



City of Muscatine

CITY COUNCIL

Thursday, November 21, 2024

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
Tony Kies, Interim City Administrator
Cinda Hilger, Deputy 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.

November 21, 2024, 6:00 PM

AGENDA

1. CALL TO ORDER
2. INVOCATION- Battalion Chief Gary Ronzheimer
3. ROLL CALL
4. PLEDGE OF ALLEGIANCE

5. FROM THE MAYOR

- A. Swearing in of firefighter Tynan Numkena
- B. Recognition of the Muscatine Community School District Agriculture Teachers
- C. Request to Approve the Appointment of Mike Terry to the Historic Preservation Commission
- D. Request to Approve the Appointment of Nathan Sneath to the Historic Preservation Commission
- E. Presentation on the Results of a Flood Study Completed by the Iowa Flood Resilient Communities Cohort

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. November 7, 2024 Regular City Council Meeting Minutes
- B. November 14, 2024 City Council In-Depth Meeting Minutes

11. * PETITIONS AND COMMUNICATIONS

- A. Request to Approve an Application for Commercial/Industrial Tax Abatement.
- B. Request on second reading of a Class "E" Retail Alcohol License for Market Jalisciense LLC, 1608 Grandview Avenue, Ste. 1 – Market Jalisciense LLC (pending inspections)
- C. Request on second reading of a Class "C" Retail Alcohol License for BigBear's Bar and Billiards, 218 Walnut Street – BigBear's LLC (pending inspections)
- D. Request for renewal of a Class "E" Retail Alcohol License for Kum & Go #1436, 416 Cedar Street – Kum & Go LLC (pending inspections)

- E. Request for renewal of a Class “C” Retail Alcohol License for Las Lomas, 1519 Park Avenue – Juan, Inc. (pending inspections)
- F. Request for a 5-day Alcohol Permit for Travelin’ Sips Mobile Bar, 1903 Park Avenue – Travelin’ Sips Mobile Bar LLC (pending inspections and insurance)
- G. Request to Close Dick Drake Way for Repairs to the Railroad Crossing Near Union Tank Car Company

12. * COMMUNICATION – RECEIVE AND FILE

13. * PURCHASE ORDERS AND AGREEMENTS

- A. Request To Approve The Issuance Of A Purchase Order to ASC Pumping Equipment, Inc., In the Amount of \$11,313.00, for the Purchase of a New Aurora Pump for the Aquatic Center.

14. * APPROVAL OF BILLS

It is recommended bills totaling \$2,548,695.32, 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. November 21, 2024 Bills for Approval Totaling \$2,548,695.32

15. PUBLIC HEARING

- A. Public Hearing for the Purpose of Hearing Community Comments Regarding the Houser Lift Station Improvement Project.
- B. Public Hearing Regarding the Lease of a Portion of Muscatine Municipal Airport Property Located North of the Runways for Development of a Solar Generating Facility.

16. BOARDS AND COMMISSIONS

17. FROM THE CITY ADMINISTRATOR

- A. Request to Waive Third Reading and to Adopt on Second and Final Reading an Ordinance Amending Title 7, Chapter 9 of the City Code of Muscatine, Iowa - Parking Meters and Rates.
- B. Resolution Authorizing Special Assessments for Unpaid Abatement Service Fees and Rental Housing Fees to Private Properties
- C. Resolution Naming Depositories.

- D. Resolution Accepting Completed Work on the Sunset Park Lighting Project and Authorizing Final Payment
- E. Resolution Setting a Public Hearing on December 5, 2024, for an Ordinance Amending City Code Title 1, Chapter 10, City Officers and Employees
- F. Resolution Approving Plans, Specifications, Form of Contract, Cost Estimate and Setting a Bid Opening Date for the Houser Lift Station Upgrade Project.
- G. Request to Enter Into an Engineering Services Agreement with Veenstra & Kimm, Inc in the Amount of \$19,000.00, for Additional Analysis Of the Park Avenue West Bridge Replacement.
- H. Request to Approve an Engineering Contract with Stanley Consultants in the Amount of \$849,700.00, for the Water & Resource Recovery Facility Electrical Assets Project.
- I. Request to Approve Contract with Eocene Environmental Group to Provide Technical Services Required for the Lead Hazard Reduction and Healthy Homes Programs
- J. Request to Permanently Install a Stop Sign on Northbound Bidwell Road at the Intersection of Leroy Street
- K. Request to Approve Entering into Three Contracts with the Iowa DOT for Buses, Including Accepting Supplemental Shortfall Funding in the amount of \$37,708.00 and \$219,682.00 and Accepting CMAQ 5311 Bus Funding in the amount of \$170,568.00

18. MAYOR AND COUNCIL REPORTS

19. OTHER BUSINESS

- A. Request to enter closed session pursuant to Iowa Code Section 21.5.1.i, to evaluate the professional competency of an individual whose appointment, hiring, performance, or discharge is being considered when necessary to prevent needless and irreparable injury to that individual's reputation and that individual requests a closed session.
- B. Request to enter closed session pursuant to Iowa Code Section 21.5.1.i, to evaluate the professional competency of an individual whose appointment, hiring, performance, or discharge is being considered when necessary to prevent needless and irreparable injury to that individual's reputation and that individual requests a closed session.

20. ADJOURNMENT



City of Muscatine

ITEM NUMBER

AGENDA ITEM SUMMARY

DATE: 11/21/2024

STAFF

Kevin Coon, City Engineer
Brian Stineman, Public Works Director

SUBJECT

Presentation on the Results of a Flood Study Completed by the Iowa Flood Resilient Communities Cohort

EXECUTIVE SUMMARY

Presentation on the Results of a Flood Study Completed by the Iowa Flood Resilient Communities Cohort

STAFF RECOMMENDATION

This is a presentation of information only. Staff will seek action from the council at a future meeting.

BACKGROUND/DISCUSSION

In October 2023, the City of Muscatine was extended an invitation by the American Flood Coalition and the Iowa Flood Center to join the Iowa Flood Resilient Communities Cohort. The cohort consists of the cities of Columbus Junction, Dubuque, Manchester, and Muscatine. The goal of the cohort was to share experiences of how each community handles flood responses as well as to help the communities identify potential projects along with potential funding for said projects. The cohort was organized through a non-profit called the American Flood Coalition (AFC) in conjunction with the University of Iowa Flood Center (IFC).

This cohort had several group meetings throughout the past year, as well as several meetings focused solely on Muscatine. The end goal of the cohort is to assist the city with the design and funding for a construction project that will reduce or eliminate flooding within the city limits. During discussion with the group, it was determined that a detention project located around Hagerman Drive would have the best opportunity for funding as well as have a large impact on localized flooding within Muscatine. The IFC provided a technical "broad view" analysis of this area that shows the feasibility and impact of detention basins located around Hagerman Drive.

The benefits of this project location would be decreased flood risk on Amy Drive, decreased

risk of overland flow down Hagerman Drive, a reduction in stormwater flow within an undersized Upper West Branch Sewer, and an incremental reduction in stormwater in Papoose Creek Sewer.

Representatives from the Iowa Flood Center will be present at the meeting to discuss the Iowa Flood Resilient Communities Cohort and the potential project that the group decided upon. One of the goals of the cohort was to identify problem areas within the individual cities and provide technical support to show the viability of the projects and to help find a financial path towards funding the project. The technical support was provided by the Iowa Flood Center (IFC) based out of the University of Iowa. Two primary areas in Muscatine were outlined during site visits; Amy Drive, and Lake Park Boulevard. From those two choices, the AFC and IFC wished to look into reducing the stormwater flow that heads towards Amy Drive.

CITY FINANCIAL IMPACT

The Iowa Flood Center performed the analysis with no financial impact to the city.

ATTACHMENTS

1. IA FRCC Graphic
2. AFC One-Pager (nongovt partners)_ Iowa Flood Resilient Communities Cohort (1)
3. Iowa Flood Resilient Communities- Muscatine

AFC's Iowa Flood Resilient Communities Cohort





Iowa Flood Resilient Communities Cohort

Overview for nongovernmental partners

About us

The American Flood Coalition (AFC) is a nonpartisan group that brings together over 350 members — including cities, elected officials, military leaders, businesses, and civic groups — to advance solutions to flooding and sea level rise. We support local members by connecting them to a network of leaders, creating tools that simplify resilience planning and funding, partnering on deep pilot projects, and identifying policy changes that turn visions for flood resilience into reality.

Why work with us

The bipartisan infrastructure law provides billions in funding for flood resilience, giving communities a once-in-a-generation opportunity to strengthen infrastructure against flooding. However, communities can benefit from an increased capacity to identify and prepare for funding that equitably fits their flood resilience needs. Communities can advance towards flood resiliency when armed with the necessary support to assess plans, strengthen and prioritize projects, and identify the right federal grants.

This is why AFC is launching the Iowa Flood Resilient Co-Governance Cohort, **an initiative in which local officials address flood resilience in collaboration with a nongovernmental community partner**. Through group workshops and individual working sessions with experts on our staff, AFC will support cohort participants through guidance on prioritizing a flood resilience project and identifying the most viable federal funding sources. Cohort participants will walk away with a roadmap of clear next steps to move forward with a federal grant application or advance other actions that build flood resilience. Nongovernmental partners will play a key role in collaborating with their local government to provide input on equitable community engagement and ensuring community voices are incorporated when planning local flood resilience efforts.

Benefits for participating nongovernmental partners

Nongovernmental community partners (organization or individual) will partner with local officials in advancing equitable flood resilience projects. The Cohort will **empower communities to address flooding** by providing them with tools and resources, including:

- **Opportunities to actively partner with your local government** to ensure equity and community input are central to flood resilience planning.
- **Access to experts providing guidance** on effective community engagement.
- **Tools and resources to capture and incorporate community input**, including identifying equitable ways to partner with public offices and elected officials.
- **One-on-one sessions with AFC's team of experts** that have experience in hazard mitigation planning, local flood resilience planning, integrating public input, and federal funding programs.
- **Access to a network of peers with similar flood resilience challenges** that can serve as a resource in the long term.



Expectations for participants (nongovernmental partners)

Nongovernmental partners will participate in several group convenings and individual working sessions to provide input on best practices for equitably incorporating public input and community voices into flood resilience projects.

The Cohort will be established in October 2023. Over the course of a year, **from Nov 2023 - Oct 2024, cohort participants will be expected to attend all Cohort activities planned for nongovernmental partners.** Cohort activities will be in the form of individual working sessions between AFC and each cohort participant (approximately 1 hour) and group workshops for all cohort members (approximately 1.5 hours). **Nongovernmental partners will attend Cohort activities and devote time amounting to approximately ten hours over the course of a year and will receive an honorarium for their participation in these activities.**

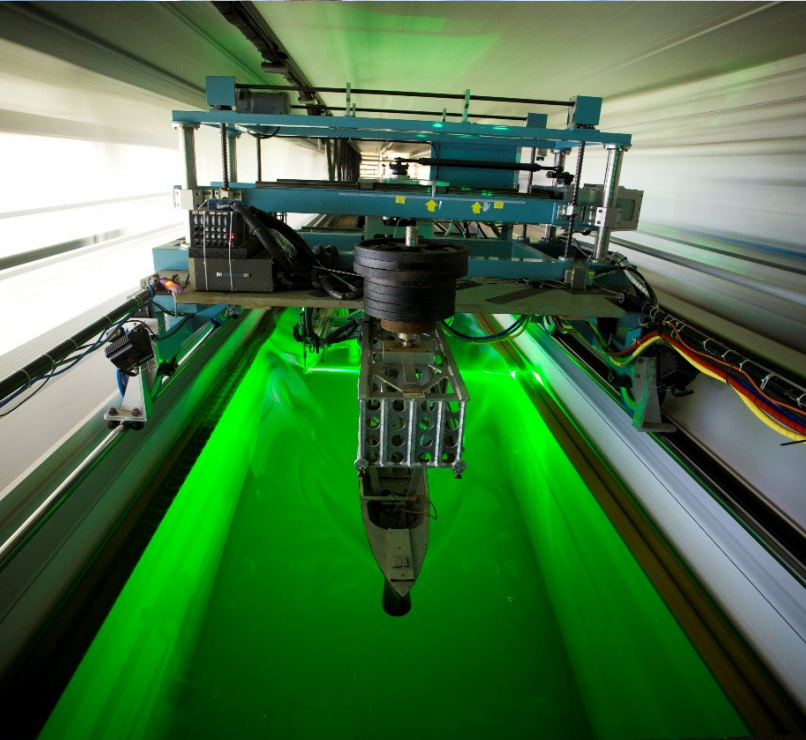
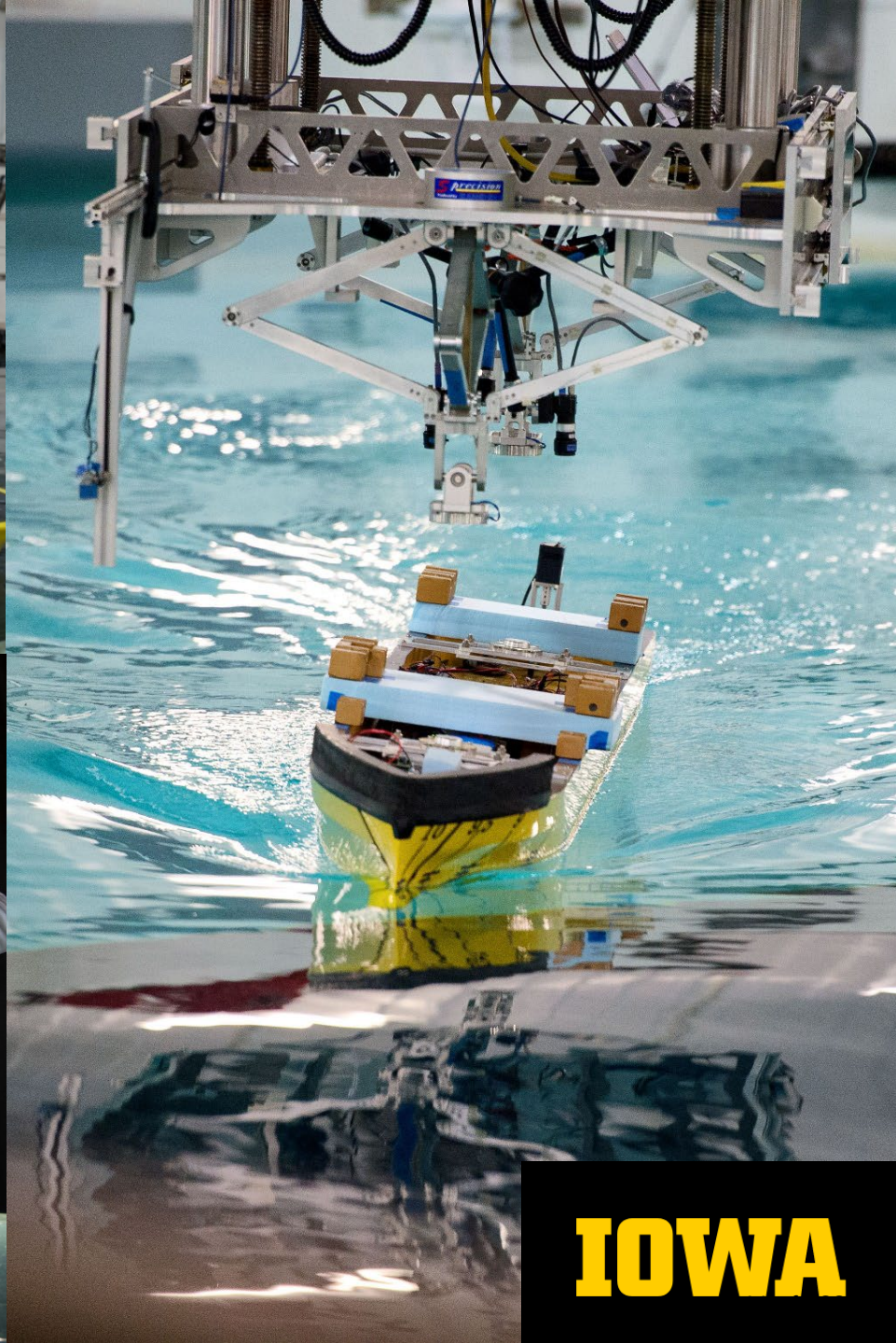
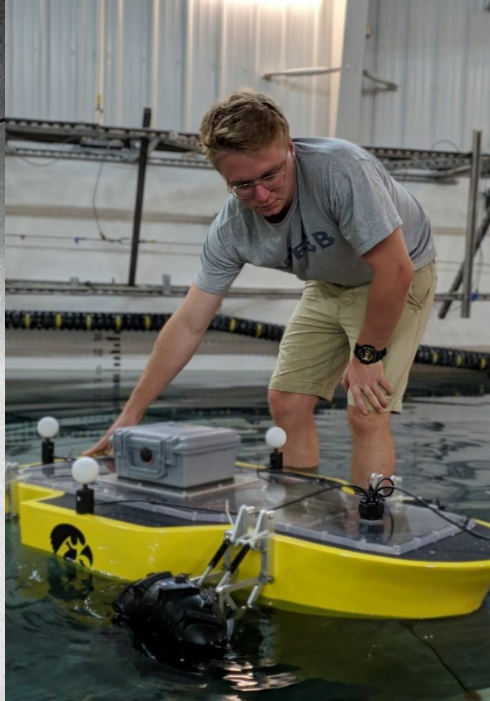
Participants should be aware that they (or their organization) may be named as a cohort participant in written materials produced by American Flood Coalition and may be mentioned in conversations with state and federal officials. Key themes and takeaways from participants' comments during individual or group meetings may be summarized as a part of AFC's efforts to highlight the challenges that communities face in accessing federal flood resilience programs, though specific comments and experiences will not be attributed.

IOWA

Iowa Flood Resilient Communities Cohort

Partnership between the American Flood Coalition and the Iowa Flood Center

Funding is provided by the Walton Family Foundation





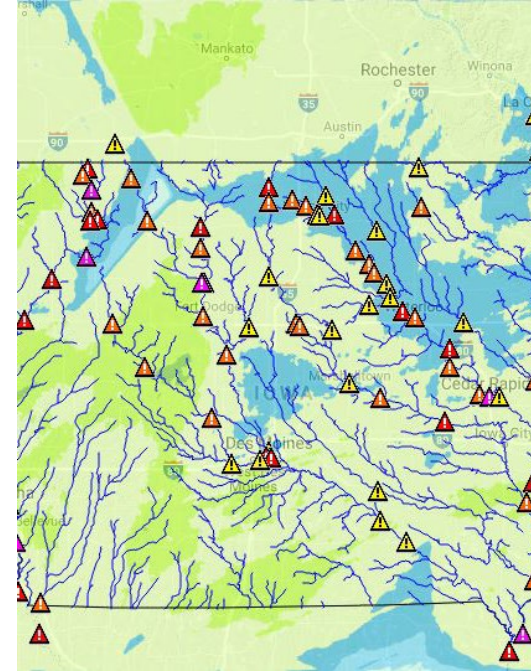


Sec. 15. NEW SECTION. 466C.1 IOWA FLOOD CENTER

1. The state board of regents shall establish and maintain in Iowa City as a part of the state university of Iowa an Iowa Flood Center. In conducting the activities of this chapter, the center shall work cooperatively with the department of natural resources, the department of agriculture and land stewardship, the water resources coordinating council, and other state and federal agencies.
2. The Iowa flood center shall have all of the following purposes:
 - a. To develop hydrologic models for physically based **flood frequency estimation** and **real-time forecasting of floods**, including hydraulic models of **flood plain inundation mapping**.
 - b. To establish community-based programs to **improve flood monitoring and prediction** along Iowa's major waterways and to support ongoing flood research.
 - c. **To share resources and expertise of the Iowa flood center**
 - d. To assist in the **development of a workforce** in the state, knowledgeable regarding flood research, prediction, and mitigation strategies.

Iowa Flood Center

- Established by the Iowa Legislature after the catastrophic Iowa flood of 2008 as the nation's only academic center dedicated solely to flood research
- Offers Iowans accurate, scientific information to help them better understand their flood risks and prepare for future flooding
- Shares flood information online through the Iowa Flood Information System



FLOOD MONITORING



This figure is a flood mapping map showing the extent of flooding along a river system, likely the Snake River. The map displays various flood stages indicated by different colors and symbols:

- Major Flood Stage:** Indicated by a purple triangle symbol.
- Moderate Flood:** Indicated by a red triangle symbol.
- Flood Stage:** Indicated by an orange triangle symbol.
- Action Stage:** Indicated by a yellow triangle symbol.
- No Alert:** Indicated by a green triangle symbol.

The map also includes geographical features such as hills, valleys, and towns like Chelsen and Belle Plaine. Key infrastructure shown includes highways (e.g., Hwy E66, Hwy V18, Hwy 30, Hwy 131) and landmarks like Otter Creek Marsh State Wildlife and Belle Plaine High School. A legend box in the bottom left corner provides the key for the flood stage symbols. The DNR logo is visible in the bottom left, and the US Army Corps of Engineers logo is in the bottom center. The page number "Page 16 of 428" is located in the bottom right corner.

IFIS

FLOOD MAPPING

LEGEND

- Major Flood Stage
- Moderate Flood
- Flood Stage
- Action Stage
- No Alert

DNR

US Army Corps of Engineers®

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LEGEND

- Major Flood Stage
- Moderate Flood
- Flood Stage
- Action Stage
- No Alert

DNR

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Page 16 of 428



LEGEND

- Major Flood Stage
- Moderate Flood
- Flood Stage
- Action Stage
- No Alert

DNR

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CEDAR RAPIDS

River: Cedar River

Gauge ID: 05464500 (reference)

Flood Level: 12 ft

Date Created: Jan 2011

Terms of Use: provisional - not for regulatory use

View Maps by

☒ River Stage

☐ Annual Chance

Flood Map Controller

Stage: 31 ft

Discharge: 139000 cfs

☐ Water Depth

☒ Damage Estimate

LEGEND

Major Flood Stage

Moderate Flood Stage

Flood Stage

Action Stage

No Alert

> 75%

50-75%

25-50%

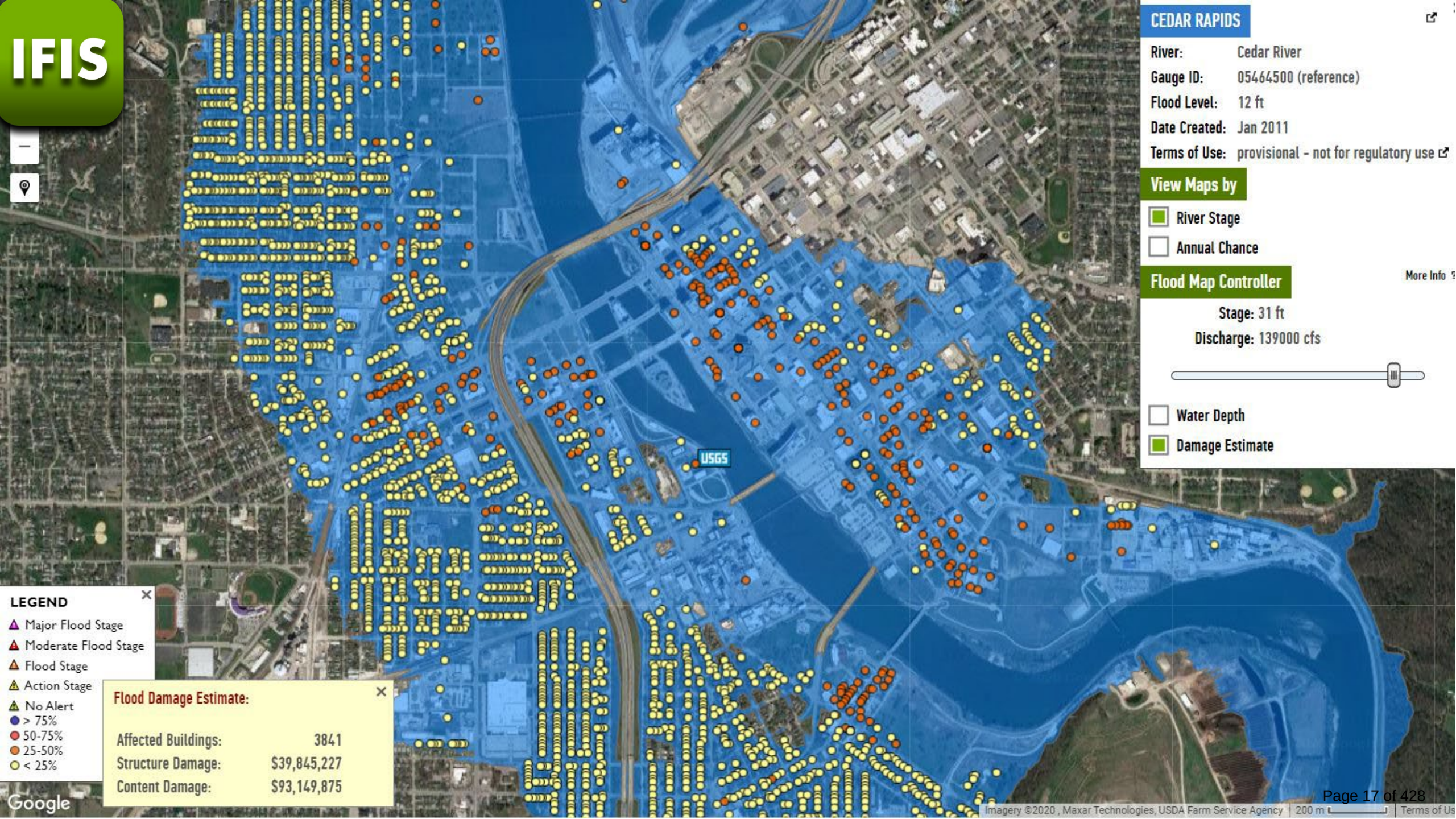
< 25%

Flood Damage Estimate:

Affected Buildings: 3841

Structure Damage: \$39,845,227

Content Damage: \$93,149,875





American Flood Coalition Staff in Collaboration with IFC

American Flood Coalition



Jack Krolkowski

Flood Planning Director
jack@floodcoalition.org



Yasmine Dyson

Associate Strategy Director
yasmine@floodcoalition.org



Catie Malone

Strategy Program Analyst
catie@floodcoalition.org



Ruth Akintoye

Senior Flood Planning Associate
ruth@floodcoalition.org

Iowa Flood Center



Kate Giannini

Program Manager
Iowa Watershed Approach
kate-giannini@uiowa.edu

Meet the Iowa Flood Resilient Communities Cohort!





Collaboration between AFC and local leaders – and connections among communities to explore solutions

- Held two in-person community site visits
- Identified potential flood mitigation projects
- Three webinars-cohort wide on Funding, Community Engagement, and Technical Assistance
- Individual community meetings with State and Federal Funding Agencies
- Next Steps: Financial Support for next phase



Muscatine- Flood Mitigation Projects Identified

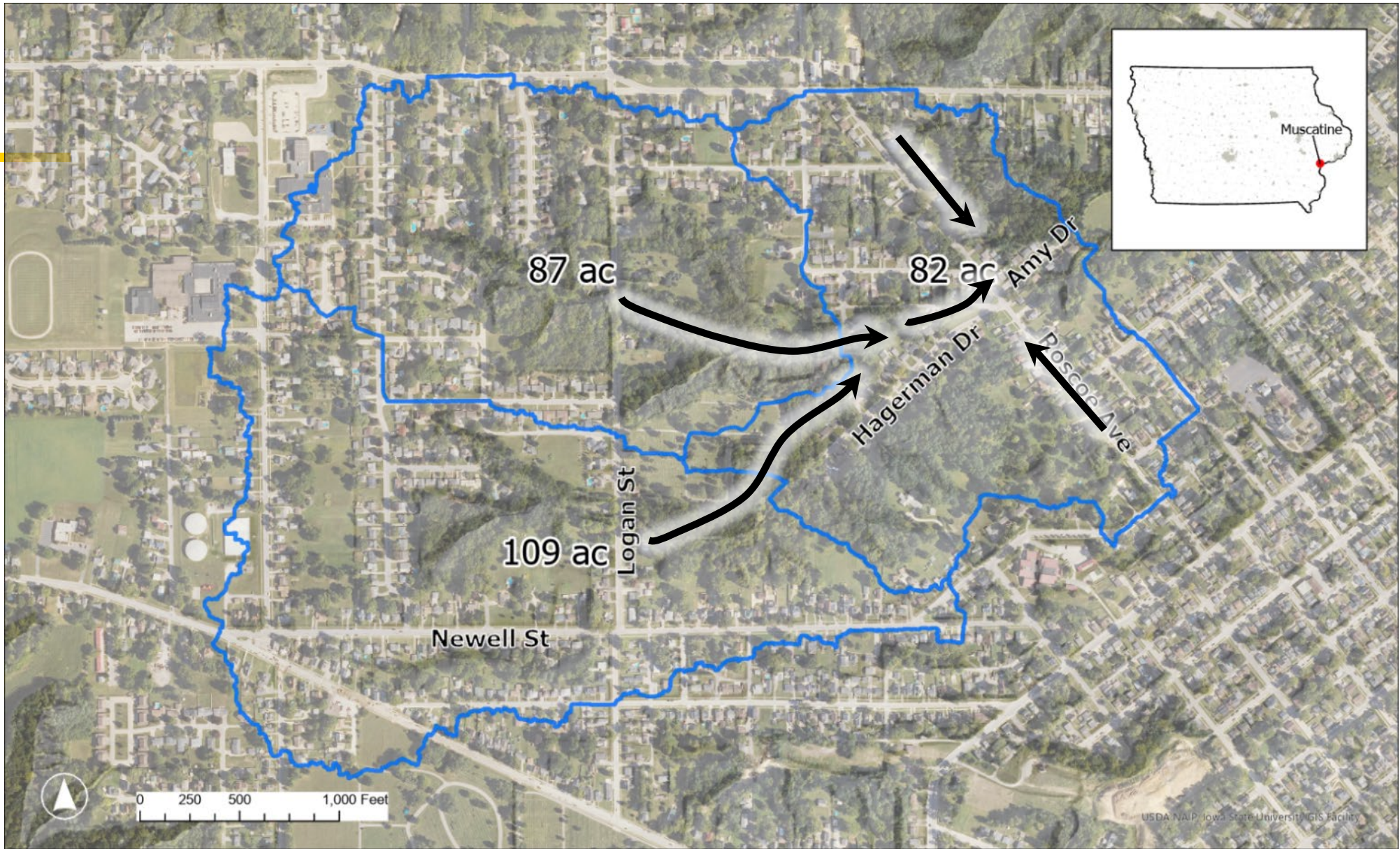
- Technical Analysis of Hagerman and Amy Drive
- Use this watershed analysis to apply for future funding for more detailed project scoping



Hagerman Drive Watershed Analysis

City of Muscatine, American Flood Coalition

October 15, 2024



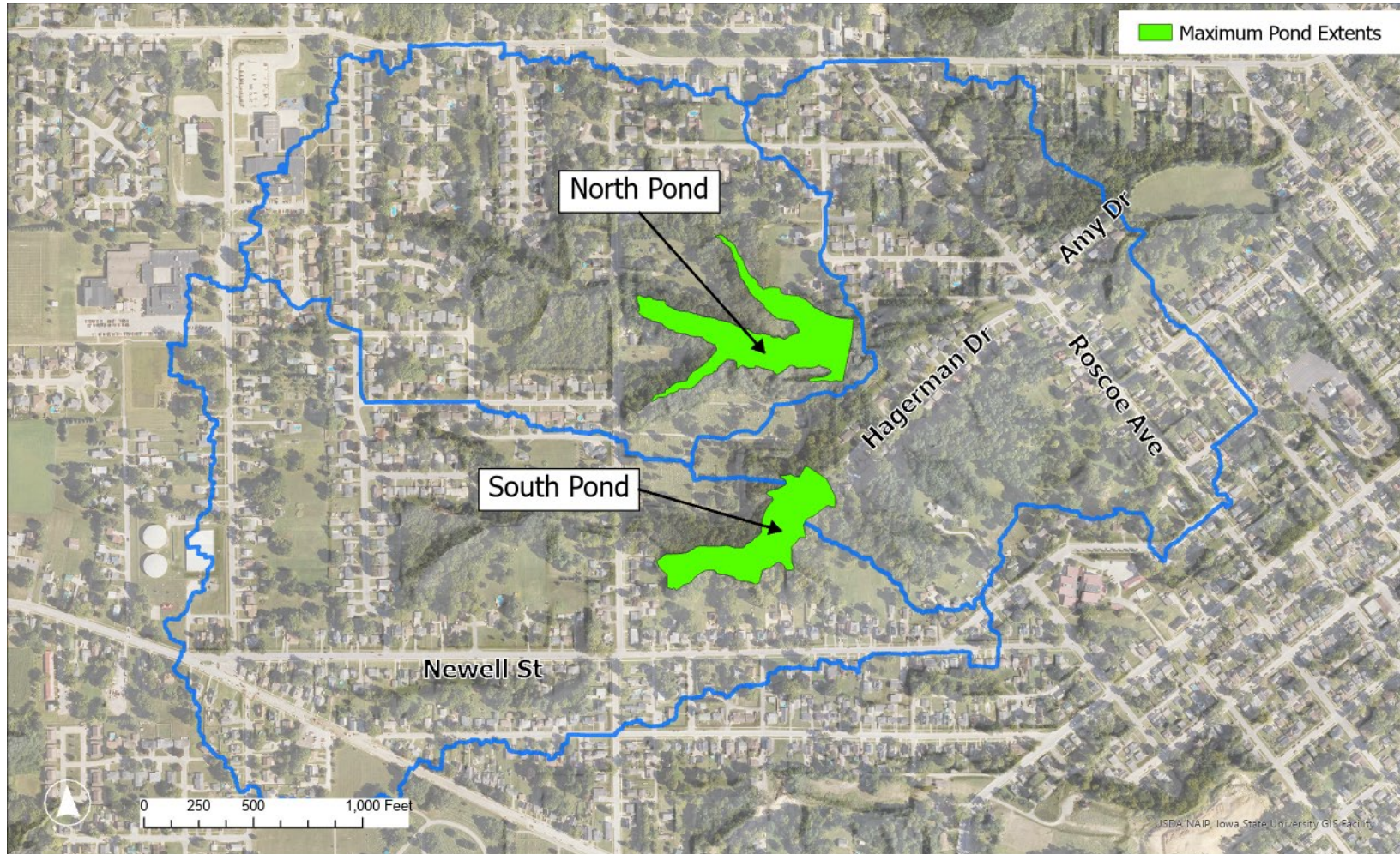
IOWA

Amy Drive

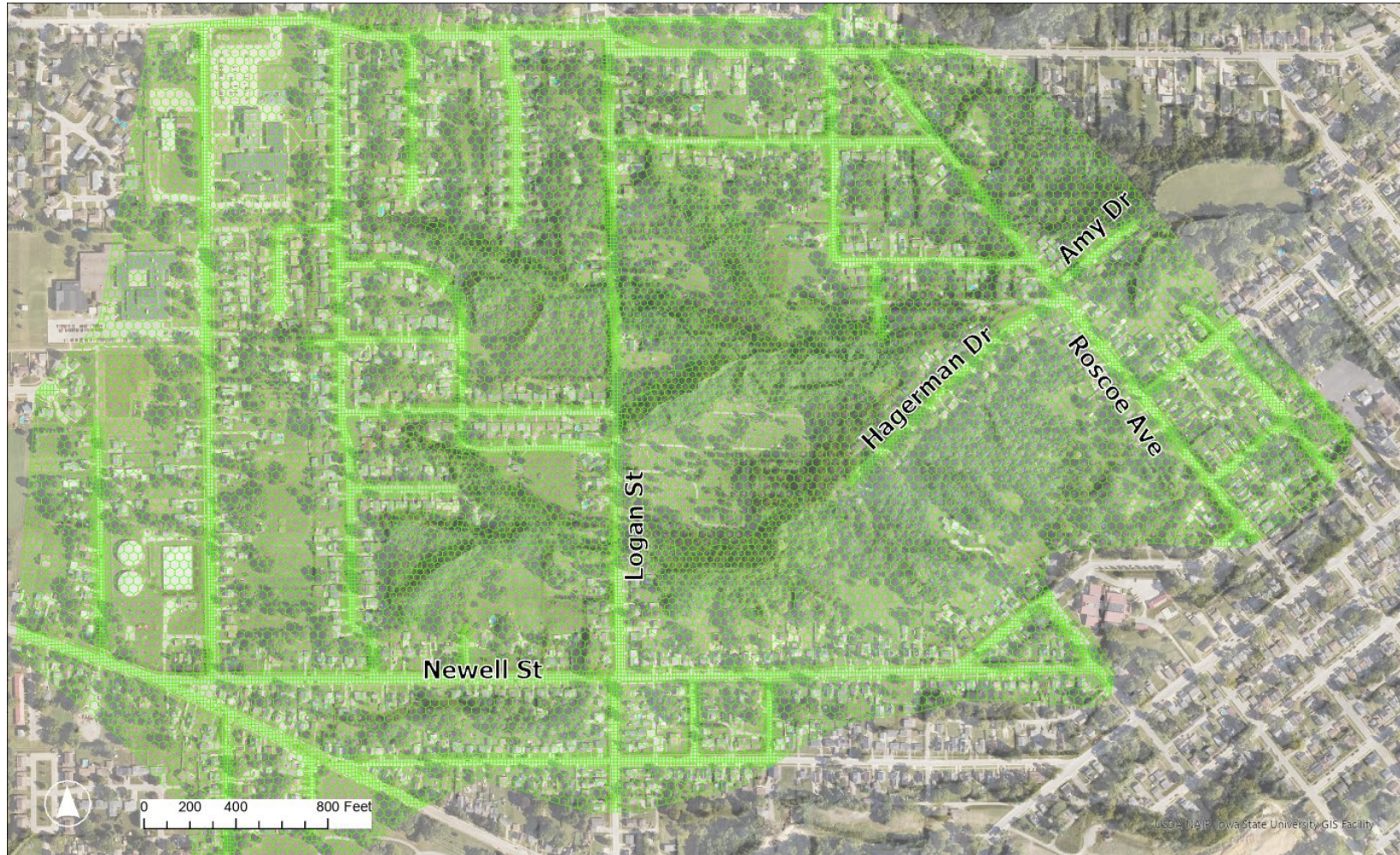


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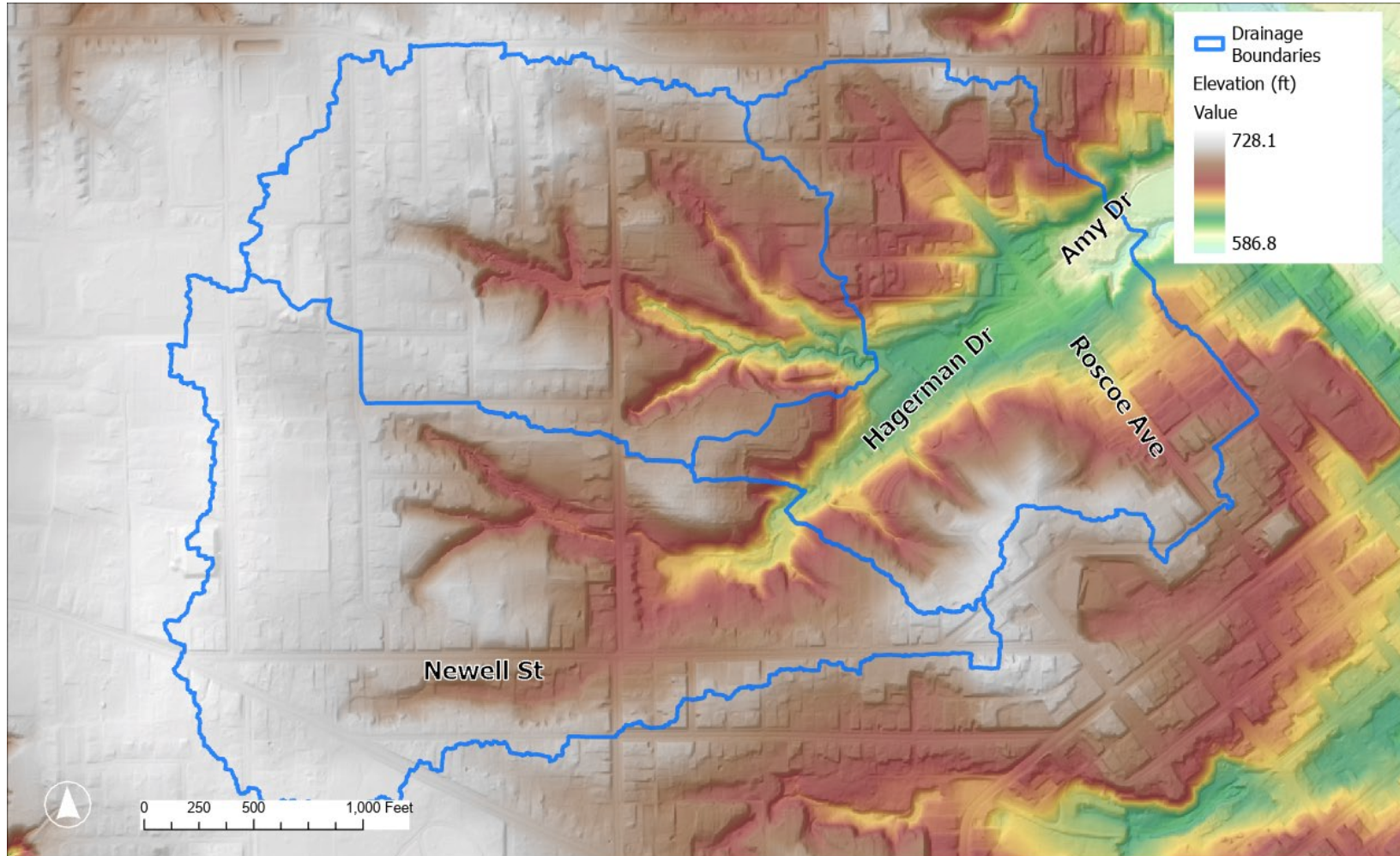
Proposed Project Locations



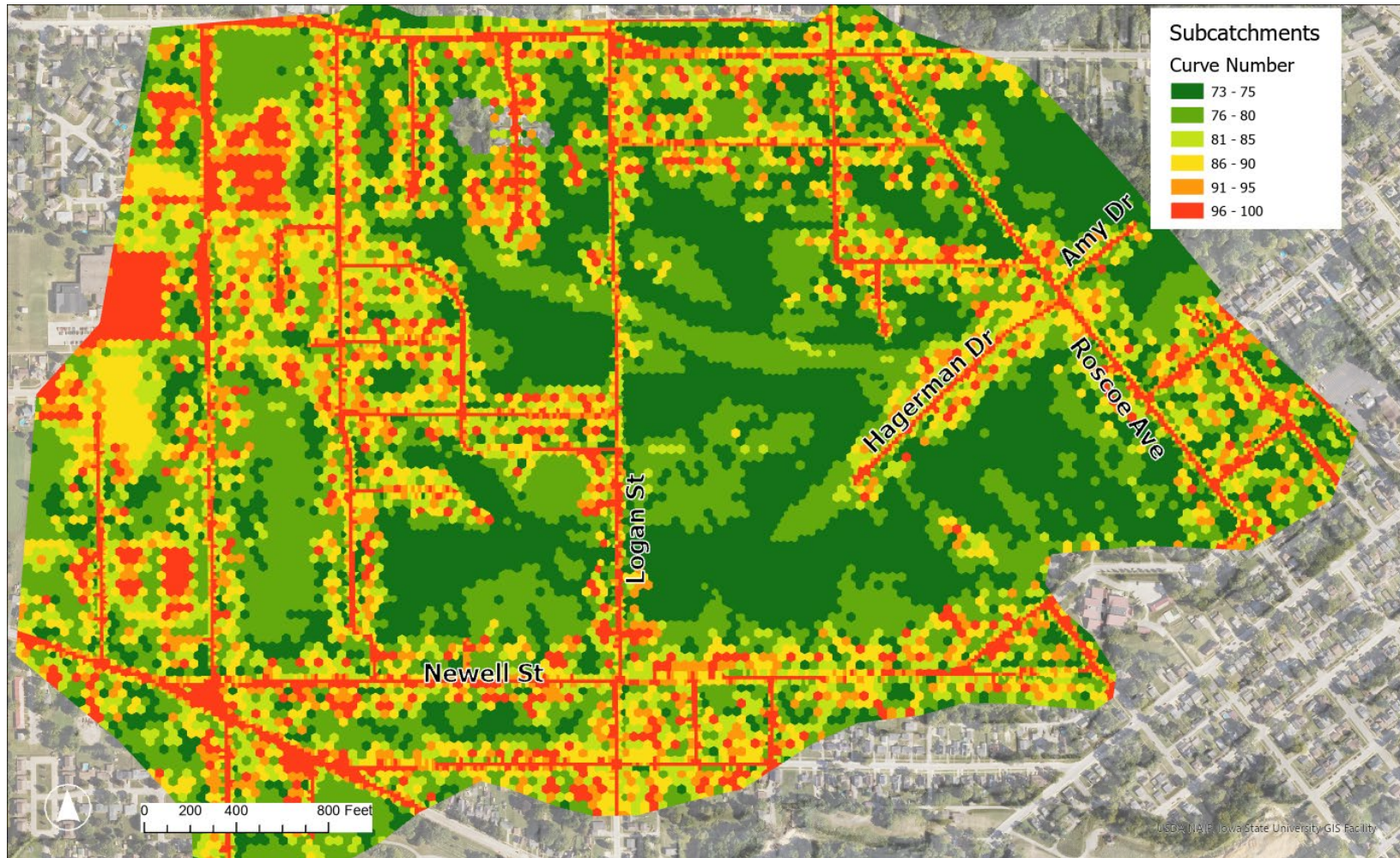
PCSWMM Model - Mesh



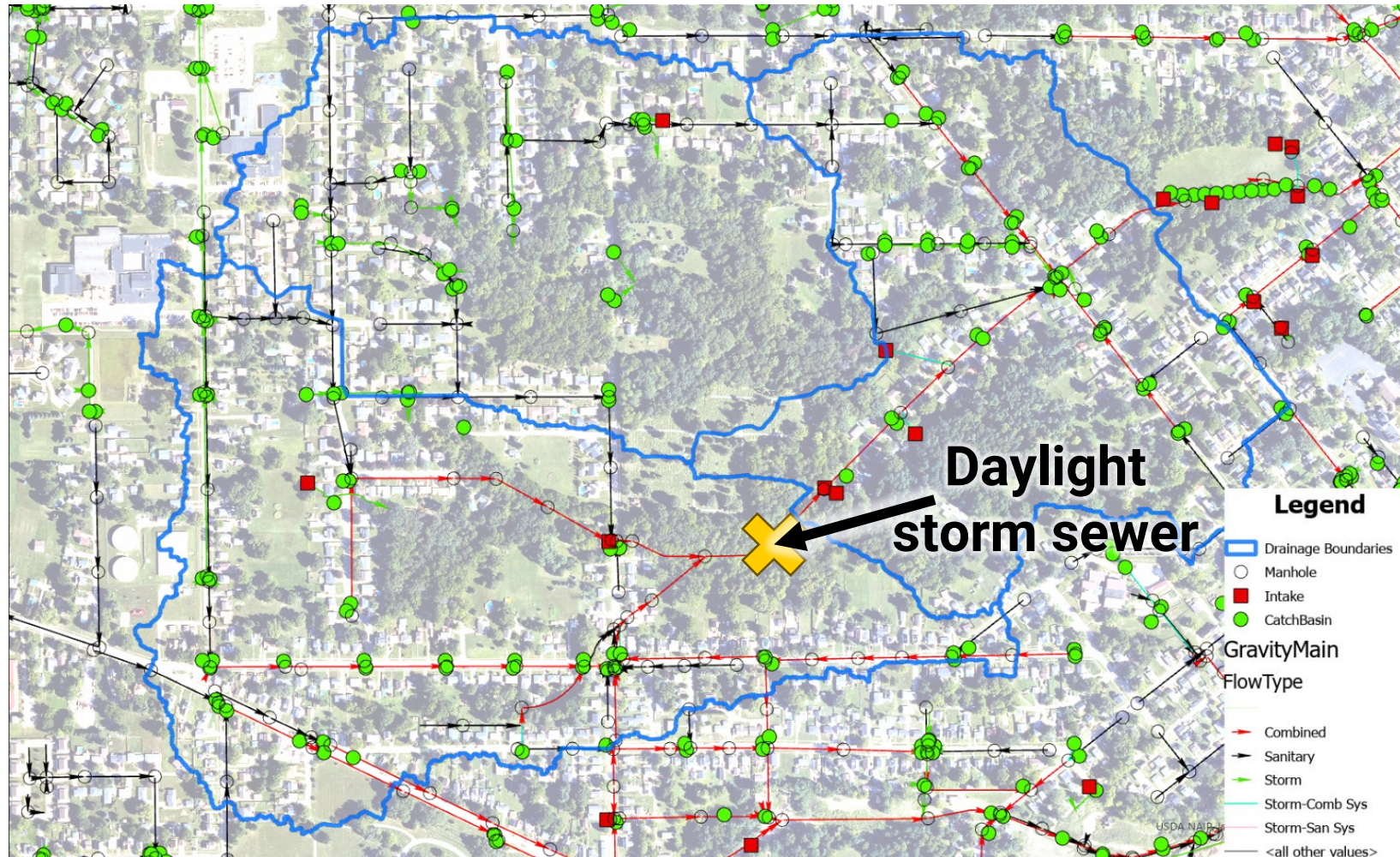
PCSWMM Model – Terrain



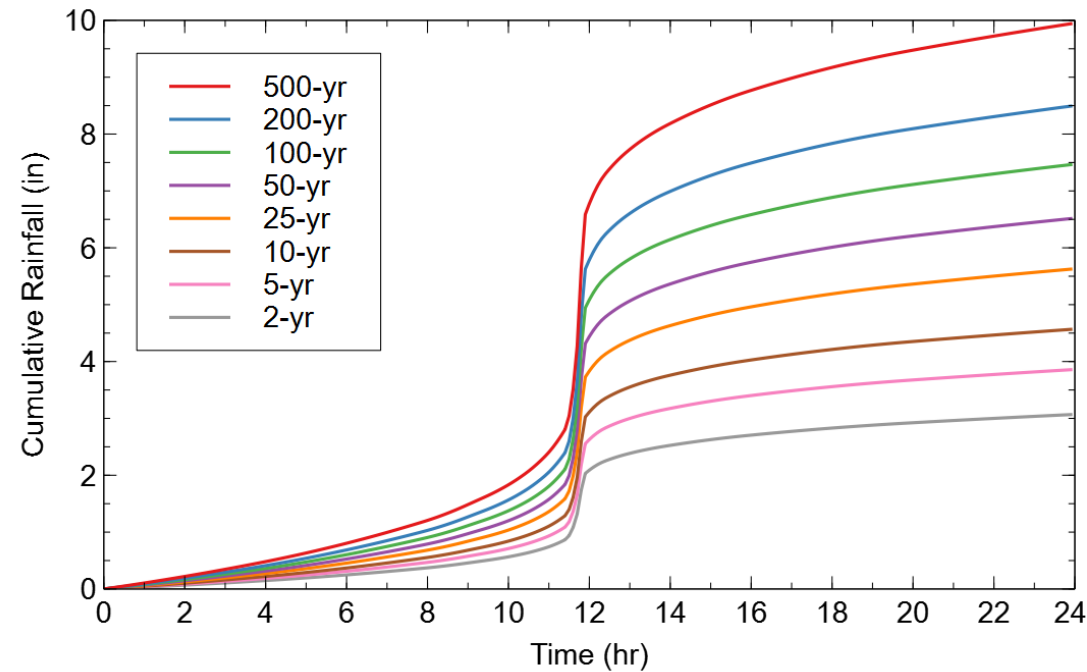
PCSWMM Model - Infiltration



PCSWMM Model – Storm Sewers

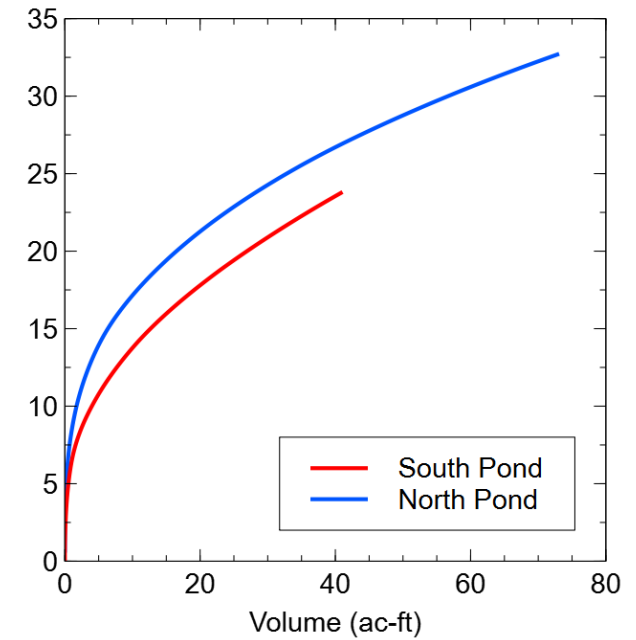
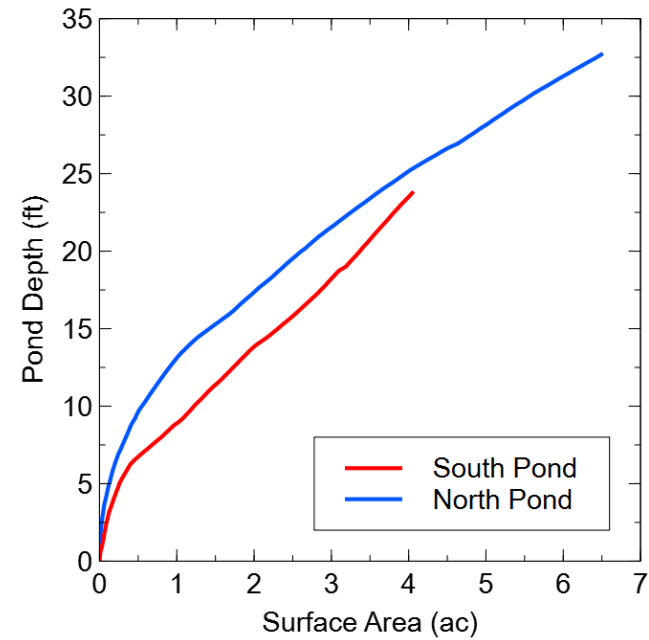
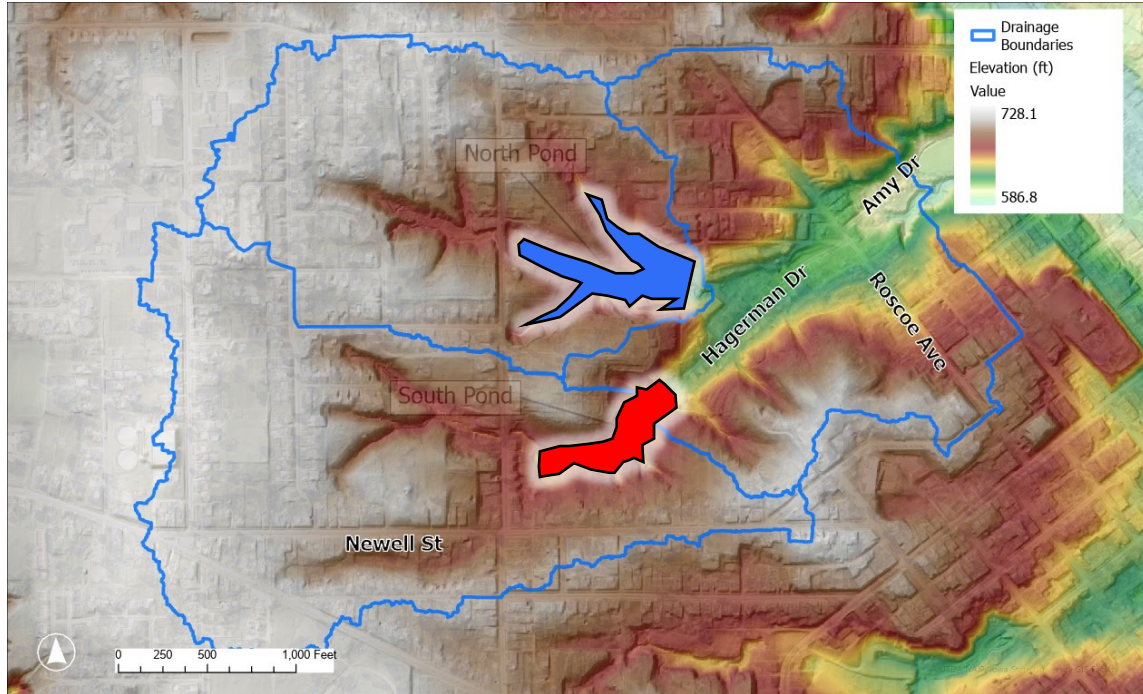


Design storms

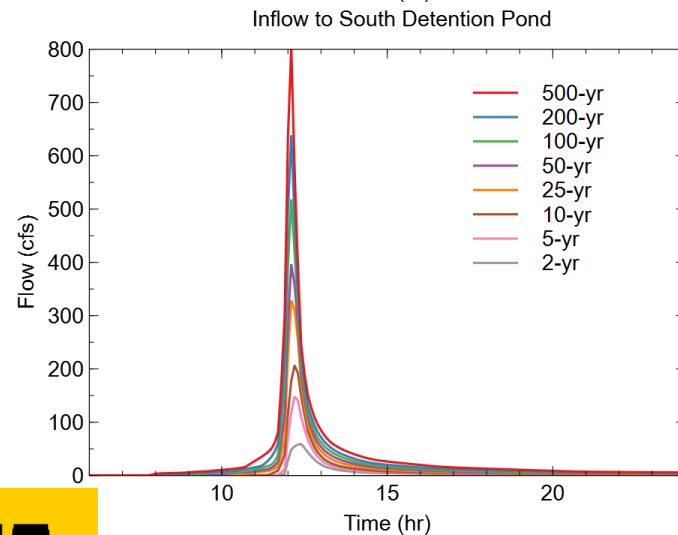
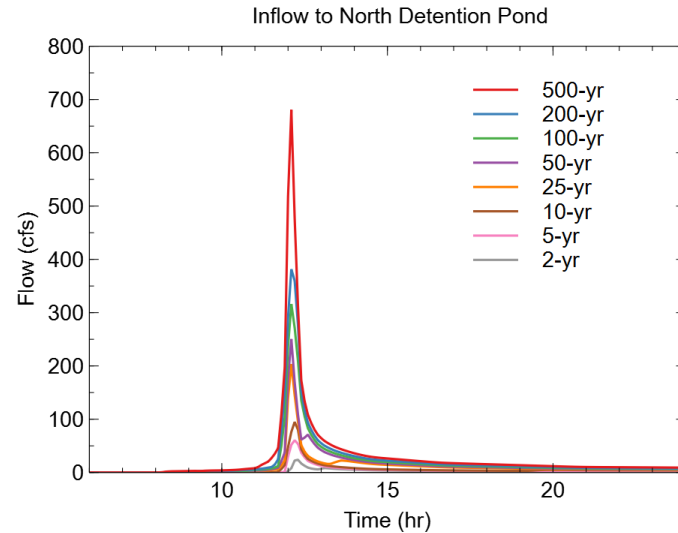


Return Period	1-yr	2-yr	5-yr	10-yr	25-yr	50-yr	100-yr
Annual Exceedance Probability, AEP	100	50	20	10	4	2	1
Total Depth (in)	2.63	3.07	3.86	4.57	5.63	6.52	7.47

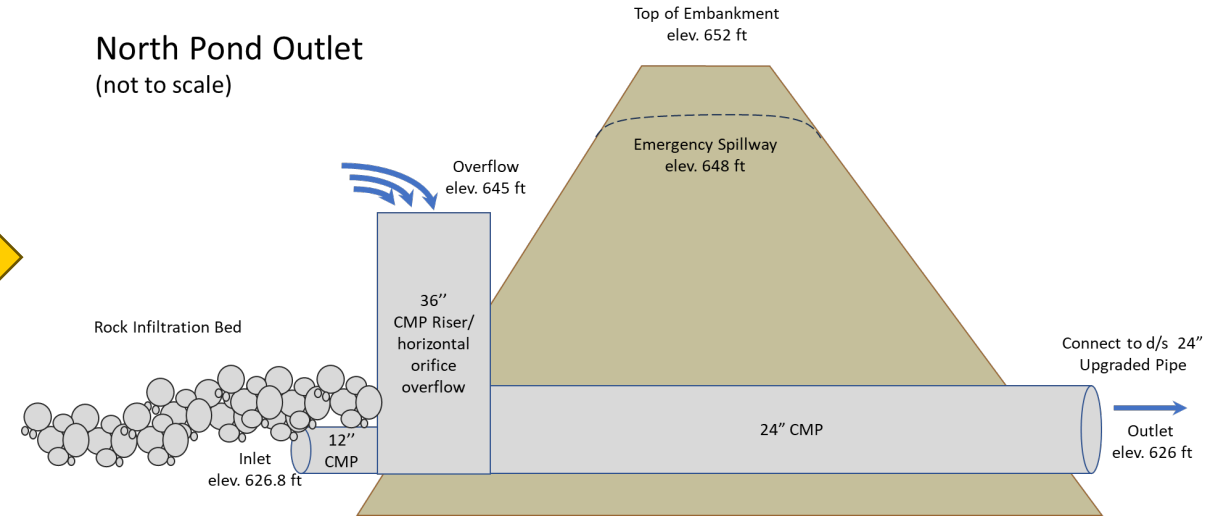
Pond Storage



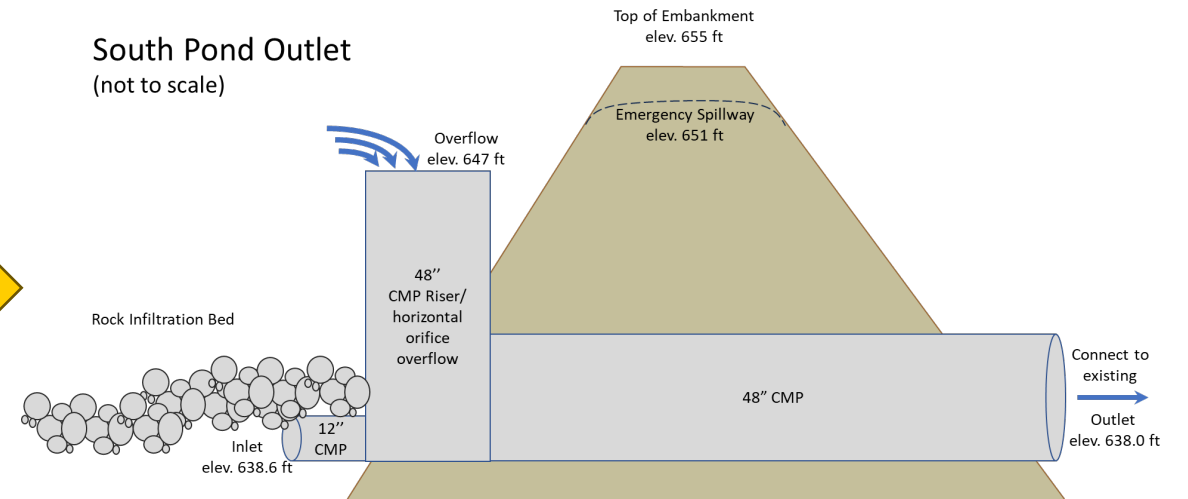
Outlet Designs - HydroCAD



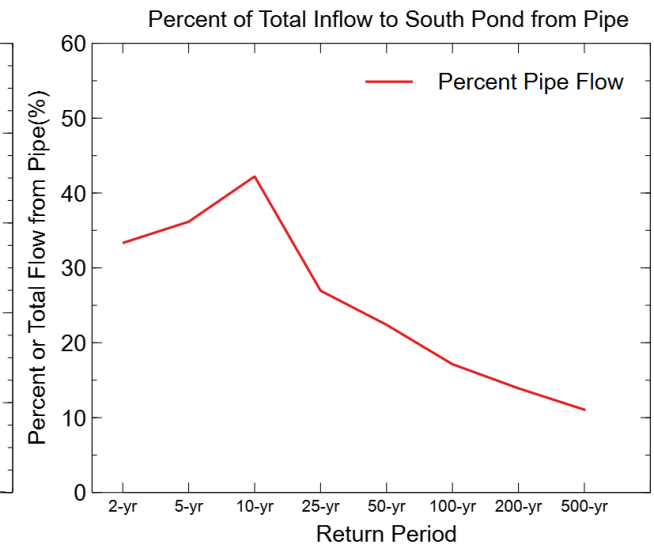
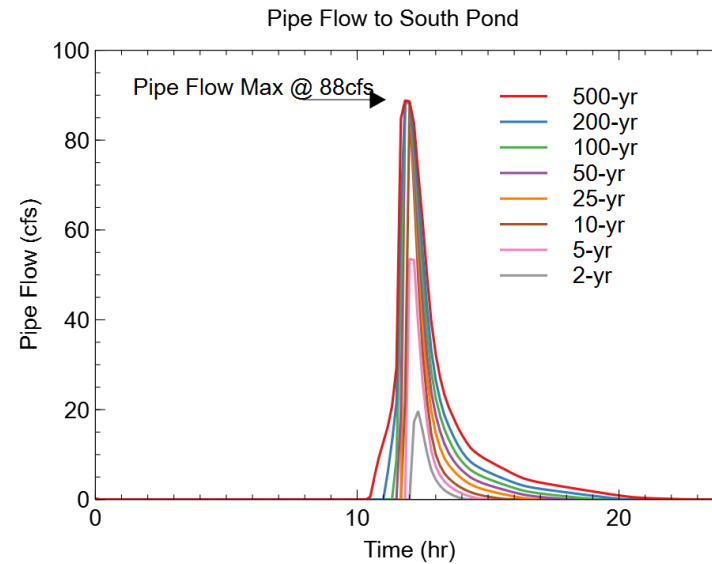
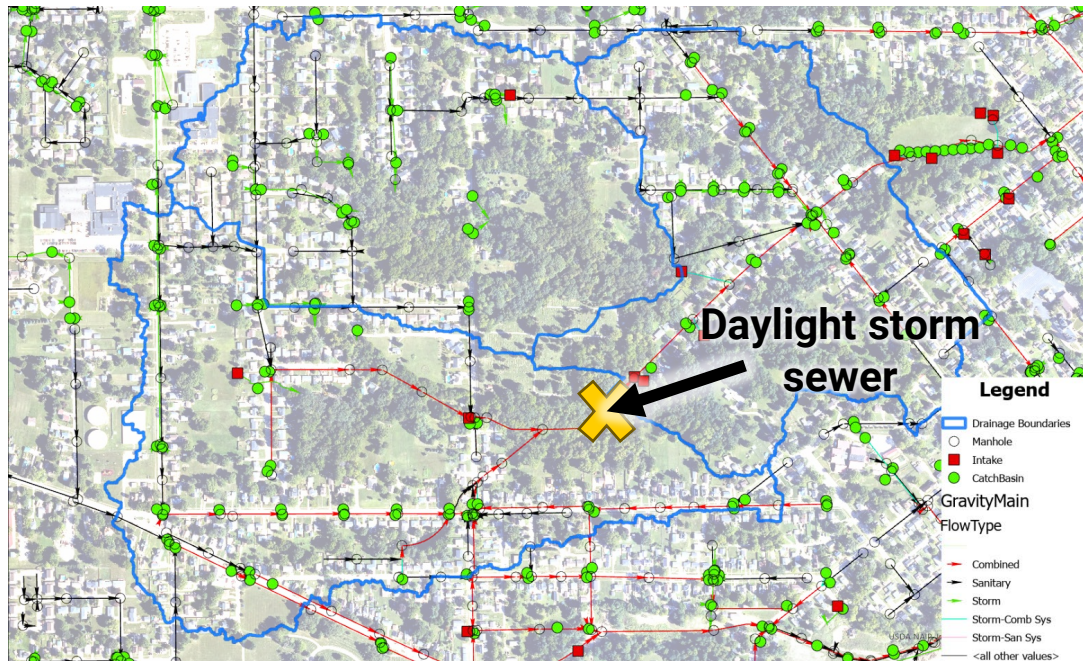
North Pond Outlet
(not to scale)



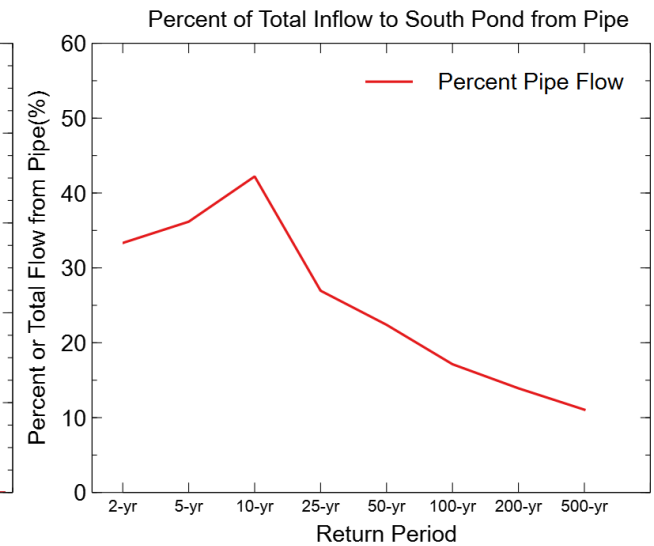
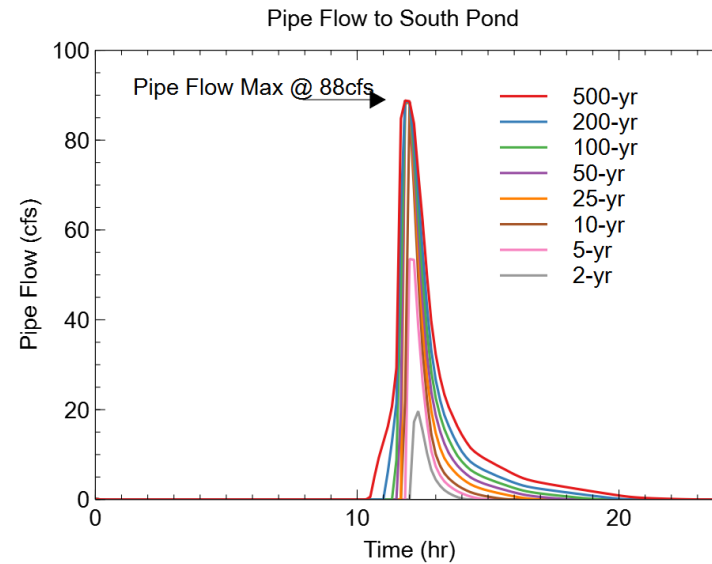
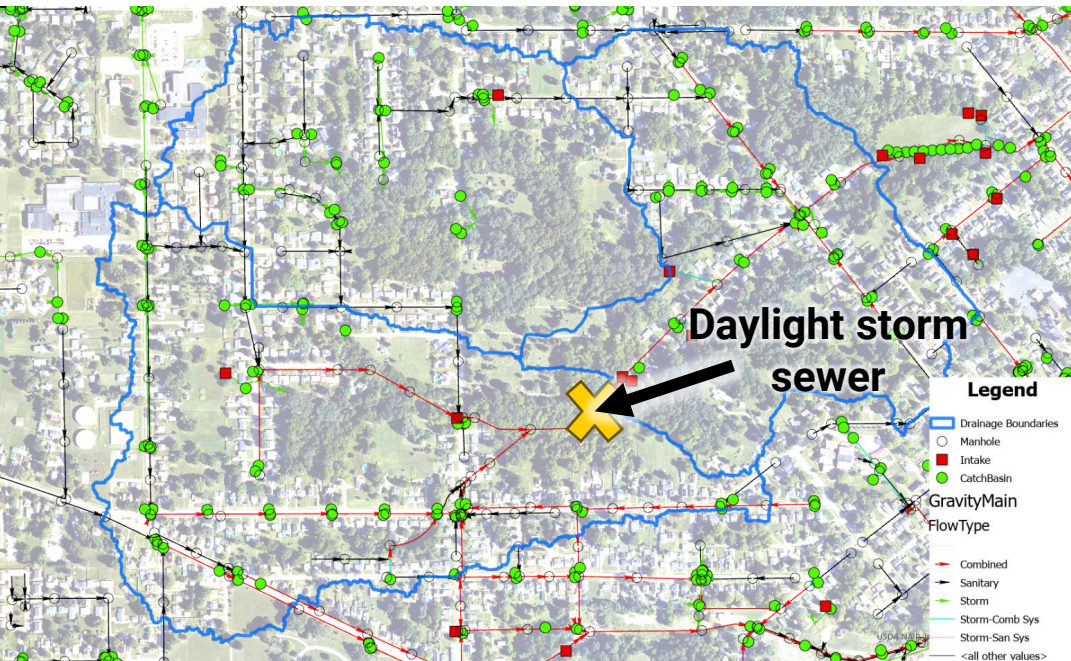
South Pond Outlet
(not to scale)



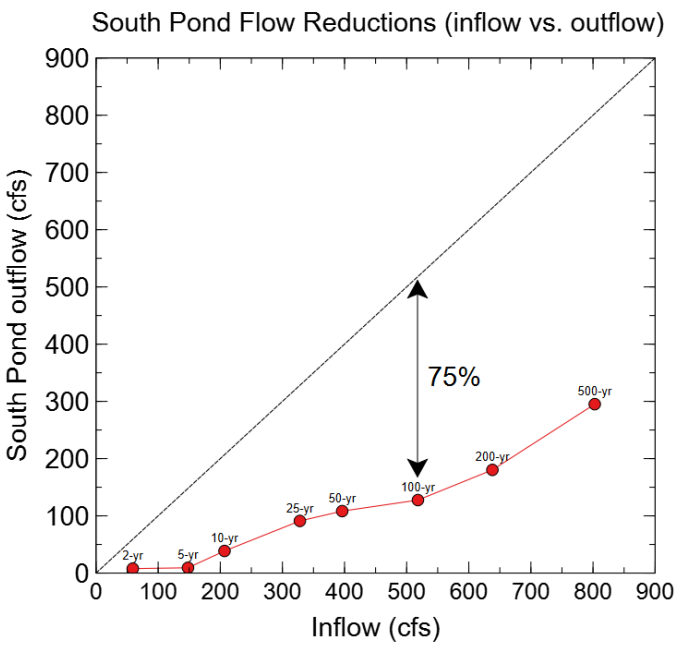
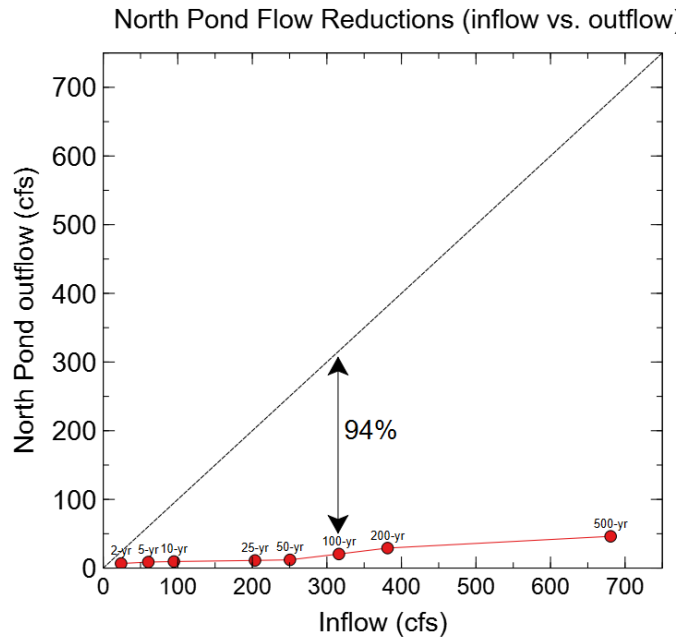
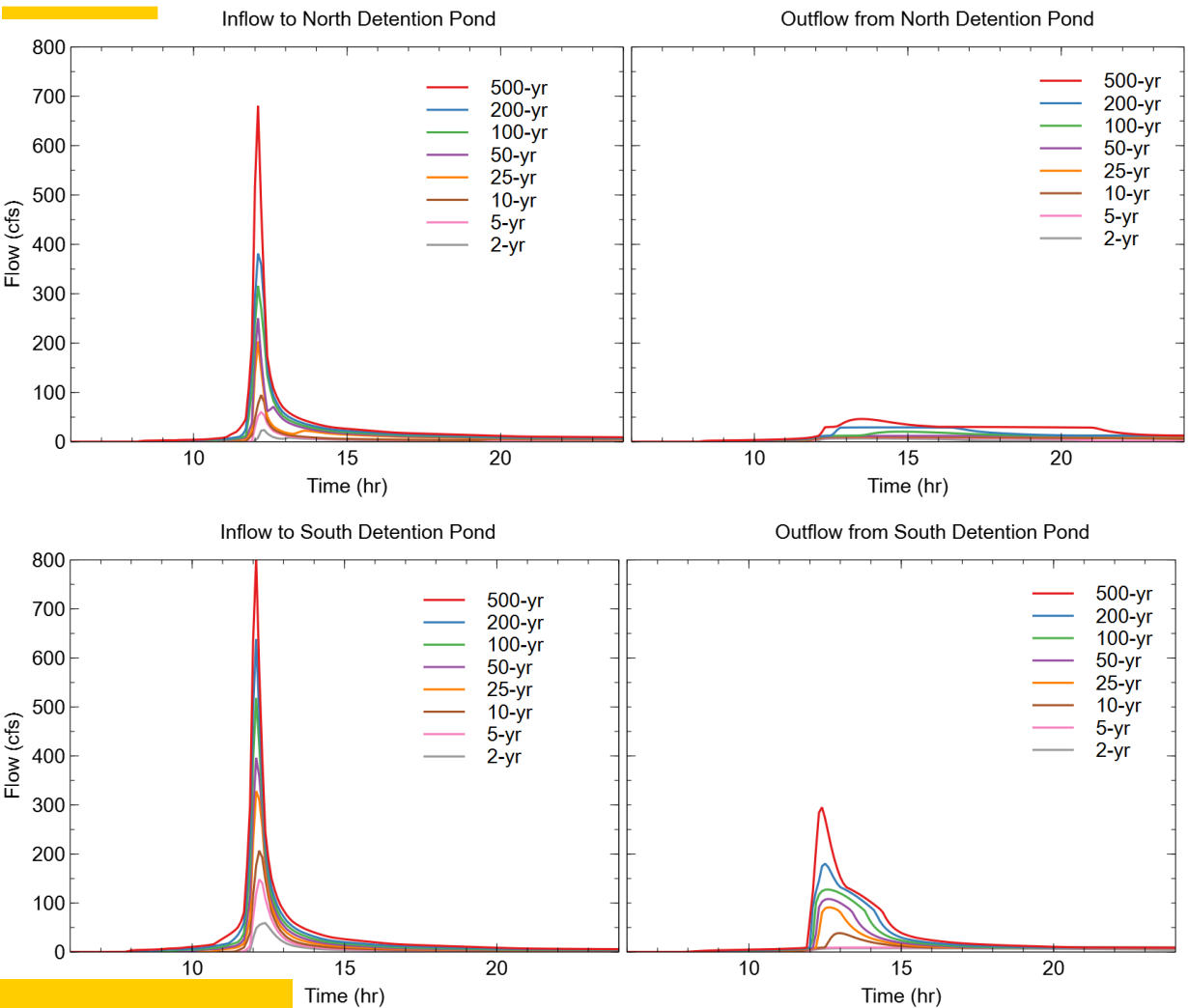
Storm Sewer flow to South Pond



Storm Sewer flow to South Pond

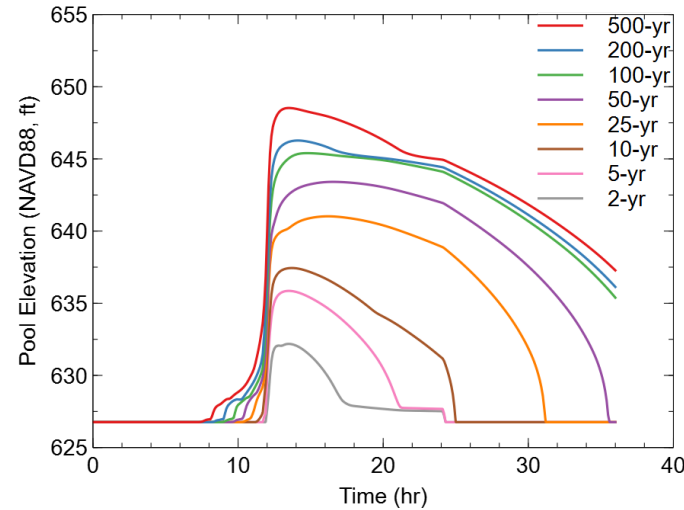


Flow Reductions

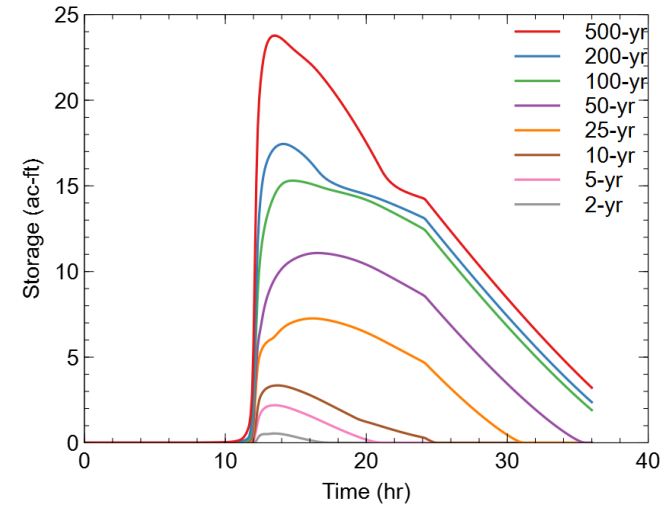


Pool Elevations/Storage

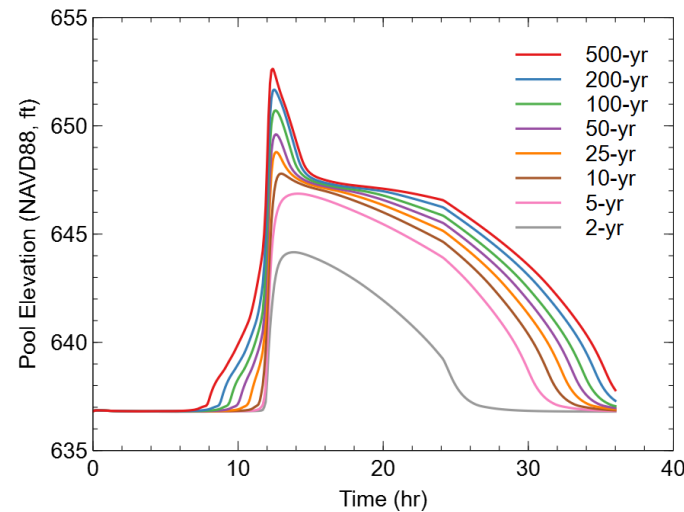
Pool Elevations for North Detention Pond



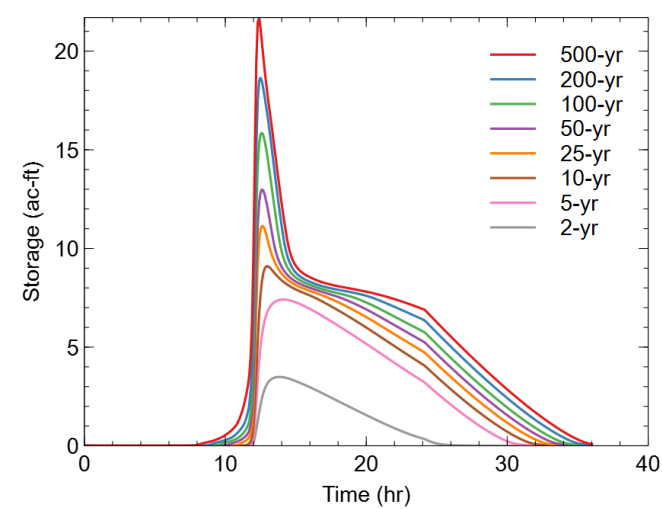
Storage for North Detention Pond



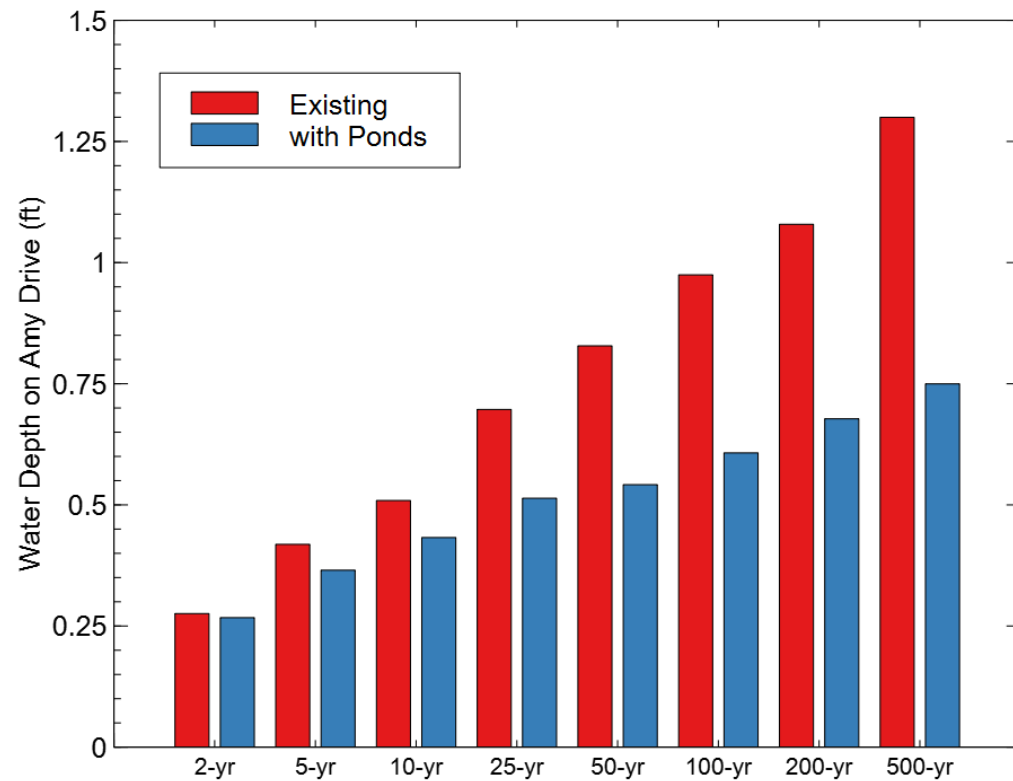
Pool Elevations for South Detention Pond



Storage for South Detention Pond



Simulated Flood Depths



Future Design Details

- Further design details and permitting will be required by Iowa DNR. These projects will likely be classified as High Hazard due to the potential loss of life should the dam fail during an event.
- Probable Maximum Flood event will be needed to design the final embankment heights and spillway capacities.

IOWA

Thank you

→ ihr.uiowa.edu

Dan Gilles
Water Resources Engineer
Daniel-gilles@uiowa.edu



City of Muscatine

CITY COUNCIL MINUTES

Thursday, November 7, 2024

1. **CALL TO ORDER**

Mayor Bark called the City Council meeting for November 7, 2024 to order at 06:00 PM.

2. **INVOCATION-Aleese Kenitzer**

3. **ROLL CALL**

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

4. **PLEDGE OF ALLEGIANCE**

5. **FROM THE MAYOR**

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

Councilmember Angie Lewis, seconded by Councilmember Peggy Gordon moved to approve the agenda as presented. Vote: Ayes -7, Nays - 0, Motion .

7. **COMMUNICATIONS - CITIZENS**

Megan Francis , 3331 Mulberry Avenue was present representing Crossroads and Senior Resources to share information regarding the 2025 Illuminate at Weed Park this Holiday Season.

Chris Post, 206 Cherry Street, was present to share her concerns with the City tearing down historic buildings such as the button factory on Mississippi Drive, Ms. Post stated tearing down these buildings is tearing down a part of Muscatine history.

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

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

Councilmember Angie Lewis, seconded by Councilmember Don Lampe, moved to approve the Consent Agenda including Items 10-14. Ayes - 7 , Nays - 0, Motion Passed.

10. * REVIEW AND POTENTIAL VOTE TO APPROVE MINUTES

- A. October 17, 2024 Regular City Council Meeting Minutes
- B. October 30, 2024 City Council Goal Setting Minutes
- C. October 29, 2024 Special City Council Meetings (3 Interviews for City Administrator Position)

11. * PETITIONS AND COMMUNICATIONS

- A. Request on second reading of a Class “E” Retail Alcohol License for The Crown Liquor & Smoke, 714 Grandview Avenue – Crown Retail 1 LLC (pending inspections)
- B. Request on first reading of a Class “E” Retail Alcohol License for Market Jalisciense LLC, 1608 Grandview Avenue, Ste. 1 – Market Jalisciense LLC (pending inspections)
- C. Request on first reading of a Class “C” Retail Alcohol License for BigBear’s Bar and Billiards, 218 Walnut Street – BigBear’s LLC (pending inspections)
- D. Request for renewal of a Class “B” Retail Alcohol License for Aldi Inc. #5, 3200 Northport Drive – Aldi Inc. (pending inspections)
- E. Request for renewal of a Class “C” Retail Alcohol License for Headquarters Corp, 2108 Grandview Avenue – Headquarters Corp. (pending inspections)
- F. Request for renewal of a Class “C” Retail Alcohol License for Contrary Brewing Co., 411 West Mississippi Drive – Contrary Brewing LLC (pending inspections)
- G. Request for renewal of a Class “C” Retail Alcohol License for Hubble’s Tap, 214 East 2 nd Street – Hubble’s Glenda LLC (pending inspections and insurance)
- H. Request for renewal of a Class “C” Retail Alcohol License for Missipi Brewing Company, 107 Iowa Avenue – R & D Operations (pending inspections and insurance)
- I. CIGARETTE/TOBACCO PERMITS
 JULY 1, 2024 – JUNE 30, 2025
 COUNCIL APPROVAL – NOVEMBER 7, 2024
 1. The Crown Liquor & Smoke, 714 Grandview Avenue – Crown Retail 1 LLC

12. * COMMUNICATION – RECEIVE AND FILE

- A. October 14, 2024, Muscatine County Board of Supervisors Meeting Minutes
- B. October 21, 2024, Muscatine County Board of Supervisors Meeting Minutes
- C. October 28, 2024 Muscatine County Board of Supervisors Meeting Minutes

- D. September 24, 2024 Board of Water, Electric and Communications Trustees Meeting Minutes

13. * PURCHASE ORDERS AND AGREEMENTS

- A. Request to Approve the Issuance of A Purchase Order to Hanell Construction, in the Amount of \$5,860.00, for Replacing the Stained Glass Coverings at Greenwood Cemetery Chapel.
- B. Request to Approve the Issuance of a Purchase Order to Diamond Floor Finish, in an Amount not to Exceed \$6,628.00, for the Refinishing of the Floor at 501 Cedar Street.
- C. Request to Approve the Issuance of a Purchase Order to Pure Fitness Innovations, for an amount not to exceed \$7,249.00, for the purchase of an MJ5 Multi-Station Crossover Machine.

14. * APPROVAL OF BILLS

- A. November 7, 2024 Bills for Approval

15. PUBLIC HEARING

- A. Public Hearing in Regard to Potential Environmental Impacts of West Hill Phase 6D Sewer Separation Project.
There were no written or oral comments regarding this public hearing.
Councilmember Nadine Brockert, seconded by Councilmember Matt Conard, moved for the public hearing to be closed. Vote: Ayes - 7, Nays - None, Motion Passed.

16. BOARDS AND COMMISSIONS

17. FROM THE CITY ADMINISTRATOR

- A. First Reading of an Ordinance Amending Title 7, Chapter 9 of the City Code of Muscatine, Iowa - Parking Meters and Rates.
Councilmember Angie Lewis, Seconded by Councilmember Peggy Gordon, moved to approve the first reading of Ordinance. Vote: Ayes - 7, Nays - 0, Motion Passed.
- B. Resolution Establishing Rates for Parking Meters and Parking Meter Hoods, Providing an Option for Parking Meter Fees to be Paid Electronically through a Parking App, and Changing Three Metered Spaces in Lot 7 to Leased Parking Spaces.
Councilmember Jeff Osborne, seconded by Councilmember Matt Conard moved to Adopt the Resolution.

Vote: Ayes - 7, Nays - 0, Motion Passed. Tyler Montez was present to share his concerns with the parking meter app and security issues associated with them. His questions were addressed by Mayor Bark and IT Manager John Kreuzenstein.

- C. Resolutions (7) Approving Internal Advances of Funds for Tax Increment Urban Renewal Projects
 - I Resolution Authorizing Internal Advance of Funds for the 2024-2025 Urban Renewal Administration and Professional Support Program.
Councilmember Jeff Osborne, seconded by Councilmember John Jindrich moved to Adopt the Resolution.
Vote: Ayes - 7, Nays - 0, Motion Passed.
 - II Resolution Authorizing Internal Advance of Funds for the Economic Development Grant for the Greater Muscatine Chamber of Commerce and Industry (GMCCI) Support Program
Councilmember John Jindrich, seconded by Councilmember Angie Lewis moved to Adopt the Resolution.
Vote: Ayes - 7, Nays - 0, Motion Passed.
 - III Resolution Authorizing the Internal Advance of Funds for the Small Business Forgivable Loan Program
Councilmember Jeff Osborne, seconded by Councilmember Don Lampe moved to Adopt the Resolution.
Vote: Ayes - 7, Nays - 0, Motion Passed.
 - IV Resolution Authorizing the Internal Advance of Funds for the Downtown Façade Improvements Forgivable Loan Program
Councilmember John Jindrich, seconded by Councilmember Jeff Osborne moved to Adopt the Resolution.
Vote: Ayes - 7, Nays - 0, Motion Passed.
 - V Resolution Authorizing the Internal Advance of Funds for the City Wayfinding Program – Years 2 and 3
Councilmember Angie Lewis, seconded by Councilmember Peggy Gordon moved to Adopt the Resolution.
Vote: Ayes - 7, Nays - 0, Motion Passed.
 - VI Resolution Authorizing the Internal Advance of Funds for the Economic Development Forgivable Loan to Muscatine Downtown Investors, LLC
Councilmember John Jindrich, seconded by Councilmember Matt Conard moved to Adopt the Resolution.
Councilmember Osborne addressed citizen regarding the demolition of a downtown building.
Vote: Ayes - 7, Nays - 0, Motion Passed.
 - VII Resolution Authorizing the Internal Advance of Funds for the Dredge Spoils Site Relocation Project

Councilmember Angie Lewis, seconded by Councilmember Nadine Brockert moved to Adopt the Resolution.

