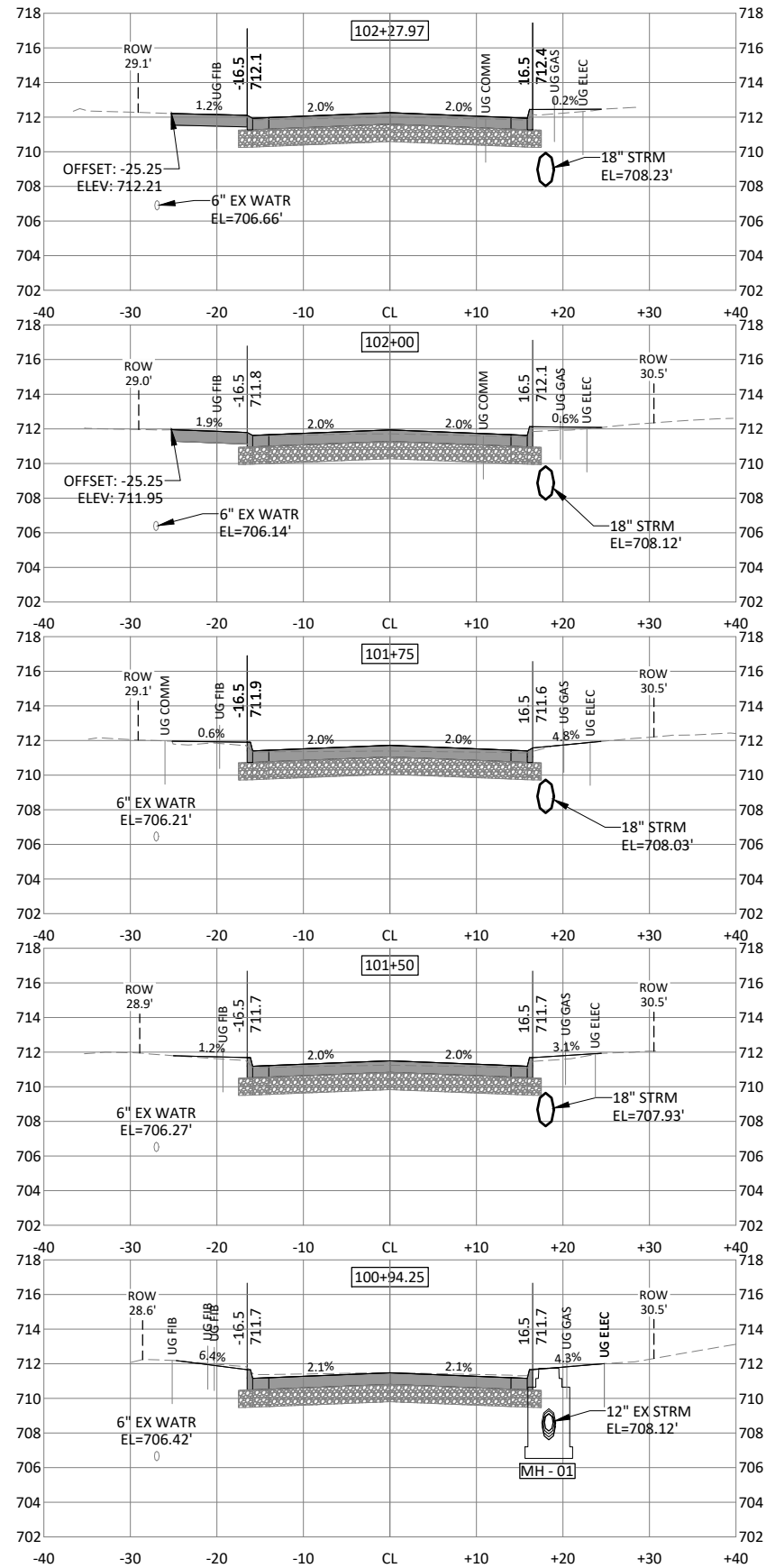


401 1ST ST SE, SUITE 201
CEDAR RAPIDS, IOWA 52401
Phone: (319) 362-3219
Email: CedarRapids@bolton-menk.com
www.bolton-menk.com

DESIGNED	NO.	ISSUED FOR	DATE
RCK	0	BID	3/13/2025
DRAWN			
CHECKED			
ALH			
CLIENT PROJ. NO.			
133022			

CITY OF MUSCATINE, IOWA	SHEET R.02
FULLIAM AVE RECONSTRUCTION - PHASE 3	
EROSION & SEDIMENT CONTROL	

© Bolton & Menk, Inc. 2025. All Rights Reserved.
MUSCATINE, IOWA 52401
3/13/2025 1:33:30 PM

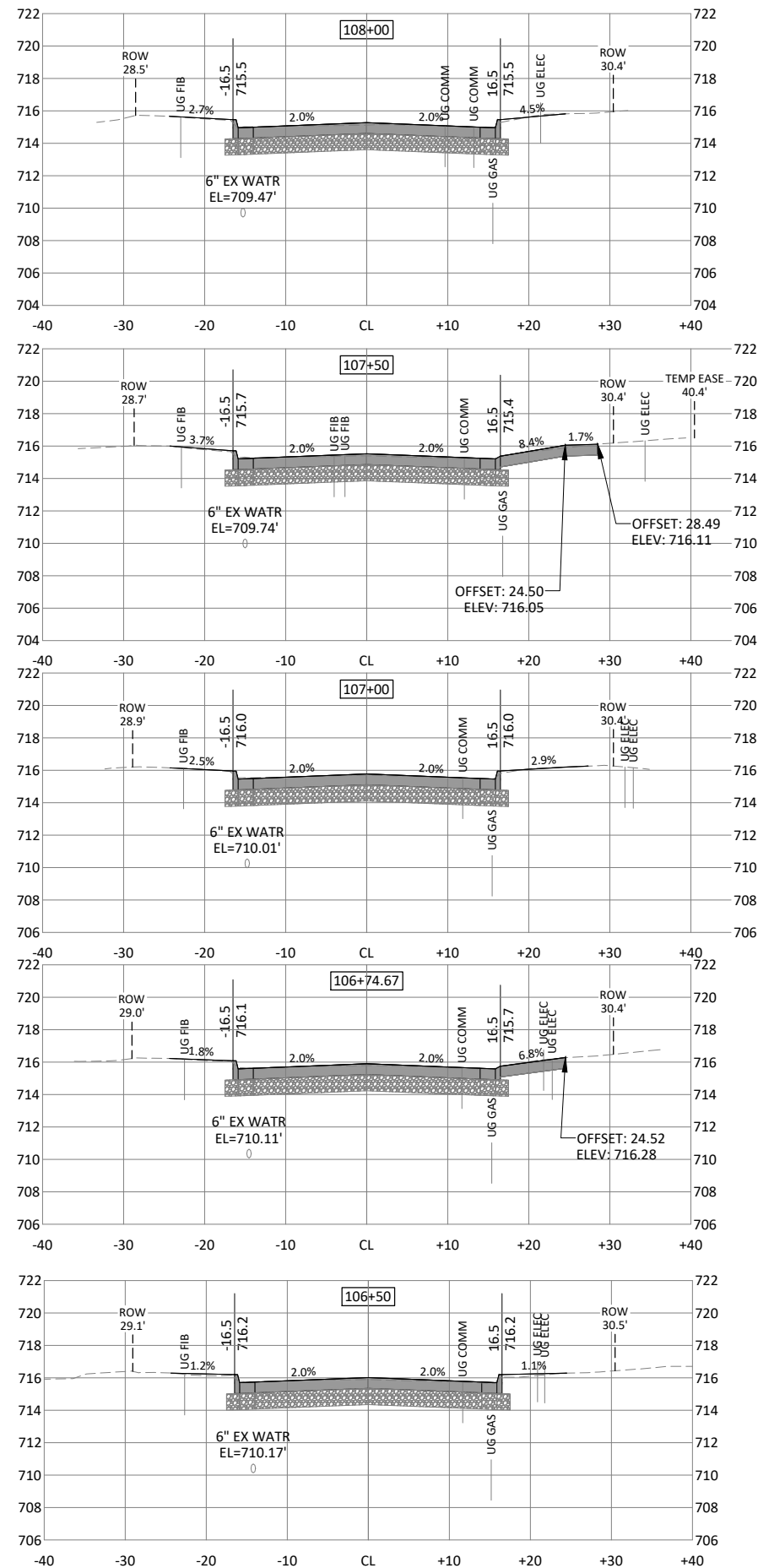
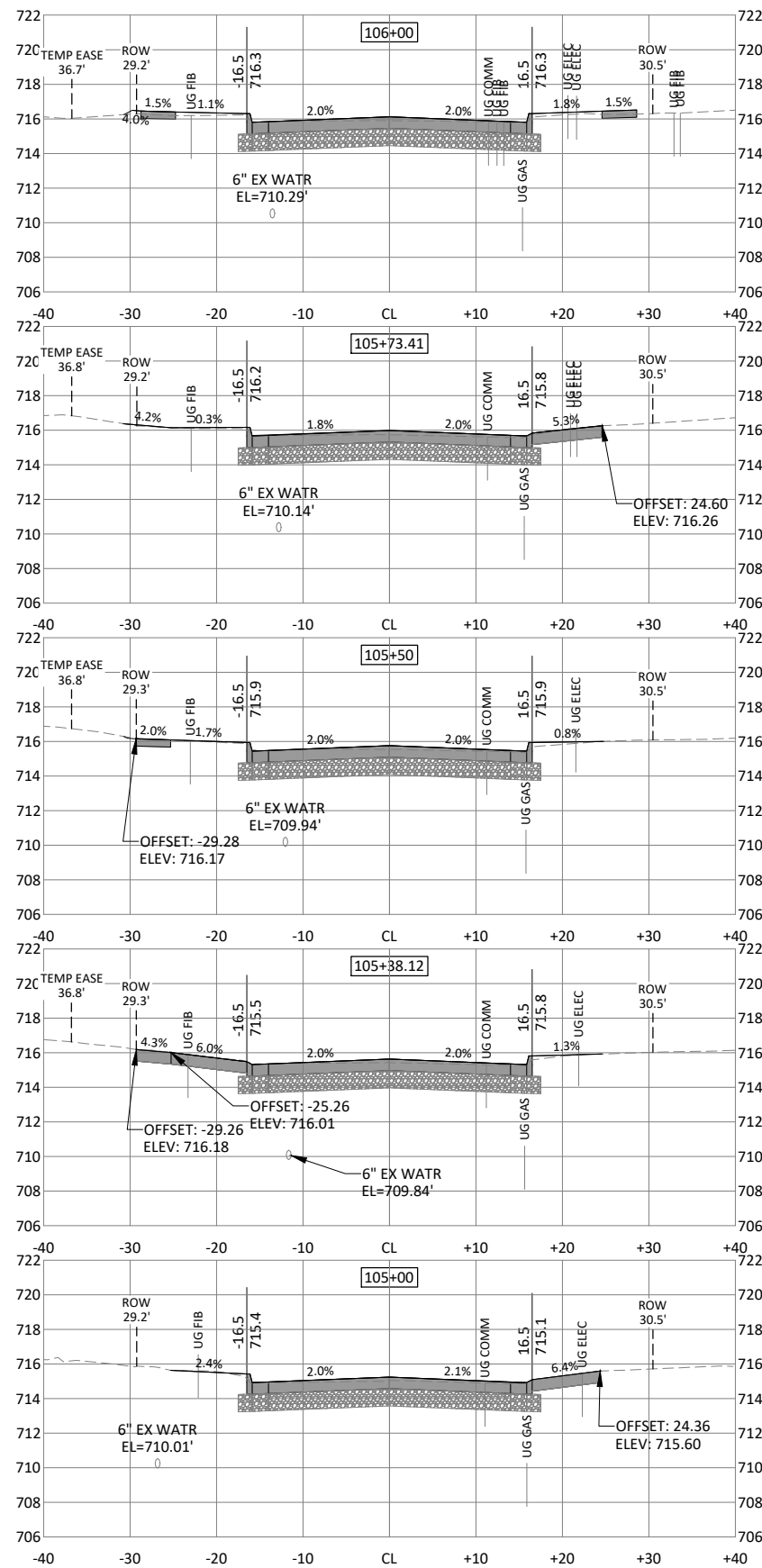


401 1ST ST SE, SUITE 201
CEDAR RAPIDS, IOWA 52401
Phone: (319) 362-3219
Email: CedarRapids@bolton-menk.com
www.bolton-menk.com

DESIGNED	RCK	NO.	ISSUED FOR	DATE
DRAWN	RCK	0	BID	3/13/2025
CHECKED	ALH			
CLIENT PROJ. NO.	133022			

CITY OF MUSCATINE, IOWA
FULLIAM AVE RECONSTRUCTION - PHASE 3
MAINLINE CROSS-SECTIONS

SHEET
W.01





City of Muscatine

ITEM NUMBER

AGENDA ITEM SUMMARY

DATE: 3/20/2025

STAFF

Kevin Coon, City Engineer
Brian Stineman, Public Works Director
Zack Etzel, Sewer Department Supervisor

SUBJECT

Public Hearing for Review of the Plans and Specifications for the Cured-In-Place-Pipe-Liner Project.

EXECUTIVE SUMMARY

STAFF RECOMMENDATION

BACKGROUND/DISCUSSION

Every year Public Works inspects the sewer pipe network and identifies areas in need for lining to extend usable life. This project is for the lining 1,880 feet of 8" sanitary sewer and 334 feet of 24" storm sewer.

CITY FINANCIAL IMPACT

ATTACHMENTS

1. REHABILITATION OF UNDERGROUND PIPES (1)

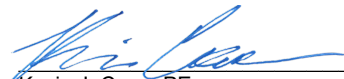


REHABILITATION OF UNDERGROUND PIPES WITH CURED-IN-PLACE-PIPE-LINER PROJECT

**CITY OF MUSCATINE
MUSCATINE, IOWA**

PREPARED BY:

I HEREBY CERTIFY THAT THIS ENGINEERING DOCUMENT WAS PREPARED BY ME OR UNDER
MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER
UNDER THE LAWS OF THE STATE OF IOWA.


Kevin J. Coon, PE

3/14/2025
DATE

REGISTRATION NO. 26366

MY LICENSE RENEWAL DATE IS DECEMBER 31, 2025

PAGES OR SHEETS COVERED BY THIS SEAL: ALL

Notice of Public Hearing and Notice to Bidders	NB-1 to NB-3
Instructions to Bidders	IB-1 to IB-6
Form of Proposal.....	FP-1 to FP-7
Form of Contract	FC-1 to FC-2
Performance, Payment & Maintenance Bond.....	PPB-1 to PPB-4
Special Provisions.....	SP-1 to SP-15
Detailed Specifications	DS-1
Estimated Reference Notes.....	BID ITEM-1 to BID ITEM-8

PUBLIC NOTICE

NOTICE OF TIME AND PLACE OF PUBLIC HEARING ON THE REHABILITATION OF UNDERGROUND PIPES WITH CURED-IN-PLACE- PIPE-LINER PROJECT

Public Notice is hereby given that the City Council of the City of Muscatine, Iowa will hold a Public Hearing to hear objections to the plans, specifications, form of contract, and cost estimate for the proposed REHABILITATION OF UNDERGROUND PIPES WITH CURED-IN-PLACE-PIPE-LINER PROJECT on February 6, 2025 at 6:00 p.m. in the City Council Chambers at Muscatine City Hall. All interested persons are invited to attend and will be given an opportunity to be heard relative to this matter.

Matthew Mardesen, City Administrator

NOTICE TO BIDDERS
**Rehabilitation of Underground Pipes
with Cured-in-Place-Pipe-Liner Project**

Notice is hereby given that the City of Muscatine, Iowa, will receive sealed proposals via IonWave in the office of the City Engineer, Public Works Building, until 2:00 p.m., April 8th, 2025 for the Rehabilitation of Underground Pipes with Cured-in-Place-Pipe-Liner Project for the City of Muscatine. At 2:05 p.m. on the same day the City's Purchasing Agent shall open the bids received and announce the apparent results.

Bids will be reported to the City Council at their meeting to be held at 6:00 p.m., April 17th, 2025. Said proposals shall be acted on at that time or at such later time and place as may then be fixed.

Description of the Type and Location of the Project

The Rehabilitation of Underground Pipes with Cured-in-Place-Pipe-Liner Project consists of lining sewer pipes with cured-in-place liner for the sewer pipes listed below. All pipes are within the corporate limits of Muscatine, Iowa. ***Work must be completed by September 1, 2025.***

Proposed Fiscal Year 2024/2025 Rehabilitation of Underground Pipes with CIPP Liner:

GM3435	8"	280'	900 block Wier St.
GM3281	8"	289'	2000 block Fair Acres Dr.
GM4368	8"	281'	2900 block Mulberry Ave.
GM3220	8"	425'	900 block Scott St.
GM2161	8"	261'	400 block W Fulliam Ave.
GM2165	8"	352'	400 block W Fulliam Ave.
GM3892	24"	334'	3300 block Spinning Wheel Ct.

Proposals shall be submitted on the form furnished by the City and accompanied by a bid security in an amount equal to five (5) percent of the bid and shall stand as security that the successful bidder will enter into a contract for the work bid upon within ten (10) days after acceptance of his proposal by the City.

The City reserves the right to defer acceptance of any proposal for a period not to exceed sixty (60) calendar days and to reject any and all bids, to waive technicalities and to enter into such contract as it shall deem for the best interest of said City.

The Contractor must ensure that employees and applicants for employment are not discriminated against because of their race, color, religion, sex or national origin.

Payment to the Contractor will be made from funds legally available for that purpose. Payment will be made on the basis of monthly estimates equal to ninety-five (95) percent of the contract price. The balance of the five (5) percent due to the contractor will not be made earlier than thirty (30) days from the final acceptance of said work by the City, subject to the conditions and in accordance with the provisions of Chapter 573 of the Code of Iowa. Before final payment will be made, the Contractor shall certify that all materials, labor and services have been paid for.

All work is to be performed and completed in compliance with OSHA and in strict compliance

with these contract documents prepared by the City of Muscatine Public Works Department, which have heretofore been approved by the City Council and are now on file for public examination.

Proposed plans, specifications, and contract documents may be obtained from the Department of Public Works, 1459 Washington Street, Public Works Department, Muscatine, Iowa 52761, between the hours of 8:00 a.m. and 5:00 p.m., Monday thru Friday.

This Notice is published by order of the City Council of the City of Muscatine, Iowa.

Matthew Mardesen, City Administrator

INSTRUCTIONS TO BIDDERS

TABLE OF CONTENTS

01 - BIDDER'S KNOWLEDGE	09 - DISQUALIFICATION OF BIDDERS
02 - BIDDER'S QUALIFICATIONS	10 - QUANTITIES
03 - METHOD OF BIDDING	11 - COMPLETION DATE
04 - SUBMISSION OF BIDS	12 - GUARANTEE
05 – WITHDRAWAL OF BIDS	13 - QUESTIONS AND ADDENDA
06 - EVALUATION OF BIDS	14 - PRECONSTRUCTION CONFERENCE
07 – SALES TAX EXEMPTION	15 - SUB-CONTRACTORS
08 – EXECUTION OF CONTRACT	16 – BIDDER STATUS FORM

IB-01 BIDDER'S KNOWLEDGE

The proposed sewer lining improvements are located throughout the City of Muscatine, Iowa. Bidders shall familiarize themselves with the specifications and existing conditions, which will affect the construction. Specific items relating to the preparation of bids and the submission thereof are listed elsewhere in these Contract Documents. It will be the responsibility of the Bidder to examine all Contract Documents and to make a personal examination of the job site and the physical conditions, which may affect bidding and performance under the contract.

IB-02 BIDDER'S QUALIFICATIONS

The Bidder may be required to satisfy the Owner as to his integrity, experience, equipment, personnel and financial ability to perform the work.

If the successful Bidder is a non-Iowa corporation, he shall submit proof to the Owner, prior to the execution of the contract, of authorization by the Secretary of State to do business in Iowa.

IB-03 METHOD OF BIDDING

Bidder shall submit unit prices as required for the work covered by the specifications. Prices shall cover complete work and include all costs incidental thereto, unless otherwise indicated.

The Engineer may change location, quantities, and combination of units as required during the progress of construction.

Bids will be computed using quantities shown in the proposal. The project quantities are approximate and only for comparison of bids.

In the event of discrepancies between unit prices and unit price extensions listed in Bidder's proposal, unit prices shall govern.

IB-04 SUBMISSION OF BIDS

The bids shall be submitted only to the City's electronic bid submission website, IonWave (<https://muscatineiowa.ionwave.net>). All attachments, including the bid security, shall be uploaded in PDF format to the "Response Attachments" section of the project's page found on the City of Muscatine's IonWave website.

The bid shall be signed by a legally authorized representative of the Bidder.

Do not submit plans and/or specifications with the bid.

IB-05 WITHDRAWAL OF BIDS

Bids may be withdrawn any time prior to the scheduled closing time for receipt of bids; but no bids may be withdrawn for a period of thirty (30) calendar days thereafter.

IB-06 EVALUATION OF BIDS

The Owner may consider such factors as bid price, experience and responsibility of Bidder, and similar factors in determining which bid deems to be the best interest of the Owner for the project.

The Owner may make such investigations as he deems necessary to determine the ability of the Bidder to perform the work, and the Bidder shall furnish to the Owner all such information and data for this purpose as the Owner may request. The Owner reserves the right to reject any bid if the evidence submitted by, or investigation of, such Bidder fails to satisfy the Owner that such Bidder is properly qualified to carry out the obligations of the agreement and to complete the work contemplated therein.

The Owner may reject any or all bids, waive informalities or technicalities in any bid, and accept that bid which it deems to be in its best interest.

IB-07 SALES TAX EXEMPTION

The City of Muscatine will provide prime contractor and all subcontractors for this project with a certificate of exemption and an authorization letter which can be presented to material suppliers which will allow the contractor/subcontractor to purchase building materials used in this contract exempt from Iowa sales tax and any applicable local option sales tax and school infrastructure local option tax. Complete information on qualifying materials and supplies can be found at www.state.ia.us/tax, the Iowa Department of Revenue and Finance (IDRF) web site. Links can be found in the Business Taxes and Local Government categories. Bids submitted for this project should be submitted on this basis.

IB-08 EXECUTION OF CONTRACT

The party to whom the contract is awarded will be required to execute the Agreement and obtain the performance bond and payment bond within ten (10) calendar days from the date when Notice of Award is delivered to the Bidder. The Notice to Award shall be accompanied by the necessary Agreement and bond forms. In case of failure of the Bidder to execute the Agreement, the Owner may at his option consider the Bidder in default, in which case the bid bond accompanying the proposal shall become the property of the Owner.

The Owner, within thirty-one (31) days of receipt of acceptable performance bond, payment bond and Agreement signed by the party to whom the Agreement was awarded shall sign the Agreement and return to such party an executed copy of the Agreement. Should the Owner not execute the Agreement within such period, the Bidder may, by written notice, withdraw his signed Agreement. Such notice of withdrawal shall be effective upon receipt of the notice by the Owner.

The Notice to Proceed shall be issued, in writing, following approval and execution of the contract by the City Council. The Contractor will acknowledge receipt of Notice to Proceed and work shall proceed within ten (10) days, or as mutually agreed between Owner and Contractor.

The contract, when executed, shall be deemed to include the entire agreement between the parties; the Contractor shall not claim any modification resulting from representation or

promise made by representatives of the Owner or other persons.

IB-09 DISQUALIFICATION OF BIDDERS

Attention of bidders is directed to Section 553.23 of the current Code of Iowa, regarding unlawful activity in making public contracts.

IB-10 QUANTITIES

Estimated quantities shown on the proposal form are provided solely for the Contractor's information and shall not be construed as being necessarily accurate or complete.

Bidders must satisfy themselves of the accuracy of the estimated quantities in the bid tabulation included in the Form of Proposal by examination of the site and a review of the contract documents including addenda. After bids have been submitted, the Bidder shall not assert that there was a misunderstanding concerning the quantities of work or of the nature of the work to be done. This contract is an indefinite quantity, indefinite delivery contract. See special provisions (B) Description of Contract.

IB-11 COMPLETION DATE

All work must be completed as described in special provision.

Should the Contractor fail to complete the construction work within the time specified, he shall reimburse the Owner for any extra engineering and inspection costs deemed necessary by the Owner necessitated by the continuance of the work beyond the time herein specified for completion. Such extra engineering costs, not included in the liquidated damages, charged to the Contractor as hereby agreed to in no way constitute a penalty, but said costs represent additional expense to the Owner caused by delayed prosecution of the work by the Contractor. Such additional expense will be deducted from the monies due the Contractor at the time of final payment, recognizing any extensions of time granted by the Owner.

IB-12 GUARANTEE

The Contractor shall furnish a maintenance bond, subject to the Owner's approval, guaranteeing to keep all work constructed under this contract in good repair for a period of two (2) years from date of final acceptance. Good repair shall be construed to mean free from any functional or structural deterioration, except that caused from ordinarily reasonable use and acts of God, which appreciably reduces the effectiveness of the improvement for the purpose intended or any serious departure from the standards or original construction.

If, in the opinion of the Owner, such deterioration takes place, they shall so notify the Contractor in writing to the address or email address given in the Contractor's proposal and send a copy of such notice to the bonding company, which notice is mutually agreed to be sufficient and adequate. If the Contractor shall not proceed to remedy such defects as are called to his attention in the notice within twenty (20) days, the City shall cause the repairs to be made as it deems best, and the entire cost thereof shall be paid by the Contractor or his sureties unless the City and Contractor mutually agree to extend the 20 days due to extenuating circumstances.

IB-13 QUESTIONS AND ADDENDA

If any person contemplating submitting a bid for the proposed work, material or equipment is in doubt as to the true meaning of any part of the plans, specifications or other Contract Documents, he may request an interpretation thereof. The person submitting the request will be responsible for its prompt delivery.

Questions concerning interpretation or intent of the Contract Documents should be directed to:

Kevin Coon, P.E. or Zack Etzel
Public Works Building
1459 Washington Street
Muscatine, IA 52761
Phone 563-263-8933
Fax 563-263-2127

Any oral interpretation given will be valid only if confirmed by written addendum. Information obtained from an officer, agent, or employee of the Owner shall not affect the risks or obligations assumed by the Contractor or relieve him from fulfilling any of the conditions of the contract.

The Owner reserves the right to revise or amend the Contract Documents, prior to the date set for receipt of bids. Such revisions and amendments, if any, will be announced by an addendum or addenda to the Contract Documents.

Copies of such addenda as may be issued will be furnished to all holders of specifications.

Bidders are required to acknowledge receipt of all addenda by listing such addenda in the Form of Proposal.

IB-14 PRECONSTRUCTION CONFERENCE

Following the award of contract, the Contractor and his subcontractors will be required to attend a preconstruction meeting at a time and place designated by the Owner.

IB-15 SUB-CONTRACTORS

The prime contractor shall submit to the Owner, in writing, the names of all sub-contractors along with the items and amounts to be sublet. The prime contractor shall not sublet more than 49% of the estimated dollar amount of the contract. All sub-contractors shall be approved by the Owner before work is begun.

IB-16 BIDDER STATUS FORM

The prime contractor shall submit to the Owner a completed Bidder Status Form per 875 Iowa Administrative Code Chapter 156.

**REHABILITATION OF UNDERGROUND PIPES
WITH CURED-IN-PLACE-PIPE-LINER PROJECT
CITY OF MUSCATINE - MUSCATINE, IOWA**

FORM OF PROPOSAL

NOTE TO BIDDERS: Please use the Form of Proposal included in the contract documents of the specifications. Separate copies of this proposal will be furnished to bidders upon application to the Owner.

Name of Bidder _____

Address of Bidder _____

TO: The Honorable Mayor
and City Council
City Hall
Muscatine, Iowa 52761

GENTLEMEN:

- A. The undersigned Bidder submits herewith bid security in the amount of \$ _____ or _____% in accordance with the terms set forth in the Instructions to Bidders.
- B. The undersigned Bidder, having examined the contract documents, specifications, Notice to Bidders, the location and sites of the proposed work, the nature of the work to be done, extent and condition of existing pavements affecting, or affected by the proposed work, and being fully advised as to the extent and character of the work and all existing local conditions, relative to construction difficulties, hazards, labor transportation, hauling, trucking, plant sites, and other factors affected by or affecting the work covered by this proposal as outlined in the specifications and plans, including Addenda _____ and _____.

HEREBY PROPOSES to furnish all materials, tools, appliances, plant and equipment; and to perform all necessary labor required for the complete construction of the Rehabilitation of Underground Pipes with Cured-in-Place-Pipe-Liner Project for the City of Muscatine, Iowa and all items incidental thereto and to perform all work in accordance with the plans and specifications for said project, including all items to expense and profit, as follows:

1. To do all extra work which may be required to complete the work contemplated at unit price or lump sum, to be agreed upon prior to starting such work.
2. To execute the form of contract with ten (10) days after Notice of Award is received and to complete all work as stated in the special provisions.

- C. Attached, hereto, is an affidavit in proof that the undersigned Bidder has not colluded with any person in respect to this Bid or any other Bids or the submitting of Bids for the contract for which this Bid is submitted.
- D. The undersigned Bidder states that this proposal is made in conformity with the Contract Documents and agrees that, in the event of any discrepancies or differences between any conditions of his proposal and the Contract Documents prepared by the Owner, the provisions of the latter shall prevail.
- E. The total bid is based on estimated quantities, and the actual amount will be adjusted in accordance with the final determination of quantities involved. In case of error in the item totals as quoted, the proper figure based on the estimated quantities and the unit prices as quoted shall govern, and contractor's bid will be modified as needed to reflect this revised cost.
- F. The undersigned Bidder is prepared to submit the Bidders' Qualifications statement upon request.

Firm: _____

By: _____

(Title)

(Business Address)

(Seal - if bid is by a corporation)

BID FORM

Item Number	Description	Est. Qty.	Unit	Unit Price \$	Total Price \$
	GENERAL ITEMS				
1.	Mobilization	1	Lump Sum		
2.	Traffic Control	1	Lump Sum		
3.	Bypass Pumping	1	Lump Sum		
	CURED-IN-PLACE-PIPE				
4.	8" CIPP Installed	1,888	Linear Foot		
5.	24" CIPP Installed	334	Linear Foot		
6.	OTHER PAY ITEMS				
	Removal of Roots	200	Linear Foot		
7.	Removal of Minerals or Attached Deposits	100	Linear Foot		
8.	Removal of Protruding Taps	6	Linear Foot		
9.	Reinstatement of Service Laterals	30	Per each		
10.	TOTAL BID				

Contractor_____

Date_____

NONCOLLUSION AFFIDAVIT OF PRIME BIDDER

EXHIBIT A

State of _____)
) ss.
County of _____)

_____, being first duly sworn, deposes and says that:

(1) He is the _____ of _____,
the Bidder that has submitted the attached Bid:

(2) He is fully informed respecting the preparation and contents of the attached Bid and of all
pertinent circumstances respecting such Bid;

(3) Such Bid is genuine and is not a collusive or sham bid;

(4) Neither the said Bidder nor any of its officers, partners, owners, agents, representatives, employees
or parties in interest, including this affiant, has in any way colluded, conspired, connived or agreed,
directly or indirectly, with any other Bidder, firm or person to submit a collusive or sham Bid in
connection with the Contract for which the attached Bid has been submitted or to refrain from bidding in
connection with such Contract, or has in any manner, directly or indirectly, sought by agreement, or
collusion or communication or conference with any other Bidder, firm, or person to fix the price or prices
in the attached Bid or of any Bidder, or, to fix any, overhead, profit, or cost element of the bid price or the
bid price of any other Bidder, or to secure through any collusion, conspiracy, connivance, or unlawful
agreement any advantage against the City of Muscatine or any person interested in the proposed Contract;
and

(5) The price or prices quoted in the attached Bid are fair and proper and are not tainted by any
collusion, conspiracy, connivance, or unlawful agreement on the part of the Bidder or any of its agents,
representatives, owners, employees, or parties in interest, including this affiant (Signed)

(Signed) _____

Title

Subscribed and sworn to before me
this _____ day of _____, 2025.

Title

My commission expires _____

NONCOLLUSION AFFIDAVIT OF SUBCONTRACTOR
EXHIBIT B

State of _____)
) ss.
County of _____)

_____, being first duly sworn, deposes and says that:

(1) He is the _____ of _____, hereinafter referred to as the "Subcontractor";

(2) He is fully informed respecting the preparation and contents of the Subcontractor's Proposal submitted by the Subcontractor to _____, the Contractor for certain work in connection with the _____ Contract pertaining to the _____ Project in Muscatine, Iowa;

(3) Such Subcontractor's Proposal is genuine and is not a collusive or sham bid;

(4) Neither the Subcontractor nor any of its officers, partners, owners, agents, representatives, employees or parties in interest, including this affiant, has in any way colluded, conspired, connived or agreed, directly or indirectly, with any other Bidder, firm or person to submit a collusive or sham Bid in connection with the Contract for which the attached Bid has been submitted or to refrain from bidding in connection with such Contract, or has in any manner, directly or indirectly, sought by agreement, or collusion or communication or conference with any other Bidder, firm, or person to fix the price or prices in the attached Bid or of any Bidder, or, to fix any overhead, profit, or cost element of the bid price or the bid price of any other Bidder, or to secure through any collusion, conspiracy, connivance, or unlawful agreement any advantage against the City of Muscatine or any person interested in the proposed Contract; and

(5) The price or prices quoted in the Subcontractor's Proposal are fair and proper and are not tainted by any collusion, conspiracy, connivance, or unlawful agreement on the part of the Bidder or any of its agents, representatives, owners, employees, or parties in interest, including this affiant.

(Signed) _____

Title

Subscribed and sworn to before me
this _____ day of _____, 2025

Title

My commission expires _____

STATEMENT OF BIDDER'S QUALIFICATIONS

EXHIBIT C

All questions must be answered and the data given must be clear and comprehensive. The statement must be notarized. If necessary, questions may be answered on separate attached sheets. The Bidder may submit any additional information he desires.

1. Name of Bidder.
2. Permanent main office address, including City, State & Zip Code.
3. When organized.
4. If a corporation, where incorporated.
5. How many years have you engaged in construction work under your present firm or trade name?
6. Contracts on Hand: Show each contract and the anticipated dates of completion.
7. General character of work performed by your company.
8. Have you ever failed to complete any work awarded to you? If so, where and why?
9. Have you ever defaulted on a contract? If so, where and why?
10. List the more important contracts recently completed by you, stating the final dollar value for each, and the month and year completed.
11. Will you upon request, fill out a detailed financial statement and furnish any other information that may be required by the City of Muscatine?
12. (a) Have you ever been a party to or otherwise involved in any action or legal proceeding involving matters related to race, color, nationality or religion? If so, give full details.

(b) Have you ever been accused of discrimination based upon race, color, nationality, or religion in any action or legal proceeding, including any proceeding related to any Federal Agency? If so, give full details.
13. The undersigned hereby authorizes and requests any person, firm or corporation to furnish any information requested by the City of Muscatine in verification of the recitals comprising this Statement of Bidder's Qualifications.

Dated at _____ this _____ of _____
_____, 2025.

(Name of Bidder)

By _____

Title _____

State of _____)
County of _____) ss

_____ being duly sworn, deposes and says that he is the
_____ of _____
_____ and that the answers to the foregoing questions and all statements
therein contained are true and correct.

Subscribed and sworn to before me this _____ day of _____, 2025.

Notary Public

My Commission expires _____.

FORM OF CONTRACT

THIS AGREEMENT, made and entered into this ____ day of _____, 2025, by and between the City of Muscatine, Iowa, party of the first part, hereinafter referred to as the "City" and _____, party of the second part, hereinafter referred to as the "Contractor".

WITNESSETH

That the Contractor and the City for the consideration stated herein mutually agree as follows:

ARTICLE 1: Statement of work. The Contractor shall furnish all supervision, technical, personnel, labor, materials, machinery, tools, equipment, and services, including utility and transportation services and perform all work required for the construction of the Rehabilitation of Underground Pipes with Cured-in-Place-Pipe-Liner Project, Muscatine, Iowa, all in strict accordance with the Contract Documents prepared by the City of Muscatine, Department of Public Works.

ARTICLE 2. The City will pay the Contractor for the performance of the contract, from funds legally available for that purpose. Payment will be made on the basis of an estimate equal to ninety-five (95) percent of the contract price, including materials, subject to approval of the City. The balance of the five (5) percent due to the Contractor will be made no earlier than thirty (30) days from the final acceptance of said work by the City.

The Contractor shall provide surety bond in the amount of 100% of the contract and shall guarantee the maintenance of the improvement for a period of two (2) years after its completion and acceptance by the City.

Completion Dates: All work shall be completed in accordance with the special provisions contained herein.

The contract amount is \$_____.

ARTICLE 3. Contract: The executed contract documents shall consist of the following:

- | | |
|---------------------------|---------------------------------------|
| a. This Agreement | f. Signed Copy of Proposal |
| b. Addenda Numbers _____ | g. Special Provision |
| c. Contract Documents | h. Detailed Specifications Referenced |
| d. Notice to Bidders | i. Standard Specifications Referenced |
| e. Instruction to Bidders | j. General Conditions |

THIS AGREEMENT, together with other documents enumerated in this ARTICLE 3, with said other documents are as fully a part of the contract as if hereto attached or herein repeated, forms the contract between the parties hereto. In the event that any provision in any component part of this contract conflicts with any provision of any other component part, the provision of the

component part first enumerated in this ARTICLE 3 shall govern, except as otherwise specifically stated.

IN WITNESS WHEREOF, the parties thereto have caused this AGREEMENT to be executed in triplicate original copies on the date and year first above written.

CITY OF MUSCATINE, IOWA

CONTRACTOR

By: Mayor Brad Bark

BY

TITLE

ATTEST: _____
By: Matthew Mardesen, City Administrator

ATTEST: _____

TITLE

PERFORMANCE, PAYMENT, AND MAINTENANCE BOND

KNOW ALL BY THESE PRESENTS:

That we, _____, as Principal (hereinafter the "Contractor" or "Principal" and _____, as Surety are held and firmly bound unto _____, as Obligee (hereinafter referred to as "the Jurisdiction"), and to all persons who may be injured by any breach of any of the conditions of this Bond in the penal sum of _____ dollars (\$ _____), lawful money of the United States, for the payment of which sum, well and truly to be made, we bind ourselves, our heirs, legal representatives and assigns, jointly or severally, firmly by these presents.

The conditions of the above obligations are such that whereas said Contractor entered into a contract with the Jurisdiction, bearing date the _____ day of _____, _____, hereinafter the "Contract") wherein said Contractor undertakes and agrees to construct the following described improvements:

REHABILITATION OF UNDERGROUND PIPE WITH CURED-IN-PLACE-PIPE-LINER PROJECT

and to faithfully perform all the terms and requirements of said Contract within the time therein specified, in a good and workmanlike manner, and in accordance with the Contract Documents. Provided, however, that one year after the date of acceptance as complete of the work under the above referenced Contract, the maintenance portion of this Bond shall continue in force but the penal sum for maintenance shall be reduced to the sum of _____ DOLLARS (\$ _____), which is the cost associated with those items shown on the proposal and in the Contract that require a maintenance bond period in excess of one year.

It is expressly understood and agreed by the Contractor and Surety in this bond that the following provisions are a part of this Bond and are binding upon said Contractor and Surety, to-wit:

1. **PERFORMANCE:** The Contractor shall well and faithfully observe, perform, fulfill, and abide by each and every covenant, condition, and part of said Contract and Contract Documents, by reference made a part hereof, for the above referenced improvements, and shall indemnify and save harmless the Jurisdiction from all outlay and expense incurred by the Jurisdiction by reason of the Contractor's default of failure to perform as required. The Contractor shall also be responsible for the default or failure to perform as required under the Contract and Contract Documents by all its subcontractors, suppliers, agents, or employees furnishing materials or providing labor in the performance of the Contract.
2. **PAYMENT:** The Contractor and the Surety on this Bond hereby agreed to pay all just claims submitted by persons, firms, subcontractors, and corporations furnishing materials for or performing labor in the performance of the Contract on account of which this Bond is given, including but not limited to claims for all amounts due for labor, materials, lubricants, oil, gasoline, repairs on machinery, equipment, and tools, consumed or used by the Contractor or any subcontractor, wherein the same are not satisfied out of the portion of the contract price the Jurisdiction is required to retain until completion of the improvement, but the Contractor and Surety shall not be liable to said persons, firms, or corporations unless the claims of said claimants against said portion of the contract price shall have been established as provided by law. The Contractor and Surety hereby bind themselves to the obligations and conditions set forth in Chapter 573 of the Iowa Code, which by this reference is made a part hereof as though fully set out herein.
3. **MAINTENANCE:** The Contractor and the Surety on this Bond hereby agree, at their own expense:

- A. To remedy any and all defects that may develop in or result from work to be performed under the Contract within the period of _____ year (s) from the date of acceptance of the work under the Contract, by reason of defects in workmanship or materials used in construction of said work;
 - B. To keep all work in continuous good repair; and
 - C. To pay the Jurisdiction's reasonable costs of monitoring and inspection to assure that any defects are remedied, and to repay the Jurisdiction all outlay and expense incurred as a result of Contractor's and Surety's failure to remedy any defect as required by this section.
4. GENERAL: Every Surety on this Bond shall be deemed and held bound, any contract to the contrary notwithstanding, to the following provisions:
- A. To consent without notice to any extension of time to the Contractor in which to perform the Contract;
 - B. To consent without notice to any change in the Contract or Contract Documents, which thereby increases the total contract price and the penal sum of this bond, provided that all such changes do not, in the aggregate, involve an increase of more than 20% of the total contract price, and that this bond shall then be released as to such excess increase; and
 - C. To consent without notice that this Bond shall remain in full force and effect until the Contract is completed, whether completed within the specified contract period, within an extension thereof, or within a period of time after the contract period has elapsed and the liquidated damage penalty is being charged against the Contractor.
 - D. That no provision of this Bond or of any other contract shall be valid that limits to less than five years after the acceptance of the work under the Contract the right to sue on this Bond.
 - E. That as used herein, the phrase "all outlay and expense" is not to be limited in any way, but shall include the actual and reasonable costs and expenses incurred by the Jurisdiction including interest, benefits, and overhead where applicable. Accordingly, "all outlay and expense" would include but not be limited to all contract or employee expense, all equipment usage or rental, materials, testing, outside experts, attorneys fees (including overhead expenses of the Jurisdiction's staff attorneys), and all costs and expenses of litigation as they are incurred by the Jurisdiction. It is intended the Contractor and Surety will defend and indemnify the Jurisdiction on all claims made against the Jurisdiction on account of Contractor's failure to perform as required in the Contract and Contract Documents, that all agreements and promises set forth in the Contract and Contract Documents, in approved change orders, and in this Bond will be fulfilled, and that the Jurisdiction will be fully indemnified so that it will be put into the position it would have been in had the Contract been performed in the first instance as required.

In the event the Jurisdiction incurs any "outlay and expense" in defending itself against any claim as to which the Contractor or Surety should have provided the defense, or in the enforcement of the promises given by the Contractor in the Contract, Contract Documents, or approved change orders, or in the enforcement of the promises given by the Contractor and Surety in this Bond, the Contractor and Surety agree that they will make the Jurisdiction whole for all such outlay and expense, provided that the Surety's obligation under this bond shall not exceed 125% of the penal sum of this bond.

In the event that any actions or proceedings are initiated regarding this Bond, the parties agree that the venue thereof shall be _____ County, State of Iowa. If legal action is required by the Jurisdiction to

enforce the provisions of this Bond or to collect the monetary obligation incurring to the benefit of the Jurisdiction, the Contractor and the Surety agree, jointly, and severally, to pay the Jurisdiction all outlay and expense incurred therefor by the Jurisdiction. All rights, powers, and remedies of the Jurisdiction hereunder shall be cumulative and not alternative and shall be in addition to all rights, powers, and remedies given to the Jurisdiction, by law. The Jurisdiction may proceed against surety for any amount guaranteed hereunder whether action is brought against the Contractor or whether Contractor is joined in any such action(s) or not.

NOW THEREFORE, the condition of this obligation is such that if said Principal shall faithfully perform all the promises of the Principal, as set forth and provided in the Contract, in the Contract Documents, and in this Bond, then this obligation shall be null and void, otherwise it shall remain in full force and effect.

When a work, term, or phrase is used in this Bond, it shall be interpreted or construed first as defined in this Bond, the Contract, or the Contract Documents; second, if not defined in the Bond, Contract, or Contract Documents, it shall be interpreted or construed as defined in applicable provisions of the Iowa Code; third, if not defined in the Iowa Code, it shall be interpreted or construed according to its generally accepted meaning in the construction industry; and fourth, if it has no generally accepted meaning in the construction industry, it shall be interpreted or construed according to its common or customary usage.

Failure to specify or particularize shall not exclude terms or provisions not mentioned and shall not limit liability hereunder. The Contract and Contract Documents are hereby made a part of this Bond.

(CON'T – PERFORMANCE, PAYMENT, AND MAINTENANCE BOND) Project No. _____

PRINCIPAL:

Contractor

By _____
Signature

Title

SURETY:

Surety Company

By _____
Signature Attorney-in-Fact Officer

Printed Name of Attorney-in-Fact Officer

FORM APPROVED BY:

Attorney for Jurisdiction

Company Name

Company Address

City, State, Zip Code

Company Telephone Number

NOTE:

1. All signatures on this performance, payment, and maintenance bond must be original signatures in ink; copies, facsimile, or electronic signatures will not be accepted.
2. This bond must be sealed with the Surety's raised, embossing seal.
3. The Certificate or Power of Attorney accompanying this bond must be valid on its face and sealed with the Surety's raised, embossing seal.
4. The name and signature of the Surety's Attorney-in-Fact/Officer entered on this bond must be exactly as listed on the Certificate or Power of Attorney accompanying this bond.

SPECIAL PROVISIONS

Table of Contents

01 - Form of Detailed Specifications	SP-01
02 - Definitions	SP-02
03 - Notice to Proceed.....	SP-03
04 – Maintenance and Control of Traffic.....	SP-04
05 - Copies of Plans and Specifications.....	SP-05
06 - Right-of-Way.....	SP-06
07 - Construction Facilities	SP-07
08 - Insurance.....	SP-08
09 - Contract Termination.....	SP-09
10 - Codes and Standards.....	SP-10
11 – Material Test and Certification	SP-11
12 - Payment	SP-12
13 - Coordination of Construction by the Contractor	SP-13
14 - Sanitary Facilities	SP-14
15 - Minor Work	SP-15
16 - Site Clean-up	SP-16
17 - Final Inspection and Acceptance	SP-17
18 - Legal Relations and Responsibility to Public	SP-18
19 – Description of Contract.....	SP-19
20 – Description and Completion of Work.....	SP-20
21 – Limitations of Operations and Access	SP-21
22 – City Signs.....	SP-22
23 – General Parking Requirements	SP-23
34 – Final Cleanup	SP-24

SP-01 FORM OF DETAILED SPECIFICATIONS

The Detailed Specifications are of the abbreviated or outline type and the Contractor must supply omitted words or phrases by interference. Omissions of words or phrases such as "the contractor shall", "in conformance with", "shall be", "as noted on the plans", "according to the plans", "a", "an", "the", and "all" are intentional.

SP-02 DEFINITIONS

OWNER:	City of Muscatine, Iowa which is the Party of the First Part in the accompanying contract, acting through its authorized representatives, and referred to in these proceedings as "City" or "Owner".
ENGINEER:	A City Engineer of Muscatine, Iowa, or his authorized representative.
INSPECTOR:	The authorized representative of the Owner, assigned to the detailed inspection of the work or materials therefore, and to such other duties as may be delegated to him in these specifications.
CONTRACTOR:	The Party of the Second Part in the accompanying contract for the improvement covered by these specifications or his authorized representative.
SUBCONTRACTOR:	Any person, firm, or corporation who has, with the approval of the Owner, contracted with the Prime Contractor to execute and perform in his stead all, or any part, of the contract.
SPECIFICATIONS:	The documents that set forth manner in which the proposed work is to be accomplished, which have been prepared by the Department of Public Works and approved by the Owner, official copies of which are now on file with the City Clerk.
WORK OR PROJECT:	The improvement that is to be made, the approximate quantities for which, and the location of, as set out in the NOTICE TO BIDDERS.

PLANS:

Drawings that may indicate manner, materials, or requirements of this contract and are made a part of the Contract as if bound into the specifications.

SP-03 NOTICE TO PROCEED

The Contractor shall not commence work before receiving written notice to proceed and must begin within twenty (20) days after such notice.

SP-04 MAINTENANCE AND CONTROL OF TRAFFIC

The Contractor shall conduct his work as to assure the least possible obstruction to access by the residents along the project. Suitable access shall mean a roadway of sufficient width, free from ruts, potholes and mud holes, and capable of carrying emergency traffic without damage to the vehicles. When access must be denied due to construction, the Contractor shall provide suitable access within 24 hours after responsible construction is completed. Whenever construction is stopped due to inclement weather, weekends, holidays or other reasons, suitable access shall be provided for all property owners.

Emergency vehicles shall be provided access at all times.

The Contractor shall maintain all equipment within the gross weight limits as licensed by the State of Iowa. Damage to existing sealcoat or concrete streets as a result of excessive loads shall be the Contractor's responsibility to repair.

All open excavations, machinery, material or other items on the project that could constitute a hazard to the travelling public shall be marked by lighted barricades to ensure the safety of the public.

The Contractor shall furnish the name and telephone number of at least one individual who shall be responsible and available 24/7 for maintaining project signs and barricades at night, weekends and any time workers are not present.

SP-05 COPIES OF PLANS & SPECIFICATIONS

After award of contract, the Owner will furnish the Contractor three (3) sets of contract documents. Additional sets will be available upon request. There are no plans for this project.

SP-06 RIGHT-OF-WAY

All construction activity will be on rights-of-way provided by Owner.

SP-07 CONSTRUCTION FACILITIES

Limited storage space for materials and equipment will be available within portions of the right-of-way provided for construction.

All additional storage areas used or proposed by the contractor will be subject to approval.

The Contractor will arrange for any utilities required for construction facilities, and all expense will be borne by the Contractor. No utilities or facilities are required by the City for this contract.

SP-08 INSURANCE

The Contractor shall purchase and maintain throughout the construction period, insurance in the following minimum requirements, and the coverage must be written in a company that has a Best's rating of B+ or better:

- (1) Worker's compensation insurance including Employer's Liability and Occupation disease covering all Iowa employees for statutory Iowa benefits who perform any of the obligations assumed by the Contractor under the contract. The policy will contain broad form all states endorsement.
- (2) Comprehensive General Liability, including independent contractors, completed operations and products, contractual liability, broad form property damage, personal injury, and X, C, and U coverage; coverages must meet the following limits. Deductibles on bodily injury are not acceptable:

COVERAGE	MINIMUM LIMITS
Bodily Injury or Death	\$1,000,000 each occurrence \$2,000,000 aggregate
Property Damage	\$1,000,000 each occurrence
Combined Single Limit	\$1,000,000 each occurrence
Umbrella Liability Coverage	\$2,000,000 Total

- (3) Comprehensive General Automobile liability insurance on all self-propelled vehicles not covered under general liability and used in connection with the Contract, whether owner, non-owner, or hired:

COVERAGE	MINIMUM LIMITS
Bodily Injury or Death	\$1,000,000 each occurrence
Property Damage	\$1,000,000 each occurrence
Option: Combined Single Limit	\$1,000,000 each occurrence

The Owner shall have the right at any time to require public liability insurance and property damage liability insurance greater than those required in the above paragraphs. In any such event, the additional premium or premiums payable solely as the result of such additional insurance shall be the City's responsibility to pay.

Any reductions in limits or coverages or exceptions to the insurance requirements can be made if requested in writing and mutually agreed to.

The Contractor shall furnish to the Owner, Certificates of Insurance evidencing compliance with the foregoing requirements before commencing any operations under this contract. (These Certificates shall contain a provision that the coverage afforded under the policies will not be canceled or materially changed until at least thirty (30) days prior written notice has been given to the Owner and Engineer).

SP-09 CONTRACT TERMINATION

Provisions contained in Chapter 573A Code of Iowa providing for the termination of contracts in construction of public improvements when construction is stopped because of national emergency shall apply to and be a part of this contract and binding on all parties including subcontractors and sureties upon any bond given or filed in connection therewith.

SP-10 CODES AND STANDARDS

- a. Comply with all applicable laws, building and construction codes, and requirements of governmental agencies under those jurisdiction work is being performed; fees for permits and licenses shall be paid by Contractor.
- b. Unless specifically noted to the contrary, conform with and test in accordance with applicable sections of latest revisions of codes and standards listed in Detailed Specifications.
- c. Conflicts:
 1. Between referenced codes and standards: code or standard establishing more stringent

requirements shall be followed.

2. Between referenced codes and standards and specifications and/or plans: one establishing more stringent requirements shall be followed.

3. Between specifications and plans: plans shall govern.

d. All work included under this Contract shall be done in accordance with the Occupational Safety and Health Act of 1970 (Williams-Steiger Act) as amended and enforced by the governmental authority responsible for the local enforcement of the Act. Enforcement and responsibility for fulfilling this provision of the specifications shall rest solely with the contractor, his superintendents, and his foreman, and in no way shall rest with the Owner or the Engineer.

e. All work included under this contract shall be done in accordance with the Secretary of Labor's Safety and Health Standards established under PL 31-54.

SP-11 MATERIAL TEST AND CERTIFICATION

Material tests or certification will be required on all materials incorporated in the project. Such testing and certification costs shall be paid for by the Contractor. Two (2) copies of the test results or certification should be filed with the Engineer prior to the material usage.

SP-12 PAYMENT

Separate payment will be made for only those items specifically listed in the proposal. Payment will be made for the quantities of work completed in accordance with Item DS-05 included in the Detailed Specifications.

Payment will also be made in accordance with the Notice to Bidders.

SP-13 COORDINATION OF CONSTRUCTION BY THE CONTRACTOR

Coordinate work with other contractors, Owner, MP&W, and Engineer to assure orderly and expeditious progress of work.

Select order of work and establish schedule of working hours for construction, subject to approval of Owner and Engineer.

Maintain existing water systems, sewer systems, gas systems, electrical utilities, highways and railroads in substantially continuous operation during construction, unless specifically permitted otherwise by Engineer or other authority.

Perform work hazardous to operation of existing water systems, sewer systems, gas systems, electrical utilities, railroads and highways, or which will require interruption of service, at times specifically approved by Owner and Engineer, or authority in charge of specific utility

or service involved.

The Contractor shall be responsible for giving advance notice to all public and private utility companies of his work and use all necessary precautions to prevent damage to all utilities. The Contractor shall be held responsible for all damages and will bear the cost of any repairs or damages caused by his neglect.

Make any temporary connections necessary for maintaining service during course of work and continued operation of sewer system at Contractor's expense.

Make temporary connections in workmanlike manner; avoid hazards to personnel or service.

Remove temporary connections after permanent connections are made.

Schedule construction to minimize interruptions to utility service or use of street barricades and detours.

SP-14 SANITARY FACILITIES

Sanitary facilities shall be provided by Contractor for use of all construction personnel, including those of other contractors, for the duration of the project, as follows:

Facilities shall consist of chemical units, complete with weather-tight enclosure adequately ventilated, and equipped with latching door.

Chemical units shall be maintained weekly or at lesser periods if determined necessary. Chemical units shall be in accordance with the rules and regulations of the locality of the project (state, county or city).

Contractor shall furnish toilet paper for the chemical units and shall replenish supply whenever required.

Sanitary facilities remain property of the Contractor and, upon completion of the work, shall be removed from the site.

SP-15 MINOR WORK

Any minor work not specifically mentioned in the specifications or shown on the plans but obviously necessary for the proper completion of the work shall be considered as being a part of and included in the contract and shall be executed in the proper manner and the contractor shall **not** be entitled to extra or additional compensation for same.

SP-16 SITE CLEANUP

The Contractor shall be responsible for removal of all debris, dirt, and dust remaining at the project site, which is the result of the various construction operations. The final cleanup of

the project site must be completed to the satisfaction of the Owner and Engineer before final payment will be made.

SP-17 FINAL INSPECTION AND ACCEPTANCE

The Contractor shall notify the Engineer when work is considered to be complete and ready for final inspection.

The Engineer, after determining that the work is ready for final inspection and giving ten (10) days notice to the Contractor, will make final inspection and tests he deems necessary to determine that provisions of the specifications are satisfied.

The Owner will not accept work or make final payment to the Contractor until the Engineer has certified that the work of the Contractor is complete and in conformance with the specifications.

SP-18 LEGAL RELATIONS AND RESPONSIBILITY TO PUBLIC

The Contractor assumes full responsibility for the safekeeping of all materials and equipment and for all unfinished work until final acceptance by the Owner, and if any of it be damaged or be destroyed from any cause, he shall replace it at his own expense.

The Contractor shall indemnify and save harmless the Owner against any liens for nonpayment of his bills in connection with the contract work. The Contractor shall furnish the Owner satisfactory evidence that all persons who have done work or furnished materials, equipment, or service of any type under this contract have been fully paid prior to the acceptance of the work by the Owner.

Contractor will indemnify, defend, keep and save harmless, Owner, its agents, officials and employees against all suits or claims that may be based on bodily injury to persons or damage to property of others, or personal injury including libel and slander that is the result of an error, omission or negligent act of Contractor or any person employed by the Contractor, sub-contractor or any person employed by the Contractor, sub-contractor or agent of either.

SP-19 DESCRIPTION OF CONTRACT

This contract is for the lining of sewer pipes at multiple locations within the City of Muscatine. This project will operate based on an indefinite quantity, indefinite delivery task order contract. There is a minimum of \$80,000 worth of work and a maximum of \$100,000 worth of work to be completed by August 1, 2025. While it is unknown as to the exact number of locations and quantities, locations and estimated quantities have been provided to aid in the bidding process.

SP-20 DESCRIPTION AND COMPLETION OF WORK

The proposed improvements consist of lining sewer pipe with cured-in-place-pipe-liner of various sewer pipes within the City of Muscatine, Iowa. It is to be understood that the quantities given are estimated quantities and that payment is based upon units of work satisfactorily completed, multiplied by the contract unit prices.

All work on this project, (\$100,000 maximum) shall be completed on or before August 1, 2025. Liquidated damages shall be \$200.00 per day for days used after August 1, 2025. If any additional work is added to the contract, additional days will be added accordingly.

SP-21 LIMITATIONS OF OPERATIONS AND ACCESS

The Contractor shall conduct the work so as to create a minimum amount of inconvenience to traffic. Every effort shall be made to maintain access to all businesses and residences.

SP-22 CITY SIGNS

The Contractor shall be responsible for providing notice to the Street Maintenance Supervisor or his representative of any street signs or traffic control signs that will conflict with construction operations. The Street Department shall remove and collect said signs. The City will replace them when construction is complete.

Without proper notification the Contractor shall be responsible for the cost associated with the replacement of City signs which will be deducted from the monthly pay application.

Payment for this work shall be considered incidental to this contract.

SP-23 GENERAL PARKING REQUIREMENTS

The Contractor shall place temporary "No Parking" signs for the project as necessary. These signs may be obtained from the Public Works Department at 1459 Washington Street. The Contractor shall be responsible for providing standards and placing the signs on each day's work, not less than twenty four (24) hours before work commences, and removing them after work has been completed on that segment of the program or for that day. The cost of erecting and maintaining said signs shall be considered incidental to this contract.

If, after proper no parking notice has been given, parked cars are still interrupting construction operations, the Engineer or his representative may authorize additional measures to be taken. All temporary "No Parking" signs must be placed twenty four (24) hours prior to their effective time in order for police enforcement to occur.

The Contractor shall photograph the placement of the temporary "No Parking" as well as a means of documenting the date and time in the photo.

SP-24 FINAL CLEANUP

Before final acceptance of the work, the Contractor shall remove all unused material and rubbish from the site of the work, clean out intakes, catch basins and manholes of all debris

within the project limits, remedy any objectionable conditions the Contractor may have created on private property, and leave the right-of-way in a clean condition. The Contractor shall not make any agreement, which allows salvaged or unused material to remain on private property without prior approval of Engineer.

All ground occupied by the Contractor in connection with the work shall be restored. Restoration shall include appropriate smoothing to its original condition and may include making the area suitable for cultivation and, where vegetation has been disturbed, sodding of the area. All material removed from the work site due to final cleaning shall become the property of the Contractor, except for clean concrete which can go to the Washington Street storage lot.

Final cleanup shall be subject to approval of the Engineer and in accordance with applicable regulations.

REHABILITATION OF UNDERGROUND PIPES WITH CURED-IN-PLACE-PIPE LINER

PART 1

GENERAL

1.01 SUMMARY

- A. The intent of this work is to provide for the reconstruction of pipelines and conduits by the installation of a resin-impregnated flexible tube via a process commonly referred to as Cured-In-Place-Pipe (CIPP). This tube shall be inverted into the original pipeline/conduit and expanded to fit tightly against said pipeline by the use of water or air pressure. The resin system shall then be cured by elevating the temperature of the water or air used for the inflation to a level sufficient for the initiators in the resin to effect a thermosetting reaction.

1.02 SCOPE OF WORK

- A. Pre-Cleaning and Inspection – The Contractor shall clean the pipes or conduits to be lined thoroughly before commencement of the CIPP process. Root masses, debris, protruding laterals, mineral or other attached deposits, or any other matter not herein defined, shall be removed from the conduit at this time. A complete closed-circuit television (CCTV) inspection of each line segment shall be included in this process to document the condition of the pipe or conduit post cleaning but prior to CIPP lining. A copy of the video inspection shall be provided to the Engineer or Owner upon request.
- B. Cured-In-Place- Pipe Lining – The intent of the CIPP process is to rehabilitate the pipes and other conduits identified by the Engineer or Owner to the extent required by the applicable ASTM standards referenced below. This process shall conform to all requirements for liner thickness, cure time, inversion method(s), testing, quality control, and other methods and process as may be specified herein.
- C. Bypass Pumping – Contractor shall provide such piping, pumping, connections, fittings, and other appurtenances as necessary to bypass flows. There shall be no disruption of flow to the existing lines caused by the installation of this bypass, nor shall any sewer spills or overages be caused as a result of this action. Contractor shall notify residents of project twice prior to commencing with work for each respective section. The first contact shall happen at least one (1) week prior to work commencing and the second must happen 24 – 48 hours prior to beginning work for each respective section. These two notification shall include a request to refrain from using water while the pipe lining process is occurring .
- D. Reinstatement of Laterals and Connections – This work includes the reinstatement of all laterals and other connections that may be temporarily blocked as a result of the CIPP process. The Contractor shall use a mechanical cutter or other means as approved by the Engineer to place these connections back in service as soon as practicable after the curing process is complete.

- E. Post Installation Inspection and Documentation – After the installation and curing of the CIPP liner, and after the reinstatement of laterals or other connections, the Contractor shall perform a CCTV inspection to document the condition of the rehabilitated pipes and laterals (if any). Provide a copy of the video inspection to the Engineer or Owner upon completion.
- F. Traffic Control – The Contractor shall be solely responsible for all signage, flagging, cones, personnel and any other item or personnel required for traffic control. If a road closure is necessary, Contractor shall provide a detour plan specific to the road closure being requested at least 2 weeks prior to commencing work for that particular section.

1.03 REFERENCES

A. American Society for Testing and Materials (ASTM):

1. ASTM D543 Test Method for Resistance of Plastics to Chemical Reagents
2. ASTM D638 Test Method for Tensile Properties of Plastics
3. ASTM D790 Test Method for Tensile Properties of Unreinforced and Reinforced Plastics and Electrical Insulating Materials
4. ASTM F1216 Rehabilitation of Existing Pipelines and Conduits by Inversion and Curing of a Resin-Impregnated Tube

1.04 PRE-QUALIFICATION AND APPROVAL

- A. Pre-Approval of Products - The system proposed (materials, methods, and workmanship) must be proven through previous successful installations to an extent and nature satisfactory to the Owner and the Engineer. Only previous installations that are commensurate with the size of the current project being proposed will be considered for approval purposes. Since CIPP is intended to have a fifty (50) year design life, only products deemed to have this performance will be accepted. All products and installers must be pre-approved prior to the formal opening of bids/proposals.

Criteria for Acceptance - Products and Installers seeking approval must meet all of the following criteria to be deemed commercially acceptable:

1. Minimum Footage Installed - For a Product to be considered Commercially Proven, a minimum of one million (1,000,000) linear feet must have been successfully installed. The Manufacturer (Licensor) shall have completed sufficient testing to document that the materials and the method(s) of installation proposed will produce the desired long-term performance.
2. Financial Means and Related Experience - For an Installer (a/k/a the Contractor) to be considered Commercially Proven, the Installer must satisfy all insurance, financial, and bonding requirements of the Owner, and must have at least three year's active experience in the commercial installation of the product bid. The Installer's key personnel shall have at least two hundred fifty thousand (250,000) linear feet of successful experience, including sufficient quantities of installations in diameter and linear footage similar to in diameters and linear footage proposed for this project. The Installer shall be trained in appropriate CIPP installation and shall have installed a minimum of five hundred thousand (500,000) linear feet of CIPP.

Pre-Approval Deadline – To allow for adequate consideration by the Engineer and Owner, documentation for Products and Installers seeking pre-approved status must be submitted no less than seven (7) working days prior to the bid/proposal due date. The Engineer or Owner will advise of acceptance (or rejection) a minimum of three (3) days prior to the due date. All required submittals must be satisfactory to the Engineer and/or Owner.

Required Pre-Approval Information - The Contractor shall submit the following pre-approval information:

3. Manufacturer's certification that the materials to be used meet the referenced standards and these specifications.
4. License or certificate verifying Manufacturer's/Licenser's approval of the Installer.
5. Reference lists demonstrating compliance with the minimum requirements listed as per above.

1.06 SUBMITTALS

- A. CCTV Technician NASSCO PACP Certification – The Contractor shall provide certification documentation for all technicians on the project who are performing pre-installation and post-installation CCTV inspections. These technicians shall hold National Association of Sewer Service Companies (NASSCO) certification for NASSCO's Pipeline Assessment and Certification Program (PACP).
 - B. Bypass Plan – The Contractor shall provide and otherwise develop a plan for bypass pumping. The pump and bypass lines shall be of adequate capacity and size to handle the anticipated flow. This plan shall be approved by the Engineer or Owner before work begins on the section(s) requiring bypass.
6. A sample of public notices, door hangers, and other materials to be used by the Contractor for public communications purposes shall be provided to the Engineer or Owner prior to distribution.
 7. No liners will be approved for installation until all items have been submitted, reviewed for conformance with the specifications and approved by the Engineer.

1.07 QUALITY ASSURANCE

- A. Corrosion – The Contractor or Installer shall fabricate finished liner from materials which, when cured, will be chemically resistant to internal exposure to domestic sewage.
- B. Appearance – Liner(s) shall be continuous over the entire length of the insertion run and be as free as commercially practicable from visual defects such as foreign inclusions, dry spots, pinholes, wrinkles and delamination.

PART 2

PRODUCTS

2.01 CURED- IN-PLACE-PIPE LINER

- A. Resin – Resin used in the curing process shall have specific characteristics, including:
 - 1. The resin system shall be corrosion-resistant polyester, vinyl ester, or epoxy that when properly cured meets the minimum requirements given herein.
 - 2. Resins may contain pigments, dyes or colorants which will not interfere with visual inspection of the cured liner.
- B. Tube – The tube that is inverted into the host pipe and ultimately cured-in-place shall have specific characteristics, including:
 - 1. The tube shall consist of one or more layers of a flexible needled felt or otherwise be capable of carrying resin and withstanding the installation pressures and curing temperatures. The tube shall be compatible with the resin system to be used on this project. The material shall be able to stretch to fit irregular pipe sections and negotiate bends.
 - 2. The tube shall be fabricated to a size that, when installed, will tightly fit the internal circumference and the length of the original conduit. Allowances shall be made for the longitudinal and circumferential stretching that occurs during placement of the tube.
 - 3. The tube shall be uniform in thickness and, when subjected to the installation pressures, shall meet or exceed the designed finish wall thickness.
 - 4. Any plastic film applied to the tube on what will become the interior wall of the cured liner shall be compatible with the resin system used. The film shall also be of such translucence that the resin is clearly visible and shall be firmly bonded to the felt material.
 - 5. The tube shall be marked for distance at regular intervals along its entire length, not to exceed ten feet (10'). Such markings shall include the lining manufacturer's name.
- C. Fit and Thickness - The finished CIPP liner shall fit tightly to the host pipeline at all observable points and shall meet or exceed the minimum thickness submitted per the design process. The material's properties shall meet or exceed the physical requirements as listed in the most current edition of ASTM F-1216.

PART 3

EXECUTION

3.01 PREPARATION

- A. Locating Manholes and Access Points - It shall be the responsibility of the Owner to locate, designate, and otherwise provide all manhole or access points for the work, and to provide to the Contractor rights of access to these points.
- B. Access to Water - The Owner shall provide free access to and usage of water hydrants for cleaning, installation of the tube, and other work items requiring water.
- C. Debris Removal Prior to CIPP Installation - The Contractor shall remove all internal debris from the pipeline that will interfere with the installation of the CIPP. The Owner shall provide at its expense a dumpsite for debris removed during the cleaning operations. Unless stated otherwise, it is assumed that this site will be at or near the local sewage treatment facility. Any hazardous waste encountered during this project will be considered as a change of conditions.
- D. Bypass Pumping - The Contractor shall provide for the flow of sewage around the section, or sections, of pipe designated for rehabilitation (if applicable). The pump and bypass lines shall be of adequate capacity and size to handle the anticipated flow.
- E. Inspection of Lines Prior to CIPP Installation - Experienced personnel trained in locating breaks, obstacles, and service connections by CCTV shall perform inspection of the pipelines. The interior of the pipeline shall be carefully inspected to determine the location of any conditions that may prevent proper installation of the CIPP.
- F. Video and Logs - A video recording and suitable log shall be kept for later reference by the Owner.
- G. Removal of Obstructions - It shall be the responsibility of the Contractor to clear the line of obstructions such as solids, roots, mineral or attached deposits, protruding taps, etc. that will prevent the insertion of CIPP. These items shall be removed to within one half inch ($\frac{1}{2}$ ") of the pipe wall. Unless otherwise provided as a separate pay item, the removal of these materials shall be considered incidental to the CIPP installation.
- H. Necessary Point Repairs - If pre-installation inspection reveals an obstruction that will prevent the CIPP installation process, and this obstruction cannot be removed by conventional sewer cleaning or cutting equipment, the Contractor shall make a point repair excavation to uncover and remove or repair the obstruction. Such excavation shall be approved in writing by the Owner's representative prior to the commencement of the work and shall be considered as a separate pay item.

3.02 INSTALLATION

- A. Resin Impregnation and Wet Out – Each liner to be installed in the project shall be infused or impregnated with a thermosetting resin. This process shall include the following procedures:
 - 1. The Contractor shall designate the location where the liner will be impregnated with resin prior to installation; this is the so called “wet-out” process. A vacuum

- impregnation process shall be used in conjunction with a roller system to achieve a uniform distribution of the resin throughout the tube. The Installer or Contractor shall allow the Engineer to inspect materials and the "wet out" procedure at its (the Engineer's) discretion.
2. Only resin and catalyst systems which are approved by the liner manufacturer(s) shall be utilized.
 3. The Contractor shall transport resin-impregnated liners to the job site(s) in suitable light-proof containers. Temperatures in said containers shall be maintained below forty degrees Fahrenheit (40°F).
 4. The quantity of resin used for the tube's impregnation shall be sufficient to fill the volume of air voids in the tube. Additional allowances shall be made for polymerization shrinkage and the anticipated loss of any resin through cracks and irregularities in the original pipe wall.
- B. Public Notification – Those persons living or working at businesses in the area contiguous to the pipes being lined shall be notified in writing prior to the installation of CIPP. This process shall include:
1. A public notification program shall be implemented by the Contractor. The Contractor shall be responsible for contacting each home or business connected to the sanitary sewer and informing them of the work to be conducted, and when the sewer will be off-line.
 2. Written notice shall be delivered to each home or business describing the scope of work, work schedule, how the liner installation and necessary work affects them (the homeowner or business owner). This notice shall include the telephone number of the Contractor so that affected persons can call to discuss the project or any problems that could arise.
 3. Personal contact shall be implemented with any home or business that cannot be reconnected within the time stated in the written notice.
- C. Insertion of Liner – The insertion of liner in the various pipe line segments shall conform to the following procedures:
1. The Contractor shall insert the liner through an existing manhole or other access point by means of an inversion process as per ASTM F1216 (latest version). Lubricant may be used to facilitate the liner inversion.
 2. Temperature gauges shall be placed at the upstream and downstream ends of the section to be lined by the Contractor to monitor the pressurized fluid's (air or water) temperature. In addition to monitoring the temperature inside the tube, temperature gauges shall be placed between the host pipe and the liner at as many points as is practical to record the heating that takes place on the outside of the liner.
- D. Curing Liner – The curing of liner shall conform to the following procedures:
1. After inversion is complete, the Contractor shall apply heat source(s) and recirculation equipment to the installed liner per ASTM F1216 (latest version). Equipment shall be used that is capable of uniformly raising the temperature of the liner above the temperature required to effect cure of the resin.
 2. Initial cure shall be complete when inspection of exposed portions of the liner by the Contractor indicates that the liner is hard and sound. Initial cure shall also be deemed complete when remote temperature sensors indicate that the temperature of

the liner is of sufficient grade to realize an exotherm. The Contractor shall cool the hardened liner to a temperature below one hundred degrees (100°F) before relieving pressure in the liner.

3.03 CONNECTIONS

- A. Service Reinstatements – The following procedures shall be adhered to by the Contractor for the reinstatement of service laterals and other connections, including:
 - 1. Determine which service connections shall be reinstated from the pre-television inspection video survey. The Owner shall assist with the designation of which services are “active” and also indicate which services should not be reinstated.
 - 2. Reconnect services (without excavation) by in-tandem usage of the CCTV camera and cutting device. The Contractor shall re-establish services to a minimum of ninety-five percent (95%) of the flow capacity prior to the mainline liner installation.
 - 3. Sanitary services shall not be out of service for more than twenty-four (24) hours during the lining process.
 - 4. The edges of the liner at each service reinstatement shall be buffed smooth by the Contractor with a wire brush. No rough or jagged connections will be allowed. This process shall be deemed incidental to the project and no pay item for said buffing will be included.
- B. Manhole Connections – Where each CIPP liner connects to a manhole, the following procedure shall be required:
 - 1. At the connection to the manhole, the Contractor shall provide a watertight seal between the host pipe and liner pipe. This seal shall be made using materials or procedures acceptable to the Engineer.

3.04 FIELD QUALITY CONTROL

- A. Testing – As part of the continuous quality assurance program, the Contractor shall initiate and follow the following procedures for the entire installation phase of the project:
 - 1. The Contractor shall prepare one sample per liner diameter installed. The samples shall be restrained samples. The restrained samples shall be tested by a third party in accordance with ASTM F-1216 for thickness and initial physical properties. Flat plate samples shall be tested for initial physical properties only.
- B. CCTV Inspection – The Contractor shall comply with the following CCTV inspection procedures, including:
 - 1. The Contractor shall post-CCTV the completed work per the NASSCO PACP. The television inspection should be used to confirm tightness of the fit of the CIPP to the host pipe and to identify any imperfections. The finished liner shall be continuous over its entire length and be free from visual defects such as foreign inclusions, dry spots, pinholes, and delamination.
 - 2. Each connection shall be “panned” with a color camera to confirm the smoothness of the reinstated services.

- C. Post Lining Submittals – The Contractor shall provide the Engineer and/or Owner with the following information sets after completion of CIPP installation, including:
1. Testing results per ASTM 1216 (flexural modulus only).
 2. CCTV video of pre-lining and post-lining condition of the sewer line. This video shall be captured in Motion Pictures Expert Group (MPEG) 1 format. Color computer-generated written reports shall also be provided for each line segment that has a CIPP installed.

3.05 CLEANING AND RESTORATION

- A. General Clean Up - At completion of the CIPP work, the Contractor shall remove rubbish, debris, dirt, equipment and excess material from site. The Contractor shall also clean and restore adjacent surfaces soiled by and during course of the CIPP work.

PART FOUR DELIVERABLES AND PAYMENTS

4.01 MEASUREMENT

- A. Distance Measurement - Measurement of the actual number of feet of CIPP installed shall be made from the center of the manhole wall of the structure where inversion occurs to the center of the manhole where the CIPP terminates.
- B. Other Payment Units - Any ancillary items (if not deemed incidental to the project by the Engineer or Owner) shall be paid at a unit price basis as specified by the contract's payment schedule as per below:
1. Removal of Roots – will be paid on a per foot basis for the footage of the entire line segment (upstream manhole to downstream manhole);
 2. Removal of Mineral or Attached Deposits – will be paid per foot basis for the footage of the entire line segment (upstream manhole to downstream manhole);
 3. Removal of Protruding Taps – will be paid per each;
 4. Reinstatement of Laterals – will be paid on per each.

4.02 ACCEPTANCE

- A. Defective Work – Within sixty (60) days of the final delivery of written and video reports, the Engineer will notify the Contractor of any defective work. Defective work (if any) will be corrected by the Contractor within sixty (60) days of receipt of this written notification.

4.03 DELIVERABLES

- A. Video Files - As part of the final submittal on this project, the Contractor shall submit all video recordings and database information (in approved PACP format), on DVDs or external hard drives (as dictated by the size and quantity of the files submitted). If a hard drive is submitted, the submittal shall include the power cord and USB connection cable. The external hard drive shall become the property of the Owner unless otherwise indicated or specified.
- B. Written Reports – As part of the final submittal on this project, the Contractor shall provide two copies of a bound written report in the approved PACP format. This report

shall include a cover page with the name of the project, scope of the project, and date of submission; an index page with listing of line segment reports; a complete set of line segment reports and a page or pages of holders containing the DVDs of this project's data (if applicable).

4.04 PAYMENTS

- A. Pay Estimates - Pay estimates will be submitted on a regularly scheduled basis to the Engineer by the Contractor.
- B. Approval of Quantities - The Engineer shall review the quantities submitted by the Contractor, and shall immediately inform the Contractor of its certification or disallowing of any quantities submitted for payment. If the quantities of work in question by the Engineer can't be immediately resolved to the satisfaction of both parties, the pay estimate shall move forward without those quantities included. Said denied quantities may be resolved and submitted on the next pay estimate.

END OF SECTION



City of Muscatine

ITEM NUMBER

AGENDA ITEM SUMMARY

DATE: 3/20/2025

STAFF

Brian Stineman, Public Works Director

SUBJECT

Public Hearing for Review of Plans and Specifications for Snow Removal Equipment at the Muscatine Municipal Airport

EXECUTIVE SUMMARY

STAFF RECOMMENDATION

BACKGROUND/DISCUSSION

City staff are working with Bolton & Menk Engineering, our contracted airport consultant, to prepare plans and specifications for the procurement of snow removal equipment for the airport. This project will be funded at 90% by a grant from the Federal Aviation Administration (FAA). The remaining 10% will be funded by bond proceeds.

CITY FINANCIAL IMPACT

ATTACHMENTS

1. Muscatine-SRE-2025 Project Manual
2. MUT-SRE-EOPC

PROJECT MANUAL

Snow Removal Equipment Acquisition

Muscatine Municipal Airport

City of Muscatine

Muscatine, Iowa

3-19-0063-028-2025

OT5.128792



**BOLTON
& MENK**

Real People. Real Solutions.

Bolton-Menk.com

SECTION 00005 – CERTIFICATION

PROJECT MANUAL

for

Snow Removal Equipment Acquisition

Muscatine Municipal Airport

City of Muscatine

Muscatine, Iowa

3-19-0063-028-2025

OT5.128792



I hereby certify that this engineering document was prepared by me or under my direct personal supervision and that I am a duly licensed Professional Engineer under the laws of the State of Iowa.


Joseph P. Roenfeldt

License No. 21134

My renewal date is December 31, 2025

Pages or sheets covered by this seal:

All Pages

Date: March 4, 2025

SECTION 00010 - TABLE OF CONTENTS

Snow Removal Equipment Acquisition
Muscatine Municipal Airport
Muscatine, Iowa

CONTRACT DOCUMENTS:

PROJECT MANUAL:

INTRODUCTORY INFORMATION, BIDDING REQUIREMENTS, CONTRACT FORMS AND CONDITIONS OF CONTRACT

00005 – CERTIFICATION PAGE
00010 – TABLE OF CONTENTS
00100 – NOTICE TO BIDDERS
00105 – NOTICE OF PUBLIC HEARING
00200 – INSTRUCTIONS TO BIDDERS

ITEMS TO BE SUBMITTED WITH THE BID:

00410 – PROPOSAL
00410 – C – PROPOSAL ATTACHMENT: PART C – BID ITEMS AND QUANTITIES
00411 – BIDDER STATUS FORM
00411 – WORKSHEET: AUTHORIZATION TO TRANSACT BUSINESS
00412 – BUY AMERICAN - CERTIFICATION OF COMPLIANCE WITH FAA BUY AMERICAN
PREFERENCE EQUIPMENT/BUILDING PROJECTS
00412 – BUY AMERICAN WAIVER REQUEST
00412 – FAA FORM 5100-136, BUY AMERICAN PROJECT/PRODUCT CONTENT PERCENTAGE
CALCULATION – WORK SHEET
00412 – FAA FORM 5100-137, BUY AMERICAN PREFERENCES – FINAL ASSEMBLY QUESTIONNAIRE
00412 – BUY AMERICAN CONFORMANCE LISTING
00415 – MANUFACTURER CERTIFICATION
00416 – VENDOR CERTIFICATION
00420 – BID BOND

ITEMS TO BE EXECUTED AFTER AWARD OF CONTRACT:

00500 – CONTRACT
00610 – PERFORMANCE BOND
00620 – PAYMENT BOND
00650 – INSURANCE REQUIREMENTS

FAA SUPPLEMENTARY PROVISIONS

FAA SP – FAA SUPPLEMENTARY PROVISIONS

FAA GENERAL CONTRACT PROVISIONS

10 – DEFINITION OF TERMS
20 – PROPOSAL REQUIREMENTS AND CONDITIONS
30 – AWARD AND EXECUTION OF CONTRACT
40 – SCOPE OF WORK
50 – CONTROL OF WORK
60 – CONTROL OF MATERIALS
70 – LEGAL REGULATIONS AND RESPONSIBILITY TO PUBLIC
80 – EXECUTION AND PROGRESS
90 – MEASUREMENT AND PAYMENT

SUPPLEMENTAL SPECIFICATIONS

TS – TECHNICAL SPECIFICATIONS

ARP5539A SAE SPECIFICATIONS FOR ROTARY PLOW WITH CARRIER VEHICLE

ARP5564 SAE SPECIFICATIONS FOR AIRPORT RUNWAY BROOMS

APPENDICES

- FAA AC 150/5220-20A – AIRPORT SNOW AND ICE CONTROL EQUIPMENT

******END OF SECTION******

SECTION 00100 - NOTICE TO BIDDERS

Snow Removal Equipment Acquisition
Muscatine Municipal Airport
Muscatine, Iowa

Time and Place for Filing Sealed Proposals. Sealed bids for the work comprising the repair and improvement as stated below must be filed before 2:00 P.M. local time on April 11, 2025, in the office of the City Clerk, City Hall, 215 Sycamore Street, Muscatine, Iowa 52761.

Time and Place Sealed Proposals Will be Opened and Considered. Sealed proposals will be opened and bids tabulated at 2:00 P.M. local time on April 11, 2025, in the office of the City Clerk, City Hall, 215 Sycamore Street, Muscatine 52761 for consideration by the City of Muscatine at its meeting at 6:00 P.M. local time on April 17, 2025, City Hall, 215 Sycamore Street, Muscatine, Iowa 52761. The City of Muscatine reserves the right to reject any and all bids, to waive informalities or technicalities in any bid, and to enter into such contract, or contracts, as it shall deem to be in the best interest of the City of Muscatine.

Time for Commencement and Completion of Work. Work on the improvement shall commence upon approval of the contract by the City Council and as stated in the Notice to Proceed. All work under the Contract must be substantially complete in One-Hundred Eighty (180) Calendar Days. Liquidated damages as set forth in Section 00500 – Contract.

Bid Security. Each bidder shall accompany its bid with bid security, as defined in Iowa Code Section 26.8, as security that the successful bidder will enter into a contract for the work bid upon. The bidder's security shall be in an amount equal to 5% percent of the total amount of the bid. The bid shall contain no condition except as provided in the specifications.

If the bidder fails to execute the contract and to furnish an acceptable performance and payment bond or provide a Certificate of Insurance within ten (10) days after acceptance of the bid by the City of Muscatine, the bid security may be forfeited or cashed by the City of Muscatine as liquidated damages.

Contract Documents. Copies of the project documents are available for a price of \$25.00 per set. This fee is refundable, provided the plans and specifications are returned complete and in good usable condition, and they are returned within fourteen (14) calendar days after the award of the project. Please contact Bolton & Menk, Inc., at cedarrapids@bolton-menk.com to obtain a hard copy set of project documents. Complete digital project bidding documents are available at www.bolton-menk.com or www.questcdn.com. You may view the digital plan documents for free by entering **Quest project # 9519467** on the website's Project Search page. Documents may be downloaded for \$0.00. Please contact QuestCDN.com at 952-233-1632 or info@questcdn.com for assistance in free membership registration, viewing, downloading, and working with this digital project information.

Preference of Products and Labor. By virtue of statutory authority, further preference will be given to products and provisions grown and coal produced within the State of Iowa, and to Iowa domestic labor, to the extent lawfully required under Iowa statutes. **Failure to submit a fully completed Bidder Status Form with the bid may result in the bid being deemed nonresponsive and rejected.**

Sales Tax Exemption Certificates. The bidder shall not include sales tax in the bid. The City of Muscatine will distribute tax exemption certificates and authorization letters to the Contractor and all subcontractors who are identified. The Contractor and subcontractor may make copies of the tax exemption certificates and provide a copy to each supplier providing construction materials. These tax exemption certificates and authorization letters are applicable only for this specific project under the Contract.

Award of Contract. All proposals submitted in accordance with the instructions presented herein will be subject to evaluation. Bids may be held by the City of Muscatine for a period not to exceed **Ninety (90) days** from the date of the bid opening for the purpose of conducting the bid evaluation.

The Owner will base the award of contract upon the lowest aggregate sum proposal submitted from those bidders the Owner confirms as being responsive and responsible. The right is reserved, as the City of Muscatine may require, to reject any and all bids and to waive any informality in the bids received.

Prospective Bidders are hereby advised that award of contract is contingent upon the owner receiving Federal funding assistance under the Airport Improvement Program.

Federal Provisions

This project is subject to the following Federal provisions, statutes, and regulations:

Equal Employment Opportunity - Executive Order 11246 and 41 CFR Part 60: The Bidder's attention is called to the "Equal Opportunity Clause" and the "Standard Federal Equal Employment Opportunity Construction Contract Specifications" set forth within the supplementary provisions. The successful Bidder shall not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. The Contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, color, religion, sex, or national origin.

Certification of Non-Segregated Facilities – 41 CFR Part 60: A certification of Non-segregated Facilities must be submitted prior to the award of a federally-assisted construction contract exceeding \$10,000 which is not exempt from the provisions of the Equal Opportunity Clause.

Contractors receiving federally assisted construction contract awards exceeding \$10,000, which are not exempt from the provisions of the Equal Opportunity Clause will be required to provide for the forwarding of the notice to prospective subcontractors for supplies and construction contracts where the subcontracts exceed \$10,000 and are not exempt from the provisions of the Equal Opportunity Clause. The penalty for making false statements in offers is prescribed in 18 U.S.C. 1001.

Debarment, Suspension, Ineligibility and Voluntary Exclusion – 49 CFR Part 29: The bidder certifies, by submission of a proposal or acceptance of a contract, that neither it nor its principals are presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency. Individuals or companies listed in the General Services Administration's "Excluded Parties Listing System" will not be considered for award of contract.

Foreign Trade Restriction – 49 CFR Part 30

The Bidder and Bidder's subcontractors, by submission of an offer and/or execution of a contract, is required to certify that it:

- a. Is not owned or controlled by one or more citizens of a foreign country included in the list of countries that discriminate against U.S. firms published by the Office of the United States Trade Representative (USTR).
- b. Has not knowingly entered into any contract or subcontract for this project with a person that is a citizen or national of a foreign country on said list or is owned or controlled directly or indirectly by one or more citizens or nationals of a foreign country on said list.
- c. Has not procured any product nor subcontracted for the supply of any product for use on the project that is produced in a foreign country on said list.

Buy American Certificate – Aviation Safety and Capacity Act of 1990:

This contract is subject to the “Buy American Preferences” of the Aviation Safety and Capacity Act of 1990. Per Title 49 U.S.C. Section 50101, all steel and manufactured products installed under an AIP assisted project must be produce in the United States unless the Federal Aviation Administration has granted a formal waiver.

As a condition of bid responsiveness, Bidders must complete and submit as part of their proposal the enclosed Buy American certification. The bidder must indicate whether it intends to meet Buy American preferences by only installing steel and manufactured products produced with the United State of America; or if it intends to seek a permissible waiver to the Buy American requirements.