Vote: Ayes - 7, Nays - 0, Motion Passed.

D. Resolutions (14) for Annual Appropriation for Tax Increment Financing (TIF) Rebate Obligations

I Resolution for Annual Appropriation for Tax Increment Financing (TIF) Rebate Obligations- Wal-View Development Project.

Councilmember Nadine Brockert, seconded by Councilmember Peggy Gordon moved to Adopt the Resolution.

Vote: Ayes - 7, Nays - 0, Motion Passed.

II Resolution for Annual Appropriation for Tax Increment Financing (TIF) Rebate Obligations- Musco Sports Lighting Project.

Councilmember Nadine Brockert, seconded by Councilmember Angie Lewis moved to Adopt the Resolution.

Vote: Ayes - 7, Nays - 0, Motion Passed.

III Resolution for Annual Appropriation for Tax Increment Financing (TIF) Rebate Obligations- Harrison Lofts, LLC

Councilmember Angie Lewis, seconded by Councilmember Peggy Gordon moved to Adopt the Resolution.

Vote: Ayes - 7, Nays - 0, Motion Passed.

IV Resolution for Annual Appropriation for Tax Increment Financing (TIF) Rebate Obligations- Riverview Hotel Development

Councilmember Angie Lewis, seconded by Councilmember Matt Conard moved to Adopt the Resolution.

Vote: Ayes - 7, Nays - 0, Motion Passed.

V Resolution for Annual Appropriation for Tax Increment Financing (TIF) Rebate Obligations- HNI Corporation

Councilmember Peggy Gordon, seconded by Councilmember Don Lampe moved to Adopt the Resolution.

Vote: Ayes - 7, Nays - 0, Motion Passed.

VI Resolution for Annual Appropriation for Tax Increment Financing (TIF) Rebate Obligations- White Distribution & Supply LLC

Councilmember Angie Lewis, seconded by Councilmember Matt Conard moved to Approve the Request.

Vote: Ayes - 7, Nays - 0, Motion Passed.

VII Resolution for Annual Appropriation for Tax Increment Financing (TIF) Rebate Obligations- Bush Development LLC/Hershey Development LLC

Councilmember Peggy Gordon, seconded by Councilmember Angie Lewis moved to Adopt the Resolution.

Vote: Ayes - 7, Nays - 0, Motion Passed.

- VIII Resolution for Annual Appropriation for Tax Increment Financing (TIF) Rebate Obligations- JNB Oak Park, LP
Councilmember Angie Lewis, seconded by Councilmember Don Lampe moved to Adopt the Resolution.
Vote: Ayes - 7, Nays - 0, Motion Passed.
- IX Resolution for Annual Appropriation for Tax Increment Financing (TIF) Rebate Obligations- NPSW Enterprises, LLC
Councilmember Angie Lewis, seconded by Councilmember Peggy Gordon moved to Adopt the Resolution.
Vote: Ayes - 7, Nays - 0, Motion Passed.
- X Resolution for Annual Appropriation for Tax Increment Financing (TIF) Rebate Obligations- Fridley Theatres Outlot #1
Councilmember Peggy Gordon, seconded by Councilmember Angie Lewis moved to Adopt the Resolution.
Vote: Ayes - 7, Nays - 0, Motion Passed.
- XI Resolution for Annual Appropriation for Tax Increment Financing (TIF) Rebate Obligations- Colorado Senior Lofts LLC
Councilmember Angie Lewis, seconded by Councilmember Peggy Gordon moved to Adopt the Resolution.
Vote: Ayes - 7, Nays - 0, Motion Passed.
- XII Resolution for Annual Appropriation for Tax Increment Financing (TIF) Rebate Obligations- Grandview Senior Lofts, LLC
Councilmember Nadine Brockert, seconded by Councilmember Angie Lewis moved to Adopt the Resolution.
Vote: Ayes - 7, Nays - 0, Motion Passed.
- XIII Resolution for Annual Appropriation for Tax Increment Financing (TIF) Rebate Obligations- JNB Family 1 NP (Steamboat Apartments)
Councilmember John Jindrich, seconded by Councilmember Peggy Gordon moved to Adopt the Resolution.
Vote: Ayes - 7, Nays - 0, Motion Passed.
- XIV Resolution for Annual Appropriation for Tax Increment Financing (TIF) Rebate Obligations- Love's Travel Stops & Country Stores, Inc
Councilmember Nadine Brockert, seconded by Councilmember Matt Conard moved to Adopt the Resolution.
Vote: Ayes - 7, Nays - 0, Motion Passed.
- E. Resolution Relating to Financing of Certain Proposed Projects to be Undertaken by the City; Establishing Compliance with Reimbursement Bond Regulations under the Internal Revenue Code.
Councilmember Angie Lewis, seconded by Councilmember Don Lampe moved to Adopt the Resolution.
Vote: Ayes - 7, Nays - 0, Motion Passed.

- F. Resolution Approving Contract and Bond with Park Associates dba Park Planet for the Pocket Park Playground Development for \$73,180.00 as Part of the Ignite Vitality: Mulberry, a Neighborhood Revitalization Project.
Councilmember John Jindrich, seconded by Councilmember Nadine Brockert moved to Approve the Request.
Councilmember Gordon has questions regarding location of the Park that were addressed by Community Development Director Jodi Royal-Goodwin. Vote: Ayes - 7, Nays - 0, Motion Passed.
- G. Resolution Approving a Development Agreement with Muscatine Downtown Investors, LLC
Councilmember Angie Lewis, seconded by Councilmember Matt Conard moved to Adopt the Resolution.
Vote: Ayes - 7, Nays - 0, Motion Passed.
- H. Resolution Setting a Public Hearing on November 21, 2024, for Review of the Plans and Specifications for the Lake Park Boulevard Bridge Deck Overlay Project.
Councilmember Peggy Gordon, seconded by Councilmember Angie Lewis moved to Adopt the Resolution.
Vote: Ayes - 7, Nays - 0, Motion Passed.
- I. Resolution Setting a Public Hearing on November 21, 2024, Regarding Leasing a Portion of the Muscatine Municipal Airport Property Located North of the Runways for Development of a Solar Generating Facility.
Councilmember Angie Lewis, seconded by Councilmember Don Lampe moved to Adopt the Resolution.
Vote: Ayes - 7, Nays - 0, Motion Passed.
- J. Resolution Setting a Public Hearing on November 21st, 2024, for the Purpose of Hearing Community Comments Regarding the Houser Lift Station Improvement Project.
Councilmember John Jindrich, seconded by Councilmember Nadine Brockert moved to Adopt the Resolution.
Vote: Ayes - 7, Nays - 0, Motion Passed.
- K. Resolution Accepting Completed Work Performed by Sulco LLC for the Weed Park Lagoon Project and Authorizing Final Payment of \$91,161.44, Including 5% Retainage to be Released 30 Days from the Date of this Acceptance.
Councilmember Peggy Gordon, seconded by Councilmember Nadine Brockert moved to Adopt the Resolution.
Vote: Ayes - 7, Nays - 0, Motion Passed.
- L. Request to Enter into a Contract with RecDesk LLC for Recreation Management Software for the Parks and Recreation Department at the Start-up Cost of \$9,500.00.
Councilmember Nadine Brockert, seconded by Councilmember Angie Lewis

moved to Approve the Request.

Vote: Ayes - 7, Nays - 0, Motion Passed.

- M. Request to Approve Annual Urban Renewal Report for Fiscal Year 2023/2024
Councilmember Angie Lewis, seconded by Councilmember Peggy Gordon
moved to Approve the Request.
Vote: Ayes - 7, Nays - 0, Motion Passed.
- N. Request to Approve Annual Street Finance Report for Fiscal Year 2023/2024.
Councilmember Peggy Gordon, seconded by Councilmember John Jindrich
moved to Approve the Request.
Vote: Ayes - 7, Nays - 0, Motion Passed.
- O. Request to Approve Fiscal Year 2023/2024 Annual Financial Report to the State
of Iowa.

Councilmember Angie Lewis, seconded by Councilmember Don Lampe moved
to Approve the Request.

Vote: Ayes - 7, Nays - 0, Motion Passed.

- P. Request to Approve the Issuance of A Purchase Order to Winsor Consulting, in
the Amount of \$40,918.48, for Computer Server and Storage Products.
Councilmember Peggy Gordon, seconded by Councilmember Angie Lewis
moved to Approve the Request.
Vote: Ayes - 7, Nays - 0, Motion Passed.
- Q. Request to Approve Contract with Bolton & Menk, Inc. Not to Exceed
\$57,500.00, to Engineer and Manage the Sidewalk Project for the Ignite Vitality:
Mulberry, a Neighborhood Revitalization Project.
Councilmember Jeff Osborne, seconded by Councilmember Don Lampe moved
to Approve the Request.
Vote: Ayes - 7, Nays - 0, Motion Passed.
- R. Request to Approve a Contract with The Nelrod Company for the Physical Needs
Assessment and Energy Audit for Muscatine Municipal Housing Agency in the
Amount of \$9,799.00.
Councilmember Peggy Gordon, seconded by Councilmember Angie Lewis
moved to Approve the Request.
Vote: Ayes - 7, Nays - 0, Motion Passed.
- S. Request to Issue a Purchase Order, in the Amount of \$59,585.00, to Heuer
Construction, Inc. for the Repair and Replacement of a Section of Dick Drake
Way.
Councilmember John Jindrich, seconded by Councilmember Nadine Brockert
moved to Approve the Request.
Council had questions regarding the timing of this project that were addressed
by Public Works Director Brian Stineman. Mr. Stineman stated this project is

planned to start and be finished prior to the end of 2024.

Vote: Ayes - 7, Nays - 0, Motion Passed.

- T. Request to Issue a Purchase Order in the amount of \$65,332.97 to HRT Mission Adaptive Gear for Body Armor for the MSORT Team.

Councilmember John Jindrich, seconded by Councilmember Angie Lewis moved to Approve the Request.

Vote: Ayes - 7, Nays - 0, Motion Passed.

- U. Update on PetData program from Animal Control Officer Courtney Patel

Animal Control Officer Courtney Patel gave an update on the Pet Data Program.

- V. Review Of Three Trees To Be Removed Around Casey's Landing Rock and Planting Additional Trees

Rich Klimes shared with City Council regarding the honey locust trees that are in question to be removed for the purpose of better viewing of the Muscatine watermelon on the Riverfront. Mr. Klimes stated that one of the trees is not healthy, one is questionable and one is healthy. Mr. Klimes presented the cost to remove the three trees and to plan 6 additional trees as a replacement to the trees.

After discussion there were no objections from City Council for the removal of the three trees.

18. MAYOR AND COUNCIL REPORTS

19. OTHER BUSINESS

- A. Request to enter closed session pursuant to Iowa Code Section 21.5.1.i, to evaluate the professional competency of an individual whose appointment, hiring, performance, or discharge is being considered when necessary to prevent needless and irreparable injury to that individual's reputation and that individual requests a closed session

Councilmember Peggy Gordon, seconded by Councilmember Angie Lewis moved to enter Closed Session at 7:28 PM. Vote: Ayes - 7, Nays - 0, Motion passed.

Present: Councilmembers: Conard, Lewis, Lampe, Brockert, Osborne, Gordon and Jindrich. Interim City Administrator Tony Kies, Deputy City Clerk Cinda Hilger and Human Resources Manager Stephanie Romagnoli.

Councilmember Lewis, Seconded by Councilmember Lampe moved to exit closed session at 7:42 PM.

Vote: Ayes - 7, Nays - 0, Motion passed.

- B. Request to enter closed session pursuant to Iowa Code Section 21.5.1.i, to evaluate the professional competency of an individual whose appointment, hiring, performance, or discharge is being considered when necessary to prevent needless and irreparable injury to that individual's reputation and that individual requests a closed session

Councilmember Lewis, seconded by Councilmember Gordon moved to enter

Closed Session at 7:43 PM. Vote: Ayes - 7, Nays - 0, Motion passed.

Present: Councilmembers: Conard, Lewis, Lampe, Brockert, Osborne, Gordon and Jindrich. Interim City Administrator Tony Kies, Deputy City Clerk Cinda Hilger and Human Resources Manager Stephanie Romagnoli.

Councilmember Brockert, Seconded by Councilmember Gordon moved to exit closed session at 8:05 PM.

Vote: Ayes - 7, Nays - 0, Motion passed.

- C. Request to enter closed session pursuant to Iowa Code Section 21.5.1.i, to evaluate the professional competency of an individual whose appointment, hiring, performance, or discharge is being considered when necessary to prevent needless and irreparable injury to that individual's reputation and that individual requests a closed session

Councilmember Gordon, seconded by Councilmember Lewis moved to enter Closed Session at 8:06 PM. Vote: Ayes - 7, Nays - 0, Motion passed.

Present: Councilmembers: Conard, Lewis, Lampe, Brockert, Osborne, Gordon and Jindrich. Interim City Administrator Tony Kies, Deputy City Clerk Cinda Hilger and Human Resources Manager Stephanie Romagnoli.

Councilmember Gordon, Seconded by Councilmember Lewis moved to exit closed session at 8:32 PM.

Vote: Ayes - 7, Nays - 0, Motion passed.

- D. Request to enter closed session pursuant to Iowa Code Section 21.5.1.i, to evaluate the professional competency of an individual whose appointment, hiring, performance, or discharge is being considered when necessary to prevent needless and irreparable injury to that individual's reputation and that individual requests a closed session

Councilmember Brockert, seconded by Councilmember Gordon moved to enter Closed Session at 8:38 PM. Vote: Ayes - 7, Nays - 0, Motion passed.

Present: Councilmembers: Conard, Lewis, Lampe, Brockert, Osborne, Gordon and Jindrich. Interim City Administrator Tony Kies, Deputy City Clerk Cinda Hilger and Human Resources Manager Stephanie Romagnoli.

Councilmember Gordon, Seconded by Councilmember Lewis moved to exit closed session at 8:46 PM.

Vote: Ayes - 7, Nays - 0, Motion passed.

- E. Discussion and possible action on appointment of Muscatine City Administrator pursuant to the City of Muscatine, Iowa Code of Ordinances 1-10-2(A).

Councilmember Gordon made a motion to direct staff to make an offer for the appointment of City Administrator to the preferred candidate, seconded by Councilmember Lewis. Vote: Ayes - 7, Nays - 0, Motion passed.

Council asked staff to notice for an exempt session to take place on Tuesday November 12, 2024 for the purpose of discussing compensation for this position.

20. ADJOURNMENT

Councilmember Lewis moved to adjourn the meeting at 8:55 PM.



City of Muscatine

CITY COUNCIL MINUTES

Thursday, November 14, 2024

1. **CALL TO ORDER**

Mayor Pro Tem Lewis called the City Council meeting for November 14, 2024 to order at 06:00 PM.

2. **ROLL CALL**

Councilmembers Present: Nadine Brockert, John Jindrich, Peggy Gordon, Angie Lewis, Don Lampe. Councilmembers Absent: Jeff Osborne, Matt Conard.

3. **PLEDGE OF ALLEGIANCE**

4. **COUNCIL DISCUSSION ITEMS**

- A. Presentation on Muscatine Aquatic Center Update Plan
Staff provided a presentation with information related to the update plan for the Muscatine Aquatic Center. The presentation included background on the Aquatic Center, 2024 season accomplishments, and items for consideration for updates or replacement within the Aquatic Center including pool lights, replacement benches and tables, shade umbrellas, and more.
- B. Presentation on Muscatine Boat Harbor and Marina Update Plan
Staff provided a presentation with information related to the update plan for the Muscatine Boat Harbor and Marina. The presentation included background on the Boat Harbor, marina measurement details, 2024 season statistics, and items for consideration for updates or replacement in the Boat Harbor including boat lifts, covered slips, dredging, and more.
- C. Presentation on TIF Request from Carver Pump - Andy Carver
Item to be presented at a later date.
- D. Proposed Installation of Public Art on MuscaBus Shelters
Staff provided a presentation with information regarding the installation of

Public Art on the Muscabus Shelters. The presentation included estimated costs and funding options, involvement of the Public Art Advisory Commission and City Council on decisions about what is placed on shelters.

There was a consensus from City Council to move forward with the pilot project of placing art on the Shelter located at City Hall.

E. Project Update from Engineering Division of Public Works

Staff provided a presentation with information related to the ongoing and upcoming Public Works projects to include: West Hill Sewer Separation phases 6A, 6B, 6C and 6D, Fulliam Reconstruction Project, Redundant Force Main, Devitt Avenue Sidewalks, Isett Corridor Reconstruction, Dick Drake Railroad Overpass and Park Avenue West Bridge Replacement.

F. Discussion of Proposed Traffic Control at Leroy and Bidwell Intersection

Staff provided a presentation regarding the intersection of Bidwell and Leroy Street. Staff shared information regarding the history of the traffic flow at this intersection and reasoning for wanting to make the proposed changes. Several traffic configurations were discussed with City Council agreeing to move forward with Stop signs in both directions on Bidwell at Leroy Street. Staff will bring an item back to Council for final Approval.

5. **MAYOR AND COUNCIL REPORTS**

6. **ADJOURNMENT**

Councilmember Gordon moved the meeting be adjourned at 7:35 PM.

Application for Commercial/Industrial Tax Abatement
City of Muscatine, Iowa

_____ Prior Approval for Intended Improvements

Date: 11/5/24

_____ Approval of Completed Improvements

Address of subject property: 2211 Grandview AVE Muscatine IA Zip: 52761

Muscatine County Parcel ID#: 1309400029 Year Built: 2024

Legal Description of Property: 9-74-2W Lot 2 CHIN SD 8 PL 990-991

Lots 1 and 2 of Chin Subdivision to the City of Muscatine → See attached

Name of real property owner(s): Basulto Properties LLC Phone: 563-299-2016

Address of real property owner(s): 2518 Mulberry Avenue, Muscatine IA 52761

Main Contact Name: David Basulto Phone: 563-299-2016

Main Contact email address: _____

Property Classification: _____ Commercial ☒ Industrial _____ Multi Use

Project Type: _____ ☒ New Structure _____ Addition _____ Renovation

Description of the project: 240 X 50 X 17 pole building; metal sheeting structure

Assessed Value of Property Before Project: \$20,520

Assessed Value After Project Completion: _____

Cost of Improvements: \$489,000 Completion Date: 11/5/24

Abatement Schedule: Must Increase building assessment by at least 15%

Tax Exemption Schedule Selected (pick one) ☒ 10 Year Declining Schedule: ☒ 3 year 100%

Signature of Applicant: David Basulto

City Council Action

_____ Approved _____ Disapproved (Reason is disapproved) _____

City Clerk: _____ Date: _____

A tract of land located in the Southeast Quarter of Section 9, Township 76 North, Range 2 West of the 5th Principal Meridian, in Muscatine County, Iowa, described as follows:

Commencing at the Northwest Corner of the Southeast Quarter of the Southeast Quarter of said Section 9; thence North $89^{\circ} 07' 20''$ East (assumed bearing) 517.0 feet along the North line of the Southeast Quarter of the Southeast Quarter; thence South $40^{\circ} 03' 26''$ East 35.27 feet to the Point of Beginning; thence continuing South $40^{\circ} 03' 26''$ East 165.43 feet; thence South $55^{\circ} 24' 00''$ West 184.68 feet; thence North $34^{\circ} 36' 00''$ West 164.68 feet; thence North $55^{\circ} 24' 00''$ East 168.96 feet to the Point of Beginning, containing 0.669 acres, more or less

EXHIBIT A



City of Muscatine

ITEM NUMBER 2024-0521

AGENDA ITEM SUMMARY

DATE: 11/21/2024

STAFF

Brian Stineman, Public Works Director

SUBJECT

Request to Close Dick Drake Way for Repairs to the Railroad Crossing Near Union Tank Car Company

EXECUTIVE SUMMARY

Presented for Council consideration is a request to close Dick Drake Way to make repairs around the railroad crossing near Union Tank Car Company

STAFF RECOMMENDATION

Approve the request

BACKGROUND/DISCUSSION

It has come to the attention of the Public Works Department that the roadway on each side of the rail crossing on Dick Drake Way near Union Tank Car Company is in very poor condition and needs to be replaced. Public Works has coordinated with the CPKC Railroad to working in their right of way, has hired a contractor to perform the work, and has contracted for flaggers to alert rail traffic in this area. We have also coordinated with GPC to allow them to notify their contracted haulers of the closure and detour.

The work is expected to begin Monday, November 25, and be completed by Friday, December 6, weather permitting. A detour map has been included with these documents.

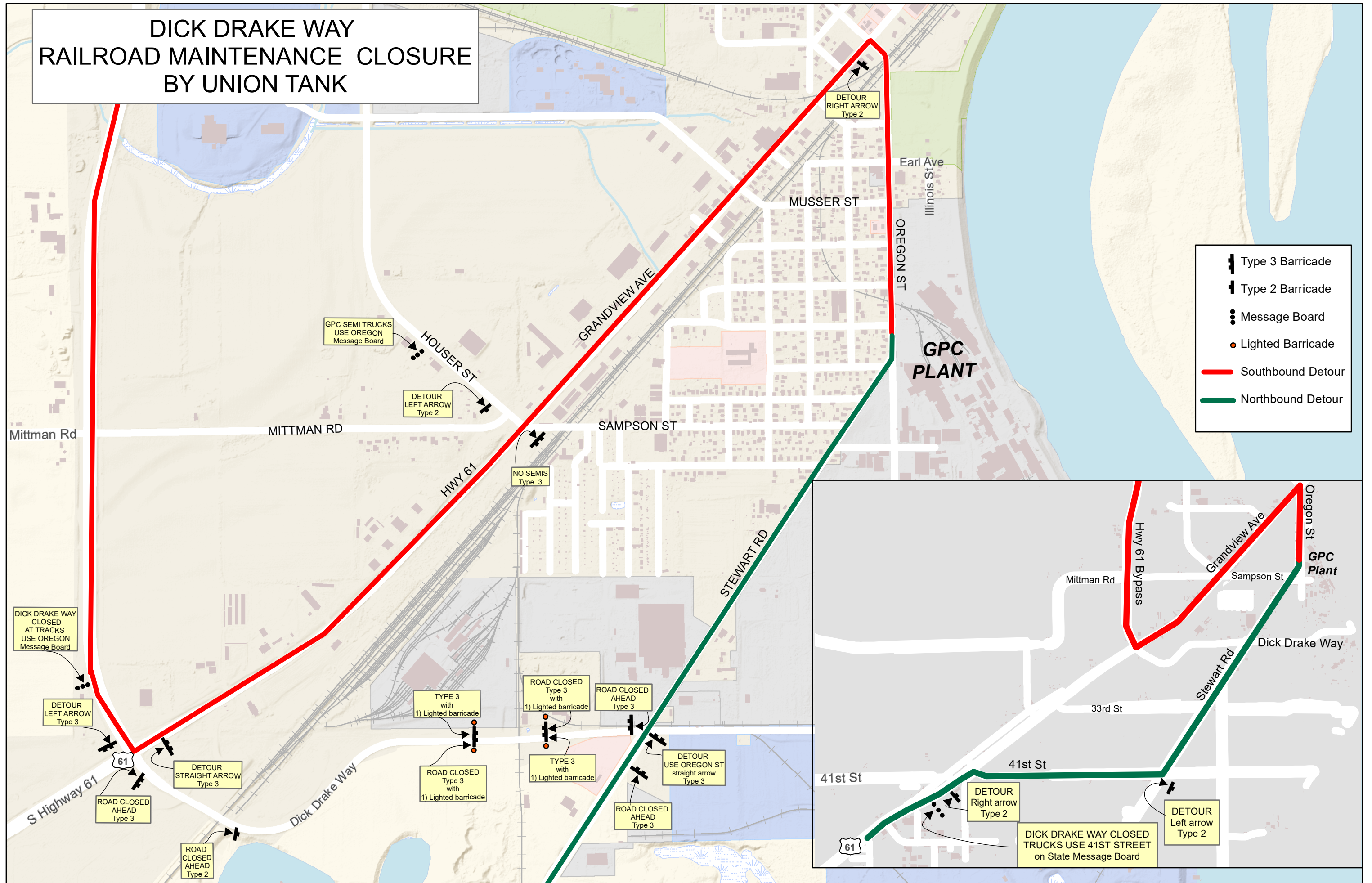
CITY FINANCIAL IMPACT

Funding for these repairs is available from Road Use Tax.

ATTACHMENTS

1. DDW Detour for Railroad work

DICK DRAKE WAY RAILROAD MAINTENANCE CLOSURE BY UNION TANK





City of Muscatine

ITEM NUMBER 2024-0510

AGENDA ITEM SUMMARY

DATE: 11/21/2024

STAFF

Blake Allington, Program Supervisor
Melissa Baker, Parks Supervisor
Richard Klimes, Parks and Recreation Director

SUBJECT

Request To Approve The Issuance Of A Purchase Order to ASC Pumping Equipment, Inc., In the Amount of \$11,313.00, for the Purchase of a New Aurora Pump for the Aquatic Center.

EXECUTIVE SUMMARY

The Parks and Recreation Department requests the purchase of an Aurora Pump for the Muscatine Aquatic Center. We are asking that \$11,313.00 be approved to ASC Pumping Equipment as they are the direct provider of this product. Installation will be completed by staff. Shipping for this pump is estimated at \$400. That is in addition to the \$10,913 pump. There are no additional quotes for this product due to the fact that we are buying directly from the manufacturer of Aurora pumps.

STAFF RECOMMENDATION

City staff recommends approval

BACKGROUND/DISCUSSION

The Muscatine Aquatic Center is nearly 20 years old. In the 23/24 Aquatic Center budget, it was approved for the replacement of a pump due to life span needs and maintenance issues.

CITY FINANCIAL IMPACT

In the FY 24/25 Aquatic Center budget, \$10,000 was approved for the replacement of one pump. The overage will be covered within the operating budget.

ATTACHMENTS

1. ASC Pump Quote



ASC Pumping Equipment, Inc.
10705 Cottonwood Street
Lenexa KS 66215
United States
(913) 747-0390

Quote
#Q07947
10/23/2024

Customer

PARKS AND RECREATION
CITY OF MUSCATINE
1211 PARK DRIVE
MUSCATINE IA 52761
United States

TOTAL

\$10,913.00

Quote Expires: 11/22/2024

Project	Division	Quoted By	Lead Time	Freight Terms	Shipping Method
6X6X12B 341 REPLACEMENT PUMP AND MOTOR	Kansas	Eric Busenbark	3-4 WEEKS	PPDADD	Best Way

Item	Description	Quantity	Rate	Amount
X302064ASC	AURORA 6X6X12B LB 284-326 BRONZE FITTED CLOSE COUPLED PUMP..CASING - 180A-334 BRACKET - E0793-1 IMPELLER - 443-2664-208 NSF/ANSI 50: No EPOXY COATING: Yes GPM: 1000 TDH: 39 TRIM: 10.25" TAG: RECIRCULATION S/N: 24-	1	\$10,913.00	\$10,913.00
180-2516-010	AURORA CASTING# 180A334 6x6x12B	1	\$0.00	\$0.00
116-0477-010	AURORA 340 SERIES 9" BRACKET, 284-326 FRAME, (CAST No. A128), (E0893-1)	1	\$0.00	\$0.00
476-0574-644	REPAIR KIT 6X6X12B LARGE BORE	1	\$0.00	\$0.00
GR3-CI-TF-284JM-6-BR-D-15	TECHTOP 15HP 3/60/208/230/460V 1200RPM 284JM TEFC PREM EFF MOTOR	1	\$0.00	\$0.00

Total

\$10,913.00

Contact Info:
Eric Busenbark
(913) 747-0390
ericb@ascpump.com
www.ascpump.com

Quote does not include Sales Tax or Freight unless otherwise noted. Funds to be paid in USD



Q07947

Oct 23, 2024 9:56:53 AM

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BILLS FOR APPROVAL SUMMARY
November 22, 2024

Computer Bill Lists

Regular Bills 9/20/24		\$	1,296,133.97
Special Ck Run 11/8/24	Operating		1,265.99
Special Ck Run 11/8/24	Section 8		6,425.00
Special CK Run 11/15/24	Operating		7,998.12
Special Ck Run 11/19/24	Operating		6,197.50
Payroll Vendor Checks 11/8/24			17,485.56
Payroll Vendor ACH Payments 11/8/24			105,736.20
	Subtotal	\$	<u>1,441,242.34</u>

ACH Debit Memo Payments

Wellmark Insurance	Health/Dental Insurance November	\$	82,000.00
Wellmark Insurance	Health/Dental Insurance November		82,000.00
Payroll Account	Transfer		496,482.92
Payroll Account	Transfer		366.31
Treasurer State of Iowa	State Tax Withholding		32,379.65
IPERS	October Contributions		133,197.80
Internal Revenue Service	Federal Withholding		133,897.35
Internal Revenue Service	Federal Withholding		68.56
	Subtotal	\$	<u>960,392.59</u>

Voucher Program

Various Landlords	Estimated November Rent	\$	180,000.00
		\$	<u>180,000.00</u>

Voids

Void CK 11/8/24	Operating	\$	(11,926.99)
Void CK 11/8/24	Section 8		(6,817.00)
Void CK 11/15/24	Operating		(7,998.12)
Void CK 11/19/24	Operating		(6,197.50)
	Subtotal	\$	<u>(32,939.61)</u>

Total Expenditures	\$	<u><u>2,548,695.32</u></u>
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Accounts Payable

Transactions by Account

User: SMeyer
 Printed: 11/19/2024 - 2:36PM
 Batch: 00006.11.2024



Account Number	Vendor	Description	GL Date	Check No	Amount	PO No
1000-00-0000-23550	RELIANCE STANDARD LIFE INS CCPR Batch 00002.10.2024 Life Insurance		10/25/2024	0	2.95	
1000-00-0000-23550	RELIANCE STANDARD LIFE INS CCPR Batch 00002.10.2024 Life Insurance		10/25/2024	0	1.20	
	Vendor Subtotal:				4.15	
1000-00-0000-23630	RELIANCE STANDARD LIFE INS CCPR Batch 00001.10.2024 Optional Life		10/11/2024	0	319.92	
1000-00-0000-23630	RELIANCE STANDARD LIFE INS CCPR Batch 00002.10.2024 Optional Life		10/25/2024	0	319.91	
	Vendor Subtotal:				639.83	
1000-01-1111-52600	TCM BANK NA VISA	Wal-Mart - City Admin Reception	11/19/2024	0	6.28	
1000-01-1111-52600	TCM BANK NA VISA	Aldi - Food for Goal Setting	11/19/2024	0	310.08	
1000-01-1111-52600	TCM BANK NA VISA	Hy-Vee - City Admin Interview	11/19/2024	0	29.21	
	Vendor Subtotal:				345.57	
1000-01-1111-52600	KAYLA PETERSEN	Reimb Food for Admin Interviews	11/18/2024	0	7.47	
	Vendor Subtotal:				7.47	
1000-01-1111-64120	COREY RHEINECKER	Reimb Mileage 10/28/24 Interview	11/19/2024	0	368.40	
	Vendor Subtotal:				368.40	
1000-01-1131-46200	RELIANCE STANDARD LIFE INS CCLife Ins Nov		11/15/2024	0	22.38	
	Vendor Subtotal:				22.38	
1000-01-1131-46600	RELIANCE STANDARD LIFE INS CCLTD Nov 24		11/15/2024	0	30.58	

			Vendor Subtotal:		30.58
1000-01-1131-61340	TCM BANK NA VISA	Adobe - Subscription	11/19/2024	0	59.99
1000-01-1131-61340	TCM BANK NA VISA	Adobe - Subscription	11/19/2024	0	254.27
			Vendor Subtotal:		314.26
1000-01-1131-62310	XEROX CORPORATION	October Copies	11/19/2024	0	8.63
			Vendor Subtotal:		8.63
1000-01-1132-46200	RELIANCE STANDARD LIFE INS CC	Life Ins Nov	11/15/2024	0	19.50
			Vendor Subtotal:		19.50
1000-01-1132-46600	RELIANCE STANDARD LIFE INS CC	LTD Nov 24	11/15/2024	0	24.04
			Vendor Subtotal:		24.04
1000-01-1132-51300	QUILL CORPORATION	Orange Card Stock Paper	11/18/2024	0	10.49
			Vendor Subtotal:		10.49
1000-01-1132-62310	XEROX CORPORATION	October Copies	11/19/2024	0	2.46
			Vendor Subtotal:		2.46
1000-01-1132-62530	CROSSROADS INC.	Shredding	11/19/2024	0	22.00
			Vendor Subtotal:		22.00
1000-01-1132-64200	TCM BANK NA VISA	NPELRA - Refund	11/19/2024	0	-345.00
			Vendor Subtotal:		-345.00
1000-01-1132-64700	DAVID HARRIS	Registration	11/19/2024	0	1,000.00
1000-01-1132-64700	DAVID HARRIS	Registration	11/19/2024	0	200.00

			Vendor Subtotal:		1,200.00
1000-01-1144-46200	RELiance STANDARD LIFE INS CCLife Ins Nov		11/15/2024	0	5.56
			Vendor Subtotal:		5.56
1000-01-1144-46600	RELiance STANDARD LIFE INS CCLTD Nov 24		11/15/2024	0	6.40
			Vendor Subtotal:		6.40
1000-01-1144-61550	DSI Medical Services	Randoms - Popp/Ordway/Last/Barnard/F	11/19/2024	0	295.00
1000-01-1144-61550	DSI Medical Services	Randoms - Evans/Hoon/Brand/Broche/A	11/19/2024	0	346.50
1000-01-1144-61550	DSI Medical Services	Randoms - Cooper/Fortenbacher	11/19/2024	0	146.50
			Vendor Subtotal:		788.00
1000-01-1144-66200	IOWA COMMUNITIES ASSURANCE Bldg Endorsements (3) Taylor Park		11/18/2024	0	1,073.00
			Vendor Subtotal:		1,073.00
1000-05-1141-38650	TCM BANK NA VISA	Credit Card Rewards	11/19/2024	0	-6,876.00
			Vendor Subtotal:		-6,876.00
1000-05-1141-46200	RELiance STANDARD LIFE INS CCLife Ins Nov		11/15/2024	0	32.95
			Vendor Subtotal:		32.95
1000-05-1141-46600	RELiance STANDARD LIFE INS CCLTD Nov 24		11/15/2024	0	57.13
			Vendor Subtotal:		57.13
1000-05-1141-51300	SOURCE NOW LLC	CE412A HP #305X Yellow Toner Cartri	11/18/2024	0	271.58 00029155
1000-05-1141-51300	SOURCE NOW LLC	CE410A HP #305X Black Toner Cartridg	11/18/2024	0	234.18 00029155
1000-05-1141-51300	SOURCE NOW LLC	CE411A HP #305X Cyan Toner Cartridg	11/18/2024	0	135.79 00029155
1000-05-1141-51300	SOURCE NOW LLC	CE413A HP #305X Magenta Toner Carti	11/18/2024	0	135.79 00029155

			Vendor Subtotal:		777.34
1000-05-1141-65100	QUAD CITY TIMES & MUSC JOURN	Publication	11/19/2024	0	95.99
1000-05-1141-65100	QUAD CITY TIMES & MUSC JOURN	Bills 10/10/24	11/19/2024	0	70.83
1000-05-1141-65100	QUAD CITY TIMES & MUSC JOURN	Minutes 10/17/24	11/19/2024	0	438.24
1000-05-1141-65100	QUAD CITY TIMES & MUSC JOURN	CA Interview Minutes	11/19/2024	0	61.57
1000-05-1141-65100	QUAD CITY TIMES & MUSC JOURN	Goal Setting Minutes	11/19/2024	0	13.24
1000-05-1141-65100	QUAD CITY TIMES & MUSC JOURN	Goal Setting Minutes	11/19/2024	0	17.87
			Vendor Subtotal:		697.74
1000-05-1143-46200	RELIANCE STANDARD LIFE INS CC	Life Ins Nov	11/15/2024	0	45.11
			Vendor Subtotal:		45.11
1000-05-1143-46600	RELIANCE STANDARD LIFE INS CC	LTD Nov 24	11/15/2024	0	51.85
			Vendor Subtotal:		51.85
1000-05-1143-51100	STAPLES ADVANTAGE	Folders for Budget	11/18/2024	0	68.22
			Vendor Subtotal:		68.22
1000-05-1143-51100	AMAZON.COM	Push Pins	11/18/2024	0	5.39
			Vendor Subtotal:		5.39
1000-05-1143-51300	QUILL CORPORATION	Time Card Paper	11/18/2024	0	32.91
			Vendor Subtotal:		32.91
1000-05-1143-62310	XEROX CORPORATION	October Copies	11/19/2024	0	22.19
1000-05-1143-62310	XEROX CORPORATION	October Copier	11/19/2024	0	118.55
1000-05-1143-62310	XEROX CORPORATION	October Copies	11/19/2024	0	45.52
			Vendor Subtotal:		186.26
1000-05-1145-63300	XEROX CORPORATION	October Copier	11/19/2024	0	166.47

			Vendor Subtotal:		166.47
1000-05-1145-69400	AMAZON.COM	Amazon Prime One Year	11/15/2024	0	1,299.00
			Vendor Subtotal:		1,299.00
1000-05-1145-69400	TCM BANK NA VISA	Credit Card Rewards	11/19/2024	0	-1,299.00
			Vendor Subtotal:		-1,299.00
1000-05-1146-46200	RELIANCE STANDARD LIFE INS CC	Life Ins Nov	11/15/2024	0	29.50
			Vendor Subtotal:		29.50
1000-05-1146-46600	RELIANCE STANDARD LIFE INS CCLTD	Nov 24	11/15/2024	0	38.65
			Vendor Subtotal:		38.65
1000-05-1146-52890	AMAZON.COM	C960 Webcam	11/18/2024	0	29.99 00029152
1000-05-1146-52890	AMAZON.COM	WDS100T4B0E Western Digital 1TB M.	11/15/2024	0	203.97 00029215
1000-05-1146-52890	AMAZON.COM	Internal Solid State Drive SSD	11/19/2024	0	67.99
1000-05-1146-52890	AMAZON.COM	CT2K8G4DFRA32A Crucial 16GB Kit (	11/15/2024	0	95.97 00029215
1000-05-1146-52890	AMAZON.COM	Arvitek 4-Port KVM Switch, VGA, USB	11/15/2024	0	23.80 00029215
			Vendor Subtotal:		421.72
1000-05-1146-61340	CONVERGE ONE INC	Maintenance Resale/Software	11/18/2024	0	6,988.70 00028387
			Vendor Subtotal:		6,988.70
1000-05-1146-61340	TCM BANK NA VISA	Jamf Software - Subscription	11/19/2024	0	20.00
			Vendor Subtotal:		20.00
1000-05-1146-65240	MUSCATINE POWER & WATER	October Internet - Weed Park	11/15/2024	0	83.18
1000-05-1146-65240	MUSCATINE POWER & WATER	October Internet - Greenwood	11/15/2024	0	83.18
1000-05-1146-65240	MUSCATINE POWER & WATER	October Internet - Cemetery	11/15/2024	0	59.99

			Vendor Subtotal:		226.35
1000-10-1113-61630	REBECCA LAWIN MCCARLEY	Historical Study	11/19/2024	0	4,840.50
			Vendor Subtotal:		4,840.50
1000-10-1221-35380	BARBARA CLESTER	Reimb Overpayment on Nuisance	11/19/2024	0	3.00
			Vendor Subtotal:		3.00
1000-10-1221-46200	RELIANCE STANDARD LIFE INS CC	Life Ins Nov	11/15/2024	0	89.79
			Vendor Subtotal:		89.79
1000-10-1221-46600	RELIANCE STANDARD LIFE INS CCLTD	Nov 24	11/15/2024	0	127.07
			Vendor Subtotal:		127.07
1000-10-1221-51100	AMAZON.COM	Packing Tape/Address Labels	11/18/2024	0	40.94
			Vendor Subtotal:		40.94
1000-10-1221-61340	TCM BANK NA VISA	Adobe - Subscription	11/19/2024	0	21.19
			Vendor Subtotal:		21.19
1000-10-1221-62120	KELLOR & KELLOR LANDSCAPE I	400 Colorado St Tree Planting	11/15/2024	0	930.00
1000-10-1221-62120	KELLOR & KELLOR LANDSCAPE I	400 Colorado St Tree Planting	11/15/2024	0	100.00
			Vendor Subtotal:		1,030.00
1000-10-1221-62310	ADVANCED BUSINESS SYSTEMS I	Copier	11/18/2024	0	25.75
1000-10-1221-62310	ADVANCED BUSINESS SYSTEMS I	Copier	11/18/2024	0	20.85
			Vendor Subtotal:		46.60
1000-10-1221-62310	XEROX CORPORATION	Copier	11/18/2024	0	27.58

1000-10-1221-62310	XEROX CORPORATION	Copies	11/18/2024	0	0.54
1000-10-1221-62310	XEROX CORPORATION	October Copies	11/19/2024	0	4.93
Vendor Subtotal:					33.05
1000-10-1221-62470	KELLOR & KELLOR LANDSCAPE I	Nuisance Abatement - 912 Cedar St	11/15/2024	0	245.00
1000-10-1221-62470	KELLOR & KELLOR LANDSCAPE I	Nuisance Abatement - 1417 Oregon St	11/15/2024	0	514.50
1000-10-1221-62470	KELLOR & KELLOR LANDSCAPE I	Nuisance Abatement - 114 W 10th St	11/15/2024	0	206.50
1000-10-1221-62470	KELLOR & KELLOR LANDSCAPE I	Nuisance Abatement - 506 Lorenz	11/15/2024	0	69.01
1000-10-1221-62470	KELLOR & KELLOR LANDSCAPE I	Nuisance Abatement - 103 W 7th St	11/15/2024	0	129.50
1000-10-1221-62470	KELLOR & KELLOR LANDSCAPE I	Nuisance Abatement - 2003 Breese	11/15/2024	0	78.44
1000-10-1221-62470	KELLOR & KELLOR LANDSCAPE I	Nuisance Abatement - 1815 Schley Ave	11/15/2024	0	39.94
1000-10-1221-62470	KELLOR & KELLOR LANDSCAPE I	Nuisance Abatement - 5111 W 59th Ave	11/15/2024	0	77.00
1000-10-1221-62470	KELLOR & KELLOR LANDSCAPE I	Nuisance Abatement - 1114 Nebraska St	11/15/2024	0	78.44
1000-10-1221-62470	KELLOR & KELLOR LANDSCAPE I	Nuisance Abatement - Parcel 083432801	11/15/2024	0	143.38
1000-10-1221-62470	KELLOR & KELLOR LANDSCAPE I	Nuisance Abatement - 1216 E 2nd St	11/18/2024	0	38.50
1000-10-1221-62470	KELLOR & KELLOR LANDSCAPE I	Nuisance Abatement - Parcel 083535701	11/15/2024	0	118.38
1000-10-1221-62470	KELLOR & KELLOR LANDSCAPE I	Nuisance Abatement - 2203 Lucas St	11/15/2024	0	116.94
1000-10-1221-62470	KELLOR & KELLOR LANDSCAPE I	Nuisance Abatement - 713 Mulberry Ave	11/15/2024	0	38.50
1000-10-1221-62470	KELLOR & KELLOR LANDSCAPE I	Nuisance Abatement - 519 Orange St	11/15/2024	0	39.94
1000-10-1221-62470	KELLOR & KELLOR LANDSCAPE I	Nuisance Abatement - 112 Roscoe Ave	11/15/2024	0	20.69
1000-10-1221-62470	KELLOR & KELLOR LANDSCAPE I	Nuisance Abatement - 706 Pine St	11/15/2024	0	39.94
1000-10-1221-62470	KELLOR & KELLOR LANDSCAPE I	Nuisance Abatement - 603 Climer St	11/15/2024	0	168.00
1000-10-1221-62470	KELLOR & KELLOR LANDSCAPE I	Nuisance Abatement - 118 W 9th St	11/15/2024	0	206.50
1000-10-1221-62470	KELLOR & KELLOR LANDSCAPE I	Nuisance Abatement - 607 Climer St	11/15/2024	0	154.00
1000-10-1221-62470	KELLOR & KELLOR LANDSCAPE I	Nuisance Abatement - 408 W Fulliam Av	11/15/2024	0	206.50
1000-10-1221-62470	KELLOR & KELLOR LANDSCAPE I	Nuisance Abatement - 1607 Lincoln Blvc	11/15/2024	0	322.00
1000-10-1221-62470	KELLOR & KELLOR LANDSCAPE I	Nuisance Abatement - 307 Parkington	11/15/2024	0	154.00
1000-10-1221-62470	KELLOR & KELLOR LANDSCAPE I	Nuisance Abatement - 111 W 9th St	11/15/2024	0	168.00
1000-10-1221-62470	KELLOR & KELLOR LANDSCAPE I	Nuisance Abatement - 2018 Crestline Dr	11/15/2024	0	158.32
1000-10-1221-62470	KELLOR & KELLOR LANDSCAPE I	Nuisance Abatement - 308 W 7th St	11/15/2024	0	253.13
1000-10-1221-62470	KELLOR & KELLOR LANDSCAPE I	Nuisance Abatement - 615 Chestnut St	11/15/2024	0	129.50
1000-10-1221-62470	KELLOR & KELLOR LANDSCAPE I	Nuisance Abatement - 1211 Howard	11/15/2024	0	38.50
1000-10-1221-62470	KELLOR & KELLOR LANDSCAPE I	Nuisance Abatement - 608 E 10th St	11/15/2024	0	129.50
1000-10-1221-62470	KELLOR & KELLOR LANDSCAPE I	Nuisance Abatement - 617 E9th St	11/15/2024	0	206.50
1000-10-1221-62470	KELLOR & KELLOR LANDSCAPE I	Nuisance Abatement - 109 W 6th St	11/15/2024	0	38.50
1000-10-1221-62470	KELLOR & KELLOR LANDSCAPE I	Nuisance Abatement - 106 W 7th St	11/15/2024	0	168.00
1000-10-1221-62470	KELLOR & KELLOR LANDSCAPE I	Nuisance Abatement - 600 E 10th St	11/15/2024	0	360.50
1000-10-1221-62470	KELLOR & KELLOR LANDSCAPE I	Nuisance Abatement - 511 W 7th St	11/15/2024	0	413.00
1000-10-1221-62470	KELLOR & KELLOR LANDSCAPE I	Nuisance Abatement - 619 Monroe St	11/15/2024	0	154.00
1000-10-1221-62470	KELLOR & KELLOR LANDSCAPE I	Nuisance Abatement - 2018 Crestline Dr	11/15/2024	0	374.50
1000-10-1221-62470	KELLOR & KELLOR LANDSCAPE I	Nuisance Abatement - 2879 Hwy 61	11/15/2024	0	206.50
1000-10-1221-62470	KELLOR & KELLOR LANDSCAPE I	Nuisance Abatement - 614 Chestnut	11/18/2024	0	131.50

1000-10-1221-62470	KELLOR & KELLOR LANDSCAPE IN Nuisance Abatement - 314 Gilbert St	11/18/2024	0	355.00
1000-10-1221-62470	KELLOR & KELLOR LANDSCAPE IN Nuisance Abatement - 113 Brooks St	11/18/2024	0	206.50
1000-10-1221-62470	KELLOR & KELLOR LANDSCAPE IN Nuisance Abatement - 100 Pond St	11/15/2024	0	148.75
1000-10-1221-62470	KELLOR & KELLOR LANDSCAPE IN Nuisance Abatement - 111 W 9th St	11/15/2024	0	129.50
1000-10-1221-62470	KELLOR & KELLOR LANDSCAPE IN Nuisance Abatement - 319 Grandview Ave	11/15/2024	0	322.00
1000-10-1221-62470	KELLOR & KELLOR LANDSCAPE IN Nuisance Abatement - 515 Orange St	11/15/2024	0	168.00
1000-10-1221-62470	KELLOR & KELLOR LANDSCAPE IN Nuisance Abatement - 705 E 7th St	11/15/2024	0	77.00
1000-10-1221-62470	KELLOR & KELLOR LANDSCAPE IN Nuisance Abatement - 701 E 7th St	11/18/2024	0	129.50
1000-10-1221-62470	KELLOR & KELLOR LANDSCAPE IN Nuisance Abatement - 315 Bond St	11/18/2024	0	77.00
1000-10-1221-62470	KELLOR & KELLOR LANDSCAPE IN Nuisance Abatement - 707 E 7th St	11/15/2024	0	336.00
1000-10-1221-62470	KELLOR & KELLOR LANDSCAPE IN Nuisance Abatement - 315 Bond St	11/18/2024	0	168.00
1000-10-1221-62470	KELLOR & KELLOR LANDSCAPE IN Nuisance Abatement - 817 Cedar St	11/18/2024	0	206.50
1000-10-1221-62470	KELLOR & KELLOR LANDSCAPE IN Nuisance Abatement - 1208 Nebraska St	11/18/2024	0	245.00
1000-10-1221-62470	KELLOR & KELLOR LANDSCAPE IN Nuisance Abatement - 407 E 7th St	11/15/2024	0	171.00
1000-10-1221-62470	KELLOR & KELLOR LANDSCAPE IN Nuisance Abatement - 2003 Breese	11/15/2024	0	169.44
1000-10-1221-62470	KELLOR & KELLOR LANDSCAPE IN Nuisance Abatement - 1815 Schley Ave	11/15/2024	0	130.94
1000-10-1221-62470	KELLOR & KELLOR LANDSCAPE IN Nuisance Abatement - 5111 W 59th Ave	11/15/2024	0	115.50
1000-10-1221-62470	KELLOR & KELLOR LANDSCAPE IN Nuisance Abatement - 1114 Nebraska	11/15/2024	0	207.94
1000-10-1221-62470	KELLOR & KELLOR LANDSCAPE IN Nuisance Abatement - 1632 Beach Cir	11/15/2024	0	207.94
1000-10-1221-62470	KELLOR & KELLOR LANDSCAPE IN Nuisance Abatement - Parcel 083535701	11/15/2024	0	79.88
1000-10-1221-62470	KELLOR & KELLOR LANDSCAPE IN Nuisance Abatement - 2203 Lucas St	11/15/2024	0	39.94
1000-10-1221-62470	KELLOR & KELLOR LANDSCAPE IN Nuisance Abatement - 713 Mulberry Ave	11/15/2024	0	38.50
1000-10-1221-62470	KELLOR & KELLOR LANDSCAPE IN Nuisance Abatement - 519 Orange St	11/15/2024	0	111.69
1000-10-1221-62470	KELLOR & KELLOR LANDSCAPE IN Nuisance Abatement - 112 Roscoe Ave	11/15/2024	0	337.44
1000-10-1221-62470	KELLOR & KELLOR LANDSCAPE IN Nuisance Abatement - 706 Pine St	11/15/2024	0	304.19
1000-10-1221-62470	KELLOR & KELLOR LANDSCAPE IN Nuisance Abatement - 2003 Breese	11/18/2024	0	221.94
1000-10-1221-62470	KELLOR & KELLOR LANDSCAPE IN Nuisance Abatement - 1815 Schley Ave	11/18/2024	0	39.94
1000-10-1221-62470	KELLOR & KELLOR LANDSCAPE IN Nuisance Abatement - 1114 Nebraska	11/18/2024	0	169.44
1000-10-1221-62470	KELLOR & KELLOR LANDSCAPE IN Nuisance Abatement - 1632 Beach Cir	11/18/2024	0	245.00
1000-10-1221-62470	KELLOR & KELLOR LANDSCAPE IN Nuisance Abatement - 519 Orange St	11/18/2024	0	245.00
1000-10-1221-62470	KELLOR & KELLOR LANDSCAPE IN Nuisance Abatement - Parcel 082527602	11/18/2024	0	168.00
1000-10-1221-62470	KELLOR & KELLOR LANDSCAPE IN Nuisance Abatement - Parcel 082527602	11/15/2024	0	119.82
1000-10-1221-62470	KELLOR & KELLOR LANDSCAPE IN Nuisance Abatement - 901 E 11th St	11/18/2024	0	91.00
1000-10-1221-62470	KELLOR & KELLOR LANDSCAPE IN Nuisance Abatement - 201 W 7th St	11/18/2024	0	131.50
1000-10-1221-62470	KELLOR & KELLOR LANDSCAPE IN Nuisance Abatement - 1243 Dale St	11/18/2024	0	206.50
1000-10-1221-62470	KELLOR & KELLOR LANDSCAPE IN Nuisance Abatement - 817 Cedar St	11/18/2024	0	77.00
1000-10-1221-62470	KELLOR & KELLOR LANDSCAPE IN Nuisance Abatement - 910 Sycamore St	11/18/2024	0	168.00
1000-10-1221-62470	KELLOR & KELLOR LANDSCAPE IN Nuisance Abatement - 215 Clinton St	11/18/2024	0	413.00
1000-10-1221-62470	KELLOR & KELLOR LANDSCAPE IN Nuisance Abatement - 103 E 6th St	11/18/2024	0	91.00
1000-10-1221-62470	KELLOR & KELLOR LANDSCAPE IN Nuisance Abatement - 602 W Fulliam Ave	11/18/2024	0	49.01
1000-10-1221-62470	KELLOR & KELLOR LANDSCAPE IN Nuisance Abatement - 1114 Nebraska	11/18/2024	0	206.50
1000-10-1221-62470	KELLOR & KELLOR LANDSCAPE IN Nuisance Abatement - 2003 Breese	11/15/2024	0	39.94
1000-10-1221-62470	KELLOR & KELLOR LANDSCAPE IN Nuisance Abatement - 1815 Schley	11/15/2024	0	39.94
1000-10-1221-62470	KELLOR & KELLOR LANDSCAPE IN Nuisance Abatement - 1114 Nebraska	11/15/2024	0	78.44

1000-10-1221-62470	KELLOR & KELLOR LANDSCAPE IT	Nuisance Abatement - 1216 E 2nd St	11/18/2024	0	77.00
1000-10-1221-62470	KELLOR & KELLOR LANDSCAPE IT	Nuisance Abatement - Parcel 083535701	11/15/2024	0	79.88
1000-10-1221-62470	KELLOR & KELLOR LANDSCAPE IT	Nuisance Abatement - 2203 Lucas St	11/15/2024	0	78.44
1000-10-1221-62470	KELLOR & KELLOR LANDSCAPE IT	Nuisance Abatement - 713 Mulberry Ave	11/15/2024	0	38.50
1000-10-1221-62470	KELLOR & KELLOR LANDSCAPE IT	Nuisance Abatement - 519 Orange St	11/15/2024	0	39.94
1000-10-1221-62470	KELLOR & KELLOR LANDSCAPE IT	Nuisance Abatement - 112 Roscoe Ave	11/15/2024	0	39.94
1000-10-1221-62470	KELLOR & KELLOR LANDSCAPE IT	Nuisance Abatement - 706 Pine St	11/15/2024	0	78.44
1000-10-1221-62470	KELLOR & KELLOR LANDSCAPE IT	Nuisance Abatement - Parcel 082527602	11/15/2024	0	118.80
1000-10-1221-62470	KELLOR & KELLOR LANDSCAPE IT	Nuisance Abatement - 917 Iowa Ave	11/18/2024	0	206.50
1000-10-1221-62470	KELLOR & KELLOR LANDSCAPE IT	Nuisance Abatement - 419 W 6th St	11/18/2024	0	79.88
1000-10-1221-62470	KELLOR & KELLOR LANDSCAPE IT	Nuisance Abatement - 717 Mulberry Ave	11/18/2024	0	168.00
1000-10-1221-62470	KELLOR & KELLOR LANDSCAPE IT	Nuisance Abatement - 2003 Breese	11/18/2024	0	78.44
1000-10-1221-62470	KELLOR & KELLOR LANDSCAPE IT	Nuisance Abatement - 1815 Schley	11/18/2024	0	78.44
1000-10-1221-62470	KELLOR & KELLOR LANDSCAPE IT	Nuisance Abatement - 1114 Nebraska	11/18/2024	0	78.44
1000-10-1221-62470	KELLOR & KELLOR LANDSCAPE IT	Nuisance Abatement - 1632 Beach Cir	11/18/2024	0	245.00
1000-10-1221-62470	KELLOR & KELLOR LANDSCAPE IT	Nuisance Abatement - 2203 Lucas St	11/18/2024	0	78.44
1000-10-1221-62470	KELLOR & KELLOR LANDSCAPE IT	Nuisance Abatement - 519 Orange St	11/18/2024	0	78.44
1000-10-1221-62470	KELLOR & KELLOR LANDSCAPE IT	Nuisance Abatement - 112 Roscoe Ave	11/18/2024	0	39.94
1000-10-1221-62470	KELLOR & KELLOR LANDSCAPE IT	Nuisance Abatement - 706 Pine St	11/18/2024	0	78.44
1000-10-1221-62470	KELLOR & KELLOR LANDSCAPE IT	Nuisance Abatement - Parcel 082527602	11/18/2024	0	119.82
Vendor Subtotal:					15,300.39
1000-10-1221-62470	A NOTCH ABOVE TREE SERVICE	37 Gas Lantern - Removal of Nuisance T	11/15/2024	0	755.00 00028940
Vendor Subtotal:					755.00
1000-10-1221-64120	TCM BANK NA VISA	Pasta Al Forno - Meal Gillette	11/19/2024	0	20.86
1000-10-1221-64120	TCM BANK NA VISA	Jimmy Johns - Meal Gillette	11/19/2024	0	8.55
1000-10-1221-64120	TCM BANK NA VISA	Kum & Go - Fuel Reimb	11/19/2024	0	26.96
Vendor Subtotal:					56.37
1000-10-1221-64200	TCM BANK NA VISA	IowACE Conference - Registration Lussc	11/19/2024	0	225.00
Vendor Subtotal:					225.00
1000-10-1221-65100	QUAD CITY TIMES & MUSC JOURN	Pattern Book Architech RFQ - Public No	11/18/2024	0	17.87
Vendor Subtotal:					17.87

1000-10-1221-65275	VERIZON WIRELESS	October Wireless	11/18/2024	0	473.02
		Vendor Subtotal:			473.02
1000-10-1221-65275	TCM BANK NA VISA	Google - Google Voice	11/19/2024	0	72.83
		Vendor Subtotal:			72.83
1000-10-1221-65275	VERIZON	October GPS	11/15/2024	0	69.80
		Vendor Subtotal:			69.80
1000-10-1221-69800	POINT & PAY	September CC Fees	11/18/2024	0	318.22
		Vendor Subtotal:			318.22
1000-15-1311-33430	GATSO USA INC.	ATE Fees October	11/19/2024	0	12,717.00
		Vendor Subtotal:			12,717.00
1000-15-1311-33435	TCM BANK NA VISA	Iowa Judicial Branch - ATE Filing	11/19/2024	0	95.00
1000-15-1311-33435	TCM BANK NA VISA	Iowa Judicial Branch - ATE Filing	11/19/2024	0	95.00
1000-15-1311-33435	TCM BANK NA VISA	Iowa Judicial Branch - ATE Filing	11/19/2024	0	95.00
1000-15-1311-33435	TCM BANK NA VISA	Iowa Judicial Branch - ATE Filing	11/19/2024	0	95.00
1000-15-1311-33435	TCM BANK NA VISA	Iowa Judicial Branch - ATE Filing	11/19/2024	0	95.00
1000-15-1311-33435	TCM BANK NA VISA	Iowa Judicial Branch - ATE Filing	11/19/2024	0	95.00
1000-15-1311-33435	TCM BANK NA VISA	Iowa Judicial Branch - ATE Filing	11/19/2024	0	95.00
1000-15-1311-33435	TCM BANK NA VISA	Iowa Judicial Branch - ATE Filing	11/19/2024	0	95.00
1000-15-1311-33435	TCM BANK NA VISA	Iowa Judicial Branch - ATE Filing	11/19/2024	0	95.00
		Vendor Subtotal:			855.00
1000-15-1311-33440	MUNICIPAL COLLECTIONS OF AMI	Collection Agency Fee - October	11/18/2024	0	300.00
		Vendor Subtotal:			300.00
1000-15-1311-46200	RELIANCE STANDARD LIFE INS CC	Life Ins Nov	11/15/2024	0	301.18
		Vendor Subtotal:			301.18

1000-15-1311-46600	RELIANCE STANDARD LIFE INS CCLTD Nov 24		11/15/2024	0	264.06
1000-15-1311-46600	RELIANCE STANDARD LIFE INS CCBW LTD Nov 24		11/15/2024	0	12.13
	Vendor Subtotal:				276.19
1000-15-1311-51100	AMAZON.COM	Label Maker Tape	11/15/2024	0	23.38
	Vendor Subtotal:				23.38
1000-15-1311-51300	TCM BANK NA VISA	POS Heavyweight Thermal Paper 8.5"x9	11/19/2024	0	450.00 00028855
	Vendor Subtotal:				450.00
1000-15-1311-52250	TCM BANK NA VISA	NARK II Duquenois-Levine Reagent-Me	11/19/2024	0	310.09 00028936
	Vendor Subtotal:				310.09
1000-15-1311-52300	GALLS LLC	New Issue Flashlights for Duty	11/15/2024	0	243.31
	Vendor Subtotal:				243.31
1000-15-1311-52300	UNIFORM DEN INC	Replacement Shirt	11/15/2024	0	88.28
	Vendor Subtotal:				88.28
1000-15-1311-52600	TCM BANK NA VISA	Dunkin Donuts - Meeting Food	11/19/2024	0	27.39
1000-15-1311-52600	TCM BANK NA VISA	Sal Vitales - Peer Support Meeting	11/19/2024	0	223.28
	Vendor Subtotal:				250.67
1000-15-1311-52710	TCM BANK NA VISA	Kum & Go - Fuel	11/19/2024	0	57.40
	Vendor Subtotal:				57.40
1000-15-1311-52880	TCM BANK NA VISA	Axon Taser Target-Target Frame 27.5X'	11/19/2024	0	88.97 00028815
1000-15-1311-52880	TCM BANK NA VISA	Axon Taser Target-Conductive Professio	11/19/2024	0	177.89 00028815

Vendor Subtotal:					266.86
1000-15-1311-52890	TCM BANK NA VISA	Zipr-Weld Split-Back Tamper Evident E	11/19/2024	0	321.06 00028937
1000-15-1311-52890	TCM BANK NA VISA	22-0080-01 Dry Gas Standard 108 Liter (	11/19/2024	0	125.00 00028901
1000-15-1311-52890	TCM BANK NA VISA	Amazon - Flashlight	11/19/2024	0	64.76
1000-15-1311-52890	TCM BANK NA VISA	Amazon - Flashlight Return	11/19/2024	0	-64.76
Vendor Subtotal:					446.06
1000-15-1311-61340	TCM BANK NA VISA	Nero - Software	11/19/2024	0	44.95
Vendor Subtotal:					44.95
1000-15-1311-62310	XEROX CORPORATION	October Copies	11/19/2024	0	2.46
Vendor Subtotal:					2.46
1000-15-1311-62410	TEMP ASSOCIATES	Temp Employee Week Ending 10/27/24	11/15/2024	0	847.20
1000-15-1311-62410	TEMP ASSOCIATES	Temp Employee Week Ending 11/3/24	11/15/2024	0	847.20
1000-15-1311-62410	TEMP ASSOCIATES	Temp Employee Week Ending 11/10/24	11/18/2024	0	698.94
Vendor Subtotal:					2,393.34
1000-15-1311-64200	TCM BANK NA VISA	NTOA - Refund	11/19/2024	0	-339.00
1000-15-1311-64200	TCM BANK NA VISA	FBINAA - Registration Jirak	11/19/2024	0	35.00
1000-15-1311-64200	TCM BANK NA VISA	Iowa Police Chief Assoc - Registration	11/19/2024	0	240.00
Vendor Subtotal:					-64.00
1000-15-1311-64700	DAVID HARRIS	Registration O'Connor/Motto	11/19/2024	0	1,000.00
Vendor Subtotal:					1,000.00
1000-15-1311-67140	A-1 QUALITY TIRE & CAR CARE	Tire Repairs #756	11/15/2024	0	28.50
Vendor Subtotal:					28.50
1000-15-1311-67320	GROSJEAN'S COLLISION & REPAIR	Repair Front End Damage to 2019 Chevy	11/18/2024	0	7,348.98 00029105

Vendor Subtotal:					7,348.98
1000-15-1311-67320	EXCEL AUTO GLASS INC	Windshield Repair	11/15/2024	0	79.95
Vendor Subtotal:					79.95
1000-15-1311-67320	HOLMES COLLISION REPAIR INC	Repair Front Bumber on Squad 761	11/15/2024	0	967.20 00028721
Vendor Subtotal:					967.20
1000-15-1311-67320	LUCAS COMMUNICATION INC	Move Office Phones	11/15/2024	0	409.64
Vendor Subtotal:					409.64
1000-15-1311-67320	SIGN PRO	Remove Graphics #953	11/18/2024	0	130.00
Vendor Subtotal:					130.00
1000-15-1311-69200	TCM BANK NA VISA	USPS - Postage	11/19/2024	0	31.18
1000-15-1311-69200	TCM BANK NA VISA	USPS - Postage	11/19/2024	0	18.55
Vendor Subtotal:					49.73
1000-15-1312-46200	RELIANCE STANDARD LIFE INS CC	Life Ins Nov	11/15/2024	0	3.13
Vendor Subtotal:					3.13
1000-15-1312-46600	RELIANCE STANDARD LIFE INS CCBW LTD	Nov 24	11/15/2024	0	14.97
Vendor Subtotal:					14.97
1000-15-1312-61650	PETDATA, INC	Pet Licensing	11/15/2024	0	500.00
Vendor Subtotal:					500.00
1000-15-1316-52830	TCM BANK NA VISA	Stainless Steel Attachable Bowl	11/19/2024	0	39.96 00028822
1000-15-1316-52830	TCM BANK NA VISA	Handler Leather Tracking Harness	11/19/2024	0	84.99 00028822

1000-15-1316-52830	TCM BANK NA VISA	Cobra Buckle Dog Collar	11/19/2024	0	84.99 00028822
1000-15-1316-52830	TCM BANK NA VISA	Dogtra 1900s Handsfree Plus B&L	11/19/2024	0	279.99 00028822
1000-15-1316-52830	TCM BANK NA VISA	Herm Sprenger Ultra Plus Chrome Plated	11/19/2024	0	16.00 00028822
1000-15-1316-52830	TCM BANK NA VISA	Tubular Nylon Lines 30'	11/19/2024	0	40.99 00028822
1000-15-1316-52830	TCM BANK NA VISA	Tac-Black Leather Braided Obedience Le	11/19/2024	0	47.99 00028822
Vendor Subtotal:					594.91
1000-15-1316-64120	WILLIAM REDDICK	Reimb Meals 10/28/24 - 11/1/24	11/15/2024	0	55.27
Vendor Subtotal:					55.27
1000-15-1317-65260	VERIZON WIRELESS	October Cell Phones - HIDTA	11/18/2024	0	49.18
Vendor Subtotal:					49.18
1000-15-1320-61660	REINFORCEMENT CONSULTING LI	Mental Health Consultation	11/15/2024	0	875.00
Vendor Subtotal:					875.00
1000-20-1321-46200	RELIANCE STANDARD LIFE INS CC	Life Ins Nov	11/15/2024	0	448.86
Vendor Subtotal:					448.86
1000-20-1321-46600	RELIANCE STANDARD LIFE INS CC	LTD Nov 24	11/15/2024	0	192.19
Vendor Subtotal:					192.19
1000-20-1321-52300	TCM BANK NA VISA	Phelps - Volunteer T-Shirt Matt	11/19/2024	0	25.53
1000-20-1321-52300	TCM BANK NA VISA	Fire Investigation Unit Uniform T-Shirt -	11/19/2024	0	18.50 00028918
1000-20-1321-52300	TCM BANK NA VISA	Fire Investigation Unit Uniform T-Shirt -	11/19/2024	0	18.50 00028918
1000-20-1321-52300	TCM BANK NA VISA	Fire Investigation Unit Uniform T-Shirt -	11/19/2024	0	18.50 00028918
1000-20-1321-52300	TCM BANK NA VISA	Paramedic Uniform T-Shirt - Whitehall	11/19/2024	0	34.18 00028918
1000-20-1321-52300	TCM BANK NA VISA	Fire Investigation Unit Uniform T-Shirt -	11/19/2024	0	18.50 00028918
1000-20-1321-52300	TCM BANK NA VISA	Paramedic Uniform T-Shirt - Petersen	11/19/2024	0	34.18 00028918
1000-20-1321-52300	TCM BANK NA VISA	Fire Investigation Unit Uniform T-Shirt -	11/19/2024	0	18.50 00028918
1000-20-1321-52300	TCM BANK NA VISA	Fire Investigation Unit Uniform T-Shirt -	11/19/2024	0	18.50 00028918
1000-20-1321-52300	TCM BANK NA VISA	Fire Investigation Unit Uniform T-Shirt -	11/19/2024	0	21.50 00028918
Vendor Subtotal:					226.39

1000-20-1321-52710	TCM BANK NA VISA	Love's - Fuel	11/19/2024	0	64.71
		Vendor Subtotal:			64.71
1000-20-1321-61520	UNITY HEALTHCARE - TRINITY MI	Physcial Colon	11/19/2024	0	314.00
		Vendor Subtotal:			314.00
1000-20-1321-61560	TMESYS LLC	Prescription - K McCarthy	11/19/2024	0	81.62
1000-20-1321-61560	TMESYS LLC	Prescription - J Barnhart	11/19/2024	0	680.62
		Vendor Subtotal:			762.24
1000-20-1321-62310	XEROX CORPORATION	October Copies	11/19/2024	0	4.93
		Vendor Subtotal:			4.93
1000-20-1321-64120	TCM BANK NA VISA	NFA Meal Ticket - E. Joslyn (10/19-10/2	11/19/2024	0	305.13 00029011
1000-20-1321-64120	TCM BANK NA VISA	NFA Meal Ticket - J. Rymars (10/13-10/	11/19/2024	0	305.13 00028848
1000-20-1321-64120	TCM BANK NA VISA	Prairie Meadows Hotel - Lodging Barrett	11/19/2024	0	356.16
1000-20-1321-64120	TCM BANK NA VISA	Love's - Meal Ewers	11/19/2024	0	13.91
1000-20-1321-64120	TCM BANK NA VISA	Fairfield Inn - Lodging Ewers	11/19/2024	0	355.04
1000-20-1321-64120	TCM BANK NA VISA	The Filling Station - Meal Ewers	11/19/2024	0	20.19
		Vendor Subtotal:			1,355.56
1000-20-1321-64400	TCM BANK NA VISA	Hy-Vee Market Grille - Meal Anthony/C	11/19/2024	0	33.89
		Vendor Subtotal:			33.89
1000-20-1321-64700	DAVID HARRIS	Registration Verschoore/Rock/Rymars	11/19/2024	0	1,500.00
		Vendor Subtotal:			1,500.00
1000-20-1321-69400	PATRICK GINGERICH	Reimb - Craft & Culture Firefighter Cont	11/18/2024	0	175.00
		Vendor Subtotal:			175.00

1000-20-1321-69400	TCM BANK NA VISA	AFSA - Membership Dues M Hartman	11/19/2024	0	50.00
1000-20-1321-69400	TCM BANK NA VISA	CPSE - Renewal Fees Hartman	11/19/2024	0	650.00
		Vendor Subtotal:			700.00
1000-20-1321-69400	BEN BARRETT	Reimb - Craft & Culture Firefighter Conf	11/18/2024	0	175.00
		Vendor Subtotal:			175.00
1000-25-1115-46200	RELIANCE STANDARD LIFE INS CC	Life Ins Nov	11/15/2024	0	3.19
		Vendor Subtotal:			3.19
1000-25-1115-46600	RELIANCE STANDARD LIFE INS CC	LTD Nov 24	11/15/2024	0	5.48
		Vendor Subtotal:			5.48
1000-25-1115-61550	ARMOR UP AMERICA	November EAP	11/19/2024	0	318.50
		Vendor Subtotal:			318.50
1000-25-1115-64200	DAVID HARRIS	Registration Allington	11/19/2024	0	500.00
		Vendor Subtotal:			500.00
1000-25-1411-46200	RELIANCE STANDARD LIFE INS CC	Life Ins Nov	11/15/2024	0	3.13
		Vendor Subtotal:			3.13
1000-25-1411-46600	RELIANCE STANDARD LIFE INS CC	BW LTD Nov 24	11/15/2024	0	17.80
		Vendor Subtotal:			17.80
1000-25-1411-52830	MENARDS (MUSC)	Vise	11/15/2024	0	99.00
		Vendor Subtotal:			99.00
1000-25-1411-52830	SINCLAIR	File Guide	11/15/2024	0	39.09

			Vendor Subtotal:		39.09
1000-25-1411-53120	VAN METER INDUSTRIAL INC	Photo Control Stem	11/15/2024	0	32.16
			Vendor Subtotal:		32.16
1000-25-1411-53220	ARNOLD MOTOR SUPPLY	GASOLINE NOZZLE	11/15/2024	0	115.83 00029056
			Vendor Subtotal:		115.83
1000-25-1411-53220	MUSCATINE LAWN & POWER	Damper	11/15/2024	0	95.99
			Vendor Subtotal:		95.99
1000-25-1411-53220	SINCLAIR	Spark Plug	11/15/2024	0	7.99
			Vendor Subtotal:		7.99
1000-25-1411-53220	MUSCATINE LUMBER	Materials	11/15/2024	0	9.20
1000-25-1411-53220	MUSCATINE LUMBER	Eye Bolts/Hooks	11/15/2024	0	8.87
			Vendor Subtotal:		18.07
1000-25-1411-53330	HAHN READY MIX INC	TARDS 4000# CONCRETE	11/15/2024	0	1,020.44 00028997
			Vendor Subtotal:		1,020.44
1000-25-1411-62210	PHELPS THE UNIFORM SPECIALIST	Laundry - Greenwood	11/15/2024	0	13.05
			Vendor Subtotal:		13.05
1000-25-1411-65100	MUSCATINE POWER & WATER	October Phones - Greenwood	11/15/2024	0	30.69
			Vendor Subtotal:		30.69
1000-25-1411-65210	MUSCATINE POWER & WATER	October Phones - Cemetery	11/15/2024	0	34.10

			Vendor Subtotal:		34.10
1000-25-1421-46200	RELIANCE STANDARD LIFE INS CCLife Ins Nov		11/15/2024	0	28.44
			Vendor Subtotal:		28.44
1000-25-1421-46600	RELIANCE STANDARD LIFE INS CCLTD Nov 24		11/15/2024	0	34.52
			Vendor Subtotal:		34.52
1000-25-1421-62310	XEROX CORPORATION	October Copies	11/19/2024	0	2.46
			Vendor Subtotal:		2.46
1000-25-1423-46200	RELIANCE STANDARD LIFE INS CCLife Ins Nov		11/15/2024	0	32.00
			Vendor Subtotal:		32.00
1000-25-1423-46600	RELIANCE STANDARD LIFE INS CCLTD Nov 24		11/15/2024	0	16.10
1000-25-1423-46600	RELIANCE STANDARD LIFE INS CCBW LTD Nov 24		11/15/2024	0	99.40
			Vendor Subtotal:		115.50
1000-25-1423-52300	PHELPS CUSTOM IMAGE WEAR	Uniforms - S Day	11/19/2024	0	97.70
			Vendor Subtotal:		97.70
1000-25-1423-52400	TCM BANK NA VISA	Uline - Liquid Soap	11/19/2024	0	73.69
			Vendor Subtotal:		73.69
1000-25-1423-52740	ARNOLD MOTOR SUPPLY	Chain Oil	11/15/2024	0	20.99
			Vendor Subtotal:		20.99
1000-25-1423-52740	SMITH SALES & SERVICE	Oil	11/15/2024	0	45.80
1000-25-1423-52740	SMITH SALES & SERVICE	Oil	11/15/2024	0	93.20

		Vendor Subtotal:			139.00
1000-25-1423-52750	MENARDS (MUSC)	Anitfreeze	11/18/2024	0	33.60
		Vendor Subtotal:			33.60
1000-25-1423-52830	ARNOLD MOTOR SUPPLY	Battery Charger/Plugs	11/15/2024	0	67.07
		Vendor Subtotal:			67.07
1000-25-1423-52890	MENARDS (MUSC)	Bar Oil	11/15/2024	0	19.98
		Vendor Subtotal:			19.98
1000-25-1423-52890	SINCLAIR	Chain Loop	11/15/2024	0	41.98
		Vendor Subtotal:			41.98
1000-25-1423-53110	MENARDS (MUSC)	Sanding Sponge/Pail	11/15/2024	0	22.96
		Vendor Subtotal:			22.96
1000-25-1423-53120	GRAINGER DEPT 802675066	Circuit Breaker Plug In	11/15/2024	0	46.75
		Vendor Subtotal:			46.75
1000-25-1423-53120	MENARDS (MUSC)	GFCI/Pole Breaker	11/18/2024	0	88.47
1000-25-1423-53120	MENARDS (MUSC)	Decor Plate/Ball Valve/Cover	11/15/2024	0	79.91
		Vendor Subtotal:			168.38
1000-25-1423-53120	VAN METER INDUSTRIAL INC	Cutting Reels/Connectors	11/15/2024	0	44.09
1000-25-1423-53120	VAN METER INDUSTRIAL INC	Strap	11/15/2024	0	0.98
1000-25-1423-53120	VAN METER INDUSTRIAL INC	Connector	11/15/2024	0	4.31
1000-25-1423-53120	VAN METER INDUSTRIAL INC	LED Panel/Wire/Fittings	11/15/2024	0	81.01
		Vendor Subtotal:			130.39

1000-25-1423-53130	MENARDS (MUSC)	Nipple/Coupling	11/15/2024	0	10.96
1000-25-1423-53130	MENARDS (MUSC)	Wire	11/15/2024	0	79.99
Vendor Subtotal:					90.95
1000-25-1423-53130	PLUMB SUPPLY COMPANY	Plug	11/15/2024	0	15.34
1000-25-1423-53130	PLUMB SUPPLY COMPANY	Adapters	11/15/2024	0	65.52
1000-25-1423-53130	PLUMB SUPPLY COMPANY	Bushing	11/15/2024	0	4.88
Vendor Subtotal:					85.74
1000-25-1423-53220	MENARDS (MUSC)	Hinge	11/18/2024	0	13.25
Vendor Subtotal:					13.25
1000-25-1423-62120	FREERS & SONS TREE SERVICE	DROP 11 TREES IN WEED PARK	11/15/2024	0	1,900.00 00029014
Vendor Subtotal:					1,900.00
1000-25-1423-62210	PHELPS THE UNIFORM SPECIALIST	Laundry - Weed Park	11/15/2024	0	14.20
1000-25-1423-62210	PHELPS THE UNIFORM SPECIALIST	Laundry - Weed Park	11/15/2024	0	14.20
1000-25-1423-62210	PHELPS THE UNIFORM SPECIALIST	Laundry - Weed Park	11/15/2024	0	14.20
Vendor Subtotal:					42.60
1000-25-1423-62260	PS3 Enterprises Inc.	Temp Sanitation	11/15/2024	0	100.00
1000-25-1423-62260	PS3 Enterprises Inc.	Temp Sanitation	11/15/2024	0	181.90
Vendor Subtotal:					281.90
1000-25-1423-62450	A TECH/FREEMAN ALARM	Alarms 11/1/24 - 1/31/25	11/15/2024	0	116.97
Vendor Subtotal:					116.97
1000-25-1423-64200	IOWA STATE UNIVERSITY EXTENS	Forestry, Aquatice ROW - Baker/Strong	11/15/2024	0	90.00
Vendor Subtotal:					90.00

1000-25-1423-65210	MUSCATINE POWER & WATER	October Phones - River Center	11/15/2024	0	21.39
1000-25-1423-65210	MUSCATINE POWER & WATER	October Phones - Weed Park	11/15/2024	0	31.36
Vendor Subtotal:					52.75
1000-25-1423-65275	VERIZON WIRELESS	October I Pads	11/15/2024	0	40.01
Vendor Subtotal:					40.01
1000-25-1423-65310	ALLIANT ENERGY	October Gas - Pearl City Station	11/15/2024	0	40.59
1000-25-1423-65310	ALLIANT ENERGY	October Gas - Harbor	11/15/2024	0	42.22
1000-25-1423-65310	ALLIANT ENERGY	October Gas - Weed Park	11/15/2024	0	67.07
Vendor Subtotal:					149.88
1000-25-1423-65320	MUSCATINE POWER & WATER	October Electric - Musser	11/15/2024	0	37.02
1000-25-1423-65320	MUSCATINE POWER & WATER	October Electric - River Center	11/15/2024	0	99.65
1000-25-1423-65320	MUSCATINE POWER & WATER	October Electric - Maint Shed	11/15/2024	0	23.27
1000-25-1423-65320	MUSCATINE POWER & WATER	October Electric - Commission	11/15/2024	0	18.51
1000-25-1423-65320	MUSCATINE POWER & WATER	October Electric - Levee	11/15/2024	0	37.02
Vendor Subtotal:					215.47
1000-25-1423-65410	MUSCATINE POWER & WATER	October Water - Maint Shed	11/15/2024	0	6.41
1000-25-1423-65410	MUSCATINE POWER & WATER	October Water - River Center	11/15/2024	0	35.74
Vendor Subtotal:					42.15
1000-25-1423-67130	RIVO INC	DIAGNOSTIC OF TAYLOR PARK SE'	11/15/2024	0	270.75 00028903
Vendor Subtotal:					270.75
1000-25-1424-46200	RELIANCE STANDARD LIFE INS CC	Life Ins Nov	11/15/2024	0	9.07
Vendor Subtotal:					9.07
1000-25-1424-46600	RELIANCE STANDARD LIFE INS CCLTD	Nov 24	11/15/2024	0	8.61
1000-25-1424-46600	RELIANCE STANDARD LIFE INS CCBW LTD	Nov 24	11/15/2024	0	8.90

				Vendor Subtotal:	17.51
1000-25-1424-52250	TCM BANK NA VISA	Farm & Fleet - Brush Killer	11/19/2024	0	26.99
				Vendor Subtotal:	26.99
1000-25-1424-52860	TCM BANK NA VISA	Ebay - Window Sticker	11/19/2024	0	28.56
				Vendor Subtotal:	28.56
1000-25-1424-53140	MENARDS (MUSC)	Spray Paint	11/15/2024	0	75.83
				Vendor Subtotal:	75.83
1000-25-1424-53140	SHERWIN WILLIAMS	3 - GALLON B54 W 113	11/15/2024	0	153.29 00029100
				Vendor Subtotal:	153.29
1000-25-1424-53220	MUSCATINE LUMBER	Tape & Dispenser	11/15/2024	0	25.97
				Vendor Subtotal:	25.97
1000-25-1424-53220	TCM BANK NA VISA	Harbor Freight - Hex Key/Anchor/Winch	11/19/2024	0	46.46
				Vendor Subtotal:	46.46
1000-25-1424-64200	DAVID HARRIS	Registration Hull	11/19/2024	0	500.00
				Vendor Subtotal:	500.00
1000-25-1424-65210	CENTURYLINK	November Phones - Kent Stein	11/19/2024	0	107.96
1000-25-1424-65210	CENTURYLINK	November Phones - Kent Stein	11/15/2024	0	79.03
				Vendor Subtotal:	186.99
1000-25-1427-46200	RELIANCE STANDARD LIFE INS CC	Life Ins Nov	11/15/2024	0	9.07

			Vendor Subtotal:		9.07
1000-25-1427-46600	RELIANCE STANDARD LIFE INS CCLTD Nov 24		11/15/2024	0	8.61
1000-25-1427-46600	RELIANCE STANDARD LIFE INS CCBW LTD Nov 24		11/15/2024	0	8.90
			Vendor Subtotal:		17.51
1000-25-1427-53130	SITEONE LANDSCAPE SUPPLY	Brass Couplings	11/15/2024	0	94.89
			Vendor Subtotal:		94.89
1000-25-1427-53140	SHERWIN WILLIAMS	3 - GALLON B54 W 113	11/15/2024	0	153.29 00029100
			Vendor Subtotal:		153.29
1000-25-1427-53220	TCM BANK NA VISA	Predator Engine	11/19/2024	0	149.99 00028970
			Vendor Subtotal:		149.99
1000-25-1427-53340	WENDLING QUARRIES INC	FAIRWAY- TOPDRESSING SAND	11/19/2024	0	1,924.60 00029093
			Vendor Subtotal:		1,924.60
1000-25-1427-62210	PHELPS THE UNIFORM SPECIALIST	Laundry - Soccer	11/19/2024	0	24.00
1000-25-1427-62210	PHELPS THE UNIFORM SPECIALIST	Laundry - Soccer	11/15/2024	0	24.00
1000-25-1427-62210	PHELPS THE UNIFORM SPECIALIST	Laundry - Soccer	11/15/2024	0	26.09
			Vendor Subtotal:		74.09
1000-25-1427-63300	PS3 Enterprises Inc.	Temp Sanitation	11/15/2024	0	200.00
			Vendor Subtotal:		200.00
1000-25-1427-65210	MUSCATINE POWER & WATER	October Phone/Internet - Soccer	11/19/2024	0	64.66
			Vendor Subtotal:		64.66

1000-25-1427-65210	VERIZON WIRELESS	October Cell Phones	11/15/2024	0	40.01
		Vendor Subtotal:			40.01
1000-25-1427-67140	TCM BANK NA VISA	SET OF 2: 22X11.00 - 10 WHEEL & R	11/19/2024	0	139.89 00028989
1000-25-1427-67140	TCM BANK NA VISA	SHIPPING	11/19/2024	0	60.05 00028989
		Vendor Subtotal:			199.94
1000-25-1431-46200	RELIANCE STANDARD LIFE INS CC	Life Ins Nov	11/15/2024	0	12.13
		Vendor Subtotal:			12.13
1000-25-1431-46600	RELIANCE STANDARD LIFE INS CC	LTD Nov 24	11/15/2024	0	13.93
		Vendor Subtotal:			13.93
1000-25-1431-52810	BERLINS PRO SHOP	Basketball Clinic T-Shirts	11/15/2024	0	71.50
		Vendor Subtotal:			71.50
1000-25-1431-52810	TCM BANK NA VISA	BULK KIDS COMBO CANDY	11/19/2024	0	119.88 00028811
1000-25-1431-52810	TCM BANK NA VISA	COLOR SCRATCH PUMPKIN KIT	11/19/2024	0	47.90 00028811
1000-25-1431-52810	TCM BANK NA VISA	HALLOWEEN TRICK-OR-TREAT MA	11/19/2024	0	87.96 00028811
		Vendor Subtotal:			255.74
1000-25-1431-62310	XEROX CORPORATION	October Copies	11/19/2024	0	2.46
		Vendor Subtotal:			2.46
1000-25-1431-62370	TCM BANK NA VISA	Sycamore Printing - Prints	11/19/2024	0	27.00
		Vendor Subtotal:			27.00
1000-25-1432-52300	BERLINS PRO SHOP	TURKEY TROT SHIRTS YMED	11/19/2024	0	70.75 00029180
1000-25-1432-52300	BERLINS PRO SHOP	TURKEY TROT SHIRTS SML	11/19/2024	0	254.70 00029180
1000-25-1432-52300	BERLINS PRO SHOP	TURKEY TROT SHIRTS YSML	11/19/2024	0	42.45 00029180
1000-25-1432-52300	BERLINS PRO SHOP	TURKEY TROT SHIRTS XL	11/19/2024	0	141.50 00029180

1000-25-1432-52300	BERLINS PRO SHOP	TURKEY TROT SHIRTS MED	11/19/2024	0	353.75 00029180
1000-25-1432-52300	BERLINS PRO SHOP	TURKEY TROT SHIRTS LRG	11/19/2024	0	212.25 00029180
1000-25-1432-52300	BERLINS PRO SHOP	TURKEY TROT SHIRTS YLRG	11/19/2024	0	42.45 00029180
1000-25-1432-52300	BERLINS PRO SHOP	TURKEY TROT SHIRTS XXL	11/19/2024	0	90.75 00029180
Vendor Subtotal:					1,208.60
1000-25-1432-53120	ACCO UNLIMITED CORP	HYDREL 12V 4426 LIGHT	11/15/2024	0	2,088.00 00028562
1000-25-1432-53120	ACCO UNLIMITED CORP	Freight	11/15/2024	0	60.80
Vendor Subtotal:					2,148.80
1000-25-1432-53130	GRAINGER DEPT 802675066	Sillcock	11/15/2024	0	66.87
Vendor Subtotal:					66.87
1000-25-1432-65210	MUSCATINE POWER & WATER	October Phones - Weed Park	11/15/2024	0	71.27
Vendor Subtotal:					71.27
1000-25-1435-62320	SYCAMORE PRINTING INC	Sports Dome Prints	11/19/2024	0	46.00
Vendor Subtotal:					46.00
1000-30-1511-46200	RELIANCE STANDARD LIFE INS CC	Life Ins Nov	11/15/2024	0	71.76
Vendor Subtotal:					71.76
1000-30-1511-46600	RELIANCE STANDARD LIFE INS CCLTD	Nov 24	11/15/2024	0	101.10
Vendor Subtotal:					101.10
1000-30-1511-52890	AMAZON.COM	TV Mounting Bracket	11/15/2024	0	92.99
Vendor Subtotal:					92.99
1000-30-1511-52890	TCM BANK NA VISA	Wal-Mart - Boxes	11/19/2024	0	22.68

Vendor Subtotal:					22.68
1000-30-1511-61340	TCM BANK NA VISA	Big Imprint - Monthly	11/19/2024	0	116.00
1000-30-1511-61340	TCM BANK NA VISA	Siteground - Renewal	11/19/2024	0	237.87
1000-30-1511-61340	TCM BANK NA VISA	Zoom - Monthly fee	11/19/2024	0	55.99
1000-30-1511-61340	TCM BANK NA VISA	Mailchimp - E Newsletter	11/19/2024	0	110.00
1000-30-1511-61340	TCM BANK NA VISA	Adobe - Creative Cloud	11/19/2024	0	49.99
Vendor Subtotal:					569.85
1000-30-1511-61660	UNIQUE MANAGEMENT SERVICES	Collection Agency Fee	11/15/2024	0	361.15
Vendor Subtotal:					361.15
1000-30-1511-62460	AMAZON.COM	Black Cake: A Read w/Jenna Pick & Tre	11/15/2024	0	240.84
1000-30-1511-62460	AMAZON.COM	Mini Dots Value Pack	11/15/2024	0	87.61
Vendor Subtotal:					328.45
1000-30-1511-62460	TCM BANK NA VISA	Wal-Mart - Program Fees	11/19/2024	0	83.03
1000-30-1511-62460	TCM BANK NA VISA	Wal-Mart - Program Fees	11/19/2024	0	75.66
1000-30-1511-62460	TCM BANK NA VISA	Wal-Mart - Program Fees	11/19/2024	0	24.35
1000-30-1511-62460	TCM BANK NA VISA	JoAnn's - Program Fees	11/19/2024	0	35.94
Vendor Subtotal:					218.98
1000-30-1511-64120	TCM BANK NA VISA	The Greater - Parking	11/19/2024	0	32.00
Vendor Subtotal:					32.00
1000-30-1511-64400	TCM BANK NA VISA	Tupelo Honey - Meal (4)	11/19/2024	0	97.59
Vendor Subtotal:					97.59
1000-30-1511-64700	DAVID HARRIS	Registration Howell/Fillmore	11/19/2024	0	1,000.00
Vendor Subtotal:					1,000.00

1000-30-1511-65100	TCM BANK NA VISA	Facebook - Advertising	11/19/2024	0	34.99
1000-30-1511-65100	TCM BANK NA VISA	Facebook - Advertising	11/19/2024	0	13.98
		Vendor Subtotal:			48.97
1000-30-1511-65210	MUSCATINE POWER & WATER	October Phones - Library	11/15/2024	0	206.95
		Vendor Subtotal:			206.95
1000-30-1511-65240	MUSCATINE POWER & WATER	October Internet - Library	11/15/2024	0	570.00
		Vendor Subtotal:			570.00
1000-30-1511-65240	VERIZON WIRELESS	October Cell Phones	11/15/2024	0	24.02
		Vendor Subtotal:			24.02
1000-30-1511-65240	T-MOBILE	October Remote Hot Spot	11/18/2024	0	89.25
		Vendor Subtotal:			89.25
1000-30-1511-74500	LIBRARY SYSTEMS & SERVICES	L Books/Materials	11/19/2024	0	7,689.06
		Vendor Subtotal:			7,689.06
1000-30-1511-74500	TCM BANK NA VISA	Old House Journal - Subscription	11/19/2024	0	28.00
1000-30-1511-74500	TCM BANK NA VISA	Wall Street Journal - Monthly Fee	11/19/2024	0	60.49
		Vendor Subtotal:			88.49
1000-35-1521-46200	RELIANCE STANDARD LIFE INS CC	Life Ins Nov	11/15/2024	0	43.64
		Vendor Subtotal:			43.64
1000-35-1521-46600	RELIANCE STANDARD LIFE INS CCLTD	Nov 24	11/15/2024	0	62.78
		Vendor Subtotal:			62.78

1000-35-1521-51100	AMAZON.COM	Flash Drives	11/18/2024	0	49.47
		Vendor Subtotal:			49.47
1000-35-1521-51200	AMAZON.COM	5 Books - Muscatine Memories: 175 Yea	11/18/2024	0	162.85 00029057
		Vendor Subtotal:			162.85
1000-35-1521-52600	MENARDS (MUSC)	Water	11/19/2024	0	24.36
		Vendor Subtotal:			24.36
1000-35-1521-52820	TCM BANK NA VISA	Blick Art - Watercolor Brushes	11/19/2024	0	55.90
		Vendor Subtotal:			55.90
1000-35-1521-52890	PAT CARVER	Reimb Supplies	11/18/2024	0	42.54
		Vendor Subtotal:			42.54
1000-35-1521-52890	MENARDS (MUSC)	Adapter/Cord	11/19/2024	0	11.77
		Vendor Subtotal:			11.77
1000-35-1521-52890	AMAZON.COM	Batteries	11/18/2024	0	85.31
1000-35-1521-52890	AMAZON.COM	Mouse Traps	11/18/2024	0	57.06
1000-35-1521-52890	AMAZON.COM	Battery	11/18/2024	0	64.87
1000-35-1521-52890	AMAZON.COM	Batteries	11/18/2024	0	100.93
1000-35-1521-52890	AMAZON.COM	Mouse Trap	11/18/2024	0	30.85
		Vendor Subtotal:			339.02
1000-35-1521-52890	TCM BANK NA VISA	Neals - New Cord for Seebo	11/19/2024	0	51.00
		Vendor Subtotal:			51.00
1000-35-1521-61640	ANNETTE HOVLAND	Teaching Fee Class ID 7296	11/18/2024	0	50.00
1000-35-1521-61640	ANNETTE HOVLAND	Teaching Fee Class ID 7297	11/18/2024	0	50.00
1000-35-1521-61640	ANNETTE HOVLAND	Teaching Fee Class ID 7300	11/18/2024	0	50.00

1000-35-1521-61640	ANNETTE HOVLAND	Teaching Fee Class ID 7301	11/18/2024	0	50.00
		Vendor Subtotal:			200.00
1000-35-1521-61640	HEATHER MICHELE SEIBEL	Teaching Fee Class ID 7313	11/18/2024	0	150.00
1000-35-1521-61640	HEATHER MICHELE SEIBEL	Teaching Fee Class ID 7322	11/18/2024	0	300.00
		Vendor Subtotal:			450.00
1000-35-1521-62370	GORDON FLESCH COMPANY	Copier	11/18/2024	0	84.22
		Vendor Subtotal:			84.22
1000-35-1521-64500	MELANIE ALEXANDER	Reimb Mileage 10/26/24	11/19/2024	0	36.00
		Vendor Subtotal:			36.00
1000-35-1521-64500	LYNN BARTENHAGEN	October 2024 Mileage	11/18/2024	0	14.34
		Vendor Subtotal:			14.34
1000-35-1521-65210	MUSCATINE POWER & WATER	October Phones - Art Center	11/18/2024	0	166.94
		Vendor Subtotal:			166.94
1000-35-1521-65240	MUSCATINE POWER & WATER	October Internet - Art Center	11/18/2024	0	82.97
		Vendor Subtotal:			82.97
1000-35-1521-69200	TCM BANK NA VISA	USPS - Postage	11/19/2024	0	89.29
1000-35-1521-69200	TCM BANK NA VISA	USPS - Postage	11/19/2024	0	1.77
		Vendor Subtotal:			91.06
1000-35-1521-69400	TCM BANK NA VISA	Iowa Museum Assoc - Membership	11/19/2024	0	150.00
		Vendor Subtotal:			150.00

1000-40-1151-46200	RELIANCE STANDARD LIFE INS CCLife Ins Nov		11/15/2024	0	23.46
		Vendor Subtotal:			23.46
1000-40-1151-46600	RELIANCE STANDARD LIFE INS CCBW LTD Nov 24		11/15/2024	0	40.89
1000-40-1151-46600	RELIANCE STANDARD LIFE INS CCLTD Nov 24		11/15/2024	0	17.97
		Vendor Subtotal:			58.86
1000-40-1151-52400	MENARDS (MUSC)	Polish	11/15/2024	0	3.49
		Vendor Subtotal:			3.49
1000-40-1151-52400	AMAZON.COM	ZEP Instant Hand Sanitizer Gel - 1 Gallo	11/19/2024	0	153.64 00029023
1000-40-1151-52400	AMAZON.COM	Blue Center Stripe Bar Towels (Case of 6	11/18/2024	0	156.24 00029029
		Vendor Subtotal:			309.88
1000-40-1151-52750	MENARDS (MUSC)	Chain Lubricant	11/15/2024	0	25.98
		Vendor Subtotal:			25.98
1000-40-1151-52890	ARNOLD MOTOR SUPPLY	Rubberized Undercoat	11/18/2024	0	20.78
		Vendor Subtotal:			20.78
1000-40-1151-52890	MENARDS (MUSC)	Batteries	11/15/2024	0	27.94
1000-40-1151-52890	MENARDS (MUSC)	Knobs	11/15/2024	0	16.97
		Vendor Subtotal:			44.91
1000-40-1151-53120	MENARDS (MUSC)	Bulbs	11/19/2024	0	17.98
		Vendor Subtotal:			17.98
1000-40-1151-53120	VAN METER INDUSTRIAL INC	Photo Control	11/18/2024	0	95.95
1000-40-1151-53120	VAN METER INDUSTRIAL INC	Bulbs	11/18/2024	0	96.15

		Vendor Subtotal:			192.10
1000-40-1151-53130	PLUMB SUPPLY COMPANY	Thread Seal Tape/Relief Valve	11/15/2024	0	88.85
		Vendor Subtotal:			88.85
1000-40-1151-53130	TCM BANK NA VISA	Chicago Faucets 116.212.AB.1 Faucet w	11/19/2024	0	668.79 00028687
		Vendor Subtotal:			668.79
1000-40-1151-65310	ALLIANT ENERGY	October Gas - Library	11/18/2024	0	52.93
		Vendor Subtotal:			52.93
1000-40-1151-67330	RAYNOR DOOR CO INC OF THE QU	Repair/Reattach Rail Center Mount	11/18/2024	0	425.00
		Vendor Subtotal:			425.00
1000-40-1151-67330	TMI INC	Quarterly Billing Contract	11/18/2024	0	2,841.00
		Vendor Subtotal:			2,841.00
1000-40-1151-67330	TRANE US INC	ACT00417 Actuator; Rotary, Non-Spring	11/15/2024	0	1,513.17 00028978
1000-40-1151-67330	TRANE US INC	ACT00417 Actuator; Rotary, Non-Spring	11/15/2024	0	18.00
		Vendor Subtotal:			1,531.17
1000-40-1151-67330	DEPT OF INSPECTIONS & APPEALS	Annual Fees	11/15/2024	0	240.00
1000-40-1151-67330	DEPT OF INSPECTIONS & APPEALS	Annual Fees	11/15/2024	0	40.00
		Vendor Subtotal:			280.00
1000-40-1151-67330	MIDWEST ALARM SERVICES	Sprinkler Inspection	11/18/2024	0	252.00
1000-40-1151-67330	MIDWEST ALARM SERVICES	Sprinkler Inspection	11/18/2024	0	192.00
1000-40-1151-67330	MIDWEST ALARM SERVICES	Sprinkler Inspection	11/18/2024	0	192.00
		Vendor Subtotal:			636.00

1000-40-1151-67330	TCM BANK NA VISA	Cover Plate Replacement Kit for Ultra G	11/19/2024	0	233.10 00029028
		Vendor Subtotal:			233.10
1000-40-1611-46200	RELIANCE STANDARD LIFE INS CC	Life Ins Nov	11/15/2024	0	35.35
		Vendor Subtotal:			35.35
1000-40-1611-46600	RELIANCE STANDARD LIFE INS CC	LTD Nov 24	11/15/2024	0	49.78
		Vendor Subtotal:			49.78
1000-40-1611-52300	JEREMY HOPKINS	Reimb Uniforms - J Hopkins	11/19/2024	0	50.00
		Vendor Subtotal:			50.00
1000-40-1611-61340	TCM BANK NA VISA	AutoDesk - Refund	11/19/2024	0	-2,825.87
		Vendor Subtotal:			-2,825.87
1000-40-1611-64700	DAVID HARRIS	Registration Coon	11/19/2024	0	500.00
		Vendor Subtotal:			500.00
1000-40-1611-65275	VERIZON WIRELESS	October I Pads	11/15/2024	0	120.03
		Vendor Subtotal:			120.03
1000-40-1621-46200	RELIANCE STANDARD LIFE INS CC	Life Ins Nov	11/15/2024	0	51.65
		Vendor Subtotal:			51.65
1000-40-1621-46600	RELIANCE STANDARD LIFE INS CC	BW LTD Nov 24	11/15/2024	0	166.96
1000-40-1621-46600	RELIANCE STANDARD LIFE INS CC	LTD Nov 24	11/15/2024	0	20.64
		Vendor Subtotal:			187.60

1000-40-1621-52300	TCM BANK NA VISA	Outer Winter Wear (Bibs) for Jesse Spit	11/19/2024	0	139.99 00028975
1000-40-1621-52300	TCM BANK NA VISA	Outer Winter Wear (Jacket) for Jesse Sp	11/19/2024	0	119.99 00028975
Vendor Subtotal:					259.98
1000-40-1621-52830	S.J. SMITH CO.	Cut Off Wheel	11/15/2024	0	99.75
Vendor Subtotal:					99.75
1000-40-1621-52830	TCM BANK NA VISA	Harbor Freight - Castor Wheels	11/19/2024	0	14.98
Vendor Subtotal:					14.98
1000-40-1621-52890	ARNOLD MOTOR SUPPLY	Funnel	11/15/2024	0	4.10
Vendor Subtotal:					4.10
1000-40-1621-53130	DULTMEIER SALES	Elbow	11/15/2024	0	39.50
Vendor Subtotal:					39.50
1000-40-1621-53130	MENARDS (MUSC)	Coupling/Hose Clamp	11/15/2024	0	4.48
Vendor Subtotal:					4.48
1000-40-1621-53310	RIVER STONE GROUP	Hot Mix Asphalt	11/15/2024	0	2,572.50 00029003
1000-40-1621-53310	RIVER STONE GROUP	Hot Mix Asphalt	11/15/2024	0	1,040.04 00029063
1000-40-1621-53310	RIVER STONE GROUP	Hot Mix	11/18/2024	0	1,564.82
Vendor Subtotal:					5,177.36
1000-40-1621-53400	MENARDS (MUSC)	Return	11/15/2024	0	-24.99
1000-40-1621-53400	MENARDS (MUSC)	Reflective/Drive In Post Kit	11/15/2024	0	97.70
1000-40-1621-53400	MENARDS (MUSC)	Reflective Letters	11/15/2024	0	72.71
1000-40-1621-53400	MENARDS (MUSC)	Mailbox Posts/Reflective Letters	11/15/2024	0	72.71
1000-40-1621-53400	MENARDS (MUSC)	2" x 100' Tile Tape	11/18/2024	0	23.97 00029205
1000-40-1621-53400	MENARDS (MUSC)	12" Slip Couples	11/18/2024	0	49.95 00029205
1000-40-1621-53400	MENARDS (MUSC)	12" x 20' HDPE	11/18/2024	0	929.94 00029205

		Vendor Subtotal:			1,221.99
1000-40-1621-53400	WENDLING QUARRIES INC	Class A Road Rock	11/18/2024	0	1,375.00 00029163
1000-40-1621-53400	WENDLING QUARRIES INC	Class A Road Rock	11/18/2024	0	30.53
		Vendor Subtotal:			1,405.53
1000-40-1621-61550	DSI Medical Services	Pre-Employment - Spitznogle/Hopkins	11/19/2024	0	150.00
		Vendor Subtotal:			150.00
1000-40-1621-64700	DAVID HARRIS	Registration Shoppa/Downey	11/19/2024	0	1,000.00
		Vendor Subtotal:			1,000.00
1000-40-1621-65275	VERIZON WIRELESS	October I Pads	11/15/2024	0	120.03
		Vendor Subtotal:			120.03
1000-40-1621-65275	VERIZON	October GPS	11/15/2024	0	203.29
1000-40-1621-65275	VERIZON	October GPS	11/15/2024	0	34.90
		Vendor Subtotal:			238.19
1000-40-1621-65310	ALLIANT ENERGY	October Gas - Morgan Bldg	11/15/2024	0	36.64
1000-40-1621-65310	ALLIANT ENERGY	October Gas - PW	11/15/2024	0	33.06
1000-40-1621-65310	ALLIANT ENERGY	October Gas - PW	11/15/2024	0	48.31
1000-40-1621-65310	ALLIANT ENERGY	October Gas - Lower Lot	11/15/2024	0	42.87
1000-40-1621-65310	ALLIANT ENERGY	October Gas - PW	11/15/2024	0	56.15
		Vendor Subtotal:			217.03
1000-40-1621-74200	LOGAN CONTRACTORS SUPPLY INC	Crack/Joint Sealer	11/15/2024	0	72,328.40 00028587
		Vendor Subtotal:			72,328.40
1000-40-1623-46200	RELIANCE STANDARD LIFE INS CC	Life Ins Nov	11/15/2024	0	3.13

			Vendor Subtotal:		3.13
1000-40-1623-46600	RELIANCE STANDARD LIFE INS CCBW LTD Nov 24		11/15/2024	0	16.30
			Vendor Subtotal:		16.30
1000-40-1623-52300	DAVID FRY	Reimb Shoe - D Fry	11/19/2024	0	123.04
			Vendor Subtotal:		123.04
1000-40-1623-52830	MENARDS (MUSC)	Rakes	11/15/2024	0	87.91
			Vendor Subtotal:		87.91
1000-40-1623-62410	TEMP ASSOCIATES	Temp Employee Week Ending 11/10/24	11/18/2024	0	1,624.48
1000-40-1623-62410	TEMP ASSOCIATES	Temp Employee Week Ending 11/3/24	11/15/2024	0	1,458.34
			Vendor Subtotal:		3,082.82
1000-40-1624-46200	RELIANCE STANDARD LIFE INS CCLife Ins Nov		11/15/2024	0	3.13
			Vendor Subtotal:		3.13
1000-40-1624-46600	RELIANCE STANDARD LIFE INS CCBW LTD Nov 24		11/15/2024	0	17.80
			Vendor Subtotal:		17.80
1000-40-1624-52300	PHELPS CUSTOM IMAGE WEAR	Uniforms - B Hoon	11/19/2024	0	108.61
			Vendor Subtotal:		108.61
1000-40-1624-52860	IOWA PRISON INDUSTRIES	W10-5P Yellow HIP 30"x24" Low Grou	11/15/2024	0	275.80 00028839
1000-40-1624-52860	IOWA PRISON INDUSTRIES	W10-5 Yellow HIP 36"x36" Low Groun	11/15/2024	0	387.50 00028839
			Vendor Subtotal:		663.30
1000-40-1624-52890	JOHN HERRMAN	1/2" x 6 x 20' Flat Strip A-36	11/15/2024	0	159.88 00029091

			Vendor Subtotal:		159.88
1000-40-1624-65320	EASTERN IOWA LIGHT & POWER C	October Power - Hwy 61 & University	11/18/2024	0	129.64
1000-40-1624-65320	EASTERN IOWA LIGHT & POWER C	October Power - Hwy 61 & Mulberry	11/19/2024	0	146.79
1000-40-1624-65320	EASTERN IOWA LIGHT & POWER C	October Power - 38 & Bidwell	11/18/2024	0	52.20
			Vendor Subtotal:		328.63
1000-40-1641-46200	RELIANCE STANDARD LIFE INS CC	Life Ins Nov	11/15/2024	0	28.41
			Vendor Subtotal:		28.41
1000-40-1641-46600	RELIANCE STANDARD LIFE INS CC	LTD Nov 24	11/15/2024	0	33.94
			Vendor Subtotal:		33.94
1000-40-1641-62370	GORDON FLESCH COMPANY	Copier	11/15/2024	0	64.00
			Vendor Subtotal:		64.00
1000-40-1641-64700	DAVID HARRIS	Registration Birch	11/19/2024	0	500.00
			Vendor Subtotal:		500.00
			Subtotal for FUND: 1000		189,662.60
3981-30-3981-64120	MOLLY GARRETT	Reimb Parking 10/10/24	11/18/2024	0	23.00
			Vendor Subtotal:		23.00
3981-30-3981-64120	ROBERT FIEDLER	Reimb Parking 10/10/24	11/18/2024	0	10.00
			Vendor Subtotal:		10.00
3981-30-3981-64120	TCM BANK NA VISA	Marriott - Lodging Yocom	11/19/2024	0	377.10
3981-30-3981-64120	TCM BANK NA VISA	Marriott - Lodging Taylor	11/19/2024	0	386.51
3981-30-3981-64120	TCM BANK NA VISA	Marriott - Lodging Stoffer	11/19/2024	0	347.20

3981-30-3981-64120	TCM BANK NA VISA	Marriott - Lodging Fiedler	11/19/2024	0	173.60
		Vendor Subtotal:			1,284.41
3981-30-3981-64400	ROBERT FIEDLER	Reimb Meals 10/10/24	11/18/2024	0	30.69
		Vendor Subtotal:			30.69
3981-30-3981-64400	TCM BANK NA VISA	Beer Can Alley - Meal (3)	11/19/2024	0	72.68
3981-30-3981-64400	TCM BANK NA VISA	Tupelo Honey - Meals Emma/Emerson/M	11/19/2024	0	72.35
		Vendor Subtotal:			145.03
3981-30-3981-74500	LIBRARY SYSTEMS & SERVICES	L Books/Materials	11/19/2024	0	395.56
		Vendor Subtotal:			395.56
3981-30-3983-61340	RELIABLE NETWORK SOLUTIONS	Monthly Fee	11/15/2024	0	49.00
		Vendor Subtotal:			49.00
3981-30-3983-61340	TCM BANK NA VISA	Apple - Channel 5	11/19/2024	0	54.98
3981-30-3983-61340	TCM BANK NA VISA	Apple - I Cloud Storage Fee	11/19/2024	0	2.99
3981-30-3983-61340	TCM BANK NA VISA	Boxcast - Monthly Streaming	11/19/2024	0	219.00
3981-30-3983-61340	TCM BANK NA VISA	Boxcast - Storage Fee	11/19/2024	0	102.13
		Vendor Subtotal:			379.10
3981-30-3983-65240	MUSCATINE POWER & WATER	October Channel 5 - Library	11/15/2024	0	330.83
		Vendor Subtotal:			330.83
		Subtotal for FUND: 3981			2,647.62
4157-40-4157-61150	BERENS-TATE CONSULTING GROU	Arbitrage Rebate Services	11/18/2024	0	1,750.00 00028027
		Vendor Subtotal:			1,750.00

Subtotal for FUND: 4157					1,750.00
4159-40-4159-61420	HDR ENGINEERING, INC	Isett/Cypress Corridor Consulting	11/19/2024	0	94,705.85
Vendor Subtotal:					94,705.85
Subtotal for FUND: 4159					94,705.85
4160-40-4160-61420	VEENSTRA & KIMM INC	Park Ave Bridge Engineering	11/15/2024	0	414.00
Vendor Subtotal:					414.00
Subtotal for FUND: 4160					414.00
4180-00-0000-20600	HEUER CONSTRUCTION	Fulliam Ave Phase 2 Retainage	11/19/2024	0	6,909.35
Vendor Subtotal:					6,909.35
4180-40-4180-73200	HEUER CONSTRUCTION	Fulliam Ave Phase 2 Retainage	11/19/2024	0	25,077.84
Vendor Subtotal:					25,077.84
4180-41-4180-61420	BOLTON & MENK INC	Fulliam Ave Phase II	11/15/2024	0	917.50
Vendor Subtotal:					917.50
Subtotal for FUND: 4180					32,904.69
4207-50-4207-73900	CRAWFORD COMPANY INC	HVAC Lift Station Project	11/19/2024	0	6,349.00
Vendor Subtotal:					6,349.00
Subtotal for FUND: 4207					6,349.00
4276-40-4276-61420	STANLEY CONSULTANTS INC	WH Phase 6 Engineering Services	11/15/2024	0	112,570.00

				Vendor Subtotal:	112,570.00
4276-40-4276-73100	KE FLATWORK INC	WH Phase 6a/b Pay App #30	11/19/2024	0	52,496.80
				Vendor Subtotal:	52,496.80
4276-40-4276-73100	TCM BANK NA VISA	AmericaInn - Refund Overcharge	11/19/2024	0	-280.00
				Vendor Subtotal:	-280.00
				Subtotal for FUND: 4276	164,786.80
4298-40-4298-61420	MCCLURE ENGINEERING CO	Marian CDF Relocation	11/15/2024	0	20,870.50
				Vendor Subtotal:	20,870.50
				Subtotal for FUND: 4298	20,870.50
4490-25-4490-73900	BOLAND RECREATION INC	Install Equipment Lucas Park & Brook S	11/15/2024	0	13,000.00
				Vendor Subtotal:	13,000.00
				Subtotal for FUND: 4490	13,000.00
4498-25-4498-66300	ARTHUR J GALLAGHER RISK MNG	Builder's Risk - Sports Dome	11/18/2024	0	66,318.36
				Vendor Subtotal:	66,318.36
4498-25-4498-73900	MERIT CONSTRUCTION	Sport Dome Project	11/19/2024	0	218,536.66
				Vendor Subtotal:	218,536.66
				Subtotal for FUND: 4498	284,855.02
4639-40-4639-61420	LEGAT ARCHITECTS	Wash Bay Building	11/19/2024	0	795.00

			Vendor Subtotal:		795.00
			Subtotal for FUND: 4639		795.00
4661-00-4661-61150	BERENS-TATE CONSULTING GROU	Arbitrage Rebate Services	11/18/2024	0	1,750.00
			Vendor Subtotal:		1,750.00
			Subtotal for FUND: 4661		1,750.00
4842-00-4847-68300	ALANA HONTS	Facade Grant	11/19/2024	0	5,000.00
			Vendor Subtotal:		5,000.00
4842-00-4847-68300	MERRILL HOTEL	Facade Grant	11/18/2024	0	4,204.03
			Vendor Subtotal:		4,204.03
			Subtotal for FUND: 4842		9,204.03
4863-10-4863-61420	BOLTON & MENK INC	New AVGAS Fuel System	11/15/2024	0	3,095.90
			Vendor Subtotal:		3,095.90
			Subtotal for FUND: 4863		3,095.90
4865-40-4865-61420	BOLTON & MENK INC	Airport Runway Lighting	11/15/2024	0	1,231.50
			Vendor Subtotal:		1,231.50
			Subtotal for FUND: 4865		1,231.50
4903-00-4903-61660	CORBIN DESIGN	October Services	11/19/2024	0	638.75
			Vendor Subtotal:		638.75

Subtotal for FUND: 4903					638.75
5211-00-0000-23630	RELIANCE STANDARD LIFE INS CCPR Batch 00002.10.2024 Optional Life		10/25/2024	0	3.32
5211-00-0000-23630	RELIANCE STANDARD LIFE INS CCPR Batch 00001.10.2024 Optional Life		10/11/2024	0	3.30
Vendor Subtotal:					6.62
5211-40-5211-46200	RELIANCE STANDARD LIFE INS CCLife Ins Nov		11/15/2024	0	15.63
Vendor Subtotal:					15.63
5211-40-5211-46600	RELIANCE STANDARD LIFE INS CCLTD Nov 24		11/15/2024	0	17.97
Vendor Subtotal:					17.97
5211-40-5211-52400	AMAZON.COM	WD-40/ZEP	11/15/2024	0	84.59
Vendor Subtotal:					84.59
5211-40-5211-61550	DSI Medical Services	Pre-Employ Drug - Brand	11/19/2024	0	49.50
5211-40-5211-61550	DSI Medical Services	Pre-Employment - Dusenberry/Coreman	11/19/2024	0	150.00
Vendor Subtotal:					199.50
5211-40-5211-65100	ICAN	Advertising	11/15/2024	0	372.00
Vendor Subtotal:					372.00
5211-40-5211-65275	T-MOBILE	October Cell Phones	11/19/2024	0	128.22
Vendor Subtotal:					128.22
5211-40-5211-65310	ALLIANT ENERGY	October Gas - Transit	11/15/2024	0	24.06
5211-40-5211-65310	ALLIANT ENERGY	October Gas - Transit	11/15/2024	0	20.70
5211-40-5211-65310	ALLIANT ENERGY	October Gas - Transit	11/15/2024	0	14.17
Vendor Subtotal:					58.93

5211-40-5211-74100	THE DENOMINATOR COMPANY	Tally Counter for Bus #263 & #264	11/18/2024	0	1,091.25 00028862
		Vendor Subtotal:			1,091.25
5211-40-5212-46200	RELIANCE STANDARD LIFE INS	CCLife Ins Nov	11/15/2024	0	0.63
		Vendor Subtotal:			0.63
5211-40-5212-46600	RELIANCE STANDARD LIFE INS	CCBW LTD Nov 24	11/15/2024	0	3.35
		Vendor Subtotal:			3.35
		Subtotal for FUND: 5211			1,978.69
5311-00-0000-23550	RELIANCE STANDARD LIFE INS	CCPR Batch 00002.10.2024 Life Insurance	10/25/2024	0	0.09
		Vendor Subtotal:			0.09
5311-05-5311-46200	RELIANCE STANDARD LIFE INS	CCLife Ins Nov	11/15/2024	0	6.16
		Vendor Subtotal:			6.16
5311-05-5311-46600	RELIANCE STANDARD LIFE INS	CCBW LTD Nov 24	11/15/2024	0	4.21
5311-05-5311-46600	RELIANCE STANDARD LIFE INS	CCLTD Nov 24	11/15/2024	0	8.46
		Vendor Subtotal:			12.67
5311-05-5311-52890	POM INCORPORATED	108-927-001 Plate Rate Decal - Two Hou	11/18/2024	0	312.00 00029050
5311-05-5311-52890	POM INCORPORATED	108-927-001 Plate Rate Decal - Ten Hou	11/18/2024	0	156.00 00029050
		Vendor Subtotal:			468.00
5311-05-5311-61330	NET TECH SOLUTIONS	Park Tech Annual Lic 1/15/25 - 1/14/26	11/18/2024	0	1,575.00
		Vendor Subtotal:			1,575.00
5311-05-5311-62310	XEROX CORPORATION	October Copies	11/19/2024	0	0.62

		Vendor Subtotal:		0.62	
5311-05-5311-63300	POM INCORPORATED	Round Trip Shipping	11/18/2024	0	50.00 00029050
5311-05-5311-63300	POM INCORPORATED	Handheld Programmer Kit Rental	11/18/2024	0	500.00 00029050
		Vendor Subtotal:		550.00	
5311-05-5311-69900	MUSCATINE COUNTY TREASURER	Reimb Fee Plate KWH628	11/18/2024	0	5.00
		Vendor Subtotal:		5.00	
		Subtotal for FUND: 5311		2,617.54	
5451-25-5451-46200	RELIANCE STANDARD LIFE INS CC	Life Ins Nov	11/15/2024	0	18.76
		Vendor Subtotal:		18.76	
5451-25-5451-46600	RELIANCE STANDARD LIFE INS CCLTD	Nov 24	11/15/2024	0	17.99
5451-25-5451-46600	RELIANCE STANDARD LIFE INS CCBW LTD	Nov 24	11/15/2024	0	16.83
		Vendor Subtotal:		34.82	
5451-25-5451-52100	D & K PRODUCTS	CHASER 2 AMINE	11/19/2024	0	312.20 00029027
		Vendor Subtotal:		312.20	
5451-25-5451-52730	SPRATT OIL SALES	DIESEL FUEL	11/19/2024	0	270.00 00029233
5451-25-5451-52730	SPRATT OIL SALES	UNLEADED GAS	11/19/2024	0	1,108.26 00029233
5451-25-5451-52730	SPRATT OIL SALES	DIESEL FUEL	11/19/2024	0	2.70
		Vendor Subtotal:		1,380.96	
5451-25-5451-52830	TCM BANK NA VISA	Harbor Freight - Tool	11/19/2024	0	179.99
		Vendor Subtotal:		179.99	
5451-25-5451-52830	CEDAR COUNTY REPAIR	STIHL POWER WASHER	11/19/2024	0	1,040.00 00029193

Vendor Subtotal:					1,040.00
5451-25-5451-52890	MENARDS (MUSC)	Drano/ZEP	11/19/2024	0	36.37
5451-25-5451-52890	MENARDS (MUSC)	SHOP/PAINT SUPPLIES	11/18/2024	0	200.00 00029190
5451-25-5451-52890	MENARDS (MUSC)	SHOP/PAINT SUPPLIES	11/18/2024	0	4.10
Vendor Subtotal:					240.47
5451-25-5451-52890	TCM BANK NA VISA	Harbor Freight - Supplies	11/19/2024	0	39.84
Vendor Subtotal:					39.84
5451-25-5451-53140	MENARDS (MUSC)	STAIN (FOR BENCHES)	11/15/2024	0	186.40 00029125
Vendor Subtotal:					186.40
5451-25-5451-53220	MOTION INDUSTRIES INC	Seal	11/19/2024	0	26.97
Vendor Subtotal:					26.97
5451-25-5451-53220	R & R PRODUCTS INC	INNER SEAL	11/19/2024	0	60.30 00029240
5451-25-5451-53220	R & R PRODUCTS INC	OUTER SEAL	11/19/2024	0	35.70 00029240
5451-25-5451-53220	R & R PRODUCTS INC	WASHER	11/19/2024	0	4.80 00029240
5451-25-5451-53220	R & R PRODUCTS INC	ROLLER REBUILD KIT	11/19/2024	0	121.20 00029240
5451-25-5451-53220	R & R PRODUCTS INC	WAVE WASHER	11/19/2024	0	7.65 00029240
5451-25-5451-53220	R & R PRODUCTS INC	BEARING	11/19/2024	0	133.80 00029240
Vendor Subtotal:					363.45
5451-25-5451-53220	CEDAR COUNTY REPAIR	CHAINSAW CHAINS	11/19/2024	0	75.98 00029232
5451-25-5451-53220	CEDAR COUNTY REPAIR	CHAINSAW BAR	11/19/2024	0	52.99 00029232
Vendor Subtotal:					128.97
5451-25-5451-62210	PHELPS THE UNIFORM SPECIALIST	Laundry - Golf	11/19/2024	0	90.81
Vendor Subtotal:					90.81

5451-25-5451-64200	DAVID HARRIS	Registration Parcher	11/19/2024	0	500.00
5451-25-5451-64200	DAVID HARRIS	Registration Meerdink	11/19/2024	0	500.00
		Vendor Subtotal:			1,000.00
5451-25-5451-65210	MUSCATINE POWER & WATER	October Phone - Golf	11/19/2024	0	27.99
		Vendor Subtotal:			27.99
5451-25-5451-65310	ALLIANT ENERGY	October Gas - Golf	11/19/2024	0	55.88
		Vendor Subtotal:			55.88
5451-25-5451-65320	EASTERN IOWA LIGHT & POWER C	October Power - Golf	11/19/2024	0	714.30
5451-25-5451-65320	EASTERN IOWA LIGHT & POWER C	October Power - Golf	11/19/2024	0	604.16
		Vendor Subtotal:			1,318.46
5451-25-5451-69400	GCSAA	Membership - B Parcher	11/19/2024	0	465.00
		Vendor Subtotal:			465.00
5451-25-5452-46200	RELIANCE STANDARD LIFE INS CC	Life Ins Nov	11/15/2024	0	17.25
		Vendor Subtotal:			17.25
5451-25-5452-46600	RELIANCE STANDARD LIFE INS CCLTD	Nov 24	11/15/2024	0	19.91
		Vendor Subtotal:			19.91
5451-25-5452-52851	7G DISTRIBUTING LLC	Beer for Resale	11/15/2024	0	253.70
		Vendor Subtotal:			253.70
5451-25-5452-52851	IOWA BEVERAGE	Beer for Resale	11/15/2024	0	176.05
		Vendor Subtotal:			176.05

5451-25-5452-52852	TCM BANK NA VISA	Wal-Mart - Food for Resale	11/19/2024	0	49.10
5451-25-5452-52852	TCM BANK NA VISA	Wal-Mart - Food for Resale	11/19/2024	0	31.12
5451-25-5452-52852	TCM BANK NA VISA	Wal-Mart - Food for Resale	11/19/2024	0	21.66
5451-25-5452-52852	TCM BANK NA VISA	Wal-Mart - Food for Resale	11/19/2024	0	41.58
5451-25-5452-52852	TCM BANK NA VISA	Wal-Mart - Food for Resale	11/19/2024	0	18.94
5451-25-5452-52852	TCM BANK NA VISA	Wal-Mart - Food for Resale	11/19/2024	0	39.82
5451-25-5452-52852	TCM BANK NA VISA	Wal-Mart - Food for Resale	11/19/2024	0	17.52
5451-25-5452-52852	TCM BANK NA VISA	Hy-Vee - Resale Food	11/19/2024	0	14.40
Vendor Subtotal:					234.14
5451-25-5452-52853	TITLEIST	SHIPPING	11/19/2024	0	8.40 00029176
5451-25-5452-52853	TITLEIST	TITLEIST TSR1 DRIVER	11/19/2024	0	370.00 00029176
Vendor Subtotal:					378.40
5451-25-5452-52853	TCM BANK NA VISA	J & M Golf - Merch Resale	11/19/2024	0	21.82
5451-25-5452-52853	TCM BANK NA VISA	J & M Golf - Merch Resale	11/19/2024	0	25.15
5451-25-5452-52853	TCM BANK NA VISA	J & M Golf - Merch Resale	11/19/2024	0	43.37
5451-25-5452-52853	TCM BANK NA VISA	J & M Golf - Merch Resale	11/19/2024	0	35.21
5451-25-5452-52853	TCM BANK NA VISA	J & M Golf - Merch Resale	11/19/2024	0	97.27
Vendor Subtotal:					222.82
5451-25-5452-52890	AMAZON.COM	21073062 MagTek Magnetic Swipe Reac	11/15/2024	0	75.99 00029215
5451-25-5452-52890	AMAZON.COM	CT2K8G4DFRA32A Crucial 16GB Kit (	11/15/2024	0	95.97 00029215
Vendor Subtotal:					171.96
5451-25-5452-64700	DAVID HARRIS	Registration Kuddes	11/19/2024	0	500.00
Vendor Subtotal:					500.00
5451-25-5452-65310	ALLIANT ENERGY	October Gas - Golf	11/19/2024	0	43.46
Vendor Subtotal:					43.46
5451-25-5452-65510	MUSCATINE POWER & WATER	October Cable - Golf	11/19/2024	0	208.10
Vendor Subtotal:					208.10

Subtotal for FUND: 5451					9,136.76
5461-25-5461-65320	MUSCATINE POWER & WATER	October Electric - River Center	11/15/2024	0	33.22
5461-25-5461-65320	MUSCATINE POWER & WATER	October Electric - Maint Shed	11/15/2024	0	69.80
Vendor Subtotal:					103.02
5461-25-5461-65410	MUSCATINE POWER & WATER	October Water - River Center	11/15/2024	0	11.91
5461-25-5461-65410	MUSCATINE POWER & WATER	October Water - Maint Shed	11/15/2024	0	19.22
Vendor Subtotal:					31.13
Subtotal for FUND: 5461					134.15
5642-00-0000-23550	RELIANCE STANDARD LIFE INS CCPR Batch 00002.10.2024 Life Insurance		10/25/2024	0	0.70
Vendor Subtotal:					0.70
5642-00-0000-23630	RELIANCE STANDARD LIFE INS CCPR Batch 00001.10.2024 Optional Life		10/11/2024	0	207.63
5642-00-0000-23630	RELIANCE STANDARD LIFE INS CCPR Batch 00002.10.2024 Optional Life		10/25/2024	0	207.64
Vendor Subtotal:					415.27
5642-45-5642-46200	RELIANCE STANDARD LIFE INS CCLife Ins Nov		11/15/2024	0	47.21
Vendor Subtotal:					47.21
5642-45-5642-46600	RELIANCE STANDARD LIFE INS CCBW LTD Nov 24		11/15/2024	0	108.27
5642-45-5642-46600	RELIANCE STANDARD LIFE INS CCLTD Nov 24		11/15/2024	0	36.42
Vendor Subtotal:					144.69
5642-45-5642-52840	VAN METER INDUSTRIAL INC	Safety Vest	11/15/2024	0	9.98
5642-45-5642-52840	VAN METER INDUSTRIAL INC	Safety Vest	11/15/2024	0	4.99
Vendor Subtotal:					14.97

5642-45-5642-52890	MARK A DIERCKS	Locks for Dumpster Lids	11/15/2024	0	112.00 00029085
		Vendor Subtotal:			112.00
5642-45-5642-52890	ARNOLD MOTOR SUPPLY	Grease Tube	11/19/2024	0	30.90
		Vendor Subtotal:			30.90
5642-45-5642-52890	MENARDS (MUSC)	Hooks/Straight Link	11/15/2024	0	23.07
		Vendor Subtotal:			23.07
5642-45-5642-62285	WEIKERT IRON AND METAL	Scrap Appliance	11/18/2024	0	180.00
		Vendor Subtotal:			180.00
5642-45-5642-64200	DAVID HARRIS	Registration Cardoza/Barton	11/19/2024	0	1,000.00
		Vendor Subtotal:			1,000.00
5642-45-5642-65210	MUNICIPAL COLLECTIONS OF AMI	Collection Agency Fee - October	11/18/2024	0	29.38
		Vendor Subtotal:			29.38
5642-45-5642-65260	US CELLULAR	October Cell Phones	11/15/2024	0	67.48
		Vendor Subtotal:			67.48
5642-45-5642-65275	VERIZON	October GPS	11/15/2024	0	139.60
		Vendor Subtotal:			139.60
5642-45-5642-65310	ALLIANT ENERGY	October Gas - Transfer Garage	11/15/2024	0	40.96
		Vendor Subtotal:			40.96
5642-45-5642-65410	MUSCATINE POWER & WATER	October Water - Recycle	11/19/2024	0	38.02

Vendor Subtotal:					38.02
5642-45-5642-65420	MUSCATINE POWER & WATER	October Sewer - Recycle	11/19/2024	0	14.77
5642-45-5642-65420	MUSCATINE POWER & WATER	October Sewer - Recycle	11/19/2024	0	19.79
Vendor Subtotal:					34.56
5642-45-5643-52890	AMAZON.COM	Receipt Book	11/15/2024	0	44.25
Vendor Subtotal:					44.25
Subtotal for FUND: 5642					2,363.06
5652-00-0000-23550	RELIANCE STANDARD LIFE INS CCPR Batch 00002.10.2024 Life Insurance		10/25/2024	0	0.10
Vendor Subtotal:					0.10
5652-00-0000-23630	RELIANCE STANDARD LIFE INS CCPR Batch 00002.10.2024 Optional Life		10/25/2024	0	41.12
5652-00-0000-23630	RELIANCE STANDARD LIFE INS CCPR Batch 00001.10.2024 Optional Life		10/11/2024	0	41.13
Vendor Subtotal:					82.25
5652-45-5652-46200	RELIANCE STANDARD LIFE INS CCLife Ins Nov		11/15/2024	0	10.37
Vendor Subtotal:					10.37
5652-45-5652-46600	RELIANCE STANDARD LIFE INS CCLTD Nov 24		11/15/2024	0	11.95
Vendor Subtotal:					11.95
5652-45-5652-61420	SCS ENGINEERS	FY24 Environmental Compliance	11/19/2024	0	2,108.00
5652-45-5652-61420	SCS ENGINEERS	FY25 Environmental Compliance	11/19/2024	0	5,210.00
5652-45-5652-61420	SCS ENGINEERS	FY25 On-Call Support	11/19/2024	0	1,081.38
5652-45-5652-61420	SCS ENGINEERS	FY25 Airpace Analysis	11/19/2024	0	1,440.00
5652-45-5652-61420	SCS ENGINEERS	SCS RMC Services	11/19/2024	0	379.00
Vendor Subtotal:					10,218.38

5652-45-5652-62510	EUROFINS TEST AMERICA	Testing	11/18/2024	0	3,629.00
		Vendor Subtotal:			3,629.00
5652-45-5652-62520	JON BRAUNS	October 2024 Leachate Hauling	11/18/2024	0	2,550.00
		Vendor Subtotal:			2,550.00
5652-45-5652-62530	RITTMER INC	October 2024 Landfill	11/18/2024	0	40,150.00
		Vendor Subtotal:			40,150.00
5652-45-5652-65320	EASTERN IOWA LIGHT & POWER C	October Power - Ward	11/18/2024	0	126.28
5652-45-5652-65320	EASTERN IOWA LIGHT & POWER C	October Power - Landfill	11/18/2024	0	53.32
		Vendor Subtotal:			179.60
		Subtotal for FUND: 5652			56,831.65
5658-45-5658-35219	LAURIE LEE	Reimb - E-Waste Pickup	11/19/2024	0	15.00
		Vendor Subtotal:			15.00
5658-45-5658-46200	RELIANCE STANDARD LIFE INS CC	Life Ins Nov	11/15/2024	0	19.69
		Vendor Subtotal:			19.69
5658-45-5658-46600	RELIANCE STANDARD LIFE INS CCLTD	Nov 24	11/15/2024	0	17.33
5658-45-5658-46600	RELIANCE STANDARD LIFE INS CCBW LTD	Nov 24	11/15/2024	0	41.44
		Vendor Subtotal:			58.77
5658-45-5658-51100	AMAZON.COM	Bulletin Board	11/18/2024	0	99.98
5658-45-5658-51100	AMAZON.COM	Sharpie	11/18/2024	0	34.03
5658-45-5658-51100	AMAZON.COM	Clipboard	11/18/2024	0	10.59
		Vendor Subtotal:			144.60

5658-45-5658-51300	AMAZON.COM	W1380X HP #138X Black Toner Cartrid	11/18/2024	0	251.78 00029152
		Vendor Subtotal:			251.78
5658-45-5658-52750	S.J. SMITH CO.	Propane Gas	11/15/2024	0	94.20
5658-45-5658-52750	S.J. SMITH CO.	Propane Gas	11/15/2024	0	95.20
		Vendor Subtotal:			189.40
5658-45-5658-52830	ARNOLD MOTOR SUPPLY	Valve Core Tool	11/18/2024	0	5.64
		Vendor Subtotal:			5.64
5658-45-5658-52890	MENARDS (MUSC)	Anchor/Hook	11/18/2024	0	11.49
		Vendor Subtotal:			11.49
5658-45-5658-52890	SYCAMORE PRINTING INC	Stickers for Recycle Cans	11/15/2024	0	173.00 00029073
		Vendor Subtotal:			173.00
5658-45-5658-52890	TITAN MACHINERY INC	Intake Hose	11/19/2024	0	86.70
		Vendor Subtotal:			86.70
5658-45-5658-52890	AMAZON.COM	Microphone/CB Radio	11/15/2024	0	77.58
5658-45-5658-52890	AMAZON.COM	Anetenna/Microphone Replacement	11/18/2024	0	90.68
		Vendor Subtotal:			168.26
5658-45-5658-53110	ARNOLD MOTOR SUPPLY	Materials	11/19/2024	0	17.66
		Vendor Subtotal:			17.66
5658-45-5658-53110	MOSE LEVY	Flats	11/19/2024	0	80.58
		Vendor Subtotal:			80.58

5658-45-5658-62210	PHELPS THE UNIFORM SPECIALIST	Laundry - Transfer	11/18/2024	0	12.19
5658-45-5658-62210	PHELPS THE UNIFORM SPECIALIST	Laundry - Transfer	11/15/2024	0	12.19
5658-45-5658-62210	PHELPS THE UNIFORM SPECIALIST	Laundry - Transfer	11/15/2024	0	12.19
	Vendor Subtotal:				36.57
5658-45-5658-62250	LAJEK PEST CONTROL SOLUTIONS	Pest Control	11/19/2024	0	45.00
	Vendor Subtotal:				45.00
5658-45-5658-62250	TCM BANK NA VISA	Farm & Fleet - Pest Control	11/19/2024	0	36.45
	Vendor Subtotal:				36.45
5658-45-5658-62285	WEIKERT IRON AND METAL	Scrap Appliance	11/18/2024	0	834.00
	Vendor Subtotal:				834.00
5658-45-5658-62410	TEAM STAFFING SOLUTIONS INC	Temp Employee Week Ending 10/27/24	11/15/2024	0	90.00
5658-45-5658-62410	TEAM STAFFING SOLUTIONS INC	Temp Employee Week Ending 11/3/24	11/18/2024	0	186.90
5658-45-5658-62410	TEAM STAFFING SOLUTIONS INC	Temp Employee Week Ending 11/10/24	11/19/2024	0	186.90
	Vendor Subtotal:				463.80
5658-45-5658-62520	JON BRAUNS	October 2024 Solid Waste	11/18/2024	0	24,288.00
5658-45-5658-62520	JON BRAUNS	October 2024 Fuel Surcharge	11/18/2024	0	1,927.89
	Vendor Subtotal:				26,215.89
5658-45-5658-64120	TCM BANK NA VISA	Grand Harbor Resort - Lodging Popp	11/19/2024	0	304.64
	Vendor Subtotal:				304.64
5658-45-5658-65210	MUSCATINE POWER & WATER	October Phones - Transfer	11/19/2024	0	125.50
	Vendor Subtotal:				125.50
5658-45-5658-65220	MUSCATINE POWER & WATER	October Phones LD - Transfer	11/19/2024	0	0.24

			Vendor Subtotal:		0.24
5658-45-5658-65275	VERIZON	October GPS	11/15/2024	0	34.90
			Vendor Subtotal:		34.90
5658-45-5658-65310	ALLIANT ENERGY	October Gas - Transfer	11/15/2024	0	129.25
			Vendor Subtotal:		129.25
5658-45-5658-65320	MUSCATINE POWER & WATER	October Electric - Transfer	11/19/2024	0	2,374.00
			Vendor Subtotal:		2,374.00
5658-45-5658-65410	MUSCATINE POWER & WATER	October Water - Transfer	11/19/2024	0	195.74
			Vendor Subtotal:		195.74
5658-45-5658-65420	MUSCATINE POWER & WATER	October Sewer - Transfer	11/19/2024	0	14.77
5658-45-5658-65420	MUSCATINE POWER & WATER	October Sewer - Transfer	11/19/2024	0	587.59
			Vendor Subtotal:		602.36
5658-45-5658-69400	TCM BANK NA VISA	US Composting Council - Membership	11/19/2024	0	24.00
			Vendor Subtotal:		24.00
			Subtotal for FUND: 5658		32,644.91
5660-00-0000-23550	RELIANCE STANDARD LIFE INS CCPR Batch 00002.10.2024	Life Insurance	10/25/2024	0	1.20
			Vendor Subtotal:		1.20
5660-00-0000-23630	RELIANCE STANDARD LIFE INS CCPR Batch 00001.10.2024	Optional Life	10/11/2024	0	201.00
5660-00-0000-23630	RELIANCE STANDARD LIFE INS CCPR Batch 00002.10.2024	Optional Life	10/25/2024	0	201.00
			Vendor Subtotal:		402.00

5660-50-5661-46200	RELIANCE STANDARD LIFE INS CC	Life Ins Nov	11/15/2024	0	31.75
		Vendor Subtotal:			31.75
5660-50-5661-46600	RELIANCE STANDARD LIFE INS CC	LTD Nov 24	11/15/2024	0	40.76
		Vendor Subtotal:			40.76
5660-50-5661-51100	AMAZON.COM	Copy Holder/Shipping Labels	11/18/2024	0	85.06
		Vendor Subtotal:			85.06
5660-50-5661-51100	STOREY KENWORTHY / MATT PAR	Office Supplies	11/18/2024	0	15.80 00029212
5660-50-5661-51100	STOREY KENWORTHY / MATT PAR	Credit On Account	11/18/2024	0	-19.39
		Vendor Subtotal:			-3.59
5660-50-5661-51300	STOREY KENWORTHY / MATT PAR	Toner	11/18/2024	0	148.94 00029212
		Vendor Subtotal:			148.94
5660-50-5661-61420	STANLEY CONSULTANTS INC	Environmental Compliance Review Proj	11/18/2024	0	486.00
		Vendor Subtotal:			486.00
5660-50-5661-62370	GORDON FLESCH COMPANY	Copier	11/18/2024	0	29.54
		Vendor Subtotal:			29.54
5660-50-5661-64120	JON KOCH	Reimb Ubers - J Koch	11/19/2024	0	228.68
		Vendor Subtotal:			228.68
5660-50-5661-64400	JON KOCH	Reimb Meals - J Koch	11/19/2024	0	137.17
		Vendor Subtotal:			137.17

5660-50-5661-69400	IOWA RURAL WATER ASSOCIATION	Membership Dues J Koch	11/19/2024	0	75.00
		Vendor Subtotal:			75.00
5660-50-5662-35230	MUNICIPAL COLLECTIONS OF AMI	Collection Agency Fee - October	11/18/2024	0	102.34
		Vendor Subtotal:			102.34
5660-50-5662-46200	RELIANCE STANDARD LIFE INS CC	Life Ins Nov	11/15/2024	0	60.37
		Vendor Subtotal:			60.37
5660-50-5662-46600	RELIANCE STANDARD LIFE INS CCBW LTD	Nov 24	11/15/2024	0	80.77
5660-50-5662-46600	RELIANCE STANDARD LIFE INS CC LTD	Nov 24	11/15/2024	0	51.55
		Vendor Subtotal:			132.32
5660-50-5662-52220	JAYNE PRODUCTS	Struvite Remover	11/18/2024	0	8,399.00 00029126
		Vendor Subtotal:			8,399.00
5660-50-5662-52300	PHELPS CUSTOM IMAGE WEAR	Uniforms - J Dahnke	11/19/2024	0	91.56
		Vendor Subtotal:			91.56
5660-50-5662-52300	JACOB DAHNKE	Reimb Shoes - J Dahnke	11/19/2024	0	85.59
		Vendor Subtotal:			85.59
5660-50-5662-53210	GRAINGER DEPT 802675066	Air Filters for Grit Building	11/18/2024	0	493.98 00029175
		Vendor Subtotal:			493.98
5660-50-5662-53210	AMAZON.COM	Air-Con 3 Ton 36000 BTU Mini Split 3 T	11/19/2024	0	2,007.11 00028504
5660-50-5662-53210	AMAZON.COM	Grease Tubes	11/18/2024	0	39.95
5660-50-5662-53210	AMAZON.COM	Phiwicsh 8' LED 125w Shop Lights	11/18/2024	0	455.10 00029157
		Vendor Subtotal:			2,502.16

5660-50-5662-53210	TCM BANK NA VISA	Ebay - Return Bulb	11/19/2024	0	-97.88
5660-50-5662-53210	TCM BANK NA VISA	Ebay - Air Filters	11/19/2024	0	72.90
		Vendor Subtotal:			-24.98
5660-50-5662-53220	GRAINGER DEPT 802675066	Coupler	11/18/2024	0	10.58
5660-50-5662-53220	GRAINGER DEPT 802675066	Hardware	11/18/2024	0	12.61
		Vendor Subtotal:			23.19
5660-50-5662-53220	MENARDS (MUSC)	Batteries, Hardware, Misc Supplies	11/19/2024	0	116.03 00029218
		Vendor Subtotal:			116.03
5660-50-5662-53220	NORTHWEST MECHANICAL, INC	Natural Gas Valve Replacement Boiler	11/18/2024	0	15,757.00 00028976
		Vendor Subtotal:			15,757.00
5660-50-5662-62210	PHELPS THE UNIFORM SPECIALIST	Laundry - WRRF	11/18/2024	0	272.67
		Vendor Subtotal:			272.67
5660-50-5662-62250	LAJEK PEST CONTROL SOLUTIONS	Pest Control	11/18/2024	0	45.00
		Vendor Subtotal:			45.00
5660-50-5662-62530	TCM BANK NA VISA	Total Backflow - Calibration	11/19/2024	0	95.00
		Vendor Subtotal:			95.00
5660-50-5662-62530	DRJ GROUP, LLC	Annual Fire Extinguisher Maintenance	11/18/2024	0	371.50 00029196
		Vendor Subtotal:			371.50
5660-50-5662-65210	CLEARFLY	November Phones	11/18/2024	0	192.48
		Vendor Subtotal:			192.48

5660-50-5662-65260	VERIZON WIRELESS	October Cell Phones	11/18/2024	0	244.89
		Vendor Subtotal:			244.89
5660-50-5662-69400	JACOB OTT	Reimb Exam Fee	11/19/2024	0	32.29
		Vendor Subtotal:			32.29
5660-50-5662-69400	Kalli Anson	Reimb Testing - K Anson	11/19/2024	0	32.29
		Vendor Subtotal:			32.29
5660-50-5662-74200	LINCOLNWAY CUSTOM GOLF CAR	2017 Yamaha Golf Cart	11/18/2024	0	4,900.00 00029160
		Vendor Subtotal:			4,900.00
5660-50-5663-46200	RELIANCE STANDARD LIFE INS CC	Life Ins Nov	11/15/2024	0	18.13
		Vendor Subtotal:			18.13
5660-50-5663-46600	RELIANCE STANDARD LIFE INS CCBW	LTD Nov 24	11/15/2024	0	17.20
5660-50-5663-46600	RELIANCE STANDARD LIFE INS CCLTD	Nov 24	11/15/2024	0	17.22
		Vendor Subtotal:			34.42
5660-50-5663-52300	CLINT WILLIAMS	Reimb Uniforms - C Williams	11/19/2024	0	75.00
		Vendor Subtotal:			75.00
5660-50-5663-53130	MENARDS (MUSC)	Plumbing Supplies for Stewart Lift Static	11/18/2024	0	155.86 00029183
		Vendor Subtotal:			155.86
5660-50-5663-53210	VULCAN INDUSTRIES INC	Barscreen Parts	11/18/2024	0	460.00 00029070
5660-50-5663-53210	VULCAN INDUSTRIES INC	Freight	11/18/2024	0	55.00
		Vendor Subtotal:			515.00

5660-50-5663-53220	GRAINGER DEPT 802675066	TWAS Wet Well Pipe	11/18/2024	0	148.31 00029156
5660-50-5663-53220	GRAINGER DEPT 802675066	Clamp	11/18/2024	0	84.78
Vendor Subtotal:					233.09
5660-50-5663-53220	AMAZON.COM	Fittings	11/18/2024	0	67.51
Vendor Subtotal:					67.51
5660-50-5663-65260	VERIZON WIRELESS	October Cell Phones	11/18/2024	0	244.88
Vendor Subtotal:					244.88
5660-50-5663-65275	MUSCATINE POWER & WATER	October Internet - Mad Creek	11/18/2024	0	63.18
Vendor Subtotal:					63.18
5660-50-5663-65310	ALLIANT ENERGY	October Gas - 57th	11/18/2024	0	41.65
Vendor Subtotal:					41.65
5660-50-5663-65320	MUSCATINE POWER & WATER	October Electric - Spinning Wheel	11/18/2024	0	35.75
5660-50-5663-65320	MUSCATINE POWER & WATER	October Electric - Houser	11/18/2024	0	78.18
5660-50-5663-65320	MUSCATINE POWER & WATER	October Electric - Papoose	11/18/2024	0	3,005.96
5660-50-5663-65320	MUSCATINE POWER & WATER	October Electric - Isett	11/18/2024	0	2,606.53
5660-50-5663-65320	MUSCATINE POWER & WATER	October Electric - Stewart	11/18/2024	0	584.34
5660-50-5663-65320	MUSCATINE POWER & WATER	October Electric - Arbor Commons	11/18/2024	0	44.06
5660-50-5663-65320	MUSCATINE POWER & WATER	October Electric - Mad Creek	11/18/2024	0	1,552.84
5660-50-5663-65320	MUSCATINE POWER & WATER	October Electric - Stormwater	11/18/2024	0	184.38
Vendor Subtotal:					8,092.04
5660-50-5663-65410	MUSCATINE POWER & WATER	October Water - Houser	11/18/2024	0	22.13
5660-50-5663-65410	MUSCATINE POWER & WATER	October Water - Papoose	11/18/2024	0	142.33
5660-50-5663-65410	MUSCATINE POWER & WATER	October Water - Isett	11/18/2024	0	155.27
5660-50-5663-65410	MUSCATINE POWER & WATER	October Water - Stewart	11/18/2024	0	47.56
5660-50-5663-65410	MUSCATINE POWER & WATER	October Water - Arbor Commons	11/18/2024	0	26.54
5660-50-5663-65410	MUSCATINE POWER & WATER	October Water - Mad Creek	11/18/2024	0	117.70

Vendor Subtotal:					511.53
5660-50-5663-67130	CRAWFORD COMPANY INC	Jetting Floor Drains at Isett Lift Station	11/18/2024	0	675.00 00029036
Vendor Subtotal:					675.00
5660-50-5665-46200	RELIANCE STANDARD LIFE INS CC	Life Ins Nov	11/15/2024	0	26.76
Vendor Subtotal:					26.76
5660-50-5665-46600	RELIANCE STANDARD LIFE INS CCBW LTD	Nov 24	11/15/2024	0	32.92
5660-50-5665-46600	RELIANCE STANDARD LIFE INS CCLTD	Nov 24	11/15/2024	0	23.58
Vendor Subtotal:					56.50
5660-50-5665-52210	AIRGAS USA LLC	Compressed Air	11/18/2024	0	132.50 00028802
5660-50-5665-52210	AIRGAS USA LLC	Compressed Air	11/18/2024	0	100.05
Vendor Subtotal:					232.55
5660-50-5665-52210	MIDLAND SCIENTIFIC INC	Mbth Pwd Plws	11/18/2024	0	133.28
5660-50-5665-52210	MIDLAND SCIENTIFIC INC	Fine Point	11/18/2024	0	124.94
5660-50-5665-52210	MIDLAND SCIENTIFIC INC	Lab Supplies	11/18/2024	0	1,801.55 00029139
5660-50-5665-52210	MIDLAND SCIENTIFIC INC	Autoclavable Bag Transparent	11/18/2024	0	106.06
5660-50-5665-52210	MIDLAND SCIENTIFIC INC	Sulfide Standard	11/18/2024	0	59.31
Vendor Subtotal:					2,225.14
5660-50-5665-52210	ULINE	Insulated Foam Shipping Kit	11/18/2024	0	109.70 00029095
Vendor Subtotal:					109.70
5660-50-5665-52210	USA BLUE BOOK	Lab Supplies	11/18/2024	0	185.24 00029038
5660-50-5665-52210	USA BLUE BOOK	Lab Supplies	11/18/2024	0	0.27
5660-50-5665-52210	USA BLUE BOOK	Ear Plugs	11/18/2024	0	73.46
Vendor Subtotal:					258.97

5660-50-5665-52210	AMAZON.COM	Scott Multi-Fold 2 Ply Towels	11/18/2024	0	133.20 00029076
		Vendor Subtotal:			133.20
5660-50-5665-52210	NORTH CENTRAL LABORATORIES	Lab Supplies	11/18/2024	0	137.76 00028919
5660-50-5665-52210	NORTH CENTRAL LABORATORIES	Lab Supplies	11/18/2024	0	9.85
		Vendor Subtotal:			147.61
5660-50-5665-63500	PHELPS THE UNIFORM SPECIALIST	Laundry - WRRF	11/18/2024	0	28.40
		Vendor Subtotal:			28.40
5660-50-5665-64200	DAVID HARRIS	Registration Randall	11/19/2024	0	500.00
		Vendor Subtotal:			500.00
5660-50-5666-46200	RELIANCE STANDARD LIFE INS CO	Life Ins Nov	11/15/2024	0	9.39
		Vendor Subtotal:			9.39
5660-50-5666-46600	RELIANCE STANDARD LIFE INS CO	BW LTD Nov 24	11/15/2024	0	54.46
		Vendor Subtotal:			54.46
5660-50-5666-52300	DEAN SCHLAPKOHL	Reimb Shoes - D Schlapkohl	11/19/2024	0	150.00
		Vendor Subtotal:			150.00
5660-50-5666-52740	ARNOLD MOTOR SUPPLY	Oil	11/18/2024	0	274.95 00029141
		Vendor Subtotal:			274.95
5660-50-5666-52750	ARNOLD MOTOR SUPPLY	Def Fluid	11/18/2024	0	33.98 00029141
		Vendor Subtotal:			33.98
5660-50-5666-53210	GRAINGER DEPT 802675066	Hardware	11/18/2024	0	48.01

		Vendor Subtotal:			48.01
5660-50-5666-53210	STUTSMAN INC	Deitrich Injector 70 Series	11/18/2024	0	1,355.00 00029201
		Vendor Subtotal:			1,355.00
5660-50-5666-53220	ARNOLD MOTOR SUPPLY	Fittings & Hose for Dredge	11/18/2024	0	423.59 00029140
		Vendor Subtotal:			423.59
5660-50-5666-53220	MENARDS (MUSC)	Lock Nut/Cutting Wheel	11/18/2024	0	81.07
		Vendor Subtotal:			81.07
5660-50-5666-53220	AMAZON.COM	Lights	11/18/2024	0	61.18
5660-50-5666-53220	AMAZON.COM	Grease Gun/Wheel Spinner	11/18/2024	0	67.93
		Vendor Subtotal:			129.11
5660-50-5666-62510	MINNESOTA VALLEY TEST LAB IN	Testing	11/19/2024	0	308.00 00029222
		Vendor Subtotal:			308.00
5660-50-5666-62510	STATE HYGIENIC LABORATORY A	Testing	11/19/2024	0	413.00 00029216
		Vendor Subtotal:			413.00
5660-50-5666-65320	EASTERN IOWA LIGHT & POWER C	October Power - Musser	11/18/2024	0	1,235.90
		Vendor Subtotal:			1,235.90
5660-50-5668-46200	RELIANCE STANDARD LIFE INS CC	Life Ins Nov	11/15/2024	0	6.26
		Vendor Subtotal:			6.26
5660-50-5668-46600	RELIANCE STANDARD LIFE INS CCBW	LTD Nov 24	11/15/2024	0	33.84

			Vendor Subtotal:		33.84
5660-50-5668-64700	DAVID HARRIS	Registration Swailes	11/19/2024	0	500.00
			Vendor Subtotal:		500.00
			Subtotal for FUND: 5660		55,089.87
5664-00-0000-23550	RELIANCE STANDARD LIFE INS CCPR Batch 00002.10.2024 Life Insurance	10/25/2024	0	0.16	
			Vendor Subtotal:		0.16
5664-00-0000-23630	RELIANCE STANDARD LIFE INS CCPR Batch 00001.10.2024 Optional Life	10/11/2024	0	3.31	
5664-00-0000-23630	RELIANCE STANDARD LIFE INS CCPR Batch 00002.10.2024 Optional Life	10/25/2024	0	3.30	
			Vendor Subtotal:		6.61
5664-40-5664-46200	RELIANCE STANDARD LIFE INS CCLife Ins Nov	11/15/2024	0	32.85	
			Vendor Subtotal:		32.85
5664-40-5664-46600	RELIANCE STANDARD LIFE INS CCBW LTD Nov 24	11/15/2024	0	72.01	
5664-40-5664-46600	RELIANCE STANDARD LIFE INS CCLTD Nov 24	11/15/2024	0	25.18	
			Vendor Subtotal:		97.19
5664-40-5664-51100	MENARDS (MUSC)	Wall Clock	11/15/2024	0	29.99
5664-40-5664-51100	MENARDS (MUSC)	Wall Clock	11/15/2024	0	18.00
			Vendor Subtotal:		47.99
5664-40-5664-52890	UTILITY EQUIPMENT CO	8" Clay x 8" Clay Flex Coupling w/Shear	11/15/2024	0	260.00 00029084
			Vendor Subtotal:		260.00
5664-40-5664-53140	J & R SUPPLY INC	Inverted Green Marking Paint	11/18/2024	0	480.00 00028425

			Vendor Subtotal:		480.00
5664-40-5664-65275	VERIZON WIRELESS	October I Pads	11/15/2024	0	40.01
			Vendor Subtotal:		40.01
5664-40-5664-65275	VERIZON	October GPS	11/15/2024	0	10.95
			Vendor Subtotal:		10.95
5664-50-5667-46200	RELIANCE STANDARD LIFE INS CC	Life Ins Nov	11/15/2024	0	7.67
			Vendor Subtotal:		7.67
5664-50-5667-46600	RELIANCE STANDARD LIFE INS CCLTD	Nov 24	11/15/2024	0	10.55
			Vendor Subtotal:		10.55
5664-50-5667-62530	PS3 Enterprises Inc.	Temp Sanitation	11/18/2024	0	170.00
			Vendor Subtotal:		170.00
5664-50-5667-64200	TCM BANK NA VISA	ISWEP - Registration Koch	11/19/2024	0	282.38
			Vendor Subtotal:		282.38
			Subtotal for FUND: 5664		1,446.36
5711-10-5711-65320	MUSCATINE POWER & WATER	October Electric - Runway	11/18/2024	0	43.26
			Vendor Subtotal:		43.26
5711-10-5711-67130	VOLTMER INC.	Repair of Regulators	11/19/2024	0	3,000.00
			Vendor Subtotal:		3,000.00

Subtotal for FUND: 5711				3,043.26	
5811-00-0000-11550	MUNICIPAL COLLECTIONS OF AMI	Collection Agency Fee - October	11/18/2024	0	43.13
Vendor Subtotal:					43.13
5811-00-0000-23550	RELIANCE STANDARD LIFE INS CC	PR Batch 00002.10.2024 Life Insurance	10/25/2024	0	0.40
Vendor Subtotal:					0.40
5811-20-5811-35150	IOWA MEDICAID ENTERPRISE (IME	December GEMT Share	11/19/2024	0	13,313.08
Vendor Subtotal:					13,313.08
5811-20-5811-46200	RELIANCE STANDARD LIFE INS CC	Life Ins Nov	11/15/2024	0	18.66
Vendor Subtotal:					18.66
5811-20-5811-46600	RELIANCE STANDARD LIFE INS CC	LTD Nov 24	11/15/2024	0	24.64
Vendor Subtotal:					24.64
5811-20-5811-52300	TCM BANK NA VISA	Uniform T-Shirts - D. Rudolph, McKim,	11/19/2024	0	129.84 00029113
5811-20-5811-52300	TCM BANK NA VISA	Uniform Sweatshirts - D. Rudolph, McKi	11/19/2024	0	76.59 00029113
5811-20-5811-52300	TCM BANK NA VISA	Uniform Sweatshirts - D. Rudolph, McKi	11/19/2024	0	14.45
Vendor Subtotal:					220.88
5811-20-5811-52720	TCM BANK NA VISA	Kum & Go - Fuel	11/19/2024	0	69.95
5811-20-5811-52720	TCM BANK NA VISA	Underwood Truck Stop - Fuel	11/19/2024	0	60.37
Vendor Subtotal:					130.32
5811-20-5811-64120	TCM BANK NA VISA	IEMSA - Conference Registration M Hart	11/19/2024	0	284.00
5811-20-5811-64120	TCM BANK NA VISA	Marriott - Lodging Ewers	11/19/2024	0	593.60
Vendor Subtotal:					877.60

5811-20-5811-64400	TCM BANK NA VISA	Kum & Go - Transfer Meal	11/19/2024	0	15.00
5811-20-5811-64400	TCM BANK NA VISA	Kum & Go - Transfer Meal	11/19/2024	0	15.00
5811-20-5811-64400	TCM BANK NA VISA	Casey's - Transfer Meal	11/19/2024	0	18.68
5811-20-5811-64400	TCM BANK NA VISA	Casey's - Transfer Meal	11/19/2024	0	24.97
5811-20-5811-64400	TCM BANK NA VISA	Culver's - Transfer Meal (2)	11/19/2024	0	23.06
5811-20-5811-64400	TCM BANK NA VISA	Pizza Ranch - Transfer Meal (2)	11/19/2024	0	27.97
5811-20-5811-64400	TCM BANK NA VISA	Texas Roadhouse - Transfer Meal	11/19/2024	0	21.74
5811-20-5811-64400	TCM BANK NA VISA	Texas Roadhouse - Transfer Meal	11/19/2024	0	25.00
5811-20-5811-64400	TCM BANK NA VISA	Casey's - Transfer Meal	11/19/2024	0	13.75
5811-20-5811-64400	TCM BANK NA VISA	Casey's - Transfer Meal	11/19/2024	0	13.98
5811-20-5811-64400	TCM BANK NA VISA	Kwik Star - Transfer Meal	11/19/2024	0	3.67
Vendor Subtotal:					202.82
5811-20-5811-64600	TCM BANK NA VISA	National Registry EMT - Fees Janssen	11/19/2024	0	175.00
Vendor Subtotal:					175.00
5811-20-5811-67320	TCM BANK NA VISA	PSTrax - License Renewal	11/19/2024	0	322.62
Vendor Subtotal:					322.62
5811-20-5811-69400	TCM BANK NA VISA	IEMSA - Membership Dues M Hartman	11/19/2024	0	35.00
Vendor Subtotal:					35.00
Subtotal for FUND: 5811					15,364.15
7625-00-0000-23630	RELIANCE STANDARD LIFE INS CCPR Batch 00001.10.2024 Optional Life	10/11/2024	0	47.00	
7625-00-0000-23630	RELIANCE STANDARD LIFE INS CCPR Batch 00002.10.2024 Optional Life	10/25/2024	0	47.00	
Vendor Subtotal:					94.00
7625-40-7625-46200	RELIANCE STANDARD LIFE INS CCLife Ins Nov	11/15/2024	0	25.02	
Vendor Subtotal:					25.02
7625-40-7625-46600	RELIANCE STANDARD LIFE INS CCBW LTD Nov 24	11/15/2024	0	53.16	

7625-40-7625-46600	RELIANCE STANDARD LIFE INS CCLTD Nov 24		11/15/2024	0	17.97
		Vendor Subtotal:			71.13
7625-40-7625-51300	AMAZON.COM	Q2612A HP #12A Black Toner Cartridge	11/19/2024	0	101.92 00029253
		Vendor Subtotal:			101.92
7625-40-7625-52400	MENARDS (MUSC)	Simple Green	11/19/2024	0	16.56
		Vendor Subtotal:			16.56
7625-40-7625-52720	BLICK & BLICK OIL INC	Gas for Tank 2	11/18/2024	0	18,224.31 00029224
7625-40-7625-52720	BLICK & BLICK OIL INC	Gas for Tank 2	11/18/2024	0	28.71
		Vendor Subtotal:			18,253.02
7625-40-7625-52730	HARMS OIL COMPANY	Diesel for Tank 1	11/19/2024	0	17,039.05 00029162
		Vendor Subtotal:			17,039.05
7625-40-7625-52740	ARNOLD MOTOR SUPPLY	Oil	11/19/2024	0	64.68
		Vendor Subtotal:			64.68
7625-40-7625-52740	RAINBO OIL CO-JET BULK OIL	Oil and WWS Solvent for Stock	11/15/2024	0	393.85 00029128
		Vendor Subtotal:			393.85
7625-40-7625-53210	ARNOLD MOTOR SUPPLY	Fuse	11/15/2024	0	5.18
7625-40-7625-53210	ARNOLD MOTOR SUPPLY	Pen Oil, Seafoam for Stock	11/15/2024	0	170.76 00029211
		Vendor Subtotal:			175.94
7625-40-7625-53210	MENARDS (MUSC)	Batteries	11/19/2024	0	15.43
		Vendor Subtotal:			15.43

7625-40-7625-53210	NAPA OF MUSCATINE	Brake Pads for Stock	11/15/2024	0	458.35 00029200
		Vendor Subtotal:			458.35
7625-40-7625-53210	AMAZON.COM	LED Back Up Light	11/15/2024	0	15.99
		Vendor Subtotal:			15.99
7625-40-7625-53210	CARQUEST OF MUSCATINE	Filters/Wipers	11/15/2024	0	68.84
		Vendor Subtotal:			68.84
7625-40-7625-53220	ARNOLD MOTOR SUPPLY	Air Filters for 418	11/15/2024	0	148.40 00029097
7625-40-7625-53220	ARNOLD MOTOR SUPPLY	Air Filters for 418	11/19/2024	0	148.40 00029244
7625-40-7625-53220	ARNOLD MOTOR SUPPLY	Wheel Nut	11/15/2024	0	4.12
7625-40-7625-53220	ARNOLD MOTOR SUPPLY	Sealant	11/19/2024	0	54.99
7625-40-7625-53220	ARNOLD MOTOR SUPPLY	Fittings	11/18/2024	0	25.12
7625-40-7625-53220	ARNOLD MOTOR SUPPLY	Oil Seal	11/15/2024	0	34.32
7625-40-7625-53220	ARNOLD MOTOR SUPPLY	Parking Brake Shoe Set/Hardware Kit	11/15/2024	0	77.11
7625-40-7625-53220	ARNOLD MOTOR SUPPLY	Gasket	11/18/2024	0	4.76
7625-40-7625-53220	ARNOLD MOTOR SUPPLY	Hoses for 680	11/18/2024	0	523.37 00029223
7625-40-7625-53220	ARNOLD MOTOR SUPPLY	Gasket	11/18/2024	0	9.52
7625-40-7625-53220	ARNOLD MOTOR SUPPLY	Gasket	11/18/2024	0	4.76
		Vendor Subtotal:			1,034.87
7625-40-7625-53220	ELLIOTT EQUIPMENT COMPANY	Arm Rebuild for 439	11/15/2024	0	6,802.91 00028963
7625-40-7625-53220	ELLIOTT EQUIPMENT COMPANY	Arm Rebuild for 439	11/15/2024	0	147.36
7625-40-7625-53220	ELLIOTT EQUIPMENT COMPANY	Grippers and Spacers for 439	11/18/2024	0	199.48 00029136
		Vendor Subtotal:			7,149.75
7625-40-7625-53220	HOGLUND BUS CO. INC.	AC Compressor #262	11/18/2024	0	662.14
		Vendor Subtotal:			662.14
7625-40-7625-53220	MENARDS (MUSC)	Coupling/Adapter	11/15/2024	0	5.80
		Vendor Subtotal:			5.80

7625-40-7625-53220	NAPA OF MUSCATINE	Fittings	11/15/2024	0	20.88
7625-40-7625-53220	NAPA OF MUSCATINE	Filter	11/15/2024	0	27.19
7625-40-7625-53220	NAPA OF MUSCATINE	Filter	11/15/2024	0	26.79
7625-40-7625-53220	NAPA OF MUSCATINE	Filter	11/15/2024	0	27.19
7625-40-7625-53220	NAPA OF MUSCATINE	Rotors for 258	11/18/2024	0	296.38 00029207
7625-40-7625-53220	NAPA OF MUSCATINE	Filter	11/18/2024	0	13.59
7625-40-7625-53220	NAPA OF MUSCATINE	Brake Pads and Rotors for 261	11/19/2024	0	331.57 00029243
Vendor Subtotal:					743.59
7625-40-7625-53220	REEVES BATTERY SALES	Battery for 904	11/18/2024	0	140.00 00029220
7625-40-7625-53220	REEVES BATTERY SALES	Battery for Vehicle #745	11/18/2024	0	140.00 00029229
7625-40-7625-53220	REEVES BATTERY SALES	Battery for Vehicle #745	11/18/2024	0	150.00 00029229
Vendor Subtotal:					430.00
7625-40-7625-53220	JOHN HERRMAN	Steel for New Tire Rack in the Shop	11/15/2024	0	519.12 00029189
Vendor Subtotal:					519.12
7625-40-7625-53220	CARQUEST OF MUSCATINE	Lubrication/Filter	11/15/2024	0	57.55
7625-40-7625-53220	CARQUEST OF MUSCATINE	Filters	11/15/2024	0	29.33
7625-40-7625-53220	CARQUEST OF MUSCATINE	Return	11/15/2024	0	-25.52
Vendor Subtotal:					61.36
7625-40-7625-53220	EMAG MUSCATINE FD LLC	16 Rear Axle Bolts for Unit 258	11/18/2024	0	225.92 00029204
Vendor Subtotal:					225.92
7625-40-7625-53220	EMAG MUSCATINE CBG LLC	Solenoid for Stock	11/19/2024	0	240.70 00029227
Vendor Subtotal:					240.70
7625-40-7625-62530	R & A RISK PROFESSIONALS INC	Monthly Inspections of Our Fuel System	11/18/2024	0	637.00 00028695
Vendor Subtotal:					637.00
7625-40-7625-64200	DAVID HARRIS	Registration McLaughlin	11/19/2024	0	500.00

			Vendor Subtotal:		500.00
7625-40-7625-65275	VERIZON	October GPS	11/15/2024	0	17.45
			Vendor Subtotal:		17.45
7625-40-7625-67130	EXCEL AUTO GLASS INC	Re-Seal Windshield in 129	11/15/2024	0	200.00 00029181
			Vendor Subtotal:		200.00
7625-40-7625-67130	PLETCHER ENTERPRISES INC	Weld Tailgate on RC14	11/15/2024	0	1,295.21 00029098
7625-40-7625-67130	PLETCHER ENTERPRISES INC	Rebuild Cross Members on RC13	11/15/2024	0	1,276.79 00029099
7625-40-7625-67130	PLETCHER ENTERPRISES INC	Welding Repairs on RC15	11/18/2024	0	840.76 00029120
			Vendor Subtotal:		3,412.76
7625-40-7625-67130	DOUGLAS C REIST	Tow to Shop #745	11/18/2024	0	75.00
			Vendor Subtotal:		75.00
7625-40-7625-67130	MIDWEST WIRELESS LLC	Repair Radio #260	11/18/2024	0	69.50
			Vendor Subtotal:		69.50
7625-40-7625-67130	TRUCKS UNLIMITED INC	Diagnose 440 DEF Leaking	11/15/2024	0	205.00 00029191
7625-40-7625-67130	TRUCKS UNLIMITED INC	Diagnose and Repair #14	11/18/2024	0	1,004.03 00029245
			Vendor Subtotal:		1,209.03
7625-40-7625-67140	A-1 QUALITY TIRE & CAR CARE	Tire Repairs #RC15	11/15/2024	0	70.00
7625-40-7625-67140	A-1 QUALITY TIRE & CAR CARE	Tire Repairs #RC13	11/15/2024	0	88.50
7625-40-7625-67140	A-1 QUALITY TIRE & CAR CARE	Repairs for RC15	11/18/2024	0	101.45 00029182
7625-40-7625-67140	A-1 QUALITY TIRE & CAR CARE	Repairs for 439	11/18/2024	0	143.50 00029187
7625-40-7625-67140	A-1 QUALITY TIRE & CAR CARE	11R22.5 Drive Caps for Stock	11/19/2024	0	615.00 00029186
7625-40-7625-67140	A-1 QUALITY TIRE & CAR CARE	Tire Repairs	11/19/2024	0	70.00
			Vendor Subtotal:		1,088.45

7625-40-7625-67150	CENTRAL PETROLEUM EQUIP CO	Breakaway	11/15/2024	0	98.78
	Vendor Subtotal:				98.78
	Subtotal for FUND: 7625				55,175.00
7650-00-7650-46100	WELLMARK BLUE CROSS & BLUE	October Health Admin	11/19/2024	0	51,674.70
7650-00-7650-46100	WELLMARK BLUE CROSS & BLUE	October Health Claims	11/19/2024	0	304,483.42
7650-00-7650-46100	WELLMARK BLUE CROSS & BLUE	October Stop Loss Adjustment	11/19/2024	0	-124.64
	Vendor Subtotal:				356,033.48
7650-00-7650-46150	WELLMARK BLUE CROSS & BLUE	October Weekly Deposits	11/19/2024	0	-328,000.00
	Vendor Subtotal:				-328,000.00
	Subtotal for FUND: 7650				28,033.48
7655-00-7655-46300	WELLMARK BLUE CROSS & BLUE	October Dental Admin	11/19/2024	0	786.00
7655-00-7655-46300	WELLMARK BLUE CROSS & BLUE	October Dental Claims	11/19/2024	0	15,157.28
	Vendor Subtotal:				15,943.28
	Subtotal for FUND: 7655				15,943.28
7921-00-7921-69900	TCM BANK NA VISA	Meal Overage Rheingans	11/19/2024	0	0.75
7921-00-7921-69900	TCM BANK NA VISA	Meal Overage Grafton	11/19/2024	0	6.66
7921-00-7921-69900	TCM BANK NA VISA	Tupelo Honey - Meals Emma/Emerson/M	11/19/2024	0	2.45
7921-00-7921-69900	TCM BANK NA VISA	Apple - I Cloud Storage Fee Tax Chargec	11/19/2024	0	0.21
7921-00-7921-69900	TCM BANK NA VISA	Beer Can Alley - Meal (3) Tip Overage	11/19/2024	0	2.32
7921-00-7921-69900	TCM BANK NA VISA	Late Fee Reversed	11/19/2024	0	-40.00
7921-00-7921-69900	TCM BANK NA VISA	Apple - Channel 5 Tax	11/19/2024	0	3.85
7921-00-7921-69900	TCM BANK NA VISA	Costco - Candy Trunk or Treat (to be reir	11/19/2024	0	491.95
7921-00-7921-69900	TCM BANK NA VISA	Constant Contact - Refill Money for Senc	11/19/2024	0	461.50
	Vendor Subtotal:				929.69
	Subtotal for FUND: 7921				929.69

7940-00-7940-46200	RELIANCE STANDARD LIFE INS CC	Life Ins Nov	11/15/2024	0	21.78
7940-00-7940-46200	RELIANCE STANDARD LIFE INS CC	Life Ins Nov	11/15/2024	0	17.77
7940-00-7940-46200	RELIANCE STANDARD LIFE INS CC	Life Ins Nov	11/15/2024	0	16.87
7940-00-7940-46200	RELIANCE STANDARD LIFE INS CC	Life Ins Nov	11/15/2024	0	6.69
Vendor Subtotal:					63.11
7940-00-7940-46600	RELIANCE STANDARD LIFE INS CC	LTD Nov 24	11/15/2024	0	19.39
7940-00-7940-46600	RELIANCE STANDARD LIFE INS CC	LTD Nov 24	11/15/2024	0	18.61
7940-00-7940-46600	RELIANCE STANDARD LIFE INS CC	LTD Nov 24	11/15/2024	0	11.50
7940-00-7940-46600	RELIANCE STANDARD LIFE INS CC	LTD Nov 24	11/15/2024	0	32.63
7940-00-7940-46600	RELIANCE STANDARD LIFE INS CC	BW LTD Nov 24	11/15/2024	0	8.37
7940-00-7940-46600	RELIANCE STANDARD LIFE INS CC	BW LTD Nov 24	11/15/2024	0	8.37
Vendor Subtotal:					98.87
7940-00-7940-52300	PHELPS CUSTOM IMAGE WEAR	Uniforms - E Cruz	11/19/2024	0	37.25
Vendor Subtotal:					37.25
7940-00-7940-62310	XEROX CORPORATION	October Copies	11/19/2024	0	4.31
7940-00-7940-62310	XEROX CORPORATION	October Copies	11/19/2024	0	0.62
7940-00-7940-62310	XEROX CORPORATION	October Copies	11/19/2024	0	0.62
7940-00-7940-62310	XEROX CORPORATION	October Copies	11/19/2024	0	4.93
Vendor Subtotal:					10.48
7940-00-7940-65275	VERIZON	October GPS	11/15/2024	0	34.90
Vendor Subtotal:					34.90
Subtotal for FUND: 7940					244.61
8144-10-8144-73700	CORNERSTONE COMMERCIAL COI	Facade Pay App #6	11/19/2024	0	104,219.48
Vendor Subtotal:					104,219.48
Subtotal for FUND: 8144					104,219.48

8148-10-8148-46200	RELIANCE STANDARD LIFE INS CC	Life Ins Nov	11/15/2024	0	15.75
	Vendor Subtotal:				15.75
8148-10-8148-46600	RELIANCE STANDARD LIFE INS CC	LTD Nov 24	11/15/2024	0	25.08
	Vendor Subtotal:				25.08
8148-10-8148-65275	TCM BANK NA VISA	Google - Google Voice	11/19/2024	0	29.14
	Vendor Subtotal:				29.14
	Subtotal for FUND: 8148				69.97
8180-90-8180-46200	RELIANCE STANDARD LIFE INS CC	Life Ins Nov	11/15/2024	0	3.44
	Vendor Subtotal:				3.44
8180-90-8180-46600	RELIANCE STANDARD LIFE INS CC	LTD Nov 24	11/15/2024	0	5.89
	Vendor Subtotal:				5.89
8180-90-8180-61660	PHILIP PALMER	Radon Measurement - 1812 Schiller	11/19/2024	0	125.00 00029251
8180-90-8180-61660	PHILIP PALMER	Residential Inspection - 1812 Schiller	11/19/2024	0	325.00 00029251
	Vendor Subtotal:				450.00
8180-90-8180-68300	EICHELBERGER LAW OFFICE	DPA B Allington	11/15/2024	0	2,500.00
	Vendor Subtotal:				2,500.00
	Subtotal for FUND: 8180				2,959.33
8370-00-8370-73900	CNR DRYWALL	Tape, Mud, Texture and Paint Drywall at	11/19/2024	0	5,900.00 00029022
	Vendor Subtotal:				5,900.00

Subtotal for FUND: 8370					5,900.00
8450-05-8450-74250	DELL MARKETING L.P.	PowerEdge T360	11/19/2024	0	6,755.44 00029221
8450-05-8450-74250	DELL MARKETING L.P.	PowerEdge T360	11/19/2024	0	4,945.71 00029221
Vendor Subtotal:					11,701.15
Subtotal for FUND: 8450					11,701.15
8451-30-8451-74250	ENVISIONWARE INC.	Shipping Freight	11/15/2024	0	2,035.00 00029040
8451-30-8451-74250	ENVISIONWARE INC.	X11 Kiosk (Qty 4)	11/15/2024	0	9,100.00 00029040
8451-30-8451-74250	ENVISIONWARE INC.	X11 Kiosk Sidecar (Qty 4)	11/15/2024	0	1,150.00 00029040
Vendor Subtotal:					12,285.00
8451-30-8451-74250	AMAZON.COM	SMT1500C APC 1500VA Smart-UPS	11/18/2024	0	572.49 00029154
8451-30-8451-74250	AMAZON.COM	Switch Enterprise	11/18/2024	0	-1,649.00
8451-30-8451-74250	AMAZON.COM	Switch Enterprise	11/18/2024	0	1,649.00
Vendor Subtotal:					572.49
Subtotal for FUND: 8451					12,857.49
9002-90-9020-41100	CITY OF MUSCATINE HOUSING RE Admin Longevity 11/8/24		11/15/2024	0	4.23
9002-90-9020-41100	CITY OF MUSCATINE HOUSING RE Admin Full-Time Wages 11/8/24		11/15/2024	0	1,469.80
9002-90-9020-41100	CITY OF MUSCATINE HOUSING RE Admin Part-Time Wages 11/8/24		11/15/2024	0	122.72
Vendor Subtotal:					1,596.75
9002-90-9020-41300	CITY OF MUSCATINE HOUSING RE Hopkins - Evictions		11/19/2024	0	405.00
Vendor Subtotal:					405.00
9002-90-9020-41500	CITY OF MUSCATINE HOUSING RE Auto Allowance 11/8/24		11/15/2024	0	37.50
Vendor Subtotal:					37.50

9002-90-9020-41902	AMAZON.COM	Toner	11/15/2024	0	78.99
		Vendor Subtotal:			78.99
9002-90-9020-41904	CITY OF MUSCATINE HOUSING RE MPW - October Base PRI		11/19/2024	0	13.65
		Vendor Subtotal:			13.65
9002-90-9020-41904	MUSCATINE POWER & WATER	October Phones - Clark House	11/19/2024	0	87.48
9002-90-9020-41904	MUSCATINE POWER & WATER	October Internet - Clark House	11/19/2024	0	82.97
		Vendor Subtotal:			170.45
9002-90-9020-41904	US CELLULAR	October Cell Phones	11/19/2024	0	71.38
		Vendor Subtotal:			71.38
9002-90-9020-41907	IOWA NAHRO	Dues for Housing Employees	11/18/2024	0	33.25
9002-90-9020-41907	IOWA NAHRO	Dues for Muscatine Housing Agency	11/18/2024	0	14.25
		Vendor Subtotal:			47.50
9002-90-9020-41910	CROSSROADS INC.	Shredding	11/15/2024	0	11.00
		Vendor Subtotal:			11.00
9002-90-9020-41910	TCM BANK NA VISA	Iowa Judicial Branch - Eviction M Logel	11/19/2024	0	95.00
9002-90-9020-41910	TCM BANK NA VISA	Iowa Judicial Branch - Eviction M Logel	11/19/2024	0	95.00
9002-90-9020-41910	TCM BANK NA VISA	Iowa Judicial Branch - Eviction M Logel	11/19/2024	0	-95.00
		Vendor Subtotal:			95.00
9002-90-9020-41914	CITY OF MUSCATINE HOUSING RE MPW - Sept/Oct Machlink		11/19/2024	0	23.56
		Vendor Subtotal:			23.56
9002-90-9020-43100	MUSCATINE POWER & WATER	October Water - Clark House	11/19/2024	0	381.93

			Vendor Subtotal:			381.93
9002-90-9020-43200	MUSCATINE POWER & WATER	October Electric - Clark House	11/19/2024	0		4,299.96
			Vendor Subtotal:			4,299.96
9002-90-9020-43700	ALLIANT ENERGY	October Gas - Clark House	11/19/2024	0		915.55
			Vendor Subtotal:			915.55
9002-90-9020-43900	MUSCATINE POWER & WATER	October Sewer - Clark House	11/19/2024	0		1,166.82
			Vendor Subtotal:			1,166.82
9002-90-9020-44100	CITY OF MUSCATINE HOUSING RE Maint Full-Time Wages 11/8/24		11/15/2024	0		3,170.30
9002-90-9020-44100	CITY OF MUSCATINE HOUSING RE Maint Part-Time Wages 11/8/24		11/15/2024	0		1,484.28
9002-90-9020-44100	CITY OF MUSCATINE HOUSING RE Maint Longevity 11/8/24		11/15/2024	0		18.85
			Vendor Subtotal:			4,673.43
9002-90-9020-44201	MENARDS (MUSC)	Scour Pad/Pine Cleaner	11/19/2024	0		56.57
			Vendor Subtotal:			56.57
9002-90-9020-44201	AMAZON.COM	Wire Brush/Floor Cleaner	11/15/2024	0		91.38
			Vendor Subtotal:			91.38
9002-90-9020-44202	CITY OF MUSCATINE HOUSING RE September Fuel		11/15/2024	0		73.54
9002-90-9020-44202	CITY OF MUSCATINE HOUSING RE October Fuel		11/15/2024	0		71.51
			Vendor Subtotal:			145.05
9002-90-9020-44203	MENARDS (MUSC)	Pocket Driver	11/15/2024	0		89.00
9002-90-9020-44203	MENARDS (MUSC)	Trowel/Blade	11/19/2024	0		34.44
			Vendor Subtotal:			123.44

9002-90-9020-44203	PLUMB SUPPLY COMPANY	Dozer Hole Saw	11/18/2024	0	7.64
		Vendor Subtotal:			7.64
9002-90-9020-44204	MENARDS (MUSC)	Stucco Patch	11/19/2024	0	55.98
		Vendor Subtotal:			55.98
9002-90-9020-44204	PLUMB SUPPLY COMPANY	Spud	11/15/2024	0	6.89
		Vendor Subtotal:			6.89
9002-90-9020-44205	AMAZON.COM	Light Ballast	11/15/2024	0	61.68
		Vendor Subtotal:			61.68
9002-90-9020-44206	HD SUPPLY FACILITIES MAINT	Bathroom Sink	11/15/2024	0	84.14
9002-90-9020-44206	HD SUPPLY FACILITIES MAINT	Sink	11/19/2024	0	79.19
		Vendor Subtotal:			163.33
9002-90-9020-44206	MENARDS (MUSC)	Nipples	11/15/2024	0	46.43
9002-90-9020-44206	MENARDS (MUSC)	Nipples	11/19/2024	0	13.98
		Vendor Subtotal:			60.41
9002-90-9020-44206	AMAZON.COM	Angle Stop Valve	11/18/2024	0	57.24
		Vendor Subtotal:			57.24
9002-90-9020-44215	AMAZON.COM	No Parking Sign	11/15/2024	0	33.95
		Vendor Subtotal:			33.95
9002-90-9020-44218	AMAZON.COM	Burner	11/15/2024	0	23.98
9002-90-9020-44218	AMAZON.COM	Stove Knobs	11/15/2024	0	56.88

		Vendor Subtotal:		80.86	
9002-90-9020-44301	CITY OF MUSCATINE HOUSING RE Refuse	11/15/2024	0	23.00	
		Vendor Subtotal:		23.00	
9002-90-9020-44302	PHELPS CLEANING SERVICE INC Emergency Water Set Up	11/15/2024	0	1,493.00	
		Vendor Subtotal:		1,493.00	
9002-90-9020-44313	ZACK STUMBO Lawn Care	11/15/2024	0	120.00	
		Vendor Subtotal:		120.00	
9002-90-9020-44317	TRI-STATE AUTOMATIC SPRINKLECH Sprinkler Repairs: Replace Leaking	11/15/2024	0	1,850.00	00028058
9002-90-9020-44317	TRI-STATE AUTOMATIC SPRINKLECH Sprinkler Repairs: Replace Leaking	11/15/2024	0	1,753.42	
9002-90-9020-44317	TRI-STATE AUTOMATIC SPRINKLE Sprinkler Inspection	11/19/2024	0	567.00	
		Vendor Subtotal:		4,170.42	
9002-90-9020-45103	CITY OF MUSCATINE HOUSING RE Unemployment 11/8/24	11/15/2024	0	3.21	
		Vendor Subtotal:		3.21	
9002-90-9020-45401	CITY OF MUSCATINE HOUSING RE FICA 11/8/24	11/15/2024	0	473.33	
		Vendor Subtotal:		473.33	
9002-90-9020-45402	CITY OF MUSCATINE HOUSING RE IPERS 11/8/24	11/15/2024	0	591.90	
		Vendor Subtotal:		591.90	
9002-90-9020-75200	CARRIAGE HOUSE CARPET ONE CH 314 Flooring Rehab Materials: Pressu	11/19/2024	0	189.00	00029067
9002-90-9020-75200	CARRIAGE HOUSE CARPET ONE CH 314 Flooring Rehab Materials: CB80	11/19/2024	0	317.50	00029067
9002-90-9020-75200	CARRIAGE HOUSE CARPET ONE CH 314 Flooring Rehab Materials: Covel	11/19/2024	0	39.98	00029067
9002-90-9020-75200	CARRIAGE HOUSE CARPET ONE CH 314 Flooring Rehab Materials: Planij	11/19/2024	0	98.97	00029067
9002-90-9020-75200	CARRIAGE HOUSE CARPET ONE CH 314 Flooring Rehab Labor per: Instal	11/19/2024	0	1,410.50	00029068
9002-90-9020-75200	CARRIAGE HOUSE CARPET ONE CH 314 Flooring Rehab Labor per: Floo	11/19/2024	0	200.00	00029068