PROJECT DESCRIPTION: Snow Removal Equipment Including Carrier Vehicle, Snow Blower and Broom

This Notice is given by authority of the City of Muscatine, Iowa

Cinda Hilger, City Clerk

SECTION 00105 - NOTICE OF PUBLIC HEARING

Snow Removal Equipment Acquisition
Muscatine Municipal Airport
Muscatine, Iowa

Public Hearing on Proposed Contract Documents and Estimated Costs for Repair or Improvement. A public hearing will be held by the City of Muscatine on the proposed contract documents (plans, specifications and form of contract) and estimated cost for the improvement at its meeting at 6:00 P.M. local time on March 20, 2025, at City Hall, 215 Sycamore Street, Muscatine, Iowa 52761.

PROJECT DESCRIPTION: Snow Removal Equipment Including Carrier Vehicle, Snow Blower and Broom

At said hearing, the City Council will consider the plans, specifications, proposed form of contract, and estimated total cost for the project, the same now being on file in the office of the City Administrator, 215 Sycamore Street, Muscatine, Iowa 52761, reference to which is made for a more detailed and complete description of the proposed improvements, and at said time and place the said City Council will also receive and consider any objections to said plans, specifications, estimate of cost, and form of contract made by any interested party.

SECTION 00200 - INSTRUCTIONS TO BIDDERS

Snow Removal Equipment Acquisition
Muscatine Municipal Airport
Muscatine, Iowa

The work comprising the above-mentioned project shall be constructed in accordance with the FAA Standard Specifications, and as further modified by the supplemental specifications and special provisions included in the contract documents. The terms used in the contract version of the documents are defined in said Standard Specifications. Before submitting a bid, please review the requirements in these specifications. Please be certain that all documents have been completed properly as failure to complete and sign all documents and to comply with the requirements listed below can cause a submitted bid not to be read.

ARTICLE 1 - BID SECURITY

- 1.01 The bid security must be in the minimum amount of 5% of the total bid amount including all add alternates (do not deduct the amount of deduct alternates). Bid security shall be in the form of a cashier's check, or a certified check drawn on a FDIC insured bank in Iowa; or a certified check drawn on a FDIC insured bank chartered under the laws of the United States; or a certified share draft drawn **ON A CREDIT UNION IN IOWA OR CHARTERED UNDER THE LAWS OF THE UNITED STATES; OR A BID BOND EXECUTED BY** a corporation authorized to contract as a surety in Iowa or satisfactory to the City of Muscatine, hereinafter called the "Jurisdiction".
- 1.02 The bid bond must be submitted on the **enclosed Bid Bond form as no other bid bond forms are acceptable. All signatures on the bid bond must be original signatures in ink;** electronic, copies, or facsimile (fax) of any signature on the bid bond is not acceptable.
- 1.03 Bid security other than said bid bond shall be in accordance with Chapter 26 of the Iowa Code.

ARTICLE 2 - SUBMISSION OF THE PROPOSAL AND IDENTITY OF BIDDER

- 2.01 The proposal shall be sealed in an envelope, properly identified as the Proposal with the project title and the name and address of the bidder. The bid security shall be sealed in a separate envelope identified as the "Bid Security" and attached to the outside of the bid proposal envelope. The Proposal and Bid security shall be deposited with the Jurisdiction at or before the time and at the place provided in the Notice to Bidders. It is the sole responsibility of the bidder to see that its proposal is delivered to the Jurisdiction prior to the time for opening bids along with the appropriate bid security. Any proposal received after the scheduled time for the receiving of proposals will be returned to the bidder unopened and will not be considered.
- 2.02 The following documents shall be completed, signed, and returned in the Proposal envelope. The bid cannot be read if any of these documents are omitted from the Proposal envelope.
 - A. PROPOSAL – Complete each of the following parts:
 - PART B – ACKNOWLEDGMENT OF ADDENDA, IF ANY HAVE BEEN ISSUED
 - PART C – BID ITEMS, QUANTITIES AND PRICES
 - PART F – ADDITIONAL REQUIREMENTS
 - PART G – IDENTITY OF BIDDER

- B. The following documents which are part of the proposal documents must be completed and attached:
1. Bidder Status Form
 2. Worksheet: Authorization To Transact Business
 3. Buy American - Certification of Compliance with FAA Buy American Preference Equipment/Building Project
 4. Buy American Waiver Request
 5. FAA Form 5100-136, Buy American Project/Product Content Percentage Calculation – Work Sheet
 6. FAA Form 5100-137, Buy American Preferences – Final Assembly Questionnaire
 7. Buy American Conformance Listing
 8. Sign the proposal. The signature on the proposal and all proposal attachments must be an original signature in ink signed by the same individual who is the Company Owner or an authorized Officer of the Company; copies or facsimile of any signature will not be accepted.
 9. Documents must be submitted as printed. No alterations, additions, or deletions are permitted. If the Bidder notes a requirement in the contract documents which the Bidder believes will require a conditioned or unsolicited alternate bid, the Bidder must immediately notify the Engineer in writing. The Engineer will issue any necessary interpretation by an addendum.

ARTICLE 3 - PROSECUTION AND PROGRESS OF THE WORK

- 3.01 The work is located at the Muscatine Municipal Airport.

Work on the improvement shall commence upon approval of the contract by the City of Muscatine and as stated in the Notice to Proceed. All work under the Contract must be substantially complete as stated in Section 00500-Contract. Liquidated Damages will be assessed as detailed in the stated in Section 00500 - Contract.

- 3.02 Community Events.

A successful bidder will be required to coordinate with the owner and accommodate the owner's requirements for the following list of events:

None

- 3.03 Each successful bidder will be required to furnish a corporate surety bond in an amount equal to 100% of its contract price. Said bond shall be issued by a responsible surety approved by City of Muscatine and shall guarantee the faithful performance of the contract, the terms and conditions therein contained, the prompt payment of all material and labor, protect and save harmless City of Muscatine from claims and damages of any kind caused by the operations of the contract, and shall also guarantee the maintenance of the improvement caused by failures in materials and construction for a period of one (1) year from and after acceptance of the work.
- 3.04 The City of Muscatine, in accordance with Title VI of the Civil Rights Act of 1964, 78 Stat. 252, 42U.S.C. 2000d to 2000d-4 and title 49 Code of Federal Regulations, Department of Transportation, Subtitle A, Office of the Secretary, Part 21, Nondiscrimination in Federally-assisted programs of the Department of Transportation issued pursuant to such Act, hereby notifies all bidders that it will affirmatively ensure that with any contract entered into pursuant to this advertisement, minority business enterprises will be afforded full opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, or national origin in consideration for an award.

ARTICLE 4 - PREFERENCE OF PRODUCTS AND LABOR

- 4.01 In accordance with Iowa statutes, a resident bidder shall be allowed preference against a nonresident bidder from a state or foreign country provided that state or foreign country gives or requires any preference to bidders from that state or foreign country. This includes, but is not limited to, any preference to bidders, the imposition of any type of labor force preference, or any other form of preferential treatment to bidders or laborers from that state or foreign country. The preference allowed shall be equal to the preference given or required by the state of foreign country in which the nonresident bidder is a resident. In the instance of a resident labor force preference, a nonresident bidder shall apply the same resident labor force preference to a public improvement in this state as would be required in the construction of a public improvement by the state or foreign country in which the nonresident bidder is a resident.
- 4.02 Buy American Preference
- A. As a matter of bid responsiveness, Bidder must indicate within their proposal how they intend to comply with the Buy American preferences established by Title 49 USC 50101. The bidder may choose to certify it will comply with Buy American preferences by only installing steel and manufactured products that are 100% made in the United States; or the bidder may choose to certify that they cannot fully comply with Buy American preferences and thus requests a waiver to Buy American preferences.
- B. A bidder that certifies they will meet Buy American preferences by requesting a waiver also agrees to prepare and submit a formal waiver request and the associated component cost calculation if selected by the owner as the bidder with the apparent low bid. The successful bidder must submit their formal waiver request and component cost calculation to the owner within the timeframe prescribed on the Buy American certification.

ARTICLE 5 - TAXES

- 5.01 The City of Muscatine will issue a sales tax exemption certificate and authorization letters to the Contractor and all subcontractors for all materials purchased on the project. Tax exemption certificates are applicable only for the specific project for which the tax exemption certificate is issued.
- 5.02 The Contractor shall provide a listing to the City of Muscatine identifying all appropriate subcontractors qualified for use of the tax exemption certificate. The Contractor and subcontractors may make copies of the certificate and provide to each supplier providing construction materials.
- 5.03 Income Tax:
- A. The Successful Bidder is subject to payment of Iowa income tax on income from this work in amounts prescribed by law.
- B. If successful bidder is a non-Iowa partnership, individual or association, Bidder shall furnish evidence prior to execution of contract that bond or securities have been posted with the Iowa Department of Revenue in the amount required by law.

*******END OF SECTION*******

ITEMS TO BE SUBMITTED WITH THE BID

Snow Removal Equipment Acquisition

Muscatine Municipal Airport

City of Muscatine

Muscatine, Iowa

3-19-0063-028-2025

OT5.128792

SECTION 00410 - PROPOSAL

Snow Removal Equipment Acquisition
Muscatine Municipal Airport
Muscatine, Iowa

PROPOSAL: PART A – SCOPE

The City of Muscatine, hereinafter called the "Jurisdiction," has need of a qualified contractor to complete the work comprising the below referenced repair or improvement. The undersigned Bidder hereby proposes to complete the work comprising the below referenced repair or improvement as specified in the contract documents, which are officially on file with the Jurisdiction, in the office of the City Administrator, 215 Sycamore Street, Muscatine, Iowa 52761, at the prices hereinafter provided in Part C of the Proposal, for the following described improvements:

PROJECT DESCRIPTION: Snow Removal Equipment Including Carrier Vehicle, Snow Blower and Broom

PROPOSAL: PART B – ACKNOWLEDGMENT OF ADDENDA

The Bidder hereby acknowledges that all addenda become a part of the contract documents when issued and that each such addendum has been received and utilized in the preparation of this bid. The Bidder hereby acknowledges receipt of the following addenda by inserting the number of each addendum in the blanks below:

ADDENDUM NUMBER _____	ADDENDUM NUMBER _____
ADDENDUM NUMBER _____	ADDENDUM NUMBER _____

and certifies that said addenda were utilized in the preparation of this bid.

PROPOSAL: PART C – BID ITEMS AND QUANTITIES

UNIT BID PRICE CONTRACTS: The Bidder must provide the Unit Bid Price, the Total Bid Price, any Alternate Prices, and the Total Construction Costs on the Proposal Attachment: Part C – Bid Items and Quantities. In case of discrepancy, the **Unit Bid Price governs**. The quantities shown on the Proposal Attachment: Part C – Bid Items and Quantities are approximate only but are considered sufficiently adequate for the purpose of comparing bids. **The Total Base Bid plus all bid alternates shall be used for comparison of bids.** The jurisdiction shall only use the Total Construction Cost for determining the sufficiency of the bid security.

SEE INCLUDED PROPOSAL ATTACHMENT

PROPOSAL: PART D – GENERAL

The Bidder hereby acknowledges that the Jurisdiction, in advertising for public bids for this project reserves the right to:

1. Reject any or all bids. Award of the contract, if any, to be to the lowest responsible, responsive bidder; and
2. Reject any or all alternates in determining the items to be included in the contract. Designation of the lowest responsible, responsive bidder to be based on comparison of the total bid only, not including any alternates; and

3. Make such alterations to the contract documents or in the proposal quantities as it determines necessary in accordance with the contract documents after execution of the contract. Such alterations shall not be considered a waiver of any conditions of the contract documents, and shall not invalidate any of the provisions thereof; and

The Bidder hereby agrees to:

1. Enter into a contract, if this proposal is selected, in the form approved by the Jurisdiction, provide proof of registration with the Iowa Division of Labor in accordance with Chapter 91C of the Iowa Code, and furnish a performance, and payment bond; and
2. Forfeit bid security, not as a penalty but as liquidated damages, upon failure to enter into such contract and/or to furnish said bond; and
3. Commence the work upon written Notice to Proceed; and
4. Substantially complete the work on or before as detailed in Section 00500 – Contract; and
5. Pay liquidated damages for noncompliance with said completion provisions at the rate detailed in Section 00500 – Contract.

PROPOSAL: PART E – NON-COLLUSION AFFIDAVIT

The Bidder hereby certifies:

1. That this proposal is not affected by, contingent on, or dependent on any other proposal submitted for any improvement with the Jurisdiction; and
2. That no individual employed by the Bidder has employed any person to solicit or procure the work on this project, nor will any employee of the Bidder make any payment or agreement for payment of any compensation in connection with the procurement of this project; and
3. That no part of the bid price received by the Bidder was or will be paid to any person, corporation, firm, association, or other organization for soliciting the bid, other than the payment of their normal compensation to persons regularly employed by the Bidder whose services in connection with the construction of the project were in the regular course of their duties for the Bidder; and
4. That this proposal is genuine and not collusive or sham; that the Bidder has not colluded, conspired, connived, or agreed, directly or indirectly, with any bidder or person, to submit a sham bid or to refrain from bidding; and
5. That the bid has not in any manner, directly or indirectly, sought, by agreement or collusion, or communication or conference, with any person, to fix the bid price of the Bidder or of any other bidder; and
6. That all statements in this proposal are true; and
7. That the individual(s) executing this proposal have the authority to execute this proposal on behalf of the Bidder.

PROPOSAL: PART F – ADDITIONAL REQUIREMENTS

The Bidder hereby agrees to comply with the additional requirements listed below which are included in this proposal and identified as proposal attachments:

The following documents are attached to and made a part of this Bid:

1. Bid Guaranty in the form of a completed Bid Bond in the amount of 5% (five percent) of the amount bid.
2. Completed "Bidder Status Form," signed and dated. The Worksheet: Authorization to Transact Business is not required to be submitted with the Bid. It is intended to be used to assist the bidder in completing the Bidder Status Form.
3. Completed "Buy American Certification of Compliance with FAA Buy American Preference Equipment/Building Projects," signed and dated. **If you check the first box certifying compliance with Buy American requirements, then additional forms listed below as item 4, item 5, and item 6 are not required.**
4. Completed "Buy American Waiver Request," signed and dated, if the second box is checked on the "Buy American Certification." Otherwise, attach form and indicate "N.A." on the form. Signed copies must be provided within five (5) calendar days of the bid opening to be considered for award.
5. Completed "FAA Form 5100-136, Buy American Project/Product Content Percentage Calculation – Work Sheet," signed and dated if "Buy American Waiver Request" is completed. Otherwise, attach form and indicate "N.A." on the form. Signed copies must be provided within five (5) calendar days of the bid opening to be considered for award. Shall be filled out for each piece of equipment provided.
6. Completed "FAA Form 5100-137, Buy American Preferences – Final Assembly Questionnaire," signed and dated if "Buy American Waiver Request" is completed. Otherwise, attach form and indicate "N.A." on the form. Signed copies must be provided within five (5) calendar days of the bid opening to be considered for award. Shall be filled out for each piece of equipment provided.
7. Completed "Buy American Conformance Listing," signed and dated if signed and dated if "Buy American Waiver Request" is completed. Otherwise, attach form and indicate "N.A." on the form. Signed copies must be provided within five (5) calendar days of the bid opening to be considered for award.
8. Completed "Manufacturer Certification Statement," signed and dated for each bid item.
9. Completed "Vendor Certification Statement," signed and dated for each bid item.
10. Evidence of BIDDER'S qualifications per the requirements of the Instructions-to-Bidders.

PROPOSAL: PART G - IDENTITY OF BIDDER

The Bidder shall indicate whether the bid is submitted by a/an:

☐ Individual,
Sole Proprietorship

Bidder

☐ Partnership

Signature

☐ Corporation

By

Name (Print/Type)

☐ Limited Liability Company

Title

☐ Joint-venture; all parties must join-in and
execute all documents

Street Address

☐ Other

City, State, Zip Code

The bidder shall enter its Public
Registration Number _____ - _____
issued by the Iowa Commissioner of Labor
Pursuant Section 91C.5 of the Iowa Code.

Telephone Number

**Type or print the name and title of the company's
owner, president, CEO, etc. if a different person
than entered above**

Failure to provide said Registration
Number shall result in the bid being read
under advisement. A contract will not be
executed until the Contractor is registered.

Name

Title

E-Mail

**NOTE: The signature on this proposal must be an original signature in ink; copies, facsimiles, or
electronic signatures will not be accepted.**

SECTION 00410 – C - PROPOSAL

Snow Removal Equipment Acquisition
Muscatine Municipal Airport
Muscatine, Iowa

PROPOSAL ATTACHMENT: PART C – BID ITEMS AND QUANTITIES

This is a UNIT BID PRICE CONTRACT. The bidder must provide the Unit Bid Price, the Total Bid Price, and the Total Bid Amount; in case of discrepancy, the Unit Bid Price governs. The Quantities shown on the Proposal Attachment: Part C – Bid Items and quantities are approximate only but are considered sufficiently adequate for the purpose of comparing bids. **The Jurisdiction shall use the Total Base Bid plus all bid alternate amounts for comparison of bids.**

SEE SCHEDULE OF PRICES ON NEXT PAGE

BASE BID

ITEM	DESCRIPTION	UNIT	APPROX. QUANTITY	UNIT PRICE	AMOUNT
1	Carrier Vehicle	1	LS	\$	\$
TOTAL – BASE BID				\$	

TOTAL – BASE BID (Written Format):

BID ALTERNATE A

ITEM	DESCRIPTION	UNIT	APPROX. QUANTITY	UNIT PRICE	AMOUNT
A1	Snow Broom	1	LS	\$	\$
TOTAL – BID ALTERNATE A				\$	

TOTAL – BID ALTERNATE A (Written Format):

BID ALTERNATE B

ITEM	DESCRIPTION	UNIT	APPROX. QUANTITY	UNIT PRICE	AMOUNT
B1	Snow Blower	1	LS	\$	\$
TOTAL – BID ALTERNATE B				\$	

TOTAL – BID ALTERNATE B (Written Format):

Note: It is understood that the above quantities are estimated for the purpose of this bid. All quantities are subject to revision by the owner as noted in section 00500 – CONTRACT.

Bidder Name

Section 00411 - Bidder Status Form

To be completed by all bidders

Part A

Please answer "Yes" or "No" for each of the following:

- ☐ Yes ☐ No My company is authorized to transact business in Iowa.
(To help you determine if your company is authorized, please review the worksheet on the next page).
- ☐ Yes ☐ No My company has an office to transact business in Iowa.
- ☐ Yes ☐ No My company's office in Iowa is suitable for more than receiving mail, telephone calls, and e-mail.
- ☐ Yes ☐ No My company has been conducting business in Iowa for at least 3 years prior to the first request for bids on this project.
- ☐ Yes ☐ No My company is not a subsidiary of another business entity, or my company is a subsidiary of another business entity that would qualify as a resident bidder in Iowa.
- If you answered "Yes" to each question above, your company qualifies as a resident bidder. Please complete Parts B and D of this form.
- If you answered "No" to one or more questions above, your company is a non-resident bidder. Please complete Parts C and D of this form.

To be completed by resident bidders

Part B

My company has maintained offices in Iowa during the past 3 years at the following addresses:

Dates: _____ to _____ Address: _____
(mm/dd/yyyy) City, State, Zip: _____

Dates: _____ to _____ Address: _____
(mm/dd/yyyy) City, State, Zip: _____

Dates: _____ to _____ Address: _____
(mm/dd/yyyy) City, State, Zip: _____

You may attach additional sheet(s) if needed.

To be completed by non-resident bidders

Part C

1. Name of home state or foreign country reported to the Iowa Secretary of State: _____
2. Does your company's home state or foreign country offer preferences to bidders who are residents? ☐ Yes ☐ No
3. If you answered "Yes" to question 2, identify each preference offered by your company's home state or foreign country and the appropriate legal citation.

You may attach additional sheet(s) if needed.

To be completed by all bidders

Part D

I certify that the statements made on this document are true and complete to the best of my knowledge and I know that my failure to provide accurate and truthful information may be reason to reject my bid.

Firm Name: _____

Signature: _____ Date: _____

SECTION 00411 - WORKSHEET: AUTHORIZATION TO TRANSACT BUSINESS

This worksheet may be used to help complete Part A of the Resident Bidder Status form. If at least one of the following describes your business, you are authorized to transact business in Iowa.

- ☐ Yes ☐ No My business is currently registered as a contractor with the Iowa Division of Labor.
- ☐ Yes ☐ No My business is a sole proprietorship, and I am an Iowa resident for Iowa income tax purposes.
- ☐ Yes ☐ No My business is a general partnership or joint venture. More than 50 percent of the general partners or joint venture parties are residents of Iowa for Iowa income tax purposes.
- ☐ Yes ☐ No My business is an active corporation with the Iowa Secretary of State and has paid all fees required by the Secretary of State, has filed its most recent biennial report, and has not filed articles of dissolution.
- ☐ Yes ☐ No My business is a corporation whose articles of incorporation are filed in a state other than Iowa, the corporation has received a certificate of authority from the Iowa Secretary of State, has filed its most recent biennial report with the Secretary of State, and has neither received a certificate of withdrawal from the Secretary of State nor had its authority revoked.
- ☐ Yes ☐ No My business is a limited liability partnership which has filed a statement of qualification in this state and the statement has not been canceled.
- ☐ Yes ☐ No My business is a limited liability partnership which has filed a statement of qualification in a state other than Iowa, has filed a statement of foreign qualification in Iowa and a statement of cancellation has not been filed.
- ☐ Yes ☐ No My business is a limited partnership or limited liability limited partnership which has filed a certificate of limited partnership in this state and has not filed a statement of termination.
- ☐ Yes ☐ No My business is a limited partnership or a limited liability limited partnership whose certificate of limited partnership is filed in a state other than Iowa, the limited partnership or limited liability limited partnership has received notification from the Iowa Secretary of State that the application for certificate of authority has been approved and no notice of cancellation has been filed by the limited partnership or the limited liability limited partnership.
- ☐ Yes ☐ No My business is a limited liability company whose certificate of organization is filed in Iowa and has not filed a statement of termination.
- ☐ Yes ☐ No My business is a limited liability company whose certificate of organization is filed in a state other than Iowa, has received a certificate of authority to transact business in Iowa and the certificate has not been revoked or canceled.

SECTION 00412 - BUY AMERICAN - CERTIFICATION OF COMPLIANCE WITH FAA BUY AMERICAN PREFERENCE EQUIPMENT/BUILDING PROJECTS

As a matter of bid responsiveness, the bidder or offeror must complete, sign, date, and submit this certification statement with their proposal. The bidder or offeror must indicate how they intend to comply with 49 USC § 50101, and other Made in America Laws, U.S. statutes, guidance, and FAA policies by selecting one on the following certification statements. These statements are mutually exclusive. Bidder must select one or the other (not both) by inserting a checkmark (✓) or the letter "X".

- ☐ Bidder or offeror hereby certifies that it will comply with 49 USC § 50101, BABA and other related U.S. statutes, guidance, and policies of the FAA by:
- a) Only installing steel and manufactured products produced in the United States;
 - b) Only installing construction materials defined as: an article, material, or supply – other than an item of primarily iron or steel; a manufactured product; cement and cementitious materials; aggregates such as stone, sand, or gravel; or aggregate binding agents or additives that are or consist primarily of non-ferrous metals; plastic and polymer-based products (including polyvinylchloride, composite building materials, and polymers used in fiber optic cables); glass (including optic glass); lumber or drywall that have been manufactured in the United States.
 - c) Installing manufactured products for which the Federal Aviation Administration (FAA) has issued a waiver as indicated by inclusion on the current FAA Nationwide Buy American Waivers Issued listing; or
 - d) Installing products listed as an Excepted Article, Material or Supply in Federal Acquisition Regulation Subpart 25.108.

By selecting this certification statement, the bidder or offeror agrees:

- a) To provide to the Airport Sponsor or FAA evidence that documents the source and origin of the steel and manufactured product.
 - b) To faithfully comply with providing U.S. domestic product.
 - c) To furnish U.S. domestic product for any waiver request that the FAA rejects.
 - d) To refrain from seeking a waiver request after establishment of the contract, unless extenuating circumstances emerge that the FAA determines justified.
- ☐ The bidder or offeror hereby certifies it cannot comply with the 100 percent Buy American Preferences of 49 USC § 50101(a) but may qualify for a Type 3 waiver under 49 USC § 50101(b). By selecting this certification statement, the apparent bidder or offeror with the apparent low bid agrees:
- a) To submit to the Airport Sponsor or FAA within 15 calendar days of being selected as the responsive bidder, a formal waiver request and required documentation that supports the type of waiver being requested.
 - b) That failure to submit the required documentation within the specified timeframe is cause for a non-responsive determination that may result in rejection of the proposal.
 - c) To faithfully comply with providing U.S. domestic products at or above the approved U.S. domestic content percentage as approved by the FAA.
 - d) To refrain from seeking a waiver request after establishment of the contract, unless extenuating circumstances emerge that the FAA determines justified.

January 20, 2023

Required Documentation

Type 2 Waiver (Nonavailability) - The iron, steel, manufactured goods or construction materials are not available in sufficient quantity or quality in the United States. The required documentation for the Nonavailability waiver is:

- a) Completed Content Percentage Worksheet and Final Assembly Questionnaire
- b) Record of thorough market research, consideration where appropriate of qualifying alternate items, products, or materials including;
- c) A description of the market research activities and methods used to identify domestically manufactured items capable of satisfying the requirement, including the timing of the research and conclusions reached on the availability of sources.

Type 3 Waiver – The cost of the item components and subcomponents produced in the United States is more than 60 percent of the cost of all components and subcomponents of the “item”. The required documentation for a Type 3 waiver is:

- a) Completed Content Percentage Worksheet and Final Assembly Questionnaire including;
- b) Listing of all product components and subcomponents that are not comprised of 100 percent U.S. domestic content (Excludes products listed on the FAA Nationwide Buy American Waivers Issued listing and products excluded by Federal Acquisition Regulation Subpart 25.108 (products of unknown origin must be considered as non- domestic products in their entirety).
- c) Cost of non-domestic components and subcomponents, excluding labor costs associated with final assembly at place of manufacture.
- d) Percentage of non-domestic component and subcomponent cost as compared to total “item” component and subcomponent costs, excluding labor costs associated with final assembly at place of manufacture.

Type 4 Waiver (Unreasonable Costs) - Applying this provision for iron, steel, manufactured goods or construction materials, would increase the cost of the overall project by more than 25 percent. The required documentation for this waiver is:

- a) Completed Content Percentage Worksheet and Final Assembly Questionnaire from
- b) At minimum two comparable equal bidders and/or offerors;
- c) Receipt or record that demonstrates that supplier scouting called for in Executive Order 14005, indicates that no domestic source exists for the project and/or component;
- d) Completed waiver applications for each comparable bid and/or offer.

False Statements: Per 49 USC § 47126, this certification concerns a matter within the jurisdiction of the Federal Aviation Administration and the making of a false, fictitious, or fraudulent certification may render the maker subject to prosecution under Title 18, United States Code.

Date

Signature

Company Name

Title

January 20, 2023

SECTION 00412 - BUY AMERICAN WAIVER REQUEST

Title 49 U.S.C Section 50101 (b)

FOR AIRFIELD DEVELOPMENT PROJECTS FUNDED UNDER THE AIRPORT IMPROVEMENT PROGRAM

Type of Waiver Request:

The bidder may request a waiver subject to the provisions of Section 50101(b)(3) or Section 50101(b)(4). The bidder may not request a waiver under Section 50101(b)(1) or Section 50101(b)(2). Bidder is hereby advised that the Owner's approval with the bidder's waiver request is contingent upon FAA approval. The bidder must select one of the following applicable waiver provisions:

☐ **Section 50101(b)(3):** Bidder hereby requests a waiver to Buy American preferences based upon Section 50101(b)(3) for the equipment identified below. The bidder certifies that _____ % of the cost of components and subcomponents comprising the equipment are produced in the United States and that final assembly occurs within the United States. *(Bidder must attach a copy of the component cost calculation table)*

Equipment: _____

☐ **Section 50101(b)(4):** Bidder hereby requests a waiver to Buy American preferences based upon Section 50101(b)(4). The bidder asserts provision of domestic material increases the cost of the overall project by more than 25%. *(Note: This type of waiver is very rare)*

Signed copies must be provided within five (5) calendar days of the bid opening to be considered for award.

Certification Signature:

In accordance with Section 50101(b), we request a waiver to the Buy American provisions based on the above certification and attached documentation.

Bidder's Firm Name

Date

Signature

1.1 Instructions for Section 50101(b)(3) Waiver:

1. "Equipment" in Section 50101 shall mean the following:
 - a) Individual type "L" items (Airfield Lighting Equipment) as listed in FAA Advisory Circular 150/5345-53.
 - b) Individual bid items as established within FAA Advisory Circular 150/5370-10. The bid item application may not be applied for the type "L" items listed in AC 150/5345-53.
 - c) A waiver request may only address one specific equipment item. Submit separate requests for each equipment item for which a waiver.
 - d) Items listed under the Nationwide Waiver do not require further review. Please refer to the following webpage: http://www.faa.gov/airports/aip/procurement/federal_contract_provisions/media/buy_american_waiver.xls
2. The bidder must base the U.S. percentage upon the value that results from completing a component cost calculation table similar to the attached format. The bidder shall avoid mere pro forma efforts to establish the waiver request percentage. The Bidder must submit the component cost calculation table as an attachment to the waiver request.
3. Components/subcomponents are the material and products composing the "equipment."
4. The final assembly of the AIP-funded "equipment" must be within the USA (*Section 50101(b)(3)(B)*). Final assembly is the substantial transformation of the components and subcomponents into the end product.
5. All steel used in the "Equipment" must be produced in the United States.
6. The Buy American requirements apply to all tier contractors and subcontractors. All contractors/subcontractors are required to provide appropriate documentation that indicates origin of manufacturer and percentage of domestic made product.
7. The bidder is hereby advised there is no implied or expressed guarantee that a requested waiver will be issued by the Federal Aviation Administration (FAA). Less than 60% of the USA component/subcomponent proposed for this facility CANNOT be waived. Products made with foreign steel are not eligible for a waiver.

1.2 Instructions for Section 50101(b)(4) Waiver:

1. The 25% cost increase waiver is rarely applicable. Consult Owner before making this request.

1.3 North America Free Trade Act (NAFTA)

NAFTA **does not** apply to the AIP. Products and material made in Canada or Mexico must be considered as foreign made products.



U.S. Department
of Transportation
**Federal
Aviation
Administration**

FAA Form 5100-136, Buy American Project/Product Content Percentage Calculation – Worksheet

Paperwork Reduction Act Burden Statement

A federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to a penalty for failure to comply with a collection of information subject to the requirements of the Paperwork Reduction Act unless that collection of information displays a currently valid OMB Control Number. The OMB Control Number for this information collection is 2120-0569. Public reporting for this collection of information is estimated to be approximately 8 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, completing and reviewing the collection of information. All responses to this collection of information are required under 49 U.S.C. Section 47105 to retain a benefit and to meet the reporting requirements of 2 CFR 200. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to: Information Collection Clearance Officer, Federal Aviation Administration, 10101 Hillwood Parkway, Fort Worth, TX 76177-1524.

Instructions for FAA Form 5100-136, Buy American Preference - Content Percentage Worksheet

General Instructions/Information

This form is intended for use by applicants (manufacturers, contractors, suppliers) for an FAA Buy American Preference waiver of the requirements of section 70914 of the Build America, Buy America (BABA) Act included in the Infrastructure Investment and Jobs Act (IIJA) (Pub. L. No. 117-58). This form and the Final Assembly Questionnaire (FAA form 137) must be submitted together for all waiver requests. Complete the below sections.

Applicant Information Section

Enter applicant and point-of-contact information.

Project/Product Information Section (The Final Project)

Enter summary information about the specific FAA eligible project for which this waiver is requested, including the calculated costs and percentage information from the project material structure worksheet.

FAA Buy American Preference Compliance Section (“Construction Materials”)

Enter summary cost and percentage information about the presence of non-domestic portions of iron, steel, or other singular “construction materials” that consist primarily of non-ferrous metals; plastic and polymer-based products (including polyvinylchloride, composite building materials, and polymers used in fiber optic cables); glass (including optic glass); lumber; or drywall which are not combined with any of other materials through a manufacturing process.

Use of Non-Domestic Construction Materials Justification Section

Enter a description of your good faith efforts made to locate and secure domestic materials that are not 100% domestically produced in the United States, including the use of the Supplier Scouting by the Manufacturing Extension Partnership (MEP) or market research. This information is required for any non-U.S. portions of structural steel and or iron.

Project Material Structure Worksheet (Manufactured Goods)

Enter onto the worksheet the final project and manufactured component/subcomponent items, prices and total costs, excluding labor and retail markup through level 2 only. Eligible materials below level two should be included with its associated component or subcomponent. Price multiplied by quantity equals costs.

For additional information on how to complete this form, contact the FAA regional or airport district office associated with the airport worksite, or for assistance for other waivers, contact FAA headquarters via the AIP Buy American Preference Requirements webpage.

Level. Enter material level 0, 1, or 2. Level 0 is the final product, Level 1 is a component, and Level 2 is a sub-component.

Part Number. Enter a reference number used to track the item.

Item Description. Enter a concise but clear description of the item.

Quantity. Enter the quantity of the item described in the product/project.

Unit of Measure. Enter the unit of measure used for the item. Examples: Each, Ton, or Sq. Ft.

Price/Unit of Measure. Enter the price for each unit of the item.

U.S. Origin Price/Unit of Measure. Enter the price for each unit of U.S. origin.

U.S. Origin Cost. Enter the total cost.

Non-U.S. Price/Unit of Measure. Enter the price for each unit not of U.S. origin.

Non-U.S. Cost. Enter the total cost of the item not of U.S. origin.

Country of Non-U.S. Materials. Enter the country or countries of origin for all non-U.S. materials. Enter "Not applicable" if only U.S. materials are used for the item.

Example A – Completed Material Structure Worksheet

On the next page is an illustration of a Project Material Structure Worksheet. In this illustration, the final project and each manufactured component/subcomponent costs, excluding labor and retail mark-up, are listed. The total cost of materials, excluding labor and retail mark-up is \$720,000 (\$565,000 of U.S. costs and \$155,000 Non-U.S. costs). Items [materials] combined through a manufacturing process may be indicated as a manufactured component/subcomponent.

Unit of measure prices are multiplied by the quantity to identify costs. The sum of each component/subcomponents is equal to the amounts in the final project. Eligible materials below level 2 may be included within a manufactured good in levels 1 or 2. Ineligible or excluded materials should be omitted.

The country of origin of all non-U.S. material are listed by each component and the final product. Other variations of the project components/subcomponents are possible as each manufacturer may produce or apply components/subcomponents differently.

Level (0, 1, 2)	Part Number	Item Description	Quantity	Unit of Measure	Price/Unit of Measure	U.S. Origin Price/Unit of Measure	U.S. Origin Cost	Non-U.S. Price/Unit of Measure	Non-U.S. Cost	Country of Non U.S. Materials
0	Ref #	Final Project	1	Each	\$720,000	\$425,000	\$565,000	\$72,500	\$155,000	Country A, Country B, Country C
1	Ref #	Manufactured Component	4	Ton	\$320,000	\$70,000	\$210,000	\$27,500	\$110,000	Non-U.S. Country A
1	Ref #	Manufactured Component	1	Each	\$100,000	\$100,000	\$100,000	\$0	\$0	Not Applicable
1	Ref #	Manufactured Component	1	Each	\$25,000	\$25,000	\$25,000	\$0	\$0	Not Applicable
1	Ref #	Manufactured Component	1	Sq. Ft.	\$100,000	\$60,000	\$60,000	\$40,000	\$40,000	Non-U.S. Country B
2	Ref #	Manufactured Subcomponent	1	Each	\$25,000	\$20,000	\$20,000	\$5,000	\$5,000	Non-U.S. Country C
1	Ref #	Manufactured Component	1	Each	\$50,000	\$50,000	\$50,000	\$0	\$0	Not Applicable
1	Ref #	Structural Steel Material	1	Tons	\$100,000	\$100,000	\$100,000	\$0	\$0	Not Applicable



Buy American Project/Product Content Percentage Calculation – Worksheet

Applicant Information

Date of Application:

Applicant Name:

Applicant Type (choose one):

☐ Prime Contractor ☐ Manufacturer ☐ Supplier

Point of Contact (First and Last Name):

Applicant Business Address:

Email address:

Telephone:

Extension:

Project/Product Information

FAA Eligible Project:

Airport Sponsor:

Airport LOCID:

FAA Award Number:

FAA Item Number (FAA Advisory Circular reference, if applicable):

Total Material Cost:

Total U.S. Material Content Cost:	Percentage:	%
--	-------------	---

Total Non-U.S. Material Content Cost:	Percentage:	%
--	-------------	---

FAA Buy American Preference (including Buy American Build American) Compliance

Does this project include any iron, steel or any of the following construction materials, not 100% produced in the United States?

☐ Yes ☐ No

If “Yes,” indicate the cost and percentage of the project below.

Steel (e.g., structural steel, rebar)	Cost:	Percentage:	%
Iron	Cost:	Percentage:	%
Non-ferrous metals	Cost:	Percentage:	%
Plastic and polymer-based products	Cost:	Percentage:	%
Glass (including optic glass)	Cost:	Percentage:	%
Lumber	Cost:	Percentage:	%
Drywall	Cost:	Percentage:	%

Use of Non-Domestic Construction Materials Justification

Provide a description of your efforts to locate and secure a domestic source for those “construction materials” or final manufactured goods that are not 100% produced in the U.S., including use of the Manufacturing Extension Partnership (MEP) and market research.

Project Material Structure Worksheet

Level (0, 1, 2)	Part Number	Item Description	Quantity	Unit of Measure	Price/Unit of Measure	U.S. Origin Price/Unit of Measure	U.S. Origin Cost (Each)	Non-U.S. Price/Unit of Measure	Non-U.S. Cost (Each)	Country of Non-U.S. Materials
0			1	Each						

Level (0, 1, 2)	Part Number	Item Description	Quantity	Unit of Measure	Price/Unit of Measure	U.S. Origin Price/Unit of Measure	U.S. Origin Cost (Each)	Non-U.S. Price/Unit of Measure	Non-U.S. Cost (Each)	Country of Non-U.S. Materials

Level (0, 1, 2)	Part Number	Item Description	Quantity	Unit of Measure	Price/Unit of Measure	U.S. Origin Price/Unit of Measure	U.S. Origin Cost (Each)	Non-U.S. Price/Unit of Measure	Non-U.S. Cost (Each)	Country of Non-U.S. Materials

Level (0, 1, 2)	Part Number	Item Description	Quantity	Unit of Measure	Price/Unit of Measure	U.S. Origin Price/Unit of Measure	U.S. Origin Cost (Each)	Non-U.S. Price/Unit of Measure	Non-U.S. Cost (Each)	Country of Non-U.S. Materials

Certification

The undersigned certifies that this information is true and accurate to the best of their knowledge. A false certification represents a violation of 18 U.S.C § 1001 and 49 U.S.C § 47126. Signatory has the burden of proof to establish compliance.

Signature: _____ Date: _____

Name: _____

Title: _____

Submit by Email

Signed copies must be provided within five (5) calendar days of the bid opening to be considered for award.

FOR FAA USE ONLY

(Mark the appropriate Waiver Type & Scope)

Applicable FAA Waiver Type

- ☐ Type I Public Interest (HQ Only)
- ☐ Type II Nonavailability (HQ Only)
- ☐ Type III More than 60% and Final Assembly within the U.S.
- ☐ Type IV Unreasonable Cost (Requires MEP/requires HQ coordination)
- ☐ BABA Iron, Steel, or Construction Material (requires justification) (Apply BABA Flag)

Applicable FAA Waiver Scope

- ☐ Project Specific
- ☐ Nationwide – (General Applicability) (For HQ Only)

Justifications

- ☐ Manufacturing Extension Partnership (MEP) Coordinated

FAA Official's Signature:

End of FAA-Use Only Section



U.S. Department
of Transportation
**Federal Aviation
Administration**

FAA Form 5100-137, Buy American Preferences – Final Assembly Questionnaire

Paperwork Reduction Act Burden Statement

A federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to a penalty for failure to comply with a collection of information subject to the requirements of the Paperwork Reduction Act unless that collection of information displays a currently valid OMB Control Number. The OMB Control Number for this information collection is 2120-0569. Public reporting for this collection of information is estimated to be approximately 8 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, completing and reviewing the collection of information. All responses to this collection of information are required under 49 U.S.C. Section 47105 to retain a benefit and to meet the reporting requirements of 2 CFR 200. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to: Information Collection Clearance Officer, Federal Aviation Administration, 10101 Hillwood Parkway, Fort Worth, TX 76177-1524.

-- CONFIDENTIAL --
NOT SUBJECT TO DISCLOSURE UNDER EXEMPTION # 4
OF THE FREEDOM OF INFORMATION ACT

Buy American Preferences – Final Assembly Questionnaire

To assist the Federal Aviation Administration (FAA) in making the determination of whether final assembly of the product occurs in the United States, please complete and submit this questionnaire when requesting a Buy American Waiver under 49 USC § 50101(b)(3)(A).

Company Name:

Date:

FAA Eligible Item:

FAA Item Number (if applicable):

Address of Final Assembly Location:

1. Provide a description of the assembly process occurring at the specified final location in the United States.
 - a. Describe the final assembly process and its various operations.
 - b. How long does the final assembly process take to complete?
2. Provide a description of the resources used to conduct the assembly of the product at the specified location in the United States.
 - a. How many employees are involved in the final assembly process and what is the general skill level of those employees?
 - b. What type of equipment is used during the final assembly process?
 - c. What is a rough estimate of the associated cost to conduct final assembly of the product at the specified location in the United States?

The undersigned certifies that this information is true and accurate to the best of their knowledge. A false certification represents a violation of 18 U.S.C § 1001 and 49 U.S.C § 47126. Signatory has the burden of proof to establish compliance.

Signature: _____

Name:

[Submit by Email](#)

Signed copies must be provided within five (5) calendar days of the bid opening to be considered for award.

SECTION 00412 - BUY AMERICAN CONFORMANCE LISTING

Title 49 U.S.C Section 50101 (b)

FOR AIRFIELD DEVELOPMENT PROJECTS FUNDED UNDER THE AIRPORT IMPROVEMENT PROGRAM

- Preparation of a Component Cost Calculation Table is not necessary for equipment listed on the FAA national listing:
http://www.faa.gov/airports/aip/procurement/federal_contract_provisions/media/buy_american_waiver.xls
- Bidder shall submit a listing of equipment it proposes to install on the project that is included on the current National Buy American conformance list.

Equipment Type	Name of Manufacturer	Product Number

Signed copies must be provided within five (5) calendar days of the bid opening to be considered for award.

Certification Signature:

The bidder hereby certifies that the above listed equipment, which we propose for installation on the subject project, is on the current National Buy American Conformance list on the website listed above.

I hereby certify the above information is accurate and complete.

Bidder's Firm Name

Date

Signature

SECTION 00415 - MANUFACTURER CERTIFICATION STATEMENT

Muscatine Municipal Airport
Muscatine, Iowa

Carrier Vehicle

Certification Statement

This certification shall be submitted with the bid proposal.

"I certify that I understand the terms and conditions outlined in Federal Aviation Administration's Advisory Circular 150/5220-20A specification that outlines the requirements for airport snow and ice control equipment. I shall submit certified records of compliance test with a response to this request for bids. Further, by my signature, I certify that I have conducted the necessary test to ensure that the equipment provided meets the operational and performance requirements it advertises."

Project Name: Snow Removal Equipment Acquisition

Project Location: Muscatine Municipal Airport

Make: _____ Model: _____

Horsepower: _____

Contact Name: _____ Title: _____
Type, Stamp or Print Legibly

Owner Name: _____ Phone: _____

Address: _____

City, State, Zip: _____

Signed by: _____ Date: _____

CERTIFICATION REQUIRED TO BE
SUBMITTED WITH BID PROPOSAL

SECTION 00415 - MANUFACTURER CERTIFICATION STATEMENT

Muscatine Municipal Airport
Muscatine, Iowa

Snow Blower

Certification Statement

This certification shall be submitted with the bid proposal.

"I certify that I understand the terms and conditions outlined in Federal Aviation Administration's Advisory Circular 150/5220-20A specification that outlines the requirements for airport snow and ice control equipment. I shall submit certified records of compliance test with a response to this request for bids. Further, by my signature, I certify that I have conducted the necessary test to ensure that the equipment provided meets the operational and performance requirements it advertises."

Project Name: Snow Removal Equipment Acquisition

Project Location: Muscatine Municipal Airport

Make: Model: Casting Distance: Cutting Width:

Contact Name: Title: Type, Stamp or Print Legibly

Owner Name: Phone:

Address:

City, State, Zip:

Signed by: Date:

CERTIFICATION REQUIRED TO BE SUBMITTED WITH BID PROPOSAL

SECTION 00415 - MANUFACTURER CERTIFICATION STATEMENT

Muscatine Municipal Airport
Muscatine, Iowa

Snow Broom

Certification Statement

This certification shall be submitted with the bid proposal.

"I certify that I understand the terms and conditions outlined in Federal Aviation Administration's Advisory Circular 150/5220-20A specification that outlines the requirements for airport snow and ice control equipment. I shall submit certified records of compliance test with a response to this request for bids. Further, by my signature, I certify that I have conducted the necessary test to ensure that the equipment provided meets the operational and performance requirements it advertises."

Project Name: Snow Removal Equipment Acquisition

Project Location: Muscatine Municipal Airport

Make: Model:

Broom Height: Broom Width:

Contact Name: Title:
Type, Stamp or Print Legibly

Owner Name: Phone:

Address:

City, State, Zip:

Signed by: Date:

CERTIFICATION REQUIRED TO BE
SUBMITTED WITH BID PROPOSAL

SECTION 00416 - VENDOR CERTIFICATION STATEMENT

Muscatine Municipal Airport
Muscatine, Iowa

Carrier Vehicle

Certification Statement

This certification shall be submitted with the bid proposal.

"I certify that I understand the terms and conditions outlined in Federal Aviation Administration's Advisory Circular 150/5220-20A specification that outlines the requirements for airport snow and ice control equipment. I shall submit certified records of compliance test with a response to this request for bids. Further, by my signature, I certify that I have conducted the necessary test to ensure that the equipment provided meets the operational and performance requirements it advertises."

Project Name: Snow Removal Equipment Acquisition

Project Location: Muscatine Municipal Airport

Make: _____

Model: _____

Horsepower: _____

Contact Name: _____
Type, Stamp or Print Legibly

Title: _____

Owner Name: _____

Phone: _____

Address: _____

City, State, Zip: _____

Signed by: _____

Date: _____

CERTIFICATION REQUIRED TO BE SUBMITTED WITH BID PROPOSAL

SECTION 00416 - VENDOR CERTIFICATION STATEMENT

Muscatine Municipal Airport
Muscatine, Iowa

Snow Blower

Certification Statement

This certification shall be submitted with the bid proposal.

"I certify that I understand the terms and conditions outlined in Federal Aviation Administration's Advisory Circular 150/5220-20A specification that outlines the requirements for airport snow and ice control equipment. I shall submit certified records of compliance test with a response to this request for bids. Further, by my signature, I certify that I have conducted the necessary test to ensure that the equipment provided meets the operational and performance requirements it advertises."

Project Name: Snow Removal Equipment Acquisition

Project Location: Muscatine Municipal Airport

Make: _____ Model: _____
Casting Distance: _____ Cutting Width: _____

Contact Name: _____ Title: _____
Type, Stamp or Print Legibly

Owner Name: _____ Phone: _____

Address: _____

City, State, Zip: _____

Signed by: _____ Date: _____

CERTIFICATION REQUIRED TO BE SUBMITTED WITH BID PROPOSAL

SECTION 00416 - VENDOR CERTIFICATION STATEMENT

Muscatine Municipal Airport
Muscatine, Iowa

Snow Broom

Certification Statement

This certification shall be submitted with the bid proposal.

"I certify that I understand the terms and conditions outlined in Federal Aviation Administration's Advisory Circular 150/5220-20A specification that outlines the requirements for airport snow and ice control equipment. I shall submit certified records of compliance test with a response to this request for bids. Further, by my signature, I certify that I have conducted the necessary test to ensure that the equipment provided meets the operational and performance requirements it advertises."

Project Name: Snow Removal Equipment Acquisition

Project Location: Muscatine Municipal Airport

Make: _____ Model: _____

Broom Height: _____ Broom Width: _____

Contact Name: _____ Title: _____
Type, Stamp or Print Legibly

Owner Name: _____ Phone: _____

Address: _____

City, State, Zip: _____

Signed by: _____ Date: _____

CERTIFICATION REQUIRED TO BE SUBMITTED WITH BID PROPOSAL

SECTION 00420 - BID BOND

Snow Removal Equipment Acquisition
Muscatine Municipal Airport
Muscatine, Iowa

KNOW ALL BY THESE PRESENTS:

That we, _____, as Principal, and
_____, as Surety,
are held and firmly bound unto, City of Muscatine as Oblige, (hereinafter referred to as "the Jurisdiction"), in the
penal sum of _____
_____ dollars (\$ _____),
lawful money of the United States, for which payment said Principal and Surety bind themselves, their heirs,
executors, administrators, successors, and assigns jointly and severally, firmly by these presents.

The condition of the above obligation is such that whereas the Principal has submitted to the Jurisdiction a certain
proposal, in a separate envelope, and hereby made a part hereof, to enter into a contract in writing, for the following
described improvements:

Snow Removal Equipment Including Carrier Vehicle, Snow Blower and Broom

The Surety hereby stipulates and agrees that the obligations of said Surety and its bond shall be in no way impaired
or affected by any extension of the time within which the Jurisdiction may accept such bid or execute such Contract;
and said Surety does hereby waive notice of any such extension.

In the event that any actions or proceedings are initiated with respect to this Bond, the parties agree that the venue
thereof shall be Muscatine County, State of Iowa. If legal action is required by the Jurisdiction against the Surety or
Principal to enforce the provisions of the bond or to collect the monetary obligation incurring to the benefit of the
Jurisdiction, the Surety or Principal agrees to pay the Jurisdiction all damages, costs, and attorney fees incurred by
enforcing any of the provisions of this Bond. All rights, powers, and remedies of the Jurisdiction hereunder shall be
cumulative and not alternative and shall be in addition to all rights, powers, and remedies given to the Jurisdiction,
by law. The Jurisdiction may proceed against Surety for any amount guaranteed hereunder whether action is brought
against Principal or whether Principal is joined in any such action or actions or not.

NOW, THEREFORE, if said proposal by the Principal be accepted, and the Principal shall enter into a contract with
Jurisdiction in accordance with the terms of such proposal, including the provision of insurance and of a bond as may
be specified in the contract documents, with good and sufficient surety for the faithful performance of such contract,
for the prompt payment of labor and material furnished in the prosecution thereof, and for the maintenance of said
improvements as may be required therein, then this obligation shall become null and void; otherwise, the Principal
shall pay to the Jurisdiction the full amount of the bid bond, together with court costs, attorney's fees, and any other
expense of recovery.

Signed and sealed this _____ day of _____, 2025.

SURETY:

PRINCIPAL:

By

Surety Company

Signature Attorney-in-Fact/Officer

Name of Attorney-in-Fact/Officer

Company Name

Company Address

City, State, Zip Code

Company Telephone Number

By

Bidder

Signature

Name (Print/Type)

Title

Address

City, State, Zip Code

Telephone Number

NOTE: All signatures on this bid bond must be original signatures in ink; electronic, copies, or facsimile of any signature will not be accepted. This bond must be sealed with the Surety's raised, embossing seal or official adhesive seal. The Certificate or Power of Attorney accompanying this bond must be valid on its face and sealed with the Surety's raised, embossing seal or official adhesive seal.

ITEMS TO BE EXECUTED AFTER AWARD OF CONTRACT

Snow Removal Equipment Acquisition

Muscatine Municipal Airport

City of Muscatine

Muscatine, Iowa

3-19-0063-028-2025

OT5.128792

SECTION 00500 - CONTRACT

Snow Removal Equipment Acquisition
Muscatine Municipal Airport
Muscatine, Iowa

This CONTRACT made and entered into at _____ this ____ day of _____, 2025,
by and between the City of Muscatine hereinafter called the "Jurisdiction", and _____
_____, hereinafter called the "Contractor".

WITNESSETH:

The Contractor hereby agrees to complete the work comprising the Snow Removal Equipment Acquisition as specified in the contract documents, which are officially on file with the Jurisdiction, in the office of the City Administrator, 215 Sycamore Street, Muscatine, Iowa 52761. This contract includes all such contract documents. All work under this contract shall be constructed in accordance with the FAA Standard Specifications, and as further modified by the Special Provisions, Technical Specifications and Supplemental Specifications included in said contract documents and the Contract Attachment which is attached hereto. The Contractor further agrees to complete the work in strict accordance with said contract documents, and to guarantee the work as required by law for the time required in said contract documents after its acceptance by the Jurisdiction.

This contract is awarded and executed for completion of the work specified in the contract documents for the bid prices shown on the Contract Attachment: Bid Items and Quantities which were proposed by the Contractor in its proposal submitted in accordance with the Notice to Bidders and Notice of Public Hearing for the following described improvements:

Snow Removal Equipment Including Carrier Vehicle, Snow Blower and Broom

The Contractor agrees to perform said work for and in consideration of the Jurisdiction's payment of the bid amount of _____ dollars (\$_____), which amount shall constitute the required amount of the performance bond, and payment bond. The Contractor hereby agrees to commence work as stated in the written Notice to Proceed; and substantially complete the work the work in accordance with the following contract provisions:

CONTRACT PROVISIONS

A. Completion of Work

1. All work under the Contract must be substantially complete as noted in the Notice to Bidders and the Notice of Public Hearing.

B. Liquidated Damage

1. Pay liquidated damages for noncompliance with said completion provisions in the amount of \$250 (Two Hundred Fifty dollars) for each day the work remains incomplete.
2. In addition to the above-mentioned liquated damages, the contractor also agrees to reimburse the owner, by a reduction in the final payment due to the contractor, an amount equal to the additional charges for engineering services incurred due to the continuance of work beyond the specified allotted contract completion date, working days or calendar days.

C. Maintenance Bond & Warranty

1. To remedy any and all defects that may develop in or result from work to be performed under the Contract with the City of Muscatine, from the date of acceptance of the work under the Contract, by reason of defects in workmanship or materials used in construction of said work.
2. Shall also guarantee the maintenance of the improvement caused by failures in materials and construction for a period of one (1) year from and after acceptance of the work.

CONTRACTOR'S CERTIFICATIONS

- A. The Contractor understands and agrees that all certifications made by the Contractor within the Proposal shall apply under this Agreement as if fully rewritten herein. The Contractor further certifies the following.

1. Certification of Eligibility (29 CFR Part 5.5)

- a. By Entering into this contract, the CONTRACTOR certifies that neither he or she nor any person or firm who has an interest in the CONTRACTOR'S firm is a person or firm ineligible to be awarded Government contracts by virtue of Section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).
- b. No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of Section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).
- c. The penalty for making false statements is prescribed in the U.S. Criminal Code 18 U.S.C.

2. Certification of Non-Segregated Facilities (41 CFR Part 60-1.8)

- a. The federally assisted construction CONTRACTOR certifies that it does not maintain or provide, for its employees, any segregated facilities at any of its establishments and that it does not permit its employees to perform their services at any location, under its control, where segregated facilities are maintained. The BIDDER certifies that it will not maintain or provide, for its employees, segregated facilities at any of its establishments and that it will not permit its employees to perform their services at any location under its control where segregated facilities are maintained. The Bidder agrees that a breach of this certification is a violation of the Equal Opportunity Clause, which is to be incorporated in the contract.

As used in this certification, the term "segregated facilities" means any waiting rooms, work areas, restrooms, and washrooms, restaurants and other eating areas, timeclocks, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees which are segregated on the basis of race, color, religion, or national origin because of habit, local custom, or any other reason. The Bidder agrees that (except where it has obtained identical certifications from proposed subcontractors for specific time periods) it will obtain identical certifications from proposed subcontractors prior to the award of subcontracts exceeding \$10,000 which are not exempt from the provisions of the Equal Opportunity Clause and that it will retain such certifications in its files.

IN WITNESS WHEREOF, the Parties hereto have executed this instrument, in triplicate on the date first shown written.

JURISDICTION: City of Muscatine, Iowa

By

Brad Bark, Mayor, City of Muscatine

ATTEST:

Cinda Hilger, City Clerk

CONTRACTOR:

Company Name:

By

Name:

Title:

Street Address

City, State, Zip Code

Telephone

E-Mail

CONTRACTOR PUBLIC REGISTRATION INFORMATION TO BE PROVIDED BY:

1. All Contractors: The Contractor shall enter its Public Registration No. _____ issued by the Iowa Commissioner of Labor pursuant to Section 91C.5 of the Iowa Code.
2. Out-of-State Contractors:
 - A. Pursuant to Section 91C.7 of the Iowa Code, an out-of-state contractor, before commencing a contract in excess of five thousand dollars in value in Iowa, shall file a bond with the division of labor services of the department of workforce development. The contractor should contact 515-242-5871 for further information. Prior to contract execution, the Jurisdictional Engineer may forward a copy of this contract to the Iowa Department of Workforce Development as notification of pending construction work. It is the contractor's responsibility to comply with said Section 91C.7 before commencing this work.
 - B. Prior to entering into contract, the designated low bidder, if it is a corporation organized under the laws of a state other than Iowa, shall file with the Jurisdictional Engineer a certificate from the Secretary of the State of Iowa showing that it has complied with all the provisions of Chapter 490 of the Code of Iowa, as amended, governing foreign corporations. For further information contact the Iowa Secretary of State Office at 515-281-5204.

Bond No. _____

Name of Surety _____

NOTE: All signatures on this contract must be original signatures in ink; electronic, copies or facsimile of any signature will not be accepted.

CORPORATE ACKNOWLEDGMENT

State of _____)
_____) SS
_____ County)

On this ____ day of _____, 2025, before me, the undersigned, a Notary Public in and for the State of _____, personally appeared _____ and _____, to me known, who, being by me duly sworn, did say that they are the _____, and _____, respectively, of the corporation executing the foregoing instrument; that (no seal has been procured by) (the seal affixed thereto is the seal of) the corporation; that said instrument was signed (and sealed) on behalf of the corporation by authority of this Board of Directors; that _____ and _____ acknowledged the execution of the instrument to be the voluntary act and deed of the corporation, by it and by them voluntarily executed.

Signature _____

Notary Public in and for the State of _____

My commission expires _____ 20, _____

PARTNERSHIP ACKNOWLEDGMENT

State of _____)
_____) SS
_____ County)

On this ____ day of _____, 2025, before me, the undersigned, a Notary Public in and for the State of _____, personally appeared _____ to me personally known, who being by me duly sworn, did say that the person is one of the partners of _____, a partnership, and that the instrument was signed on behalf of the partnership by authority of the partners and the partner acknowledged the execution of the instrument to be the voluntary act and deed of the partnership by it and by the partner voluntarily executed

Signature _____

Notary Public in and for the State of _____

My commission expires _____ 20, _____

INDIVIDUAL ACKNOWLEDGMENT

State of _____)
_____) SS
_____ County)

On this ____ day of _____, 2025, before me, the undersigned, a Notary Public in and for the State of _____, personally appeared _____ and _____, to me known to be the identical person(s) named in and who executed the foregoing instrument, and acknowledged that (he) (she) (they) executed the instrument as (his) (her) (their) voluntary act and deed.

Signature _____

Notary Public in and for the State of _____

My commission expires _____ 20, _____

LIMITED LIABILITY COMPANY ACKNOWLEDGMENT

State of _____)
_____) SS
_____ County)

On this ____ day of _____, 2025, before me a Notary Public in and for said county, personally appeared _____, to me personally known, who being by me duly sworn did say that person is _____ of said _____, that (the seal affixed to said instrument is the seal of said OR no seal has been procured by the said) _____, and that said instrument was signed and sealed on behalf of the said _____, by authority of its managers and the said _____ acknowledged the execution of said instrument to be the voluntary act and deed of said _____, by it voluntarily executed.

Signature _____

Notary Public in and for the State of _____

My commission expires _____ 20, _____

CONTRACT ATTACHMENT: ITEM 1: GENERAL - NONE

CONTRACT ATTACHMENT: ITEM 2: BID ITEMS AND QUANTITIES

THIS CONTRACT IS AWARDED AND EXECUTED FOR COMPLETION OF THE WORK SPECIFIED IN THE CONTRACT DOCUMENTS FOR THE BID PRICES TABULATED BELOW AS PROPOSED BY THE CONTRACTOR IN ITS PROPOSAL SUBMITTED IN ACCORDANCE WITH NOTICE TO BIDDERS AND NOTICE OF PUBLIC HEARING. ALL QUANTITIES ARE SUBJECT TO REVISION BY THE JURISDICTION. THE JURISDICTION RESERVES THE RIGHT TO ADJUST QUANTITIES AS NECESSARY TO MAXIMIZE FUNDS BUDGETED FOR THIS PROJECT AS NOTED IN SECTION 00500 – CONTRACT.

SECTION 00610 - PERFORMANCE BOND

Bond Number

PRINCIPAL *(Legal Name and Business Address)*

STATE OF INCORPORATION

SURETY *(Legal Name and Business Address)*

CONTRACT NO.

CONTRACT DATE

PENAL SUM OF BOND *(Expressed in words and numerals)*

OBLIGATION

KNOW ALL PERSONS BY THESE PRESENTS, that the above-named PRINCIPAL, hereinafter referred to and called CONTRACTOR, and the above-named SURETY hereby bind themselves unto The City of Muscatine, 215 Sycamore Street, Muscatine, Iowa as OBLIGEE, hereinafter referred to and called OWNER, in the penal sum stated above, in lawful money of the United States of America to be paid to OWNER. For payment of the penal sum, we bind ourselves, our heirs, executors, administrators, successors, and assigns, jointly and severally, firmly by these presents.

WHEREAS,

CONTRACTOR has entered into the written contract agreement identified hereinabove with the OWNER for the following project:

Project Name: Snow Removal Equipment Acquisition

Project Location: Muscatine Municipal Airport, Muscatine, Iowa

which said contract and associated contract documents, including any present or future amendment thereto, is incorporated herein by reference and is hereinafter referred to as the Contract.

CONDITION

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION is such that, if CONTRACTOR shall promptly and faithfully perform all undertakings, covenants, terms, conditions and agreements of the Contract during the original term of the Contract and any extensions thereof that are granted by the OWNER, with or without notice to the SURETY, and during the period of any guarantee or warranties required under the Contract, and if CONTRACTOR shall perform and fulfill all undertakings, covenants, terms, conditions and agreements of any and all duly authorized modifications of the Contract that hereafter are made, then this obligation shall be void; otherwise it shall remain in full force and effect subject to the following additional conditions:

1. SURETY, for value received, hereby stipulates and agrees that no change, extension of time, modification, omission, addition or change in or to the Contract, or the work performed thereunder or the specifications accompanying the same, shall in any way affect the SURETY'S obligation on this bond; and SURETY hereby agrees to waive notice of any and all such extensions, modifications, omissions, alterations, and additions to the terms of the Contract, work or specifications.
1. Whenever CONTRACTOR shall be and declared by the OWNER to be in default under the Contract, the Surety shall promptly and at the SURETY'S expense remedy the default by implementing one or more of the following actions:

Muscatine Municipal Airport
0T5.128792
March 2025

PERFORMANCE BOND

PAGE 00610-1

- a. Arrange for the CONTRACTOR, with consent of the OWNER, to perform and complete the Contract; or
 - b. Undertake to perform and complete the Contract itself, through its agents or through independent contractors; or
 - c. Obtain bids or negotiated proposals from qualified contractors acceptable to the OWNER for a contract for performance and completion of the Contract; arrange for a contract to be prepared for execution by the OWNER and the contractor selected with the OWNER'S concurrence, to be secured with performance and payment bonds executed by a qualified surety equivalent to the Bonds issued on the Contract; and make available as work progresses (even though there should be a default or a succession of defaults under the contract or contracts of completion arranged under this paragraph) sufficient funds to pay the cost of completion less the balance of the contract price; but not exceeding, including other costs and damages for which the Surety may be liable hereunder, the penal sum of the bond. The term "balance of the contract price", as used in this paragraph, shall mean the total amount payable by OWNER to CONTRACTOR under the Contract and any amendments thereto, disbursed at the rate provided in the original contract, less the amount properly paid by OWNER to CONTRACTOR.
 - d. With written consent of the OWNER, SURETY may waive its right to perform and complete, arrange for completion, or obtain a new contractor and with reasonable promptness, investigate and determine the amount the SURETY is liable to the OWNER and tender payment therefor to the OWNER.
2. CONTRACTOR and SURETY agree that if in connection with the enforcement of this Bond, the OWNER is required to engage the services of an attorney, that reasonable attorney fees incurred by the OWNER, with or without suit, are in addition to the balance of the contract price.
 3. No right of action shall accrue on this bond to or for the use of any person or corporation other than the OWNER named herein or the successors or assigns of the OWNER.

WITNESS

In witness whereof, this instrument is executed this the _____ day of _____, 2025.

INDIVIDUAL PRINCIPAL:

Company Name: _____

Signature: _____

Name: _____

Title: _____

CORPORATE PRINCIPAL:

ATTEST:

Corporate Name: _____

Signature: _____

Signature: _____

Name: _____

Name: _____

Title: _____

Title: _____

(Affix Corporate Seal)

SURETY:

ATTEST:

Surety Name: _____

Signature: _____

Signature: _____

Name: _____

Name: _____

Title: _____

Title: _____

(Affix Seal)

(Attach Power of Attorney)

OWNER ACCEPTANCE

The OWNER approves the form of this Performance Bond.

Date: _____

Signature: _____

Name: _____

Title: _____

ATTEST:

Signature: _____

Name: _____

Title: _____

SECTION 00620 - PAYMENT BOND

Bond Number

PRINCIPAL *(Legal Name and Business Address)*

STATE OF INCORPORATION

SURETY *(Legal Name and Business Address)*

CONTRACT NO.

CONTRACT DATE

PENAL SUM OF BOND *(Expressed in words and numerals)*

OBLIGATION

KNOW ALL PERSONS BY THESE PRESENTS, that the above-named PRINCIPAL, hereinafter referred to and called CONTRACTOR, and the above-named SURETY hereby bind themselves unto The City of Muscatine, 215 Sycamore Street, Muscatine, Iowa as OBLIGEE, hereinafter referred to and called OWNER, in the penal sum stated above, in lawful money of the United States of America to be paid to OWNER. For payment of the penal sum, we bind ourselves, our heirs, executors, administrators, successors, and assigns, jointly and severally, firmly by these presents.

WHEREAS,

CONTRACTOR has entered into the written contract agreement identified hereinabove with the OWNER for the following project:

Project Name: Snow Removal Equipment Acquisition

Project Location: Muscatine Municipal Airport, Muscatine, Iowa

which said contract and associated contract documents, including any present or future amendment thereto, is incorporated herein by reference and is hereinafter referred to as the Contract.

CONDITION

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION is such that, if CONTRACTOR shall promptly make payment to all employees, persons, firms or corporations for all incurred indebtedness and just claims for labor, supplies, materials and services furnished for or used in connection with the performance of the Contract, then this obligation shall be void; otherwise it shall remain in full force and effect subject to the following additional conditions:

1. CONTRACTOR and SURETY indemnify and hold harmless the OWNER for all claims, demands, liens or suits that arise from performance of the Contract.
2. SURETY, for value received, hereby stipulates and agrees that no change, extension of time, modification, omission, addition or change in or to the Contract, or the work performed thereunder or the specifications accompanying the same, shall in any way affect the SURETY'S obligation on this bond; and SURETY hereby agrees to waive notice of any and all such extensions, modifications, omissions, alterations, and additions to the terms of the Contract, work or specifications.
3. No final settlement between the OWNER and the CONTRACTOR shall abridge the right of any beneficiary hereunder, whose claim may be unsatisfied.
4. The amount of this bond shall be reduced by and to the extent of any payments made in good faith hereunder.

Muscatine Municipal Airport
0T5.128792
March 2025

PAYMENT BOND

PAGE 00620-1

5. Amounts owed by the OWNER to the CONTRACTOR under the Contract shall be used for the performance of the Contract and to satisfy claims, if any, under any Performance Bond. By the CONTRACTOR furnishing and the OWNER accepting this Bond, they agree that all funds earned by the CONTRACTOR in the performance of the Contract are dedicated to satisfy obligations of the CONTRACTOR and the SURETY under this Bond, subject to the OWNER'S priority to use the funds for the completion of the project.

WITNESS

In witness whereof, this instrument is executed this the _____ day of _____, 2025.

INDIVIDUAL PRINCIPAL:

Company Name: _____

Signature: _____

Name: _____

Title: _____

CORPORATE PRINCIPAL:

ATTEST:

Signature: _____

Name: _____

Title: _____

(Affix Corporate Seal)

Corporate Name: _____

Signature: _____

Name: _____

Title: _____

SURETY:

ATTEST:

Signature: _____

Name: _____

Title: _____

(Affix Seal)

Surety Name: _____

Signature: _____

Name: _____

Title: _____

(Attach Power of Attorney)

OWNER ACCEPTANCE

The OWNER approves the form of this Performance Bond.

Date: _____

Signature: _____

Name: _____

Title: _____

ATTEST:

Signature: _____

Name: _____

Title: _____

FAA SUPPLEMENTARY PROVISIONS

Snow Removal Equipment Acquisition

Muscatine Municipal Airport

City of Muscatine

Muscatine, Iowa

3-19-0063-028-2025

OT5.128792

SUPPLEMENTARY PROVISIONS

PART A - FEDERAL CONTRACT PROVISIONS FOR CONSTRUCTION AND EQUIPMENT CONTRACTS

APPLICATION OF REFERENCES

ALL REFERENCES MADE HEREIN TO “CONTRACTOR”, “BIDDER”, AND “OFFEROR” SHALL PERTAIN TO THE PRIME CONTRACTOR. ALL REFERENCES MADE HEREIN TO “SUBCONTRACTOR” SHALL PERTAIN TO ANY AND ALL SUBCONTRACTORS UNDER CONTRACT WITH THE PRIME CONTRACTOR OR A SUBCONTRACTOR.

ALL REFERENCES MADE HEREIN TO “CONSULTANT” SHALL PERTAIN TO ARCHITECT/ENGINEER (A/E) UNDER CONTRACT WITH THE SPONSOR. ALL REFERENCES MADE HEREIN TO “SUBCONSULTANT” SHALL PERTAIN TO ANY AND ALL SUBCONSULTANTS UNDER CONTRACT WITH THE A/E.

ALL REFERENCES MADE HEREIN TO “SPONSOR” AND “OWNER” SHALL PERTAIN TO THE STATE, CITY, AIRPORT AUTHORITY OR OTHER PUBLIC ENTITY EXECUTING CONTRACTS WITH THE PRIME CONTRACTOR AND/OR THE A/E.

PROVISIONS APPLICABLE TO ALL CONTRACTS

ACCESS TO RECORDS AND REPORTS	3
BUY AMERICAN PREFERENCE	3
CIVIL RIGHTS – GENERAL	4
CIVIL RIGHTS – TITLE VI ASSURANCE	4
PROHIBITION ON CERTAIN TELECOMMUNICATIONS AND VIDEO SURVEILLANCE SERVICES OR EQUIPMENT.....	6
FEDERAL FAIR LABOR STANDARDS ACT (FEDERAL MINIMUM WAGE).....	7
OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970	7
RIGHT TO INVENTIONS.....	7
SEISMIC SAFETY.....	7
TAX DELINQUENCY AND FELONY CONVICTIONS	8
TRADE RESTRICTION CERTIFICATION.....	8
VETERAN’S PREFERENCE	9
DOMESTIC PREFERENCES FOR PROCUREMENTS.....	9

PROVISIONS APPLICABLE TO CONTRACTS EXCEEDING \$2,000

COPELAND "ANTI-KICKBACK" ACT	10
DAVIS-BACON REQUIREMENTS	10

PROVISIONS APPLICABLE TO CONTRACTS EXCEEDING \$10,000

AFFIRMATIVE ACTION REQUIREMENT	17
DISTRACTED DRIVING.....	18
EQUAL EMPLOYMENT OPPORTUNITY (EEO)	18
PROHIBITION OF SEGREGATED FACILITIES	24
PROCUREMENT OF RECOVERED MATERIALS	24
TERMINATION OF CONTRACT	25

PROVISIONS APPLICABLE TO CONTRACTS EXCEEDING \$25,000

DEBARMENT AND SUSPENSION	28
--------------------------------	----

PROVISIONS APPLICABLE TO CONTRACTS EXCEEDING \$100,000

CONTRACT WORKHOURS AND SAFETY STANDARDS ACT REQUIREMENTS	29
LOBBYING AND INFLUENCING FEDERAL EMPLOYEES.....	30

PROVISIONS APPLICABLE TO CONTRACTS EXCEEDING \$150,000

CLEAN AIR AND WATER POLLUTION CONTROL	31
---	----

PROVISIONS APPLICABLE TO CONTRACTS EXCEEDING \$250,000

BREACH OF CONTRACT TERMS	32
DISADVANTAGED BUSINESS ENTERPRISE.....	32

PROVISIONS APPLICABLE TO ALL CONTRACTS

ACCESS TO RECORDS AND REPORTS

Reference: 2 CFR § 200.334
2 CFR § 200.337
FAA Order 5100.38

The Contractor must maintain an acceptable cost accounting system. The Contractor agrees to provide the Owner, the Federal Aviation Administration and the Comptroller General of the United States or any of their duly authorized representatives access to any books, documents, papers and records of the Contractor which are directly pertinent to the specific contract for the purpose of making audit, examination, excerpts and transcriptions. The Contractor agrees to maintain all books, records and reports required under this contract for a period of not less than three years after final payment is made and all pending matters are closed.

BUY AMERICAN PREFERENCE

Reference: 49 USC § 50101
Executive Order 14005, *Ensuring the Future is Made in All of America by All of America's Workers*
Bipartisan Infrastructure Law (Pub. L. No. 117-58), Build America, Buy America (BABA)

The Contractor certifies that its bid/offer is in compliance with 49 USC § 50101, BABA and other related Made in America Laws,¹ U.S. statutes, guidance, and FAA policies, which provide that Federal funds may not be obligated unless all iron, steel and manufactured goods used in AIP funded projects are produced in the United States, unless the Federal Aviation Administration has issued a waiver for the product; the product is listed as an Excepted Article, Material Or Supply in Federal Acquisition Regulation subpart 25.108; or is included in the FAA Nationwide Buy American Waivers Issued list.

The bidder or offeror must complete and submit the certification of compliance with FAA's Buy American Preference, BABA and Made in America laws included herein with their bid or offer. The Airport Sponsor/Owner will reject as nonresponsive any bid or offer that does not include a completed certification of compliance with FAA's Buy American Preference and BABA.

The bidder or offeror certifies that all constructions materials, defined to mean an article, material, or supply other than an item of primarily iron or steel; a manufactured product; cement and cementitious materials; aggregates such as stone, sand, or gravel; or aggregate binding agents or additives that are or consist primarily of: non-ferrous metals; plastic and polymer-based products (including polyvinylchloride, composite building materials, and polymers used in fiber optic cables); glass (including optic glass); lumber; or drywall used in the project are manufactured in the U.S.

¹ Per Executive Order 14005 "Made in America Laws" means all statutes, regulations, rules, and Executive Orders relating to federal financial assistance awards or federal procurement, including those that refer to "Buy America" or "Buy American," that require, or provide a preference for, the purchase or acquisition of goods, products, or materials produced in the United States, including iron, steel, and manufactured products offered in the United States.

CIVIL RIGHTS – GENERAL

Reference: 49 USC § 47123

In all its activities within the scope of its airport program, the Contractor agrees to comply with pertinent statutes, Executive Orders, and such rules as identified in Title VI List of Pertinent Nondiscrimination Acts and Authorities to ensure that no person shall, on the grounds of race, color, national origin (including limited English proficiency), creed, sex (including sexual orientation and gender identity), age, or disability be excluded from participating in any activity conducted with or benefiting from Federal assistance.

This provision is in addition to that required by Title VI of the Civil Rights Act of 1964.

The above provision binds the Contractor and subcontractors from the bid solicitation period through the completion of the contract.

CIVIL RIGHTS – TITLE VI ASSURANCES

Reference: 49 USC § 47123
FAA Order 1400.11

Title VI Solicitation Notice

The Sponsor, in accordance with the provisions of Title VI of the Civil Rights Act of 1964 (78 Stat. 252, 42 USC §§ 2000d to 2000d-4) and the Regulations, hereby notifies all bidders or offerors that it will affirmatively ensure that for any contract entered into pursuant to this advertisement, disadvantaged business enterprises will be afforded full and fair opportunity to submit bids in response to this invitation and no businesses will be discriminated against on the grounds of race, color, national origin (including limited English proficiency), creed, sex (including sexual orientation and gender identity), age, or disability in consideration for an award.

Title VI List of Pertinent Nondiscrimination Acts and Authorities

During the performance of this contract, the Contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the “Contractor”) agrees to comply with the following non-discrimination statutes and authorities; including but not limited to:

- Title VI of the Civil Rights Act of 1964 (42 USC § 2000d *et seq.*, 78 stat. 252) (prohibits discrimination on the basis of race, color, national origin);
- 49 CFR part 21 (Non-discrimination in Federally-Assisted programs of the Department of Transportation—Effectuation of Title VI of the Civil Rights Act of 1964);
- The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, (42 USC § 4601) (prohibits unfair treatment of persons displaced or whose property has been acquired because of Federal or Federal-aid programs and projects);
- Section 504 of the Rehabilitation Act of 1973 (29 USC § 794 *et seq.*), as amended (prohibits discrimination on the basis of disability); and 49 CFR part 27 (Nondiscrimination on the Basis of Disability in Programs or Activities Receiving Federal Financial Assistance);
- The Age Discrimination Act of 1975, as amended (42 USC § 6101 *et seq.*) (prohibits discrimination on the basis of age);

- Airport and Airway Improvement Act of 1982 (49 USC § 47123), as amended (prohibits discrimination based on race, creed, color, national origin, or sex);
- The Civil Rights Restoration Act of 1987 (PL 100-259) (broadened the scope, coverage and applicability of Title VI of the Civil Rights Act of 1964, the Age Discrimination Act of 1975 and Section 504 of the Rehabilitation Act of 1973, by expanding the definition of the terms “programs or activities” to include all of the programs or activities of the Federal-aid recipients, sub-recipients and contractors, whether such programs or activities are Federally funded or not);
- Titles II and III of the Americans with Disabilities Act of 1990 (42 USC § 12101, et seq) (prohibit discrimination on the basis of disability in the operation of public entities, public and private transportation systems, places of public accommodation, and certain testing entities) as implemented by U.S. Department of Transportation regulations at 49 CFR parts 37 and 38;
- The Federal Aviation Administration’s Nondiscrimination statute (49 USC § 47123) (prohibits discrimination on the basis of race, color, national origin, and sex);
- Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations (ensures nondiscrimination against minority populations by discouraging programs, policies, and activities with disproportionately high and adverse human health or environmental effects on minority and low-income populations);
- Executive Order 13166, Improving Access to Services for Persons with Limited English Proficiency, and resulting agency guidance, national origin discrimination includes discrimination because of limited English proficiency (LEP). To ensure compliance with Title VI, you must take reasonable steps to ensure that LEP persons have meaningful access to your programs [70 Fed. Reg. 74087 (2005)];
- Title IX of the Education Amendments of 1972, as amended, which prohibits you from discriminating because of sex in education programs or activities (20 USC § 1681, et seq).

Nondiscrimination Requirements / Title VI Clauses for Compliance

Compliance with Nondiscrimination Requirements:

During the performance of this contract, the Contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the “Contractor”) agrees as follows:

1. **Compliance with Regulations:** The Contractor (hereinafter includes consultants) will comply with the Title VI List of Pertinent Nondiscrimination Acts and Authorities, as they may be amended from time to time, which are herein incorporated by reference and made a part of this contract.
2. **Nondiscrimination:** The Contractor, with regard to the work performed by it during the contract, will not discriminate on the grounds of race, color, national origin (including limited English proficiency), creed, sex (including sexual orientation and gender identity), age, or disability in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The Contractor will not participate directly or indirectly in the discrimination prohibited by the Nondiscrimination Acts and Authorities, including

employment practices when the contract covers any activity, project, or program set forth in Appendix B of 49 CFR part 21.

3. **Solicitations for Subcontracts, including Procurements of Materials and Equipment:** In all solicitations, either by competitive bidding or negotiation made by the Contractor for work to be performed under a subcontract, including procurements of materials, or leases of equipment, each potential subcontractor or supplier will be notified by the Contractor of the contractor's obligations under this contract and the Nondiscrimination Acts and Authorities on the grounds of race, color, or national origin.
4. **Information and Reports:** The Contractor will provide all information and reports required by the Acts, the Regulations, and directives issued pursuant thereto and will permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the Sponsor or the Federal Aviation Administration to be pertinent to ascertain compliance with such Nondiscrimination Acts and Authorities and instructions. Where any information required of a contractor is in the exclusive possession of another who fails or refuses to furnish the information, the Contractor will so certify to the Sponsor or the Federal Aviation Administration, as appropriate, and will set forth what efforts it has made to obtain the information.
5. **Sanctions for Noncompliance:** In the event of a Contractor's noncompliance with the non-discrimination provisions of this contract, the Sponsor will impose such contract sanctions as it or the Federal Aviation Administration may determine to be appropriate, including, but not limited to:
 - a. Withholding payments to the Contractor under the contract until the Contractor complies; and/or
 - b. Cancelling, terminating, or suspending a contract, in whole or in part.
6. **Incorporation of Provisions:** The Contractor will include the provisions of paragraphs one through six in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Acts, the Regulations, and directives issued pursuant thereto. The Contractor will take action with respect to any subcontract or procurement as the Sponsor or the Federal Aviation Administration may direct as a means of enforcing such provisions including sanctions for noncompliance. Provided, that if the Contractor becomes involved in, or is threatened with litigation by a subcontractor, or supplier because of such direction, the Contractor may request the Sponsor to enter into any litigation to protect the interests of the Sponsor. In addition, the Contractor may request the United States to enter into the litigation to protect the interests of the United States.

PROHIBITION ON CERTAIN TELECOMMUNICATIONS AND VIDEO SURVEILLANCE SERVICES OR EQUIPMENT

Reference: 2 CFR § 200, Appendix II(K)
2 CFR § 200.216

Contractor and Subcontractor agree to comply with mandatory standards and policies relating to use and procurement of certain telecommunications and video surveillance services or equipment in compliance with the National Defense Authorization Act [Public Law 115-232 § 889(f)(1)].

FEDERAL FAIR LABOR STANDARDS ACT (FEDERAL MINIMUM WAGE)

Reference: 29 USC § 201, et seq
2 CFR § 200.430

All contracts and subcontracts that result from this solicitation incorporate by reference the provisions of 29 CFR part 201, et seq, the Federal Fair Labor Standards Act (FLSA), with the same force and effect as if given in full text. The FLSA sets minimum wage, overtime pay, recordkeeping, and child labor standards for full and part-time workers.

The Contractor has full responsibility to monitor compliance to the referenced statute or regulation. The Contractor must address any claims or disputes that arise from this requirement directly with the U.S. Department of Labor – Wage and Hour Division.

OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970

Reference: 20 CFR Part 1910

All contracts and subcontracts that result from this solicitation incorporate by reference the requirements of 29 CFR Part 1910 with the same force and effect as if given in full text. The employer must provide a work environment that is free from recognized hazards that may cause death or serious physical harm to the employee. The employer retains full responsibility to monitor its compliance and their subcontractor's compliance with the applicable requirements of the Occupational Safety and Health Act of 1970 (29 CFR Part 1910). The employer must address any claims or disputes that pertain to a referenced requirement directly with the U.S. Department of Labor – Occupational Safety and Health Administration.

RIGHT TO INVENTIONS

Reference: 2 CFR Part 200, Appendix II(F)
37 CFR Part 401

Contracts or agreements that include the performance of experimental, developmental, or research work must provide for the rights of the Federal Government and the Owner in any resulting invention as established by 37 CFR part 401, Rights to Inventions Made by Non-profit Organizations and Small Business Firms under Government Grants, Contracts, and Cooperative Agreements. This contract incorporates by reference the patent and inventions rights as specified within 37 CFR § 401.14. Contractor must include this requirement in all sub-tier contracts involving experimental, developmental, or research work.

SEISMIC SAFETY

Reference: 49 CFR Part 41

The Contractor agrees to ensure that all work performed under this contract, including work performed by subcontractors, conforms to a building code standard that provides a level of seismic safety substantially equivalent to standards established by the National Earthquake Hazards Reduction Program (NEHRP). Local building codes that model their code after the current version of the International Building Code (IBC) meet the NEHRP equivalency level for seismic safety.

TAX DELINQUENCY AND FELONY CONVICTIONS

Reference: Section 8113 of the Consolidated Appropriations Act, 2022 (Public Law 117-103) and similar provisions in subsequent appropriations acts
DOT Order 4200.6 – Appropriations Act Requirements for Procurement and Non-Procurement Regarding Tax Delinquency and Felony Convictions

The Contractor certifies:

- 1) It is not a corporation that has any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability. A tax delinquency is any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted, or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability.
- 2) It is not a corporation that was convicted of a criminal violation under any Federal law within the preceding 24 months. A felony conviction is a conviction within the preceding twenty four (24) months of a felony criminal violation under any Federal law and includes conviction of an offense defined in a section of the U.S. code that specifically classifies the offense as a felony and conviction of an offense that is classified as a felony under 18 USC § 3559.

The Contractor agrees to incorporate the above certification in all lower tier subcontracts.

TRADE RESTRICTION CERTIFICATION

Reference: 49 USC § 50104
49 CFR Part 30

By submission of an offer, the Offeror certifies that with respect to this solicitation and any resultant contract, the Offeror:

- 1) is not owned or controlled by one or more citizens of a foreign country included in the list of countries that discriminate against U.S. firms as published by the Office of the United States Trade Representative (USTR);
- 2) has not knowingly entered into any contract or subcontract for this project with a person that is a citizen or national of a foreign country included on the list of countries that discriminate against U.S. firms as published by the USTR; and
- 3) has not entered into any subcontract for any product to be used on the Federal project that is produced in a foreign country included on the list of countries that discriminate against U.S. firms published by the USTR.

This certification concerns a matter within the jurisdiction of an agency of the United States of America and the making of a false, fictitious, or fraudulent certification may render the maker subject to prosecution under Title 18 USC § 1001.

The Offeror/Contractor must provide immediate written notice to the Owner if the Offeror/Contractor learns that its certification or that of a subcontractor was erroneous when

submitted or has become erroneous by reason of changed circumstances. The Contractor must require subcontractors provide immediate written notice to the Contractor if at any time it learns that its certification was erroneous by reason of changed circumstances.

Unless the restrictions of this clause are waived by the Secretary of Transportation in accordance with 49 CFR § 30.17, no contract shall be awarded to an Offeror or subcontractor:

- 1) who is owned or controlled by one or more citizens or nationals of a foreign country included on the list of countries that discriminate against U.S. firms published by the USTR; or
- 2) whose subcontractors are owned or controlled by one or more citizens or nationals of a foreign country on such USTR list; or
- 3) who incorporates in the public works project any product of a foreign country on such USTR list.

Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render, in good faith, the certification required by this provision. The knowledge and information of a contractor is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

The Offeror agrees that, if awarded a contract resulting from this solicitation, it will incorporate this provision for certification without modification in all lower tier subcontracts. The Contractor may rely on the certification of a prospective subcontractor that it is not a firm from a foreign country included on the list of countries that discriminate against U.S. firms as published by USTR, unless the Offeror has knowledge that the certification is erroneous.

This certification is a material representation of fact upon which reliance was placed when making an award. If it is later determined that the Contractor or subcontractor knowingly rendered an erroneous certification, the Federal Aviation Administration (FAA) may direct through the Owner cancellation of the contract or subcontract for default at no cost to the Owner or the FAA.

VETERAN'S PREFERENCE

Reference: 49 USC § 47112(c)

In the employment of labor (excluding executive, administrative, and supervisory positions), the Contractor and all sub-tier contractors must give preference to covered veterans as defined within Title 49 United States Code Section 47112. Covered veterans include Vietnam-era veterans, Persian Gulf veterans, Afghanistan-Iraq war veterans, disabled veterans, and small business concerns (as defined by 15 USC § 632) owned and controlled by disabled veterans. This preference only applies when there are covered veterans readily available and qualified to perform the work to which the employment relates.

DOMESTIC PREFERENCES FOR PROCUREMENTS

Reference: 2 CFR § 200.322
2 CFR Part 200, Appendix II(L)

The Bidder or Offeror certifies by signing and submitting this bid or proposal that, to the greatest extent practicable, the Bidder or Offeror has provided a preference for the purchase, acquisition, or use of goods, products, or materials produced in the United States (including, but not limited to, iron, aluminum, steel, cement, and other manufactured products) in compliance with 2 CFR § 200.322.