9002-90-9020-75200	CARRIAGE HOUSE CARPET ONE	CH 314 Flooring Rehab Labor per: Instal	11/19/2024	0	254.00 00029068
		Vendor Subtotal:			2,509.95
9002-90-9020-75200	CARVER CONSTRUCTION	CH 510 Cabinet Install: 5 Uppers and 5 I	11/15/2024	0	900.00 00028905
9002-90-9020-75200	CARVER CONSTRUCTION	CH 510 Cabinet Install: Misc. Fasteners :	11/15/2024	0	75.00 00028905
		Vendor Subtotal:			975.00
		Subtotal for FUND: 9002			25,292.70
9006-90-9060-31100	MUSCATINE POWER & WATER	Utility Reimb C Hernandez 2700 D Bloo	11/18/2024	0	119.00
9006-90-9060-31100	MUSCATINE POWER & WATER	Utility Reimb J Fisher 2708 C Blooiming	11/18/2024	0	90.00
9006-90-9060-31100	MUSCATINE POWER & WATER	Utility Reimb A Rios 2708 E Blooimingt	11/18/2024	0	14.00
9006-90-9060-31100	MUSCATINE POWER & WATER	Utility Reimb A Rios 2708 E Blooimingt	11/18/2024	0	112.00
9006-90-9060-31100	MUSCATINE POWER & WATER	Utility Reimb A Carter 2800 A Blooimin	11/18/2024	0	112.00
9006-90-9060-31100	MUSCATINE POWER & WATER	Utility Reimb D Wilson 2804 E Blooimir	11/18/2024	0	44.00
9006-90-9060-31100	MUSCATINE POWER & WATER	Utility Reimb A Huscko 2812 D Blooimi	11/18/2024	0	1.00
9006-90-9060-31100	MUSCATINE POWER & WATER	Utility Reimb A Garren 2812 C Blooimir	11/18/2024	0	73.00
9006-90-9060-31100	MUSCATINE POWER & WATER	Utility Reimb M Krajnik 2900 D Blooim	11/18/2024	0	9.00
9006-90-9060-31100	MUSCATINE POWER & WATER	Utility Reimb M Yerington 2904 E Blooi	11/18/2024	0	24.00
9006-90-9060-31100	MUSCATINE POWER & WATER	Utility Reimb I Sherrill 2908 C Blooimin	11/18/2024	0	143.00
		Vendor Subtotal:			741.00
9006-90-9060-41100	CITY OF MUSCATINE HOUSING RE Admin Full-Time Wages 11/8/24		11/15/2024	0	1,889.41
9006-90-9060-41100	CITY OF MUSCATINE HOUSING RE Admin Part-Time Wages 11/8/24		11/15/2024	0	122.72
9006-90-9060-41100	CITY OF MUSCATINE HOUSING RE Admin Longevity 11/8/24		11/15/2024	0	3.90
		Vendor Subtotal:			2,016.03
9006-90-9060-41500	CITY OF MUSCATINE HOUSING RE Auto Allowance 11/8/24		11/15/2024	0	25.00
		Vendor Subtotal:			25.00
9006-90-9060-41901	TEMP ASSOCIATES	Temp Employee Week Ending 10/27/24	11/15/2024	0	908.31
		Vendor Subtotal:			908.31

9006-90-9060-41904	CITY OF MUSCATINE HOUSING RE MPW - October Base PRI		11/19/2024	0	6.47
		Vendor Subtotal:			6.47
9006-90-9060-41904	US CELLULAR	October Cell Phones	11/19/2024	0	35.16
		Vendor Subtotal:			35.16
9006-90-9060-41907	IOWA NAHRO	Dues for Muscatine Housing Agency	11/18/2024	0	6.75
9006-90-9060-41907	IOWA NAHRO	Dues for Housing Employees	11/18/2024	0	15.75
		Vendor Subtotal:			22.50
9006-90-9060-41910	CROSSROADS INC.	Shredding	11/15/2024	0	11.00
		Vendor Subtotal:			11.00
9006-90-9060-41914	CITY OF MUSCATINE HOUSING RE MPW - Sept/Oct Machlink		11/19/2024	0	11.16
		Vendor Subtotal:			11.16
9006-90-9060-43100	MUSCATINE POWER & WATER	October Water - 2708 Apt D	11/19/2024	0	17.38
9006-90-9060-43100	MUSCATINE POWER & WATER	October Water - 2700 Apt D	11/15/2024	0	1.74
9006-90-9060-43100	MUSCATINE POWER & WATER	October Water - 2804 Apt C	11/19/2024	0	17.38
9006-90-9060-43100	MUSCATINE POWER & WATER	October Water - 2804 Apt E	11/19/2024	0	19.10
9006-90-9060-43100	MUSCATINE POWER & WATER	October Water - 2704 Apt D	11/19/2024	0	27.68
9006-90-9060-43100	MUSCATINE POWER & WATER	October Water - 2708 Apt E	11/19/2024	0	15.06
9006-90-9060-43100	MUSCATINE POWER & WATER	October Water - 2704 Apt C	11/19/2024	0	19.10
9006-90-9060-43100	MUSCATINE POWER & WATER	October Water - 2704 Apt B	11/19/2024	0	14.49
9006-90-9060-43100	MUSCATINE POWER & WATER	October Water - 2800 Apt E	11/19/2024	0	3.48
		Vendor Subtotal:			135.41
9006-90-9060-43200	MUSCATINE POWER & WATER	October Electric - 2708 Apt D	11/19/2024	0	24.92
9006-90-9060-43200	MUSCATINE POWER & WATER	October Electric - 2700 Apt D	11/15/2024	0	2.42
9006-90-9060-43200	MUSCATINE POWER & WATER	October Electric - 2804 Apt C	11/19/2024	0	25.32
9006-90-9060-43200	MUSCATINE POWER & WATER	October Electric - 2804 Apt E	11/19/2024	0	24.29
9006-90-9060-43200	MUSCATINE POWER & WATER	October Electric - 2704 Apt D	11/19/2024	0	25.42
9006-90-9060-43200	MUSCATINE POWER & WATER	October Electric - 2708 Apt E	11/19/2024	0	20.43
9006-90-9060-43200	MUSCATINE POWER & WATER	October Electric - 2704 Apt C	11/19/2024	0	27.07

9006-90-9060-43200	MUSCATINE POWER & WATER	October Electric - 2704 Apt B	11/19/2024	0	21.38
9006-90-9060-43200	MUSCATINE POWER & WATER	October Electric - 2800 Apt E	11/19/2024	0	4.24
Vendor Subtotal:					175.49
9006-90-9060-43700	ALLIANT ENERGY	October Gas - 2700 Apt B	11/18/2024	0	8.08
Vendor Subtotal:					8.08
9006-90-9060-43900	MUSCATINE POWER & WATER	October Sewer - 2708 Apt D	11/19/2024	0	34.56
9006-90-9060-43900	MUSCATINE POWER & WATER	October Sewer - 2700 Apt D	11/15/2024	0	3.46
9006-90-9060-43900	MUSCATINE POWER & WATER	October Sewer - 2804 Apt C	11/19/2024	0	34.56
9006-90-9060-43900	MUSCATINE POWER & WATER	October Sewer - 2804 Apt E	11/19/2024	0	34.56
9006-90-9060-43900	MUSCATINE POWER & WATER	October Sewer - 2704 Apt D	11/19/2024	0	44.58
9006-90-9060-43900	MUSCATINE POWER & WATER	October Sewer - 2708 Apt E	11/19/2024	0	29.95
9006-90-9060-43900	MUSCATINE POWER & WATER	October Sewer - 2704 Apt C	11/19/2024	0	34.56
9006-90-9060-43900	MUSCATINE POWER & WATER	October Sewer - 2704 Apt B	11/19/2024	0	28.80
9006-90-9060-43900	MUSCATINE POWER & WATER	October Sewer - 2800 Apt E	11/19/2024	0	6.91
Vendor Subtotal:					251.94
9006-90-9060-44100	CITY OF MUSCATINE HOUSING RE Maint Full-Time Wages 11/8/24		11/15/2024	0	2,558.78
9006-90-9060-44100	CITY OF MUSCATINE HOUSING RE Maint Part-Time Wages 11/8/24		11/15/2024	0	1,402.58
9006-90-9060-44100	CITY OF MUSCATINE HOUSING RE Maint Longevity 11/8/24		11/15/2024	0	23.40
Vendor Subtotal:					3,984.76
9006-90-9060-44201	MENARDS (MUSC)	ZEP	11/19/2024	0	14.03
Vendor Subtotal:					14.03
9006-90-9060-44201	AMAZON.COM	Dawn/Mop Pads	11/15/2024	0	98.09
Vendor Subtotal:					98.09
9006-90-9060-44202	CITY OF MUSCATINE HOUSING RE October Fuel		11/15/2024	0	35.22
9006-90-9060-44202	CITY OF MUSCATINE HOUSING RE September Fuel		11/15/2024	0	64.65
Vendor Subtotal:					99.87

9006-90-9060-44203	MENARDS (MUSC)	Paper Towels/Spray Bottle/Lock Nut/He	11/15/2024	0	94.33
		Vendor Subtotal:			94.33
9006-90-9060-44204	MENARDS (MUSC)	SS 2800E Rear Entry Door: Mastercraft®	11/19/2024	0	314.60 00029226
9006-90-9060-44204	MENARDS (MUSC)	Case Set	11/19/2024	0	39.99
		Vendor Subtotal:			354.59
9006-90-9060-44204	AMAZON.COM	Faucet Parts	11/15/2024	0	95.35
9006-90-9060-44204	AMAZON.COM	SS Interior Door Handles: Privacy Lever:	11/19/2024	0	217.84 00029225
		Vendor Subtotal:			313.19
9006-90-9060-44205	MENARDS (MUSC)	Outlet Plate/Bulb	11/19/2024	0	17.02
9006-90-9060-44205	MENARDS (MUSC)	Lights	11/15/2024	0	92.75
		Vendor Subtotal:			109.77
9006-90-9060-44205	AMAZON.COM	Wireless Light Switch	11/15/2024	0	73.55
		Vendor Subtotal:			73.55
9006-90-9060-44206	AMAZON.COM	Delta Faucet	11/19/2024	0	76.39
		Vendor Subtotal:			76.39
9006-90-9060-44207	MENARDS (MUSC)	Orange Peel Spray/Texture	11/19/2024	0	89.78
		Vendor Subtotal:			89.78
9006-90-9060-44208	AMAZON.COM	SS Bath Fan Parts Stock: Packard 50584	11/19/2024	0	190.92 00029111
9006-90-9060-44208	AMAZON.COM	SS Bath Fan Parts Stock: Broan S991004	11/19/2024	0	99.96 00029111
9006-90-9060-44208	AMAZON.COM	SS Bath Fan Parts Stock: 99020014 Exhaust	11/19/2024	0	146.80 00029111
		Vendor Subtotal:			437.68
9006-90-9060-44218	AMAZON.COM	Electric Burner Replacement	11/15/2024	0	23.98

		Vendor Subtotal:		23.98
9006-90-9060-44301	CITY OF MUSCATINE HOUSING RE Refuse	11/15/2024	0	83.40
		Vendor Subtotal:		83.40
9006-90-9060-44308	KELLY HEATING COOLING & PLBC Service Call 2700 B	11/19/2024	0	85.00
		Vendor Subtotal:		85.00
9006-90-9060-44311	KELLY HEATING COOLING & PLBC Sewer Backup	11/19/2024	0	360.00
9006-90-9060-44311	KELLY HEATING COOLING & PLBC Clean Pipe	11/19/2024	0	165.55
		Vendor Subtotal:		525.55
9006-90-9060-44312	NELSON ELECTRIC INC Replace Breaker	11/18/2024	0	207.36
		Vendor Subtotal:		207.36
9006-90-9060-44315	TRI-STATE AUTOMATIC SPRINKLE Sprinkler Inspection	11/15/2024	0	48.00
		Vendor Subtotal:		48.00
9006-90-9060-44315	RIVERBEND MAINTENANCE LLC SS 2800E Paint: Walls	11/18/2024	0	700.00 00029045
		Vendor Subtotal:		700.00
9006-90-9060-45103	CITY OF MUSCATINE HOUSING RE Unemployment 11/8/24	11/15/2024	0	4.41
		Vendor Subtotal:		4.41
9006-90-9060-45401	CITY OF MUSCATINE HOUSING RE FICA 11/8/24	11/15/2024	0	453.03
		Vendor Subtotal:		453.03
9006-90-9060-45402	CITY OF MUSCATINE HOUSING RE IPERS 11/8/24	11/15/2024	0	566.45

Vendor Subtotal:				566.45	
Subtotal for FUND: 9006				12,790.76	
9007-90-9070-41100	CITY OF MUSCATINE HOUSING RE Admin Full-Time Wages 11/8/24	11/15/2024	0	5,460.41	
9007-90-9070-41100	CITY OF MUSCATINE HOUSING RE Admin Part-Time Wages 11/8/24	11/15/2024	0	981.77	
9007-90-9070-41100	CITY OF MUSCATINE HOUSING RE Admin Longevity 11/8/24	11/15/2024	0	13.33	
Vendor Subtotal:				6,455.51	
9007-90-9070-41500	CITY OF MUSCATINE HOUSING RE Auto Allowance 11/8/24	11/15/2024	0	12.50	
Vendor Subtotal:				12.50	
9007-90-9070-41500	TCM BANK NA VISA	Smash Park - Meal Chelsea	11/19/2024	0	23.42
9007-90-9070-41500	TCM BANK NA VISA	Smash Park - Meal Elibeth	11/19/2024	0	24.67
9007-90-9070-41500	TCM BANK NA VISA	Smash Park - Meal Melissa	11/19/2024	0	23.42
9007-90-9070-41500	TCM BANK NA VISA	Smash Park - Meal Stephanie	11/19/2024	0	19.99
9007-90-9070-41500	TCM BANK NA VISA	Hyatt Place - Lodging Chelsea	11/19/2024	0	244.16
9007-90-9070-41500	TCM BANK NA VISA	Hyatt Place - Lodging Elibeth	11/19/2024	0	244.16
9007-90-9070-41500	TCM BANK NA VISA	Hyatt Place - Lodging Stephanie	11/19/2024	0	244.16
9007-90-9070-41500	TCM BANK NA VISA	Hyatt Place - Lodging Melissa	11/19/2024	0	244.16
9007-90-9070-41500	TCM BANK NA VISA	Chick-Fil-A - Meal Chelsea	11/19/2024	0	6.09
9007-90-9070-41500	TCM BANK NA VISA	Chick-Fil-A - Meal Elibeth	11/19/2024	0	10.49
9007-90-9070-41500	TCM BANK NA VISA	Chick-Fil-A - Meal Stephanie	11/19/2024	0	13.32
9007-90-9070-41500	TCM BANK NA VISA	Chick-Fil-A - Meal Melissa	11/19/2024	0	10.75
9007-90-9070-41500	TCM BANK NA VISA	Zombie Burger - Meal Stephanie	11/19/2024	0	11.33
9007-90-9070-41500	TCM BANK NA VISA	Zombie Burger - Meal Melissa	11/19/2024	0	17.39
9007-90-9070-41500	TCM BANK NA VISA	Zombie Burger - Meal Chelsea	11/19/2024	0	16.04
9007-90-9070-41500	TCM BANK NA VISA	Smash Burger - Meal Melissa	11/19/2024	0	13.74
9007-90-9070-41500	TCM BANK NA VISA	Smash Burger - Meal Chelsea	11/19/2024	0	19.99
9007-90-9070-41500	TCM BANK NA VISA	Smash Burger - Meal Elibeth	11/19/2024	0	14.19
9007-90-9070-41500	TCM BANK NA VISA	Smash Burger - Meal Stephanie	11/19/2024	0	19.54
Vendor Subtotal:				1,221.01	
9007-90-9070-41902	ADVANCED BUSINESS SYSTEMS IT Copier	11/18/2024	0	15.54	
Vendor Subtotal:				15.54	

9007-90-9070-41904	CITY OF MUSCATINE HOUSING RE MPW - October Base PRI		11/19/2024	0	51.74
	Vendor Subtotal:				51.74
9007-90-9070-41907	IOWA NAHRO	Dues for Muscatine Housing Agency	11/18/2024	0	54.00
9007-90-9070-41907	IOWA NAHRO	Dues for Housing Employees	11/18/2024	0	126.00
	Vendor Subtotal:				180.00
9007-90-9070-41907	TCM BANK NA VISA	Canva - Subscription	11/19/2024	0	179.99
	Vendor Subtotal:				179.99
9007-90-9070-41910	CROSSROADS INC.	Shredding	11/15/2024	0	22.00
	Vendor Subtotal:				22.00
9007-90-9070-41914	CITY OF MUSCATINE HOUSING RE MPW - Sept/Oct Machlink		11/19/2024	0	89.26
	Vendor Subtotal:				89.26
9007-90-9070-45103	CITY OF MUSCATINE HOUSING RE Unemployment 11/8/24		11/15/2024	0	3.28
	Vendor Subtotal:				3.28
9007-90-9070-45401	CITY OF MUSCATINE HOUSING RE FICA 11/8/24		11/15/2024	0	475.02
	Vendor Subtotal:				475.02
9007-90-9070-45402	CITY OF MUSCATINE HOUSING RE IPERS 11/8/24		11/15/2024	0	609.43
	Vendor Subtotal:				609.43
9007-90-9070-47150	NATIVIDAD SANTANA	New HAP A Ramirez 11 of 31 Days Oct	11/19/2024	0	152.00
	Vendor Subtotal:				152.00

9007-90-9070-47150	THERESA HANSON	New HAP L Brierly 23 of 30 Days Novem	11/19/2024	0	342.00
		Vendor Subtotal:			342.00
9007-90-9071-41100	CITY OF MUSCATINE HOUSING RE Admin Full-Time Wages 11/8/24		11/15/2024	0	2,040.80
		Vendor Subtotal:			2,040.80
9007-90-9071-41500	TCM BANK NA VISA	Omni - Lodging E Cruz	11/19/2024	0	684.68
9007-90-9071-41500	TCM BANK NA VISA	Omni - Lodging E Cruz Refund	11/19/2024	0	-200.00
		Vendor Subtotal:			484.68
9007-90-9071-41904	TCM BANK NA VISA	Google - Google Voice	11/19/2024	0	29.14
		Vendor Subtotal:			29.14
9007-90-9071-41911	NEXTGEN MOTORS	Elliott Car Repairs	11/15/2024	0	1,000.00
		Vendor Subtotal:			1,000.00
9007-90-9071-45401	CITY OF MUSCATINE HOUSING RE FICA 11/8/24		11/15/2024	0	148.83
		Vendor Subtotal:			148.83
9007-90-9071-45402	CITY OF MUSCATINE HOUSING RE IPERS 11/8/24		11/15/2024	0	192.64
		Vendor Subtotal:			192.64
		Subtotal for FUND: 9007			13,705.37
		Report Total:			1,299,133.97

11/8/2024	ACH PAYROLL	MISSION SQUARE ICMA RETIRE	14,488.37
11/8/2024	ACH PAYROLL	MISSION SQUARE ICMA RC	1,816.29
11/8/2024	ACH PAYROLL	MUNICIPAL FIRE & POLICE	84,756.54
11/8/2024	ACH PAYROLL	NATIONWIDE	4,675.00
11/8/2024	PAYROLL CHECKS	AFA FLEX BILLING	5,143.44
11/8/2024	PAYROLL CHECKS	AFLAC	549.16
11/8/2024	PAYROLL CHECKS	ALLSTATE	14.94
11/8/2024	PAYROLL CHECKS	AMERICAN FIDELITY	3,122.30
11/8/2024	PAYROLL CHECKS	CITY OF MUSCATINE	7,461.93
11/8/2024	PAYROLL CHECKS	CLERK OF COURT	130.00
11/8/2024	PAYROLL CHECKS	POLICE & FIRE INS	194.94
11/8/2024	PAYROLL CHECKS	POLK CO SHERIFF	587.45
11/8/2024	PAYROLL CHECKS	STATE OF IL	198.40
11/8/2024	PAYROLL CHECKS	UNITED WAY	83.00
11/8/2024	SPECIAL CHECKS	HELEN COOPER	20.75
11/8/2024	SPECIAL CHECKS	ECS INC	35.00
11/8/2024	SPECIAL CHECKS	PATTI FULLER-BLOECHL	50.00
11/8/2024	SPECIAL CHECKS	SAM KOESTER	100.00
11/8/2024	SPECIAL CHECKS	LINDSEY KRAUSHAAR	35.00
11/8/2024	SPECIAL CHECKS	ALEX LONGHURST	220.00
11/8/2024	SPECIAL CHECKS	WILILAM MATHIS	27.00
11/8/2024	SPECIAL CHECKS	QUAD CITIES COUNCIL	250.00
11/8/2024	SPECIAL CHECKS	JEFF RICHARD	25.00
11/8/2024	SPECIAL CHECKS	JOSEPH OR ANNETTE ROHAN	414.46
11/8/2024	SPECIAL CHECKS	DREA SHANNON	10.00
11/8/2024	SPECIAL CHECKS	LAUREN STREET	6.25
11/8/2024	SPECIAL CHECKS	CAROL WEBB	65.53
11/8/2024	SPECIAL CHECKS	MATT WHITLOW	7.00
11/8/2024	SPECIAL CHECKS	DHSR	3,345.00
11/8/2024	SPECIAL CHECKS	REAL ESTATE RESOURCE	3,080.00
11/15/2024	SPECIAL CHECKS	ATLAS COMMUNITY STUDIO	7,888.13
11/15/2024	SPECIAL CHECKS	TIM GORDON	109.99
11/19/2024	SPECIAL CHECKS	JASON SELL	6,072.50
11/19/2024	SPECIAL CHECKS	CHAD WISHAM	125.00



City of Muscatine

ITEM NUMBER 2024-0463

AGENDA ITEM SUMMARY

DATE: 11/21/2024

STAFF

Nancy Lueck, Finance Director

SUBJECT

Request to Waive Third Reading and to Adopt on Second and Final Reading an Ordinance Amending Title 7, Chapter 9 of the City Code of Muscatine, Iowa - Parking Meters and Rates.

EXECUTIVE SUMMARY

At the October 9, 2024, In Depth meeting, staff provided an overview of Parking Apps considered by staff and the criteria used to evaluate these systems. Staff recommended the mPay2Park system by Net Tech. Net Tech is the City's vendor for the current Parking hand-held devices and the parking software system. There was a consensus of the City Council to proceed with entering into an agreement with this vendor for this system and to begin the steps necessary to implement this system, including establishing new rates for parking meter fees. The City Council approved the agreement for the mPay2Park system at the October 17 meeting.

Section 7-9-6, of the City Code of Muscatine provides the Council may by Resolution from time to time establish the rates for parking or standing a vehicle in a designated space in an on-street parking zone and Section 7-9-7 provides the City Council may from time to time establish the parking rate for off-street parking meter spaces. The Resolution that is also included on the agenda for the November 7, 2024, meeting includes the following changes for: (1) increasing the fee for 2-hour meters from \$.50 per hour to \$.75 per hour, (2) increasing the fee for 10-hour meters from \$.25 per hour to \$.40 per hour, (3) increasing the fee for meter hood rentals from \$4.00 per day to \$5.00 per day to correspond with the meter fee increases, (4) implementing the mPay2Park App as an option for parking customers to pay parking meter fees, (5) providing for the convenience fee per transaction for parking customers using the mPay2Park App to be paid by the parking customer (currently \$.35 per transaction), and (6) that seldom-used meters 7L115, 7L116, and 7L117 in Parking Lot 7 be removed, and these spaces be changed to leased parking spaces.

While most of the changes to implement the mPay2:Park Parking App can be made by Resolution, Title 7, Chapter 9, of the City Code also needs to be updated. The City Code ordinance changes are primarily for: (1) language changes from coin-only operation of parking

meters to "coin or other approved forms of payment", and (2) changes from parking meter expiration only showing on the parking meters to "meter expiration showing on the meters or other electronic devices".

STAFF RECOMMENDATION

Staff recommends the first reading of this ordinance be approved at the November 7, 2024 meeting. It is requested that City Council consider waiving the 3rd reading, and approving this ordinance on the 2nd and final reading at the November 21, 2024 meeting.

BACKGROUND/DISCUSSION

After the May 2024 In Depth meeting, City Council directed staff to evaluate Parking App vendors in lieu of the proposal to replace the existing parking meters with those that would accept multiple forms of payment. Staff had at least 5 vendors provide demonstrations of their systems – this included Park Mobile, Passport, Park Hub, POM Pay (still in development), and Net Tech’s mPay2Park systems. Other parking app vendors have also contacted the City.

With these demonstrations, staff gained knowledge about common features of these systems and determined the important factors for the City of Muscatine in evaluating the systems, including:

1. Costs to be paid to the parking vendors per transaction
2. Potential costs to the City for credit/debit card fees
3. How easy the systems were for the parking users
4. Impact to the Meter Attendants for parking enforcement
5. How the systems would integrate with the current hand-held ticket devices
6. Rates that would be needed to cover the cost of implementing the parking app system

After review of the demonstrations, staff recommended the mPay2Park system by Net Tech. Net Tech is the City’s vendor for the Parking hand-held devices and parking software system.

1. The mPay2Park system has a fee of \$.35 per transaction to be paid by the customer – this fee includes the credit/debit card fees (most other systems had a fee per transaction paid to the vendor, with the fees for accepting credit/debt cards as an additional fee or cost to be paid by the City). The City can set lower rates with this system than with the other systems.

2. Two stickers will be provided by the vendor for each meter: (1) one will have the meter number and the Parking Zone number and also include a QR code with this information, (2) the other will have instructions for accessing this system. No large signs are needed since the Zone number and meter number are on the stickers on each meter – this should make it easier for users to locate zone numbers, etc.

3. Users can request to be sent a notification 5 or 10 minutes before the time expires. They can extend the time on the meters remotely (with an additional \$.35 transaction fee). Time cannot be extended beyond the limits allowed for each space (i.e. 2-hour meters could not be

extended over that limit).

4. Meter attendants can bring up in their hand-held devices, the parking spaces that have been paid for using this App. Since it's the same vendor, they can readily switch from viewing the spaces that have been paid for by the App, and the feature on the hand-held to issue parking tickets. (Other vendors indicated that they could make their systems integrate with our hand-held devices, however, it would likely involve special programming.)

Costs to the City to implement the system would include:

1. Adding Internet access to the current hand-held devices (\$480 annually for each device)
2. Lease of a wand to change meter rates (\$550)

The current parking meter rates of \$.50 per hour for 2-hour meters and \$.25 per hour for 10-hour meters were effective July 1, 2013. Since July 1, 2013, the Consumer Price Index has increased by 34.4%. Staff proposed to increase these rates to \$.75 per hour for 2-hour meters and \$.40 per hour for 10-hour meters. This proposed increase will fund the inflationary cost increases since 2013 as well as the additional costs for the Parking App system (Internet service, etc.). (With most of the other systems, rate increases to \$1.00/hour for 2-hour and \$.50 for 10-hour meters would have likely been needed.)

At the October 9, 2024, In Depth meeting, there was a consensus of the City council to proceed with implementation of the mPay2Park system and to implement the rates proposed by staff. The City Council approved the agreement for the mPay2Park system at the October 17 meeting.

Section 7-9-6, of the City Code of Muscatine provides the Council may by Resolution from time to time establish the rates for parking or standing a vehicle in a designated space in an on-street parking zone and Section 7-9-7 provides the City Council may from time to time establish the parking rate for off-street parking meter spaces. The Resolution that is also included on the agenda for the November 7, 2024, meeting includes the following changes for: (1) increasing the fee for 2-hour meters from \$.50 per hour to \$.75 per hour, (2) increasing the fee for 10-hour meters from \$.25 per hour to \$.40 per hour, (3) increasing the fee for meter hood rentals from \$4.00 per day to \$5.00 per day to correspond with the meter fee increases, (4) implementing the mPay2Park App as an option for parking customers to pay parking meter fees, (5) providing for the convenience fee per transaction for parking customers using the mPay2Park App to be paid by the parking customer (currently \$.35 per transaction), and (6) that seldom-used meters 7L115, 7L116, and 7L117 in Parking Lot 7 be removed, and these spaces be changed to leased parking spaces.

While most of the changes to implement the mPay2:Park Parking App can be made by Resolution, Title 7, Chapter 9, of the City Code also needs to be updated. The City Code ordinance changes are primarily for: (1) language changes from coin-only operation of parking meters to "coin or other approved forms of payment", and (2) changes from parking meter expiration only showing on the parking meters to "meter expiration showing on the meters or

other electronic devices".

CITY FINANCIAL IMPACT

There will be minimal additional expenses to the City for the mPay2Park Parking App. This includes adding Internet service to the hand-held parking enforcement devices (\$1,000 per year) and leasing a wand to change parking rates. The new meter rates will fund these additional costs and will also fund the Parking fund operating deficits budgeted for the last several years.

ATTACHMENTS

1. Ord_2024-0463 (3)

**CITY OF MUSCATINE
ORDINANCE 2024-0463**

**AN ORDINANCE AMENDING TITLE 7, CHAPTER 9 OF THE CITY CODE OF
MUSCATINE, IOWA - PARKING METERS AND RATES**

WHEREAS, the City Council for the City of Muscatine, Iowa, has established the use of parking meters in order to set and enforce time limits for parking in each metered space in the downtown parking zone; and

WHEREAS, the City's parking meters currently only accept coin payments; and

WHEREAS, the City Council is adding the mPay2Park Parking App as an option for parking customers to use to pay for metered spaces; and

WHEREAS, the City Code currently only provides for coin payments and City Code language revisions are needed to add the Parking App option.

NOW THEREFORE, be it ordained by the City Council of the City of Muscatine, in the State of Iowa, as follows:

SECTION 1: **AMENDMENT** “7-9-1 Definitions” of the Muscatine Municipal Code is hereby *amended* as follows:

A M E N D M E N T

7-9-1 Definitions

For the purpose of this Chapter, the following terms shall have the meanings respectively ascribed to them in this section:

- A. "Operator" shall mean any individual who shall operate a vehicle as the owner thereof, or as the agent, employee, or permittee of the owner, or is in actual physical control of a vehicle.
- B. "Park or Parking" shall mean the standing of a vehicle, whether occupied or not, upon a street other than temporarily for the purpose of, and while actually engaged in, receiving or discharging passengers or loading or unloading merchandise in non-handicap designated parking spaces, or in obedience to traffic regulations, signs, or signals, or an involuntary stopping of the vehicle by reason of causes beyond the control of the operator of the vehicle.
- C. "Parking Meter" shall mean any mechanical device or meter not inconsistent with this Chapter placed or erected for the regulation of parking by authority of this Chapter. Each parking meter installed shall indicate by proper legend the legal parking time limit established by the Council. ~~and, when operated, shall at all times indicate the~~

~~balance of legal parking time, and at the expiration of such period shall indicate illegal or overtime parking.~~

- D. "Parking Meter Space" shall mean any space within the downtown parking zone adjacent to a parking meter and which is duly designated for the parking of a single vehicle by lines painted or otherwise durably marked on the curb or on the surface of the streets adjacent to or adjoining the parking meters.
- E. "Parking Zone" shall mean any restricted street upon which parking meters are installed and in operation or parking time restrictions are established by resolution of City Council and designated by signage.
- F. "Street" shall mean any public street, avenue, road, alley, highway, lane, path, or other public place established for the use of vehicles.
- G. "Vehicle" shall mean any device in, upon, or by which any person or property is or may be transported upon a highway, except a device which is operated upon rails or tracks.
- H. "Leased or Reserved Parking Space" shall mean any space within a parking zone which is duly designated as such for the parking of a single vehicle within an area designated by lines painted or otherwise durably marked on the curb or on the surface of the street or parking lot.

SECTION 2: **AMENDMENT** "7-9-3 Installation And Construction; Control And Maintenance Of Meters" of the Muscatine Municipal Code is hereby *amended* as follows:

AMENDMENT

7-9-3 Installation And Construction; Control And Maintenance Of Meters

The City Administrator, or his or her designate, shall cause parking meters to be installed upon the curb or sidewalk immediately adjacent to the parking spaces in the parking zones established by Section 7-9-4 of the City Code, such installation to be placed not more than two feet (2') from the curb nor more than four feet (4') from the front line of the parking spaces as indicated, and the City Administrator, or his or her designate, shall be responsible for the regulation, control, operation, maintenance, and use of such parking meters. Each device shall be so set as to display a signal showing legal parking upon the deposit of the appropriate coin or coins, lawful money of the United States of America, or other approved forms of payment, for the period of time prescribed by resolution of Council. ~~Each device shall be so arranged that upon the expiration of the lawful time limit it will indicate by proper visible signal that the lawful parking period has expired, and in such cases, the right of such vehicle to occupy such space shall cease and the operator, owner, possessor, or manager thereof shall be subject to the penalties hereinafter provided.~~

SECTION 3: AMENDMENT “7-9-5 Coin Operation Of Meters” of the Muscatine Municipal Code is hereby *amended* as follows:

A M E N D M E N T

7-9-5 Coin ~~Operation~~ and Other Approved Forms of Payment for the Operation Of Meters

Except in a period of emergency determined by an officer of the Fire Department or Police Department, or in compliance with the directions of a Police Officer or traffic control sign or signal, when any vehicle shall be parked in any parking space alongside of or next to which a parking meter is located, the operator of such vehicle shall, upon entering the parking meter space, immediately deposit or cause to be deposited in that meter such proper coin or coins of the United States of America, or to make other approved forms of payment as is required for that parking meter and is designated by proper directions on the meter. Failure to deposit such proper coin, ~~or coins,~~ or to make other approved forms of payment shall constitute a violation of this Chapter. Upon the deposit of such coin, ~~or coins,~~ or other approved forms of payment, ~~and the setting of the timing mechanism in operation when so required,~~ the parking space may be lawfully occupied by such vehicle during the period of time which has been prescribed for the part of the street in which such parking space is located; provided, that any person placing a vehicle in a parking meter space adjacent to a meter which indicates that unused time has been left in the meter by the previous occupant of the space shall not be required to deposit a coin, ~~or coins,~~ or other approved forms of payment so long as his or her occupancy of such space does not exceed the indicated unused parking time. If such vehicle shall remain parked in any such parking space beyond the parking time limit set for such parking space, and if the meter or other electronic device shall indicate such illegal parking, then, and in that event, such vehicle shall be considered as parking overtime and beyond the period of legal parking time and such parking shall be deemed a violation of this Chapter.

SECTION 4: AMENDMENT “7-9-6 On-Street Meter Rates And On Street Parking Restrictions” of the Muscatine Municipal Code is hereby *amended* as follows:

A M E N D M E N T

7-9-6 On-Street Meter Rates ~~And~~ and On Street Parking Restrictions

Parking or standing a vehicle in a designated parking meter space in an on-street parking zone shall be lawful upon the deposit of coins of the United States of America or making other approved forms of payment as established by resolution adopted from time to time by the City Council.

A vehicle may be parked only once in an on-street parking stall in the downtown parking zone for any time period up to the maximum parking time limit as indicated on the parking meter or

by appropriate signs, after which the vehicle shall be moved from that parking stall. A vehicle moved from the parking stall may not be parked in that same parking stall during the next consecutive eight (8) hour period even though the vehicle was parked for less than the maximum parking time limit.

SECTION 5: **AMENDMENT** “7-9-8 Hours Meters And Lots To Be Operated” of the Muscatine Municipal Code is hereby *amended* as follows:

AMENDMENT

7-9-8 Hours Meters And Lots To Be Operated

- A. Parking meters shall be operated in the parking zones established by Section 7-9-4 of the City Code, every day, except Saturdays, Sundays and holidays, between the hours of eight o'clock (8:00) A.M. and five o'clock (5:00) P.M.
- B. As used in this Section, the term “holiday” shall mean the days which are declared to be legal holidays for City employees under Title 1-15-8, of the City Code. When the holiday falls on a Saturday, the holiday will be observed on Friday. If the holiday falls on Sunday, the holiday will be observed on Monday.
- C. The Council may, by resolution from time to time determine the length of time that parking is permissible at both an individual parking space for which a meter is installed ~~upon the deposit of such coin or coins of United States of America in the parking meter~~ as herein provided; and the unmetered parking spaces with time limits.
- D. Vehicles shall not be parked in designated parking spaces in Lot #2, Lot #4, Lot #8, and on Second Street, which are not parking meter spaces beyond the length of time provided by resolution according to Section 7-9-8(C) and vehicles shall not be parked in more than one such parking space in either Lot #2, Lot #4, or Lot #8 during any consecutive twenty four (24) hour period.
- E. The Council may, by resolution from time to time establish the rate and hours of operation for leased or reserved parking spaces.

SECTION 6: **AMENDMENT** “7-9-9 Parking Meter Violations; Expired Meter, Overtime Parking” of the Muscatine Municipal Code is hereby *amended* as follows:

AMENDMENT

7-9-9 Parking Meter Violations; Expired Meter, Overtime Parking

- A. **Evidence.** Parking is prohibited in any parking space on a street or in a municipal parking lot where a meter is installed and displays a signal showing that the parking is not permitted unless a deposit of such coin or coins of the United States of America or

other forms of approved payment is made as herein provided. Any vehicle parking in violation shall be deemed illegally parked. The fact that a vehicle is in an individual parking space when the time signal on the parking meter of the same or in other parking devices shows no parking permitted unless a deposit of a proper coin or other forms of approved payments is made as herein provided shall be deemed prima face evidence of the unlawful parking of such motor vehicle by its operator or owner.

- B. **Overtime Parking, Extending Time.** It shall be unlawful and a violation of the provisions of this Chapter for any person to cause, allow, permit, or suffer any vehicle registered in the name of or operated by such person to be parked overtime, or beyond the period of legal parking time established for any parking space as described in this Chapter or to deposit in any parking meter any coin for the purpose of parking beyond the maximum legal parking time for the particular parking zone.
- C. **Expired Meter.** It shall be unlawful for any person to permit any vehicle to remain or be placed in any parking space adjacent to any parking meter ~~while such meter~~ or other parking device, is displaying a signal indicating that the vehicle occupying such parking space has already been parked beyond the period prescribed for such parking space.
- D. **Separate Offenses.** Each consecutive hour during one calendar day that a vehicle remains illegally parked as above provided shall be a separate and distinct offense under this Chapter. The first offense shall terminate one hour after the time a ticket charging said offense is issued, which time shall be noted on the ticket, and a separate and new offense shall occur during each one hour period thereafter.
- E. **To Park Within Marked Lines.** It shall be unlawful for any person to park any vehicle across any line or marking of a parking meter space or in such position that the vehicle shall not be entirely within the area designated by such lines or markings.
- F. **Tampering with Meters.** It shall be unlawful for any person to deface, injure, tamper with, open or willfully break, destroy, or impair the usefulness of any parking meter installed under the provisions of this Chapter.

SECTION 7: AMENDMENT “7-9-11 Parking Meter Funds” of the Muscatine Municipal Code is hereby *amended* as follows:

AMENDMENT

7-9-11 Parking Meter Funds

The coins deposited in parking meters and funds collected through other forms of payment are required and shall be used to defray the expense of proper regulation of traffic upon the public streets; to provide for the cost of supervision, regulation, and control of the parking of vehicles in parking zones; and to cover the cost of purchase, supervision, protection, inspection, installation, operation, maintenance, control, and use of parking meters and other parking and traffic control devices. Any of such funds remaining thereafter may be used either to purchase, lease, or otherwise acquire parking lots or other off-street parking areas for the parking of

vehicles; or such remaining funds may be used for the retirement of revenue bonds issued for the purpose of acquiring, improving, maintaining, or operating parking lots or other off-street parking areas for the parking of vehicles, in the event the revenue from such parking lots or other off-street parking areas for the parking of vehicles is insufficient to pay the cost of retiring such bonds and for any other lawful purpose permitted by the Code of Iowa. If the parking enterprise has a surplus in its fund, then this surplus may be transferred to any other city fund, by resolution of the City Council.

PASSED AND ADOPTED BY THE CITY OF MUSCATINE CITY COUNCIL

Presiding Officer

Attest

Dr. Brad Bark, Mayor, City of
Muscatine

Cinda Hilger, Deputy City Clerk, City
of Muscatine



City of Muscatine

ITEM NUMBER 2024-0511

AGENDA ITEM SUMMARY

DATE: 11/21/2024

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 \$9,801.53, the administrative fees are \$6,500.00, and the assessment fees are \$2,900.00. The total amount being requested for assessment at this time totals \$19,201.53.

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 and vegetation violations at the properties listed on the attachment. Dates of service are from July 2024 to August 2024. 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 September 2024. 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 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 11.21.2024
2. Council Resolution Special Assessments 11.21.2024

SPECIAL ASSESSMENTS REPORT 11/21/2024 - PAGE 1

Parcel ID	Site Address	Owner Name	Date of Work	Type	Service Fee	Admin Fee	Assess Fee	Total Fee
1303480011	709 Grandview Ave	Arg Wo9pslb001 LLC	08/07/2024	Vegetation - Grass/Weeds	\$423.25	\$150.00	\$50.00	\$623.25
0835281007	805 Oak St	Arrowood Tyler or Alyssa	08/22/2024	Vegetation - Grass/Weeds	\$481.00	\$75.00	\$50.00	\$606.00
0835333023	403 W 8th St	Causey Christopher R	08/21/2024	Vegetation - Trees/Shrubs	\$96.00	\$150.00	\$50.00	\$296.00
0834201014	1816 Logan St	Cedar Park Preservation	08/28/2024	Nuisance	\$142.70	\$75.00	\$50.00	\$267.70
0835385003	608 W 7th St	Chavez Teresa	07/18/2024	Vegetation - Grass/Weeds	\$153.75	\$150.00	\$50.00	\$353.75
0835201009	1318 Oak St	Cox Timothy	08/03/2024	Vegetation - Grass/Weeds	\$57.75	\$75.00	\$50.00	\$182.75
0835409011	510 Walnut St	Dhg Construction LLC	08/06/2024	Nuisance	\$38.50	\$75.00	\$50.00	\$163.50
1303128002	507 Lowe St	Elliott Aaron S	07/29/2024	Vegetation - Grass/Weeds	\$1,443.00	\$75.00	\$50.00	\$1,568.00
0834454022	2203 Lucas St	Epperly Glenn M	07/29/2024	Vegetation - Grass/Weeds	\$39.94	\$150.00	\$50.00	\$239.94
0834454022	2203 Lucas St	Epperly Glenn M	08/12/2024	Vegetation - Grass/Weeds	\$39.94	\$150.00	\$50.00	\$239.94
0836202002	1554 Washington St	Federal Home Loan Mortgage Corporation	08/20/2024	Vegetation - Grass/Weeds	\$442.50	\$150.00	\$50.00	\$642.50
0834406009	1513 Devitt Ave	Flores Victor G	07/31/2024	Nuisance	\$137.90	\$75.00	\$50.00	\$262.90
0835153002	711 Roscoe Ave	Ford Olivia	08/23/2024	Vegetation - Grass/Weeds	\$134.50	\$75.00	\$50.00	\$259.50
0836160007	814 E 6th St	Gifford Emily	08/19/2024	Vegetation - Grass/Weeds	\$465.00	\$75.00	\$50.00	\$590.00
0836160007	814 E 6th St	Gifford Emily	08/20/2024	Nuisance	\$123.95	\$75.00	\$50.00	\$248.95
0835333010	817 Fuller St	Gray Aric or O'Campo Gracie	08/13/2024	Nuisance	\$173.30	\$75.00	\$50.00	\$298.30
1303252007	1905 Hershey Ave	Haney Amanda K	08/13/2024	Vegetation - Grass/Weeds	\$211.50	\$150.00	\$50.00	\$411.50
0835252004	1122 Mulberry Ave	Hillman Rob C or Katie V	08/15/2024	Nuisance	\$98.00	\$75.00	\$50.00	\$223.00
0835252004	1122 Mulberry Ave	Hillman Rob C or Katie V	08/30/2024	Vegetation - Grass/Weeds	\$115.50	\$150.00	\$50.00	\$315.50
0825177025	1801 Lincoln Blvd	Hogan Kevin E	09/06/2024	Rental - Failure to Show for Inspection	\$60.00	\$25.00	\$50.00	\$135.00
0827378002	2314 Long Meadow Ln	Hurd-Johnson Nicholas R	09/11/2024	Rental - Failure to Show for Inspection	\$60.00	\$25.00	\$50.00	\$135.00
0834176009	1632 Beach Cir	Jenkins Mendi	07/23/2024	Vegetation - Grass/Weeds	\$78.44	\$150.00	\$50.00	\$278.44
0834176009	1632 Beach Cir	Jenkins Mendi	08/12/2024	Vegetation - Grass/Weeds	\$78.44	\$150.00	\$50.00	\$278.44
1320301007	5111 59th Ave W	JL Watts Co	07/23/2024	Vegetation - Grass/Weeds	\$77.00	\$150.00	\$50.00	\$277.00
0835333007	125 Roscoe Ave	Landa Jennifer or Eduardo	08/12/2024	Vegetation - Grass/Weeds	\$172.70	\$75.00	\$50.00	\$297.70
0835376018	706 Pine St	Liquidator LLC	08/05/2024	Vegetation - Grass/Weeds	\$78.44	\$150.00	\$50.00	\$278.44
0835376018	706 Pine St	Liquidator LLC	08/12/2024	Vegetation - Grass/Weeds	\$39.94	\$150.00	\$50.00	\$239.94
0835303003	515 Hagerman Dr	Martinez Jose G or Maria E	08/22/2024	Vegetation - Trees/Shrubs	\$332.25	\$75.00	\$50.00	\$457.25
0835430001	519 Orange St	Mccormick Jeremy E & Leahey Laura	07/30/2024	Vegetation - Grass/Weeds	\$39.94	\$150.00	\$50.00	\$239.94
0835430001	519 Orange St	Mccormick Jeremy E & Leahey Laura	08/12/2024	Vegetation - Grass/Weeds	\$39.94	\$150.00	\$50.00	\$239.94
1310276009	1815 Schley Ave	Mccormick Timothy M or Mindy S	07/23/2024	Vegetation - Grass/Weeds	\$78.44	\$150.00	\$50.00	\$278.44
1310276009	1815 Schley Ave	Mccormick Timothy M or Mindy S	08/05/2024	Vegetation - Grass/Weeds	\$59.19	\$150.00	\$50.00	\$259.19
1302106002	954 Whicher St	Moore Joshua or Stacie	08/16/2024	Vegetation - Grass/Weeds	\$558.00	\$75.00	\$50.00	\$683.00
1310233009	1114 Nebraska St	Morse Mary F	07/23/2024	Vegetation - Grass/Weeds	\$39.94	\$150.00	\$50.00	\$239.94
1310233009	1114 Nebraska St	Morse Mary F	08/05/2024	Vegetation - Grass/Weeds	\$59.19	\$150.00	\$50.00	\$259.19

SPECIAL ASSESSMENTS REPORT 11/21/2024 - PAGE 2

Parcel ID	Site Address	Owner Name	Date of Work	Type	Service Fee	Admin Fee	Assess Fee	Total Fee
0825276025	825276025	Oak Creek Development Inc	08/05/2024	Vegetation - Grass/Weeds	\$121.25	\$150.00	\$50.00	\$321.25
0825276025	825276025	Oak Creek Development Inc	08/12/2024	Vegetation - Grass/Weeds	\$42.82	\$150.00	\$50.00	\$242.82
0835378027	401 W 7th St	Owens Gregory	08/08/2024	Vegetation - Grass/Weeds	\$173.00	\$150.00	\$50.00	\$373.00
0834279003	408 W Fulliam Ave	Pomeroy Keith	08/21/2024	Vegetation - Grass/Weeds	\$99.13	\$150.00	\$50.00	\$299.13
1310403011	2009 Wallace St	Reinier Edwin F	08/07/2024	Nuisance	\$680.30	\$75.00	\$50.00	\$805.30
0835288003	506 E 8th St	Resca Properties LLC	09/30/2024	Rental - Failure to Show for Inspection	\$60.00	\$25.00	\$50.00	\$135.00
1303452007	2003 Breese Ave	Residential Equity Partners LLC	07/22/2024	Vegetation - Grass/Weeds	\$78.44	\$150.00	\$50.00	\$278.44
1303452007	2003 Breese Ave	Residential Equity Partners LLC	08/05/2024	Vegetation - Grass/Weeds	\$59.19	\$150.00	\$50.00	\$259.19
1303180016	109 Grover St	Rti Investments LLC	09/12/2024	Rental - Third Reinspection	\$120.00	\$25.00	\$50.00	\$195.00
1302307005	304 Liberty St	Rti Investments LLC	09/25/2024	Rental - Third Reinspection	\$120.00	\$25.00	\$50.00	\$195.00
1303431008	402 Evans St	Rti Investments LLC	09/12/2024	Rental - Third Reinspection	\$120.00	\$25.00	\$50.00	\$195.00
0825355003	520 Monroe St	Rti Investments LLC	09/25/2024	Rental - Second Reinspection	\$60.00	\$25.00	\$50.00	\$135.00
0835352005	112 Roscoe Ave	Sluts Christina Marie Reid & Reid Alan James	07/30/2024	Vegetation - Grass/Weeds	\$39.94	\$150.00	\$50.00	\$239.94
0835352005	112 Roscoe Ave	Sluts Christina Marie Reid & Reid Alan James	08/12/2024	Vegetation - Grass/Weeds	\$38.50	\$150.00	\$50.00	\$238.50
0835180007	1200 Iowa Ave	Tico Investments LLC	08/22/2024	Vegetation - Grass/Weeds	\$239.63	\$150.00	\$50.00	\$439.63
0835457005	418 Iowa Ave	Tico Investments LLC	09/13/2024	Rental - Failure to Show for Inspection	\$60.00	\$25.00	\$50.00	\$135.00
0835381024	419 W 6th St	Truitt Larry E	08/30/2024	Vegetation - Grass/Weeds	\$154.00	\$150.00	\$50.00	\$354.00
0835207012	708 Colver St	Ulch Kelly J	08/26/2024	Vegetation - Grass/Weeds	\$211.50	\$75.00	\$50.00	\$336.50
1302127019	511 W 4th St	Vick Taylor	08/30/2024	Vegetation - Grass/Weeds	\$115.50	\$150.00	\$50.00	\$315.50
0835288011	713 Mulberry Ave	Walker Melissa	07/30/2024	Vegetation - Grass/Weeds	\$38.50	\$150.00	\$50.00	\$238.50
0835288011	713 Mulberry Ave	Walker Melissa	08/12/2024	Vegetation - Grass/Weeds	\$38.50	\$150.00	\$50.00	\$238.50
0835288011	713 Mulberry Ave	Walker Melissa	08/13/2024	Vegetation - Grass/Weeds	\$250.00	\$150.00	\$50.00	\$450.00
1310281016	1803 Demorest Ave	Zaehringer Willard	08/26/2024	Vegetation - Grass/Weeds	\$211.50	\$150.00	\$50.00	\$411.50

Grand Totals by Fee Type:	\$9,801.53	\$6,500.00	\$2,900.00	\$19,201.53
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Grand Totals by Service Type:	Nuisance Services	\$2,269.65
	Rental Services	\$1,260.00
	Vegetation Services	\$15,671.88

RESOLUTION NO. 2024-0511

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;
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 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 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 21st DAY OF November.

Brad Bark, Mayor

ATTEST:

Cinda Hilger, Deputy City Clerk



City of Muscatine

ITEM NUMBER 2024-0512

AGENDA ITEM SUMMARY

DATE: 11/21/2024

STAFF

Nancy Lueck, Finance Director

SUBJECT

Resolution Naming Depositories.

EXECUTIVE SUMMARY

The State Code of Iowa requires that all funds of the city be deposited in one or more depositories approved by the governing body of the City. The Code also requires the Depository Resolution to provide a maximum dollar amount of funds to be deposited in each institution. The City's current Depository Resolution names First National Bank, Central State Bank and Community Bank as the city's depositories, and the current resolution provides for a maximum of \$20,000,000 at each of these banks.

The attached resolution will update the bank names and allow for a maximum of \$30,000,000 in deposits in each bank.

STAFF RECOMMENDATION

Staff recommends approval of this Resolution

BACKGROUND/DISCUSSION

The State Code of Iowa requires that all funds of the city be deposited in one or more depositories approved by the governing body of the City. The Code also requires the Depository Resolution to provide a maximum dollar amount of funds to be deposited in each institution. The City's current Depository Resolution named First National Bank, Central State Bank, and Community Bank as the city's depositories. The current resolution provides for a maximum of \$20,000,000 at each of these banks. The City's depository resolution was last updated in 2010.

The City's Investment Policy provides that the City takes bids on investments, primarily Certificates of Deposit, from each of the three banks as well as the Iowa Public Agency Investment Trust (IPAIT). If IPAIT has the high bid, the local bank with the highest bid has the opportunity to match IPAIT's bid. City funds in IPAIT are considered investments and are not subject to the depository resolution requirement.

The amounts on deposit at each of these banks fluctuate based on each bank's interest in bidding on the CDs as well as the amount of funds the City has on hand to invest. The City has peak periods during the fiscal year with higher amounts of funds on hand, which includes October and April when property tax funds are received, as well as when the City sells bonds to fund City projects (generally in June of even numbered years). During this year's audit review, the auditors noted that the \$20,000,000 amount was exceeded at one bank.

This Resolution will update the bank names to MidWestOne Bank, CBI Bank and Trust, and Community Bank and Trust. This Resolution will also update the maximums at each bank to \$30,000,000.

CITY FINANCIAL IMPACT

None

ATTACHMENTS

1. DEPOSITORIES RESOLUTION UPDATE.11-21-24

RESOLUTION NO. 2024-0512

RESOLUTION NAMING DEPOSITORIES

BE IT RESOLVED by the City Council of the City of Muscatine, in Muscatine County, Iowa: That the following named banks be designated as depositories of City of Muscatine funds in amounts not to exceed the amounts named opposite each of said designated depositories and the City Finance Director is hereby authorized to deposit the City of Muscatine funds in amounts not to exceed in the aggregate the amounts named for said banks as follows:

NAME OF DEPOSITORY	LOCATION	Maximum Deposit in effect under prior Resolution	Maximum Deposit under this Resolution
MidWestOne Bank	Muscatine, Iowa	\$ 20,000,000.00	\$ 30,000,000.00
CBI Bank & Trust	Muscatine, Iowa	\$ 20,000,000.00	\$ 30,000,000.00
Community Bank & Trust	Muscatine, Iowa	\$ 20,000,000.00	\$ 30,000,000.00

The vote on the resolution is as follows:

AYES:

NAYS:

Dated at Muscatine, Iowa, this 21st day of November, 2024.

Brad Bark, Mayor

ATTEST:

Cinda Hilger, Deputy City Clerk



City of Muscatine

ITEM NUMBER 2024-0519

AGENDA ITEM SUMMARY

DATE: 11/21/2024

STAFF

Jodi Royal-Goodwin, Community Development Director

SUBJECT

Resolution Accepting Completed Work on the Sunset Park Lighting Project and Authorizing Final Payment

EXECUTIVE SUMMARY

Presented for Council consideration is a resolution accepting work on the Sunset Park lighting project and authorizing the final payment for \$4,224.57.

STAFF RECOMMENDATION

Staff recommends Council adopt the resolution.

BACKGROUND/DISCUSSION

Staff is requesting the Council adopt the attached resolution accepting the completed work on the Sunset Park lighting project and authorizing final payment.

In December 2023, Council approved the plans, specifications and form of contract to replace the exterior lights at Sunset Park Apartments, and January 18 Council approved a contract for \$109,503 with Tri-City Electric Co. Work began on the project in April, but experienced delays due to delays in getting supplies.

In July staff identified a need for additional lighting on the playground and requested pricing to add 2 additional fixtures and remove a pole and fixture determined to be unnecessary. On September 15, Council approved a change order removing 1 pole and fixture (decrease \$4,150 and adding to fixtures near the playground (add \$4,343.37) for a net contract increase of \$193.37 to \$109,696.37

All work is now complete and operational and the contractor is owed the contract balance, \$4,224.57.

CITY FINANCIAL IMPACT

There is no impact to the general fund. Contract expenses are paid with MMHA Capital Program Funds.

ATTACHMENTS

1. Resolution Accepting Work-Approving Payment 11-21-24

RESOLUTION NO. 2024-0519

**RESOLUTION ACCEPTING COMPLETED WORK ON THE
SUNSET PARK LIGHTING
PROJECT AND AUTHORIZING FINAL PAYMENT**

WHEREAS, City Council, acting as the Board of Commissioners for the Muscatine Municipal Housing Agency (MMHA), approved the Plans, Specifications, and Form of Contract for the 2024 Sunset Park Lighting Project; and

WHEREAS, MMHA entered into a Contract with Tri-City Electric Co. for the Sunset Park Lighting project for \$109,503.00, with one change order totaling a net addition of \$193.37; and

WHEREAS, all work under the contract has been completed by Tri-City Electric and has been approved and accepted by the Project Manager and as of November 13, 2024, appears to meet the requirements of the Plans and Specifications heretofore adopted by the Council; and

WHEREAS, the amount of \$105,471.80 has been previously paid to Tri-City Electric Co and a balance of \$4,224.57, including retention, remains due and payable;

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Muscatine, acting as the Muscatine Public Housing Authority Board of Commissioners, the City of Muscatine make payment of \$4,224.57 to Tri-City Electric Co 30 days from the date of this acceptance.

PASSED, APPROVED, AND ADOPTED THIS 21st DAY OF NOVEMBER, 2024.

CITY COUNCIL OF THE CITY OF MUSCATINE, IOWA

Dr. Brad Bark, Mayor

ATTEST

Cinda Hilger, Deputy City Clerk



City of Muscatine

ITEM NUMBER 2024-0523

AGENDA ITEM SUMMARY

DATE: 11/21/2024

STAFF

Brad Bark, Mayor

SUBJECT

Resolution Setting a Public Hearing on December 5, 2024, for an Ordinance Amending City Code Title 1, Chapter 10, City Officers and Employees

EXECUTIVE SUMMARY

This resolution will set a public hearing for December 5, 2024, regarding amendments to Title 1, Chapter 10 of City Code related to City Officers and Employees.

STAFF RECOMMENDATION

Staff recommends the adoption of this resolution.

BACKGROUND/DISCUSSION

CITY FINANCIAL IMPACT

There is no financial impact for setting the public hearing.

ATTACHMENTS

1. Resolution Setting a Public Hearing on an Ordinance Amending Title 1 Chapter 10 of City Code (1)
2. Public Notice Title 1, Chapter 10
3. Ord_2024-0527 (2).Amended

RESOLUTION NO. 2024-0523

A RESOLUTION SETTING THE TIME AND PLACE TO CONDUCT A PUBLIC HEARING ON AN ORDINANCE AMENDING TITLE 1, CHAPTER 10, OF CITY CODE – CITY OFFICERS AND EMPLOYEES

WHEREAS, the City of Muscatine is committed to maintaining transparency and accountability in its governance and administrative processes; and

WHEREAS, the City of Muscatine wishes to amend Title 1, Chapter 10 in order to create the positions of Assistant City Administrator and City Clerk; and

WHEREAS, A public hearing is required prior to any action by the Council;

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 changes to Title 1, Chapter 10 of City Code relating to City Officers and Employees. Said hearing is to conducted at 6:00 P.M. on Thursday, December 5, 2024, in the City Hall Council Chambers, and that the attached public notice of the time and place of said public hearing shall be given by publication in the Muscatine Journal at least seven (7) days but not more than twenty (20) days prior to the established date of the public hearing.

PASSED, APPROVED, AND ADOPTED by the City Council for the City of Muscatine, Iowa, on this, the 21st day of November 2024.

Dr. Brad Bark, Mayor

ATTEST:

Cinda Hilger, Deputy City Clerk

PUBLIC NOTICE

NOTICE OF TIME AND PLACE OF PUBLIC HEARING ON AMENDMENTS TO TITLE 1, CHAPTER 10 – ADDING THE POSITIONS OF ASSISTANT CITY ADMINISTRATOR AND CITY CLERK

Public Notice is hereby given that the City Council of the City of Muscatine, Iowa will hold a Public Hearing for public comment on amendments to Title 1, Chapter 10 of City Code related to the addition of the positions of Assistant City Administrator and City Clerk. Said hearing will be held in the City Council Chambers, City Hall, Muscatine, Iowa on December 5, 2024 at 6:00 p.m. All interested persons are invited to attend and will be given an opportunity to be heard relative to this matter.

Anthony Kies, Interim City Administrator

**CITY OF MUSCATINE
ORDINANCE 2024-0527**

**ORDINANCE AMENDING TITLE 1, CHAPTER 10 - CITY OFFICERS AND
EMPLOYEES TO ADD THE POSITIONS OF ASSISTANT CITY ADMINISTRATOR
AND CITY CLERK**

WHEREAS, the City of Muscatine has determined that it is in the best interest of the of the City of Muscatine to create the position of Assistant City Administrator to more ably continue and provide for services to the citizens of the City of Muscatine and to accomplish the objectives of orderly and proper administration of the policies and ordinances of the City of Muscatine for the benefit of its employees, agents, and residents.

WHEREAS, the City of Muscatine has determined that it is both necessary under Iowa law and in the best interest of the City of Muscatine to create an individual position for a role City Clerk so as to best provide for effective communication between the city government and its residents, ensuring that public records are accurately maintained and accessible; and allow the City Clerk to provide services as the custodian of official city documents, including ordinances, resolutions, and meeting minutes, which are essential for informed citizenship and civic engagement; and

NOW THEREFORE, be it ordained by the City Council of the City of Muscatine, in the State of Iowa, as follows:

SECTION 1: **AMENDMENT** “1-10-1 Bond Requirements And Amounts”
of the Muscatine Municipal Code is hereby *amended* as follows:

A M E N D M E N T

1-10-1 Bond Requirements And Amounts

The following officers and employees shall have an official bond in the amount proscribed below and as required under Section 64.2 of the Code of Iowa. Costs to be paid by City.

- A. City Administrator: \$500,000
- B. City Clerk: \$500,000
- C. Finance Director (Treasurer): \$500,000
- D. All other City Officers and Employees: \$500,000

SECTION 2: **AMENDMENT** “1-10-2 City Administrator” of the Muscatine Municipal Code is hereby *amended* as follows:

A M E N D M E N T

1-10-2 City Administrator

- A. **Establishment, Appointment, and Removal.** The office of the City Administrator is hereby created, which office shall be filled by a majority vote of the Council. The appointee shall hold office during the pleasure of the Council, and shall be subject to removal by a majority vote of the Council. ~~He or she shall also be the City Clerk.~~
- B. **Qualifications.** The City Council shall appoint by majority vote a competent person on the basis of his or her qualifications as City Administrator.

(Code of Iowa, Section 372.13(4))

- C. **Excepted Appointment.** The City Administrator shall not be considered a department head.
- ~~D. **Deputy City Clerk.** The City Administrator shall appoint a Deputy City Clerk to perform the duties of the City Clerk in the Administrator's absence and to perform other duties as assigned to him or her.~~
- E. **Duties and Responsibilities.** The City Administrator shall have the following duties:
 - 1. ~~**Powers and Duties as City Administrator.**~~ Enforcement of all City laws and regulations as directed by the Council.
 - 2. Administration of Council policies and directives.
 - 3. Continuous study of the City government's operating procedures, organization, and facilities and to recommend fiscal and other policies to the Council whenever necessary.
 - 4. Preparation and administration of the City's annual operating budget.
 - 5. Supervision of the City's administrative policies and procedures, including personnel.
 - 6. Keeping the Council informed on the progress of its programs and the status of its policies.
 - 7. Coordinating and directing all City services provided through the various departments.
 - 8. Appointment and removal of City employees in accordance with City policies

regarding this activity.

9. Study possible joint arrangements with City boards such as, but not limited to, the Board of Water, Electric, and Communications Trustees or any other independent board and make recommendations for such arrangements as are mutually acceptable.
10. Assist the Mayor in any of his or her duties, as requested by him or her and approved by the Council.
11. Review and revise imposition of penalties, costs, fees, bond, and insurance requirements as set out in the Appendices to this Code of Ordinances.
12. Oversee daily operations of City and staff.
13. Any elected official shall deal with City Department Heads and employees, who are subject to the direction and supervision of the City Administrator solely, through the City Administrator, and Council Members shall not give orders to any such Department Heads or employees either publicly or privately. All departmental activity requiring the attention of the Council shall be brought before that body by the City Administrator. Elected officials shall have access to department heads or staff employees for the purpose of open and two-way communications; however, any meetings, issues or concerns raised by department heads, staff or elected officials shall be brought to the attention of the City Administrator.

14. ~~a. The powers and duties of the City Administrator shall include: Enforcement of all City laws and regulations as directed by the Council. Administration of Council policies and directives. Continuous study of the City government's operating procedures, organization, and facilities and to recommend fiscal and other policies to the Council whenever necessary. Preparation and administration of the City's annual operating budget. Supervision of the City's administrative policies and procedures, including personnel. Keeping the Council informed on the progress of its programs and the status of its policies. Coordinating and directing all City services provided through the various departments. Appointment and removal of City employees in accordance with City policies regarding this activity. Study possible joint arrangements with City boards such as, but not limited to, the Board of Water, Electric, and Communications Trustees or any other independent board and make recommendations for such arrangements as are mutually acceptable. Assist the Mayor in any of his or her duties, as requested by him or her and approved by the Council. Review and revise imposition of penalties, costs, fees, bond, and insurance requirements as set out in the Appendices to this Code of Ordinances. Oversee daily operations of City and staff.~~
(Code of Iowa, Section 372.13(4))

15. ~~owers and Duties as Clerk.~~ The Powers and Duties of the Clerk shall include: ~~Record of Appointments on Boards.~~ It shall be the duty of the Clerk to keep a record of all appointments to all City Advisory Commissions and Boards. Such record must show the name, the period of the appointment,

~~the date of its commencement and ending, by whom appointed, and the name of the board to which the appointment is made.~~
~~(Code of Iowa, Section 372.13(4))~~ **Publication of Minutes.** Within fifteen days following a regular or special meeting of the council, the clerk shall cause the minutes of the proceedings of the council, including the total expenditure from each city fund, to be published in a newspaper of general circulation in the city. The publication shall include a list of all claims allowed and a summary of all receipts and shall show the gross amount of the claims as required by Iowa Code, Section 372.13[6].
~~(Code of Iowa, Section 372.13(6))~~ **Recording Measures.** The clerk shall promptly record a statement with the measure, where applicable, indicating whether the mayor signed, vetoed, or took no action on the measure, and whether the measure was repassed after the mayor's veto.
~~(Code of Iowa, Section 380.7(2))~~ **Publication of Ordinances.** The clerk shall publish a summary of all ordinances or the complete text of ordinances and amendments in the manner provided in Section 362.3 of the Iowa Code.
~~(Code of Iowa, Section 380.7(3))~~ **Authentication of Measures.** The Clerk shall authenticate all measures except motions with the clerk's signature and certification as to time and manner of publication, if any. The clerk's certification is presumptive evidence of the facts stated therein.
~~(Code of Iowa, Section 380.7(4))~~ **Availability of Records.** The Clerk shall maintain for public use copies of all effective ordinances and codes.
~~(Code of Iowa, Section 380.7(5))~~ **Issuance of Licenses and Permits.** Except as otherwise provided, any person desiring a license or permit for any purpose from the City shall pay the requisite license fee to the Clerk, who shall thereupon issue the proper license.

SECTION 3: AMENDMENT "1-10-3 City Attorney" of the Muscatine Municipal Code is hereby *amended* as follows:

A M E N D M E N T

1-10-3 Assistant City ~~Attorney~~Administrator

- A. Establishment, Appointment, and Removal.** There is hereby established the office of ~~City Attorney~~Assistant City Administrator, who shall be appointed by ~~and hold office during the pleasure of the Council and shall be subject to removal of~~ a majority vote of the Council, hold office during the pleasure of the Council, and shall be subject to removal of a majority vote of the Council. ~~Notwithstanding this Subsection, the Council may use whatever additional legal counsel is available and appropriate as long as not in conflict with any provision of this Code of Ordinances.~~
- B. Management and Qualifications.** The City Attorney shall not be an employee of the City but shall be under the administrative direction of the City Administrator. The City

~~Attorney shall be a graduate of a college of law and shall be a licensed Attorney authorized to practice in the State of Iowa upon employment.~~ The Assistant City Administrator shall be under the administrative direction of the City Administrator. The Assistant City Administrator shall be selected by the Council from any current City department head with the competence and sufficient qualifications to be Assistant City Administrator.

- C. **Powers and ~~Duties~~ Responsibilities.** The Assistant City Administrator shall be responsible for the performance of the duties of the City Administrator in his or her absence in accordance with Muscatine Code of Ordinances 1-10-2 and shall perform other duties as assigned by the City Administrator in furtherance of the performance of the duties of City Administrator. ~~The City Attorney performs legal services for and on behalf of the City, its officers, boards, commissions, and departments; attends meetings of various official bodies and gives oral advice and opinions in writing when requested; performs the preparation and review of ordinances, resolutions, contracts, and other legal documents as requested; tries cases and appears in other legal matters before courts, including district and appellate courts, boards, and commissions; confers with City officials on legal problems; performs research in connection with constitution, statutes, ordinances, decisions, rules, and regulations; prepares complaints, answers, and briefs for court cases; and performs additional administrative duties as assigned.~~

(Code of Iowa, Section 372.13(4))

- D. **Compensation.** The compensation of the ~~City Attorney~~ Assistant City Administrator shall be such amount as may from time to time be fixed by the Council.

(Code of Iowa, Section 372.13(4))

SECTION 4: AMENDMENT “1-10-4 Succession Requirements” of the Muscatine Municipal Code is hereby *amended* as follows:

A M E N D M E N T

1-10-4 ~~Succession Requirements~~ City Clerk

- A. The Council shall appoint a Clerk to maintain city records and perform other duties prescribed by State law or City ordinance.

(Code of Iowa, Section 372.13(3))

- B. The Powers and Duties of the Clerk shall include:

1. Record of Appointments on Boards, It shall be the duty of the Clerk to keep a record of all appointments to all City Advisory Commissions and Boards. Such a

record must show the name, the period of the appointment, the date of its commencement and ending, by whom appointed, and the name of the board to which the appointment is made.

(Code of Iowa, Section 372.13(3))

2. Publication of Minutes. Within fifteen days following a regular or special meeting of the council, the clerk shall cause the minutes of the proceedings of the council, including the total expenditure from each city fund, to be published in a newspaper of general circulation in the city. The publication shall include a list of all claims allowed and a summary of all receipts and shall show the gross amount of the claims as required by Iowa Code, Section 372.13[6].

(Code of Iowa, Section 372.13(6))

3. Recording Measures. The clerk shall promptly record a statement with the measure, where applicable, indicating whether the mayor signed, vetoed, or took no action on the measure, and whether the measure was repassed after the mayor's veto.

(Code of Iowa, Section 380.7(2))

4. Publication of Ordinances. The clerk shall publish a summary of all ordinances or the complete text of ordinances and amendments in the manner provided in Section 362.3 of the Iowa Code.

(Code of Iowa, Section 380. 7(3))

5. Authentication of Measures, The Clerk shall authenticate all measures except motions with the clerk's signature and certification as to time and manner of publication, if any. The clerk's certification is presumptive evidence of the facts stated therein.

(Code of Iowa, Section 380.7(4))

6. Availability of Records. The Clerk shall maintain for public use copies of all effective ordinances and codes.

(Code of Iowa, Section 380.7(5))

7. Issuance of Licenses and Permits, except as otherwise provided, any person desiring a license or permit for any purpose from the City shall pay the requisite license fee to the Clerk, who shall thereupon issue the proper license.

C. The City Clerk shall appoint a Deputy City Clerk to perform the duties of the City Clerk in his or her absence and shall perform other duties as assigned by the City Clerk in furtherance of the performance of the duties of the City Clerk.

D. Compensation, The compensation of the City Clerk shall be such amount as may from time to time be fixed by the Council.

SECTION 5: **ADOPTION** “1-10-5 City Attorney” of the Muscatine Municipal Code is hereby *added* as follows:

A D O P T I O N

1-10-5 City Attorney(*Added*)

- A. Establishment, Appointment, and Removal, There is hereby established the office of City Attorney, who shall be appointed by and hold office during the pleasure of the Council and shall be subject to removal of a majority vote of the Council. Notwithstanding this Subsection, the Council may use whatever additional legal counsel is available and appropriate as long as not in conflict with any provision of this Code of Ordinances.
(Code of Iowa, Section 372.13(4))
- B. Qualifications. The City Attorney shall not be an employee of the City but shall be under the administrative direction of the City Administrator. The City Attorney shall be a graduate of a college of law and shall be a licensed Attorney authorized to practice in the State of Iowa upon employment.
- C. Powers and duties. The City Attorney performs legal services for and on behalf of the City, its officers, boards, commissions, and departments; attends meetings of various official bodies and gives oral advice and opinions in writing when requested; performs the preparation and review of ordinances, resolutions, contracts, and other legal documents as requested; tries cases and appears in other legal matters before courts, including district and appellate courts, boards, and commissions; confers with City officials on legal problems; performs research in connection with constitution, statutes, ordinances, decisions, rules, and regulations; prepares complaints, answers, and briefs for court cases; and performs additional administrative duties as assigned.
(Code of Iowa, Section 372.13(4))
- D. Compensation, The compensation of the City Attorney shall be such amount as may from time to time be fixed by the Council.
(Code of Iowa, Section 372.13(4))

SECTION 6: **ADOPTION** “1-10-6 Succession Requirements” of the Muscatine Municipal Code is hereby *added* as follows:

ADOPTION

1-10-6 Succession Requirements(Added)

Every City Officer shall transfer to his or her successor in office all books, papers, records, documents and property, in his or her custody and relating to his or her office.

SECTION 7: **REPEALER CLAUSE** All ordinances or resolutions or parts thereof, which are in conflict herewith, are hereby repealed.

SECTION 8: **SEVERABILITY CLAUSE** Should any part or provision of this Ordinance be declared by the courts to be unconstitutional or invalid, such decision shall not affect the validity of the Ordinances a whole or any part thereof other than the part so declared to be unconstitutional or invalid.

SECTION 9: **EFFECTIVE DATE** This Ordinance shall be in full force and effect from _____ and after the required approval and publication according to law.

PASSED AND ADOPTED BY THE CITY OF MUSCATINE CITY COUNCIL

_____.

Presiding Officer

Attest

Dr. Brad Bark, Mayor, City of
Muscatine

Cinda Hilger, Deputy City Clerk, City
of Muscatine



City of Muscatine

ITEM NUMBER 2024-0525

AGENDA ITEM SUMMARY

DATE: 11/21/2024

STAFF

Jon Koch, Water Pollution Control Plant Director

SUBJECT

Resolution Approving Plans, Specifications, Form of Contract, Cost Estimate and Setting a Bid Opening Date for the Houser Lift Station Upgrade Project.

EXECUTIVE SUMMARY

A public hearing has been conducted and now is the time to approve the resolution for the plans, specifications, form of contract, cost estimates and setting of a bid opening date for December 20th, 2024, at 2pm in City Hall Council Chambers for the Houser Lift Station Upgrade Project. Cost estimates for this project are \$382,000.00.

STAFF RECOMMENDATION

Staff recommends approval of the resolution to proceed with the project.

BACKGROUND/DISCUSSION

The City Council approved the Houser Lift Station Upgrade Project in April 2024. This project was detailed in the latest CIP for the WRRF. The engineering evaluated upsizing the pumps, replacing the aging electrical system and installing a generator capable transfer switch to ensure the station can be operated during a power outage. Current estimations for the project are \$382,000.00. This was a budgeted capital project to be funded from the WPCP Replacement Reserve Fund.

CITY FINANCIAL IMPACT

This was a budgeted capital project to be funded from the WPCP Replacement Reserve Fund.

ATTACHMENTS

1. Resolution Approving Plans and Specs Houser.241121
2. CostEstimate_HouserLS_Final.241014
3. HouserLS_Drawings_Final.241014
4. HouserLS-ProjectManual_Final.241014

RESOLUTION NO. 2024-0525

A RESOLUTION APPROVING THE PLANS, SPECIFICATIONS,
FORM OF CONTRACT, COST ESTIMATIONS AND ESTABLISHING
A BID OPENING DATE FOR THE HOUSER LIFT STATION
UPGRADE PROJECT

WHEREAS, the City Council of the City of Muscatine, Iowa, has conducted a public hearing to receive comments related to the Plans, Specifications, Form of Contract, Cost Estimations and Bid Opening Date for the Houser Lift Station Upgrade Project, and

WHEREAS, following comments received during the public hearing, the City Council must now approve the final plans, specifications, form of contract and bid opening date for the Houser Lift Station Upgrade Project;

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF MUSCATINE, IOWA, that the plans, specifications and form of contract for the Houser Lift Station Upgrade Project are approved, and

BE IT FURTHER RESOLVED, that a bid opening date is hereby established for December 20th, 2024, at 2 pm at City Hall Council Chambers.

PASSED, APPROVED, AND ADOPTED this 21st day of November, 2024.

BY THE CITY COUNCIL
OF THE CITY OF
MUSCATINE, IOWA

Bradley Bark, Mayor

ATTEST:

Cinda Hilger, Deputy City Clerk

Construction Cost Opinion - Final

BID ITEM	DESCRIPTION	QTY	UNIT	Unit Cost	Extended Cost
1	SANITARY SEWER BYPASS PUMPING	1	LS	\$ 15,000	\$ 15,000
2	DEMOLITION - WET WELL COVER	1	LS	\$ 2,000	\$ 2,000
3	ALUMINUM WET WELL COVER	28	SF	\$ 150	\$ 4,200
4	DEMOLITION - MECHANICAL	1	LS	\$ 10,000	\$ 10,000
5	JIB CRANE, WALL MOUNTED	1	LS	\$ 5,000	\$ 5,000
6	CORE DRILL, 10"	2	EA	\$ 500	\$ 1,000
7	DRYWELL SUBMERSIBLE PUMPS	2	EA	\$ 48,000	\$ 96,000
8	PLUG VALVE, 8"	1	EA	\$ 8,200	\$ 8,200
9	PLUG VALVE, 6"	4	EA	\$ 5,500	\$ 22,000
10	SWING CHECK VALVE, 6"	2	EA	\$ 10,000	\$ 20,000
11	GATE VALVE, MJ, 6"	1	EA	\$ 2,000	\$ 2,000
12	DI PIPE, FLANGED, 8"	14	LF	\$ 220	\$ 3,080
13	DI PIPE, FLANGED, 6"	8	LF	\$ 200	\$ 1,600
14	DI PIPE, FLANGED, 4"	2	LF	\$ 500	\$ 1,000
15	DI PIPE, MJ, 6"	16	LF	\$ 150	\$ 2,400
16	FITTINGS, DI, BASE ELBOW WITH CONCRETE PEDESTAL	2	EA	\$ 1,500	\$ 3,000
17	FITTINGS, DI, ELBOW, 6"	3	EA	\$ 650	\$ 1,950
18	FITTINGS, DI, REDUCER, 8"X6"	2	EA	\$ 750	\$ 1,500
19	FITTINGS, DI, ELBOW, 8"	1	EA	\$ 1,000	\$ 1,000
20	FITTINGS, DI, TEE, 8"	1	EA	\$ 2,000	\$ 2,000
21	TAPPING SLEEVE, 8"X6"	1	EA	\$ 2,000	\$ 2,000
22	PIPE SUPPORTS	3	EA	\$ 800	\$ 2,400
23	PAINTING, PIPE AND FITTINGS	1	LS	\$ 2,000	\$ 2,000
24	FLOW METER, 8"	1	EA	\$ 15,000	\$ 15,000
25	CONTROLS INTEGRATION	1	LS	\$ 15,000	\$ 15,000
26	DEMOLITION - HVAC	1	LS	\$ 2,000	\$ 2,000
27	UNIT HEATER	1	LS	\$ 6,500	\$ 6,500
28	EXHAUST FAN	1	LS	\$ 12,500	\$ 12,500
29	ELECTRICAL DEMOLITION	1	LS	\$ 5,000	\$ 5,000
30	SERVICE AND GENERATOR CONNECTION	1	LS	\$ 19,000	\$ 19,000
31	ELECTRICAL PANELS AND TRANSFORMER	1	LS	\$ 11,000	\$ 11,000
32	PUMP VFDS AND EQUIPMENT CONNECTION	1	LS	\$ 18,000	\$ 18,000
33	LIGHTING, RECEPTACLES, AND BRANCH CIRCUITS	1	LS	\$ 6,000	\$ 6,000
34	CONTROL CONDUIT AND WIRING	1	LS	\$ 6,000	\$ 6,000
35	TEMPORARY POWER CONNECTIONS DURING CONSTRUCTION	1	LS	\$ 8,000	\$ 8,000
36	MOBILIZATION	1	LS	\$ 30,000	\$ 30,000
37	CONVENTIONAL SEEDING	100	SY	\$ 4	\$ 400
Total					\$ 363,730
Rounded Total					\$ 364,000
DETAILS NOT ITEMIZED		%	5		\$ 18,200
Engineer's Opinion of Probable Construction Cost (Rounded)					\$ 382,000

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	HYDRANT
CURB STOP AND BOX	CURB STOP AND BOX
REDUCER	REDUCER
SANITARY MANHOLE	SANITARY MANHOLE
STORM MANHOLE	STORM MANHOLE
AREA LIGHT	AREA LIGHT
STREET LIGHT	STREET LIGHT
UTILITY POLE	UTILITY POLE
CONTROL POINTS	CONTROL POINTS
PROPERTY CORNER	PROPERTY CORNER
TREE	TREE

ABBREVIATIONS

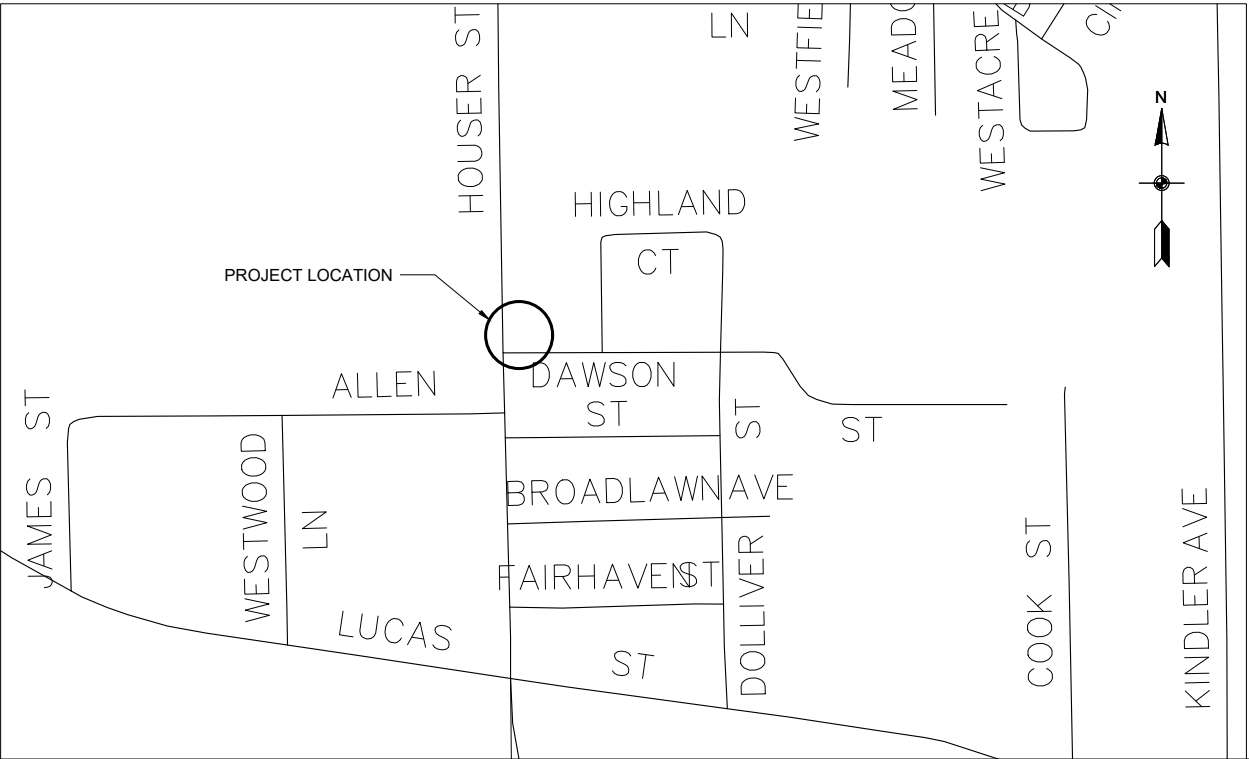
APPROX	APPROXIMATE
AVE	AVENUE
DI	DUCTILE IRON
DR	DRIVE
EXST	EXISTING
INV	INVERT
LF	LINEAR FEET
MAX	MAXIMUM
MH	MANHOLE
MIN	MINIMUM
N	NORTH
PH	PHASE
S	SOUTH
SAN	SANITARY
ST	STREET
STA	STATION
TYP	TYPICAL

HOUSER STREET LIFT STATION
UPGRADE PROJECT
MUSCATINE, IOWA

DRAWING INDEX

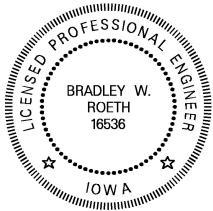
SHEET NUMBER	TITLE	REVISION NUMBER
G1	COVER SHEET	D
C1	SITE PLAN AND BYPASS PUMPING NOTES	D
D1	DEMOLITION PLAN UPPER LEVEL	D
D2	DEMOLITION PLAN LOWER LEVEL	D
M1	PLAN VIEW UPPER LEVEL	D
M2	PLAN VIEW LOWER LEVEL	D
M3	SECTIONS- LOWER LEVEL NORTH AND SOUTH	D
M4	SECTIONS- LOWER LEVEL EAST AND WEST	D
M5	SECTIONS- UPPER LEVEL NORTH, SOUTH, EAST AND WEST	D
M6	SECTIONS AND DETAILS	D
UE.1	ELECTRICAL DEMOLITION PLANS	D
UE.2	LIGHTING PLANS	D
UE.3	POWER PLANS	D
UE.4	ELECTRICAL SITE PLAN	D
UE.5	ELECTRICAL RISER DIAGRAM – DEMOLITION	D
UE.6	ELECTRICAL RISER DIAGRAM – NEW	D
UE.7	ELECTRICAL SYMBOLS AND ABBREVIATIONS	D
UE.8	ELECTRICAL SCHEDULES	D
UE.9	ELECTRICAL SCHEDULES	D
UE.10	ELECTRICAL SCHEDULES	D
H.1	HEAT AND VENTILATION PLANS	D

LOCATION MAP



H- DRAWINGS SEALED BY MICHAEL D. DRAHOS, IOWA P.E. 13067.
SIGNATURE BLOCK ON H.1

UE- DRAWINGS SEALED BY JEFFREY R. REINHART, IOWA P.E. 13499.
SIGNATURE BLOCK ON UE.1



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.