PROVISIONS APPLICABLE TO CONTRACTS EXCEEDING \$2,000

COPELAND “ANTI-KICKBACK” ACT

Reference: 2 CFR Part 200, Appendix II(D)
29 CFR Parts 3 and 5

Contractor must comply with the requirements of the Copeland “Anti-Kickback” Act (18 USC 874 and 40 USC 3145), as supplemented by Department of Labor regulation 29 CFR part 3. Contractor and subcontractors are prohibited from inducing, by any means, any person employed on the project to give up any part of the compensation to which the employee is entitled. The Contractor and each Subcontractor must submit to the Owner, a weekly statement on the wages paid to each employee performing on covered work during the prior week. Owner must report any violations of the Act to the Federal Aviation Administration.

DAVIS-BACON REQUIREMENTS

Reference: 2 CFR Part 200, Appendix II(D)
29 CFR Part 5
49 USC § 47112(b)
40 USC §§ 3141-3144, 3146, and 3147

1. Minimum Wages.

- (i) All laborers and mechanics employed or working upon the site of the work will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by the Secretary of Labor under the Copeland Act (29 CFR Part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalent thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the Contractor and such laborers and mechanics.

Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph (1)(iv) of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR § 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: *Provided*, that the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under (1)(ii) of this section) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the Contractor and its subcontractors at the site of the work in a prominent and accessible place where it can easily be seen by the workers.

(ii) (A) thru (D)

(A) The contracting officer shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The contracting officer shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:

- (1) The work to be performed by the classification requested is not performed by a classification in the wage determination;
- (2) The classification is utilized in the area by the construction industry; and
- (3) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(B) If the Contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the Administrator of the Wage and Hour Division, U.S. Department of Labor, Washington, DC 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(C) In the event the Contractor, the laborers, or mechanics to be employed in the classification, or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Administrator for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(D) The wage rate (including fringe benefits where appropriate) determined pursuant to subparagraphs (1)(ii) (B) or (C) of this paragraph, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

(iii) Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

(iv) If the Contractor does not make payments to a trustee or other third person, the Contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, *Provided*, that the Secretary of Labor has found, upon the written request of the Contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor

may require the Contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

2. Withholding.

The Federal Aviation Administration or the Sponsor shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld from the Contractor under this contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the Contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the contract, the Federal Aviation Administration may, after written notice to the Contractor, Sponsor, Applicant, or Owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

3. Payrolls and Basic Records.

(i) Payrolls and basic records relating thereto shall be maintained by the Contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker; his or her correct classification; hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in 1(b)(2)(B) of the Davis-Bacon Act); daily and weekly number of hours worked; deductions made; and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-Bacon Act, the Contractor shall maintain records that show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual costs incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

(ii) (A) thru (D)

(A) The Contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the Federal Aviation Administration if the agency is a party to the contract, but if the agency is not such a party, the Contractor will submit the payrolls to the applicant, Sponsor, or Owner, as the case may be, for transmission to the Federal Aviation Administration. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR § 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually

- identifying number for each employee (*e.g.*, the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division Web site at <https://www.dol.gov/agencies/whd/government-contracts/construction/payroll-certification> or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker and shall provide them upon request to the Federal Aviation Administration if the agency is a party to the contract, but if the agency is not such a party, the Contractor will submit them to the applicant, Sponsor, or Owner, as the case may be, for transmission to the Federal Aviation Administration, the Contractor, or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the sponsoring government agency (or the applicant, Sponsor, or Owner).
- (B) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the Contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:
- (1) That the payroll for the payroll period contains the information required to be provided under 29 CFR § 5.5(a)(3)(ii), the appropriate information is being maintained under 29 CFR § 5.5 (a)(3)(i), and that such information is correct and complete;
 - (2) That each laborer and mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in Regulations, 29 CFR Part 3;
 - (3) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.
- (C) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph (3)(ii)(B) of this section.
- (D) The falsification of any of the above certifications may subject the Contractor or subcontractor to civil or criminal prosecution under Section 1001 of Title 18 and Section 231 of Title 31 of the United States Code.
- (iii) The Contractor or subcontractor shall make the records required under paragraph (3)(i) of this section available for inspection, copying, or transcription by authorized representatives of the Sponsor, the Federal Aviation Administration, or the Department of Labor and shall permit such representatives to interview employees during working hours on the job. If the Contractor or subcontractor fails to submit the required records or to make them available, the Federal agency may, after written notice to the Contractor, Sponsor, applicant, or Owner, take such action as may be necessary to cause the suspension of any further

payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR § 5.12.

4. Apprentices and Trainees.

(i) Apprentices

Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of Apprenticeship Training, Employer and Labor Services or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice. The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the Contractor's or subcontractor's registered program shall be observed. Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination. In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws approval of an apprenticeship program, the Contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(ii) Trainees

Except as provided in 29 CFR § 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration. The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Every trainee must be

paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination that provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate that is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. In the event the Employment and Training Administration withdraws approval of a training program, the Contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

- (iii) Equal Employment Opportunity. The utilization of apprentices, trainees, and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR Part 30.

5. Compliance with Copeland Act Requirements.

The Contractor shall comply with the requirements of 29 CFR Part 3, which are incorporated by reference in this contract.

6. Subcontracts.

The Contractor or subcontractor shall insert in any subcontracts the clauses contained in 29 CFR §§ 5.5(a)(1) through (10) and such other clauses as the Federal Aviation Administration may by appropriate instructions require, and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR § 5.5.

7. Contract Termination: Debarment.

A breach of the contract clauses in paragraph 1 through 10 of this section may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR § 5.12.

8. Compliance with Davis-Bacon and Related Act Requirements.

All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR Parts 1, 3, and 5 are herein incorporated by reference in this contract.

9. Disputes Concerning Labor Standards.

Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR Parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the Contractor (or any of its subcontractors)

and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

10. Certification of Eligibility.

- (i) By entering into this contract, the Contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the Contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR § 5.12(a)(1).
- (ii) No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR § 5.12(a)(1).
- (iii) The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 USC § 1001.

PROVISIONS APPLICABLE TO CONTRACTS EXCEEDING \$10,000

AFFIRMATIVE ACTION REQUIREMENT

Reference: 41 CFR Part 60-4
Executive Order 11246

Notice of Requirement for Affirmative Action to Ensure Equal Employment Opportunity

1. The Offeror's or Bidder's attention is called to the "Equal Opportunity Clause" and the "Standard Federal Equal Employment Opportunity Construction Contract Specifications" set forth herein.
2. The goals and timetables for minority and female participation, expressed in percentage terms for the Contractor's aggregate workforce in each trade on all construction work in the covered area, are as follows:

Timetables:	Goal:
Goals for minority participation for each trade:	3.4
Goals for female participation in each trade:	6.9%

These goals are applicable to all of the Contractor's construction work (whether or not it is Federal or federally assisted) performed in the covered area. If the Contractor performs construction work in a geographical area located outside of the covered area, it shall apply the goals established for such geographical area where the work is actually performed. With regard to this second area, the Contractor also is subject to the goals for both its federally involved and nonfederally involved construction.

The Contractor's compliance with the Executive Order and the regulations in 41 CFR Part 60-4 shall be based on its implementation of the Equal Opportunity Clause, specific affirmative action obligations required by the specifications set forth in 41 CFR 60-4.3(a) and its efforts to meet the goals. The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade, and the Contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from Contractor to Contractor or from project to project for the sole purpose of meeting the Contractor's goals shall be a violation of the contract, the Executive Order and the regulations in 41 CFR Part 60-4. Compliance with the goals will be measured against the total work hours performed.

3. The Contractor shall provide written notification to the Director of the Office of Federal Contract Compliance Programs (OFCCP) within 10 working days of award of any construction subcontract in excess of \$10,000 at any tier for construction work under the contract resulting from this solicitation. The notification shall list the name, address, and telephone number of the subcontractor; employer identification number of the subcontractor; estimated dollar amount of the subcontract; estimated starting and completion dates of the subcontract; and the geographical area in which the subcontract is to be performed.
4. As used in this notice and in the contract resulting from this solicitation, the "covered area" is:

State	County	City
Iowa	Muscatine	Muscatine

DISTRACTED DRIVING

Reference: Executive Order 13513
DOT Order 3902.10

In accordance with Executive Order 13513, "Federal Leadership on Reducing Text Messaging While Driving", (10/1/2009) and DOT Order 3902.10, "Text Messaging While Driving", (12/30/2009), the Federal Aviation Administration encourages recipients of Federal grant funds to adopt and enforce safety policies that decrease crashes by distracted drivers, including policies to ban text messaging while driving when performing work related to a grant or subgrant.

In support of this initiative, the Owner encourages the Contractor to promote policies and initiatives for its employees and other work personnel that decrease crashes by distracted drivers, including policies that ban text messaging while driving motor vehicles while performing work activities associated with the project. The Contractor must include the substance of this clause in all sub-tier contracts exceeding \$10,000 that involve driving a motor vehicle in performance of work activities associated with the project.

EQUAL EMPLOYMENT OPPORTUNITY (EEO)

Reference: 2 CFR Part 200, Appendix II(C)
41 CFR § 60-1.4
41 CFR § 60-4.3
Executive Order 11246

Equal Opportunity Clause

During the performance of this contract, the Contractor agrees as follows:

- (1) The Contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, sexual orientation, gender identity, or national origin. The Contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, sex, sexual orientation, gender identity, or national origin. Such action shall include, but not be limited to, the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff, or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.
- (2) The Contractor will, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, or national origin.
- (3) The contractor will not discharge or in any other manner discriminate against any employee or applicant for employment because such employee or applicant has inquired about, discussed, or disclosed the compensation of the employee or applicant or another employee or applicant. This provision shall not apply to instances in which an employee who has access to the compensation information of other employees or applicants as a part of such employee's essential job functions discloses the compensation of such other

employees or applicants to individuals who do not otherwise have access to such information, unless such disclosure is in response to a formal complaint or charge, in furtherance of an investigation, proceeding, hearing, or action, including an investigation conducted by the employer, or is consistent with the contractor's legal duty to furnish information.

- (4) The Contractor will send to each labor union or representative of workers with which it has a collective bargaining agreement or other contract or understanding, a notice to be provided by the agency contracting officer, advising the labor union or workers' representative of the Contractor's commitments under this section 202 of Executive Order 11246 of September 24, 1965, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.
- (5) The Contractor will comply with all provisions of Executive Order 11246 of September 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.
- (6) The Contractor will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by the rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the contracting agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.
- (7) In the event of the Contractor's noncompliance with the nondiscrimination clauses of this contract or with any such rules, regulations, or orders, this contract may be canceled, terminated, or suspended in whole or in part and the Contractor may be declared ineligible for further Government contracts in accordance with procedures authorized in Executive Order 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.
- (8) The Contractor will include the provisions of paragraphs (1) through (8) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The Contractor will take such action with respect to any subcontract or purchase order as may be directed by the Secretary of Labor as a means of enforcing such provisions, including sanctions for noncompliance: *Provided*, however, that in the event the contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction, the Contractor may request the United States to enter into such litigation to protect the interests of the United States.

Standard Federal Equal Employment Opportunity Construction Contract Specifications

1. As used in these specifications:
 - a. "Covered area" means the geographical area described in the solicitation from which this contract resulted;
 - b. "Director" means Director, Office of Federal Contract Compliance Programs (OFCCP), U.S. Department of Labor, or any person to whom the Director delegates authority;
 - c. "Employer identification number" means the Federal social security number used on the Employer's Quarterly Federal Tax Return, U.S. Treasury Department Form 941;

- d. "Minority" includes:
- (1) Black (all persons having origins in any of the Black African racial groups not of Hispanic origin);
 - (2) Hispanic (all persons of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin, regardless of race);
 - (3) Asian and Pacific Islander (all persons having origins in any of the original peoples of the Far East, Southeast Asia, the Indian Subcontinent, or the Pacific Islands); and
 - (4) American Indian or Alaskan native (all persons having origins in any of the original peoples of North America and maintaining identifiable tribal affiliations through membership and participation or community identification).
2. Whenever the Contractor, or any subcontractor at any tier, subcontracts a portion of the work involving any construction trade, it shall physically include in each subcontract in excess of \$10,000 the provisions of these specifications and the Notice which contains the applicable goals for minority and female participation and which is set forth in the solicitations from which this contract resulted.
 3. If the Contractor is participating (pursuant to 41 CFR part 60-4.5) in a Hometown Plan approved by the U.S. Department of Labor in the covered area either individually or through an association, its affirmative action obligations on all work in the Plan area (including goals and timetables) shall be in accordance with that Plan for those trades which have unions participating in the Plan. Contractors must be able to demonstrate their participation in and compliance with the provisions of any such Hometown Plan. Each contractor or subcontractor participating in an approved plan is individually required to comply with its obligations under the EEO clause and to make a good faith effort to achieve each goal under the Plan in each trade in which it has employees. The overall good faith performance by other contractors or subcontractors toward a goal in an approved Plan does not excuse any covered contractor's or subcontractor's failure to take good faith efforts to achieve the Plan goals and timetables.
 4. The Contractor shall implement the specific affirmative action standards provided in paragraphs 7a through 7p of these specifications. The goals set forth in the solicitation from which this contract resulted are expressed as percentages of the total hours of employment and training of minority and female utilization the Contractor should reasonably be able to achieve in each construction trade in which it has employees in the covered area. Covered construction contractors performing construction work in a geographical areas where they do not have a Federal or federally assisted construction contract shall apply the minority and female goals established for the geographical area where the work is being performed. Goals are published periodically in the Federal Register in notice form, and such notices may be obtained from any Office of Federal Contract Compliance Programs office or from Federal procurement contracting officers. The Contractor is expected to make substantially uniform progress in meeting its goals in each craft during the period specified.
 5. Neither the provisions of any collective bargaining agreement, nor the failure by a union with whom the Contractor has a collective bargaining agreement, to refer either minorities or women shall excuse the Contractor's obligations under these specifications, Executive Order 11246, or the regulations promulgated pursuant thereto.

6. In order for the nonworking training hours of apprentices and trainees to be counted in meeting the goals, such apprentices and trainees must be employed by the Contractor during the training period, and the Contractor must have made a commitment to employ the apprentices and trainees at the completion of their training, subject to the availability of employment opportunities. Trainees must be trained pursuant to training programs approved by the U.S. Department of Labor.
7. The Contractor shall take specific affirmative actions to ensure equal employment opportunity. The evaluation of the Contractor's compliance with these specifications shall be based upon its effort to achieve maximum results from its actions. The Contractor shall document these efforts fully, and shall implement affirmative action steps at least as extensive as the following:
 - a. Ensure and maintain a working environment free of harassment, intimidation, and coercion at all sites, and in all facilities at which the Contractor's employees are assigned to work. The Contractor, where possible, will assign two or more women to each construction project. The Contractor shall specifically ensure that all foremen, superintendents, and other onsite supervisory personnel are aware of and carry out the Contractor's obligation to maintain such a working environment, with specific attention to minority or female individuals working at such sites or in such facilities.
 - b. Establish and maintain a current list of minority and female recruitment sources, provide written notification to minority and female recruitment sources and to community organizations when the Contractor or its unions have employment opportunities available, and maintain a record of the organizations' responses.
 - c. Maintain a current file of the names, addresses, and telephone numbers of each minority and female off-the-street applicant and minority or female referral from a union, a recruitment source, or community organization and of what action was taken with respect to each such individual. If such individual was sent to the union hiring hall for referral and was not referred back to the Contractor by the union or, if referred, not employed by the Contractor, this shall be documented in the file with the reason therefor, along with whatever additional actions the Contractor may have taken.
 - d. Provide immediate written notification to the Director when the union or unions with which the Contractor has a collective bargaining agreement has not referred to the Contractor a minority person or woman sent by the Contractor, or when the Contractor has other information that the union referral process has impeded the Contractor's efforts to meet its obligations.
 - e. Develop on-the-job training opportunities and/or participate in training programs for the area which expressly include minorities and women, including upgrading programs and apprenticeship and trainee programs relevant to the Contractor's employment needs, especially those programs funded or approved by the Department of Labor. The Contractor shall provide notice of these programs to the sources compiled under 7b above.
 - f. Disseminate the Contractor's EEO policy by providing notice of the policy to unions and training programs and requesting their cooperation in assisting the Contractor in meeting its EEO obligations; by including it in any policy manual and collective bargaining agreement; by publicizing it in the company newspaper, annual report, etc.;

by specific review of the policy with all management personnel and with all minority and female employees at least once a year; and by posting the company EEO policy on bulletin boards accessible to all employees at each location where construction work is performed.

- g. Review, at least annually, the company's EEO policy and affirmative action obligations under these specifications with all employees having any responsibility for hiring, assignment, layoff, termination, or other employment decisions including specific review of these items with onsite supervisory personnel such as superintendents, general foremen, etc., prior to the initiation of construction work at any job site. A written record shall be made and maintained identifying the time and place of these meetings, persons attending, subject matter discussed, and disposition of the subject matter.
- h. Disseminate the Contractor's EEO policy externally by including it in any advertising in the news media, specifically including minority and female news media, and providing written notification to and discussing the Contractor's EEO policy with other contractors and subcontractors with whom the Contractor does or anticipates doing business.
- i. Direct its recruitment efforts, both oral and written, to minority, female, and community organizations, to schools with minority and female students and to minority and female recruitment and training organizations serving the Contractor's recruitment area and employment needs. Not later than one month prior to the date for the acceptance of applications for apprenticeship or other training by any recruitment source, the Contractor shall send written notification to organizations such as the above, describing the openings, screening procedures, and tests to be used in the selection process.
- j. Encourage present minority and female employees to recruit other minority persons and women and, where reasonable, provide after school, summer, and vacation employment to minority and female youth both on the site and in other areas of a contractor's work force.
- k. Validate all tests and other selection requirements where there is an obligation to do so under 41 CFR part 60-3.
- l. Conduct, at least annually, an inventory and evaluation at least of all minority and female personnel, for promotional opportunities and encourage these employees to seek or to prepare for, through appropriate training, etc., such opportunities.
- m. Ensure that seniority practices, job classifications, work assignments, and other personnel practices do not have a discriminatory effect by continually monitoring all personnel and employment related activities to ensure that the EEO policy and the Contractor's obligations under these specifications are being carried out.
- n. Ensure that all facilities and company activities are nonsegregated except that separate or single-user toilet and necessary changing facilities shall be provided to assure privacy between the sexes.
- o. Document and maintain a record of all solicitations of offers for subcontracts from minority and female construction contractors and suppliers, including circulation of solicitations to minority and female contractor associations and other business associations.

- p. Conduct a review, at least annually, of all supervisor's adherence to and performance under the Contractor's EEO policies and affirmative action obligations.
8. Contractors are encouraged to participate in voluntary associations, which assist in fulfilling one or more of their affirmative action obligations (7a through 7p). The efforts of a contractor association, joint contractor-union, contractor-community, or other similar group of which the Contractor is a member and participant may be asserted as fulfilling any one or more of its obligations under 7a through 7p of these specifications provided that the Contractor actively participates in the group, makes every effort to assure that the group has a positive impact on the employment of minorities and women in the industry, ensures that the concrete benefits of the program are reflected in the Contractor's minority and female workforce participation, makes a good faith effort to meet its individual goals and timetables, and can provide access to documentation which demonstrates the effectiveness of actions taken on behalf of the Contractor. The obligation to comply, however, is the Contractor's and failure of such a group to fulfill an obligation shall not be a defense for the Contractor's noncompliance.
 9. A single goal for minorities and a separate single goal for women have been established. The Contractor, however, is required to provide equal employment opportunity and to take affirmative action for all minority groups, both male and female, and all women, both minority and non-minority. Consequently, the Contractor may be in violation of the Executive Order if a particular group is employed in a substantially disparate manner (for example, even though the Contractor has achieved its goals for women generally, the Contractor may be in violation of the Executive Order if a specific minority group of women is underutilized).
 10. The Contractor shall not use the goals and timetables or affirmative action standards to discriminate against any person because of race, color, religion, sex, sexual orientation, gender identity, or national origin.
 11. The Contractor shall not enter into any subcontract with any person or firm debarred from Government contracts pursuant to Executive Order 11246.
 12. The Contractor shall carry out such sanctions and penalties for violation of these specifications and of the Equal Opportunity Clause, including suspension, termination, and cancellation of existing subcontracts as may be imposed or ordered pursuant to Executive Order 11246, as amended, and its implementing regulations, by the Office of Federal Contract Compliance Programs. Any contractor who fails to carry out such sanctions and penalties shall be in violation of these specifications and Executive Order 11246, as amended.
 13. The Contractor, in fulfilling its obligations under these specifications, shall implement specific affirmative action steps, at least as extensive as those standards prescribed in paragraph 7 of these specifications, so as to achieve maximum results from its efforts to ensure equal employment opportunity. If the Contractor fails to comply with the requirements of the Executive Order, the implementing regulations, or these specifications, the Director shall proceed in accordance with 41 CFR part 60-4.8.
 14. The Contractor shall designate a responsible official to monitor all employment related activity to ensure that the company EEO policy is being carried out, to submit reports relating to the provisions hereof as may be required by the Government, and to keep

records. Records shall at least include for each employee, the name, address, telephone numbers, construction trade, union affiliation if any, employee identification number when assigned, social security number, race, sex, status (e.g., mechanic, apprentice, trainee, helper, or laborer), dates of changes in status, hours worked per week in the indicated trade, rate of pay, and locations at which the work was performed. Records shall be maintained in an easily understandable and retrievable form; however, to the degree that existing records satisfy this requirement, contractors shall not be required to maintain separate records.

15. Nothing herein provided shall be construed as a limitation upon the application of other laws which establish different standards of compliance or upon the application of requirements for the hiring of local or other area residents (e.g. those under the Public Works Employment Act of 1977 and the Community Development Block Grant Program).

PROHIBITION OF SEGREGATED FACILITIES

Reference: 2 CFR Part 200, Appendix II(C)
41 CFR Part 60-1

- (a) The Contractor agrees that it does not and will not maintain or provide for its employees any segregated facilities at any of its establishments, and that it does not and will not permit its employees to perform their services at any location under its control where segregated facilities are maintained. The Contractor agrees that a breach of this clause is a violation of the Equal Employment Opportunity clause in this contract.
- (b) "Segregated facilities," as used in this clause, means any waiting rooms, work areas, rest rooms and wash rooms, restaurants and other eating areas, time clocks, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees that are segregated by explicit directive or are in fact segregated on the basis of race, color, religion, sex, sexual orientation, gender identity, or national origin because of written or oral policies or employee custom. The term does not include separate or single-user rest rooms or necessary dressing or sleeping areas provided to assure privacy between the sexes.
- (c) The Contractor shall include this clause in every subcontract and purchase order that is subject to the Equal Employment Opportunity clause of this contract.

PROCUREMENT OF RECOVERED MATERIALS

Reference: 2 CFR § 200.323
2 CFR Part 200, Appendix II(J)
40 CFR Part 247
42 USC § 6901, et seq (Resource Conservation and Recovery Act (RCRA))

Contractor and subcontractor agree to comply with Section 6002 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act, and the regulatory provisions of 40 CFR Part 247. In the performance of this contract and to the extent practicable, the Contractor and subcontractors are to use products containing the highest percentage of recovered materials for items designated by the Environmental Protection Agency (EPA) under 40 CFR Part 247 whenever:

- a) The contract requires procurement of \$10,000 or more of a designated item during the fiscal year; or
- b) The contractor has procured \$10,000 or more of a designated item using Federal funding during the previous fiscal year.

The list of EPA-designated items is available at www.epa.gov/smm/comprehensive-procurement-guidelines-construction-products.

Section 6002(c) establishes exceptions to the preference for recovery of EPA-designated products if the contractor can demonstrate the item is:

- a) Not reasonably available within a timeframe providing for compliance with the contract performance schedule;
- b) Fails to meet reasonable contract performance requirements; or
- c) Is only available at an unreasonable price.

TERMINATION OF CONTRACT

Reference: 2 CFR Part 200, Appendix II(B)
FAA Advisory Circular 150/5370-10, Section 80-09

Termination for Convenience (Construction & Equipment Contracts)

The Owner may terminate this contract in whole or in part at any time by providing written notice to the Contractor. Such action may be without cause and without prejudice to any other right or remedy of Owner. Upon receipt of a written notice of termination, except as explicitly directed by the Owner, the Contractor shall immediately proceed with the following obligations regardless of any delay in determining or adjusting amounts due under this clause:

1. Contractor must immediately discontinue work as specified in the written notice.
2. Terminate all subcontracts to the extent they relate to the work terminated under the notice.
3. Discontinue orders for materials and services except as directed by the written notice.
4. Deliver to the Owner all fabricated and partially fabricated parts, completed and partially completed work, supplies, equipment and materials acquired prior to termination of the work, and as directed in the written notice.
5. Complete performance of the work not terminated by the notice.
6. Take action as directed by the Owner to protect and preserve property and work related to this contract that Owner will take possession.

Owner agrees to pay Contractor for:

1. Completed and acceptable work executed in accordance with the contract documents prior to the effective date of termination;
2. Documented expenses sustained prior to the effective date of termination in performing work and furnishing labor, materials, or equipment as required by the contract documents in connection with uncompleted work;

3. Reasonable and substantiated claims, costs, and damages incurred in settlement of terminated contracts with Subcontractors and Suppliers; and
4. Reasonable and substantiated expenses to the Contractor directly attributable to Owner's termination action.

Owner will not pay Contractor for loss of anticipated profits or revenue or other economic loss arising out of or resulting from the Owner's termination action.

The rights and remedies this clause provides are in addition to any other rights and remedies provided by law or under this contract.

Termination for Cause (Construction)

Section 80-09 of FAA Advisory Circular 150/5370-10 establishes standard language for conditions, rights, and remedies associated with Owner termination of this contract for cause due to default of the Contractor.

Termination for Cause (Equipment)

The Owner may, by written notice of default to the Contractor, terminate all or part of this Contract for cause if the Contractor:

1. Fails to begin the Work under the Contract within the time specified in the Notice- to-Proceed;
2. Fails to make adequate progress as to endanger performance of this Contract in accordance with its terms;
3. Fails to make delivery of the equipment within the time specified in the Contract, including any Owner approved extensions;
4. Fails to comply with material provisions of the Contract;
5. Submits certifications made under the Contract and as part of their proposal that include false or fraudulent statements; or
6. Becomes insolvent or declares bankruptcy.

If one or more of the stated events occur, the Owner will give notice in writing to the Contractor and Surety of its intent to terminate the contract for cause. At the Owner's discretion, the notice may allow the Contractor and Surety an opportunity to cure the breach or default.

If within ten (10) days of the receipt of notice, the Contractor or Surety fails to remedy the breach or default to the satisfaction of the Owner, the Owner has authority to acquire equipment by other procurement action. The Contractor will be liable to the Owner for any excess costs the Owner incurs for acquiring such similar equipment.

Payment for completed equipment delivered to and accepted by the Owner shall be at the Contract price. The Owner may withhold from amounts otherwise due the Contractor for such completed equipment, such sum as the Owner determines to be necessary to protect the Owner against loss because of Contractor default.

Owner will not terminate the Contractor's right to proceed with the work under this clause if the delay in completing the work arises from unforeseeable causes beyond the control and without the fault or negligence of the Contractor. Examples of such acceptable causes include: acts of God, acts of the Owner, acts of another Contractor in the performance of a contract with

the Owner, and severe weather events that substantially exceed normal conditions for the location.

If, after termination of the Contractor's right to proceed, the Owner determines that the Contractor was not in default, or that the delay was excusable, the rights and obligations of the parties will be the same as if the Owner issued the termination for the convenience the Owner.

The rights and remedies of the Owner in this clause are in addition to any other rights and remedies provided by law or under this contract.

PROVISIONS APPLICABLE TO CONTRACTS EXCEEDING \$25,000

DEBARMENT AND SUSPENSION

Reference: 2 CFR Part 180 (Subpart B)
2 CFR Part 200, Appendix II(H)
2 CFR Part 1200
DOT Order 4200.5
Executive Orders 12549 and 12689

Certification of Offeror/Bidder Regarding Debarment

By submitting a bid/proposal under this solicitation, the bidder or offeror certifies that neither it nor its principals are presently debarred or suspended by any Federal department or agency from participation in this transaction.

Certification of Lower Tier Contractors Regarding Debarment

The successful bidder, by administering each lower tier subcontract that exceeds \$25,000 as a “covered transaction”, must confirm each lower tier participant of a “covered transaction” under the project is not presently debarred or otherwise disqualified from participation in this federally-assisted project. The successful bidder will accomplish this by:

1. Checking the System for Award Management at website: <http://www.sam.gov>.
2. Collecting a certification statement similar to the Certification of Offeror /Bidder Regarding Debarment, above.
3. Inserting a clause or condition in the covered transaction with the lower tier contract.

If the Federal Aviation Administration later determines that a lower tier participant failed to disclose to a higher tier participant that it was excluded or disqualified at the time it entered the covered transaction, the FAA may pursue any available remedies, including suspension and debarment of the non-compliant participant.

PROVISIONS APPLICABLE TO CONTRACTS EXCEEDING \$100,000

CONTRACT WORKHOURS AND SAFETY STANDARDS ACT REQUIREMENTS

Reference: 2 CFR Part 200, Appendix II(E)
2 CFR § 5.5(b)
40 USC § 3702
40 USC § 3704

1. Overtime Requirements.

No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic, including watchmen and guards, in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.

2. Violation; Liability for Unpaid Wages; Liquidated Damages.

In the event of any violation of the clause set forth in paragraph (1) of this clause, the Contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (1) of this clause, in the sum of \$29 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (1) of this clause.

3. Withholding for Unpaid Wages and Liquidated Damages.

The Federal Aviation Administration (FAA) or the Owner shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (2) of this clause.

4. Subcontractors.

The Contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraphs (1) through (4) and also a clause requiring the subcontractor to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (1) through (4) of this clause.

LOBBYING AND INFLUENCING FEDERAL EMPLOYEES

Reference: 31 USC § 1352 – Byrd Anti-Lobbying Amendment
2 CFR Part 200, Appendix II(I)
49 CFR Part 20, Appendix A

Certification Regarding Lobbying

The Bidder or Offeror certifies by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:

- (1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the Bidder or Offeror, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
- (2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.
- (3) The undersigned shall require that the language of this certification be included in the award documents for all sub-awards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all sub-recipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

PROVISIONS APPLICABLE TO CONTRACTS EXCEEDING \$150,000

CLEAN AIR AND WATER POLLUTION CONTROL

References: 2 CFR Part 200, Appendix II(G)
42 USC § 7401, et seq
33 USC § 1251, et seq

Contractor agrees to comply with all applicable standards, orders, and regulations issued pursuant to the Clean Air Act (42 USC §§ 7401-7671q) and the Federal Water Pollution Control Act as amended (33 USC §§ 1251-1387). The Contractor agrees to report any violation to the Owner immediately upon discovery. The Owner assumes responsibility for notifying the Environmental Protection Agency (EPA) and the Federal Aviation Administration.

The Contractor must include this requirement in all subcontracts that exceed \$150,000.

PROVISIONS APPLICABLE TO CONTRACTS EXCEEDING \$250,000

BREACH OF CONTRACT TERMS

Reference: 2 CFR § 200 Appendix II(A)

Any violation or breach of terms of this contract on the part of the Contractor or its subcontractors may result in the suspension or termination of this contract or such other action that may be necessary to enforce the rights of the parties of this agreement.

Owner will provide Contractor written notice that describes the nature of the breach and corrective actions the Contractor must undertake in order to avoid termination of the contract. Owner reserves the right to withhold payments to Contractor until such time the Contractor corrects the breach or the Owner elects to terminate the contract. The Owner's notice will identify a specific date by which the Contractor must correct the breach. Owner may proceed with termination of the contract if the Contractor fails to correct the breach by the deadline indicated in the Owner's notice.

The duties and obligations imposed by the Contract Documents and the rights and remedies available thereunder are in addition to, and not a limitation of, any duties, obligations, rights and remedies otherwise imposed or available by law.

DISADVANTAGED BUSINESS ENTERPRISE

Reference: 49 CFR Part 26

Solicitation Language (Solicitations that include a Contract Goal)

Bid Information Submitted as a matter of responsiveness:

The Owner's award of this contract is conditioned upon Bidder or Offeror satisfying the good faith effort requirements of 49 CFR § 26.53.

As a condition of responsiveness, the Bidder or Offeror must submit the following information with its proposal on the forms provided herein:

- 1) The names and addresses of Disadvantaged Business Enterprise (DBE) firms that will participate in the contract;
- 2) A description of the work that each DBE firm will perform;
- 3) The dollar amount of the participation of each DBE firm listed under (1);
- 4) Written statement from Bidder or Offeror that attests their commitment to use the DBE firm(s) listed under (1) to meet the Owner's project goal;
- 5) Written confirmation from each listed DBE firm that it is participating in the contract in the kind and amount of work provided in the prime contractor's commitment; and
- 6) If Bidder or Offeror cannot meet the advertised project DBE goal, evidence of good faith efforts undertaken by the Bidder or Offeror as described in appendix A to 49 CFR part 26. The documentation of good faith efforts must include copies of each DBE and non-DBE subcontractor quote submitted to the bidder when a non-DBE subcontractor was selected over a DBE for work on the contract.

Bid Information submitted as a matter of bidder responsibility:

The Owner's award of this contract is conditioned upon Bidder or Offeror satisfying the good faith effort requirements of 49 CFR § 26.53.

As a condition of responsibility, every Bidder or Offeror must submit the following information on the forms provided herein within five days after bid opening.

- 1) The names and addresses of Disadvantaged Business Enterprise (DBE) firms that will participate in the contract;
- 2) A description of the work that each DBE firm will perform;
- 3) The dollar amount of the participation of each DBE firm listed under (1);
- 4) Written statement from Bidder or Offeror that attests their commitment to use the DBE firm(s) listed under (1) to meet the Owner's project goal;
- 5) Written confirmation from each listed DBE firm that it is participating in the contract in the kind and amount of work provided in the prime contractor's commitment; and
- 6) If Bidder or Offeror cannot meet the advertised project DBE goal, evidence of good faith efforts undertaken by the Bidder or Offeror as described in appendix A to 49 CFR part 26. The documentation of good faith efforts must include copies of each DBE and non-DBE subcontractor quote submitted to the bidder when a non-DBE subcontractor was selected over a DBE for work on the contract.

Solicitation Language (Race/Gender Neutral Means)

The requirements of 49 CFR part 26 apply to this contract. It is the policy of the Owner to practice nondiscrimination based on race, color, sex, or national origin in the award or performance of this contract. The Owner encourages participation by all firms qualifying under this solicitation regardless of business size or ownership.

Prime Contracts (Contracts Covered by a DBE Program)

Contract Assurance (49 CFR § 26.13)

The Contractor, subrecipient or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The Contractor shall carry out applicable requirements of 49 CFR part 26 in the award and administration of DOT-assisted contracts. Failure by the Contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the recipient deems appropriate, which may include, but is not limited to:

- 1) Withholding monthly progress payments;
- 2) Assessing sanctions;
- 3) Liquidated damages; and/or
- 4) Disqualifying the Contractor from future bidding as non-responsible.

Prompt Payment (49 CFR § 26.29)

The prime contractor agrees to pay each subcontractor under this prime contract for satisfactory performance of its contract no later than thirty (30) calendar days from the receipt of each payment the prime contractor receives from Owner. The prime contractor agrees

further to return retainage payments to each subcontractor within thirty (30) calendar days after the subcontractor's work is satisfactorily completed. Any delay or postponement of payment from the above referenced time frame may occur only for good cause following written approval of the Owner. This clause applies to both DBE and non-DBE subcontractors.

Termination of DBE Subcontracts (49 CFR § 26.53(f))

The prime contractor must not terminate a DBE subcontractor listed in response to the above *Solicitation Language (Solicitations that include a Contract Goal)* section (or an approved substitute DBE firm) without prior written consent of Owner. This includes, but is not limited to, instances in which the prime contractor seeks to perform work originally designated for a DBE subcontractor with its own forces or those of an affiliate, a non-DBE firm, or with another DBE firm.

The prime contractor shall utilize the specific DBEs listed to perform the work and supply the materials for which each is listed unless the contractor obtains written consent from the Owner. Unless the Owner's consent is provided, the prime contractor shall not be entitled to any payment for work or material unless it is performed or supplied by the listed DBE.

The Owner may provide such written consent only if the Owner agrees, for reasons stated in the concurrence document, that the prime contractor has good cause to terminate the DBE firm. For purposes of this paragraph, good cause includes the circumstances listed in 49 CFR §26.53.

Before transmitting to the Owner its request to terminate and/or substitute a DBE subcontractor, the prime contractor must give notice in writing to the DBE subcontractor, with a copy to the Owner, of its intent to request to terminate and/or substitute, and the reason for the request.

The prime contractor must give the DBE five days to respond to the prime contractor's notice and advise the Owner and the contractor of the reasons, if any, why it objects to the proposed termination of its subcontract and why the Owner should not approve the prime contractor's action. If required in a particular case as a matter of public necessity (e.g., safety), the Owner may provide a response period shorter than five days.

In addition to post-award terminations, the provisions of this section apply to preaward deletions of or substitutions for DBE firms put forward by offerors in negotiated procurements.

FAA GENERAL CONTRACT PROVISIONS

Snow Removal Equipment Acquisition

Muscatine Municipal Airport

City of Muscatine

Muscatine, Iowa

3-19-0063-028-2025

OT5.128792

Section 10 Definition of Terms

When the following terms are used in these specifications, in the contract, or in any documents or other instruments pertaining to construction where these specifications govern, the intent and meaning shall be defined as follows:

Paragraph Number	Term	Definition
10-01	AASHTO	The American Association of State Highway and Transportation Officials.
10-02	Access Road	The right-of-way, the roadway and all improvements constructed thereon connecting the airport to a public roadway.
10-03	Advertisement	A public announcement, as required by local law, inviting bids for work to be performed and materials to be furnished.
10-04	Airport	Airport means an area of land or water which is used or intended to be used for the landing and takeoff of aircraft; an appurtenant area used or intended to be used for airport buildings or other airport facilities or rights of way; airport buildings and facilities located in any of these areas, and a heliport.
10-05	Airport Improvement Program (AIP)	A grant-in-aid program, administered by the Federal Aviation Administration (FAA).
10-06	Air Operations Area (AOA)	The term air operations area (AOA) shall mean any area of the airport used or intended to be used for the landing, takeoff, or surface maneuvering of aircraft. An air operation area shall include such paved or unpaved areas that are used or intended to be used for the unobstructed movement of aircraft in addition to its associated runway, taxiway, or apron.
10-07	Apron	Area where aircraft are parked, unloaded or loaded, fueled and/or serviced.
10-08	ASTM International (ASTM)	Formerly known as the American Society for Testing and Materials (ASTM).
10-09	Award	The Owner's notice to the successful bidder of the acceptance of the submitted bid.
10-10	Bidder	Any individual, partnership, firm, or corporation, acting directly or through a duly authorized representative, who submits a proposal for the work contemplated.
10-11	Building Area	An area on the airport to be used, considered, or intended to be used for airport buildings or other airport facilities or rights-of-way together with all airport buildings and facilities located thereon.
10-12	Calendar Day	Every day shown on the calendar.
10-13	Certificate of Analysis (COA)	The COA is the manufacturer's Certificate of Compliance (COC) including all applicable test results required by the specifications.

Paragraph Number	Term	Definition
10-14	Certificate of Compliance (COC)	The manufacturer's certification stating that materials or assemblies furnished fully comply with the requirements of the contract. The certificate shall be signed by the manufacturer's authorized representative.
10-15	Change Order	A written order to the Contractor covering changes in the plans, specifications, or proposal quantities and establishing the basis of payment and contract time adjustment, if any, for work within the scope of the contract and necessary to complete the project.
10-16	Contract	A written agreement between the Owner and the Contractor that establishes the obligations of the parties including but not limited to performance of work, furnishing of labor, equipment and materials and the basis of payment. The awarded contract includes but may not be limited to: Advertisement, Contract form, Proposal, Performance bond, payment bond, General provisions, certifications and representations, Technical Specifications, Plans, Supplemental Provisions, standards incorporated by reference and issued addenda.
10-17	Contract Item (Pay Item)	A specific unit of work for which a price is provided in the contract.
10-18	Contract Time	The number of calendar days or working days, stated in the proposal, allowed for completion of the contract, including authorized time extensions. If a calendar date of completion is stated in the proposal, in lieu of a number of calendar or working days, the contract shall be completed by that date.
10-19	Contractor	The individual, partnership, firm, or corporation primarily liable for the acceptable performance of the work contracted and for the payment of all legal debts pertaining to the work who acts directly or through lawful agents or employees to complete the contract work.
10-20	Contractors Quality Control (QC) Facilities	The Contractor's QC facilities in accordance with the Contractor Quality Control Program (CQCP).
10-21	Contractor Quality Control Program (CQCP)	Details the methods and procedures that will be taken to assure that all materials and completed construction required by the contract conform to contract plans, technical specifications and other requirements, whether manufactured by the Contractor, or procured from subcontractors or vendors.
10-22	Control Strip	A demonstration by the Contractor that the materials, equipment, and construction processes results in a product meeting the requirements of the specification.
10-23	Construction Safety and Phasing Plan (CSPP)	The overall plan for safety and phasing of a construction project developed by the airport operator, or developed by the airport operator's consultant and approved by the airport operator. It is included in the invitation for bids and becomes part of the project specifications.
10-24	Drainage System	The system of pipes, ditches, and structures by which surface or subsurface waters are collected and conducted from the airport area.

Paragraph Number	Term	Definition
10-25	Engineer	The individual, partnership, firm, or corporation duly authorized by the Owner to be responsible for engineering, inspection, and/or observation of the contract work and acting directly or through an authorized representative.
10-26	Equipment	All machinery, together with the necessary supplies for upkeep and maintenance; and all tools and apparatus necessary for the proper construction and acceptable completion of the work.
10-27	Extra Work	An item of work not provided for in the awarded contract as previously modified by change order or supplemental agreement, but which is found by the Owner's Engineer or Resident Project Representative (RPR) to be necessary to complete the work within the intended scope of the contract as previously modified.
10-28	FAA	The Federal Aviation Administration. When used to designate a person, FAA shall mean the Administrator or their duly authorized representative.
10-29	Federal Specifications	The federal specifications and standards, commercial item descriptions, and supplements, amendments, and indices prepared and issued by the General Services Administration.
10-30	Force Account	a. Contract Force Account - A method of payment that addresses extra work performed by the Contractor on a time and material basis. b. Owner Force Account - Work performed for the project by the Owner's employees.
10-31	Intention of Terms	Whenever, in these specifications or on the plans, the words "directed," "required," "permitted," "ordered," "designated," "prescribed," or words of like import are used, it shall be understood that the direction, requirement, permission, order, designation, or prescription of the Engineer and/or Resident Project Representative (RPR) is intended; and similarly, the words "approved," "acceptable," "satisfactory," or words of like import, shall mean approved by, or acceptable to, or satisfactory to the Engineer and/or RPR, subject in each case to the final determination of the Owner. Any reference to a specific requirement of a numbered paragraph of the contract specifications or a cited standard shall be interpreted to include all general requirements of the entire section, specification item, or cited standard that may be pertinent to such specific reference.
10-32	Lighting	A system of fixtures providing or controlling the light sources used on or near the airport or within the airport buildings. The field lighting includes all luminous signals, markers, floodlights, and illuminating devices used on or near the airport or to aid in the operation of aircraft landing at, taking off from, or taxiing on the airport surface.
10-33	Major and Minor Contract Items	A major contract item shall be any item that is listed in the proposal, the total cost of which is equal to or greater than 20% of the total amount of the award contract. All other items shall be considered minor contract items.

Paragraph Number	Term	Definition
10-34	Materials	Any substance specified for use in the construction of the contract work.
10-35	Modification of Standards (MOS)	Any deviation from standard specifications applicable to material and construction methods in accordance with FAA Order 5300.1.
10-36	Notice to Proceed (NTP)	A written notice to the Contractor to begin the actual contract work on a previously agreed to date. If applicable, the Notice to Proceed shall state the date on which the contract time begins.
10-37	Owner	The term "Owner" shall mean the party of the first part or the contracting agency signatory to the contract. Where the term "Owner" is capitalized in this document, it shall mean airport Sponsor only. The Owner for this project is the City of Muscatine.
10-38	Passenger Facility Charge (PFC)	Per 14 Code of Federal Regulations (CFR) Part 158 and 49 United States Code (USC) § 40117, a PFC is a charge imposed by a public agency on passengers enplaned at a commercial service airport it controls.
10-39	Pavement Structure	The combined surface course, base course(s), and subbase course(s), if any, considered as a single unit.
10-40	Payment bond	The approved form of security furnished by the Contractor and their own surety as a guaranty that the Contractor will pay in full all bills and accounts for materials and labor used in the construction of the work.
10-41	Performance bond	The approved form of security furnished by the Contractor and their own surety as a guaranty that the Contractor will complete the work in accordance with the terms of the contract.
10-42	Plans	The official drawings or exact reproductions which show the location, character, dimensions and details of the airport and the work to be done and which are to be considered as a part of the contract, supplementary to the specifications. Plans may also be referred to as 'contract drawings.'
10-43	Project	The agreed scope of work for accomplishing specific airport development with respect to a particular airport.
10-44	Proposal	The written offer of the bidder (when submitted on the approved proposal form) to perform the contemplated work and furnish the necessary materials in accordance with the provisions of the plans and specifications.
10-45	Proposal guaranty	The security furnished with a proposal to guarantee that the bidder will enter into a contract if their own proposal is accepted by the Owner.
10-46	Quality Assurance (QA)	Owner's responsibility to assure that construction work completed complies with specifications for payment.
10-47	Quality Control (QC)	Contractor's responsibility to control material(s) and construction processes to complete construction in accordance with project specifications.

Paragraph Number	Term	Definition
10-48	Quality Assurance (QA) Inspector	An authorized representative of the Engineer and/or Resident Project Representative (RPR) assigned to make all necessary inspections, observations, tests, and/or observation of tests of the work performed or being performed, or of the materials furnished or being furnished by the Contractor.
10-49	Quality Assurance (QA) Laboratory	The official quality assurance testing laboratories of the Owner or such other laboratories as may be designated by the Engineer or RPR. May also be referred to as Engineer's, Owner's, or QA Laboratory.
10-50	Resident Project Representative (RPR)	The individual, partnership, firm, or corporation duly authorized by the Owner to be responsible for all necessary inspections, observations, tests, and/or observations of tests of the contract work performed or being performed, or of the materials furnished or being furnished by the Contractor, and acting directly or through an authorized representative.
10-51	Runway	The area on the airport prepared for the landing and takeoff of aircraft.
10-52	Runway Safety Area (RSA)	A defined surface surrounding the runway prepared or suitable for reducing the risk of damage to aircraft. See the construction safety and phasing plan (CSPP) for limits of the RSA.
10-53	Safety Plan Compliance Document (SPCD)	Details how the Contractor will comply with the CSPP.
10-54	Specifications	A part of the contract containing the written directions and requirements for completing the contract work. Standards for specifying materials or testing which are cited in the contract specifications by reference shall have the same force and effect as if included in the contract physically.
10-55	Sponsor	A Sponsor is defined in 49 USC § 47102(24) as a public agency that submits to the FAA for an AIP grant; or a private Owner of a public-use airport that submits to the FAA an application for an AIP grant for the airport.
10-56	Structures	Airport facilities such as bridges; culverts; catch basins, inlets, retaining walls, cribbing; storm and sanitary sewer lines; water lines; underdrains; electrical ducts, manholes, handholes, lighting fixtures and bases; transformers; navigational aids; buildings; vaults; and, other manmade features of the airport that may be encountered in the work and not otherwise classified herein.
10-57	Subgrade	The soil that forms the pavement foundation.
10-58	Superintendent	The Contractor's executive representative who is present on the work during progress, authorized to receive and fulfill instructions from the RPR, and who shall supervise and direct the construction.

Paragraph Number	Term	Definition
10-59	Supplemental Agreement	A written agreement between the Contractor and the Owner that establishes the basis of payment and contract time adjustment, if any, for the work affected by the supplemental agreement. A supplemental agreement is required if: (1) in scope work would increase or decrease the total amount of the awarded contract by more than 25%; (2) in scope work would increase or decrease the total of any major contract item by more than 25%; (3) work that is not within the scope of the originally awarded contract; or (4) adding or deleting of a major contract item.
10-60	Surety	The corporation, partnership, or individual, other than the Contractor, executing payment or performance bonds that are furnished to the Owner by the Contractor.
10-61	Taxilane	A taxiway designed for low speed movement of aircraft between aircraft parking areas and terminal areas.
10-62	Taxiway	The portion of the air operations area of an airport that has been designated by competent airport authority for movement of aircraft to and from the airport's runways, aircraft parking areas, and terminal areas.
10-63	Taxiway/Taxilane Safety Area (TSA)	A defined surface alongside the taxiway prepared or suitable for reducing the risk of damage to an aircraft. See the construction safety and phasing plan (CSPP) for limits of the TSA.
10-64	Work	The furnishing of all labor, materials, tools, equipment, and incidentals necessary or convenient to the Contractor's performance of all duties and obligations imposed by the contract, plans, and specifications.
10-65	Working day	A working day shall be any day other than a legal holiday, Saturday, or Sunday on which the normal working forces of the Contractor may proceed with regular work for at least six (6) hours toward completion of the contract. When work is suspended for causes beyond the Contractor's control, it will not be counted as a working day. Saturdays, Sundays and holidays on which the Contractor's forces engage in regular work will be considered as working days.
10-66	Owner Defined terms	None for this Project.

END OF SECTION 10

Section 20 Proposal Requirements and Conditions

20-01 Advertisement (Notice to Bidders). The Owner, or their authorized agent, shall publish the advertisement at such places and at such times as are required by local law or ordinances. The published advertisement shall state the time and place for submitting sealed proposals; a description of the proposed work; instructions to bidders as to obtaining proposal forms, plans, and specifications; proposal guaranty required; and the Owner's right to reject any and all bids. If the Owner prequalifies bidders, they shall publish the advertisement at such places and at such times as are required by local law or ordinances.

20-02 Qualification of bidders. Each bidder shall submit evidence of competency and evidence of financial responsibility to perform the work to the Owner at the time of bid opening.

Evidence of competency, unless otherwise specified, shall consist of statements covering the bidder's past experience on similar work, and a list of equipment and a list of key personnel that would be available for the work.

Each bidder shall furnish the Owner satisfactory evidence of their financial responsibility. Evidence of financial responsibility, unless otherwise specified, shall consist of a confidential statement or report of the bidder's financial resources and liabilities as of the last calendar year or the bidder's last fiscal year. Such statements or reports shall be certified by a public accountant. At the time of submitting such financial statements or reports, the bidder shall further certify whether their financial responsibility is approximately the same as stated or reported by the public accountant. If the bidder's financial responsibility has changed, the bidder shall qualify the public accountant's statement or report to reflect the bidder's true financial condition at the time such qualified statement or report is submitted to the Owner.

Unless otherwise specified, a bidder may submit evidence that they are prequalified with the State Highway Division and are on the current "bidder's list" of the state in which the proposed work is located. Evidence of State Highway Division prequalification may be submitted as evidence of financial responsibility in lieu of the certified statements or reports specified above.

20-03 Contents of proposal forms. The Owner's proposal forms state the location and description of the proposed construction; the place, date, and time of opening of the proposals; and the estimated quantities of the various items of work to be performed and materials to be furnished for which unit bid prices are asked. The proposal form states the time in which the work must be completed, and the amount of the proposal guaranty that must accompany the proposal. The Owner will accept only those Proposals properly executed on physical forms or electronic forms provided by the Owner. Bidder actions that may cause the Owner to deem a proposal irregular are given in paragraph 20-09 *Irregular proposals*.

Mobilization is limited to 10 percent of the total project cost.

20-04 Issuance of proposal forms. The Owner reserves the right to refuse to issue a proposal form to a prospective bidder if the bidder is in default for any of the following reasons:

- a. Failure to comply with any prequalification regulations of the Owner, if such regulations are cited, or otherwise included, in the proposal as a requirement for bidding.
- b. Failure to pay, or satisfactorily settle, all bills due for labor and materials on former contracts in force with the Owner at the time the Owner issues the proposal to a prospective bidder.
- c. Documented record of Contractor default under previous contracts with the Owner.
- d. Documented record of unsatisfactory work on previous contracts with the Owner.

20-05 Interpretation of estimated proposal quantities. An estimate of quantities of work to be done and materials to be furnished under these specifications is given in the proposal. It is the result of careful calculations and is believed to be correct. It is given only as a basis for comparison of proposals and the award of the contract. The Owner does not expressly, or by implication, agree that the actual quantities involved will correspond exactly therewith; nor shall the bidder plead misunderstanding or deception because of such estimates of quantities, or of the character, location, or other conditions pertaining to the work. Payment to the Contractor will be made only for the actual quantities of work performed or materials furnished in accordance with the plans and specifications. It is understood that the quantities may be increased or decreased as provided in the Section 40, paragraph 40-02, Alteration of Work and Quantities, without in any way invalidating the unit bid prices.

20-06 Examination of plans, specifications, and site. The bidder is expected to carefully examine the site of the proposed work, the proposal, plans, specifications, and contract forms. Bidders shall satisfy themselves to the character, quality, and quantities of work to be performed, materials to be furnished, and to the requirements of the proposed contract. The submission of a proposal shall be prima facie evidence that the bidder has made such examination and is satisfied to the conditions to be encountered in performing the work and the requirements of the proposed contract, plans, and specifications.

20-07 Preparation of proposal. The bidder shall submit their proposal on the forms furnished by the Owner. All blank spaces in the proposal forms, unless explicitly stated otherwise, must be correctly filled in where indicated for each and every item for which a quantity is given. The bidder shall state the price (written in ink or typed) both in words and numerals which they propose for each pay item furnished in the proposal. In case of conflict between words and numerals, the words, unless obviously incorrect, shall govern.

The bidder shall correctly sign the proposal in ink. If the proposal is made by an individual, their name and post office address must be shown. If made by a partnership, the name and post office address of each member of the partnership must be shown. If made by a corporation, the person signing the proposal shall give the name of the state where the corporation was chartered and the name, titles, and business address of the president, secretary, and the treasurer. Anyone signing a proposal as an agent shall file evidence of their authority to do so and that the signature is binding upon the firm or corporation.

20-08 Responsive and responsible bidder. A responsive bid conforms to all significant terms and conditions contained in the Owner's invitation for bid. It is the Owner's responsibility to decide if the exceptions taken by a bidder to the solicitation are material or not and the extent of deviation it is willing to accept.

A responsible bidder has the ability to perform successfully under the terms and conditions of a proposed procurement, as defined in 2 CFR § 200.318(h). This includes such matters as Contractor integrity, compliance with public policy, record of past performance, and financial and technical resources.

20-09 Irregular proposals. Proposals shall be considered irregular for the following reasons:

- a. If the proposal is on a form other than that furnished by the Owner, or if the Owner's form is altered, or if any part of the proposal form is detached.
- b. If there are unauthorized additions, conditional or alternate pay items, or irregularities of any kind that make the proposal incomplete, indefinite, or otherwise ambiguous.
- c. If the proposal does not contain a unit price for each pay item listed in the proposal, except in the case of authorized alternate pay items, for which the bidder is not required to furnish a unit price.
- d. If the proposal contains unit prices that are obviously unbalanced.
- e. If the proposal is not accompanied by the proposal guaranty specified by the Owner.
- f. If the applicable Disadvantaged Business Enterprise information is incomplete.

The Owner reserves the right to reject any irregular proposal and the right to waive technicalities if such waiver is in the best interest of the Owner and conforms to local laws and ordinances pertaining to the letting of construction contracts.

20-10 Bid guarantee. Each separate proposal shall be accompanied by a bid bond, certified check, or other specified acceptable collateral, in the amount specified in the proposal form. Such bond, check, or collateral, shall be made payable to the Owner.

20-11 Delivery of proposal. Each proposal submitted shall be placed in a sealed envelope plainly marked with the project number, location of airport, and name and business address of the bidder on the outside. When sent by mail, preferably registered, the sealed proposal, marked as indicated above, should be enclosed in an additional envelope. No proposal will be considered unless received at the place specified in the advertisement or as modified by Addendum before the time specified for opening all bids. Proposals received after the bid opening time shall be returned to the bidder unopened.

20-12 Withdrawal or revision of proposals. A bidder may withdraw or revise (by withdrawal of one proposal and submission of another) a proposal provided that the bidder's request for withdrawal is received by the Owner in writing or by email before the time specified for opening bids. Revised proposals must be received at the place specified in the advertisement before the time specified for opening all bids.

20-13 Public opening of proposals. Proposals shall be opened, and read, publicly at the time and place specified in the advertisement. Bidders, their authorized agents, and other interested persons are invited to attend. Proposals that have been withdrawn (by written or telegraphic request) or received after the time specified for opening bids shall be returned to the bidder unopened.

20-14 Disqualification of bidders. A bidder shall be considered disqualified for any of the following reasons:

a. Submitting more than one proposal from the same partnership, firm, or corporation under the same or different name.

b. Evidence of collusion among bidders. Bidders participating in such collusion shall be disqualified as bidders for any future work of the Owner until any such participating bidder has been reinstated by the Owner as a qualified bidder.

c. If the bidder is considered to be in "default" for any reason specified in paragraph 20-04, *Issuance of Proposal Forms*, of this section.

20-15 Discrepancies and Omissions. A Bidder who discovers discrepancies or omissions with the project bid documents shall immediately notify the Owner's Engineer of the matter. A bidder that has doubt as to the true meaning of a project requirement may submit to the Owner's Engineer a written request for interpretation no later than seven (7) calendar days prior to bid opening.

Any interpretation of the project bid documents by the Owner's Engineer will be by written addendum issued by the Owner. The Owner will not consider any instructions, clarifications or interpretations of the bidding documents in any manner other than written addendum.

END OF SECTION 20

Section 30 Award and Execution of Contract

30-01 Consideration of proposals. After the proposals are publicly opened and read, they will be compared on the basis of the summation of the products obtained by multiplying the estimated quantities shown in the proposal by the unit bid prices. If a bidder's proposal contains a discrepancy between unit bid prices written in words and unit bid prices written in numbers, the unit bid price written in words shall govern.

Until the award of a contract is made, the Owner reserves the right to reject a bidder's proposal for any of the following reasons:

a. If the proposal is irregular as specified in Section 20, paragraph 20-09, *Irregular Proposals*.

b. If the bidder is disqualified for any of the reasons specified Section 20, paragraph 20-14, *Disqualification of Bidders*.

In addition, until the award of a contract is made, the Owner reserves the right to reject any or all proposals, waive technicalities, if such waiver is in the best interest of the Owner and is in conformance with applicable state and local laws or regulations pertaining to the letting of construction contracts; advertise for new proposals; or proceed with the work otherwise. All such actions shall promote the Owner's best interests.

30-02 Award of contract. The award of a contract, if it is to be awarded, shall be made within the time specified in the Notice to Bidders and Notice of Public Hearing Section of this project manual.

If the Owner elects to proceed with an award of contract, the Owner will make award to the responsible bidder whose bid, conforming with all the material terms and conditions of the bid documents, is the lowest in price.

30-03 Cancellation of award. The Owner reserves the right to cancel the award without liability to the bidder, except return of proposal guaranty, at any time before a contract has been fully executed by all parties and is approved by the Owner in accordance with paragraph 30-07 *Approval of Contract*.

30-04 Return of proposal guaranty. All proposal guaranties, except those of the two lowest bidders, will be returned immediately after the Owner has made a comparison of bids as specified in the paragraph 30-01, *Consideration of Proposals*. Proposal guaranties of the two lowest bidders will be retained by the Owner until such time as an award is made, at which time, the unsuccessful bidder's proposal guaranty will be returned. The successful bidder's proposal guaranty will be returned as soon as the Owner receives the contract bonds as specified in paragraph 30-05, *Requirements of Contract Bonds*.

30-05 Requirements of contract bonds. At the time of the execution of the contract, the successful bidder shall furnish the Owner a surety bond or bonds that have been fully executed by the bidder and the surety guaranteeing the performance of the work and the payment of all legal debts that may be incurred by reason of the Contractor's performance of the work. The surety and the form of the bond or bonds shall be acceptable to the Owner. Unless otherwise specified in this subsection, the surety bond or bonds shall be in a sum equal to the full amount of the contract.

30-06 Execution of contract. The successful bidder shall sign (execute) the necessary agreements for entering into the contract and return the signed contract to the Owner, along with the fully executed surety bond or bonds specified in paragraph 30-05, *Requirements of Contract Bonds*, of this section, within 15 calendar days from the date mailed or otherwise delivered to the successful bidder.

30-07 Approval of contract. Upon receipt of the contract and contract bond or bonds that have been executed by the successful bidder, the Owner shall complete the execution of the contract in accordance with local laws or ordinances, and return the fully executed contract to the Contractor. Delivery of the fully executed contract to the

Contractor shall constitute the Owner's approval to be bound by the successful bidder's proposal and the terms of the contract.

30-08 Failure to execute contract. Failure of the successful bidder to execute the contract and furnish an acceptable surety bond or bonds within the period specified in paragraph 30-06, *Execution of Contract*, of this section shall be just cause for cancellation of the award and forfeiture of the proposal guaranty, not as a penalty, but as liquidated damages to the Owner.

END OF SECTION 30

Section 40 Scope of Work

40-01 Intent of contract. The intent of the contract is to provide for construction and completion, in every detail, of the work described. It is further intended that the Contractor shall furnish all labor, materials, equipment, tools, transportation, and supplies required to complete the work in accordance with the plans, specifications, and terms of the contract.

40-02 Alteration of work and quantities. The Owner reserves the right to make such changes in quantities and work as may be necessary or desirable to complete, in a satisfactory manner, the original intended work. Unless otherwise specified in the Contract, the Owner's Engineer or RPR shall be and is hereby authorized to make, in writing, such in-scope alterations in the work and variation of quantities as may be necessary to complete the work, provided such action does not represent a significant change in the character of the work.

For purpose of this section, a significant change in character of work means: any change that is outside the current contract scope of work; any change (increase or decrease) in the total contract cost by more than 25%; or any change in the total cost of a major contract item by more than 25%.

Work alterations and quantity variances that do not meet the definition of significant change in character of work shall not invalidate the contract nor release the surety. Contractor agrees to accept payment for such work alterations and quantity variances in accordance with Section 90, paragraph 90-03, *Compensation for Altered Quantities*.

Should the value of altered work or quantity variance meet the criteria for significant change in character of work, such altered work and quantity variance shall be covered by a supplemental agreement. Supplemental agreements shall also require consent of the Contractor's surety and separate performance and payment bonds. If the Owner and the Contractor are unable to agree on a unit adjustment for any contract item that requires a supplemental agreement, the Owner reserves the right to terminate the contract with respect to the item and make other arrangements for its completion.

40-03 Omitted items. The Owner, the Owner's Engineer or the RPR may provide written notice to the Contractor to omit from the work any contract item that does not meet the definition of major contract item. Major contract items may be omitted by a supplemental agreement. Such omission of contract items shall not invalidate any other contract provision or requirement.

Should a contract item be omitted or otherwise ordered to be non-performed, the Contractor shall be paid for all work performed toward completion of such item prior to the date of the order to omit such item. Payment for work performed shall be in accordance with Section 90, paragraph 90-04, *Payment for Omitted Items*.

40-04 Extra work. Should acceptable completion of the contract require the Contractor to perform an item of work not provided for in the awarded contract as previously modified by change order or supplemental agreement, Owner may issue a Change Order to cover the necessary extra work. Change orders for extra work shall contain agreed unit prices for performing the change order work in accordance with the requirements specified in the order, and shall contain any adjustment to the contract time that, in the RPR's opinion, is necessary for completion of the extra work.

When determined by the RPR to be in the Owner's best interest, the RPR may order the Contractor to proceed with extra work as provided in Section 90, paragraph 90-05, *Payment for Extra Work*. Extra work that is necessary for acceptable completion of the project, but is not within the general scope of the work covered by the original contract shall be covered by a supplemental agreement as defined in Section 10, paragraph 10-59, *Supplemental Agreement*.

If extra work is essential to maintaining the project critical path, RPR may order the Contractor to commence the extra work under a Time and Material contract method. Once sufficient detail is available to establish the level of

effort necessary for the extra work, the Owner shall initiate a change order or supplemental agreement to cover the extra work.

Any claim for payment of extra work that is not covered by written agreement (change order or supplemental agreement) shall be rejected by the Owner.

40-05 Maintenance of traffic. Not Used

40-06 Removal of existing structures. Not Used

40-07 Rights in and use of materials found in the work.: Not Used

40-08 Final cleanup. Not Used

END OF SECTION 40

Section 50 Control of Work

50-01 Authority of the Resident Project Representative (RPR). The RPR has final authority regarding the interpretation of project specification requirements. The RPR shall determine acceptability of the quality of materials furnished, method of performance of work performed, and the manner and rate of performance of the work. The RPR does not have the authority to accept work that does not conform to specification requirements.

50-02 Conformity with plans and specifications. All work and all materials furnished shall be in reasonably close conformity with the lines, grades, grading sections, cross-sections, dimensions, material requirements, and testing requirements that are specified (including specified tolerances) in the contract, plans, or specifications.

The term “reasonably close conformity” is also intended to provide the RPR with the authority, after consultation with the Sponsor and FAA, to use sound engineering judgment in their determinations to accept work that is not in strict conformity, but will provide a finished product equal to or better than that required by the requirements of the contract, plans and specifications.

The RPR will not be responsible for the Contractor’s means, methods, techniques, sequences, or procedures of construction or the safety precautions incident thereto.

50-03 Coordination of contract, plans, and specifications. The contract, plans, specifications, and all referenced standards cited are essential parts of the contract requirements. If electronic files are provided and used on the project and there is a conflict between the electronic files and hard copy plans, the hard copy plans shall govern. A requirement occurring in one is as binding as though occurring in all. They are intended to be complementary and to describe and provide for a complete work. In case of discrepancy, calculated dimensions will govern over scaled dimensions; contract technical specifications shall govern over contract general provisions, plans, cited standards for materials or testing, and cited advisory circulars (ACs); contract general provisions shall govern over plans, cited standards for materials or testing, and cited ACs; plans shall govern over cited standards for materials or testing and cited ACs. If any paragraphs contained in the Special Provisions conflict with General Provisions or Technical Specifications, the Special Provisions shall govern.

From time to time, discrepancies within cited testing standards occur due to the timing of the change, edits, and/or replacement of the standards. If the Contractor discovers any apparent discrepancy within standard test methods, the Contractor shall immediately ask the RPR for an interpretation and decision, and such decision shall be final.

The Contractor shall not take advantage of any apparent error or omission on the plans or specifications. In the event the Contractor discovers any apparent error or discrepancy, Contractor shall immediately notify the Owner or the designated representative in writing requesting their written interpretation and decision.

50-04 List of Special Provisions.

SP-1 – In case of discrepancy within the various items included in the contract documents, the items shall prevail, or govern, in the following or descending order:

1. Special Provisions listed in Section 50-04
2. Additional Carrier Vehicle Requirements found in the Technical Specifications
3. Additional Snowplow Requirements found in the Technical Specifications
4. Additional Rotary Plow Requirements found in the Technical Specifications
5. Additional Broom Requirements found in the Technical Specifications
6. Deletions of SAE Specifications found in the Technical Specifications
7. SAE ARP Specifications
8. Supplemental Specifications

9. FAA General Contract Provisions

50-05 Cooperation of Contractor. Not Used.

50-06 Cooperation between Contractors. Not Used.

50-07 Construction layout and stakes. Not Used.

50-08 Authority and duties of Quality Assurance (QA) inspectors. QA inspectors shall be authorized to inspect all work done and all material furnished. Such QA inspection may extend to all or any part of the work and to the preparation, fabrication, or manufacture of the materials to be used. QA inspectors are not authorized to revoke, alter, or waive any provision of the contract. QA inspectors are not authorized to issue instructions contrary to the plans and specifications or to act as foreman for the Contractor.

QA Inspectors are authorized to notify the Contractor or their representatives of any failure of the work or materials to conform to the requirements of the contract, plans, or specifications and to reject such nonconforming materials in question until such issues can be referred to the RPR for a decision.

50-09 Inspection of the work. All materials and each part or detail of the work shall be subject to inspection. The RPR shall be allowed access to all parts of the work and shall be furnished with such information and assistance by the Contractor as is required to make a complete and detailed inspection.

If the RPR requests it, the Contractor, at any time before acceptance of the work, shall remove or uncover such portions of the finished work as may be directed. After examination, the Contractor shall restore said portions of the work to the standard required by the specifications. Should the work thus exposed or examined prove acceptable, the uncovering, or removing, and the replacing of the covering or making good of the parts removed will be paid for as extra work; but should the work so exposed or examined prove unacceptable, the uncovering, or removing, and the replacing of the covering or making good of the parts removed will be at the Contractor's expense.

Provide advance written notice to the RPR of work the Contractor plans to perform each week and each day. Any work done or materials used without written notice and allowing opportunity for inspection by the RPR may be ordered removed and replaced at the Contractor's expense.

50-10 Removal of unacceptable and unauthorized work. All work that does not conform to the requirements of the contract, plans, and specifications will be considered unacceptable, unless otherwise determined acceptable by the RPR as provided in paragraph 50-02, *Conformity with Plans and Specifications*.

Unacceptable work, whether the result of poor workmanship, use of defective materials, damage through carelessness, or any other cause found to exist prior to the final acceptance of the work, shall be removed immediately and replaced in an acceptable manner in accordance with the provisions of Section 70, paragraph 70-14, *Contractor's Responsibility for Work*.

No removal work made under provision of this paragraph shall be done without lines and grades having been established by the RPR. Work done contrary to the instructions of the RPR, work done beyond the lines shown on the plans or as established by the RPR, except as herein specified, or any extra work done without authority, will be considered as unauthorized and will not be paid for under the provisions of the contract. Work so done may be ordered removed or replaced at the Contractor's expense.

Upon failure on the part of the Contractor to comply with any order of the RPR made under the provisions of this subsection, the RPR will have authority to cause unacceptable work to be remedied or removed and replaced; and unauthorized work to be removed and recover the resulting costs as a liquidated damage against the Contractor.

50-11 Load restrictions. Not Used.

50-12 Maintenance during construction. The Contractor shall maintain the work during construction and until the work is accepted. Maintenance shall constitute continuous and effective work prosecuted day by day, with adequate equipment and forces so that the work is maintained in satisfactory condition at all times.

All costs of maintenance work during construction and before the project is accepted shall be included in the unit prices bid on the various contract items, and the Contractor will not be paid an additional amount for such work.

50-13 Failure to maintain the work. Should the Contractor at any time fail to maintain the work as provided in paragraph 50-12, *Maintenance during Construction*, the RPR shall immediately notify the Contractor of such noncompliance. Such notification shall specify a reasonable time within which the Contractor shall be required to remedy such unsatisfactory maintenance condition. The time specified will give due consideration to the exigency that exists.

Should the Contractor fail to respond to the RPR's notification, the Owner may suspend any work necessary for the Owner to correct such unsatisfactory maintenance condition, depending on the exigency that exists. Any maintenance cost incurred by the Owner, shall be recovered as a liquidated damage against the Contractor.

50-14 Partial acceptance. If at any time during the execution of the project the Contractor substantially completes a usable unit or portion of the work, the occupancy of which will benefit the Owner, the Contractor may request the RPR to make final inspection of that unit. If the RPR finds upon inspection that the unit has been satisfactorily completed in compliance with the contract, the RPR may accept it as being complete, and the Contractor may be relieved of further responsibility for that unit. Such partial acceptance and beneficial occupancy by the Owner shall not void or alter any provision of the contract.

50-15 Final acceptance. Upon due notice from the Contractor of presumptive completion of the entire project, the RPR and Owner will make an inspection. If all construction provided for and contemplated by the contract is found to be complete in accordance with the contract, plans, and specifications, such inspection shall constitute the final inspection. The RPR shall notify the Contractor in writing of final acceptance as of the date of the final inspection.

If, however, the inspection discloses any work, in whole or in part, as being unsatisfactory, the RPR will notify the Contractor and the Contractor shall correct the unsatisfactory work. Upon correction of the work, another inspection will be made which shall constitute the final inspection, provided the work has been satisfactorily completed. In such event, the RPR will make the final acceptance and notify the Contractor in writing of this acceptance as of the date of final inspection.

50-16 Claims for adjustment and disputes. If for any reason the Contractor deems that additional compensation is due for work or materials not clearly provided for in the contract, plans, or specifications or previously authorized as extra work, the Contractor shall notify the RPR in writing of their intention to claim such additional compensation before the Contractor begins the work on which the Contractor bases the claim. If such notification is not given or the RPR is not afforded proper opportunity by the Contractor for keeping strict account of actual cost as required, then the Contractor hereby agrees to waive any claim for such additional compensation. Such notice by the Contractor and the fact that the RPR has kept account of the cost of the work shall not in any way be construed as proving or substantiating the validity of the claim. When the work on which the claim for additional compensation is based has been completed, the Contractor shall, within 10 calendar days, submit a written claim to the RPR who will present it to the Owner for consideration in accordance with local laws or ordinances.

Nothing in this subsection shall be construed as a waiver of the Contractor's right to dispute final payment based on differences in measurements or computations.

END OF SECTION 50

Section 60 Control of Materials

60-01 Source of supply and quality requirements. The materials used in the work shall conform to the requirements of the contract, plans, and specifications. Unless otherwise specified, such materials that are manufactured or processed shall be new (as compared to used or reprocessed).

60-02 Samples, tests, and cited specifications. Not Used.

60-03 Certification of compliance/analysis (COC/COA). Not Used.

60-04 Plant inspection. Not Used.

60-05 Engineer/ Resident Project Representative (RPR) field office. An Engineer/RPR field office is not required. Not Used.

60-06 Storage of materials. Materials shall be stored to assure the preservation of their quality and fitness for the work. Stored materials, even though approved before storage, may again be inspected prior to their use in the work. Stored materials shall be located to facilitate their prompt inspection.

60-07 Unacceptable materials. Any material or assembly that does not conform to the requirements of the contract, plans, or specifications shall be considered unacceptable and shall be rejected. The Contractor shall remove any rejected material or assembly from the site of the work, unless otherwise instructed by the RPR.

Rejected material or assembly, the defects of which have been corrected by the Contractor, shall not be returned to the site of the work until such time as the RPR has approved its use in the work.

60-08 Owner furnished materials. The Contractor shall furnish all materials required to complete the work, except those specified, if any, to be furnished by the Owner. Owner-furnished materials shall be made available to the Contractor at the location specified.

All costs of handling, transportation from the specified location to the site of work, storage, and installing Owner-furnished materials shall be included in the unit price bid for the contract item in which such Owner-furnished material is used.

After any Owner-furnished material has been delivered to the location specified, the Contractor shall be responsible for any demurrage, damage, loss, or other deficiencies that may occur during the Contractor's handling, storage, or use of such Owner-furnished material. The Owner will deduct from any monies due or to become due the Contractor any cost incurred by the Owner in making good such loss due to the Contractor's handling, storage, or use of Owner-furnished materials.

END OF SECTION 60

Section 70 Legal Regulations and Responsibility to Public

70-01 Laws to be observed. The Contractor shall keep fully informed of all federal and state laws, all local laws, ordinances, and regulations and all orders and decrees of bodies or tribunals having any jurisdiction or authority, which in any manner affect those engaged or employed on the work, or which in any way affect the conduct of the work. The Contractor shall at all times observe and comply with all such laws, ordinances, regulations, orders, and decrees; and shall protect and indemnify the Owner and all their officers, agents, or servants against any claim or liability arising from or based on the violation of any such law, ordinance, regulation, order, or decree, whether by the Contractor or the Contractor's employees.

70-02 Permits, licenses, and taxes. The Contractor shall procure all permits and licenses, pay all charges, fees, and taxes, and give all notices necessary and incidental to the due and lawful execution of the work.

70-03 Patented devices, materials, and processes. If the Contractor is required or desires to use any design, device, material, or process covered by letters of patent or copyright, the Contractor shall provide for such use by suitable legal agreement with the Patentee or Owner. The Contractor and the surety shall indemnify and hold harmless the Owner, any third party, or political subdivision from any and all claims for infringement by reason of the use of any such patented design, device, material or process, or any trademark or copyright, and shall indemnify the Owner for any costs, expenses, and damages which it may be obliged to pay by reason of an infringement, at any time during the execution or after the completion of the work.

70-04 Restoration of surfaces disturbed by others.. Not Used.

70-05 Federal Participation. The United States Government has agreed to reimburse the Owner for some portion of the contract costs. The contract work is subject to the inspection and approval of duly authorized representatives of the FAA Administrator. No requirement of this contract shall be construed as making the United States a party to the contract nor will any such requirement interfere, in any way, with the rights of either party to the contract.

70-06 Sanitary, health, and safety provisions. The Contractor's worksite and facilities shall comply with applicable federal, state, and local requirements for health, safety and sanitary provisions.

70-07 Public convenience and safety. Not Used.

70-08 Construction Safety and Phasing Plan (CSPP). Not Used.

70-09 Use of explosives. Not Used.

70-10 Protection and restoration of property and landscape. Not Used.

70-11 Responsibility for damage claims. The Contractor shall indemnify and hold harmless the Engineer/RPR and the Owner and their officers, agents, and employees from all suits, actions, or claims, of any character, brought because of any injuries or damage received or sustained by any person, persons, or property on account of the operations of the Contractor; or on account of or in consequence of any neglect in safeguarding the work; or through use of unacceptable materials in constructing the work; or because of any act or omission, neglect, or misconduct of said Contractor; or because of any claims or amounts recovered from any infringements of patent, trademark, or copyright; or from any claims or amounts arising or recovered under the "Workmen's Compensation Act," or any other law, ordinance, order, or decree. Money due the Contractor under and by virtue of their own contract considered necessary by the Owner for such purpose may be retained for the use of the Owner or, in case no money is due, their own surety may be held until such suits, actions, or claims for injuries or damages shall have been settled and suitable evidence to that effect furnished to the Owner, except that money due the Contractor will not be withheld when the Contractor produces satisfactory evidence that he or she is adequately protected by public liability and property damage insurance.

70-12 Third party beneficiary clause. It is specifically agreed between the parties executing the contract that it is not intended by any of the provisions of any part of the contract to create for the public or any member thereof, a third-party beneficiary or to authorize anyone not a party to the contract to maintain a suit for personal injuries or property damage pursuant to the terms or provisions of the contract.

70-13 Opening sections of the work to traffic. Not Used.

70-14 Contractor's responsibility for work. Until the RPR's final written acceptance of the entire completed work, excepting only those portions of the work accepted in accordance with Section 50, paragraph 50-14, *Partial Acceptance*, the Contractor shall have the charge and care thereof and shall take every precaution against injury or damage to any part due to the action of the elements or from any other cause, whether arising from the execution or from the non-execution of the work. The Contractor shall rebuild, repair, restore, and make good all injuries or damages to any portion of the work occasioned by any of the above causes before final acceptance and shall bear the expense thereof except damage to the work due to unforeseeable causes beyond the control of and without the fault or negligence of the Contractor, including but not restricted to acts of God such as earthquake, tidal wave, tornado, hurricane or other cataclysmic phenomenon of nature, or acts of the public enemy or of government authorities.

70-15 Contractor's responsibility for utility service and facilities of others. Not Used.

70-15.1 FAA facilities and cable runs. Not Used.

70-16 Furnishing rights-of-way. The Owner will be responsible for furnishing all rights-of-way upon which the work is to be constructed in advance of the Contractor's operations. Not Used.

70-17 Personal liability of public officials. In carrying out any of the contract provisions or in exercising any power or authority granted by this contract, there shall be no liability upon the Engineer, RPR, their authorized representatives, or any officials of the Owner either personally or as an official of the Owner. It is understood that in such matters they act solely as agents and representatives of the Owner.

70-18 No waiver of legal rights. Upon completion of the work, the Owner will expeditiously make final inspection and notify the Contractor of final acceptance. Such final acceptance, however, shall not preclude or stop the Owner from correcting any measurement, estimate, or certificate made before or after completion of the work, nor shall the Owner be precluded or stopped from recovering from the Contractor or their surety, or both, such overpayment as may be sustained, or by failure on the part of the Contractor to fulfill their obligations under the contract. A waiver on the part of the Owner of any breach of any part of the contract shall not be held to be a waiver of any other or subsequent breach.

The Contractor, without prejudice to the terms of the contract, shall be liable to the Owner for latent defects, fraud, or such gross mistakes as may amount to fraud, or as regards the Owner's rights under any warranty or guaranty.

70-19 Environmental protection. Not Used.

70-20 Archaeological and historical findings. Not Used.

70-21 Insurance Requirements. The contractor shall provide at the time of the signing of the contract an insurance certificate as proof of insurance coverage that the equipment is fully insured, and insurance coverage shall remain in effect until final acceptance by the owner.

END OF SECTION 70

Section 80 Execution and Progress

80-01 Subletting of contract. The Owner will not recognize any subcontractor on the work. The Contractor shall at all times when work is in progress be represented either in person, by a qualified superintendent, or by other designated, qualified representative who is duly authorized to receive and execute orders of the Resident Project Representative (RPR).

The Contractor shall perform, with his organization, an amount of work equal to at least **Twenty-Five (25%)** percent of the total contract cost.

Should the Contractor elect to assign their contract, said assignment shall be concurred in by the surety, shall be presented for the consideration and approval of the Owner, and shall be consummated only on the written approval of the Owner.

The Contractor shall provide copies of all subcontracts to the RPR fourteen (14) days prior to being utilized on the project. As a minimum, the information shall include the following:

- Subcontractor's legal company name.
- Subcontractor's legal company address, including County name.
- Principal contact person's name, telephone and fax number.
- Complete narrative description, and dollar value of the work to be performed by the subcontractor.
- Copies of required insurance certificates in accordance with the specifications.
- Minority/ non-minority status.

80-02 Notice to proceed (NTP). The Owners notice to proceed will state the date on which contract time commences. The Contractor is expected to commence project operations within ten (10) days of the NTP date. The Contractor shall notify the RPR at least 24 hours in advance of the time contract operations begins. The Contractor shall not commence any actual operations prior to the date on which the notice to proceed is issued by the Owner.

80-03 Execution and progress. The Contractor shall not commence any actual construction prior to the date on which the NTP is issued by the Owner.

80-04 Limitation of operations. Not Used.

80-04.1 Operational safety on airport during construction. Not Used.

80-05 Character of workers, methods, and equipment. The Contractor shall, at all times, employ sufficient labor and equipment for prosecuting the work to full completion in the manner and time required by the contract, plans, and specifications.

All workers shall have sufficient skill and experience to perform properly the work assigned to them. Workers engaged in special work or skilled work shall have sufficient experience in such work and in the operation of the equipment required to perform the work satisfactorily.

Any person employed by the Contractor or by any subcontractor who violates any operational regulations or operational safety requirements and, in the opinion of the RPR, does not perform his work in a proper and skillful manner or is intemperate or disorderly shall, at the written request of the RPR, be removed immediately by the Contractor or subcontractor employing such person, and shall not be employed again in any portion of the work without approval of the RPR.

Should the Contractor fail to remove such person or persons, or fail to furnish suitable and sufficient personnel for the proper execution of the work, the RPR may suspend the work by written notice until compliance with such orders.

When the methods and equipment to be used by the Contractor in accomplishing the work are not prescribed in the contract, the Contractor is free to use any methods or equipment that will accomplish the work in conformity with the requirements of the contract, plans, and specifications.

80-06 Temporary suspension of the work. The Owner shall have the authority to suspend the work wholly, or in part, for such period or periods the Owner may deem necessary, due to unsuitable weather, or other conditions considered unfavorable for the execution of the work, or for such time necessary due to the failure on the part of the Contractor to carry out orders given or perform any or all provisions of the contract.

In the event that the Contractor is ordered by the Owner, in writing, to suspend work for some unforeseen cause not otherwise provided for in the contract and over which the Contractor has no control, the Contractor may be reimbursed for actual money expended on the work during the period of shutdown. No allowance will be made for anticipated profits. The period of shutdown shall be computed from the effective date of the written order to suspend work to the effective date of the written order to resume the work. Claims for such compensation shall be filed with the RPR within the time period stated in the RPR's order to resume work. The Contractor shall submit with their own claim information substantiating the amount shown on the claim. The RPR will forward the Contractor's claim to the Owner for consideration in accordance with local laws or ordinances. No provision of this article shall be construed as entitling the Contractor to compensation for delays due to inclement weather or for any other delay provided for in the contract, plans, or specifications.

80-07 Determination and extension of contract time. The time for completion (stated as number of calendar days, number of working days or based on a specified completion date) shall be stated in the proposal and contract and shall be known as the Contract Time.

If the contract time requires extension for reasons beyond the Contractor's control, it shall be adjusted as follows:

Contract time based on calendar days. Contract Time based on calendar days shall consist of the number of calendar days stated in the contract counting from the effective date of the Notice to Proceed and including all Saturdays, Sundays, holidays, and non-work days. All calendar days elapsing between the effective dates of the Owner's orders to suspend and resume all work, due to causes not the fault of the Contractor, shall be excluded.

At the time of final payment, the contract time shall be increased in the same proportion as the cost of the actually completed quantities bears to the cost of the originally estimated quantities in the proposal. Such increase in the contract time shall not consider either cost of work or the extension of contract time that has been covered by a change order or supplemental agreement. Charges against the contract time will cease as of the date of final acceptance.

80-08 Failure to complete on time. For each calendar day or working day, as specified in the contract, that any work remains uncompleted after the contract time (including all extensions and adjustments as provided in paragraph 80-07, *Determination and Extension of Contract Time*) the sum specified in the contract and proposal as liquidated damages (LD) will be deducted from any money due or to become due the Contractor or their own surety. Such deducted sums shall not be deducted as a penalty but shall be considered as liquidation of a reasonable portion of damages including but not limited to additional engineering services that will be incurred by the Owner should the Contractor fail to complete the work in the time provided in their contract.

Liquated damages shall be as described in the Contract Section of this project manual.

Permitting the Contractor to continue and finish the work or any part of it after the time fixed for its completion, or after the date to which the time for completion may have been extended, will in no way operate as a waiver on the part of the Owner of any of its rights under the contract.

80-09 Default and termination of contract. The Contractor shall be considered in default of their contract and such default will be considered as cause for the Owner to terminate the contract for any of the following reasons, if the Contractor:

- a. Fails to begin the work under the contract within the time specified in the Notice to Proceed, or
- b. Fails to perform the work or fails to provide sufficient workers, equipment and/or materials to assure completion of work in accordance with the terms of the contract, or
- c. Performs the work unsuitably or neglects or refuses to remove materials or to perform anew such work as may be rejected as unacceptable and unsuitable, or
- d. Discontinues the execution of the work, or
- e. Fails to resume work which has been discontinued within a reasonable time after notice to do so, or
- f. Becomes insolvent or is declared bankrupt, or commits any act of bankruptcy or insolvency, or
- g. Allows any final judgment to stand against the Contractor unsatisfied for a period of 10 days, or
- h. Makes an assignment for the benefit of creditors, or
- i. For any other cause whatsoever, fails to carry on the work in an acceptable manner.

Should the Owner consider the Contractor in default of the contract for any reason above, the Owner shall immediately give written notice to the Contractor and the Contractor's surety as to the reasons for considering the Contractor in default and the Owner's intentions to terminate the contract.

If the Contractor or surety, within a period of 10 days after such notice, does not proceed in accordance therewith, then the Owner will, upon written notification from the RPR of the facts of such delay, neglect, or default and the Contractor's failure to comply with such notice, have full power and authority without violating the contract, to take the execution of the work out of the hands of the Contractor. The Owner may appropriate or use any or all materials and equipment that have been mobilized for use in the work and are acceptable and may enter into an agreement for the completion of said contract according to the terms and provisions thereof, or use such other methods as in the opinion of the RPR will be required for the completion of said contract in an acceptable manner.

All costs and charges incurred by the Owner, together with the cost of completing the work under contract, will be deducted from any monies due or which may become due the Contractor. If such expense exceeds the sum which would have been payable under the contract, then the Contractor and the surety shall be liable and shall pay to the Owner the amount of such excess.

80-10 Termination for national emergencies. The Owner shall terminate the contract or portion thereof by written notice when the Contractor is prevented from proceeding with the construction contract as a direct result of an Executive Order of the President with respect to the execution of war or in the interest of national defense.

When the contract, or any portion thereof, is terminated before completion of all items of work in the contract, payment will be made for the actual number of units or items of work completed at the contract price or as mutually agreed for items of work partially completed or not started. No claims or loss of anticipated profits shall be considered.

Reimbursement for organization of the work, and other overhead expenses, (when not otherwise included in the contract) and moving equipment and materials to and from the job will be considered, the intent being that an equitable settlement will be made with the Contractor.

Acceptable materials, obtained or ordered by the Contractor for the work and that are not incorporated in the work shall, at the option of the Contractor, be purchased from the Contractor at actual cost as shown by receipted bills and actual cost records at such points of delivery as may be designated by the RPR.