Signature: Bradley W. Roeth Date: 10/14/2024
Bradley W. Roeth
License Number 16536
My license renewal date is
December 31, 2024

Sheets covered by this seal: G1, C1, D1, D2, M1- M5

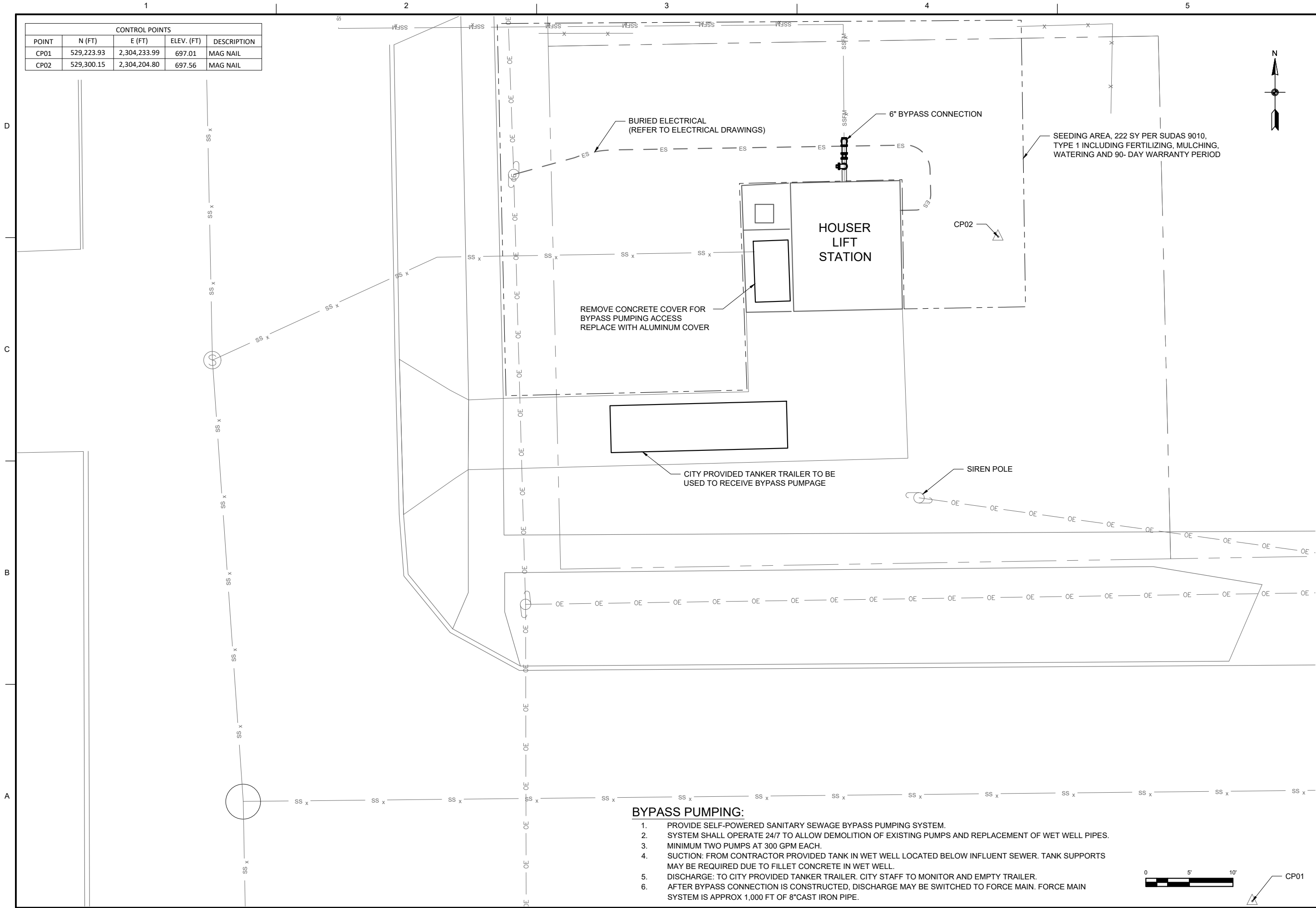
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DRAWN BY: XXX	CVD BY: BWR	SUBMITTED BY: BWR	ISSUE DATE: XX-XX-XX	FILE NAME: ANSI B
CITY OF MUSCATINE 215 SYCAMORE ST. MUSCATINE, IOWA 52761		WATERSMITH ENGINEERING 1029 HERSHEY AVE MUSCATINE, IA 52761		

HOUSER STREET LIFT STATION
UPGRADE PROJECT
1301 HOUSER STREET
MUSCATINE, IOWA

COVER SHEET

SHEET
IDENTIFICATION

G1





WATERSMITH
ENGINEERING

DESIGNED BY: BWR	DATE:	SOLICITATION NO.:
DRAWN BY: XXX	CWD BY: BWR	CONTRACT NO.:
SUBMITTED BY: BWR	ISSUE DATE: xx-xx-xx	FILE NUMBER:
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CITY OF MUSCATINE
215 SYCAMORE ST.
MUSCATINE, IOWA 52761

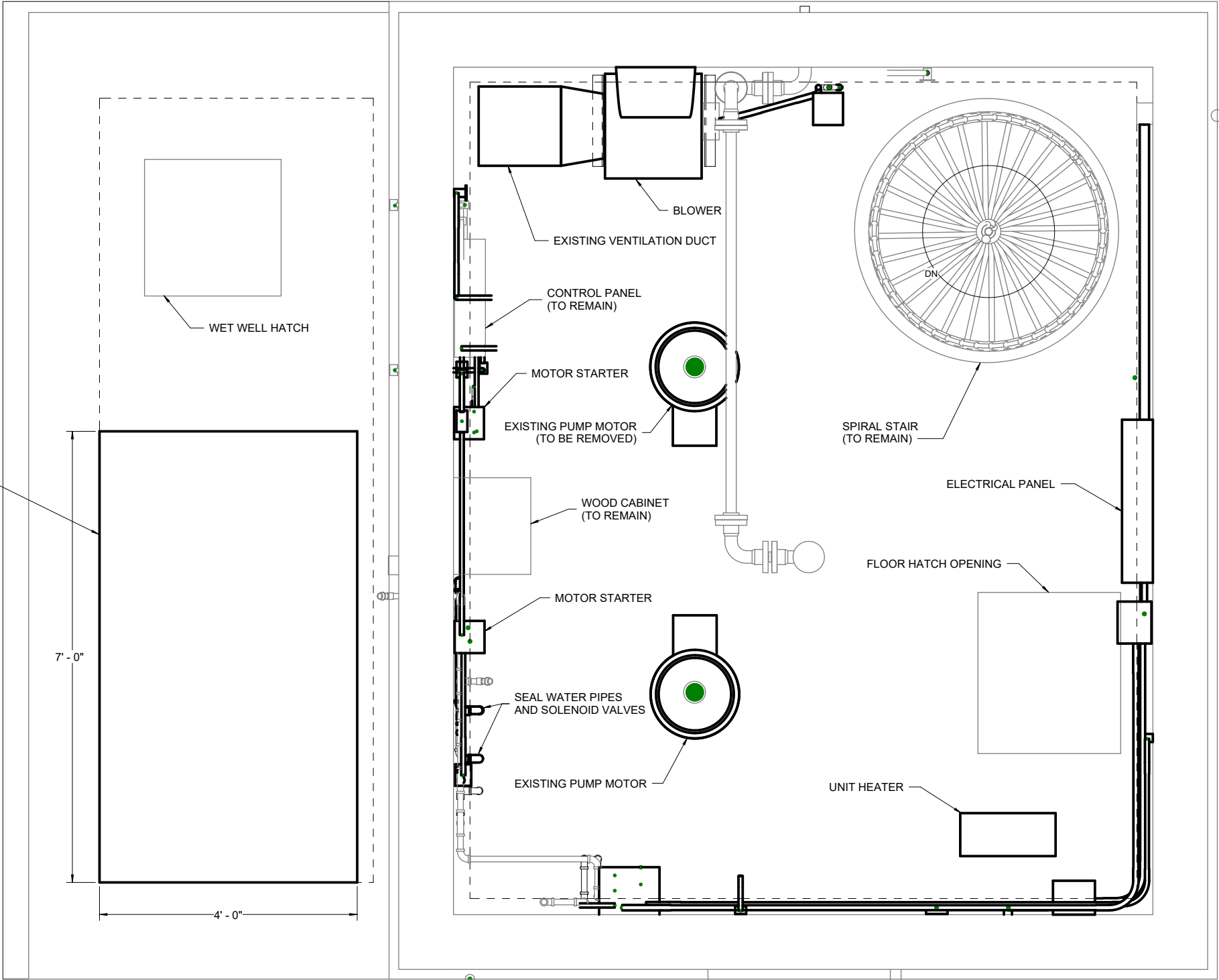
WATERSMITH ENGINEERING
1029 HERSHEY AVE
MUSCATINE, IA 52761

HOUSER STREET LIFT STATION
UPGRADE PROJECT
1301 HOUSER STREET
MUSCATINE, IOWA

SITE PLAN
AND BYPASS PUMPING NOTES

SHEET
IDENTIFICATION
C1

SAW CUT AND REMOVE CONCRETE OVER
WET WELL FOR BYPASS PUMPING ACCESS



**BOLD ITEMS
TO BE REMOVED**
REFER TO UE- DRAWINGS
FOR ELECTRICAL
DEMOLITION

1 DEMOLITION PLAN - UPPER LEVEL
1" = 1'-0"



WATERSMITH
ENGINEERING

DESIGNED BY: BWR	DATE:	SOLICITATION NO.:	CONTRACT NO. 130.02
DWN BY: BS		SUBMITTED BY: BWR	FILE NUMBER:
PLOT SCALE:	ISSUE DATE:	SIZE: ANSI B	FILENAME:

CITY OF MUSCATINE
215 SYCAMORE STREET
MUSCATINE, IA 52761

WATERSMITH ENGINEERING
1029 HERSHEY AVE
MUSCATINE, IA 52761

MARK	D	FINAL REVIEW	DESCRIPTION	DATE	APPR
				10/11/24	BWR

HOUSER STREET LIFT STATION UPGRADE PROJECT
1301 HOUSER STREET
MUSCATINE, IOWA

**DEMOLITION PLAN
UPPER LEVEL**

SHEET
IDENTIFICATION
D1

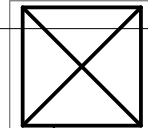
10" INFLUENT SEWER

2
M3

1
M3

10" CORE DRILL TO REPLACE
EXISTING SUCTION PIPE
(TYP FOR 2)

WET WELL



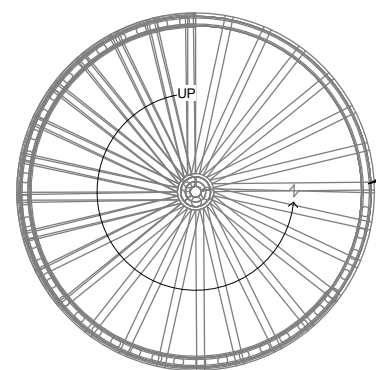
VENTILATION
DUCT
EXISTING PUMP AND
FOUNDATION

EXISTING SUMP
(PUMP REMAINS)

1
M4

8" FORCE MAIN

2
M4



LIGHT FIXTURE

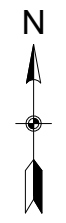
HATCH OPENING

VERTICAL SHAFT AND BEARINGS

EXISTING PUMP AND FOUNDATION

EXISTING BEAM

EXISTING SPIRAL STAIR



BOLD ITEMS
TO BE REMOVED
REFER TO UE- DRAWINGS
FOR ELECTRICAL
DEMOLITION

1 DEMOLITION PLAN - LOWER LEVEL
1" = 1'-0"

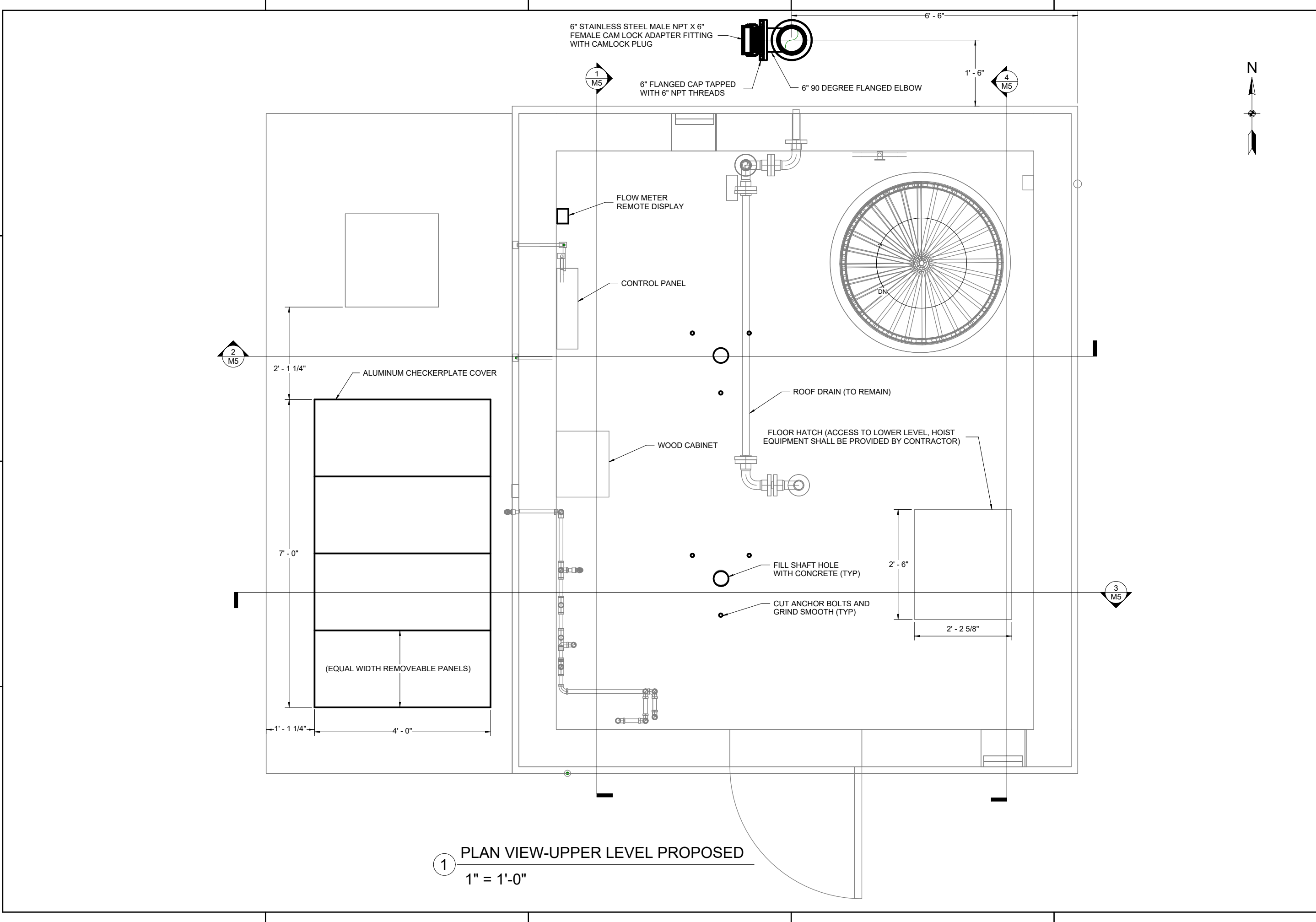
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DESIGNED BY: BWR	DATE:	SOLICITATION NO.:
DWN BY: BS		CONTRACT NO. 130.02
SUBMITTED BY: BWR	ISSUE DATE:	FILE NUMBER:
PLOT SCALE:	FILENAME:	
SIZE: ANSI B		

CITY OF MUSCATINE 215 SYCAMORE STREET MUSCATINE, IA 52761	WATERSMITH ENGINEERING 1029 HERSHEY AVE MUSCATINE, IA 52761
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HOUSER STREET LIFT STATION UPGRADE PROJECT
1301 HOUSER STREET
MUSCATINE, IOWA
DEMOLITION PLAN
LOWER LEVEL

SHEET
IDENTIFICATION
D2



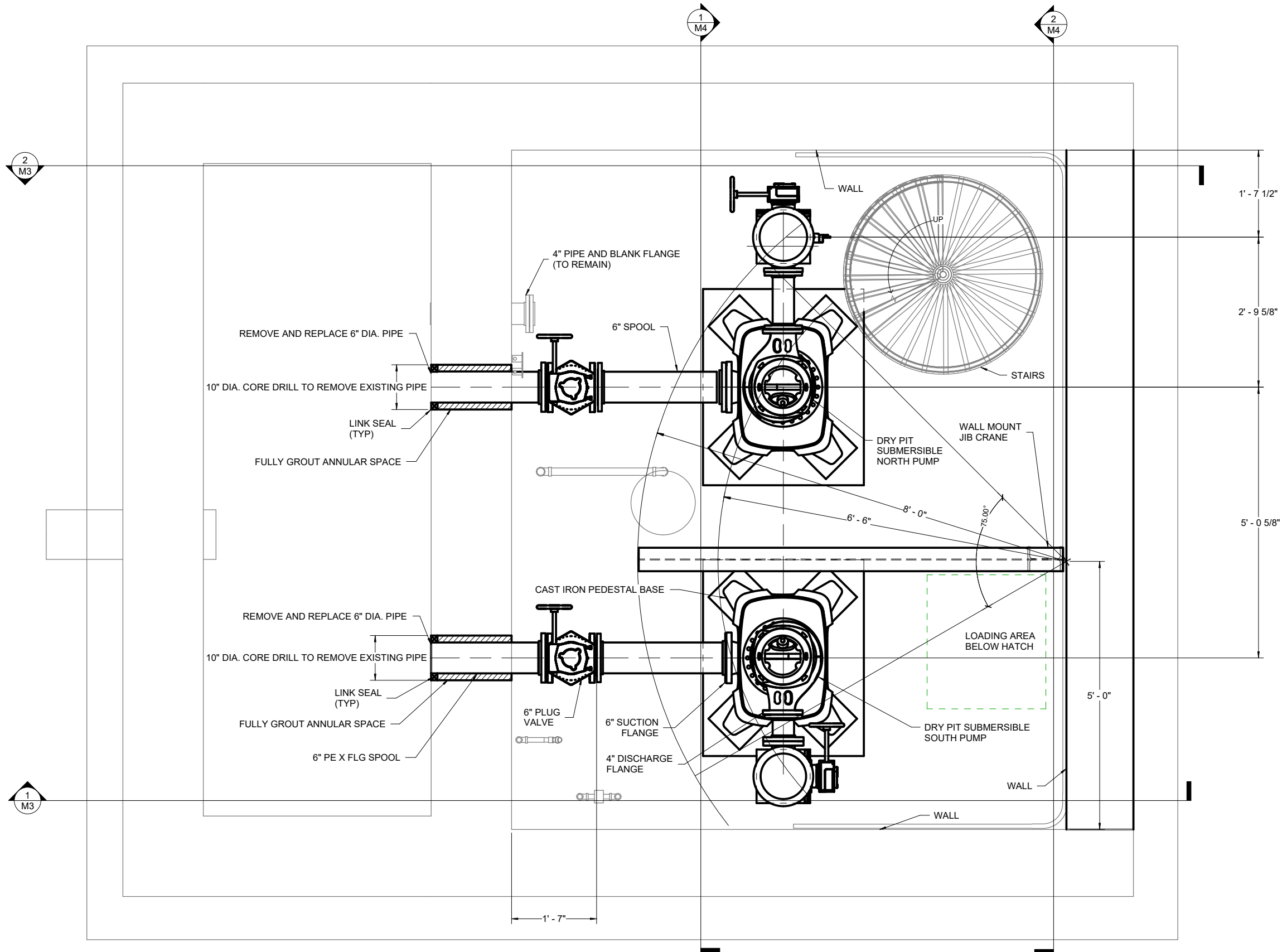
1 PLAN VIEW-UPPER LEVEL PROPOSED
1" = 1'-0"



WATERSMITH
ENGINEERING

DESIGNED BY: BWR	DATE:	SOLICITATION NO.:	CONTRACT NO.:
DWN BY: BS		FILE NUMBER:	
SUBMITTED BY: BWR		FILE NAME:	
PLOT SCALE:	ANSI B	FILE NUMBER:	
CITY OF MUSCATINE 215 SYCAMORE STREET MUSCATINE, IA 52761	WATERSMITH ENGINEERING 1029 HERSHEY AVE MUSCATINE, IA 52761	10/11/24	BWR
HOUSER STREET LIFT STATION UPGRADE PROJECT 1301 HOUSER STREET MUSCATINE, IOWA		FINAL REVIEW	DATE
PLAN VIEW UPPER LEVEL		DESCRIPTION	APPRO

SHEET
IDENTIFICATION
M1



1 PLAN VIEW- LOWER LEVEL PROPOSED
1" = 1'-0"

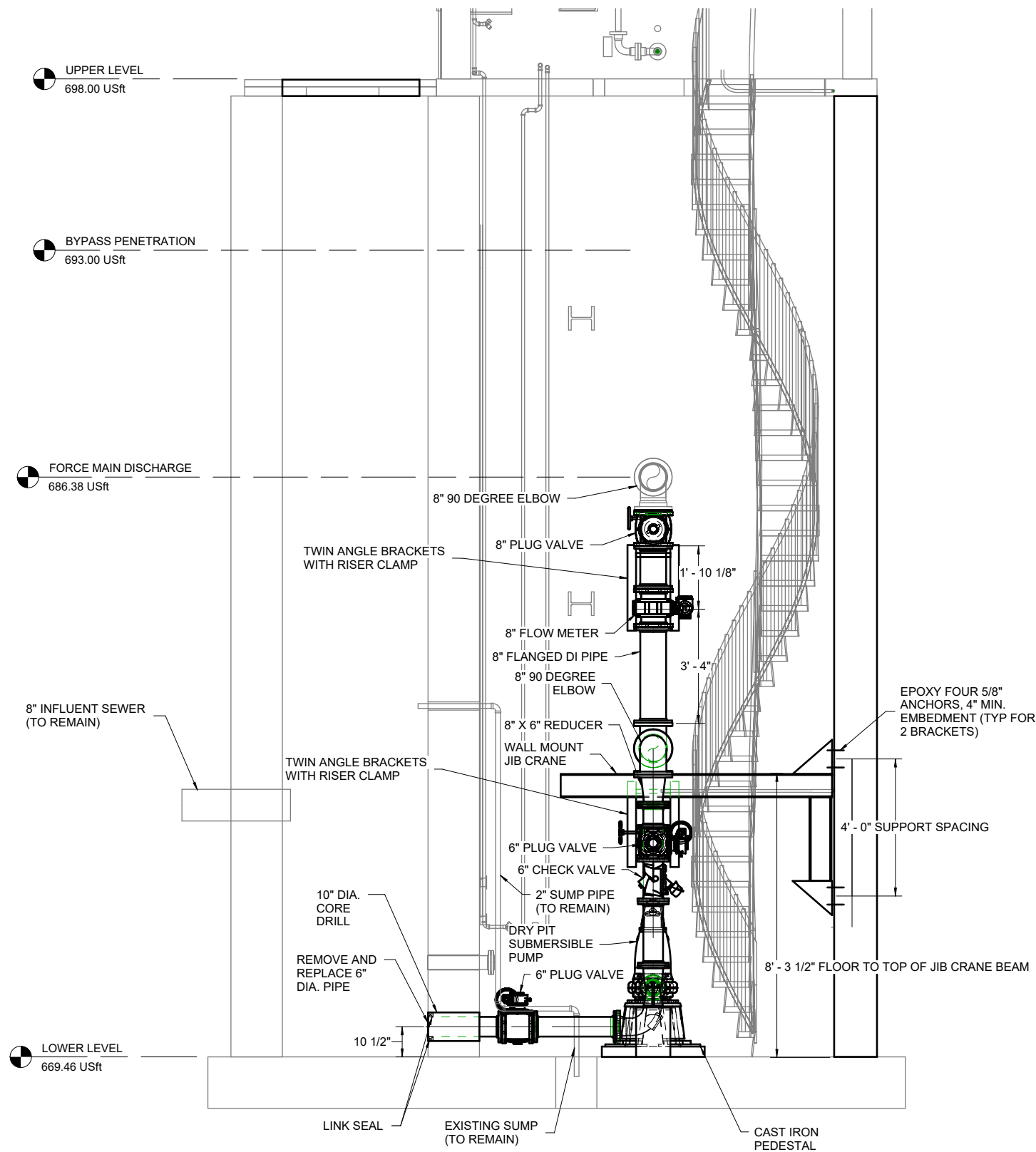
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SUBMITTED BY: BWR	ISSUE DATE:	FILE NUMBER:
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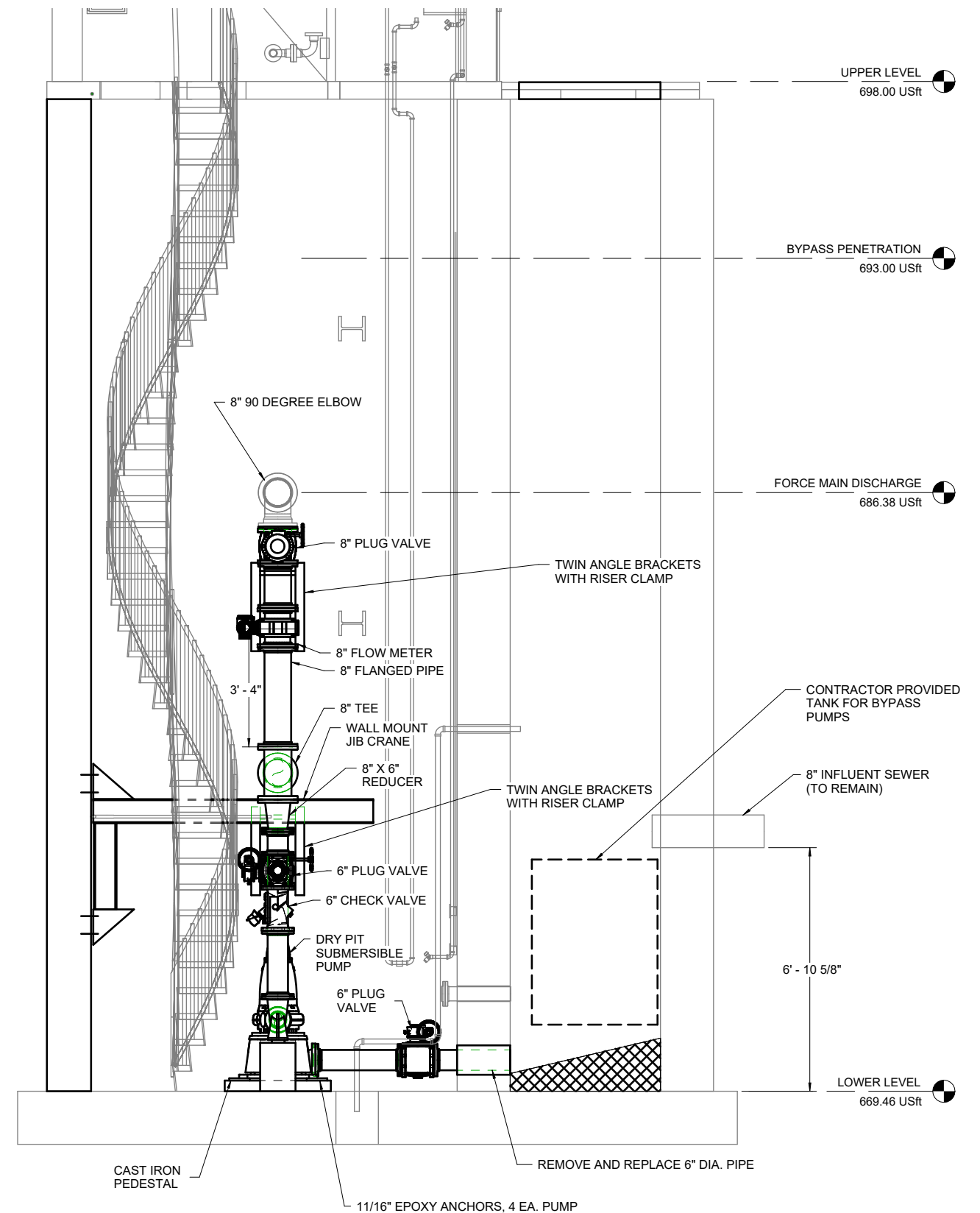
CITY OF MUSCATINE 215 SYCAMORE STREET MUSCATINE, IA 52761	WATERSMITH ENGINEERING 1029 HERSHEY AVE MUSCATINE, IA 52761
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HOUSER STREET LIFT STATION UPGRADE PROJECT 1301 HOUSER STREET MUSCATINE, IOWA	PLAN VIEW LOWER LEVEL
---	--------------------------

SHEET IDENTIFICATION M2



1 SECTION- LOWER LEVEL NORTH VIEW PROPOSED
1/2" = 1'-0"



2 SECTION- LOWER LEVEL SOUTH VIEW PROPOSED
1/2" = 1'-0"

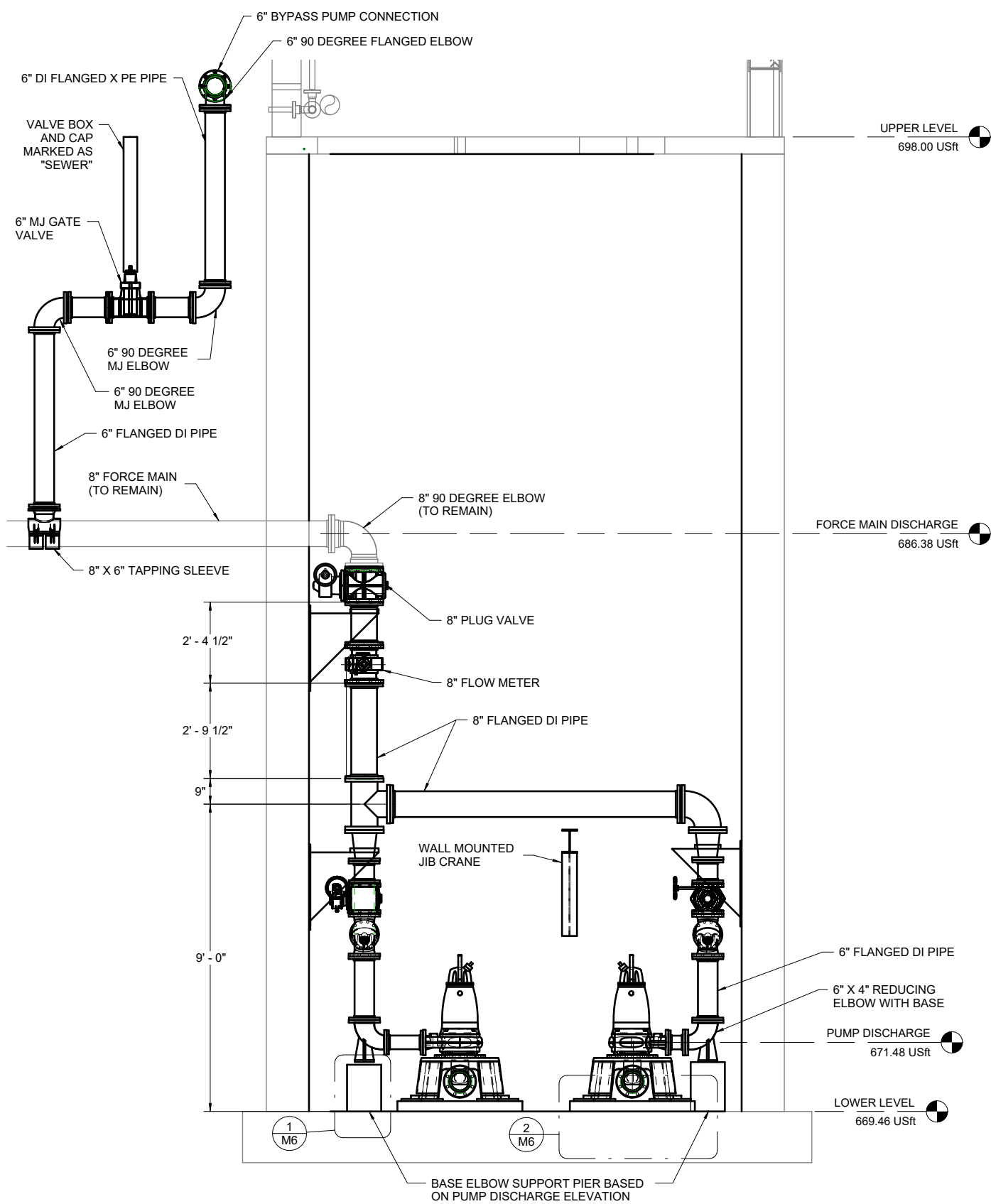
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PLOT SCALE:	ISSUE DATE:
SIZE: ANSI B	FILENAME:

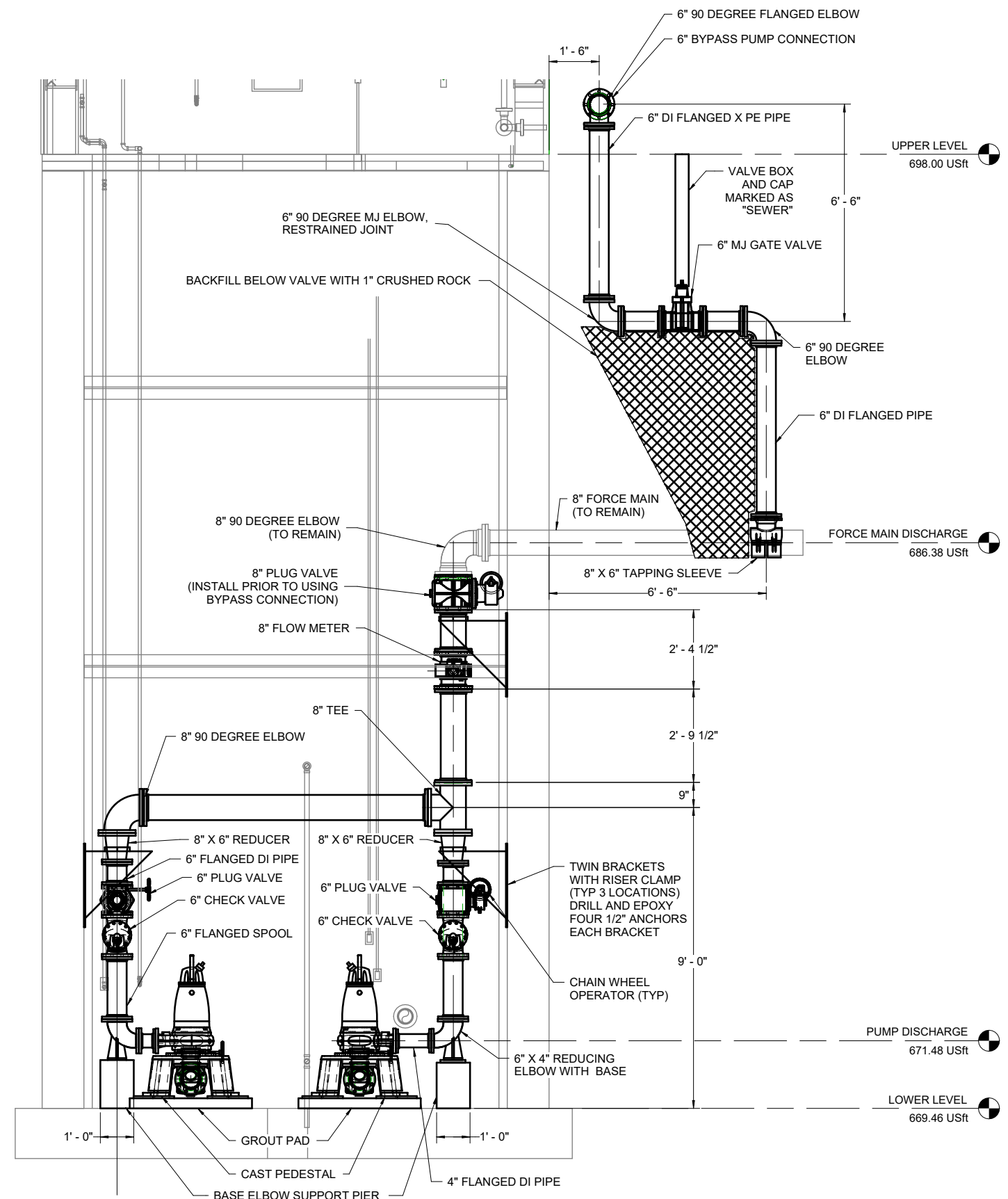
CITY OF MUSCATINE 215 SYCAMORE STREET MUSCATINE, IA 52761	WATERSMITH ENGINEERING 1029 HERSHEY AVE MUSCATINE, IA 52761
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HOUSER STREET LIFT STATION UPGRADE PROJECT
1301 HOUSER STREET
MUSCATINE, IOWA

**SECTIONS- LOWER LEVEL
NORTH AND SOUTH**



1 SECTION- LOWER LEVEL EAST VIEW PROPOSED
1/2" = 1'-0"



2 SECTION- LOWER LEVEL WEST VIEW PROPOSED
1/2" = 1'-0"

[illegible]

CITY OF MUSCATINE	DESIGNED BY:	DATE:
218 SYCAMORE STREET	DWN BY:	SOURCINATION NO.
MUSCATINE, IA 52761	BG	
	SUBMITTED BY:	CONTRACT NO.
	BWR	130.02
	PLOT SCALE:	FILE NUMBER:
	SIZE:	FILENAME:
	ANSI B	
WATERSMITH ENGINEERING		
1029 HERSHEY AVE		
MUSCATINE, IA 52761		

HOUSER STREET LIFT STATION UPGRADE PROJECT
1301 HOUSER STREET
MUSCATINE, IOWA

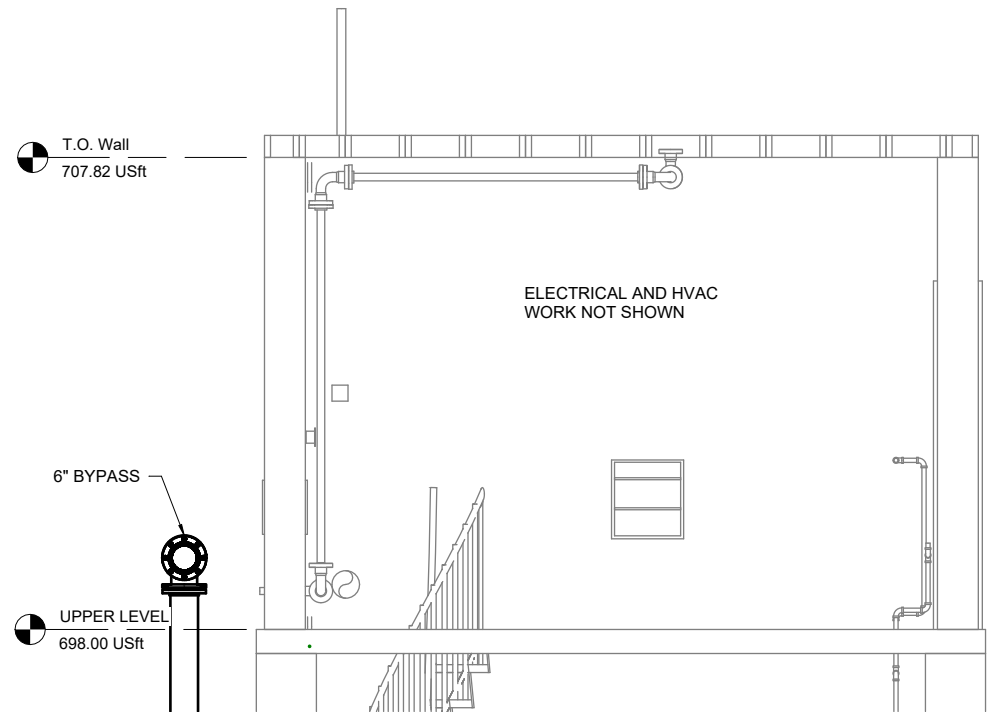
**SECTIONS- LOWER LEVEL
EAST AND WEST**

MARK	D	FINAL REVIEW	DESCRIPTION	DATE	BWR	APPR
				10/11/24		

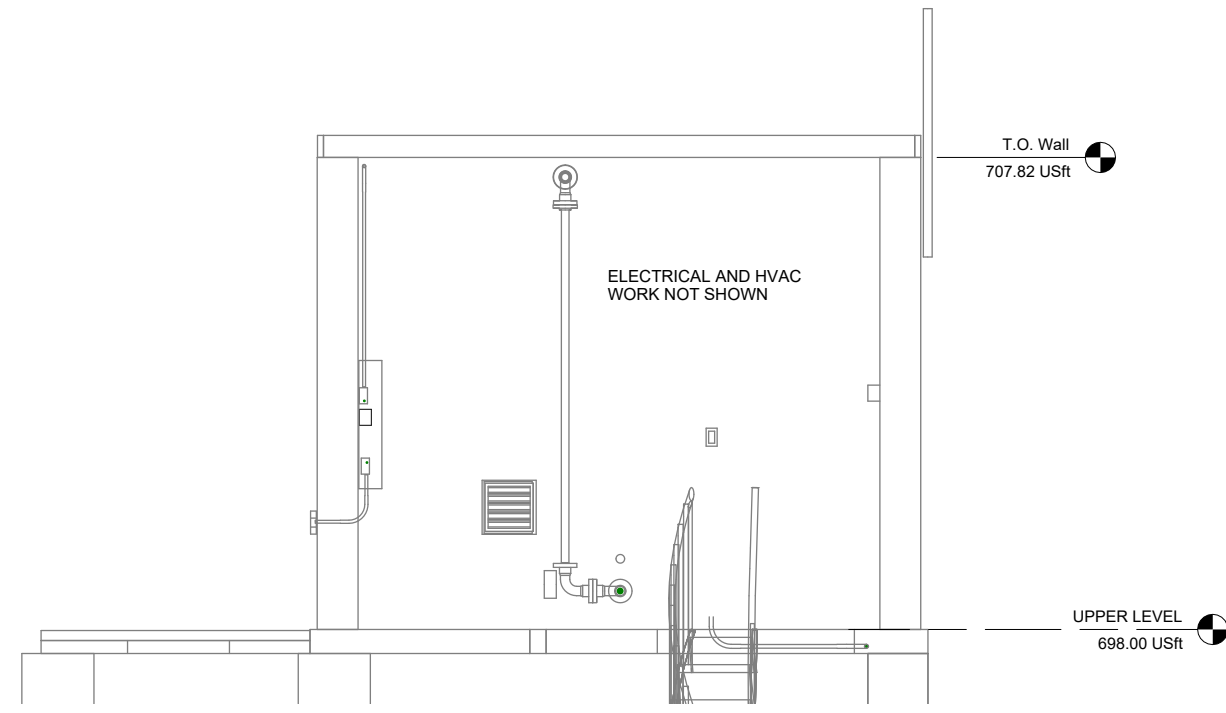
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HOUSER STREET LIFT STATION UPGRADE PROJECT 1301 HOUSER STREET MUSCATINE, IOWA	SECTIONS-UPPER LEVEL N, S, E, W
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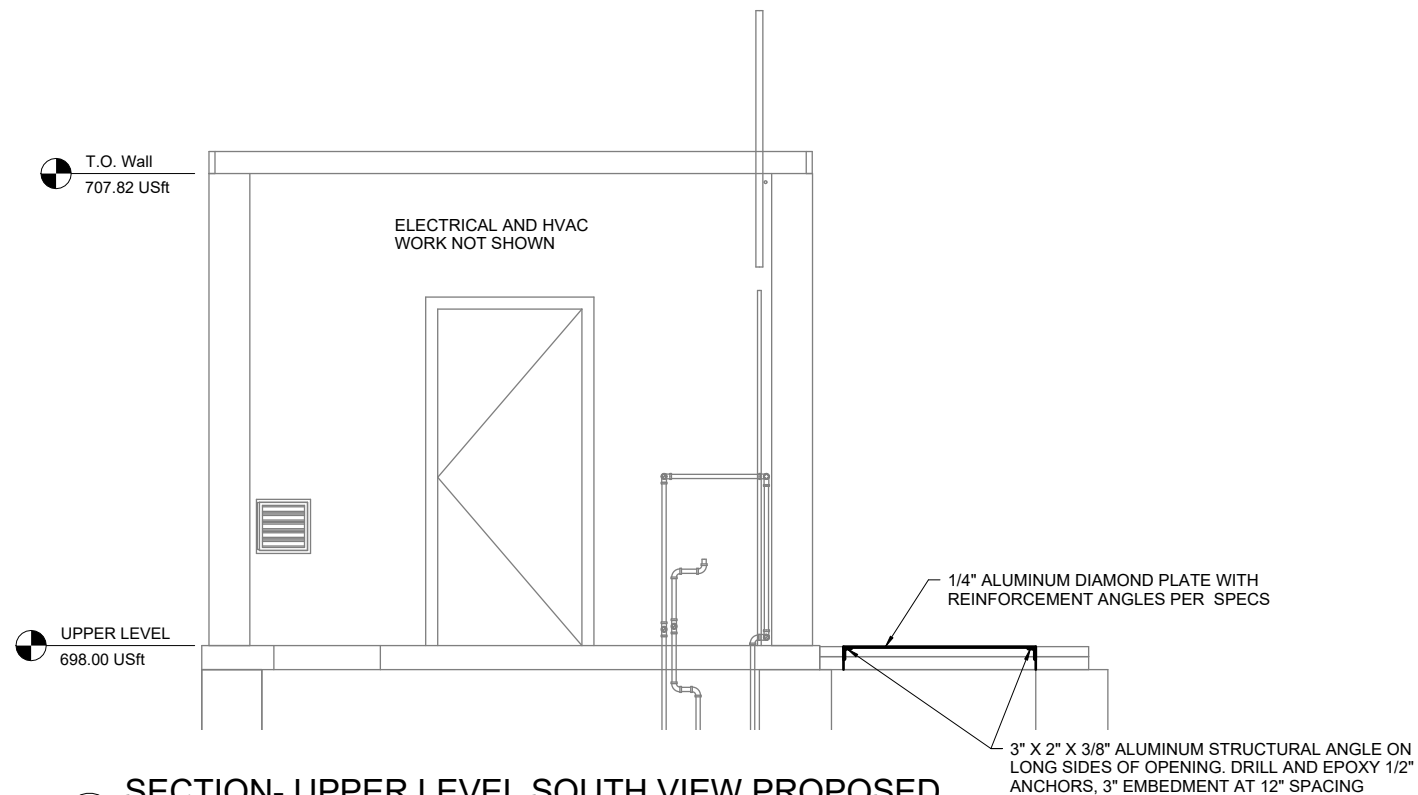
SHEET
IDENTIFICATION
M5



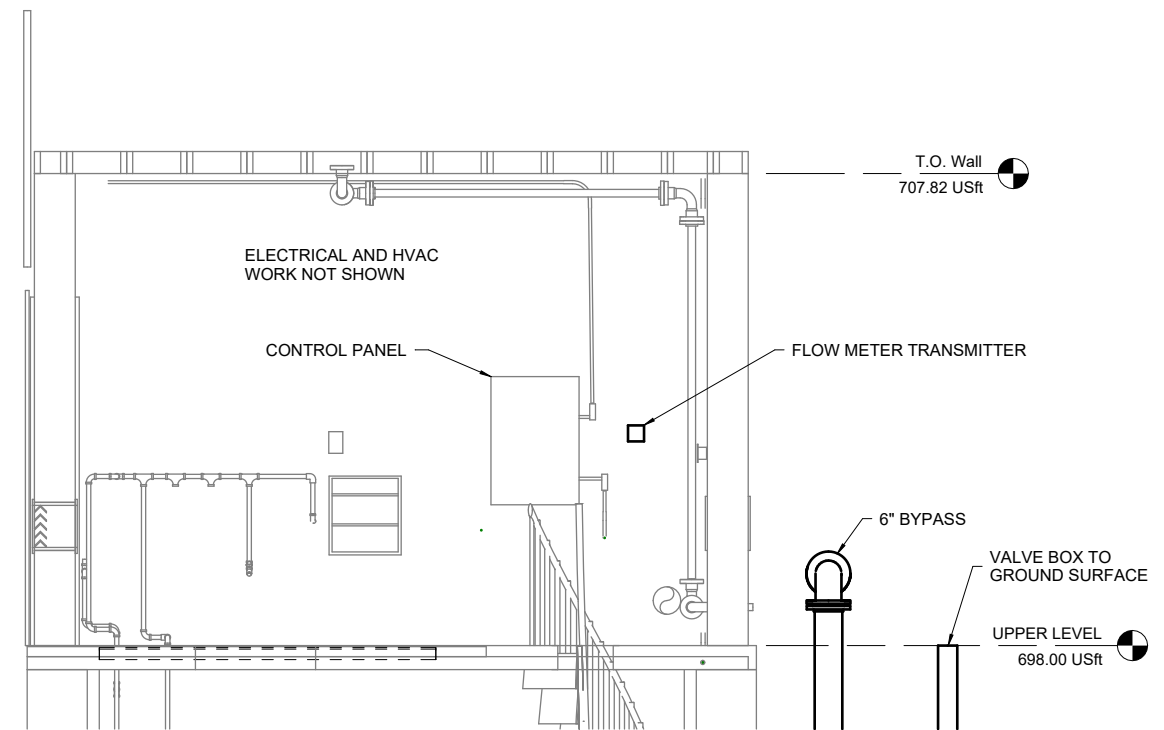
① SECTION- UPPER LEVEL WEST VIEW PROPOSED
1/2" = 1'-0"



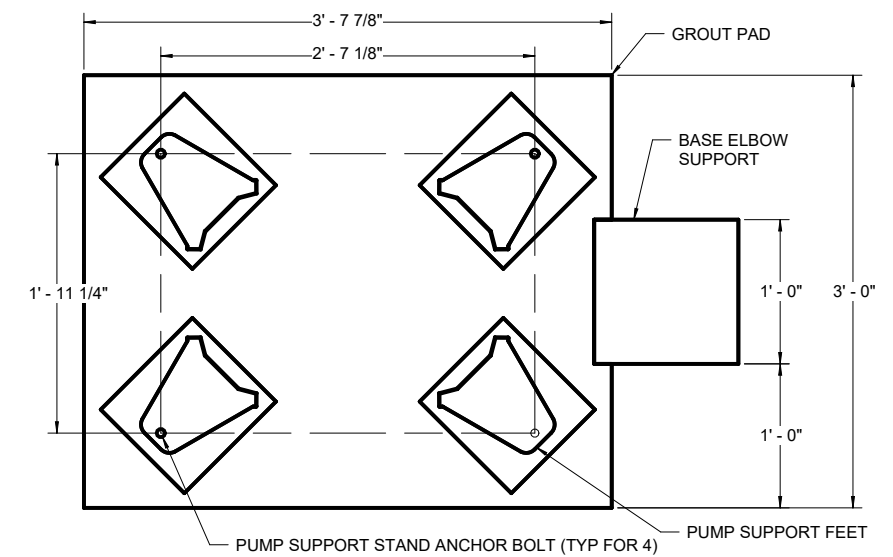
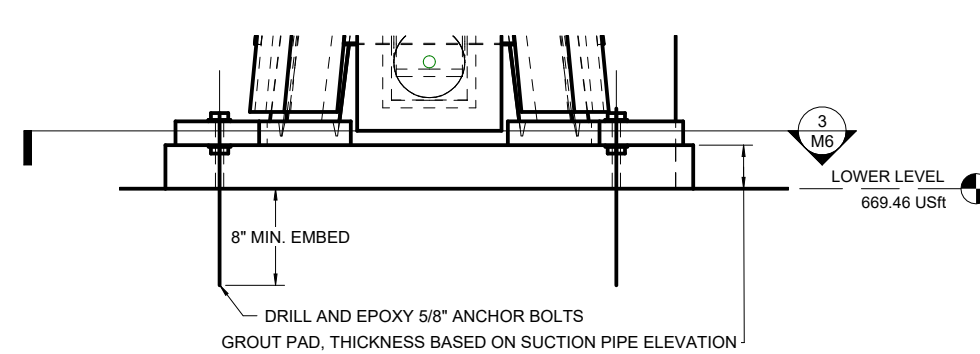
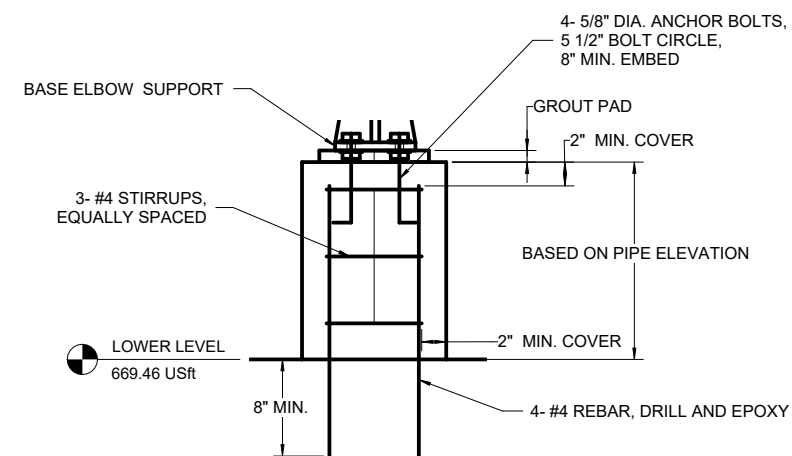
② SECTION- UPPER LEVEL NORTH VIEW PROPOSED
1/2" = 1'-0"

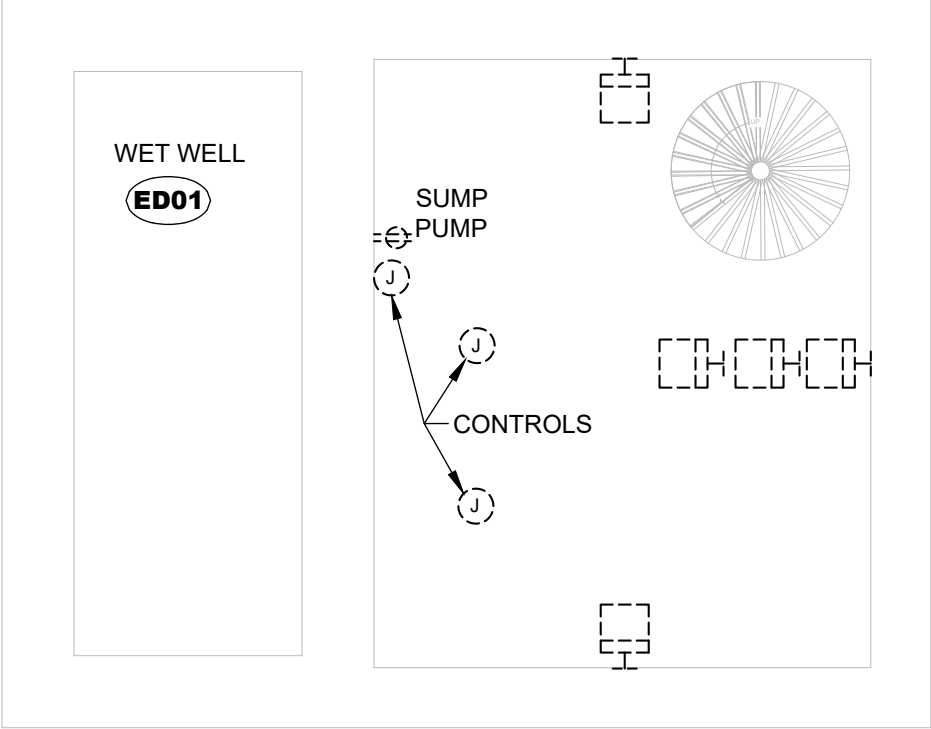


③ SECTION- UPPER LEVEL SOUTH VIEW PROPOSED
1/2" = 1'-0"

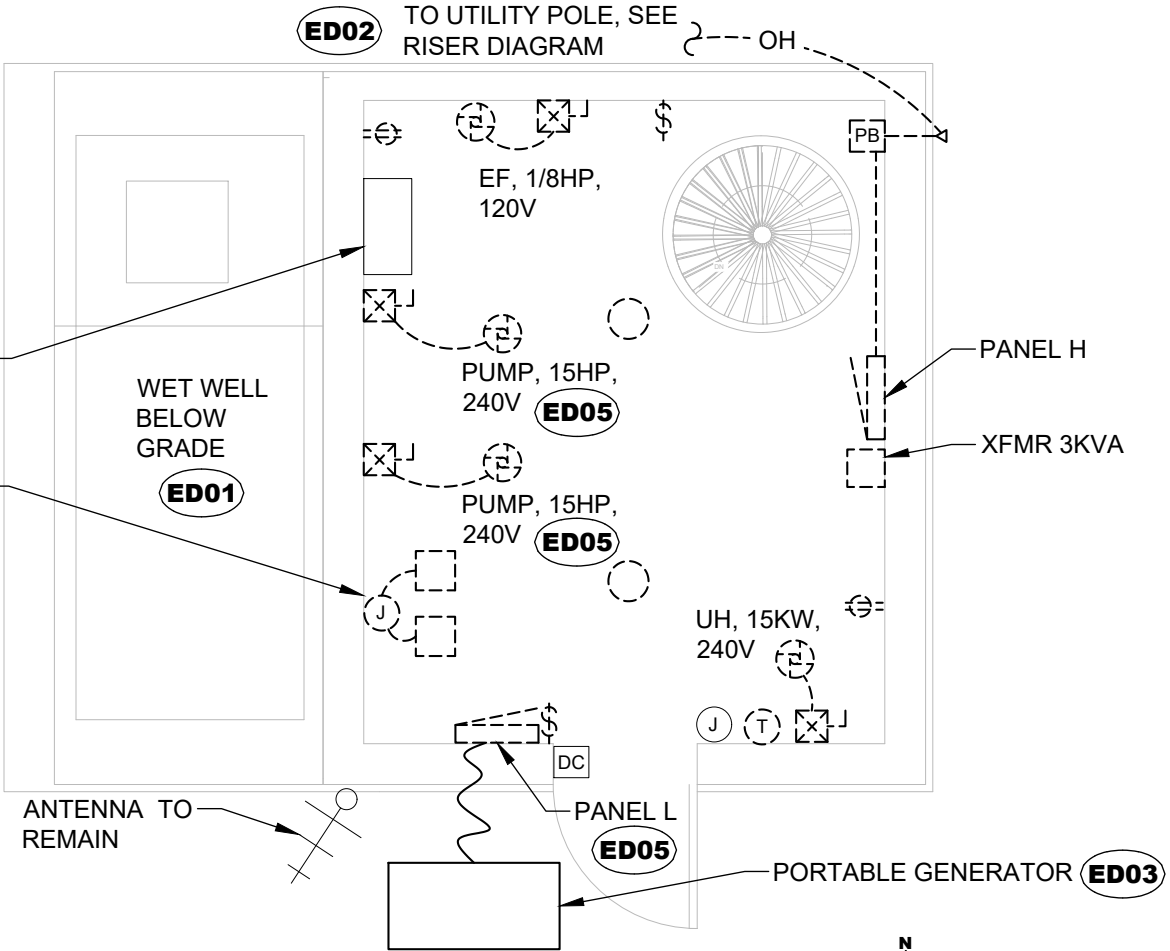


④ SECTION- UPPER LEVEL EAST VIEW PROPOSED
1/2" = 1'-0"





1 LOWER LEVEL ELECTRICAL DEMOLITION PLAN
SCALE: 0'0" 2'0" 4'0" 8'0"



2 UPPER LEVEL ELECTRICAL DEMOLITION PLAN
SCALE: 0'0" 2'0" 4'0" 8'0"

GENERAL ELECTRICAL DEMOLITION NOTES:

- A. Unless noted otherwise, all items shown in dark dashed pen type shall be removed and disposed of by the Contractor. All items in light, solid pen shall remain.
- B. Coordinate service outages with the Owner a minimum of seven days in advance. See Phasing Notes for more information on temporary connections, outages, and switchover to the new electrical service.
- C. Where outlets, equipment, fixtures, conduits and wiring are abandoned, remove conduit and wiring back to source.

KEYED ELECTRICAL DEMOLITION NOTES

- ED01 **WET WELL HAZARDOUS LOCATION.** This area is a Class 1, Division 1, Group D hazardous location. All items in this area are to remain. Do not work in this area.
- ED02 **UTILITY COMPANY.** Coordinate all work with Muscatine Power and Water (563-263-2631). The utility company will remove the transformers and meter. See Phasing Notes for more information.
- ED03 **PORTABLE GENERATOR FOR TEMPORARY POWER.** Provide a 5 KW 120/240V, 1ph, 3W portable generator to provide power to controls during pump replacement. Temporary diesel pumps will be used so 480V temporary generator power is not necessary.
- ED04 **CONTROL PANEL.** The control panel and components served from it will remain and be re-fed per the new work.
- ED05 **PHASING.** See the Phasing Notes for keeping pumping operational during electrical service replacement.

DEMOLITION KEY	
TO REMAIN	—————
TO BE REMOVED	-----

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.

Jeffrey R. Reinhart 10/11/2024
(signature) (date)

Jeffrey R. Reinhart
License number 13499
My license renewal date is December 31, 2025
Pages or sheets covered by this seal: UE.1 THROUGH UE.10

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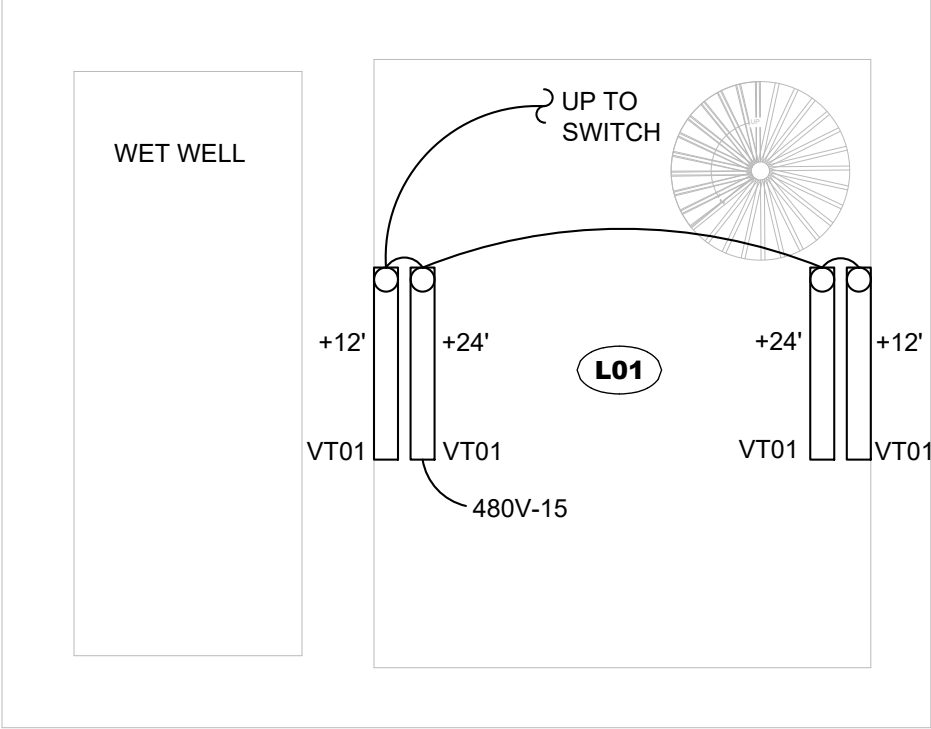
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CITY OF MUSCATINE 215 SYCAMORE STREET MUSCATINE, IA 52761			WATERSMITH ENGINEERING 1028 HERSHEY AVE MUSCATINE, IA 52761				
HOUSER STREET LIFT STATION UPGRADE PROJECT 1301 HOUSER STREET MUSCATINE, IOWA							ELECTRICAL DEMOLITION PLANS
SHEET IDENTIFICATION UE.1							

D

C

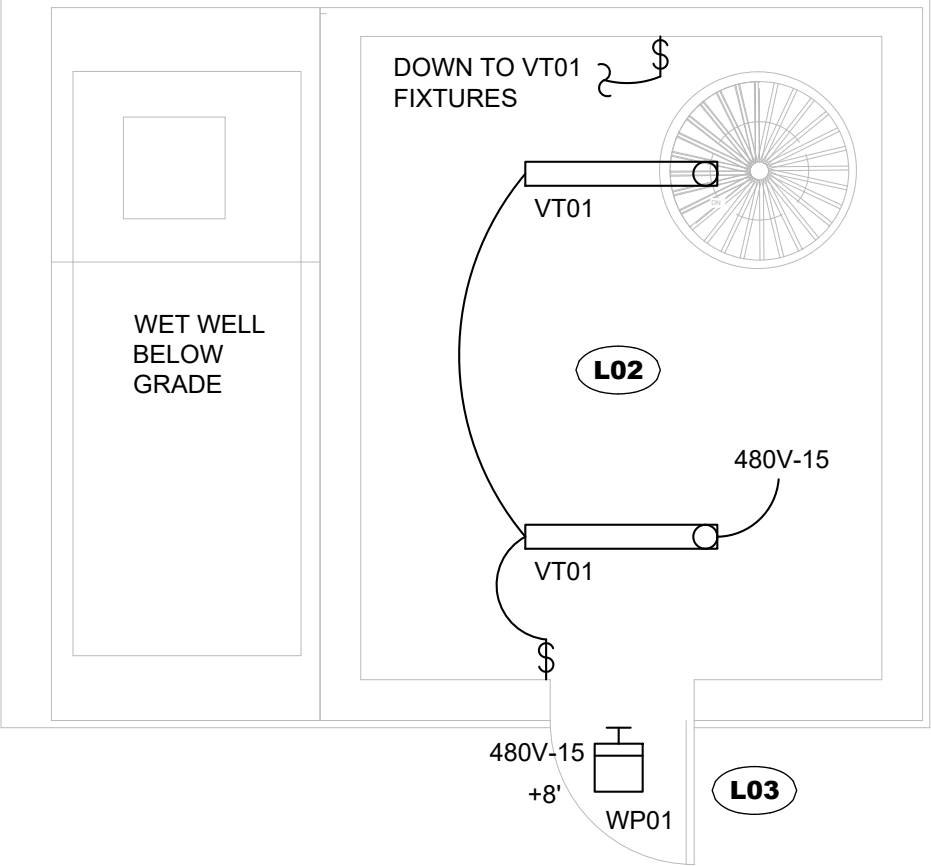
B

A



1 LOWER LEVEL LIGHTING PLAN

SCALE: 0'0" 2'0" 4'0" 8'0"



2 UPPER LEVEL LIGHTING PLAN

SCALE: 0'0" 2'0" 4'0" 8'0"



KEYED LIGHTING NOTES

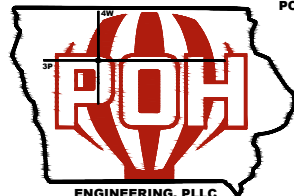
- L01 LOWER LEVEL FIXTURES. Wall mount fixtures at the heights indicated. Coordinate with piping layout prior to rough-in.
- L02 UPPER LEVEL FIXTURES. Suspend roughly 6" down from structure with aircraft cable to accommodate existing utilities on the structure.
- L03 EXTERIOR FIXTURE. Drill through masonry wall to serve light fixture. Install on weatherproof surface box. Coordinate location with new louver.

LIGHTING KEY

XX## FIXTURE TYPE
+## MOUNTING HEIGHT
480V-# CIRCUIT #

NEW WORK KEY

EXISTING _____
NEW WORK _____



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JRR					
PLOT SCALE: <td></td> <td>ISSUE DATE:<td></td><td></td><td></td></td>		ISSUE DATE: <td></td> <td></td> <td></td>			
JRR		JRR			
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ANSI B		UE.1			

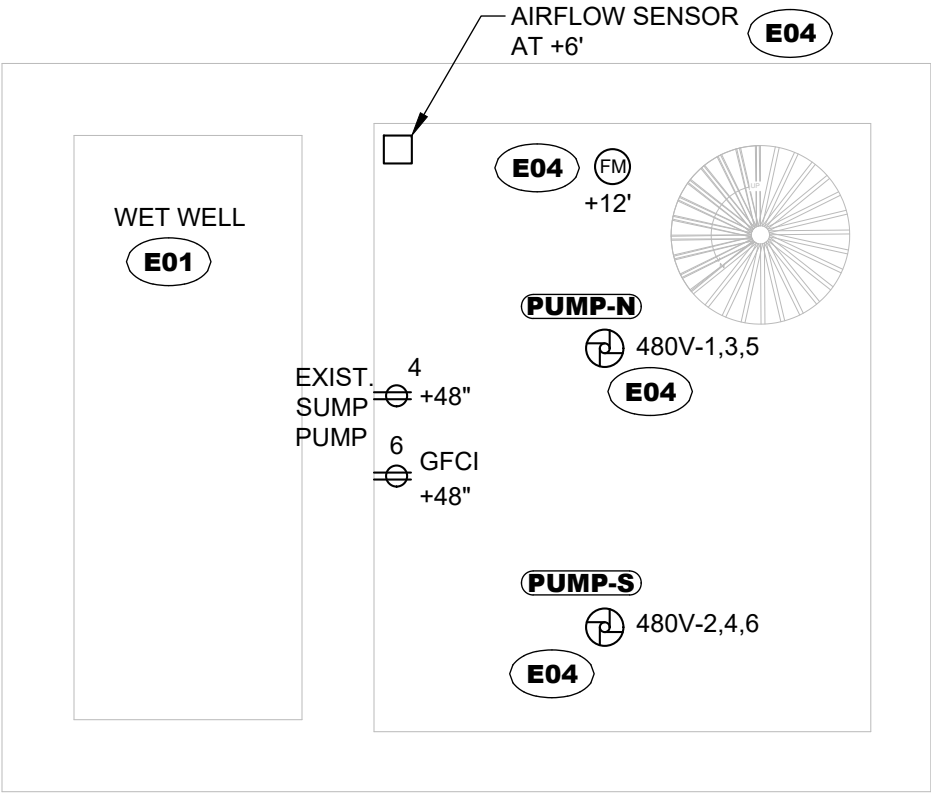
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MUSCATINE, IA 52761

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MUSCATINE, IA 52761

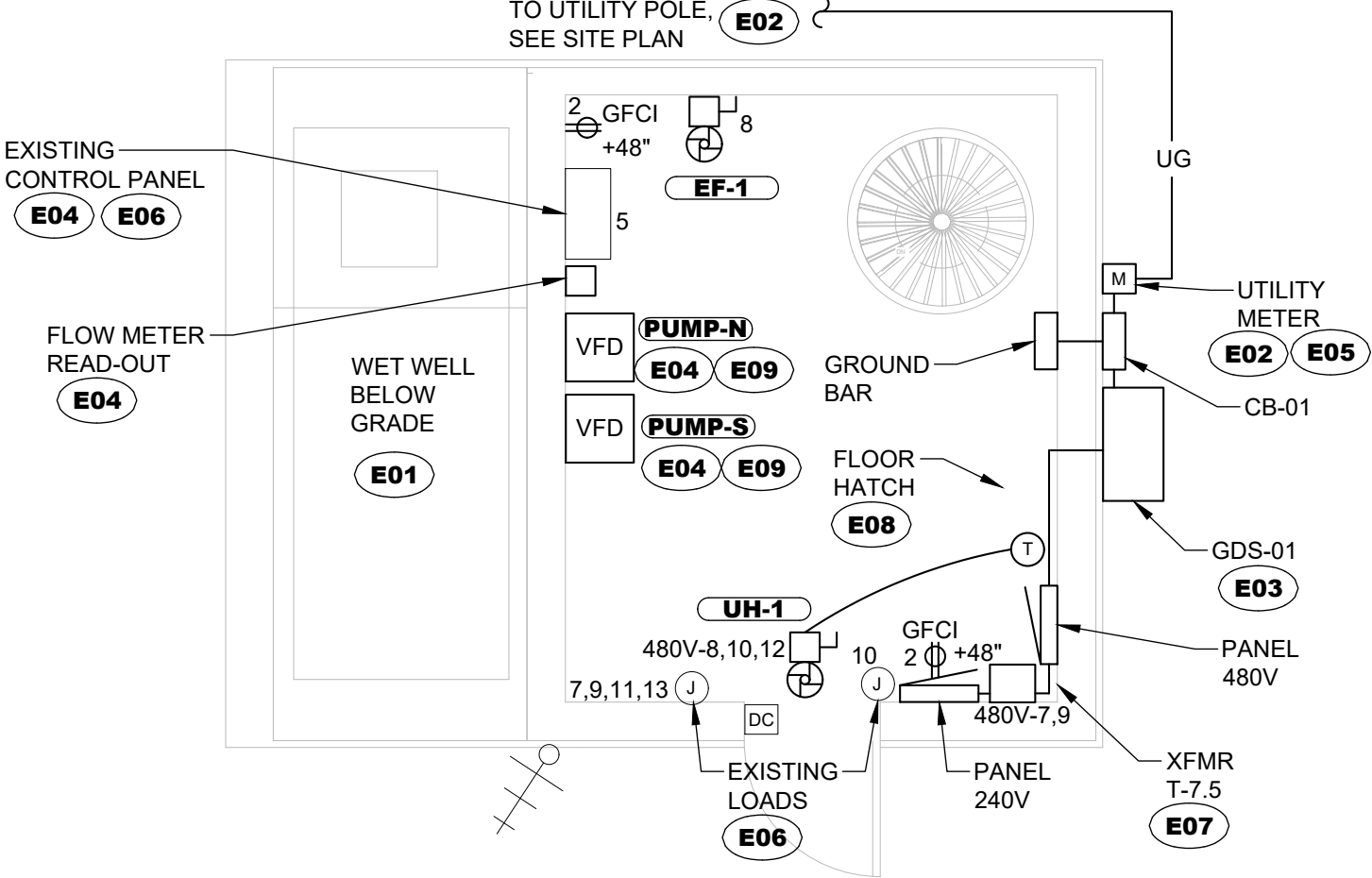
HOUSER STREET LIFT STATION UPGRADE PROJECT
1301 HOUSER STREET
MUSCATINE, IOWA

LIGHTING PLANS

SHEET
IDENTIFICATION
UE.2



1 LOWER LEVEL POWER PLAN
SCALE: 0'0" 2'0" 4'0" 8'0"



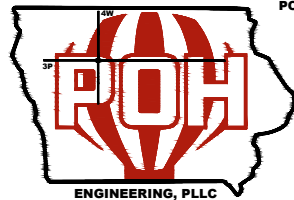
2 UPPER LEVEL POWER PLAN
SCALE: 0'0" 2'0" 4'0" 8'0"

KEYED ELECTRICAL NOTES

- E01 WET WELL HAZARDOUS LOCATION. This area is a Class 1, Division 1, Group D hazardous location. Do not install new work in this area.
- E02 UTILITY COMPANY. Coordinate all work with Muscatine Power and Water (563-263-2631). The utility company will install new transformers and meter. Contractor shall install the meter socket, secondary feeder from the building to the utility pole (leaving 50 feet of slack for the Utility Company to extend up the pole).
- E03 OWNER'S PORTABLE GENERATOR. The Owner will be purchasing a portable generator to serve all of their lift stations separately from this project. Coordinate generator connection details with the Owner prior to ordering the equipment.
- E04 CONTROL PANEL. See the Equipment Connection Schedule and Control/Monitor Connection Schedule for more information. Connect pump power, seal fail sensors, over-temperature sensors, air flow sensor, VFD's, and flow meter to control panel.
- E05 PHASING. Secondary building feeder, Utility Meter, Main Circuit Breaker, Generator Docking Station / MTS, Panel 480V, Panel 240V, and XFMR T-7.5S can be installed prior to de-energizing and removing the existing equipment. See Phasing Notes for more information.
- E06 EXISTING ITEMS RE-FED. Intercept and re-feed existing 120V loads per the Panel 240V schedule. Install new junction boxes at location of removed Panel L.
- E07 TRANSFORMER. Install transformer high on wall and support from wall and ceiling structure with strut.
- E08 FLOOR HATCH. Do not install items on wall that protrude more than 4 inches out to maintain access to the floor hatch.
- E09 PULL BOX. Install 12 inch x 12 inch x 6 inch pull box above VFD for future installation of metering CT's by the Owner.

POWER KEY	
+ #	MOUNTING HEIGHT
#	PANEL-CIRCUIT # (TO PANEL 240V U.N.O.)

NEW WORK KEY	
EXISTING	_____
NEW WORK	_____



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SUBMITTED BY: JRR	ISSUE DATE: 05/10/2024	SOLICITATION NO.:
PLOT SCALE: 1/8" = 1'-0"	FILE NAME: UE.1	CONTRACT NO.:
SIZE: ANSI B	FILE NUMBER:	DATE: 10/11/24
	DESCRIPTION:	DATE: 10/11/24
	MARK:	DATE: 10/11/24

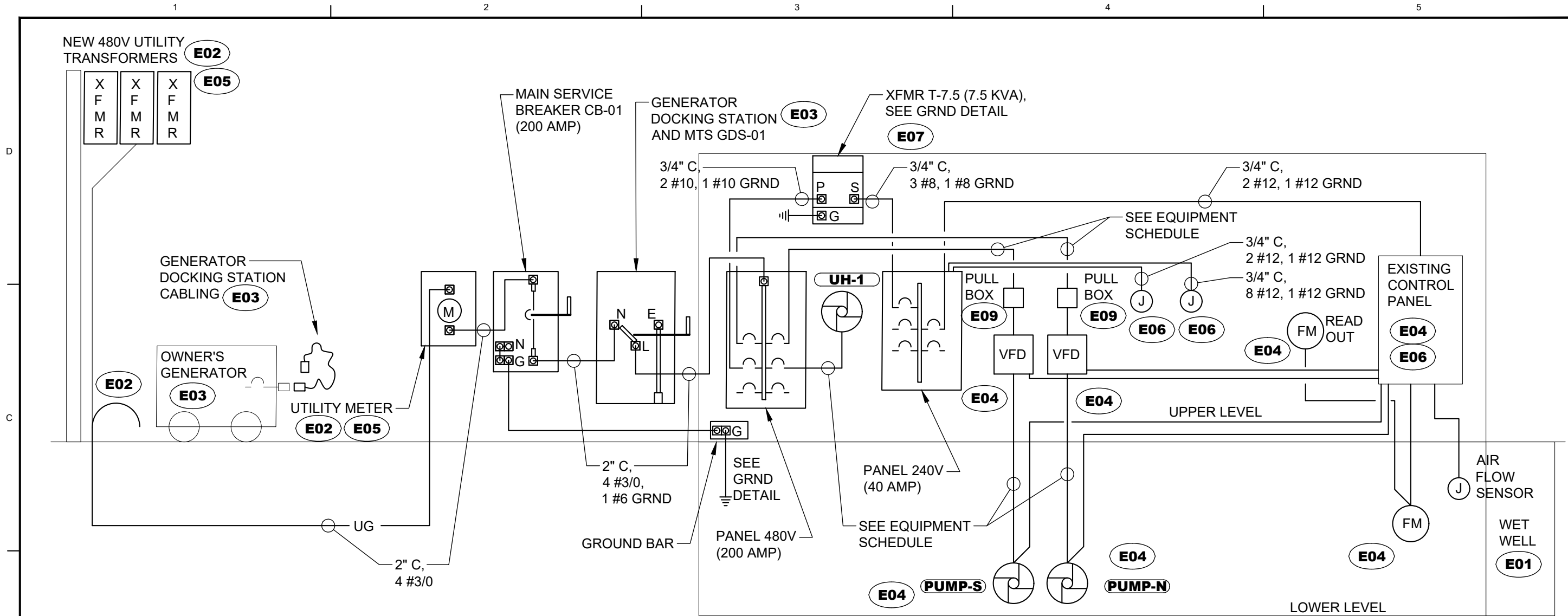
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215 SYCAMORE STREET
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HOUSER STREET LIFT STATION UPGRADE PROJECT
1301 HOUSER STREET
MUSCATINE, IOWA

POWER PLANS

SHEET
IDENTIFICATION
UE.3



1 ELECTRICAL RISER DIAGRAM - NEW WORK
SCALE: NO SCALE

KEYED ELECTRICAL NOTES

- E01 WET WELL HAZARDOUS LOCATION. This area is a Class 1, Division 1, Group D hazardous location. Do not install new work in this area.
- E02 UTILITY COMPANY. Coordinate all work with Muscatine Power and Water (563-263-2631). The utility company will install new transformers and meter. Contractor shall install the meter socket, secondary feeder from the building to the utility pole (leaving 50 feet of slack for the Utility Company to extend up the pole).
- E03 OWNER'S PORTABLE GENERATOR. The Owner will be purchasing a portable generator to serve all of their lift stations separately from this project. Coordinate generator connection details with the Owner prior to ordering the equipment.
- E04 CONTROL PANEL. See the Equipment Connection Schedule and Control/Monitor Connection Schedule for more information. Connect pump power, seal fail sensors, over-temperature sensors, air flow sensor, VFD's, and flow meter to control panel.
- E05 PHASING. Secondary building feeder, Utility Meter, Main Circuit Breaker, Generator Docking Station / MTS, Panel 480V, Panel 240V, and XFMR T-7.5S can be installed prior to de-energizing and removing the existing equipment. See Phasing Notes for more information.
- E06 EXISTING ITEMS RE-FED. Intercept and re-feed existing 120V loads per the Panel 240V schedule. Install new junction boxes at location of removed Panel L.
- E07 TRANSFORMER. Install transformer high on wall and support from wall and ceiling structure with strut.
- E08 FLOOR HATCH. Do not install items on wall that protrude more than 4 inches out to maintain access to the floor hatch.
- E09 PULL BOX. Install 12 inch x 12 inch x 6 inch pull box above VFD for future installation of metering CT's by the Owner.

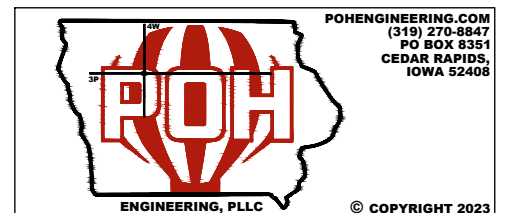
ALL WIRING IS COPPER

NEW WORK KEY

EXISTING _____

NEW WORK _____

TEMPORARY - - - - -



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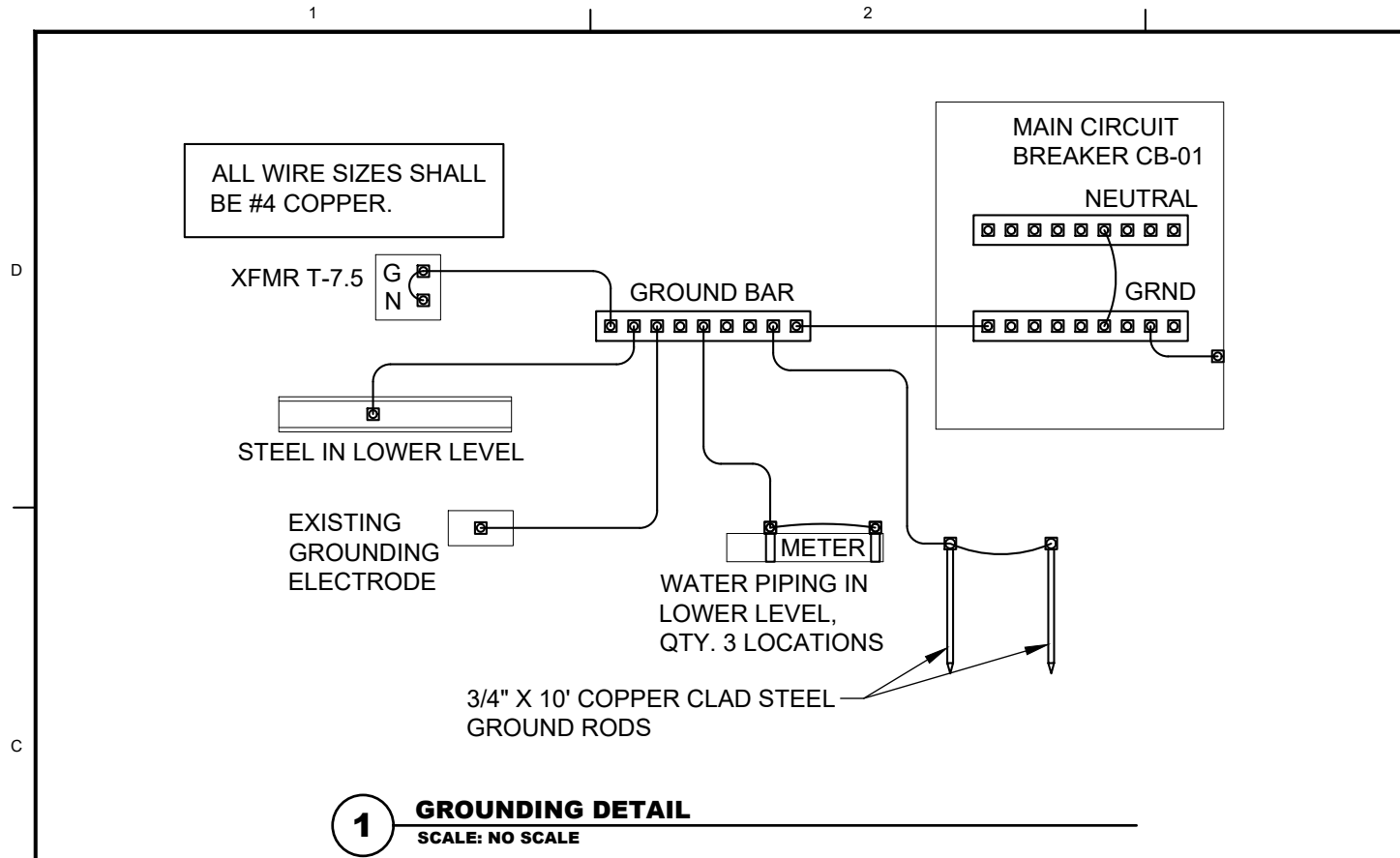
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HOUSER STREET LIFT STATION UPGRADE PROJECT
1301 HOUSER STREET
MUSCATINE, IOWA

ELECTRICAL RISER DIAGRAM
NEW WORK

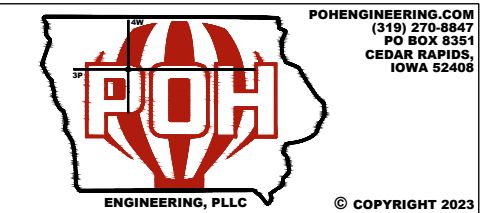
SHEET
IDENTIFICATION
UE.6



POWER SYMBOLS (NOT ALL MAY BE USED)		LIGHTING SYMBOLS (NOT ALL MAY BE USED)	
	DUPLEX		SURFACE LIGHTING FIXTURE
	QUAD		SURFACE MOUNTED INTERIOR FIXTURE
	120 VOLT RECEPTACLE (+18" AFF UNO)		WALL MOUNTED INTERIOR FIXTURE
	AFCI = ARC FAULT CIRCUIT INTERRUPTER,		LIGHTING CONTROL INDICATION
	GFCI = GROUND FAULT CIRCUIT INTERRUPTER,		
	CLG = CEILING MOUNTED,		
	IG = ISOLATED GROUND,		
	SR = SPLIT WIRED (TOP HALF SWITCHED),		
	TVSS = SURGE SUPPRESSION,		
	TR = TAMPER RESISTANT		
	SPECIAL POWER RECEPTACLE AS NOTED (+18" AFF UNO)		LIGHTING SWITCH (+46" AFF UNO)
	PULL BOX		BLANK = 1 POLE, 3 = 3-WAY, 4 = 4-WAY, 2P = 2 POLE, K = KEYED
	JUNCTION BOX		WALL BOX OCCUPANCY SENSOR (+46" AFF UNO)
	ELECTRICAL ITEM AS NOTED		
	ELECTRICAL PANELBOARD, OR ENCLOSURE AS NOTED		
	DISCONNECT SWITCH		
	MOTOR STARTER		
	VFD		
	EQUIPMENT MOTOR CONNECTION		

LIGHTING CONTROLS (NOT ALL MAY BE USED)		CONTROLS SYSTEMS (NOT ALL MAY BE USED)	
			LEVEL INDICATOR (FLOAT)
			FLOW METER
			LEVEL TRANSDUCER

ABBREVIATIONS (NOT ALL MAY BE USED)		ABBREVIATIONS (NOT ALL MAY BE USED)	
A	AMPERE OR AMP	HD	HAND DRYER
AC	ABOVE COUNTER	HP	HORSEPOWER
ACT	ACOUSTICAL CEILING TILE	HVAC	HEATING, VENTILATION, AIR CONDITIONING
A/C	AIR CONDITIONER	HZ	HERTZ
ADA	AMERICANS WITH DISABILITIES ACT	IBC	INTERNATIONAL BUILDING CODE
AF	AMP FUSE	IMC	INTERMEDIATE METAL CONDUIT
AFCI	ARC FAULT CIRCUIT INTERRUPTER	JB	JUNCTION BOX
AFF	ABOVE FINISHED FLOOR	KV	KILOVOLT
AFG	ABOVE FINISHED GRADE	KVA	KILOVOLT AMPS
AHJ	AUTHORITY HAVING JURISDICTION	KVAR	KILOVOLT AMPS REACTIVE
AHU	AIR HANDLING UNIT	KW	KILOWATT
AIC	AVAILABLE INTERRUPTING CURRENT	KWH	KILOWATT HOUR
AL	ALUMINUM	LED	LIGHT EMITTING DIODE
ALUM	ALUMINUM	LS	LIFE SAFETY
AMP	AMPERE	LTG	LIGHTING
ATS	AUTOMATIC TRANSFER SWITCH	MC	MECHANICAL CONTRACTOR
AWG	AMERICAN WIRE GAUGE	MCA	MINIMUM CIRCUIT AMPS
BAS	BUILDING AUTOMATION SYSTEM	MCB	MAIN CIRCUIT BREAKER
BBH	BASEBOARD HEATER	MCM	THOUSAND CIRCULAR MILS
BC	BELOW COUNTER	MECH	MECHANICAL
C	CONDUIT	MLO	MAIN LUG ONLY
CAT	CATEGORY	MTS	MANUAL TRANSFER SWITCH
CB	CIRCUIT BREAKER	MW	MICROWAVE
C/B	CIRCUIT BREAKER	N	NEUTRAL (GROUNDED)
CCT	CIRCUIT	NC	NORMALLY CLOSED
CCTV	CLOSED CIRCUIT TELEVISION	NEC	NATIONAL ELECTRICAL CODE
CLG	CEILING	NEC	NATIONAL ELECTRICAL CODE
CO	CARBON MONOXIDE	NEMA	NATIONAL ELECTRICAL MANUFACTURERS ASSN
CRIT	CRITICAL	NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
CU	COPPER	NF	NON-FUSED
CUH	CABINET UNIT HEATER	NL	NIGHT LIGHT
DC	DIRECT CURRENT	NO	NORMALLY OPEN
DD	DOUBLE DUPLEX	N/A	NOT APPLICABLE
DP	DOUBLE POLE	OH	OVERHEAD
DT	DOUBLE THROW	OVHD	OVERHEAD
DW	DISHWASHER	P	POLE
DWC	DRYWALL CEILING	PB	PULL BOX
DWG	DRAWING	PH	PHASE
EC	ELECTRICAL CONTRACTOR	PLBG	PLUMBING
EF	EXHAUST FAN	PTZ	PAN-TILT-ZOOM
ELEC	ELECTRICAL	PVC	POLYVINYL CHLORIDE
EM	EMERGENCY	RGS	RIGID GALVANIZED STEEL
EMT	ELECTRICAL METALLIC TUBING	SH	SHIELDED
ENT	ELECTRICAL NON-METALLIC TUBING	SP	SINGLE POLE
EQ	EQUIPMENT	SPD	SURGE PROTECTIVE DEVICE
EQUIP	EQUIPMENT	SPEC	SPECIFICATION OR SPECIFICATIONS
EX	EXISTING	SR	SIMPLEX RECEPTACLE
FA	FIRE ALARM	TCP	TEMPERATURE CONTROL PANEL
FAAP	FIRE ALARM ANNUNCIATOR PANEL	TV	TELEVISION
FACP	FIRE ALARM CONTROL PANEL	TVSS	TRANSIENT VOLTAGE SURGE SUPPRESSOR
FCU	FAN COIL UNIT	TW	TWISTED
FLA	FULL LOAD AMPS	UC	UTILITY COMPANY
G	GROUND (GROUNDING)	UG	UNDERGROUND
GAP	GENERATOR ANNUNCIATOR PANEL	UL	UNDERWRITERS LABORATORIES
GC	GENERAL CONTRACTOR	UNO	UNLESS NOTED OTHERWISE
GRC	GALVANIZED RIGID STEEL	V	VOLTAGE OR VOLT OR VOLTS
GRND	GROUND (GROUNDING)	VFD	VARIABLE FREQUENCY DRIVE
GFCI	GROUND FAULT CIRCUIT INTERRUPTER	W	WIRE
H	HOT (PHASE)	WP	WEATHERPROOF
		XFMR	TRANSFORMER





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APPROVED BY: JRR	DATE: 05/10/2024		

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MUSCATINE, IA 52761

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HOUSER STREET LIFT STATION UPGRADE PROJECT
13011 HOUSER STREET
MUSCATINE, IOWA

ELECTRICAL SYMBOLS AND ABBREVIATIONS

SHEET IDENTIFICATION
UE.7

DRY TYPE TRANSFORMER SCHEDULE

PLAN MARK	RATED	WINDING MATERIAL	PRIMARY VOLTAGE/PHASE/WIRE	SECONDARY VOLTAGE/PHASE/WIRE	% TAPS + / -, # = QTY.	TEMP RISE 220 DEG C INS	SQUARE D SERIES	K- RATING	SPECIFIC NOTES
T-7.5	7.5 KVA	ALUMINUM	480V/1PH/2W	240V/1PH/3W	2.5%, 2+, 4-	115 DEG C	7S1F	1	WALL MOUNTED

GENERAL NOTES (APPLY TO ALL TRANSFORMERS UNLESS NOTED OTHERWISE):

- A. UNLESS OTHERWISE NOTED, INSTALL ALL TRANSFORMERS ON WALL WITH STRUT TO CEILING STRUCTURE. USE VIBRATION ISOLATORS.
- B. CONNECT ALL TRANSFORMERS WITH LIQUID-TIGHT FLEXIBLE METAL CONDUIT.
- C. PROVIDE LUGS FOR PRIMARY AND SECONDARY CONNECTIONS.

CIRCUIT BREAKER SCHEDULE

PLAN MARK	SWITCH LOCATION	SYSTEM			BREAKER TYPE	ENCL. NEMA	AIC RATING	BKR. FRAME	BKR. AMP	SQUARE D SERIES	SPECIFIC NOTES
		VOLT	PHASE	W							
CB-01	EXTERIOR	480	3	4	LI	3R	35K	200	200	JGL36200 / J250AWK	1

BREAKER TYPES:

MA = MAGNETIC TRIP TYPE LI = LONG-TIME, INSTANTANEOUS ELECTRONIC TRIP TYPE

SPECIFIC NOTES:

1. CIRCUIT BREAKER SHALL BE SERVICE RATED, ELECTRONIC (LI) TYPE.

MANUAL TRANSFER SWITCH AND GENERATOR DOCKING STATION SCHEDULE

PLAN MARK	SWITCH LOCATION	SYSTEM			AMP RATING	NEMA ENCL.	A/C RATING	TYPE	TRYSSTAR SERIES	FEATURES	ACCESSORIES	SPECIFIC NOTES
		VOLT	PHASE	W								
GDS-01	EXTERIOR	480	3	4	200	3R	35,000	DS/MTS	TMTS-1	PRM, MC, PE, CLC	CAM LOCKS, 4/0 CU CABLES	1

DOCKING STATION TYPE:

DS/MTS = GENERATOR DOCKING STATION WITH MANUAL TRANSFER SWITCH

ACCESSORIES:

PRM = PHASE ROTATION MONITORING MC = MONITORING CONTACTS PE = PADLOCKABLE ENCLOSURE CLC = CAM LOCK CONNECTIONS

GENERAL NOTES (APPLY TO ALL ITEMS UNLESS NOTED OTHERWISE):

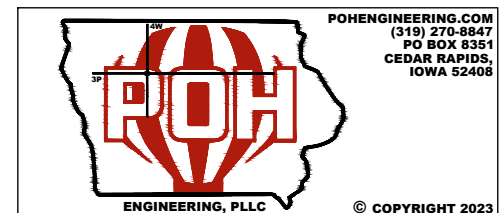
1. SEE SPECIFICATIONS FOR MORE INFORMATION.

SPECIFIC NOTES:

1. PROVIDE COLOR CODED CAM LOCK MALE CONNECTORS CONNECTED TO THE DOCKING STATION BUS.
2. PROVIDE TRYSTAR POWER CABLE (600V, 30 GAUGE FLEXIBLE CLASS K COPPER, TYPE PPE JACKETED. PROVIDE MATCHING CAM LOCK CONNECTORS ON BOTH ENDS).

CONSTRUCTION PHASING AND SEQUENCING NOTES

- A. The following are phasing and sequencing notes for construction. The lift station can not be without power for an extended period of time. The following is a guide to maintaining power to the existing lift station and providing power to the new lift station equipment to minimize downtime.
- B. Install as much of the new electrical service as possible without de-energizing the existing service. This includes the secondary feeder, Utility Meter, Main Circuit Breaker, Generator Docking Station / MTS, Panel 480V, XFMR T-7.5, Panel 240V, and their feeders.
- C. Utilize a portable generator for power to existing Panel L (120/240V) during the switchovers and where otherwise needed. Pumping requirements will be met during the switchovers with diesel pumping.
- D. After the new pumps are installed/connected, install the remaining new electrical distribution equipment and their feeders. Remove temporary connections and equipment.
- E. Coordinate switchovers with the General Contractor, Utility Company, and Owner to minimize downtime.



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CITY OF MUSCATINE 215 SYCAMORE STREET MUSCATINE, IA 52761	JRR	DOWN BY: JRR	CAD BY: JRR	SOLICITATION NO.: 081670224
WATERSMITH ENGINEERING 1029 HERSHEY AVE MUSCATINE, IA 52761	JRR	SUBMITTED BY:	ISSUE DATE:	FILE NUMBER:
			PLOT SCALE:	
			SIZE:	FILE NAME:
			ANSI B	LUE 1

HOUSER STREET LIFT STATION UPGRADE PROJECT
1301 HOUSER STREET
MUSCATINE, IOWA

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LIGHTING FIXTURE SCHEDULE

PLAN MARK	FIXTURE DESCRIPTION AND FEATURES	MANUFACTURERS	ACUITY FIXTURE SERIES	MOUNTING STYLE	ENVIRO TYPE	DIMENSIONS				LED LIGHT OUTPUT			WATTAGE		DRIVER		NOTES
						H"	W"	L/D"	DIA"	LUMENS	TEMP	CRI	WATTS	PER	VOLT	TYPE	
VT01	4 FOOT VAPOR TIGHT LINEAR LED, WHITE FINISH, FROSTED LENS, BRACKET	ACUITY, COOPER, HUBBELL, SIGNIFY,	CSVT L48 5000LM MVOLT 40K 80CRI	SURFACE MOUNTED ON EXISTING WALL	WET	4	5	48	N/A	5000	40K	80	42	FIXTURE	UNIV	10% DIM	
WP01	ARCHITECTURAL WALLPACK, LED, BRONZE FINISH, INTEGRAL PHOTOCCELL	ACUITY, COOPER, HUBBELL, SIGNIFY,	WPX0 LED AL0 SWW2 MVOLT PE DDBXD M2	SURFACE MOUNTED ON EXISTING WALL	WET	6	6	2	N/A	1650	40K	70	13	FIXTURE	UNIV	10% DIM	

GENERAL ITEMS:

A. LED DRIVERS SHALL BE MULTIVOLT, WITH 5 YEAR WARRANTY.

CONTROL/MONITORING CONDUIT SCHEDULE

FROM EQUIPMENT	TO EQUIPMENT	DESCRIPTION (SEE CONTROL DRAWINGS AND SPECS FOR WIRING SIZE/TYPE)	CONDUIT (ALL WIRING IN CONDUIT)	SPECIFIC NOTES
AIR FLOW METER	EXISTING CONTROL PANEL	FLOW VERIFICATION TO PLC CONTROL PANEL	1" CONDUIT	
FLOW METER (FM)	EXISTING CONTROL PANEL	FLOW METER SIGNAL TO PLC CONTROL PANEL	1" CONDUIT	
FLOW METER (FM)	FLOW METER READ-OUT	FLOW METER SIGNAL TO FLOW METER READ-OUT	1" CONDUIT	
TWO PUMP FAIL SWITCH	EXISTING CONTROL PANEL	PUMP FAIL SWITCHES IN PUMP TO CONTROL PANEL	1" CONDUIT FOR EACH PUMP	
TWO PUMP OVER-TEMP SWITCHES	EXISTING CONTROL PANEL	PUMP OVER-TEMP SWITCHES IN PUMP TO CONTROL PANEL	1" CONDUIT FOR EACH PUMP	
TWO PUMP VFD'S	EXISTING CONTROL PANEL	CONTROL AND MONITORING	1" CONDUIT FOR EACH VFD	

VARIABLE FREQUENCY DRIVE SCHEDULE

PLAN MARK	MOTOR			VARIABLE SPEED DRIVE CONTROLLER				DISCONNECT		YASKAWA SERIES	AIC RATING
	HP	VOLT	PH	TYPE	AMPS	ENCL.	ACCESSORIES	TYPE	AMP		
PUMP-N	15	480	3	PUMP	21	1	KP LCD SC FT	NONE	N/A	GA800	25,000
PUMP-S	15	480	3	PUMP	21	1	KP LCD SC FT	NONE	N/A	GA800	25,000

VFD AND DISCONNECT TYPES:

FD=FUSED DISCONNECT CB=CIRCUIT BREAKER MP=MOTOR PROTECTOR

ACCESSORIES:

KP=KEYPAD WITH RUN, HAND/AUTO, STOP BUTTONS LCD=LCD READOUT SD=SPEED CONTROLLER FT=FUSED CONTROL TRANSFORMER.

GENERAL NOTES (APPLY TO ALL VFDS UNLESS NOTED OTHERWISE):

1. COORDINATE MOTOR REQUIREMENTS WITH MECHANICAL SHOP DRAWINGS PRIOR TO ORDERING VFDS.
2. PROVIDE TWO N.O. AND TWO N.C. AUXILIARY INTERLOCKING RELAYS.
3. PROVIDE ELECTRONIC OVERLOADS AND PHASE LOSS PROTECTION.
4. PROVIDE EMI/RFI PROTECTION, 3% AC LINE REACTOR.
5. LINE WIRING, LOAD WIRING, AND CONTROL WIRING FOR EACH DRIVE SHALL BE IN SEPARATE RACEWAY. DO NOT SHARE RACEWAYS.
6. VFD MUST BE CAPABLE OF CARRYING THE FULL LOAD AMPERAGE OF THE MOTOR WITHOUT USING ANY OF ITS OVERLOAD CAPACITY.
7. PROVIDE SHAFT GROUNDING BRUSH AND BRAIDED GROUNDING CONNECTION TO THE MOTOR FRAME.
8. PROVIDE INTELLIGENT INTERFACE CARD TO MATCH FACILITY SCADA SYSTEM.

EQUIPMENT CONNECTION SCHEDULE

PLAN MARK	EQUIPMENT DESCRIPTION	LOCATION	POWER SOURCE	INPUT VOLTAGE	WATTS OR HP	FULL LOAD AMPS	MINIMUM CCT. AMPS	CCT. BKR SIZE	POWER WIRE FEEDER SIZE	DISCONNECT AT EQUIPMENT	VFD OR STARTER	QTY	SPECIFIC NOTES
EF-1	EXHAUST FAN	UPPER LEVEL	240V	120V/1PH	1/2 HP	9.8	12.3	20A	2 #12, 1 #12 GRND	1P SWITCH	NO	1	
UH-1	ELEC UNIT HEATER	UPPER LEVEL	480V	480V/3PH	15 KW	18.1	22.6	30A	3 #10, 1 #10 GRND	IN PANEL	NO	1	
PUMP-N	SEWAGE PUMP	LOWER LEVEL	480V	480V/3PH	12 HP	16.0	20.0	30A	3 #8, 1 #10 GRND	IN PANEL	VFD	1	1
PUMP-S	SEWAGE PUMP	LOWER LEVEL	480V	480V/3PH	12 HP	16.0	20.0	30A	3 #8, 1 #10 GRND	IN PANEL	VFD	1	1

ABBREVIATION KEY:

AF = AMP FUSE · NE = NON-FUSED · WP = WEATHERPROOF · 4X = NEMA 4X ENCLOSURE · CCT = CIRCUIT · BKR = BREAKER · C = CONDUIT · GRND = GROUND

1P = 1 POLE TOGGLE SWITCH : 2P = 2 POLE TOGGLE SWITCH

GENERAL NOTES (APPLY TO ALL PIECES OF EQUIPMENT UNLESS NOTED OTHERWISE):

A. COORDINATE FINAL CONNECTION DETAILS WITH EQUIPMENT SHOP DRAWINGS PRIOR TO ROUGH-IN AND ORDERING OF SUPPLY EQUIPMENT.

SPECIFIC NOTES:

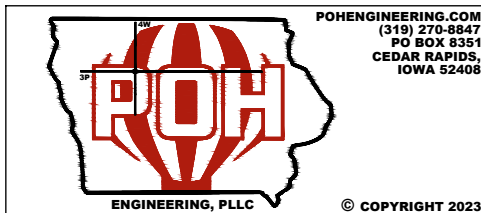
1. FINAL CONNECTIONS SHALL BE BY HARD DUTY, OIL AND WATER RESISTANT CABLES FROM WEATHERPROOF JUNCTION BOXES.

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215 OF MUSCATINE CITY OF MUSCATINE 215 SYCAMORE STREET MUSCATINE, IA 52761 WATERSMITH ENGINEERING 1029 HERSHEY AVE MUSCATINE, IA 52761	DESIGNED BY: JRR	DATE: 06/16/2024
	DWN BY: JRR	SOLICITATION NO.: CONTRACT NO.: FILE NUMBER: PLOT SCALE: ISSUE DATE: SIZE: ANSI B

HOUSER STREET LIFT STATION UPGRADE PROJECT
1301 HOUSER STREET
MUSCATINE, IOWA

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ELECTRICAL BRANCH CIRCUIT PANEL SCHEDULE

PANEL NAME: 480V Location: EAST WALL

Voltage:	480 / 277 V	Phase / Wire:	3PH / 4W	Feeder:	SEE RISER	Panel Style:	BRANCH CIRCUIT, SURFACE MTD
Amps:	200A	AIC Amp Rating:	35,000 AIC	Main:	LUGS	Circuit Bkr Type:	BOLT-ON
Features: TYPEWRITTEN DIRECTORY, GROUND BAR, INTEGRAL 100KA TVSS MODULE, DOOR-IN-DOOR CONSTRUCTION							

Abbrevs: (GFCI) = GFCI BREAKER, (AFCI) = ARC FAULT BREAKER, (ST) = SHUNT TRIP BREAKER, (LSIG) = LSIG TYPE BREAKER
Loads: R = RECEPTACLE, L = LIGHTING, M = MECHANICAL EQUIPMENT, K = KITCHEN EQUIPMENT, E = OTHER EQUIPMENT

Notes:

cct #	Load(s) Served	Load VA	Breaker		Circuit Wiring	Phase			Circuit Wiring	Breaker		Load VA	Load(s) Served	cct #
			P	Amp		A	B	C		Amp	P			
1		4432				8864						4432		2
3	PUMP-N (NORTH)	4432	3	40	SEE EQ SCHED		8864		SEE EQ SCHED	40	3	4432	PUMP-S (SOUTH)	4
5	WITH HANDLE LOCK	4432						8864				4432	WITH HANDLE LOCK	6
7	TRANSFORMER T-7.5	2490	2	20	SEE RISER DIAGRAM	7490						5000		8
9		2576					7576		SEE EQ SCHED	30	3	5000	HEATER UH-1	10
11	SPARE		2	30				5000				5000	WITH HANDLE LOCK	12
13						0								14
15	LIGHTING	300	1	20	2 #12, 1 #12 GRND		300			20	3		SPARE	16
17	SPARE		1	20				0						18
19	SPARE		1	20		0								20
21	SPARE		1	20			0			30	3		SPARE	22
23	SPACE							0						24
25	SPACE					0							SPACE	26
27	SPACE						0						SPACE	28
29	SPACE							0					SPACE	30

Total Connected Load (VA)	46958
NEC Calculated Load (VA)	57431

16354	16740	13864
59.0	60.4	50.1

Amps per phase

56	Total Connected Load (Amps)
69	NEC Calculated Load (Amps)

BRANCH CIRCUIT PANEL SCHEDULE

PANEL NAME: 240V Location: SOUTH WALL

Voltage:	240 / 120 V	Phase / Wire:	1PH / 3W	Feeder:	SEE RISER	Panel Style:	BRANCH CIRCUIT, SURFACE MTD
Amps:	40A	AIC Amp Rating:	22,000 AIC	Main:	BACKFED BKR	Circuit Bkr Type:	BOLT-ON
Features: TYPEWRITTEN DIRECTORY, GROUND BAR, HINGED DOOR-IN-DOOR CONSTRUCTION							

Abbrevs: (GFCI) = GFCI BREAKER, (AFCI) = ARC FAULT BREAKER, (ST) = SHUNT TRIP BREAKER, (LSIG) = LSIG TYPE BREAKER

cct #	Load(s) Served	Load VA	Breaker		Circuit Wiring	Phase		Circuit Wiring	Breaker		Load VA	Load(s) Served	cct #
			P	Amp		A	B		Amp	P			
1	BACKFED MAIN BREAKER		2	40	SEE RISER DIAGRAM	360		2 #12, 1 #12 GRND	20	1	360	RECEPTACLES	2
3							900	2 #12, 1 #12 GRND	20	1	900	SUMP PUMP RECEPTACLE	4
5	EXISTING CONTROL PANEL RE-FED	1200	1	20	2 #12, 1 #12 GRND	1380		2 #12, 1 #12 GRND	20	1	180	RECEPTACLES	6
7	EXISTING LOAD RE-FED	250	1	20	2 #12, 1 #12 GRND		1426	2 #12, 1 #12 GRND	20	1	1176	EXHAUST FAN EF-1 (HANDLE LOCK)	8
9	EXISTING LOAD RE-FED	250	1	20	2 #12, 1 #12 GRND	500		2 #12, 1 #12 GRND	20	1	250	CONTROL POWER	10
11	EXISTING LOAD RE-FED	250	1	20	2 #12, 1 #12 GRND		250		20	1		SPARE	12
13	EXISTING LOAD RE-FED	250	1	20	2 #12, 1 #12 GRND	250			20	1		SPARE	14
15	SPARE		1	20			0		20	1		SPARE	16
17	SPARE		1	20		0			20	1		SPARE	18

Total Connected Load (VA)	5066
NEC Calculated Load (VA)	5722

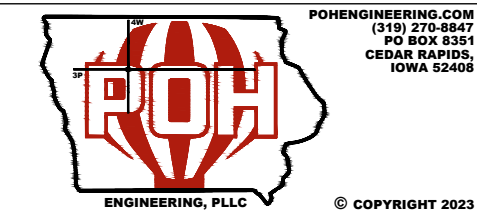
2490	2576
20.8	21.5

Amps per phase

21	Total Connected Load (Amps)
24	NEC Calculated Load (Amps)

GENERAL ELECTRICAL NOTES

- A. The wet well shall be classified as a Class 1, Division 1 hazardous location per NEC 501. Items in this area are existing and will not be modified. Do not install new electrical conduit/wiring through this area. The building interior is not classified due to meeting the ventilation requirements of NFPA 820.
- B. 277/480 volt power wiring, 120/240 volt power wiring and control/monitoring wiring shall be installed in separate raceways per the NEC.
- C. Coordinate equipment sizes, details, and locations prior to installation.
- D. Arc Flash report shall be by the project engineer, not as part of these documents. Final feeder sizes/length information shall be obtained by the Contractor, and arc flash label installation after construction is complete shall be by the Contractor. Assume a separate trip to the project site will be required. See specification more information.
- E. Coordinate service outages with the Owner a minimum of seven days in advance. See Phasing Notes for more information on temporary connections, outages, and switchover to the new electrical service.
- F. Refer to the specifications for more information on the common material/installation requirements listed below:
- Trench, backfill, and re-seed for installation of underground conduits. Use warning tape over conduits.
 - Label all equipment, conduits, wires, and pull boxes per the NEC. Include panel and circuit numbers on all equipment, boxes, and conduits.
 - Provide a green grounding conductor throughout all work.
 - Provide a separate neutral (grounded) conductor for each electrical phase.
 - Penetrations through the masonry/concrete walls/floors shall be sealed.
 - All items raceway, equipment, and boxes shall be weatherproof.
 - Minimum size of conduit shall be 3/4 inch for power; 1 inch for controls.
 - Interior above grade conduit and exterior conduit above grade shall be galvanized rigid steel, aluminum, intermediate metal conduit, or Schedule 80 PVC. Interior below grade (pump pit) conduit shall be Schedule 80 PVC. Exterior conduit below ground shall be Schedule 40 PVC or HDPE.
 - Utilize liquid tight flexible metal conduit for final connections to equipment and transformer.
 - Use expansion fittings for PVC conduit per manufacturer's recommendations and for runs over 25 feet in length.



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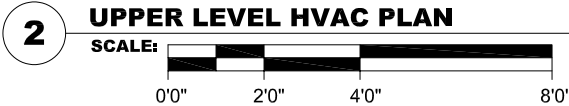
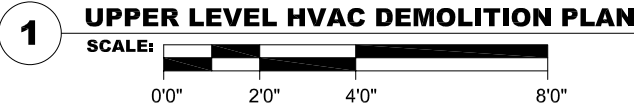
DATE	3/10/2024	SOLICITATION NO.		JRR	DATE	10/1/24	JRR	APPR
DESIGNED BY:	JRR	CREATED BY:	JRR	CONTRACT NO.:		FINAL REVIEW		
SUBMITTED BY:	JRR	ISSUED BY:	JRR	FILE NUMBER:		DESCRIPTION		
PLOT SCALE:		ISSUE DATE:		FILE NAME:				
SIZE:	ANSI B	UE.1						

CITY OF MUSCATINE 215 SYCAMORE STREET MUSCATINE, IA 52761	WATERSMITH ENGINEERING 1028 HERSHEY AVE MUSCATINE, IA 52761
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HOUSER STREET LIFT STATION UPGRADE PROJECT
13011 HOUSER STREET
MUSCATINE, IOWA

ELECTRICAL SCHEDULES

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MECHANICAL SYMBOLS

- ① THERMOSTAT
 -  CONNECT TO EXIST. SERVICE
 -  TYPE OF EQUIP
EQUIP. NO. EQUIPMENT DESIGNATION
 -   SUPPLY DUCT (UP & DOWN)
 -   RETURN DUCT (UP & DOWN)
 -   EXHAUST DUCT (UP & DOWN)

ELECTRIC UNIT HEATER SCHEDULE

UNIT NO	MANUFACTURER'S DESIGNATION	KW	BTU/HR	AIRFLOW CFM	ELECTRIC V / PH	NOTES
UH-1	INDEECO UHIR	15	51,200	1,100	480 / 3	1, 2, 3, 4
NOTES: 1. INCLUDE BUILT-IN DISCONNECT SWITCH AND 24V CONTROL TRANSFORMER 2. 2-STAGE HEATING CONTROL 3. PROVIDE REMOTE WALL MOUNTED 24V 2-STAGE HEATING THERMOSTAT. 4. CONTRACTOR TO PROVIDE WALL MOUNTING BRACKET.						

FAN SCHEDULE

UNIT NO	MANUFACTURER'S DESIGNATION	SERVES	CFM	S.P.D. (IN)	RPM	MOTOR HP	ELECTRICAL			SONES	NOTES
							VOLTS/PH	MCA	MOCP		
EF-1	GREENECK USF-12-B7	ROOM VENTILATION	550	0.5	1148	0.5	115/1	6.6	15	6.9	1, 2, 3
NOTES: - FAN SHALL RUN CONTINUOUSLY. - FAN SHALL BE COATED GALVANIZED CONSTRUCTION WITH ALUMINUM WHEEL, SPARK RESISTANT. - PROVIDE EC MOTOR WITH VARI-GREEN MANUAL SPEED CONTROL.											

GENERAL HVAC NOTES:

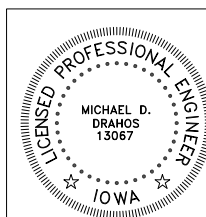
- A. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE BUILDING CODES ADOPTED BY THE STATE OF IOWA AND CITY OF MUSCATINE.
- B. INSTALL ALL EQUIPMENT PER THE MANUFACTURER'S RECOMMENDATIONS.
- C. PROVIDE SUFFICIENT CLEARANCE AROUND EQUIPMENT FOR MAINTENANCE.
- D. CONTRACTOR TO CUT AND PATCH WALLS, FLOORS, AND CEILINGS AS REQUIRED FOR INSTALLATION OF DUCTS AND EQUIPMENT.
- E. COORDINATE HANGER SUPPORT MATERIAL WITH STRUCTURAL CONDITIONS.
- F. COORDINATE INSTALLATION OF NEW WORK WITH ALL OTHER TRADES.
- G. COORDINATE EQUIPMENT POWER REQUIREMENTS WITH ELECTRICAL CONTRACTOR.

KEY

NEW WORK _____

EXISTING TO REMAIN _____

EXISTING TO BE REMOVED _____



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.

 10-11-2024

MICHAEL D. DRAHOS

Iowa Registration Number: 13067

My license renewal date is December 31, 2025.

Pages or sheets covered by this seal:

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WPE# BI24027

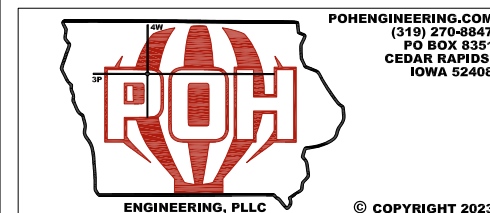
WPE **WEST PLAINS ENGINEERING, INC.**

215 2ND AVENUE SE, SUITE 200 • CEDAR RAPIDS, IA 52401

PHONE: (319) 365-0030 • FAX: (319) 365-4122

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	DRAWN BY: G.L. MDD	SOLICITATION NO.:
WATERSMITH ENGINEERING 1029 HERSHEY AVE MUSCATINE, IA 52761	SUBMITTED BY: MDD	CONTRACT NO.:
	PLOT SCALE:	FILE NUMBER:
	SIZE: ANSI B	FILE NAME: UE.

HOUSER STREET LIFT STATION UPGRADE PROJECT
1301 HOUSER STREET
MUSCATINE, IOWA

HEATING & VENTILATION PLANS

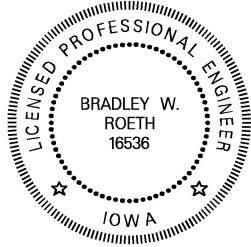
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**PROJECT MANUAL
HOUSER STREET LIFT STATION UPGRADE PROJECT
CITY OF MUSCATINE**

**Watersmith Engineering
1029 Hershey Ave.
Muscatine, IA 52761**



CERTIFICATIONS



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.

Bradley W. Roeth
(signature)

10/11/2024

(date)

Bradley W. Roeth

License number 16536

My license renewal date is December 31, 2024.

Pages or sheets covered by this seal: Specification Divisions 1, 2, 5, 9, 33 and 40



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.

Jeffrey R. Reinhart
(signature)

10-11-2024

(date)

Jeffrey R. Reinhart

License number 13499

My license renewal date is December 31, 2025.

Pages or sheets covered by this seal: Specification Division 26



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.

Michael D. Drahos
(signature)

10-11-2024

(date)

Michael D. Drahos

License number 13067

My license renewal date is December 31, 2025.

Pages or sheets covered by this seal: Specification Division 23

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Houser Street Lift Station Upgrade Project
City of Muscatine
Muscatine, Iowa

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21 sheets numbered G1 through H.1, dated 10/11/2024 and with each sheet bearing the following general title:

Houser Street Lift Station Upgrade Project
Muscatine, Iowa

**NOTICE TO BIDDERS AND
NOTICE OF PUBLIC HEARING**
CITY OF MUSCATINE PUBLIC IMPROVEMENT PROJECT
HOUSER STREET LIFT STATION UPGRADE PROJECT

Notice is hereby given that 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 November 21, 2024, in Muscatine City Hall, 215 Sycamore Street for the Houser Street Lift Station Upgrade Project.

The City of Muscatine will receive bids for the Houser Street Lift Station Upgrade Project until 2:00 p.m., on the 20th day of December 2024 to the City's IonWave website (<http://muscatineiowa.ionwave.net>). 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. All Bids will be opened and bids tabulated at the time and date above in the office of the City Finance Director, City of Muscatine, 215 Sycamore Street, Muscatine, Iowa 52761.

The City Council will consider all bids received at its council meeting to be held at 6:00 p.m. on the 2nd day of January 2025, at the City Hall, Muscatine, Iowa.

General Nature of the Public Improvement:

Replacement of pumps, pipe, fittings, and valves at a sanitary sewer lift station; related electrical and mechanical work; bypass pumping, including excavation, concrete demolition, and installation of bypass fittings; and incidental related work.

Work on the improvement shall commence immediately upon approval of the contract by the Council, and be completed as stated below.

Contractor shall fully complete the project no later than August 31, 2025. Should the contractor fail to complete the work in this timeframe, liquidated damages of \$500 per calendar day will be assessed for work not completed within the designated contract term.

Copies of the contract documents are available for download for free on the City's IonWave website, referenced above. Paper copies of the contract documents may be obtained by contacting Brad Roeth, Watersmith Engineering brad@watersmithengineering.com. A fee of \$200 per set will apply. This fee is refundable, provided the following conditions are met. 1. The plans and specifications are returned complete and in good usable condition. 2. And they are returned within fourteen (14) calendar days after the award of the project.

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 statutes.

The City of Muscatine is exempt from paying Sales and Use Tax and will supply Contractor with an "Iowa Sales Tax Exemption Certificate" and an authorization letter to allow the Contractor to buy equipment and material for the project without paying Sales and Use tax.

In accordance with Iowa statutes, a resident bidder shall be allowed a preference as against a nonresident 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 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.

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 and will furnish after the award of contract a corporate surety bond, in a form acceptable to the Jurisdiction, for the faithful performance of the contract, in an amount equal to 100% of the amount of the contract. The bidder's security shall be a bid bond on the form provided in the contract documents with corporate surety satisfactory to the Jurisdiction. The bid shall contain no condition except as provided in the specifications.

The City of Muscatine reserves the right to defer acceptance of any bid for a period of up to sixty (60) calendar days after receipt of bids and no bid may be withdrawn during this period. If requested, the bid security of unsuccessful bidders shall be promptly returned as soon as the successful bidder is determined or within thirty (30) days, whichever is sooner.

The City of Muscatine does hereby reserve the right to reject any or all bids, to waive informalities, and to enter into such contract, or contracts, as it shall deem to be in the best interest of the jurisdiction.

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 and the terms and conditions therein contained and shall guarantee the prompt payment of all material and labor, and 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 two years from and after acceptance of the contract. The guaranteed maintenance period for new paving shall be four years.

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 insure that in 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.

A non-mandatory prebid conference will be held at 10:00am on December 5, 2024, at the Muscatine Water and Resource Recovery Facility at 1202 Musser Street, Muscatine, Iowa. Immediately after the conference, a site tour will be conducted.

This Notice is given by authority of the *City of Muscatine*

/s/ Jon Koch

INSTRUCTIONS TO BIDDERS

Project Name Houser Street Lift Station Upgrade Project

The work comprising the above referenced project shall be constructed in accordance with this Project Manual. Before submitting your bid, review the requirements of Division 1, General Requirements and SUDAS General Provisions, in particular the sections regarding proposal requirements, bonding, contract execution and insurance requirements. 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 your bid not to be read.

I. BID SECURITY

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 bid bond executed by a corporation authorized to contract as a surety in Iowa or satisfactory to the Jurisdiction. 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; facsimile (fax) of any signature or use of an electronic signature on the bid bond is not acceptable. "Miscellaneous Bank Checks," and personal checks, as well as "Money Orders" and "Traveler's Checks" issued by persons, firms, or corporations licensed under Chapter 533C of the Iowa Code, are not acceptable bid security.

II. SUBMISSION OF THE PROPOSAL AND IDENTITY OF BIDDER

- A. 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. All Bids will be opened and bids tabulated at the time and date above in the office of the City Finance Director, City of Muscatine, 215 Sycamore Street, Muscatine, Iowa 52761. 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 not be considered.

B. The following documents shall be completed, signed, and submitted. The bid cannot be read if any of these documents are omitted from the Proposal envelope.

1. PROPOSAL – Complete each of the following parts:

- Part B – Acknowledgment of Addenda, if any have been issued
- Part C – Bid Prices
- Part G – Identity of Bidder (including the Bidder Status Form)

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 or electronic signatures will not be accepted. 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 on the following page and can be used to assist Bidders in completing the Bidder Status Form.

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.

The following documents must be submitted as printed. No alterations, additions, or deletions are allowed. If the Bidder notes a requirement in the contract documents that 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.

PROPOSAL

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 improvement. The undersigned Bidder hereby proposes to complete the work comprising the below referenced improvement as specified in the contract documents, which are officially on file with the City of Muscatine Finance Director, at the prices hereinafter provided in Part C of the Proposal, for the following described improvements:

PROJECT DESCRIPTION:

Houser Street Lift Station Upgrade Project

Replacement of pumps, pipe, fittings, and valves at a sanitary sewer lift station; related electrical and mechanical work; bypass pumping, including excavation, concrete demolition, and installation of bypass fittings; and incidental related work.

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, QUANTITIES, AND PRICES

BASE BID CONTRACTS: The Bidder must provide any Bid Prices, any Alternate Prices, and the Total of the Base Bid plus any Add-Alternates on the Proposal Attachment: Part C – Bid Prices. The Total of the Base bid plus any Alternates selected by the Jurisdiction shall be used only for comparison of bids. The Total of the Base Bid plus any Add-Alternates shall be used for determining the sufficiency of the bid security.

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 plus any selected 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 on this project on or before a date to be specified in a written notice to proceed by the Jurisdiction, and to fully complete the project no later than August 31, 2025; and to pay liquidated damages for noncompliance with said completion provisions at the rate of five-hundred dollars (\$500.00) 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 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 that all statements in this proposal are true; and
5. That the individual(s) executing this proposal have the authority to execute this proposal on behalf of the Bidder.

(CON'T - PROPOSAL)

Project Name Houser Street Lift Station Upgrade Project

PROPOSAL: PART G – IDENTITY OF BIDDER

The Bidder shall indicate whether the bid is submitted by a/an:

- ☐ Individual,
Sole Proprietorship
- ☐ Partnership
- ☐ Corporation
- ☐ Limited Liability Company
- ☐ Joint-venture: all parties must join-in and
execute all documents
- ☐ Other

The Bidder shall enter its Public Registration
Number ____ - ____ issued
By the Iowa Commissioner of Labor Pursuant
Section 91C.5 of the Iowa Code.

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.

Bidder

Signature

By

Name (Print/Type)

Title

Street Address

City, State, Zip 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**

Name

Title

**NOTE: The signature on this proposal must be an original signature in ink; copies, facsimiles,
or electronic signatures will not be accepted.**

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 a reason to reject my bid.

Firm Name: _____

Signature: _____ Date: _____

PROPOSAL**PROPOSAL ATTACHMENT: PART C – BID PRICES**

This is a LUMP SUM PRICE CONTRACT. The bidder must provide the Bid Price(s), any Alternate Price(s), and the Total of the Base Bid plus any Add-Alternates in this Proposal Attachment: Part C – Bid Prices the total of the base bid plus any alternates selected by the Jurisdiction shall be used only for comparison of bids. The total of the Base Bid plus any Add-Alternates shall be used for determining the sufficiency of the bid security.

DESCRIPTION	AMOUNT
BASE BID AMOUNT	\$
	\$
TOTAL BID AMOUNT	

BID BOND

KNOW ALL BY THESE PRESENTS:

That we, _____, as Principal, and _____, as Surety, are held and firmly bound unto City of Muscatine, Iowa, as Obligee, (hereinafter referred to as "the Jurisdiction"), in the penal sum of _____

_____ dollars (\$_____), or _____ percent of the amount bid in 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;

Houser Street Lift Station Upgrade Project

Replacement of pumps, pipe, fittings, and valves at a sanitary sewer lift station; related electrical and mechanical work; bypass pumping, including excavation, concrete demolition, and installation of bypass fittings; and incidental related work.

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 _____, 20_____.

SURETY:

By _____
 Surety Company

 Signature Attorney-in-Fact/Officer

 Printed Name of Attorney-in-Fact/Officer

 Company Name

 Company Address

 City, State, Zip Code

 Company Telephone Number

PRINCIPAL:

By _____
 Bidder

 Signature

 Printed Name

 Title

 Address

 City, State, Zip Code

 Telephone Number

NOTE: All signatures on this bid bond must be original signatures in ink; copies, facsimile, or electronic signatures will not be accepted. This bond must be sealed with the Surety's raised, embossing 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.

CONTRACTCONTRACT NO. _____
DATE _____

THIS CONTRACT, made and entered into at _____ this _____ day of _____, _____, by and between the _____ by its _____, upon order of its _____ hereinafter called the "Jurisdiction," and _____, hereinafter called the "Contractor."

WITNESSETH:

The Contractor hereby agrees to complete the work comprising the below referenced improvement as specified in the contract documents, which are officially on file with the Jurisdiction, in the office of the _____. This contract includes all contract documents. The work under this contract shall be constructed in accordance with the SUDAS Standard Specifications, _____ Edition, and as further modified by the supplemental specifications and special provisions included in said contract documents, and the Contract Attachment - Item 1: General, 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 lump sum price of _____, which was 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:

Houser Street Lift Station Upgrade Project

Replacement of pumps, pipe, fittings, and valves at a sanitary sewer lift station; related electrical and mechanical work; bypass pumping, including excavation, concrete demolition, and installation of bypass fittings; and incidental related work.

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, maintenance, and payment bond. The Contractor hereby agrees to commence work under this contract on or before a date to be specified in a written notice to proceed by the Jurisdiction and to fully complete the project _____; and to pay liquidated damages for noncompliance with said completion provisions at the rate of _____ dollars (\$_____) for each calendar day thereafter that the work remains incomplete.

IN WITNESS WHEREOF, the Parties hereto have executed this instrument, in triplicate on the date first shown written.

JURISDICTION

CONTRACTOR

By _____

Contractor

(Seal)

ATTEST:

By

Signature

Title

FORM APPROVED BY:

Street Address

Attorney for Jurisdiction

City, State, Zip Code

Telephone

CONTRACTOR PUBLIC REGISTRATION INFORMATION To Be Provided By:

1. All Contractors: The Contractor shall enter its Public Registration Number ____ - ____ 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. 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 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 Iowa Code, or as amended, governing foreign corporations.

NOTE: All signatures on this contract must be original signatures in ink; copies, facsimile, or electronic signatures 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 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.

 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 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.

Notary Public in and for the State of _____
My commission expires _____, 20____

SURETY BOND NO. _____

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 City of Muscatine, Iowa , 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:

Houser Street Lift Station Upgrade Project

Replacement of pumps, pipe, fittings, and valves at a sanitary sewer lift station; related electrical and
mechanical work; bypass pumping, including excavation, concrete demolition, and installation of bypass
fittings; and incidental related work.

(CON'T – PERFORMANCE, PAYMENT, AND MAINTENANCE BOND)

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 the remaining maintenance period identified in #3 below shall be reduced to the sum of (insert an estimated dollar value to maintain the completed project, if lower than the contract price, for the remaining period identified in #3 below, otherwise delete the sentence) 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 all work except new paving to be performed under the Contract within the period 2 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; and
 - B. To remedy any and all defects that may develop in or result from new paving work to be performed under the Contract within the period 4 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;
 - C. To keep all work in continuous good repair; and
 - D. 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.
 - E. 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.

(CON'T – PERFORMANCE, PAYMENT, AND MAINTENANCE BOND)

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.

(CON'T – PERFORMANCE, PAYMENT AND MAINTENANCE BOND)

In the event that any actions or proceedings are initiated regarding 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) 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 word, 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.

Project No. _____

(CON'T – PERFORMANCE, PAYMENT, AND MAINTENANCE BOND)

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.

01 1100 SUMMARY OF WORK

PART 1 GENERAL

1.1 WORK COVERED BY CONTRACT DOCUMENTS

A. Project Description

The work includes replacement of pumps, pipe, fittings, and valves at a sanitary sewer lift station; related electrical and mechanical work; bypass pumping, including excavation, concrete demolition, and installation of bypass fittings; and incidental related work.

B. Location

The sanitary sewer lift station is located at the northeast corner of Houser Street and Dawson Street in Muscatine, Iowa.

1.2 MAINTENANCE OF SERVICE

- A. Maintenance of sanitary sewage pumping is required throughout the contract. Bypass pumping must be installed and functional before the existing pumps may be taken off-line.
- B. Bypass pumping requirements are indicated in the drawings.
- C. Contractor shall secure the lift station prior to leaving the site.
- D. Contractor shall provide access for City staff to the lift station at all times for any necessary operations and maintenance.

1.3 EXISTING WORK

- A. Remove or alter existing work in such a manner as to prevent injury or damage to any portions of the existing work which remain. Repair or replace portions of existing work which have been altered during construction operations to match existing or adjoining work, as approved by ENGINEER. At the completion of operations, existing work must be in a condition equal to or better than that which existed before new work started.

1.4 LOCATION OF UNDERGROUND UTILITIES

- A. Contact Iowa One Call a minimum of 48 hours prior to excavating, to mark utilities, and within sufficient time required if work occurs on a Monday or after a Holiday. Verify existing utility locations indicated on contract drawings, within area of work. Identify and mark all other utilities not managed and located by the local utility companies. Verify elevations before installing new work closer than nearest manhole or other structure at which an adjustment in grade can be made.

1.5 SALVAGE MATERIAL AND EQUIPMENT

- A. All item designated for demolition and/or removal are the Contractor's responsibility for disposal or salvage.

1.6 WORK HOURS

- 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.

Houser Street Lift Station Upgrade Project
City of Muscatine
Muscatine, Iowa

01 1100 SUMMARY OF WORK

PART 2 PRODUCTS

Not used.

PART 3 EXECUTION

Not used.

END OF SECTION

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. 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.
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. Working days will be charged for Sundays and recognized legal holidays the contractor does work.

As an incentive to the Contractor to expedite the work, working days will not be charged for Saturdays that the Contractor does work, unless a mandatory six-day work week is specified in the contract documents.

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

02 4100 DEMOLITION

PART 1 GENERAL

1.1 PROJECT DESCRIPTION

A. Demolition/Deconstruction Plan.

1. Prepare a Demolition Plan and submit proposed demolition, and removal procedures for approval before work is started. Include in the plan procedures for careful removal and disposition of materials specified to be salvaged, coordination with other work in progress, a disconnection schedule of utility services and a detailed description of methods and equipment to be used for each operation and of the sequence of operations. Plan must be approved by Engineer prior to work beginning.

B. General Requirements

1. Do not begin demolition or deconstruction until authorization is received from the Engineer. The work of this section is to be performed in a manner that maximizes the value derived from the salvage and recycling of materials. Remove rubbish and debris from the project site; do not allow accumulations inside or outside the building. The work includes demolition of identified items and materials, and removal of resulting rubbish and debris. Remove rubbish and debris from property daily, unless otherwise directed. Store materials that cannot be removed daily in areas specified by the Engineer.

1.2 ITEMS TO REMAIN IN PLACE

- ##### **A. Protect existing vegetation, structures, equipment, utilities, and improvements. Coordinate the work of this section with all other work indicated. Construct and maintain shoring, bracing, and supports as required. Ensure that structural elements are not overloaded. Increase structural supports or add new supports as may be required as a result of any cutting, removal, deconstruction, or demolition work performed under this contract. Do not overload structural elements and pavements to remain. Provide new supports and reinforcement for existing construction weakened by demolition, deconstruction, or removal work. Repairs, reinforcement, or structural replacement require approval by the Engineer prior to performing such work.**

B. Existing Construction Limits and Protection.

1. Do not disturb existing construction beyond the extent indicated or necessary for installation of new construction. Provide temporary shoring and bracing for support of building components to prevent settlement or other movement. Provide protective measures to control accumulation and migration of dust and dirt in all work areas. Remove snow, dust, dirt, and debris from work areas daily.

C. Utility Service

1. Maintain existing utilities indicated to stay in service and protect against damage during demolition and deconstruction operations.

D. Facilities

1. Protect electrical and mechanical services and utilities. Where removal of existing utilities and pavement is specified or indicated, provide approved barricades, temporary covering of exposed areas, and temporary services or connections for electrical and mechanical utilities. Floors, roofs, walls, columns, pilasters, and other structural components that are designed and constructed to stand without lateral support or shoring, and are determined to be in stable condition, must remain standing without additional bracing, shoring, or lateral support until demolished or deconstructed, unless directed otherwise by the Engineer.

02 4100 DEMOLITION

Ensure that no elements determined to be unstable are left unsupported and place and secure bracing, shoring, or lateral supports as may be required as a result of any cutting, removal, deconstruction, or demolition work performed under this contract.

1.3 BURNING

- A. The use of burning at the project site for the disposal of refuse and debris will not be permitted.

PART 2 PRODUCTS

Not used.

PART 3 EXECUTION

3.1 EXISTING FACILITIES TO BE REMOVED

A. Concrete

- 1. Saw concrete along straight lines to a depth of a minimum 2 inch. Make each cut in walls perpendicular to the face and in alignment with the cut in the opposite face. Break out the remainder of the concrete provided that the broken area is concealed in the finished work, and the remaining concrete is sound. At locations where the broken face cannot be concealed, grind smooth or saw cut entirely through the concrete. Sawcuts in existing concrete pads must be at the nearest existing expansion joint or weakened plane joint and at full depth.

B. Patching

- 1. Where removals leave holes and damaged surfaces exposed in the finished work, patch and repair these holes and damaged surfaces to match adjacent finished surfaces, using on-site materials when available. Where new work is to be applied to existing surfaces, perform removals and patching in a manner to produce surfaces suitable for receiving new work. Make finished surfaces of patched area flush with the adjacent existing surface and match the existing adjacent surface as closely as possible to texture and finish. Provide patching as specified and indicated, and include the following:
 - i. Concrete and Masonry: Completely fill holes and depressions left as a result of removals in existing masonry walls to remain, with an approved masonry patching material, applied in accordance with the manufacturer's printed instructions.

C. Mechanical Equipment and Fixtures

- 1. Disconnect mechanical hardware at the nearest connection to existing services to remain, unless otherwise noted. Disconnect mechanical equipment and fixtures at fittings. Remove service valves attached to the unit. Salvage each item of equipment and fixtures as a whole unit. Salvage each unit with its normal operating auxiliary equipment. Do not remove equipment until approved.

D. Piping

- 1. Disconnect piping at unions, flanges and valves, and fittings as required to reduce the pipe into straight lengths for practical storage. Store salvaged piping according to size and type. If the piping that remains can become pressurized due to upstream valve failure, attach end caps, blind flanges, or other types of plugs or fittings with a pressure gage and bleed

02 4100 DEMOLITION

valve to the open end of the pipe to ensure positive leak control. Box prefabricated supports, hangers, plates, valves, and specialty items according to size and type.

E. Fixtures, Motors and Machines

1. Remove and salvage fixtures, motors and machines associated with plumbing, heating, air conditioning, refrigeration, and other mechanical system installations. Salvage, box and store auxiliary units and accessories with the main motor and machines.

3.2 DISPOSAL OF REMOVED MATERIALS

A. Regulation of Removed Materials

1. Dispose of debris, rubbish, scrap, and other nonsalvageable materials resulting from removal operations with all applicable federal, state and local regulations.

END OF SECTION

50 5013 MISCELLANEOUS METAL FABRICATIONS

PART 1 GENERAL

1.1 OVERVIEW

Section includes requirements for miscellaneous metalwork.

1.2 SUBMITTALS:

- A. Installation drawings. Submit templates, erection, and installation drawings indicating thickness, type, grade, class of metal, and dimensions. Show construction details, reinforcement, anchorage, and installation in relation to the building construction.
- B. Product data.

1.3 QUALIFICATION OF WELDERS:

- A. Qualify welders in accordance with AWS D1.1. Use procedures, materials, and equipment of the type required for the work.

1.4 DELIVERY, STORAGE, AND PROTECTION:

- A. Protect from corrosion, deformation, and other types of damage. Store items in an enclosed area free from contact with soil and weather. Remove and replace damaged items with new items.

PART 2 PRODUCTS

2.1 MATERIALS:

- A. Aluminum Alloy Products: Provide in accordance with ASTM B209 for sheet plate, ASTM B221 for extrusions and ASTM B26 or ASTM B108 for castings. Provide aluminum extrusions at least 3/8 inch thick.

2.1 MATERIALCOVER PLATES AND FRAMES:

- A. Fabricate cover plates of 1/4 inch thick aluminum not more than 50 pounds per plate with a diamond-plate non-slip surface. Reinforce to sustain a live load of 200 pounds per square foot. Provide structural shapes and plates for frames, securely fastened to the structure as indicated. Miter and weld all corners. Butt joint straight runs. Provide flush drop handles for each plate. Remove sharp edges and burrs from cover plates and exposed edges of frames. Weld all connections and grind top surface smooth. Provide 1/8 inch clearance at edges and between cover plates.

PART 3 EXECUTION

3.1 GENERAL INSTALLATION REQUIREMENTS:

- A. Install items at locations indicated in accordance with manufacturer's instructions. Verify all field dimensions prior to fabrication. Include materials and parts necessary to complete each assembly, whether indicated or not. Miss-alignment and miss-sizing of holes for fasteners is cause for rejection. Conceal fastenings where practicable. Joints exposed to weather must be watertight.

50 5013 MISCELLANEOUS METAL FABRICATIONS

3.2 WORKMANSHIP:

- A. Provide miscellaneous metalwork that is true and accurate in shape, size, and profile. Make angles and lines continuous and straight. Make curves consistent, smooth and unfaceted. Provide continuous welding along the entire area of contact except where tack welding is permitted. Do not tack weld exposed connections. Unless otherwise indicated and approved, provide a smooth finish on exposed surfaces. Provide countersunk rivets where exposed. Provide coped and mitered corner joints aligned flush and without gaps.

3.3 ANCHORAGE, FASTENINGS, AND CONNECTIONS:

- A. Provide anchorage as necessary, whether indicated or not, for fastening miscellaneous metal items securely in place. Include slotted inserts, expansion shields, through bolts for masonry, headed shear studs, machine and carriage bolts for steel, through bolts, lag bolts, and screws for wood. Do not use wood plugs. Provide non-ferrous attachments for non-ferrous metal. Provide exposed fastenings of compatible materials (avoid contact of dissimilar metals), that generally match in color and finish the surfaces to which they are applied. Conceal fastenings where practicable.

3.4 DISSIMILAR METALS:

- A. Where dissimilar metals are in contact, protect surfaces with a coating in accordance with MPI 79 to prevent galvanic or corrosive action. Where aluminum is in contact with concrete, plaster, mortar, masonry, wood, or absorptive materials subject to wetting, protect in accordance with ASTM D1187, asphalt-base emulsion. Clean surfaces with metal shavings from installation at the end of each workday.

END OF SECTION

09 9000 PAINTS AND COATINGS

PART 1 GENERAL

1.1 OVERVIEW

Section includes the requirements for painting of new and existing, interior and exterior substrates, including masonry, concrete, metal, wood, and other miscellaneous materials.

1.2 PAINTING INCLUDED:

- A. Mechanical and Electrical Painting: Includes field coating of interior and exterior new surfaces. Include the following items unless indicated otherwise.
 - 1. Exposed piping, conduit, and ductwork;
 - 2. Supports, hangers, air grilles, and registers;
 - 3. Miscellaneous metalwork and insulation coverings.

1.3 SUBMITTALS:

- A. Product data.

1.4 ENVIRONMENTAL REQUIREMENTS

- A. Comply, at minimum, with manufacturer recommendations for space ventilation during and after installation.
- B. Coatings:
 - 1. Do not apply coating when air or substrate conditions are:
 - i. Less than 5 degrees F above dew point;
 - ii. Below 50 degrees F or over 95 degrees F, unless specifically pre-approved by the product manufacturer. Do not, under any circumstances, violate the manufacturer's application recommendations.

PART 2 PRODUCTS

2.1 MATERIALS

- A. Conform to the coating specifications and standards referenced in PART 3. Submit Product Data Sheets for specified coatings and solvents. Provide preprinted cleaning and maintenance instructions for all coating systems. Submit Manufacturer's Instructions on Mixing: Detailed mixing instructions, minimum and maximum application temperature and humidity, pot life, and curing and drying times between coats.

PART 3 EXECUTION

3.1 PROTECTION OF AREAS AND SPACES NOT TO BE PAINTED

- A. Prior to surface preparation and coating applications, remove, mask, or otherwise protect hardware, hardware accessories, machined surfaces, radiator covers, plates, lighting fixtures, public and private property, and other such items not to be coated that are in contact with surfaces to be coated. Following completion of painting, reinstall removed items by workmen

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skilled in the trades. Restore surfaces contaminated by coating materials, to original condition and repair damaged items.

3.2 SURFACE PREPARATION

- A. Remove dirt, splinters, loose particles, grease, oil, disintegrated coatings, and other foreign matter and substances deleterious to coating performance as specified for each substrate before application of paint or surface treatments. Remove oil and grease prior to mechanical cleaning. Schedule cleaning so that dust and other contaminants will not fall on wet, newly painted surfaces. Spot-prime exposed ferrous metals such as nail heads on or in contact with surfaces to be painted with water-thinned paints, with a suitable corrosion-inhibitive primer capable of preventing flash rusting and compatible with the coating specified for the adjacent areas. Refer to MPI ASM and MPI MRM for additional more specific substrate preparation requirements.
- B. Ferrous Surfaces including Shop-coated Surfaces and Small Areas that contain rust, mill scale and other foreign substances: detergent wash in accordance with SSPC SP 1 to remove oil and grease. Where shop coat is missing or damaged, clean according to SSPC SP 2. Protect shop-coated ferrous surfaces from corrosion by treating and touching up corroded areas immediately upon detection.

3.9 COATING SYSTEMS FOR METAL

- A. Apply coatings of Tables in MPI Division 5 for Exterior and Interior.
 1. Apply specified ferrous metal primer to steel surfaces on the same day that surface is cleaned, to surfaces that meet all specified surface preparation requirements at time of application.
 2. Inaccessible Surfaces: Prior to erection, use one coat of specified primer on metal surfaces that will be inaccessible after erection.
 3. Shop-primed Surfaces: Touch up exposed substrates and damaged coatings to protect from rusting prior to applying field primer.
 4. Surface Previously Coated with Epoxy or Urethane: Apply MPI 101, 0.038 mm 1.5 mils DFT immediately prior to application of epoxy or urethane coatings.
 5. Pipes and Tubing: The semitransparent film applied to some pipes and tubing at the mill is not to be considered a shop coat. Overcoat these items with the specified ferrous-metal primer prior to application of finish coats.

3.15 PAINT TABLES

- A. MPI Division 5: Exterior Metal, Ferrous and Non-Ferrous Paint Table
 - a. New Steel that has been hand or power tool cleaned to SSPC SP 2 or SSPC SP 3

Alkyd					
New	Existing, uncoated	Primer	Intermediate	Topcoat	System DFT
MPI EXT 5.1Q-G5 (Semigloss)	MPI REX 5.1D-G5 (Semigloss)	MPI 23	MPI 94	MPI 94	5.25 mils

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B. MPI Division 5: Interior Metal, Ferrous and Non-Ferrous Paint Table

- a. Interior Steel / Ferrous Surfaces, Metal, Mechanical, systems including valves, conduit, hangers, supports, and miscellaneous metal items not otherwise specified.

Alkyd				
New, uncoated existing	Primer	Intermediate	Topcoat	System DFT
MPI INT 5.1E- G2 (Flat)	MPI 76	MPI 49	MPI 49	5.25 mils

END OF SECTION

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PART 1 – GENERAL

1.01 SECTION INCLUDES

- A. Quality Assurance
- B. Methods of Request for Approval
- C. Submittals
- D. Job Conditions
- E. Project Coordination
- F. Drawings and Measurements
- G. Workmanship
- H. Patching Materials
- I. Equipment Housekeeping Pads
- J. Equipment Clean-Up
- K. Cutting and Patching
- L. General Installation Requirements
- M. Protection of Installed Work
- N. System Startup
- O. Demonstration and Instruction
- P. Adjusting
- Q. Final Cleaning
- R. Closeout Procedures
- S. Project Record Documents
- T. Warranty and Bonds

1.02 DEFINITIONS

- A. Contractor
 - 1. The term “Contractor” refers to the installation Contractor responsible for the furnishing and installation of all work indicated within this Specification.
- B. Furnish
 - 1. The term “furnish” is used to mean “purchase, supply, provide and deliver to the Project site, protect and provide interim storage and be ready for unloading, unpacking, assembly, installation, and similar operations in accordance with Manufacturer’s specifications.”
- C. Provide
 - 1. The terms “provide” means to “furnish and install, complete and ready for the intended use.”
- D. Install
 - 1. The term “install” is used to describe operations at project site including the actual “unloading, unpacking, rigging in place, assembly, erection, placing, anchoring, applying, working to dimension, finishing, curing, protecting, cleaning, and similar operations”.
- E. Installer
 - 1. The “Installer” is the Contractor, Subcontractor and/or supplier who uses their own employees for performance of all construction
- F. If Applicable:

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1. The term “if applicable” will be that work which may be required for completed construction at applicable locations, but is not necessarily shown or described in the Contract Documents.
- G. As Necessary
 1. The term “as necessary” will be that work which is required for completed construction, but is not necessarily shown or described in the Contract Documents.
- H. As Required
 1. The term “as required” will be that work which is required for completed construction and is shown on the drawings or described in the project Specification.
- I. Concealed
 1. The term “concealed” means hidden from sight, buried as in chases, furred spaces, shafts, fixed ceiling or embedded in construction.
- J. Exposed
 1. The term “exposed” means bare, open to the elements, out in the open, uncovered.
- K. Product
 1. The term “product” will mean any item of equipment, material, fixture, apparatus, appliance or accessory installed under this Division.
- L. Substantial Completion
 1. “Substantial Completion” is deemed that the project is sufficiently complete to be utilized for its intended use as stated in the body of this written Specification.
- M. Words in the singular will also mean and include the plural, wherever the context so indicates, and words in the plural will mean the singular, wherever the context so indicates.

1.03 DESCRIPTION OF WORK

- A. The work shall include everything in this Division of the Specifications and everything indicated on the Drawings that is complementary to this Division of the Specifications. Refer to the Index of Drawings to determine what Drawings apply directly to this work.

1.04 QUALITY ASSURANCE

- A. Codes and Standards:
 1. All work shall be executed in accordance with the Local, State and other attending rules and regulations applicable to the trade affected and be subject to the inspection of these departments.
 2. Materials and equipment shall be new and of best quality, of the type best suited for the purpose intended, and be made by nationally recognized and substantially established manufacturers. The type and weight of material used for each purpose shall be as herein specified, and material shall conform with the requirements of the latest standard specifications of the “ASTM” for that particular material.
 3. Do not use materials and equipment removed from existing premises, except as specifically permitted by the Contract Documents.
 4. Where the notation of NFPA is indicated the equipment shall conform to National Fire Protection Association Standard.
- B. Fees
 1. All fees, permits, licenses, etc., necessary in order to complete the work of this section shall be obtained and paid by this Contractor.
- C. Alternate Equipment
 1. Where items of equipment and materials are specifically identified herein by a single manufacturer’s name, or as many as three manufacturer’s names, model or catalog numbers, and the words “or equal and approved” do not follow the manufacturer’s names, only such specific items may be used in the base bid, except as hereinafter provided.

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2. Items of equipment of the Contractor's choice may be offered as alternates to such specified items, either in the spaces provided for same in the proposal form or if no space is provided, on the bidder's letterhead attached to each copy of the proposal form.
 3. Alternate proposal must be accompanied by full descriptive and technical data for item proposed, together with statement of amount of cost addition or deduction from the base bid if alternate is accepted. Substitutions proposed by the Contractor will not be considered in the award of the contract.
 4. The Contractor must judge that such alternate equipment is of equal quality and character to the specified equipment, and it is physically adaptable for installation within the allotted space with all required service clearances. Unless otherwise specified with this Division, the Engineer will not approve or disapprove any alternate equipment or materials before the bids are opened.
 5. The cost of any changes to other trades as a result of use of the alternate material or equipment must be borne by the Contractor submitting such material or equipment.
- D. Equipment of Substitution:
1. Where items of equipment and materials are specifically identified herein by a single manufacturer's name, or as many as three manufacturer's names, model or catalog numbers, and the words "or equal and approved" follow the manufacturer's name, such items may be substituted until such time that the "Schedule of Materials and Equipment" is submitted to the Architect or Engineer. The base bid and any alternate shall be based on materials only as specified or approved.
- E. Where work required by the drawings and specification is above the standard required by local regulations, it shall be done as shown and/or specified.

1.05 METHODS OF REQUEST FOR APPROVAL:

- A. Prior to the award of the contract, interested parties may request approval of substitute materials. Such requests shall be made in writing and delivered to the Architect or Engineer no later than ten (10) days prior to the receipt of bids. Any substitutions that the Architect or Engineer finds satisfactory will then be published in an addendum as "acceptable substitutions."
- B. The listing of any manufacturer as "acceptable" does not imply automatic approval. It is the sole responsibility of the Division 23 Contractor to ensure that any price quotations received and submittals made are for products which meet or exceed the specifications included herein.
- C. The Contractor must judge that such items of substitution are of equal quality and character to the specified items and it is physically adaptable for installation within the allotted space with all required service clearances. This includes the following:
 1. Has investigated proposed product and determined that it meets or exceeds the quality level of the specified product.
 2. Will provide the same (or better) warranty for the substitution as for the specified product.
 3. Will coordinate installation and make changes to other Work which may be required for the Work to be complete with no additional cost to the Owner.
 4. Waives claims for additional costs or time extensions which may subsequently become apparent.
 5. Will reimburse Owner and Architect/Engineer for review or redesign services associated with re-approval by authorities.
- D. The cost of any changes to other trades as a result of use of the substitution material or equipment must be borne by the Contractor submitting such material or equipment.
- E. After the award of the contract, any request for a substitution must be made in writing by the Contractor (not material supplier or Sub-Contractor). Such request shall state the name of the product specified, the name of the product proposed for substitution, the reason for requesting the substitution, and any change in contract amount resulting from the substitution. No such

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substitution shall be made until an appropriate Contract Modification has been issued and approved.

- F. Manufactured materials hereinafter specified or shown on the Drawings shall be installed or applied in accordance with the directions of the manufacturer unless specifically designated otherwise in the Specifications or on the Drawings.
- G. Substitutions may be considered when a product becomes unavailable through no fault of the Contractor.
- H. Substitutions will not be considered when they are indicated or implied on shop drawing or product data submittals, without separate written request, or when acceptance will require revision to the Contract Documents.
- I. Substitution Submittal Procedure:
 - 1. Submit three copies of request for substitution for consideration. Limit each request to one proposed substitution.
 - 2. Submit shop drawings, product data, and certified test results attesting to the proposed product equivalence. Burden of proof is on proposer.
 - 3. The Architect will notify Contractor in writing of decision to accept or reject request.
 - 4. Request shall be made in writing and be delivered to A/E no later than seven days prior to receipt of bids.

1.06 SUBMITTALS

- A. Submittals for Review
 - 1. When the following are specified in individual sections, submit them for review:
 - a. Product data.
 - b. Shop drawings.
 - 2. After review, provide copies and distribute in accordance with SUBMITTAL PROCEDURES article below.
- B. Submittals for Information
 - 1. When the following are specified in individual sections, submit them for information:
 - a. Design data.
 - b. Certificates.
 - c. Test reports.
 - d. Inspection reports.
 - e. Manufacturer's instructions.
 - f. Other types indicated.
- C. Submittals for Project Closeout
 - 1. When the following are specified in individual sections, submit them at project closeout:
 - a. Project record documents.
 - b. Operation and maintenance data.
 - c. Warranties.
 - d. Bonds.
 - e. Test and balance reports.
 - f. System certification as required.
 - g. Other types as indicated.
- D. Submittal of Shop Drawings:
 - 1. Electronic submittals shall be in PDF format; an electronically-marked up file will be returned. Create PDFs at native size and right-side up; illegible or scanned files will be rejected.
 - a. Submittals shall be for specific equipment to be provided on the project and not an entire catalog.

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2. Major components of the system shall be submitted at one time under a protective cover with each section indexed with visible file tabs. All equipment shall be labeled per the equipment tags on the drawings, ie. Equipment names, etc.
 3. Shop drawings shall indicate manufacturer name, model number, dimensions, voltage and current characteristics, construction and rough-in connections of all materials to be used. Each shop drawing shall be certified as being checked and approved by the Contractor before submittal.
 4. Shop drawings not indicated as being approved by the Contractor will be returned without review.
 5. The Contractor shall provide approved shop drawings with the Operating and Maintenance Manual.
 6. The following wording will appear on shop drawings reviewed by the Engineer. Contractors not wishing to comply with these conditions shall not submit a bid.
"Corrections or comments made on the shop drawings during this review do not relieve Contractor from compliance with requirements of the Drawings and Specifications. This check is only for review of general compliance with the design concept of the project and general compliance with the information given in the contract documents. The Contractor is responsible for confirming and correlating all quantities and dimensions; selecting fabrication processes and techniques of construction; coordinating their work with that of all other trades and performing their work in a safe and satisfactory manner."
 7. The Engineer is not an error checker. Where the Contractor is submitting shop drawings that differ from the specifications, the Contractor must itemize in writing, each variance from the specifications. Failure to do so will be considered an error on the Contractors part and the specified materials shall be furnished. Shop drawings submitted in error or with errors as compared to Specifications and Drawings will be the responsibility of the Contractor to correct such error later.
 8. Shop drawings must only be those materials as specified or approved in published addendum. Others will be returned without review.
 9. Identify variations from Contract Documents and product or system limitations which may be detrimental to successful performance of the completed Work.
 10. When revised for resubmission, identify all changes made since previous submission.
 11. Sequentially number the transmittal form. Revise submittals with original number and a sequential alphabetic suffix.
 12. Identify Project, Contractor, Subcontractor or supplier; pertinent drawing and detail number, and specification section number, as appropriate on each copy.
 13. The Engineer does not provide approval of shop drawings, only a review for general conformance with the design concept and information given in the Contract Documents.
- E. Guarantee:
1. The Contractor shall assume responsibility for any defects which may develop in any part of his work caused by faulty workmanship, material or equipment, and agrees to replace, repair or alter, at his expense, any such faulty workmanship, material or equipment that has been brought to his attention during a period of one year from the date of the final certificate for payment. Acceptance of the work shall not waive this guarantee.
 2. Note that individual specification sections may indicate longer warranty periods on specific components or parts. In each case, the more stringent warranty period shall govern.
 3. For equipment or component parts of equipment put into service during construction for use by Owner, submit documents within 10 days after acceptance.
 4. Any requested use of the equipment or component parts of equipment by the contractor for the contractor, whether the General Contractor or any subcontractor, shall be the responsibility of the contractor. The equipment or components shall be cleaned to new condition prior to substantial completion. Warranty shall begin at time of the project's substantial completion.

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- F. Operating and Maintenance Instructions:
1. For Each Item of Equipment and Each System:
 - a. Description of unit or system, and component parts.
 - b. Identify function, normal operating characteristics, and limiting conditions.
 - c. Include performance curves, with engineering data and tests.
 - d. Complete nomenclature and model number of replaceable parts.
 2. Operating Procedures: Include start-up, break-in, and routine normal operating instructions and sequences. Include regulation, control, stopping, shut-down, and emergency instructions. Include summer, winter, and any special operating instructions.
 3. Maintenance Requirements: Include routine procedures and guide for preventative maintenance and trouble shooting; disassembly, repair, and reassembly instructions; and alignment, adjusting, balancing, and checking instructions.
 4. Provide servicing and lubrication schedule, and list of lubricants required.
 5. Include manufacturer's printed operation and maintenance instructions for each component.
 6. Include sequence of operation by controls manufacturer.
 7. Provide original manufacturer's parts list, illustrations, assembly drawings, and diagrams required for maintenance.
 8. Provide control diagrams by controls manufacturer as installed. (Record Drawings)
 9. Provide charts of valve tag numbers, with location and function of each valve, keyed to flow and control diagrams.
 10. Provide list of original manufacturer's spare parts, current prices, and recommended quantities to be maintained in storage.
 11. Include test and balancing reports.
 12. One copy of each shop drawing shall be included in the notebooks but shall not serve in lieu of maintenance and operating instructions. Temperature control diagrams must include a description of the sequence of control.
 13. The Contractor shall submit O&M Manuals to the Engineer, not the Owner, for review. The Engineer will forward the manuals to the Owner.
 14. This Contractor shall also supervise the initial operation as required to acquaint him thoroughly with the best practice.
 15. This Contractor shall furnish the Engineer with a written statement from the Owner indicating complete acceptance of the equipment data and instruction of the operator. The Engineer will not approve the request for final payment until such statement has been submitted.
 16. Additional Requirements: As specified in individual product specification sections.
 17. Assembly of Operation and Maintenance Manuals
 - a. Assemble operation and maintenance data into durable manuals for Owner's personnel use.
 - 1) Binders: Commercial quality, 8-1/2 by 11 inch (216 by 280 mm) three D side ring binders with durable plastic covers; [3] inch ([76] mm) maximum ring size. When multiple binders are used, correlate data into related consistent groupings.
 - 2) Cover: Identify each binder with typed or printed title OPERATION AND MAINTENANCE INSTRUCTIONS; identify title of Project; identify Contractor Name; identify Architect and Engineer Firms names; identify subject matter of contents.
 - 3) Project Directory: Title and address of Project; names, addresses, and telephone numbers of Architect, Consultants, Contractor and subcontractors, with names of responsible parties.
 - 4) Tables of Contents: List every item separated by a divider, using the same identification as on the divider tab; where multiple volumes are required, include

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- all volumes Tables of Contents in each volume, with the current volume clearly identified.
- 5) Dividers: Provide tabbed dividers for each separate product and system; identify the contents on the divider tab; immediately following the divider tab include a description of product and major component parts of equipment. Where systems involve more than one specification section, provide separate tabbed divider for each system.
- 6) Text: Manufacturer's printed data, or typewritten data on 24 pound paper.
- 7) Drawings: Provide with reinforced punched binder tab. Bind in with text; fold larger drawings to size of text pages.
- 8) Arrange content by systems under section numbers and sequence of Table of Contents of this Project Manual.
- 9) Arrange and organize the paper and digital version in the same manner.
- b. Prepare instructions and data by personnel experienced in maintenance and operation of described products. Prepare data in the form of an instructional manual.
- c. Provide both an electronic version of the O&M Manuals and a hard copy.
- 18. Additional Requirements: As specified in individual product specification sections.
- G. Test Reports:
 - 1. Work which is required to be placed within the construction or concealed shall be carefully tested and inspected before being permanently concealed.
 - 2. Instruments for making tests shall be furnished by this Contractor.
 - 3. The final test shall be performed as soon as possible after the work is entirely completed
 - 4. Test reports submitted electronically shall be in standard PDF format or submitted with software to view the file.
- H. For each submittal for review, allow 15 days excluding delivery time to and from the Contractor.

1.07 JOB CONDITIONS:

- A. Fees and Service Charges:
 - 1. Permits, licenses, fees and service charges required in connection with the work shall be secured and paid for by this Contractor, and upon completion of the work he shall furnish proof of acceptance from the proper Local and State Department having jurisdiction.
- B. Mechanical Symbols and Abbreviations:
 - 1. Symbols and abbreviations are as indicated in legends on the Drawings.
- C. Correlation of Work:
 - 1. This Contractor shall be responsible for close correlation of his work with that of other Contractors and shall organize his work so that it will not interfere with or delay the work of other Contractors.
 - 2. Field verification of scale dimensions on Plans is directed since actual locations, distances and levels will be governed by actual field conditions.
 - 3. The Division 23 Contractor shall check architectural, structural, plumbing, heating and ventilating plans to avert possible installation conflicts. Should drastic changes from original Plans be necessary to resolve such conflicts, the Sub-Contractor shall notify the Prime Contractor who in turn shall notify the Architect or Engineer and secure written approval and agreement on necessary adjustments before the installation is started.
 - 4. Discrepancies shown on different Plans, or between Plans and actual field conditions, or between Plans and Specifications, shall promptly be brought to the attention of the Architect or Engineer for a decision.
 - 5. Where a discrepancy exists between drawing and specifications or other disciplines the worst cost case shall be provided.
 - 6. Coordinate work of alterations and renovations to expedite completion sequentially and to accommodate occupancy requirements.

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7. Coordinate space requirements, supports, and installation of mechanical and electrical work which are indicated diagrammatically on Drawings. Follow routing shown for pipes, ducts, and conduit, as closely as practicable; place runs parallel with lines of building. Utilize spaces efficiently to maximize accessibility to other installations, for maintenance, and for repairs.
 8. Coordinate completion and clean-up of work of separate sections.
 9. After Owner occupancy of premises, coordinate access to site for correction of defective work and work not in accordance with Contract Documents, to minimize disruption of Owner's activities.
- D. Final Inspection:
1. Upon completion of work, the Contractor shall notify the Architect or Engineer in writing and make arrangements for a final observation. The Contractor shall also submit the operating and maintenance manuals at this time. The Engineer will not schedule nor perform a final inspection without successful submittal of operating and maintenance manuals by the Contractor.
 2. During the final observation, pre-final or follow-up final, the Contractor and all his Prime Sub-Contractors shall have the foreman of the project present.
 3. After the final observation is made, the Contractor will receive a list of items requiring adjustment, correction, replacement, or completion.
 4. The Contractor shall comply completely with all the listed requirements within a negotiated number of days of receipt of list. Should the Contractor fail to complete items on the list within this time limit, the Owner reserves the right to have the work completed by others and the cost deducted from the contract price, including change orders.
 5. The Contractor shall notify in writing to the Architect and/or Engineer once all punch list items are corrected, that he is ready for a follow-up final. The written notice shall contain explanations for those known items not completed and a schedule for completing them.
 6. The Architect and/or Engineer shall schedule a follow-up final to confirm completion. Repeated observation trips required of the Engineer by the Contractor's inability to complete the project satisfactorily will require the Contractor to reimburse the Engineer for all incurred costs after the follow-up final observation.

1.08 PROJECT COORDINATION

- A. Project Coordinator: Construction Manager/General Contractor.
- B. This section applies to all work performed and specified under Division 23.
- C. Cooperate with the Construction manager/General Contractor and Owner in allocation of mobilization areas of site; for field offices and sheds, for access, traffic, and parking facilities.
- D. During construction, coordinate use of site and facilities through the Construction Manager/General Contractor
- E. Comply with specified procedures for intra-project communications, submittals, reports and records, schedules, coordination drawings, and recommendations; and resolution of ambiguities and conflicts.
- F. Comply with instructions of the Construction Manager / General Contractor for use of temporary utilities and construction facilities.
- G. Coordinate scheduling, submittals, and work of the various sections of the Project Manual to ensure efficient and orderly sequence of installation of interdependent construction elements, with provisions for accommodating items installed later.
- H. Coordinate space requirements, supports, and installation of mechanical and electrical work that are indicated diagrammatically on Drawings. Follow routing shown for pipes, ducts, and conduit, as closely as practicable; place runs parallel with lines of building. Utilize spaces efficiently to maximize accessibility for other installations, for maintenance, and for repairs.

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- I. Coordinate installation of equipment, piping, ductwork, etc. with electrical gear. Equipment shall not be located in front of panels. Ductwork and piping shall not be routed above panels. Coordinate location of HVAC equipment with Division 26.
- J. Coordinate completion and clean-up of work of separate sections.
- K. After Owner occupancy of premises, coordinate access to site for correction of defective work and work not in accordance with Contract Documents, to minimize disruption of Owner's activities.
- L. Make the following types of submittals to Architect/Engineer through the Construction Manager/General Contractor.
 - 1. Requests for interpretation/information.
 - 2. Requests for substitution.
 - 3. Shop drawings, product data and samples.
 - 4. Test and inspection reports.
 - 5. Manufacturer's instructions and field reports.
 - 6. Applications for payment and change order requests.
 - 7. Progress schedules.
 - 8. Coordination drawings.
 - 9. Closeout submittals.
 - a. Warranties
 - b. Bonds
 - c. System Certification
 - d. Test and Balance Reports
 - 10. As-built Record Drawings.
 - 11. Operation and Maintenance Manuals.

1.09 DRAWINGS AND MEASUREMENTS

- A. Contract drawings for mechanical work are in part diagrammatic, intended to convey the scope of work and indicate general arrangement of equipment, ducts, conduits, piping and approximate sizes and locations of equipment and outlets.
- B. Mechanical trades shall follow these drawings in laying out their work, consult general construction drawings to familiarize themselves with all conditions affecting their work, and shall verify spaces in which their work will be installed.
- C. Coordinate work with other trades as job conditions reasonably require.
- D. Where job conditions require reasonable changes in indicated locations and arrangement, make such changes without extra cost to Owner.
- E. The drawings are not intended to be scaled for roughing in measurements nor to serve as shop drawings.
- F. The Contractor shall consult the architectural, structural, mechanical, electrical, or equipment drawings for dimensions, obstructions, and location of equipment or other trades. Any discrepancies between architectural, structural, electrical, or equipment drawings and the HVAC work shown on these drawings shall be reported to the Engineers for adjustment.
- G. The installation details, instructions, and recommendations of the manufacturer of the product used, or modified to obtain the best end result, shall be the basis of attaining installation of the products for usage on this project except where definite and specific instructions are set forth herein or details are shown on the plans.

1.10 WORKMANSHIP

- A. The installation work included in this specification shall be performed in a neat workmanlike manner by people experienced and skilled in the HVAC trade. Only the best quality

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workmanship will be accepted. All exposed parts of the systems such as exposed piping, HVAC Equipment, etc., shall be square and true with the building construction.

1.11 PATCHING MATERIALS

- A. New Materials: As specified in product sections; match existing products and work for patching and extending work.

1.12 EQUIPMENT HOUSEKEEPING PADS

- A. Provide reinforced concrete housekeeping pads for all floor mounted HVAC equipment (i.e. fan)
- B. Provide anchor bolts, per equipment manufacturer's directions, to attach equipment to pads.

1.13 TRANSPORTATION AND HANDLING

- A. Coordinate schedule of product delivery to designated prepared areas in order to minimize site storage time and potential damage to stored materials.
- B. Transport and handle products in accordance with manufacturer's instructions.
- C. Transport materials in covered trucks to prevent contamination of product and littering of surrounding areas.
- D. Promptly inspect shipments to ensure that products comply with requirements, quantities are correct, and products are undamaged.
- E. Provide equipment and personnel to handle products by methods to prevent soiling, disfigurement, or damage.
- F. Arrange for the return of packing materials, such as wood pallets, where economically feasible.

1.14 STORAGE AND PROTECTION

- A. Designate receiving/storage areas for incoming products so that they are delivered according to installation schedule and placed convenient to work area in order to minimize waste due to excessive materials handling and misapplication.
- B. Store and protect products in accordance with manufacturers' instructions.
- C. Store with seals and labels intact and legible.
- D. Store sensitive products in weather tight, climate controlled, enclosures in an environment favorable to product.
- E. For exterior storage of fabricated products, place on sloped supports above ground.
- F. Cover products subject to deterioration with impervious sheet covering. Provide ventilation to prevent condensation and degradation of products.
- G. Prevent contact with material that may cause corrosion, discoloration, or staining.
- H. Provide equipment and personnel to store products by methods to prevent soiling, disfigurement, or damage.
- I. Arrange storage of products to permit access for inspection. Periodically inspect to verify products are undamaged and are maintained in acceptable condition.

1.15 EQUIPMENT CLEAN-UP

- A. Special care must be taken for protection of air handling equipment, pumps, etc. All must be kept completely protected from weather elements, painting, etc. until the building is substantially completed. Damage from rust, paint, scratches, etc. shall be corrected as directed by the A/E.
- B. Clean all registers, grilles, diffusers, air handling equipment, etc., thoroughly, just prior to final inspection. Equipment shall be cleaned by an approved method.

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- C. Protection of HVAC equipment during painting of the building shall be the responsibility of the Painting Contractor. This shall not relieve the HVAC Contractor of the responsibility for checking to assure that adequate protection is being provided.

1.16 CUTTING AND PATCHING

- A. Execute cutting and patching to complete the work, to uncover work to install improperly sequenced work, to remove and replace defective or non-conforming work, to remove samples of installed work for testing when requested, to provide openings in the work for penetration of mechanical and electrical work, to execute patching to complement adjacent work, and to fit Products together to integrate with other work.
- B. Execute work by methods that avoid damage to other work and that will provide appropriate surfaces to receive patching and finishing.
- C. Cut rigid materials using masonry saw or core drill. Pneumatic tools not allowed without prior approval.
- D. In existing construction, this Contractor shall perform all cutting required and all necessary patching after completion to restore the surface to its original condition, unless otherwise indicated.
- E. Should the cutting of walls, floors, ceiling, partitions, etc., be required for proper installation of the work or apparatus of this Contractor, or be made necessary on account of his failure to give General Contractor proper information at the time required, such cutting shall be done at his own expense, restoring the work to its original condition.
- F. All cutting and patching done by this Contractor shall be subject to the direction and approval of the A/E. This Contractor shall not endanger the stability of the structure by cutting, digging, or otherwise, and shall not at any time cut or alter work of any other contractor without A/E's consent.

1.17 GENERAL INSTALLATION REQUIREMENTS

- A. Install products as specified in individual sections.
- B. Make neat transitions. Patch work to match adjacent work in texture and appearance.

1.18 PROTECTION OF INSTALLED WORK

- A. Protect installed work and provide special protection where specified in individual specification sections.
- B. Provide temporary and removable protection for installed Products. Control activity in immediate work area to prevent damage. This includes the protection of the work of other trades.

1.19 SYSTEM STARTUP

- A. Verify tests, meter readings, and specified electrical characteristics agree with those required by the equipment or system manufacturer.
- B. Verify that wiring and support components for equipment are complete and tested.
- C. Execute start-up under supervision of applicable Contractor personnel and manufacturer's representative in accordance with manufacturers' instructions.
- D. Any irregularities, faulty equipment, etc. shall be repaired or replaced as required prior to acceptance.

1.20 DEMONSTRATION AND INSTRUCTION

- A. Contractor shall complete all start-up and perform all interim testing of each system prior to scheduling or requesting to schedule training. All systems shall be completely operational before training or demonstration will occur.

23 0010 GENERAL PROVISIONS

- B. Demonstrate operation and maintenance of Products to Owner's representative at a scheduled time with the Owner.
- C. Demonstrate start-up, operation, control, adjustment, trouble-shooting, servicing, maintenance, and shutdown of each item of equipment at agreed time, at equipment location.
- D. Provide a qualified person who is knowledgeable about the Project to perform demonstration and instruction of Owner Personnel.
- E. Utilize operation and maintenance manuals as basis for instruction. Review contents of manuals with Owner's personnel in detail to explain all aspects of operation and maintenance.

1.21 ADJUSTING

- A. Adjust operating Products and equipment to ensure smooth and unhindered operation.

1.22 FINAL CLEANING

- A. Execute final cleaning prior to final project assessment.
- B. Clean equipment and fixtures to a sanitary condition with cleaning materials appropriate to the surface and material being cleaned.
- C. Remove waste, surplus materials, trash/rubbish, and construction facilities from the site; dispose of in legal manner; do not burn or bury.

1.23 CLOSEOUT PROCEDURES

- A. Make submittals that are required by governing or other authorities.
 - 1. Provide copies to Architect.
- B. Notify Architect when work is considered finally complete.
- C. Complete items of work determined by Architect's final inspection.

1.24 PROJECT RECORD DOCUMENTS

- A. 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. Record information concurrent with construction progress.
- D. 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. Changes made by Addenda and modifications.
- E. Record Drawings and Shop Drawings: Legibly mark each item to record actual construction including:
 - 1. Measured horizontal and vertical locations of underground utilities and appurtenances, referenced to permanent surface improvements.
 - 2. Field changes of dimension and detail.
 - 3. Details not on original Contract Documents.
- F. At completion of project Contractor shall provide a minimum of two (2) sets of As-Built Record drawings. Additional sets shall be provided if required under General Requirements.

23 0010 GENERAL PROVISIONS

1.25 WARRANTY AND BONDS

- A. Obtain warranties and bonds, executed in duplicate by responsible Sub-Contractors, suppliers and manufacturers, within ten days after completion of the applicable item of work. Except for items put into use with Owner's permission, leave date of beginning of time of warranty until the Date of Substantial completion is determined.
- B. Verify that documents are in proper form, contain full information, and are notarized.
- C. Co-execute submittals when required.
- D. Retain warranties and bonds until time specified for submittal.
- E. Include originals of each in operation and maintenance manuals, indexed separately on Table of Contents.
- F. Separate each warranty or bond with index tab sheets keyed to the Table of Contents listing. Provide full information, using separate typed sheets as necessary. List Sub-Contractor, Supplier, and Manufacturer, with name address, and telephone number of responsible principal.
- G. Warranty:
 - 1. The Contractor shall assume responsibility for any defects which may develop in any part of his work caused by faulty workmanship, material or equipment, and agrees to replace, repair or alter, at his expense, any such faulty workmanship, material or equipment that has been brought to his attention during a period of one year from the date of the final certificate for payment. Acceptance of the work shall not waive this guarantee.
 - 2. Note that individual specification sections may indicate longer warranty periods on specific components or parts. In each case, the more stringent warranty period shall govern.
 - 3. For equipment or component parts of equipment put into service during construction for use by Owner, submit documents within 10 days after acceptance.
 - a. Any requested use of the equipment or component parts of equipment by the contractor for the contractor, whether the General Contractor or any subcontractor, shall be the responsibility of the contractor. The equipment or components shall be cleaned to new condition prior to substantial completion. Warranty shall begin at time of the project's substantial completion.

END OF SECTION 23 0010

Houser Street Lift Station Upgrade Project
City of Muscatine
Muscatine, Iowa

23 0010 GENERAL PROVISIONS

23 0510 MINOR HVAC DEMOLITION

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Mechanical demolition.

PART 2 PRODUCTS

2.01 MATERIALS AND EQUIPMENT

- A. Materials and equipment for patching and extending work: As specified in individual sections.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify field measurements and ductwork arrangements are as shown on Drawings.
- B. Verify that ductwork and equipment to be removed serve only abandoned facilities.
- C. Demolition drawings are based on casual field observation .
- D. Report discrepancies to Architect before disturbing existing installation.
- E. Beginning of demolition means installer accepts existing conditions.

3.02 PREPARATION

- A. Disconnect ductwork systems in walls, floors, and ceilings which are to be removed.
- B. Coordinate service outages with Owner. Notify Owner 48 hours prior to any outage.

3.03 DEMOLITION AND EXTENSION OF EXISTING MECHANICAL WORK

- A. Remove, relocate, and extend existing installations to accommodate new construction.
- B. Disconnect old heat transfer terminal units. Remove all associated piping and equipment.
- C. Repair adjacent construction and finishes damaged during demolition and extension work.
- D. Extend existing installations using materials and methods as specified.

3.04 CLEANING AND REPAIR

- A. Clean and repair existing materials and equipment which remain or are to be reused.

END OF SECTION 23 0510

Houser Street Lift Station Upgrade Project
City of Muscatine
Muscatine, Iowa

23 0510 MINOR HVAC DEMOLITION

23 0593 TESTING, ADJUSTING, AND BALANCING FOR HVAC

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Testing, adjustment, and balancing of air systems.

1.02 REFERENCE STANDARDS

- A. AABC (NSTSB) - AABC National Standards for Total System Balance, 7th Edition; 2016.
- B. ASHRAE Std 111 - Measurement, Testing, Adjusting, and Balancing of Building HVAC Systems; 2008.
- C. NEBB (TAB) - Procedural Standards for Testing Adjusting and Balancing of Environmental Systems; 2015, with Errata (2017).
- D. SMACNA (TAB) - HVAC Systems Testing, Adjusting and Balancing; 2002.

1.03 SUBMITTALS

- A. Final Report: Indicate deficiencies in systems that would prevent proper testing, adjusting, and balancing of systems and equipment to achieve specified performance.
 - 1. Revise TAB plan to reflect actual procedures and submit as part of final report.
 - 2. Submit draft copies of report for review prior to final acceptance of Project. Provide final copies for Architect and for inclusion in operating and maintenance manuals.
 - 3. Include actual instrument list, with manufacturer name, serial number, and date of calibration.
 - 4. Form of Test Reports: Where the TAB standard being followed recommends a report format use that; otherwise, follow ASHRAE Std 111.
 - 5. Units of Measure: Report data in I-P (inch-pound) units only.
 - 6. Include the following on the title page of each report:
 - a. Name of Testing, Adjusting, and Balancing Agency.
 - b. Address of Testing, Adjusting, and Balancing Agency.
 - c. Telephone number of Testing, Adjusting, and Balancing Agency.
 - d. Project name.
 - e. Project location.
 - f. Project Architect.
 - g. Project Engineer.
 - h. Project Contractor.
 - i. Report date.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION

3.01 GENERAL REQUIREMENTS

- A. Testing and Balancing Agency shall be a subcontractor to the Mechanical Contractor.
- B. Perform total system balance in accordance with one of the following:
 - 1. AABC (NSTSB), AABC National Standards for Total System Balance.
 - 2. ASHRAE Std 111, Practices for Measurement, Testing, Adjusting and Balancing of Building Heating, Ventilation, Air-Conditioning, and Refrigeration Systems.
 - 3. SMACNA (TAB).
- C. Begin work after completion of systems to be tested, adjusted, or balanced and complete work prior to Substantial Completion of the project.
- D. TAB Agency Qualifications:
 - 1. Company specializing in the testing, adjusting, and balancing of systems specified in this section.
 - 2. Having minimum of three years documented experience.

23 0593 TESTING, ADJUSTING, AND BALANCING FOR HVAC

3. Certified by one of the following:
 - a. AABC, Associated Air Balance Council: www.aabc.com/#sle; upon completion submit AABC National Performance Guaranty.
 - b. NEBB, National Environmental Balancing Bureau: www.nebb.org/#sle.
 - c. TABB, The Testing, Adjusting, and Balancing Bureau of National Energy Management Institute: www.tabbcertified.org/#sle.
- E. TAB Supervisor and Technician Qualifications: Certified by same organization as TAB agency.
- F. Completely coordinate with work of all other trades.
- G. Testing and Balancing Agency shall furnish all labor, materials, tools, equipment, and services to test, balance and adjust all mechanical systems as indicated, in accordance with provisions of Contract Documents.

3.02 RESPONSIBILITIES OF TESTING AND BALANCING AGENCY

- A. Directly responsible to the Mechanical Contractor.
 1. Report any balancing problem to the Engineer for resolution.
- B. Accurately calibrate and maintain all test instruments in good working order.
 1. If requested, conduct tests of instruments in the presence of the Engineer.
- C. Check component parts of complete system for their independent functions and composite operation in the system so that all capacities and requirements as shown on drawings and outlined in specifications have been met.
- D. Inspect the installation and operation of the mechanical piping systems, sheet metal work, temperature controls and other components of the HVAC systems as relates to proper arrangement and adequate provisions for testing and balancing.
 1. Advise the Engineer of necessary adjustments and corrective measures.
- E. Schedule work with trades involved.
- F. Check, adjust and balance system components to obtain optimum conditions in each conditioned space.
- G. Record all inspections, tests and adjustments.
- H. Prepare and submit reports of all tests.

3.03 RESPONSIBILITIES OF INSTALLING CONTRACTOR

- A. Startup all systems and keep in correct operation during balancing operations.
- B. Assign personnel as required to make necessary adjustments and corrections to balance systems.
- C. Maintain accessibility to test locations and devices requiring adjustment.
- D. Allow adequate time in project schedule for completion of TAB Activity prior to substantial completion.

3.04 JOB CONDITIONS

- A. Perform work at time as agreed upon by Installing Contractor and Owner.
 1. If work is not done during peak cooling season, demonstrate satisfactory balancing during next peak cooling season.

3.05 EXAMINATION

- A. Verify that systems are complete and operable before commencing work. Ensure the following conditions:
 1. Systems are started and operating in a safe and normal condition.
 2. Temperature control systems are installed complete and operable.
 3. Proper thermal overload protection is in place for electrical equipment.

23 0593 TESTING, ADJUSTING, AND BALANCING FOR HVAC

4. Duct systems are clean of debris.
5. Fans are rotating correctly.
- B. Submit field reports. Report defects and deficiencies that will or could prevent proper system balance.
- C. Advise Engineer of necessary adjustments and corrective measures.
- D. Beginning of work means acceptance of existing conditions.

3.06 ADJUSTMENT TOLERANCES

- A. Air Handling Systems: Adjust to within plus or minus 10 percent of design for supply systems and plus or minus 10 percent of design for return and exhaust systems.

3.07 RECORDING AND ADJUSTING

- A. Field Logs: Maintain written logs including:
 1. Running log of events and issues.
 2. Discrepancies, deficient or uncompleted work by others.
 3. Contract interpretation requests.
 4. Lists of completed tests.
- B. Ensure recorded data represents actual measured or observed conditions.
- C. After adjustment, take measurements to verify balance has not been disrupted or that such disruption has been rectified.
- D. Leave systems in proper working order, replacing belt guards, closing access doors, closing doors to electrical switch boxes, and restoring thermostats to specified settings.

3.08 AIR SYSTEM PROCEDURE

- A. Adjust air handling and distribution systems to provide required or design supply, return, and exhaust air quantities.
- B. Make air quantity measurements in ducts by Pitot tube traverse of entire cross sectional area of duct.
- C. Vary total system air quantities by adjustment of fan speeds. Provide drive changes required. Vary branch air quantities by damper regulation.

3.09 SCOPE

- A. Test, adjust, and balance the following:
 1. Fans.

3.10 MINIMUM DATA TO BE REPORTED

- A. Exhaust Fans:
 1. Location.
 2. Manufacturer.
 3. Model number.
 4. Serial number.
 5. Air flow, specified and actual.
 6. Total static pressure (total external), specified and actual.
 7. Inlet pressure.
 8. Discharge pressure.
 9. Sheave Make/Size/Bore.
 10. Number of Belts/Make/Size.
 11. Fan RPM.

END OF SECTION 23 0593

Houser Street Lift Station Upgrade Project
City of Muscatine
Muscatine, Iowa

23 0593 TESTING, ADJUSTING, AND BALANCING FOR HVAC

23 3100 HVAC DUCTS AND CASINGS

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Metal ducts.

1.02 RELATED REQUIREMENTS

- A. Section 23 0593 - Testing, Adjusting, and Balancing for HVAC

1.03 REFERENCE STANDARDS

- A. ASTM A36/A36M - Standard Specification for Carbon Structural Steel; 2014.
- B. ASTM A240/A240M - Standard Specification for Chromium and Chromium-Nickel Stainless Steel Plate, Sheet, and Strip for Pressure Vessels and for General Applications; 2018.
- C. ASTM A480/A480M - Standard Specification for General Requirements for Flat-Rolled Stainless and Heat-Resisting Steel Plate, Sheet, and Strip; 2018a.
- D. ASTM A653/A653M - Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process; 2018.
- E. ASTM A666 - Standard Specification for Annealed or Cold-Worked Austenitic Stainless Steel Sheet, Strip, Plate, and Flat Bar; 2015.
- F. ASTM A1011/A1011M - Standard Specification for Steel, Sheet and Strip, Hot-Rolled, Carbon, Structural, High-Strength Low-Alloy, High-Strength Low-Alloy with Improved Formability, and Ultra-High Strength; 2018a.
- G. ASTM B209/B209M - Standard Specification for Aluminum and Aluminum-Alloy Sheet and Plate; 2021.
- H. ASTM E84 - Standard Test Method for Surface Burning Characteristics of Building Materials; 2018b.
- I. NFPA 90A - Standard for the Installation of Air-Conditioning and Ventilating Systems; 2018.
- J. NFPA 96 - Standard for Ventilation Control and Fire Protection of Commercial Cooking Operations; 2017.
- K. SMACNA (DCS) - HVAC Duct Construction Standards Metal and Flexible; 2005 (Revised 2009).
- L. SMACNA (KVS) - Kitchen Ventilation Systems and Food Service Equipment Fabrication and Installation Guidelines; 2001.
- M. SMACNA (LEAK) - HVAC Air Duct Leakage Test Manual; 2012.
- N. UL 1978 - Grease Ducts; Current Edition, Including All Revisions.
- O. UL 2221 - Tests of Fire Resistive Grease Duct Enclosure Assemblies; Current Edition, Including All Revisions.

1.04 SUBMITTALS

- A. Product Data: Provide data for duct materials.
- B. Project Record Documents: Record actual locations of ducts and duct fittings. Record changes in fitting location and type. Show additional fittings used.

1.05 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Company specializing in manufacturing the type of products specified in this section, with minimum three years of documented experience.

1.06 FIELD CONDITIONS

- A. Do not install duct sealants when temperatures are less than those recommended by sealant manufacturers.

23 3100 HVAC DUCTS AND CASINGS

- B. Maintain temperatures within acceptable range during and after installation of duct sealants.

PART 2 PRODUCTS

2.01 GENERAL REQUIREMENTS

- A. Provide UL Class 1 ductwork, fittings, hangers, supports, and appurtenances in accordance with NFPA 90A and SMACNA (DCS) guidelines unless stated otherwise.
- B. Duct Sealing and Leakage in accordance with Static Pressure Class:
 - 1. Duct Pressure Class and Material for Common Mechanical Ventilation Applications:
 - a. General Exhaust Air: 2 in-wc pressure class, stainless steel.
 - 1) Seal: Class C, apply to seal off traverse joints.
 - 2) Leakage: rectangular, Class 24 or 24 cfm/100 sq ft.
- C. Duct Fabrication Requirements:
 - 1. Duct and Fitting Fabrication and Support: SMACNA (DCS).
 - 2. Use reinforced and sealed sheet-metal materials at recommended gauges for indicated operating pressures or pressure class.
 - 3. Construct tees, bends, and elbows with radius of not less than 1-1/2 times width of duct on centerline. Where not possible and where rectangular elbows must be used, provide airfoil turning vanes of perforated metal with glass fiber insulation.
 - 4. Increase duct sizes gradually, not exceeding 15 degrees divergence wherever possible; maximum 30 degrees divergence upstream of equipment and 45 degrees convergence downstream.
 - 5. Where ducts are connected to exterior wall louvers and duct outlet is smaller than louver frame, provide blank-out panels sealing louver area around duct. Use same material as duct, painted black on exterior side; seal to louver frame and duct.
 - 6. Fabricate continuously welded duct fittings two gages heavier than duct gages indicated in SMACNA Standard. Joints shall be minimum 4 inch cemented slip joint, brazed or electric welded. Prime coat welded joints.
 - 7. The minimum duct construction shall be 18 ga.

2.02 METAL DUCTS

- A. Material Requirements:
 - 1. Stainless Steel: ASTM A666, Type 316.

PART 3 EXECUTION

3.01 INSTALLATION

- A. Install products following the manufacturer's instructions.
- B. During construction, provide temporary closures of metal or taped polyethylene on open ductwork to prevent construction dust from entering the ductwork system.
- C. All ductwork shall be run substantially as shown on the plans with bends and curves. The A/E reserves the right to slightly change the run of certain ducts without extra cost to the Owner, if necessary to avoid unforeseen structural or other interferences.
- D. Install and seal metal and flexible ducts in accordance with SMACNA HVAC Duct Construction Standards - Metal and Flexible.
- E. Locate ducts with sufficient space around equipment to allow normal operating and maintenance activities.
- F. Use double nuts and lock washers on threaded rod supports.
- G. Where vertical duct risers pass through floors, securely fasten supporting angles on at least two sides of the ducts with rivets, screws, or bolts and support the assembly on the adjoining floor construction in an approved manner. Angles shall be black iron primed with zinc chromate.

23 3100 HVAC DUCTS AND CASINGS

- H. Securely attach all ductwork to the building construction in a manner to be free from vibration and swaying under all conditions.
- I. Ducts shall be substantially supported with hangers located according to SMACNA standards. Hang ducts from beams and joists wherever possible.
- J. At exterior wall louvers, seal duct to louver frame _____.

END OF SECTION 23 3100

Houser Street Lift Station Upgrade Project
City of Muscatine
Muscatine, Iowa

23 3100 HVAC DUCTS AND CASINGS

23 3416 CENTRIFUGAL HVAC FANS

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Airfoil wheel centrifugal fans, spark-proof construction.

1.02 REFERENCE STANDARDS

- A. ABMA STD 9 - Load Ratings and Fatigue Life for Ball Bearings; 2015.
- B. AMCA 99 - Standards Handbook; 2016.

1.03 SUBMITTALS

- A. Product Data: Provide data on centrifugal fans and accessories including fan curves with specified operating point plotted, power, rpm, sound power levels for both fan inlet and outlet at rated capacity, and electrical characteristics and connection requirements.
- B. Manufacturer's Instructions: Include complete installation instructions.
- C. Maintenance Data: Include instructions for lubrication, motor and drive replacement, spare parts list, and wiring diagrams.

1.04 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Company specializing in manufacturing the type of products specified in this section, with minimum three years of documented experience.
- B. Products Requiring Electrical Connection: Listed and classified by Underwriters Laboratories Inc. as suitable for the purpose specified and indicated.

1.05 DELIVERY, STORAGE, AND HANDLING

- A. Protect motors, shafts, and bearings from weather and construction dust.

PART 2 PRODUCTS

2.01 MANUFACTURERS

- A. Greenheck.
- B. Loren Cook.
- C. Twin City Fan.
- D. Engineer Approved Equivalent.

2.02 WHEEL AND INLET

- A. Airfoil Centrifugal Wheel: Steel construction with smooth curved inlet flange, heavy backplate die-formed hollow airfoil shaped aluminum blades continuously welded at tip flange, and backplate; cast iron or cast steel hub riveted to backplate and keyed to shaft with set screws.

2.03 HOUSING

- A. Heavy gauge steel, spot welded for AMCA 99 Class I and II fans, and continuously welded for Class III, adequately braced, designed to minimize turbulence with spun inlet bell and shaped cut.

2.04 BEARINGS AND DRIVES

- A. Bearings: Heavy duty pillow block type, selfgreasing ball bearings, with ABMA STD 9 life at 50,000 hours.
- B. Shafts: Hot rolled steel, ground and polished, with keyway, protectively coated with lubricating oil, and shaft guard.
- C. Drive and Motor: Direct drive with premium efficient motor.

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23 3416 CENTRIFUGAL HVAC FANS

PART 3 EXECUTION

3.01 INSTALLATION

- A. Install in accordance with manufacturer's instructions.

END OF SECTION 23 3416

23 8200 CONVECTION HEATING AND COOLING UNITS

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Electric unit heaters.

1.02 RELATED REQUIREMENTS

1.03 REFERENCE STANDARDS

- A. AHRI Directory of Certified Product Performance - Air-Conditioning, Heating, and Refrigeration Institute (AHRI); current edition at www.ahrinet.org.
- B. NFPA 70 - National Electrical Code; Most Recent Edition Adopted by Authority Having Jurisdiction, Including All Applicable Amendments and Supplements.
- C. NFPA 90A - Standard for the Installation of Air-Conditioning and Ventilating Systems; 2018.

1.04 SUBMITTALS

- A. Product Data: Provide typical catalog of information including arrangements.
- B. Shop Drawings:
 - 1. Indicate cross sections of cabinets, grilles, bracing and reinforcing, and typical elevations.
- C. Manufacturer's Instructions: Indicate installation instructions and recommendations.
- D. Operation and Maintenance Data: Include manufacturer's descriptive literature, operating instructions, installation instructions, maintenance and repair data, and parts listings.

PART 2 PRODUCTS

2.01 ELECTRIC UNIT HEATERS

- A. Manufacturers:
 - 1. Indeeco.
 - 2. QMark.
 - 3. Modine.
 - 4. Engineer Approved Equivalent.
- B. Provide products listed, classified, and labeled by Underwriters Laboratories Inc. (UL) as suitable for purpose indicated.
- C. Heating Element Assembly:
 - 1. Thermal safety cut-out within electric terminal box with automatically reset switch located near electric terminal box.
 - 2. Horizontal Projection Units:
 - a. Steel fins copper brazed to steel sheath and epoxy sealed for moisture resistance.
 - b. Nickel chromium resistance wire surrounded with magnesium oxide and sheathed in steel, spiral-finned tubes.
 - c. High-mass, all steel tubular type, copper brazed, centrally located and installed in fixed element banks.
- D. Housing:
 - 1. Horizontal Projection Units:
 - a. Construction materials to consist of heavy gauge steel with high gloss baked enamel finish.
 - b. Provide with threaded holes for threaded rod suspension.
 - c. Provisions for access to internal components for maintenance, adjustments, and repair.
- E. Air Inlets and Outlets:
 - 1. Inlets: Provide protective grilles with fan blade guard.
 - 2. Outlets: Provide directional louvers.

23 8200 CONVECTION HEATING AND COOLING UNITS

- F. Fan: Factory balanced, direct drive, axial type with fan guard.
- G. Motor: Totally enclosed, thermally protected, and provided with permanently lubricated bearings.
- H. Controls:
 - 1. Wall mounted remote thermostat with 24-volt auxiliary relay.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify that field measurements are as indicated on drawings.

3.02 INSTALLATION

- A. Install in accordance with manufacturer's recommendations.
- B. Install equipment exposed to finished areas after walls and ceilings are finished and painted.
- C. Do not damage equipment or finishes.
- D. Unit Heaters:
 - 1. Hang from building structure, with pipe hangers anchored to building, not from piping or electrical conduit.
 - 2. Mount as high as possible to maintain greatest headroom unless otherwise indicated.
- E. Units with Electric Heating Elements:
 - 1. Install as indicated including electrical devices furnished by manufacturer but not factory installed.