Termination of the contract or a portion thereof shall neither relieve the Contractor of their responsibilities for the completed work nor shall it relieve their surety of its obligation for and concerning any just claim arising out of the work performed.

80-11 Work area, storage area and sequence of operations. Not Used.

END OF SECTION 80

Section 90 Measurement and Payment

90-01 Measurement of quantities. All work completed under the contract will be measured by the RPR, or their authorized representatives, using United States Customary Units of Measurement.

The method of measurement and computations to be used in determination of quantities of material furnished and of work performed under the contract will be those methods generally recognized as conforming to good engineering practice.

The term "lump sum" when used as an item of payment will mean complete payment for the work described in the contract. When a complete structure or structural unit (in effect, "lump sum" work) is specified as the unit of measurement, the unit will be construed to include all necessary fittings and accessories.

90-02 Scope of payment. The Contractor shall receive and accept compensation provided for in the contract as full payment for furnishing all materials, for performing all work under the contract in a complete and acceptable manner, and for all risk, loss, damage, or expense of whatever character arising out of the nature of the work or the execution thereof, subject to the provisions of Section 70, paragraph 70-18, *No Waiver of Legal Rights*.

When the "basis of payment" subsection of a technical specification requires that the contract price (price bid) include compensation for certain work or material essential to the item, this same work or material will not also be measured for payment under any other contract item which may appear elsewhere in the contract, plans, or specifications.

90-03 Compensation for altered quantities. When the accepted quantities of work vary from the quantities in the proposal, the Contractor shall accept as payment in full, so far as contract items are concerned, payment at the original contract price for the accepted quantities of work actually completed and accepted. No allowance, except as provided for in Section 40, paragraph 40-02, *Alteration of Work and Quantities*, will be made for any increased expense, loss of expected reimbursement, or loss of anticipated profits suffered or claimed by the Contractor which results directly from such alterations or indirectly from their own unbalanced allocation of overhead and profit among the contract items, or from any other cause.

90-04 Payment for omitted items. As specified in Section 40, paragraph 40-03, *Omitted Items*, the RPR shall have the right to omit from the work (order nonperformance) any contract item, except major contract items, in the best interest of the Owner.

Should the RPR omit or order nonperformance of a contract item or portion of such item from the work, the Contractor shall accept payment in full at the contract prices for any work actually completed and acceptable prior to the RPR's order to omit or non-perform such contract item.

Acceptable materials ordered by the Contractor or delivered on the work prior to the date of the RPR's order will be paid for at the actual cost to the Contractor and shall thereupon become the property of the Owner.

In addition to the reimbursement hereinbefore provided, the Contractor shall be reimbursed for all actual costs incurred for the purpose of performing the omitted contract item prior to the date of the RPR's order. Such additional costs incurred by the Contractor must be directly related to the deleted contract item and shall be supported by certified statements by the Contractor as to the nature the amount of such costs.

90-05 Payment for extra work. Extra work, performed in accordance with Section 40, paragraph 40-04, *Extra Work*, will be paid for at the contract prices or agreed prices specified in the change order or supplemental agreement authorizing the extra work.

90-06 Partial payments. Partial payments will be made to the Contractor at least once each month as the work progresses. Said payments will be based upon estimates, prepared by the RPR, of the value of the work performed and materials complete and in place, in accordance with the contract, plans, and specifications. Such partial payments may also include the delivered actual cost of those materials stockpiled and stored in accordance with paragraph 90-07, *Payment for Materials on Hand*. No partial payment will be made when the amount due to the Contractor since the last estimate amounts to less than five hundred dollars.

- a. From the total of the amount determined to be payable on a partial payment, 5% (five percent) of such total amount will be deducted and retained by the Owner for protection of the Owner's interests. Unless otherwise instructed by the Owner, the amount retained by the Owner will be in effect until the final payment is made except as follows:
 - (1) Contractor may request release of retainage on work that has been partially accepted by the Owner in accordance with Section 50-03. Contractor must provide a certified invoice to the RPR that supports the value of retainage held by the Owner for partially accepted work.
 - (2) In lieu of retainage, the Contractor may exercise at its option the establishment of an escrow account per paragraph 90-08.
- b. The Contractor is required to pay all subcontractors for satisfactory performance of their contracts no later than 30 days after the Contractor has received a partial payment. Contractor must provide the Owner evidence of prompt and full payment of retainage held by the prime Contractor to the subcontractor within 30 days after the subcontractor's work is satisfactorily completed. A subcontractor's work is satisfactorily completed when all the tasks called for in the subcontract have been accomplished and documented as required by the Owner. When the Owner has made an incremental acceptance of a portion of a prime contract, the work of a subcontractor covered by that acceptance is deemed to be satisfactorily completed.
- c. When at least 95% of the work has been completed to the satisfaction of the RPR, the RPR shall, at the Owner's discretion and with the consent of the surety, prepare estimates of both the contract value and the cost of the remaining work to be done. The Owner may retain an amount not less than twice the contract value or estimated cost, whichever is greater, of the work remaining to be done. The remainder, less all previous payments and deductions, will then be certified for payment to the Contractor.

It is understood and agreed that the Contractor shall not be entitled to demand or receive partial payment based on quantities of work in excess of those provided in the proposal or covered by approved change orders or supplemental agreements, except when such excess quantities have been determined by the RPR to be a part of the final quantity for the item of work in question.

No partial payment shall bind the Owner to the acceptance of any materials or work in place as to quality or quantity. All partial payments are subject to correction at the time of final payment as provided in paragraph 90-09, *Acceptance and Final Payment*.

The Contractor shall deliver to the Owner a complete release of all claims for labor and material arising out of this contract before the final payment is made. If any subcontractor or supplier fails to furnish such a release in full, the Contractor may furnish a bond or other collateral satisfactory to the Owner to indemnify the Owner against any potential lien or other such claim. The bond or collateral shall include all costs, expenses, and attorney fees the Owner may be compelled to pay in discharging any such lien or claim.

90-07 Payment for materials on hand. Not Used.

90-08 Payment of withheld funds. At the Contractor's option, if an Owner withholds retainage in accordance with the methods described in paragraph 90-06 *Partial Payments*, the Contractor may request that the Owner deposit the retainage into an escrow account. The Owner's deposit of retainage into an escrow account is subject to the following conditions:

- a. The Contractor shall bear all expenses of establishing and maintaining an escrow account and escrow agreement acceptable to the Owner.

b. The Contractor shall deposit to and maintain in such escrow only those securities or bank certificates of deposit as are acceptable to the Owner and having a value not less than the retainage that would otherwise be withheld from partial payment.

c. The Contractor shall enter into an escrow agreement satisfactory to the Owner.

d. The Contractor shall obtain the written consent of the surety to such agreement.

90-09 Acceptance and final payment. When the contract work has been accepted in accordance with the requirements of Section 50, paragraph 50-15, *Final Acceptance*, the RPR will prepare the final estimate of the items of work actually performed. The Contractor shall approve the RPR's final estimate or advise the RPR of the Contractor's objections to the final estimate which are based on disputes in measurements or computations of the final quantities to be paid under the contract as amended by change order or supplemental agreement. The Contractor and the RPR shall resolve all disputes (if any) in the measurement and computation of final quantities to be paid within 30 calendar days of the Contractor's receipt of the RPR's final estimate. If, after such 30-day period, a dispute still exists, the Contractor may approve the RPR's estimate under protest of the quantities in dispute, and such disputed quantities shall be considered by the Owner as a claim in accordance with Section 50, paragraph 50-16, *Claims for Adjustment and Disputes*.

After the Contractor has approved, or approved under protest, the RPR's final estimate, and after the RPR's receipt of the project closeout documentation required in paragraph 90-11, *Contractor Final Project Documentation*, final payment will be processed based on the entire sum, or the undisputed sum in case of approval under protest, determined to be due the Contractor less all previous payments and all amounts to be deducted under the provisions of the contract. All prior partial estimates and payments shall be subject to correction in the final estimate and payment.

If the Contractor has filed a claim for additional compensation under the provisions of Section 50, paragraph 50-16, *Claims for Adjustments and Disputes*, or under the provisions of this paragraph, such claims will be considered by the Owner in accordance with local laws or ordinances. Upon final adjudication of such claims, any additional payment determined to be due the Contractor will be paid pursuant to a supplemental final estimate.

90-10 Construction warranty.

a. In addition to any other warranties in this contract, the Contractor warrants that work performed under this contract conforms to the contract requirements and is free of any defect in equipment, material, workmanship, or design furnished, or performed by the Contractor or any subcontractor or supplier at any tier.

b. This warranty shall continue for a period of one year from the date of final acceptance of the work, except as noted. If the Owner takes possession of any part of the work before final acceptance, this warranty shall continue for a period of one year from the date the Owner takes possession.

c. The Contractor shall remedy at the Contractor's expense any failure to conform, or any defect. In addition, the Contractor shall remedy at the Contractor's expense any damage to Owner real or personal property, when that damage is the result of the Contractor's failure to conform to contract requirements; or any defect of equipment, material, workmanship, or design furnished by the Contractor.

d. The Contractor shall restore any work damaged in fulfilling the terms and conditions of this clause. The Contractor's warranty with respect to work repaired or replaced will run for one year from the date of repair or replacement.

e. The Owner will notify the Contractor, in writing, within seven (7) days after the discovery of any failure, defect, or damage.

f. If the Contractor fails to remedy any failure, defect, or damage within 14 days after receipt of notice, the Owner shall have the right to replace, repair, or otherwise remedy the failure, defect, or damage at the Contractor's expense.

g. With respect to all warranties, express or implied, from subcontractors, manufacturers, or suppliers for work performed and materials furnished under this contract, the Contractor shall: (1) Obtain all warranties that would be given in normal commercial practice; (2) Require all warranties to be executed, in writing, for the benefit of the Owner, as directed by the Owner, and (3) Enforce all warranties for the benefit of the Owner.

h. This warranty shall not limit the Owner's rights with respect to latent defects, gross mistakes, or fraud.

90-11 Contractor Final Project Documentation. Approval of final payment to the Contractor is contingent upon completion and submittal of the items listed below. The final payment will not be approved until the RPR approves the Contractor's final submittal. The Contractor shall:

- a.** Provide two (2) copies of all manufacturer's warranties specified for materials, equipment, and installations.
- b.** Complete all punch list items identified during the Final Inspection.
- c.** Provide complete release of all claims for labor and material arising out of the Contract.
- d.** When applicable per state requirements, return copies of sales tax completion forms.
- e.** Manufacturer's certifications for all items incorporated in the work.
- f.** Project Operation and Maintenance (O&M) Manual(s).
- g.** Security for Construction Warranty.
- h.** Equipment commissioning documentation submitted, if required.

END OF SECTION 90

SUPPLEMENTAL SPECIFICATIONS

Snow Removal Equipment Acquisition

Muscatine Municipal Airport

City of Muscatine

Muscatine, Iowa

3-19-0063-028-2025

OT5.128792

TECHNICAL SPECIFICATIONS

Snow Removal Equipment Acquisition
Muscatine Municipal Airport
City of Muscatine
Muscatine, Iowa

The following technical specifications are for the intended purpose of receiving quotes for purchase of the specified carrier vehicle and associated attachments.

In addition to meeting these technical specifications, the bidder shall include all necessary components with the provided carrier vehicle and/or equipment to ensure they are complete and ready for use for snow, ice, slush, sand and other debris as detailed in FAA Advisory Circular 150/5220-20A, even if those components are not specifically specified herein. FAA Advisory Circular 150/5220-20A can be found in the appendix section of this project manual.

Please note that the base specifications referenced in these technical specifications shall be SAE International Aerospace Recommended Practice (ARP) reference specifications will be herein further modified by these technical specifications.

Lighting Caveat: Provided snow removal equipment and accessories shall not be positioned as to obstruct the illumination of lighting systems i.e. reflectors and clearance lights/headlights, tail lights, backup light, stop lights, and turn signals.

Certification: Purchasers of equipment described in this Advisory Circular should obtain a certification in writing from the manufacturer/vendor that the components constituting the whole of the equipment being supplied to the airport operator comply with the applicable performance, design, and construction requirements of the referenced specification. This certification is mandatory if the equipment is purchased with federal funds under the Airport Improvement Program (AIP).

Testing: The manufacturer is responsible for conducting tests to ensure that its snow removal and ice control equipment meets the operational and performance requirements it advertises. The manufacturer must submit certified records of these compliance tests with each response to an invitation to bid. Equipment tests must be conducted on standard production models and not on specially constructed prototypes.

Refer to FAA Advisory Circular 150/5220-20A, Chapter 8 Operational Standards and Compliance Testing

Per FAA Advisory Circular 150/5220-20A, Section 8-4, 4 x 4 Tractors and Wheel Loaders are exempt from snowplow testing as mentioned in SAE ARP 5539A.

The equipment supplied shall meet the standards stated in AC 150/5220-20A Appendix 1 Part B (for Carrier Vehicle), Appendix 2, and Appendix 3 Part B (High-Speed Rotary Plow) and SAE ARP Specifications, included in this bid package, which are considered the performance specifications for the project. All snow removal equipment shall meet the minimum performance specifications outlined in SAE ARP specifications and as further modified herein:

Deletions of ARP Specification Requirements (ARP 5539A Specifications for Rotary Plow with Carrier Vehicle)

- Section 3.4 Minimum Performance Requirements (to be Specified by the Purchaser) – ***Remove: Entire Section***
- Section 3.5 Optional Equipment – ***Remove: Entire Section***
- Section 3.7 Chassis – ***Delete “A pintle hook, rated at not less than the GVWR, shall be permanently attached to the rear frame structure capable of towing a vehicle.”***
- Section 3.8.2 Coolant Temperatures – ***Remove “required unless otherwise specified.”***
- Section 3.8.4 Fuel Tank(s) and Lines – ***Delete “unless a higher number is desired by the customer.”***
- Section 3.8.7 Exhaust System and Muffler – ***Delete “Customers may specify the location and direction of exhaust system discharge when appropriate for storage building ventilation systems or other operational needs.”***
- Section 3.9 Transmission – ***Remove all references to “manual”***
- Section 3.9.1.a Manual – ***Remove: Entire Section***
- Section 3.11 Steering Mechanism – ***Delete “All-wheel steering may substantially increase the handling ability of the vehicle and, therefore, its productivity. The purchaser shall specify if all wheel steering is required, and if all-wheel steering is required, if it is to be front wheel steer, rear steer, crab steer, coordinated steer.”***
- Section 3.13.c Spare Rim/Tire– ***Remove: Entire Section***
- Section 3.14.2 Lines and Fittings – ***Delete “When specified by the purchaser, provide arctic type hoses with temperature ratings appropriate for the location of intended use.”***
- Section 3.15.3 Batteries – ***Delete “An on-board self-regulating battery charger may be specified by the purchaser.”***
- Section 3.17.5 Windows and Windshield – ***Remove all references to tinted glass.***
- Section 3.19 Painting, Marking, and Lighting of Vehicles – ***Remove: Entire Section If carrier is not a truck type. This section is required for a truck type carrier vehicle.***
- Section 3.20 Miscellaneous– ***Remove: Section 3.20.8 through 3.20.10***
- Table 1 Snow Field & Uniform Snow – ***Remove: Entire Section***
- Table 2 Windrowed Snow – ***Remove: Entire Section***
- Appendix A Performance Testing – ***Remove: Entire Section***
- Appendix B Options – ***Remove: Entire Section***
- Appendix C Operational Needs Detail Sheet – ***Remove: Entire Section***

Additional Carrier Vehicle and Attachment Requirements

Carrier Vehicle (Base Bid)

- Compatible with all specified equipment attachments in this proposal
- Current Production Model year with a diesel engine with the minimum horsepower needed to power snow blower.
- If a PTO is provided, it must meet the minimum requirements of attachment manufacturer minimum hp and PTO hp for the attachments provided.
- Carrier vehicle shall be four-wheel drive or all-wheel drive construction.
- Provide an automatic type of transmission.
- Provide Limited Slip or Locking Differential.
- Cooling system heaters, oil pan heaters, lubricating oil heaters, battery and block heaters, and cold start aides shall be provided with the supplied equipment, if the cold start aids are an available option from the manufacturer for the equipment. Aftermarket cold start aids are not required for the equipment supplied.
- Hoses shall be provided that are compatible with temperature ratings appropriate for the location.
- Provide Power Steering.
- Provide Tilt Steering Wheel.
- Provide Line Type Hydraulic Filter with Replaceable Elements.
- Provide Quick Connect hydraulic hoses and fittings
- Hydraulic pump shall meet and exceed the minimum GPM necessary to run any combination of attachments that could be mounted on the carrier vehicle at the same time.
- Hydraulic fluid reservoir shall meet and exceed the minimum necessary to run any combination of attachments that could be mounted on the carrier vehicle at the same time.
- If optional hardware and software are available from the manufacturer allowing a single joystick control of all equipment, this is the preferred configuration.
- Provide an appropriate quick hitching system compatible with the specified attachments.
- Provide maintenance free batteries with jump start studs
- If allowable by vehicle manufacturer, a means shall be provided to easily disconnect the batteries to allow them to be disconnected for storage.
- Install single yellow rotary beacon mounted on uppermost point meeting the requirement of FAA AC 150/5210-5D
- Provide a minimum of two front-mounted task-oriented flood lights and two rear mounted task-oriented flood lights mounted on carrier vehicle cab that are capable of lighting areas to be cleared and equipment on the carrier vehicle.
- Provide heated exterior, telescoping mirrors.
- Provide full-size conventional operator's cab.
- Provide a minimum of two speed windshield wipers with winter wiper type blades.

- Provide a high-capacity heating system with integral heater, defroster and air conditioning.
- Provide tires that are applicable for snow removal operations.
- Provide front wheel fenders if an applicable manufacturer option.
- If a counterweight system is needed to properly operate the attachments, it shall be provided.
- If the rear of the carrier vehicle cannot be easily seen from the driver's seat, rear camera shall only be provided.
- Install a UNICOM radio in carrier vehicle cab. Transceivers: Each transceiver should be equipped with its own microphone, antenna and remote speaker. VHF radios used to communicate with air traffic control facilities shall satisfy the criteria set forth in section 3 of Radio Technical Commission for Aeronautics document DO-186, "Minimum Performance Standards for Airborne Radio Communications Equipment Operating Within the Radio Frequency Range 117.975 to 137.000 MHz.," dated January 20, 1984. This document may be examined at any Federal Aviation Administration Regional Office or purchased from: RTCA Secretariat, One McPherson Square, 1425 K Street, NW, Suite 500, Washington, DC 20005. Transceivers using other frequencies shall meet applicable standards of the Federal Communications Commission.
- Provide an operator's manual, parts manual, maintenance and service manual, engine manual, body/chassis manual, electrical/vacuum troubleshooting manual and wiring diagram manual.

Quick Hitch for Carrier Vehicle and Carrier Vehicle Accessories

- Compatible with provided Carrier Vehicle
- The quick hitch system must allow the airport staff the ability to switch out any attachments and be ready for use in under 1 hour, including all electrical, mechanical or hydraulic controls.
- Hitching of attachments to carrier vehicle must not interfere with other possible snow removal attachments.
- Quick Connect Hydraulics Hoses, PTO shafts or electrical connections.
- Conveniently mounted in cab of carrier vehicle joystick controls

Snow Blower (Alternate Bid B)

- Compatible with Carrier Vehicle
- Front mounted design.
- Minimum 108" (9') cutting width (must be outside wheelbase)
- Capacity shall be 500 tons/hour minimum
- Casting distance shall be 50' minimum
- Provide replaceable cutting edges
- If available from manufacturer provide Tungsten Carbide replaceable wear cutting edge
- Provide 42" minimum cutting height
- Provide a single chute
- Provide hydraulic rotation and deflection chute control
- Conveniently mounted in cab of carrier vehicle joystick controls
- Provide parking stands.
- Hydraulics shall be quick disconnect type fitting compatible with the carrier vehicle.
- Snow blower shall be able to be taken off the front to allow airport to be able to utilize other front mounted equipment.
- One complete copy of the owner's manual, parts manual and maintenance and service manual
- ***Snow removal attachments and other accessories should not be positioned so as to obstruct the illumination of the lighting system, i.e. reflectors and clearance lights/headlights, tail lights, back up lights and stop lights***

Deletions of ARP Specification Requirements (ARP 5564A Specifications for Airport Runway Brooms)

- Section 5.1 Runway Broom Configurations ***Remove: the following sections:***
 - ***5.1 Front Mount Dedicated***
 - ***5.2 Front Mount Dual Purpose***
 - ***5.3 Front Mount Multi Purposes***
 - ***5.4 Loader Mounted***
 - ***5.6 Tow Behind***
 - ***5.7 Multi-Tasking (MTE)***
- Section 5.5 Tractor Mounted ***Remove: "...This type normally has the broom preceding the tractor. Power for the unit comes from the power take-off shaft (PTO) of the tractor. For efficient snow moving capacity, the PTO of the tractor must be adequate for the projected snow removal requirements. The uses, advantages and disadvantages are the same as the loader mounted."***
- Section 6.1 General Description ***Remove: "...The broom shall have the ability to remove snow, ice, slush, sand and other debris at the rated speed, capacity, and conditions per the following (Also see Table A2 in the Appendix):***
 - a) The broom must be able to move 3 inches of snow at 15 pounds per cubic foot at the rated vehicle speed and full swept path.***
And,
 - b) The broom must be able to move 1 inch of snow at 40 pounds per cubic foot at the rated vehicle speed and full swept path.***

At a minimum, the user must specify (See Table A2 and Table A3 in the Appendix for typical values):

 - ***Broom configuration (Select per section 5):***
 - ***Required speed of operation (MPH):***
 - ***Brush swept path (feet):***
 - ***Snow moving capacity (tons per hour):Surface area swept rate (square feet per hour):***
 - ***Broom power supply horsepower (horsepower):***
 - ***Brush diameter (inches):***
 - ***Brush rotation speed (0-RPM):***
 - ***Brush available torque (foot-pounds):***
 - ***Air blast capacities (CFM @ MPH):Bristle type and configuration:***

Care must be taken by the user when specifying the capacity in Tons per Hour. The broom must have enough "Available Horsepower" to meet the capacity (Tons per Hour) requirements of the specification. See example in section 7.5 of the appendix.

To confirm the brush rotational speed and available torque values, the manufacturer must supply engineering hydraulic power calculations of the brush drive train from the engine or power supply to the brush shaft. This includes sizes and specifications of all components of the brush drive train from the engine to the brush shaft including specification sheets for the broom engine, brush and air blast hydrostatic pumps, motors, and gearbox(s) showing type, size, and manufacture. Efficiency losses must also be accounted for. The calculations must be understandable, complete, logical, and in a mathematical order per the Society of Automotive Engineers (SAE) and the Fluid Power Society standard formulas and practices. The burden of proof is the responsibility of manufacturer. Failure to provide this information for whatever reason will result in disqualification.

- Remove all sub sections of section 6.2 Broom Chassis Platform, including:
 - 6.2.1 Carrier Vehicle
 - 6.2.2 Tow Broom Frame
 - 6.2.3 Backup Lights
 - 6.2.4 Vehicle Safety Identification Lights
- Remove section 6.3 Broom Engine Assembly (or Power Supply) in its entirety.
- Remove section 6.4 Fuel System in its entirety.
- Remove section 6.5 Electrical System in its entirety.
- Remove all sub sections of section 6.6 Sheet Metal Components and Accessibility in its entirety
- Section 6.13 Brush Bristles **Remove: the following sections:**
 - 6.13.1 Wafers, Flat
 - 6.13.3 Cassettes
- Section 6.13.2 Convolute **Remove: “...Typical convolute wafer bristles dimensions are:**
 - **Outside diameter: 36 inch, Inside diameter = 10.75 +0.13 -0.00 inches**
 - **Outside diameter: 46 inch, Not available**
- Remove section 6.14.2 Cassettes in its entirety.
- Remove section 6.15 Forced Air Blast in its entirety.
- Section 6.16 Hydraulics System **Remove: “...Filters within the hydraulic system shall conform to the Society of Automotive Engineers (SAE) Information Report, SAE J 931- Hydraulic Power Circuit Filtration. Proper filtering shall be done on both the high pressure and low-pressure circuits. There shall be a 5-micron absolute rating on the hydrostatic pumps’ filters and placed in the charge pressure lines. There shall be a clogged filter indicator light at the operator’s station indicating filter replacement. Shut off valves for all filters below tank fluid level shall be installed to allow filter changes with minimal loss of oil.”**

- Section 6.16 Hydraulics System **Remove:** *“...The hydraulic fluid tank shall have; a filler neck with a strainer, a drain plug, a shutoff valve, an air vent and baffles. Its capacity shall exceed the volume of oil required for the operation of any combination of attachments by 50 percent. A sight glass shall be provided to allow the operator to verify that fluid level is sufficient for safe operation without the necessity of opening the system. A low oil level warning and engine shutdown device shall be provided in the cab. A high hydraulic oil temperature warning and engine shutdown device shall be provided in the cab. A low hydraulic oil temperature or high back pressure warning shall also be provided in the cab.”*
- Remove section 6.17 Controls and Instruments in its entirety.
- Remove section 6.18 Finish and Paint in its entirety.
- Remove section 6.22 Additional Equipment which may be specified by the user in its entirety.
- Remove Appendix A - Additional Information Concerning Airport Runway Brooms in its entirety.

Additional Airport Runway Broom Requirements

Snow Broom (Alternate Bid A)

- Shall be able to be mounted on front of carrier vehicle.
- Broom width shall be 12' minimum length with 32" minimum diameter brush with poly brushes that are replaceable with minimal amounts of tooling.
- Compatible with supplied carrier vehicle hitch system and must be able to be disconnected by the airport staff to allow the ability switch out any attachments and be ready for use in under 1 hour, including all electrical, mechanical or hydraulic controls.
- The broom shall be hydraulically driven.
- Hydraulics shall be quick disconnect type fitting compatible with the carrier vehicle.
- If hydraulics of carrier vehicle cannot allow for powering broom alone, a means shall be provided from the carrier vehicle to run the hydraulics of the power boom own hydraulic tank/pump.
- Caster Wheels shall be provided if the manufacturer suggests due to the size of the broom and the hitch type.
- Caster Wheels shall be provided if the manufacturer suggests due to the size of the broom and the hitch type
- Broom shall be able to be taken off the front to allow airport to be able to utilize other front mounted equipment.
- **Snow removal attachments and other accessories shall not be positioned so as to obstruct illumination of the lighting system, i.e., reflectors and clearance lights, headlights, task-oriented lighting, back up lights and/or stop lights.**

SAE ARP 5539A Rotary Plow with Carrier Vehicle

Shall Be Inserted Here for Each Plan Holder

SAE ARP 5564A Airport Runway Brooms

Shall Be Inserted Here for Each Plan Holder

APPENDICES

Snow Removal Equipment Acquisition

Muscatine Municipal Airport

City of Muscatine

Muscatine, Iowa

3-19-0063-028-2025

OT5.128792



U.S. Department of
Transportation

Federal Aviation
Administration

Advisory Circular

Subject: Airport Snow and Ice Control
Equipment

Date: 9/24/2014

Initiated by: AAS-100

AC No: 150/5220-20A

Change:

1. **Purpose.** This advisory circular (AC) provides guidance to assist airport operators in the procurement of snow and ice control equipment for airport use.
2. **Cancellation.** This AC cancels AC 150/5220-20, dated 6/30/1992.
3. **Vehicle movement coordination.** At certificated airports, vehicle operations in the movement and non-movement areas must be conducted in accordance with Title 14 Code of Federal Regulations (CFR) Part 139.329, Pedestrians and Ground Vehicles, and appropriate provisions of AC 150/5200-30, Airport Winter Safety and Operations. The information in this AC should be used to develop a Snow and Ice Control Plan (SICP) per 14 CFR Part 139.313 Snow and Ice Control. For guidance, specification and standards for painting, marking, and lighting of vehicles operating in the airport air operations area (AOA), refer to the latest edition of AC 150/5210-5, Painting, Marking, and Lighting of Vehicles Used on an Airport. The use of AC 150/5210-5 is mandatory for vehicles purchased with federal grant monies through the Airport Improvement Program (AIP) and/or with revenue from the Passenger Facility Charge Program (PFC). To help minimize the potential for runway incursions, see Airport Cooperative Research Program (ACRP) Synthesis #12, Preventing Vehicle – Aircraft Incidents during Winter Operations and Periods of Low Visibility, ACRP Synthesis #29, Ramp Safety Practices and AC 150/5210-20, Ground Vehicle Operations on Airports, for guidance in the areas of but not limited to communications, fatigue, and operational protocols.
4. **Application.** The Federal Aviation Administration (FAA) recommends the standards and other guidance in this AC for use in the purchase of snow removal and ice control equipment. In general, use of this AC is not mandatory. Certificated airports may use the standards and recommendations contained in this AC to satisfy specific requirements of 14 CFR Part 139, Certification of Airports, Subparts C (Airport Certification Manual) and D (Operations). Use of this AC is mandatory for all projects funded with federal grant monies through the AIP and/or with revenue from the PFC Program. See Grant Assurance No. 34, Policies, Standards, and Specifications, and PFC Assurance No. 9, Standards and Specifications.
5. **Principal Changes.**
 - a. Reconfigured this AC to present the relationship between AC 150/5200-30 and this AC when determining the types of snow equipment and the number of such types to clear Priority 1 paved areas.

b. This AC now references industry consensus specifications by the Society of Automotive Engineers (SAE) G15, Airport Snow and Ice Control Equipment Committee. Previously, the FAA wrote its own specifications. This AC notes a few pieces of snow removal equipment (SRE), for example, liquid deicer spreaders, for which SAE has not yet finalized their draft specifications. However once SAE publishes their specifications for such equipment, this advisory circular may also reference those specifications.

6. Use of metric units. Throughout this AC, U.S. customary units are used followed with “soft” (rounded) conversion to metric units. The U.S. customary units govern.

A handwritten signature in dark ink, appearing to read "Michael J. O'Donnell". The signature is fluid and cursive, with a large initial "M" and "J".

Michael J. O'Donnell
Director of Airport Safety and Standards

TABLE OF CONTENTS

Chapter 1.	Overview	1
1-1.	Background.....	1
1-2.	Classification of snow and ice control equipment.....	2
1-3.	Selection process.....	2
1-4.	Runway friction testing equipment.....	3
1-5.	In-pavement temperature sensors and mobile pavement temperature sensors.....	3
1-6.	Automated Weather Support for Deicing Decision Making (WSDDM) system. ..	3
1-7.	Use of SAE ARP specifications.....	3
1-8.	Variable use of equipment.....	3
1-9.	Certification.....	3
Chapter 2.	Selection Process for Various Snow Removal and Ice Control Equipment	5
2-1.	Selection process.....	5
2-2.	Step 1 - determination of Priority 1 paved areas.....	5
2-3.	Minimum snow removal and ice control equipment requirements.....	8
2-4.	Selecting a high-speed rotary plow for commercial and non-commercial service airports.....	10
2-5.	Selecting a snow plow cutting edge (length) for commercial and non-commercial service airports.....	15
2-6.	Selecting a dry material spreader.....	21
2-7.	Selecting a liquid material spreader.....	25
2-8.	Selecting a runway broom with airblast.....	25
Chapter 3.	High-Speed Rotary Plows.....	27
3-1.	Description.....	27
3-2.	High-speed rotary plow capacities.....	27
3-3.	SAE ARP equipment specification for high-speed rotary plows.....	27
Chapter 4.	Snow Plows	31
4-1.	Description.....	31
4-2.	Snow plow uses.....	31
4-3.	SAE ARP equipment specification for snow plows and carrier vehicles.....	32
Chapter 5.	Material Spreaders	35
5-1.	Description.....	35
5-2.	Types of material spreaders.....	35
5-3.	SAE ARP equipment specification for material spreaders.....	36
Chapter 6.	Runway Brooms	39
6-1.	Description.....	39
6-2.	Types of runway brooms.....	39
6-3.	Classification.....	39
6-4.	SAE ARP equipment specification for runway brooms with airblast.....	40

Chapter 7. Types of Carrier Vehicles.....	45
7-1. Description.....	45
7-2. Carrier vehicle dimensions.....	46
7-3. Outdoor storage of carrier vehicles.....	46
7-4. SAE ARP equipment specification for MTE dedicated carrier vehicles.....	46
Chapter 8. Operational Standards and Compliance Testing.....	51
8-1. General.....	51
8-2. Required carrier vehicle tests.....	51
8-3. High-speed rotary plow test.....	52
8-4. Snow plow test.....	52
8-5. Dry and liquid material spreader tests.....	53
8-6. Runway brooms with airblast.....	53
Appendix 1. Specification for Carrier Vehicle.....	55
Appendix 2. Optional/Alternate Equipment Specification.....	57
Appendix 3. High-Speed Rotary Plow Specification.....	61
Appendix 4. Snow Plow Specification.....	63
Appendix 5. Material Spreader Specification.....	65
Appendix 6. Runway Broom with Airblast Specification.....	69

LIST OF FIGURES

Figure 1–1. Airport snow and ice control equipment.....	1
Figure 2–1. Example of determined prioritized paved areas based on AC 150/5200-30.....	6
Figure 2–2. Priority 1 paved area example.....	7
Figure 2–3. High-speed rotary plow calculations for airports with commercial service.....	13
Figure 2–4. High-speed rotary plow calculations for airports with non-commercial service.....	14
Figure 2–5. Snow removal (tons/hr) for Priority 1 paved areas for commercial service airports.....	16
Figure 2–6. Snow removal (tons/hr) for Priority 1 paved areas for non-commercial service airports.....	17
Figure 2–7. Effective snow plow blade length related to snow displacement.....	19
Figure 2–8. Effective versus actual snow plow blade length.....	20
Figure 2–9. Hopper capacity – sand.....	23
Figure 2–10. Hopper capacity – urea.....	24
Figure 3–1. Single-stage rotary plow.....	28
Figure 3–2. Two-stage rotary plow.....	28
Figure 3–3. Typical rotary plow types.....	29
Figure 4–1. Snow plow components.....	33
Figure 4–2. Different types of snow plows.....	34

Figure 5–1. Dry material spreader types	37
Figure 5–2. Example of one design and component layout of a dry material spreader.....	38
Figure 6–1. Typical runway brooms	41
Figure 6–2. Towed type runway broom.....	42
Figure 6–3. Common types of broom bristles used on airports	43

LIST OF TABLES

Table 2-1. Itemized Priority 1 paved areas	8
Table 2-2. Equipment selection criteria for non-commercial service airports.....	9
Table 2-3. High-speed rotary plow performance	10
Table 2-4. Determining the class and number of high-speed rotary plows	12
Table 2-5. Weight to volume relationship of sand and urea	22
Table 7-1. MTE specification selections	47

This page intentionally left blank.

Chapter 1. Overview



Figure 1–1. Airport snow and ice control equipment

1-1. Background.

Airport operators should maintain runways and taxiways if possible to a “no worse than wet” (i.e., no contaminant accumulation) condition during winter storms. To meet this challenge, the purchase of snow and ice control equipment will not only require significant financial commitments, but also require careful planning. This advisory circular (AC) provides airport operators a selection process for snow removal and ice control equipment like those shown in Figure 1-1.

a. Selection process. The selection process involves three components: (1) identifying the type of equipment for a specific task, (2) determining the number of such equipment, and (3) using the recommended equipment specification to better ensure the equipment performs the required task.

b. Selection components. The first component uses the appendices in this AC that provide a general template of what task the desired equipment should perform and other relative operational information. The second component requires the airport operator to determine: (1) the total square footage of the critical paved areas of the airfield and supporting paved facilities, such as areas required by the airport rescue and fire fighting service, necessary for viable and safe aircraft operations during winter storm events, and (2) the airport’s classification as either a commercial service airport or a non-commercial service airport. The selection of some equipment will require additional computations to determine the number of such equipment,

such as high-speed rotary plows and snow plows. In these cases, this AC provides graphical tables to make such computations. The third component is based, to a large extent, on manufacturer equipment specifications. However, to minimize the amount of variation among the various pieces of equipment and carrier vehicles to perform specific tasks, this AC references Aerospace Recommended Practice (ARP) specifications for snow and ice control equipment that were developed by the Society of Automotive Engineers (SAE), Aerospace Division.

c. Federal Aviation Administration (FAA) equipment goal. This AC references SAE ARPs to facilitate the purchase by airport operators of standard equipment that has been tested and certified by the manufacturer to meet the intended performance and quality of product acceptable to the FAA.

1-2. Classification of snow and ice control equipment.

This AC classifies snow and ice control equipment according to the specific task(s) that the equipment is designed to perform.

a. This AC discusses high-speed rotary plows, snow plows, solid and liquid material spreaders, runway brooms with air blast, and carrier vehicles (the prime movers for such equipment). Find the definition for each equipment, their components, and performance measures in the referenced SAE ARP equipment specifications.

b. Chapter 7 describes the most common types of carrier vehicles used by today's industry. This AC categorizes carrier vehicles as either conventional carrier vehicles or dedicated carrier vehicles. This categorization is made to identify those multi-task carrier vehicles built with the capability to perform three integrated functions, namely snowplowing, brooming, and airblasting at a speed of at least 30 mph (48 km/h). Industry refers to these carrier vehicles as high-speed multi-task equipment (MTE), as defined by SAE ARP 5548, Multi-Tasking Equipment (MTE) for Airfield Snow Removal High Speed, Multi-Tasking Snow Removal Unit to include Carrier Vehicle, Snow Plow, Rotary Broom High Velocity Air.

1-3. Selection process.

a. Step 1 - The first step is for the airport operator to determine the total square footage of the critical paved areas of the airfield and supporting paved facilities, such as paved areas required by the airport rescue and fire fighting service, necessary for viable and safe aircraft operations during winter storms. This critical paved area establishes the "Priority 1" response effort for the airport operator. Find guidance for prioritizing paved areas and facilities in AC 150/5200-30.

b. Step 2 - Once the Priority 1 paved area is designated, the airport operator should determine the Airfield Clearance Time from AC 150/5200-30 according to the airport's classification as either a commercial service airport or a non-commercial service airport. The classification establishes a specified clearance time for the Priority 1 paved area to be cleared for a range of annual airplane operations. The intent of Step 2 is for an airport operator to have a sufficient amount of snow removal and ice control equipment to clear 1 inch (2.5 cm) of snow weighing up to 25 lbs/ft³ (400 kg/m³) from Priority 1 areas within a reasonable time to accommodate the documented annual airplane operations.

c. Chapter 2 - Provides examples of this process for the various equipment.

d. Final step – equipment specification(s) - After determining the type of snow removal and ice control equipment, the airport operator should use the recommended specifications provided by this AC to develop bid packages.

1-4. Runway friction testing equipment.

Find specifications for friction testing equipment used to conduct runway friction surveys during winter operations in AC 150/5200-30 and AC 150/5320-12, Measurement, Construction, and Maintenance of Skid-Resistant Airport Pavement Surfaces.

1-5. In-pavement temperature sensors and mobile pavement temperature sensors.

Find specifications for in-pavement temperature sensors and mobile pavement temperature sensors in AC 150/5200-30.

1-6. Automated Weather Support for Deicing Decision Making (WSDDM) system.

Find the specification for WSDDM systems in AC 150/5200-30.

1-7. Use of SAE ARP specifications.

Use SAE ARP equipment specifications referenced in this AC individually or in combination with one another. For example, an airport operator desiring to acquire a self-propelled high-speed rotary plow can use a single SAE ARP specification that prescribes both the high-speed rotary plow and the carrier vehicle within the same specification. On the other hand, an airport operator desiring to acquire a snow plow carrier vehicle with a snow plow, plus a towed-behind airport broom with air blast would use more than one SAE ARP specification. The appendices in this AC assist the airport operator in the bid purchasing process of the various pieces of equipment.

1-8. Variable use of equipment.

Depending upon winter conditions, a snow plow supported by a runway broom may be all that is required to keep an airport open to traffic. Other airports may need more diverse equipment to combat more severe winter conditions. In assessing airport needs, the airport operator must compare the cost/benefit relationship of acquiring a multi-functional piece of equipment offering a number of attachments versus the acquisition of single units, each designed primarily to accomplish one task.

1-9. Certification.

Purchasers of equipment described in this AC should obtain a certification in writing from the manufacturer/vendor that the components constituting the whole of the equipment being supplied to the airport operator comply with the applicable performance, design, and construction requirements of the referenced specification. This certification is mandatory if the equipment is purchased with federal funds under the Airport Improvement Program (AIP) or approved under

the Passenger Facility Charges (PFC) Program. In both events, a signed copy of the certification must be made part of the equipment documentation.

Chapter 2. Selection Process for Various Snow Removal and Ice Control Equipment

2-1. Selection process.

This chapter explains the selection process for snow removal and ice control equipment which commences with Step 1, the determination of the total Priority 1 paved area. As previously stated, some of the equipment is determined using only the first step while the remaining equipment follows a 2-step process. Both steps apply the same assumption to remove 1 inch (2.5 cm) of snow weighing up to 25 lbs/ft³ (400 kg/m³) from the Priority 1 paved area within a specified time for the airport's annual airplane operations (based on its classification as a commercial service airport or non-commercial service airport). Furthermore, this AC applies an equipment efficiency factor equal to 70 percent. This assumption takes into account the need by such equipment to slow down and to change course (for example, approaching the end of a runway to reverse course), back-and-forth clearing operations common on stub taxiways and connector taxiways, and to account for slight snow spillage, slight overlapping of clearing operations, and poor visibility driving conditions. Lastly, the chapter familiarizes the airport operator in the use of the graphs and tables required by the 2-step process for determining the number of high-speed rotary plows and snow plows. Practical examples illustrate the full selection process.

2-2. Step 1 - determination of Priority 1 paved areas.

Figure 2-1 illustrates how to determine the total Priority 1 paved area using AC 150/5200-30.

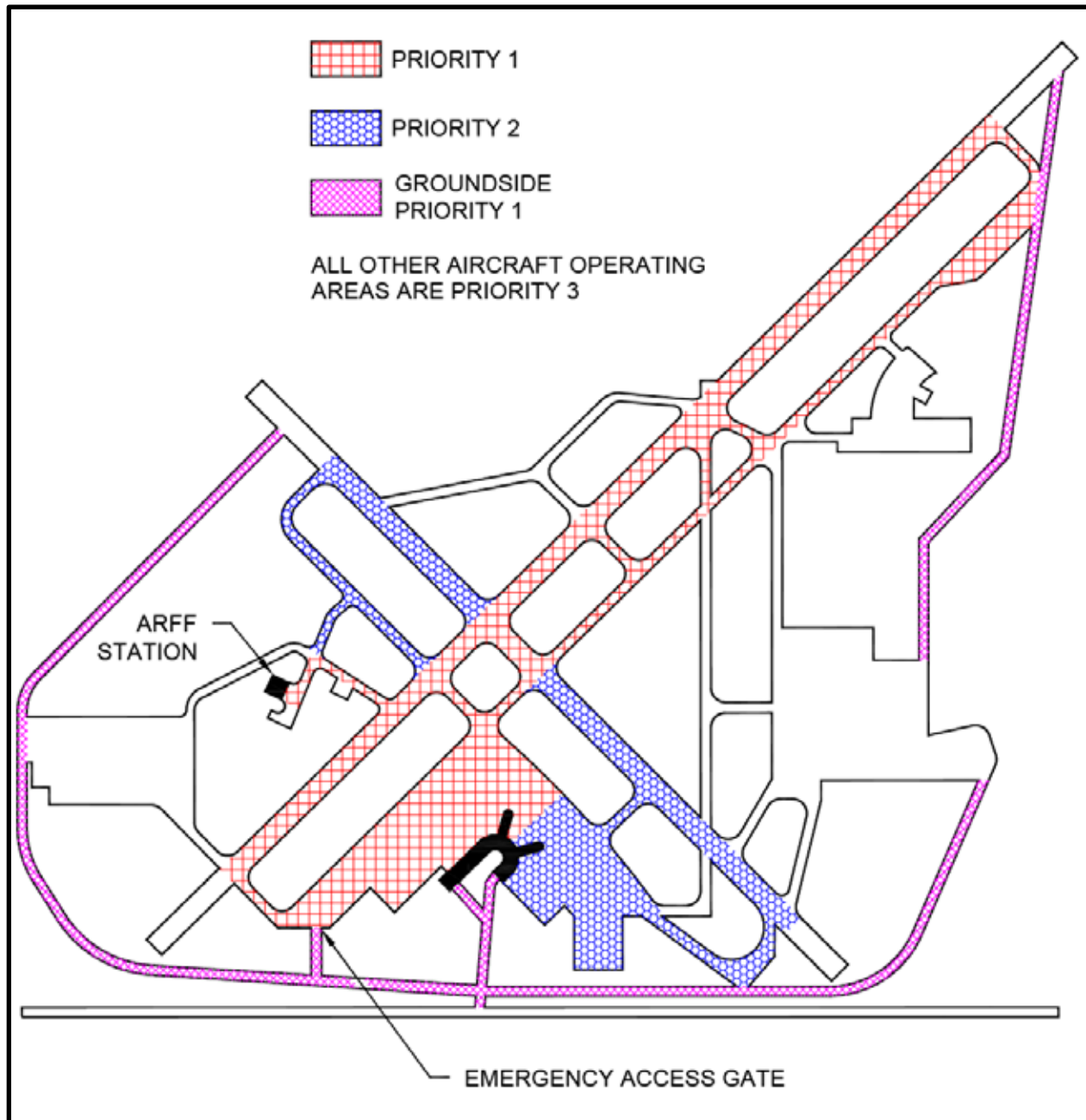


Figure 2–1. Example of determined prioritized paved areas based on AC 150/5200-30

It is important to recognize that the airport operator determines which critical paved areas are adequate for viable and safe aircraft operations during winter storm events. Figure 2–2 illustrates where it was determined that not all taxi routes needed plowing as Priority 1 areas.



Figure 2–2. Priority 1 paved area example

Example: An operator of a commercial service airport receiving more than 30 inches of snow annually and having an annual activity level of 35,000 operations needs to determine the types and number of snow and ice control equipment necessary to clear the Priority 1 paved area. In accordance with AC 150/5200-30, a reasonable clearance time is 1 hour for this level of annual airplane operations. The airport for this example is shown in Figure 2–1.

Step 1: Apply AC 150/5200-30 to assist in designating critical paved areas as Priority 1. For this airport, Table 2-1 itemizes the critical paved areas with the Priority 1 total square footage.

Table 2-1. Itemized Priority 1 paved areas

Critical Priority 1 paved areas to be cleared	
Location	Paved Area (square feet)
Main runway (9000 ft × 150 ft)	1,350,000
Parallel taxiways (9000 ft × 75 ft)	675,000
4 taxiway/runway connectors	107,812
Taxiway fillets	20,000
Airport Rescue and Fire Fighting (ARFF) station apron, emergency roads, identified ARFF mutual aid access point(s), and de-icing facilities	20,000
Terminal apron	600,000
Centralized aircraft deicing facility (northside)	259,000
TOTAL Priority 1 paved area to be cleared	3,031,812

Note: The ARFF area requires the region in front of the ARFF facility clear to provide for the unobstructed exit/entry for ARFF vehicles regardless of the square footage of the given paved area.
 For equipment selection purposes, the paved area may be rounded upwards to 3,100,000 ft² (288,150 m²).
 For runways with navigation aids (NAVAID), see AC 150/5200-30 for requirements on how to determine the snow clearance area to be maintained.

2-3. Minimum snow removal and ice control equipment requirements.

Base the required minimum types and number of snow removal and ice control equipment on several factors. Two parameters, namely the total square footage of the Priority 1 paved area and the airport's service classification, determine the types and number of runway brooms, solid material spreaders, and liquid material spreaders. On the other hand, selection of high-speed rotary plows and snow plows requires the parameter of tonnage of snow to be removed in a given time in addition to other parameters required by the equipment.

For example:

1. What is the minimum casting distance of removed snow from the high-speed rotary plow?
2. What is the angle of attack of the snow plow's cutting edge relative to the direction of travel?
3. If snow plows support a high-speed rotary plow, what is the operational speed of the clearing operation?

Because high-speed rotary plows dictate the general clearing operation, supportive snow plows are selected with the condition that they match the speed and the snow removal capacity (tonnage per hour) of the high-speed rotary plow. The selection of some types of winter-related equipment is not based on any of these parameters. For example, runway friction testers and in-pavement temperature sensors provide information about runway surface characteristics before and after clearing operations or/and the completion of sand or deicing/anti-icing chemical applications.

a. Commercial service airports. For commercial service airports that provide scheduled air carrier service, at least one high-speed rotary plow is recommended. Supplement this high-speed rotary plow with at least two snow plows having equal snow removal capacity. In addition to this tandem grouping, for each 750,000 ft² (70,000 m²) of pavement area declared as Priority 1, one towed or self-propelled runway broom with air-blast and one solid material spreader for sand and/or one for applying solid deicing/anti-icing chemicals is recommended. If a liquid deicing/anti-icing chemical is used in lieu of, or in addition to, a solid deicing/anti-icing chemical, a minimum of one liquid deicing/anti-icing chemical spraying vehicle is recommended. Paragraphs 2-4 and 2-5 provide the selection criteria to determine the number and types of high-speed rotary plows and snow plows by using a second step.

b. Non-commercial service airports. For non-commercial service airports with over 10,000 operations and at least 15 inches (38 cm) of annual snowfall should have a minimum of one high-speed rotary plow supported by two snow plows of equal snow removal capacity. For non-commercial service airports with over 10,000 operations that experience an annual snowfall of less than 15 inches (38 cm), provide a minimum of one snow plow. For non-commercial service airports having 10,000 or fewer annual operations that experience more than 30 inches (76 cm) of annual snowfall, provide a minimum of one high-speed rotary plow supported by two snow plows of equal snow removal capacity. For non-commercial service airports having 10,000 or fewer annual operations that experience an annual snowfall of 30 inches (76 cm) or less, provide a minimum of one snow plow. Table 2-2 illustrates these selection criteria. Paragraphs 2-4 and 2-5 provide the selection criteria to determine the number and types of high-speed rotary plows and snow plows by using a second step.

Table 2-2. Equipment selection criteria for non-commercial service airports

Minimum high-speed rotary plow and snow plow for non-commercial Service Airports		
Annual Operations	Annual Snowfall (inches)	Minimum type and number of equipment
10,000 or fewer	30 inches (76 cm) or less	1 snow plow
	more than 30 inches (76 cm)	1 high-speed rotary plow supported by 2 snow plows
over 10,000	15 inches (38 cm) or more	1 high-speed rotary plow supported by 2 snow plows
	Less than 15 inches (38 cm)	1 snow plow

Note: Read table from left to right to determine the minimum type and number of plow equipment.

c. Other supporting equipment. Other types of supporting equipment such as front wheel loaders or ice-melters may be needed to assist in the removal of snow from all non-critical, remaining operational areas including secondary taxiways or low priority ramp aprons. AC 150/5200-30 classifies such paved areas as Priority 2 or Priority 3 areas.

2-4. Selecting a high-speed rotary plow for commercial and non-commercial service airports.

Use high-speed rotary plows, also called “rotaries” or “snowblowers,” to cast heavy concentrations of plowed snow away from movement areas such as runways and taxiways. The selected high-speed rotary plow(s) should be capable of removing the volume of snow from the Priority 1 paved area with a pre-determined casting distance to comply with runway and taxiway snow bank clearance criteria in AC 150/5200-30. This equipment, which may be self-propelled or attached to a conventional carrier vehicle, uses either one or more rotating elements (single or two-stage units) to disaggregate a snowpack. The disaggregated snow is then broken into particles small enough to pass through a casting mechanism having a directional chute. Because of their large capacity, self-propelled high-speed rotary plows are frequently required at medium to large airports while high-speed rotary plows attached to a conventional carrier vehicle may be more appropriate at smaller facilities or facilities whose climate is less severe. Table 2-3 shows the various classes of high-speed rotary plows in terms of minimum casting distance and removal capacity in tons/hour. Measure the casting distance from the longitudinal centerline of the snow removal unit to the center of mass within the perimeter of the cast pattern.

Table 2-3. High-speed rotary plow performance

High-Speed Rotary Plows			
Size	Class	Minimum Casting Distance Feet (m)	Minimum Capacity Tons/hour (metric tons/hour)
Small	I	50 (15)	Up to 600 (550)
Medium	II	75 (23)	1500 (1360)
Intermediate	III	100 (31)	2500 (2270)
Large	IV	100 (31)	3000 (2730)
Very Large	V	100 (31)	4000 (3640)
		150 (46)	3000 (2730)
Extra Large	VI	100 (31)	5000 (4550) or more

Example (continued): The operator of the same commercial service airport wants to acquire a high-speed rotary plow(s) for the upcoming winter season. For non-commercial service airports, follow the same procedure.

Determine the size and number of high-speed rotary plows needed based on the following airport conditions:

- Annual activity level equals 35,000 operations with a reasonable clearance time of 1 hour for the total Priority 1 paved area.
- Accumulated snow on the runway and taxiways are to be cast at least 100 feet from the rotary when it travels along paved edge. This casting distance sets equipment selection Criterion 1.

- Average runway operating speed of the rotary plow unit is at least 25 mph (40 km/h) to meet the reasonable clearance time of 1 hour and annual airplane operation rate. **Note:** this illustrative operating speed is higher than normally used for smaller airports.
- Typical snow density is 25 lbs/ft³ (400 kg/m³).

GRAPHICAL SOLUTION

Step 1. Determine the total critical paved area for Priority 1. From paragraph 2-2, Priority 1 was determined as $PA = 3,100,000 \text{ ft}^2$ (290,000 m²).

Step 2. Use of graphs. Use either Figure 2–3 or Figure 2–4.

Since this example is a commercial service airport, apply Figure 2–3. Enter the graph from the horizontal axis labeled “Square feet of Priority 1 area” with $PA = 31$ (3,100,000 ft²) and proceed vertically until you intersect the appropriate reference line labeled “10,000 but less than 40,000 annual operations.”

Upon locating this reference line, proceed to the left to intersect the vertical axis which reads “Snow tons per hour $\times 1000$.” This intersection determines the tonnage (volume) of snow to be removed from the total Priority 1 paved area within the reasonable clearance time of 1 hour. In this example, the removal rate = 4,600 tons per hour. The removal rate sets equipment selection Criterion 2.

Equipment selection: Using the same figure, continue proceeding to the left of the figure with 4,600 tons per hour to pre-select among the various classes of rotary plows and their number. As seen, Class I rotary plows are too small, while a single Class VI rotary plow exceeds the removal rate of 4,600 tons per hour. Table 2-4 (read from left to right) summarizes the selection possibilities that account for Criterion 1 (the required casting distance of at least 100 feet) and Criterion 2 (removal rate of 4,600 tons per hour) to arrive at a final determination.

Table 2-4. Determining the class and number of high-speed rotary plows

Class of high-speed rotary plow	Table 2-3 Preliminary quantity per class	Criterion 1		Criterion 2		Number of rotary plows needed
		Casting Distance feet (m)	Remaining candidates	Minimum Capacity tons/hour (metric tons/hour)	Remaining candidates	
I	Too small	-	-	Up to 600 (550)	-	-
II	2	75 (23)	no	1500 (1360)	-	-
III	1	100 (31)	yes	2500 (2270)	Yes	2
IV	1	100 (31)	yes	3000 (2730)	No	excessive
V	1	100 (31)	yes	4000 (3640)	No	excessive
	1	150 (46)	yes	3000 (2730)	No	excessive
VI	Too large	-	-	5000 (4550) or more	-	-

Selection: In this example, two Class III high-speed rotary plows with a total snow removal rate of 5,000 tons/hour were selected. However, a different selection might be made if justified. For example, if the airport plans a near-term (within 5 years) runway extension including the standard parallel taxiway and connectors, then two Class IV or two Class V rotary plows or combinations of with Class II rotary plows may be warranted to achieve a snow removal rate of 6,000 tons/per hour.

Upon determining the rotary class and number of rotary plows, see Chapter 3 for selection models and the recommended SAE ARP equipment specification for purchasing, testing, and certifying high-speed rotary plows.

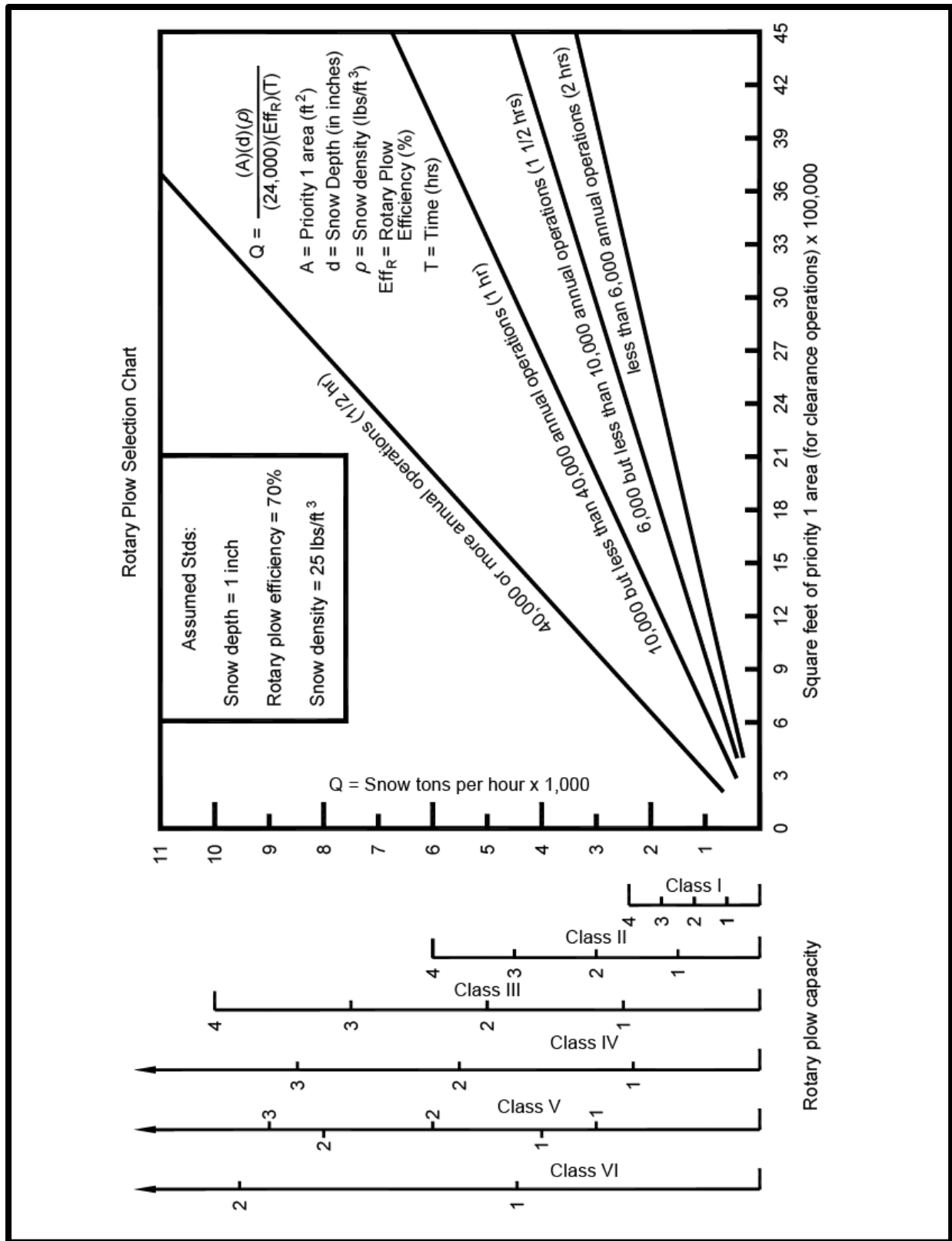


Figure 2-3. High-speed rotary plow calculations for airports with commercial service

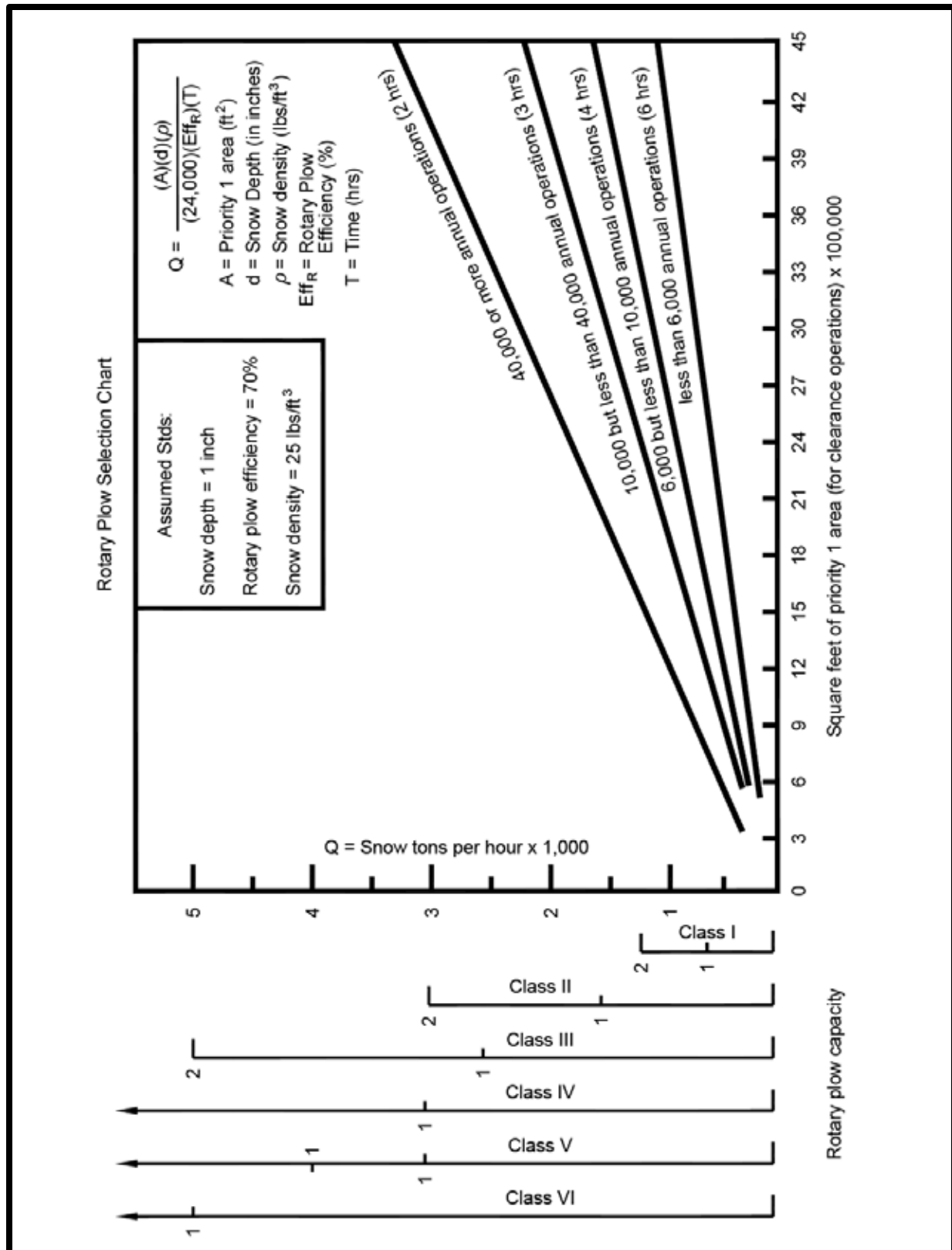


Figure 2–4. High-speed rotary plow calculations for airports with non-commercial service

2-5. Selecting a snow plow cutting edge (length) for commercial and non-commercial service airports.

Snow plows consist of a cutting edge to shear snow from the pavement, and a moldboard to lift and cast the dislodged snow to the side of the cleared path. The cutting edge may ride in contact with the pavement or be held a small distance above it by means of shoes or caster wheels. A complete snow plow unit consists of the snow plow, a carrier vehicle (conventional or dedicated), hitch, and other accessories (see Figure 4-1). Chapter 4 classifies snow plow sizes. The following selection process determines the overall length of the cutting edge, termed “actual cutting edge.” With the exception of bullnose clearing operations, the cutting edge is tilted to produce smaller cleared paths than bullnosing. This reduction in the actual length of the cutting edge is referred to as the “effective cutting edge.” **Note:** The process of selecting a snow plow cutting edge is not an exact science and different manufacturers may suggest alternative selection approaches tailored to their blade types and equipment. The results should be essentially the same.

Example (continued): The operator of the same commercial service airport wants to acquire snow plow(s) to support the high-speed rotary plows for the upcoming winter season.

Determine the actual length of the total cutting edge and number of carrier vehicles necessary. Base the determination on the following airport conditions:

- Annual activity level equals 35,000 operations with a reasonable clearance time of 1 hour for the total Priority 1 paved area.
- Average runway operating speed of the snow plow unit is at least 25 mph (40 km/h) to meet the reasonable clearance time of 1 hour and annual airplane operation rate. **Note:** this illustrative operating speed is higher than normally used for smaller airports.
- Typical snow density is 25 lbs/ft³ (400 kg/m³) – the industry accepted standard.
- Cutting angle of the blade will be set at 35 degrees.
- The efficiency of the snow plow matches the high-speed rotary plow at 70 percent.

GRAPHICAL SOLUTION

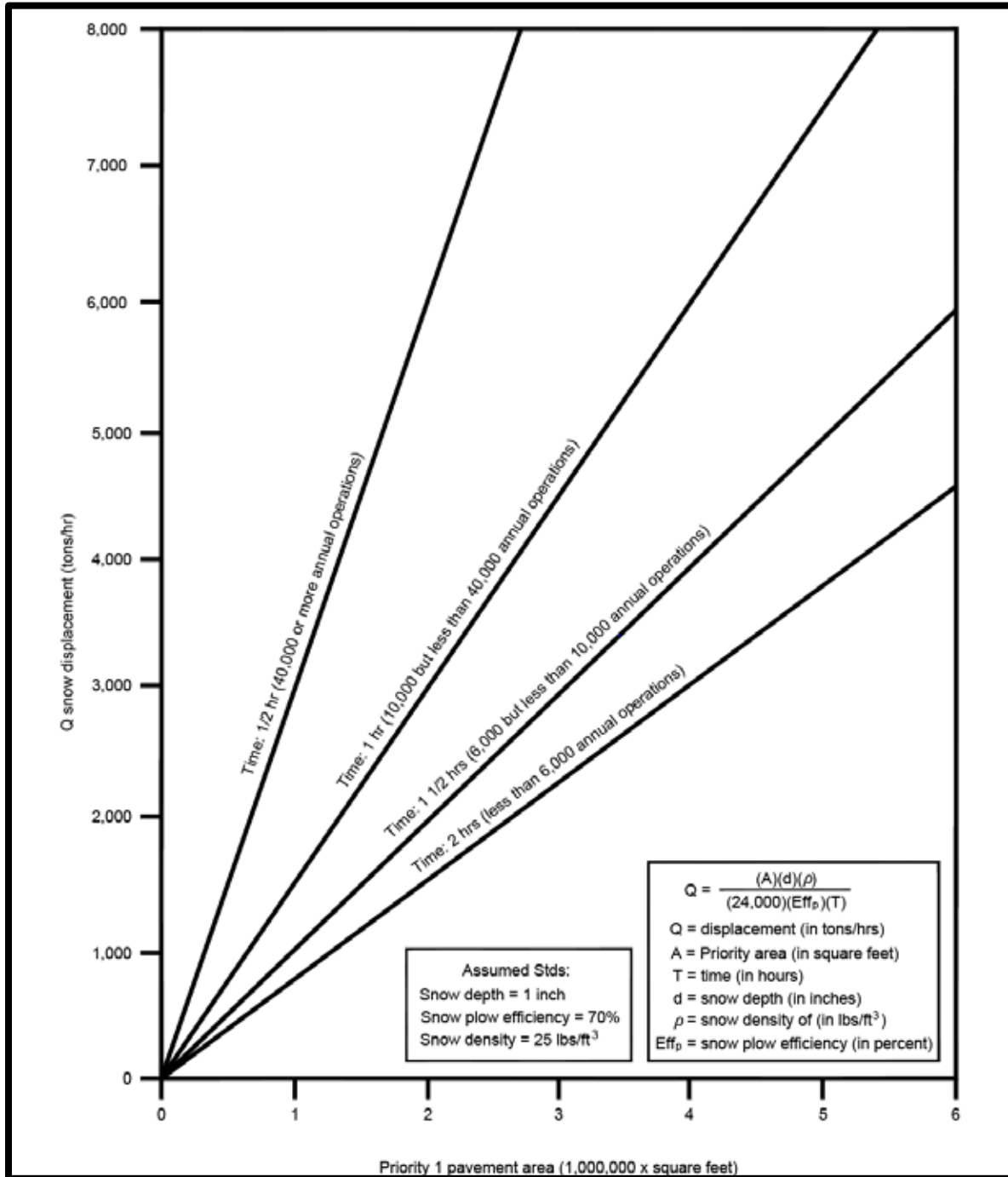
Step 1: Determine the total critical paved area for Priority 1. From paragraph 2-2, Priority 1 was determined as $Q = 3,100,000 \text{ ft}^2$ (290,000 m²).

Step 2: Use of graphs (three graphs are used). Start with Figure 2–5 to determine the tonnage of snow removal per hour. Follow the same procedure for non-commercial service airports by using Figure 2–6.

Enter the graph from the horizontal axis labeled “Priority 1 Paved Area” with $PA = 3.1$ (3,100,000 ft²) and proceed vertically until you intersect the appropriate reference line labeled “Time: 1 hour” which is a reasonable clearance time for this commercial service airport with 10,000 to 40,000 annual operations.

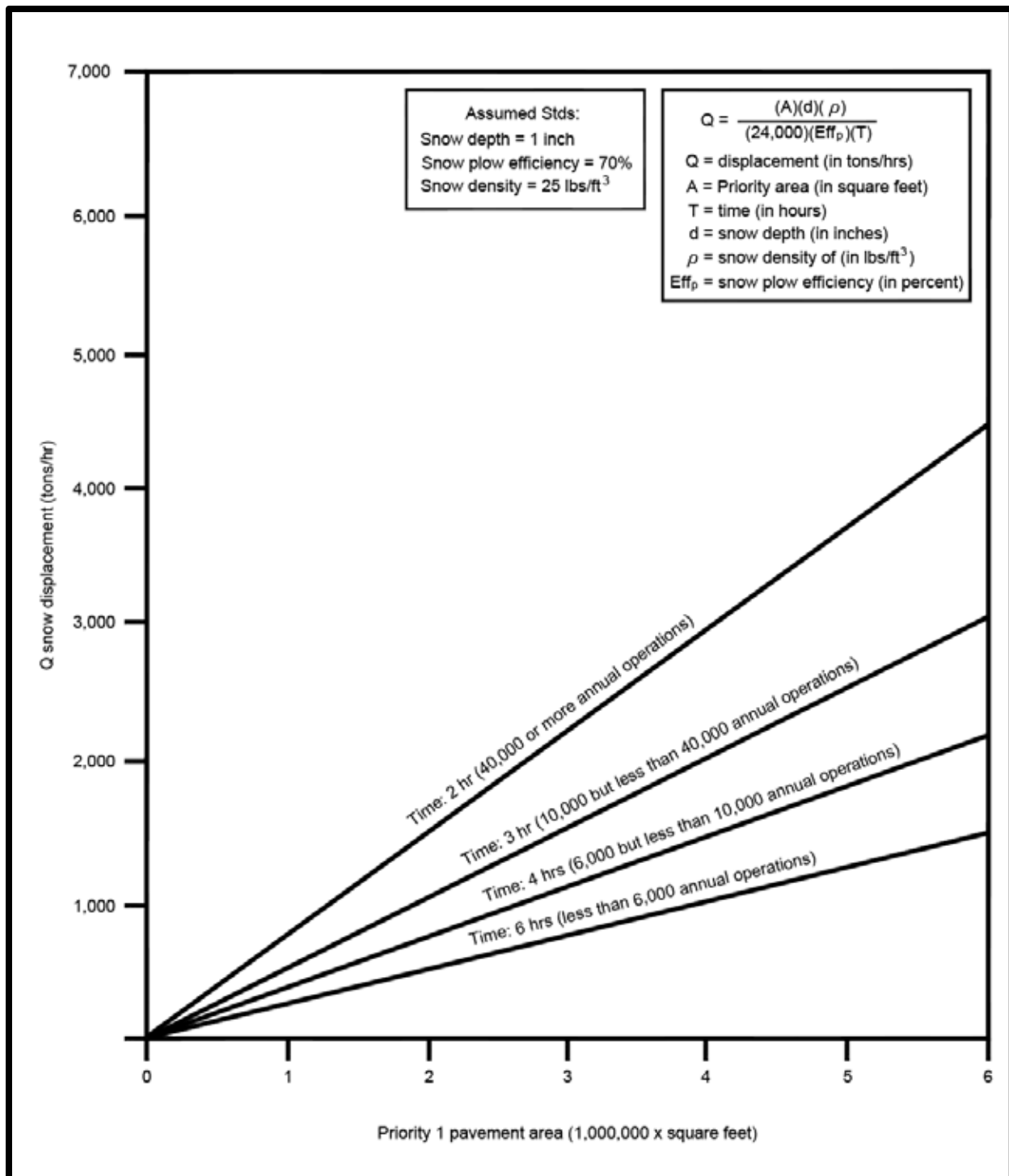
Upon locating the “Time: 1 hour” reference line, proceed to the left to intersect the vertical axis which reads “Q Snow displacement (tons/hr).” This intersection determines the tonnage

(volume) of snow to be cleared from the entire Priority 1 paved area within the recommended clearance time of 1 hour. In this example, $Q = 4,600$ tons per hour.



Note: Use the provided equation when priority 1 paved areas yield snow displacement (tons/hr) amounts greater than what the chart provides. When using the chart do not interpolate between clearance times.

Figure 2–5. Snow removal (tons/hr) for Priority 1 paved areas for commercial service airports



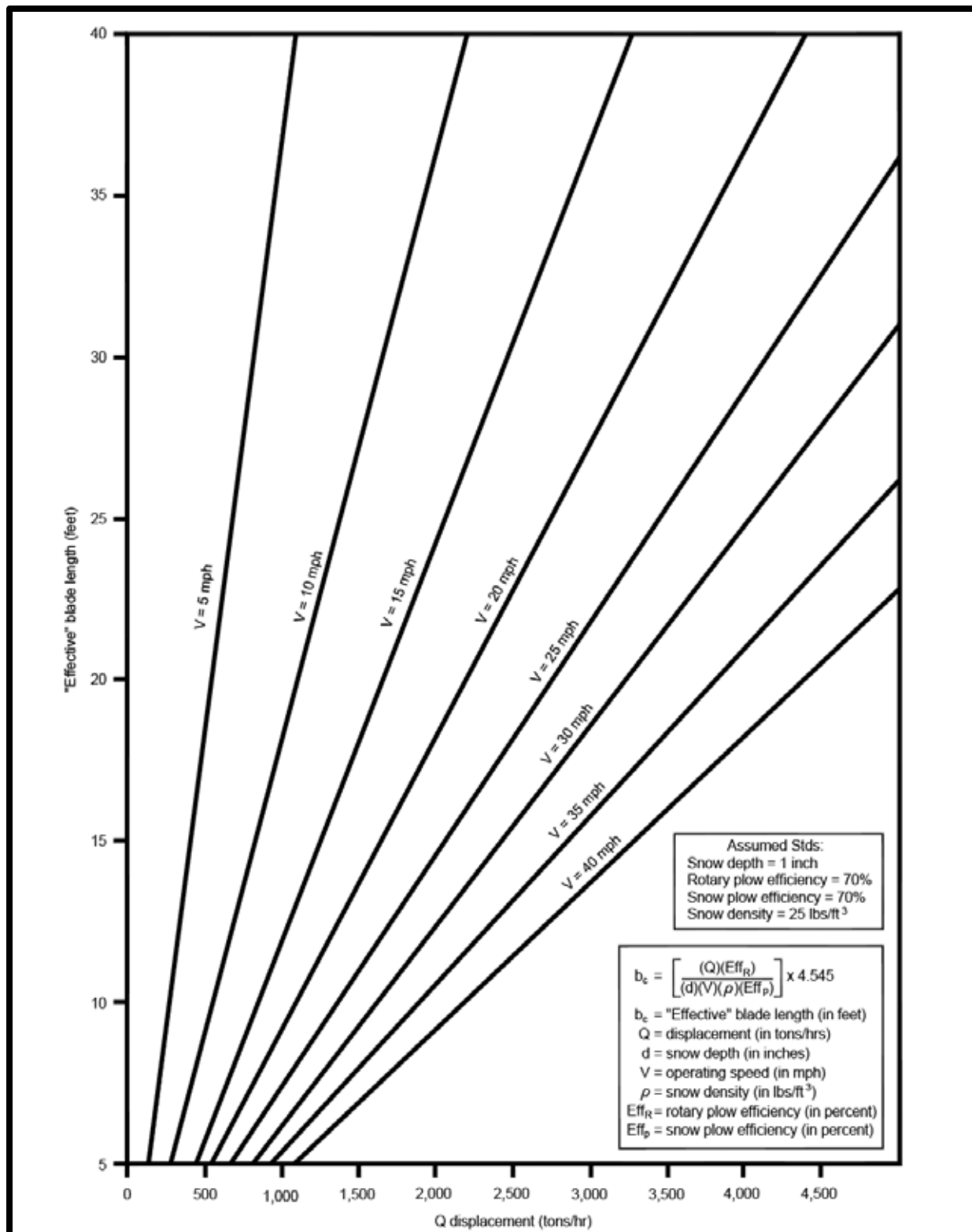
Note: When using the chart do not interpolate between clearance times.

Figure 2-6. Snow removal (tons/hr) for Priority 1 paved areas for non-commercial service airports

Step 3: Enter Figure 2–7 to determine the length of the snow plow’s “effective” cutting edge at the required minimum operating speed at 25 mph (40 km/h).

Enter the graph from the horizontal axis labeled “snow displacement (tons/hr)” with 4,600 tons/hr and proceed vertically until you intersect the appropriate reference line labeled “V = 25 mph.”

Upon locating the “V = 25 mph” reference line, proceed to the left to intersect the vertical axis which reads “effective cutting edge.” This intersection yields 33.5 feet (10.2 m).



Note: Use the provided equation when snow displacement (tons/hr) needs exceed the amount provided by the chart. When using the chart do not interpolate between speeds.

Figure 2-7. Effective snow plow blade length related to snow displacement

Step 4: Determine the “actual” cutting edge length to be purchased by using Figure 2–8.

Enter the horizontal axis which reads “Effective blade length” with 33.5 feet (10.2 m). Proceed vertically to the appropriate reference line reading “cutting angle 35°.” At this intersection, proceed to the left to intersect the vertical axis to read 41 feet (12.5 m).

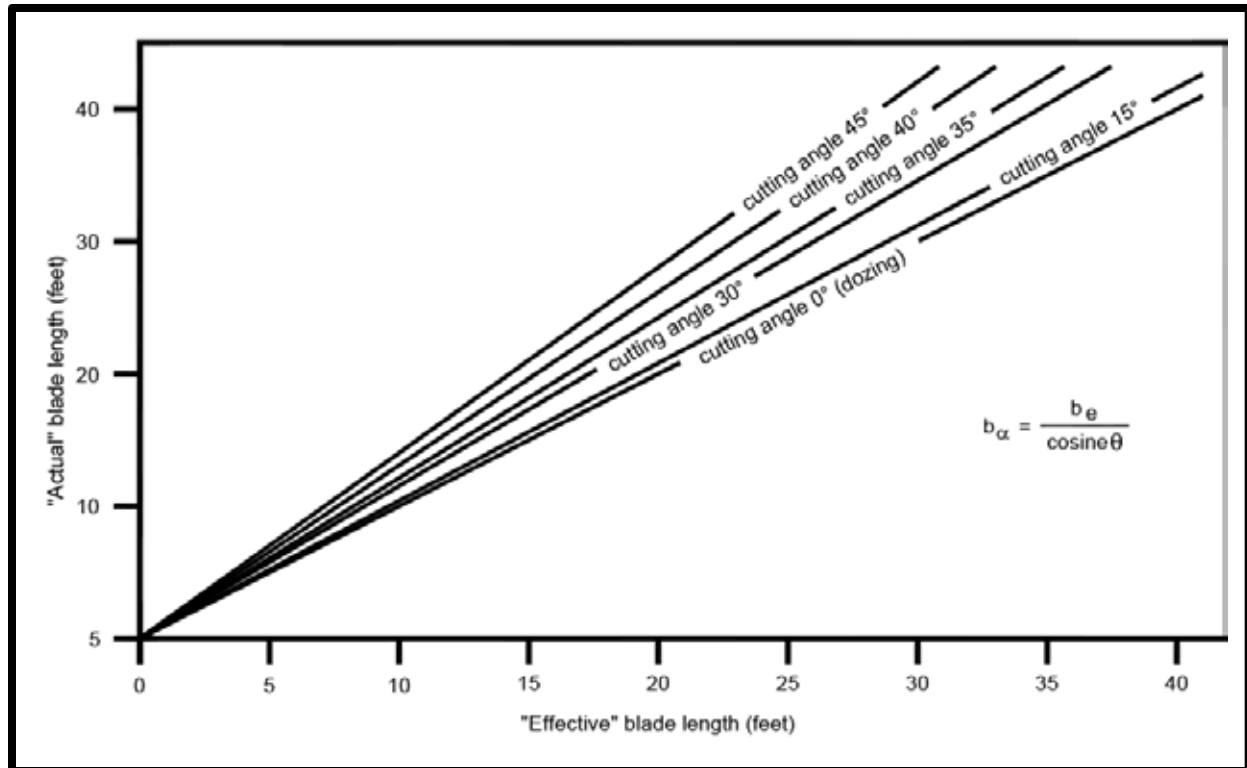


Figure 2–8. Effective versus actual snow plow blade length

Selection: The selection criterion for snow plows supporting a rotary plow is 2 snow plows for each rotary plow. Hence, four snow plows should be obtained with separate carrier vehicles.

Note: If the airport is not in a snow region and does not receive sufficient annual snowfall for a high-speed rotary plow, then the airport operator should select 2 snow plows with 20-foot and 22-foot cutting edges.

CAUTION:

Snow plows that support high-speed rotary plows must match the travelling speed of the rotary and match or exceed the snow removal capacity of the rotary.

Upon determining the length and number of snow plows, see Chapter 4 for selection of models and the recommended SAE ARP equipment specification for purchasing, testing, and certifying snow plows.

2-6. Selecting a dry material spreader.

Select dry material spreaders based on hopper capacity and by the ability to apply material in a uniform distribution pattern to a prescribed surface area (swath) at a predetermined application rate. A conventional slide-on spreader is adequate for most airport applications of dry chemicals and sand. Special requirements may justify alternative or multi-purpose types of spreaders, e.g., a tailgate spreader coupled with a dump truck body.

a. Hopper capacity. Determine hopper capacity by the type of material or combination of materials to be spread, the rate of application, and the paved area including the swath to be covered. Figure 2–9 and Figure 2–10 show the weight/volume (left and right vertical scales) relationship among sand and airside urea. Deicer manufacturers should provide the airport operator their particular chart and recommended application rate to determine hopper capacities.

b. Application rate. Airport operators should follow material manufacturers' recommended application rates for their products.

Example: An airport operator intends to apply two different dry materials using one hopper. The first treatment is an application of airside urea to a 6000-foot (1,800 m) runway using a single 75-foot (23 m) swath at a rate of 2.0 ounces/yd² (68 g/m²). The final treatment to the same runway and swath is an application of dry, heated sand at a rate of 4.0 ounces/yd² (136 g/m²). What is the hopper capacity of the dry material spreader needed to treat the runway surface? Since two different materials are to use the same hopper, determine and select the largest hopper capacity.

GRAPHICAL SOLUTION

Step 1: Determine the volume and weight of airside urea. Enter Figure 2–10 for airside urea along the horizontal axis with 6,000-foot (1800 m) runway length by 75-foot (23 m) width (swath). Proceed vertically to the intersection with the appropriate reference line labeled “application rate 2.0 ounces per square yard.” Proceed to the left to intersect the vertical axis labelled “Weight” to read 6,200 pounds (2,800 kg). Proceed to the right to intersect the vertical axis labelled “Hopper Capacity” to read 4.9 yd³ (3.7 m³). Notice that this chart applies to a 75-foot treated swath. Hence, if the airport operator wishes to treat the entire runway, which measures 150 feet wide, use the “Adjustment Factor” table within the chart, multiplying the result for the 75-foot swath by the adjustment factor. For example, a runway width of 100 feet (30 m) has a hopper capacity of 4.9 yd³ (answer) × 1.3 = 6.37 yd³ (4.9 m³).

Step 2: Determine the volume and weight of dry, heated sand. Enter Figure 2–9 for sand along the horizontal axis with 6,000-foot (1800 m) runway length by 75-foot (23 m) width (swath). Proceed vertically to the intersection with the appropriate reference line labeled “application rate 4.0 ounces per square yard.” Proceed to the left to intersect the vertical axis labelled “Weight” to read 13,000 pounds (5,900 kg). Proceed to the right to intersect the vertical axis labelled “Hopper Capacity” to read 4.2 yd³ (3.2 m³).

Table 2-5. Weight to volume relationship of sand and urea

Weight/Volume Relationship of Sand and Urea		
	Weight of Material	Volume of Material
Sand	13,000 lbs. (5,900 kg) heaviest	4.2 yd ³ (3.2 m ³)
Airside Urea	6,200 lbs. (2,800 kg)	4.9 yd ³ (3.7 m ³) largest

Selection: Select a hopper capacity of at least 5.0 cubic yards to accommodate the largest volume namely, airside urea, see Table 2-5. With this information, the airport operator can contact spreader manufacturers for acceptable types and sizes. **Note:** In selecting the size of a spreader unit, the location of the dry material storage bins/silos and the time it takes to reload the hopper(s) with material must also be considered.

Upon determining the largest hopper capacity and heaviest weight of material being spread, see Chapter 5 for selection of models and the recommended SAE ARP equipment specification for purchasing, testing, and certifying dry material spreaders.

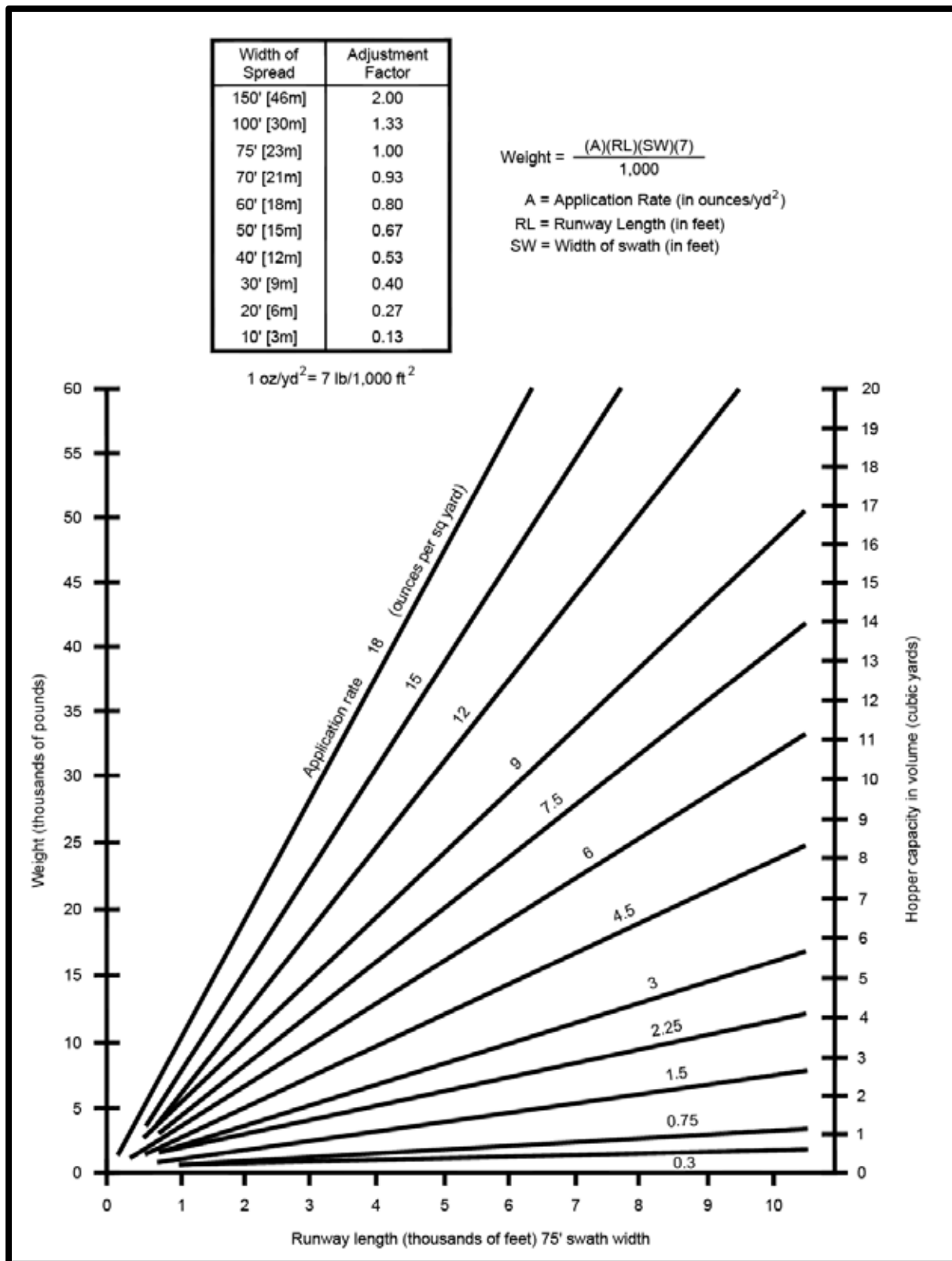


Figure 2-9. Hopper capacity – sand

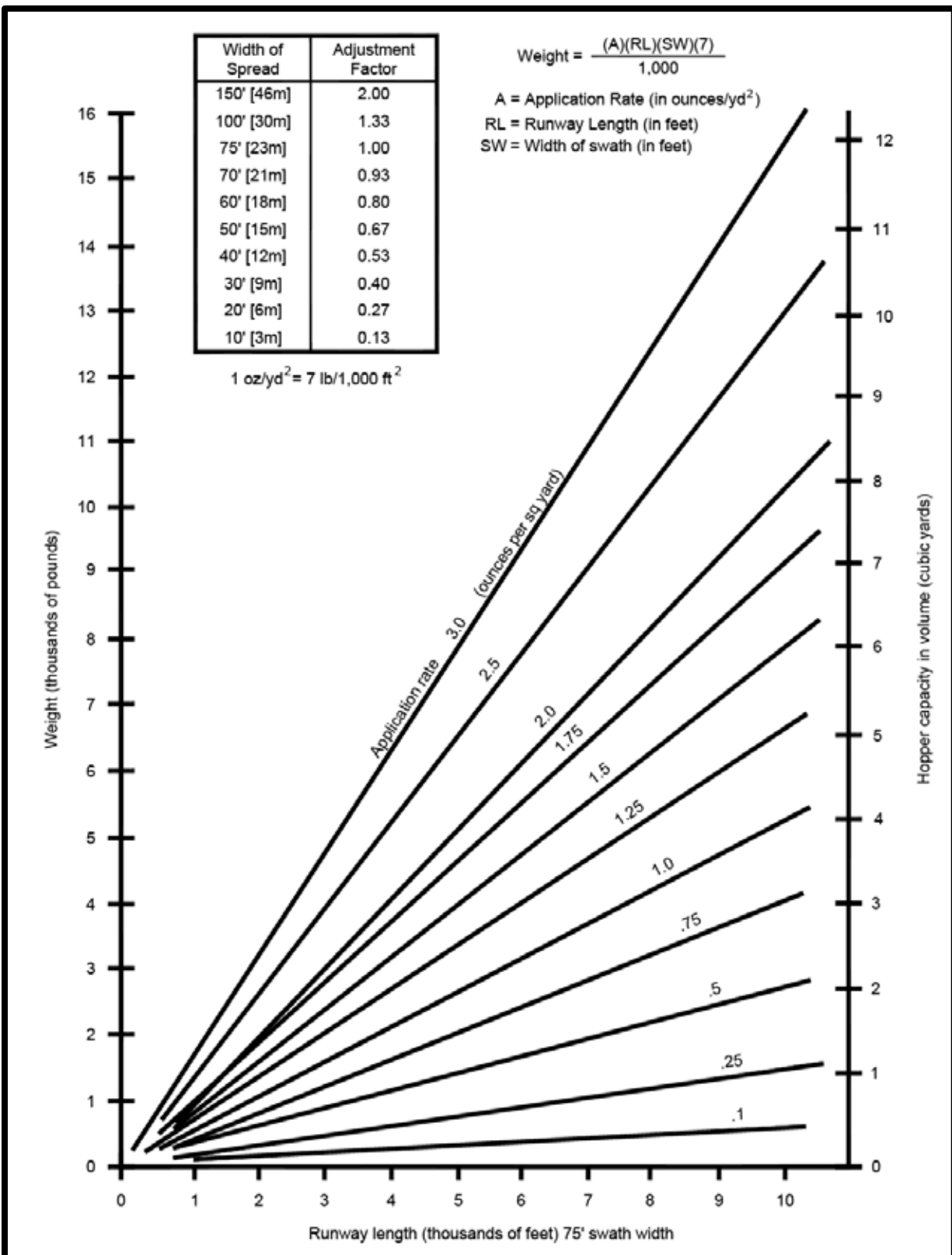


Figure 2-10. Hopper capacity – urea

2-7. Selecting a liquid material spreader.

Select liquid material spreaders based on tankage capacity and by the ability to apply material in a uniform distribution pattern to a prescribed surface area (swath) at a predetermined application rate. In contrast to dry sand, application rates of de/anti-icer fluids vary depending on ice and snow accumulations and overall weather conditions. According to AC 150/5200-30, application rates for a specific product are based on manufacturer recommendations. For example, rates are typically 0.30 gal/1,000 ft² (12.2 liter/1,000 m²) when anti-icing or 1.0 gal/1,000 ft² (41 liter/1,000 m²) when deicing. In all cases, refer to the manufacturer's recommended application rates for anti-icing and deicing applications. The size of the sprayer tank is a function of the square footage to be covered and the maximum fluid coverage rate to be applied.

Example: Determine the tankage capacity. The airport operator determines that 700,000 ft² (65,000 m²) of Priority 1 paved area will receive a liquid deicer applied at the manufacturer's recommendation of 1.0 gal/1,000 ft² (41 liter/1,000 m²). This operation will meet all but the most severe conditions with only one pass of the equipment.

NUMERICAL SOLUTION

Step 1: Determine the total gallons of liquid deicer used.

Multiple as follows:

$$700,000 \text{ ft}^2 \times 1.0 \text{ gal/1,000 ft}^2 = 700 \text{ gals}$$

$$(65,030 \text{ m}^2 \times 41 \text{ liter/1,000 m}^2 = 2,665 \text{ liters})$$

Selection: Select at least a tank capacity of 700 gallons. **Note:** When selecting the size of a liquid spreader unit, consider the location of the storage tanks and the time it takes to reload the sprayer with fluid.

Upon determining the tank capacity, see Chapter 5 for selection of models and the AC specification for purchasing, testing, and certifying liquid material spreaders.

2-8. Selecting a runway broom with airblast.

The selection process follows the process described per SAE ARP 5564, Runway brooms, paragraph 6, in particular paragraph 6.1 and Appendix A of the SAE ARP specification.

This page intentionally left blank

Chapter 3. High-Speed Rotary Plows

3-1. Description.

High-speed rotary plows, also called “rotaries” or “snowblowers,” are primarily used to cast heavy concentrations of snow away from movement areas such as runways and taxiways. The equipment, which may be self-propelled or attached to a carrier vehicle, uses one or more rotating elements (single or two-stage units) to disaggregate a snowpack. The disaggregated snow is then broken into particles small enough to pass through a casting mechanism and directional chute. Because of their large capacity, self-propelled rotary plows are frequently required at medium to large airports while rotary plows attached to a carrier vehicle may be more appropriate at smaller facilities or facilities where the climate is less severe.

a. Single-stage high-speed rotary plows. Single-stage high-speed rotary plows use one rotating device to accomplish both the disaggregating and the casting functions. Single-stage rotary plows may be of any suitable design with either single or dual turbine fans and with or without moveable or fixed side extension wings. Two common designs are the scoop wheel type (see Figure 3–1), which may have a propeller-like pre-cutter bar to break up hard snow, and the drum with turbine impeller type (Figure 3–3g).

b. Two-stage high-speed rotary plows. Two-stage high-speed rotary plows separate the disaggregating function from the casting function (see Figure 3–1 and Figure 3–2). Disaggregators can be of any suitable design, such as a solid auger (single or dual) or ribbon reel (helical). Impellers, which cast the snow, can be of web or disk design.

c. Options. In selecting a high-speed rotary plow design (single-stage or two-stage) to meet the demands of local conditions, an airport operator should consider the various equipment options available and acquire the most effective unit.

3-2. High-speed rotary plow capacities.

Table 2-3 shows snow removal capacities and casting distances for various high speed rotary plow classes. Acquire these in either single or two-stage design. Their capacities are in tons/hour. Measure the casting distance from the longitudinal centerline of the snow removal unit to the center of mass within the perimeter of the cast pattern. Conduct the test when there is no wind.

3-3. SAE ARP equipment specification for high-speed rotary plows.

High-speed rotary plows and carrier vehicles must be in accordance with SAE ARP 5539, Rotary Plow with Carrier Vehicle. An additional federal AIP/PFC specification requirements for SAE ARP 5539 is that for carrier vehicle controllability and safety, all-wheel drive must be standard.

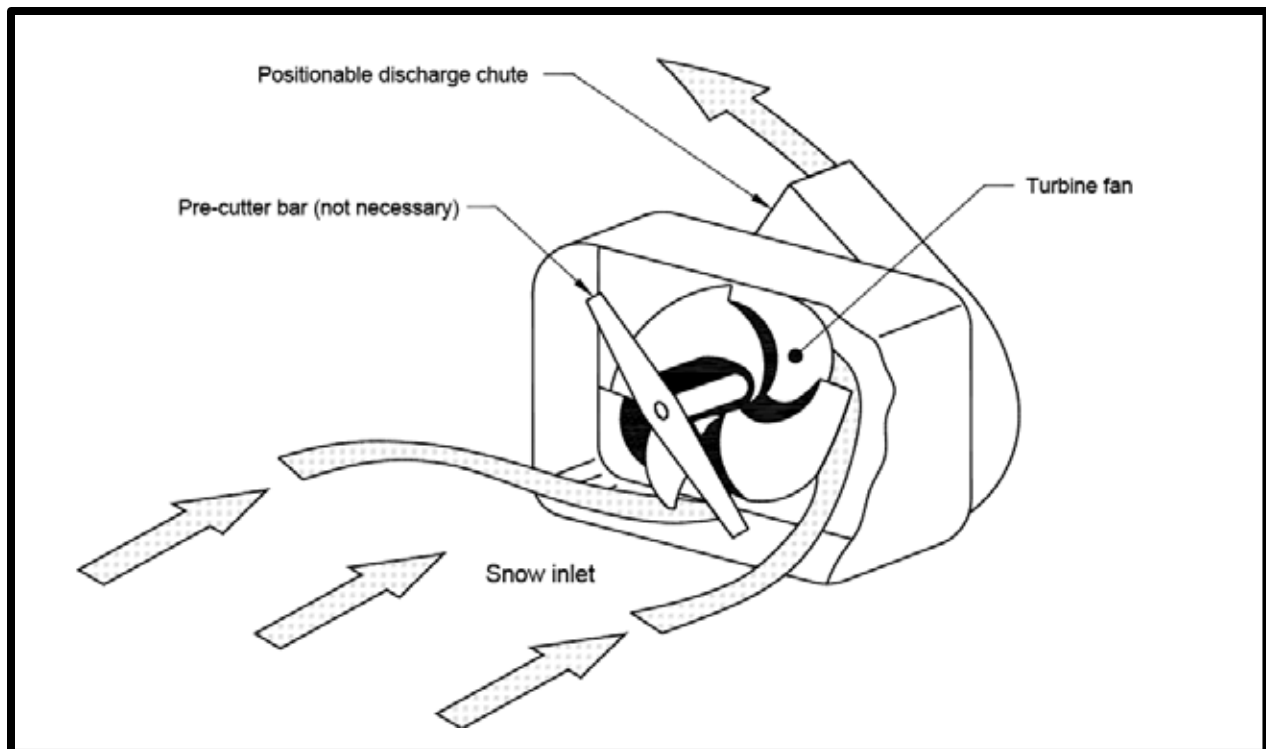


Figure 3–1. Single-stage rotary plow

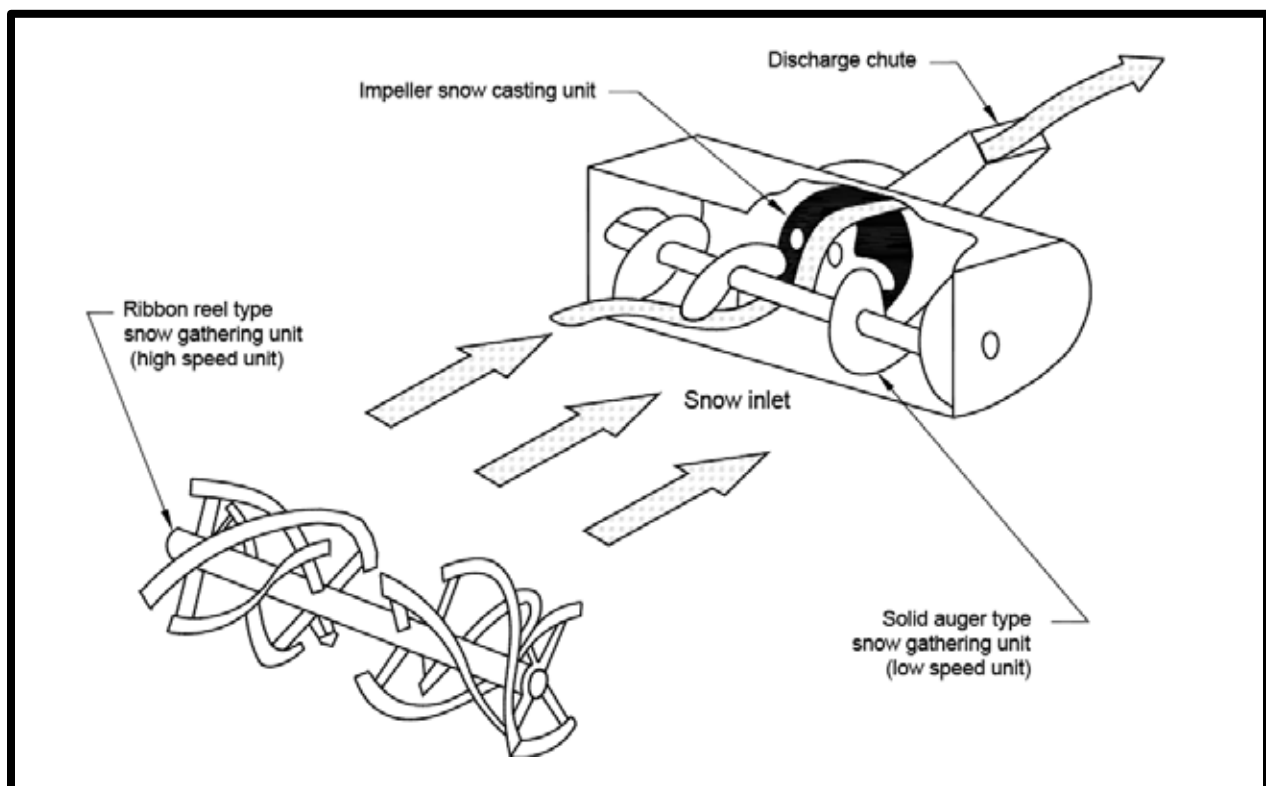


Figure 3–2. Two-stage rotary plow

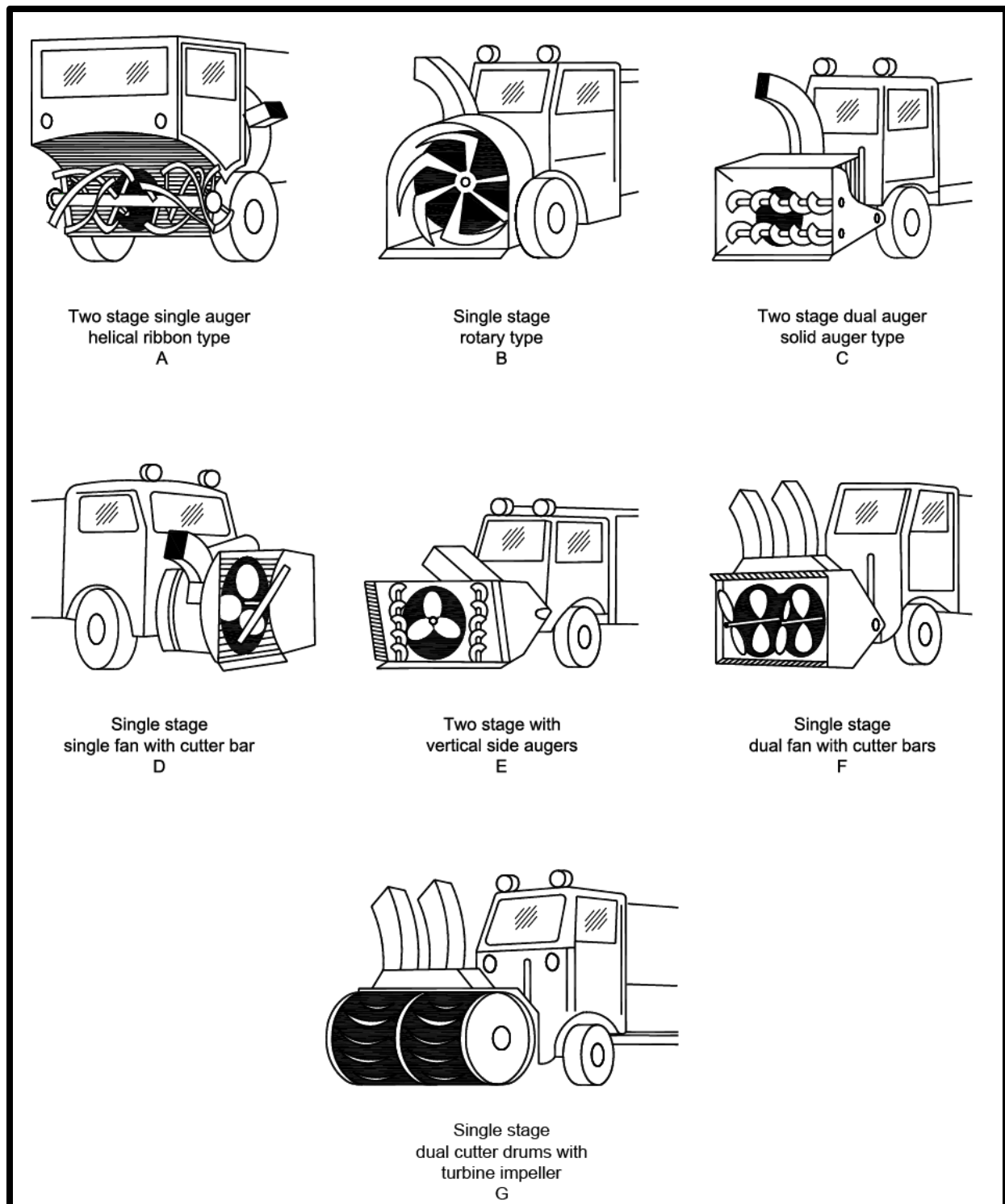


Figure 3-3. Typical rotary plow types

This page intentionally left blank.

Chapter 4. Snow Plows

4-1. Description.

Snow plows consist of a cutting edge to shear snow from the pavement and a moldboard to lift and cast the dislodged snow to the side of the cleared path. The cutting edge may ride in contact with the pavement or be held a small distance above it by means of shoes or caster wheels. A complete snow plow unit consists of a snow plow, carrier vehicle, and accessories (see Figure 4–1). Snow plow sizes may be classified as follows:

a. Small snow plow. This category includes snow plows with cutting edge lengths ranging from approximately 6 feet up to 10 feet (1.8 m up to 3.0 m). Included in this category are underbody-mounted truck scrapers with similar length cutting edges.

b. Intermediate snow plow. This category includes snow plows with cutting edge lengths ranging from approximately 10 feet up to 15 feet (3.0 m up to 4.6 m). Included in this category are underbody-mounted truck scrapers with similar length cutting edges.

c. Large snow plow. This category includes snow plows with cutting edge lengths ranging from approximately 15 feet up to 22 feet (4.6 m up to 6.7 m). Included in this category are ramp dozer plows and large special purpose plows.

d. Extra large snow plow. This category includes plows with cutting edge lengths greater than 22 feet (6.7 m). Included in this category are ramp dozer plows and extra-large special purpose plows.

4-2. Snow plow uses.

Snow plows are most commonly mounted on the front of a carrier vehicle, but they may also be mounted on the side or underneath the vehicle as illustrated in Figure 4–2. A flat and level moldboard deflector should be used when limiting the board casting of the plowed snow. A “bat wing” or large funnel design of the moldboard should be used when the intention is to broadcast the discharged snow over a greater distance and more spread out with less uniformity.

a. Front-mounted snow plows.

(1) **One-way fixed angle snow plow.** This unit is primarily used in large open area snowplowing operations that require a high-volume and high-speed snow discharge at fixed left or right cutting angles.

(2) **Power reversible snow plow.** This unit may be used for both large open area or confined area snowplowing operations. The design provides variable blade positions to either the right or left of the bulldozing position. This allows high volumes of snow to be displaced in a direction dictated by wind conditions or other constraints. The ability to reverse the snow plow angle improves operational efficiency and may reduce the number of snow plow units required.

(3) **Rollover power reversible snow plow.** The primary use of this unit is for large open area snowplowing operations. High-speed and high volume snow discharge to either a right or left cutting angle may be achieved by rotating the blade assembly through 180 degrees. This type of snow plow is not recommended for bulldozing. The rollover concept reduces snow spillage by confining and spreading it through a tapered moldboard design.

(4) **Power reversible snow plow with folding wings.** The primary use of this unit is for wide and extra-wide swath snowplowing operations at various speeds. Cutting an extra-wide swath may require a special carrier vehicle having high horsepower. Make sure that the wings fold snugly against the carrier vehicle chassis when not in use.

(5) **Flexible reversible snow plow.** This unit is made of polymer construction and is capable of changing its cross-sectional shape. It is versatile and can be used as a one-way fixed angle snow plow or a power reversible snow plow with the added feature that it can be adjusted to fit a variety of weather and snow conditions.

(6) **Ramp dozer.** The primary use of this unit is in confined areas that require wide to extra-wide swath plowing, but it may also be used to transport and dump snow. The ramp blade is equipped with side plates to contain snow and prevent spillage. Removal of the moldboard cutting edge allows the moldboard to act as a bucket for snow loading.

(7) **Snow buckets and snow baskets.** Such equipment must be equipped for mounting on a wheel loader or industrial 4×4 tractor. See Part B of Appendix 4 for details.

b. Side-mounted wings.

(1) **Extension wings.** Mount these attachments on either side of the carrier vehicle to increase the swath of the front-mounted snow plow. They are capable of high volume, high-speed snow removal operations.

(2) **Leveling wings.** These units operate with a front-mounted snow plow for windrow and snow bank leveling/trimming operations. The adjustable height of the leveling wing is designed to cast high drifted snow banks away from the cleared snow swath cut by the snow plow. They are designed for high-speed snow removal operations.

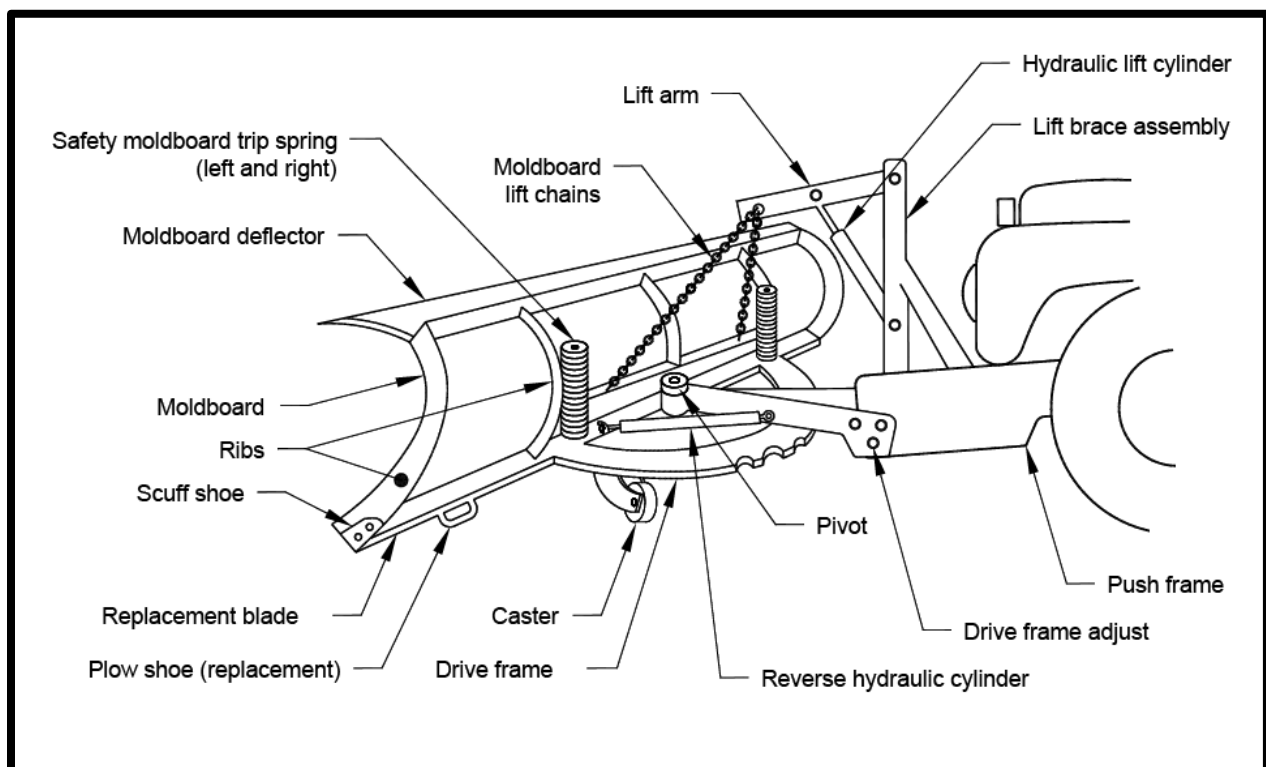
c. Underbody-mounted scraper. Mount this unit behind the cab and on the underbody of a large truck or grader. During operation, the scraper blade applies constant ground pressure on the pavement surface. The blade is capable of rotating its snow cast to either the left or right, thereby enhancing its ability to operate in confined areas.

4-3. SAE ARP equipment specification for snow plows and carrier vehicles.

Snow plows and carrier vehicles must be in accordance with SAE ARP 5943, Snowplows and Hitches.

Additional federal AIP/PFC specification requirements for SAE ARP 5943 follow:

- a. For conventional carrier vehicle controllability and safety, all-wheel drive must be provided.
- b. Only non-metal cutting edges may be used on pavements having in-pavement lighting.
- c. Under paragraph 4.1.1.(c), the snow plow manufacturer must provide the airport sponsor certification for the polyethylene moldboard material.
- d. Under paragraph 4.2.1, the overall width of the snow plow assembly in the folder position (wings retracted) with required casters must allow enter into the federally funded snow removal building (AC 150/5220-18, Buildings for Storage and Maintenance of Airport Snow and Ice Control Equipment and Materials) housing the snow plow and other such equipment.



Note: This figure illustrates a power reversible snow plow with all typical components. Details of snow plow components may vary with snow plow manufacturer and type of snow plow.

Figure 4–1. Snow plow components

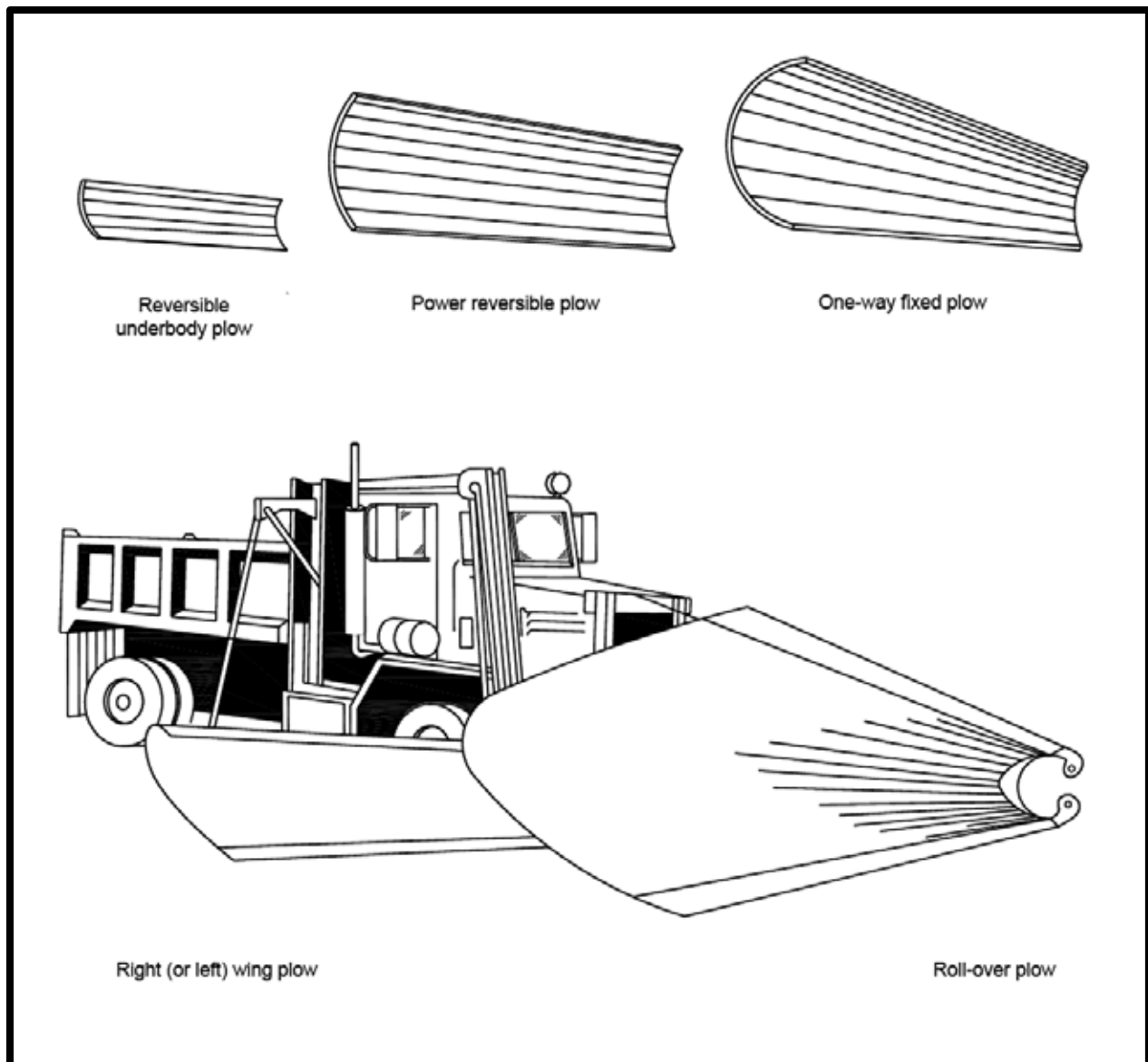


Figure 4-2. Different types of snow plows

Chapter 5. Material Spreaders

5-1. Description.

The function of a material spreader is to provide a continuous, unrestricted, accurately metered flow of sand and solid or liquid deicers/anti-icers per AC 150/5200-30 to a pavement surface over a predetermined spread area. Spreader units may be a permanently vehicle-mounted, a slip-in hopper, or they may be towed by a carrier vehicle. A spreader unit consists of a material storage compartment (hopper or tank), pre-wetting mechanism, a feed mechanism to carry the material to the discharge opening, a metering device to control the application rate, and a distribution mechanism. The selection of a material spreader is primarily defined by the carrying capacity of the hopper (cubic yards) or tankage (gallons) and the width of the path to receive material. This chapter provides a method to determine hopper and tankage capacities.

5-2. Types of material spreaders.

a. Dry material spreaders. This type of material spreader for sand and solid de/anti-icers uses a hopper type material spreader combined, as standard, with a liquid reservoir for pre-wetting sand with an approved liquid de/anti-icer, for skid mounting or chassis mounting onto a carrier vehicle. Figures 5-1 and 5-2 illustrate typical types of dry material spreaders. Spreading width varies from about 12 feet (3.6 m) to about 80 feet (24 m) and hopper capacity varies from about 5 yd³ (4 m³) to 16 yd³ (12 m³)

(1) **Conventional hopper spreaders.** Chassis mounted or slip in type hopper spreaders mount longitudinally between or directly over the carrier vehicle frame members.

(2) **Multi-purpose dump body spreader.** Multi-purpose dump body spreaders mount directly over the carrier vehicle frame members. The spreader may function as an elevating-dump body and as a material spreader.

(3) **Tailgate spreader.** Tailgate spreaders mount on or under the tailgate of an elevating dump body. Hopper capacity is determined by the capacity of the dump body.

(4) **Towed trailer spreader.** A trailer spreader is towed by a separate vehicle but has its own frame and suspension system.

b. Liquid material spreaders. Liquid material spreaders may be self-contained or mounted on a carrier vehicle. These spreaders apply de/anti-icing chemicals to pavement surfaces via a spray applicator system consisting of a supply tank, pump, flow rate monitor, and a spray bar equipped with nozzles. Tank capacities typically range from 500 to 5,000 gallons (1,900 to 19,000 liters). Justify the tank size requirement based upon the Priority 1 pavement area declared and the application of 0.5 gallon of liquid deicer/anti-icing fluid per 1,000 square feet (20.4 liters/1,000 m²) within 30 minutes for airports with greater than 40,000 operations or within 1 hour for airports with less than 40,000 operations.

5-3. SAE ARP equipment specification for material spreaders.

Sand and solid deicing/anti-icing material spreaders must be in accordance with SAE ARP 6059, Solid Deicing/Anti-icing Material Spreader for Airport Application. SAE G15 is developing draft ARP 5559, Liquid Deicing/Anti-icing Material Spreader for Airport Application. This AC will reference that aerospace recommended practice upon its issuance by SAE. Until then, liquid deicing/anti-icing material spreaders must be in accordance with Appendix 5 Part B specifications for liquid spreaders. Additional Federal AIP/PFC specification requirements for SAE ARP 6059 follow:

- a.** For conventional carrier vehicle controllability and safety, all-wheel drive must be provided.
- b.** Paragraph 3.2 specifies the maximum material spreading width of not less than 40 feet.
- c.** Paragraph 3.3.1; for new carrier vehicle applications the spreader manufacturer and the airport operator must work with the carrier vehicle manufacturer to ensure compatibility.
- d.** Paragraph 3.9; type 1 standard; type 2 not eligible.
- e.** Paragraph 3.16; the following items are standard:
 - (1) Paragraph 3.16.4; one per airport under SAE ARP 5623, Mobile Infrared Runway Surface and Digital Ambient Sensor.
 - (2) Paragraphs 3.16.9, 3.16.10; 3.16.11; 3.16.12; 3.16.15; 3.16.16; 3.16.17; and 3.16.18 are all standard.
- f.** Paragraph 3.17 not eligible.
- g.** Paragraph 3.18; only 1 set of manuals, diagnostic tools, equipment, software, and programs are furnished.

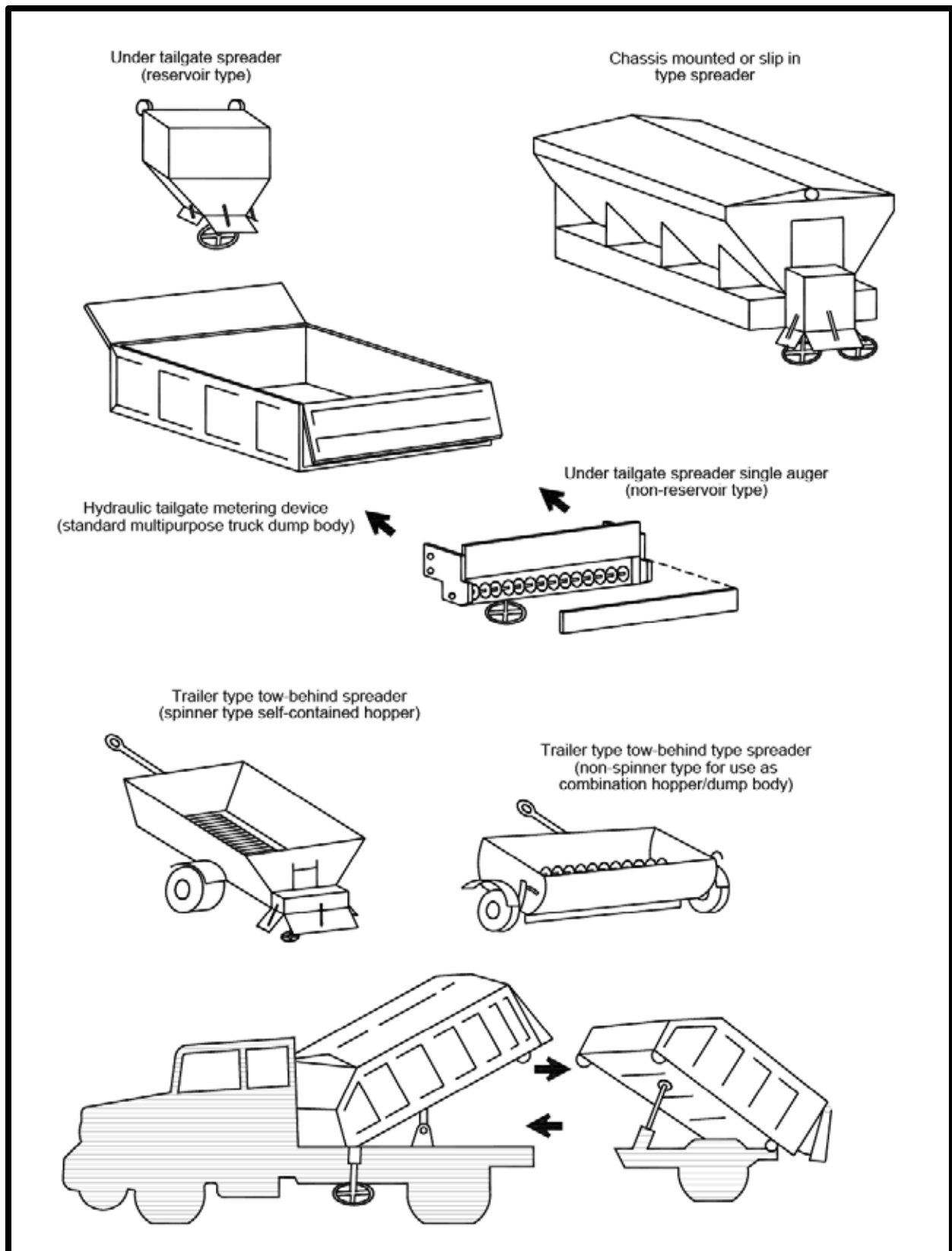
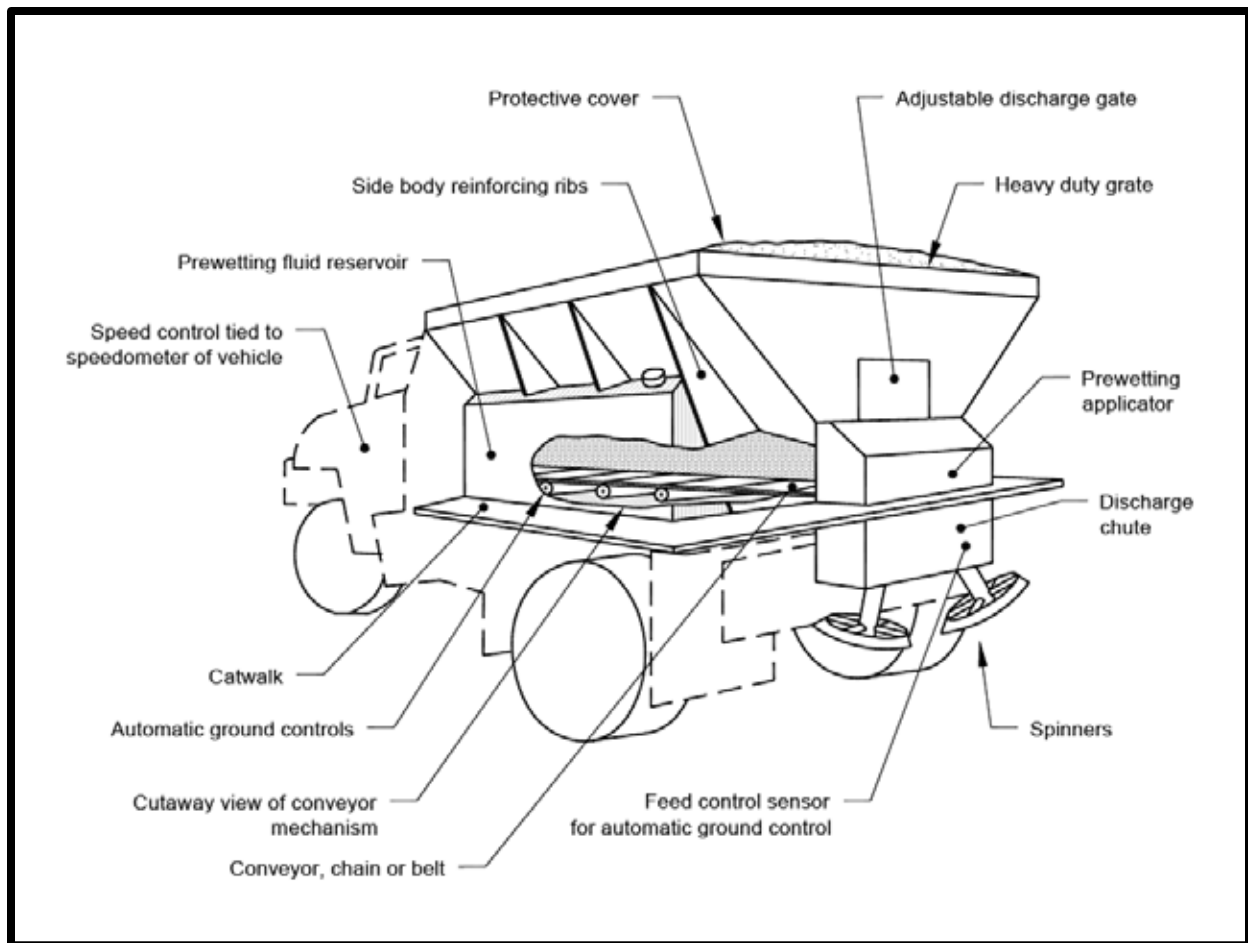


Figure 5-1. Dry material spreader types



Note: This figure depicts the typical layout of a typical dry hopper system having a hydraulic or mechanical drive, a belt or chain-type conveyor, and a dual spinner spreader. Some optional recommended devices are also depicted. Other spreader configurations may contain components differing in design, but essentially perform the same function.

Figure 5–2. Example of one design and component layout of a dry material spreader

Chapter 6. Runway Brooms

6-1. Description.

Runway brooms with airblast are primarily used in the high-speed sweeping and cleaning of snow, slush, ice, and debris from movement and non-movement areas by using a brush. They incorporate high-speed brooms that consist of a number of brush sections, which may be front mounted to a carrier vehicle (conventional or dedicated), mounted underbody, or mounted on a trailer arrangement that is towed by a carrier vehicle. All are capable of sweeping wet slushy snow as well as fine dry snow from pavement surfaces. The broom framework design provides continuous service under difficult working conditions in cold climates. Complement a broom with an airblast system located behind the brush assembly. Use the runway brooms with airblast systems to sweep the pavement area clean of snow, slush, sand, and other debris, help dry the pavement surface, and clear snow from around runway lights.

6-2. Types of runway brooms.

a. Typical configurations of runway brooms being used worldwide on airports are as follows. The front mounted configuration has the broom preceding the carrier vehicle and allows the operator to directly observe the area being swept. Two other similar versions are a tractor mounted and a loader mounted configuration with the broom attached to the front. The loader mounted option requires a dedicated auxiliary engine. The towed behind configuration fixes the broom to a trailer that is towed by a carrier vehicle. The operator uses mirrors to observe the area being swept and must maneuver the carrier vehicle and trailer together by carefully observing their outer dimensions. The underbody configuration places the broom between the front and rear axles of the carrier vehicle.

b. Figures 6-1 and 6-2 illustrate some of the broom types that use a conventional carrier vehicle configuration while SAE ARP 5548, Multi-Tasking Equipment (MTE) for Airfield Snow Removal, illustrates the various MTE dedicated carrier vehicle configurations. Figure 6-3 illustrates common types of broom bristles.

6-3. Classification.

The following two general classes constitute the family of runway brooms. Measure all swath widths when the broom is angled 30 degrees from the transverse position.

a. **Small swath sweeper.** This sweeper class may be of any physical design having a demonstrated or manufacturer's certified snow or slush removal and broadcasting ability sufficient to produce clear pavement within the swath width at the rated speed. The sweeper must have a minimum broom diameter of 36 inches (91 cm) and a swath width of not more than 12 feet (3.7 m).

b. **Large swath sweeper.** This sweeper class may be of any physical design having a demonstrated or manufacturer's certified snow or slush removal and broadcasting ability sufficient to produce clear pavement within the swath width at the rated speed. The sweeper must

have a minimum broom diameter of 36 inches (91 cm) and a swath width greater than 12 feet (3.7 m).

6-4. SAE ARP equipment specification for runway brooms with airblast.

Runway brooms with airblast must be in accordance with SAE ARP 5564, Airport Runway Brooms. Additional federal AIP/PFC specification requirements for SAE ARP 5564 follow:

a. For conventional carrier vehicle controllability and safety, all-wheel drive must be provided for conventional carrier vehicles.

b. For dedicated carrier vehicle (MTE) controllability and safety, all-wheel drive must be provided for MTE carrier vehicles.

c. Airblast is standard equipment for all selections.

d. Under paragraph 6.22 of SAE ARP 5564, the following additional equipment is standard. Other items listed under paragraph 6.22 are not eligible.

(1) Specialized tools – not to include computers and electronic diagnostic machines.

(2) Cold weather package – must provide justification for approval.

(3) Optional brush wafers and cassettes – only wafers permitted.

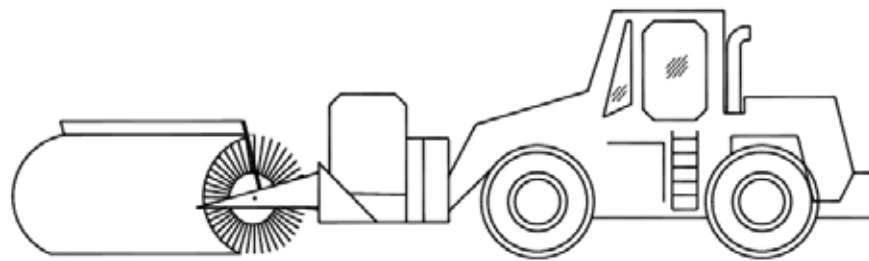
(4) LED marker lights located per SAE ARP 5564.

(5) An automatic lubrication system for all possible points.

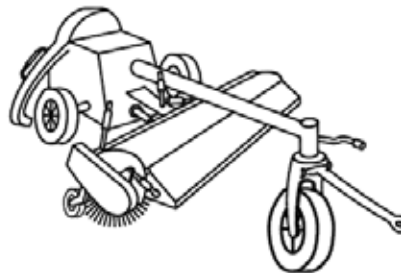
(6) 20-pound fire extinguisher.

(7) Brush speed control by ground control.

(8) Foreign object debris (FOD)/debris pickup box with cab controls.



Pushed type sweeper tractor or wheel loader vehicle powered by auxiliary engine
small to large swath



Towed type sweeper 36 - 46 inch brush
small to large swath



Pushed type sweeper special purpose vehicle integral engine/rear blower cab-over design
small to large swath



Pushed type sweeper special purpose or truck type vehicle two engine/front blower
heavy duty/large swath

Figure 6-1. Typical runway brooms

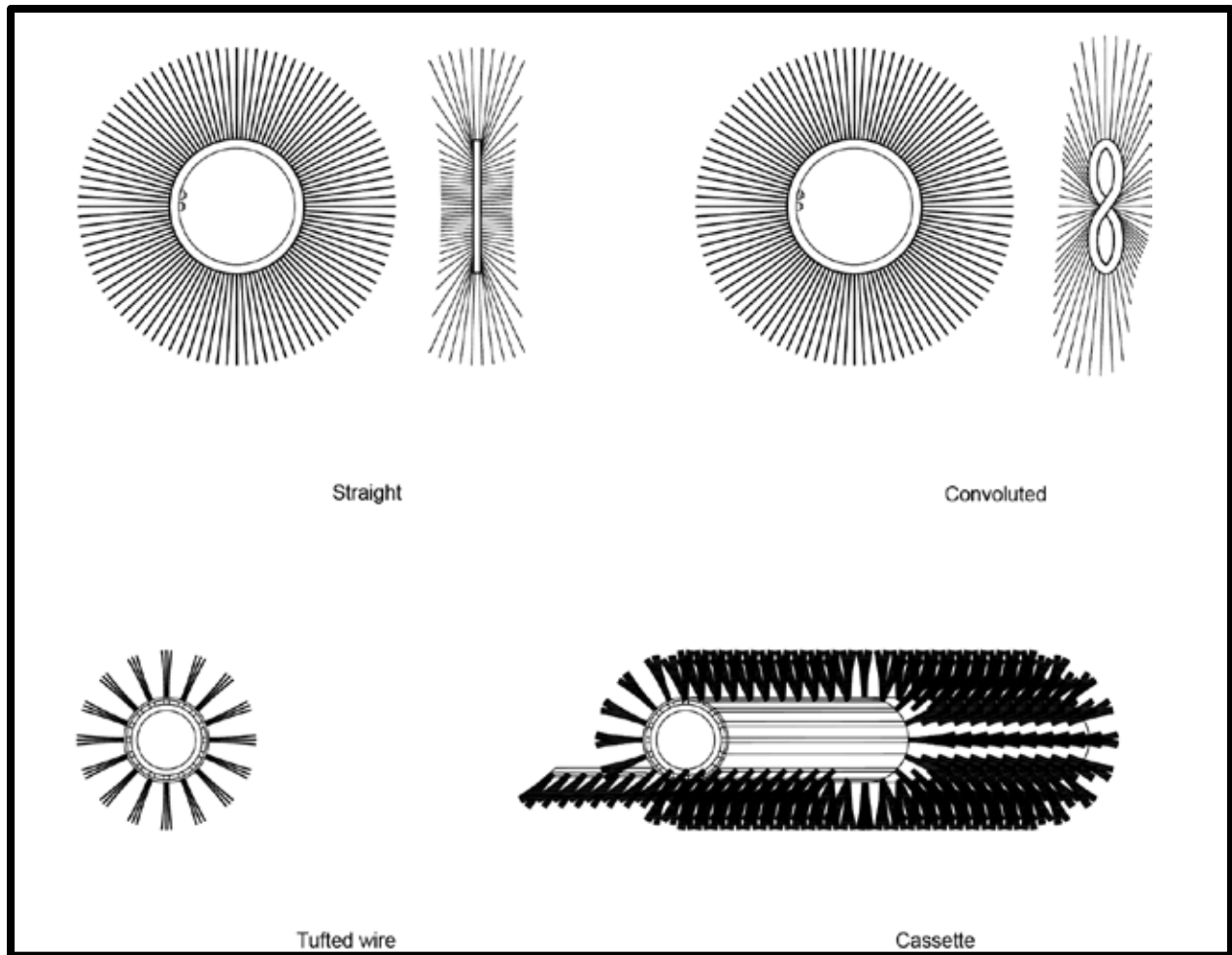


Figure 6–3. Common types of broom bristles used on airports

This page intentionally left blank.

Chapter 7. Types of Carrier Vehicles

7-1. Description.

The term carrier vehicle represents the various self-propelled prime movers that provide the power necessary for the snow removal and ice control equipment to move snow, slush, ice, and other debris from the pavement during winter operations. Carrier vehicle selection is determined by the mission(s) to be performed and the capacity of the selected equipment to perform the designated task(s). The term “capacity” can refer to the amount of snow to be removed, the hopper of dry material spreaders, or tankage of liquid material spreaders.

a. Truck type conventional carrier vehicles. Truck type conventional carrier vehicles are standard production truck models designed primarily to meet an airport’s snow and ice control needs by attaching or/and towing snow removal and ice control equipment. Additionally, this truck type can be of an integrated design that is built for a specific piece of equipment, such as a self-propelled high-speed rotary plow. Conventional carrier vehicles also have the ability to perform secondary airport functions; they can be equipped for several summer time tasks, such as Foreign Object Debris (FOD) exercises. They should conform to the manufacturer’s performance recommendations and be suitable for mounting all specified accessories.

b. Truck type special purpose carrier vehicles. Special purpose carrier vehicles can be conventional or dedicated carrier vehicles. An example of a conventional special purpose carrier vehicle is one that is customized specifically to meet special airport needs. Some examples include a specialized high-speed rotary plow necessary to remove and cast huge volumes of heavy dense snow; a specialized snow plow that requires an extra-wide moldboard and horsepower to perform extra-wide swath clearing operations over long distances. In comparison, this AC makes a distinction to identify those multi-task carrier vehicles exclusively built with the capability to perform three integrated functions, namely snowplowing, brooming, and airblasting at a speed of at least 30 mph (48 km/h). Industry refers to this specifically built carrier vehicle as high-speed multi-task equipment (MTE) as defined by SAE ARP 5548, Multi-Tasking Equipment (MTE) for Airfield Snow Removal High Speed, Multi-Tasking Snow Removal Unit to include Carrier Vehicle, Snow Plow, Rotary Broom High Velocity Air. For airport operators selecting MTEs, see paragraph 7-4 for further information and requirements.

c. Front-wheel loaders. Front-wheel loaders are standard production four-wheel drive articulated and non-articulated conventional carrier vehicles, normally equipped with a front-mounted bucket or basket, that operate at low speeds of 5 to 20 mph (8 to 30 km/h). They are very efficient for short haul operations and are used to clear or haul compacted snow and ice from ramp and terminal areas and around pavement lights. A front-wheel loader will generally out-perform a truck-mounted snow plow in such confined areas, but it is not as efficient when large open paved areas need to be cleared quickly. Other applications include snow loading and stockpiling and loading of solid chemicals and airside sand.

d. Industrial 4×4 tractors. Industrial 4×4 tractors are standard production models adapted for snow and ice control work in confined areas. While similar to wheel loaders, most are built to operate at higher speeds.

7-2. Carrier vehicle dimensions.

Carrier vehicle dimensions should permit the carrier vehicles to pass through the standard door openings of service and storage buildings. See AC 150/5220-18, Buildings for Storage and Maintenance of Airport Snow and Ice Control Equipment and Materials, for FAA recommended door openings, parking space set-asides, and other clearances within these buildings. Additionally, the selected dimensions should permit servicing of equipment by standard lifts and cranes without the need for special equipment or the need for building modifications.

7-3. Outdoor storage of carrier vehicles.

See Appendix 2 for additional equipment to consider when operating a carrier vehicle below -40°F (-40°C) or when the carrier vehicle must be stored outside or in an unheated building.

7-4. SAE ARP equipment specification for MTE dedicated carrier vehicles.

MTEs must be in accordance with SAE ARP 5548, Multi-Tasking Equipment (MTE) for Airfield Snow Removal High Speed, Multi-Tasking Snow Removal Unit to include Carrier Vehicle, Snow Plow, Rotary Broom High Velocity Air. Additional Federal AIP/PFC specification requirements for SAE ARP 5548 follow:

a. An airport sponsor requesting a MTE must be eligible for both a snow plow truck and a runway broom. One MTE replaces the eligibility for two pieces of snow removal and ice control equipment.

b. Complete a Snow and Ice Control Plan and calculate the tons per hour requirement of the Priority 1 paved area for the MTE performance.

c. For dedicated carrier vehicle (MTE) controllability and safety, power must be provided to at least two axles.

d. For dedicated carrier vehicle other than MTE controllability and safety, all-wheel drive must be provided.

e. Additional features not a part of this specification may not be eligible for federal funding.

f. This SAE ARP specification allows the procurement official to specify various options or selections; however, unless a selection is offered in Table 7-1 the purchaser will receive the standard catalog equipment offered on the winning bidder's equipment. A selection is not available to the procurement official.

Table 7-1. MTE specification selections

SAE ARP 5548 Paragraph number	Selection Descriptions	Pre-approved by FAA as standard, required item	Type of Airport Selection <i>See Notes 1 and 2</i>
4.1	Indicate acceptable design(s): 1. Modular unit 2. Integral non-articulating 3. Integral articulating	Justification required	Note 2
4.3.1	100-foot wall to wall maximum turning test	YES	Note 1
	Supplemental performance testing		Airport may select and manufacturer should attend testing
5.2.3	Install pintle hitch	YES	Note 1
5.3	Standard catalog diesel engines Note: Alternative fuel engines (not available at this time.)	YES	Note 1
5.3.7	Thermostatically controlled fuel tank heaters	Justification required	Note 2
5.3.7	Thermostatically controlled fuel line heaters	Justification required	Note 2
5.4.4i	Transfer case (standard manufacturer's equipment)	YES	Note 1
5.6.1	Steering enhancements (standard manufacturer's design)	YES	Note 1
5.6.2	Standard catalog steering	YES	No selection among stated options
5.6.2	Enhanced steering	Justification required	Note 2
5.6.2	AWS managers switch	Justification required	Note 2
5.8.3	Spare rim/tire	Justification required	Note 2
5.9.2	Arctic type hoses	Justification required	Note 2
5.9.2	UV protected hoses	Justification required	Note 2
5.9.4	Hydraulic system preheater (must be justified)	Justification required	Note 2

SAE ARP 5548 Paragraph number	Selection Descriptions	Pre-approved by FAA as standard, required item	Type of Airport Selection <i>See Notes 1 and 2</i>
5.10.2	Auto-lubrication system	Justification required	Note 2
5.11.1	Managed battery system	YES	Note 1
5.12d	Choose 1 type:	YES	Note 1
	(a) Reflectors		
	(b) Conspicuity markings		
5.12.3	Auxiliary or specialty lighting	NO	Not allowed
5.12.5	Audible back up alarm	YES	Note 1
5.12.6	Standard equipment horn (manufacturer’s standard air or electric - no choice)	YES	Note 1
5.13.1	Engine coolant heater	YES	Note 1
5.13.2	Engine oil heater	Justification required	Note 2
5.13.4	Ether start provision	YES	Note 1
5.13.6	Hydraulic tank heaters	Justification required	Note 2
5.15	Operator’s cab (no choice of cab, manufacturer’s standard design)	YES	Note 1
5.15.3	Cab glass (no choice of cab, manufacturer’s standard design)	YES	Note 1
5.15.4	Heated wipers & fluid system	Justification required	Note 2
5.15.7	Rear view mirrors (No choice of mirrors, manufacturer’s standard design)	YES	Note 1
5.15.8	Sun visors (No choice of visors, manufacturer’s standard design)	YES	Note 1
5.15.11	Prewired for two-way radio components (power only)	YES	Note 1
5.15.12	Windshield deluge system	YES	Note 1
5.16.7	AM/FM radio with clock	NO	Not allowed
7.5	Select (1) type of cutting edge:	YES	Note 1
	(a) Tungsten carbide	Not allowed with in-pavement lighting	
	(b) Rubber (must have in-pavement lights)		
	(c) Polyurethane (must have in-pavement lights)		

SAE ARP 5548 Paragraph number	Selection Descriptions	Pre-approved by FAA as standard, required item	Type of Airport Selection <i>See Notes 1 and 2</i>
	(d) High carbon steel	Not allowed with in-pavement lighting	
	(e) Rubber section blades w/carbide inserts		
	(f) Reverse angle style cutting edge		
7.6	Single or double acting lift cylinder (manufacturers standard design)	YES	Note 1
7.6.1	Plow quick hitch	Justification required	Note 2
7.7	Spray guard	YES	Note 1
7.8	Shock/impact absorbers	YES	Note 1
7.10.1 & 2	Type of caster assembly – no selection (manufacturers standard design)	YES	Note 1
8.2	Stowable broom head (must be justified)	Justification required	Note 2
8.2	Non-stowable broom head	YES	Note 1
8.3.3	36 inch brush diameter	Justification required	Note 2
8.3.3	46 inch brush diameter (recommended)	Justification required	Note 2
8.3.4	Select 1 type:	YES	Note 1
	(a) Wire bristles		
	(b) Poly bristles		
	(c) Poly/wire combo: Mix: _____ (Sponsor must specify mix.)		
8.3.5.1a	Wafer bristles (standard)	YES	Note 1
8.3.5.1c	Bristle end count: _____	YES	Note 1
Notes: 1) FAA standard where the airport sponsor receives what the manufacturer supplies. 2) The airport sponsor must justify the need and make such justification available to the FAA upon request. Additionally, the airport sponsor receives what the manufacturer supplies.			

This page intentionally left blank.

Chapter 8. Operational Standards and Compliance Testing

8-1. General.

The manufacturer is responsible for conducting tests to ensure that its snow removal and ice control equipment meets the operational and performance requirements it advertises. The manufacturer must submit certified records of these compliance tests with each response to an invitation to bid. Equipment tests must be conducted on standard production models and not on specially constructed prototypes.

a. Pre-testing. Examine each test carrier vehicle to ensure that it is a standard production model and not a specially constructed unit made specifically for the test. Prior to testing, all controls, adjusting mechanisms, hydraulic systems and other assemblies must be operated to ensure against leaks, restrictions, and malfunctions. Once assured that the unit is fit, actual testing may begin.

b. Additional testing. The purchaser may consider conducting his or her own operational performance tests on equipment prior to acceptance. In such cases, the manufacturer should have the opportunity to witness the performance of such tests, but the costs for such testing and interpretation of results is the sole responsibility of the purchaser.

8-2. Required carrier vehicle tests.

Test the carrier vehicle in accordance with (1) this paragraph and (2) any referenced SAE ARP(s) for the specified equipment the carrier vehicle is to support. Conduct the following temperature, performance, and compliance tests when acquiring a carrier vehicle. Carrier vehicles must be all-wheel drive.

a. Cold weather operations. A fully-equipped carrier vehicle (all types) with all attached snow removal and ice control equipment should be able to perform normal operations at an ambient temperature:

(1) of 10°F (-12°C) below the lowest temperature in which the vehicle is expected to operate, or

(2) at -40°F (-40°C) at airports located in extremely cold climates.

b. Hot weather operations. The vehicle should be capable of operating at an ambient temperature of 70°F (21°C) at the maximum speed recommended by the manufacturer without any of the vehicle components exceeding their normal operating temperature.

c. Power. Carrier vehicles must have sufficient power to perform all operational and attachment functions simultaneously.

d. Performance. The following tests must be conducted on a carrier vehicle loaded to its Gross Vehicle Weight and must include the following systems: hydraulic, power train, brake, lighting, controls, and instruments.

(1) **10 mile test.** Drive the carrier vehicle over hard surfaced roads at normal airport speeds for a distance of 10 miles (16 km) with no problems experienced. Focus special attention on vibration, steering, vehicle drift, rattles, leaks, and interior controls.

(2) **One hour test.** Perform this time test at a speed of 5 mph (8 km/h) over all types of terrain that would normally be encountered at the airport.

(3) **Service brake test.** Conduct this test at speeds of 20 mph and 40 mph (32 km/h and 64 km/h). Using the service brakes only, the fully loaded carrier vehicle must be brought to a complete stop within a distance of 35 and 131 feet (11 and 40 m) respectively measured from the point of brake application. The test must be conducted for two complete cycles in either direction on a hard pavement surface that is dry, reasonably level and free of loose material. Make no steering corrections for vehicle drift during the stop.

(4) **Emergency brake test.** Conduct this test at a speed of 40 mph (64 km/h). Using the emergency brake only, the fully loaded carrier vehicle must be brought to a complete stop on the most critical airfield pavement grade within a distance of 288 feet (88 m) measured from the point of brake application. Conduct this test on a hard surface that is dry and free of loose material. Once stopped, the brake must continue to hold the carrier vehicle without movement for five minutes. Make no steering corrections for carrier vehicle drift during the stop.

8-3. High-speed rotary plow test.

Field test in accordance with SAE ARP 5539, Rotary Plow with Carrier Vehicle, for the casting distance and tonnage capacity specified by airport operator. Use Table 2-3 of this AC.

8-4. Snow plow test.

With the exception for 4×4 tractors and wheel loaders, field test to SAE ARP 5943, Snowplows and Hitches, to demonstrate the ability to:

- a. sustain a speed of 25 mph (40 km/h) on level pavement with a snow plow cutting edge angle set at 37 degrees while negotiating a 3 to 6 inch (7.6 to 15.2 cm) snow accumulation having a density of approximately 25 lbs/ft³ (400 kg/m³) throughout a test section of at least 500 feet (150 m).
- b. discharge snow to either side of the carrier vehicle while moving (if the unit is power reversible).
- c. minimize snow spillover to 5 percent of total snow displaced.
- d. produce a clear swath that is even, regular and non-skipping.
- e. have the cutting edge (blade) free of vibration during operation.
- f. carrier vehicles must be all-wheel drive.

8-5. Dry and liquid material spreader tests.

Field test in accordance with SAE ARP 6059. Liquid and dry spreader settings for swath width and application rate must be verified by field measurements to an accuracy of 2 percent under a no wind condition. Towed spreaders are not to vibrate excessively during operation and braking.

8-6. Runway brooms with airblast.

Field test in accordance with SAE ARP 5564, Airport Runway Brooms, and the following testing requirements:

a. A field test must be conducted to simulate operations on a runway or taxiway having a length of at least 1,000 feet (305 m). Snow depth may vary, but the broom should be capable of removing snow at the following depths and densities:

(1) Small Swath Brooms - 12 feet and under. Two inches (5 cm) of light snow having density of 8 to 15 lbs/ft³ (128 to 240 kg/m³) or one-half inch (1.3 cm) of slush at density of 40 lbs/ft³ (641 kg/m³).

(2) Large Swath Brooms - over 12 feet. Three inches (7.6 cm) of light snow having a density of 8 to 15 lbs/ft³ (128 to 240 kg/m³) or one inch (2.5cm) of slush at a density of 40 lbs/ft³ (641 kg/m³).

b. Speed must be as high as practical but not less than 8 mph (13 km/h) for small swath brooms and 25 mph (40 km/h) for large swath brooms.

c. The resulting cleared swath must demonstrate the following:

(1) The resulting swath width is reasonably clean without snow deposits resulting from bouncing or skipping of the brush.

(2) The unit with airblast must be capable of varying its brush rotational speed, angle of attack, and the degree of brush pressure applied to a surface area.

(3) The unit with airblast must be capable of broadcasting snow to either side of the carrier vehicle.

(4) The broom should show no performance degradation when sweeping thin deposits of sand, ash, water, or other light debris.

(5) The unit with airblast must be designed to allow all performance and monitoring functions to be controlled or observed by a single operator from the carrier vehicle cab.

This page intentionally left blank.

Appendix 1. Specification for Carrier Vehicle

Part A - Airport Operator Checklist

When preparing a solicitation to purchase a carrier vehicle, an airport operator or specification writer should use Part A to identify user requirements and Part B to define the specification to meet these requirements. Part A is important because it tailors the carrier vehicle to the specific requirements of the purchaser, i.e., automatic versus manual transmission, gasoline versus diesel, heated windshield versus plain etc. Both parts, when combined, become the technical basis for a user's request for proposal.

A1-1. Anticipated uses and/or features of vehicle. (Be specific) _____

A1-2. Performance requirements.

- a. Required working speed _____
- b. Minimum speed _____
- c. Turning radius _____

A1-3. Engine/transmission.

- a. Automatic _____ Manual _____
- b. Gasoline _____ Diesel _____
- c. Number of forward speeds _____

A1-4. Transfer case. (See Table 7-1 line item 5.4.4i.)

A1-5. Axle capacities. Front _____ Rear _____

A1-6. Fuel capacity _____ gallons

A1-7. Auxiliary equipment. (see Appendix 2) _____

Part B - Specification for Carrier Vehicle

A1-8. Materials and components. See referenced SAE ARP equipment specification.

A1-9. Delivery.

a. Preparation for delivery.

(1) **Shipment.** The vendor is responsible for the safe and timely delivery of the vehicle and its accessories, spare parts, and tools to the agreed place of delivery.

(2) **Marking.** Carrier vehicles must be marked for shipment in accordance with instructions agreed to by the purchaser.

b. Instruction and training. The manufacturer must, at no additional cost, furnish the services of trained personnel to the purchaser at a time and place agreed to by all parties. These individuals must provide instruction to airport personnel sufficient for the personnel to familiarize themselves with the operation and maintenance of the carrier vehicle and its auxiliary equipment. The period of instruction must not be less than 24 hours or as specified in the referenced SAE ARP equipment specification.

Appendix 2. Optional/Alternate Equipment Specification

A2-1. General.

Most snow and ice control equipment is designed to operate under normal winter conditions. At various times, working tolerances and/or severe weather or operating conditions require specialized support equipment to assist the primary unit prior to or during operation. Several of these options are discussed below:

A2-2. Carrier vehicle.

Equipment to be considered when operating a carrier vehicle at or below -40°F (-40°C) or when the vehicle must be stored outside or in an unheated building is as follows:

a. Engine/transmission.

- (1) **Engine-jacket water heater.** Recirculating type with thermostatic control and weatherproof receptacle plug (minimum - 1500 watts).
- (2) **Engine oil pan heater.** 300 watts
- (3) **Battery warmer pad.** Approximately 50 - 100 watts per battery
- (4) **Transmission oil pan heater.** Wattage as recommended by the transmission manufacturer

b. Vehicle cab.

- (1) **Additional door handles.** Handles must be installed on lower part of vehicle cab door.
- (2) **Auxiliary cab heater and circulating fans.**
- (3) **Mirrors.**
 - (a) Remote control for exterior mirrors.
 - (b) Electrically heated exterior mirrors.
- (4) **Windows.**
 - (a) Heated windshield.
 - (b) Extra window in lower part of cab doors.
 - (c) Reverse slope windshield.
- (5) **Seats.** Heated driver seat.

(6) **Cab insulation upgrade** (to reduce exterior noise below 85 dBa).

(7) **Air horn.**

c. Mechanical.

(1) **Special starting systems.**

(a) Dual battery system.

(b) Ether cold starting system.

(2) **Permanently installed battery charger.**

(a) Maintenance charging. (0-10 amp capacity)

(b) Automatic cutoff.

(c) Connection.

(i) Weather resistant and chassis mounted.

(ii) Adaptable to 110 volt electrical outlet

(iii) Heavy duty

(iv) 20 amp capacity

(3) **Engine cooling.**

(a) Oversize radiator.

(b) Radiator shutters. (if compatible with engine design)

(4) **Automatic engine shutdown.** An automatic engine shutdown system is equipped with an override switch to prevent engine damage due to low engine oil pressure, high coolant temperature, or low coolant level.

(5) **Special alternator.** Specify drive type, amperage, and voltage.

(6) **All-wheel or articulated steering.** For all-wheel steering systems, the rear drive-steer axle must be controlled in the cab.

(7) **Silicone hoses.**

d. Quick disconnect hitches.

(1) **Automatic/remote hitch.** Controls to activate the hitching and unhitching mechanisms must be located in the vehicle cab. The hitch must be capable of mating the plow

equipment to the carrier vehicle attachment points even when minor angular differences exist between the attachment points and the hitching assembly. An additional hydraulic, pneumatic, or mechanical locking/unlocking device may be installed to ensure safe and positive final coupling. Locking devices must be activated through the use of existing vehicle power systems.

(2) **Semi-automatic hitch.** The initial hook-up between carrier vehicle and hitching device must be controlled from the vehicle cab with final lock-on accomplished manually at the vehicle/ hitch interface. The hitch must be capable of initial hook-up even when minor angular differences exist between the plow attachment points and the hitching assembly. All manual locking devices must ensure a safe and positive final coupling.

A2-3. High-speed rotary plow.

a. Low temperature options.

- (1) **Engine-jacket water heater.** (1,000 watt unit)
- (2) **Engine oil pan heater.** (300 watt unit)
- (3) **Battery warmer pad.** (500 watt unit)

b. Spot casting and loading chute.

A2-4. Snow plow.

a. Moldboard coatings. Polyurethane nonstick coatings when applied to the front face of a moldboard will reduce skin friction and prevent snow from sticking to the moldboard.

b. Snow deflector shield. A snow deflector shield may be attached to the upper edge of a snow plow moldboard. Attaching devices are hinges, bolts, and acceptable spring-loaded mechanisms.

A2-5. Material spreaders.

a. Dry material spreaders.

(1) **Vehicle speed sensor system.** This system must automatically regulate and match the material spread rate with vehicle speed. Operation of the system must be from the vehicle transmission or by auxiliary tire traction. The system must include an automatic material cut-off.

(2) **Belt over chain.** Attached to the standard conveyor chain, the belt provides a more positive delivery of product to spinner, resulting in a more uniform spreading pattern.

(3) **Load choker.** An inverted “V” type adjustable load choker will reduce the load pressure on the conveyor system of larger spreaders.

(4) **Cab shield.** A shield projects from top of leading edge of the spreader over the truck cab. Its function is to protect against spillage of material on cab and drive train of carrier vehicle during loading.

(5) **Chain oiler.** An oiler operates by gravity flow and keeps the conveyor chain oiled during operation.

(6) **Hopper cover.** A cover runs the full length of the hopper and protects the load from the elements.

(7) **Catwalks.**

b. Liquid material spreaders.

(1) **Calibration system.** The calibration system must consist of a control console, a sensor control valve, a ground speed sensor, and an application rate sensor. It must maintain a uniform application rate at all normal carrier vehicle application speeds over the entire width of the boom or any combination of sections thereof.

(2) **Flusher unit.** A flusher unit must have four broad fan nozzles capable of delivering 150 gpm (567 liters/min) at 50 psi (345 kPa).

(3) **Quick disconnect hitch.** A quick disconnect hitch for a snow plow should be considered when purchasing a self-contained spreader unit.

Appendix 3. High-Speed Rotary Plow Specification

Part A - Airport Operator Checklist

When preparing a solicitation to purchase a rotary plow, an airport operator or specification writer should use Part A to identify user requirements and Part B to define the specification to meet these requirements. Part A is important because it tailors the high-speed rotary plow to the specific requirements of the purchaser, i.e., single-stage versus two-stage, solid auger versus turbine impeller, etc. Both parts, when combined, become the technical basis for the user's request for bid proposal.

A3-1. Anticipated uses and/or features of high-speed rotary plow. (Be specific)

A3-2. Size of Priority 1 paved area _____ square feet (m²)

A3-3. Capacity _____ tons/hr

A3-4. Casting distance _____ ft(m) @ Snow weight (density) of _____ lbs/ft³(kg/m³)

A3-5. Anticipated speed of operation _____ mph (km/h)

A3-6. Unusual conditions/problems/obstructions (if any)

A3-7. Other/optional equipment

Part B – High-Speed Rotary Plow Specification

A3-8. See paragraph 3.3 of this AC.

A3-9. High-speed rotary plows and carrier vehicles must be in accordance with SAE ARP 5539, Rotary Plow with Carrier Vehicle. Additional Federal AIP/PFC specification requirement for SAE ARP 5539 is that for carrier vehicle controllability and safety, all-wheel drive must be provided.

Appendix 4. Snow Plow Specification

Part A - Airport Operator Checklist

When preparing a solicitation to purchase a snow plow, an airport operator or specification writer should use Part A to identify user requirements, and Part B to define the specification to meet these requirements. Part A is important because it tailors the snow plow to the specific needs of the purchaser, i.e., type of plow desired, type of moldboard, plow shoes versus caster wheels, etc. Both parts, when combined, become the technical basis for a user's request for bid proposal.

A4-1. Anticipated uses and/or features of snow plow. (Be specific) _____

A4-2. Size of Priority 1 paved area _____ square feet (m²)

A4-3. Type of plow preferred _____

A4-4. Plow length _____ ft (m), **height** _____ ft (m), **width** _____ ft (m)

A4-5. Anticipated speed of operation _____ mph (km/h)

A4-6. Unusual conditions/problems/obstructions that may be encountered _____

A4-7. Typical snow conditions _____

A4-8. Moldboard _____ **steel** _____ **non-steel**

A4-9. Other/optional equipment _____

Part B – Snow Plow Specification

A4-10. Snow plows and carrier vehicles must be in accordance with SAE ARP 5943, Snowplows and Hitches. See paragraph 2 below for snow baskets and snow buckets. Additional federal AIP/PFC specification requirements for SAE ARP 5943 follow:

- a.** For carrier vehicle controllability and safety, all-wheel drive must be standard.
- b.** Under paragraph 4.1.1.(c), the plow manufacturer must provide the airport sponsor certification for the polyethylene moldboard material.
- c.** Under paragraph 4.2.1, the overall width of the plow assembly in the folded position (wings retracted) with required casters must be allowed to enter the federally funded snow removal building (AC 150/5220-18, Buildings for Storage and Maintenance of Airport Snow and Ice Control Equipment and Materials) that houses the snow plow and other such equipment.

A4-11. Snow bucket.

- a. Geometry.** The capacity of a front-mounted bucket must range anywhere from 3 to 8 yd³ (2.4 to 6.2 m³) depending upon the type of snow removal operation.
- b. Features.** The bucket must be made of welded construction using high-strength, wear resistant steel plate and bracing. It must be equipped for mounting on a wheel loader or a 4×4 tractor. The installed bucket must be capable of sustaining a level load while being tilted 20° in the forward and transverse position. It must be equipped with a quick coupler hitch for swift changeovers. Snow buckets may have a built-up bottom of abrasion-resistant steel to improve wear life.

A4-12. Snow basket.

- a. Geometry.** The front-mounted basket width must range from 8 to 17 feet (2.4 to 5.2 m). The basket hitching assembly must be designed for easy mounting on a wheel loader or a 4×4 tractor.
- b. Features.** The basket must have the same pick up and discharge characteristics as a snow bucket, e.g., be capable of sustaining a level load while being tilted 20 degrees in the forward and transverse position. It must have a quick coupler hitch for swift changeovers. Baskets must be welded using flexible high-strength wear-resistant steel weaving over a steel frame. Construction must be of the minimum weight capable of withstanding the rigorous stress of loading and unloading. Snow baskets may have a built-up bottom of abrasion-resistant steel to improve wear life.

Appendix 5. Material Spreader Specification

Part A - Airport Operator Checklist

When preparing a solicitation to purchase a spreader system, an airport operator or specification writer should use Part A to identify user requirements and Part B to define the specification to meet these requirements. Part A is important because it tailors the spreader to the special preferences of the purchaser, i.e., special lighting, hopper/tank sizes, desired carrier vehicle cab features, special safety equipment, etc. Both parts, when combined, become the technical basis for a user's request for bid proposal.

A5-1. Solid material spreader.

a. Anticipated uses and/or features of spreader. (Be specific) _____

b. Size of Priority 1 paved area _____ square feet (m^2)

c. Size of hopper _____ cubic yd (m^3)

d. Material to be spread _____

e. Application rate _____ ounces/ yd^2 (gr/m^2)

f. Time needed to complete major operation _____ minutes

g. Proximity to loading farm _____ minutes

h. Capacity of loading farm _____ tons

i. Other _____

A5-2. Liquid spreader

a. Anticipated uses and/or features of spreader. (Be specific) _____

b. Size of Priority 1 paved area _____ square feet (m^2)

c. Size of tank _____ gal (liters)

d. Critical application rate _____ ounces/1000 ft^2 (liters/1000 m^2)

e. Time needed to complete major operation _____ minutes

f. Proximity to loading farm _____ minutes

g. Capacity of loading farm _____ gallons(liters)

h. Other _____

Part B - Material Spreader Specifications

A5-3. Solid material spreader components

Sand and solid deicing/anti-icing material spreaders must be in accordance with SAE ARP 6059, Solid Deicing/Anti-icing Material Spreader for Airport Application.

A5-4. Liquid material spreader components

SAE G15 is finishing draft SAE ARP 5559, Liquid Deicing/Anti-icing Material Spreader for Airport Application. This AC will reference that aerospace recommended practice upon its issuance by SAE. Until then, the carrier vehicle for liquid spreaders complies with SAE ARP 6059 and the liquid spreader must comply with paragraph 2 below.

a. Standard equipment. A liquid material spreader must have the following standard equipment:

(1) **Hydraulic system.** The spreader hydraulic system must meet the basic requirements of the carrier vehicle system under SAE ARP 6059. The system must also be capable of supplying the power to operate the deicing pumps, to fold the booms, and to turn the spreader on and off.

(2) **Tank.** The tank must be constructed of grade 304 stainless steel or better. Optional construction, using polymer or fiberglass materials, is acceptable providing that the manufacturer certifies that the materials used are capable of meeting the same stress and fatigue requirements as their stainless steel counterparts. The shell, head, and baffles of steel tanks with a capacity of 2000 gallons (7570 l) or less must be made of at least 12-gauge material. For tanks with a capacity greater than 2000 gallons (7570 l), these components must be made of 10-gauge material. Sills for all tanks must be no less than 8-gauge and they must also be made of grade 304 stainless steel. Baffle spacing for any tank should not be more than 44 inches (112 cm). Tanks must be equipped with a manhole opening to allow inspection of the tank interior.

(3) **Pumping system.** The pumping system must have sufficient capacity for full boom width spraying at a maximum discharge rate of 3 gallons/1000 square feet (120 liters/1000 square meters) while operating at a speed of 30 mph (48 km/hr).

(4) **Spray boom and nozzles.** The spray boom must be constructed in sections with each section capable of independent use. The boom design must permit it to break away when an object is struck. Spray nozzles must be equipped with check valves and be located to provide uninterrupted surface coverage. Filters must be installed on lines leading to the spray booms.

b. Services. All spreader drive components must have a minimal number of lubrication points with easy access for maintenance. The spreader must receive lubrication prior to delivery with lubricants designated for use in the winter conditions normally experienced at the delivery location. The spreader must be conspicuously tagged to identify the lubricants and their temperature ranges.

This page intentionally left blank.

Appendix 6. Runway Broom with Airblast Specification

Part A - Airport Operator Checklist

When preparing a solicitation to purchase a runway broom with airblast an airport operator or specification writer should use Part A to identify user requirements and Part B to define the specification to meet these requirements. Part A is important because it tailors the runway broom with airblast to the specific preferences of the purchaser, i.e., special lighting, pushed versus pulled equipment, type of airblast system, specific safety equipment, etc. Both parts, when combined, become the technical basis for a user's request for bid proposal.

A6-1. Anticipated uses and/or features of brooms with airblast. (Be specific) _____

A6-2. Size of Priority 1 paved area to be swept _____ ft² (m²).

A6-3. Time required to sweep primary surface areas _____ minutes

A6-4. Sweeper speed needed to meet clearance time _____ mph (km/h)

A6-5. Type of sweeper desired (pushed / pulled) _____

A6-6. Airblast system _____

A6-7. Size of broom _____ length _____ diameter _____

A6-8. Type of brush _____ wire _____ polypropylene _____ poly/wire

A6-9. Optional equipment _____

A6-10. Other _____

Part B - Runway Brooms with Airblast Specification

A6-11. Runway Broom with airblast must be in accordance with SAE ARP 5564, Airport Runway Brooms.

A6-12. Optional equipment. Sweepers are designed to operate under normal winter conditions. To improve equipment effectiveness, however, certain options are available to the purchaser that can enhance performance. Typical options are the following:

- a.** Airblast system. See paragraph 2-8.
- b.** Quick disconnects. Quick disconnects may be provided for all controls, hydraulic hoses/lines, electrical cables, drivelines, and instrumentation.
- c.** Dual front fork wheels. Dual wheels are available as additional steering safety on towed sweepers.
- d.** Fenders. Noncorrosive fenders and mud flaps help control snow, slush, and water by helping to keep them off of the sweeper.
- e.** Hydrostatic and hydraulic test equipment. This equipment allows trouble shooting of hydrostatic and hydraulic systems.
- f.** Hydraulic jack.
- g.** Maintenance Free Batteries.
- h.** Air brakes for towed sweepers.
- i.** Automatic low oil pressure/high water temperature shut down devices.
- j.** Fire extinguisher.
- k.** Engine temperature and hydrostatic pressure loss warning devices.

ENGINEER'S ESTIMATE
SNOW REMOVAL EQUIPMENT ACQUISITION
CITY OF MUSCATINE, IOWA
 BMI PROJECT NO. 0T5.128792



BASE BID

March 4, 2025

Item No.	Item	Unit	Quantity	Unit Price	Total Amount
1	CARRIER VEHICLE	LS	1	\$375,000.00	\$375,000.00

OPINION OF PROBABLE CONSTRUCTION COST: \$375,000.00

ALTERNATE A

Item No.	Item	Unit	Quantity	Unit Price	Total Amount
A1	SNOW BROOM	LS	1	\$110,000.00	\$110,000.00

ALTERNATE A - PROBABLE CONSTRUCTION COST: \$110,000.00

ALTERNATE B

Item No.	Item	Unit	Quantity	Unit Price	Total Amount
B1	SNOW BLOWER	LS	1	\$40,000.00	\$40,000.00

ALTERNATE B - PROBABLE CONSTRUCTION COST: \$40,000.00

BASE BID + ALL ALTERNATES - PROBABLE CONSTRUCTION COST: \$525,000.00



City of Muscatine

ITEM NUMBER 2025-0113

AGENDA ITEM SUMMARY

DATE: 3/20/2025

STAFF

Andrew Fangman, Assistant Community Development Director

SUBJECT

First Reading of an Ordinance Amending Title 8, Chapter 1, Section 4 of City Code to Mirror the State Historic Building Code. Public Hearing A

EXECUTIVE SUMMARY

The State Historic Building Code aims to provide greater flexibility in redeveloping historic buildings, especially concerning accessibility. It seeks to balance this flexibility with maintaining safety standards and complying with federal accessibility requirements under the Americans with Disabilities Act (ADA). The Construction Appeal and Advisory Board recommends adopting a City Building Code amendment that replicates the State Historic Building Code.

STAFF RECOMMENDATION

The Construction Appeal and Advisory Board and Staff recommend adoption of the ordinance.

BACKGROUND/DISCUSSION

Both the City of Muscatine and the State of Iowa have adopted the 2015 International Building Code (IBC) as their respective building codes. This includes the 2015 International Existing Building Code (IEBC), which governs work on existing structures.

The State of Iowa has also incorporated the State Historic Building Code within its building code framework. This code prioritizes the restoration and modification of historic buildings while preserving their original architectural integrity. It maintains safety while promoting cost-effective solutions. The State Historic Building Code replaces certain accessibility requirements in the IEBC with standards from Chapter 302 of the Iowa Administrative Code, offering greater flexibility in meeting federal accessibility regulations.

The City of Muscatine has adopted the 2015 IEBC without any modifications.

The State Historic Building Code applies to buildings covered by the State Building Code that meet one of the following criteria:

- Designated as a historic property under local or state legislation or survey.
- Certified as a contributing resource within a National Register-listed or locally designated historic district.
- Possess an opinion or certification confirming their eligibility for inclusion on the state or National Register of Historic Places, either individually or as a contributing building to a historic district.

Since Muscatine has its own building code, the State Building Code does not apply to non-state-owned buildings within the city. Consequently, the increased flexibility offered by the State Historic Building Code is unavailable to qualifying historic buildings in Muscatine.

Prior to action on such an amendment, a public hearing must be held. This resolution sets that public hearing for the March 20th City Council meeting.

The city could achieve similar flexibility by adopting the same 2015 IEBC amendment as the state. This amendment would replace specific accessibility requirements in the IEBC with standards from Chapter 302 of the Iowa Administrative Code.

Following extensive discussions across multiple meetings on creating such flexibility, the Construction Appeals and Advisory Board voted to recommend the adoption of a City Building Code amendment that mirrors the State Historic Building Code.

The board discussed eligibility criteria for applying the proposed amendment to the code. Two approaches were discussed:

- 1) Mirroring, the State Historic Building Code: Require structures to be individually listed on the National Register, listed as contributing structures in a National Register-listed historic district, or have a certification of eligibility; or
- 2) Establishing Age or Built-By Date: Locally set a specific age or built-by date for eligible structures.

The board came to consensus that the State Historic Building Code's eligibility criteria should be maintained. Using this approach, the 13 structures individually listed on the National Register of Historic Places and the 459 buildings listed as contributing structures in one of the three National Register-listed historic districts would be eligible for the modified accessibility standards. For structures not listed, the City Historic Preservation Commission could issue an opinion on eligibility for listing on the state or National Register, either individually or as a contributing building to a historic district.

For additional information and understanding of the proposal, the following documents are attached:

- Draft Code Language: This proposed addition to Section 8-1-4(D) would implement the recommendation of the Construction Appeals and Advisory Board.

- Full Text of the State Historic Building Code: This includes Chapter 302 of the State Building Code and the relevant sections of the 2015 International Existing Building Code (IEBC) that would be replaced.
- List of Structures: This document includes properties in Muscatine that are individually listed on the National Register of Historic Places or are designated as contributing structures within one of the three National Register-listed historic districts.
- Construction Appeals and Advisory Board Minutes: These minutes document the discussions regarding this issue by the Board.

CITY FINANCIAL IMPACT

None.

ATTACHMENTS

1. Ordinance
2. Sections of 2015 IEBC That Would be Superseded by Adoption of the Historic Building Code
3. State Historic Building Code
4. Chapter 302 State Building Code—Accessibility of Buildings and Facilities Available to the Public
5. Eligible Structure List
6. 08.28.2024 Construction Appeal and Advisory Board Minutes
7. 09.25.2024 Construction Appeal and Advisory Board Minutes

**CITY OF MUSCATINE
ORDINANCE 2025-0113**

**ORDINANCE AMENDING TITLE 8, CHAPTER 1, SECTION 4 OF CITY CODE
TO MIRROR THE STATE HISTORIC BUILDING CODE.**

WHEREAS, The State Historic Building Code aims to provide greater flexibility in redeveloping historic buildings, especially concerning accessibility. It seeks to balance this flexibility with maintaining safety standards and complying with federal accessibility; and requirements;

WHEREAS, The State of Iowa has adopted the 2015 International Building Code as its building code. This includes the 2015 International Existing Building Code (IEBC), which governs work on existing structures. The State has also incorporated the State Historic Building Code within this framework. The State Historic Building Code replaces certain accessibility requirements in the IEBC with standards from Chapter 302 of the Iowa Administrative Code, offering greater flexibility in meeting federal accessibility regulations; and

WHEREAS, Because the City of Muscatine has adopted its own building code, the State Building Code, including the State Historic Building Code, does not apply to non-state-owned buildings within the City of Muscatine: and

WHEREAS, Like the State, the City has also adopted the 2015 International Building Code as its building code, including the 2015 IEBC. However, City Code does not currently include an amendment to the IEBC modifying certain accessibility standards in qualifying historic buildings; and

WHEREAS, The code flexibility created by the State Historic Building Code has been shown to make it easier for property owners to maintain and continue to invest in historic structures. Making such flexibility available to those owning historic structures in Muscatine would help achieve the community goal of maintaining and revitalizing historic buildings; and

WHEREAS, Similar flexibility could be achieved in the City Building Code by adopting the same 2015 IEBC amendments as the State Historic Building Code, which replaces specific accessibility requirements in the IEBC with standards from Chapter 302 of the Iowa Administrative Code; and

WHEREAS, Following extensive discussions across multiple meetings on creating such flexibility, the Construction Appeals and Advisory Board voted to recommend the adoption of a City Building Code amendment that mirrors the State Historic Building Code.

NOW THEREFORE, be it ordained by the City Council of the City of Muscatine, in the State of Iowa, as follows:

SECTION 1: AMENDMENT “8-1-4 Amendments” of the Muscatine Municipal Code is hereby *amended* as follows:

BEFORE AMENDMENT

8-1-4 Amendments

That the International Building Code, adopted by the City of Muscatine, Iowa, be amended to read as follows:

- A. **Building Permit Fees.** A fee for each required permit shall be paid to the Community Development as set forth in the Schedule of Building-Related Permits and Other Requirements in Appendix D to this Code of Ordinances.
- B. **Existing Building.** Section 101.4.7 is amended to read as follows: “The provisions of Chapter 34 of the document entitled “International Building Code”, 2015 Edition, shall apply to matters governing the repair, alteration, change of occupancy, addition to and relocation of existing building.”
- C. **Storm Shelters.** Section 423.4 is amended to read as follows: “Group E occupancies. In areas where the shelter design wind speed for tornados is 250 MPW in accordance with Figure 304.2(1) of ICC 500, all Group E occupancies with an aggregate occupant load of 50 or more, as established in accordance with ICC 500. The shelter of the Group E occupancy shall have an occupant load of either of the applicable: (1) the total occupant load of the entire structure when the structure is a new structure, or (2) the calculated occupant load of the square footage added to an existing structure.”
 - 1. **Exceptions.** 1. Group E day care facilities; 2. Group E occupancies accessory to places of religious worship; 3. Building meeting the requirements for shelter design in ICC 500.
 - 2. “ICC 500” as referenced and incorporated by Section 423 be amended as follows
 - a. Deletion of Section 702.2, Sanitation Facilities
 - b. Section 702.3 is amended to read as follows: "702.3 Emergency lighting. Community tornado shelters shall be provided with an emergency lighting system. The emergency lighting system shall provide an average of 1 foot-candle (11 Lux) of illumination in occupied shelter areas, occupant support areas, required corridors, passageways and means of egress. Personal use flashlights shall be permitted for the emergency lighting system requirement for tornado shelters when provided at a quantity not less than one (1) flashlight per 10 occupants. Personal use flashlights shall be a minimum of two “D” cell size or equivalent light output, and readily accessible from within the occupied shelter areas or immediately adjacent occupant support areas.”ⁱ

AFTER AMENDMENT

8-1-4 Amendments

That the International Building Code, adopted by the City of Muscatine, Iowa, be amended to read as follows:

- A. **Building Permit Fees.** A fee for each required permit shall be paid to the Community Development as set forth in the Schedule of Building-Related Permits and Other Requirements in Appendix D to this Code of Ordinances.
- B. **Existing Building.** Section 101.4.7 is amended to read as follows: "The provisions of Chapter 34 of the document entitled "International Building Code", 2015 Edition, shall apply to matters governing the repair, alteration, change of occupancy, addition to and relocation of existing building."
- C. **Storm Shelters.** Section 423.4 is amended to read as follows: "Group E occupancies. In areas where the shelter design wind speed for tornados is 250 MPW in accordance with Figure 304.2(1) of ICC 500, all Group E occupancies with an aggregate occupant load of 50 or more, as established in accordance with ICC 500. The shelter of the Group E occupancy shall have an occupant load of either of the applicable: (1) the total occupant load of the entire structure when the structure is a new structure, or (2) the calculated occupant load of the square footage added to an existing structure."
 - 1. **Exceptions.** 1. Group E day care facilities; 2. Group E occupancies accessory to places of religious worship; 3. Building meeting the requirements for shelter design in ICC 500.
 - 2. "ICC 500" as referenced and incorporated by Section 423 be amended as follows
 - a. Deletion of Section 702.2, Sanitation Facilities
 - b. Section 702.3 is amended to read as follows: "702.3 Emergency lighting. Community tornado shelters shall be provided with an emergency lighting system. The emergency lighting system shall provide an average of 1 foot-candle (11 Lux) of illumination in occupied shelter areas, occupant support areas, required corridors, passageways and means of egress. Personal use flashlights shall be permitted for the emergency lighting system requirement for tornado shelters when provided at a quantity not less than one (1) flashlight per 10 occupants. Personal use flashlights shall be a minimum of two "D" cell size or equivalent light output, and readily accessible from within the occupied shelter areas or immediately adjacent occupant support areas." ⁱ
- D. Historic Building Code
 - 1. Purpose

The purpose of the historic building code is to facilitate the restoration or change of occupancy of qualified historic buildings or structures so as to

preserve their original or restored architectural elements and features and, concurrently, to provide reasonable safety to occupants and users, through a cost-effective approach to preservation.

2. Scope

This Section applies to any structures that meets any of the following criteria:

- a. Is listed in the State or National Register of Historic Places
- b. Is certified as a contributing resource within a National Register-listed designated historic district
- c. That has an opinion that the property is eligible to be listed on the State or National Register of Historic Places either individually or as a contributing building to a historic district by the City of Muscatine Historic Preservation Commission.

3. This Section provides alternative standards to following certain specifically identified provisions of the International Existing Building Code, 2015 edition

- a. The following sections are deleted
 - (1) Section 705
 - (2) Section 906
 - (3) Section 1012.8
 - (4) Section 1105.1
 - (5) Section 1205.1
 - (6) Appendix B
- b. In lieu of the section of the IEBC referenced in Section 8-1-4(D)(3) (a), the provision of the Iowa Administrative Code 661 - Chapter 302 State Building Code - Accessibility of Buildings and Facilities Available to the Public, may be applied to qualifying structures.
- c. Definition - the definition of "Historic Building" is amended to read as follows: "Historic Building" means any structure meeting the eligibility criteria set forth in Section 8-1-4(D)(2) of "Historic Building"

PASSED AND ADOPTED BY THE CITY OF MUSCATINE CITY COUNCIL

Presiding Officer

Attest

Dr. Brad Bark, Mayor, City of
Muscatine

Cinda Hilger, City Clerk, City of
Muscatine

CHAPTER 2

DEFINITIONS

SECTION 201 GENERAL

[A] HISTORIC BUILDING. Any building or structure that is one or more of the following:

1. Listed, or certified as eligible for listing, by the State Historic Preservation Officer or the Keeper of the National Register of Historic Places, in the National Register of Historic Places.
2. Designated as historic under an applicable state or local law.
3. Certified as a contributing resource within a National Register, state designated or locally designated historic district.

SECTION 705 ACCESSIBILITY

705.1 General.

A *facility* that is altered shall comply with the applicable provisions in Sections 705.1.1 through 705.1.14, and Chapter 11 of the *International Building Code* unless it is *technically infeasible*. Where compliance with this section is *technically infeasible*, the alteration shall provide access to the maximum extent that is technically feasible.

A *facility* that is constructed or altered to be accessible shall be maintained accessible during occupancy.

Exceptions:

1. The altered element or space is not required to be on an accessible route unless required by Section 705.2.

SECTION 906 ACCESSIBILITY

906.1 General.

A building, *facility* or element that is altered shall comply with this section and Sections 705 and 806.

906.2 Type B dwelling or sleeping units.

Where four or more Group I-1, 1-2, R-1, R-2, R-3 dwelling or sleeping units are being altered, the requirements of Section 1107 of the *International Building Code* for Type B units and Chapter 9 of the *International Building Code* for visible alarms apply only to the quantity of the spaces being altered.

1012.8 Accessibility

Existing buildings that undergo a change of group or occupancy classification shall comply with this section.

Exception: Type B dwelling or sleeping units required by Section 1107 of the *International Building Code* are not required to be provided in existing buildings and facilities undergoing a *change of occupancy* in conjunction with less than a Level 3 alteration.

1012.8.1 Partial change in occupancy.

Where a portion of the building is changed to a new occupancy classification, any alteration shall comply with Sections 705, 806 and 906, as applicable.

1012.8.2 Complete change of occupancy.

Where an entire building undergoes a *change of occupancy*, it shall comply with Section 1012.8.1 and shall have all of the following accessible features:

1. At least one accessible building entrance.
2. At least one accessible route from an accessible building entrance to *primary function* areas.
3. Signage complying with Section 1111 of the *International Building Code*.
4. Accessible parking, where parking is provided.
5. At least one accessible passenger loading zone, where loading zones are provided.
6. At least one accessible route connecting accessible parking and accessible passenger loading zones to an accessible entrance.

Where it is *technically infeasible* to comply with the new construction standards for any of these requirements for a change of group or occupancy, the above items shall conform to the requirements to the maximum extent technically feasible.

Exception: The accessible features listed in Items 1 through 6 are not required for an accessible route to Type B units.²⁰¹⁵

SECTION 1105 ACCESSIBILITY

1105.1 Minimum requirements.

Accessibility provisions for new construction shall apply to additions. An addition that affects the accessibility to, or contains an area of, *primary function* shall comply with the requirements of Sections 705, 806 and 906, as applicable.

SECTION 1205 CHANGE OF OCCUPANCY

1205.15 Accessibility requirements.

The provisions of Section 1012.8 shall apply to facilities designated as historic structures that undergo a *change of occupancy*, unless *technically infeasible*. Where compliance with the requirements for accessible routes, ramps, entrances, or toilet rooms would threaten or destroy the historic significance of the building or *facility*, as determined by the authority having jurisdiction, the alternative requirements of Sections 1204.1.1 through 1204.1.4 for those elements shall be permitted

Exception: Type B dwelling or sleeping units required by Section 1107 of the *International Building Code* are not required to be provided in historical buildings.

APPENDIX B

SUPPLEMENTARY ACCESSIBILITY REQUIREMENTS FOR EXISTING BUILDINGS AND FACILITIES

The provisions contained in this appendix are not mandatory unless specifically referenced in the adopting ordinance.

SECTION B101 QUALIFIED HISTORICAL BUILDINGS AND FACILITIES

B101.1 **General.**

Qualified historic buildings and facilities shall comply with Sections B101.2 through B101.5.

B101.2 Qualified historic buildings and facilities.

These procedures shall apply to buildings and facilities designated as historic structures that undergo alterations or a *change of occupancy*.

B101.3 Qualified historic buildings and facilities subject to Section 106 of the National Historic Preservation Act.

Where an *alteration* or *change of occupancy* is undertaken to a qualified *historic building* or facility that is subject to Section 106 of the National Historic Preservation Act, the federal agency with jurisdiction over the undertaking shall follow the Section 106 process. Where the state historic preservation officer or Advisory Council on Historic Preservation determines that compliance with the requirements for accessible routes, ramps, entrances, or toilet facilities would threaten or destroy the historic significance of the building or facility, the alternative requirements of Section 410.9 for that element are permitted.

B101.4 Qualified historic buildings and facilities not subject to Section 106 of the National Historic Preservation Act.

Where an *alteration* or *change of occupancy* is undertaken to a qualified *historic building* or facility that is not subject to Section 106 of the National Historic Preservation Act, and the entity undertaking the alterations believes that compliance with the requirements for accessible routes, ramps, entrances, or toilet facilities would threaten or destroy the historic significance of the building or facility, the entity shall consult with the state historic preservation officer. Where the state historic preservation officer determines that compliance with the accessibility requirements for accessible routes, ramps, entrances, or toilet facilities would threaten or destroy the historical significance of the building or facility, the alternative requirements of Section 410.9 for that element are permitted.

B101.4.1 Consultation with interested persons.

Interested persons shall be invited to participate in the consultation process, including state or local accessibility officials, individuals with disabilities, and organizations representing individuals with disabilities.

B101.4.2 Certified local government historic preservation programs.

Where the state historic preservation officer has delegated the consultation responsibility for

purposes of this section to a local government historic preservation program that has been certified in accordance with Section 101 of the National Historic Preservation Act of 1966 [(16 U.S.C. 470a(c))] and implementing regulations (36 CFR 61.5), the responsibility shall be permitted to be carried out by the appropriate local government body or official.

B101.5 Displays.

In qualified historic buildings and facilities where alternative requirements of Section 1105 are permitted, displays and written information shall be located where they can be seen by a seated person. Exhibits and signs displayed horizontally shall be 44 inches (1120 mm) maximum above the floor.

SECTION B102 FIXED TRANSPORTATION FACILITIES AND STATIONS

B102.1 General.

Existing fixed transportation facilities and stations shall comply with Section B102.2.

B102.2 Existing facilities—key stations.

Rapid rail, light rail, commuter rail, intercity rail, high-speed rail and other fixed guideway systems, altered stations, and intercity rail and key stations, as defined under criteria established by the Department of Transportation in Subpart C of 49 CFR Part 37, shall comply with Sections B102.2.1 through B102.2.3.

B102.2.1 Accessible route.

At least one accessible route from an accessible entrance to those areas necessary for use of the transportation system shall be provided. The accessible route shall include the features specified in Appendix E109.2 of the *International Building Code*, except that escalators shall comply with *International Building Code* Section 3004.2.2. Where technical unfeasibility in existing stations requires the accessible route to lead from the public way to a paid area of the transit system, an accessible fare collection machine complying with *International Building Code* Appendix E109.2.3 shall be provided along such accessible route.

B102.2.2 Platform and vehicle floor coordination.

Station platforms shall be positioned to coordinate with vehicles in accordance with applicable provisions of 36 CFR Part 1192. Low-level platforms shall be 8 inches (250 mm) minimum above top of rail.

Exception: Where vehicles are boarded from sidewalks or street-level, low-level platforms shall be permitted to be less than 8 inches (250 mm).

B102.2.3 Direct connections.

New direct connections to commercial, retail, or residential facilities shall, to the maximum extent feasible, have an accessible route complying with Section 705.2 from the point of connection to boarding platforms and transportation system elements used by the public. Any elements provided to facilitate future direct connections shall be on an accessible route connecting boarding platforms and transportation system elements used by the public.

**SECTION B103
DWELLING UNITS AND SLEEPING UNITS**

B103.1 Communication features.

Where dwelling units and sleeping units are altered or added, the requirements of Section E104.3 of the *International Building Code* shall apply only to the units being altered or added until the number of units with accessible communication features complies with the minimum number required for new construction.

**SECTION B104
REFERENCED STANDARDS**

Y3.H626 2P National Historic Preservation J101.2, 43/933 Act of 1966, as amended J101.3, 3rd Edition, Washington, DC: J101.3.2 US Government Printing Office, 1993.

2012 *International Building Code*. Washington, DC: International Code Council, 2011.

49 CFR Part 37.43 (c), Alteration of Transportation Facilities by Public Entities, Department of Transportation, 400 7th Street SW, Room

CHAPTER 350
STATE HISTORIC BUILDING CODE

661—350.1(103A) Scope and definition.

350.1(1) Scope. This chapter applies to buildings which meet the requirements for placement on the National Register of Historic Places. This chapter is an alternative to the state building code or local building codes for the buildings to which it applies.

“Historic building” means any building or structure that is listed in the state or National Register of Historic Places; that is designated as a historic property under local or state designation law or survey; that is certified as a contributing resource within a National Register-listed or locally designated historic district; or that has an opinion or certification that the property is eligible to be listed on the state or National Register of Historic Places either individually or as a contributing building to a historic district by the state historic preservation officer pursuant to Iowa Code section 103A.42 or the Keeper of the National Register of Historic Places.

350.1(2) Administration. The provisions of 661—Chapter 300 are adopted by reference.

350.1(3) Adoption. The provisions of the International Existing Building Code, 2015 edition, published by the International Code Council, 500 New Jersey Avenue NW, 6th Floor, Washington, D.C. 20001, are hereby adopted as the alternative requirements for rehabilitation, preservation, restoration, repair, alteration, change of occupancy and relocation of and addition to historic buildings, with the following amendments:

Delete section 101.1.

Delete section 101.4.2 and insert in lieu thereof the following new section:

101.4.2 Buildings previously occupied. The legal occupancy of any structure existing on the date of adoption of this code shall be permitted to continue without change, except as specifically covered in this code or the state fire code, or as deemed necessary by the building code commissioner for the general safety and welfare of the occupants and the public.

Delete section 101.5.

Delete section 101.6.

Delete section 101.7.

Delete sections 103, 104, and 105 and sections therein.

Delete sections 106.1, 106.3, 106.4, 106.5, and 106.6.

Delete sections 108, 109, 110, 112, 113, 114, 115, 116 and 117 and sections therein.

Delete the definition of “historic building.”

Delete section 705.

Delete section 906.

Delete section 1012.8.

Delete section 1105.1.

Delete section 1205.15.

Delete appendix B and insert in lieu thereof “Any building or facility subject to this Chapter shall comply with the provisions of 661—Chapter 302.”

Delete all references to the “International Fuel Gas Code” and insert in lieu thereof “rule 661—301.9(103A).”

Delete all references to the “International Plumbing Code” and insert in lieu thereof “state plumbing code.”

Delete all references to the “International Mechanical Code” and insert in lieu thereof “state mechanical code.”

Delete all references to the “International Building Code” and insert in lieu thereof “rule 661—301.3(103A).”

Delete all references to the “International Residential Code” and insert in lieu thereof “rule 661—301.8(103A).”

Delete all references to the “International Fire Code” and insert in lieu thereof “state fire code.”

EXCEPTION: A construction project subject to the provisions of this rule may comply with either the requirements adopted herein or the provisions of this rule as it was previously published if the project is commenced on or before June 30, 2016.

NOTE 1: International Existing Building Code, 2015 edition, Resource A, provides guidelines for evaluating fire ratings of archaic materials and assemblies which may be used by designers and code officials when evaluating compliance with provisions of this chapter.

NOTE 2: Except for elevators excluded from the jurisdiction of the Iowa division of labor services by the provisions of Iowa Code section 89A.2, each elevator is required to comply with any applicable requirements established by the Iowa division of labor services and is subject to enforcement of any applicable regulations by the Iowa division of labor services.

NOTE 3: Except for boilers and pressure vessels excluded from the jurisdiction of the Iowa division of labor services by the provisions of Iowa Code section 89.4, each boiler or pressure vessel is required to comply with any applicable requirements established by the Iowa division of labor services and is subject to enforcement of any applicable regulations by the Iowa division of labor services.

Any boiler which is subject to requirements established by the Iowa department of natural resources is required to comply with any such requirements and is subject to enforcement of any applicable regulations by the Iowa department of natural resources.

This rule is intended to implement Iowa Code sections 103A.41 through 103A.45.

[ARC 8304B, IAB 11/18/09, effective 1/1/10; ARC 2493C, IAB 4/13/16, effective 5/18/16]

[Filed 12/2/05, Notice 9/14/05—published 12/21/05, effective 4/1/06]

[Filed 11/1/06, Notice 9/27/06—published 11/22/06, effective 1/1/07]

[Filed ARC 8304B (Notice ARC 8180B, IAB 9/23/09), IAB 11/18/09, effective 1/1/10]

[Filed ARC 2493C (Notice ARC 2265C, IAB 11/25/15), IAB 4/13/16, effective 5/18/16]

CHAPTER 302
STATE BUILDING CODE—ACCESSIBILITY OF BUILDINGS AND
FACILITIES AVAILABLE TO THE PUBLIC

[Prior to 12/21/05, see rules 661—16.700(103A,104A) to 661—16.720(103A,104A)]

661—302.1(103A,104A) Purpose and scope. Rules 661—302.1(103A,104A) through 661—302.20(103A,104A) are intended to ensure that buildings and facilities used by the public, other than places of worship, are accessible to, and functional for, persons with disabilities. Rule 661—302.3(103A,104A) applies statewide to new construction of buildings and facilities available to the public and to renovation and rehabilitation projects on existing buildings and facilities when local or state building codes require compliance with standards for new construction. Rule 661—302.20(103A,104A) applies statewide to construction of multiunit residential buildings.

NOTE A: Although rule 661—302.2(103A,104A) is based upon the federal 2010 ADA Standards for Accessible Design and adopts the language of the 2010 ADA Standards for Accessible Design by reference, and rule 661—302.20(103A,104A) is based upon the requirements of the federal Fair Housing Act, state and local building officials charged with enforcement of these rules are unable to warrant the acceptance of any approval of design or construction by federal agencies or any other state. A state or local official's decision to approve a building plan under these rules does not prevent the federal government or another state from making a different decision under applicable law, notwithstanding any similarities among such laws.

NOTE B: Other federal and state laws address requirements for accessibility for persons with disabilities and may be applicable to buildings and facilities subject to rules 661—302.1(103A,104A) through 661—302.20(103A,104A). Nothing in these rules should be interpreted as limiting the applicability of other provisions of state or federal law. These provisions include, but are not limited to, the following:

1. Iowa Code chapter 216, the Iowa civil rights Act of 1965.
2. Iowa Code chapter 216C, which enumerates the rights of persons who are blind or partially blind and persons with physical disabilities.
3. Iowa Code chapter 321L and 661—Chapter 18, which relate to requirements for parking for persons with disabilities.
4. The federal Architectural Barriers Act of 1968 (Public Law 90-480).
5. The federal Rehabilitation Act of 1973 (Public Law 93-112).
6. The federal Fair Housing Act of 1968 (Public Law 90-284), the federal Fair Housing Amendments Act of 1988 (Public Law 100-430), and related regulations, including 24 CFR 100, Subpart D.

[ARC 9993B, IAB 2/8/12, effective 3/15/12]

661—302.2(103A,104A) Definitions. The following definitions are adopted for purposes of rules 661—302.1(103A,104A) through 661—302.20(103A,104A).

“ADA” means the federal Americans with Disabilities Act, Public Law 101-336.

“ADAAG” means Americans with Disabilities Act Accessibility Guidelines for Buildings and Facilities, 28 CFR Part 36, Appendix A, as revised through July 1, 1994.

“ADASAD 2010” means 2010 ADA Standards for Accessible Design, published by the U.S. Department of Justice, September 15, 2010. Included in the publication are accessibility standards for state and local government facilities and accessibility standards for public accommodations and commercial facilities.

NOTE: Copies of ADASAD 2010 and additional explanatory material may be downloaded from <http://www.ada.gov/regs2010/ADAregs2010.htm>.

“IBC 2015” means the International Building Code, 2015 edition, published by the International Code Council, 500 New Jersey Avenue NW, 6th Floor, Washington, D.C. 20001.

[ARC 9993B, IAB 2/8/12, effective 3/15/12; ARC 2492C, IAB 4/13/16, effective 5/18/16]

661—302.3(103A,104A) Accessibility of buildings and facilities available to the public. Buildings and facilities which are available to the public, other than places of worship, shall comply with one of the following:

302.3(1) Applicable provisions of ADASAD 2010, or

302.3(2) IBC 2015, Chapter 11 and applicable accessibility provisions contained in IBC 2015.

NOTE: Approval of construction plans based upon compliance with the applicable provisions of the International Building Code, 2015 edition, as provided, does not relieve the designer, builder, building owner, or building operator from responsibility under federal law to comply with all applicable provisions of the 2010 ADA Standards for Accessible Design.

[ARC 9993B, IAB 2/8/12, effective 3/15/12; ARC 2492C, IAB 4/13/16, effective 5/18/16]

Rules 661—302.1(103A,104A) to 661—302.3(103A,104A) are intended to implement Iowa Code sections 103A.7, 103A.9, and 104A.1.

661—302.4(103A,104A) Site development. Rescinded IAB 2/8/12, effective 3/15/12.

661—302.5(103A,104A) Building elements and spaces accessible to the physically handicapped. Rescinded IAB 2/8/12, effective 3/15/12.

661—302.6(103A,104A) Restaurants and cafeterias. Rescinded IAB 2/8/12, effective 3/15/12.

661—302.7(103A,104A) Medical care facilities. Rescinded IAB 2/8/12, effective 3/15/12.

661—302.8(103A,104A) Business and mercantile facilities. Rescinded IAB 2/8/12, effective 3/15/12.

661—302.9(103A,104A) Libraries. Rescinded IAB 2/8/12, effective 3/15/12.

661—302.10(103A,104A) Transient lodging facilities. Rescinded IAB 2/8/12, effective 3/15/12.

661—302.11(103A,104A) Transportation facilities. Rescinded IAB 2/8/12, effective 3/15/12.

661—302.12 to 302.19 Reserved.

661—302.20(103A,104A) Making apartments accessible and functional for persons with disabilities.

302.20(1) Multiple dwelling unit buildings. This rule shall apply to all multiple dwelling unit buildings that consist of four or more dwelling units, if such buildings have one or more elevators. In such buildings without an elevator, all ground floor units must be accessible. The requirements of this rule shall apply to the individual dwelling units and the common use spaces which are accessible to persons with disabilities in multiple dwelling unit buildings.

EXCEPTION 1: A multiple dwelling unit building shall be deemed to be in compliance with this rule if it is located in a local jurisdiction which has enacted accessibility rules which have been recognized by the U.S. Department of Housing and Urban Development as providing a safe harbor for compliance with the accessibility requirements established in the federal Fair Housing Act and if the building has been found to be in compliance with those requirements, unless the building is required to comply with the requirements of the Uniform Federal Accessibility Standards, or other applicable standards which may be more restrictive than the provisions of this rule.

EXCEPTION 2: Certain multiple dwelling unit buildings are required to comply with the Uniform Federal Accessibility Standards, published by the U.S. Access Board, 1988. Compliance with the provisions of this rule does not substitute for compliance with any applicable provision of the Uniform Federal Accessibility Standards, or any other applicable standards which may be more restrictive than the provisions of this rule.

NOTE: Compliance with the Uniform Federal Accessibility Standards is generally required for buildings and facilities constructed with federal financial assistance.

“Dwelling unit” means a single unit of residence for a household of one or more persons. Examples of a dwelling unit covered by these rules include a condominium, an apartment unit within an apartment building, and another type of dwelling in which sleeping accommodations are provided but toilet or cooking facilities are shared by occupants of more than one room or portion of the dwelling. Examples of the latter include dormitory rooms and sleeping accommodations in shelters intended for occupancy as a residence for homeless persons.

“Ground floor” means a floor of a building with a building entrance on an accessible route. A building may have one or more ground floors. Where the first floor containing dwelling units in a building is above grade, all units on that floor must be served by a building entrance on an accessible route. This floor will be considered to be a ground floor.

a. The individual dwelling units shall contain an accessible route into and through the unit.

(1) All doors intended for use as passage through the dwelling unit shall have a clear opening of at least 32" nominal width with the door open 90 degrees, measured between the face of the door and the stop. Openings more than 24" in depth are not considered doorways.

NOTE: A 34" door, hung in the standard manner, provides an acceptable 32" opening.

(2) Except at doorways, the minimum clear width of the accessible route shall be at least 36" wide.

(3) In single-story units, special features such as lofts or sunken or raised areas are not required to be on an accessible route provided the areas do not interrupt the accessible route through the remainder of the dwelling unit.

(4) In multistory dwelling units in buildings with elevators, the story of the unit that is served by the building elevator shall be the primary entry to the unit and such entry/accessible floor shall comply with the requirements of subparagraphs (1), (2) and (3) above. The entry/accessible floor shall contain a bathroom or powder room which complies with paragraph "c" below.

(5) Exterior deck, patio, or balcony surfaces shall be no more than ½" below the floor level of the interior of the dwelling unit, unless they are constructed of impervious material such as concrete, brick or flagstone. In such case, the surface shall be no more than 4" below the floor level of the interior or lower if required by local building code.

(6) Thresholds at exterior doors, including sliding tracks, shall be no higher than ¾". Thresholds and changes in elevations as in subparagraph (5) above shall be beveled with a slope no greater than 1:2.

b. Kitchens shall meet or be adaptable to meet the following:

(1) A clear floor space at least 30" × 48" that allows a parallel approach by a person in a wheelchair must be provided at the range or cooktop and the sink. Either a parallel or forward approach must be provided at the oven, dishwasher, refrigerator/freezer or trash compactor.

(2) Clearance between counters and all opposing base cabinets, countertops, appliances or walls must be at least 40". In U-shaped kitchens with a sink or cooktop at the base of the "U," the base cabinets must be removable at that location or a 60" turning radius must be provided.

c. All bathrooms of covered multifamily dwelling units shall comply with provisions of subparagraph (1) of this paragraph or at least one bathroom in the dwelling unit shall comply with provisions of subparagraph (2) of this paragraph and all other bathrooms and powder rooms within the dwelling unit must be on an accessible route with usable entry doors in accordance with paragraph "a" above.

However, in multistory dwelling units, only those bathrooms on the accessible level are subject to these requirements. Where the powder room is the only facility provided on the accessible level of a multistory dwelling unit, the powder room must comply with the provisions of subparagraph (1) or (2) of this paragraph.

(1) Sufficient maneuvering space shall be provided within the bathroom for a person using a wheelchair or other mobility aid to enter and close the door, use the fixtures, reopen the door and exit. Doors may swing into the clear floor space provided at any fixture if the maneuvering space is provided. Maneuvering space may include any knee space or toe space available below the bathroom fixtures.

Clear floor space at fixtures may overlap.

If the shower stall is the only bathing facility provided in the covered dwelling unit, the shower stall shall measure at least 36" × 36".

NOTE: Cabinets under lavatories are acceptable provided the bathroom has space to allow a parallel approach by a person in a wheelchair; if parallel approach is not possible within the space, any cabinets provided would have to be removable to afford the necessary knee clearance for forward approach.

(2) Where the door swings into the bathroom, there shall be a clear space (2'6" × 4'0") within the room to position a wheelchair or other mobility aid clear of the path of the door as it is closed and to permit the use of the fixtures. This clear space can include any knee space and toe space available below the bathroom fixtures.

Where the door swings out, a clear space shall be provided within the bathroom for a person using a wheelchair or other mobility aid to position the wheelchair such that the person is allowed use of the fixtures. There also shall be a clear space to allow persons using wheelchairs to reopen the door to exit.

When both tub and shower fixtures are provided in the bathroom, at least one fixture shall be made accessible. When two or more lavatories are provided in a bathroom, at least one shall be made accessible.

Toilets shall be located within bathrooms in a manner that permits a grab bar to be installed on one side of the fixture. In locations where toilets are adjacent to walls or bathtubs, the centerline of the fixture shall be a minimum of 1'6" from the obstacle. The other (nongrab bar) side of the toilet fixture shall be a minimum of 1'3" from the finished surface of the adjoining walls, vanities, or the edge of a lavatory.

Vanities and lavatories shall be installed with the center line of the fixture a minimum of 1'3" horizontally from an adjoining wall or fixture. The top of the fixture rim is a maximum height of 2'10" above the finished floor. If knee space is provided below the vanity, the bottom of the apron is at least 2'3" above the floor. If provided, full knee space (for front approach) is at least 1'5" deep.

Bathtubs and tub/showers located in the bathroom shall provide a clear access aisle adjacent to the lavatory that is at least 2'6" wide and extends for a length of 4'0" (measured from the head of the bathtub).

Stall showers in the bathroom may be of any size or configuration. A minimum clear floor space 2'6" wide × 4'0" deep should be available outside the stall. If the shower stall is the only bathing facility provided in the covered dwelling unit, or on the accessible level of a covered multistory unit, and measures a nominal 36" × 36", the shower stall must have reinforcing to allow for installation of an optional wall-hung bench seat.

d. Walls in bathrooms which are to be adaptable shall be reinforced to allow later installation of grab bars around toilet, tub, shower stall and shower seat where provided.

Where the toilet is not placed adjacent to a side wall, provision shall be made for floor-mounted foldaway or similar alternative grab bars. Where the powder room is the only toilet facility located on an accessible level of a multistory dwelling unit, it must comply with this requirement for reinforced walls for grab bars. "Powder room" means a room with a toilet and sink.

NOTE: A tub may have shelves or benches at either end; or a tub may be installed without surrounding walls, if there is provision for alternative mounting of grab bars. For example, a sunken tub placed away from walls could have reinforced areas for installation of floor-mounted grab bars. The same principle applies to shower stalls, e.g., glass-walled stalls could be planned to allow floor-mounted grab bars to be installed later.

Reinforcement for grab bars may be provided in a variety of ways (for example, by plywood or wood blocking) so long as the necessary reinforcement is placed so as to permit later installation of appropriate grab bars.

e. Public and common use areas shall be readily accessible to and usable by persons with disabilities.

f. Light switches, electrical outlets, thermostats and other environmental controls shall be located no higher than 48", and no lower than 15", above the floor. If the reach is over an obstruction (for example, an overhanging shelf) between 20" and 25" in depth, the maximum height is reduced to 44" for forward approach; or 46" for side approach, provided the obstruction (for example, a kitchen base cabinet) is no more than 24" in depth. Obstructions should not extend more than 25" from the wall beneath a control. (See ADAAG Figure 5.)

NOTE: Controls or outlets that do not satisfy these specifications are acceptable provided that comparable controls or outlets (i.e., that perform the same functions) are provided within the same area and are accessible.

302.20(2) Elevators. An elevator shall be required in any apartment building of four or more stories. An elevator required by this subrule shall meet the requirements established for accessible elevators in rule 661—302.5(103A,104A), which adopts by reference section 4.10 of the Americans with Disabilities Act Accessibility Guidelines (28 CFR Part 36, Appendix A).

NOTE: Elevators are not required in apartment buildings of three or fewer stories; however, the Uniform Federal Accessibility Standards, or any other applicable standard, may require the installation of an elevator. If an elevator is not required to be installed by this rule, then the elevator is not subject to the requirements of rule 661—302.5(103A,104A).

302.20(3) Any covered units within a multiple unit dwelling which comply with a code or standard which has been certified as a safe harbor for compliance with the accessibility requirements of the federal Fair Housing Act by the U.S. Department of Housing and Urban Development shall be deemed to be in compliance with rule 661—302.20(103A,104A), unless the covered units are required to comply with the Uniform Federal Accessibility Standards or any other applicable requirements which may be more restrictive than the provisions of this rule.

Rule 661—302.20(103A,104A) is intended to implement Iowa Code sections 103A.7(5) and 104A.2.

[Filed 12/2/05, Notice 9/14/05—published 12/21/05, effective 4/1/06]

[Filed ARC 9993B (Notice ARC 9922B, IAB 12/14/11), IAB 2/8/12, effective 3/15/12]

[Filed ARC 2492C (Notice ARC 2250C, IAB 11/25/15), IAB 4/13/16, effective 5/18/16]

Structures Individually Listed on the National Register of Historic Places of Historic Places

- S. M. McKibben House – Walnut St.
- Old Jail – 411 E. 4th St. – 1974
- Sinnett Octagon House – Park Ave near Hwy 61 bypass
- Trinity Episcopal Church – 411 E. 2nd St.
- Alexander Clark House – 203 W. 3rd St.
- First Presbyterian Church – 401 Iowa Ave.
- J. C. B. Warde House – 205 Cherry St.
- Welch Apartments – 224 Iowa Ave.
- Muscatine County Courthouse – 3rd St.
- W. Joseph Fuller House – 1001 Mulberry Ave.
- Clark-Blackwell House – 206 Cherry St.
- Pliny and Adelia Fay House – 112 Locust St.
- Greenwood Cemetery Chapel – 1814 Lucas

Structures Listed as Contributing to the Downtown Commercial Historic District

- 228 W. 2nd Street
- 224 W. 2nd Street
- 218 W. 2nd Street
- 217-219 W. 2nd Street
- 212 W. 2nd Street
- 209-211 W. 2nd Street
- 208-210 W. 2nd Street
- 207 W. 2nd Street
- 206 W. 2nd Street
- 205 W. 2nd Street
- 201-203 W. 2nd Street
- 200-202-204 W. 2nd Street
- 131-133 W. 2nd Street
- 128 W. 2nd Street
- 124-126 W. 2nd Street
- 123-129 W. 2nd Street
- 117-121 W. 2nd Street
- 100-102 W. 2nd Street
- 100 E. 2nd Street
- 101 E. 2nd Street
- 102-104 E. 2nd Street
- 106-108 E. 2nd Street
- 110-112-114-116 E. 2nd Street
- 115 E. 2nd Street
- 121-123 E. 2nd Street
- 124 E. 2nd Street
- 127 E. 2nd Street
- 129 E. 2nd Street
- 130 E. 2nd Street
- 200 E. 2nd Street
- 201 E. 2nd Street
- 203 E. 2nd Street
- 204 E. 2nd Street
- 205 E. 2nd Street
- 206 E. 2nd Street
- 207-209 E. 2nd Street
- 208-210-212 E. 2nd Street
- 211 E. 2nd Street
- 213 E. 2nd Street
- 214-216-218-220 E. 2nd Street
- 215 E. 2nd Street
- 217 E. 2nd Street
- 219-221-223 E. 2nd Street
- 225 E. 2nd Street
- 227 E. 2nd Street
- 229 E. 2nd Street
- 301 E. 2nd Street
- 303 E. 2nd Street
- 305 E. 2nd Street
- 307-309-311 E. 2nd Street
- 313 E. 2nd Street
- 315-317 E. 2nd Street
- 319-321 E. 2nd Street
- 323-325 E. 2nd Street
- 327-329-331 E. 2nd Street
- 411 E. 2nd Street
- 413-415 E. 2nd Street
- 417 E. 2nd Street
- 419 E. 2nd Street
- 224 E. 3rd Street
- 301 E. 3rd Street
- 317 E. 3rd Street
- 400 E. 3rd Street
- 206-208 Cedar Street
- 210 Cedar Street
- 115 Chestnut Street
- 116 Chestnut Street
- 117 Chestnut Street
- 118 Chestnut Street
- 119 Chestnut Street
- 213 Chestnut Street
- 214 Chestnut Street
- 107 Iowa Avenue
- 109-111-113 Iowa Av
- 214 Iowa Avenue
- 214 ½ Iowa Avenue
- 216-218 Iowa Ave
- 220-224-226 Iowa
- 315-317 W. Mississippi Dr
- 305 W. Mississippi Dr
- 301 W. Mississippi Dr
- 221-225 W. Mississippi Drive
- 101 W. Mississippi Dr
- 101 E. Mississippi Dr
- 117 E. Mississippi Dr
- 126 Pine Street
- 214-216-218 Sycamore St
- 215 Sycamore Street
- 206-208 Walnut St
- 210 Walnut Street
- 212 Walnut Street
- 214 Walnut Street
- 216 Walnut Street
- 218 Walnut Street
- 220 Walnut Street
- 222 Walnut Street
- 224 Walnut Street
- 228 Walnut Street

Structures Listed as Contributing to the West Hill Historic District

- 301 W. 2nd Street
- 309 W. 2nd Street
- 313 W. 2nd Street
- 315 W. 2nd Street
- 317-319 W. 2nd St
- 321 W. 2nd Street
- 323 W. 2nd Street
- 326 W. 2nd Street
- 403 W. 2nd Street
- 411 W. 2nd Street
- 415 W. 2nd Street
- 419 W. 2nd Street
- 326 W. 2nd Street
- 400 W. 2nd Street
- 406 W. 2nd Street
- 414 W. 2nd Street
- 107 Spruce Street
- 502 W. 2nd Street
- 506 W. 2nd Street
- 510 W. 2nd Street
- 516 W. 2nd Street
- 503 W. 2nd Street
- 507 W. 2nd Street
- 511 W. 2nd Street
- 107 Locust Street
- 112 Locust Street
- 515 W. 2nd Street
- 608 W. 2nd Street
- 609 W. 2nd Street
- 207 Broadway Street
- 706 W. 2nd Street
- 718 W. 2nd Street
- 814 W. 2nd Street
- 201 W. 3rd Street
- 203-205 W. 3rd St
- 209 W. 3rd Street
- 213 W. 3rd Street
- 219 W. 3rd Street
- 216 W. 3rd Street
- 300 W. 3rd Street
- 212 Pine Street
- 306 W. 3rd Street
- 310 W. 3rd Street
- 314 W. 3rd Street
- 316 W. 3rd Street
- 305 W. 3rd Street
- 303 W. 3rd Street
- 307 W. 3rd Street
- 211 Linn Street
- 309 W. 3rd Street
- 311 W. 3rd Street
- 313 W. 3rd Street
- 315 W. 3rd Street
- 210 Linn Street
- 212 Linn Street
- 404 W. 3rd Street
- 406 W. 3rd Street
- 408 W. 3rd Street
- 414 W. 3rd Street
- 416 W. 3rd Street
- 401 -403 W. 3rd St
- 405 W. 3rd Street
- 407 W. 3rd Street
- 411 W. 3rd Street
- 413 W. 3rd Street
- 415 W. 3rd Street
- 417 W. 3rd Street
- 505 W. 3rd Street
- 509 W. 3rd Street
- 513 W. 3rd Street
- 519 W. 3rd Street
- 514 W. 3rd Street
- 518 W. 3rd Street
- 606 W. 3rd Street
- 614 W. 3rd Street
- 601 W. 3rd Street
- 605 W. 3rd Street
- 615 W. 3rd Street
- 617-619 W. 3rd St
- 700 W. 3rd Street
- 706 W. 3rd Street
- 710 W. 3rd Street
- 716 W. 3rd Street
- 701 W. 3rd Street
- 705 W. 3rd Street
- 715 W. 3rd Street
- 205 Cherry Street
- 206 Cherry Street
- 208 Cherry Street
- 800 W. 3rd Street
- 809 W. 2nd Street
- 201 Ash Street
- 802 W. 3rd Street
- 806 W. 3rd Street
- 812 W. 3rd Street
- 816 W. 3rd Street
- 801 W. 3rd Street
- 807 W. 3rd Street
- 308 Cherry Street
- 809 W. 3rd Street
- 200 Ash Street
- 206-208 Ash Street
- 900 W. 3rd Street
- 901 W. 3rd Street
- 905 W. 3rd Street
- 310 Chestnut Street
- 316 Chestnut Street
- 318 Chestnut Street
- 408 Chestnut Street
- 406 Chestnut Street
- 402 Chestnut Street
- 209 W. 4th Street
- 211 W. 4th Street
- 217 W. 4th Street
- 204 W. 4th Street
- 409 Pine Street
- 317 Pine Street
- 208 W. 4th Street
- 212 W. 4th Street
- 310 Pine Street
- 312 -314 Pine St
- 316-318 Pine Street
- 308 W. 4th Street
- 310 W. 4th Street
- 312 W. 4th Street
- 314 W. 4th Street
- 316 W. 4th Street
- 309 W. 4th Street
- 309 Linn Street
- 301 W. 4th Street
- 315 W. 4th Street
- 319 W. 4th Street
- 400 W. 4th Street
- 402 W. 4th Street
- 410 W. 4th Street
- 310 Linn Street
- 412 W. 4th Street
- 414 W. 4th Street
- 420 W. 4th Street
- 403 W. 4th Street
- 405 W. 4th Street
- 407 W. 4th Street
- 411 W. 4th Street
- 417 W. 4th Street
- 312 Spruce Street
- 502 W. 4th Street
- 504 W. 4th Street
- 506 W. 4th Street
- 508 W. 4th Street
- 510 W. 4th Street
- 514 W. 4th Street
- 516 W. 4th Street
- 518 W. 4th Street
- 501 W. 4th Street
- 505 W. 4th Street
- 507 W. 4th Street
- 509 W. 4th Street
- 511 W. 4th Street
- 513 W. 4th Street
- 517 W. 4th Street
- 312 Locust Street
- 314 Locust Street
- 316 Locust Street
- 408 Locust Street
- 313 Broadway St
- 311 Broadway St
- 601 W. 4th Street
- 603 W. 4th Street
- 605 W. 4th Street
- 611 W. 4th Street
- 613 W. 4th Street
- 617 W. 4th Street
- 701 W. 4th Street
- 705 W. 4th Street
- 707 W. 4th Street
- 709 W. 4th Street
- 3 Cherry Lane
- 408 Broadway St
- 404 Broadway St
- 715 W. 4th Street
- 312 Broadway St
- 314 Broadway St
- 710 W. 4th Street
- 804 W. 4th Street
- 317 Cherry Street
- 313 Cherry Street
- 400 Cherry Street
- 810 W. 4th Street
- 805 W. 4th Street
- 809 W. 4th Street
- 402 Cherry Street
- 410 Cherry Street

Structures Listed as Contributing to the Fair Oaks Historic District



Figure 43. Map of properties surveyed in the Fair Oaks neighborhood, with preliminary evaluations.

also see table on following pages for preliminary evaluations of individual resources

MINUTES
August 28, 2024 – 5:30 p.m.
Construction Appeal & Advisory Board
Muscatine City Hall
Lower-Level Conference Room

Present: Devin Abel, Ken Gilkerson, and Tim Kelly

Absent: Jim Noble and James Miller

Staff: Andrew Fangman, Assistant Community Development Director
Andrew Oien, Building Division Manager

Minutes:

Meeting called to order at 5:30 pm.

Action on approving the minutes from the June 12th meeting was tabled until the next meeting, as they were not included in the agenda packet.

Devin Abel moved, seconded by Ken Gilkerson, to amend the bylaws to change the permanent standing meeting time and date to 5:30 PM on the fourth Wednesday of the month. The motion passed by a 3-0 vote.

Andrew Oien discussed potential state action to adopt a mandatory statewide building permit, similar to the state's implementation of electrical and plumbing codes.

A general discussion took place regarding the State Historic Building Code. This code aims to restore or modify historic buildings while preserving their original architecture, ensuring safety and cost-effectiveness. It replaces certain accessibility sections of the International Existing Building Code (IEBC) with standards from Chapter 302 of the Iowa Administrative Code, offering more flexibility in meeting federal accessibility requirements. While Muscatine City has adopted the 2015 IEBC without changes, its own building code means the State Building Code doesn't apply to non-state-owned buildings within the city. Therefore, the additional flexibility offered by the State Historic Building Code is not available to qualifying historic buildings in Muscatine.

The board discussed the benefits of creating similar flexibility in Muscatine by adopting a local code amendment. A specific example of a downtown business relocation that could have been facilitated by such flexibility was cited. The board reached a consensus that they would like to see an action item on making a formal recommendation to the City Council to include a local amendment to the State Historic Building Code on the next agenda.

Andrew Oien informed the board that staff intends to present a proposed amendment at the next meeting that would eliminate the requirement for engineered plans for post-framed buildings under 1,440 square feet. The board indicated their desire to discuss this proposed amendment at their next meeting.

A discussion took place regarding the format and content of applications for appeals to the board. Forms used by Linn County for this purpose were reviewed, and the general consensus was that they served as a good template. Specific requests were made for the appellant to have a space to explain the rationale for the appeal, and for the inclusion of relevant pictures or illustrations when possible.

Meeting adjourned at 6:23 p.m.

ATTEST:

Respectfully Submitted,

Devin Abel Chairperson
Construction Appeal & Advisory Board

Andrew Oien, Secretary
Building Division Manager

MINUTES
September 25, 2024 – 5:30 p.m.
Construction Appeal & Advisory Board
Muscatine City Hall
Lower-Level Conference Room

Present: Devin Abel, Jim Nobel, and Tim Kelly

Absent: Ken Gilkerson and James Miller

Staff: Andrew Fangman, Assistant Community Development Director

Also Present: Jeff Osborne

Minutes:

Meeting called to order at 5:24 pm.

Jim Nobel moved, seconded by Devin Able to approve the minutes from the June 12, 2024. The motion passed by a 3-0 vote.

Tim Kelly moved, seconded by Jim Nobel to approve the minutes from the August 25, 2024. The motion passed by a 3-0 vote.

A discussion took place regarding the State Historic Building Code. This code aims to restore or modify historic buildings while preserving their original architecture, ensuring safety and cost-effectiveness. It replaces certain accessibility sections of the International Existing Building Code (IEBC) with standards from Chapter 302 of the Iowa Administrative Code, offering more flexibility in meeting federal accessibility requirements. Jeff Osborne spoke in favor such an amendment.

Having previously agreed to recommend a local amendment mirroring the State Historic Building Code, the board discussed eligibility criteria for applying the proposed amendment to the code.

Two approaches were discussed:

- Mirroring State Historic Building Code: Require structures to be individually listed on the National Register, listed as contributing structures in a National Register-listed historic district, or have a certification of eligibility.
- Establishing Age or Built-By Date: Set a specific age or built-by date for eligible structures

After weighing the pros and cons of each approach, the board reached a consensus that a local amendment to the City Building Code mirroring the State Historic Building Code should also use the same eligibility criteria.

Tim Kelly moved, seconded by Devin Able to make a recommendation that City Council adopted an amendment to the City Building Code mirroring the State Historic Building Code, including the eligibility criteria. The motion passed by a 3-0 vote.

The board discussed a potential amendment to eliminate the engineering plan requirement for post-framed buildings under 1,440 square feet. They expressed conceptual support for this change.

Questions arose about how post-frame buildings currently bypass the engineering requirement. The board agreed to address this issue at the next meeting as a potential action item. They requested answers to their specific questions about the current handling of such buildings be included in the agenda packet for the next meeting.

Meeting adjourned at 6:01 p.m.

ATTEST:

Respectfully Submitted,

Devin Abel Chairperson
Construction Appeal & Advisory Board

Andrew Oien, Secretary
Building Division Manager



City of Muscatine

ITEM NUMBER 2025-0109

AGENDA ITEM SUMMARY

DATE: 3/20/2025

STAFF

Kevin Coon, City Engineer
Brian Stineman, Public Works Director

SUBJECT

Resolution to Approve the Plans and Specifications for the West Hill Sewer Separation Phase 6D Project. Public Hearing B.

EXECUTIVE SUMMARY

Presented for council consideration is a resolution to approve the plans and specifications for the West Hill Sewer Separation Phase 6D Project.

STAFF RECOMMENDATION

Adopt the resolution.

BACKGROUND/DISCUSSION

West Hill Phase 6D is the second to last phase of the West Hill Sewer Separation Project. There is a Phase 6E project after this that encompasses the remaining street work for sewer separation. There are also improvements to the Papoose Creek Lift Station that need to be made that will be a separate project, but will not disturb city streets. The West Hill Phase 6D scope includes new sanitary sewer, new storm sewer, new roadway, and the removal of aged out portions of the Upper West Branch Sewer Tunnel. The work area includes all of Hagerman Drive, Eisenhower St, Devitt Avenue from Eisenhower St. to Newell Ave, and Logan St. from Saint Mary's Catholic Cemetery to Newell Ave. The project is expected to be completed in late November of 2026. The letting date is April 8th.

CITY FINANCIAL IMPACT

Funds are available for this project through the State Revolving Fund and the Local Option Sales Tax.

ATTACHMENTS

1. Resolution approving Plans and Specs (2)

RESOLUTION NO. 2025-0109

**APPROVING PLANS, SPECIFICATIONS, FORM OF CONTRACT, AND COST
ESTIMATE FOR THE WEST HILL SEWER SEPARATION PHASE 6D
PROJECT**

WHEREAS, there is on file in the Public Works Department a copy of the plans, specifications, form of contract, and notice to bidders for the proposed West Hill Sewer Separation Phase 6D Project; and

WHEREAS, said plans, specifications, form of contract, and cost estimate have been examined by this Council;

NOW, THEREFORE, be it resolved by this Council that:

1. All objections to the foregoing plans, specifications, form of contract, notice to bidders, and cost estimate are overruled.
2. The foregoing plans, specifications, form of contract, and cost estimate are finally approved.
3. Date for Receipt of Bids is set for April 8th, 2025 at 2:00 pm

PASSED, APPROVED, AND ADOPTED THIS 20th DAY OF MARCH, 2025.

CITY COUNCIL OF THE CITY OF MUSCATINE, IOWA

Brad Bark, Mayor

ATTEST:

Cinda Hilger, City Clerk



City of Muscatine

ITEM NUMBER 2025-0108

AGENDA ITEM SUMMARY

DATE: 3/20/2025

STAFF

SUBJECT

Resolution to Approve the Plans and Specifications for the Fulliam Avenue Reconstruction Phase 3 Project. Public hearing C.

EXECUTIVE SUMMARY

Presented for council consideration is a resolution to approve the plans and specifications for the Fulliam Avenue Reconstruction Phase 3 Project.

STAFF RECOMMENDATION

Adopt the resolution.

BACKGROUND/DISCUSSION

For the past three years the City has been reconstructing Fulliam Avenue between Houser Street and Kindler Ave. This is the final year and final phase of the project. This phase is for the replacement of approximately 700 feet of Fulliam Avenue and will add multiple storm sewer inlets to bring the drainage on the street up to modern standards. The work is set to be completed during the summer with a completion date prior to the beginning of the new school year. Bids will be due April 24th.

CITY FINANCIAL IMPACT

Funds are available through the Local Option Sales Tax and Road Use Tax.

ATTACHMENTS

1. Resolution approving Plans and Specs (3)

RESOLUTION NO. 2025-0108

**APPROVING PLANS, SPECIFICATIONS, FORM OF CONTRACT, AND COST
ESTIMATE FOR THE FULLIAM AVENUE RECONSTRUCTION PHASE 3
PROJECT**

WHEREAS, there is on file in the Public Works Department a copy of the plans, specifications, form of contract, and notice to bidders for the proposed Fulliam Avenue Reconstruction Phase 3 Project; and

WHEREAS, said plans, specifications, form of contract, and cost estimate have been examined by this Council;

NOW, THEREFORE, be it resolved by this Council that:

1. All objections to the foregoing plans, specifications, form of contract, notice to bidders, and cost estimate are overruled.
2. The foregoing plans, specifications, form of contract, and cost estimate are finally approved.
3. Date for Receipt of Bids is set for April 24th, 2025 at 2:00 pm

PASSED, APPROVED, AND ADOPTED THIS 20th DAY OF MARCH, 2025.

CITY COUNCIL OF THE CITY OF MUSCATINE, IOWA

Brad Bark, Mayor

ATTEST:

Cinda Hilger, City Clerk



City of Muscatine

ITEM NUMBER 2025-0107

AGENDA ITEM SUMMARY

DATE: 3/20/2025

STAFF

Brian Stineman, Public Works Director

SUBJECT

Resolution to Approve the Plans and Specifications for the Cured-In-Place-Pipe-Liner Project.
Public Hearing D.

EXECUTIVE SUMMARY

Presented for council consideration is a resolution to approve the plans and specifications for the Cured-In-Place-Pipe-Liner Project.

STAFF RECOMMENDATION

Adopt the resolution.

BACKGROUND/DISCUSSION

Every year the collections and drainage department identifies sewers in need of repair. The sewers that are deemed structurally sound, yet may have leakage or root issues can have their life extended significantly by using cured in-place liner. By using cured in-place liner the city avoids sewer replacement and roadway reconstruction costs. The identified portions of sewer are on: 900 block of Weir St, 2000 block of Fair Acres Dr, 2900 block of Mulberry Ave, 900 block of Scott St, 400 block of W Fulliam Ave, and the 3300 block of Spinning Wheel Ct.

CITY FINANCIAL IMPACT

Funds are available from the Collections and Drainage Budget.

ATTACHMENTS

1. Resolution approving Plans and Specs (4)

RESOLUTION NO. 2025-0107_____

**APPROVING PLANS, SPECIFICATIONS, FORM OF CONTRACT, AND COST
ESTIMATE FOR CURED-IN-PLACE-PIPE-LINER PROJECT**

WHEREAS, there is on file in the Public Works Department a copy of the plans, specifications, form of contract, and notice to bidders for the proposed Cured-In-Place-Pipe-Liner Project; and

WHEREAS, said plans, specifications, form of contract, and cost estimate have been examined by this Council;

NOW, THEREFORE, be it resolved by this Council that:

1. All objections to the foregoing plans, specifications, form of contract, notice to bidders, and cost estimate are overruled.
2. The foregoing plans, specifications, form of contract, and cost estimate are finally approved.
3. Date for Receipt of Bids is set for April 8th, 2025 at 2:05 pm

PASSED, APPROVED, AND ADOPTED THIS 20th DAY OF MARCH, 2025.

CITY COUNCIL OF THE CITY OF MUSCATINE, IOWA

Brad Bark, Mayor

ATTEST:

Cinda Hilger, City Clerk



City of Muscatine

ITEM NUMBER 2025-0114

AGENDA ITEM SUMMARY

DATE: 3/20/2025

STAFF

Brian Stineman, Public Works Director

SUBJECT

Resolution Approving Plans and Specifications for Snow Removal Equipment at the Muscatine Municipal Airport. Public Hearing E.

EXECUTIVE SUMMARY

Resolution Approving Plans and Specifications for Snow Removal Equipment at the Muscatine Municipal Airport.

STAFF RECOMMENDATION

Adopt the resolution

BACKGROUND/DISCUSSION

City staff are working with Bolton & Menk Engineering, our contracted airport consultant, to prepare plans and specifications for the procurement of snow removal equipment for the airport. This project will be funded at 90% by a grant from the Federal Aviation Administration (FAA). The remaining 10% will be funded by bond proceeds.

CITY FINANCIAL IMPACT

The City is responsible for the 10% local match which has been allocated in future bond proceeds.

ATTACHMENTS

1. Resolution Approving Plans and Specs airport SRE

RESOLUTION NO. 2025-0114

**APPROVING PLANS, SPECIFICATIONS, FORM OF CONTRACT, AND COST
ESTIMATE FOR THE MUSCATINE
AIRPORT SNOW REMOVAL EQUIPMENT PROJECT**

WHEREAS, there is on file in the Public Works Department a copy of the plans, specifications, form of contract, and notice to bidders for the proposed Muscatine Airport Snow Removal Equipment Project; and

WHEREAS, said plans, specifications, form of contract, and cost estimate have been examined by this Council;

NOW, THEREFORE, be it resolved by this Council that:

1. All objections to the foregoing plans, specifications, form of contract, notice to bidders, and cost estimate are overruled.
2. The foregoing plans, specifications, form of contract, and cost estimate are finally approved.
3. Date for Receipt of Bids is set for April 11, 2025 at 2:00 pm

PASSED, APPROVED, AND ADOPTED THIS 20th DAY OF MARCH, 2025.

CITY COUNCIL OF THE CITY OF MUSCATINE, IOWA

Brad Bark, Mayor

ATTEST:

Cinda Hilger, City Clerk



City of Muscatine

ITEM NUMBER 2025-0100

AGENDA ITEM SUMMARY

DATE: 3/20/2025

STAFF

April Limburg, City Planner

SUBJECT

First Reading of an Ordinance to Vacate and Deed Undeveloped Right of Way between the Adjoining Property Owner of 607 Van Buren Street and Parcel ID 082518004

EXECUTIVE SUMMARY

A request was submitted to vacate and deed the undeveloped right of way between 607 Van Buren Street and Parcel ID 0825158004 to the adjoining property owner of both parcels.

STAFF RECOMMENDATION

Staff recommends approval of the attached ordinance to vacate and deed to the adjoining property owner located at 607 VanBuren St right of way.

BACKGROUND/DISCUSSION

Matthew Hanssen is requesting that the portion of the alley right of way that bisects his property at 607 Van Buren Street, be vacated and ultimately conveyed to him as the adjoining property owner. He currently maintains the right of way and would like to build a garage on a portion of the to-be-vacated alley right of way. The Planning and Zoning Commissions recommended the right of way vacation at their February 11, 2025, meeting. A public hearing was held on March 6, 2025, to vacate, surplus, and deed over the undeveloped right of way.

CITY FINANCIAL IMPACT

This portion of the public right of way serves no current or anticipated future public use. This action will eliminate any future financial impacts of ownership.

ATTACHMENTS

1. Ordinance RoW
2. Van Buren ROW

ORDINANCE NO. 2025-0100

AN ORDINANCE VACATING AND DEEDING THE UNDEVELOPED RIGHT OF WAY BETWEEN 607 VAN BUREN ST and PARCEL ID 0825158004

WHEREAS, the Planning and Zoning Commission of the City of Muscatine, on February 11, 2025 recommended approval of the vacation and deeding to the adjoining property owner located at between 607 Van Buren St and Parcel ID 0825158004 undeveloped right of way.

WHEREAS, the City Council of the City of Muscatine has conducted a public hearing on said vacation and surplus request and March 6, 2025;

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF MUSCATINE, IOWA, AS FOLLOWS:

Section I. The following described real estate be vacated by the City of Muscatine, Iowa:

ALL OF THE 18' WIDE EAST-WEST UNDEVELOPED ALLEY ADJOINING LOTS 37 THRU 46 BLK 33 PARK PLACE ADD AND LOTS 22 TO 31 BLK 33 PARK PLACE ADD

Section II. Any Ordinance or part thereof in conflict or inconsistent with the provisions of this Ordinance is hereby repealed.

PASSED, APPROVED AND ADOPTED this 20th day of March, 2025.

**BY THE CITY COUNCIL OF THE
CITY OF MUSCATINE, IOWA**

Brad Bark, Mayor

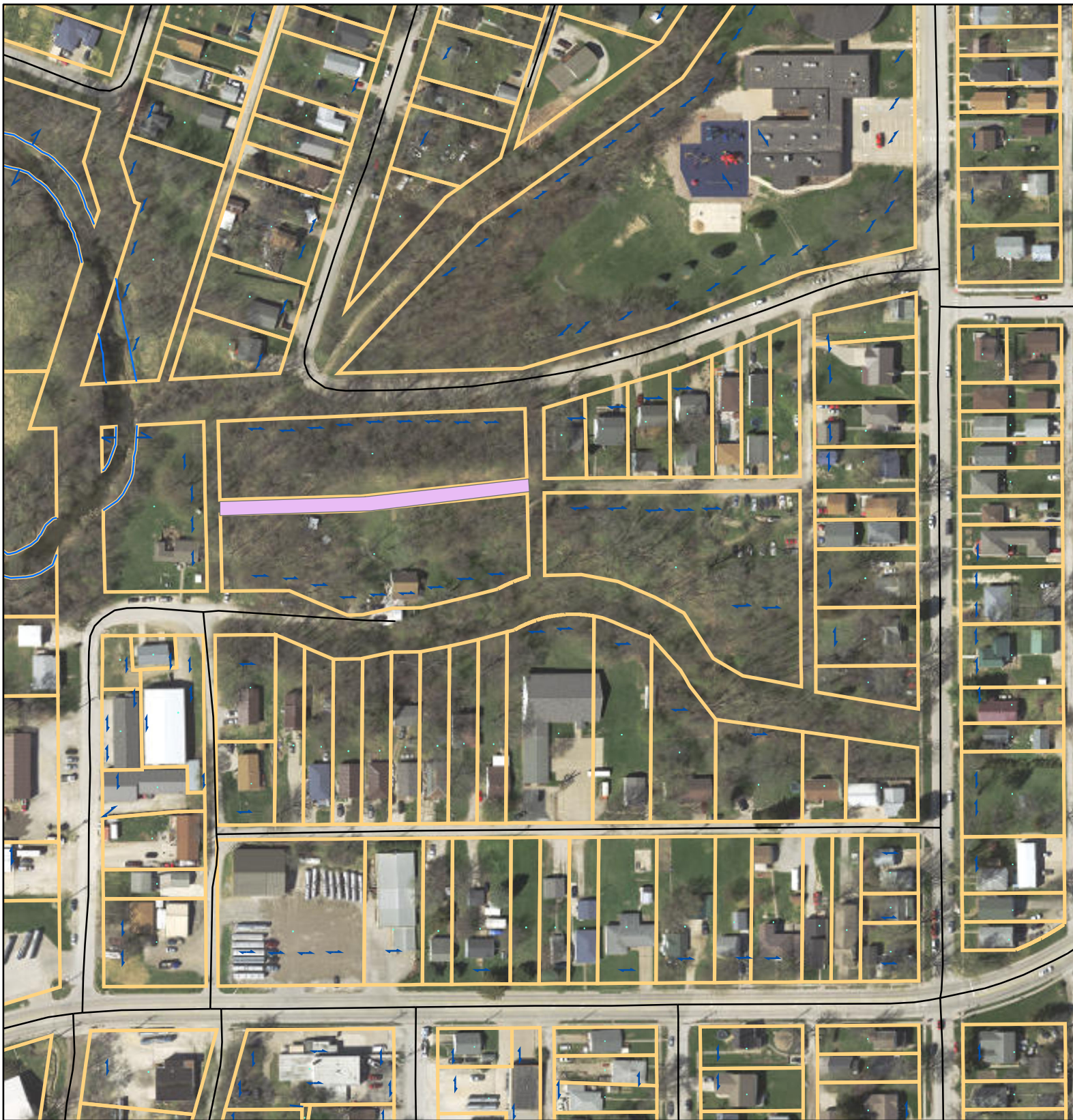
Attest:

Cinda Hilger, City Clerk

1st Reading March 20, 2025

2nd Reading April 3, 2025

3rd Reading April 17, 2025



Legend

-  ROW
-  Parcels

PZROWV-1-2025 Right of Way adjoining
lots 37 thru 46 BLK 33 Park Place Add
and Lots 22 to 31 BLK 33 Park Place Add

210 105 0 210 Feet





City of Muscatine

ITEM NUMBER 2025-0101

AGENDA ITEM SUMMARY

DATE: 3/20/2025

STAFF

April Limburg, City Planner

SUBJECT

First Reading of an Ordinance to Vacate and Deed an Undeveloped Right of Way to the Adjoining Property Owners Located at 1719 Pearlview Court and 1715 Pearlview Court

EXECUTIVE SUMMARY

A request was submitted to vacate and deed the undeveloped and unused 10' wide strip of right of way adjoining the southern property line of the property, to the adjacent property owners at 1719 Pearlview Court and 1715 Pearlview Court.

STAFF RECOMMENDATION

Staff recommends approval of the attached ordinance to vacate and deed the undeveloped right of way to the adjoining property owners at 1719 Pearlview Ct and 1715 Pearlview Ct .

BACKGROUND/DISCUSSION

Heather Duwa and Mark Butterworth are requesting that the undeveloped and unused 10' wide strip of right of way adjoining the south property line of their property, be vacated and conveyed to them. This right of way was platted to allow for the construction of a walking path to the area immediately to the east of Pearlview Court. Subsequent development has removed the need for direct pedestrian access between Pearlview Court and this area. The Planning and Zoning Commissions recommended the right of way vacation at the February 11, 2025, meeting. A public hearing was held on March 6, 2025, to vacate, surplus, and deed over the undeveloped right of way.

CITY FINANCIAL IMPACT

This portion of the public right of way serves no current or anticipated future public use. This action will eliminate any future financial impacts of ownership.

ATTACHMENTS

1. Ordinance RoW (1)
2. Pearlview Ct RoW

ORDINANCE NO. 2025-0101

AN ORDINANCE VACATING AND DEEDING THE UNDEVELOPED RIGHT OF WAY BETWEEN 1719 PEARLVIEW CT AND 1715 PEARLVIEW CT

WHEREAS, the Planning and Zoning Commission of the City of Muscatine, on February 11, 2025 recommended approval of the vacation and deeding to the adjoining property owner located at 1719 Pearlview Ct and 1715 Pearlview Ct the undeveloped right of way.

WHEREAS, the City Council of the City of Muscatine has conducted a public hearing on said vacation and surplus request and March 6, 2025;

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF MUSCATINE, IOWA, AS FOLLOWS:

Section I. The following described real estate be vacated by the City of Muscatine, Iowa:

A STRIP OF LAND 10 FEET BY 164.83 FEET ADJOINING LOTS 14 & 15 PLATTED AS PUBLIC RIGHT OF WAY AND DEPICTED ON THE FINAL PLAT OF PEARLMAN'S SUBDIVISION IN THE CITY OF MUSCATINE, AS RECORDED IN BOOK 6 PAGE 102 IN THE OFFICE OF THE RECORDER, MUSCATINE COUNTY, IOWA.

Section II. Any Ordinance or part thereof in conflict or inconsistent with the provisions of this Ordinance is hereby repealed.

PASSED, APPROVED AND ADOPTED this 20th day of March, 2025.

**BY THE CITY COUNCIL OF THE
CITY OF MUSCATINE, IOWA**

Brad Bark, Mayor

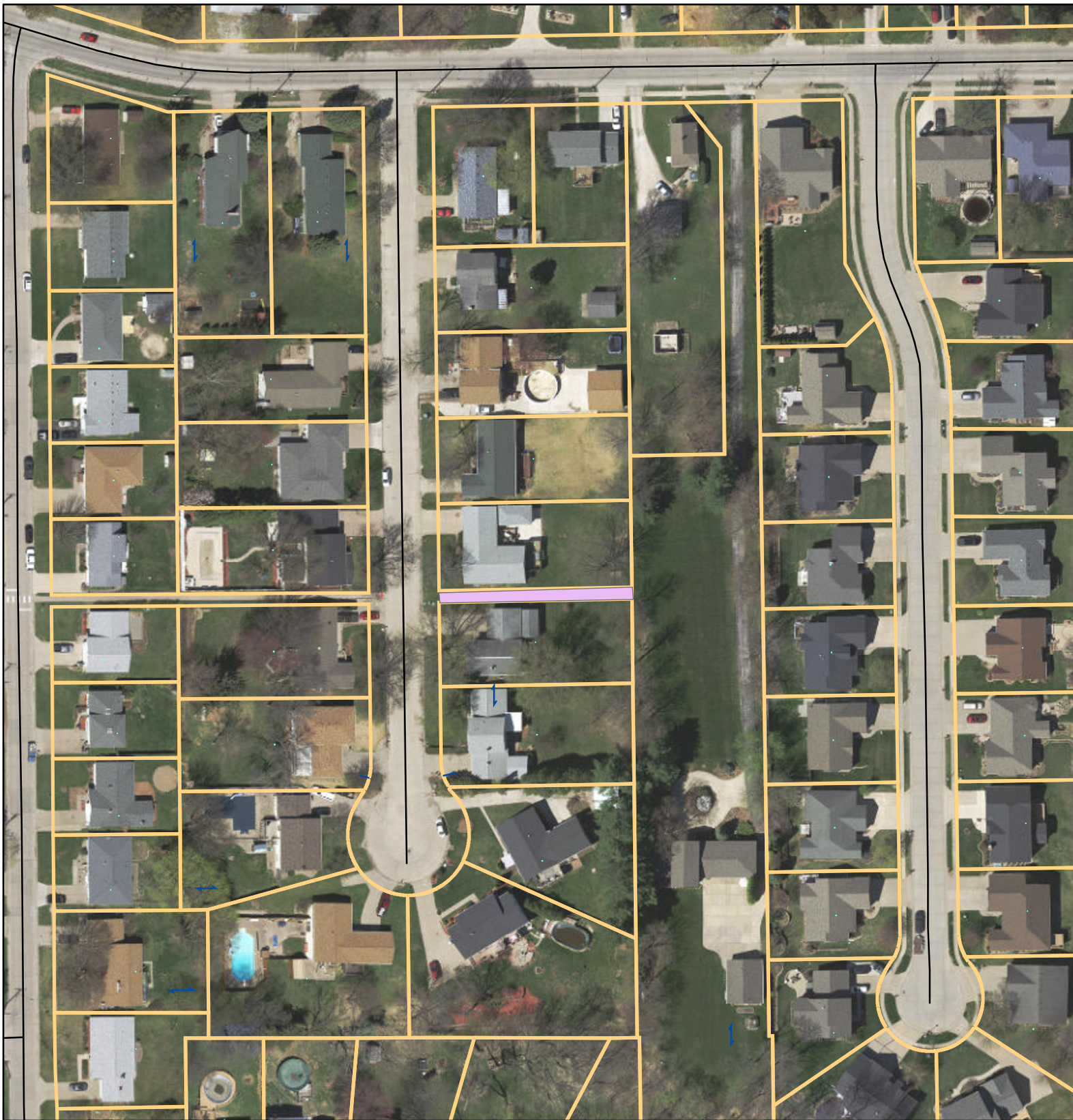
Attest:

Cinda Hilger, City Clerk

1st Reading March 20, 2025

2nd Reading April 3, 2025

3rd Reading April 17, 2025



Legend



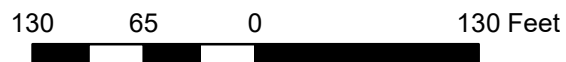
ROW



Parcels

PZROWV-2-2024 Right of Way

A STRIP OF LAND 10 FEET BY 164.83 FEET
ADJOINING LOTS 14 & 15





City of Muscatine

ITEM NUMBER 2025-0105

AGENDA ITEM SUMMARY

DATE: 3/20/2025

STAFF

Jodi Royal-Goodwin, Community Development Director

SUBJECT

Resolution Authorizing Special Assessments for Unpaid Abatement Service Fees and Rental Housing Fees to Private Properties

EXECUTIVE SUMMARY

Presented for City Council's consideration is a resolution authorizing the assessment of unpaid abatement service fees and rental housing fees to private properties. The abatement and rental housing costs total \$11,328.59, the administrative fees are \$3,950.00, and the assessment fees are \$2,200.00. The total amount being requested for assessment at this time totals \$17,478.59.

STAFF RECOMMENDATION

Staff recommends approval of the resolution to assess the unpaid abatement service fees and rental housing fees to their respective properties.

BACKGROUND/DISCUSSION

The City's contractor has provided abatement services for nuisance, snow/ice on sidewalks and vegetation violations at the properties listed on the attachment. Dates of service are from November 2023 to January 2025. The City was billed for these services and has subsequently paid the contractor. Assessing the outstanding bills to the property taxes will help the City recoup its costs.

Many of these properties are vacant and are routinely maintained by the City Contractor to avoid nuisance, vegetation and substandard building violations where applicable. Assessing the fees allows the City the opportunity to be reimbursed at the time the property is sold or a tax certificate is claimed. Other properties are occupied, in which case the owner was billed for the services provided. If the initial invoice to the property owner is not paid a late notice is sent prior to requesting assessment.

The City has provided rental housing services for properties listed on the attachment, including but not limited to, rental property inspections and Rental Facility License issuance as required

per the Muscatine Rental Housing Code. Dates of service are from July 2024 to January 2025. The City billed the owner for the services provided and sent multiple invoices prior to requesting assessment. In accordance with Title 16 of City Code, if the initial Rental Facility License invoice sent to the owner is not paid a second invoice is sent with a \$25 late payment penalty fee. Then if the second invoice is not paid, a third and fourth invoice are sent with 1.5% interest being accrued on each invoice. A final payment notice is sent with the fourth invoice notifying the owner of the deadline to avoid the outstanding balance being assessed to the property taxes. Assessing the outstanding bills to the property taxes will help the City recoup its costs.

A \$50.00 assessment fee has been added to each property for each abatement instance to cover processing costs. Adding an assessment fee for each abatement instance is a new process as the recently implemented program now used for violation abatements does not group all the abatement instances for a single property together, rather it records them separately. This is to allow a better means to track repeat offenders and as such this change only affects properties that the City is required to abate multiple times. Additional fees are charged by the County for each assessment.

CITY FINANCIAL IMPACT

Fees are to reimburse the City for expenses associated with the services provided to abate the nuisance, snow/ice on sidewalks and vegetation violations and the provided rental housing services. If assessments are not approved or are reduced, payments to the City's contractor without charge and providing rental housing services without charge will impact the general fund.

ATTACHMENTS

1. Council Special Assessments Report 03.20.2025
2. Council Resolution Special Assessments 2025.03.20

SPECIAL ASSESSMENTS REPORT 03/20/2025 - PAGE 1

Parcel ID	Site Address	Owner Name	Date of Work	Type	Service Fee	Admin Fee	Assess Fee	Total Fee
1310281006	1718 Miles Ave	Acc 549 LLC	11/26/2024	Nuisance	\$359.80	\$75.00	\$50.00	\$484.80
0836187011	1216 E 2nd St	Castro Luis or Rosa Maria	12/12/2024	Snow/Ice on Sidewalks	\$31.86	\$75.00	\$50.00	\$156.86
0836187011	1216 E 2nd St	Castro Luis or Rosa Maria	01/04/2025	Snow/Ice on Sidewalks	\$25.45	\$75.00	\$50.00	\$150.45
1310213003	1211 Indiana St	Collazo Juan Ramos	01/02/2025	Vegetation - Trees/Shrubs	\$1,600.00	\$75.00	\$50.00	\$1,725.00
1303254009	108 Pond St	Collier Denise M	11/22/2024	Nuisance	\$56.01	\$75.00	\$50.00	\$181.01
0930301002	400 Colorado St	Colorado Senior Lofts LLC	11/09/2024	Nuisance	\$117.45	\$75.00	\$50.00	\$242.45
0835252006	1118 Mulberry Ave	Dre Group LLC	08/08/2024	Nuisance	\$1,909.20	\$75.00	\$50.00	\$2,034.20
0825377030	1008 Grand Ave	Dy Yashua	12/06/2024	Nuisance	\$172.70	\$75.00	\$50.00	\$297.70
0836206014	610 Fairview Ave	El Olmito LLC	01/24/2025	Rental - Failure to Show for Inspection	\$60.00	\$25.00	\$50.00	\$135.00
0834454022	2203 Lucas St	Epperly Glenn M	11/14/2024	Vegetation - Grass/Weeds	\$78.44	\$150.00	\$50.00	\$278.44
0834454022	2203 Lucas St	Epperly Glenn M	12/12/2024	Snow/Ice on Sidewalks	\$39.38	\$75.00	\$50.00	\$164.38
0834454022	2203 Lucas St	Epperly Glenn M	01/04/2025	Snow/Ice on Sidewalks	\$25.45	\$75.00	\$50.00	\$150.45
1303477009	607 Grandview Ave	Flores Yunior A	12/04/2024	Nuisance	\$208.80	\$150.00	\$50.00	\$408.80
1310252002	31 Gas Lantern Sq	Humble Elite LLC	10/29/2024	Vegetation - Trees/Shrubs	\$1,460.00	\$75.00	\$50.00	\$1,585.00
1310252002	37 Gas Lantern Sq	Humble Elite LLC	10/23/2024	Vegetation - Trees/Shrubs	\$755.00	\$75.00	\$50.00	\$880.00
0834176009	1632 Beach Cir	Jenkins Mendi	11/14/2024	Vegetation - Grass/Weeds	\$116.94	\$150.00	\$50.00	\$316.94
0836227012	181 Sherman St	Jones Dominick K or Sarah	11/27/2024	Rental - Failure to Show for Inspection	\$60.00	\$25.00	\$50.00	\$135.00
0835481038	222 Walnut St	Manjoine Joseph P	12/17/2024	Rental - Second Reinspection	\$360.00	\$25.00	\$50.00	\$435.00
1310276009	1815 Schley Ave	Mccormick Timothy M or Mindy S	11/14/2024	Vegetation - Grass/Weeds	\$135.94	\$150.00	\$50.00	\$335.94
1310276009	1815 Schley Ave	Mccormick Timothy M or Mindy S	12/12/2024	Snow/Ice on Sidewalks	\$38.28	\$150.00	\$50.00	\$238.28
1310276009	1815 Schley Ave	Mccormick Timothy M or Mindy S	01/04/2025	Snow/Ice on Sidewalks	\$26.55	\$75.00	\$50.00	\$151.55
1303251008	2127 Hershey Ave	Mcloughlin Terry L	11/19/2024	Nuisance	\$194.00	\$75.00	\$50.00	\$319.00
0835461028	319 W 4th St	Mendoza Manuel Salvador	11/26/2024	Nuisance	\$101.80	\$75.00	\$50.00	\$226.80
1310233009	1114 Nebraska St	Morse Mary F	11/14/2024	Vegetation - Grass/Weeds	\$79.88	\$150.00	\$50.00	\$279.88
1310233009	1114 Nebraska St	Morse Mary F	12/12/2024	Snow/Ice on Sidewalks	\$16.51	\$150.00	\$50.00	\$216.51
1310233009	1114 Nebraska St	Morse Mary F	01/04/2025	Snow/Ice on Sidewalks	\$11.95	\$75.00	\$50.00	\$136.95
0835287008	718 E 7th St	Muscatine Housing Solutions LLC	12/16/2024	Nuisance	\$838.15	\$75.00	\$50.00	\$963.15

SPECIAL ASSESSMENTS REPORT 03/20/2025 - PAGE 2

Parcel ID	Site Address	Owner Name	Date of Work	Type	Service Fee	Admin Fee	Assess Fee	Total Fee
1303226002	1839 Lucas St	Navalany Diana	10/08/2024	Vegetation - Grass/Weeds	\$231.00	\$75.00	\$50.00	\$356.00
0835483012	215 E 2nd St	Perhay Kenneth A II	11/26/2024	Rental - Failure to Show for Inspection	\$180.00	\$25.00	\$50.00	\$255.00
1303403009	215 Clinton St	Pesina Pedro	12/04/2024	Nuisance	\$154.70	\$150.00	\$50.00	\$354.70
1303403009	215 Clinton St	Pesina Pedro	12/12/2024	Nuisance	\$151.73	\$150.00	\$50.00	\$351.73
1303403009	215 Clinton St	Pesina Pedro	12/27/2024	Nuisance	\$319.63	\$150.00	\$50.00	\$519.63
0835182036	1007 Sycamore St	Reist Candis K	11/15/2024	Nuisance	\$182.40	\$75.00	\$50.00	\$307.40
1303452007	2003 Breese Ave	Residential Equity Partners LLC	11/14/2024	Vegetation - Grass/Weeds	\$78.44	\$150.00	\$50.00	\$278.44
1303452007	2003 Breese Ave	Residential Equity Partners LLC	12/12/2024	Snow/Ice on Sidewalks	\$30.38	\$150.00	\$50.00	\$230.38
1303452007	2003 Breese Ave	Residential Equity Partners LLC	01/04/2025	Snow/Ice on Sidewalks	\$33.55	\$75.00	\$50.00	\$158.55
0835430009	515 Orange St	Rti Investments LLC	01/02/2025	Nuisance	\$183.00	\$150.00	\$50.00	\$383.00
0825355003	520 Monroe St	Rti Investments LLC	11/25/2024	Rental - Third Reinspection	\$120.00	\$25.00	\$50.00	\$195.00
1302131006	705 W 4th St	Saville Jacob A	11/22/2023	Vegetation - Grass/Weeds	\$248.70	\$25.00	\$50.00	\$323.70
0835352005	112 Roscoe Ave	Sluts Christina Marie Reid & Reid Alan James	12/12/2024	Snow/Ice on Sidewalks	\$24.34	\$150.00	\$50.00	\$224.34
0835352005	112 Roscoe Ave	Sluts Christina Marie Reid & Reid Alan James	01/04/2025	Snow/Ice on Sidewalks	\$17.93	\$75.00	\$50.00	\$142.93
1310281005	1804 Miles Ave	Summy Rentals LLC	12/02/2024	Nuisance	\$211.25	\$75.00	\$50.00	\$336.25
1303277018	1611 Hershey Ave	Tico Investments LLC	07/29/2024	Rental - Facility License	\$188.00	\$25.00	\$50.00	\$263.00
0825305010	615 Jackson St	Trevino Jesse P or Elda R	07/26/2024	Rental - Facility License	\$94.00	\$25.00	\$50.00	\$169.00

Grand Totals by Fee Type:	\$11,328.59	\$3,950.00	\$2,200.00	\$17,478.59
----------------------------------	--------------------	-------------------	-------------------	--------------------

Grand Totals by Service Type:	Nuisance Services	\$7,410.62
	Rental Services	\$1,587.00
	Snow/Ice on Sidewalks Services	\$2,121.63
	Vegetation Services	\$6,359.34

RESOLUTION NO. - 2025-0105

RESOLUTION AUTHORIZING THE ASSESSMENT OF UNPAID ABATEMENT
SERVICE FEES AND RENTAL HOUSING FEES TO PRIVATE PROPERTIES

WHEREAS, the City of Muscatine has incurred costs for
Nuisance abatements according to City Code Section 9-3-9;
Rental housing fees according to City Code Section 16-4;
Snow and ice removal services according to City Code Section 3-1-4;
Vegetation abatements according to City Code Section 16-8-9; and

WHEREAS, proper notice was given before such action according to provisions of
City Code Section 9-3-5 for nuisance abatements;
City Code Section 16-4-3 for rental housing fees;
City Code Section 3-1-4 for snow and ice removal services;
City Code Section 16-8-10 for vegetation abatements; and

WHEREAS, the City Council of the City of Muscatine is allowed to assess such costs according to
City Code Section 9-3-11 for nuisance abatements;
City Code Section 16-4-3 for rental housing fees;
City Code Section 3-1-4 for snow and ice removal services;
City Code Section 16-8-12 for vegetation abatements;

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL FOR THE CITY OF MUSCATINE, IOWA,
that the abatement service fees of the following property owner(s) be assessed to the
described properties in the amount(s) noted and reflected on the attached property tax bills.

PASSED AND APPROVED THIS 20th DAY OF March, 2025.

Brad Bark, Mayor

ATTEST:

Cinda Hilger, City Clerk



City of Muscatine

ITEM NUMBER 2025-0117

AGENDA ITEM SUMMARY

DATE: 3/20/2025

STAFF

Andrew Fangman, Assistant Community Development Director

SUBJECT

Resolution Approving the Final Plat of AUR Northland Subdivision

EXECUTIVE SUMMARY

AUR Northland LLC has submitted a combined preliminary/final plat for the AUR Northland Subdivision, a 3.26-acre, single-lot development. Site access, for the proposed modular data processing center, will be provided by an existing 33-foot access easement leading to Solomon Avenue. Despite its location in unincorporated Muscatine County, this subdivision is subject to City of Muscatine review and approval due to its proximity within the two-mile limit.

STAFF RECOMMENDATION

The Planning and Zoning Commission and staff recommend approval.

This proposed subdivision is consistent with the orderly development of the City of Muscatine and does not directly conflict with the goals of the adopted Comprehensive Plan. Being located outside city limits, the development will not require city infrastructure or services. The proposed modular data center will have a similar physical appearance and impact to the adjoining electrical substation.

BACKGROUND/DISCUSSION

AUR Northland LLC has submitted a combined preliminary/final plat for the AUR Northland Subdivision, a 3.26-acre, single-lot development with access provided from Solomon Avenue. The purpose of this subdivision is the development of a modular data processing center. The facility will utilize slab-on-grade construction and will include data processing facilities, transformers, storage containers, and a work trailer. Electrical power will be provided by the adjoining Eastern Iowa REC electrical substation. Access to the site is via an existing 33-foot access easement that connects to Solomon Avenue. While the subdivision is located in unincorporated Muscatine County, it falls within the City of Muscatine's two-mile review and approval jurisdiction.

CITY FINANCIAL IMPACT

None

ATTACHMENTS

1. AUR Northland Subdivision (County) Resoultion & Supporting Docs Templates
2. AUR Northland Subdivision Plat
3. AUR Northland Subdivsion Memo Map

AUR NORTHLAND SUBDIVISION

CERTIFICATE OF ACCEPTANCE OF FINAL PLAT

STATE OF IOWA, MUSCATINE COUNTY, ss:

We, the undersigned, Brad Bark, and Cinda Hilger, of the City of Muscatine, Iowa, do hereby certify that the attached plat named and designated **AUR Northland Subdivision** in unincorporated Muscatine County, Iowa, but within two miles of the Corporate limit of the City of Muscatine, was on March 20, 2025, filed in the office of the City Clerk and presented to the City Council of the City of Muscatine, Iowa, by resolution, a true copy of which is hereto attached, marked Exhibit A, and by this reference made a part hereof; and we, the undersigned, as Mayor and City Clerk, respectively, of the City of Muscatine, Iowa, were by said Resolution duly directed to certify such examination, consent, and approval in order to entitle said plat to be recorded in the office of the County Recorder of Muscatine County, Iowa, among the real estate records of Muscatine County, Iowa.

Dated at Muscatine, Iowa, this **20th Day of March, 2025**

Brad Bark, Mayor

Attest:

Cinda Hilger City Clerk

STATE OF IOWA, MUSCATINE COUNTY, ss:

Be it Remembered that on the **20th Day of March, 2025**, before me, a Notary Public in and for the State of Iowa, personally appeared Brad Bark and Cinda Hilger, to me personally known, who being by me each duly sworn, did say that they are Mayor and City Clerk of the City of Muscatine, Iowa, respectively, and that the seal affixed to the foregoing instrument is the seal of the City of Muscatine, Iowa; that said instrument was signed and sealed on behalf of the City of Muscatine, Iowa, in accordance with a Resolution passed by the City Council held on this **20th Day of March, 2025**; that Brad Bark and Cinda Hilger, as Mayor and City Clerk of the City of Muscatine, Iowa, respectively, severally acknowledged the execution of said instrument to be the voluntary act and deed of the City of Muscatine, Iowa, by its and them voluntarily executed.

Witness my hand and Notarial Seal the day and year last above written.

Notary Public in and for the State of Iowa

EXHIBIT A

Prepared by Andrew Fangman , 215 Sycamore Street, Muscatine, IA 52761 (563) 262-4141

RESOLUTION NO. 2025-0117

A RESOLUTION APPROVING THE FINAL PLAT OF AUR NORTHLAND SUBDIVISION

WHEREAS, there has been filed with the Planning and Zoning Commission of the City of Muscatine, Iowa, and there is now submitted to the City Council of said City, a final plat of the real estate situated within two miles the Corporate Limits of the City of Muscatine, County of Muscatine, State of Iowa, which plat lays out and subdivides a tract of real estate into 1 lots to wit:

Beginning at the Northeast Corner of the Northwest Quarter of the Southwest Quarter of 1 Section 19, Township 77 North, Range 1 West of the Fifth Principal Meridian, Muscatine County, Iowa; thence South 00°45'34" West, along the east line of said Northwest Quarter of the Southwest Quarter, basis of bearings for this survey being the Iowa Regional Coordinate System, Zone 14 Burlington, a distance of 383.67 feet; thence North 89°03'00" West 482.49 feet to a point in the east line of Lot 3 of Northland Subdivision, a subdivision survey plat recorded as File Number 1999-01836, in the Office of the Muscatine County Recorder; thence North 00°25'04" East 175.00 feet along said east line, to the Southwest Corner of Parcel "B", a plat of survey recorded as File Number 1999-08682, in the Office of the Muscatine County Recorder; thence South 88°59'23" East 208.71 feet along the south line of said parcel to the Southeast Corner; thence North 00°26'29" East 208.91 feet along the east line of said parcel to the Northeast Corner, said corner found in the north line of said Northwest Quarter of the Southwest Quarter; thence South 89°03'00" East 275.99 feet along said north line, to the Point of Beginning.

Said parcel contains 3.26 acres, more or less, and is subject to all easements and other restrictions of record.

WHEREAS, said plat has been approved by the Planning and Zoning Commission of the City of Muscatine, Iowa, and has been examined by the City Council of the City of Muscatine, Iowa; and

WHEREAS, the City Council of the City of Muscatine, Iowa, finds that the plat fully complies with the Statutes of the State of Iowa and the Ordinances of the City of Muscatine, Iowa, relative to plats, additions, and subdivisions within two miles of the Corporate Limits of the City of Muscatine, Iowa, and said plat is conducive to an orderly development of the City of Muscatine, Iowa, and not in conflict with the rights-of-way of any extension of any streets or alleys now established; and

WHEREAS, the City Council of the City of Muscatine, Iowa, finds the final plat **AUR Northland Subdivision** should be approved.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF MUSCATINE, IOWA, that said final plat named **AUR Northland Subdivision** is hereby approved and accepted by the City Council of the City of Muscatine, Iowa, and that the Mayor and City Clerk of the City of Muscatine are hereby authorized and directed to certify upon said plat the examination, consent, approval, and acceptance of the same by the City Council of the City of Muscatine, Iowa, in order that said plat may be recorded in the office of the County Recorder among the real estate records of Muscatine County, Iowa.

PASSED, APPROVED, AND ADOPTED 20th Day of March, 2025.

**BY THE CITY COUNCIL OF THE
CITY OF MUSCATINE, IOWA**

Attest:

Brad Bark, Mayor

Cinda Hilger, City Clerk

**CERTIFICATE OF THE PLANNING AND ZONING COMMISSION
OF THE CITY OF MUSCATINE, IOWA**

I, the undersigned, Andrew Fangman, do hereby certify that I am the Secretary of the Planning and Zoning Commission of the City of Muscatine, Muscatine County, Iowa, and that the attached Final Plat of **AUR Northland Subdivision** a subdivision in Muscatine County, Iowa, Iowa, was approved and recommended by said Commission on the **11th Day of March, 2025**, according to the minutes and records of said Commission in my possession.

Dated at Muscatine, Iowa, this **20th Day of March, 2025**.

Andrew Fangman, Secretary
Planning and Zoning Commission
City of Muscatine, Iowa

CERTIFICATE OF TRUE COPY

I, Nancy Lueck, Director of Finance of the City of Muscatine, Iowa, certify that attached hereto are true copies of the following:

1. Certificate of Acceptance of Final Plat (original).
2. Resolution No. 2025- 0117 approving the Final Plat of **AUR Northland Subdivision**, a subdivision in Muscatine County, Iowa.
3. Certificate of the Planning & Zoning Commission.

All related to the subdivision of real estate described in those documents, and that all were duly adopted and approved by the City Council and Mayor of the City of Muscatine, Iowa, and the originals are on file in the official records at City Hall for the City of Muscatine, Iowa.

Nancy Lueck, Director of Finance

AUR Northland Subdivision

LOT 1
MENARDS COMMERCIAL SUBDIVISION
DOCUMENT No. 2007-01033
MENARDS INC.

LOT 3
NORTHLAND SUBDIVISION
FILE No. 1999-01836
INTERSTATE POWER
& LIGHT COMPANY

MATTHEW G. ELAM
HERRY L. ELAM

SOUTHWEST CORNER
SECTION 19
T77N, R1W
RECORD TIES
FILE#: 2003-07364

County Engineer _____ Date _____

Central Iowa Power Cooperative _____ Date _____

For County Recorder Use

SE - NW
JERRY J. HENNING TRUST, 1/2 INT.
CATHY L. HENNING TRUST, 1/2 INT.
CENTER 1/4 C.
SEC
T77
RECOR

CENTER $\frac{1}{4}$ CORNER
SECTION 19
T77N, R1W
RECORD TIES
FILE#: 2000-01802
NEW TIES MADE

NE - SW
MATTHEW G. ELAM
& SHERRY L. ELAM

- N 89°26'15" W
1337.81'

SOUTH $\frac{1}{4}$ CORNER
SECTION 19
T77N, R1W
RECORD TIES
DOC#: 2012-01339

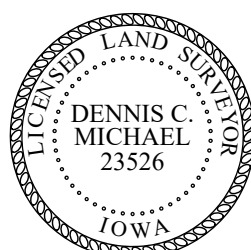
FILE NAME AUR Northland Subdivision Survey.dwg		
SCALE 100 Ft/In	DATE 2/6/2025	DRAWN BY DM
JOB 241009-2	REVISION 1/1	SHEET 1/1

SETBACKS
FRONT - 50'
SIDE - 15'
REAR - 40'

Vicinity Map

Pages or sheets covered by this seal: Sheet 1.

**BASIS OF BEARINGS
IOWA REGIONAL COORDINATE SYSTEM
ZONE 14, BURLINGTON
DATUM: NAD 83 (NA2011)
GEOID: GEOID18 (CONUS)
COMBINED SCALE FACTOR: 0.99999497**



AUR Northland Subdivision Survey FINAL

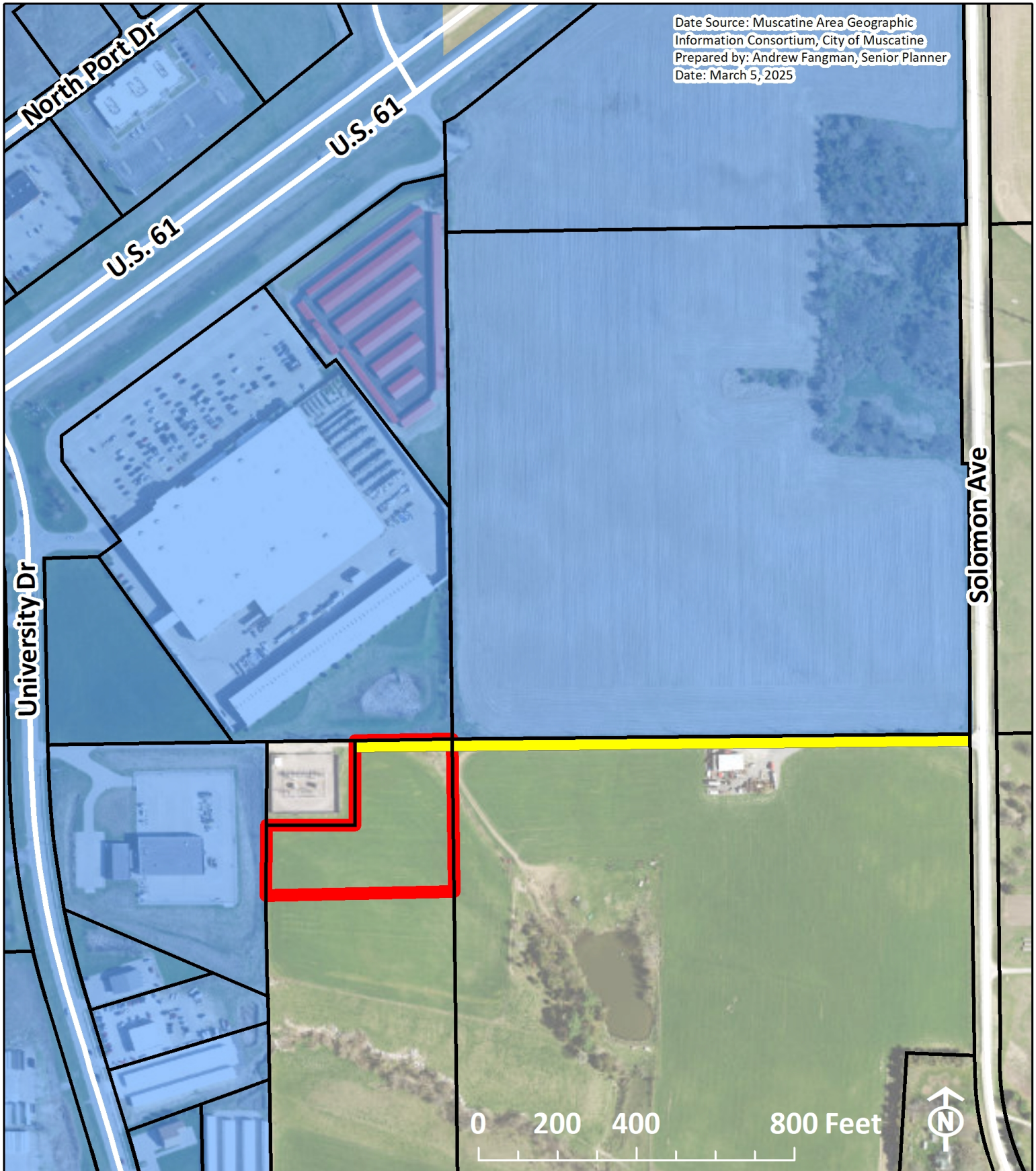
Final Audit Report

2025-02-07

Created:	2025-02-07
By:	Dennis Michael (dennis@michaelsurveyingllc.com)
Status:	Signed
Transaction ID:	CBJCHBCAABAABQSIY4H8cFI2_1PquZwWPer1moeUs3S

"AUR Northland Subdivision Survey FINAL" History

-  Document created by Dennis Michael (dennis@michaelsurveyingllc.com)
2025-02-07 - 0:03:44 AM GMT
-  Document emailed to Brian Schoer (brian.schoer@easterniowa.com) for signature
2025-02-07 - 0:03:49 AM GMT
-  Document emailed to Dan Ketchum (dan.ketchum@cipco.net) for signature
2025-02-07 - 0:03:49 AM GMT
-  Email viewed by Brian Schoer (brian.schoer@easterniowa.com)
2025-02-07 - 0:05:15 AM GMT
-  Email viewed by Dan Ketchum (dan.ketchum@cipco.net)
2025-02-07 - 2:05:35 PM GMT
-  Document e-signed by Dan Ketchum (dan.ketchum@cipco.net)
Signature Date: 2025-02-07 - 2:06:32 PM GMT - Time Source: server
-  Document e-signed by Brian Schoer (brian.schoer@easterniowa.com)
Signature Date: 2025-02-07 - 9:26:00 PM GMT - Time Source: server
-  Agreement completed.
2025-02-07 - 9:26:00 PM GMT



Date Source: Muscatine Area Geographic Information Consortium, City of Muscatine
 Prepared by: Andrew Fangman, Senior Planner
 Date: March 5, 2025



AUR Northland Subdivision



Proposed Subdivision



Existing Parcel Lines



Existing 33' Wide Access Easement



City of Muscatine



City of Muscatine

ITEM NUMBER 2025-0115

AGENDA ITEM SUMMARY

DATE: 3/20/2025

STAFF

Jon Koch, Water Pollution Control Plant Director

SUBJECT

Resolution Awarding A Contract to S&R Lawncare LLC, in the amount of \$16,500.00, for Lift Station Mowing and Lawn Care Services.

EXECUTIVE SUMMARY

Resolution Awarding A Contract to S&R Lawncare LLC, in the amount of \$16,500.00, for Lift Station Landscaping Services.

STAFF RECOMMENDATION

Staff recommends approval of this resolution.

BACKGROUND/DISCUSSION

There are 23 lift stations around town with 13 that have grass to mow as well as the Mulberry Habitat Basin. The amount spent on labor and fuel to mow these stations is over \$30,000.00 annually. It is hired out to save money and to have trained mechanics working on lift station equipment instead of mowing grass. This has improved station functionality and equipment upkeep since contracting this out for the first time in 2023. This year we are seeking a three year contract for these services. Other bids were from Kellor & Kellor for \$72,500.00 , Karsyn's Lawncare for \$17,850.00 and Grasshopper Lawncare for \$49,500.00.

CITY FINANCIAL IMPACT

This is a budgeted item.

ATTACHMENTS

1. LS Mowing Contract Resolution.250320
2. Bid Tab Sheet LS Mowing.250314

RESOLUTION 2025-0115

**APPROVING CONTRACT FOR THE
LIFT STATION MOWING AND LAWN CARE SERVICES**

WHEREAS, the City requested bids for Lift Station Mowing and Lawn Care Services and four bids were received; and

WHEREAS, the bid from S&R Lawncare LLC., in the amount of \$16,500.00 was determined to be the lowest responsible bid; and

WHEREAS, the contract has been examined by this Council;

NOW, THEREFORE, IT IS RESOLVED that:

1. The contract between the City of Muscatine, Iowa and S&R Lawncare LLC. dated the 20th day of March, 2025, in the amount of \$16,500.00 is approved
2. The insurance requirements submitted by S&R Lawncare LLC. is approved.

The original executed contract shall be placed on file in the office of the City Clerk.

PASSED, APPROVED AND ADOPTED THIS 20TH DAY OF MARCH, 2025.

Dr. Brad Bark, Mayor

ATTEST:

Cinda Hilger, City Clerk

2025-2027 Request for Proposal Lift Station Mowing Bid Tabulation: Bids were due March 14th, 10am

Bidders notified of winning bid March 14th, 2025.

Bidding Firm	Contact email	Proof of Insurance	Project Proposal \$	Additional costs/charges
Grasshopper	Grasshopper.tipton@gmail.com	Yes	\$49,500.00	
Kellor and Kellor	Akellor.kellor@machlink.com	No	\$72,500.00	
Karsyn's Lawn Care	Karsyngarrison27@gmail.com	Yes	\$17,850.00	
S&R	Lawncare.sandr@gmail.com	Yes	\$16,500.00	
Minson Ground Maint	minsongroundmaintenance@outlook.com	Yes	\$111,586.02	



City of Muscatine

ITEM NUMBER 2025-0098

AGENDA ITEM SUMMARY

DATE: 3/20/2025

STAFF

Amy Fortenbacher, Transit Supervisor
Brian Stineman, Public Works Director

SUBJECT

Resolution Setting a Public Hearing on April 17, 2025, at 6:00 pm in the City Council Chambers, for the City of Muscatine Transit (Muscabus) Annual Application for State and Federal Transit Funds Through the Consolidated Funding Application.

EXECUTIVE SUMMARY

Presented for the City Council's consideration is a resolution setting a public hearing at 6:00 PM on April 17, 2025, in the City Hall Chambers for the City of Muscatine Transit (Muscabus) annual application for State and Federal Transit funds through the Consolidated Funding Application.

STAFF RECOMMENDATION

It is the recommendation of the Public Works/Transit staff to approve the request to set a Public Hearing on April 17, 2025, for the 2026 Consolidated Funding Application.

BACKGROUND/DISCUSSION

MuscaBus applies annually to the Iowa Department of Transportation for Federal (FTA) and State (STA) funding to financially support our transit system. This funding is to assist with operating expenses and capital expenses for new bus purchases. As part of the application, the FTA requires that we conduct a Public Hearing and publish a public notice of the Public Hearing "approximately 30 days" in advance of the hearing. The hearing gives the public an opportunity to express any concerns they may have about the funding.

CITY FINANCIAL IMPACT

It is anticipated the City will receive \$539,290.00 in federal funding for the federal fiscal year 2026 (FFY26). The contract date will be July 1, 2025 to June 30, 2026. The anticipated state funding for FFY26 is \$330,367.00. The application also includes a request for one conversion van in the amount of \$111,100 (85% federally funded or \$94,435.00, 15% locally funded or

\$16,665.00) and one light duty low floor mini-bus in the amount of \$209,000.00 (85% federally funded or \$177,650.00, 15% locally funded or \$31,350.00).

ATTACHMENTS

1. Public Resolution 2026 setting public hearing
2. PUBLIC NOTICE 2026

RESOLUTION NO. 2025-0098

SET TIME AND PLACE FOR PUBLIC HEARING ON ANNUAL APPLICATION FOR STATE AND FEDERAL TRANSIT FUNDS

WHEREAS, the City Council of the City of Muscatine, Iowa has heretofore granted preliminary approval of the proposed Fiscal Year 2026 Application for State and Federal transit funds; and

WHEREAS, the proposed projects are to be paid for out of funds legally available for that purpose;

NOW, THEREFORE, be it resolved by this Council that:

SECTION I: On April 17, 2025 at 6:00 p.m. in the City Council Chambers at City Hall, Muscatine, Iowa, this Council shall hold a public hearing of the plans, specifications, form of contract, and cost estimates for these proposed projects.

SECTION II: The City Clerk shall give notice of such public hearing by publication of a notice in the Muscatine Journal. The notice shall be in the following form:

(NOTICE OF PUBLIC HEARING ATTACHED)

PASSED, APPROVED, AND ADOPTED THIS 20th DAY OF MARCH 2025.

CITY COUNCIL OF THE CITY OF MUSCATINE, IOWA

Brad Bark, Mayor

ATTEST:

Cinda Hilger, City Clerk

PUBLIC NOTICE

NOTICE OF TIME AND PLACE OF PUBLIC HEARING

ON FISCAL YEAR 2026 APPLICATION

FOR STATE TRANSIT FUNDS AND FEDERAL TRANSIT FUNDS

Public Notice is hereby given that the City Council of the City of Muscatine, Iowa, will hold a Public Hearing at Council Chambers, Muscatine City Hall, 215 Sycamore Street (ADA-accessible facility), Muscatine, Iowa on April 17, 2025 at 6:00 p.m. for the purpose of considering estimates of operating and capital financial assistance from the Federal Transit Administration (FTA section 5311) and the Iowa Department of Transportation for Iowa State Transit assistance (STA). These funds are for operating and capital assistance for the Fiscal Year 2026.

Muscatine City Transit (MuscaBus) will request funding as shown below:

Operating Funds:

State (STA State Assistance) 1.71%	\$330,367.00
------------------------------------	--------------

Federal (FTA Section 5311)	\$539,290.00
----------------------------	--------------

Statewide Federal Capital Assistance:

One Conversion Van	\$111,100.00
--------------------	--------------

(Funded at 85% or \$94,435.00)

One, LD mini-bus	\$209,000.00
------------------	--------------

(Funded at 85% or \$177,650.00)

All interested persons are invited to attend and will be given an opportunity to be heard relative to this matter. Written and telephone comments can be directed to Amy Fortenbacher, Transit Supervisor for Muscatine City Transit (MuscaBus), 1459 Washington Street, Muscatine, Iowa 52761; (563)263-8152. All comments should be received no later than 4:00 p.m. on April 17, 2025. Public Transportation (MuscaBus) is available on request, please make an appointment for transportation at least a day before the meeting time by calling (563)263-8152.

Cinda Hilger, City Clerk



City of Muscatine

ITEM NUMBER 2025-0118

AGENDA ITEM SUMMARY

DATE: 3/20/2025

STAFF

Andrew Fangman, Assistant Community Development Director

SUBJECT

Resolution Setting a Public Hearing on April 3, 2025, at 6:00 pm on an Ordinance Amending City Code to Promote Residential Infill by Relaxing Side-Yard Setback Requirements for Certain Preexisting Very Narrow Residential Parcels, by Amending Section 2, Chapter 26, Title 10, of City Code

EXECUTIVE SUMMARY

This proposed amendment addresses one challenge of redeveloping Muscatine's numerous narrow, pre-zoning residential lots, particularly those 30-feet wide, which hinder infill development due to restrictive side-yard setback requirements. To facilitate the construction of functional, economical homes on these lots, the proposed amendment would allow for reduced side-yard setbacks, ensuring a minimum buildable width of 20 feet while maintaining a minimum 5-foot setback for fire safety. This change aims to streamline infill development, support initiatives like the Muscatine Center for Social Action's housing project, the City's pattern book initiative, and revitalizing older neighborhoods by enabling the construction of new, appropriately sized homes on existing narrow parcels without requiring individual variances. Prior to action on such an amendment, a public hearing must be held. This resolution sets that public hearing during the April 3rd City Council meeting.

STAFF RECOMMENDATION

Staff recommends setting a public hearing on the proposed amendment for the April 3rd City Council meeting.

BACKGROUND/DISCUSSION

For qualifying parcels, this amendment would reduce the side-yard setback as needed to maintain a minimum buildable width of 20 feet, provided that the side-yard setback is not reduced to less than 5 feet.

For a new home to be constructed, the parcel upon which it is constructed must meet the minimum parcel size and lot frontage requirements established for the zoning district which it is located in. Any newly created residential parcel must also comply with these standards.

Muscatine adopted its first zoning ordinance in 1957. Prior to this there were no minimum lot size, or frontage requirements for new home construction or land subdivision. Approximately 59% of housing units in Muscatine were built before 1960. This means a majority of homes and the parcels that they are located on predate the implementation of any minimum lot size, frontage, or setback regulations.

Consequently, a significant number of residentially zoned parcels do not meet one or more of the, parcel size, or frontage requirements of their respective zoning districts. Over 32% of residentially zoned parcels do not meet the minimum parcel size requirements of their zoning districts, likely due to their creation before the establishment of zoning in Muscatine.

Existing zoning regulations allow for the continued residential use and potential redevelopment of parcels with existing lot size and frontage deficiencies. Section 10-26-4(A) of the City Code permits uses allowed in a zoning district, even if the parcel does not meet minimum lot size or frontage requirements. However, the manner in which setback requirements are applied makes it difficult to redevelop existing, but extremely narrow, residential parcels.

When Muscatine was originally platted, lots were typically 60 feet by 140 feet. This practice continued in numerous subdivisions and additions during Muscatine's early years. During this period of rapid growth, it was common for these 60-foot lots to be split in half, creating 30-foot-wide lots with residences built on each. As there were no regulations prohibiting this practice, hundreds of these very narrow residential parcels can be found throughout older parts of Muscatine.

Over time, many of these very narrow residential parcels have become vacant due to the destruction or demolition of the existing dwellings. These parcels are ideally located for infill development. Constructing new homes on these parcels would revitalize surrounding neighborhoods, create much-needed new housing stock cost-effectively, and require no additional investment in public infrastructure.

The smallest and most typical setback requirement among residential zoning districts is six feet. On a 30-foot-wide parcel, this results in a building envelope of only 18 feet in width. This dramatically decreases the viability and likelihood of desired residential infill development occurring on such narrow parcels.

Muscatine Center for Social Action (MCSA), has received a neighborhood revitalization grant from the Iowa Finance Authority to build six single-family owner-occupied homes on infill sites in an area centered along Mulberry Avenue between Jefferson School and 5th Street. Three of these six homes are being developed on parcels that are 30' by 140'. The first of these new homes is currently under constructed at 409 E. 6th Street. The homes being constructed here and on the other two 30-foot-wide lots share the same design, with a width of just under 20 feet. To accommodate this design, a variance was required to reduce the side yard setbacks from 6 feet to 5 feet.



Home under construction on 30' wide lot at 409 E. 6th St

Creating a functional, attractive, and economical home design on a parcel only 30 feet wide presented a significant design challenge. The extra two feet of building width, enabled by the minor reduction in side yard setbacks through these variances, was crucial for creating a functional, attractive, and economical home design.

The opportunities and challenges of infill development on 30-foot-wide parcels extend beyond the three parcels involved in the ongoing MCSA project. Currently, at least two dozen vacant residential parcels with a width of approximately 30 feet exist. Four of these are vacant City-owned surplus parcels. Additional such parcels are likely to become vacant over time. Therefore, any successful strategy for infill development must include the redevelopment of a significant number of these narrow lots.

To promote additional infill development, the City of Muscatine is currently collaborating with an architectural firm to create a pattern book of building plans. This book will include three sets of shovel-ready, complete building plans that any community member can freely use.

Recognizing the opportunities and design challenges presented by the large number of very narrow infill parcels, one of the three plan sets will be for a three-bedroom, two-bathroom house that can be built on a 30-foot-wide lot.

Similar to the MCSA projects, the pattern book design for a home on a 30-foot-wide lot will likely have a width of nearly 20 feet. Under current zoning regulations, constructing such a structure on a 30-foot-wide parcel would require a variance to reduce side yard setbacks to 5 feet. It is counterproductive to require someone seeking to construct a structure according to plans produced by the City, in furtherance of a broader community objective, to first obtain a variance.

A better approach would to make a change to City Code that allow for the desired type of infill development by right. To that end City Staff proposes that following be added as Section 10-26-2(K)

“K. Where a parcel which existed as of January 1, 2025 and has less area or frontage than herein required in the district in which it is located, a new single-family residence may nevertheless be constructed on such a parcel provided that:

- 1. A single-family residence is a permitted use in zoning district in which the parcel is located.***
- 2. Side-yard setbacks are maintained, except the buildable width cannot be reduced to less than 20 feet, except that there shall be a side yard setback five feet shall be maintained.”***

Adding this section would maximize flexibility in redeveloping existing very narrow residential parcels without substantially altering the overall zoning regulations.

The proposed amendment does not allow for the reduction of side yard setbacks to less than five feet. This is because the adopted building code requires that any exterior wall constructed within five feet of a property line must be constructed as a one-hour fire-rated wall. To achieve this rating, specific fire-resistant materials must be used, and the number of openings (windows and doors) is limited. These restrictions make it both uneconomical and a design challenge to construct closer than five feet to a property line, particularly for the type of single-family home infill development this proposed amendment aims to promote.

On February 11, 2025, the Planning and Zoning Commission voted unanimously to recommend the adoption of this code change.

Prior to action on such an amendment, a public hearing must be held. This resolution sets that public hearing during the April 3rd City Council meeting.

CITY FINANCIAL IMPACT

None

ATTACHMENTS

1. Resolution Setting a Public Hearing (1)
2. Public Notice (1)

RESOLUTION NO. 2025-0118

RESOLUTION SETTING THE TIME AND PLACE OF PUBLIC HEARING ON AN ORDINANCE AMENDING CITY CODE TO PROMOTE RESIDENTIAL INFILL BY RELAXING SIDE-YARD SETBACK REQUIREMENTS FOR CERTAIN PREEXISTING VERY NARROW RESIDENTIAL PARCELS, BY AMENDING SECTION 2, CHAPTER 26, TITLE 10, OF CITY CODE

WHEREAS, or a new home to be constructed, the parcel upon which it is constructed must meet the minimum parcel size and lot frontage requirements established for the zoning district which it is located in. Any newly created residential parcel must also comply with these standards;

WHEREAS, Muscatine adopted its first zoning ordinance in 1957. Prior to this there were no minimum lot size, or frontage requirements for new home construction or land subdivision. Approximately 59% of housing units in Muscatine were built before 1960. Consequently, a significant number of residentially zoned parcels do not meet one or more of the, parcel size, or frontage requirements of their respective zoning districts. Over 32% of residentially zoned parcels do not meet the minimum parcel size requirements of their zoning districts, likely due to their creation before the establishment of zoning in Muscatine;

WHEREAS, The manner in which setback requirements are applied makes it difficult to redevelop existing, but extremely narrow, residential parcels;

WHEREAS, When Muscatine was originally platted, lots were typically 60 feet by 140 feet and it was common for these 60-foot lots to be split in half, creating 30-foot-wide lots with residences built on each. Over time, many of these very narrow residential parcels have become vacant due to the destruction or demolition of the existing dwellings;

WHEREAS, Such parcels are ideally located for infill development. Constructing new homes on these parcels would revitalize surrounding neighborhoods, create much-needed new housing stock cost-effectively, and require no additional investment in public infrastructure;

WHEREAS, The smallest and most typical setback requirement among residential zoning districts is six feet. On a 30-foot-wide parcel, this results in a building envelope of only 18 feet in width. Creating a functional, attractive, and economical home design on a parcel only 30 feet wide presented a significant design challenge. An extra two feet of building width, enabled by the minor reduction in side yard setbacks is very crucial for creating a functional, attractive, and economical home design on such lots ;

WHEREAS, To facilitate the construction of functional, economical homes on these lots, the proposed amendment would reduce the side-yard setback as needed to maintain a minimum buildable width of 20 feet, provided that the side-yard setback is not reduced to less than 5 feet;

WHEREAS, the Planning and Zoning Commission on February 11th did vote to recommend approval of an amendment; and

WHEREAS, a public hearing must be held prior any City Council action on such an amendment to City Code.

NOW, THEREFORE, BE IT RESOLVED, by the City Council for the City of Muscatine, that a Public Hearing is hereby established to review to allow the public to comments on the proposed ordinance amending Title 10 of the City Code of Muscatine. Said hearing to be conducted at 6:00 P.M. on Thursday, April 3, 2025, in the City Hall Council Chambers.

PASSED, APPROVED, AND ADOPTED by the City Council for the City of Muscatine, Iowa, on this, the 20th day of March 2025.

Dr. Brad Bark, Mayor

ATTEST:

Cinda Hilger, City Clerk

PUBLIC NOTICE
NOTICE OF TIME AND PLACE OF PUBLIC HEARING
ON ORDINANCE AMENDING CITY CODE TO PROMOTE RESIDENTIAL
INFILL BY RELAXING SIDE-YARD SETBACK REQUIREMENTS FOR
CERTAIN PREEXISTING VERY NARROW RESIDENTIAL PARCELS, BY
AMENDING SECTION 2, CHAPTER 26, TITLE 10, OF CITY CODE

This proposed amendment addresses the challenge of redeveloping Muscatine's numerous narrow, pre-zoning residential lots, particularly those 30-feet wide, which hinder infill development due to restrictive side-yard setback requirements. To facilitate the construction of functional, economical homes on these lots, the proposed amendment would allow for reduced side-yard setbacks, ensuring a minimum buildable width of 20 feet while maintaining a minimum 5-foot setback for fire safety. This change aims to streamline infill development, support initiatives like the Muscatine Center for Social Action's housing project and the city's pattern book initiative, and revitalize older neighborhoods by enabling the construction of new, appropriately sized homes on existing narrow parcels without requiring individual variances.

Notice is further given that the City council of the City of Muscatine, Iowa, will conduct a public hearing on said proposed change to City Code on Thursday, April 3, 2025, at 6:00 p.m. in the City Hall Council Chambers, 215 Sycamore St. Muscatine, Iowa, at which time all interested parties are invited to comment. The hearing will be held during the regular Muscatine City Council meeting

Following such hearing, the Muscatine City Council may take action on said proposal without further notice or opportunity for hearing. If you are a person requiring a special accommodation for a disability or language barrier, please contact the City at 563-262-4141 at least three (3) business days in advance of the meeting date.

Cinda Hilger, City Clerk



City of Muscatine

ITEM NUMBER 2025-0119

AGENDA ITEM SUMMARY

DATE: 3/20/2025

STAFF

Andrew Fangman, Assistant Community Development Director

SUBJECT

Resolution Setting a Public Hearing on April 3, 2025, at 6:00 pm on an Ordinance to the City Building Code that Would Remove the Need for the Submission of Engineered Plans for Post-Framed Buildings that are Less 1,440 Square Feet in Size, by Amending Section 4, Chapter 1, Title 8, And Section 2, Chapter 10, Title 8 Of City Code

EXECUTIVE SUMMARY

Existing building codes lack specific provisions for directly approving post-frame buildings. Therefore, post-frame construction typically requires approval as an alternate method to ensure safety and durability. For post frame buildings exceeding 1,000 square feet, plans must be signed off by an engineer.

The Construction Appeals and Advisory Board recommends approving an amendment that would exempt post-frame buildings under 1,440 square feet from the requirement of submitting engineered plans.

Prior to action on such an amendment, a public hearing must be held. This resolution sets that public hearing during the April 3rd City Council meeting.

STAFF RECOMMENDATION

Staff recommends setting a public hearing on the proposed amendment for the April 3rd City Council meeting.

BACKGROUND/DISCUSSION

Post-frame buildings are a type of structure that uses large, vertical posts, that are embedded in the ground or anchored to concrete piers, as the primary support structure for the roof and walls. This construction method differs significantly from traditional stick-framed structures which are constructed on continuous foundations. This approach to construction is known for being economical and easy to assemble quickly, making it popular for detached garages and other storage type uses.

While adopted building codes allow for post-frame buildings, they lack specific, prescriptive provisions, unlike those for more traditional construction methods. Prescriptive provisions outline exact requirements for materials, dimensions, and construction methods to ensure compliance with performance requirements (e.g., strength, stability, fire resistance). When a building code lacks prescriptive provisions for a construction type, it's classified as an "alternate method of construction." In such cases, the building design must demonstrate compliance with performance requirements through engineering calculations and analysis, when the size and scope of a post-frame building fails to meet any one the following criteria:

- no larger than 1,000 square feet in floor area, and
- has posts spaced no more than 8 feet on center, and
- has a sidewall height of 12 feet or less.

Currently, obtaining a building permit for any post-frame building exceeding these criteria requires plans signed off by an engineer to ensure compliance with all applicable performance provisions. The requirement for engineered plans can add significant cost to constructing such a post-frame building.

The Construction Appeal Advisory Board and City Staff are recommending that City Code be amended to increase the allowed floor area to 1,440 square feet, before requiring engineered plans, provided the post spacing does not exceed 8 feet on center and the sidewall height remains below 12 feet.

Zoning regulations establish a maximum size limit of 1,440 square feet for garages and accessory buildings on residential parcels less than 20,000 square feet (approximately ½ acre). Raising the maximum size for post-frame buildings that can be built without engineering to match this limit would mean that nearly all allowable detached residential garages and accessory buildings could be constructed as post-frame structures without the submission of engineered plans. Maintaining requirements for such non-engineered post-frame structures, such as a maximum post spacing of 8 feet on center and a sidewall height of 12 feet, ensures that these structures remain relatively low-risk and low-hazard.

Attached is the code language that if inserted, would make this change.

Prior to taking action on such an amendment, a public hearing must be held. This resolution sets that public hearing during the April 3rd City Council meeting.

CITY FINANCIAL IMPACT

None.

ATTACHMENTS

1. Post Frame Building Amendment Text
2. Resolution Setting a Public Hearing

3. Public Notice (10)

8-1-4(E)

E. Post Frame Buildings

Post frame buildings satisfying all of the following requirements are exempt from the engineering certification of plans:

1. Floor area of 1,440 square feet or less.
2. Eave height of 12 feet or less.
3. Post spacing of 8 feet or less

8-10-2(F)

F. Post Frame Buildings

Post frame buildings satisfying all of the following requirements are exempt from the engineering certification of plans:

1. Floor area of 1,440 square feet or less.
2. Eave height of 12 feet or less.
3. Post spacing of 8 feet or less

RESOLUTION NO. _____

RESOLUTION SETTING THE TIME AND PLACE OF PUBLIC HEARING ON AN ORDINANCE AMENDING THE CITY BUILDING CODE THAT WOULD REMOVE THE NEED FOR THE SUBMISSION OF ENGINEERED PLANS FOR POST FRAMED BUILDINGS THAT ARE LESS 1,440 SQ. FT. IN SIZE, BY AMENDING SECTION 4, CHAPTER 1, TITLE 8, AND SECTION 2, CHAPTER 10, TITLE 8 OF CITY CODE

WHEREAS, Post-frame buildings are a type of structure that uses large, vertical posts, that are embedded in the ground or anchored to concrete piers, as the primary support structure for the roof and walls;

WHEREAS, When a building code lacks prescriptive provisions for a construction type, it's classified as an "alternate method of construction." In such cases, the building design must demonstrate compliance with performance requirements through engineering calculations and analysis, when the size and scope of a post frame building exceeds any one the following criteria: it is no larger than 1000 sq. feet in floor area, has posts spaced no more than 8 feet on center, and has a sidewall height of 12 feet or less;

WHEREAS, Currently, obtaining a building permit for any post-frame building exceeding these criteria requires plans signed off by an engineer to ensure compliance with all applicable performance provisions. The requirement for engineered plans can add significant cost to constructing such a post-frame building;

WHEREAS, The Construction Appeal Advisory Board is recommending that City Code be amended to increase the allowed floor area to 1,440 square feet, before requiring engineered plans, provided the post spacing does not exceed 8 feet on center and the sidewall height remains below 12 feet;

WHEREAS, Zoning regulations establish a maximum size limit of 1,440 square feet for garages and accessory buildings on residential parcels less than 20,000 square feet (approximately ½ acre). Raising the maximum size for post-frame buildings that can be built without engineering to match this limit would mean that nearly all allowable detached residential garages and accessory buildings could be constructed as post-frame structures without the submission of engineered plans. Maintaining requirements for such non-engineered post-frame structures, such as a maximum post spacing of 8 feet on center and a sidewall height of 12 feet, ensures that these structures remain relatively low-risk and low-hazard and;

WHEREAS, a public hearing must be held prior any City Council action on such an amendment to City Code.

NOW, THEREFORE, BE IT RESOLVED, by the City Council for the City of Muscatine, that a Public Hearing is hereby established to review to allow the public to comments on the proposed ordinance amending Title 10 of the City Code of Muscatine. Said hearing to be conducted at 6:00 P.M. on Thursday, April 3, 2025, in the City Hall Council Chambers.

PASSED, APPROVED, AND ADOPTED by the City Council for the City of Muscatine, Iowa, on this, the 20th day of March 2025.

Dr. Brad Bark, Mayor

ATTEST:

Cinda Hilger, City Clerk

PUBLIC NOTICE

ORDINANCE AMENDING THE CITY BUILDING CODE THAT WOULD REMOVE THE NEED FOR THE SUBMISSION OF ENGINEERED PLANS FOR POST FRAMED BUILDINGS THAT ARE LESS 1,440 SQ. FT. IN SIZE, BY AMENDING SECTION 4, CHAPTER 1, TITLE 8, AND SECTION 2, CHAPTER 10, TITLE 8 OF CITY CODE

Existing building code lack specific provisions for directly approving post-frame buildings. In such cases, the building design must demonstrate compliance with performance requirements through engineering calculations and analysis, when the size and scope of a post frame building exceeds any one the following criteria: it is no larger than 1000 sq. feet in floor area, has posts spaced no more than 8 feet on center, and has a sidewall height of 12 feet or less. The proposed amendment would increase the allowed floor area to 1,440 square feet, before requiring engineered plans, provided the post spacing does not exceed 8 feet on center and the sidewall height remains below 12 feet,

Notice is further given that the City council of the City of Muscatine, Iowa, will conduct a public hearing on said proposed change to City Code on Thursday, April 3, 2025, at 6:00 p.m. in the City Hall Council Chambers, 215 Sycamore St. Muscatine, Iowa, at which time all interested parties are invited to comment. The hearing will be held during the regular Muscatine City Council meeting

Following such hearing, the Muscatine City Council may take action on said proposal without further notice or opportunity for hearing. If you are a person requiring a special accommodation for a disability or language barrier, please contact the City at 563-262-4141 at least three (3) business days in advance of the meeting date.

Cinda Hilger, City Clerk



City of Muscatine

ITEM NUMBER 2025-0106

AGENDA ITEM SUMMARY

DATE: 3/20/2025

STAFF

Blake Allington, Program Supervisor
Richard Klimes, Parks and Recreation Director

SUBJECT

Resolution Setting A Public Hearing on April 3, 2025, at 6:00 pm for the Purpose of Hearing Community Comments Regarding the Sale and Consumption of Alcoholic Beverages at the new MUSCO Sports Center.

EXECUTIVE SUMMARY

Presented for the City Council's consideration is a request to approve setting a public hearing to hear public comments regarding the sale and consumption of alcohol at the MUSCO Sports Center.

STAFF RECOMMENDATION

Staff recommends setting the public hearing.

BACKGROUND/DISCUSSION

The City Code Section 3-5-10(N) identifies the specific municipal parks and recreational facilities where the possession and consumption of alcoholic beverages, including beer, is lawful to be sold and consumed on public property. The new Musco Sports Center, a 122,056-square-foot multi-sports indoor recreational facility, is being constructed by the City of Muscatine at 500 South Houser Street. Allowing the sale and consumption of alcoholic beverages at the Musco Sports Center concession stand aligns with the expected service level and is consistent with practices at comparable regional facilities. The Parks and Recreation Advisory Commission is supportive of the sale of alcohol at the Musco Sports Center. Currently, alcohol is allowed to be sold and consumed at the municipal golf course and on certain areas of the Muscatine Riverfront by permit only.

CITY FINANCIAL IMPACT

The concession stand at the MUSCO Sports Center will be operated by a privately contracted vendor. The vendor will be responsible for the sales, inventory and all applicable permits and insurance requirements. The City will receive a percentage of the gross sales which will be determined once a vendor is procured.

ATTACHMENTS

1. Alcohol at Dome Resolution Setting Public Hearing
2. Public Notice Alcohol at Dome

RESOLUTION NO. 2025-0106

**RESOLUTION SETTING THE TIME AND PLACE OF PUBLIC HEARING ON
ORDINANCE ALLOWING FOR POSSESSION, CONSUMPTION, AND SALE OF
ALCOHOL AT THE MUSCO SPORTS CENTER, SUBSECTION N, SECTION 10 –
OTHER REGULATIONS, CHAPTER 5 – PUBLIC PARKS, OF TITLE 3 – PUBLIC
WAYS AND PROPERTY OF CITY CODE**

WHEREAS, City Code Section 3-5-10(N) identifies the specific municipal parks and recreational facilities where the possession and consumption of alcoholic beverages, including beer, is lawful;

WHEREAS, the Musco Sports Center, a 122,056 square-foot multi-sports indoor recreational facility, is being constructed by the City of Muscatine at 500 South Houser Street;

WHEREAS, allowing the sale and consumption of alcoholic beverages at the Musco Sports Center's concession stands aligns with the expected service level and is consistent with practices at comparable regional facilities; and

WHEREAS, the Parks and Recreation Commission is supportive of the sale of alcohol at the Musco Sports Center; and

WHEREAS, a public hearing must be held prior any City Council action on such an amendment to City Code.

NOW, THEREFORE, BE IT RESOLVED, by the City Council for the City of Muscatine, that a Public Hearing is hereby established to review to allow the public to comments on the proposed ordinance amending Subsection N, Section 10, Chapter 5, Title 3 of the City Code of Muscatine. Said hearing to be conducted at 6:00 P.M. on Thursday, April 3, 2025, in the City Hall Council Chambers.

PASSED, APPROVED, AND ADOPTED by the City Council for the City of Muscatine, Iowa, on this, the 20th day of March 2025.

Dr. Brad Bark, Mayor

ATTEST:

Cinda Hilger, City Clerk

PUBLIC NOTICE

RESOLUTION SETTING THE TIME AND PLACE OF PUBLIC HEARING ON ORDINANCE ALLOWING FOR POSSESSION, CONSUMPTION, AND SALE OF ALCOHOL AT THE MUSCO SPORTS CENTER, SUBSECTION N, SECTION 10 – OTHER REGULATIONS, CHAPTER 5 – PUBLIC PARKS, OF TITLE 3 – PUBLIC WAYS AND PROPERTY OF CITY CODE

City Code Section 3-5-10(N) identifies the specific municipal parks and recreational facilities where the possession and consumption of alcoholic beverages, including beer, is lawful. The Musco Sports Center, a 122,056 square-foot multi-sports indoor recreational facility, is being constructed by the City of Muscatine at 500 South Houser Street. Allowing the sale and consumption of alcoholic beverages at the Musco Sports Center's concession stands aligns with the expected service level and is consistent with practices at comparable regional facilities. The Parks and Recreation Commission is supportive of the sale of alcohol at the Musco Sports Center.

Notice is further given that the City council of the City of Muscatine, Iowa, will conduct a public hearing on said changes to City Code on Thursday, April 3, 2025, at 6:00 p.m. in the City Hall Council Chambers, at which time all interested parties are invited to comment. Following such hearing, the Muscatine City Council may take action on said proposal without further notice or opportunity for hearing. If you are a person requiring a special accommodation for a disability or language barrier, please contact the City at 563-262-4141 at least three (3) business days in advance of the meeting date.

Cinda Hilger, City Clerk



City of Muscatine

ITEM NUMBER 2025-0120

AGENDA ITEM SUMMARY

DATE: 3/20/2025

STAFF

Jodi Royal-Goodwin, Community Development Director

SUBJECT

Resolution Setting a Public Hearing on April 3, 2025, at 6:00 pm on the Status of the Community Development Block Grant Funded Downtown Revitalization Project

EXECUTIVE SUMMARY

Presented for Council's consideration is a resolution setting a public hearing for April 3, 2025, at 6:00 pm, to review the status of activities funded by the Iowa Economic Development Authority with Community Development Grant funds. The public hearing will include a presentation on the status of the Downtown Revitalization Project, which is a construction project to improve 9 commercial properties located in the 200 block of east 2nd Street.

STAFF RECOMMENDATION

Staff recommends Council adopt the attached resolution.

BACKGROUND/DISCUSSION

City Council approved accepting a grant from IEDA in March 2023 for a Downtown Revitalization Project to improve commercial properties located in the 200 block of east 2nd Street. The grant is funded with Community Development Block Grant funds and, in accordance with Section 508 of the Housing and Community Development Act of 1987, requires two public hearings. The first hearing is on activities proposed in the application and a second hearing on the status of funded activities midway through project implementation.

This second public hearing must include a review of:

- a. A general description of accomplishments to date;
- b. A summary of the funding for the proposed activity and source of funds;
- c. A summary of the total funds spent thus far;
- d. A general description of the remaining work to be done;
- e. The location of the activities; and

- f. A general description of changes made to the project budget, performance targets, activity schedules, project scope, location objectives or beneficiaries.

All of these conditions will be discussed in a brief presentation to be provided during the public hearing on April 3.

CITY FINANCIAL IMPACT

There is no impact to the general fund of adopting this resolution. Failure to conduct the public hearing may result in the withholding of grant funds.

ATTACHMENTS

1. SOFA Hearing Notice
2. Resolution Public Hearing SOFA

NOTICE OF PUBLIC HEARING ON THE STATUS OF FUNDED ACTIVITIES FOR THE CITY OF MUSCATINE
COMMUNITY DEVELOPMENT BLOCK GRANT (CDBG) DOWNTOWN REVITALIZATION PROJECT (23-DTR-
001)

Pursuant to the requirements of Section 508 of the Housing and Community Development Act of 1987, as amended, the Muscatine City Council will hold a public hearing on April 3, 2025 at 6:00 pm at Muscatine City Hall, 215 Sycamore Street, Muscatine. The purpose of the hearing will be to discuss the status of funding for the City of Muscatine's CDBG Downtown Revitalization Project improving commercial facades on the 200 block of East 2nd Street. The project is being funded in part through a Community Development Block Grant provided by the Iowa Economic Development Authority and matching funds from building owners and the City. If you have questions concerning the project or if you require special accommodations to attend the hearing, such as handicapped accessibility or translation services, you may contact Jodi Royal-Goodwin at 563-262-4141. Persons interested in the status of funding or the progress of the project are welcome to attend this meeting.

RESOLUTION NO. 2025-0120

**A RESOLUTION TO SET PUBLIC HEARING ON THE STATUS OF COMMUNITY DEVELOPMENT
BLOCK GRANT (CDBG) FUNDED ACTIVITIES
FOR THE DOWNTOWN REVITALIZATION PROJECT**

WHEREAS, the City of Muscatine received CDBG funds through the Iowa Economic Development Authority's (IEDA) Downtown Revitalization Program; and

WHEREAS, IEDA requires grantees to hold a hearing on the status of funded activities midway through the funded project; and

WHEREAS, a the City must publish notice of the required public hearing not more than 20 nor less than 4 days prior to the date of the public hearing.

NOW, THEREFORE, BE IT RESOLVED that the Muscatine City Council hereby sets a public hearing for Thursday, April 3, 2025, at 6:00 p.m., to review the progress on the project, funds expended and changes in the overall project.

PASSED, APPROVED AND ADOPTED this 20th day of March 2025.

DR. BRAD BARK, MAYOR
CITY OF MUSCATINE, IOWA

CINDA HILGER, CITY CLERK



City of Muscatine

ITEM NUMBER 2025-0104

AGENDA ITEM SUMMARY

DATE: 3/20/2025

STAFF

Jodi Royal-Goodwin, Community Development Director
Nancy Lueck, Finance Director

SUBJECT

Resolution Setting a Public Hearing on April 17, 2025, at 6:00 pm for the Receipt and Approval of Proposals for the Disposal and Development of Certain City-owned Real Property in the Consolidated Muscatine Urban Renewal Area

EXECUTIVE SUMMARY

Presented for Council's consideration is a resolution setting a public hearing for April 17, 2025, on the receipt and approval of proposals for the disposal and development of certain City-owned real property in the Consolidated Muscatine Urban Renewal Area.

Amy Bjork of Dorsey & Whitney, the City's bond attorney, has advised the City that there are specific legal requirements for disposal of property in the Urban Renewal Area. These are in Section 403.8.1 of the Code of Iowa, which provide for the process for the disposition of the property. These steps are detailed in the Background/Discussion section below and include (1) advertising for additional proposals for the property, (2) making an information packet (the "Development Proposal Packet") detailing the development and use objectives for the development of the Project on the Property and the expectations to be placed upon the developer, and (3) setting and holding a public hearing on the proposal to sell the Property as set forth in Section 2 of the Resolution. This resolution will set the required public hearing for April 17, 2025. After the public hearing, the City can proceed with the sale and disposal of this property.

STAFF RECOMMENDATION

Staff recommends Council adopt the resolution as presented.

BACKGROUND/DISCUSSION

Identification of BTS as the Preferred Developer of The Hawkeye Site

At the May 16, 2024 meeting, the City Council selected BTS as the preferred developer for 910 E 2nd Street ("The Hawkeye Site") and directed staff to negotiate a development agreement that would provide appropriate financial incentives, including an annual appropriation of

incremental property tax payments. A development agreement has been negotiated and will be considered by Council following the required public hearing. Appropriate steps must also be taken to facilitate the transfer and sale of this property to Lumber Lofts, LLC, the entity created by BTS for the development of the site.

The City assumed control of the site in 2004. Located on the banks of the Mississippi River at the mouth of Mad Creek, the site was previously used as a lumberyard for over 100 years before it was acquired by the City and today is used to dewater the dredge spoils from harbor dredging operations. The Hawkeye Site is the entrance to Muscatine on Highway 92 from Illinois and into our downtown from the east. Unfortunately, the dewatering operations do not leave it in the most welcoming state.

The Hawkeye Site's unique combination of size, riverfront location, and proximity to downtown and major employment centers, creates the potential for significantly more beneficial use of this site. The site is also within the area identified for Workforce Housing Tax Credits preference points as a result of the City being Designated an Iowa Thriving Community.

Council subsequently approved actions necessary to make the site development ready, including approving an engineering contract to evaluate the feasibility of relocating the dewatering operation (September 14, 2023) and hiring a survey firm to prepare documents required to pursue a conditional letter of map revision (CLOMR) from the Federal Emergency Management Agency (FEMA) to confirm the placement of fill on the site would allow for its removal from the floodplain (April 4, 2024).

Subsequently, staff prepared and released a request for proposals (RFP) for the redevelopment of the site. The was published on the City's website and sent directly to 53 individuals representing developers in the region. A non-mandatory pre-proposal meeting was held April 25, with 4 developers in attendance. However, only 1 response was received.

At the May 16 meeting, Council approved BTS as the preferred developer of the site. The proposed development is a \$11.55 million mixed-use building that will include 65 market rate apartments and limited ground floor commercial space. BTS has been awarded Workforce and Redevelopment tax credits from the State of Iowa, and anticipates beginning construction in June 2025 and to be completed within 12 months. BTS has created Lumber Lofts, LLC to be the developer and owner of this project.

The proposed project will support Council's goal to create attractive entryways into the City and provide workforce housing to support a vibrant community.

NEXT STEPS

The next step is to facilitate the transfer and sale of this property to Lumber Lofts, LLC. Amy Bjork of Dorsey & Whitney, the City's bond attorney, has advised the City that there are specific legal requirements for disposal of property in the Urban Renewal Area. These requirements are as follows: In accordance with the provisions of Section 403.8.1 of the Code of Iowa, the City

Council hereby prescribes the following process for the disposition of the Property:

1. The City Council will advertise for additional proposals for the acquisition and use of the Property in a newspaper of general circulation in the City at least once not less than twenty-one (21) days in advance of the date on which the proposals shall be due. In addition, the City shall advertise for proposals by posting the advertisement at City Hall and through available electronic means as soon as may be practical.
2. The City Council will make an information packet (the “Development Proposal Packet”) detailing the development and use objectives for the development of the Project on the Property and the expectations to be placed upon the developer of the Property available in the Office of the City Clerk. Proposals shall be due by no later than 10:00 a.m. on April 17, 2025, at the office of the City Clerk at City Hall, Muscatine, Iowa. Each proposal submitted shall set forth the proposed plan for developing the Project on the Property in accordance with the Development Proposal Packet.
3. A public hearing will be held on the proposal to sell the Property as set forth in Section 2 of this Resolution. Following the public hearing, the City Council may determine to dispose of the Property to the purchaser whose proposal, if carried out, would be in the best interests of the City in light of the urban renewal and development objectives of the City as set forth in the Development Proposal Packet. While the above process is mandated by the State Code, the public hearing notice and the resolution specifically include language that it is the City’s intent to proceed with the proposal for the development of the project on the property submitted by BTS and the sale of the property to BTS doing business as Lumber Lofts, LLC. This resolution will set the public hearing for April 17, 2025. After the public hearing, the City can proceed with the sale and transfer of this property.

CITY FINANCIAL IMPACT

There is no financial impact of adopting the resolution.

ATTACHMENTS

1. Set Date UR Disposition of Property (Muscatine-77 2025)-v2
2. Development Proposal Packet (Muscatine #77 2025)-v1

MINUTES TO SET DATE FOR HEARING
ON, AND ACCEPTANCE OF,
PROPOSALS FOR DISPOSITION OF
REAL PROPERTY

421464-77 (N/I)

Muscatine, Iowa

March 20, 2025

The City Council of the City of Muscatine, Iowa, met on March 20, 2025, at 6:00 p.m., at the City Hall, Council Chambers, in the City. The Mayor presided and the roll was called showing the following members of the Council present and absent:

Present: _____

Absent: _____.

Council Member _____ introduced a resolution hereinafter next set out and moved its adoption, seconded by Council Member _____; and after due consideration thereof by the Council, the Mayor put the question upon the adoption of the said resolution and the roll being called, the following named Council Members voted:

Ayes: _____

Nays: _____.

Whereupon, the Mayor declared the resolution duly adopted as follows:

RESOLUTION NO. 2025-0104

Resolution Fixing a Date of Meeting for Public Hearing on the Receipt and Approval of Proposals for the Disposal and Development of Certain City-owned Real Property in the Consolidated Muscatine Urban Renewal Area

WHEREAS, the City of Muscatine, Iowa (the “City”) has previously established the Consolidated Muscatine Urban Renewal Area (the “Urban Renewal Area”); and

WHEREAS, one of the City’s objectives is to promote the construction of a mixed-use building including commercial units and residential units (the “Project”) in the Urban Renewal Area; and

WHEREAS, the City is the owner of certain real property (the “Property”) situated in the in the Urban Renewal Area and more particularly described as:

BLOCK 20, IN THE CITY OF MUSCATINE, IN MUSCATINE COUNTY, IOWA, EXCEPT PARTS CONVEYED TO STATE OF IOWA BY WARRANTY DEEDS RECORDED IN BOOK 206 OF LOTS, PAGE 567 AND IN BOOK 252 OF LOTS, PAGE 160; AND EXCEPT PART CONVEYED TO CITY OF MUSCATINE, IOWA, BY SPECIAL WARRANTY DEED RECORDED IN BOOK 226 IF LOTS, PAGE 600; SUBJECT TO EASEMENT TO STATE OF IOWA RECORDED IN BOOK 252 OF LOTS, PAGE 163; AND SUBJECT OT EASEMENTS OF CITY OF MUSCATINE, IOWA RECORDED IN BOOK 151 OF LOTS, PAGE 210; IN BOOK 203 OF LOTS, PAGE 575, IN BOOK 209 OF LOTS, PAGE 584; AND IN BOOK 277 OF LOTS, PAGE 1068 AS SHOWN BY CONDEMNATION PROCEEDINGS; ALL REFERENCES BEING TO THE REAL ESTATE RECORDS OF MUSCATINE COUNTY, IOWA.

WHEREAS, the City intends to convey the Property to a purchaser under conditions that will further the City’s objective for the development of the Project in the Urban Renewal Area; and

WHEREAS, the City has received a proposal from Lumber Lofts, LLC (the “Company”), which includes the acquisition of the Property and undertaking the development and construction of the Project thereon; and

WHEREAS, it is now necessary to make provision for the disposition of the Property, in accordance with the provisions of Sections 364.7 and 403.8 of the Code of Iowa, to a developer who can carry out the Project thereon;

NOW, THEREFORE, IT IS RESOLVED by the City Council of the City of Muscatine, Iowa, as follows:

Section 1. In accordance with the provisions of Section 403.8.1 of the Code of Iowa, the City Council hereby prescribes the following process for the disposition of the Property:

A. The City Council will advertise for additional proposals for the acquisition and use of the Property in a newspaper of general circulation in the City at least once not less than twenty-one (21) days in advance of the date on which the proposals shall be

due. In addition, the City shall advertise for proposals by posting the advertisement at City Hall and through available electronic means as soon as may be practical.

B. The City Council will make an information packet (the “Development Proposal Packet”) detailing the development and use objectives for the development of the Project on the Property and the expectations to be placed upon the developer of the Property available in the Office of the City Clerk. Proposals shall be due by no later than 10:00 a.m. on April 17, 2025, at the office of the City Clerk at City Hall, Muscatine, Iowa. Each proposal submitted shall set forth the proposed plan for developing the Project on the Property in accordance with the Development Proposal Packet.

C. A public hearing will be held on the proposal to sell the Property as set forth in Section 2 of this Resolution. Following the public hearing, the City Council may determine to dispose of the Property to the purchaser whose proposal, if carried out, would be in the best interests of the City in light of the urban renewal and development objectives of the City as set forth in the Development Proposal Packet.

Section 2. The City Council will hold a public hearing on the proposal to sell the Property as set out in the preamble hereof at 6:00 p.m., on April 17, 2025, at the City Hall Council Chambers in the City. Following the public hearing the City Council may accept the proposal deemed to be in the best interests of the City and proceed with the disposition of the Property.

Section 3. The City Clerk is hereby authorized and directed to give notice of this resolution and of the public hearing on the proposal to sell the Property, by publication, at least once, not less than twenty-one (21) days prior to the date set for acceptance of proposals, in a newspaper of general circulation in the City. Furthermore, the City Clerk is hereby authorized and directed to give notice by posting notice in City Hall and by such reasonable electronic means as may be available to the City as soon as practical following the adoption of this resolution. Such notice shall be substantially in the form which is attached to this resolution.

Section 4. The City Council hereby declares that a proposal for the development of the Property has been received from the Company, and unless a subsequent proposal is submitted which better represents the best interests of the City with respect to the development of the Project on the Property as set forth in the Development Proposal Packet, this proposal shall be approved and finally accepted by the City Council on April 17, 2025, and the Property shall be subsequently disposed of in accordance therewith. The City Council further declares that this Resolution constitutes the notification of intent to accept proposal as provided for in Section 403.8 of the Code of Iowa. The City reserves the right to consider the legal and financial ability of developers submitting proposals to carry out the desired development of the Property. Furthermore, the City reserves the right to negotiate for proposals with respect to the desired development of the Property.

Section 5. All resolutions or parts thereof which are in conflict herewith are hereby repealed.

Passed and approved March 20, 2025.

Mayor

Attest:

City Clerk

• • • •

On motion and vote, the meeting adjourned.

Mayor

Attest:

City Clerk

**NOTICE OF PUBLIC HEARING AND REQUEST FOR
PROPOSALS TO DISPOSE OF AND DEVELOP PROPERTY**

The City Council of the City of Muscatine, Iowa, will meet on April 17, 2025, at the City Hall, in the City, at 6:00 p.m., for the purpose of conducting a public hearing on the proposal to dispose of certain real property (the “Property”) situated in the Consolidated Muscatine Urban Renewal Area and described as follows:

BLOCK 20, IN THE CITY OF MUSCATINE, IN MUSCATINE COUNTY, IOWA, EXCEPT PARTS CONVEYED TO STATE OF IOWA BY WARRANTY DEEDS RECORDED IN BOOK 206 OF LOTS, PAGE 567 AND IN BOOK 252 OF LOTS, PAGE 160; AND EXCEPT PART CONVEYED TO CITY OF MUSCATINE, IOWA, BY SPECIAL WARRANTY DEED RECORDED IN BOOK 226 IF LOTS, PAGE 600; SUBJECT TO EASEMENT TO STATE OF IOWA RECORDED IN BOOK 252 OF LOTS, PAGE 163; AND SUBJECT OT EASEMENTS OF CITY OF MUSCATINE, IOWA RECORDED IN BOOK 151 OF LOTS, PAGE 210; IN BOOK 203 OF LOTS, PAGE 575, IN BOOK 209 OF LOTS, PAGE 584; AND IN BOOK 277 OF LOTS, PAGE 1068 AS SHOWN BY CONDEMNATION PROCEEDINGS; ALL REFERENCES BEING TO THE REAL ESTATE RECORDS OF MUSCATINE COUNTY, IOWA.

Proposals for the purchase and development of the Property must be received in the office of the City Clerk at City Hall by no later than 10:00 a.m. on April 17, 2025. Proposals shall set forth the purchaser’s plan for the development and construction of a mixed-use building including commercial units and residential units (the “Project”) on the Property, such Project to be carried out in accordance with the objectives and details set forth in the City’s Development Proposal Packet with respect thereto. The Property will be sold to the purchaser whose proposal, if carried out, would be in the best interests of the City and would best tailor the future use of the Property to the City’s urban renewal objectives. The City reserves the right to consider the legal and financial ability of developers submitting proposals to carry out the desired development of the Property. Furthermore, the City reserves the right to negotiate for proposals with respect to the desired development of the Property.

Development Proposal Packets containing necessary information with respect to the development objectives for the Project on the Property may be obtained from the Office of the City Clerk, City Hall, Muscatine, Iowa.

On March 20, 2025, the City Council adopted a resolution constituting notification of intent to accept a proposal for the development of the Project on the Property submitted by Lumber Lofts, LLC.

At the aforementioned time and place, oral or written comments or objections may be filed or made. Following the public hearing, the City Council will consider the submitted proposals for acceptance.

By order of the City Council of the City of Muscatine, Iowa.

Cinda Hilger
City Clerk

ATTESTATION CERTIFICATE:

STATE OF IOWA
MUSCATINE COUNTY SS:
CITY OF MUSCATINE

I, the undersigned, Clerk of the City of Muscatine, do hereby certify that attached hereto is a true and correct copy of the proceedings of the City Council relating to fixing a date for hearing on the Council's proposal to take action in connection with the disposition of real property, as referred to therein.

WITNESS MY HAND hereto affixed this _____ day of _____, 2025.

City Clerk

PUBLICATION CERTIFICATE:

STATE OF IOWA
MUSCATINE COUNTY SS:
CITY OF MUSCATINE

I, the undersigned, Clerk of the City of Muscatine, do hereby certify that pursuant to the resolution of its Council fixing a date of meeting at which it is proposed to take action to with respect to the receipt of proposals for development of property, the notice, of which the printed slip attached to the publisher's affidavit hereto attached is a true and complete copy, was published on the date and in the newspaper specified in such affidavit, which newspaper has a general circulation in the City.

WITNESS MY HAND hereto affixed this _____ day of _____, 2025.

City Clerk

(Attach here publisher's original affidavit with clipping of the notice, as published.)

(PLEASE NOTE: Do not date and return this certificate until you have received the publisher's affidavit and have verified that the notice was published on the date indicated in the affidavit but please return all other completed pages to us as soon as they are available.)

DEVELOPMENT PROPOSAL PACKET

The City of Muscatine City, Iowa is inviting proposals for the acquisition and development of certain real property (the “Property”) situated in the Consolidated Muscatine Urban Renewal Area in the City of Muscatine, Iowa and more particularly described as follows:

BLOCK 20, IN THE CITY OF MUSCATINE, IN MUSCATINE COUNTY, IOWA, EXCEPT PARTS CONVEYED TO STATE OF IOWA BY WARRANTY DEEDS RECORDED IN BOOK 206 OF LOTS, PAGE 567 AND IN BOOK 252 OF LOTS, PAGE 160; AND EXCEPT PART CONVEYED TO CITY OF MUSCATINE, IOWA, BY SPECIAL WARRANTY DEED RECORDED IN BOOK 226 IF LOTS, PAGE 600; SUBJECT TO EASEMENT TO STATE OF IOWA RECORDED IN BOOK 252 OF LOTS, PAGE 163; AND SUBJECT OT EASEMENTS OF CITY OF MUSCATINE, IOWA RECORDED IN BOOK 151 OF LOTS, PAGE 210; IN BOOK 203 OF LOTS, PAGE 575, IN BOOK 209 OF LOTS, PAGE 584; AND IN BOOK 277 OF LOTS, PAGE 1068 AS SHOWN BY CONDEMNATION PROCEEDINGS; ALL REFERENCES BEING TO THE REAL ESTATE RECORDS OF MUSCATINE COUNTY, IOWA.

In accordance with the City’s urban renewal plan, zoning regulations, economic development and blight alleviation objectives governing the Property, the City intends that the Property will be purchased from the City at fair value. The City intends that the purchaser of the Property will construct a sixty-five (65) unit mixed-use building including commercial and residential units. In addition, the City intends that the mixed-use building will include indoor and outdoor gathering spaces, a fitness center on the ground floor and onsite parking.

The City will be receiving written development proposals for the acquisition and development of the Property until 10 a.m. on April 16, 2024 at the office of the City Clerk at City Hall in Muscatine. The written development proposals shall set forth the proposed developer’s plan for developing the Property in accordance herewith.

The City will select the proposal that represents development options for the Property that are in the best interests of the City in light of the urban renewal and economic development objectives for the Property.

For additional information, please contact City Administrator, Matthew Mardesen, at (563) 264-1550.



City of Muscatine

ITEM NUMBER 2025-0110

AGENDA ITEM SUMMARY

DATE: 3/20/2025

STAFF

Jodi Royal-Goodwin, Community Development Director
Nancy Lueck, Finance Director

SUBJECT

Resolution Setting a Public Hearing on April 17, 2025, at 6:00 pm at which it is Proposed to Approve a Development Agreement with Lumber Lofts, LLC, (BTS) including Annual Appropriation Tax Increment Payments.

EXECUTIVE SUMMARY

Presented for Council's consideration is a resolution setting a public hearing for April 17, 2025, at 6:00 pm regarding a proposed development agreement with Lumber Lofts, LLC, which includes an annual appropriation of Tax Increment Payments. **Lumber Lofts, LLC, is an entity of Built To Suit, which was selected as the preferred developer for the Hawkeye site (910 East 2nd Street), proposes to build a mixed-use development with 65 units of workforce housing. The City must hold a public hearing prior to approving the development agreement.**

STAFF RECOMMENDATION

Staff recommends Council adopt the resolution as presented.

BACKGROUND/DISCUSSION

At the May 16, 2024, meeting, the City Council selected BTS as the preferred developer for 910 E 2nd Street ("The Hawkeye Site") and directed staff to negotiate a development agreement that would provide appropriate financial incentives, including an annual appropriation of incremental property tax payments. A development agreement has been negotiated and will be considered by Council following the required public hearing. Appropriate steps must also be taken to facilitate the transfer and sale of this property to Lumber Lofts, LLC, the entity created by BTS for the development of the site.

The City assumed control of the site in 2004. Located on the banks of the Mississippi River at the mouth of Mad Creek, the site was previously used as a lumberyard for over 100 years before it was acquired by the City and today is used to dewater the dredge spoils from harbor dredging operations. The Hawkeye Site is the entrance to Muscatine on Highway 92 from Illinois and into our downtown from the east. Unfortunately, the dewatering operations do not leave it in the most welcoming state.

The Hawkeye Site's unique combination of size, riverfront location, and proximity to downtown and major employment centers, creates the potential for significantly more beneficial use of this site. The site is also within the area identified for Workforce Housing Tax Credits preference points as a result of the City being Designated an Iowa Thriving Community.

Council has previously approved actions necessary to make the site development ready, including approving an engineering contract to evaluate the feasibility of relocating the dewatering operation (September 14, 2023) and hiring a survey firm to prepare documents required to pursue a conditional letter of map revision (CLOMR) from the Federal Emergency Management Agency (FEMA) to confirm the placement of fill on the site would allow for its removal from the floodplain (April 4, 2024).

Subsequently, staff prepared and released a request for proposals (RFP) for the redevelopment of the site. The was published on the City's website and sent directly to 53 individuals representing developers in the region. A non-mandatory pre-proposal meeting was held April 25, with 4 developers in attendance. However, only 1 response was received.

At the May 16 meeting, Council approved BTS as the preferred developer of the site. The proposed development is a \$11.55 million mixed-use building that will include 65 market-rate apartments and limited ground floor commercial space. BTS has been awarded Workforce and Redevelopment tax credits from the State of Iowa, and anticipates beginning construction in June 2025 and to be completed within 12 months. BTS has created Lumber Lofts, LLC to be the developer and owner of this project.

The proposed project will support Council's goal to create attractive entryways into the City and provide workforce housing to support a vibrant community.
this property.

CITY FINANCIAL IMPACT

The tax increment payments will be paid solely from the incremental property taxes generated by the development.

ATTACHMENTS

1. Set Date Dev Agmt AA - (Muscatine #77 2025)-v2 (1)
2. Development Agreement (Lumber Lofts) (Muscatine #77 2024)-v3

SET DATE FOR HEARING ON
DEVELOPMENT AGREEMENT AND
TAX INCREMENT PAYMENTS

(LUMBER LOFTS, LLC)

421464-77

Muscatine, Iowa

March 20, 2025

A meeting of the City Council of the City of Muscatine, Iowa, was held at 6:00 p.m., on March 20, 2025, at the Council Chambers, in the City, pursuant to the rules of the Council.

The Mayor presided and the roll was called, showing members present and absent as follows:

Present: _____

Absent: _____.

Council Member _____ introduced the resolution next hereinafter set out and moved its adoption, seconded by Council Member _____; and after due consideration thereof by the City Council, the Mayor put the question upon the adoption of said resolution, and the roll being called, the following named Council Members voted:

Ayes: _____

Nays: _____.

Whereupon, the Mayor declared said resolution duly adopted, as follows:

RESOLUTION NO. 2025-0110

Resolution Setting a Date of Meeting at which it is Proposed to Approve a Development Agreement with Lumber Lofts, LLC, Including Annual Appropriation Tax Increment Payments

WHEREAS, the City of Muscatine, Iowa (the “City”), pursuant to and in strict compliance with all laws applicable to the City, and in particular the provisions of Chapter 403 of the Code of Iowa, has adopted an Urban Renewal Plan for the Consolidated Muscatine Urban Renewal Area (the “Urban Renewal Area”); and

WHEREAS, this City Council has adopted an ordinance providing for the division of taxes levied on taxable property in the Urban Renewal Area pursuant to Section 403.19 of the Code of Iowa and establishing the fund referred to in Subsection 2 of Section 403.19 of the Code of Iowa, which fund and the portion of taxes referred to in that subsection may be irrevocably pledged by the City for the payment of the principal of and interest on indebtedness incurred under the authority of Section 403.9 of the Code of Iowa to finance or refinance in whole or in part projects in the Urban Renewal Area; and

WHEREAS, the City proposes to enter into a certain development agreement (the “Development Agreement”) with Lumber Lofts, LLC (the “Developer”) in connection with the construction by the Developer of a mixed-use building including commercial and residential units; and

WHEREAS, the Development Agreement would provide financial incentives to the Developer in the form of annual appropriation incremental property tax payments to the Developer in an amount not to exceed \$2,400,000 under the authority of Section 403.9(1) of the Code of Iowa; and

WHEREAS, it is necessary to set a date for a public hearing on the Development Agreement, pursuant to Section 403.9 of the Code of Iowa;

NOW THEREFORE, IT IS RESOLVED by the City Council of the City of Muscatine, Iowa, as follows:

Section 1. This City Council shall meet on April 17, 2025, at 6:00 p.m., at the Council Chambers, in the City, at which time and place proceedings will be instituted and action taken to approve the Development Agreement.

Section 2. The City Clerk is hereby directed to give notice of the proposed action, the time when and place where said meeting will be held, by publication at least once not less than four days and not more than twenty days before the date of said meeting in a legal newspaper of general circulation in the City. Said notice shall be in substantially the following form:

**NOTICE OF MEETING FOR APPROVAL OF DEVELOPMENT AGREEMENT WITH
LUMBER LOFTS, LLC AND AUTHORIZATION OF ANNUAL APPROPRIATION TAX
INCREMENT PAYMENTS**

The City Council of the City of Muscatine, Iowa, will meet at the Council Chambers, on April 17, 2025, at 6:00 p.m., at which time and place proceedings will be instituted and action taken to approve a Development Agreement between the City and Lumber Lofts, LLC (the “Developer”), in connection with the construction by the Developer of a mixed-use building including commercial and residential units in the Consolidated Muscatine Urban Renewal Area (the “Urban Renewal Area”), which Agreement provides for certain financial incentives in the form of incremental property tax payments (the “Payments”) to the Developer in a total amount not exceeding \$2,400,000 as authorized by Section 403.9 of the Code of Iowa.

The commitment of the City to make the Payments to the Developer under the Development Agreement will not be a general obligation of the City, but such Payments will be payable solely and only from incremental property tax revenues generated within the Consolidated Muscatine Urban Renewal Area. Some or all of the Payments under the Development Agreement may be made subject to annual appropriation by the City Council.

At the meeting, the City Council will receive oral or written objections from any resident or property owner of the City. Thereafter, the Council may, at the meeting or at an adjournment thereof, take additional action to approve the Development Agreement or may abandon the proposal.

This notice is given by order of the City Council of Muscatine, Iowa, in accordance with Section 403.9 of the Code of Iowa.

Cinda Hilger
City Clerk

Section 3. All resolutions or parts of resolutions in conflict herewith are hereby repealed.

Section 4. This resolution shall be in full force and effect immediately upon its adoption and approval, as provided by law.

Passed and approved March 20, 2025.

Mayor

Attest:

City Clerk

• • • •

On motion and vote the meeting adjourned.

Mayor

Attest:

City Clerk

STATE OF IOWA
MUSCATINE COUNTY
CITY OF MUSCATINE

SS:

I, the undersigned, City Clerk of the City of Muscatine, Iowa hereby certify that the foregoing is a true and correct copy of the minutes of the Council of the City relating to the adoption of a resolution to fix a date of meeting at which it is proposed to take action to approve a Development Agreement.

I do further certify that the notice of hearing, to which the printed slip attached to the publisher's original affidavit hereto attached is a true and complete copy, was published on the date and in the newspaper specified in such affidavit, which newspaper has a general circulation in the City.

WITNESS MY HAND this ____ day of _____, 2025.

City Clerk

(Attach here the publisher's original affidavit with clipping of the notice as published.)

(PLEASE NOTE: Do not sign and date this certificate until you have checked a copy of the published notice and have verified that it was published on the date indicated in the publisher's affidavit.)

DEVELOPMENT AGREEMENT

This Agreement is entered into between the City of Muscatine, Iowa (the “City”) and Lumber Lofts, LLC (the “Company”) as of the ____ day of _____, 2025 (the “Commencement Date”).

WHEREAS, the City has established the Consolidated Muscatine Urban Renewal Area (the “Urban Renewal Area”) and has adopted a tax increment ordinance for the Urban Renewal Area; and

WHEREAS, the City owns and/or intends to acquire and make certain improvements to real property, which is situated in the City, lying within the Urban Renewal Area and more specifically described on Exhibit A hereto (the “Property”); and

WHEREAS, the Company has proposed to acquire the Property and undertake the construction of a mixed-use building (the “Project”) including commercial units (the “Commercial Units”) and residential units (the “Residential Units”); and

WHEREAS, the Company has requested that the City provide financial assistance in the form of (i) an economic development grant (the “Grant”) and (ii) incremental property tax payments to be used by the Company in paying the costs of constructing and maintaining the Project; and

WHEREAS, the taxable base valuation of the Property for purposes of calculations of Incremental Property Tax Revenues (as hereinafter defined) under this Agreement and Section 403.19 of the Code of Iowa shall be January 1, 2025 (the “Base Valuation”); and

WHEREAS, Chapter 15A of the Code of Iowa authorizes cities to provide grants, loans, guarantees, tax incentives and other financial assistance to or for the benefit of private persons;

NOW THEREFORE, the parties hereto agree as follows:

A. City and Company Covenants

1. Sale of the Property.

The City will sell, and the Company will acquire (the “Real Estate Transaction”) the Property for a purchase price of \$50,000.00 (the “Purchase Price”). The closing (“Closing”) of the Real Estate Transaction will be within thirty (30) days following the satisfaction or the Company’s waiver of the Conditions Precedent (as defined below).

The Company acknowledges that in lieu of advancing the Purchase Price to the City upon Closing the City will withhold an amount (the “Purchase Price Withholding Amount”) equal to the Purchase Price from the Incremental Property Tax Revenues (as hereinafter defined) received by the City to make the Payments (as hereinafter defined) before making any Payments to the Company in order to collect the Purchase Price from the Company.

The Property will be sold and transferred on the following terms:

- a. City will provide the Company with an updated abstract for the Property at least sixty days before Closing.
- b. The City will transfer the Property free and clear of all liens or encumbrances, including but not limited to liens for unpaid taxes, and free of any covenants, easements or restrictions that unreasonably interfere with the Company's intended construction and use of the Property; provided, however, that the Company shall grant, at no cost to the City, construction and/or permanent easements, as necessary, to that portion (the "Easement Property") of the Property as more particularly described on Exhibit A-1 hereto, in order for the City to access such Easement Property to construct certain force main and recreational trail improvements thereon and to maintain such improvements.
- c. The City will transfer the Property via a quit claim deed to the Company.
- d. Prior to Closing the City will remove all property, equipment and debris related to the removal by the City of the dredge spoils from the Property and the existing concrete slab on the Property.
- e. The City will transfer sole and exclusive possession of the Property to the Company at Closing.

2. Project Construction; Operational Requirement

Project Construction

The Company agrees to construct the Project on the Property. The Company agrees to make good faith efforts to commence construction of the footings for the Project as soon as practicable following the Closing, but in any event shall commence such construction by no later than December 31, 2025.

Furthermore, the Company expects this construction to result in approximately \$11,000,000 in capital improvements for the Property, including construction work, equipment, furnishings, soft costs and other capital improvements. The Project shall minimally include a sixty-five (65) unit mixed-use building with Residential Units; indoor and outdoor gathering spaces, a fitness center Commercial Units on the ground floor; and onsite parking on the Property. Further, the Project shall be designed and constructed in accordance with the façade design standards (the "Façade Design Standards") set forth on Exhibit B hereto.

The Company agrees to submit a detailed site plan (the "Site Plan") for the development of the Project to the City in accordance with City Code Section 10-2-7(I). Upon approval by the City of the Site Plan it shall be attached hereto as Exhibit C. The Site Plan shall include a plan for stormwater management for the Property that demonstrates compliance with SUDAS Section 2G-1.B.3. as well as the Extreme Flood Protection Criteria from the Iowa Storm Water Management Manual. The Site Plan may be amended in accordance with the Muscatine City Code by mutual written consent of the parties.

The Company agrees to construct the Project in accordance with the Site Plan, the Façade Design Standards and all local zoning, land use, building and safety codes and regulations. The Company agrees to complete construction of the Project by no later than December 31, 2026.

Maintenance and Use of the Project and the Property

The Company agrees to maintain ownership of the Project and to occupy or lease out part of or all of the Project throughout the Term (as hereinafter defined) of this Agreement.

The Company further agrees to maintain, preserve, and keep the Property, including but not limited to the Project, useful and in good repair and working order, ordinary wear and tear excepted, and from time to time will make all necessary repairs, replacements, renewals, and additions. Further, the Company agrees to maintain compliance with local zoning, land use, building and safety codes and regulations.

Further, the Company agrees to obtain and continuously maintain reasonable insurance covering the Property, including the Project. The Company agrees to notify the City promptly in the case of damage exceeding \$250,000 in amount to, or destruction of, the Project resulting from fire or other casualty.

3. Company's Operational Certifications. The Company agrees to certify (the "Operational Certification") to the City by no later than October 15 of each year during the Term, commencing in 2027, that the Company is in compliance with the with the requirements of Section A.2 above. Each Operational Certification shall be accompanied by documentation demonstrating, to the reasonable satisfaction of the City, that the Company is in compliance with the Operational Requirement.

4. Property Taxes. The Company agrees to make timely payment of all property taxes as they come due with respect to the Property with the completed Project thereon and to submit a receipt or cancelled check in evidence of each such payment.

5. Minimum Assessment Agreement. The Company agrees to enter into an assessment agreement (the "Assessment Agreement"), pursuant to Section 403.6 of the Code of Iowa fixing the minimum assessed valuation of the Property, in contemplation of the value to be added by the Project, at not less than Seven Million Five Hundred Thousand Dollars (\$7,500,000) (the "Minimum Assessed Valuation") as of January 1, 2027 (the "First Valuation Date"). It is intended by the Company that the Minimum Assessed Valuation shall be established on the Muscatine County property tax rolls as of the First Valuation Date regardless of the then-current degree of completion or incompleteness of the Project. The Assessment Agreement shall be in substantially the form attached hereto as Exhibit D and shall remain in effect throughout the Term of this Agreement.

6. Property Tax Payment Certification. For purposes of this Agreement “Annual Percentage” shall mean the annual percentage in effect from time to time as set forth in the following table:

Payment Year	Annual Percentage
First through Tenth Payment Years	100%
Eleventh through Twentieth Payment Years	90%

The Company agrees to certify to the City by no later than October 15th of each year during the Term, commencing in 2027, an amount (the “Company’s Estimate”) equal to the Annual Percentage of the estimated Incremental Property Tax Revenues, as hereinafter defined, anticipated to be paid in the fiscal year immediately following such certification with respect to the taxable valuation of the Property. The Company will submit the Company’s Estimate by completing and submitting the worksheet attached hereto as Exhibit E. The City reserves the right to review and request revisions to each such Company’s Estimate to ensure the accuracy of the figures submitted.

For purposes of this Agreement, Incremental Property Tax Revenues are calculated by: (1) determining the consolidated property tax levy (city, county, school, etc.) then in effect with respect to taxation of the Property; (2) subtracting (a) the debt service levies of all taxing jurisdictions, (b) the school district instructional support and physical plant and equipment levies and (c) any other levies which are required to be exempted from such calculation by action of the Iowa General Assembly; (3) multiplying the resulting modified consolidated levy rate times any incremental growth in the taxable (post-roll back) valuation of the Property, as shown on the property tax rolls of Muscatine County, above and beyond the Base Valuation; and (4) deducting any State of Iowa property tax credits which may from time to time be claimed with respect to the Property.

Upon request, the City staff shall provide reasonable assistance to the Company in completing the worksheet required under this Section A.6.

7. Reversionary Interest. Notwithstanding any other provision of this Agreement, the conveyance of the Property shall be made subject to the express condition that the Company shall commence construction of the footings for the Project by December 31, 2025.

If said condition as to all or any part of the Project is not met, then, at the City’s option, exercisable by written notice to Company at any time following the transfer and failure to meet any of the requirements, which notice sets forth the nature of the breach or violation and further provided that if the breach or violation is not corrected to City’s reasonable satisfaction within thirty (30) days of the date of receipt of the notice, then all right, title and interest in and to the portion of the Property and to any improvements thereon, together with the right of immediate possession thereof, will revert to and revest in the City and City’s assigns, as fully and completely as if the deed conveying the Property to the Company had not been executed. Written notice shall be by first class U.S. Mail, postage prepaid, to the Company, at the address set forth below, and shall be deemed received after three (3) days after being deposited in the mail.

This reversion shall be more specifically documented under separate real estate purchase agreements, deeds and such other documentation as shall be deemed necessary by the City and shall survive the termination of this Agreement. The City may file a verified claim pursuant to Iowa Code 614.24 to preserve the reversion and associated use restrictions beyond the 21-year limitations period provided by Iowa Code.

8. Legal and Administrative Costs. The Company hereby agrees to pay for the legal fees and administrative costs incurred by the City in connection with the drafting, negotiation and authorization of this Agreement, including the prerequisite amendment to the urban renewal plan, up to an amount not in excess of \$10,000. The Company agrees to remit payment to the City within 30-days of the submission of reasonable documentation by the City to the Company evidencing such costs.

9. Default Provisions.

a. Events of Default. The following shall be “Events of Default” under this Agreement, and the term “Event of Default” shall mean, whenever it is used in this Agreement (unless otherwise provided), any one or more of the following events:

- (i) Failure by the Company to complete construction of the Project, pursuant to the terms and conditions of this Agreement.
- (ii) Failure by the Company to fully and timely remit payment of property taxes when due and owing.
- (iii) Failure by the Company to comply with Section A.2, A.3, A.4, A.5 and A.6 of this Agreement.
- (iv) Failure by the Company to observe or perform any other material covenant on its part, to be observed or performed hereunder.

b. Notice and Remedies. Whenever any Event of Default described in this Agreement occurs, the City shall provide written notice to the Company describing the cause of the default and the steps that must be taken by the Company in order to cure the default. The Company shall have thirty (30) days after receipt of the notice to cure the default or to provide assurances satisfactory to City that the default will be cured as soon as reasonably possible. If the Company fails to cure the default or provide assurances, the City shall then have the right to:

- (i) Pursue any action available to it, at law or in equity, in order to enforce the terms of this Agreement.
- (ii) Withhold the Payments provided for under Section B.1 below.
- (iii) Withhold the disbursement of the Grant proceeds provided for under Section B.5 below.
- (iv) Terminate this Agreement.

B. City's Obligations

1. Payments. In recognition of the Company's obligations set out above, the City agrees to make forty (40) semiannual economic development tax increment payments (the "Payments" and each, individually a "Payment") to the Company during the Term, pursuant to Chapters 15A and 403 of the Code of Iowa, provided however that the aggregate, total amount of the Payments (the "Maximum Payment Total") shall not exceed \$2,400,000. All Payments under this Agreement shall be subject to annual appropriation by the City Council, as provided hereunder.

The Payments shall not constitute general obligations of the City and shall be made solely and only from the Annual Percentage of Incremental Property Tax Revenues received by the City from the Muscatine County Treasurer attributable to the taxable valuation of the Property.

This Agreement assumes that the full taxable valuation resulting from the Project will go on the property tax rolls as of January 1, 2027. Accordingly, assuming all appropriation determinations are approved affirmatively by the City Council under Section B.2 below, Payments will be made on December 1 and June 1 of each fiscal year, beginning December 1, 2028, and continuing through and including June 1, 2048, or until such earlier date upon which total Payments equal to the Maximum Payment Total have been made.

2. Annual Appropriation. The Payments shall be subject to annual appropriation by the City Council. Prior to December 1 of each year during the Term of this Agreement, commencing in calendar year 2027, the City Council of the City shall consider the question of obligating for appropriation to the funding of the Payments due in the following fiscal year, an amount (the "Appropriated Amount") of Incremental Property Tax Revenues to be collected in the following fiscal year equal to or less than the most recently submitted Company's Estimate.

In any given fiscal year, if the City Council determines to not obligate the then-considered Appropriated Amount, then the City will be under no obligation to fund the Payments scheduled to become due in the following fiscal year, and the Company will have no rights whatsoever to compel the City to make such Payments, to seek damages relative thereto or to compel the funding of such Payments in future fiscal years. A determination by the City Council to not obligate funds for any particular fiscal year's Payments shall not render this Agreement null and void, and the Company shall make the next succeeding submission of the Company's Estimate as called for in Section A.6 above, provided however that no Payment shall be made after June 1, 2048.

3. Payment Amounts. The aggregate Payments to be made in a fiscal year shall not exceed an amount equal to the corresponding Appropriated Amount (for example, for the Payments due on December 1, 2028 and on June 1, 2029, the aggregate maximum amount of such Payments would be determined by the Appropriated Amount determined for certification by December 1, 2027). Furthermore, the amount of each such Payment shall not exceed the Annual Percentage of Incremental Property Tax Revenues (excluding allocations of "back-fill" or "make-up" payments from the State of Iowa for property tax credits or roll-back) actually

received by the City from the Muscatine County Treasurer attributable to the taxable incremental valuation of the Property in the six (6) months immediately preceding such Payment due date.

4. Certification of Payment Obligation. In any given fiscal year, if the City Council determines to obligate the then-considered Appropriated Amount, as set forth in Section B.2 above, then the City Clerk will certify by December 1 of each such year to the Muscatine County Auditor an amount equal to the most recently obligated Appropriated Amount.

5. Economic Development Grant. The City hereby agrees to advance the proceeds of the Grant, in an amount equal to \$250,000, to the Company within thirty (30) days of the date on which the Certificate of Occupancy is issued for the Project.

6. Small Business Forgivable Loan. If the Company submits an application under the City's Small Business Forgivable Loan Program, then the City agrees to consider, in good faith, providing a forgivable loan to the Company under the terms and conditions of the City's Small Business Forgivable Loan Program.

7. Relocation of Power Lines. The City agrees to undertake the relocation of power lines on the Property at no cost to the Company and at such times as mutually agreed upon by the City and the Company.

C. Administrative Provisions

1. Amendment and Assignment. The parties hereto may not cause this Agreement to be amended, assigned, assumed, sold or otherwise transferred without the prior written consent of the other party. However, the City hereby gives its permission that the Company's rights to receive the Payments hereunder may be assigned by the Company to a private lender, as security on a credit facility taken with respect to the Project, without further action on the part of the City.

2. Successors. This Agreement shall inure to the benefit of and be binding upon the successors and assigns of the parties.

3. Term. The term (the "Term") of this Agreement shall commence on the Commencement Date and end on June 1, 2048, or on such earlier date upon which the aggregate sum of Payments made to the Company equals the Maximum Payment Total.

4. Choice of Law. This Agreement shall be deemed to be a contract made under the laws of the State of Iowa and for all purposes shall be governed by and construed in accordance with laws of the State of Iowa.

5. Force Majeure. No party to this Agreement shall be liable or responsible to the other party, nor be deemed to have defaulted under or breached this Agreement, for any failure or delay in fulfilling or performing any term of this Agreement (except for any obligations to make previously owed payments to the other party hereunder) when and to the extent such failure or delay is caused by or results from acts beyond the impacted party's ("Impacted Party") reasonable control, including, without limitation, the following force

majeure events (“Force Majeure Event(s)”) that frustrates the purpose of this Agreement: (a) acts of God; (b) flood, fire, earthquake or explosion; (c) war, invasion, hostilities (whether war is declared or not), terrorist threats or acts, riot or other civil unrest; (d) government order or law; (e) actions, embargoes or blockades in effect on or after the date of this Agreement; (f) action by any governmental authority; (g) national or regional emergency; (h) strikes, labor stoppages or slowdowns or other industrial disturbances; (i) epidemic, pandemic or similar influenza or bacterial infection (which is defined by the United States Center for Disease Control as virulent human influenza or infection that may cause global outbreak, or pandemic, or serious illness); (j) emergency state; (k) shortage of adequate medical supplies and equipment; (l) shortage of power or transportation facilities; and (m) other similar events beyond the reasonable control of the Impacted Party.

6. Notices. Except as otherwise expressly provided in this Agreement, a notice or other communication under the Agreement, by either the City or the Company to the other, shall be sufficiently given or delivered if it is dispatched by registered or certified mail, postage prepaid, return receipt requested, or delivered personally, and:

a. In the case of the Company, is addressed to or delivered personally to _____.

b. In the case of City, is addressed to or delivered personally to City Administrator, City of Muscatine, City Hall, 215 Sycamore Street, Muscatine, IA 52761.

c. The City or the Company may, upon written notice to the other, change the address to which such notices and demands are made.

D. Conditions Precedent. The Company’s obligations under this Agreement are conditioned upon the Company’s receipt of the following, each to the reasonable satisfaction of the Company (collectively the “Conditions Precedent”):

i. The Company securing an allocation of Workforce Housing Tax Credits for the Project from the Iowa Economic Development Authority;

ii. The Company securing Redevelopment Tax Credits for the Project from the Iowa Department of Revenue;

iii. The Company securing bank financing for the Project; and

iv. The Company completing all other due diligence review of the Property and the Project.

If the Conditions Precedent have not been satisfied on or before June 1, 2025, the Company may terminate this Agreement, in which case neither party shall have any obligation hereunder.

The City and the Company have caused this Agreement to be signed, in their names and on their behalf by their duly authorized officers, all as of the day and date written above.

CITY OF MUSCATINE, IOWA

By: _____
Mayor

Attest:

City Clerk

LUMBER LOFTS, LLC

By: _____

EXHIBIT A
DESCRIPTION OF THE PROPERTY

BLOCK 20, IN THE CITY OF MUSCATINE, IN MUSCATINE COUNTY, IOWA, EXCEPT PARTS CONVEYED TO STATE OF IOWA BY WARRANTY DEEDS RECORDED IN BOOK 206 OF LOTS, PAGE 567 AND IN BOOK 252 OF LOTS, PAGE 160; AND EXCEPT PART CONVEYED TO CITY OF MUSCATINE, IOWA, BY SPECIAL WARRANTY DEED RECORDED IN BOOK 226 IF LOTS, PAGE 600; SUBJECT TO EASEMENT TO STATE OF IOWA RECORDED IN BOOK 252 OF LOTS, PAGE 163; AND SUBJECT OT EASEMENTS OF CITY OF MUSCATINE, IOWA RECORDED IN BOOK 151 OF LOTS, PAGE 210; IN BOOK 203 OF LOTS, PAGE 575, IN BOOK 209 OF LOTS, PAGE 584; AND IN BOOK 277 OF LOTS, PAGE 1068 AS SHOWN BY CONDEMNATION PROCEEDINGS; ALL REFERENCES BEING TO THE REAL ESTATE RECORDS OF MUSCATINE COUNTY, IOWA.

EXHIBIT A-1
DESCRIPTION OF THE EASEMENT PROPERTY

[Insert Description of the Easement Property]

EXHIBIT B
FAÇADE DESIGN STANDARDS

EXHIBIT C
SITE PLAN

[ATTACH SITE PLAN HERE]

EXHIBIT D
FORM OF MINIMUM ASSESSMENT AGREEMENT

MINIMUM ASSESSMENT AGREEMENT

Recorder's Cover Sheet

Preparer Information: (name, address and phone number)

Amy M. Bjork, Esq., Dorsey & Whitney LLP, 801 Grand Avenue, Suite 4100, Des Moines, IA 50309; Phone: 515-699-3285

Return Document To:

Matthew Mardesen, City Administrator, City of Muscatine, Iowa, 215 Sycamore St., Muscatine, IA 52761; Phone: 563-264-1550

City: City of Muscatine, Iowa

Property Owner: Lumber Lofts, LLC

Legal Description: See Exhibit A

Book & Page Reference if applicable:

MINIMUM ASSESSMENT AGREEMENT

THIS AGREEMENT, dated as of the ____ day of _____, 2025, by and among the City of Muscatine, Iowa (the “City”), Lumber Lofts, LLC (the “Property Owner”), and the County Assessor of Muscatine County (the “Assessor”).

WITNESSETH

WHEREAS, the Property Owner owns the real property, the legal description of which is contained in Exhibit A attached hereto (the “Property”), which is located in the Muscatine Urban Renewal Area in the City; and

WHEREAS, the Property Owner has undertaken the construction of a mixed-use building on the Property; and

WHEREAS, a development agreement (the “Development Agreement”), dated _____, 2025, has been executed between the City and the Property Owner in connection with the Property Owner’s investment in and business operations on the Property; and

WHEREAS, pursuant to Section 403.6(19) of the Code of Iowa, the City and the Property Owner desire to establish a minimum taxable value for the Property and the improvements to be constructed thereon, which shall be effective as of January 1, 2027, and from then until this Agreement is terminated pursuant to the terms herein and which is intended to reflect the minimum market value of the land and improvements;

NOW, THEREFORE, the parties to this Agreement, in consideration of the promises, covenants and agreements made by each other, do hereby agree as follows:

1. Effective January 1, 2027, the minimum actual value which shall be assessed for the Property upon completion of the improvements to be constructed thereon, shall not be less than Seven Million Five Hundred Thousand Dollars (\$7,500,000) until termination of this Agreement.

2. The Property Owner hereby agrees that the assessed valuation (hereinafter referred to as the “Minimum Actual Value”) set forth in Section 1 above shall become and remain effective as of January 1, 2027, until such time as the City’s obligations to make Grant Disbursements (as defined in the Development Agreement) have been satisfied in-full, regardless of the actual degree of completion or incompleteness of the Project, even if construction of the Project is not commenced by such date. Furthermore, the Property Owner acknowledges that the City has changed its position in reliance on the timeliness of such increase in valuation as set forth in the Development Agreement.

3. The Property Owner agrees to pay when due, all taxes and assessments, general or special, and all other charges whatsoever levied upon or assessed or placed against the Property,

subject to any limitations set forth in the Development Agreement. The Property Owner further agrees that until this Agreement is terminated they will not seek administrative or judicial review of the applicability, enforceability, or constitutionality of this Agreement or the obligation to be taxed based upon the Minimum Actual Value or to raise any such argument by way of defense in any proceedings, including delinquent tax proceedings.

4. The Property Owner further agrees that until this Agreement is terminated it will not seek any tax exemption or abatement either presently or prospectively authorized under any State, federal or local law with respect to taxation of the Property including causing or allowing the property to be leased, sold, transferred to or otherwise used by an entity that is exempt from property taxes under the laws of the State of Iowa.

5. This Agreement, and the minimum assessed valuation established herein, shall be effective until such time as the City's obligations to make Grant Disbursements (as defined in the Development Agreement) have been satisfied in-full.

6. Nothing herein shall be deemed to waive the Property Owner's rights under Section 403.6(19) Code of Iowa (2025) or otherwise, to contest that portion of any actual value assignment made by the Assessor in excess of the Minimum Actual Value.

7. This Agreement shall be promptly recorded with the Muscatine County Recorder, along with a copy of Iowa Code Section 403.6.

8. Neither the preamble nor provisions of this Agreement are intended to, nor shall they be construed as, modifying the terms of any other contract between the City and the Property Owner, including the Development Agreement.

[Remainder of page intentionally left blank.]

This Agreement shall inure to the benefit of and be binding upon the successors and assigns of the parties.

CITY OF MUSCATINE, IOWA

By: _____
Mayor

Attest:

City Clerk

LUMBER LOFTS, LLC

By: _____
[Name, Title]

STATE OF IOWA)
)
COUNTY OF MUSCATINE) SS:

The foregoing instrument was acknowledged before me this ____ day of _____, 2025, by Brad Bark and Cinda Hilger, the Mayor and City Clerk, respectively, of Muscatine, Iowa, a municipal corporation of the State of Iowa, on behalf of the City.

Notary Public

The foregoing instrument was acknowledged before me this ____ day of _____, 2025, by _____ the _____ of Lumber Lofts, LLC, an Iowa limited liability company.

EXHIBIT A TO MINIMUM ASSESSMENT AGREEMENT

BLOCK 20, IN THE CITY OF MUSCATINE, IN MUSCATINE COUNTY, IOWA, EXCEPT PARTS CONVEYED TO STATE OF IOWA BY WARRANTY DEEDS RECORDED IN BOOK 206 OF LOTS, PAGE 567 AND IN BOOK 252 OF LOTS, PAGE 160; AND EXCEPT PART CONVEYED TO CITY OF MUSCATINE, IOWA, BY SPECIAL WARRANTY DEED RECORDED IN BOOK 226 IF LOTS, PAGE 600; SUBJECT TO EASEMENT TO STATE OF IOWA RECORDED IN BOOK 252 OF LOTS, PAGE 163; AND SUBJECT OT EASEMENTS OF CITY OF MUSCATINE, IOWA RECORDED IN BOOK 151 OF LOTS, PAGE 210; IN BOOK 203 OF LOTS, PAGE 575, IN BOOK 209 OF LOTS, PAGE 584; AND IN BOOK 277 OF LOTS, PAGE 1068 AS SHOWN BY CONDEMNATION PROCEEDINGS; ALL REFERENCES BEING TO THE REAL ESTATE RECORDS OF MUSCATINE COUNTY, IOWA.

CERTIFICATION BY ASSESSOR

The undersigned Assessor, being legally responsible for the assessment of the above described property upon completion of improvements to be made on it, hereby certifies that the actual value assigned to such land and improvements upon completion, shall be not less than Seven Million Five Hundred Thousand Dollars (\$7,500,000) from January 1, 2027, until termination of the Agreement.

County Assessor for Muscatine County,
State of Iowa

Subscribed and sworn to before me this ____ day of _____, 2025.

Notary Public

LIENHOLDER'S CONSENT, IF ANY

In consideration of one dollar and other valuable consideration, the receipt of which is hereby acknowledged, and notwithstanding anything in any loan or security agreement to the contrary, the undersigned ratifies, approves, consents to and confirms the Assessment Agreement entered into between the parties, and agrees to be bound by its terms. This provision shall be binding on the parties and their respective successors and assigns.

[NAME OF LIENHOLDER]

By: _____
Signature

Date: _____

STATE OF IOWA)
) SS:
COUNTY OF MUSCATINE)

The foregoing instrument was acknowledged before me this _____ day of _____, 2025, by _____ the _____ of _____.

Notary Public

[Add additional pages for each Lienholder]

[If no Lienholders exist, this consent will not be completed]

Consistent with Iowa Code §403.6(19)(b), filed with this assessor certification is a copy of subsection 19 as follows:

19. a. A municipality, upon entering into a development or redevelopment agreement pursuant to section 403.8, subsection 1, or as otherwise permitted in this chapter, may enter into a written assessment agreement with the Company of taxable property in the urban renewal area which establishes a minimum actual value of the land and completed improvements to be made on the land until a specified termination date which shall not be later than the date after which the tax increment will no longer be remitted to the municipality pursuant to section 403.19, subsection, subsection 2. The assessment agreement shall be presented to the appropriate assessor. The assessor shall review the plans and specifications for the improvements to be made and if the minimum actual value contained in the assessment agreement appears to be reasonable, the assessor shall execute the following certification upon the agreement:

The undersigned assessor, being legally responsible for the assessment of the above described property upon completion of the improvements to be made on it, certifies that the actual value assigned to that land and improvements upon completion shall not be less than \$_____.

b. This assessment agreement with the certification of the assessor and a copy of this subsection shall be filed in the office of the county recorder of the county where the property is located. Upon completion of the improvements, the assessor shall value the property as required by law, except that the actual value shall not be less than the minimum actual value contained in the assessment agreement. This subsection does not prohibit the assessor from assigning a higher actual value to the property or prohibit the owner from seeking administrative or legal remedies to reduce the actual value assigned except that the actual value shall not be reduced below the minimum actual value contained in the assessment agreement. An assessor, county auditor, board of review, director of revenue, or court of this state shall not reduce or order the reduction of the actual value below the minimum actual value in the agreement during the term of the agreement regardless of the actual value which may result from the incomplete construction of improvements, destruction or diminution by any cause, insured or uninsured, except in the case of acquisition or reacquisition of the property by a public entity. Recording of an assessment agreement complying with this subsection constitutes notice of the assessment agreement to a subsequent purchaser or encumbrancer of the land or any part of it, whether voluntary or involuntary, and is binding upon a subsequent purchaser or encumbrancer.

EXHIBIT E
COMPANY'S ESTIMATE WORKSHEET

- (1) Date of Preparation: October ____, 20__.
- (2) Assessed Taxable Valuation of Property as of January 1, 20__:
\$_____.
- (3) Base Taxable Valuation of Property:
\$_____.
- (4) Incremental Taxable Valuation of Property (2 minus 3):
\$_____ (the "TIF Value").
- (5) Current City fiscal year consolidated property tax levy rate for purposes of calculating Incremental Property Tax Revenues (the "Adjusted Levy Rate"):
\$_____ per thousand of value.
- (6) The TIF Value (4) factored by the Adjusted Levy Rate (5).
\$_____ x \$_____/1000 = \$_____ (the "TIF Estimate")
- (7) Subtract anticipated property tax credits from the TIF Estimate (6 minus 7) =
\$_____ (the "Available TIF Estimate")
- (8) Factor the Available TIF Estimate (7) by the applicable Annual Percentage =
Company's Estimate = \$_____ x .__ = _____

Annual Percentage:

Payment Year	Annual Percentage
First through Tenth Payment Years	100%
Eleventh through Twentieth Payment Years	90%



City of Muscatine

ITEM NUMBER 2025-0099

AGENDA ITEM SUMMARY

DATE: 3/20/2025

STAFF

Kevin Coon, City Engineer
Brian Stineman, Public Works Director

SUBJECT

Request to Enter Into a Professional Services Agreement with Bolton & Menk, Inc., for an Amount Not to Exceed \$24,600.00, for the Design of a Railroad Trail Crossing at Oregon Street.

EXECUTIVE SUMMARY

Request to Enter Into a Professional Services Agreement with Bolton & Menk, Inc. for Design of a Railroad Trail Crossing at Oregon Street, for an Amount Not to Exceed \$24,600.00.

STAFF RECOMMENDATION

Approve the Request

BACKGROUND/DISCUSSION

Public Works has been designing the state-mandated forcemain redundant line project for the past two years. The final phase of this project involves connecting the existing trail from Musser Park across the railroad tracks at Oregon Street to get to the trail section already completed as part of the Grandview Avenue Reconstruction Project.

Public Works has been working with the Iowa Department of Transportation and the CPKC railroad to reconfigure the rail crossing at Oregon Street to make it safer for all modes of transportation. In order to meet the construction schedule of the railroad and to incorporate it into their planning, the city needs to have plans for the layout and alignment of the proposed at-grade trail crossing. Since Bolton & Menk designed Grandview Avenue and therefore has experience in this area and working with the CPKC, it makes sense to have them complete the design of this project.

CITY FINANCIAL IMPACT

Funding is available from the Railroad Settlement Funds and the Redundant Forcemain Project.

ATTACHMENTS

1. 2025.3.5 - Oregon Trail Contract

AGREEMENT FOR PROFESSIONAL SERVICES

Oregon Trail Crossing

CITY OF MUSCATINE and BOLTON & MENK, INC.

This Agreement, made this _____ day of _____, 2025, by and between City of Muscatine, ("CLIENT"), and BOLTON & MENK, INC., 401 1st Street SE, Cedar Rapids, IA 52401, ("CONSULTANT").

WITNESS, whereas the CLIENT requires professional services in conjunction with Oregon Trail Railroad Crossing ("Project") and whereas the CONSULTANT agrees to furnish the various professional services required by the CLIENT.

NOW, THEREFORE, in consideration of the mutual covenants and promises between the parties hereto, it is agreed:

SECTION I - CONSULTANT'S SERVICES

A. The CONSULTANT agrees to perform the various Basic Services in connection with the proposed project as described in Exhibit A.

B. Upon mutual agreement of the parties, professional services in addition to the Basic Services (the "Additional Services") may be authorized as described in Paragraph IV.B, and when so authorized, shall be included with the Services to be provided under this Agreement.

SECTION II - THE CLIENT'S RESPONSIBILITIES

A. The CLIENT shall promptly compensate the CONSULTANT for the Services in accordance with Section III of this Agreement.

B. The CLIENT shall place any and all previously acquired information related to the Project in its custody at the disposal of the CONSULTANT for its use. Such information shall include, but is not limited to: boundary surveys, topographic surveys, preliminary sketch plan layouts, building plans, soil surveys, abstracts, deed descriptions, tile maps and layouts, aerial photos, utility agreements, environmental reviews, and zoning limitations. The CONSULTANT may rely upon the accuracy and sufficiency of all such information in performing services unless otherwise instructed, in writing, by CLIENT.

C. The CLIENT will guarantee access to and make all provisions for entry upon public portions of the project and reasonable efforts to provide access to private portions and pertinent adjoining properties.

D. The CLIENT will give prompt notice to the CONSULTANT whenever the CLIENT observes or otherwise becomes aware of any defect in the proposed project.

E. The CLIENT shall designate a liaison person to act as the CLIENT'S representative with respect to services to be rendered under this Agreement. Said representative shall have the authority to transmit instructions, receive instructions, receive information, interpret and define the CLIENT'S policies with respect to the project and CONSULTANT'S services.

F. The CONSULTANT'S services do not include legal, insurance counseling, accounting, independent cost estimating, financial advisory or "municipal advisor" (as described in Section 975 of the Dodd-Frank Wall Street Reform and Consumer Protection Act 2010 and the municipal advisor registration rules issued by the SEC) professional services and the CLIENT shall provide any such services as may be required for completion of the Project described in this Agreement.

G. The CLIENT will obtain any and all regulatory permits required for the proper and legal execution of the Project. CONSULTANT will assist CLIENT with permit preparation and documentation to the extent described in Exhibit A.

H. The CLIENT may hire, at its discretion, when requested by the CONSULTANT, an independent test company to perform laboratory and material testing services, and soil investigation that can be justified for the proper design and construction of the Project. The CONSULTANT shall assist the CLIENT in selecting a testing company. Payment for testing services shall be made directly to the testing company by the CLIENT and is not part of this Agreement. If CLIENT elects not to hire an independent test company, CLIENT shall provide CONSULTANT with guidance and direction on completing those aspects of design and construction that require additional testing data.

SECTION III - COMPENSATION FOR SERVICES

A. FEES.

1. The CLIENT will compensate the CONSULTANT in accordance with the Schedule of Fees for the time spent by CONSULTANT'S personnel in performance of the Services. Total fees for the Services shall not exceed \$24,600.00 without the prior consent of CLIENT. See the attached Schedule 1 for Schedule of Fees applicable to this Agreement.
2. The preceding Schedule of Fees shall apply for services provided through December 31, 2025. Hourly rates may be adjusted by CONSULTANT, in consultation with CLIENT, on an annual basis thereafter to reflect reasonable changes in its operating costs and other market factors. Adjusted rates will become effective on January 1st of each subsequent year, upon written acceptance by CLIENT.
3. Rates and charges do not include sales tax. If such taxes are imposed and become applicable after the date of this Agreement CLIENT agrees to pay any applicable sales taxes.
4. The rates in the Schedule of Fees include labor, general business and other normal and customary expenses associated with operating a professional business. Unless otherwise agreed in writing, the above rates include vehicle and personal expenses, mileage, telephone, survey stakes and routine expendable supplies; and no separate charges will be made for these activities and materials.
5. Additional Services as outlined in Section I.B will vary depending upon project conditions and will be billed on an hourly basis at the rate described in Section III.A.1.
6. Expenses required to complete the agreed scope of services or identified in this paragraph will be invoiced separately, and include but are not limited to large quantities of prints; extra report copies; out-sourced graphics and photographic reproductions; document recording fees; special field and traffic control equipment rental; outside professional and technical assistance; geotechnical services; and other items of this general nature required by the CONSULTANT to fulfill the terms of this Agreement. CONSULTANT shall be reimbursed at cost plus an overhead fee (not-to-exceed 10%) for these Direct Expenses incurred in the performance of the work subject to the Total cost not to exceed fee or approved Additional Services.

B. PAYMENTS AND RECORDS

1. The payment to the CONSULTANT will be made by the CLIENT upon billing at intervals not more often than monthly at the herein rates and terms.
2. If CLIENT fails to make any payment due CONSULTANT for Services and expenses within 45 days after date of the CONSULTANT'S invoice, a service charge of one and one-half percent (1.5%) per month or the maximum rate permitted by law, whichever is less, will be charged on any unpaid balance.
3. In addition to the service charges described in preceding paragraph, if the CLIENT fails to make payment for Services and expenses within 60 days after the date of the invoice, the CONSULTANT may, upon giving seven days' written notice to CLIENT, suspend Services and withhold project deliverables due under this Agreement until CONSULTANT has been paid in full for all past due amounts for Services, expenses and charges, without waiving any claim or right against the CLIENT and without incurring liability whatsoever to the CLIENT.
4. Documents Retention. The CONSULTANT will maintain records that reflect all revenues, costs incurred and the Services provided in the performance of the Agreement. The CONSULTANT will also agree that the CLIENT, State, or their duly authorized representatives may, at any time during normal business hours and as often as reasonably necessary, have access to and the right to examine, audit, excerpt, and transcribe any books, documents, papers, records, etc., and accounting procedures and practices of the CONSULTANT which are relevant to this Contract for a period of six years.

SECTION IV - GENERAL

A. STANDARD OF CARE. Professional services provided under this Agreement will be conducted in a manner consistent with that level of care and skill ordinarily exercised by members of the CONSULTANT'S profession currently practicing under similar conditions. No warranty, express or implied, is made.

B. CHANGE IN PROJECT SCOPE. In the event the CLIENT changes or is required to change the scope or duration of the project from that described in Exhibit I, and such changes require Additional Services by the CONSULTANT, the CONSULTANT shall be entitled to additional compensation at the applicable hourly rates. To the fullest extent practical, the CONSULTANT shall give notice to the CLIENT of any Additional Services, prior to furnishing such Additional Services. The CONSULTANT shall furnish an estimate of additional cost, prior to authorization of the changed scope of work and Agreement will be revised in writing.

C. LIMITATION OF LIABILITY

1. Liability of CONSULTANT. CONSULTANT shall indemnify CLIENT from losses, damages, and judgments arising from third-party claims or actions relating to the Project only to the extent caused by the negligent acts, errors or omissions (whether in the performance of professional services or otherwise) of CONSULTANT or CONSULTANT'S officers, employees, or subconsultants occurring during the scope of CONSULTANT's work on the Project and provided that any such claim, action, loss, damages, or judgment is attributable to bodily injury, sickness, disease, or death, or to injury to or destruction of tangible property. CONSULTANT's obligation to indemnify the CLIENT and CLIENT's officers and employees harmless does not include a duty to defend. This indemnification shall not apply to third-party claims or actions for consequential damages, lost revenues, increased expense, or lost profits, nor to any claim for punitive or exemplary damages.
2. Liability of Client. To the fullest extent permitted by law, CLIENT shall indemnify CONSULTANT from losses, damages, and judgments (including reasonable attorneys' fees and expenses of litigation) arising from claims or actions relating to the Project, provided that any such claim, action, loss, damages, or judgment is attributable

to bodily injury, sickness, disease, or death, or to injury to or destruction of tangible property, but only to the extent caused by the acts or omission of CLIENT or CLIENT'S employees, agents, or other consultants. This indemnification shall not apply to third-party claims or actions for consequential damages, lost revenues, increased expense or lost profits, nor to any claim for punitive or exemplary damages.

3. To the fullest extent permitted by law, CLIENT and CONSULTANT waive against each other, and the other's employees, officers, directors, members, agents, insurers, partners, and consultants, any and all claims for or entitlement to special, incidental, indirect, or consequential damages arising out of, resulting from, or in any way related to this Agreement, from any cause or causes. CLIENT waives all claims against individuals involved in the services provided under this Agreement and agrees to limit all claims to the CONSULTANT's corporate entity.
4. Nothing contained in this Agreement shall create a contractual relationship with or a cause of action in favor of a third party against either the CLIENT or the CONSULTANT. The CONSULTANT'S services under this Agreement are being performed solely for the CLIENT'S benefit, and no other entity shall have any claim against the CONSULTANT because of this Agreement or the performance or nonperformance of services provided hereunder.

D. INSURANCE

1. The CONSULTANT agrees to maintain, at CONSULTANT'S expense a commercial general liability (CGL) and excess or umbrella general liability insurance policy or policies insuring CONSULTANT against claims for bodily injury, death or property damage arising out of CONSULTANT'S general business activities. The general liability coverage shall provide limits of not less than \$2,000,000 per occurrence and not less than \$2,000,000 general aggregate. Coverage shall include Premises and Operations Bodily Injury and Property Damage; Personal and Advertising Injury; Blanket Contractual Liability; Products and Completed Operations Liability.
2. The CONSULTANT also agrees to maintain, at CONSULTANT'S expense, a single limit or combined limit automobile liability insurance and excess or umbrella liability policy or policies insuring owned, non-owned and hired vehicles used by CONSULTANT under this Agreement. The automobile liability coverages shall provide limits of not less than \$1,000,000 per accident for property damage, \$2,000,000 for bodily injuries, death and damages to any one person and \$2,000,000 for total bodily injury, death and damage claims arising from one accident.
3. CLIENT shall be named Additional Insured for the above CGL and Auto liability policies.
4. The CONSULTANT agrees to maintain, at the CONSULTANT'S expense, statutory worker's compensation coverage together with Coverage B, Employer's Liability limits of not less than \$500,000 for Bodily Injury by Disease per employee, \$500,000.00 for Bodily Injury by Disease aggregate and \$500,000 for Bodily Injury by Accident.
5. The CONSULTANT also agrees to maintain, at CONSULTANT'S expense, Professional Liability Insurance coverage insuring CONSULTANT against damages for legal liability arising from a negligent act, error or omission in the performance of professional services required by this Agreement during the period of CONSULTANT'S services and for three years following date of final completion of its services. The professional liability insurance coverage shall provide limits of not less than \$2,000,000 per claim and an annual aggregate of not less than \$2,000,000 on a claims-made basis.
6. CLIENT shall maintain statutory Workers Compensation insurance coverage on all of CLIENT'S employees and other liability insurance coverage for injury and property damage to third parties due to the CLIENT'S negligence.

7. Prior to commencement of this Agreement, CONSULTANT will provide the CLIENT with certificates of insurance, showing evidence of required coverages. All policies of insurance shall contain a provision or endorsement that the coverage afforded will not be canceled or reduced in limits by endorsement for any reason except non-payment of premium, until at least 30 days prior written notice has been given to the Certificate Holder, and at least 10 days prior written notice in the case of non-payment of premium

E. OPINIONS OR ESTIMATES OF CONSTRUCTION COST. Where provided by the CONSULTANT as part of Exhibit A or otherwise, opinions or estimates of construction cost will generally be based upon public construction cost information. Since the CONSULTANT has no control over the cost of labor, materials, competitive bidding process, weather conditions and other factors affecting the cost of construction, all cost estimates are opinions for general information of the CLIENT and the CONSULTANT does not warrant or guarantee the accuracy of construction cost opinions or estimates. The CLIENT acknowledges that costs for project financing should be based upon contracted construction costs with appropriate contingencies.

F. CONSTRUCTION SERVICES. It is agreed that the CONSULTANT and its representatives shall not at any time supervise, direct, control, or have authority over any contractor's work, nor shall CONSULTANT have authority over or be responsible for the means, methods, techniques, sequences, or procedures of construction selected or used by any contractor, or the safety precautions and programs incident thereto, for security or safety at any Project site, nor for any failure of a Contractor to comply with Laws and Regulations applicable to that Contractor's furnishing and performing of its work. CONSULTANT shall not be responsible for the acts or omissions of any Contractor. CLIENT acknowledges that on-site contractor(s) are solely responsible for construction site safety programs and their enforcement.

G. USE OF ELECTRONIC/DIGITAL DATA

1. Because of the potential instability of electronic/digital data and susceptibility to unauthorized changes, copies of documents that may be relied upon by CLIENT are limited to the printed copies (also known as hard copies) that are signed or sealed by CONSULTANT. Except for electronic/digital data which is specifically identified as a project deliverable for this Agreement or except as otherwise explicitly provided in this Agreement, all electronic/digital data developed by the CONSULTANT as part of the Project is acknowledged to be an internal working document for the CONSULTANT'S purposes solely and any such information provided to the CLIENT shall be on an "AS IS" basis strictly for the convenience of the CLIENT without any warranties of any kind. As such, the CLIENT is advised and acknowledges that use of such information may require substantial modification and independent verification by the CLIENT (or its designees).
2. Provision of electronic/digital data, whether required by this Agreement or provided as a convenience to the Client, does not include any license of software or other systems necessary to read, use or reproduce the information. It is the responsibility of the CLIENT to verify compatibility with its system and long-term stability of media. CLIENT shall indemnify and hold harmless CONSULTANT and its Subconsultants from all claims, damages, losses, and expenses, including attorneys' fees arising out of or resulting from third party use or any adaptation or distribution of electronic/digital data provided under this Agreement, unless such third party use and adaptation or distribution is explicitly authorized by this Agreement.

H. REUSE OF DOCUMENTS

1. Drawings and specifications and all other documents (including electronic and digital versions of any documents) prepared or furnished by CONSULTANT pursuant to this Agreement are instruments of service in respect to the Project and CONSULTANT shall retain an ownership interest therein. Upon payment of all fees owed to the CONSULTANT, the CLIENT shall acquire a limited license in all identified deliverables (including reports, plans, and specifications) for any reasonable use relative to the Project and the general operations of the CLIENT. Such limited license to Owner shall not create any rights in third parties.

2. CLIENT may make and disseminate copies for information and reference in connection with the use and maintenance of the Project by the CLIENT. However, such documents are not intended or represented to be suitable for reuse by CLIENT or others on extensions of the Project or on any other project. Any reuse by CLIENT or, any other entity acting under the request or direction of the CLIENT, without written verification or adaptation by CONSULTANT for such reuse will be at CLIENT'S sole risk and without liability or legal exposure to CONSULTANT and CLIENT shall indemnify and hold harmless CONSULTANT from all claims, damages, losses and expenses including attorney's fees arising out of or resulting from such reuse.

I. CONFIDENTIALITY. CONSULTANT agrees to keep confidential and not to disclose to any person or entity, other than CONSULTANT'S employees and subconsultants any information obtained from CLIENT not previously in the public domain or not otherwise previously known to or generated by CONSULTANT. These provisions shall not apply to information in whatever form that comes into the public domain through no fault of CONSULTANT; or is furnished to CONSULTANT by a third party who is under no obligation to keep such information confidential; or is information for which the CONSULTANT is required to provide by law or authority with proper jurisdiction; or is information upon which the CONSULTANT must rely for defense of any claim or legal action.

J. PERIOD OF AGREEMENT. This Agreement will remain in effect for the longer of a period of two (2) years or until such other expressly identified completion date, after which time the Agreement may be extended upon mutual agreement of both parties.

K. TERMINATION. This Agreement may be terminated:

1. For cause, by either party upon 7 days written notice in the event of substantial failure by other party to perform in accordance with the terms of this Agreement through no fault of the terminating party. For termination by CONSULTANT, cause includes, but is not limited to, failure by CLIENT to pay undisputed amounts owed to CONSULTANT within 120 days of invoice and delay or suspension of CONSULTANT'S services for more than 120 days for reasons beyond CONSULTANT'S cause or control; or,
2. For convenience by CLIENT upon 7 days written notice to CONSULTANT.
3. Notwithstanding, the foregoing, this Agreement will not terminate under paragraph IV.K if the party receiving such notice immediately commences correction of any substantial failure and cures the same within 10 days of receipt of the notice.
4. In the event of termination by CLIENT for convenience or by CONSULTANT for cause, the CLIENT shall be obligated to the CONSULTANT for payment of amounts due and owing including payment for services performed or furnished to the date and time of termination, computed in accordance with Section III of this Agreement. CONSULTANT shall deliver and CLIENT shall have, at its sole risk, right of use of any completed or partially completed deliverables, subject to provisions of Paragraph IV. H.
5. In event of termination by CLIENT for cause and in addition to any other remedies available to CLIENT, CONSULTANT shall deliver to CLIENT and CLIENT shall have right of use of any completed or partially completed deliverables, in accordance with the provisions of Paragraph IV.H. CLIENT shall compensate CONSULTANT for all undisputed amounts owed CONSULTANT as of date of termination.

L. INDEPENDENT CONTRACTOR. Nothing in this Agreement is intended or should be construed in any manner as creating or establishing the relationship of co-partners between the parties hereto or as constituting the CONSULTANT or any of its employees as the agent, representative, or employee of the CLIENT for any purpose or in

any manner whatsoever. The CONSULTANT is to be and shall remain an independent contractor with respect to all services performed under this Agreement.

M. CONTINGENT FEE. The CONSULTANT warrants that it has not employed or retained any company or person, other than a bona fide employee working solely for the CONSULTANT to solicit or secure this Agreement, and that it has not paid or agreed to pay any company or person, other than a bona fide employee, any fee, commission, percentage, brokerage fee, gift or any other consideration, contingent upon or resulting from award or making of this Agreement.

N. NON-DISCRIMINATION. The provisions of any applicable law or ordinance relating to civil rights and discrimination shall be considered part of this Agreement as if fully set forth herein. **The CONSULTANT is an equal opportunity employer and federal contractor or subcontractor. Consequently, the parties agree that, as applicable, they will abide by the requirements of 41 CFR 60-1.4(a), 41 CFR 60-300.5(a) and 41 CFR 60-741.5(a) and that these laws are incorporated herein by reference. These regulations prohibit discrimination against qualified individuals based on their status as protected veterans or individuals with disabilities, and prohibit discrimination against all individuals based on their race, color, religion, sex, sexual orientation, gender identity or national origin. These regulations require that covered prime contractors and subcontractors take affirmative action to employ and advance in employment individuals without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, protected veteran status or disability. The parties also agree that, as applicable, they will abide by the requirements of Executive Order 13496 (29 CFR Part 471, Appendix A to Subpart A), relating to the notice of employee rights under federal labor laws.**

O. ASSIGNMENT. Neither party shall assign or transfer any interest in this Agreement without the prior written consent of the other party.

P. SURVIVAL. All obligations, representations and provisions made in or given in Section IV and Documents Retention clause of this Agreement will survive the completion of all services of the CONSULTANT under this Agreement or the termination of this Agreement for any reason.

Q. SEVERABILITY. Any provision or part of the Agreement held to be void or unenforceable under any law or regulation shall be deemed stricken, and all remaining provisions shall continue to be valid and binding upon CLIENT and CONSULTANT, who agree that the Agreement shall be reformed to replace such stricken provision or part thereof with a valid and enforceable provision that comes as close as possible to expressing the intention of the stricken provision.

R. CONTROLLING LAW. This Agreement is to be governed by the law of the State of Iowa and venue in courts of Iowa; or at the choice of either party, and if federal jurisdictional requirements can be met, in federal court in the district in which the project is located.

S. DISPUTE RESOLUTION. CLIENT and CONSULTANT agree to negotiate all disputes between them in good faith for a period of 30 days from the date of notice of dispute prior to proceeding to formal dispute resolution or exercising their rights under law. Any claims or disputes unresolved after good faith negotiations shall then be submitted to mediation using a neutral from the American Arbitration Association Construction Industry roster. If mediation is unsuccessful in resolving the dispute, then either party may seek to have the dispute resolved by bringing an action in a court of competent jurisdiction.

SECTION V - SIGNATURES

THIS INSTRUMENT embodies the whole agreement of the parties, there being no promises, terms, conditions or obligation referring to the subject matter other than contained herein. This Agreement may only be amended, supplemented, modified or canceled by a duly executed written instrument signed by both parties.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed in their behalf.

CLIENT: _____

CONSULTANT: Bolton & Menk, Inc.

Gregory Brownard

Principal Engineer

3/10/2025

EXHIBIT A

SCOPE OF SERVICES

Objective: This scope of services outlines the Engineering Services required to complete one bid package for construction of a new pedestrian trail crossing on Oregon Street east of Grandview crossing the railroad.

The Project includes the following elements:

1. Complete sidewalk removal and reconstruction of the sidewalk within the project limits including addition of trail crossing over the railroad.

I.A. BASIC SERVICES

For purposes of this Project, Basic Services to be provided by the CONSULTANT are as follows:

Scope of services

The following pages include a description of the tasks necessary to complete your project.

TASK 1: PROJECT INITIATION AND PROJECT MANAGEMENT

- A. CONSULTANT will facilitate a virtual project kick-off meeting with CLIENT staff to accomplish the following:
 - Review and confirm the scope of the project
 - Review available information relative to the project
 - Review and discuss specific infrastructure issues and CLIENT'S current design standards as they relate to the proposed improvements on this project
 - Review and verify project schedules
 - Conduct a field review of project area by CONSULTANT and CLIENT representatives
- B. The CONSULTANT shall meet with the CLIENT and key stakeholders to review the progress and to discuss specific elements of the project. The meetings will guide the development the project including establishing project schedule, design parameters, discussion about design related items, improve the design making process and design development. The CONSULTANT shall develop meeting minutes for each meeting including maintaining a design decision log to track the key design decision on the project. Up to one (1) In-person and two (2) virtual PMT meetings will be held with the CONSULTANT and the CLIENT after the initial kickoff meeting.
- C. CONSULTANT will facilitate project communication between CONSULTANT and CLIENT throughout the duration of the project. (Including distributing meeting minutes in a timely manner).

Deliverables

- Monthly project email updates summarizing the activities over the past month and future activities planned.
- Meeting agendas and minutes

TASK 2 – PRELIMINARY DESIGN

Subtask 2.1 Utility/Railroad Coordination

- A. During the field data collection phase, the CONSULTANT will complete an Iowa One Call to identify the utilities within the project corridor. The CONSULTANT will attend up to one (1) virtual utility coordination meetings with affected utilities to review the proposed construction and identify conflicts and required relocation.
- B. Railroad coordination will be discussed again at the kickoff meeting. Additionally, the CONSULTANT will prepare for and conduct up to two (2) conference calls with the Railroad.

Subtask 2.2 – Preliminary Design

The Consultant will perform preliminary design services in the preparation of design plans and specifications depicting the proposed sidewalk, drainage, paving, signing, utility relocation, and other features of the project.

During preliminary design, the CONSULTANT will develop a conceptual plan for review by the railroad including sidewalk location, width and other proposed improvements. Once the sidewalk geometrics are approved, the CONSULTANT will then proceed with preliminary design and documentation.

The preliminary plans will include but not limited to the following task:

Title and General Information Sheets (A Sheets)

This task consists of assembling the preliminary title and general information sheets. The preliminary title sheets will include the following: index of sheets, revisions, legend, location map, project number, design traffic data.

Preliminary Typical Cross Sections and Details (B Sheets)

This task consists of assembling the Typical Cross Sections to be used for the proposed improvements as well as a preliminary determination of the limits that each Typical Section will apply. The typical Cross Sections will include but not be limited to typical sections for the proposed grading, drainage and paving improvements.

Preliminary Estimate of Quantities (C Sheets)

This task consists of a preliminary determination of the bid items to be included in the project, along with an estimate of quantities for each item.

Preliminary Plan and Profiles (D and E Sheets)

This task consists of the development of preliminary plan and profile sheets that will show the existing topography along with the proposed improvements based on the survey location centerline. Proposed Right-of-Way and Construction Easement limits based on grading/impact limits lines will be shown. Included will include the necessary CAD work to show the preliminary design features for the proposed improvements. The scale of these sheets will be 1"=20'.

Preliminary ROW Sheets (H Sheets)

This task consists of a development of the existing ROW through the project and showing preliminary easement needs. The scale of these sheet will be 1"=20'

The consultant shall provide the City a list of properties with easement/right of entry needs that accompany the H Sheets. The easement/right of entry needs will be established with the preliminary design phase to allow City staff time to meet with property owners and obtain the necessary approvals prior to bidding.

Preliminary Traffic Control and Staging (J Sheets)

Develop suitable plan for construction scheduling and staging of the Project and for traffic control measures to be implemented during construction. Staging plan shall include provisions for maintaining access to adjacent properties during construction. For estimating purposes, it is assumed that the roadway will be closed during construction and a single detour plan will be implemented.

The traffic control devices, procedures, and layouts shall be as per the Manual of Uniform Traffic Control Devices (MUTCD).

Preliminary Storm Drainage Design (M Sheets)

No Storm Sewer is anticipated to be included as part of this project.

Preliminary Sanitary Sewer Design (M Sheets)

No Sanitary Sewer is anticipated to be included as part of this project.

Preliminary Water Main Design (M Sheets)

No Water Main is anticipated to be included as part of this project.

Preliminary Removal Plans (R Sheets)

This item consists of preliminary design and drafting of proposed improvements and removals.

Preliminary Curb Ramp Design (S Sheets)

Develop preliminary curb ramp layout in accordance with Chapter 12 of Iowa SUDAS Design Manual. Design ramp geometric configurations alternatives, identify surface requirements, review general horizontal curb opening, cross slopes, running slope, and identify sidewalk width and passing space within the corridor.

Preliminary Cross Sections (W & X Sheets)

This task consists of design and drafting associated with the assembly of detailed cross sections (25' increments) to illustrate typical conditions, drainage designs, and non-typical conditions as needed for guidance during design, review, and quantity estimating purposes.

Subtask 2.3 – Preliminary Opinion of Probable Construction Cost

The Consultant shall prepare a preliminary Opinion of Probable Construction Cost for the Project

TASK 3 – FINAL DESIGN

Based upon approved preliminary design, field exam, and public informational meeting, the Consultant subsequently proceed with final design, contract drawings, specifications and opinion of probable construction cost for the award of a single Contract for the construction of the proposed improvements. The work tasks to be performed include the following:

Subtask 3.1 Final Plans

The Consultant shall provide the City with the following deliverables:

Title and General Information Sheets (A Sheets)

This task consists of assembling the preliminary title and general information sheets. The preliminary title sheets will include the following: index of sheets, revisions, legend, location map, project number, design traffic data.

Final Typical Cross Sections and Details (B Sheets)

This task consists of final design and drafting of typical cross sections and standard details to be utilized for the improvements.

Final Estimate of Quantities (C Sheets)

This task consists of final bid items to be included in the Project, as well as final quantity tabulations, and the development of the general notes and estimate reference information.

Final Plan and Profiles (D and E Sheets)

This item consists of the final design and drafting of roadway plan and profile sheets, including the detail information required for plan approvals, permitting, and construction of the proposed improvements. This task also consists of the final design and drafting for the installation of new utilities and utility adjustments that can be determined from coordination with the utility companies at the time of design.

Final Erosion Control and Surface Restoration (CE Sheets)

This item includes the final design and drafting of erosion control measures and surface restoration to be provided on the Project.

Final Reference Plans (G Sheets)

This item consists of assembling reference ties to the plan control points and the benchmark data used to develop the plans and to be preserved throughout construction of the project.

Final ROW Sheets (H Sheets)

This task consists of a documenting the existing ROW through the project and showing final easement for the project. The scale of these sheet will be 1"=20'. This task does not include obtaining any easement/right of entry permits. City staff shall be responsible for obtaining all recommended easements.

Final Traffic Control, Staging and Pavement Markings (J Sheets)

This item consists of final design and drafting of the traffic control, staging and permanent pavement marking plans.

The traffic control devices, procedures, and layouts shall be as per the Manual of Uniform Traffic Control Devices (MUTCD).

Final Storm Drainage Design (M Sheets)

No Storm sewer is anticipated as part of this project.

Final Sanitary Sewer Design (MWM Sheets)

No Sanitary sewer is anticipated as part of this project.

Final Water Main Design (MWM Sheets)

No Water Main is anticipated as part of this project.

Final pavement marking and signage plans (N Sheets)

This item consists of final design and drafting of pavement markings and signage for the Project.

Final Lighting Plans (P Sheets) – Task not used

Final Removal Plans (R Sheets)

This item consists of final design and drafting of proposed improvements and removals.

Final Curb Ramp Design (S Sheets)

Develop final curb ramp layout in accordance with Chapter 12 of Iowa SUDAS Design Manual. Final ramp geometric configurations alternatives, identify surface requirements, review general horizontal curb opening, cross slopes, running slope, and identify sidewalk width and passing space within the corridor.

Final Streetscape Design (T Sheets) – Final streetscape plans shall be developed and shall include special paving layout and details, monument signage, landscaping, and special design details.

Final Design Cross Sections (W & X Sheets)

This task consists of final design and drafting individual cross sections for the project. Cross sections will be designed and drawn at 25-foot maximum intervals, with additional cross-sections included as necessary.

Subtask 3.2 Project Manual

This task consists of providing a Project Manual for the Project, including Notice of Hearing and Letting, Instruction to Bidders, Bid Forms, Bond Forms, Agreement Forms, General Conditions of the Construction Contract, Supplementary General Conditions, and Detailed Construction Specification

Subtask 3.3 Final Opinion of Probable Construction Cost

The Consultant shall prepare a final Opinion of Probable Construction Cost for the Project.

Subtask 3.4 Final Design Meeting

It is estimated that the Consultant's staff will attend one (1) meeting with the City, and others to review progress, assist in decision-making, and receive direction from the City. This meeting will be held after a final review of the plans by the City of Marshalltown and all effected utilities in the corridor. Plan revisions will be completed based on review comments.

TASK 4 – BIDDING

The Consultant will coordinate and manage the bid letting process for the project. For estimating purpose, one (1) letting has been included as part of this task. The work task to be performed or coordinated by the Consultant shall include the following.

Subtask 4.1 Printing of Plans and Specifications

This task consists of printing and handling of the Plans and Specifications. For budget purposes it is estimated that five (5) half-sized (11"x17") plan sets and specifications will be duplicated and assembled by the Consultant. This task also includes the dissemination of the contract documents and maintaining a plan holders list during the bidding phase.

Subtask 4.2 Advertisement/Notice of Project

The Consultant shall prepare the formal Notice of Hearing and Letting. The City shall post the Notice of Letting. The City shall handle publication of the Notice of Hearing. The Consultant shall also prepare and disseminate an informal notice to contractors concerning the upcoming Project.

Subtask 4.3 Plan Clarification and Addenda

The Consultant shall be available to answer questions from contractors prior to the letting and shall issue addenda as appropriate to interpret, clarify or expend the bidding documents.

Subtask 4.4 Letting, Bid Tabulations, and Award Recommendation

The Consultant shall have a representative present when opening the bids and proposals, shall make tabulations of the bid for the Owner, shall advise the Owner on the responsiveness of the bidders and assist the Owner in making the award of contract, including preparation of necessary contract document.

Items provided by the Client

- Access to the Site
- Previous prepared reports if applicable

ADDITIONAL SERVICES

Consulting services performed other than those authorized under Tasks 1-4. shall not be considered part of the Basic Services and may be authorized by the Client as Additional Services. Additional Services consist of those services, which are not generally considered to be Basic Services; or exceed the requirements of the Basic Services; or are not definable prior to the commencement of the project; or vary depending on the technique, procedures or schedule of the project contractor. Additional services may consist of the following:

- Topographic Survey – Data from Grandview Survey will be utilized for design.

- Construction Administration
- Construction Staking
- All other services not specifically identified in the Proposal

FEES

Bolton & Menk, Inc's proposed fee for the described Scope of Services is as follows:

Scope of Services		
TASK		PRICE
1	Project Initiation and Project Management	\$ 3,800.00
2	Preliminary Design	\$ 9,000.00
3	Final Design	\$ 9,700.00
4	Bidding	\$ 2,100.00
Total		\$24,600.00

These rates include labor, general business and other normal and customary expenses associated with operating a professional business. Unless otherwise agreed, the above rates include vehicle and personal expenses, mileage, telephone, survey equipment, survey stakes and routine expendable supplies; and no separate charges will be made for these activities and materials.



City of Muscatine

ITEM NUMBER 2025-0111

AGENDA ITEM SUMMARY

DATE: 3/20/2025

STAFF

Brian Stineman, Public Works Director
Kevin Coon, City Engineer

SUBJECT

Request to Issue Payment to the Federal Aviation Administration (FAA) in an Amount Not to Exceed \$21,293.28 to Perform a Commissioning Flight Inspection of the Runway Lights at the Muscatine Municipal Airport.

EXECUTIVE SUMMARY

Request to Issue Payment to the Federal Aviation Administration (FAA) in an Amount Not to Exceed \$21,293.28 to Perform a Commissioning Flight Inspection of the Runway Lights at the Muscatine Municipal Airport.

STAFF RECOMMENDATION

Approve the request

BACKGROUND/DISCUSSION

At the April 18, 2024 City Council meeting, the council approved awarding the contract for runway lighting as described below to Kimrey Electric of Urbandale, Iowa in the amount of \$718,473.00.

- Runway 12/30 will replace all edge and threshold lights with new LED lights and wiring.
- Taxiway Runway 12/30 will replace all edge and threshold lights with new LED lights and wiring.
- Taxiway 'B' will replace all edge lighting with new LED lights and wiring.
- Runway End Identifier Lights (REIL's) are flashing strobes which locate the ends of the runway for pilots and will be replaced with new LED REIL's.
- Precision Approach Path Indicators (PAPI's) show pilots their elevation relative to the proper approach slope when on final approach for landing, and will receive new LED PAPI's.

These two projects (lighting and PAPI's/REIL's) received separate grants, but design, bidding

and construction have been combined for ease of construction and management.

Costs for this project construction related to replacement of Runway 12/30 and Taxiway 'B' Edge and Threshold Lighting and installation of PAPI and REIL systems on Runway 12/30 is funded at 90% by the Federal Aviation Administration (FAA). The City is responsible for the remaining 10% local match which has been allocated in future bond proceeds.

After completion of this project, the FAA will require a test flight to ensure that the lights are working properly and that the angles of approach for aircraft are acceptable. This request covers the cost of the test flight and the city is required to provide payment before the flight can be scheduled.

CITY FINANCIAL IMPACT

The City is responsible for the 10% local match which has been allocated in future bond proceeds.

ATTACHMENTS

1. AC-007138 Muscatine IA Signed

NON-FEDERAL REIMBURSABLE AGREEMENT

BETWEEN

**DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION**

AND

**CITY OF MUSCATINE, IOWA
MUSCATINE, IA**

WHEREAS, the Federal Aviation Administration (FAA) can furnish directly or by contract, material, supplies, equipment, and services which the **City of Muscatine, Iowa** (Sponsor) requires, has funds available for, and has determined should be obtained from the FAA;

WHEREAS, it has been determined that competition with the private sector for provision of such material, supplies, equipment, and services is minimal; the proposed activity will advance the FAA's mission; and the FAA has a unique capability that will be of benefit to the Sponsor while helping to advance the FAA's mission;

NOW THEREFORE, the FAA and the Sponsor mutually agree as follows:

ARTICLE 1. Parties

The Parties to this Agreement are the FAA-Flight Program Operations and **City of Muscatine, Iowa**.

ARTICLE 2. Type of Agreement

This Agreement is an "other transaction" authorized under 49 U.S.C. § 106(l)(6). It is not intended to be, nor will it be construed as, a partnership, corporation, joint venture or other business organization.

ARTICLE 3. Scope

- A. The purpose of this Agreement between the FAA and the Sponsor is to **provide a commissioning flight inspection of the PAPIs on Rwy 12/30 & reconfiguration flight inspection of the REILs/MIRLs on Rwy 12/30 at Muscatine Municipal Airport (KMUT) Muscatine, IA**. This Agreement provides funding for the FAA to establish these services. Therefore, this Agreement is titled:

City of Muscatine, Iowa, Muscatine, IA

- B. The FAA will **perform a commissioning flight inspection of the PAPIs on Rwy 12/30 & reconfiguration flight inspection of the REILs/MIRLs on Rwy 12/30 at Muscatine Municipal Airport (KMUT) Muscatine, IA.**
- C. The Sponsor will perform the following activities:
1. Provide funding as estimated in Article 7.
 2. Upon signature and payment of agreement, contact Richard Montgomery at 405-954-0792 or Richard.Montgomery@faa.gov once the site is ready for inspection. You may also call the Oklahoma City Service Center if you have any questions at 405-954-9780.
- D. This agreement is in whole or in part funded with funding from an AIP grant [X] Yes [] No. If Yes, the grant date is: 07/16/2024 / 08/04/2024 and the grant number is: 3-19-0063-026-2024 / 3-19-0063-027-2024. If the grant information is not available at the time of agreement execution, the Sponsor will provide the grant information to the FAA when it becomes available.

ARTICLE 4. Points of Contact

A. FAA:

1. The FAA, **Flight Program Operations, Program Support Group** will provide administrative oversight of this Agreement. **Shelley Ochs** is the **Agreement Coordinator** and liaison with the Sponsor and can be reached at 405-954-5757 or via email at shelley.d.ochs@faa.gov. This liaison is not authorized to make any commitment, or otherwise obligate the FAA, or authorize any changes which affect the estimated cost, period of performance, or other terms and conditions of this Agreement.
2. The FAA, **Flight Program Operations, Flight Operations Group** will perform the scope of work included in this Agreement. **Richard Montgomery** is the **Lead Scheduler**, Flight Program Operations, and liaison with the Sponsor for any Flight Inspection issues and can be reached at 405-954-9780 or via email at richard.montgomery@faa.gov. These liaisons are not authorized to make any commitment, or otherwise obligate the FAA, or authorize any changes which affect the estimated cost, period of performance, or other terms and conditions of this Agreement.
3. FAA Contracting Officer: The execution, amendment, and administration of this Agreement must be authorized and accomplished by the **Contracting Officer, Michele Mustin** who can be reached at 405-954-7879 or via email at michele.d.mustin@faa.gov.

B. Sponsor:

Sponsor: City of Muscatine, Iowa
ATTN: Brian Stineman, Public Works Director
Address: 1459 Washington Street
Muscatine, IA 52761-3839
Phone: 563-263-8933
Email: bstineman@muscatineiowa.gov

ARTICLE 5. Non-Interference with Operations [RESERVED]

ARTICLE 6. Property Transfer [RESERVED]

ARTICLE 7. Estimated Costs

A. The estimated FAA costs associated with this Agreement are as follows:

DESCRIPTION OF REIMBURSABLE ITEM	ESTIMATED COST
LABOR	
NA	\$0
NON-LABOR	
Flight Inspection	\$19,716.00
Non-Labor Overhead (8%)	\$ 1,577.28
Total Non-Labor	\$21,293.28
TOTAL ESTIMATED COST	\$21,293.28

Detailed Estimate:

Flight Inspection Estimated Cost

	Type	Hours	Inspections	Estimated Cost
<i>Beech Rate \$3,286/hr</i>				
PAPIs Rwys 12/30	Commission			
REILs/MIRLs Rwys 12/30 at KMUT	Reconfiguration	6	1	\$19,716.00
	8% Administrative Overhead			\$ 1,577.28
	Total Estimated Cost			\$21,293.28

B. FAA reserves the right to determine which aircraft will be used for flight inspections. Flight hour rates will be adjusted automatically according to FAA Order 4040.28 (current edition), Application of Flight Hour Rates, or as approved by the Flight Program Executive. The estimate is based on rates in effect at the time this Agreement is signed.

- C. Estimated costs contained herein are for planning purposes only and can vary depending on the actual aircraft used, and actual flight hours expended to reach the facility and to accomplish the inspection. As required by regulation, the final bill submitted to the Sponsor will reflect actual hours and costs to the FAA.
- D. Sponsor will be notified of any necessary deviations or changes to the instrument flight procedure and agrees to negotiate with the FAA to resolve additional reimbursement issues exceeding 10% of the cost estimate, in accordance with Article 9.
- E. FAA flight inspection aircraft may be delayed from scheduled itineraries for unanticipated reasons such as a National Airspace System priority, weather, or unscheduled aircraft maintenance. FAA is not responsible for any additional cost the Sponsor may incur if an inspection must be rescheduled.

ARTICLE 8. Period of Agreement and Effective Date

The effective date of this Agreement is the date of the last signature. This Agreement is considered complete when the final invoice is provided to the Sponsor and a refund is sent or payment is received as provided for in Article 9, Section D of this Agreement. This Agreement will not extend more than five years beyond its effective date.

ARTICLE 9. Reimbursement and Accounting Arrangements

- A. The Sponsor agrees to prepay the entire estimated cost of the Agreement. The Sponsor will send an electronic copy of the Agreement to the FAA Agreement Coordinator for FAA signature. The Sponsor will also send a copy of the executed Agreement and submit full advance payment in the amount stated in Article 7 to the Reimbursable Receipts Team listed in Section C of this Article. The advance payment will be held as a non-interest bearing deposit. Such advance payment by the Sponsor must be received before the FAA incurs any obligation to implement this Agreement. Upon completion of this Agreement, the final costs will be netted against the advance payment and, as appropriate, a refund or final bill will be sent to the sponsor. Per U.S. Treasury guidelines, refunds under \$1.00 will not be processed. Additionally, FAA will not bill the sponsor for amounts less than \$1.00.
- B. The Sponsor certifies that arrangements for sufficient funding have been made to cover the estimated costs of the Agreement.

- C. The Reimbursable Receipts Team is identified by the FAA as the billing office for this Agreement. The Sponsor will send an electronic copy of the executed Agreement to the Agreement Coordinator and submit the advance payment to the Reimbursable Receipts Team. The preferred method of payment for this agreement is via Pay.Gov. The sponsor can use a check or credit card to provide funding in this manner and receipt-processing time is typically within 3 working days. Alternatively, the sponsor can mail the payment to the address shown below. All payments mailed to the FAA must include the Agreement number, Agreement name, Sponsor name, and project location. Payments submitted by mail are subject to receipt-processing delay of up to 10 working days.

FAA payment remittance address using USPS:

DOT/FAA/ESC
P.O. Box 25770
AMK-322 – MPB 328
Oklahoma City, OK 73125

FAA payment remittance address using Fed Ex/ UPS/USPS Priority (**overnight**):

DOT/FAA/ESC
AMK-322 – MPB328
6500 S. MacArthur Blvd.
Oklahoma City, OK 73169

The Sponsor hereby identifies the office to which the FAA will render bills for the project costs incurred as:

City of Muscatine, Iowa
ATTN: Brian Stineman, Public Works Director
1459 Washington Street
Muscatine, IA 52761-3839
563-263-8933
bstineman@muscatineiowa.gov

- D. The FAA will accept payments under this Article from only one of two sources: either (1) the Sponsor or (2) a Third Party on behalf of the Sponsor, and the same source must make all required payments. If a Third Party makes the payments, then any refund due from FAA upon completion of the Agreement will be returned to that Third Party.

- E. The cost estimates contained in Article 7 are expected to be the maximum costs associated with this Agreement, but may be amended to recover the FAA's actual costs. If during the course of this Agreement actual costs are expected to exceed the estimated costs, the FAA will notify the Sponsor immediately. The FAA will also provide the Sponsor an amendment to the Agreement which includes the FAA's additional costs. The Sponsor agrees to prepay the entire estimated cost of the amendment. The Sponsor will send a copy of the executed amendment to the Agreement to the Reimbursable Receipts Team with the additional advance payment. Work identified in the amendment cannot start until receipt of the additional advance payment. In addition, in the event that a contractor performing work pursuant to the scope of this Agreement brings a claim against the FAA and the FAA incurs additional costs as a result of the claim, the Sponsor agrees to reimburse the FAA for the additional costs incurred whether or not a final bill or a refund has been sent.

ARTICLE 10. Changes and Amendments

Changes and/or amendments to this Agreement will be formalized by a written amendment that will outline in detail the exact nature of the change. Any amendment to this Agreement will be executed in writing and signed by the authorized representative of each party. The parties signing this Agreement and any subsequent amendment(s) represent that each has the authority to execute the same on behalf of their respective organizations. No oral statement by any person will be interpreted as amending or otherwise affecting the terms of the Agreement. Any party to this Agreement may request that it be amended, whereupon the parties will consult to consider such amendments.

ARTICLE 11. Termination

In addition to any other termination rights provided by this Agreement, either party may terminate this Agreement at any time prior to its expiration date, with or without cause, and without incurring any liability or obligation to the terminated party other than payment of amounts due and owing and performance of obligations accrued, in each case on or prior to the termination date, by giving the other party at least thirty (30) days prior written notice of termination. Payment of amounts due and owing may include all costs reimbursable under this Agreement, not previously paid, for the performance of this Agreement before the effective date of the termination; the total cost of terminating and settling contracts entered into by the FAA for the purpose of this Agreement; and any other costs necessary to terminate this Agreement. Upon receipt of a notice of termination, the receiving party will take immediate steps to stop the accrual of any additional obligations which might require payment. All funds due after termination will be netted against the advance payment and, as appropriate, a refund or bill will be issued.

ARTICLE 12. Order of Precedence [RESERVED]

ARTICLE 13. Legal Authority

This Agreement is entered into under one or more of the following authorities: 49 U.S.C. § 106(l), 31 U.S. Code 6505 Intergovernmental Cooperation Act. Under these authorities, the Administrator of the FAA is authorized to enter into and perform such contracts, leases, cooperative agreements and other transactions as necessary to carry out the functions of the Administrator and the Administration on such terms and conditions as the Administrator considers appropriate. Nothing in this Agreement will be construed as incorporating by reference or implication any provision of Federal acquisition law or regulation.

ARTICLE 14. Disputes

Where possible, disputes will be resolved by informal discussion between the parties. In the event the parties are unable to resolve any dispute through good faith negotiations, the dispute will be resolved by alternative dispute resolution using a method to be agreed upon by the parties. The outcome of the alternative dispute resolution will be final unless it is timely appealed to the Administrator, whose decision is not subject to further administrative review and, to the extent permitted by law, is final and binding (see 49 U.S.C. § 46110).

ARTICLE 15. Warranties

The FAA makes no express or implied warranties as to any matter arising under this Agreement, or as to the ownership, merchantability, or fitness for a particular purpose of any property, including any equipment, device, or software that may be provided under this Agreement.

ARTICLE 16. Insurance

The Sponsor will arrange by insurance or otherwise for the full protection of itself from and against all liability to third parties arising out of, or related to, its performance of this Agreement. The FAA assumes no liability under this Agreement for any losses arising out of any action or inaction by the Sponsor, its employees, or contractors, or any third party acting on its behalf.

ARTICLE 17. Limitation of Liability

To the extent permitted by law, the Sponsor agrees to indemnify and hold harmless the FAA, its officers, agents and employees from all causes of action, suits or claims arising out of the work performed under this Agreement. However, to the extent that such claim is determined to have arisen from the act or omission by an officer, agent, or employee of the FAA acting within the scope of his or her employment, this hold harmless obligation will not apply and the provisions of the Federal Tort Claims Act, 28 U.S.C. § 2671, et seq., will control. The FAA assumes no liability for any losses arising out of any action or inaction by the Sponsor, its employees, or contractors, or any third party acting on its behalf. In no event will the FAA be liable for claims for consequential, punitive, special and incidental damages, claims for lost profits, or other indirect damages.

ARTICLE 18. Civil Rights Act

The Sponsor will comply with Title VI of the Civil Rights Act of 1964 relating to nondiscrimination in federally assisted programs.

ARTICLE 19. Protection of Information

The parties agree that they will take appropriate measures to identify and protect proprietary, privileged, or otherwise confidential information that may come into their possession as a result of this Agreement.

ARTICLE 20. Security

In the event that the security office determines that the security requirements under FAA Order 1600.72A applies to work under this Agreement, the FAA is responsible for ensuring that security requirements, including compliance with AMS clause 3.14.2.1, Contractor Personnel Suitability Requirements are met.

ARTICLE 21. Entire Agreement

This document is the entire Agreement of the parties, who accept the terms of this Agreement as shown by their signatures below. In the event the parties duly execute any amendment to this Agreement, the terms of such amendment will supersede the terms of this Agreement to the extent of any inconsistency. Each party acknowledges participation in the negotiations and drafting of this Agreement and any amendments thereto, and, accordingly that this Agreement will not be construed more stringently against one party than against the other. If this Agreement is not executed by the Sponsor within 120 calendar days after the FAA transmits it to the Sponsor, the terms contained and set forth in this Agreement shall be null and void. Additionally, the FAA expects this agreement to be funded within 120 days of execution, if funding is not received by that date; the FAA may exercise the right to renegotiate estimated costs.

AGREED:

**FEDERAL AVIATION
ADMINISTRATION**

CITY OF MUSCATINE, IOWA

SIGNATURE _____
NAME Michele Mustin
TITLE Contracting Officer
DATE _____

SIGNATURE  _____
NAME Brian Stineman
TITLE Public Works Director
DATE 3/5/2025



City of Muscatine

ITEM NUMBER 2025-0112

AGENDA ITEM SUMMARY

DATE: 3/20/2025

STAFF

Kevin Coon, City Engineer
Brian Stineman, Public Works Director

SUBJECT

Request to Approve Supplemental Agreement 2 With Stanley Consultants for the West Hill Sewer Separation Design Contract for an Amount Not to Exceed \$1,237,576.00.

EXECUTIVE SUMMARY

Request to Approve Supplemental Agreement 2 With Stanley Consultants for the West Hill Sewer Separation Design Contract for an Amount Not to Exceed \$1,237,576.00.

STAFF RECOMMENDATION

Approve the request

BACKGROUND/DISCUSSION

The City of Muscatine entered into a Professional Services Agreement with Stanley Consultants on September 16, 2010 for design, bidding, and construction phase services for the West Hill Area Sewer Separation in the amount of \$4,216,134 spread over four phases inclusive of Subconsultant (Martin & Whitacre Surveyors and Engineers) costs. This Professional Services Agreement was subsequently amended by Supplemental Agreement 1 on August 1, 2013 to account for changes in scope in Phase 1 project. Supplemental Agreement 1 added a net of \$42,000 to the fee resulting in a total of \$4,258,134.

The professional services provided for the project have evolved over the subsequent 11+ years, including expanding the phases from four (4) to six (6) with Phase 6 having five (5) phases. The City also transitioned through multiple staffing changes to the City's project team. The design approach and deliverables have evolved with changing City staff and philosophies, and various project challenges.

The remaining work includes completing design of 6D, concept development and design of 6E, bidding and construction phase support of 6D and 6E packages. The working estimated total for the West Hill phases through Phase 6E is approximately \$54,000,000. The amended fee as percentage of construction is 10.2% which includes concept development, design, bidding

assistance, and construction phase support.

Fifteen years of engineering cost escalation, extension of project duration, use of SRF financing, and various changes in the work over the years have exhausted the original fee as amended by Supplemental Agreement 1. Therefore, Stanley Consultants is seeking authorization of Supplemental Agreement 2 to allow us to complete the remaining work.

Included in this cost is a study for the Papoose Creek Lift Station to determine how it will be affected by the sewer separation and proposals to move forward with design for upgrades or new construction.

CITY FINANCIAL IMPACT

Funds are available from Local Option Sales Tax

ATTACHMENTS

1. 20250312_L-WH_Sewer-SA2



March 12, 2025

Brian Stineman
Public Works Manager
City of Muscatine Public Works
1459 Washington Street
Muscatine, Iowa 52761

**SUBJECT: Supplemental Agreement 2
West Hill Sewer Separation Project**

Dear Brian:

The City of Muscatine entered into a Professional Services Agreement with Stanley Consultants on September 16, 2010 for design, bidding, and construction phase services for the West Hill Area Sewer Separation in the amount of \$4,216,134 spread over four phases inclusive of Subconsultant (Martin & Whitacre Surveyors and Engineers) costs. This Professional Services Agreement was subsequently amended by Supplemental Agreement 1 on August 1, 2013 to account for changes in scope in Phase 1 project. Supplemental Agreement 1 added a net of \$42,000 to the fee resulting in a total of \$4,258,134.

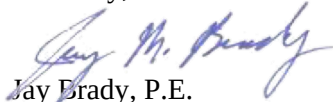
The professional services provided for the project have evolved over the subsequent 11+ years including expanding the phases from four (4) to six (6) with Phase 6 having five (5) phases. The City also transitioned through multiple staffing changes to the City's project team. The design approach and deliverables have evolved with changing City staff and philosophies, and various project challenges.

Much has been accomplished for the original fee developed almost 15 years ago including designing, bidding, and providing construction support for completed Phases 1 through 5. Phases 6AB and 6C have been design, bid, and are under construction. Phase 6D is approximately 90% designed. The remaining work includes completing design of 6D, concept development and design of 6E, bidding and construction phase support of 6D and 6E packages. The working estimated total for the West Hill phases through Phase 6E is approximately \$54,000,000. The amended fee as percentage of construction is 10.2% which includes concept development, design, bidding assistance, and construction phase support.

The project timeline has been extended by amendment of the United States Environmental Protection Agency compliance agreement from original completion in 2024 to completion in 2028. Project funding has also shifted for the Phase 6 projects to include State Revolving Fund (SRF) loans which require additional coordination with the Iowa Finance Authority and the Iowa Department of Natural Resources.

Unfortunately, 15 years of engineering cost escalation, extension of project duration, use of SRF financing, and various changes in the work over the years have exhausted the original fee as amended by Supplemental Agreement 1. Therefore, we seek authorization of Supplemental Agreement 2 to allow us to complete the remaining work.

Sincerely,



Jay Brady, P.E.
Client Services Manager
Stanley Consultants, Inc.

Attachments: Supplemental Agreement 2



SUPPLEMENTAL AGREEMENT NO. 2

This Supplemental Agreement, made and entered into by and between STANLEY CONSULTANTS, INC. (Consultant) and CITY OF MUSCATINE, IOWA (Client) amends their agreement of September 16, 2010, for Consultant to provide services to the Client for the Muscatine West Hill Sewer Separation Project, as follows:

Scope of Services

Sewer Separation

1. Continued Construction Support for Phase 6AB (January 2025 to estimated June 30, 2025).
2. Continued Construction Support for Phase 6C (January 2025 to estimated December 31, 2025).
3. Finalize Phase 6D Design (January 2025 – April 2025).
4. Provide Phase 6D Bidding Phase Services.
5. Provide Construction Support for Phase 6D (estimated May 2025 to Dec 31, 2026).
6. Prepare Phase 6E Concept Development based on concept figure from November 2024 including
 - a. Sewers on Fletcher, Climer, Greenwood Chapel area separation, Terrace Heights.
 - b. 60" Storm from location where PH6C stops to existing MH in Iowa Field with consideration of potential future shallow storm detention.
 - c. Lining of UWBS between 1104 and 1106 Iowa Avenue.
 - d. Paved access trail from Hagerman Drive to storm inlet.
 - e. Hagerman Drive storm water improvement (debris catcher, sediment bay, earthwork)
 - f. Newell Avenue Storm sewer and intake spacing analysis
 - g. Abandonment and removal of UWBS between Hagerman and Logan and between Roscoe and Iowa Field.
 - h. Stormwater analysis of Phase 6E streets for a 5 year event and SUDAS street spread requirements.
 - i. Seigel Street Extension
7. Prepare Preliminary and Final Designs for Phase 6E including permitting and SRF assistance.
8. Provide Phase 6E Bidding Phase Services.
9. Provide Construction Support for Phase 6E (estimated May 2026 to Dec 31, 2028).

Papoose Creek Pump Station Study

This study is to determine size of sanitary sewer wet well needed as separation progresses to completion, evaluates storm water pumping and sizes, and analyzes whether to modify and renovate the existing pump station or construct a new pump station in the vicinity of Mississippi Drive and Sycamore Street.

1. Perform feasibility study of Papoose Creek Pump Station including;
 - a. Evaluate and estimate post-separated design sanitary sewer flows based on populations and sewer shed areas. Peak flows will consider standard industry population based peaking factors and other areas that have been converted from combined to sanitary sewers including Hershey and Mad Creek Pump Stations.
 - b. Develop concepts for providing access ways to the east and west interceptor sewers within Papoose Creek tunnel and replacement of deteriorating lining.
 - c. Evaluate sanitary wet well size and determine preliminary design size based on estimated post-separated sanitary sewer flows.
 - d. Evaluate sanitary pump sizes and configurations with consideration of revised design flows and existing multiple pump station force main system.

1. Existing – one (1) small pump, two (2) large pumps
 2. Three (3) pumps of same size
 3. Four (4) pumps – two (2) small pumps, two (2) large pumps
- e. Perform a high level evaluation and estimation of post-separated design storm flows including:
1. Review of prior storm flow analysis and City (McDonald) concept report that includes stormwater flows.
 2. Update prior storm flow analysis with best available information on subbasins, storm sewer routings, detention, and flows. Subbasin delineations will be reviewed and updated.
 3. Estimate 1, 25, 50, and 100 year peak storm flows from subbasins using standard hydraulic and hydrologic methods.
 4. Create an existing conditions hydrologic and hydraulic stormwater model to route storm runoff from the subbasins through the storm network to Papoose Creek Pump Station. This uncalibrated model will provide insight into the system operation and peak flows.
 5. An existing conditions gravity condition model (no pumps operating) will be developed from the existing conditions H&H model as a verification to available historic and anecdotal information.
 6. Utilize the models to determine the critical storm duration that develops the largest flow.
 7. Utilize the evaluation to determine available existing system storage in the tunnel and impact on peak flow requirements.
 8. Create a proposed conditions model to determine preliminary pump station peak design flows for 1, 25, 50 and 100 year events.
 9. Make recommendations for flow meters and level sensors to gather appropriate data over time to allow future calibration of the hydraulic model needed to finalize storm pumping design flows.
- f. Develop design concepts for following alternatives:
1. Reconfiguring existing Papoose Creek Pump Station with expanded sanitary wet well, storm water pumping and gates, pump station rehabilitation, and new public restroom/generator structure.
 2. New sanitary and storm pump station north of Mississippi Drive with consideration of:
 - I. Connection of sanitary sewers and Papoose Creek tunnel to sanitary and storm pumping wells including provisions for passing sand and debris past the sanitary sewers crossing the tunnel.
 - II. Storm pumping discharge and conveyance.
 - III. Connection of sanitary pumps to existing force main system south of the railroad tracks.
 - IV. Connection of Mad Creek force main to new sanitary wet well.
 - V. Sanitary and storm pump types and arrangements.
 - VI. Sanitary valving and piping arrangement.
 - VII. Mechanical bar screen(s) and conceptual arrangement.
 - VIII. Storm sand/grit trap concept.
 - IX. Sanitary wet well gate to bring stream water into the wet well to enhance Water and Resource Recovery Facility flows.
 - X. Storm water gates and conceptual arrangement.
 - XI. Electrical utility connection, electrical room and conceptual one-line
 - XII. Preliminary emergency generator sizing and configuration.
 - XIII. HVAC (ventilation) concepts.
 - XIV. Odor control concepts.
 - XV. Maintenance access considerations.
- g. During the feasibility study, conduct a site visit to identify and/or confirm field conditions of

subbasins, storm sewer, pump station, etc.

- h. During concept development, hold a planning charrette with City staff to present initial ideas and obtain City input and feedback.
- i. Analyze two concepts for construction cost and non-monetary factors.
- j. Prepare draft study report for City to review.
- k. Attend review meeting with City to obtain input.
- l. Finalize study report.

Assumptions and Exclusions

- 1. All storm sewer infrastructure data including location, invert and casting elevations, storm sewer material type and diameters is available from the City. If this is not available, City will either provide construction plans or as-builts, or conduct field surveys to obtain this information.
- 2. Rainfall depths based on present day information. No analysis for future conditions will be completed at this time.

Time of Beginning and Completion

January 2025 - December 2028

Compensation

Hourly fee with expenses reimbursable not to exceed \$1,237,576.

Completion of West Hill Separation	\$1,037,900
Papoose Creek Pump Station Study	\$ 199,676

Revised total contract amount: \$5,495,710

Except as specifically amended by this Supplemental Agreement, all the terms and conditions of the original Agreement dated y shall remain in full force and effect.

IN WITNESS WHEREOF, the parties have caused this Supplemental Agreement to be executed on the date below indicated.

STANLEY CONSULTANTS, INC.

CITY OF MUSCATINE, IOWA

By: _____
Kate Despinoy, VP, Water Market Leader

By: _____

Date: _____

Date: _____

Attest:

Attest:

By: _____
Jay Brady

By: _____



City of Muscatine

ITEM NUMBER 2025-0102

AGENDA ITEM SUMMARY

DATE: 3/20/2025

STAFF

Gerald Ewers, Fire Chief

SUBJECT

Request to Approve a Request From 76 Township Trustees To Expand The Muscatine Fire Department Ambulance Coverage For The Entire 76 Township.

EXECUTIVE SUMMARY

Requesting to approve the 76 Township Trustees request for Muscatine Fire Department to provide ambulance coverage for the entire 76 Township. This coverage area will provide an additional \$4,290 in county subsidy for these services.

STAFF RECOMMENDATION

Staff has no objections to the request to expand the ambulance service area for 76 Township.

BACKGROUND/DISCUSSION

The Muscatine Fire Department began ambulance operations on July 1, 2000. The coverage area for our ambulance territory assumed the same coverage area for the city and several townships in the county as Muscatine Ambulance (Riley's Ambulance) covered. These boundaries have not changed since July 1, 2000. Muscatine receives approximately \$31,400 for county subsidy to provide ambulance service in several Townships. Muscatine Fire Department received a request from the 76 Township Trustees requesting Muscatine Fire to cover their entire township. According to 2024 data this would increase our ambulance calls in 76 Township from 8 to 14. Currently we receive no subsidy for 1/2 of the 76 Township that we currently provide services for. If we provided coverage for the entire Township we would receive \$4,290 for this new coverage area. Muscatine Fire Department is able to handle these additional calls without impacting services and this will generate not only additional revenue in ambulance billing for services to insurance companies, but also in county ambulance subsidy. The 76 Township trustees will be present in case there are any questions. The 76 Township trustees have already budgeted for this and have notified Louisa County Ambulance.

CITY FINANCIAL IMPACT

Currently, we receive no funding for the current ambulance coverage of half of the 76 Township. If the request is approved and we provide 100% of the ambulance coverage for 76 Township we will receive \$4,290 annually and will receive additional insurance payments for those additional ambulance transports.

ATTACHMENTS



City of Muscatine

ITEM NUMBER 2025-0116

AGENDA ITEM SUMMARY

DATE: 3/20/2025

STAFF

Jon Koch, Water Pollution Control Plant Director

SUBJECT

Request to Approve the Issuance of a Purchase Order in the Amount of \$331,000.00 to Superior Seawall, Docks and Dredging for the Marina Dredging Project.

EXECUTIVE SUMMARY

Request to Approve the Issuance of a Purchase Order in the Amount of \$331,000.00 to Superior Seawall, Docks and Dredging for the Marina Dredging Project.

STAFF RECOMMENDATION

Staff recommends approval of this purchase order.

BACKGROUND/DISCUSSION

The Muscatine marina has become full of sediment from flooding and other hydraulic settling over the past two years and needs to be mechanically dredged in certain areas to remain functional. The transient dock area has hard packed debris that cannot be dredged with the City's hydraulic dredge and needs to be removed with a barge dredge equipped with an excavator arm. Two quotes were received for this work. Legacy quoted \$327,500.00 and would leave the spoils in town. Superior quoted the work for \$331,000.00 and would take the spoils across to Illinois so that the City would not have to move them again. If Superior were to leave them in town they would have the low bid.

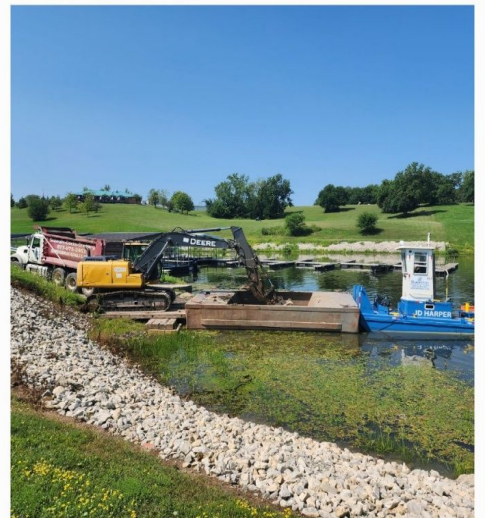
CITY FINANCIAL IMPACT

This will be taken from the WRRF operating budget and will be budget adjusted before the end of the fiscal year.

ATTACHMENTS

1. Hopper Dredge Proposal City Of Muscatine, Iowa UPDATED March 4th 2025

Hopper Barge Dredge Proposal City Of Muscatine, Iowa



Superior Seawalls, Docks & Dredge

26901 124th Ave West

Illinois City, IL 61259

877.875.2463

March 4th 2025

Project Name – Hopper Barges Silt Removal

Project # 02072025 DH

Client

City Of Muscatine

Attention – John Koch

Muscatine, Iowa

Project Size

9,500 Cubic Yard Minimum

Contact 563.554.4051 John Koch Office

jkoch@muscatineiowa.gov

Hopper Barge Dredging - Scope Of Work

1. Mobilize All Barges, Boats, Dump Trucks, Excavators, Dozer To Project
2. Prep Disposal Site, Access Road & Berms
3. Build Unloading Area With Sheet Pile & Or Crane Mats
4. Mark Location Of Silt To Be Removed With PVC Pipe & Buoys.
5. Use (1) 39,000 lbs Excavators On Sectional Barges To Load Hopper Barges
6. Transport Hopper Barges To Unloading Area
7. Use Excavator To Load Dump Trucks
8. Take Silt By Truck To Client Provide Disposal Area Within (2) Miles
9. As Needed Use Dozer To Keep Disposed Silt piled Up Tight
10. Provide Daily Silt Quantity Sheet With Date, Time, Truck # & Quantity Of Silt Removed

Equipment +/-

- (1) Sectional Barges - 40' Wide x 40' Long x 5' Deep
- Hopper Barges 12' Wide x 24' Long x 6' Deep
- (1) Long Reach On Barge Digging Silt, (1) Excavator - On Shore Loading Trucks
- Truckable Tug Boats To Move Hopper & Hopper Barges
- All Vehicles & Other Support Tools

IMPORTANT NOTES

1. Silt Disposal Basin Site Provided By Contractor
2. Silt Disposal Site Per Attached +/- 5 Miles Away
3. Any Mechanical Methods Can Be Used To Dredge
4. Client & Superior To Agree On Capacity Of Trucks & Loading Buckets Prior To Start Of Dredging
5. Dredge Logs To Be Signed By Owners Representative Daily And Will Be Used To Measure Amount Removed
6. Client To Have Authorize Person Signed Dredge Logs Daily. This Is How The Yardage Dredge Will Be Counted
7. Silt Removal Time Depends On The Water Depth From Work Area To Unloading Area.
8. With (3) Hopper Barges We Can Move +/- 40- 55 Tandem Loads A Day
9. Each Hopper Can Hold 12 – 18 Cubic Yards Per Load Depend On Water Depth
10. Restoration Of Silt Basin Not Included In Base Bid Or Options, Access Gravel Road To Remain.
11. Dredge Proposal Is Based On \$4.50 Per Gallon Off Road Diesel.
12. We Reserve The Right To Dredge In Any Mechanical Method Available As Needed To Complete Project

Initial

March 4th 2025

Project Total & Options

City Of Muscatine

Project Name – Hopper Barges Silt Removal

Project # 02072025 DH

Totals

\$279,000.00.....**Main Bid – HOPPER BARGE DREDGE**
Per Scope Of Work On Page 1
All Labor, Equipment, Fuel To Complete
Daily Load Count & Yardage Total Provided& Certified By Client Daily
\$31.00– Per Cubic Yard x 9,000 Yards = \$279,000.00

\$18,000.00.....**Option 1 - MOBILIZATION = \$18,000.00**
Sectional Barges, Hopper Barges, Push-boats,
Excavators, Dump Trucks, Includes All Crane Work

\$18,000.00.....**Option 2 - DEMOBILIZATION = \$18,000.00**
Sectional Barges, Hopper Barges, Push-boats,
Excavators, Dump Trucks, Includes All Crane Work

\$ 8,000.00.....**Option 3 - DISPOSAL SITE PREP = \$8,000.00**
Disposal Area + or – To Be Determined Based On Final Yardage
Scope Of Work, Use Dozer To Strip Topsoil Use For Perimeter Berms
+ or - 12' Wide x 6' High, Create Drainage During Rainfall.

\$ 8,000.00.....**Option 4 – ACCESS ROAD = \$8,000.00**
Road Size = 16' Wide x TBD Long With Circle Turn Around
Road Specs = Geosynthetic Fabric, Reject Rock & CA6 Road Mix
Scope Of Work = Use Dozer, Excavator To Prep Area

\$331,000.00.....**TOTAL OF SELECTED AUTHORIZED PROJECTS**

Payments & Credits

\$331,000.00-----TOTAL OF SELECTED PROJECTS
\$ 66,200.00-----20% 1st Payment - Project Deposit - Due At Contract Signing - Check # _____
Remaining Payments Net 7 Days _____
Note - Project Deposit Will Be Deducted On Demobilizing Invoice

Payment Terms & Payments – Dredging Will Be Invoiced (2) Times Per Month
Individual Projects Bill At Individual Completions
Net 7 Days Billing 1st & 15th Of Month

Terms & Conditions

Start Of Project - We Will Start Your Project Within 10 Days Written Notice.

Payments - As Listed On Contract Order.

Collection Of Debt – Will Be Sent To Our Attorney For Complete Collection. Client Agrees To Pay All Court Cost, Attorney Fees, In Collection Fees Of All Debt. All Court Hearings Will Be Conducted In Rock Island County Courthouse, Rock Island, Illinois

X _____ Date ____/____/2025 **Purchase Order** _____

Acceptance Of All Items Listed