3.03 CLEANING

- A. After construction and painting is completed, clean exposed surfaces of units.
- B. Vacuum clean coils and inside of units.
- C. Touch-up marred or scratched surfaces of factory-finished cabinets using finish materials furnished by the manufacturer.

END OF SECTION 23 8200

SECTION 26 0010 GENERAL PROVISIONS

PART 1 – GENERAL

1.01 DESCRIPTION OF WORK

- A. The work shall include everything in this Division of the Specifications and everything indicated on the Drawings that is complementary to this Division of the Specifications.

1.02 QUALITY ASSURANCE

- A. Codes and Standards:
 - 1. Work, materials and manner of placing material shall conform in every respect with the latest provisions of Local, State, and National Codes.
 - 2. Materials and equipment shall be new and of best quality, of the type best suited for the purpose intended, and be made by nationally recognized and substantially established manufacturers.
 - 3. Electrical materials used in this work shall be listed by the Underwriters Laboratories, Inc. where testing is provided and shall bear their label.
 - 4. The following list of codes, technical societies, trade organizations and governing agencies shall set the standards by which all work shall be executed and for all products to be manufactured. The most recent editions shall apply.
 - a. City Electrical Ordinances
 - b. National Electrical Code (NEC)
 - c. National Electrical Manufacturers Association (NEMA)
 - d. Underwriters Laboratories (UL)
 - e. Electrical Testing Laboratory (ETL)
 - f. International Building Code (IBC)
 - g. International Fire Code (IFC)
 - h. National Fire Protection Association (NFPA)
 - i. American Society for Testing and Materials (ASTM)
 - j. National Electrical Contractors Association (NECA)
 - k. Institute of Electrical and Electronic Engineers (IEEE)

1.03 METHODS OF REQUEST FOR APPROVAL OF EQUIVALENT EQUIPMENT

- A. Prior to the award of the contract, interested parties may request approval of substitute materials. Such requests shall be made in writing and delivered to the Engineer no later than ten (10) days prior to the receipt of bids. Any substitutions that the Engineer finds satisfactory will then be published in an addendum as “acceptable substitutions.”
- B. The listing of any manufacturer as “acceptable” does not imply automatic approval. It is the sole responsibility of the Electrical Contractor to ensure that any price quotations received and submittals made are for products which meet or exceed the specifications included herein.
- C. The Contractor must judge that such items of substitution are of equal quality and character to the specified items and it is physically adaptable for installation within the allotted space with all required service clearances.
- D. The cost of any changes to other trades as a result of use of the substitution material or equipment must be borne by the Contractor submitting such material or equipment.
- E. After the award of the contract, any request for a substitution must be made in writing. Such request shall state the name of the product specified, the name of the product proposed for substitution, the reason for requesting the substitution, and any change in contract amount resulting from the substitution.
- F. Manufactured materials hereinafter specified or shown on the Drawings shall be installed or applied in accordance with the directions of the manufacturer unless specifically designated otherwise in the Specifications or on the Drawings.

SECTION 26 0010 GENERAL PROVISIONS

1.04 SUBMITTALS

- A. Submittal of Shop Drawings:
 - 1. The Contractor shall submit one (1) electronic copy in either standard "searchable" (no scans will be accepted) PDF format. Major components of the system shall be submitted at one time under a protective cover with each section indexed. All equipment shall be labeled per the equipment tags on the drawings, i.e.. Equipment names, fixture types, etc.
 - 2. Shop drawings shall indicate catalog number, dimensions, voltage and current characteristics, wire sizes, construction and rough-in data of all materials to be used. Each shop drawing shall be certified as being checked and approved by the Contractor before submittal.
 - 3. Shop drawings not indicated as being approved by the Contractor will be returned without review.
 - 4. Corrections or comments made on the shop drawings during this review do not relieve Contractor from compliance with requirements of the Drawings and Specifications. This check is only for review of general compliance with the design concept of the project and general compliance with the information given in the contract documents. The Contractor is responsible for confirming and correlating all quantities and dimensions; selecting fabrication processes and techniques of construction; coordinating his work with that of all other trades and performing his work in a safe and satisfactory manner."
- B. Guarantee:
 - 1. The Contractor shall assume responsibility for any defects which may develop in any part of his work caused by faulty workmanship, material or equipment, and agrees to replace, repair or alter, at his expense, any such faulty workmanship, material or equipment that has been brought to his attention during a period of one year from the date of the final certificate for payment. Acceptance of the work shall not waive this guarantee.
- C. Operating and Maintenance Instructions:
 - 1. This Contractor shall furnish one (1) electronic copy in PDF format of complete catalog data, manufacturer's literature and detailed manuals covering the operating, maintenance of equipment and parts list specified under this Division of the Specification.
 - 2. The Contractor shall submit O&M Manuals to the Engineer, not the owner, for review. The Engineer will forward the manuals to the Owner.
- D. Test Reports:
 - 1. Work which is required to be placed within the construction or concealed shall be carefully tested and inspected before being permanently concealed.
 - 2. Tests shall be made in the presence of the Owner if requested, and shall meet with their approval.
 - 3. The entire system shall be subject to a test at full operating and under normal usage conditions. This shall include voltage and current checks, resistance measurements and equipment operation. Defects in the work or workmanship which appear during these tests shall be properly remedied and a test again applied and continued to a satisfactory conclusion.
 - 4. Test reports submitted electronically shall be in standard PDF format.

1.05 JOB CONDITIONS

- A. Maintain areas free of waste materials, debris, and rubbish. Maintain site in a clean and orderly condition per OSHA standards.
- B. Remove waste materials, debris, and rubbish from site periodically and dispose off-site.
- C. Permits, licenses, fees and service charges required in connection with the work shall be secured and paid for by this Contractor, and upon completion of the work he shall furnish proof of acceptance from the authority having jurisdiction.

SECTION 26 0010 GENERAL PROVISIONS

D. Correlation of Work:

1. This Contractor shall be responsible for close correlation of his work with that of other Contractors and shall organize his work so that it will not interfere with or delay the work of other Contractors.
2. Field verification of scale dimensions on Plans is directed since actual locations, distances and levels will be governed by actual field conditions.
3. The Electrical Contractor shall check all project plans to avert possible installation conflicts. Should changes from original Plans be necessary to resolve such conflicts, the Contractor shall notify the Engineer and secure written approval and agreement on necessary adjustments before the installation is started.
4. Discrepancies shown on different Plans, or between Plans and actual field conditions, or between Plans and Specifications, shall promptly be brought to the attention of the Engineer for a decision.
5. Where a discrepancy exists between drawing and specifications or other disciplines the worst cost case shall be provided.

E. Final Inspection:

1. Upon completion of work, the Contractor shall notify the Engineer in writing and make arrangements for a final observation. The Contractor shall also submit the operating and maintenance manuals at this time. The Engineer will not schedule nor perform a final inspection without successful submittal of operating and maintenance manuals by the Contractor.
2. During the final observation, pre-final or follow-up final, the Contractor and all their Sub-Contractors shall have the foreman of the project present.
3. After the final observation is made, the Contractor will receive a list of items requiring adjustment, correction, replacement, or completion. The Contractor shall comply completely with all the listed requirements within a negotiated number of days of receipt of list. Should the Contractor fail to complete items on the list within this time limit, the Owner reserves the right to have the work completed by others and the cost deducted from the contract price, including change orders. The Contractor shall notify in writing to the Engineer once all punch list items are corrected, that he is ready for a follow-up final. The written notice shall contain explanations for those known items not completed and a schedule for completing them. Engineer shall schedule a follow-up final to confirm completion.

1.06 DRAWINGS AND MEASUREMENTS

- A. The extent of the system of equipment, materials, panels, conduits, wire, fixtures and connections as shown are in general diagrammatic and not for exact locations, except in certain cases, the drawings may include details giving exact location and arrangements.
- B. The drawings are not intended to be scaled for roughing in measurements nor to serve as shop drawings.
- C. The Contractor shall consult all project drawings for dimensions, obstructions, and location of equipment or other trades. Any discrepancies between any of the project drawings and the electrical work shown on these drawings shall be reported to the Engineers for adjustment.
- D. The installation details, instructions, and recommendations of the manufacturer of the product used, or modified to obtain the best end result, shall be the basis of attaining installation of the products for usage on this project except where definite and specific instructions are set forth herein or details are shown on the plans.
- E. Devices, fixtures, equipment, and all other items are shown on the drawings only in a schematic manner and not necessarily in their specific location. The Contractor shall be responsible for exact locations of these items to form a functional and aesthetic installation either by careful

SECTION 26 0010 GENERAL PROVISIONS

review of all plan elevations, patterns, surface finishes, and equipment arrangements or by consultation with the Engineers and other trades involved.

- F. This contractor's bid shall allow a minimum of 10 feet variance in location of each device or piece of equipment shown on the plans.

1.07 WORKMANSHIP

- A. The installation work included in this specification shall be performed in a neat workmanlike manner by people experienced and skilled in the Electrical trade. Only the best quality workmanship will be accepted. All exposed parts of the electrical wiring systems such as exposed conduits, flush plates, cabinet trim, fixtures, etc., shall be square and true with the building construction.

1.08 EQUIPMENT CLEAN-UP

- A. Special care must be taken for protection of all installed devices, fixtures, equipment, etc. All must be kept completely protected from weather elements, painting, etc. until the construction is substantially completed. Damage from rust, paint, scratches, etc. shall be corrected.
- B. Clean all devices, fixtures, equipment, etc. thoroughly, just prior to final inspection.
- C. Protection of electrical equipment during painting of the building shall be the responsibility of the Electrical Contractor, as coordinated with the other Contractors.

1.09 CUTTING AND PATCHING

- A. In existing construction this Contractor shall perform all cutting required and all necessary patching after completion to restore the surface to its original condition, unless otherwise indicated.
- B. All cutting and patching done by this Contractor shall be subject to the direction and approval of the Engineer. This Contractor shall not endanger the stability of the structure by cutting, digging, or otherwise, and shall not at any time cut or alter work of any other contractor.

1.10 SEALING OF PENETRATIONS

- A. All penetrations for raceway, wire, etc. furnished under Division 26 of these specifications which penetrate walls, shall be sealed with a UL System specifically approved for the application.

1.11 EXCAVATING, TRENCHING AND BACKFILLING

- A. This Contractor shall perform all excavation to the depths required, indicated on the drawings or specified. During excavation, material suitable for backfilling shall be piled in an orderly manner a sufficient distance from trench or other excavations to prevent slides or cave ins. All excavated materials not required or usable for backfilling shall be removed from the site. Necessary grading shall be done to prevent surface water from flowing into trenches or other excavations and onto adjacent property. Furnish all pumping required to keep excavated space clear of water during construction. Provide sheeting and shoring as may be necessary for the protection of the work and the safety of personnel. Protect bottom of excavation from frost and do not place structures or pipe on frozen ground.
- B. Except where excavations will be covered by at least 4" of concrete, this contractor shall provide electrical warning tape at least 6" above buried conduit or wire.
- C. Backfill excavations below finished grades with similar materials to that removed in excavation, free from rubbish and other unsuitable material. Backfilling shall be done to finished grades indicated on drawings. If no finished grading is to be done in excavated areas, this Contractor shall backfill to existing grades and restore the surface to its original condition. All backfill shall be compacted in 6 inch lifts to 95% maximum density.
- D. Prior to any excavation, utilities shall be located with the local utility locate company, and effort shall be made to determine whether underground installations (i.e., sewer, telephone, water, fuel, electric lines, etc.) will be encountered. When the excavation approaches the estimated

SECTION 26 0010 GENERAL PROVISIONS

location of such installation, the exact location shall be determined and when it is uncovered, proper supports shall be provided for the existing installation. Utility companies shall be contacted and advised of proposed work prior to the start of actual excavation.

1.12 PROJECT RECORD DOCUMENTS

- A. Maintain one set of record drawings, containing all addendum items, changes to the work, and other revisions to the work. Turn over legibly marked up drawings to the Engineer at the project completion.

1.13 ARC FLASH STUDY

- A. The arc flash study will be performed by the project engineer (outside of this set of documents). The project engineer will perform the study, print the labels, and deliver the labels to the contractor. The Contractor shall obtain final feeder size/length information, install arc flash labels on the equipment (provided by the project engineer). This will require an additional trip to the project site after construction is completed.

PART 2 PRODUCTS

- 1.01 Not Used.

PART 3 EXECUTION

- 1.01 Not Used.

END OF SECTION

Houser Street Lift Station Upgrade Project
City of Muscatine
Muscatine, Iowa

SECTION 26 0010 GENERAL PROVISIONS

SECTION 26 0501 MINOR ELECTRICAL DEMOLITION

PART 1 – GENERAL

1.01 SECTION INCLUDES

- A. Electrical demolition.

PART 2 – PRODUCTS

2.01 MATERIALS AND EQUIPMENT

- A. Materials and equipment for patching and extending work: As specified in individual sections.

PART 3 – EXECUTION

3.01 EXAMINATION

- A. Verify field measurements and circuiting arrangements are as shown on Drawings.
- B. Electrical contractor shall verify the existing conditions at the project site before submitting cost proposal.
- C. Verify that abandoned wiring and equipment serve only abandoned facilities.
- D. Demolition drawings are based on casual field observation. Report discrepancies to Owner before disturbing existing installation. Beginning of demolition means installer accepts existing conditions.
- E. It is mandatory that the existing building remain in continuous and non-interrupted operation during remodeling/altering of the existing bldg. The specific area(s) being remodeled/alterd at any scheduled time are obviously exclusive of the statement. Services to existing building shall be kept on continuous operation including power, lighting, etc. Any interruption of these services to accomplish project construction shall be held to a minimum, arranged with the owner through the general contractor two (2) weeks in advance. Temporary services shall be furnished and installed where necessary to accomplish this purpose. Temporary systems shall be removed only after new permanent services are installed, fully operational, tested and compliant.
- F. Electrical contractor shall refer to other project drawings to familiarize himself with extent of alteration/remodeling work and more specifically note where new partitioning is being installed, where existing partitioning is being removed.
- G. If existing conduit is allowed to be reused it shall be supported per NEC and these specifications within the room it serves. Field verify the existing conditions prior to bidding.

3.02 PREPARATION

- A. Coordinate utility service outages with utility company.
- B. Coordinate service outages with owner. Temporary connections of power must be completed before modifications occur.
- C. Provide temporary wiring and connections to maintain existing systems in service during construction. When work must be performed on energized equipment or circuits, use personnel experienced in such operations.
- D. Existing Electrical Service: Maintain existing system in service until new system is complete and ready for service. Disable system only to make switchovers and connections. Minimize outage duration.
 - 1. Obtain permission from Owner at least 168 hours before partially or completely disabling system.
 - 2. Make temporary connections to maintain service in areas adjacent to work area.

3.03 DEMOLITION AND EXTENSION OF EXISTING ELECTRICAL WORK

- A. Perform work for removal and disposal of equipment and materials containing toxic substances regulated under the Federal Toxic Substances Control Act (TSCA) in accordance with

SECTION 26 0501 MINOR ELECTRICAL DEMOLITION

applicable federal, state, and local regulations. Applicable equipment and materials include, but are not limited to:

1. PCB-containing electrical equipment, including transformers, capacitors, and switches.
 2. PCB- and DEHP-containing lighting ballasts.
 3. Mercury-containing lamps and tubes, including fluorescent lamps, high intensity discharge (HID), arc lamps, ultra-violet, high pressure sodium, mercury vapor, ignitron tubes, neon, and incandescent.
- B. Remove, relocate, and extend existing installations to accommodate new construction.
 - C. Remove abandoned wiring to source of supply.
 - D. Remove exposed abandoned conduit. Cut conduit flush with walls and floors, and patch surfaces.
 - E. Disconnect abandoned outlets and remove devices. Remove abandoned outlet boxes and conduits.
 - F. Disconnect and remove abandoned panelboards and distribution equipment.
 - G. Disconnect and remove electrical devices and equipment serving utilization equipment that has been removed.
 - H. Disconnect and remove abandoned luminaires. Remove brackets, stems, hangers, and other accessories.
 - I. Repair adjacent construction and finishes damaged during demolition and extension work.
 - J. Remove all surface mounted conduit/boxes and their associated wiring. Remove all existing wiring/cabling from all existing concealed raceways in walls/floors that are to remain relating to demolished devices.

3.04 SALVAGE ITEMS

- A. Deliver to the owner all salvage items to be retained by owner.

END OF SECTION

SECTION 26 0519 CONDUCTORS AND CABLES

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Single conductor wire.
- B. Wiring connectors.
- C. Electrical tape.

1.02 ADMINISTRATIVE REQUIREMENTS

- A. Coordinate sizes of raceways, boxes, and equipment enclosures installed under other sections with the actual conductors to be installed, including adjustments for conductor sizes increased for voltage drop. Coordinate with electrical equipment installed under other sections to provide terminations suitable for use with the conductors to be installed.

1.03 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Company specializing in manufacturing the products specified in this section with minimum three years documented experience.
- B. Product Listing Organization Qualifications: An organization recognized by OSHA as a Nationally Recognized Testing Laboratory and acceptable to authorities having jurisdiction.

1.04 DELIVERY, STORAGE, AND HANDLING

- A. Receive, inspect, handle, and store conductors and cables in accordance with manufacturer's instructions.

1.05 FIELD CONDITIONS

- A. Do not install or otherwise handle thermoplastic-insulated conductors at temperatures lower than 14 degrees F, unless otherwise permitted by manufacturer's instructions.

PART 2 PRODUCTS

2.01 CONDUCTOR AND CABLE APPLICATIONS

- A. Do not use conductors and cables for applications other than as permitted by the manufacturer, manufacturing standards, and installation codes.
- B. Provide single conductor wire installed in suitable raceway unless otherwise indicated, permitted, or required.

2.02 CONDUCTOR AND CABLE MANUFACTURERS

- A. Cerro Wire, Encore Wire, Southwire, AFC, or equal.

2.03 CONDUCTOR AND CABLE GENERAL REQUIREMENTS

- A. Provide new conductors and cables manufactured not more than one year prior to installation.
- B. Unless specifically indicated to be excluded, provide all required conduit, boxes, wiring, connectors, etc. as required for a complete operating system.
- C. Conductor Material:
 - 1. Provide copper conductors only. Aluminum conductors are not acceptable for this project. Conductor sizes indicated are based on copper.
 - 2. Copper Conductors: Soft drawn annealed, 98 percent conductivity, uncoated copper conductors.
- D. Minimum Conductor Size:
 - 1. Branch Circuits: 12 AWG.
 - 1) This contractor shall derate conductor ampacity in areas of high ambient temperature per the NEC.

SECTION 26 0519 CONDUCTORS AND CABLES

- 2) Provide a separate neutral for each phase wire, no shared neutrals are allowed.
 - 3) Provide additional derating per NEC tables 310-16 through 310-31 note 8 for all home runs with more than 3 current-carrying conductors in a raceway.
2. Control Circuits: 12 AWG.
- E. Where conductor size is not indicated, size to comply with NFPA 70 but not less than applicable minimum size requirements specified.
- F. Conductor Color Coding:
 1. Color code conductors as indicated unless otherwise required by the authority having jurisdiction. Maintain consistent color coding throughout project.
 2. Color Coding Method: Integrally colored insulation.
 - a. Conductors size 4 AWG and larger may have black insulation color coded using vinyl color coding electrical tape.
 3. Color Code:
 - a. 480Y/277 V, 3 Phase, 4 Wire System:
 - 1) Phase A: Brown.
 - 2) Phase B: Orange.
 - 3) Phase C: Yellow.
 - 4) Neutral/Grounded: Gray.
 - b. 240/120 V, 1 Phase, 3 Wire System:
 - 1) Phase A: Black.
 - 2) Phase B: Red.
 - 3) Neutral/Grounded: White.
 - c. Equipment Ground: Green.

2.04 SINGLE CONDUCTOR WIRE

- A. Conductor Stranding:
 1. Feeders and Branch Circuits:
 - a. Size 12 AWG and Smaller: Solid.
 - b. Size 10 AWG and Larger: Stranded.
- B. Insulation:
 1. Copper Building Wire: Type THHN/THWN-2, except as indicated below.
 - a. Installed Underground: Type XHHW-2.

2.05 GENERATOR DOCKING WIRE

- A. 600 volt, 30 gauge strands, flexible class K cable with PPE jacket.
- B. Provide with color coded series 16 Camlok connectors, male on one end and female on the other end.
- C. See the Generator Docking Station / MTS Schedule for more information.

2.06 WIRING CONNECTORS

- A. Description: Wiring connectors appropriate for the application, suitable for use with the conductors to be connected.
- B. Wiring Connectors for Splices and Taps:
 1. Copper Conductors Size 8 AWG and Smaller: Use twist-on insulated spring connectors.
 2. Copper Conductors Size 6 AWG and Larger: Use mechanical connectors or compression connectors. Split bolt type connectors are not allowed.
- C. Wiring Connectors for Terminations:
 1. Provide terminal lugs for connecting conductors to equipment furnished with terminations designed for terminal lugs.

SECTION 26 0519 CONDUCTORS AND CABLES

2. Provide compression adapters for connecting conductors to equipment furnished with mechanical lugs when only compression connectors are specified.
3. Where over-sized conductors are larger than the equipment terminations can accommodate, provide connectors suitable for reducing to appropriate size, but not less than required for the rating of the overcurrent protective device.
4. Copper Conductors Size 8 AWG and Larger: Use mechanical connectors or compression connectors where connectors are required. Split bolt type connectors are not allowed.
5. Stranded Conductors Size 10 AWG and Smaller: Use crimped terminals for connections to terminal screws.
6. Conductors for Control Circuits: Use crimped terminals for all connections.
- D. Twist-on Insulated Spring Connectors: Rated 600 V, 221 degrees F for standard applications and 302 degrees F for high temperature applications; pre-filled with sealant for damp and wet locations.
 1. Manufacturers:
 - a. 3M, Ideal Industries, or NSI Industries
- E. Mechanical Connectors: Provide bolted type or set-screw type.
- F. Crimped Terminals: Nylon-insulated, with insulation grip and terminal configuration suitable for connection to be made.
 1. Manufacturers:
 - a. Burndy, Ilco, Thomas & Betts Corporation

2.07 WIRING ACCESSORIES

- A. Electrical Tape:
 1. Manufacturers:
 - a. 3M or equal
 3. Vinyl Color Coded Insulating Electrical Tape: Minimum thickness of 7 mil; resistant to abrasion, corrosion, and sunlight; conformable for application down to 0 degrees F and suitable for continuous temperature environment up to 221 degrees F.
- B. Split bolts shall not be permitted except for temporary wiring.
- C. Where tapping of conductors is required, use minimum of two layers wrapped half lapped. Tape shall be a minimum of 150% of thickness of insulation. Tape shall be U.L. Listed 3M Scotch Brand 33+.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify that work likely to damage wire and cable has been completed.
- B. Verify that raceways, boxes, and equipment enclosures are installed and are properly sized to accommodate conductors and cables in accordance with NFPA 70.
- C. Verify that field measurements are as shown on the drawings.
- D. Verify that conditions are satisfactory for installation prior to starting work.

3.02 PREPARATION

- A. Clean raceways thoroughly to remove foreign materials before installing conductors.

3.03 INSTALLATION

- A. Circuiting Requirements:
 1. Arrange circuiting to minimize splices.
 2. Include circuit lengths required to install connected devices within 10 ft of location shown.

SECTION 26 0519 CONDUCTORS AND CABLES

3. Circuiting Adjustments: Unless otherwise indicated, when branch circuits are shown as separate, combining them together in a single raceway is permitted, under the following conditions:
 - a. Provide no more than six current-carrying conductors in a single raceway. Dedicated neutral conductors are considered current-carrying conductors.
 - b. Increase size of conductors as required to account for ampacity derating.
 - c. Size raceways, boxes, etc. to accommodate conductors.
- B. Install conductors and cable in a neat and workmanlike manner.
- C. Installation in Raceway:
 1. Tape ends of conductors and cables to prevent infiltration of moisture.
 2. Pull all conductors and cables together into raceway at same time.
 3. Do not damage conductors and cables or exceed manufacturer's recommended maximum pulling tension and sidewall pressure.
 4. Use suitable wire pulling lubricant where necessary, except when lubricant is not recommended by the manufacturer.
 - a. Pulling compound shall be water based, no oils waxes, etc. allowed.
- D. Neatly train and bundle conductors inside boxes, wireways, panelboards and other enclosures.
- E. Make wiring connections using specified wiring connectors.
 1. Make splices and taps only in accessible boxes. Do not pull splices into raceways or make splices in conduit bodies or wiring gutters.
 2. Remove appropriate amount of conductor insulation for making connections without cutting, nicking or damaging conductors.
 3. Do not remove conductor strands to facilitate insertion into connector.
 4. Clean contact surfaces on conductors and connectors to suitable remove corrosion, oxides, and other contaminates. Do not use wire brush on plated connector surfaces.
 5. Mechanical Connectors: Secure connections according to recommended torque settings.
 6. Compression Connectors: Secure connections using recommended tools and dies.
- F. Insulate splices and taps that are made with uninsulated connectors using methods suitable for the application, with insulation and mechanical strength equivalent to unspliced conductors.
- G. Unless specifically indicated to be excluded, provide final connections to all equipment and devices, including those furnished by others, as required for a complete operating system.
- H. Route wire and cable as required to meet project conditions.
 1. Wire and cable routing indicated is approximate unless dimensioned.
 2. Where wire and cable destination is indicated and routing is not shown, determine exact routing and lengths required.
 3. Include wire and cable of lengths required to install connected devices within 10 ft of location shown.
- I. Make splices, taps, and terminations to carry full ampacity of conductors with no perceptible temperature rise.
- J. Cable for major feeders shall be continuous from origin to termination where possible.

END OF SECTION

SECTION 26 0526 GROUNDING AND BONDING

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Grounding and bonding requirements.
- B. Conductors for grounding and bonding.
- C. Connectors for grounding and bonding.
- D. Ground rod electrodes.

1.02 ADMINISTRATIVE REQUIREMENTS

- A. Coordinate the work with other trades to provide steel reinforcement complying with specified requirements for concrete-encased electrode.

1.03 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Company specializing in manufacturing the products specified in this section with minimum three years documented experience.
- B. Product Listing Organization Qualifications: An organization recognized by OSHA as a Nationally Recognized Testing Laboratory and acceptable to authorities having jurisdiction.

1.04 DELIVERY, STORAGE, AND HANDLING

- A. Receive, inspect, handle, and store products in accordance with manufacturer's instructions.

PART 2 PRODUCTS

2.01 GROUNDING AND BONDING REQUIREMENTS

- A. See detail on the drawing for grounding electrode system.
- B. Unless specifically indicated to be excluded, provide all required components, conductors, connectors, conduit, boxes, fittings, supports, accessories, etc. as necessary for a complete grounding and bonding system.
- C. Where conductor size is not indicated, size to comply with NFPA 70 but not less than applicable minimum size requirements specified.
- D. Grounding System Resistance: Not greater than 5 ohms to ground.
- E. Grounding Electrode System:
 - 1. Provide connection to required and supplemental grounding electrodes indicated to form grounding electrode system.
 - a. Provide continuous grounding electrode conductors without splice or joint.
 - b. Install grounding electrode conductors in raceway where exposed to physical damage. Bond grounding electrode conductor to metallic raceways at each end with bonding jumper.
 - 2. Metal Underground Water Pipe(s):
 - a. Provide connection to underground metal water service pipe(s) that are in direct contact not more than 5 feet from the point of entrance to the building.
 - b. Provide bonding jumper around water meter of sufficient length to permit removal of meter without disconnecting jumper.
 - 3. Ground Rod Electrode(s):
 - a. Provide two electrodes. Space electrodes not less than 10 feet from each other and any other ground electrode.

2.02 GROUNDING AND BONDING COMPONENTS

- A. Conductors for Grounding and Bonding, in addition to requirements of Section 26 0519:

SECTION 26 0526 GROUNDING AND BONDING

1. Use insulated copper conductors, except use bare copper conductors where installed underground in direct contact with earth or in concrete.
- B. Connectors for Grounding and Bonding:
 1. Description: Connectors appropriate for the application and suitable for the conductors and items to be connected; listed and labeled as complying with UL 467.
 2. Unless otherwise indicated, use exothermic welded connections for underground, concealed and other inaccessible connections.
 3. Unless otherwise indicated, use mechanical connectors, compression connectors, or exothermic welded connections for accessible connections.
- C. Ground Rod Electrodes:
 1. Material: Copper-bonded (copper-clad) steel.
 2. Size: 3/4 inch diameter by 10 feet length, unless otherwise indicated.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify that work likely to damage grounding and bonding system components has been completed.
- B. Verify that conditions are satisfactory for installation prior to starting work.

3.02 INSTALLATION

- A. Install products in accordance with manufacturer's instructions.
- B. Provide a separate, insulated green grounding conductor for each branch circuit and feeder.
- C. Make grounding and bonding connections using specified connectors.
 1. Remove appropriate amount of conductor insulation for making connections without cutting, nicking or damaging conductors. Do not remove conductor strands to facilitate insertion into connector.
 2. Remove nonconductive paint, enamel, or similar coating at threads, contact points, and contact surfaces.
 3. Exothermic Welds: Make connections using molds and weld material suitable for the items to be connected in accordance with manufacturer's recommendations.
 4. Mechanical Connectors: Secure connections according to manufacturer's recommended torque settings.
 5. Compression Connectors: Secure connections using manufacturer's recommended tools and dies.

3.03 FIELD QUALITY CONTROL

- A. Perform ground electrode resistance tests under normally dry conditions. Precipitation within the previous 48 hours does not constitute normally dry conditions.

END OF SECTION

SECTION 26 0529 HANGERS AND SUPPORTS

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Support and attachment components for equipment, conduit, cable, boxes, and other work.

1.02 ADMINISTRATIVE REQUIREMENTS

- A. Coordination:
 - 1. Coordinate sizes and arrangement of supports and bases with the actual equipment and components to be installed.
 - 2. Coordinate the work with other trades to provide additional framing and materials required for installation.
 - 3. Coordinate compatibility of support and attachment components with mounting surfaces at the installed locations.

1.03 DELIVERY, STORAGE, AND HANDLING

- A. Receive, inspect, handle, and store products in accordance with manufacturer's instructions.

PART 2 PRODUCTS

2.01 SUPPORT AND ATTACHMENT COMPONENTS

- A. General Requirements:
 - 1. Provide all required hangers, supports, anchors, fasteners, fittings, accessories, and hardware as necessary for the complete installation of electrical work.
 - 2. Where support and attachment component types and sizes are not indicated, select in accordance with manufacturer's application criteria as required for the load to be supported with a minimum safety factor of 25%. Include consideration for vibration, equipment operation, and shock loads where applicable.
 - 3. Steel Components: Use corrosion resistant materials suitable for the environment where installed.
 - a. Outdoor and Indoor Locations: Use galvanized steel or aluminum, or plastic for PVC conduit if made for that purpose.
- B. Conduit and Cable Supports: Straps, clamps, etc. suitable for the conduit or cable to be supported.
- C. Outlet Box Supports: Hangers, brackets, etc. suitable for the boxes to be supported.
- D. Metal Channel (Strut) Framing Systems: Factory-fabricated continuous-slot metal channel (strut) and associated fittings, accessories, and hardware.
 - 1. Factory-fabricated, continuous-slot, metal channel/strut and associated fittings, accessories, and hardware required for field assembly of supports.
 - 2. 12 gauge minimum, 1-5/8 inch width by 13/16 inch height.
- E. Anchors and Fasteners:
 - 1. Unless otherwise indicated and where not otherwise restricted, use the anchor and fastener types indicated for the specified applications.
 - 2. Concrete and Block: Use preset concrete inserts, expansion anchors, or screw anchors.
 - 3. Steel: Use beam clamps, machine bolts, or welded threaded studs.
 - 4. Plastic and lead anchors are not permitted.

PART 3 EXECUTION

3.01 INSTALLATION

- A. Install products in accordance with manufacturer's instructions.

SECTION 26 0529 HANGERS AND SUPPORTS

- B. Install support and attachment components in a neat and workmanlike manner.
- C. Provide independent support from structural elements.
- D. Do not penetrate, notch, or cut structural members without the approval of Structural Engineer.
- E. Equipment Support and Attachment:
 - 1. Use metal fabricated supports or supports assembled from metal channel (strut) to support equipment as required.
 - 2. Use metal channel (strut) to support surface-mounted equipment to provide space between equipment and mounting surface.
 - 3. Securely fasten floor-mounted equipment. Do not install equipment such that it relies on its own weight for support.

3.02 FIELD QUALITY CONTROL

- A. Inspect support and attachment components for damage and defects.
- B. Correct deficiencies and replace damaged or defective support and attachment components.
- C. Rigidly weld support members or use hexagon-head bolts to present neat appearance with adequate strength and rigidity. Use spring lock washers under all nuts.
- D. Install surface-mounted cabinets and panelboards with minimum of four anchors.
- E. All supports shall be securely positioned to the structure, not equipment or ceiling tile supports. Coordinate structure load capabilities with the structure being fastened to.

END OF SECTION

SECTION 26 0534 CONDUIT

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Galvanized steel rigid metal conduit (RMC).
- B. Aluminum rigid metal conduit (ARMC).
- C. Galvanized steel intermediate metal conduit (IMC).
- D. Liquidtight flexible metal conduit (LFMC).
- E. Rigid polyvinyl chloride (PVC) conduit.
- F. High-density polyethylene (HDPE) conduit.
- G. Conduit fittings.
- H. Accessories.

1.02 ADMINISTRATIVE REQUIREMENTS

- A. Coordination:
 - 1. Coordinate minimum sizes of conduits with the actual conductors to be installed, including adjustments for conductor sizes increased for voltage drop.
 - 2. Coordinate the arrangement of conduits with structural members, piping, equipment and other potential conflicts installed under other sections or by others.
 - 3. Verify exact conduit termination locations required for boxes, enclosures, and equipment installed under other sections or by others.
 - 4. Do not begin installation of conductors and cables until installation of conduit is complete between outlet, junction and splicing points.

1.03 DELIVERY, STORAGE, AND HANDLING

- A. Receive, inspect, handle, and store conduit and fittings in accordance with manufacturer's instructions.
- B. Protect conduit from corrosion and entrance of debris by storing above grade. Provide appropriate covering.
- C. Protect PVC conduit from sunlight.

PART 2 PRODUCTS

2.01 CONDUIT APPLICATIONS

- A. Do not use conduit and associated fittings for applications other than as permitted by NFPA 70 and product listing.
- B. Unless otherwise indicated and where not otherwise restricted, use the conduit types indicated for the specified applications. Where more than one listed application applies, comply with the most restrictive requirements.
- C. Underground:
 - 1. Under Slab on Grade: Use rigid PVC conduit.
 - 2. Exterior, Direct-Buried: Use PVC-coated galvanized steel rigid metal conduit or rigid PVC conduit.
 - 3. Exterior, Embedded Within Concrete: Use galvanized steel rigid metal conduit (RMC), galvanized steel intermediate metal conduit (IMC), or rigid PVC conduit.
 - 4. In or Under Slab on Grade: Use PVC conduit.
- D. Exposed, Exterior: galvanized steel rigid metal conduit (RMC) galvanized steel intermediate metal conduit (IMC), or rigid PVC conduit (Schedule 80 and listed for use where exposed to physical damage).

SECTION 26 0534 CONDUIT

- E. Interior Locations: Use galvanized steel rigid metal conduit (RMC), aluminum rigid metal conduit (ARMC), galvanized steel intermediate metal conduit (IMC), or Schedule 80 PVC.
 - 1. Use only Schedule 80 PVC in the lower level (dry well pump area) of the facility.
- F. Connections to Vibrating Equipment:
 - 1. Damp, Wet, or Corrosive Locations: Use liquid tight flexible metal conduit.
 - 2. Maximum Length: 6 feet unless otherwise indicated.
 - 3. Vibrating equipment includes motors and transformers.

2.02 CONDUIT REQUIREMENTS

- A. Manufacturers:
 - 1. Allied Tube and Conduit
 - 2. Wheatland Tube
 - 3. Carlon
 - 4. AFC
 - 5. Cantex
- B. Provide all conduit, fittings, supports, and accessories required for a complete raceway system.
- C. Minimum Conduit Size, Unless Otherwise Indicated:
 - 1. Branch Circuits: 3/4 inch trade size.
 - 2. Branch Circuit Homeruns: 3/4 inch trade size.
 - 3. Control Circuits: 1 inch trade size.
 - 4. Underground: 3/4 inch trade size.
- D. Where conduit size is not indicated, size to comply with NFPA 70 but not less than applicable minimum size requirements specified.

2.03 GALVANIZED STEEL RIGID METAL CONDUIT (RMC)

- A. Material: Galvanized steel.
- B. Fittings:
 - 1. Material: Use steel or malleable iron.
 - a. Do not use die cast zinc fittings.
 - 2. Connectors and Couplings: Use threaded type fittings only. Threadless set screw and compression (gland) type fittings are not permitted.

2.04 ALUMINUM RIGID METAL CONDUIT (ARMC)

- A. Material: Aluminum
- B. Fittings:
 - 1. Material: Use aluminum.
 - 2. Connectors and Couplings: Use threaded type fittings only. Threadless set screw and compression (gland) type fittings are not permitted.

2.05 INTERMEDIATE METAL CONDUIT (IMC)

- A. Material: Galvanized Steel.
- B. Fittings:
 - 1. Material: Use steel or malleable iron.
 - a. Do not use die cast zinc fittings.
 - 2. Connectors and Couplings: Use threaded type fittings only. Threadless set screw and compression (gland) type fittings are not permitted.

2.05 LIQUIDTIGHT FLEXIBLE METAL CONDUIT (LFMC)

- A. Material: PVC coated steel or aluminum.
- B. Fittings:

SECTION 26 0534 CONDUIT

1. Material: Use steel or malleable iron.
 - a. Do not use die cast zinc fittings.
- 2.06 RIGID POLYVINYL CHLORIDE (PVC) CONDUIT
 - A. Material: Schedule 40 or schedule 80 PVC (Schedule 80 only where exposed).
 - B. Fittings:
 1. Material: Use PVC to match conduit.
- 2.07 HIGH-DENSITY POLYETHYLENE (HDPE) CONDUIT
 - A. Material: HDPE
 - B. Joining Methods: Approved by HDPE conduit manufacturer.
- 2.08 ACCESSORIES
 - A. Solvent Cement for PVC Conduit and Fittings: As recommended by manufacturer of conduit and fittings to be installed.
 - B. Adhesive for HDPE Conduit:
 1. Specifically designed for bonding dissimilar materials in lieu of transition fittings, including but not limited to polyethylene, fiberglass, PVC, aluminum, and steel.
 - C. Pull Strings: Use nylon cord with average breaking strength of not less than 200 pound-force.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify that field measurements are as shown on drawings.
- B. Verify that mounting surfaces are ready to receive conduits.
- C. Verify routing and termination locations of conduit prior to rough-in.

3.02 INSTALLATION

- A. Conduit Routing:
 1. Unless dimensioned, conduit routing indicated is diagrammatic.
 2. When conduit destination is indicated and routing is not shown, determine exact routing.
 3. Conceal all conduits unless specifically indicated to be exposed.
 4. Conduits installed underground or embedded in concrete may be routed in the shortest route unless otherwise indicated. Route all other conduits parallel or perpendicular to building structure and surfaces, following surface contours where practical.
 5. Arrange conduit to maintain adequate headroom, clearances, and access.
 6. Install no more than the equivalent of four 90 degree bends between pull points.
 7. Arrange conduit to provide no more than distance allowed per NEC between pull points.
 8. Arrange conduit to prevent moisture traps. Provide drain fittings at low points and at sealing fittings where moisture may collect.
 9. Maintain minimum clearance of 12 inches between conduits and hot surfaces.
 10. Group parallel conduits in the same area together on a common rack.
- B. Conduit Support:
 1. Provide independent support from structure. Do not provide support from piping, ductwork, or other systems.
 2. Use conduit strap to support single surface-mounted conduit.
 - a. Use clamp back spacer with conduit strap for damp and wet locations to provide space between conduit and mounting surface.
 3. Use corrosion resistant metal channel (strut) with accessory conduit clamps to support multiple parallel surface-mounted conduits.

SECTION 26 0534 CONDUIT

4. Group related conduits; support using conduit rack. Construct rack using steel channel; provide space on each for 25 percent additional conduits.
- C. Connections and Terminations:
 1. Use suitable adapters where required to transition from one type of conduit to another.
 2. Provide drip loops for liquidtight flexible conduit connections to prevent drainage of liquid into connectors.
 3. Terminate threaded conduits in boxes and enclosures using threaded hubs or double lock nuts for dry locations and raintight hubs for wet locations.
 4. For interior PVC conduit, use expansion fittings per manufacturer's recommendations and at a maximum of 25 feet on center for continuous runs.
- D. Penetrations:
 1. Do not penetrate or otherwise notch or cut structural members, including footings and grade beams, without approval of Structural Engineer.
- E. Underground Installation:
 1. Provide trenching and backfilling to provide adequate cover and compacted backfill.
 2. Provide underground warning tape in accordance with Section 26 0553 along entire conduit length for service entrance where not concrete-encased.
- F. Provide pull string in all empty conduits and in conduits where conductors and cables are to be installed by others.
- G. Identify conduits in accordance with Section 26 0553.
- H. Provide suitable fittings to accommodate expansion and deflection where conduit crosses expansion joints.
- I. Provide grounding bushings on all conduits 2" and larger.
- J. Flexible metal conduit shall not be used in lengths longer than six feet.
- K. Use conduit fittings for sharp turns, tees, etc.
- K. Install conduit system mechanically and electrically continuous through all boxes and cabinets.

END OF SECTION

SECTION 26 0537 BOXES

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Outlet and device boxes up to 100 cubic inches, including those used as junction and pull boxes.
- B. Underground boxes/enclosures.
- C. Pull and junction boxes.

1.02 ADMINISTRATIVE REQUIREMENTS

- A. Coordination:
 - 1. Coordinate arrangement of electrical equipment with the dimensions and clearance requirements of the actual equipment to be installed.
 - 2. Coordinate minimum sizes of boxes with the actual installed arrangement of conductors, clamps, support fittings, and devices, calculated according to NFPA 70.
 - 3. Coordinate the work with other trades to provide walls suitable for installation of flush-mounted boxes where indicated.

1.03 DELIVERY, STORAGE, AND HANDLING

- A. Receive, inspect, handle, and store products in accordance with manufacturer's instructions.
- B. Products: Provide products listed and classified by Underwriters Laboratories Inc., as suitable for the purpose specified and indicated.

PART 2 PRODUCTS

2.01 BOXES

- A. General Requirements:
 - 1. Provide all boxes, fittings, supports, and accessories required for a complete raceway system and to accommodate devices and equipment to be installed.
 - 2. Where box size is not indicated, size to comply with NFPA 70 but not less than applicable minimum size requirements specified.
- B. Outlet and Device Boxes Up to 100 cubic inches, Including Those Used as Junction and Pull Boxes:
 - 1. Use cast iron boxes or cast aluminum boxes unless otherwise indicated or required; furnish with compatible weatherproof gasketed covers.
 - 2. Use nonmetallic boxes where exposed rigid PVC conduit is used.
- C. Underground Boxes/Enclosures:
 - 1. Description: In-ground, open bottom boxes furnished with flush, non-skid covers with legend indicating type of service and stainless steel tamper resistant cover bolts.
 - 2. Size: As indicated on drawings.
 - 3. Provide logo on cover to indicate type of service.
 - 4. Polymer Concrete Underground Boxes/Enclosures:
 - a. Combination fiberglass/polymer concrete boxes/enclosures are acceptable.
 - b. Provide bolted cover and mouse holes for conduit entrances.
- D. Pull and Junction Boxes:
 - 1. Description: Painted sheet metal for large boxes, with hinged cover, secured with screws.
 - 2. Use aluminum boxes for damp or wet locations unless otherwise indicated or required; furnish with compatible weatherproof gasketed covers.
 - 3. Use aluminum boxes where aluminum rigid metal conduit is used.
 - 4. Use nonmetallic boxes where exposed rigid PVC conduit is used.

SECTION 26 0537 BOXES

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify that field measurements are as shown on drawings.
- B. Verify that mounting surfaces are ready to receive boxes.

3.02 INSTALLATION

- A. Install products in accordance with manufacturer's instructions.
- B. Unless otherwise indicated, provide separate boxes for line voltage and low voltage systems.
- C. Unless otherwise indicated, boxes may be surface-mounted where exposed conduits are indicated or permitted.
- D. Box Locations:
 - 1. Locate boxes to be accessible.
 - 2. Unless dimensioned, box locations indicated are approximate.
 - a. Adjust box locations up to 10 feet if required to accommodate intended purpose.
 - 3. Locate junction and pull boxes as indicated, as required to facilitate installation of conductors, and to limit conduit length and/or number of bends between pulling points in accordance with Section 26 0534.
- E. Box Supports:
 - 1. Provide independent support from structure.
- F. Install boxes plumb and level.
- G. Underground Boxes/Enclosures:
 - 1. Install enclosure on gravel base, minimum 6 inches deep.
 - 2. Mount enclosures located in landscaped areas with top at 1 inch above finished grade.
- H. Close unused box openings.
- I. Not all pull and junction boxes are shown. Add pull and junction boxes per code and for proper installation of the raceway system, such as for wire pulling.

3.03 CLEANING

- A. Clean interior of boxes to remove dirt, debris, plaster and other foreign material.

3.04 PROTECTION

- A. Immediately after installation, protect boxes from entry of moisture and foreign material until ready for installation of conductors.
- B. Clean exposed surfaces and restore finish.

END OF SECTION

SECTION 26 0553 IDENTIFICATION FOR ELECTRICAL SYSTEMS

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Electrical identification requirements.
- B. Identification nameplates and labels.
- C. Wire and cable markers.
- D. Underground warning tape.

1.02 ADMINISTRATIVE REQUIREMENTS

- A. Coordination:
 - 1. Verify final designations for equipment, systems, and components to be identified prior to fabrication of identification products.

PART 2 PRODUCTS

2.01 IDENTIFICATION REQUIREMENTS

- A. Identification for Equipment:
 - 1. Use identification nameplate to identify each piece of electrical distribution and control equipment and associated sections, compartments, and components.
 - a. Panelboards:
 - 1) Identify ampere rating, voltage/phase, source/circuit number.
 - 2) Provide nameplates, except for branch circuit panelboards, where a typewritten panel directory shall be provided.
 - b. Enclosed switches, circuit breakers, contactors, motor controllers, VFDs, and other similar loads.
 - 1) Identify voltage/phase, source/circuit number, and load served.
 - c. Manual Transfer Switches / Docking Stations:
 - 1) Identify voltage/phase, amperage rating, incoming sources, outgoing load.
 - 2. Available Fault Current Documentation: Use identification label to identify the available fault current and date calculations were performed at locations requiring documentation by NFPA 70 at the main service disconnecting means.
- B. Identification for Conductors and Cables:
 - 1. Color Coding for Power Conductors 600V and Less: Comply with Section 26 0519.
 - 2. Use wire and cable markers to identify circuit number or other designation indicated for power, control, and instrumentation conductors and cables at the source, load, within boxes, and within equipment enclosures:
- C. Identification for Raceways:
 - 1. Use underground warning tape to identify underground raceways.
- D. Identification for Boxes:
 - 1. Use handwritten text using indelible marker to identify circuits enclosed.
 - 2. All junction boxes shall be legibly and permanently marked to indicate the circuit numbers associated with the conductors in the junction box. Junction boxes containing controls shall be labeled as such. Permanent black marker shall be acceptable.

2.02 IDENTIFICATION NAMEPLATES AND LABELS

- A. Identification Nameplates:
 - 1. Materials:
 - a. Indoor and Outdoor Locations: Use plastic suitable for exterior use.
 - 2. Plastic Nameplates: Two-layer or three-layer laminated acrylic or electrically non-conductive phenolic with beveled edges; minimum thickness of 1/16 inch; engraved text.

SECTION 26 0553 IDENTIFICATION FOR ELECTRICAL SYSTEMS

B. Identification Labels:

1. Materials: Use self-adhesive laminated plastic labels; UV, chemical, water, heat, and abrasion resistant, clear with black text.

2.03 WIRE AND CABLE MARKERS

- A. Markers for Conductors and Cables: Use wrap-around self-adhesive vinyl, wrap-around self-adhesive vinyl self-laminating, heat-shrink sleeve, plastic sleeve, plastic clip-on, or vinyl split sleeve type markers suitable for the conductor or cable to be identified.
- B. Description: tape type wire markers on feeder cables #4 and larger. Branch circuit wire and cable #6 and smaller shall be factory color coded by integral pigmentation.

2.04 UNDERGROUND WARNING TAPE

- A. Materials: Use foil-backed detectable type polyethylene tape suitable for direct burial, unless otherwise indicated.
- B. Color shall be black text on red background.

PART 3 EXECUTION

3.01 PREPARATION

- A. Clean surfaces to receive adhesive products according to manufacturer's instructions.

3.02 INSTALLATION

- A. Install products in accordance with manufacturer's instructions.
- B. Install identification products to be plainly visible for examination, adjustment, servicing, and maintenance. Unless otherwise indicated, locate products as follows:
1. Surface-Mounted Equipment: Enclosure front.
 2. Free-Standing Equipment: Enclosure front.
 3. Conduits: Legible from the ground.
 4. Boxes: Outside face of cover.
 5. Conductors and Cables: Legible from the point of access.
- C. Install identification products centered, level, and parallel with lines of item being identified.
- D. Secure nameplates to exterior surfaces of enclosures using stainless steel screws and to interior surfaces using self-adhesive backing or epoxy cement.
1. Do not use adhesives on exterior surfaces except where substrate cannot be penetrated.
- E. Install self-adhesive labels and markers to achieve maximum adhesion, with no bubbles or wrinkles and edges properly sealed.
- F. Install underground warning tape above buried lines with one tape per trench at 3 inches below finished grade.

END OF SECTION

SECTION 26 2200 LOW-VOLTAGE TRANSFORMERS

PART 1 – GENERAL

1.01 SECTION INCLUDES

- A. General purpose transformers.

1.02 ADMINISTRATIVE REQUIREMENTS

- A. Coordination:
 - 1. Coordinate the work with other trades to avoid placement of ductwork, piping, equipment, or other potential obstructions within the dedicated equipment spaces and working clearances required by NFPA 70.
 - 2. Coordinate arrangement of electrical equipment with the dimensions and clearance requirements of the actual equipment to be installed.
 - 3. Coordinate the work with placement of supports, anchors, etc. required for mounting.
 - 4. Verify with manufacturer that conductor terminations are suitable for use with the conductors to be installed.
 - 5. Notify Engineer of any conflicts with or deviations from Contract Documents. Obtain direction before proceeding with work.
- B. Coordination: Coordinate the work with placement of support framing and anchors required for mounting of transformers.

1.03 SUBMITTALS

- A. Product Data: Include voltage, kVA, impedance, tap configurations, insulation system class and rated temperature rise, efficiency, sound level, enclosure ratings, outline and support point dimensions, weight, required clearances, service condition requirements, and installed features.
- B. Shop Drawings: Provide dimensioned plan and elevation views of transformers and adjacent equipment with all required clearances indicated.
- C. Manufacturer's Installation Instructions: Indicate application conditions and limitations of use stipulated by product testing agency. Include instructions for storage, handling, protection, examination, preparation, and installation of product.

1.04 QUALITY ASSURANCE

- A. Conform to requirements of NFPA 70.
- B. Manufacturer Qualifications: Company specializing in manufacturing the products specified in this section with minimum three years documented experience.
- C. Product Listing Organization Qualifications: An organization recognized by OSHA as a Nationally Recognized Testing Laboratory (NRTL) and acceptable to authorities having jurisdiction.
- D. Products: Listed and classified by Underwriters Laboratories Inc. as suitable for the purpose specified and indicated.

1.05 DELIVERY, STORAGE, AND HANDLING

- A. Store in a clean, dry space. Maintain factory wrapping or provide an additional heavy canvas or heavy plastic cover to protect units from dirt, water, construction debris, and traffic.
- B. Handle in accordance with manufacturer's written instructions. Lift only with lugs provided for the purpose. Handle carefully to avoid damage to transformer internal components, enclosure, and finish.

SECTION 26 2200 LOW-VOLTAGE TRANSFORMERS

PART 2 – PRODUCTS

2.01 MANUFACTURERS

- A. Same as Panelboards.
- B. Source Limitations: Furnish transformers produced by the same manufacturer as the other electrical distribution equipment used for this project and obtained from a single supplier.

2.02 ALL TRANSFORMERS

- A. Description: Factory-assembled, dry type transformers for 60 Hz operation designed and manufactured in accordance with NEMA ST 20 and listed and labeled by Underwriters Laboratories Inc. as suitable for the purpose specified and indicated.
- B. Unless noted otherwise, transformer ratings indicated are for continuous loading according to IEEE C57.96 under the following service conditions:
 - 1. Altitude: Less than 3,300 feet.
 - 2. Ambient Temperature:
 - a. Less than 10 kVA: Not exceeding 77 degrees F.
 - 3. Ambient Temperature: Not exceeding 86 degrees F average or 104 degrees F maximum measured during any 24 hour period.
- C. Core: High grade, non-aging silicon steel with high magnetic permeability and low hysteresis and eddy current losses. Keep magnetic flux densities substantially below saturation point, even at 10 percent primary overvoltage. Tightly clamp core laminations to prevent plate movement and maintain consistent pressure throughout core length.
- D. Impregnate core and coil assembly with non-hydroscopic thermo-setting varnish to effectively seal out moisture and other contaminants.
- E. Basic Impulse Level: 10 kV.
- F. Ground core and coil assembly to enclosure by means of a visible flexible copper grounding strap.
- G. Provide main bonding jumper.
- H. Isolate core and coil from enclosure using vibration-absorbing mounts.
- I. Nameplate: Include transformer connection data, ratings, wiring diagrams, and overload capacity based on rated winding temperature rise.

2.03 GENERAL PURPOSE TRANSFORMERS

- A. Description: Self-cooled, two winding transformers listed and labeled as complying with UL 506 or UL 1561; ratings as indicated on the drawings.
- B. Primary Voltage: 480 volts delta, 3 phase.
- C. Secondary Voltage: 240/120 volts, 1 phase, 3 wire.
- D. Insulation System and Allowable Average Winding Temperature Rise:
 - 1. Less than 15 kVA: Class 185 degrees C insulation system with 115 degrees C average winding temperature rise.
- E. Energy Efficiency: Standard efficiency complying with NEMA TP 1.
- F. Coil Conductors: Continuous copper or aluminum windings with terminations brazed or welded.
- G. Winding Taps:
 - 1. 3 kVA through 15 kVA: Two 5 percent full capacity primary taps below rated voltage.
- H. Energy Efficiency: Standard efficiency complying with NEMA TP 1.
 - 1. Test efficiency according to NEMA TP 2.
 - 2. Label transformer according to NEMA TP 3.

SECTION 26 2200 LOW-VOLTAGE TRANSFORMERS

- I. Sound Levels: Standard sound levels complying with NEMA ST 20.
- J. Mounting Provisions:
 - 1. Less than 15 kVA: Suitable for wall mounting.
- K. Transformer Enclosure: Comply with NEMA ST 20.
 - 1. Environment Type per NEMA 250: Unless otherwise indicated, as specified for the following installation locations:
 - a. Indoor clean, dry locations: Type 2.
 - 2. Construction: Heavy gage steel.
 - a. Less than 15 kVA: Totally enclosed, non-ventilated.
 - 3. Finish: Manufacturer's standard grey, suitable for outdoor installations.
 - 4. Provide lifting eyes or brackets.
- L. Accessories:
 - 1. Mounting Brackets: Provide manufacturer's standard brackets.
 - 2. Lug Kits: Sized as required for termination of conductors as indicated on the drawings.

2.04 SOURCE QUALITY CONTROL

- A. Identify transformers in accordance with Section 26 0553.
- B. Factory test transformers according to NEMA ST 20.

PART 3 – EXECUTION

3.01 EXAMINATION

- A. Verify that field measurements are as shown on the drawings.
- B. Verify that suitable support frames and anchors are installed where required and that mounting surfaces are ready to receive transformers.
- C. Verify that conditions are satisfactory for installation prior to starting work.

3.02 INSTALLATION

- A. Perform work in a neat and workmanlike manner in accordance with NECA 1.
- B. Install transformers in accordance with manufacturer's instructions.
- C. Install transformers in accordance with NECA 409 and IEEE C57.94.
- D. Use flexible conduit, under the provisions of Section 26 0534, 2 feet minimum length, for connections to transformer case. Make conduit connections to side panel of enclosure.
- E. Arrange equipment to provide minimum clearances as specified on transformer nameplate and in accordance with manufacturer's instructions and NFPA 70.
- F. Install transformers plumb and level.
- G. Transformer Support:
 - 1. Provide required support and attachment in accordance with Section 26 0529, where not furnished by transformer manufacturer.
 - 2. Use integral transformer flanges, accessory brackets furnished by manufacturer, or field-fabricated supports to support wall-mounted transformers.
 - 3. Use trapeze hangers assembled from threaded rods and metal channel (strut) to support suspended transformers. Provide independent support from building structure. Do not provide support from piping, ductwork, or other systems.
- H. Set transformers plumb and level.
- I. Use liquid-tight flexible metal conduit, under the provisions of Section 26 0534, 2 feet minimum length, for connections to transformer case.

SECTION 26 2200 LOW-VOLTAGE TRANSFORMERS

- J. Mount wall-mounted transformers using brackets furnished by the manufacturer.
- K. Mount floor-mounted, trapeze-mounted, wall-mounted, and ceiling-mounted transformers using vibration isolators suitable for isolating the transformer noise from the building structure.
- L. Provide grounding and bonding in accordance with Section 26 0526.
- M. Where not factory-installed, install lugs sized as required for termination of conductors as shown on the drawings.
- N. Install transformer identification nameplate in accordance with Section 26 0553.

3.03 FIELD QUALITY CONTROL

- A. Perform field inspection, testing, and adjusting.

3.04 ADJUSTING

- A. Measure primary and secondary voltages and make appropriate tap adjustments.
- B. Adjust tightness of mechanical and electrical connections to manufacturer's recommended torque settings.

3.05 CLEANING

- A. Clean dirt and debris from transformer components according to manufacturer's instructions.
- B. Repair scratched or marred exterior surfaces to match original factory finish.

END OF SECTION

SECTION 26 2416 PANELBOARDS

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Lighting and appliance panelboards.
- B. Overcurrent protective devices for panelboards.

1.02 ADMINISTRATIVE REQUIREMENTS

- A. Coordination:
 - 1. Coordinate the work with other trades to avoid placement of ductwork, piping, equipment, or other potential obstructions within the dedicated equipment spaces and working clearances for electrical equipment required by NFPA 70.
 - 2. Coordinate arrangement of electrical equipment with the dimensions and clearance requirements of the actual equipment to be installed.
 - 3. Verify with manufacturer that conductor terminations are suitable for use with the conductors to be installed.

1.03 SUBMITTALS

- A. Product Data: Provide manufacturer's standard catalog pages and data sheets for panelboards, enclosures, overcurrent protective devices, and other installed components and accessories.
 - 1. Include characteristic trip curves for each type and rating of overcurrent protective device upon request.
- B. Shop Drawings: Indicate outline and support point dimensions, voltage, main bus ampacity, overcurrent protective device arrangement and sizes, short circuit current ratings, conduit entry locations, conductor terminal information, and installed features and accessories.
- C. Manufacturer's Installation Instructions: Indicate application conditions and limitations of use stipulated by product testing agency. Include instructions for storage, handling, protection, examination, preparation, and installation of product.

1.04 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Company specializing in manufacturing the products specified in this section with minimum three years documented experience.
- B. Product Listing Organization Qualifications: An organization recognized by OSHA as a Nationally Recognized Testing Laboratory and acceptable to authorities having jurisdiction.

1.05 DELIVERY, STORAGE, AND HANDLING

- A. Receive, inspect, handle, and store panelboards in accordance with manufacturer's instructions.
- B. Store in a clean, dry space. Maintain factory wrapping or provide an additional heavy canvas or heavy plastic cover to protect units from dirt, water, construction debris, and traffic.

PART 2 PRODUCTS

2.01 MANUFACTURERS

- A. ABB / General Electric
- B. Eaton Corporation
- C. Schneider Electric; Square D Products
- D. Siemens

SECTION 26 2416 PANELBOARDS

- E. Source Limitations: Furnish panelboards and associated components produced by the same manufacturer as the other electrical distribution equipment used for this project and obtained from a single supplier.

2.02 ALL PANELBOARDS

- A. Provide products listed and labeled by Underwriters Laboratories Inc. as suitable for the purpose indicated.
- B. Short Circuit Current Rating:
 - 1. Provide panelboards with listed short circuit current rating not less than the available fault current at the installed location as indicated on the drawings.
 - 2. Series rating is not allowed except where specifically noted on the drawings.
- C. Mains: Configure for top or bottom incoming feed as indicated or as required for the installation.
- D. Branch Overcurrent Protective Devices: Replaceable without disturbing adjacent devices.
- E. Bussing:
 - 1. Provide fully rated neutral bus unless otherwise indicated, with a suitable lug for each feeder or branch circuit requiring a neutral connection.
 - 2. Provide solidly bonded equipment ground bus in each panelboard, with a suitable lug for each feeder and branch circuit equipment grounding conductor.
- F. Conductor Terminations: Suitable for use with the conductors to be installed.
- G. Enclosures:
 - 1. Unless otherwise indicated, as specified for the following installation locations:
 - a. Indoor Locations: Type 1
 - 2. Boxes: Galvanized steel unless otherwise indicated.
 - a. Provide wiring gutters sized to accommodate the conductors to be installed.
 - b. Increase gutter space as required where sub-feed lugs, feed-through lugs, gutter taps, or oversized lugs are provided.
 - 3. Fronts:
 - a. Fronts for Surface-Mounted Enclosures: Same dimensions as boxes.
 - b. Finish for Painted Steel Fronts: Manufacturer's standard grey unless otherwise indicated.
 - 4. Lockable Doors: All locks keyed alike unless otherwise indicated.
- H. Future Provisions: Prepare all unused spaces for future installation of devices including bussing, connectors, mounting hardware and all other required provisions.
- I. Load centers are not acceptable.

2.03 LIGHTING AND APPLIANCE PANELBOARDS

- A. Description: Panelboards complying with NEMA PB 1, lighting and appliance branch circuit type, circuit breaker type, and listed and labeled as complying with UL 67; ratings, configurations and features as indicated on the drawings.
- B. Conductor Terminations:
 - 1. Main and Neutral Lug Material: Copper or Aluminum, suitable for terminating copper conductors.
 - 2. Main and Neutral Lug Type: Mechanical.
- C. Bussing:
 - 1. Phase Bus Connections: Arranged for sequential phasing of overcurrent protective devices.
 - 2. Phase and Neutral Bus Material: Copper or Aluminum.
 - 3. Ground Bus Material: Copper or Aluminum.

SECTION 26 2416 PANELBOARDS

- D. Circuit Breakers: Thermal magnetic bolt-on type unless otherwise indicated.
- E. Enclosures:
 - 1. Provide surface-mounted or flush-mounted enclosures as indicated.
 - 2. Fronts: Provide door-in-door trim with hinged cover for access to load terminals and wiring gutters, and separate lockable hinged door with concealed hinges for access to overcurrent protective device handles without exposing live parts.
 - 3. Provide clear plastic circuit directory holder mounted on inside of door.

2.04 OVERCURRENT PROTECTIVE DEVICES

- A. Molded Case Circuit Breakers:
 - 1. Description: Quick-make, quick-break, over center toggle, trip-free, trip-indicating circuit breakers; ratings, configurations, and features as indicated on the drawings.
 - 2. Interrupting Capacity:
 - a. Provide circuit breakers with interrupting capacity as required to provide the short circuit current rating indicated.
 - 3. Conductor Terminations:
 - a. Provide mechanical lugs unless otherwise indicated.
 - b. Provide compression lugs where indicated.
 - c. Lug Material: Suitable for terminating copper conductors.
 - 4. Thermal Magnetic Circuit Breakers: For each pole, furnish thermal inverse time tripping element for overload protection and magnetic instantaneous tripping element for short circuit protection.
 - 5. Multi-Pole Circuit Breakers: Furnish with common trip for all poles.
 - 6. Do not use tandem circuit breakers.
 - 7. Do not use handle ties in lieu of multi-pole circuit breakers.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify that field measurements are as shown on the drawings.
- B. Verify that the ratings and configurations of the panelboards and associated components are consistent with the indicated requirements.
- C. Verify that mounting surfaces are ready to receive panelboards.
- D. Verify that conditions are satisfactory for installation prior to starting work.

3.02 INSTALLATION

- A. Install products in accordance with manufacturer's instructions.
- B. Install panelboards securely, in a neat and workmanlike manner in accordance.
- C. Arrange equipment to provide minimum clearances in accordance with manufacturer's instructions and NFPA 70.
- D. Provide required supports in accordance with Section 26 0529.
- E. Install panelboards plumb.
- F. Mount panelboards such that the highest position of any operating handle for circuit breakers or switches does not exceed 79 inches above the floor or working platform.
- G. Provide grounding and bonding in accordance with Section 26 0526.
 - 1. Terminate branch circuit equipment grounding conductors on solidly bonded equipment ground bus only. Do not terminate on isolated/insulated ground bus.
- H. Height: 6 feet to top of panelboard; install panelboards taller than 6 feet with bottom no more than 4 inches above floor.

SECTION 26 2416 PANELBOARDS

- I. Provide filler plates to cover unused spaces in panelboards.
- J. Identify panelboards in accordance with Section 26 0553.
- K. Provide typed circuit directory for each branch circuit panelboard. Hand written directories are not acceptable.
- L. Ground and bond panelboard enclosure according to Section 26 0526.

3.03 ADJUSTING

- A. Adjust tightness of mechanical and electrical connections to manufacturer's recommended torque settings.
- B. Adjust alignment of panelboard fronts.
- C. Load Balancing: For each panelboard, rearrange circuits such that the difference between each measured steady state phase load does not exceed 20 percent and adjust circuit directories accordingly. Maintain proper phasing for multi-wire branch circuits.

3.04 CLEANING

- A. Clean dirt and debris from panelboard enclosures and components according to manufacturer's instructions.
- B. Repair scratched or marred exterior surfaces to match original factory finish.

END OF SECTION

SECTION 26 2726 WIRING DEVICES

PART 1 – GENERAL

1.01 SECTION INCLUDES

- A. Wall switches.
- B. Receptacles.
- C. Wall plates.

1.02 ADMINISTRATIVE REQUIREMENTS

- A. Coordination:
 - 1. Coordinate wiring device ratings and configurations with the electrical requirements of actual equipment to be installed.
 - 2. Notify Engineer of any conflicts or deviations from the contract documents to obtain direction prior to proceeding with work.

1.03 SUBMITTALS

- A. Product Data: Provide manufacturer's catalog information showing dimensions, colors, and configurations.
- B. Manufacturer's Installation Instructions: Indicate application conditions and limitations of use stipulated by product testing agency. Include instructions for storage, handling, protection, examination, preparation, and installation of product.

1.04 QUALITY ASSURANCE

- A. Conform to requirements of NFPA 70.
- B. Manufacturer Qualifications: Company specializing in manufacturing the products specified in this section with minimum three years documented experience.
- C. Products: Listed, classified, and labeled as suitable for the purpose intended.
- D. Product Listing Organization Qualifications: An organization recognized by OSHA as a Nationally Recognized Testing Laboratory (NRTL) and acceptable to authorities having jurisdiction.

1.05 DELIVERY, STORAGE, AND PROTECTION

- A. Store in a clean, dry space in original manufacturer's packaging until ready for installation.

PART 2 – PRODUCTS

2.01 MANUFACTURERS

- A. Hubbell, Pass and Seymour/Legrand, or Leviton.
- B. Source Limitations: Where possible, for each type of wiring device furnish products produced by a single manufacturer and obtained from a single supplier.

2.02 ALL WIRING DEVICES

- A. Provide products listed and classified by Underwriters Laboratories Inc. as suitable for the purpose specified and indicated.
- B. Finishes:
 - 1. All Wiring Devices: Gray with cast aluminum plate unless otherwise indicated.

2.03 WALL SWITCHES

- A. All Wall Switches: AC only, quiet operating, general-use snap switches with silver alloy contacts, complying with NEMA WD 1 and NEMA WD 6, and listed as complying with UL 20 and where applicable, FS W-S-896; types as indicated on the drawings.

SECTION 26 2726 WIRING DEVICES

1. Wiring Provisions: Terminal screws for side wiring and screw actuated binding clamp for back wiring with separate ground terminal screw.
- B. Standard Wall Switches: Industrial specification grade, 20 A, 120/277 V with standard toggle type switch actuator and maintained contacts; single pole single throw, double pole single throw, three way, or four way as indicated on the drawings.

2.04 RECEPTACLES

- A. All Receptacles: Self-grounding, complying with NEMA WD 1 and NEMA WD 6, and listed as complying with UL 498, and where applicable, FS W-C-596; types as indicated on the drawings.
 1. Wiring Provisions: Terminal screws for side wiring or screw actuated binding clamp for back wiring with separate ground terminal screw.
 2. NEMA configurations specified are according to NEMA WD 6.
- B. Convenience Receptacles:
 1. Standard Convenience Receptacles: Industrial specification grade, 20A, 125V, NEMA 5-20R; single or duplex as indicated on the drawings.
 2. Weather Resistant Convenience Receptacles: Industrial specification grade, 20A, 125V, NEMA 5-20R, , listed and labeled as weather resistant type complying with UL 498 Supplement SE suitable for installation in damp or wet locations; single or duplex as indicated on the drawings.
- C. GFI Receptacles:
 1. All GFI Receptacles: Provide with feed-through protection, light to indicate ground fault tripped condition and loss of protection, and list as complying with UL 943, class A.
 - a. Provide test and reset buttons of same color as device.
 2. Weather Resistant GFI Receptacles (for all GFI receptacles): Industrial specification grade, duplex, 20A, 125V, NEMA 5-20R, rectangular decorator style, listed and labeled as weather resistant type complying with UL 498 Supplement SE suitable for installation in damp or wet locations.

2.05 WALL PLATES

- A. Cast Aluminum or Stainless Steel: Rounded corners and edges, with corrosion resistant screws.
- B. Weatherproof Covers for Damp and Wet Locations: Gasketed, cast aluminum, with hinged lockable cover and corrosion-resistant screws; listed as suitable for use in wet locations while in use with attachment plugs connected.
- C. Identify wiring devices in accordance with Section 26 0553.

PART 3 – EXECUTION

3.01 EXAMINATION

- A. Verify that field measurements are as shown on the drawings.
- B. Verify that outlet boxes are installed in proper locations and at proper mounting heights and are properly sized to accommodate devices and conductors in accordance with NFPA 70.
- C. Verify that branch circuit wiring installation is completed, tested, and ready for connection to wiring devices.
- D. Verify that conditions are satisfactory for installation prior to starting work.

3.02 PREPARATION

- A. Clean dirt, debris, and other foreign materials from outlet boxes.

SECTION 26 2726 WIRING DEVICES

3.03 INSTALLATION

- A. Perform work in a neat and workmanlike manner in accordance with NECA 1 and, where applicable, NECA 130, including mounting heights specified in those standards unless otherwise indicated.
- B. Install wiring devices in accordance with manufacturer's instructions.
- C. Where required, connect wiring devices using pigtails not less than 6 inches long. Do not connect more than one conductor to wiring device terminals.
- D. Connect wiring devices by wrapping conductor clockwise 3/4 turn around screw terminal and tightening to proper torque specified by the manufacturer. Where present, do not use push-in pressure terminals that do not rely on screw-actuated binding.
- E. Unless otherwise indicated, connect wiring device grounding terminal to branch circuit equipment grounding conductor and to outlet box with bonding jumper.
- F. Provide GFI receptacles with integral GFI protection at each location indicated. Do not use feed-through wiring to protect downstream devices.
- G. Install wiring devices plumb and level with mounting yoke held rigidly in place.
- H. Provide single coverplate for multi-gang boxes for switches shown grouped on the drawings.
- I. With a permanent marker label the back side of device coverplates with panel & circuit number.
- J. Install wall switches with OFF position down.
- K. Install blank wall plates on junction boxes and on outlet boxes with no wiring devices installed or designated for future use.
- L. Connect wiring device grounding terminal to outlet box with bonding jumper.
- M. Install receptacles so ground pole is on the bottom.

3.04 FIELD QUALITY CONTROL

- A. Inspect each wiring device for damage and defects.
- B. Test each receptacle to verify operation and proper polarity.
- C. Test each GFCI receptacle for proper tripping operation according to manufacturer's instructions.

END OF SECTION

Houser Street Lift Station Upgrade Project
City of Muscatine
Muscatine, Iowa

SECTION 26 2726 WIRING DEVICES

SECTION 26 2817 ENCLOSED CIRCUIT BREAKERS

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Enclosed circuit breakers.

1.02 ADMINISTRATIVE REQUIREMENTS

- A. Coordination:
 - 1. Coordinate arrangement of electrical equipment with the dimensions and clearance requirements of the actual equipment to be installed.

1.03 SUBMITTALS

- A. Product Data: Provide manufacturer's standard catalog pages and data sheets for circuit breakers, enclosures, and other installed components and accessories.
 - 1. Include characteristic trip curves for each type and rating of circuit breaker upon request.
- B. Shop Drawings: Indicate outline and support point dimensions, voltage and current ratings, short circuit current ratings, conduit entry locations, conductor terminal information, and installed features and accessories.

1.04 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Company specializing in manufacturing the products specified in this section with minimum three years documented experience.
- B. Product Listing Organization Qualifications: An organization recognized by OSHA as a Nationally Recognized Testing Laboratory and acceptable to authorities having jurisdiction.

1.05 DELIVERY, STORAGE, AND HANDLING

- A. Store in a clean, dry space. Maintain factory wrapping or provide an additional heavy canvas or heavy plastic cover to protect units from dirt, water, construction debris, and traffic.
- B. Handle carefully in accordance with manufacturer's written instructions to avoid damage to enclosed circuit breaker internal components, enclosure, and finish.

PART 2 PRODUCTS

2.01 MANUFACTURERS

- A. Same as panelboards.

2.02 ENCLOSED CIRCUIT BREAKERS

- A. Units consisting of molded case circuit breakers individually mounted in enclosures.
- B. Short Circuit Current Rating:
 - 1. Provide enclosed circuit breakers with listed short circuit current rating not less than the available fault current at the installed location indicated on the drawings.
- C. Enclosed Circuit Breakers Used for Service Entrance: Listed and labeled as suitable for use as service equipment.
- D. Conductor Terminations: Suitable for use with the conductors to be installed.
- E. Provide electronic type or thermal magnetic circuit breakers as indicated on the drawings.
- F. Provide insulated, groundable fully rated solid neutral assembly where a neutral connection is required, with a suitable lug for terminating each neutral conductor.
- G. Provide solidly bonded equipment ground bus in each enclosed circuit breaker, with a suitable lug for terminating each equipment grounding conductor.
- H. Enclosures:
 - 1. Unless otherwise indicated, as specified for the following installation locations:

SECTION 26 2817 ENCLOSED CIRCUIT BREAKERS

- a. Outdoor Locations: Type 3R
 - 2. Finish for Painted Steel Enclosures: Manufacturer's standard, factory applied grey unless otherwise indicated.
 - 3. Provide surface-mounted enclosures unless otherwise indicated.
 - I. Provide externally operable handle with means for locking in the OFF position.
- 2.03 MOLDED CASE CIRCUIT BREAKERS**
- A. Description: Quick-make, quick-break, over center toggle, trip-free, trip-indicating circuit breakers; ratings, configurations, and features as indicated on the drawings.
 - B. Interrupting Capacity:
 - 1. Provide circuit breakers with interrupting capacity as required to provide the short circuit current rating indicated.
 - C. Conductor Terminations:
 - 1. Provide mechanical lugs unless otherwise indicated.
 - 2. Provide compression lugs where indicated.
 - 3. Lug Material: Suitable for terminating copper conductors.
 - D. Electronic Trip Circuit Breakers: Furnish solid state, microprocessor-based, trip units.
 - 1. Provide the following field-adjustable trip response settings:
 - a. Long time pickup, adjustable by replacing interchangeable trip unit or by setting dial.
 - b. Long time delay.
 - c. Instantaneous pickup.
 - E. Multi-Pole Circuit Breakers: Furnish with common trip for all poles.

PART 3 EXECUTION

3.01 INSTALLATION

- A. Install enclosed circuit breakers where indicated, in accordance with manufacturer's instructions.
- B. Arrange equipment to provide minimum clearances in accordance with manufacturer's instructions and NFPA 70.
- C. Provide required supports in accordance with Section 26 0529.
- D. Install enclosed circuit breakers plumb.
- E. Except where indicated to be mounted adjacent to the equipment they supply, mount enclosed circuit breakers such that the highest position of the operating handle does not exceed 79 inches above the floor or working platform.
- F. Provide grounding and bonding in accordance with Section 26 0526.

3.02 CLEANING

- A. Clean dirt and debris from circuit breaker enclosures and components according to manufacturer's instructions.
- B. Repair scratched or marred exterior surfaces to match original factory finish.

END OF SECTION

SECTION 26 2923 VARIABLE-FREQUENCY MOTOR CONTROLLERS

PART 1 – GENERAL

1.01 SECTION INCLUDES

- A. Variable frequency controllers.
- B. Overload relays.

1.02 ADMINISTRATIVE REQUIREMENTS

- A. Coordination:
 - 1. Coordinate work with other trades to avoid placement of ductwork, piping, equipment, or other potential obstructions within dedicated equipment spaces and working clearances required by NFPA 70.
 - 2. Coordinate arrangement of electrical equipment with dimensions and clearance requirements of actual equipment to be installed.
 - 3. Notify Engineer of conflicts with or deviations from Contract Documents. Obtain direction before proceeding with work.

1.03 SUBMITTALS

- A. Product Data: Provide catalog sheets showing voltage, controller size, ratings and size of switching and overcurrent protective devices, short circuit ratings, dimensions, and enclosure details.
- B. Manufacturer's Instructions: Indicate application conditions and limitations of use stipulated by testing agency. Include instructions for storage, handling, protection, examination, preparation, and installation of product.

1.04 QUALITY ASSURANCE

- A. Conform to requirements of NFPA 70.
- B. Manufacturer Qualifications: Company specializing in manufacturing products specified in this section with minimum three years documented experience.
 - 1. Authorized service facilities located within 200 miles of project site.
- C. Products: Listed and classified by Underwriters Laboratories Inc. as suitable for the purpose specified and indicated.
- D. Product Listing Organization Qualifications: An organization recognized by OSHA as a Nationally Recognized Testing Laboratory (NRTL) and acceptable to authorities having jurisdiction.

1.05 DELIVERY, STORAGE, AND HANDLING

- A. Store in a clean, dry space. Maintain factory wrapping or provide an additional heavy canvas or heavy plastic cover to protect units from dirt, water, construction debris, and traffic.

PART 2 – PRODUCTS

2.01 MANUFACTURERS

- A. Variable Frequency Motor Controllers - Other Acceptable Manufacturers:
 - 1. Yaskawa (to match Owner's VFD's in other facilities)

2.02 VARIABLE-FREQUENCY MOTOR CONTROLLERS

- A. Provide variable-frequency motor control system consisting of required controller assemblies, operator interfaces, control power transformers, instrumentation and control wiring, sensors, accessories, system programming, etc. as necessary for complete operating system.
- B. Operating Requirements:
 - 1. Input Voltage Tolerance: Plus/minus 10 percent of nominal.

SECTION 26 2923 VARIABLE-FREQUENCY MOTOR CONTROLLERS

2. Input Frequency Tolerance: Plus/minus 5 percent of nominal.
3. Efficiency: Minimum of 96 percent at full speed and load.
4. Input Displacement Power Factor: Minimum of 0.96 throughout speed and load range.
5. Overload Rating:
 - a. Variable Torque Loads: Minimum of 110 percent of nominal for 60 seconds.
 - b. Constant Torque Loads: Minimum of 150 percent of nominal for 60 seconds.
- C. Power Conversion System: Microprocessor-based, pulse width modulation type consisting of rectifier/converter, DC bus/link, and inverter.
 1. Rectifier/Converter: Diode-based, 6-pulse type unless otherwise indicated.
- D. Control System:
 1. Provide microprocessor-based control system for automatic control, monitoring, and protection of motors. Include sensors, wiring, and connections necessary for functions and status/alarm indications specified.
 2. Provide integral operator interface for controller programming, display of status/alarm indications, fault reset, and local control functions including motor run/stop, motor forward/reverse selection, motor speed increase/decrease, and local/remote control selection.
 3. Control Functions:
 - a. Control Method: Selectable vector and scalar/volts per hertz unless otherwise indicated.
 - 1) Scalar/Volts per Hertz Control: Provide IR compensation for improved low-speed torque.
 - 2) Vector Control: Provide selectable autotuning function.
 - b. Adjustable acceleration and deceleration time; linear and S-curve ramps; selectable coast to stop.
 - c. Selectable braking control; DC injection or flux braking.
 - 1) Dynamic Braking: Provide braking chopper circuit and appropriately sized braking resistor where indicated.
 - d. Adjustable minimum/maximum speed limits.
 - e. Adjustable pulse width modulation switching carrier frequency.
 - f. Adjustable motor slip compensation.
 - g. Selectable autorestart after noncritical fault; programmable number of time delay between restart attempts.
 - h. Automatic response to loss of speed reference; Selectable to run motor at last known speed, run motor at designated speed, or stop motor.
 - i. PID Control: Provide integral PID controller employing feedback for closed-loop control where indicated or required.
 - j. Selectable frequency-skipping; minimum of three independently adjustable bands.
 - k. Automatic catching of rotating motor.
 - l. Energy-saving algorithms.
 - m. Safety Interlock: Provide permissive run safety interlock capability where indicated or required; upon activation of designated input, stop and prevent operation of motor; operational in both drive and bypass modes where applicable.
 - n. Adjustable speed using a knob or keypad.
 4. Status Indications:
 - a. Motor run/stop status, Motor forward/reverse status, Local/remote control status, Output voltage Output current, Output frequency, DC bus voltage, Motor speed, Speed reference, Instantaneous power, Energy, Elapsed run time, Controller temperature, Discrete input/output status, Analog input/output values.
 5. Protective Functions/Alarm Indications:

SECTION 26 2923 VARIABLE-FREQUENCY MOTOR CONTROLLERS

- a. Overcurrent, Motor overload, Undervoltage, Overvoltage, Controller overtemperature, Input/output phase loss, Output short circuit protection, Output ground fault protection.
6. Inputs:
 - a. Digital Input(s): Three.
 - b. Analog Input(s): Two.
7. Outputs:
 - a. Analog Output(s): One.
 - b. Relay Output(s): Two.
8. SCADA: Compatible with connected systems. Provide accessories necessary for proper interface with existing SCADA system (coordinate with city controls supplier).
 - a. Serial Communications: RS-485; support for Modbus RTU protocol.
 - b. Ethernet Communications: Support for Modbus TCP protocol.
 - c. Remote Monitoring Capabilities:
 - 1) Motor run/stop status, Hand-off-auto status, Fault information, Discrete input/output status, Analog input/output values.
 - d. Remote Control Capabilities:
 - 1) Motor run/stop, Hand-off-auto selection, Speed adjustment, Fault reset.
9. Features:
 - a. Password-protected security access, Event log, Remote monitoring and programming capability via web browser.
- I. Power Conditioning/Filtering:
 1. Provide DC link choke or input/line reactor for each controller.
 2. Provide LCL filter for controllers with IGBT-based active front end rectifier/converter.
 3. Provide input surge protection.
 4. Provide where indicated:
 - a. Input/line reactor, Input tuned passive filter, Output/load reactor, Output dV/dt filter, Output sine wave filter.
 5. Reactor Impedance: 3 percent, unless otherwise indicated or required.
- J. Service Conditions:
 1. Provide controllers and associated components suitable for operation under following service conditions without derating:
 - a. Altitude: Less than 3,300 feet.
 - b. Ambient Temperature: Between 32 degrees F and 104 degrees F.
 2. Provide controllers and associated components suitable for operation at indicated ratings under service conditions at installed location.
- K. Short Circuit Current Rating:
 1. Provide controllers with listed short circuit current rating not less than available fault current at installed location as indicated on drawings.
- L. Conductor Terminations: Suitable for use with conductors to be installed.
- M. Enclosures:
 1. Comply with NEMA ICS 6.
 2. NEMA 250 Environment Type or Equivalent IEC 60529 Rating: Unless otherwise indicated, as specified for following installation locations:
 - a. Indoor Clean, Dry Locations: Type 1 or Type 12.
 3. Finish: Manufacturer's standard unless otherwise indicated.
 4. Cooling: Forced air or natural convection as determined by manufacturer.
- N. Instrument Transformers:
 1. Select suitable ratio, burden, and accuracy as required for connected devices.

SECTION 26 2923 VARIABLE-FREQUENCY MOTOR CONTROLLERS

2. Current Transformers: Connect secondaries to shorting terminal blocks.
3. Potential Transformers: Include primary and secondary fuses with disconnecting means.

2.03 OVERCURRENT PROTECTIVE DEVICES

- A. Overload Relays:
 1. Provide overload relays and, where applicable, associated current elements/heaters selected for actual installed motor nameplate data, in accordance with manufacturer's recommendations and NFPA 70; include consideration for motor service factor and ambient temperature correction, where applicable.
 2. Resettable.
 - a. Employ manual reset unless otherwise indicated.
 - b. Employ automatic reset or remote reset where indicated.
 - c. Do not employ automatic reset with two-wire control.
 3. Solid State Overload Relays:
 - a. Selectable inverse-time trip class rating; available ratings of Class 10, 20, and 30, minimum.
 - b. Provide: Adjustable full load current, Phase loss protection, Phase imbalance protection, Ground fault protection, Ambient temperature insensitive, Thermal memory, Repeat Trip Accuracy, Trip test function, isolated alarm contact.

2.04 ACCESSORIES

- A. Auxiliary Contacts:
 1. Comply with NEMA ICS 5.
 2. Provide number and type of contacts indicated or required to perform necessary functions, including holding (seal-in) circuit and interlocking, plus one normally open (NO) and one normally closed (NC) spare contact for each bypass motor starter, minimum.
- B. Pilot Devices:
 1. Comply with NEMA ICS 5; heavy-duty type.
 2. Nominal Size: 30 mm.
 3. Pushbuttons: Unless otherwise indicated, provide momentary, nonilluminated type with flush button operator; normally open or normally closed as indicated or as required.
 4. Selector Switches: Unless otherwise indicated, provide maintained, nonilluminated type with knob operator; number of switch positions as indicated or as required.
 5. Indicating Lights: Push-to-test type unless otherwise indicated.
 6. Provide LED lamp source for indicating lights and illuminated devices.
- C. Control and Timing Relays:
 1. Comply with NEMA ICS 5.
 2. Provide number and type of relays indicated or required to perform necessary functions.
 3. Timing Relays: Electronic or pneumatic as indicated.
 - a. Adjustable Timing Range: As indicated on drawings.
- D. Control Power Transformers:
 1. Size to accommodate burden of contactor coil(s) and connected auxiliary devices.
 2. Include primary and secondary fuses.
- E. Control Terminal Blocks: Include 25 percent spare terminals.

PART 3 – EXECUTION

3.01 EXAMINATION

- A. Verify that field measurements are as indicated.
- B. Verify that ratings of controllers are consistent with indicated requirements.

SECTION 26 2923 VARIABLE-FREQUENCY MOTOR CONTROLLERS

- C. Verify that surface is suitable for controller installation.
- D. Verify that conditions are satisfactory for installation prior to starting work.

3.02 INSTALLATION

- A. Install products in accordance with manufacturer's instructions.
- B. Install controllers in accordance with NECA 1 (general workmanship).
- C. Install in accordance with NEMA ICS 7.1 and manufacturer's instructions.
- D. Do not exceed recommended maximum cable length between controller and motor.
- E. Arrange equipment to provide minimum clearances in accordance with manufacturer's instructions and NFPA 70.
- F. Provide required support and attachment in accordance with Section 26 0529.
- G. Install controllers plumb and level.
- H. Provide grounding and bonding in accordance with Section 26 0526.
- I. Tighten accessible connections and mechanical fasteners after placing controller.
- J. Identify variable frequency controllers in accordance with Section 26 0553.

3.03 FIELD QUALITY CONTROL

- A. Provide services of manufacturer's authorized representative to observe installation and assist in inspection and testing. Include manufacturer's reports with submittals.
- B. Test for proper interface with other systems.
- C. Correct deficiencies and replace damaged or defective controllers or associated components.

3.04 ADJUSTING

- A. Adjust tightness of mechanical and electrical connections to manufacturer's recommended torque settings.
- B. Make final adjustments to installed controller to assure proper operation of load system. Obtain performance requirements from installer of driven loads.

3.05 CLEANING

- A. Clean dirt and debris from controller enclosures and components according to manufacturer's instructions.
- B. Repair scratched or marred exterior surfaces to match original factory finish.

3.06 CLOSEOUT ACTIVITIES

- A. Demonstration: Demonstrate proper operation of controllers to Owner, and correct deficiencies or make adjustments as directed.
- B. Training: Train Owner's personnel on operation, adjustment, and maintenance of controllers and associated devices.
 - 1. Use operation and maintenance manual as training reference.
 - 2. Provide minimum of two hours of training at the project site.
 - 3. Instructor: Manufacturer's authorized representative.

3.07 PROTECTION

- A. Protect installed controllers from subsequent construction operations.

END OF SECTION

Houser Street Lift Station Upgrade Project
City of Muscatine
Muscatine, Iowa

SECTION 26 2923 VARIABLE-FREQUENCY MOTOR CONTROLLERS

SECTION 26 3600 TRANSFER SWITCHES

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Transfer switches for low-voltage (600 V and less) applications and associated accessories:
 - 1. Manual transfer switches / generator docking stations.

1.02 ADMINISTRATIVE REQUIREMENTS

- A. Coordination:
 - 1. Coordinate compatibility of transfer switches to be installed with work provided under other sections or by others.
 - 2. Coordinate arrangement of equipment with the dimensions and clearance requirements of the actual equipment to be installed.
 - 3. Coordinate the work with placement of supports, anchors, etc. required for mounting.

1.03 SUBMITTALS

- A. Product Data: Provide manufacturer's standard catalog pages and data sheets for each product, including ratings, configurations, dimensions, finishes, weights, service condition requirements, and installed features.
- B. Shop Drawings: Include dimensioned plan views and sections indicating locations of system components, required clearances, and field connection locations. Include system interconnection schematic diagrams showing all factory and field connections.
- C. Manufacturer's Installation Instructions: Indicate application conditions and limitations of use stipulated by product testing agency. Include instructions for storage, handling, protection, examination, preparation, installation, and operation of product.

1.04 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Company specializing in manufacturing the products specified in this section with minimum three years documented experience.
- B. Products: Listed, classified, and labeled by Underwriters Laboratories Inc. (UL) or testing firm acceptable to authorities having jurisdiction as suitable for the purpose indicated.

1.05 DELIVERY, STORAGE, AND HANDLING

- A. Receive, inspect, handle, and store transfer switches in accordance with manufacturer's instructions.
- B. Store in a clean, dry space. Maintain factory wrapping or provide an additional heavy canvas or heavy plastic cover to protect units from dirt, water, construction debris, and traffic.
- C. Handle carefully in accordance with manufacturer's instructions to avoid damage to transfer switch components, enclosure, and finish.

PART 2 PRODUCTS

2.01 MANUFACTURERS

- A. Manual Transfer Switches / Generator Docking Stations:
 - 1. Trystar
 - 2. Other manufacturers pre-approved by addendum prior to bidding

2.02 TRANSFER SWITCHES

- A. Provide complete power transfer system consisting of all required equipment, conduit, boxes, wiring, supports, accessories, system programming, etc. as necessary for a complete operating system that provides the functional intent indicated.
- B. Provide products listed, classified, and labeled as suitable for the purpose intended.

SECTION 26 3600 TRANSFER SWITCHES

- C. Manual Transfer Switches / Generator Docking Stations:
1. Enclosure: NEMA 3R rain-tight aluminum. Pad-lockable front door shall include a hinged access plate at the bottom for entry of temporary cabling that prevents unauthorized tampering while in use. NEMA 3R Integrity shall be maintained while temporary cabling is connected during use. Front and Side shall be accessible for maintenance. Top, Side, and Bottom shall be accessible for permanent cabling.
 2. Busbars shall be silver-plated copper. Equipment ground bus shall be 50% size of phase size and bonded to the enclosure. Neutral bus shall be 100% size of phase size.
 3. Temporary generator connectors shall be Camlok style mounted on gland plate. Camlok shall be 16 Series model and color coded according to system voltage requirements. Camlok connections shall be Bus Bar Style. Camlok connection shall be protected against accidental contact while not in use.
 4. Permanent Connection shall be factory installed broad range set-screw mechanical type, located behind a physical barrier.
 5. Docking Station shall have integrated Rotary Transfer Switch (MTS). MTS shall have three positions – Utility/Permanent Line – OFF – Temporary Line. MTS shall be located behind pad lockable door to prevent any tampering by unauthorized personnel.
 6. Short circuit rating shall be 65,000AIC.
 7. See the schedule on the drawings for more information.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify that field measurements are as shown on the drawings.
- B. Verify that the ratings and configurations of transfer switches are consistent with the indicated requirements.
- C. Verify that rough-ins for field connections are in the proper locations.

3.02 INSTALLATION

- A. Perform work in a neat and workmanlike manner.
- B. Install transfer switches in accordance with manufacturer's instructions.
- C. Arrange equipment to provide minimum clearances and required maintenance access.
- D. Provide required support and attachment.
- E. Install transfer switches plumb and level.
- F. Provide grounding and bonding in accordance with Section 26 0526.

3.03 CLEANING

- A. Clean exposed surfaces to remove dirt, paint, or other foreign material and restore to match original factory finish.

3.04 CLOSEOUT ACTIVITIES

- A. Demonstration: Demonstrate proper operation of transfer switches to Owner, and correct deficiencies or make adjustments as directed.
- B. Training: Train Owner's personnel on operation and maintenance of transfer switches.

END OF SECTION

SECTION 26 5100 INTERIOR LIGHTING

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Interior luminaires.
- B. Drivers.

1.02 SUBMITTALS

- A. Product Data: Provide manufacturer's standard catalog pages and data sheets including detailed information on luminaire construction, dimensions, ratings, finishes, mounting requirements, listings, service conditions, photometric performance, and installed accessories; include model number nomenclature clearly marked with all proposed features.
- B. Manufacturer's Installation Instructions: Indicate application conditions and limitations of use stipulated by product testing agency. Include instructions for storage, handling, protection, examination, preparation, and installation of product.

1.03 DELIVERY, STORAGE, AND PROTECTION

- A. Receive, handle, and store products according to manufacturer's written instructions.
- B. Keep products in original manufacturer's packaging and protect from damage until ready for installation.

1.04 WARRANTY

- A. Provide five year manufacturer warranty for all luminaires, including drivers.

PART 2 PRODUCTS

2.01 MANUFACTURERS

- A. See lighting fixture schedule.

2.02 LUMINAIRES

- A. Unless otherwise indicated, provide complete luminaires including drivers, reflectors, lenses, housings and other components required to distribute the light.
- B. LED Luminaires:
 - 1. LED Estimated Useful Life: Minimum of 50,000 hours at 70 percent lumen maintenance.
 - 2. Provide 0-10 volt driver with dimming to 10%.
 - 3. LED light engine shall be solid state for high efficiency LED array.
 - 4. Input voltage shall be universal.
 - 5. Light engine and driver shall dissipate heat passively.

2.03 DRIVERS

- A. Dimmable LED Drivers:
 - 1. Dimming Range: Continuous dimming from 100 percent to 10 percent relative light output unless dimming capability to lower level is indicated, without flicker.
 - 2. Input Voltage: Universal.

PART 3 EXECUTION

3.01 INSTALLATION

- A. Install products according to manufacturer's instructions.
- B. Install luminaires securely, in a neat and workmanlike manner.
- C. Install luminaires plumb and square.
- D. Install accessories furnished with each luminaire.

SECTION 26 5100 INTERIOR LIGHTING

- E. Make wiring connections to branch circuit using wire with insulation suitable for temperature conditions within fixture; use flexible conduit.
- F. Bond products and metal accessories to branch circuit equipment grounding conductor.

3.02 CLEANING

- A. Clean surfaces to remove dirt, fingerprints, paint, or other foreign material and restore finishes to match original factory finish.

END OF SECTION

33 3216 SANITARY LIFT STATION EQUIPMENT

PART 1 GENERAL

1.1 OVERVIEW

Section includes materials and equipment for a duplex sewage lift station. The system includes submersible pumps, pipe, valves, and accessories.

1.2 SUBMITTALS:

- A. Provide submittal including lift station components specified herein.
- B. Standard submittal data for the dry pit submersible pumps must consist of:
 - 1. Pump Performance Curves.
 - 2. Pump Outline Drawing.
 - 3. Station Drawing for Accessories.
 - 4. Electrical Motor Data.
 - 5. Typical Installation Guides.
 - 6. Technical Manuals and Parts List.
 - 7. Printed Warranty.
 - 8. Management system certificate ISO 9001.
 - 9. Manufacturer's Equipment Storage Recommendations.
 - 10. Manufacturer's Standard Recommended Start-Up Report Form.
- C. Provide Operation and Maintenance Manual that includes:
 - 1. Minimum 2 hard copies and 1 PDF electronic copy.
 - 2. Hard copies: 8.5x11, 3-ring binder.
 - 3. Cover identifying equipment supplier, contact information, and project title.
 - 4. Table of contents.
 - 5. Integrated operating instructions for complete system specified herein.
 - 6. Complete set of components operating and maintenance manuals, organized with tabs.

1.3 OPERATIONAL REQUIREMENTS AND WARRANTY:

- A. The pumps shall be provided with prorated 60 months (5 years) warranty against defects in materials and or workmanship. Unless otherwise specified, all other equipment shall be warrantied for 12 months (1 year). The warranty shall be in printed form and previously published as the manufacturer's standard warranty for all similar units manufactured, latest revision. Upon warranty occurrence, the manufacturer's authorized service center shall remove the pump, repair, reinstall and provide start up on the repaired pump. A detailed failure analysis shall be submitted to the Owner for their records summarizing corrective action taken.
- B. The manufacturer shall guarantee clog-free operation for a period of 12 months from the date of start-up of the pumps by the local authorized factory representative. A certificate shall be provided to the Owner on the day of start up with the local contact information and effective date. If the impeller clogs with typical solids or modern trash debris normally found in domestic wastewater during this period, an authorized representative shall travel to the jobsite, remove the pump, clear the obstruction and reinstall the pump at no cost for the Owner. A written report shall be provided to the Owner detailing the service call with pictures for verification purposes.

33 3216 SANITARY LIFT STATION EQUIPMENT

PART 2 PRODUCTS

2.1 SUBMERSIBLE PUMPS:

- A. Submersible, centrifugal, wastewater pumps.
- B. Quantity: 2.
- C. Operating Conditions:
 - 1. Vertical, dry pit installation.
 - 2. Design point: 500 GPM at 49 ft TDH (36 ft static head).
 - 3. Shutoff head: 85 ft minimum.
 - 4. Submersible electric motor: 460-volt, 3-phase, 60 hertz, 1765 rpm.
 - 5. Motor nameplate horsepower: 12 hp.
- D. Electrical Power Cord:
 - 1. 50' multiconductor power cord.
 - 2. SOOW or SOW-A type cord, sized according to NEC standards.
 - 3. Compression type-sealing gland used for cord entering junction chamber.
 - 4. Individual conductor sealed against wicking.
 - 5. Entire junction chamber sealed from motor housing.
 - 6. Moisture detection probes to activate alert signal.
- E. Manufacturer: Flygt N3153-465HT.
- F. The motor horsepower shall be adequate so that the pump is non-overloading throughout the entire pump performance curve from shut-off through run-out.
- G. Materials:
 - 1. Major pump components: grey cast iron, ASTM A-48, Class 30 or 35B, with smooth surfaces devoid of blow holes or other irregularities.
 - 2. Impeller and Insert ring: Hardened Iron, ASTM A-532 (Alloy III A) 25% chrome cast iron.
 - 3. Shaft: ASTM A479 S43100-T
 - 4. Lifting handle: stainless steel.
 - 5. Exposed nuts or bolts: AISI type 304 or 316 stainless steel construction.
- H. Seals:
 - 1. Dual mechanical seal configuration mounted in tandem.
 - 2. Tungsten-carbide rotary and stationary faces with Buna-N elastomer and 316 SS.
 - 3. Moisture detection probes to activate an alert signal.
 - 4. Not considered equal: common intermediate spring double seals.
- I. Motor:
 - 1. Rated for NEC Class 1, Div1 space.
 - 2. Suitable for VFD starting.

33 3216 SANITARY LIFT STATION EQUIPMENT

3. NEMA B Design; Class H insulated, allowing up to 30 starts per hour.
 4. Sealed junction box chamber as protection on top side of motor.
 5. Winding thermal sensors: set to not exceed 257°F (125°C).
- J. Cooling System:
1. Stainless steel motor cooling jacket encircling the stator housing.
 2. Shaft driven impeller that circulates cooling liquid.
 3. Fill port, drain port.
 4. Provide continuous pump operation in ambient temperatures up to 104°F.
 5. External fans, blowers, or auxiliary cooling systems not allowed.
- K. Painting:
1. Exterior castings: baked on epoxy powder coated class 30 cast iron.
- L. Bearing and shaft:
1. Upper and lower ball bearings: high carbon chromium steel, withstanding thrust and radial loads, permanently grease lubricated and have a nominal L10 lifetime of 50,000 hours.
 2. Motor shaft: 416 or 420 Stainless steel, minimum diameter 1.25".
 3. Pump and motor shaft shall be the same unit. The pump shaft is an extension of the motor shaft. Couplings shall not be acceptable.
- M. Impeller:
1. Fully balanced, keyed and bolted to motor shaft.
- N. Accessories:
1. "T" installation with suction and discharge flanges.
 2. Cast iron support stand for "T" style dry well installation.
 3. Pump protection modules: Provide Flygt MiniCAS unit with VFD filter for each pump for installation in control panel.
- O. Testing: Provide factory hydrostatic and operating test certificates.

2.2 PIPE HANGERS, INSERTS, AND SUPPORTS

- A. Pipe hangers, inserts, and supports shall conform to MSS SP-58.

2.3 PIPING & VALVES

- B. Pipe and fittings:
1. Exposed (in dry well and exterior): Ductile iron, flanged, Protecto-401 liner, shop coated, AWWA C115, standard wall thickness for pressure rating of 350 psi.
 2. Buried: Ductile iron, mechanical joint.
- C. Check valve:
1. Flanged, Ductile iron body, NBR rubber flapper, swing check valve, full-flow rated, epoxy-coated.

33 3216 SANITARY LIFT STATION EQUIPMENT

2. Accessories: Visual disc position indicator, spring assist closure, stainless steel hardware.
3. Dezurik APCO CRF100SA, or equivalent.
- D. Plug valve:
 1. Flanged, ductile iron body, full-port, resilient plug, metal seat, epoxy-coated inside and out.
 2. NBR plug facing and packing.
 3. Actuators:
 - i. Valve centerline within 5ft of floor: Manual, hand-wheel.
 - ii. Valve centerline over 5ft of floor: Manual, chain-wheel with stainless steel chain.
 4. Dezurik PEF, or equivalent.
- E. Bypass Pump Connection:
 1. Restrained plug or blind flange on bypass connection elbow.

2.4 ACCESSORIES

- A. Jib crane:
 1. Provide and install structural steel wall-mounted jib crane to move pumps or other equipment to location below the floor hatch.
 2. Capacity: 1-ton.
 3. Span: 8 feet.
 4. Minimum horizontal arc: 180-degrees.
 5. Include hinged wall cantilever fittings, hoist stops, thrust washers, bronze bushings, grease fittings, factory painted safety yellow.
 6. Manufacturer: LK Goodkin Co., or equivalent.
- B. Manual Hoist:
 1. Provide and install low headroom manual hoist suitable for mounting on jib crane.
 2. Capacity: 1-ton.
 3. Lift: 10ft.
 4. Max.pull load: 72 lbs.

PART 3 EXECUTION

3.1 VERIFICATION, TESTING, COMMISSIONING, AND TRAINING:

- A. Pressure testing of pipe, valves, fittings, and pump connections: System shall be demonstrated to hold 50 psi for 2 hours between the pump suction valves and the final discharge valve.
- B. Provide services of experienced start-up and commissioning agent to verify installation is according to control system manufacturers intent, test control system components, and start-up equipment.
- C. Provide half-day training for Owner personnel on operation and maintenance of control system.
 1. Demonstrate operation and maintenance of each component.

33 3216 SANITARY LIFT STATION EQUIPMENT

2. Use Operation and Maintenance Manual as basis of training.

3.2 SUPPORTS

- A. Hangers used to support piping 2 inches and larger shall be fabricated to permit adequate adjustment after erection while still supporting the load.
- B. Pipe guides and anchors shall be installed to keep pipes in accurate alignment, to direct the expansion movement, and to prevent buckling, swaying, and undue strain.
- C. Installation of pipe hangers, inserts and supports shall conform to MSS SP-58 except as modified herein.
 1. Types 5, 12, and 26 shall not be used.
 2. Horizontal pipe supports shall be spaced as specified in MSS SP-58 and a support shall be installed not over 1 foot from the pipe fitting joint at each change in direction of the piping. Pipe supports shall be spaced not over 5 feet apart at valves. Horizontal pipe runs shall include allowances for expansion and contraction.
 3. Support locations and types shown in plans are conceptual, alternative arrangements shall be approved by Engineer. Open area between pumps and for operation of the jib crane shall not be obstructed by pipe supports.
- D. Structural Attachments
 1. Attachment to building structure concrete and masonry shall be by cast-in concrete inserts, built-in anchors, or masonry anchor devices. Inserts and anchors shall be applied with a safety factor not less than 5. Supports shall not be attached to metal decking. Supports shall not be attached to the underside of concrete filled floor or concrete roof decks unless approved by Engineer. Masonry anchors for overhead applications shall be constructed of ferrous materials only.

3.3 EQUIPMENT GROUTING

- A. Install pump and base elbows on shims and grout pads according to manufacturers' recommendations. Grout shall be non-shrink grout meeting ASTM C1107.

END OF SECTION

40 6196 CONTROL SYSTEM DESCRIPTION

PART 1 GENERAL

1.1 OVERVIEW

Section includes modifications to control system for a duplex sewage lift station. The design intent is to reuse existing PLC control panel, level sensor, pump switches, hour meters, radio telemetry.

Contractor shall integrate new flow meter (specified herein), new variable frequency drives (specified in Section 26 2923), HVAC airflow sensor, new pump failure miniCAS relays, and make modifications to City of Muscatine's SCADA control screens at the Water and Resource Recovery Facility at 1202 Musser Street.

City of Muscatine SCADA integration contractor is Primex of Plymouth, MN. Contractor shall contract with Primex to complete this section of the specification. Primex contact is Shaun Girard, Shaun.Girard@sjeinc.com, (763) 567-1027.

1.2 SEQUENCE OF OPERATION:

A. Pump Controls:

1. Pumps shall run with lead/lag alternation based on level signals from level transducer.
2. VFDs are for motor starting and not for maintaining a set level or flowrate. After ramp up, VFD shall run pumps at full speed.
3. Lead pump shall turn on when Lead On level is reached.
4. If wet well level continues to rise and reaches Lag On level, lag pump shall run.
5. If wet well level continues to rise and reaches High Water level, alarm shall be initiated.
6. When wet well level decreases and reaches Pump Off level, pumps shall turn off and lead/lag positions shall be alternated.
7. If wet well level continues to rise and reaches the high alarm float switch, pump control shall switch to the float bypass system.
8. Pump shut-down if miniCAS relay indicates pump alarm.

B. Flow meter:

1. Provide instantaneous flow rate measurement and totalized flow volume for display at flow transmitter and relayed to SCADA.

C. Air flow sensor:

1. Dry contact alarm from the HVAC system that will be energized for an alarm condition when there is no air flow sensed in the system. This is an NFPA requirement. The airflow sensor is specified on HVAC drawing.

D. SCADA modifications:

1. Make modifications to SCADA system to allow remote monitoring and display for VFD monitoring, pump failure alarms, flow meter, airflow sensor alarm. Remote control of lift station is not required.

1.3 SUBMITTALS:

- A. Provide submittal including control system component data sheets and panel layout and wiring drawings.
- B. Provide Operation and Maintenance Manual that includes:
 1. Minimum 2 hard copies and 1 PDF electronic copy.

40 6196 CONTROL SYSTEM DESCRIPTION

2. Hard copies: 8.5x11, 3-ring binder.
3. Cover identifying equipment supplier, contact information, and project title.
4. Table of contents.
5. Integrated operating instructions for complete system specified herein.
6. Complete set of component operating and maintenance manuals, organized with tabs.
7. Panel layout and wiring diagrams.

1.4 ITEMS SPECIFIED ELSEWHERE:

- A. Submersible sewage pumps
- B. Variable frequency drives
- C. Conduits and wiring

PART 2 PRODUCTS

2.1 COMPONENTS:

- A. Flow meter:
 1. Flanged mag meter with polyurethane liner.
 2. Accessories: Grounding rings; power supply.
 3. Flow meter located in dry well rated for Class 1, Div. 1, IP-68 rated and potted by manufacturer.
 4. Remote transmitter located at normal height above main floor level.
 5. Outputs to SCADA system.
 6. Provide Unistrut support for conduit in dry well to span from flow meter to wall.
 7. Rosemount 8705 flow sensor with Rosemount 8715 remote transmitter.

PART 3 EXECUTION

3.1 VERIFICATION, TESTING, COMMISSIONING, AND TRAINING:

- A. Provide services of experienced start-up and commissioning agent to verify installation is according to control system manufacturers intent, test control system components, and start-up equipment.
- B. Provide half-day training for Owner personnel on operation and maintenance of control system.
 1. Demonstrate operation and maintenance of each component.
 2. Use Operation and Maintenance Manual as basis of training.

END OF SECTION



City of Muscatine

ITEM NUMBER 2024-0513

AGENDA ITEM SUMMARY

DATE: 11/21/2024

STAFF

Kevin Coon, City Engineer
Brian Stineman, Public Works Director

SUBJECT

Request to Enter Into an Engineering Services Agreement with Veenstra & Kimm, Inc in the Amount of \$19,000.00, for Additional Analysis Of the Park Avenue West Bridge Replacement.

EXECUTIVE SUMMARY

Request to enter into a professional services agreement with Veenstra & Kimm, Inc in the amount of \$19,000.00 for additional analysis of the Park Avenue West Bridge. This is an alternative analysis of the bridge and how to replace it due to the bridge being recommended for an individual listing on the Register of Historic Places.

STAFF RECOMMENDATION

To approve the request

BACKGROUND/DISCUSSION

In 2023, Veenstra & Kimm was chosen to design a new bridge located across Mad Creek on Park Avenue West. The funding for which is to come out of the Bridge Replacement Off-System state funding (BROS). In order to meet the requirements of our funding source, an analysis of the existing structure was needed. This analysis showed that the existing concrete arch bridge qualifies to be placed on the Register of Historic Places. The additional analysis that is being requested will allow staff and the design consultant to explore the actions needed to get the bridge replaced while meeting the requirements put forth by the State Historic Preservation Office. This analysis will look at items such as how the bridge can be memorialized, if it's possible to build around the existing structure, if the bridge can be moved etc.

CITY FINANCIAL IMPACT

Design Funds are available through the Road Use Tax.

ATTACHMENTS

1. Muscatine Park Avenue West Bridge Replacement - Alternatives Analysis

**AGREEMENT FOR PROFESSIONAL SERVICES
PARK AVENUE WEST OVER MAD CREEK - BRIDGE REPLACEMENT – ALTERNATIVES ANALYSIS
MUSCATINE, IOWA**

THIS AGREEMENT, made and entered into this _____ day of _____, 2024, by and between the **CITY OF MUSCATINE, IOWA**, a municipal corporation organized and existing pursuant to the laws of the State of Iowa, hereinafter referred to as the **City**, or **Owner**, and **VEENSTRA & KIMM, INC.**, a corporation organized and existing under the laws of the State of Iowa, hereinafter referred to as the **Engineers**, with principal offices located in West Des Moines, Iowa,

WITNESSETH; THAT WHEREAS, the City of Muscatine owns the Park Avenue West Bridge over Mad Creek, and is now contemplating the preparation of an alternatives analysis report hereinafter referred to as the "Project," and

WHEREAS, the alternatives analysis be prepared as part of the 4(f) requirements to be reviewed by FHWA, and

WHEREAS, the Owner desires to retain the Engineers to provide professional services for the Project, and

NOW, THEREFORE, it is hereby agreed by and between the parties hereto that the Owner does hereby retain the said Engineers to act for and represent it in all engineering matters involved in the Project. Such contract of employment to be subject to the following terms, conditions and stipulations, to wit:

SCOPE OF THE PROJECT, the scope of the Project shall consist of the following:

- 1. ALTERNATIVES ANALYSIS.** The Engineer's scope of work for alternatives analysis shall include a report containing the following sections (if applicable):
 - A. Description of Undertaking
 - B. Identification of Historic Bridge
 1. Description of Historic Bridge and Context
 2. Existing Condition
 - C. Alternative Development
 1. Alternative 1 – No Action
 2. Alternative 2 – Rehabilitation of the Existing Structure
 3. Alternative 3 – Relocation of the Existing Structure to an Alternative Site
 4. Alternative 4 – Road Realignment
 5. Alternative 5 – Replace the Bridge in the Current Location
 - D. Alternative Analysis Summary
 1. Alternative 1 – No Action

- 2. Alternative 2 – Rehabilitation of the Existing Structure
- 3. Alternative 4 – Road Realignment
- 4. Alternative 5 – Replace the Bridge in the Current Location (Preferred Alternative)
- 5. Alternative to Carry Forward
- E. Finding of Adverse Effect
- F. Resolution of Adverse Effect
- Appendix A. Ground Level Photographs
- Appendix B. National Register Form – Park Avenue West Bridge
- Appendix C. Historic American Engineering Record – Park Avenue West Bridge
- Appendix D. Original Park Avenue West Bridge Plans (if available)
- Appendix E. 2023 Bridge Inspection Report

7. **COMPENSATION.**

- a. The total fee for the scope of services set forth in **“1. ALTERNATIVES ANALYSIS,”** shall be based on the standard hourly fees for the time the Engineers' personnel are actually engaged in the performance of the work, plus direct out-of-pocket costs incurred by personnel who are actually engaged in the work. The Engineer's fee for **“1. ALTERNATIVES ANALYSIS,”** shall not exceed the sum of One Hundred Twenty-one Thousand Eight Hundred Dollars (\$19,000.00) without approval of the Owner. Individual estimated costs included in the not-to-exceed fee are as follows:

Estimated fee for engineering design services enumerated for the Project as set forth in **“1. ALTERNATIVES ANALYSIS”** of this Agreement:

Feasibility Analysis Report	\$19,000.00
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- 8. **PAYMENT.** The fee for work set out in **“7. COMPENSATION”** shall be billed and payable monthly during the course of the rendering of the services.
- 9. **LEGAL SERVICES.** The Owner shall provide the services of an Attorney in matters pertaining to this Project. The Engineers shall cooperate with the Owner' attorney and shall comply with her requirements as to form of contract documents and procedures relative to them.
- 10. **SERVICES NOT INCLUDED.** Services not included under this Agreement are as follows:
 - a. Additional tasks required to obtain approvals from SHPO, FHWA, and/or other stakeholders beyond preparation of this report. If these services are required the services will be completed by a subconsultant working for the Engineers and cost of such services shall be negotiated by supplemental agreement.
 - b. Other services performed or furnished by Engineer not otherwise provided for in this Agreement.

11. SUSPENSION.

- a. The Owner agrees that the Engineer is not responsible for damages arising directly or indirectly from any delays for causes beyond the Engineer's control. For purposes of this Agreement, such causes include, but are not limited to, strikes or other labor disputes; severe weather disruptions or other natural disasters or acts of God; fires, riots, war or other emergencies; failure of any government agency to act in a timely manner; failure of performance by the Owner; or discovery of any hazardous substances or differing site conditions. In addition, if the delays resulting from any such causes increase the cost or time required by the Engineer to perform its services in an orderly and efficient manner, the Engineer shall be entitled to a reasonable adjustment in schedule and compensation.
- b. If Engineer's services are extended by Contractor's actions or inactions for more than the scheduled final construction completion, as defined in the Contract Documents, through no fault of the Engineer, the Engineer will be entitled to equitable and agreeable adjustment of rates and amounts of compensation provided in this Agreement.

12. TERMINATION.

- a. In the event of termination of this Agreement by either party, the Owner shall, within fifteen (15) calendar days of termination, pay the Engineer for all services rendered and all reimbursable costs incurred by the Engineer up to the date of termination, in accordance with the payment provisions of this Agreement.
- b. The Owner may terminate this Agreement for the Owner's convenience and without cause upon giving the Engineer not less than seven (7) calendar days written notice.
- c. Either party may terminate this Agreement for cause upon giving the other party not less than seven (7) calendar days written notice for any of the following reasons.
 - 1. Substantial failure by the other party to perform in accordance with the terms of this Agreement and through no fault of the terminating party.
 - 2. Assignment of this Agreement or transfer of the Project by either party to any other entity without the prior written consent of the other party.
 - 3. Suspension of the Project or the Engineer's services by the Owner for more than ninety (90) calendar days, consecutive or in the aggregate.
 - 4. Material changes in the conditions under which this Agreement was entered into, the Scope of Services or the nature of the Project, and the failure of the parties to reach agreement on the compensation and schedule adjustments necessitated by such changes.
- d. In the event of any termination that is not the fault of the Engineer, the Owner shall

pay the Engineer, in addition to payment for services rendered and reimbursable costs incurred, for all expenses reasonably incurred by the Engineer in connection with the orderly termination of this Agreement, including but not limited to demobilization, reassignment of personnel, associated overhead costs and all other expenses directly resulting from the termination.

13. DISPUTE RESOLUTION.

- a. Owner and Engineer agree to negotiate all disputes between them in good faith for a period of thirty (30) days from the date of notice prior to other provisions of this Agreement, or under law.
- b. Owner and Engineer agree to use mediation for dispute resolution if the previously described negotiation process is not successful.
- c. In the event of any litigation arising from or related to this Agreement or the services provided under this Agreement, each party shall pay their own legal expenses, including staff time, court costs, attorney's fees and all other related expenses in such litigation.

14. BETTERMENT. When a Change Order is necessitated by an act or omission of Engineer or an error in the design of the Project, responsibility for such act, omission, or error shall be determined in good faith by Owner and Engineer. To the extent that such act, omission, or error arose out of the lack of quality professional services provided by Engineer or of the lack of professional quality deliverables prepared by Engineer, Owner shall be entitled to an amount equal to the difference between the actual cost of the change work and the estimated cost of the change work (less added value to the Owner) if there had been no such act, omission, or error. Engineer shall pay such sum to Owner.

15. CHANGED CONDITIONS. If, during the term of this Agreement, circumstances or conditions that were not originally contemplated by or known to the Engineer are revealed, to the extent that they affect the scope of services, compensation, schedule, allocation of risks or other material terms of this Agreement, the Engineer may call for renegotiation of appropriate portions of this Agreement. The Engineer shall notify the Owner of the changed conditions necessitating renegotiation, and the Engineer and the Owner shall promptly and in good faith enter into renegotiation of this Agreement to address the changed conditions. If terms cannot be agreed to, the parties agree that either party has the absolute right to terminate this Agreement, in accordance with the termination provision hereof.

16. CHANGES. If, after the plans and specifications are completed and approved by the Owner, the Engineers are required to change the plans and specifications because of changes made by the Owner, the Engineers shall receive additional compensation for

making such changes. The compensation for such changes shall be based upon the standard hourly fees plus expenses for personnel of the Engineers actually engaged in making the changes.

- 17. EXTRA WORK.** Fees stated in this Agreement cover the specific services outlined in this Agreement for the Project. If the Owner requires additional services of the Engineers in connection with the Project, or changes or modifications in the Project, the Engineers shall receive additional compensation for said services. Such additional compensation shall be at the standard hourly fees for personnel of the Engineers, plus expenses for personnel engaged in the authorized extra work.
- 18. INDEMNIFICATION.** The Engineers shall and hereby agree to hold and save the Owner harmless from any and all claims, settlements, and judgments, to include all reasonable investigative fees, attorneys' fees, suit and court costs for personal injury, property damage, and/or death arising out of the Engineers' or any of its agents', servants', and employees' errors, omissions or negligent acts for services under this Agreement, and for all injury and/or death to any and all of the Engineers' personnel, agents, servants, and employees occurring under the Workers' Compensation Act of the State of Iowa.
- 19. INSURANCE.** The Engineers shall furnish the Owner with certificates of insurance by insurance companies licensed to do business in the State of Iowa, upon which the Owner is endorsed as an additional named insured, in the following limits. It must be clearly disclosed on the face of the certificates that the coverage is on an occurrence basis.

General Liability*	\$1,000,000/2,000,000
Automobile Liability	1,000,000
Excess Liability (Umbrella)*	8,000,000/8,000,000
Workers' Compensation, Statutory Benefits Coverage B	1,000,000
Professional Liability**,***	3,000,000/3,000,000

*Occurrence/Aggregate

**The Owner is not to be named as an additional insured

***Claims made basis

- 20. ASSISTANTS AND CONSULTANTS.** It is understood and agreed that the employment of the Engineers by the Owner for the purposes aforesaid shall be exclusive, but the Engineers shall have the right to employ such assistants and consultants as they deem proper in the performance of the work.
- 21. ASSIGNMENT.** This Agreement and each and every portion thereof shall be binding upon the successors and assigns of the parties hereto.

The undersigned do hereby covenant and state that this Agreement is executed in duplicate as though each were an original and there are no oral agreements that have not been reduced to writing in this instrument.

It is further covenanted and stated that there are no other considerations or monies contingent upon or resulting from the execution of this Agreement, nor have any of the above been implied by or for any party to this Agreement.

IN WITNESS WHEREOF, the parties have hereunto subscribed their names on the date first written above.

CITY OF MUSCATINE, IOWA

ATTEST:

By _____

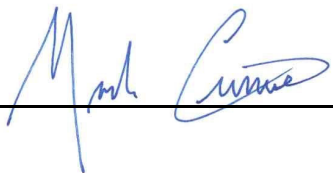
By _____

VEENSTRA & KIMM, INC.

ATTEST:

By _____

By _____

A handwritten signature in blue ink, appearing to be "Mark Curran", written over a horizontal line.A handwritten signature in blue ink, appearing to be "Patti Jass-Roth", written over a horizontal line.



City of Muscatine

ITEM NUMBER 2024-0514

AGENDA ITEM SUMMARY

DATE: 11/21/2024

STAFF

Jon Koch, Water Pollution Control Plant Director

SUBJECT

Request to Approve an Engineering Contract with Stanley Consultants in the Amount of \$849,700.00, for the Water & Resource Recovery Facility Electrical Assets Project.

EXECUTIVE SUMMARY

Request to Approve an Engineering Contract with Stanley Consultants for the Water & Resource Recovery Facility Electrical Assets Project in the Amount of \$849,700.00.

STAFF RECOMMENDATION

Staff recommends approval of the contract.

BACKGROUND/DISCUSSION

A Request for Qualifications for engineering was issued on July 15, 2024, for the WRRF Electrical Assets Project. Three proposals were received with the winning proposal coming from Stanley Consultants. A panel consisting of the Interim City Administrator, Public Works Director, WRRF Director and WRRF Maintenance Manager used a scoring matrix and in person interviews to determine the winning proposal based on experience, resources, understanding of scope of work, CMAR experience and quality of proposal. Stanley Consultants was the consensus winner by all evaluators. Since this is a CMAR project, cost can not be included in the decision making process. It is required to be determined by qualifications and the quality of the proposal. The proposed fee is in line with normal engineering costs compared to the cost of the project. It also includes a large amount of cost from an electrical contractor to do pre-construction work to keep down costs during construction. These fees are a "not to exceed" cost, so it is anticipated to be less than this amount.

The Electrical Assets Project was listed as a high priority project in the Capital Improvement Plan in July 2022. During the Rate Study in August 2022, an SRF funded project was identified for \$5,000,000.00 while being able to maintain the annual 3% rate increase that has been ongoing since 2003. The Electrical Assets Project is estimated to cost between \$5,000,000.00 and \$5,500,000.00.

CITY FINANCIAL IMPACT

A State Revolving Fund loan will be used to fund this project. The latest rate study accounted for a project of this cost while maintaining current rate structures.

ATTACHMENTS

1. Stanley PSA-MuscatineWRRF_Electrical_Assets.241114



PROFESSIONAL SERVICES AGREEMENT

THIS IS AN AGREEMENT made as of November 7, 2024, between CITY OF MUSCATINE, IOWA (CLIENT) and STANLEY CONSULTANTS, INC. (CONSULTANT). CLIENT intends to have various electrical and mechanical improvements to the City's Water and Resource Recovery Facility (WRRF) and various Lift Stations to improve reliability and safety (hereinafter called "project").

CLIENT and CONSULTANT agree:

1. **Scope of Services.** CONSULTANT shall perform professional services as stated in Exhibit 1.
2. **Compensation.** CLIENT shall compensate CONSULTANT for CONSULTANT's services as stated in Exhibit 2.
3. **Terms and Conditions.** CONSULTANT shall provide professional services in accordance with the terms and conditions stated in Exhibit 3. If client issues a purchase order or other document to initiate the commencement of services hereunder, it is agreed that any terms and conditions appearing thereon shall have no application and only the provisions of this Agreement shall automatically apply.
4. **Special Provisions.** Special provisions to this Agreement, if any, are stated in Exhibit 4.
5. CLIENT has provided or shall provide for payment from one or more lawful sources of all sums to be paid to CONSULTANT.
6. Following exhibits are attached to and made part of this Agreement:

Exhibit 1 - Scope of Services
Exhibit 2 - Compensation
Exhibit 3 - Standard Terms and Conditions
Exhibit 4 - Special Provisions

IN WITNESS WHEREOF, the parties below have executed this Agreement as of the day and year first above written.

STANLEY CONSULTANTS, INC.

CITY OF MUSCATINE, IOWA

By: _____
Kate Despinoy, Vice President of Water

By: _____
Mayor Brad Bark

Attest: _____
Jay Brady

Attest: _____

Address for giving notices:

225 IOWA AVENUE
MUSCATINE, IOWA 52761

Address for giving notices:

215 SYCAMORE STREET
MUSCATINE, IOWA 52761

If CLIENT is a public body, attach evidence of authority to sign and resolution or other document authorizing execution of AGREEMENT.



EXHIBIT 1 SCOPE OF SERVICES

Background

The City is undertaking this major renovation project to update WRRF electrical systems, replace sludge transfer pumps, and provide safety related improvements at Papoose and Isett lift stations building on the WRRF Capital Improvement Plan developed in collaboration with Stanley Consultants.

The project will also develop digital utility concepts for future implementation allowing appropriate aspects of digital utility technologies such as power metering, and other sensors to be incorporated into the design facilitating future work.

This Clean Water State Revolving Fund (SRF) financed project will be delivered by use of Construction Management at Risk (CMAR). Use of the CMAR model will allow City to obtain preferred, quality contractor familiar with the WRRF for collaborative design development resulting in superior risk and cost control. The resulting project will update the overall safety and reliability of the improved systems extending the viability of the WRRF and lift stations.

Basic Services

I. Project Management

1. Project Management – Administer the contract, manage the professional services team, coordinate and manage subconsultants, invoicing, communications with City including biweekly email electronic updates and monthly status calls with electronic meeting notes, monitor scope, budget, schedule.
2. Communications – Manage and facilitate communications including information requests, written/electronic correspondence, technical memoranda, reports, email, virtual telephone calls and meetings, on-site meetings, workshops, updates, and status calls. Prepare and distribute electronic meeting notes of the various project meeting.
3. Quality Control (QC) – Develop project specific quality control plan using Consultant's standard plan and templates Conduct quality control reviews by qualified reviewers at appropriate stages of the work and of the major deliverables prior to submission.
4. Deliverable submittals and reviews – submittals will be electronic.

II. Permitting and State Revolving Fund (SRF) Assistance

1. Initiate work request with Iowa Department of Natural Resources (IDNR) to initiate project.
2. Coordinate and participate in project initiation conference (PIC) with the IDNR and the Iowa Finance Authority (IFA).
3. Prepare an initial Intended Use Plan (IUP) application and submit before December 1, 2024 as first step to getting the project placed on the IUP for SRF construction loan. The engineering



EXHIBIT 1 SCOPE OF SERVICES

report outlined in the concept design phase will be submitted in conjunction with the IUP application.

4. Conduct up to two follow up meetings with IDNR and IFA to coordinate CMAR and major equipment procurement.
5. Support IDNR for environmental clearances by providing project information and data needed by IDNR for environmental clearance documentation.
6. Prepare and submit IDNR construction permit forms and checklists for construction permit with engineering report and 65% and 100% designs.
7. Provide needed documentation with CMAR guaranteed maximum price (GMP) to IDNR demonstrating conformance to SRF requirements.
8. Participate in review teleconference with IDNR at 65% design review stage. Incorporate relevant comments into subsequent design documents. Prepare written response to IDNR comments.

III. CMAR Contractor Selection

1. Prepare a draft CMAR request for qualifications (RFQ) for Client review. CMAR procurement documents will contain the SRF requirements and the Basis of Design Engineering Report.
2. Meet with Client to discuss the draft and then finalize the CMAR RFQ for Client use in soliciting Statements of Qualifications from qualified contractors.
3. Assist Client with the CMAR selection process and offer guidance and input as desired by Client. Final shortlisting of qualified CMAR contractors will be by the Client.
4. Prepare a draft CMAR request for proposals (RFP) for Client review.
5. Meet with Client to discuss the draft and then finalize the CMAR RFP for Client use in soliciting proposals from the shortlisted CMAR contractors.
6. Assist Client with the CMAR selection process and offer guidance and input as desired by Client. Final selection of the CMAR contractor will be by the Client.
7. Review CMAR contractor contract scope of services and provide suggestions for the scope. Review initial GMP pricing that may be requested of the CMAR contractor and provide input to Client.

IV. Concept Development

1. Kickoff
 - a. Schedule and conduct project kickoff and site tour of the facilities to discuss project logistics, confirm Consultant scope and schedule, clarify communications, clarify scope



EXHIBIT 1 SCOPE OF SERVICES

- of electrical subconsultant - Davenport Electric (DECCO) work, discuss power condition monitoring and panel electrical tracing logistics.
- b. Prepare and distribute electronic meeting notes of the kickoff meeting and site visit.
 - c. Prepare and submit initial information and data request to City for needed information and data including such items as prior reports, facility and design drawings, equipment shop drawings, pump operating data, sludge volumes.
2. Temporarily install up to three (3) power condition monitors from early November 2024 to early March 2025 to obtain additional data on power condition coming to the WRRF. Meters will be placed on switchboard #3, Switchboard 4/5, and the ATS.
 3. Stanley Consultants will provide pdf copies of the existing WRRF electrical one-line diagrams to DECCO. DECCO will complete field investigation to evaluate and redline markup the pdf one-line drawings of Switchboard 1,2,3,4,5 ; MCC 1A, 1B, 2, 4, 5, 6, 7, 9, 11A, 11B, 12A, 12B, 13.
 4. Trace 120V circuits from panels P1, 1L, 1HP, 1A1, 2AP and 3P in Administration Building, Panels 2P, 5L and 6L in the Dissolved Air Flotation (DAF) Building, Digester Control Building (DCB) and label circuit devices using DECCO.
 5. Analyze WRRF electrical system using ETap (or comparable) electrical modeling software to assist with overall electrical component sizing and electrical flow determination.
 6. Conduct as digital/smart utility planning workshop with City and electrical subcontractor to review Smart Utility vision and determine components that should be installed in this project to facilitate future digital water technologies to help optimize energy use and process control.
 7. Determine new switchboard and MCC/panelboard sizes/criteria.
 8. Once electrical equipment is procured, the actual manufacturer breaker model will be entered into the ETap model (or comparable) and Consultant will perform a coordination study for the entire WRRF distribution system from the utility, switchboards, MCC's and the main breakers of panelboards. The Etap report will indicate breaker settings that the CMAR contractor will set the breakers to during installation.
 9. Once electrical equipment is procured, the actual manufacturer breaker model will be entered into the ETap model (or comparable) and Consultant will perform an arc flash study which provides the incident energy levels for each piece of electrical equipment. Consultant, DECCO, WRRF staff have a meeting to discuss the incident energy levels and develop the proper PPE that will be noted on the Arc Flash labels. Consultant will prepare a Arc Flash report and the CMAR contractor will print arc flash labels and place on each piece of electrical equipment identified on the Arc Flash report.
 10. Determine design pump flow rates and pressures for HSW metering and circulation pumps, digested sludge transfer pumps, sludge transfer pumps to the sludge lagoons, and plant drain pumps.
 11. Evaluate pump types (lobe/hose) for each sludge/HSW service and outline advantages/disadvantages of each pump type for City decision.



EXHIBIT 1 SCOPE OF SERVICES

12. Confirm ventilation rates and criteria for replacement HVAC equipment.

13. Develop design concepts for WRRF and lift stations as follows:

a. WRRF

- Process Equipment Replacements
 - Grit headbox gate actuators
 - Grit grit augers (2)
 - Roughing Filter pump check (4) valves
 - DCB digested sludge transfer pumps (3)
 - DCB HSW Metering Pumps (2)
 - Biosolids load out pumps (2)
 - RAS Intake Valves (3) in DAF Bldg
 - Plant drain system pumps, check valves, and isolation valves (3 of each) located in DAF
- Mechanical Equipment Replacements
 - DAF Building MAUs (2) in control side of building
- Electrical Replacements
 - Replace Admin/Control Bldg dual feed switchboard #3 (new location)
 - Replace Admin/Control Bldg dual feed switchboard #1/2
 - Replace Admin/Control Bldg MCC 9 switchgear and breakers (same location)
 - Replace Admin/Control Bldg MCC 9 (same location)
 - Replace Admin/Control Bldg effluent pump room 480/208-120v transformer
 - Replace Roughing Filter Pump Building MCC 11A/B
 - Replace DCB MCC 12A and MCC 12B bucket/contactors per RFQ equipment schedule. MCC will be evaluated for complete replacement.
 - Replace DAF Bldg MCC 6
 - Replace DAF Bldg dual feed switchboard 4/5 (same location)
 - Replace Grit Bldg MCC13 MCC bucket/contactors per RFQ equipment schedule. MCC will be evaluated for complete replacement.
 - Replace Admin/Control Bldg 120V panels 1P, 1L, 1HP, 1AL, 2AP, 3P.
 - Replace DCB 120V panel 12L.
 - Replace DAF Bldg 120 V panels 5L and 6L.
 - Replace Storage Lagoon pump house 120V electrical panel.
 - Overhaul roughing filter pump motors (4)
 - Demolish DAF flotation tank room unused lights, heaters and wiring.
 - DAF chemical room – new receptacles and associated wiring, remove MAU wiring
 - DAF storage room – disconnect wiring to heater, exhaust fan and lights; replace j-boxes and terminal strips, re-terminate wires in j-boxes feeding RAS. Reuse existing wiring.



EXHIBIT 1 SCOPE OF SERVICES

- Control System Replacements – Assist City in determining the correct equipment for the following:
 - Replace Grit PLC
 - Replace Blower Building PLC
 - Replace DAF Building PLC
 - Replace Grit network switch
 - Replace Blower Building network switch
 - Replace DAF network switch
 - Replace Admin Building network switch
 - Replace DCB Building network switch
- Miscellaneous Replacements
 - Remove tank in RAS basement
 - Remove storage tank in west end of DAF
 - Remove half wall from west end of DAF and install utility door

b. Isett Lift Station

- Consultant/DECCO verify electrical one-line and document manufacture breaker and cable lengths.
- Complete load flow, short circuit, coordination study and arch flash study.
- Safety platforms to access pump shaft joints and valves in the dry well.
- Replace all three pump motors with new high efficiency motors
- Add VFD's for all 3 pump motors.
- Coordinate pump shaft analysis with pump supplier to confirm that there will be no resonate issues by using the VFDs.
- Replace the exhaust fans, MAUs, heaters, and ducting.
- Replace Pump #3, check (1) and isolation (1) valves. Asbestos abatement will be performed by City outside of the contract.
- Add new generator connection and manual transfer switch for emergency power.

c. Lift Station Replacements

- **Sampson Lift Station**
 - Stanley/DECCO verify electrical one-line and label wiring and conduit.
 - Develop a new electrical distribution system, Replace the MCC.
 - Complete load flow, short circuit, coordination study and arch flash study
- **Bond Lift Station**
 - MCC to be replaced with electric panelboard and wall mounted VFD's or softstarts
 - Add manual transfer switch for connection of a portable generator
 - Consultant/DECCO verify electrical existing one-line and label wiring



EXHIBIT 1 SCOPE OF SERVICES

- Complete load flow, short circuit, coordination and arch flash study.
- Pump motors

- **Schley Lift Station**

- MCC to be replaced with electric panelboard and wall mounted VFD's or softstarts
- Add manual transfer switch for connection of a portable generator
- Consultant/DECCO verify electrical existing one-line and label wiring
- Complete load flow, short circuit, coordination and arch flash study.
- Pump motors

- **Sunset Lift Station**

- MCC to be replaced with electric panelboard and wall mounted VFD's or softstarts
- Add manual transfer switch for connection of a portable generator
- Consultant/DECCO verify electrical existing one-line and label wiring
- Complete load flow, short circuit, coordination and arch flash study.
- Pump motors

- **Tipton Lift Station**

- MCC to be replaced with electric panelboard and wall mounted VFD's or softstarts
- Add manual transfer switch for connection of a portable generator
- Consultant/DECCO verify electrical existing one-line and label wiring
- Complete load flow, short circuit, coordination and arch flash study.

14. Prepare Basis of Design Engineering Report for submittal to Iowa Department of Natural Resources. Due to time constraints, the report figures may be sketches.

15. Meet with Client to step through the report prior to submission to the IDNR.

V. **Preliminary Design**

1. Stanley will host a concept development workshop with Client and CMAR contractor to collaboratively develop concepts, assess installation challenges and needs, and develop approach to maintaining operations while the work progresses.
2. Prepare preliminary design documents consisting of draft drawings and major equipment specifications for Client and CMAR Contractor review. SRF front ends will be incorporated into the documents.
3. Prepare updated Engineer's construction cost estimate for Client information and budget management.



EXHIBIT 1 SCOPE OF SERVICES

4. Review CMAR Contractor independent cost estimate and compare to Engineer's construction cost estimate.
5. Present the preliminary design to Client and CMAR staff at start of review period.
6. Attend preliminary design review meeting with Client staff and CMAR contractor to discuss the preliminary design review.
7. Prepare supporting IDNR construction permit application schedules and provide along with the preliminary design documents for permitting review.

VI. Equipment Procurement Assistance

1. Prepare technical specifications for low voltage switchboard and motor control centers for Client and CMAR contractor review.
2. Prepare equipment procurement documents for Client's use in request for proposal process to purchase equipment.
3. Review equipment proposals and make recommendations to Client for award of equipment purchase.
4. Review shop drawings submitted for procured equipment.
5. Assign Owner-purchased equipment contracts to CMAR contractor after award of GMP.

VII. Final Design

1. Prepare Pre-final Design (95% Unsealed) documents consisting of drawings, technical specifications and bidding front ends for Client and CMAR contractor review.
2. Prepare updated cost estimate for Client information.
3. Meet with Client and CMAR contractor to review prefinal documents.
4. Prepare final, sealed design documents for permitting and bidding/CMAR contractor final GMP. Provide electronic bid documents for Client use in their IonWave purchasing portal.
5. Issue final engineer's opinion of construction cost.
6. Review CMAR contractor's final GMP and provide feedback to Client on the GMP.
7. Finalize IDNR construction permit application and submit sealed design documents and forms to the IDNR for construction permitting.
8. Review and provide input to Client and CMAR contractor subcontractor procurement packages using two step (RFQ/RFP) process outlined in Iowa Administrative Code.



EXHIBIT 1 SCOPE OF SERVICES

9. Review and provide input to Client and CMAR contractor on subconsultant procurement results.

VIII. Construction Phase and Post-Construction Services

1. Upon receipt of Notice of Award issued by the Client, prepare and issue conformed Construction Documents to the Client and CMAR Contractor in electronic pdf format. Provide two copies of full-size drawings and technical specifications to the Client.
2. Issue Notice to Proceed to CMAR Contractor.
3. Administer Construction contract including administrative paperwork and pay application reviews and recommendations, contractor communications, and change management.
4. Upon Notice to Proceed, organize and conduct a pre-construction meeting; prepare and distribute electronic meeting notes.
5. Attend regular (approximately monthly) progress meetings in-person, prepare and distribute electronic meeting notes. Estimated number of progress meetings is 20.
 - a. Site visits will generally be performed in conjunction with progress meetings to:
 - i. Become generally familiar with and to keep the Client informed about the progress and quality of the portion of the Work completed.
 - ii. Endeavor to guard the Client against defects and deficiencies in the Work.
 - iii. Determine in general if the Work is being performed in a manner indicating that the Work, when fully completed will be in accordance with the Contract Documents.
 - iv. Prepare and distribute site visit field notes with photographic documentation.
 - v. Review and discuss issues that may arise requiring technical input.
 - b. Keep the Client reasonably informed about the progress and quality of the portion of the Work completed, and promptly report to the Client:
 - i. Known deviations from the contract documents.
 - ii. Known deviations from the most recent construction schedule submitted by the Contractor.
 - iii. Defects and deficiencies observed in the Work.
6. Review and maintain record of Contractor's electronic Shop Drawings, and Product Data submittals to check for conformity with the Contract Documents. Submittal review will be per construction contract documents.
7. Provide Contract Document interpretation and clarifications, for the duration of the Project, including:



EXHIBIT 1 SCOPE OF SERVICES

- a. Minor informal requests via progress meetings or email.
 - b. Formal written Requests for Information (RFIs). Estimated at twenty-four (24).
 - c. Prepare Instructions to Contractors (ITCs) for clarification of design. Estimated at ten (10).
 - d. Maintain a Log of RFIs and ITCs.
8. Assist with changes to the Contract Documents including:
 - a. Review deviations from design documents due to field conditions. Estimated at eight (8).
 - b. Review Change Authorization Requests (CAR) proposals for conformance and price. Estimated at two (2).
 - c. Prepare up to two (2) Change Orders for the Client's approval and execution as required.
9. Conduct post construction review of the work per engineering disciplines, environmental/civil, mechanical, electrical, controls, and issue punch list of items to be completed.
10. Conduct final review of the work per engineering discipline up to two (2) disciplines after the contractor has notified Consultant, they have completed the punch list items.
11. Review the Operation and Maintenance manuals from the contractor and verify warranty information is included.
12. When the Project is ready for acceptance by the City, prepare a letter certifying that the Project has been completed in accordance with the Contract Documents.
13. Provide an equivalent of up to 24 days (192 hours) onsite for construction observation and resolving field issues outside of progress meeting site visits.
14. When the Project is completed, the Consultant shall prepare and provide a full set of as-constructed Record Drawings based on changes to the Contract Documents and Contractor mark-ups, (estimated at 12 graphics hours) as follows:
15. Construction red line wiring map with assistance of CMAR electrical contractor including identification, labeling and drawings of all power distribution in the entire facility.
16. Update panel schedules to reflect as installed.
17. Upon completion of construction, assemble final closeout records and assist in obtaining executed documents to conclude the work. The electronic close out records include:
 - a. Approved substitutions.
 - b. Final product submittals.
 - c. Field note documentation.
 - d. Meeting minutes.



EXHIBIT 1 SCOPE OF SERVICES

- e. Record Drawings in pdf format files.
- f. Power distribution wiring map drawing in pdf format files.
- g. Update panel schedules in pdf format files.
- h. Operation and Maintenance Manuals.



EXHIBIT 2 COMPENSATION

Consultant shall be compensated on an hourly fee basis with expenses reimbursable not to exceed \$849,700. Hourly fees and expenses shall be in accordance with the attached rate and charges schedules that will be updated around April 1st of each year.

The approximate breakdown of the fees and charges includes:

Project Management	\$ 41,372
Permitting/SRF, CMAR & Equipment Procurement	\$ 37,100
Concept Development	\$100,200
Design	\$390,300
Construction Phase	\$114,650
Electrical Power Monitoring	\$ 23,785
Electrical Subcontractor Field Tracing/Documentation	\$142,293



1. CLIENT'S RESPONSIBILITIES

- 1.1 Name CLIENT's representative with authority to receive information and transmit instructions for CLIENT.
- 1.2 Provide CLIENT's requirements for project, including objectives and constraints, design and construction standards, bonding and insurance requirements, and contract forms.
- 1.3 Provide available information pertinent to project upon which CONSULTANT may rely.
- 1.4 Arrange for access by CONSULTANT upon public and private property, as required.
- 1.5 Examine documents presented by CONSULTANT, obtain legal and other advice as CLIENT deems appropriate, and render written decisions within reasonable time.
- 1.6 Obtain consents, approvals, licenses, and permits necessary for project.
- 1.7 Advertise for and open bids when scheduled.
- 1.8 Provide services necessary for project but not within scope of CONSULTANT's services.
- 1.9 Indemnify CONSULTANT, its employees, agents, and consultants against claims arising out of CONSULTANT's design, if there has been a deviation from the design beyond the CONSULTANT's control or failure to follow CONSULTANT's recommendation and such deviation or failure caused the claims.
- 1.10 Promptly notify CONSULTANT when CLIENT learns of contractor error or any development that affects scope or timing of CONSULTANT's services.
- 1.11 Nothing in this agreement shall create a fiduciary duty between the parties.

2. PERIOD OF SERVICE

- 2.1 CONSULTANT is not responsible for delays due to factors beyond its control.
- 2.2 If CLIENT requests changes in project, compensation for and time of performance of CONSULTANT's services shall be adjusted appropriately.

3. CONSTRUCTION COST AND COST ESTIMATES

- 3.1 **Construction Cost.** Construction cost means total cost of entire project to CLIENT, except for CONSULTANT's compensation and expenses, cost of land, rights-of-way, legal and accounting services, insurance, financing charges, and other costs which are CLIENT's responsibility as provided in this Agreement.
- 3.2 **Cost Estimates.** Since CONSULTANT has no control over cost of labor, materials, equipment, or services furnished by others, over contractors' methods of determining prices, or over competitive bidding or market conditions, its estimates of project construction cost will be made on the basis of its employees' experience and qualifications and will represent their best judgment as experienced and qualified professionals, familiar with the construction industry. CONSULTANT does not guarantee that proposals, bids, or actual construction cost will not vary from its estimates of project cost.

4. GENERAL

4.1 Termination.

- 4.1.1 Either party may terminate their obligation to provide further services upon twenty (20) days' written notice, after material default by other party through no fault of terminating party.
- 4.1.2 CLIENT may terminate CONSULTANT's obligation to provide further services upon twenty (20) days' written notice if project is abandoned. In such event, progress payments due to CONSULTANT for services rendered plus unpaid reimbursable to expenses, shall constitute total compensation due.

4.2 Reuse of Documents.



4.2.1 All tangible items prepared by CONSULTANT are instruments of service, and CONSULTANT retains all copyrights. CLIENT may retain copies for reference, but reuse on another project without CONSULTANT's written consent is prohibited. CLIENT will indemnify CONSULTANT, its employees, agents, and consultants against claims resulting from such prohibited reuse. Said items are not intended to be suitable for completion of this project by others.

4.2.2 Submittal or distribution of items in connection with project is not publication in derogation of CONSULTANT's rights.

4.2.3 **Confidentiality.** Each party acknowledges that in connection with this Agreement it may receive certain confidential or proprietary technical and business information and materials of the other party ("Confidential Information"). Each party, its agents and employees shall hold and maintain in strict confidence all Confidential Information, shall not disclose Confidential Information to any third party, and shall not use any Confidential Information except as may be necessary to perform its obligations under the agreement except as may be required by a court or governmental authority. CLIENT and CONSULTANT shall keep all information and communications related to the project confidential in the same manner each party protects its own confidential information, to the extent that it is marked "proprietary" or "confidential" or with a similar label or which by the nature of the information generally would be regarded as proprietary or confidential. This clause shall not apply to information that is previously known by either party, lawfully becomes public knowledge, or is required to be disclosed by law or a court order. CONSULTANT shall be allowed to use non-confidential information on the project, including CLIENT name, project location, and project details for marketing purposes.

4.3 Payment.

4.3.1 CONSULTANT shall submit a monthly statement for services rendered and reimbursable expenses incurred. CLIENT shall make prompt monthly payments.

4.3.2 If CLIENT fails to make payment within thirty (30) days after receipt of statement, interest at maximum legal rate or at a rate of 18%, whichever is less, shall accrue; and, in addition, CONSULTANT may, after giving seven (7) days' written notice, suspend services until it has been paid in full all amounts due it.

4.3.3 CLIENT has provided or shall provide for payment from one or more lawful sources of all sums to be paid to CONSULTANT.

4.3.4 CONSULTANT's compensation shall not be reduced on account of any amounts withheld from payments to contractors.

4.3.5 If services performed by CONSULTANT are subject to state or local sales taxes, said taxes will be reflected in the invoices and remitted according to state law. If CLIENT claims a status that would make the transaction exempt, then CLIENT shall provide appropriate proof of exempt status to CONSULTANT.

4.4 **Controlling Law.** Agreement shall be governed by the law of the State where the project is located, excluding its choice of law rules. Jurisdiction shall similarly be where the project is located.

4.5 Successors and Assigns.

4.5.1 The parties bind themselves, their successors, and legal representatives to the other party and to successors and legal representatives of such other party, in respect to all covenants and obligations of this Agreement.

4.5.2 Neither party shall assign, sublet, or transfer any interest in this Agreement without written consent of the other, provided CONSULTANT may employ such independent consultants, associates, and subcontractors as it may deem appropriate.

4.5.3 Nothing in this Agreement shall be construed to give any rights or benefits to anyone other than the parties.

4.6 **CONSULTANT's Accounting Records.** Records of CONSULTANT's personnel time, reimbursable expenses, and accounts between parties shall be kept on a generally-recognized accounting basis.

4.7 **Separate Provisions.** If any provisions of this Agreement shall be held to be invalid or unenforceable, remaining provisions shall be valid and binding.



4.8 Waiver. No waiver shall constitute a waiver of any subsequent breach.

4.9 Warranty.

4.9.1 CONSULTANT shall use reasonable care to reflect requirements of all applicable laws, rules, or regulations of which CONSULTANT has knowledge or about which CLIENT specifically advises in writing, which are in effect on date of Agreement. CONSULTANT INTENDS TO RENDER SERVICES IN ACCORDANCE WITH GENERALLY ACCEPTED PROFESSIONAL STANDARDS AT THE TIME SERVICES ARE PERFORMED, BUT NO OTHER WARRANTY IS EXTENDED, EITHER EXPRESS OR IMPLIED, IN CONNECTION WITH SUCH SERVICES. CLIENT's rights and remedies in this Agreement are exclusive.

4.9.2 CONSULTANT shall not be responsible for contractors' construction means, methods, techniques, sequences, or procedures, or for contractors' safety precautions and programs, or for contractors' failure to perform according to contract documents.

4.9.3 The CONSULTANT believes that any computer software provided under this Agreement is suitable for the intended purpose, however, it does not warrant the suitability, merchantability, or fitness for a particular purpose of this software.

4.9.4 Subject to the standard of care set forth in Paragraph 4.9.1, CONSULTANT and its Subconsultants may use or rely upon design elements, work, and information ordinarily or customarily furnished by others, including, but not limited to, CLIENT or his authorized representatives, public record, specialty contractors, manufacturers, suppliers, and publishers of technical standards.

4.10 Period of Repose. Any applicable statute of limitations or repose shall commence to run and any alleged cause of action shall be deemed to have accrued not later than completion of services to be performed by CONSULTANT.

4.11 Indemnification. To the fullest extent permitted by law, CONSULTANT shall indemnify and hold harmless CLIENT, CLIENT's officers, directors, partners, and employees from and against any and all third party claims for bodily injury and for damage to tangible property to the extent caused by the negligent acts or omissions of CONSULTANT or CONSULTANT's officers, directors, partners, employees, agents, and CONSULTANT's consultants in the performance and furnishing of CONSULTANT's services under this Agreement. Any indemnification shall be limited to the terms and amounts of coverage of the CONSULTANT's insurance policies and Section 4.12, Limitation of Liability.

To the fullest extent permitted by law, CLIENT shall indemnify and hold harmless CONSULTANT, CONSULTANT's officers, directors, partners, employees, and agents and CONSULTANT's consultants from and against any and all third party claims for bodily injury and for damage to tangible property to the extent caused by the negligent acts or omissions of CLIENT or CLIENT's officers, directors, partners, employees, agents, and CLIENT's consultants with respect to this Agreement on the Project. In addition to the indemnity provided under this section, and to the fullest extent permitted by law, CLIENT shall indemnify and hold harmless CONSULTANT and its officers, directors, partners, employees, and agents and CONSULTANT's consultants from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) caused by, arising out of, or relating to the presence, discharge, release, or escape of asbestos, PCBs, petroleum, hazardous waste, or radioactive material at, on, under, or from the Project site.

4.12 Limitation of Liability. TO THE FULLEST EXTENT PERMITTED BY LAW, AND NOTWITHSTANDING ANY OTHER PROVISION OF THIS AGREEMENT, THE TOTAL LIABILITY, IN THE AGGREGATE, OF THE CONSULTANT (INCLUDING ITS OFFICERS, DIRECTORS, EMPLOYEES, AGENTS AND SUBCONSULTANTS), TO CLIENT AND ANYONE CLAIMING BY, THROUGH OR UNDER CLIENT, FOR ANY AND ALL CLAIMS, LOSSES, COSTS, OR DAMAGES WHATSOEVER ARISING OUT OF, RESULTING FROM, OR IN ANY WAY RELATED TO THE PERFORMANCE OF SERVICES UNDER THIS AGREEMENT FROM ANY CAUSES, INCLUDING BUT NOT LIMITED TO NEGLIGENCE, PROFESSIONAL ERRORS OR OMISSIONS, OR WARRANTIES EXPRESSED OR IMPLIED, OF CONSULTANT OR CONSULTANT'S CONSULTANTS, SHALL NOT EXCEED \$50,000.00 OR THE TOTAL COMPENSATION RECEIVED BY CONSULTANT FOR THE PROJECT, WHICHEVER IS GREATER. THIS LIMITATION INCLUDES LIABILITY UNDER SECTION 4.11. IN NO EVENT SHALL CONSULTANT BE LIABLE TO CLIENT FOR ANY INDIRECT, SPECIAL, INCIDENTAL, PUNITIVE, OR CONSEQUENTIAL DAMAGES OF ANY KIND ARISING OUT OF OR RELATED TO THIS AGREEMENT.



Standard Terms and Conditions Exhibit 3

4.13 Extent of Agreement. This Agreement represents the entire agreement between the parties and may be amended only by written instrument signed by both parties.

4.14 INSURANCE. CONSULTANT shall purchase and maintain insurance for the coverages and for not less than the limits of liability set forth below:

(a) Workers' Compensation: workers' compensation insurance as required by the laws of the states or countries with jurisdiction of the services to be performed, including employer's liability insurance, with a limit of \$1,000,000 per accident.

(b) Commercial General Liability: commercial general liability, including coverage for all premises, operations, operations of independent contractors, products and completed operations, and contractual liability. Coverage shall have limits of not less than \$1,000,000 for each occurrence and aggregate.

(c) Commercial Automobile Liability: commercial automobile liability covering the use of all owned, non-owned, and hired automobiles with minimum combined single limits of \$1,000,000.

(d) Professional Liability: professional liability insurance for claims arising out of performance of professional services caused by any negligent error, omission, or act for which the insured is legally liable, with a minimum limit of \$1,000,000, to be kept in force for two (2) years after completion of project.

CONSULTANT shall provide certificates or other evidence from insurance carriers of the required insurance coverages, if requested by CLIENT in writing within 30 days of start of performance. All insurance except workers' compensation and professional liability shall designate CLIENT as additional insured.

(e) Cyber Liability: Data Breach and Privacy/Cyber Liability Insurance in a limit of not less than \$1,000,000 per occurrence.

4.15 Subrogation Waiver. The parties waive all rights against each other, and against contractors, consultants, agents, and employees of the other for damages covered by any property insurance during construction, and each shall require similar waivers from their contractors, consultants, and agents.

4.16 Force Majeure. Parties will not be liable for delays in delivery or for failure to perform obligations, other than payment, due to causes beyond their reasonable control, including, but not limited to, product allocations, material shortages, labor disputes, transportation delays, unforeseen circumstances, acts of God, acts or omissions of other parties, acts or omissions of civil or military authorities, government priorities, fire, strikes, floods, epidemics, quarantine restrictions, riots, terrorists acts, or war. CONSULTANT's time for delivery or performance will be automatically extended by the period of such delay or CONSULTANT may, at its option, cancel any services, in whole or in part, without liability by giving notice to CLIENT.

4.17 EQUAL EMPLOYMENT OPPORTUNITY CLAUSE. When applicable, the CONSULTANT and SUBCONSULTANT shall abide by the requirements of 41 CFR 60-1.4(a), 60-300.5(a), 60-741.5(a) and Appendix A of Subpart A of 29 CFR 471. 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, or national origin. Moreover, these regulations require that covered prime CONSULTANTS and SUBCONSULTANTS take affirmative action to employ and advance in employment individuals without regard to race, color, religion, sex, national origin, protected veteran status or disability.

4.18 FLORIDA PROJECTS ONLY - NO EMPLOYEE OR AGENT OF CONSULTANT IS A PARTY TO THIS CONTRACT. PURSUANT TO FLORIDA STATUTE 558.0035, AN INDIVIDUAL EMPLOYEE OR AGENT OF CONSULTANT MAY NOT BE HELD INDIVIDUALLY LIABLE FOR NEGLIGENCE OCCURRING WITHIN THE COURSE AND SCOPE OF THIS CONTRACT. CONSULTANT MAINTAINS PROFESSIONAL LIABILITY INSURANCE AS REQUIRED UNDER THIS CONTRACT AND ANY DAMAGES ARE SOLEY ECONOMIC IN NAUTRE AND THE DAMAGES DO NOT EXTEND TO PERSONAL INJURIES OR PROPERTY NOT SUBJECT TO THE CONTRACT.

Hourly Rates



Compensation for office-based personnel in the U.S. for time in the performance of the work, including travel time, shall be in accordance with the following Hourly Rates.

Client	City of Muscatine
Description	WRRF Priority Projects
Location	Muscatine, Iowa

Hourly Rates subject to revision on or after! **2 Apr 2025**

Billing Title	Hourly Rate
Student Intern, Shop Drawing Clerk	\$75.00
Field Technician, Architect Intern	\$88.00
Sr Project Administrator, Administrative Assistant, Sr GIS Analyst 1, EIT 1	\$102.00
EIT1, Cost Estimator, Scientist 1,	\$116.00
EIT2, Engineer 1, Architect 1, Architect 2, Scientist 2, CAD Designer 2, Specifications Editor	\$127.00
CAD Designer, Associate CAD Designer, Sr Specification Editor	\$143.00
Architect, Engineer 2, Sr Architect 2, Sr Scientist 2, Electrical EIT, Sr Designer	\$154.00
Structural EIT II, Electrical EIT II, Controls Engineer, Sr Engineer 1, Sr Architect 3, Sr CAD Designer 2, GIS Coordinator	\$168.00
Sr Environmental Engineer, Principal Architect, Sr Designer, Sr Engineer 1, Principal Architect 1, Principal Scientist	\$181.00
Sr Mechanical Engineer, Sr Engineer 2, Principal CAD Designer, Principal GIS Analyst, Sr Consultant	\$193.00
Sr CAD Designer, Sr Process Advisor, Sr Structural Engineer, Sr Engineer 2, Principal CAD Designer, Principal GIS Analyst, Sr Consultant, Principal Electrical Designer	\$206.00
Sr Cost Estimator, Sr Engineer 3, Principal Engineer 1, Principal Electrical Designer	\$220.00
Principal Engineer 2, Sr Structural Engineer II	\$229.00
Senior Controls Engineer, Principal Engineer III	\$242.00
Client Services Manager, Project Manager, Principal Environmental Engineer	\$255.00
Process Quality Reviewer, Principal Electrical Engineer	\$267.00
Power Conditioning Advisor	\$280.00
Principal Consultant	\$293.00
CMAR Advisor	\$306.00

SCHEDULE OF CHARGES

Fiscal Year 2024-2025

- I. Compensation for items of expense and other charges incurred in connection with the performance of the work shall be in accordance with the following schedule:

Automobile	\$0.75/mile
Four-Wheel Drive Vehicles	\$0.89/mile
Ground Transportation (rental car, taxi, etc.)	At Cost Plus 10%
Air Travel (commercial and charter)	At Cost Plus 10%
Living Expenses (away from assigned office)	At Cost Plus 10%
Equipment Rental	At Cost Plus 10%
Laboratory Analysis	At Cost Plus 10%
Soils Testing and Analysis	At Cost Plus 10%
Outside Photographic Work	At Cost Plus 10%
All-Terrain Vehicle (ATV) with Trailer	\$115/day

- II. Graphic Arts Charges:

Field Tablet	\$20/day
MiFi	\$10/day
OCR Scanning	\$1/image
Image Scanning	\$7/image
Thermal Imaging Camera	\$190/day

- III. Reprographics:

Copying		
Black/white copies: 1-100	\$0.17 for 8.5 x 11	\$0.31 for 11 x 17
Color Copies: 1-100 copies	\$0.42 for 8.5 x 11	\$0.72 for 11 x 17
Bindery		
Manual Process		\$66/hour
Mechanical Process		\$45/hour

- IV. Large Format Engineer Drawings:

Large Format color plots	\$0.83 per sq. ft.	
Large Format B/W up to 100 Sq. Ft.	\$0.35 per sq. ft.	
Scan to File Service – Large Format over 17 In.		
1-25		
26-100	\$1.76/scan	
100+	\$0.90/scan	
Burning Scans to CDs		
CDs	\$5.95/scan	
Duplicate CDs	\$3.00/each	
Small Scan: 1-100	8.5 x 11 to 11 x 17	\$0.30/each
Small Scan: 101+	8.5 x 11 to 11 x 17	\$0.13/each

V. Environmental Field Equipment Rental:

Stormwater Sampling Equipment, incl. portable	\$600 per use	
Flow meter	\$200 per use	
pH Field Test Kit	\$20 each	
Total Residual Chlorine (TRC) Field Test Kit	\$35 each	
Field Kit (pH,TRC,gloves,alconox, field book, etc)	\$100 each	
Monthly Comp Sampling & Flow Measurement	\$200/24 hour comp	
Ice Bag	\$5 each	
	Daily Rental	Weekly Rental
PH/DO/Cond/ORP meter with flow cell	\$125	\$375
Oil/water interface probe	\$ 45	\$135
Transducer w/ data logger	\$ 55	\$150
Turbidity meter	\$ 20	\$ 60
Photoionization detector (PID)	\$ 50	\$145
Magnetic locator	\$ 15	\$ 45
Depth to water meter	\$ 20	\$ 75
Peristaltic or groundwater pump	\$ 40	\$ 85
Hand Auger or Soil Probe	\$ 15	\$ 40
4-Gas air monitor	\$ 25	\$100
pH probe	\$ 10	\$ 20
Hammer drill	\$ 25	\$100
Steam evaluation kit	\$ 50	\$200
Noise meter	\$ 75	\$300
Soils and Aggregates		
Proctor	\$250/each	
Gradation and P.I.	\$275/each	
Gradation only	\$175/each	
Fracture face	\$65/each	
Moisture	\$30/each	
Asphalt		
Burn-off and Gradation	\$200/each	
Rice	\$125/set	
Gyratory	\$180/set	
Cores	\$35/ea	
Oven calibration set	\$200/set	
Dry rodded VCA (unit weight)	\$100/ea	
Concrete		
Cylinder Compressive Strength	\$30/each	
Aggregate Gradation	\$145/each	
	*Prices do not include travel time for sampling	
Asbestos Sampling		
Asbestos Sampling Kit	\$25/use	
Asbestos Cutter Sleeve, Vials	\$2.50/each	

VI. UAS Services (Drone):

Flight and processing time (not including travel exp)	\$185/hr
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VII. Compensation for purchases, items of expense, and other charges not scheduled above, incurred in connection with the performance of the work, shall be at cost plus 10%.

VIII. Charges are subject to revision on or after March 29, 2025.



City of Muscatine

ITEM NUMBER 2024-0518

AGENDA ITEM SUMMARY

DATE: 11/21/2024

STAFF

Jodi Royal-Goodwin, Community Development Director

SUBJECT

Request to Approve Contract with Eocene Environmental Group to Provide Technical Services Required for the Lead Hazard Reduction and Healthy Homes Programs

EXECUTIVE SUMMARY

Presented for the Council's consideration is a contract with Eocene Environmental Group for technical services necessary to implement the Lead Hazard Reduction and Healthy Homes programs. The contract outlines fees for each service associated with individual projects and will be paid with grant resources.

STAFF RECOMMENDATION

Staff recommends Council approve the contract.

BACKGROUND/DISCUSSION

Staff is requesting Council approve a contract with Eocene Environmental Group to perform inspection, testing and project management services required to implement the Lead Hazard Reduction and Healthy Homes programs.

At its April 20, 2023, meeting, City Council approved submitting a Lead Hazard Reduction Grant application to the U.S. Department of Housing and Urban Development (HUD) focused on Census Tract 508, which is in the center of the city and includes the Mulberry Revitalization Program area, to maximize resources and realize the greatest impact. In October, the City was notified of a grant award, and City Council accepted the grant at their November 16, 2023, meeting.

In the next 3 years the program anticipates addressing lead and other hazards in 65 homes occupied or routinely visited by children under the age of 6 from low-income families. The total program budget for this task is approximately \$3.337 million, including \$2,556,932 for the Lead Hazard Reduction Program, an additional \$400,000 from the Healthy Homes Program to address other hazards that contribute to multiple childhood diseases and injuries in the home,

such as mold, allergens, and carbon monoxide, and \$380,000 in local match funds. Match resources include:

- \$100,000 – Housing Agency Resources
- \$250,000 – Mulberry Neighborhood Revitalization CDBG Housing Façade (10 units)
- \$30,000 – Landlord Required Contribution (15% of individual project costs)

A Program Manager and Intake Specialist were hired last spring and have been working with HUD to develop program guidelines and outcomes. Over the past few months staff has focused on recruiting and training contractors for lead abatement projects and marketing the program to area residents.

These mitigation projects require very specialized testing, abatement and monitoring practices to be completed by a certified individual. As a result, it is standard practice for grantees, especially first time grantees, to contract the technical services necessary for the actual inspections and abatement activity.

Lead Hazard Reduction Program staff issued a request for proposals based on project goals and modeled after other Iowa grantees. One response was received from Eocene (formerly Impact 7G). The attached contract was negotiated to insure grant compliance and timely services. City staff will continue to conduct client outreach, eligibility determination, contractor recruitment, and contract and grant administration.

CITY FINANCIAL IMPACT

There is no impact to the general fund for approving this contract. All fees were included in the grant budget and will be paid with grant resources.

ATTACHMENTS

1. Eocene TA Contract

PROFESSIONAL SERVICES AGREEMENT (PSA)



Project: Muscatine Lead Hazard Reduction Grant (2024)

Property: TBD, Muscatine, IA

Client: City of Muscatine

Contact: Arthur Bell

Address: 215 Sycamore Street

City/State/Zip: Muscatine, IA 52761

Phone: 563-223-8241

Email: abell@muscatineiowa.gov

AGREEMENT made this 14th day of November, 2024, by and between the service provider, Eocene Environmental Group, Inc. (Eocene) and City of Muscatine (Client).

WHEREAS the client intends to engage the services of Eocene to: complete Lead Hazard Reduction Inspections and Project Management in reference to Eocene's October 24, 2024, response to the City's Request for Proposal (RFP).

WHEREAS, Eocene agrees to provide said services pursuant to the terms of this Agreement.

NOW THEREFORE, the parties agree as follows:

1. Project

Eocene agrees to provide the services listed below, to the City of Muscatine, for the Lead Hazard Reduction (LHR) Grant. All work will be in accordance with federal, state, and local regulations.

2. Scope of Services

Eocene will complete the services listed below as further described in Eocene's October 24, 2024, response the City's RFP.

A. Lead Inspection/Risk Assessments (LI/RA) and associated reports.

- a. This service includes scheduling and completing LI/RAs and the associated reports. Lead hazards identified in the LI/RA will be included in the Scope of Work (Section C below).
- b. An electronic copy of the report will be emailed to the Client and a paper copy mailed by certified mail to the homeowner.

- B. Healthy Homes Assessments
 - a. This service includes completion of the Healthy Homes Assessment with radon testing during the LI/RA and completion of the associated report. Hazards identified in the assessment will be included in the Scope of Work.
 - b. An electronic copy of the report will be emailed to the Client and a paper copy mailed by certified mail to the homeowner.
- C. Scope of Work and Cost Estimates.
 - a. This service includes creation of Scope of Work line items from the LI/RAs and Healthy Homes Assessments to be used for the hazard mitigation Bid Letting.
 - b. An electronic copy of the documents will be emailed to the Client.
- D. Project Management and Services
 - a. Duties include contractor, construction, and program management items such as bid tours, abatement project monitoring visits, and updating the online collaborative project tracker for quarterly reporting.
- E. Clearance Inspections and associated reports/Certificate of Compliance
 - a. This service includes scheduling the Clearance Inspections based on the contractors' schedule, completion of the Clearance Inspections after hazard mitigation is complete and completing the associated Clearance Inspection Reports.
 - b. An electronic copy of the report will be emailed to the Client and abatement contractor, and a paper copy mailed by certified mail to the homeowner.

3. Eocene Responsibilities

- Eocene Hereby agrees to:
- I. Provide the professional services as set forth in this Agreement; and
 - II. Perform said services in a manner consistent with that degree of care and skill ordinarily exercised by members of the same profession currently practicing at the same time and in the same or similar locality.

4. Client Responsibilities

- Client hereby agrees to:
- I. Provide a knowledgeable representative of the Property, who will be available to coordinate all on-site work; and
 - II. Provide unrestricted access to the Property for Eocene to perform the services; and
 - III. Provide copies of any previously completed reports that may be pertinent to this Project.

5. Schedule

The Project will commence immediately upon receipt of the executed Professional Services Agreement (PSA) from the Client.

6. Project Cost, Payment and Termination

The Client shall pay Eocene the below pricing for services provided for the LHR Grant, as provided in the Proposed Fee Schedule, dated October 24, 2024. The Tasks table describes the cost associated with each task that may be required for each qualifying property. Direct costs such as communications, postage, routine printing and copying are not invoiced separately but are included with the Lump Sum to streamline the accounting process and reduce overhead costs.

Tasks	Cost
LI/RA (per unit – expected 70 units)	\$3,150.00
Healthy Homes Assessment with Radon Testing (per unit – expected 70 units)	\$1,200.00

Tasks	Cost
Scope of Work and Cost Estimates (per unit – expected 65 units)	\$850.00
Project Management and Services (per unit – expected 65 units)	\$750.00
Clearance Testing (per unit – expected 65 units)	\$2,000.00
*Clearance Testing – Failed Visual Assessment (per occurrence)	\$600.00
*Clearance Testing – Failed Dust Sampling (per occurrence)	\$985.00

Invoices for Eocene's services will be submitted every 30 days or upon project completion if project completion is less than 30 days. Invoices shall be due and payable upon receipt. If any invoice is not paid within 30 days, Eocene may, without waiving any claim or right against the Client, and without liability whatsoever to the Client, suspend or terminate the performance of services. Time and material costs will be adjusted annually in accordance with rate increases paid to personnel, inflation, and market conditions.

7. Work Product

All field notes, laboratory test data, calculations, estimates and other documents including all documents on electronic media prepared by Eocene as instruments of service and/or used in the preparation of the final project deliverables shall remain the property of Eocene.

All project documents including, but not limited to, plans and specifications furnished by Eocene under this project are intended for use on this project only. Any reuse, without specific written verification or adoption by Eocene, shall be at the Client's sole risk, and Client shall defend, indemnify and hold harmless Eocene from all claims, damages and expenses including attorney's fees arising out of or resulting therefrom.

Under no circumstances shall delivery of electronic files for use by the Client be deemed a sale by Eocene, and Eocene makes no warranties, either express or implied, of merchantability and fitness for any particular purpose. In no event shall Eocene be liable for indirect or consequential damages as a result of the Client's use or reuse of the electronic files.

Because electronic file information can be easily altered, corrupted, or modified by other parties, either intentionally or inadvertently, without notice or indication, Eocene reserves the right to remove itself from its ownership and/or involvement in the material from each electronic medium not held in its possession. Client shall retain copies of the work performed by Eocene in electronic form only for information and use by Client for the specific purpose for which Eocene was engaged. Said material shall not be used by Client or transferred to any other party, for use in other projects, additions to this project, or any other purpose for which the material was not strictly intended by Eocene without Eocene's expressed written permission. Any unauthorized use or reuse or modifications of this material shall be at Client's sole risk. Furthermore, the Client agrees to defend, indemnify, and hold Eocene harmless from all claims, injuries, damages, losses, expenses, and attorney's fees arising out of the modification or reuse of these materials.

8. Project Site

The Client agrees to use good faith efforts to maintain a safe Project site for Eocene staff and, as applicable, subcontractors and assigns. Such good faith efforts shall include, but not exhaustive, ensuring that Project site is free and clear of any imminent hazards that pose a direct and immediate danger to any such individual potentially affected.

9. Claims and Disputes

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 Eocene. Eocene's services under this Agreement are being performed solely for the Client's benefit, and no other party or entity shall have any claim against Eocene because of this Agreement or the performance or nonperformance of services hereunder. The Client and Eocene agree to require a similar

provision in all contracts with contractors, subcontractors, subconsultants, vendors and other entities involved in this Project to carry out the intent of this provision.

The Client shall make no claim for professional negligence, either directly or in a third party claim, against Eocene unless the Client has first provided Eocene with a written certification executed by an independent professional currently practicing in the same discipline as Eocene and licensed in the State in which the claim arises.

10. Limited Liability

The Client agrees, to the fullest extent permitted by law, to limit the liability of Eocene and Eocene's officers, directors, partners, employees, shareholders, owners and subconsultants to the Client for any and all claims, losses, costs, damages of any nature whatsoever or claims expenses from any cause or causes, including attorneys' fees and costs and expert witness fees and costs, so that the total aggregate liability of Eocene and its officers, directors, partners, employees, shareholders, owners and subconsultants to all those named shall not exceed \$50,000. It is intended that this limitation apply to any and all liability or cause of action however alleged or arising, unless otherwise prohibited by law.

11. Mediation

In an effort to resolve any conflicts that arise during the project or following the completion of the project, the Client and Eocene agree that all disputes between them arising out of or relating to this Agreement shall be submitted to non-binding mediation unless the parties mutually agree otherwise. The Client and Eocene further agree to include a similar mediation provision in all agreements with independent contractors and consultants retained for the Project and to require all independent contractors and consultants also to include a similar mediation provision in all agreements with subcontractors, sub-consultants, suppliers or fabricators so retained, thereby providing for mediation as the primary method for dispute resolution between the parties to those agreements.

12. Attorney's Fees

If litigation arises for purposes of collecting fees or expenses due under this Agreement, the Court in such litigation shall award reasonable costs and expenses, including attorney fees, to the prevailing party. In awarding attorney fees, the Court shall not be bound by any Court fee schedule, but shall, in the interest of justice, award the full amount of costs, expenses, and attorney fees paid or incurred in good faith.

13. Controlling Law

This Agreement shall be construed and enforced in accordance with the laws of the state of Iowa.

14. Assignment

Neither the Agreement nor any of the rights or obligations arising under the Agreement may be assigned without prior written consent.

This agreement is approved and accepted by the Client and Eocene upon both parties signing and dating the agreement. The effective date of the agreement shall be the last date entered below.

CITY OF MUSCATINE

Accepted by:

Printed/Typed Name:

Title:

Date:

EOCENE ENVIRONMENTAL GROUP, INC.

Accepted by:



Printed/Typed Name: Ryan Peterson

Title: Vice President

Date: 11/14/2024



City of Muscatine

ITEM NUMBER 2024-0526

AGENDA ITEM SUMMARY

DATE: 11/21/2024

STAFF

Amy Fortenbacher, Transit Supervisor
Brian Stineman, Public Works Director

SUBJECT

Request to Approve Entering into Three Contracts with the Iowa DOT for Buses, Including Accepting Supplemental Shortfall Funding in the amount of \$37,708.00 and \$219,682.00 and Accepting CMAQ 5311 Bus Funding in the amount of \$170,568.00

EXECUTIVE SUMMARY

Presented for the City Council's consideration is a request to accept and sign three contracts with the Iowa DOT. The first two contracts are for Supplemental Shortfall Funding in the amount of \$37,708.00 and \$219,682.00. The third contract is for Congestive Mitigation and Air Quality Improvement (CMAQ 5311) Bus Funding in the amount of \$170,568.00

STAFF RECOMMENDATION

It is the recommendation of the Public Works/Transit Staff to approve the contracts with the Iowa DOT to receive these funds.

BACKGROUND/DISCUSSION

The Iowa DOT applied to the FTA for Supplemental Shortfall Funding to help with the increasing cost of buses over the past three years. These funds are additions to the original grants that were issued. MuscaBus received a grant in the amount of \$86,275.00 (issued on 4/30/20) that we used to purchase bus #262 (actual cost \$198,278.00). The contract in the amount of \$37,708.00 will be applied to the cost of bus #262.

The Iowa DOT has issued a CMAQ 5311 contract in the amount of \$170,568.00 (\$85,284.00 per bus) to replace buses #251 and #252. A second Supplemental Shortfall Funding contract in the amount of \$219,682.00 (\$109,841 per bus) was also issued to be applied to replacing bus #251 and #252. MuscaBus received council approval to replace bus #251 and #252 on March 7, 2024 and to issue a purchase order in the amount of \$377,372.00 (\$188,686.00 per bus) for the purchase of two replacement buses. We received the new buses #263 and #264 and were placed into service in September 2024.

CITY FINANCIAL IMPACT

The contracts are in the amount of \$37,708.00, \$170,568.00, and \$219,682.00 to be used to reimburse the City of Muscatine for the purchase of buses #262, #263, and #264.

ATTACHMENTS

1. Muscatine_FY22_Supplemental_Shortfall_00007698_and_00007699_Combined_3MGrfYYMI
GSRcJW6
2. Muscatine_FY21_CMAQ_00007704_Combined_MrfMYAfSfGSv5WSd



KIM REYNOLDS, GOVERNOR

SCOTT MARLER, IOWA DOT DIRECTOR
MELISSA GILLETT, IOWA DOT COO

IOWA DEPARTMENT OF TRANSPORTATION
Modal Transportation Bureau
Public Transit Section
Laura Lutz-Zimmerman
800 Lincoln Way
Ames, IA 50010
515-239-7935
laura.lutzzimmerman@iowadot.us
www.iowadot.gov

November 13, 2024

Anthony Kies, Chief Executive Officer
City of Muscatine
1459 Washington
Muscatine, IA 52761

Re: Bus Shortfall Funding
Contract No. 00007698 and 00007699

Dear Mr. Kies:

Attached are the bus shortfall contracts that helps cover the difference in pricing for vehicle(s) listed on contract 00001497 and contract 00007686. Please note the federal participation rate on this shortfall contract may be different than the rate on the original contract. This may affect the amount of local funding the transit agency will be responsible for. This Agreement must be signed and dated by the transit system's designated signatory and submitted to Seamless Documents within 60 days of the date of this notification. The contract will then be forwarded to the Iowa DOT for signature, and you will receive a fully executed contract after that.

Be aware that Part II of this Agreement, and the appendices referenced in Part II apply to the contract. These references may be found on the Iowa DOT website at <https://iowadot.gov/transit/Funding-programs-and-applications/joint-participation-agreement-attachments>.

Please contact me with any questions or concerns.

Sincerely,

eSigned via SeamlessDocs.com
Laura Lutz-Zimmerman
Key: 86be9f4c-2f01-4024-9d4d-3fa5fbdbe1cd

Laura Lutz-Zimmerman
Transit Programs Administrator
Modal Transportation Bureau

UEI: R3J6GP2HDMG4

TRANSIT JOINT PARTICIPATION AGREEMENT
TO IMPLEMENT A FEDERAL TRANSIT ADMINISTRATION (FTA)
BUS PROJECT
[CFDA 20.526]

WHEREAS, the Iowa Department of Transportation (hereinafter called the DEPARTMENT) has, in accordance with Chapter 324A of the Code of Iowa, secured a grant under 49 U.S.C. 5339 from the Federal Transit Administration on behalf of Iowa public transit systems, and

WHEREAS, the **City of Muscatine** (hereinafter called the AGENCY) has been duly designated as a public transit system by local officials, in accordance with Chapter 324A of the Code, and

WHEREAS, Grant IA-2024-027-01-00 (FTA execution date: 9/17/2024) includes the project detailed below, programmed for the AGENCY:

Description of Project Element	FTA Code	Federal Funds Ceiling	% Federal Participation
1. Two 176" Light-Duty Mid-Sized Buses (replaces 251 and 252) – Supplemental Shortfall Funding	11.12.04	\$ 219,682	85%
Total Federal Ceiling:		\$ 219,682	

NOW, THEREFORE, THE DEPARTMENT AND THE AGENCY HAVE AGREED THAT THE AGENCY shall proceed with implementation of the above-described project, subject to all terms, conditions and obligations connected with the federal grant, and also subject to such policies, procedures and conditions as have been established by the DEPARTMENT and which are documented in Part II of this AGREEMENT (found at <https://iowadot.gov/transit/Funding-programs-and-applications/joint-participation-agreement-attachments>).

BE IT FURTHER AGREED THAT THE DEPARTMENT shall reimburse the AGENCY for eligible costs of implementing each element of said project at the participation rate(s) and subject to the funding ceiling(s) delineated above.

THIS AGREEMENT TO BE IN EFFECT from **August 4, 2022, through October 31, 2026**. [Any project element not obligated twelve months prior to the original expiration date of this AGREEMENT will be forfeited unless prior written approval of other arrangement(s) is received from the DEPARTMENT.]

IN WITNESS WHEREOF, the parties hereunto have caused this AGREEMENT to be executed by their proper officials thereunto duly authorized as of the dates below indicated, in consideration of the mutual covenants, promises and representations herein.

For The AGENCY:

For the DEPARTMENT:

Anthony Kies, Chief Executive Officer
City of Muscatine
Date:

Tamara Nicholson, Director
Modal Transportation Bureau
Iowa Department of Transportation
Date:

UEI: R3J6GP2HDMG4

TRANSIT JOINT PARTICIPATION AGREEMENT
TO IMPLEMENT A FEDERAL TRANSIT ADMINISTRATION (FTA)
BUS PROJECT
[CFDA 20.526]

WHEREAS, the Iowa Department of Transportation (hereinafter called the DEPARTMENT) has, in accordance with Chapter 324A of the Code of Iowa, secured a grant under 49 U.S.C. 5339 from the Federal Transit Administration on behalf of Iowa public transit systems, and

WHEREAS, the **City of Muscatine** (hereinafter called the AGENCY) has been duly designated as a public transit system by local officials, in accordance with Chapter 324A of the Code, and

WHEREAS, Grant IA-2024-027-01-00 (FTA execution date: 9/17/2024) includes the project detailed below, programmed for the AGENCY:

Description of Project Element	FTA Code	Federal Funds Ceiling	% Federal Participation
1. One 176" Light-Duty Mid-Sized Buses (replaces 246) – Supplemental Shortfall Funding	11.12.04	\$ 37,708	85%
Total Federal Ceiling:		\$ 37,708	

NOW, THEREFORE, THE DEPARTMENT AND THE AGENCY HAVE AGREED THAT THE AGENCY shall proceed with implementation of the above-described project, subject to all terms, conditions and obligations connected with the federal grant, and also subject to such policies, procedures and conditions as have been established by the DEPARTMENT and which are documented in Part II of this AGREEMENT (found at <https://iowadot.gov/transit/Funding-programs-and-applications/joint-participation-agreement-attachments>).

BE IT FURTHER AGREED THAT THE DEPARTMENT shall reimburse the AGENCY for eligible costs of implementing each element of said project at the participation rate(s) and subject to the funding ceiling(s) delineated above.

THIS AGREEMENT TO BE IN EFFECT from **April 30, 2020, through October 31, 2026**. [Any project element not obligated twelve months prior to the original expiration date of this AGREEMENT will be forfeited unless prior written approval of other arrangement(s) is received from the DEPARTMENT.]

IN WITNESS WHEREOF, the parties hereunto have caused this AGREEMENT to be executed by their proper officials thereunto duly authorized as of the dates below indicated, in consideration of the mutual covenants, promises and representations herein.

For The AGENCY:

For the DEPARTMENT:

Anthony Kies, Chief Executive Officer
City of Muscatine
Date:

Tamara Nicholson, Director
Modal Transportation Bureau
Iowa Department of Transportation
Date:



KIM REYNOLDS, GOVERNOR

SCOTT MARLER, IOWA DOT DIRECTOR
MELISSA GILLETT, IOWA DOT COO

IOWA DEPARTMENT OF TRANSPORTATION
Modal Transportation Bureau
Public Transit Section
Laura Lutz-Zimmerman
800 Lincoln Way
Ames, IA 50010
515-239-7935
laura.lutzzimmerman@iowadot.us
www.iowadot.gov

November 12, 2024

Anthony Kies, Chief Executive Officer
City of Muscatine
1459 Washington
Muscatine, IA 52761

Re: FY21 5311 CMAQ Funding
Contract No. 00007704

Dear Mr. Kies:

Attached is the FY21 5311 CMAQ contract. These funds were in a grant executed with FTA in August 2022; however, we just discovered this contract was never issued. We apologize for the oversight error on our part. This Agreement must be signed and dated by the transit system's designated signatory and submitted to Seamless Documents within 60 days of the date of this notification. The contract will then be forwarded to the Iowa DOT for signature, and you will receive a fully executed contract after that.

Be aware that Part II of this Agreement, and the appendices referenced in Part II apply to the contract. These references may be found on the Iowa DOT website at <https://iowadot.gov/transit/Funding-programs-and-applications/joint-participation-agreement-attachments>.

Please contact me with any questions or concerns.

Sincerely,

eSigned via SeamlessDocs.com
Laura Lutz-Zimmerman
Key: 2742c719-ec7b-4a83-aa9e-22a08f0252cd

Laura Lutz-Zimmerman
Transit Programs Administrator
Modal Transportation Bureau

TRANSIT JOINT PARTICIPATION AGREEMENT
TO IMPLEMENT A FEDERAL TRANSIT ADMINISTRATION (FTA)
CONGESTION MITIGATION AND AIR QUALITY IMPROVEMENT (CMAQ 5311)
[CFDA 20.509]

WHEREAS, the Iowa Department of Transportation (hereinafter called the DEPARTMENT) has, in accordance with Chapter 324A of the Code of Iowa, secured a grant under 5311 from the Federal Transit Administration on behalf of Iowa public transit systems, and

WHEREAS, the **City of Muscatine** (hereinafter called the AGENCY) has been duly designated as a public transit system by local officials, in accordance with Chapter 324A of the Code, and

WHEREAS, Grant IA-2019-002-01-03 (executed by FTA on 8/4/22) includes the project detailed below, programmed for the AGENCY:

Description of Project Element	FTA Code	Federal Funds Ceiling	% Federal Participation
1. Two 176" Light-Duty Buses (replaces 251 and 252)	11.12.04	\$170,568	80%
Total Federal Ceiling:		\$170,568	

NOW, THEREFORE, THE DEPARTMENT AND THE AGENCY HAVE AGREED THAT THE AGENCY shall proceed with implementation of the above-described project, subject to all terms, conditions and obligations connected with the federal grant, and also subject to such policies, procedures and conditions as have been established by the DEPARTMENT and which are documented in Part II of this AGREEMENT (found at <https://iowadot.gov/transit/Funding-programs-and-applications/joint-participation-agreement-attachments>).

BE IT FURTHER AGREED THAT THE DEPARTMENT shall reimburse the AGENCY for eligible costs of implementing each element of said project at the participation rate(s) and subject to the funding ceiling(s) delineated above.

THIS AGREEMENT TO BE IN EFFECT **August 4, 2022, through October 31, 2026**. [Any project element not obligated twelve months prior to the original expiration date of this AGREEMENT will be forfeited, unless prior written approval of other arrangement(s) is received from the DEPARTMENT.]

IN WITNESS WHEREOF, the parties hereunto have caused this AGREEMENT to be executed by their proper officials thereunto duly authorized as of the dates below indicated, in consideration of the mutual covenants, promises and representations herein.

For The AGENCY:

For the DEPARTMENT:

Anthony Kies, Chief Executive Officer
City of Muscatine
Date:

Tamara Nicholson, Director
Modal Transportation Bureau
Iowa Department of Transportation
Date: