PUBLIC IMPROVEMENTS
CONTRACT DOCUMENTS

2022 HMA RESIDENTIAL PAVING PROGRAM CONTRACT 2 – LOSST

ACTIVITY ID  
062022014

PLAN FILE NO.  
N/A

CITY COUNCIL APPROVAL

APPROVAL DATE  
May 9, 2022

ROLL CALL NO.

CONTRACT NO.

CONTRACTOR

CONTRACT AMOUNT  
$

ENGINEERING DEPARTMENT
Steven L. Neber, P.E.
Des Moines City Engineer

Funding Information
Object Code 543060
Organization No C038PW99
Project No ST800
ENGINEERING DEPARTMENT
CITY OF DES MOINES, IOWA

2022 HMA Residential Paving Program Contract 2 – LOSST

Activity ID 062022014

The following documents are part of this contract:

Document
Instructions to Bidders
Official Publications
Proposal
Bid Bond
Contract
Performance, Payment and Maintenance Bond
Addenda:

Special Provisions:
Bidding Requirements
Technical Specifications

Supplemental Specifications:
General Supplemental Specifications to SUDAS, 2022 Edition
Supplemental Specification for Water Services
Supplemental Specification for Traffic Signage
Supplemental Specification for Tree Protection
Supplemental Specification for Project Sign

March 21, 2022
April 1, 2021
August 20, 2021
March 24, 2017
September 25, 2019

PROJECT ENGINEER: Joseph Eddy

Phone Number: (515) 283-4034
INSTRUCTIONS TO BIDDERS

Activity ID   062022014
Project Name 2022 HMA Residential Paving Program Contract 2 – LOSST
Fed/St. Project No.

The work comprising the above referenced project shall be constructed in accordance with the SUDAS Standard Specifications, 2022 Edition; and as further modified by the supplemental specifications and special provisions included in the contract documents. The Des Moines City Engineer is the Engineer. The terms used in the contract documents are defined in said SUDAS Standard Specifications. The City of Des Moines is the Contracting Authority on this project and shall hereinafter be referred to as the "Jurisdiction". Before submitting your bid, please review the SUDAS Standard Specifications, in particular, Division 1 - General Provisions and Covenants, including the sections regarding proposal requirements, bonding, contract execution and insurance requirements. Please be certain that all documents have been properly completed and submit them to the City Clerk, 1st Floor, City Hall, 400 Robert D. Ray Drive, Des Moines, Iowa, 50309.

I. BID SECURITY

The bid security must be in the minimum amount of 10% of the total bid amount including all add alternates (do not deduct the amount of deduct-alternates). Bid security shall be as defined in Section 26.8 of the Iowa Code and shall be in the form of a cashier's check or certified check drawn on a state-chartered or federally chartered bank, or a certified share draft drawn on a state-chartered or federally chartered credit union, or a 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 (DSM Urban 04/20/98) 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 on the bid bond is not acceptable. Bid security other than said bid bond shall be made payable to the City of Des Moines. "Miscellaneous Bank Checks", and personal checks, as well as "Money Orders" and "Traveler’s Checks" issued by persons, firms or corporations licensed under Chapter 533B of the Iowa Code, are not acceptable bid security. NOTE: If the Bidder submits Bid Security in the form of a Bid Bond, and the Bidder wishes to have their Bid Bond returned to them after an approved contract and bond has been executed or after there is a rejection of all bids (in accordance with Iowa Code 26.10), the Bidder shall include a self-addressed envelope with the Bid Bond.

II. SUBMISSION OF THE PROPOSAL AND IDENTITY OF BIDDER

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 that 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. Bidders must either utilize the two envelopes provided with the Bidding documents, or Bidders provide their own two envelopes, for their proposals and bid security for submission of their bids.

Sales Tax: The bidder should not include sales tax in the bid pursuant to Iowa Code. A sales tax exemption certificate will be available for all material purchased for incorporation in the project.

Accessibility for individuals with disabilities. The City of Des Moines is pleased to provide accommodations to individuals with disabilities or groups and encourages participation in City government. To better serve you, please notify us at least three business days in advance when possible at 515-283-4209, should special accommodations be required.
B. All pages of the Proposal must be returned. The following documents shall be completed, signed and returned in the Proposal envelope.

PROPOSAL - Complete each of the following parts:
- Part B - Acknowledgement of Addenda, if any have been issued;
- Part C - Bid Items, Quantities and Prices;
- Part F - Additional Requirements; The following proposal attachment documents must be completed and attached:

<table>
<thead>
<tr>
<th>ITEM NO.</th>
<th>DESCRIPTION OF ATTACHMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Reciprocal Resident Bidder and Labor Force</td>
</tr>
<tr>
<td>2.</td>
<td>General</td>
</tr>
</tbody>
</table>

- Part G - Identity of Bidder.

The Bidder shall sign the proposal. The signature on the proposal and all proposal attachments must be an original signature in ink signed by the same individual who is the Company Owner or an authorized Officer of the Company; copies or facsimile of any signature will not be accepted. The Bidder Status Form (PROPOSAL Part F Item 2D), is required by the Iowa Labor Commissioner, pursuant to Iowa Admin. 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 Admin. 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: Authorization to Transact Business from the Labor Commissioner is included on page 3 of 3 of the Instructions to Bidders, to assist Bidders in completing the Bidder Status Form.

C. Out-of-State Contractors:

1. 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 Iowa Department of Workforce Development. The contractor should contact 515-242-5871 for further information. Prior to contract execution, the City Engineer may forward a copy of this contract to the Iowa Department of Workforce Development as notification of pending construction work. It is the contractor's responsibility to comply with said Section 91C.7 before commencing this work.

2. Prior to entering into contract, the designated low bidder, if it be 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 Code of Iowa, or as amended, governing foreign corporations. For further information contact the Iowa Secretary of State Office at 515-281-5204.

III. GENERAL

A. All bid documents must be submitted as printed. No alterations, additions, or deletions are permitted. 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.

B. Additional information regarding addenda, plan holders, bid tabulations, etc. can be found on the Engineering Department web site at <http://www.dm.gov/Departments/Engineering/Pages/BidsContracts.aspx>.
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.

309-6001 02-14
NOTICE TO BIDDERS

CITY OF DES MOINES PUBLIC IMPROVEMENT PROJECT

Time and Place for Filing Sealed Proposals. Sealed bids for the work comprising each improvement as stated below must be filed at or before 11:00 a.m. on April 5, 2022, in the office of the City Clerk, 1st Floor, City Hall, 400 Robert D. Ray Drive, Des Moines, Iowa, 50309.

Accessibility for individuals with disabilities. The City of Des Moines is pleased to provide accommodations to individuals with disabilities or groups and encourages participation in City government. To better serve you, please notify us at least three business days in advance when possible at 515-283-4209, should special accommodations be required.

Time and Place Sealed Proposals Will be Opened and Considered. Sealed proposals will be opened and bids tabulated at 11:00 a.m., on April 5, 2022, in the City Council Chambers, 2nd Floor, City Hall, 400 Robert D. Ray Drive, Des Moines, Iowa, for consideration by the City Council (Council) at its meeting on May 9, 2022. The City of Des Moines (Jurisdiction) reserves the right to reject any and all bids.

Time for Commencement and Completion of Work. Work on each improvement shall be commenced upon approval of the contract by the Council, and completed as stated below.

Bid Security. Each bidder shall accompany its bid with bid security as defined in Section 26.8 of the Iowa Code and as specified by the Jurisdiction.

Contract Documents. Copies of the contract documents will be available after March 21, 2022, from the City Engineer's Office, 2nd Floor, City Hall, 400 Robert D. Ray Drive, Des Moines, Iowa 50309, at no cost, phone (515-283-4573).

Preference for Iowa Products and Labor. 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.

Sales Tax. The bidder should not include sales tax in the bid. A sales tax exemption certificate will be available for all material purchased for incorporation in the project.

General Nature of Public Improvement.

2022 HMA Residential Paving Program Contract 2 – LOSST, 062022014
The improvement includes furnishing labor, equipment, and materials for the removal of existing Hot Mix Asphalt (HMA) pavement and surfacing materials by milling/scarifying to an average depth of four (4) inches, prepare subgrade/subbase, reconstruct with four (4) inches of HMA pavement with two (2) lifts, replace sections of Portland Cement Concrete (PCC) curb and gutter, and replace existing sidewalk ramps with ADA compliant ramps; all in accordance with the contract documents and as directed by the engineer at the following locations within the City of Des Moines, Iowa:

Franklin Avenue from 24th Street to dead end east
Amos Avenue from S.W. 17th Street to S.W. 14th Street
Hart Avenue from S.E. 36th Street to S.E. 40th Street
S.E. 24th Street from Maury Street to Shaw Street
S.E. 27th Street from Maury Street to dead end north
E. 30th Street from dead end south to Hubbell Avenue
E. Ovid Avenue from E. 7th Street to E. 12th Street
E. Jefferson Avenue from Larnard Drive to E. 31st Street
Larnard Drive from E. 29th Street to E. Jefferson Avenue
Hyde Drive from S.W. 12th Street to Caulder Avenue
56th Street from Ovid Avenue to Douglas Avenue

The improvement also includes furnishing labor, equipment, and materials for the removal of existing HMA pavement and surfacing materials by milling/scarifying to an average depth of four (4) inches, preparing subgrade/subbase with cement stabilization, reconstruct with four (4) inches of HMA pavement with two (2) lifts, replace sections of PCC curb and gutter, and replace existing sidewalk ramps with ADA compliant ramps; all in accordance with the contract documents and as directed by the engineer at the following locations within the City of Des Moines, Iowa:

Broad Street from S.W. 5th Street to South Union Street
E. 40th Street from E. University Avenue to Mahaska Avenue
Garden Road from Sunset Road to 2935 Bell Avenue.

This project shall be fully completed not later than May 31, 2023, and in accordance with the Completion Provisions.

**Engineer's Construction Estimate.** $1,600,000.00

**Preletting Conference.**
NOTICE OF PUBLIC HEARING

CITY OF DES MOINES PUBLIC IMPROVEMENT PROJECT

Public Hearing on Proposed Contract Documents and Estimated Costs for Improvement. A public hearing will be held by the City Council on the proposed contract documents (plans, specifications and form of contract) on file in the City Engineer’s Office, and estimated cost for each improvement at its meeting on May 9, 2022, at 5:00 p.m., in the City Council Chambers, 2nd Floor, City Hall, 400 Robert D. Ray Drive, Des Moines, Iowa. Please check the posted agenda in advance of the May 9, 2022 meeting for any update on the manner in which the public hearing will be conducted to comply with COVID-19 social distancing and safety guidelines. The City Council Meetings are open to all individuals regardless of disability. To better serve you, please notify the City Clerk at least three business days in advance, when possible, should special accommodations be required.

General Nature of Public Improvement

2022 HMA Residential Paving Program Contract 2 – LOSST, 062022014

The improvement includes furnishing labor, equipment, and materials for the removal of existing Hot Mix Asphalt (HMA) pavement and surfacing materials by milling/scarifying to an average depth of four (4) inches, prepare subgrade/subbase, reconstruct with four (4) inches of HMA pavement with two (2) lifts, replace sections of Portland Cement Concrete (FCC) curb and gutter, and replace existing sidewalk ramps with ADA compliant ramps; all in accordance with the contract documents and as directed by the engineer at the following locations within the City of Des Moines, Iowa:

Franklin Avenue from 24th Street to dead end east
Amos Avenue from S.W. 17th Street to S.W. 14th Street
Hart Avenue from S.E. 36th Street to S.E. 40th Street
S.E. 24th Street from Maury Street to Shaw Street
S.E. 27th Street from Maury Street to dead end north
E. 30th Street from dead end south to Hubbell Avenue
E. Ovid Avenue from E. 7th Street to E. 12th Street
E. Jefferson Avenue from Lamard Drive to E. 31st Street
Lamard Drive from E. 29th Street to E. Jefferson Avenue
Hyde Drive from S.W. 12th Street to Caulder Avenue
56th Street from Ovid Avenue to Douglas Avenue

The improvement also includes furnishing labor, equipment, and materials for the removal of existing HMA pavement and surfacing materials by milling/scarifying to an average depth of four (4) inches, preparing subgrade/subbase with cement stabilization, reconstruct with four (4) inches of HMA pavement with two (2) lifts, replace sections of PCC curb and gutter, and replace existing sidewalk ramps with ADA compliant ramps; all in accordance with the contract documents and as directed by the engineer at the following locations within the City of Des Moines, Iowa:

Broad Street from S.W. 5th Street to South Union Street
E. 40th Street from E. University Avenue to Mahaska Avenue
Garden Road from Sunset Road to 2935 Bell Avenue

Published in the Des Moines Register
April 20, 2022
To the Honorable Mayor and Members of the
City Council, City of Des Moines, Iowa

PROPOSAL: PART A - SCOPE

The City of Des Moines, 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 improvements or project as specified in the contract documents, which are officially on file with the Jurisdiction, in the Des Moines City Engineer's Office, at the prices hereinafter provided in Part C of this Proposal, for the following described improvements:

2022 HMA Residential Paving Program Contract 2 – LOSST, 062022014
The improvement includes furnishing labor, equipment, and materials for the removal of existing Hot Mix Asphalt (HMA) pavement and surfacing materials by milling/scarring to an average depth of four (4) inches, prepare subgrade/subbase, reconstruct with four (4) inches of HMA pavement with two (2) lifts, replace sections of Portland Cement Concrete (PCC) curb and gutter, and replace existing sidewalk ramps with ADA compliant ramps; all in accordance with the contract documents and as directed by the engineer at the following locations within the City of Des Moines, Iowa:

Franklin Avenue from 24th Street to dead end east  
Amos Avenue from S.W. 17th Street to S.W. 14th Street  
Hart Avenue from S.E. 56th Street to S.E. 40th Street  
S.E. 24th Street from Maury Street to Shaw Street  
S.E. 27th Street from Maury Street to dead end north  
E. 30th Street from dead end south to Hubbell Avenue  
E. Ovid Avenue from E. 7th Street to E. 12th Street  
E. Jefferson Avenue from Larnard Drive to E. 31st Street  
Larnard Drive from E. 29th Street to E. Jefferson Avenue  
Hyde Drive from S.W. 12th Street to Caulder Avenue  
56th Street from Ovid Avenue to Douglas Avenue

The improvement also includes furnishing labor, equipment, and materials for the removal of existing HMA pavement and surfacing materials by milling/scarring to an average depth of four (4) inches, preparing subgrade/subbase with cement stabilization, reconstruct with four (4) inches of HMA pavement with two (2) lifts, replace sections of PCC curb and gutter, and replace existing sidewalk ramps with ADA compliant ramps; all in accordance with the contract documents and as directed by the engineer at the following locations within the City of Des Moines, Iowa:

Broad Street from S.W. 5th Street to South Union Street  
E. 40th Street from E. University Avenue to Mahaska Avenue  
Garden Road from Sunset Road to 2935 Bell Avenue

PROPOSAL: PART B - ACKNOWLEDGEMENT 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

UNIT BID PRICE CONTRACTS: The bidder must provide all unit prices, the amount, the total construction cost, any alternate price(s), and the total construction cost plus any add-alternates if there are alternates on the proposal on Proposal Attachment Part C - Bid Items, Quantities, and Prices. The total construction cost plus any alternates selected by the Jurisdiction shall be used for comparison of bids. The total construction cost plus any add-alternates shall be used for determining the sufficiency of the bid security.
BASE BID CONTRACTS: The bidder must provide any bid price(s), the total base bid price, any alternate price(s), and the total base bid plus any add-alternates if there are alternates on the proposal on Proposal Attachment: Part C - Bid Items, Quantities, and Prices. The total base bid plus any alternates selected by the Jurisdiction shall be used for comparison of bids. The total 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 and provide the following documents:
   - Proof of registration with the Iowa Division of Labor in accordance with Chapter 91C of the Iowa Code by providing a valid Registration Number,
   - Proof of insurance by a Certificate(s) of Insurance,
   - 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 documents and information as requested in Item 1 above acceptable to the Des Moines City Engineer; and

3. Commence the work on this project on or after the date a written Notice to Proceed is issued by the Jurisdiction, and to fully complete the project not later than May 31, 2023, and in accordance with the Completion Provisions; and to pay liquidated damages for noncompliance with said completion provisions at the rate of Five Hundred and 00/100 ($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 paid 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 put in 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.

PROPOSAL: PART F - ADDITIONAL REQUIREMENTS

The Bidder hereby agrees to comply with the additional requirements listed below, which are included in this proposal and identified as proposal attachments:

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<thead>
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<td>Reciprocal Resident Bidder and Labor Force</td>
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<td>2.</td>
<td>General</td>
</tr>
</tbody>
</table>
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

By

Bidder

Signature

Name (Print/Type)

Title

Street Address

City, State, Zip Code

Telephone Number / Email Address

A contract will not be executed until the apparent low Bidder is registered with the Iowa Commissioner of Labor pursuant to Section 91C.5 of the Iowa Code. The Bidder should contact 515-242-5871 for registration information.

Engineering Department Staff will contact the apparent low Bidder and obtain the name and title of the company's owner, president, CEO, etc. if a different person than entered above.

NOTE: The signature on this proposal must be an original signature in ink; copies or facsimile of any signature will not be accepted.
This is a unit bid price contract. The bidder must provide all unit prices, the amount, the total construction cost, any alternate price(s), and the total construction cost plus any add-alternates if there are alternates on the proposal. The total construction cost plus any altersates selected by the Jurisdiction shall be used for comparison of bids. The total construction cost plus any add-alternates shall be used for determining the sufficiency of the bid security.

<table>
<thead>
<tr>
<th>ITEM</th>
<th>ITEM CODE</th>
<th>DESCRIPTION</th>
<th>UNITS</th>
<th>QUANTITY</th>
<th>UNIT PRICE</th>
<th>AMOUNT</th>
</tr>
</thead>
<tbody>
<tr>
<td>0001</td>
<td>2010.1.08.E</td>
<td>GRANULAR SUBBASE, REMOVE, STOCKPILE ON-SITE, AND REUSE AND REPLACE ON SURFACE AFTER CEMENT SUBGRADE STABILIZATION - ASSUME 4&quot; DEPTH</td>
<td>TON</td>
<td>359.00</td>
<td>$</td>
<td>$</td>
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<td>2010.1.08.H</td>
<td>GRANULAR STABILIZATION, MODIFIED SUBBASE</td>
<td>TON</td>
<td>1677.00</td>
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<td>0003</td>
<td>2010.1.08.H</td>
<td>GRANULAR STABILIZATION, 3&quot; CLEAN CRUSHED STONE</td>
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<td>2010.2.04.C</td>
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<td>0006</td>
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<td>0008</td>
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<td>MANHOLE ADJUSTMENT, MINOR, WITH BOXOUT</td>
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<td>0009</td>
<td>7010.1.08.E</td>
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<td>0100</td>
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<td>HMA STANDARD TRAFFIC (ST) SURFACE, 1/2&quot; MIX, NO FRIC, PG 58-28S</td>
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<td>0112</td>
<td>7030.1.08.G</td>
<td>DETECTABLE WARNING DEVICES, CAST IRON</td>
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<td>DRIVEWAY, PAVED, PCC, 6&quot;</td>
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<td>0114</td>
<td>7040.1.08.G</td>
<td>MILLING, 4&quot; AVERAGE DEPTH</td>
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TOTAL CONSTRUCTION COST $
Iowa Code section 73A.21 provides for a Reciprocal Resident Bidder and Labor Force preference.

Because of the nature of this project (i.e. Federal-aid participation), the Reciprocal Resident Bidder and Labor Force preference,

☐ shall not apply to this project, and the bidder need not complete the Resident Bidder Information below.

☒ shall apply to this project, and the bidder shall complete the Resident Bidder Information below.

To implement section 73A.21, the Iowa Labor Commissioner adopted chapter 156 of the Iowa Administrative Code. "Bidder Preferences in Government Contracting". Iowa Admin. Code rule 875-156.2(1) requires each bidder to complete the attached Bidder Status Form. The Bidder must complete and submit the Bidder Status Form, signed by an authorized representative of the bidder, with their bid Proposal. Under Iowa Admin. Code rule 875-156.2(1), failure to provide the statement with the bid may result in the bid being deemed nonresponsive and may result in the bid being rejected.
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: Authorization to Transact Business", on page 3 of the "Instructions to Bidders")

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 nonresident bidder. Please complete Parts C and D of this form.

Part B

To be completed by resident bidders

My company has maintained offices in Iowa during the past 3 years at the following addresses:

Dates: _____ / _____ / _____ to _____ / _____ / _____ Address:
City, State, Zip:

Dates: _____ / _____ / _____ to _____ / _____ / _____ Address:
City, State, Zip:

Dates: _____ / _____ / _____ to _____ / _____ / _____ Address:
City, State, Zip:

You may attach additional sheet(s) if needed.

Part C

To be completed by non-resident bidders

1. Name of home state or foreign country reported to the Iowa Secretary of State:

2. Does your company’s home state or foreign country offer preferences to bidders who are residents? Yes____ No____

3. If you answered “Yes” to question 2, identify each preference offered by your company’s home state or foreign country and the appropriate legal citation.

You may attach additional sheet(s) if needed.

Part D

To be completed by all bidders

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:

You must submit the completed form to the governmental body requesting bids per 875 Iowa Administrative Code Chapter 156.

This form has been approved by the Iowa Labor Commissioner.

309-6001 02-14
PROPOSAL ATTACHMENT: PART F - ADDITIONAL REQUIREMENTS
ITEM 2 - GENERAL

1. The work under this proposal shall be constructed in accordance with the SUDAS Standard Specifications, 2022 Edition, and as further modified by the supplemental specifications and special provisions included in the contract documents.

Alternate Sales Tax:
Section 1020, 1.08, B, of the Supplemental Specifications shall apply. The bidder should not include sales tax in the bid. A sales tax exemption certificate will be available for all material purchased for incorporation in the project.

2. The Bidder hereby acknowledges that the City of Des Moines in advertising for public bids for this work reserves the right to give a limited notice to proceed of a duration not longer than three months. This limited notice to proceed shall be given where all necessary right-of-way has not yet been acquired. The limited notice to proceed will allow construction to proceed as far as possible and practicable on the right-of-way, which has been acquired.

3. The Bidder hereby acknowledges and agrees:
   • To comply with the Equal Employment Opportunity Program included in the City of Des Moines Contract Compliance Program, which is available at the following website <http://www.dm.gov/Departments/Engineering/PDF/Contract%20Compliance%20Program%20(June%202017).pdf>
     or from the City Engineer’s Office.
   • To comply with any and all applicable provisions of the Des Moines Human Rights Ordinance, Chapter 62, of the Des Moines Municipal Code.
   • Not to discriminate against any employees, or applicants for employment, on the basis of age, race, religion, creed, color, sex, sexual orientation, national origin, ancestry, disability, familial status or gender identity.
   • To include this provision in all subcontracts for this project.

4. The City’s Overall Annual DBE/TSB Goal for calendar year 2021 is 6.03%, which represents a target that the City would like to achieve in including DBE/TSB participation on City contracts; and is not a mandatory goal for this project. The Certified Directory of DBEs is available at the following website <https://secure.iowadot.gov/DBE/Directory/Index/>. The Certified Directory of TSBs is available at the following website <https://iowaeda.dynamics365portals.us/tsb-search/>.

PROPOSAL ATTACHMENT: PART F - ADDITIONAL REQUIREMENTS
ITEM 3 - COMPLETION PROVISIONS

The bidder hereby agrees to commence and complete the work in accordance with the attached Completion Provisions.
PROPOSAL ATTACHMENT: PART F – ADDITIONAL REQUIREMENTS
ITEM 3 – COMPLETION PROVISIONS

The Bidder hereby agrees to:

1. Commence the work on the project on or after a date to be specified in a written Notice to Proceed by the City and to fully complete the project not later than May 31, 2023, and to pay liquidated damages for noncompliance with said completion provision in the amount of five hundred and no/100 dollars ($500.00) for each calendar day thereafter.

2. Undertake and schedule work in compliance with intermediate completion provisions as described below. The work to be completed by the intermediate completion date shall be such work as required to satisfy the intermediate completion date description.

**Intermediate Completion Conditions:**

- From time of mobilization to each of the project site locations, the Contractor shall be allowed no more than ten (10) calendar days to complete all milling, grading, removals, paving, cleanup, and restoration at each site; and to pay liquidated damages for noncompliance with said completion provision in the amount of five hundred and no/100 dollars ($500.00) for each calendar day thereafter.

The following items do not need to be completed for the Intermediate Completion Condition as described above. This list includes but is not limited to the following:
- Seeding
- Sod
- Construction of ADA compliant sidewalk ramps

- Commence the work at the following site on or after June 6, 2022, and fully complete the work (including punch list items) by August 12, 2022, and to pay liquidated damages for noncompliance with said completion provision in the amount of five hundred and no/100 dollars ($500.00) for each calendar day thereafter.

  - E. Ovid Avenue from E. 7th Street to E. 12th Street

3. Pay separate sums of liquidated damages that will be assessed for each of the conditions described hereinbefore, and they shall be cumulative if multiple conditions have not been satisfied.
BID BOND

KNOW ALL BY THESE PRESENTS:

That we, ________________________________, as Principal, and ________________________________, as Surety, are held and firmly bound unto the City of Des Moines, as Obligee (hereinafter the "Jurisdiction"), in the penal sum of ________________________________ dollars

($________________) lawful money of the United States, for which payment the Principal and Surety bind themselves, their heirs, executors, administrators, successors, and assigns jointly and severally, firmly by these presents.

The Principal has submitted to the Jurisdiction a proposal to enter into a contract in writing, for the following described improvements:

2022 HMA Residential Paving Program Contract 2 – LOSST, 062022014

The improvement includes furnishing labor, equipment, and materials for the removal of existing Hot Mix Asphalt (HMA) pavement and surfacing materials by milling/scarifying to an average depth of four (4) inches, prepare subgrade/subbase, reconstruct with four (4) inches of HMA pavement with two (2) lifts, replace sections of Portland Cement Concrete (PCC) curb and gutter, and replace existing sidewalk ramps with ADA compliant ramps; all in accordance with the contract documents and as directed by the engineer at the following locations within the City of Des Moines, Iowa:

Franklin Avenue from 24th Street to dead end east
Amos Avenue from S.W. 17th Street to S.W. 14th Street
Hart Avenue from S.E. 36th Street to S.E. 40th Street
S.E. 24th Street from Maury Street to Shaw Street
S.E. 27th Street from Maury Street to dead end north
E. 30th Street from dead end south to Hubbell Avenue
E. Ovid Avenue from E. 7th Street to E. 12th Street
E. Jefferson Avenue from Larnard Drive to E. 31st Street
Larnard Drive from E. 29th Street to E. Jefferson Avenue
Hyde Drive from S.W. 12th Street to Caudler Avenue
56th Street from Ovid Avenue to Douglas Avenue

The improvement also includes furnishing labor, equipment, and materials for the removal of existing HMA pavement and surfacing materials by milling/scarifying to an average depth of four (4) inches, preparing subgrade/subbase with cement stabilization, reconstruct with four (4) inches of HMA pavement with two (2) lifts, replace sections of PCC curb and gutter, and replace existing sidewalk ramps with ADA compliant ramps; all in accordance with the contract documents and as directed by the engineer at the following locations within the City of Des Moines, Iowa:

Broad Street from S.W. 5th Street to South Union Street
E. 40th Street from E. University Avenue to Mahaska Avenue
Garden Road from Sunset Road to 2935 Bell Avenue
The Surety hereby stipulates and agrees that the obligations of the Surety and its Bond will be in no way impaired or affected by any extension of the time within which the Jurisdiction may accept the Bid or execute a Contract; and the 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 will be Polk County, State of Iowa. If legal action is required by the Jurisdiction against the Surety or Principal to enforce the provisions of this bond or to collect the monetary obligation accruing to the benefit of the Jurisdiction, the Surety or Principal agrees to pay the Jurisdiction all outlay and expense incurred by the Jurisdiction in enforcing any of the provisions of this Bond. All rights, powers, and remedies of the Jurisdiction are cumulative and not alternative and are in addition to all rights, powers and remedies given to the Jurisdiction by law. The Jurisdiction may proceed against the Surety for any amount guaranteed hereunder whether action is brought against Principal or whether or not the Principal is joined in the action. As used herein, the phrase “all outlay and expense” is not to be limited in any way, but includes 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, 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.

If the proposal by the Principal is accepted and the Principal enters into a contract with the Jurisdiction in accordance with the terms of the proposal, including the provision of insurance and bond as specified in the contract documents with good and sufficient surety for the faithful performance of the contract, for the prompt payment of labor and material furnished in the prosecution of the work, and for the maintenance of the improvements as may be required in the contract documents or, in the event the Principal does not enter into a contract and provide the required insurance and bonds, the Principal pays the penal sum to the Jurisdiction, then this obligation will become null and void; otherwise, the Surety 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:

________________________

Surety Company

By _______________________

Signature Attorney-in-Fact/Officer

________________________

Name of Attorney-in-Fact/Officer

________________________

Company Name

________________________

Company Address

________________________

City, State Zip Code

________________________

Company Telephone Number

PRINCIPAL:

________________________

Bidder

By _______________________

Signature

________________________

Name

________________________

Title

________________________

Address

________________________

City, State Zip Code

________________________

Telephone Number
NOTE:

1. All signatures on this bid bond must be original signatures in ink; copies or facsimile of any signature will not be accepted.

2. This bond must be sealed with the Surety's raised, embossed seal.

3. The Certificate or Power of Attorney accompanying this bond must be valid on its face and sealed with the Surety's raised, embossing seal or security watermark.

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.
CONTRACT

THIS CONTRACT, made and entered into at Des Moines, Iowa, on ______________, by and between the City of Des Moines, by its Mayor, upon order of its City Council, hereinafter the "Jurisdiction", and

_________________________________, hereinafter 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 Des Moines City Engineer's Office. This contract includes all contract documents. The work under this contract shall be constructed in accordance with the SUDAS Standard Specifications, 2022 Edition; and as further modified by the supplemental specifications and special provisions included in said contract documents, and the Contract Attachments attached hereto. The Des Moines City Engineer is the Engineer. The Contractor further agrees to complete the work in strict accordance with said contract documents, and to guarantee the work as required by law, for the time required in said contract documents, after its acceptance by the Jurisdiction.

This contract is awarded and executed for completion of the work specified in the contract documents for the bid prices shown on the Contract Attachment: Item 2: Bid Items, Quantities and Prices which were proposed by the Contractor in its proposal submitted in accordance with the Notice to Bidders for the following described improvements:

2022 HMA Residential Paving Program Contract 2 – LOSST, 062022014
The improvement includes furnishing labor, equipment, and materials for the removal of existing Hot Mix Asphalt (HMA) pavement and surfacing materials by milling/scarring to an average depth of four (4) inches, prepare subgrade/subbase, reconstruct with four (4) inches of HMA pavement with two (2) lifts, replace sections of Portland Cement Concrete (PCC) curb and gutter, and replace existing sidewalk ramps with ADA compliant ramps; all in accordance with the contract documents and as directed by the engineer at the following locations within the City of Des Moines, Iowa:

Franklin Avenue from 24th Street to dead end east
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E. 30th Street from dead end south to Hubbell Avenue
E. Ovid Avenue from E. 7th Street to E. 12th Street
E. Jefferson Avenue from Larnard Drive to E. 31st Street
Larnard Drive from E. 29th Street to E. Jefferson Avenue
Hyde Drive from S.W. 12th Street to Caudle Avenue
56th Street from Ovid Avenue to Douglas Avenue

The improvement also includes furnishing labor, equipment, and materials for the removal of existing HMA pavement and surfacing materials by milling/scarring to an average depth of four (4) inches, preparing subgrade/subbase with cement stabilization, reconstruct with four (4) inches of HMA pavement with two (2) lifts, replace sections of PCC curb and gutter, and replace existing sidewalk ramps with ADA compliant ramps; all in accordance with the contract documents and as directed by the engineer at the following locations within the City of Des Moines, Iowa:

Broad Street from S.W. 5th Street to South Union Street
E. 40th Street from E. University Avenue to Mahaska Avenue
Garden Road from Sunset Road to 2935 Bell Avenue

The Contractor agrees to perform said work for and in consideration of the Jurisdiction's payment of the bid amount of ________________________________ dollars ($___________________________) which amount shall constitute the required amount of the performance, payment, and maintenance bond. The Contractor hereby agrees to commence work under this contract on or after the date a written Notice to Proceed is issued by the Jurisdiction and to fully complete the project not later than May 31, 2023, and in accordance with the Completion Provisions; and to pay liquidated damages for noncompliance with completion provision in the amount of Five Hundred and 00/100 dollars ($500.00), 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:

By

T. M. Franklin Cowie, Mayor

(Seal)

ATTEST:

P. Kay Cmelik, City Clerk

FORM APPROVED BY:

Kathleen Vanderpool, Deputy City Attorney

C)NTRACTOR:

Contractor

By

Signature

Title

Street Address

City, State - Zip Code

Telephone Number / Email Address

CONTRACTOR PUBLIC REGISTRATION INFORMATION To Be Provided By:

1. All Contractors: The Contractor's Public Registration Number, issued by the Iowa Commissioner of Labor pursuant to Section 91C.5 of the Iowa Code, is as follows:

   Number

2. Out-of-State Contractors:

   A. Pursuant to Section 91C.7 of the Iowa Code, an out-of-state contractor, before commencing a contract in excess of five thousand dollars in value in Iowa, shall file a bond with the division of labor services of the department of workforce development. The contractor should contact 515-242-5871 for further information. Prior to contract execution, the City Engineer may forward a copy of this contract to the Iowa Department of Workforce Development as notification of pending construction work. It is the contractor's responsibility to comply with said Section 91C.7 before commencing this work.

   B. Prior to entering into contract, the designated low bidder, if it be 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 Code of Iowa, or as amended, governing foreign corporations. For further information contact the Iowa Secretary of State Office at 515-281-5204.

NOTE: All signatures on this contract must be original signatures in ink: copies or facsimile of any signature will not be accepted.
CORPORATE ACKNOWLEDGEMENT

State of __________________________ )
______________________________ County )

SS

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; ______________________ 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 __________________________

My commission expires _____________________________________

SUDAS 04/25/2016

CONTRACT Page 4 of 4
1. The Contractor acknowledges and agrees:
   - To comply with the Equal Employment Opportunity Program included in the City of Des Moines Contract Compliance Program, which is available at the following website <http://www.dmgov.org/Departments/Engineering/PDF/Contract%20Compliance%20Program%20(June%202017).pdf> or from the City Engineer’s Office.
   - To comply with any and all applicable provisions of the Des Moines Human Rights Ordinance, Chapter 62, of the Des Moines Municipal Code.
   - Not to discriminate against any employees, or applicants for employment, on the basis of age, race, religion, creed, color, sex, sexual orientation, national origin, ancestry, disability, familial status or gender identity.
   - To include this provision in all subcontracts for this project.

2. The Contractor agrees to comply with the requirements of the City of Des Moines Contract Compliance Program as referenced in the proposal. Final acceptance of the project will not be made until the Contractor has submitted to the City Engineer a notarized summary of payments to and scope of work by all DBE/TSB subcontractors.

3. The City of Des Moines Master Construction Safety Packet (Safety Plan) is available at <http://www.dmgov.org/Departments/Engineering/PDF/MasterConstructionSafetyPacket.pdf> and is also available upon request from the Engineering Department. The Engineering Department will make available a copy of the City of Des Moines Safety Plan to the Contractor when the contract is awarded. The Contractor understands and agrees that said Safety Plan is for the Contractor’s information only and that it is the Contractor’s sole responsibility to provide, or make available, this safety information to all its Subcontractors.

4. The Contractor understands and agrees that the construction of the work included in this contract is by its nature dangerous work. The Contractor agrees:
   - That the Contractor should have a safety program; however, the Contractor need not submit a safety program to the City of Des Moines, and City of Des Moines staff will not review or approve the Contractor’s safety program. The City of Des Moines assumes that the Contractor will maintain a safe worksite; however, City of Des Moines staff will not intrude in the Contractor’s responsibility for safety issues.
   - That 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.
   - That the Contractor is responsible for the project area or work site.
   - That the Contractor is solely responsible for the safety of everyone on its work site.
   - That it is the Contractor’s sole responsibility to provide as safe a working site as possible given the nature of the work.
   - That 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.

5. The Contractor acknowledges and agrees that no contract shall be binding upon the City of Des Moines until said contract has been executed by the Bidder, and shall have been approved by the City Council and executed by the Mayor and attested to by the City Clerk.
6. The Contractor agrees that sixty (60) days shall constitute a reasonable time within which it shall be required to make progress payments or final payment to subcontractors after each subcontractor's satisfactory performance of its work, all as required by Section 573.12 2.b.(2) of the Code of Iowa.
This contract is awarded and executed for completion of the work specified in the contract documents for the bid price tabulated below as proposed by the contractor in its proposal submitted in accordance with notice to bidders and notices of public hearing. All quantities are subject to revision by the Jurisdiction. Quantity changes which amount to twenty (20) percent or less of the total bid shall not affect the unit bid price of that item.

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<th>ITEM</th>
<th>ITEM CODE</th>
<th>DESCRIPTION</th>
<th>UNITS</th>
<th>QUANTITY</th>
<th>PRICE</th>
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TOTAL CONSTRUCTION COST

* Item does not have to be included in 4-year maintenance bond but shall be covered by a 1-year maintenance bond.

NOTE: It is understood that the above quantities are estimated for the purpose of this bid. All quantities are subject to revision by the City. Quantity changes which amount to twenty (20) percent or less of the total bid shall not affect the unit bid price of that item.
CONTRACT ATTACHMENT:  ITEM 3 – COMPLETION PROVISIONS

The Contractor hereby agrees to:

1. Commence the work on the project on or after a date to be specified in a written Notice to Proceed by the City and to fully complete the project not later than May 31, 2023, and to pay liquidated damages for noncompliance with said completion provision in the amount of five hundred and no/100 dollars ($500.00) for each calendar day thereafter.

2. Undertake and schedule work in compliance with intermediate completion provisions as described below. The work to be completed by the intermediate completion date shall be such work as required to satisfy the intermediate completion date description.

Intermediate Completion Conditions:

- From time of mobilization to each of the project site locations, the Contractor shall be allowed no more than ten (10) calendar days to complete all milling, grading, removals, paving, cleanup, and restoration at each site; and to pay liquidated damages for noncompliance with said completion provision in the amount of five hundred and no/100 dollars ($500.00) for each calendar day thereafter.

The following items do not need to be completed for the Intermediate Completion Condition as described above. This list includes but is not limited to the following:
  - Seeding
  - Sod
  - Construction of ADA compliant sidewalk ramps

- Commence the work at the following site on or after June 6, 2022, and fully complete the work (including punch list items) by August 12, 2022, and to pay liquidated damages for noncompliance with said completion provision in the amount of five hundred and no/100 dollars ($500.00) for each calendar day thereafter.

  - E. Ovid Avenue from E. 7th Street to E. 12th Street

3. Pay separate sums of liquidated damages that will be assessed for each of the conditions described hereinbefore, and they shall be cumulative if multiple conditions have not been satisfied.
PERFORMANCE, PAYMENT & MAINTENANCE BOND

KNOW ALL BY THESE PRESENTS:

That we, ________________________________________, as Principal (the "Contract" or "Principal"), and ________________________________________, as Surety, are held and firmly bound unto the City of Des Moines, as Obligee (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 and severally, firmly by these presents.

The conditions of the above obligations are such that whereas the Contractor entered into a contract with the Jurisdiction, bearing the date of _________________, (the "Contract") wherein the Contractor undertakes and agrees to construct the following described improvements:

2022 HMA Residential Paving Program Contract 2 – LOSST, 062022014

The improvement includes furnishing labor, equipment, and materials for the removal of existing Hot Mix Asphalt (HMA) pavement and surfacing materials by milling/scarifying to an average depth of four (4) inches, prepare subgrade/subbase, reconstruct with four (4) inches of HMA pavement with two (2) lifts, replace sections of Portland Cement Concrete (PCC) curb and gutter, and replace existing sidewalk ramps with ADA compliant ramps; all in accordance with the contract documents and as directed by the engineer at the following locations within the City of Des Moines, Iowa:

Franklin Avenue from 24th Street to dead end east  
Amos Avenue from S.W. 17th Street to S.W. 14th Street  
Hart Avenue from S.E. 36th Street to S.E. 40th Street  
S.E. 24th Street from Maury Street to Shaw Street  
S.E. 27th Street from Maury Street to dead end north  
E. 30th Street from dead end south to Hubbell Avenue  
E. Ovid Avenue from E. 7th Street to E. 12th Street  
E. Jefferson Avenue from Larnard Drive to E. 31st Street  
Larnard Drive from E. 29th Street to E. Jefferson Avenue  
Hyde Drive from S.W. 12th Street to Caulder Avenue  
36th Street from Ovid Avenue to Douglas Avenue

The improvement also includes furnishing labor, equipment, and materials for the removal of existing HMA pavement and surfacing materials by milling/scarifying to an average depth of four (4) inches, preparing subgrade/subbase with cement stabilization, reconstruct with four (4) inches of HMA pavement with two (2) lifts, replace sections of PCC curb and gutter, and replace existing sidewalk ramps with ADA compliant ramps; all in accordance with the contract documents and as directed by the engineer at the following locations within the City of Des Moines, Iowa:

Broad Street from S.W. 5th Street to South Union Street  
E. 40th Street from E. University Avenue to Mahaska Avenue  
Garden Road from Sunset Road to 2935 Bell Avenue
and to faithfully perform all the terms and requirements of the Contract within the time specified, in a good and
workmanlike manner, and in accordance with the Contract Documents. Provided however, that one year after
the date of acceptance by the Jurisdiction as complete, of the work under the above referenced Contract, the
maintenance portion of this Bond shall continue in force but the penal sum for maintenance shall be reduced to

($_________________________), which is the cost associated with those items shown on the Proposal and in the

Contract which require a maintenance bond period in excess of one year.

It is expressly understood and agreed by the Contractor and Surety that the following provisions are a part of this
Bond and are binding upon the 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 the Contract and Contract Documents, by reference made a part
hereof, and shall indemnify and save harmless the Jurisdiction from all outlay and expense incurred by the
Jurisdiction by reason of the Contractor's default or 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 Surety on this bond hereby agree to pay all just claims submitted by
persons, firms, subcontractors, and corporations furnishing materials for or performing labor in the
performance of the Contract, including but not limited to claims for all amounts due for labor, materials,
lubricants, oil, gasoline, repairs on machinery, equipment and tools, consumed or used by the Contractor or
any subcontractor, wherein the same are not satisfied out of the portion of the contract price which the
Jurisdiction is required to retain until completion of the improvement, but the Contractor and Surety shall
not be liable unless the claims have been established as provided by law. The Contractor and Surety hereby
bind themselves to the obligations and conditions set forth in Iowa Code Chapter 573.

3. MAINTENANCE: The Contractor and the Surety shall, at their own expense:
   A. Remedy any and all defects that may develop in or result from work to be performed
      under the Contract within the period of four (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 the work;
   B. Keep all work in continuous good repair; and
   C. Pay the Jurisdiction's reasonable costs of monitoring and inspecting 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.

Contractor's and Surety's obligation extends to defects in workmanship or materials not discovered or
known to the Jurisdiction at the time the work was accepted.

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, that increases the total contract price and the penal sum of this bond, provided that all such changes do not, in the aggregate, involve an increase of more than twenty percent of the total contract price, and that this Bond shall then be released as to such excess increase; and

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 liquidated damages are being charged against the Contractor.

5. The Contractor and every Surety on this Bond shall be deemed and held bound, any contract to the contrary notwithstanding, to the following provisions:

A. That no provision of this Bond or of any other contract shall be valid which limits to less than five years after the acceptance of the work under the Contract the right to sue on this Bond.

B. 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 as 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.

C. In the event the Jurisdiction incurs any "outlay and expense" in defending itself with respect to any claim as to which the Contractor or Surety should have provided the defense, or in the enforcement of the promises given by the Contractor in the Contract, Contract Documents, or approved change orders, or in the enforcement of the promises given by the Contractor and Surety in this Bond, the Contractor and Surety agree that they will make the Jurisdiction whole for all such outlay and expense, provided that the Surety's obligation under this Bond shall not exceed 125% of the penal sum of this Bond.

In the event that any actions or proceedings are initiated with respect to this Bond, the parties agree that the venue thereof shall be Polk 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 accruing to the benefit of the Jurisdiction, the Contractor and Surety agree, jointly and severally, to pay the Jurisdiction all outlay and expense incurred 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 the Surety for any amount guaranteed hereunder whether action is brought against the Contractor or whether or not the Contractor is joined in the action.

NOW THEREFORE, the condition of this obligation is such that if the Principal shall faithfully perform all of 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.

Witness our hands, in triplicate, this ______ day of ______________ , 20_____

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Kathleen Vanderpool
Deputy City Attorney

NOTE:

1. All signatures on this performance, payment & maintenance bond must be original signatures in ink; copies or facsimile of any signature will not be accepted.

2. This bond must be sealed with the Surety's raised, embossed 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.

5. This bond form must be utilized as printed; no additions/deletions/alterations are permitted, other than providing the required information.
ENGINEERING DEPARTMENT
CITY OF DES MOINES, IOWA

SPECIAL PROVISION
BIDDING REQUIREMENTS
ON

2022 HMA RESIDENTIAL PAVING PROGRAM CONTRACT 2 - LOSST
ACTIVITY ID 06-2022-014

1) AWARD OF CONTRACT

The apparent low Bidder on this project will be required to furnish executed contract; Performance, Payment, and Maintenance Bond; Certificate of Insurance; and NPDES Certification Statements, if required, in substantial compliance with the contract documents to the Engineering Department before 12:00 noon on Friday, May 6, 2022. Completed documents in accordance with the contract documents and acceptable to the City of Des Moines Engineering and Legal Departments will be presented to the City Council for award of this contract on Monday, May 9, 2022. This would allow construction to begin upon issuance of the Notice to Proceed by the City Engineer.

By submission of a bid, the Bidder agrees that if the Bidder fails to furnish said executed contract; Performance, Payment, and Maintenance Bond; Certificate of Insurance; and NPDES Certification Statements, if required, in substantial compliance with the contract documents to the Engineering Department before 12:00 noon on Friday, May 6, 2022; the amount of the Bidder's bid security may become the property of the City and may be retained—not as a penalty but as liquidated damages. The award of the contract may then, at the discretion of the City, be made to the next-lowest responsible Bidder, or the work may be re-advertised or may be constructed by the City in any legal manner. Notice to Proceed will not be issued until the Contractor's insurance is in compliance with the specifications.

The Bidder is reminded that all subcontractors must be approved by the City Council. The Council policy is that subcontractors be approved at the time the contract is awarded, if possible. The Bidder should submit a letter requesting approval of any subcontractors along with the subcontractor’s NPDES Certification Statement, if required, at the time its executed contracts are submitted for approval.

2) CONTRACT COMPLIANCE PROGRAM


a. EEO Program – Complaints of discrimination in violation of the Des Moines Human Rights Ordinance, or corresponding state or federal law, should still be filed with the appropriate city, state, or federal agency. If a Contractor is found by one of these agencies to be engaging in illegal discrimination, the Contractor will be in breach of its contract with the City of Des Moines and appropriate action will be taken.

b. DBE/TSB Program: Certification – The City of Des Moines' program is a DBE/TSB Program whereby both certified DBEs and certified TSBs are equally eligible under the program. All DBEs shall be certified by the Iowa Department of Transportation (IDOT), and the Certified Directory of DBEs is available at the following website [https://secure.owadot.gov/DBE/Directory/Index/](https://secure.owadot.gov/DBE/Directory/Index/).
All TSBs shall be certified by the Iowa Department of Inspections and Appeals, and the Certified Directory of TSBs is available at the following website https://www.iowa.gov/tsb/index.php/search. The TSB website allows the user to search by name or other keyword. If the user enters the keyword "CONST" in the space next to Service Description and clicks SEARCH, the database will provide a listing of all TSBs that have identified various forms of construction as their type of work. The Directories will not be printed in the contract documents. Copies of the DBE and TSB Directories are available from the Engineering Department upon request.

c. DBE/TSB Program: Annual and Contract Goals – The City’s overall annual DBE/TSB goal will be based on the IDOT DBE overall annual goal established for the corresponding federal fiscal year as further adjusted and established by the Engineering Department to consider such factors as the current capacity of DBEs/TSBs to perform work, differences in the DBE versus TSB market, etc. By utilizing the IDOT overall annual DBE goal as the City’s overall annual DBE/TSB goal, the goal will be independently reviewed annually and updated regarding the availability of the DBEs that are ready, willing, and able to perform work. Many DBEs are also certified as TSBs and the availability is similar. The City’s overall annual DBE/TSB goal represents a target that the City would like to achieve by including DBE/TSB participation on City contracts; and is not a mandatory goal for this project. The Bidder is encouraged to use its best efforts to meet, and if possible exceed, the City’s overall annual DBE/TSB goal.

3) ALTERNATE SALES AND USE TAX

Section 1020, 1.08, B, of the General Supplemental Specifications shall apply to this contract. The Bidder should not include sales tax in the bid pursuant to Iowa Code. A sales tax exemption certificate will be available for all material purchased for incorporation in the project. Complete information on qualifying materials and supplies can be found at www.state.ia.us/tax, the Iowa Department of Revenue and Finance’s (IDRF) web site. Links are found in the Business Taxes and Local Government categories. Contact the IDRF at idrf@idrf.state.ia.us if you have questions on this requirement.
# SPECIAL PROVISION
## TECHNICAL SPECIFICATIONS
### ON

## 2022 HMA RESIDENTIAL PAVING PROGRAM CONTRACT 2 - LOSST
### ACTIVITY ID: 06-2022-014

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1. GENERAL REQUIREMENTS

1.1 Scope of Work

This construction contract shall be accomplished in accordance with Section 2303 of the Iowa Department of Transportation Standard Specifications and these technical specifications and special provisions. The work shall consist of furnishing all labor, materials and equipment necessary to design, produce, place, and compact flexible paving mixtures. This shall include furnishing and placing the specified tack; together with other incidental and related work as set forth in these specifications and in the contract documents.

The work shall include the construction of PCC sidewalks, and ADA compliant sidewalk ramps found to be defective from an inspection by the City of Des Moines Engineering Department. The inspection areas are located within the project areas. A set of plans detailing the design of each ADA compliant sidewalk ramp to be constructed will not be provided to the contractor. The Contractor will be provided a list of defective sidewalks and/or sidewalk ramps which are to be constructed. Work completed that is not on the provided lists will not be paid for, unless approved by the Engineer.

The contractor shall be knowledgeable and experienced with the design, layout, forming, and construction of ADA compliant sidewalk ramps. All work shall be constructed to meet the requirements of the Americans with Disabilities Act (ADA). Any work that does not meet these requirements will be considered defective, and shall be removed and replaced at the Contractor’s expense. Prior to the placement of the surface material, it shall be the Contractor’s responsibility to verify that the slopes of all surfaces are within the allowable range. The Contractor shall notify the Engineer immediately if slopes cannot be constructed within the allowable range.

The City reserves the right to measure the slopes of any surface after construction. There is no tolerance for surfaces to exceed the maximum allowable slope.

All work shall be completed in accordance with the Completion Provisions. The City will provide a Punch List of work to be completed prior to final acceptance. The City will charge liquidated damages at a rate of $500 per working day for each working day that the work remains incomplete. By submitting a bid, the bidder agrees that $500 per working day is value assigned to the City’s cost to administer this contract plus the value of the risk assigned to liability of any incomplete work.

1.2 Construction Schedule

The Contractor shall prepare and submit for approval by the Engineer a detailed construction schedule for each site which will adhere to the working day limitations specified herein. The Contractor shall be allowed to open more than one site for construction at the same time, as approved by the Engineer. No work on any project site shall begin until said schedule is approved. The City reserves the right to adjust the Contractor’s schedule to coordinate with other City asphalt overlay projects, schools, and events.

The pavement scarification and asphalt overlay projects will be completed as stated in the contract documents. Unless otherwise stated work shall be done during the normal work week (Monday through Friday). Due to high traffic volume at some project sites, the Engineer may direct that the asphalt concrete overlay work at these sites be done on a weekend. The weekly schedule is subject to inclement weather delays.
1.3 Notification to Adjoining Properties

At least one week prior to beginning any milling/scarification work on any work site, the Contractor shall provide an approved door hanger with the name and phone number of the Contractor's contact person to all adjoining properties. The approved door hanger shall provide notice to the adjoining property owners if access to their driveway will be restricted. The Contractor shall coordinate the work at commercial driveways so that access is available at all times.

The Contractor shall provide an approved door hanger with the name and phone number of the Contractor's contact person to all adjoining properties at least 48 hours before sidewalk removal. The approved door hanger shall provide notice to the adjoining property owners if the sidewalk through the driveway will be removed.

1.4 Traffic Control

The Contractor shall furnish, install, maintain, move, and remove all traffic control devices on the project. All signs shall be reflectorized and conform as to design, color, size, and legend to "Iowa Manual on Uniform Traffic Control Devices for Streets and Highways." It is understood that the Contractor shall approve placement of all traffic control devices.

Locations where no work will be authorized during peak hours of traffic movement (7:00 a.m. to 9:00 a.m. and 4:00 p.m. to 6:00 p.m., weekdays) are:

1. Near signalized intersections.
2. On any street carrying two lanes of traffic in one direction.
3. On any street classified as an arterial or collector.

The Contractor shall schedule its work elsewhere to comply with these restrictions during these hours.

The Contractor shall not remove or relocate any City of Des Moines traffic control signs without prior approval of the Engineer. The Contractor shall contact the Engineer with 24 hours advance notice when requesting a traffic control sign be moved or removed. The Contractor shall be responsible for placing any temporary traffic control signs as required prior to the existing sign being removed. At the direction of the Engineer, the Contractor shall remove any sign base, post, or footing not salvaged by the City. Temporary signs shall be removed only after the traffic control sign has been replaced to it's permanent location.

Payment for removing and relocating traffic control signs shall be full compensation to remove, relocate, and install all temporary signs.

1.5 Contract Quantities

It is understood that the quantities are estimated for the purpose of this bid. All quantities are subject to revision by the City. Quantity changes, which amount to twenty (20) percent or less of the total bid, shall not affect the unit bid price.

1.6 Method of Measurement

The quantity of pavement scarification work performed as set forth in these specifications, shall be measured in square yards. The quantity of asphalt mix will be the quantity actually incorporated into the project based on the weight from the asphalt plant tickets in tons.
1.7 Basis of Payment

Payment for pavement milling/scarification work shall be made at the contract unit price bid per square yard of work satisfactorily completed, which shall be full compensation for furnishing all materials, labor, equipment, tools, supplies, and incidental related items necessary to complete the work. The scarification around utility manholes and valves with a small machine shall be incidental and included in the cost for pavement scarification.

Payment for the asphalt mix shall be made at the contract unit price bid per ton which shall be full compensation for all labor, equipment and materials necessary to furnish, deliver and place the asphalt mix. No separate pay item will be used for the asphalt binder. The cost of the binder will be included in the asphalt mix price. All required testing and sampling for this project shall be considered incidental to the asphalt mix bid item. The contractor shall place a scratch course unless otherwise specified.

Partial payment will be made at monthly intervals based on work completed during the period.

1.8 Contract Items

The following bid items are included to establish unit prices in the event it is required for construction:

- Granular Stabilization, 3” Clean Crushed Stone
- New Stop Box Housing
- New Stop Box Rod
- Tree Protection Fence, 4’ High
- Tree Root Grinding
- Sod, Nursery in Place
- Hydraulic Seeding
- Traffic Control Sign, Remove and Replace
- Loop Detector, Replacement, 6’x8’
- Loop Detector, Replacement, 6’x20’
2. PAVEMENT SCARIFICATION

2.1 Scarification Machine and Equipment

The scarification machine to be used for pavement profiling in this contract shall be designed & built for cold scarification work and shall be self-propelled. A dust suppression system and an automatic grade and slope control system must be part of the equipment. The drum patterns shall permit a grooved or smooth surface finish as selected by the Engineer. The drum shall be totally enclosed to prevent discharge of any loosened material on adjacent work areas. Maximum width of the scarification machine shall be 12' 6"; drum width shall be 70" minimum to 9' 6" maximum. The contractor shall have a secondary scarification machine of equivalent size available in case of a breakdown to prevent delay of the project. A smaller machine shall be provided by the Contractor to scarify butt joints, around manholes and intakes and any other areas not accessible by the large scarification machine or as directed by the Engineer.

2.1.1 The scarification operation shall provide for windrowing of millings, pick up and elevating into dump trucks, all in a single lane operation. Use of front-end loaders as the primary means of pick up will not be allowed. Side loading of dump trucks will not be permitted. The contractor shall provide an adequate workforce and the equipment necessary to avoid delays in the scarification operation. The scarification operation shall not be delayed due to a lack of dump trucks.

2.1.2 The cold scarification machine shall have adequate power to force the cutting edge(s) of the drum teeth to the depth specified in the contract documents below the surface of the pavement without causing undue irregularities in the surface of the scarified pavement surface.

2.1.3 The scarification machine shall be so designed and constructed that it is capable of cutting to the specified distance from all curbs, inlets, manholes or other similar obstruction within the paved area.

2.2 Methods of Operation

The nature and condition of the scarification equipment and the manner of performance of the work shall be such that the finished scarified surface of the pavement is not torn, gouged, shoved, broken, oil coated, or otherwise injured by the scarification operation.

2.2.1 Scarification (Leveling) Depth. The pavement shall be scarified to the nominal thickness designated in the contract documents. In all areas designated for scarification (leveling), sufficient passes, or cuts, shall be made such that all irregularities or high spots are eliminated to the satisfaction of the Engineer. The scarification shall provide a smooth profile and cross section to the satisfaction of the Engineer. The maximum tolerance for scarification (leveling) in a longitudinal direction shall be one-quarter (1/4) inch under a ten (10) foot straight edge and shall be three-eighths (3/8) inch under an eight (8) foot straight edge in a transverse direction.

2.2.2 Disposal of Millings.

The millings shall become the property of the contractor.

2.2.3 Cleanup.

After the disposal operation, the Contractor shall remove and sweep the remaining small millings and debris from the street.
2.2.4 Intersecting Streets. The Contractor shall scarify straight through all intersections or around the curb radius as directed by the Engineer. At selected intersections, the cross street shall be scarified the total width of the street.

2.2.5 Transporting Equipment. All equipment used by the Contractor having metal tracks shall not be driven over City streets other than those streets being scarified. Such equipment must be transported from one scarification area to the next area to be scarified.

2.2.6 Dust Control. Adequate precaution shall be taken to ensure that excessive dust does not become airborne during construction. Additional water may be requested at any time by the Engineer to assure dust control. No separate payment will be made for performing dust control or for applying water for this purpose.

2.3 Utility Manholes and Valves

The Contractor's large machine shall be capable of scarification around manholes and utility valves within the limits of the work as specified. Any damage to manholes or valves by the scarification operation shall be the responsibility of the Contractor to correct. The Contractor or respective utility shall do all adjustment of manholes and valves in the scarification area.
3. **FLEXIBLE PAVEMENT MIXTURE**

3.1 **Description**

This project involves designing, producing, placing, and compacting flexible paving (HMA and warm mix asphalt (WMA)) mixtures in accordance with Section 2303 of the Iowa Department of Transportation Standard Specifications. Use proper quality control practices for the construction of surface or base course on a prepared base or pavement to the dimensions specified in the contract documents.

Once production of mix for an individual street has begun with a WMA technology, WMA shall be used to complete that street unless otherwise approved by the Engineer. The WMA shall meet the same requirements established for conventional HMA mixtures including production, placement, performance characteristics, strength, and durability.

3.2 **Recycled Asphalt Materials**

No separate or extra payment will be made for the binder from the RAM. The contractor must get prior approval before submitting a mix design that contains more than 25% RAP and/or before using any amount of RAS.

3.3 **Asphalt Plant**

The Contractor shall furnish a plant inspector certified by the Iowa Department of Transportation at the Contractor's expense to ensure compliance to the approved mix design(s). The hot mix asphalt plant shall be capable of supplying to the work sites a minimum of 1000 tons of hot mix asphalt during a working day. For the purpose of this section, a working day shall be defined as a maximum of a twelve (12) hour period.

3.4 **Mix Design**

Prior to commencing any asphalt overlay, the Contractor shall submit a mix design for each different type of mix to be used to the Engineer for review and approval. Upon approval of the mix design(s) by the Engineer, the Contractor may begin hot mix asphalt overlay operations. The cost of the mix design shall be incidental to and included in the unit price bid for Hot Mix Asphalt Surface Mix.

3.5 **Bituminous Materials**

The PC grade for mixes shall be PG 58-28S. This PG grade may be lowered depending on the amount and source of the recycled binder. Refer to Iowa DOT I.M. 510 for the requirements on adjusting the PG grades.

4. **SMOOTHNESS**

The Engineer will check asphalt pavement surfaces with a 10-foot straightedge placed parallel to the centerline. Areas showing high spots of more than ¼ of an inch in 10 feet will be marked. Complete surface corrections according to the procedures in Iowa DOT Section 2316 to an elevation where the area or spot will not show surface deviations in excess of 1/8 inch when tested with a 10-foot straightedge. Surface corrections will be completed at the direction of the Engineer with no additional cost to the City. No pavement smoothness or thickness incentives will be provided.
5. **QUALITY CONTROL**

The Contractor shall be responsible for quality control by providing quality control management and testing, and by being responsible to maintain the quality characteristics to meet all levels of tolerances and specifications. The Contractor shall perform the sampling and testing to provide the quality control of the asphalt binder and asphalt mixture.

The cost of all sampling and testing shall be incidental to and included in the unit price bid for hot mix asphalt. The city may take samples at the plant site for independent testing. The engineer may waive certain requirements for sampling and testing.

5.1 **Uncompacted Asphalt Sampling and Testing**

When directed by the Engineer provide a sample of the uncompacted HMA mix from the paving site in accordance with Iowa DOT Materials I. M. 322. A sufficient quantity of asphalt mix shall be obtained to provide the following test information:

- Gyratory Density
- Mix Volumetrics
- Aggregate Gradation
- Calculated asphalt content

The uncompacted samples shall be delivered to an approved materials testing laboratory, which shall perform the above-referenced tests. The test results shall be provided to the Engineer no later than 4 hours after sampling to assist in evaluating production quality on a timely basis.

5.2 **Compacted Asphalt Field Sampling and Testing**

The compacted asphalt density shall be sampled and tested according to the Iowa Department of Transportation Material Instructional Memorandum 320 & 321. One compacted asphalt density test shall be conducted per street. This requirement may be waived by the Engineer. The Engineer shall determine the location of the sample. Take density measurements of the compacted mixture no later than the next working day following placement and compaction.

The contractor shall monitor with a density gauge the compacted density of each HMA layer at a minimum of 3 separate locations for every 500 lineal feet or each City block of paving, whichever is less. Coordinate with the project inspector to witness the density monitoring. The Engineer may waive the density monitoring requirements on individual streets if the establish roller pattern will obtain the required compacted density.

6. **HOT MIX ASPHALT OVERLAY**

6.1 **Tack Coat**

Only CSS-1 will be allowed for use as a tack coat. The tack coat emulsion shall be diluted with two (2) parts water/one (1) part emulsion.

The Contractor shall place the tack coat at full street coverage on both horizontal and vertical surfaces.

6.2 **Equipment**

All equipment shall meet the requirements of Section 2303 of the Standard Specifications for Highway and Bridge Construction, Iowa Department of Transportation. The paver shall be capable of paving a continuous twenty-five (25) foot wide strip without seam.
Pavers in tandem will be acceptable; however, an adequate number of personnel shall be available to operate both pavers simultaneously.

6.3 Compaction Requirements

Compact each asphalt layer to meet the density and void requirements for “Class I Compaction” in accordance with Article 2303.03C.5 of the Iowa DOT Standard Specifications.

6.4 Construction Requirements

The asphalt overlay shall be constructed in accordance with the requirements of Section 2303 of the Standard Specifications for Highway and Bridge Construction, Iowa Department of Transportation. This item shall include hauling, placement, and compaction of the hot mix asphalt overlay on the scarified surfaces or as specified in the contract documents (see Detail 1 attached to these specifications).

7. CONSTRUCTION SPECIFICATIONS

SUDAS Standard Specifications plus current addenda, supplemental specifications, and special provisions shall apply.

8. UTILITIES

The Contractor shall contact Iowa One Call at www.iowaonecall.com, or by calling 811, or 800-292-8989, at least forty-eight (48) hours (excluding Saturdays, Sundays, and legal holidays) before commencing excavation to ascertain the locations of all utilities that may be present at each work site.

The Contractor shall coordinate the work with all utility companies with respect to protecting, relocating, and constructing utility facilities. The Contractor shall be responsible for following the guidelines of each utility, and shall exercise all due caution required, and to use construction methods and equipment to complete the work without damage to the utility facilities. No additional compensation shall be allowed for costs associated with staging and/or coordinating with utility companies, including delays.

The Contractor shall note the condition of the water service stop boxes within the limits of each work site prior to excavation and construction. The Contractor shall protect all stop boxes, and adjust stop boxes to finished grade where required during construction. The Contractor is responsible for the repair or replacement of any stop box damaged by sidewalk and/or ramp construction at its own expense. All work shall be completed in accordance with the Supplemental Specifications for Water Services.

Irrigation systems located within public rights-of-way and City parks are not located through the Iowa One Call system. The Contractor shall be responsible for the repair or replacement of any irrigation system damaged by sidewalk and/or ramp construction at its own expense.

9. SURVEY MONUMENT PRESERVATION

Prior to construction, the City shall locate and record the locations of monuments likely to be disturbed or removed during the work in this contract. During the course of the contract, the Contractor shall notify the Engineer immediately if a monument has to be disturbed or removed to complete any phase of the work. Only with prior approval of the Engineer, will the Contractor be allowed to disturb or remove a monument as needed to complete the work at any site. It shall
be the Contractor’s responsibility to hire a licensed professional land surveyor to replace any monument disturbed or removed without permission, pursuant to Iowa Code section 355.6, subsection 1.

10. INSPECTION

The Contractor shall contact the Construction Inspections Supervisor at 283-4177 (cell 208-4177) 48 hours before beginning construction. The City reserves the right to withhold payment for any and all work completed without inspection.

11. JOINTS

For joints and joint locations, see the SUDAS Standard Specifications and Supplemental Specifications. At locations where the existing PCC curb & gutter is removed to construct the curb drop, the new PCC curb and gutter shall include a BT-3 or a BT-5 joint at the existing pavement. At locations where new sidewalk ramps will be constructed adjacent to existing PCC pavement, the contractor shall provide a BT-3 or a BT-5 joint.

12. PCC SIDEWALKS

The unit bid for the construction of sidewalks and/or ADA compliant curb ramps and shall include the cost of the removal of the existing curb ramp and/or sidewalk and the installation of the new ADA compliant curb ramp and/or sidewalk, complete. All full depth saw cutting, grading, backfilling, seeding and traffic control shall be included and considered as incidental to the unit price bid for the new curb ramp and/or sidewalk, except where noted herein. Payment will not be made until all work items, including restoration, at each work site are complete.

To determine the bid price to be used for payment for each section of new curb ramp and/or sidewalk, the quantity of new sidewalk shall be measured between existing sidewalks and paid for at the price bid per square yard within the quantity or class range.

The final quantity for each bid item listed on the Proposal may vary with the type of repair requested by the City. Quantity changes more or less than twenty (20) percent shall not affect the unit bid price.

All Class ‘A’ sidewalks constructed shall be Portland Cement Concrete (PCC), 5-inches thick. All Class ‘B’ sidewalks constructed shall be PCC, 4-inches thick. All ADA compliant sidewalk ramps constructed shall include the common square of sidewalk, and shall be PCC, 6-inches thick. All ADA Compliant sidewalk ramps shall include detectable warnings which will be paid by the square foot under separate bid item for detectable warnings.

All sidewalks constructed through Driveways shall be PCC, 6-inches thick. All sidewalks constructed through Alleys shall be PCC, 7-inches thick. The cost of crushed rock backfill along the sidewalk edge through unpaved driveways and alleys shall be incidental to the price bid per square yard of PCC sidewalks through driveways and alleys.

13. DETECTABLE WARNING PANELS

Only cast iron detectable warning PANELS shall be used on this project. Detectable warnings placed on a radial shall be manufactured for radial installations. Detectable warnings shall not be cut in the field without prior approval by the Engineer.
14. **CONCRETE REMOVAL / WASTE DISPOSAL**

Existing concrete to be removed shall be saw cut full depth at removal limits unless specified otherwise by the Project Engineer. Full depth saw cutting shall be incidental to the contract. All concrete debris and other spoil materials shall be removed from the construction site and transported to an appropriate disposal area at the end of each working day. Equipment shall not be permitted on the sod border area, unless approved protective measures (typically plywood) have been installed that will protect the sod and tree roots from compaction.

15. **WORK SITE COMPLETION REQUIREMENTS**

A period of five (5) working days will be allowed to complete removal, replacement, cleanup, and restoration at any specific work site location where concrete is the finish surface.

Cleanup at all sites will consist of removing all spoil, stones, broken concrete, litter, oiled earth, oiled gravel, all forms and related materials, or any other material which is detrimental to the proper growth of plant life. New curbs, driveways, sidewalks, and pavements will be properly backfilled, seeded and broomed clean. Refer to "SUDAS Standard Specifications," Section 7030, for additional requirements.

16. **RESTORATION REQUIREMENTS**

All backfill shall be clean topsoil. Disturbed areas adjacent to the new sidewalks, curbs, driveways, trails, pavements, and granular surfaced roads shall be seeded or sodded. Areas wider than 1.5 feet shall be hydraulic seeded only during the spring season, and sodded or hydraulic seeded during the fall season. Backfilling with topsoil, seeding, and sodding areas less than 1.5 feet wide shall be incidental to sidewalk, curb, driveway, trail, pavement, and granular surfaced road construction and the cost included with the unit bid price. If additional areas beyond 1.5 feet from sidewalk, curb, driveway, trail, pavement, or granular surfaced roads are graded with prior approval of the Construction Inspections Supervisor or the Engineer, sodding and/or hydraulic seeding shall be paid for at the unit bid price. If areas are damaged without prior approval, the Contractor shall be responsible.

17. **TREE PROTECTION FENCE**

This contract includes the removal and replacement of sidewalks/driveways within the drip line of trees. The contractor shall not damage any trees or shrubs. The Contractor shall minimize the operation of equipment within the drip line of any tree. Equipment shall not be permitted on the sod border area, unless approved protective measures (typically plywood) have been installed that will protect the sod and tree roots from compaction.

As shown on the plans, or at the direction of the Engineer, the Contractor shall place Tree Protection Fence in accordance with the Supplemental Specifications for Tree Protection. Tree Protection Fence placed without approval will not be paid for.

Damage to a tree shall be determined by the engineer’s observer and shall include but not be limited to:
- Scratched or gouged bark.
- Broken branches.
- Visible compaction of soil within the tree drip line.
- Storage of materials within the tree drip line.
- Operation of equipment on the sod area without approved protective measures (typically plywood) within the tree drip line.
• Parking of vehicles or equipment on the sod area within the tree drip line.
• Spilling of harmful substances around or within the tree drip line.

The condition of any tree damaged by the Contractor will be evaluated by the Municipal Arborist. The Contractor shall be required to repair damage to the tree as directed by the Municipal Arborist. This could include, but not be limited to trimming and pruning of the branches and roots in accordance with the current edition of the American National Standards Institute (ANSI) A300 Standards for Tree Care Operations, Part 1, Pruning. When the Municipal Arborist determines that the damaged tree shall be removed, the Contractor shall remove the tree, and stump and restore the sod area. Repair and removal of damaged trees shall be completed at no cost to the City. The Contractor shall also compensate the City for the mitigation cost of any damaged tree that is removed, in accordance with City ordinance. The Contractor shall also be liable to the owner of any tree located on private property that must be removed due to damage, for the full value of the tree. Documentation of such payment shall be provided to the City.

18. TREE ROOT GRINDING

The Contractor shall contact City Forestry at 283-4134 before any additional work is done when any tree root over 2" in diameter is discovered in conflict with the sidewalk construction. If City Forestry does not respond with direction within 48 hours of the time of notification, the Contractor shall employ a certified arborist to grind and treat the root with a fungicide, document the work with a picture, and provide the picture to the City with the root location as documentation for payment. Roots over 2 inches shall be ground with a grinding machine approved by the Municipal Arborist. Such roots shall be treated with an approved fungicide. The Contractor shall be paid the unit price bid for Tree Root Grinding for each tree root 2 inches or more in diameter that is ground and treated, in accordance with City Forestry requirements. Roots under 2 inches will be neatly sawed and the cost for tree root removal under 2 inches in diameter shall be incidental to the unit bid price for sidewalk, driveway, or ramp.
19. SUBGRADE TREATMENT – CEMENT

19.1 General Provisions

The Contractor shall follow all provisions herein when performing bid item: SUBGRADE TREATMENT – CEMENT.

The Contractor shall construct the cement stabilized subgrade by uniformly mixing the existing subgrade materials, Portland cement, and water to a depth as specified in the project documents. The final mixture shall be of uniform gradation and free of soft areas.

19.2 Materials

Materials used in the construction of the cement stabilized subgrade shall meet the following requirements with proper certification standards:

<table>
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<th>Material Type</th>
<th>SUDAS Reference</th>
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<tbody>
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<td>Portland Cement, Type 1</td>
<td>2010.1.08.H and 2010.2.04.C</td>
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<td>Water</td>
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19.3 Equipment

Equipment used in the construction of SUBGRADE TREATMENT – CEMENT shall meet the following specifications.

19.3.1 Reclaimer Machine

The mine and blend machine shall meet the following additional requirements:

- Capability of pushing a supply tanker or distributor via interlocking hitch.
- Computerized WATER proportioning system being capable of monitoring WATER application with regard to depth of blending, width of blending, speed, and material density. Non-contact flow meters shall be employed to measure liquid volumes and the control systems shall be proportional to the machine's advance speed and shall be capable of maintaining accurate mixing regardless of changes in the machine’s working speed.
- The WATER applied directly into the mixing chamber.
- A machine able to uniformly mix material into a uniform gradation.
- A machine able to make "on the fly" changes to quantities of materials being added to the subgrade, regardless of the machine’s speed.
- Machine must be able to measure liquid volumes and include automated nozzle cleaning and partial spray bar use.
- All pumps on the machine must be in working condition and the operator able to verify that all nozzles are open and working properly. The operator shall be able to switch nozzles on and off for working at reduced or extended widths.
- All pumps shall be separately controlled by the automatic system in the operator's cabin. During automatic operation, the system will allow liquids to be added only when the machine is in motion. There shall be a system allowing the operator to verify that the nozzles on the spray bars are open and working from the operator's cabin.
- The pump shall spray liquid into the mixing chamber through a single spray bar with sixteen (16) spray nozzles. The nozzles shall be self-cleaning and the operator shall be able to switch off any number of individual nozzles,
for working at reduced widths, from the control console in the operator’s cabin.
- Any damage caused by the Contractor’s equipment riding on the subgrade shall be repaired at the Contractor’s expense.

19.4 CONSTRUCTION OF CEMENT STABILIZED SUBGRADE

19.4.1 Weather

The Contractor shall not begin stabilization work if the following weather conditions are to happen within 24 hours after stabilization:

- Frozen Subgrade.
- Temperature is below 40°F or expected to drop under 40°F for 4 hours.
- Rain.
- Wind speeds of 15 mph or greater unless approved by the Engineer prior to stabilization work.

19.4.2 Tolerance

Before the cement application and blending process, the subgrade must be tolerated. The subgrade shall be trimmed with equipment using automatic grade control of the cutting edge. The subgrade tolerance shall be 0.00 inch to -1.0 inch (i.e. -0.08 feet) of the grades shown on the plans. There shall be no mass grading after the cement is blended into the subgrade.

19.4.3 Cement Application and Blending

The approved rate of Portland cement indicated in the project documents will be incorporated into the roadway subgrade. The deviation from target range will not exceed 0.5% ± the approved mix design rate. Calibration and yield checks will be required daily by the Contractor to ensure the Portland cement is being applied within the tolerance allowed in this project. The Engineer may request a yield check at any time.

The Portland cement will be distributed via computerized vane feeder on the subgrade prior to mixing. DUMPING OR BLOWING OF PORTLAND CEMENT ONTO THE SUBGRADE WILL NOT BE ALLOWED. Portland cement shall not be spread over puddle water. The Contractor shall exercise care in application of Portland cement to minimize the loss of cement as dust.

The application and mixing of Portland cement into the subgrade shall be continuous in nature so that no section of mixed material is left undisturbed or finished for 20 minutes. Compaction shall begin immediately after the incorporation of water. Finishing shall be completed within 2 hours from the time of cement application. The blending operation shall take place immediately after the Portland cement is fed onto the subgrade.

The first 150 feet of roadway section shall be considered a test section. The test section will be used to determine whether the Special Provisions have been met. The Engineer shall determine if the work done by the Contractor is satisfactory prior to continuation of the cement stabilization process. The Contractor shall correct or modify procedures accordingly until it is acceptable to the Engineer. The Contractor shall correct any deficiencies at no cost to the City.
19.4.4 Compaction

The compaction procedure shall take place immediately after the blending operation. The mixture shall be homogenous in nature with uniform density throughout the section. Moisture content shall be within 2% ± of the optimum moisture immediately prior to compaction. If this requirement is not met, the Contractor shall moisten the section until the mixture meets this requirement. No section shall be left undisturbed for longer than 30 minutes during compaction operations.

Compaction shall be carried out simultaneously with lay down operations. The vibratory sheepfoot/vibratory pad roller shall be used on the mixture until the pads of the roller penetrate the surface a maximum of 0.5 inch. A pneumatic roller or vibratory steel drum roller will then be used until the surface is tightly bound and the subgrade shows no signs of rutting or displacement. The subgrade shall be compacted to the maximum density as specified in the plans.

19.4.5 Finishing

As the compaction process is completed, the subgrade will be continuously shaped and/or cut to the final subgrades as per the project plans and specifications. The prescribed tolerance shall not exceed ±0.5 inch (i.e. ±0.04 feet). Compaction shall proceed until the specified density is obtained. During compaction, the surface shall be kept moist by spraying water on the surface. Upon completion, the surface shall be free of cracks, ridges, or loose material. All finishing operations shall be completed within 2 hours from start of mixing.

19.4.6 Soft Areas

Proof rolling will be utilized to identify "soft or unstable areas" after the compaction process. If "soft or unstable areas" appear after operations due to poor compaction, the area shall be repaired by the Contractor. The Contractor will rework the blended base to obtain adequate compaction. The cost of re-working the subgrade shall be included in the bid price for SUBGRADE TREATMENT - CEMENT.

19.4.7 Application of Water

WATER shall be applied according to Section 19.3 as needed to secure required results. The cement treated surface shall be kept damp until placement of an overlying aggregate subbase and/or pavement.

19.4.8 Maintenance

Maintenance shall include immediate repairs of the subgrade. If repairs on processed material need to be made, full depth vertical cuts shall be used with cement processed material used as backfill.

19.4.9 Contractor Operations

The Contractor must have an individual on site at all times capable of making decisions and recommendations to the Engineer as field conditions change throughout the project to assure the best possible product.
20. **SUBGRADE TREATMENT – CEMENT - MOBILIZATION**

Subgrade Treatment – Cement – Mobilization item shall include all costs associated to mobilize all equipment to conduct Cement Subgrade Treatment each time as required and authorized by the Engineer. Mobilization shall be conducted to a site after utility potholing is completed, unless authorized by the Engineer. If the Engineer determines that cement subgrade treatment can not be efficiently implemented at a site based on the potholing results, and the Contractor mobilized cement subgrade treatment equipment to the site without the Engineer’s authorization or before potholing was completed, the cost for the mobilization will be at the Contractor’s expense.

21. **UTILITY POTHOLING**

Utility Potholing - item shall include all costs associated to locate and determine depth(s) of all existing underground utilities behind curbs and/or beneath pavements. This item is intended to be used to locate shallow gas service and/or fiber optic lines where cement stabilization of the subgrade soils or over-excavation and backfilling of the soil subgrade is required below the proposed pavements. This item is to be used as authorized by the Engineer, as is to be paid for each utility pothole location. Utility potholing shall be completed prior to mobilization of cement subgrade treatment equipment, unless authorized by the Engineer.

22. **PROJECT SITES**

22.1 **Franklin Avenue from 24th Street to Dead End East**

22.1.1 Remove existing Hot Mix Asphalt (HMA) pavement and surfacing materials by milling/scarifying to an average depth of 4 inches.

22.1.2 Reconstruct 4 inches of HMA pavement in two lifts.

22.2 **Amos Avenue from SW 17th Street to SW 14th Street**

22.2.1 Remove existing Hot Mix Asphalt (HMA) pavement and surfacing materials by milling/scarifying to an average depth of 4 inches.

22.2.2 Reconstruct 4 inches of HMA pavement in two lifts.

22.3 **SE Hart Avenue from SE 36th Street to SE 40th Street**

22.3.1 Remove existing Hot Mix Asphalt (HMA) pavement and surfacing materials by milling/scarifying to an average depth of 4 inches.

22.3.2 Proof-Roll Subgrade. Where soft/unstable zones are encountered, over-excavate 12 inches of existing subgrade soils and backfill excavation with Type 2 Geogrid overlaid by compacted crushed stone (Modified Subbase). The final locations and depths of required over-excavation and backfilling will be determined in the field by the City.

22.3.3 Reconstruct 4 inches of HMA pavement in two lifts.

22.4 **SE 24th Street from Maury Street to Shaw Street**
22.4.1 Remove existing Hot Mix Asphalt (HMA) pavement and surfacing materials by milling/scarifying to an average depth of 4 inches.

22.4.2 Reconstruct 4 inches of HMA pavement in two lifts.

22.4.3 Remove and replace curb and gutter at locations specified on list (provided to the Contractor) of defective areas.

22.4.4 Remove and replace sidewalks, including ADA compliant ramps, at locations specified on list (provided to the Contractor) of defective areas.

22.5 **SE 27th Street from Maury Street to Dead End North**

22.5.1 Remove existing Hot Mix Asphalt (HMA) pavement and surfacing materials by milling/scarifying to an average depth of 4 inches.

22.5.2 Reconstruct 4 inches of HMA pavement in two lifts.

22.5.3 Remove and replace curb and gutter at locations specified on list (provided to the Contractor) of defective areas.

22.5.4 Remove and replace sidewalks, including ADA compliant ramps, at locations specified on list (provided to the Contractor) of defective areas.

22.6 **E 30th Street from Hubbell Avenue to Dead End South**

22.6.1 Remove existing Hot Mix Asphalt (HMA) pavement and surfacing materials by milling/scarifying to an average depth of 4 inches.

22.6.2 Reconstruct 4 inches of HMA pavement in two lifts.

22.6.3 Remove and replace driveways at locations specified on list (provided to the Contractor) of defective areas.

22.7 **E Ovid Avenue from E 7th Street to E 12th Street**

22.7.1 Remove existing Hot Mix Asphalt (HMA) pavement and surfacing materials by milling/scarifying to an average depth of 4 inches.

22.7.2 Proof-Roll Subgrade. Where soft/unstable zones are encountered, over-excavate 12 inches of existing subgrade soils and backfill excavation with Type 2 Geogrid overlaid by compacted crushed stone (Modified Subbase). The final locations and depths of required over-excavation and backfilling will be determined in the field by the City.

22.7.3 Reconstruct 4 inches of HMA pavement in two lifts.

22.7.4 Remove and replace curb and gutter at locations specified on list (provided to the Contractor) of defective areas.

22.7.5 Remove and replace sidewalks, including ADA compliant ramps, at locations specified on list (provided to the Contractor) of defective areas.

22.7.6 Remove and replace driveways at locations specified on list (provided to the Contractor) of defective areas.
22.8 Larnard Drive from E 29th Street to E Jefferson Avenue

22.8.1 Remove existing Hot Mix Asphalt (HMA) pavement and surfacing materials by milling/scarifying to an average depth of 4 inches.

22.8.2 Reconstruct 4 inches of HMA pavement in two lifts.

22.8.3 Remove and replace curb and gutter at locations specified on list (provided to the Contractor) of defective areas.

22.8.4 Remove and replace driveways at locations specified on list (provided to the Contractor) of defective areas.

22.9 E Jefferson Avenue from Larnard Drive to E 31st Street

22.9.1 Remove existing Hot Mix Asphalt (HMA) pavement and surfacing materials by milling/scarifying to an average depth of 4 inches.

22.9.2 Reconstruct 4 inches of HMA pavement in two lifts.

22.9.3 Remove and replace curb and gutter at locations specified on list (provided to the Contractor) of defective areas.

22.9.4 Remove and replace driveways at locations specified on list (provided to the Contractor) of defective areas.

22.10 Hyde Drive from SW 12th Street to Caulder Avenue

22.10.1 Remove existing Hot Mix Asphalt (HMA) pavement and surfacing materials by milling/scarifying to an average depth of 4 inches.

22.10.2 Reconstruct 4 inches of HMA pavement in two lifts.

22.10.3 Remove and replace curb and gutter at locations specified on list (provided to the Contractor) of defective areas.

22.10.4 Remove and replace driveways at locations specified on list (provided to the Contractor) of defective areas.

22.11 Broad Street from SW 5th Street to South Union Street

22.11.1 Remove existing Hot Mix Asphalt (HMA) pavement and surfacing materials by milling/scarifying to an average depth of 4 inches.

22.11.2 Conduct Cement Subgrade Treatment / Stabilization of 12 inches of existing subgrade soils for entire length of street. Cement Subgrade Treatment shall be conducted the width of the street between the north and south curb and gutter sections.

22.11.3 Reconstruct 4 inches of HMA pavement in two lifts.

22.11.4 Remove and replace curb and gutter at locations specified on list (provided to the Contractor) of defective areas.
22.11.5 Remove and replace driveways at locations specified on list (provided to the Contractor) of defective areas.

22.12  **E 40th Street from E University Avenue to Mahaska Avenue**

22.12.1 Remove existing Hot Mix Asphalt (HMA) pavement and surfacing materials by milling/scarifying to an average depth of 4 inches.

22.12.2 Conduct Cement Subgrade Treatment / Stabilization of 12 inches of existing subgrade soils for entire length of the street.

22.12.3 Reconstruct 4 inches of HMA pavement in two lifts.

22.13  **56th Street from Ovid Avenue to Douglas Avenue**

22.13.1 Remove existing Hot Mix Asphalt (HMA) pavement and surfacing materials by milling/scarifying to an average depth of 4 inches.

22.13.2 Proof-Roll Subgrade. Where soft/unstable zones are encountered, over-excavate 12 inches of existing subgrade soils and backfill excavation with Type 2 Geogrid overlaid by compacted crushed stone (Modified Subbase). The final locations and depths of required over-excavation and backfilling will be determined in the field by the City.

22.13.2 Reconstruct 4 inches of HMA pavement in two lifts.

22.13.3 Remove and replace curb and gutter at locations specified on list (provided to the Contractor) of defective areas.

22.13.4 Remove and replace sidewalks, including ADA compliant ramps, at locations specified on list (provided to the Contractor) of defective areas.

22.13.5 Remove and replace driveways at locations specified on list (provided to the Contractor) of defective areas.

22.13.6 Install Speed Tables (See Appendix A) at locations identified by the Engineer at time of construction. Speed Table item includes all work required to construct the speed table including traffic control, pavement markings, milling, HMA paving and signage.

22.14  **Gardea Road from Sunset Road to 2935 Bell Avenue**

22.14.1 Remove existing granular subbase surfacing materials to an assumed depth of 4 inches, and stockpile materials on-site.

22.14.2 Conduct Cement Subgrade Treatment / Stabilization of 12 inches of existing subgrade soils for entire length of street. Cement Subgrade Treatment shall be conducted to a width of 18 feet for the entire length of the road.

22.14.3 Place and compact previously stockpiled granular subbase surfacing materials on top of the Cement Treated Subgrade. Clean up and restore stockpile areas.

22.14.4 Place and compact up to 4 inches of imported IDOT roadstone over entire road.
23. TYPICAL SECTIONS

TYPICAL CROSS SECTIONS
MILLING/SCARIFICATION

TYPICAL CROSS SECTIONS
HMA PAVING

TYPICAL SECTION APPLICABLE STREETS

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TECHNICAL SPECIFICATIONS

ACTIVITY ID: 06-2022-014

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APPENDIX A
PROJECT LOCATIONS
This project will be constructed in accordance with the SUDAS Standard Specifications, 2022 Edition, which were adopted by the City of Des Moines on March 7, 2022, under Roll Call No. 22-0308, as amended by these City of Des Moines General Supplemental Specifications.

The SUDAS Standard Specifications, 2022 Edition, may be viewed at the Iowa SUDAS website at: https://iowasudas.org/manuals/specifications-manual/, or can be purchased online from the Iowa SUDAS website at: https://iowasudas.org/order-the-manuals/.

Said SUDAS Standard Specifications are hereby amended as follows:

SECTION 1010 – DEFINITIONS

1010, 1.03 DEFINITIONS AND TERMS. Add the following new definition:

PRIVATE CONSTRUCTION CONTRACT. A contract awarded by a private agency or individual for construction of a publicly owned or privately-owned improvement, which by agreement of the parties is subject to these specifications.

SECTION 1020 – PROPOSAL REQUIREMENTS AND CONDITIONS

1020, 1.01 QUALIFICATION OF THE BIDDERS: Add the following new E.

*E. The City of Des Moines may disqualify a Contractor from bidding on future work or from participating as a subcontractor for a period of up to 3 years in accordance with Section 94-198 of the Municipal Code of the City of Des Moines.

1020, 1.03 QUANTITIES AND UNIT PRICES: Delete B. and replace with the following new B.

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; except in the case of an obvious, serious, clerical error where the Engineer is able to determine the bidder’s intent from the proposal; in which case, the Jurisdiction may waive irregularities that are in best interest of the Jurisdiction, as long as the integrity of the bid process can be maintained. 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.
1020, 1.09 PREPARATION OF THE PROPOSAL: Delete D. and replace with the following D:

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 the case of discrepancy, the unit price shall govern; except in the case of an obvious, serious, clerical error where the Engineer is able to determine the bidder’s intent from the proposal; in which case, the Jurisdiction may waive irregularities that are in best interest of the Jurisdiction, as long as the integrity of the bid process can be maintained.

1020, 1.15 LIMITATION ON WITHDRAWAL OF PROPOSALS AFTER OPENING OF PROPOSALS: Add the following new C:

C. After bids are opened, if the low bidder claims that it has made a serious error in the preparation of its bid, and can support such a claim with evidence satisfactory to the Jurisdiction, said bidder shall be allowed to withdraw its bid and its bid security shall be returned; *provided however, as a condition for return of its bid security, said bidder shall be required to agree that it will not be allowed to again bid on the project, either as a prime bidder or as a subcontractor, if the project, or a substantial portion of the project, is rebid within six months of the first bid opening. Under no circumstances should said bidder be permitted to alter or adjust its bid, as this would undermine the entire system of competitive bidding and be an open invitation to abuse.

SECTION 1040 – SCOPE OF WORK

1040, 1.05 PLANS: Delete the 2nd paragraph and replace with the following:

Electronic support files, will not be provided prior to letting and may be provided to the low bidder 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.

1040, 1.07 CHANGE ORDERS, B. Written Orders: Add the following to the end of the section:

Formal approval by the Jurisdiction shall be defined as follows:
The authority of the Des Moines City Manager and the Engineer to approve change orders shall be limited to those change orders which will cost $50,000 or less. Change orders for work to cost more than $50,000 shall be approved by the City Council prior to the payment of the work provided for under the change order.

*This highlighted language is not the current law of the State of Iowa and not applicable to the City's current bidding process.

1040, 1.09 CHANGED SITE CONDITIONS, A. Latent or Subsurface Conditions: Delete 1. and 2. in their entirety and replace with the following 1. and 2., and add the following new 3.

1. If the Contractor encounters latent or subsurface conditions differing materially from those indicated in the contract documents 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 changes are considered by the Contractor as a basis for compensation in addition to the contract price, the Contractor shall within three working days after discovery thereof notify the Engineer of its claim by written notice as sent
set forth herein. 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.

a. For claims greater than $50,000 the Contractor shall notify the Engineer by written notice either (i) personally delivered, (ii) sent by certified mail, return receipt requested, or (iii) delivered by a nationally recognized prepaid overnight courier service (receipt requested), to the address below:

   City of Des Moines
   Engineering Department
   400 Robert D. Ray Drive
   Des Moines, IA 50309-1891
   Attention: Steve Naber, P.E., City Engineer

   Under no circumstance will an email, text message, verbal communication or any other informal communication, be considered acceptable or satisfactory written notice required by this section. The written notice shall:

   1) Expressly state that it is a request for a contract change under Section 1040, 1.09;
   2) Expressly identify the latent or subsurface conditions that the Contractor alleges differ materially from those indicated in the contract documents which the Contractor could not have discovered by a reasonable site investigation and examination of the type customarily undertaken by prudent and competent contractors;
   3) Expressly state the reason the Contractor believes extra compensation is due;
   4) Identify work that Contractor alleges will be impacted.

b. For claims less than $50,000 the Contractor shall notify the Project Engineer by written notice sent as set forth above or sent by email providing the same detail as identified in a.1) through 4) above. Under no circumstances will a text message, verbal communication or any other informal communication be considered acceptable or satisfactory written notice required by this section.

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 written notice within three working days of discovering the conditions 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.

3. Latent or subsurface conditions that do not materially differ from those shown on the plans shall not form the basis for additional compensation. No additional compensation or extension of time shall be provided for conditions that do not materially differ, regardless of the nature of the condition encountered.

1040, 1.10 DISPUTED CLAIMS FOR EXTRA COMPENSATION: Delete 1.10 in its entirety and replace with the following:

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 in Section 1010, 1.03, the Contractor shall provide written notice to the Engineer, as set forth herein, of its intention to make claim for such extra compensation within thirty (30) days of discovering the circumstances regarding the claim and before beginning the work on which the claim is based (hereinafter referred to as a “Claim”).
a. For claims greater than $50,000 the Contractor shall notify the Engineer by written notice either (i) personally delivered, (ii) sent by certified mail, return receipt requested, or (iii) delivered by a nationally recognized prepaid overnight courier service (receipt requested) to the address below:

City of Des Moines
Engineering Department
400 Robert D. Ray Drive
Des Moines, IA 50309-1891
Attention: Steve Naber, P.E., City Engineer

Under no circumstance will an email, text message, verbal communication or any other informal communication, be considered acceptable or satisfactory written notice required by this section. The written notice shall:

1) Expressly state that it is a request for a contract change under Section 1040, 1.10;
2) Expressly state the reason the Contractor believes extra compensation is due;
3) Identify the underlying work or material that Contractor claims is beyond the scope of the Work under the contract and not ordered by the Engineer as Extra Work as defined in Section 1010, 1.03;
4) Identify any work that will be impacted.

b. For claims less than $50,000 the Contractor shall notify the Project Engineer by written notice sent as set forth above or sent by email providing the same detail as identified in a.1) through 4) above. Under no circumstances will a text message, verbal communication or any other informal communication be considered acceptable or satisfactory written notice required by this section.

The Contractor shall not proceed with that work until the Contractor and the Jurisdiction have executed a change order with respect to the Claim. The Contractor shall have no right to submit a Claim for any matter which is exclusively reserved to authority of the Engineer under the Contract Documents.

2. The Jurisdiction shall not 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, except if such damages result from negligence on the part of the Jurisdiction, its Engineer, or any of its officers or employees.

3. For any Claim, if such written notification is not given, or if after such written 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 written 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.

4. 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 Contractor has available and shall be verified by affidavit of the Contractor or other person having knowledge of the facts.

B. Presentation and Consideration of Claim: If the Contractor wishes an opportunity to present its Claim in person, the Claim shall be accompanied by a written request to do so. Where the Contractor asks an opportunity to present its Claim in person, the Jurisdiction, within thirty (30) calendar days of the filing of the Claim, shall fix a time and place for a meeting between the Contractor 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 Contractor, 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 Claim Review: In the event a Contractor’s Claim as outlined in the above procedure in Sections 1040, 1.10(A) and (B) has been disallowed, in whole or in part, the Contractor may, within thirty (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 review. The written request shall be either (i) personally delivered, (ii) sent by certified mail, return receipt requested, or (iii) delivered by a nationally recognized prepaid overnight courier service (receipt requested) addressed as follows:

City of Des Moines
Engineering Department
400 Robert D. Ray Drive
Des Moines, IA 50309-1891
Attention: City Engineer

The Jurisdiction shall decide if the matter is subject to further review and shall, within thirty (30) calendar days of the receipt of the request for review, grants or deny the request for review. The Jurisdiction’s decision shall be final. In the event the Contractor fails to make a timely written demand for review of its Claim as provided by this Section 1040, 1.10(C), the decision of the Jurisdiction shall be deemed to be final and the Contractor shall have no right to pursue arbitration or litigation of its Claim.

D. Board of Review:

1. The Board 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 matters exclusively reserved to the Engineer, 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.

2. Following the timely written demand for review of the Claim and the decision of the Jurisdiction to grant the request, a board of review shall be appointed to review the Claim. The board of review shall consist of three (3) members as follows: the Engineer, or designated representative; and two persons to be appointed by the Engineer (hereinafter the “Board”).

3. The Board shall set a date for the Contractor to present its Claim for review within sixty (60) days of the date the Jurisdiction issued its decision granting the Contractor’s request for review. The presentation before the Board shall not be in accordance with the Iowa rules of civil procedure and the Contractor shall not have the right to conduct discovery or compel the testimony of witnesses as part of the presentation. The Contractor shall submit three (3) copies of a written Claim summary and all documents it considers to be relevant to its Claim at least fourteen (14) days prior to the date set for the presentation before the Board. The presentation before the Board is intended to be an informal process to allow the Contractor to further explain its Claim and why it believes it is entitled to additional compensation. The Board reserves the right to impose such rules as it deems reasonably necessary to allow for a fair and efficient presentation.

4. Following the presentation before the Board, the Board shall render a written decision regarding the Claim within twenty (20) days of the presentation. In the event the Board renders a decision in favor of the Contractor for some or all of the Claim, the Contractor and the Jurisdiction shall promptly proceed in good faith to prepare a change order consistent with the decision of the Board. If the Board denies the Claim, in part or in full, the Contractor’s
sole and exclusive remedy is to demand final resolution of the Claim that has been denied subject to the procedure provided below.

E. Final Resolution by Binding Arbitration or Litigation: For any Claim denied by the Board, the Jurisdiction shall have the sole and exclusive right to determine whether final resolution of the Claim shall be through Binding Arbitration or litigation. The Contractor shall not have the right to pursue final resolution of any Claim that the Contractor did not submit to the Board. The Contractor must make a written demand for final resolution of the Claim upon the Jurisdiction within thirty (30) days of the date when the Board rendered its decision or it will be deemed to have waived this right and the decision of the Board will be final. The written demand shall be either (i) personally delivered, (ii) sent by certified mail, return receipt requested, or (iii) delivered by a nationally recognized prepaid overnight courier service (receipt requested) addressed as follows:

City of Des Moines  
Engineering Department  
400 Robert D. Ray Drive  
Des Moines, IA 50309-1891  
Attention: Steve Naber, P.E., City Engineer

The Jurisdiction shall notify the Contractor within thirty (30) days of the date of receiving the Contractor’s written demand for final resolution of the Claim, whether the Jurisdiction will elect to use binding arbitration or litigation to reach a final resolution of the Claim. The decision to pursue binding arbitration or litigation, shall be the sole and exclusive decision of the Jurisdiction. The decision of the Jurisdiction on whether to pursue binding arbitration or litigation is final.

1. Arbitration.

(a) If the Jurisdiction elects to use binding arbitration for final resolution of the Claim, the sole and exclusive remedy for final resolution of the Claim shall be binding arbitration (the “Arbitration”). The Arbitration shall be submitted to a single arbitrator as is mutually agreed upon by the Contractor and Jurisdiction. If the Contractor and Jurisdiction cannot agree upon a single arbitrator within twenty-one (21) days of the date of the Jurisdiction’s notification to the Contractor of the Jurisdiction’s decision to pursue binding arbitration, the Arbitration shall be submitted to a three (3) member panel appointed as follows: the Contractor shall appoint one arbitrator; the Jurisdiction shall appoint one arbitrator; and the third arbitrator shall be chosen by the first two appointed arbitrators (for the sake of convenience, the arbitrator, or arbitrators as the case may be, shall be referred to hereinafter as the “Arbitrator”). The parties agree to work toward appointment of a three (3) member Arbitration panel within twenty-one (21) days after not being able to agree on a single arbitrator. The Arbitration shall be conducted in general accord with the Construction Industry Arbitration Rules of the American Arbitration Association then in effect. The parties reserve the right to alter and amend the rules for the Arbitration as they may mutually agree in writing.

(b) The Arbitrator 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 Arbitrator’s jurisdiction shall not extend to matters exclusively reserved to the Engineer, 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 Arbitrator shall not extend to setting aside or modifying the terms or requirements of the contract.
(c) Subject to agreement of the parties and the Arbitrator, the parties shall work in good
faith to schedule the Arbitration and allow for the decision of the Arbitrator within
two hundred forty (240) days after appointment of the Arbitrator.

(d) The Arbitrator shall render a written decision within twenty (20) days after the Claim
has been fully submitted. For Arbitrations before more than one arbitrator, the
decision of a majority of the panel shall govern. The Arbitrator’s decision shall
provide a basis for the findings and legal conclusions and shall determine how the
cost of the proceedings shall be borne by the parties.

(e) The decision of the Arbitrator shall be binding and final. There shall be no further
appeal or judicial review, except under the limited circumstances as allowed by Iowa
law.

2. Litigation.

(a) If the Jurisdiction elects not to use arbitration as the means to reach final resolution of
the claim, then the sole and exclusive remedy for final resolution of the Claim shall
be litigation which must be brought in Iowa District Court in and for the County
where the Jurisdiction is located or in the United Stated District Court in and for the
District where the Jurisdiction is located.

(b) To the fullest extent permitted by law, Contractor and Jurisdiction hereto waive
any right each may have to a trial by jury in respect of litigation directly or
indirectly arising out of or in connection with this Agreement.

SECTION 1050 – CONTROL OF WORK

1050, 1.10 PROTECTION OF LINE AND GRADE STAKES: Add the following new D.

D. The Jurisdiction shall provide all construction survey staking on projects funded by the Jurisdiction
unless otherwise indicated on the plans or in the Contract Documents. On Private Construction
Contracts, the Owner, in accordance with the Private Construction Contract, shall hire a Licensed
Surveyor for all survey work.

SECTION 1060 – CONTROL OF MATERIALS

1060, 1.03 SAMPLES AND TESTING: Add the following new D.

D. All on-site inspection and testing, as well as testing of materials, will be provided by the Jurisdiction
unless otherwise indicated on the plans or by special provisions.

SECTION 1070 – LEGAL RELATIONS AND RESPONSIBILITY TO THE PUBLIC

1070, 1.03 PERMITS AND LICENSES: Delete and replace with the following:

The Contractor shall procure and pay for all necessary permits and licenses 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 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.
6. The City of Des Moines, Engineering Department, Master Construction Safety Packet is available in the Forms and Documents section at the Engineering page on the City of Des Moines website at: https://www.dsm.city/document_center/Engineering%20and%20Traffic%20Forms%20and%20Documents/ENG-Publications/MasterConstructionSafetyPacket.pdf?pdf=Master%20Construction%20Safety%20Packet&amp;l=1580921434169 and is also available upon request from the Engineering Department. The Engineering Department will make available a copy of the City of Des Moines Master Construction Safety Plan to the Contractor when the contract is awarded. Said Safety Plan is for the Contractor’s information only and it is the Contractor’s sole responsibility to provide, or make available, this safety information to all its Subcontractors.

1070, 1.12, CONSENT TO JURISDICTION OF IOWA DISTRICT COURT OR FEDERAL DISTRICT COURT: Delete 1.12 in its entirety and replace with the following new 1.12:

1070, 1.12 DISPUTE RESOLUTION AND CONSENT TO JURISDICTION OF IOWA DISTRICT COURT OR FEDERAL DISTRICT COURT IN IOWA

A. The Contractor agrees any claims, disputes, 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, and that the Jurisdiction has determined in writing is not subject to Section 1040, 1.10, shall be resolved by arbitration or litigation as elected by the Jurisdiction. As to any such causes of action, Contractor shall provide written notice to Jurisdiction requesting that Jurisdiction make its election as to whether the dispute shall be settled by arbitration or litigation. The written notice shall be either (i) personally delivered, (ii) sent by certified mail, return receipt requested, or (iii) delivered by a nationally recognized prepaid overnight courier service (receipt requested) addressed as follows:

City of Des Moines
Engineering Department
400 Robert D. Ray Drive
Des Moines, IA 50309-1891
Attention: Steve Naehr, P.E., City Engineer

Jurisdiction shall notify Contractor in writing as to its election within thirty (30) days of receipt of Contractor’s written notice requesting a determination by Jurisdiction.

1. Arbitration

(a) If the Jurisdiction elects to use binding arbitration for final resolution, the sole and exclusive remedy for final resolution of the dispute shall be binding arbitration (the “Arbitration”). The Arbitration shall be submitted to a single arbitrator as is mutually agreed upon by the Contractor and Jurisdiction. If the Contractor and Jurisdiction cannot agree upon a single arbitrator within twenty-one (21) days of the date of the Jurisdiction’s notification to the Contractor of the Jurisdiction’s decision to pursue binding arbitration, the Arbitration shall be submitted to a three (3) member panel appointed as follows: the Contractor shall appoint one arbitrator; the Jurisdiction shall appoint one arbitrator; and the third arbitrator shall be chosen by the first two appointed arbitrators (for the sake of convenience, the arbitrator, or arbitrators as the case may be, shall be referred to hereinafter as the “Arbitrator”). The parties agree to work toward appointment of a three (3) member Arbitration panel within twenty-one (21) days after not being able to agree on a single arbitrator. The Arbitration shall be conducted in general accord with the Construction Industry Arbitration Rules of the American Arbitration Association then in effect. The parties reserve the right to alter and amend the rules for the Arbitration as they may mutually agree in writing.
(b) Jurisdiction of the Arbitrator shall not extend to setting aside or modifying the terms or requirements of the contract.

(c) Subject to agreement of the parties and the Arbitrator, the parties shall work in good faith to schedule the Arbitration and allow for the decision of the Arbitrator within two hundred forty (240) days after appointment of the Arbitrator.

(d) The Arbitrator shall render a written decision within twenty (20) days after the matter has been fully submitted. For Arbitrations before more than one arbitrator, the decision of a majority of the panel shall govern. The Arbitrator’s decision shall provide a basis for the findings and legal conclusions and shall determine how the cost of the proceedings shall be borne by the parties.

(e) The decision of the Arbitrator shall be binding and final. There shall be no further appeal or judicial review, except under the limited circumstances as allowed by Iowa law.

2. Litigation.

(a) If the Jurisdiction elects not to use arbitration as the means to reach final resolution of the claim or fails to notify Contractor in writing within thirty (30) days of its election, then the sole and exclusive remedy for final resolution of the Claim shall be litigation which must be brought in Iowa District Court in and for the County where the Jurisdiction is located or in the United Stated District Court in and for the District where the Jurisdiction is located.

(b) To the fullest extent permitted by law, Contractor and Jurisdiction hereto waive any right each may have to a trial by jury in respect of litigation directly or indirectly arising out of or in connection with this Agreement.

B. Contractor further consents that it will require its subrogees and assigns to enter into an agreement to comply with the terms of Section, 1.12, and consent 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. Contractor shall make such consent a condition of the retention of subrogees and assigns.

1070, 2.10 DUST CONTROL: Add the following paragraph:

The Contractor shall be responsible to remove any project-related construction materials deposited on a public street as well as related dust control measures. The Contractor shall employ all means necessary to prevent tracking soil, or loss of material, onto public streets; including but not limited to, rocking private access roads and removing excess material from equipment before leaving the construction site. The Contractor shall promptly remove any material deposited on a public street utilizing mechanical scraping and street sweeping, or other means as required by the Jurisdictional Engineer.

1070, 3.02 INSURANCE REQUIREMENTS, A.: Delete A and replace them with the following A.

A. The contractor shall not purchase liability insurance in the name of the jurisdiction unless such purchase is allowed by special provision.
1070, 3.02 INSURANCE REQUIREMENTS, C. 2. Commercial General Liability Insurance: Revise the following limits on the Commercial General Liability Insurance:

- The Each Occurrence Limit shall be changed from $1,000,000 to $2,000,000.
- The Personal and Advertising Injury Limit, under Commercial General Liability, changed from $1,000,000 to $2,000,000.
- All other limits shall remain unchanged.

1070, 3.02 INSURANCE REQUIREMENTS, C. 3. Automobile Liability Insurance: Revise the following limits on the Automobile Liability Insurance:

- Minimum combined single limit per accident shall be changed from $1,000,000 to $2,000,000.

1070, 3.02 INSURANCE REQUIREMENTS, C.: Add the following sentence at the end of 1, 2, 3, and 5: “Waiver of Subrogation in favor of Jurisdiction is required.”

1070, 3.02 INSURANCE REQUIREMENTS, C., 6. Additional Insured Endorsements: Replace “Except for Workers Compensation, the insurance specified shall:”, with “Except for Workers Compensation and Railroad Protective Liability Insurance, the insurance specified shall:”.

1070, 3.02 INSURANCE REQUIREMENTS, C: Add the following new 8.

8. WAIVER OF SUBROGATION: To the fullest extent permitted by law, Contractor hereby releases the Jurisdiction, including their respective elected and appointed officials, agents, employees and volunteers and others working on their behalf from and against any and all liability or responsibility to the Contractor or anyone claiming through or under the Contractor by way of subrogation or otherwise, for any loss arising out of liability or occupational injury without regard to the fault of the Jurisdiction or the type of loss involved. This provision shall be applicable and in full force and effect only with respect to loss or damage occurring during the time of this Agreement. The Contractor’s policies of insurance shall contain a clause or endorsement to the effect that such releases shall not adversely affect or impair such policies or prejudice the right of the Contractor to recover thereunder.

1070, 3.03 CONTRACTOR’S INDEMNITY – CONTRACTUAL LIABILITY INSURANCE: Delete B.; and replace with the following B.

B. Except to the extent caused by or resulting from the negligent act or omission of the Jurisdiction or the Jurisdiction’s employees, consultants, agents or other for whom the Jurisdiction is responsible, 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

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.
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.

1070, 3.04 CONTRACTORS INSURANCE FOR OTHER LOSSES; WAIVER OF SUBROGATION, B.: Delete B. and replace with the following B.

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, as specified in Section 1070, 3.02 Insurance Requirements, C.8. To the extent that any subcontractors, consultants, suppliers, third parties or the agents of any of them, do not provide such coverage, any uninsured loss shall be the sole responsibility of the Contractor.

1070, 3.05 PROPERTY INSURANCE: Delete A, D, and M; and replace them with the following A, D, and M.

A. Property Insurance Required: The Contractor shall purchase and maintain property insurance, being either Builder's Risk Insurance or an Installation Floater, for the period of the contract until final acceptance of the work by the Jurisdiction, on all construction contracts where a building, electrical, mechanical, or plumming permit is required by the permitting entity.

1. Builder's Risk Insurance by Contractor: On contracts for construction of new buildings or on contracts when Builder's Risk Insurance is applicable to the contract by definition, the Contractor shall purchase and maintain Builder's Risk Insurance for the duration of the contract, unless the Jurisdiction states by special provision that the Jurisdiction shall purchase and maintain the Builder's Risk Insurance. This property insurance, Builder's Risk Insurance, provided by the Contractor shall be 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. If the Contractor's property insurance covering the work has any deductible, the Contractor shall be responsible to pay the cost associated with the deductible. Flood and Earthquake Insurance shall be required as part of the Builder's Risk Policy, and the minimum required policy limits shall be not less than 10% of the full amount of the contract. If Boiler and Machinery Insurance is required by the contract documents or by law, the Contractor shall purchase the Boiler and Machinery Insurance if the Contractor is required to purchase the Builder's Risk Insurance. If Boiler and Machinery Insurance coverage is included in the Contractor's Builders Risk Insurance policy, it may be used to satisfy the Boiler and Machinery Insurance requirement to the extent such coverage specifically covers such objects during installation, testing, and until final acceptance by the Jurisdiction.

2. Builder's Risk Insurance by the Jurisdiction: 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. The Jurisdiction will determine an appropriate deductible for the property insurance covering the
work, however, the Contractor will be responsible for paying a deductible of up to $5,000 for each occurrence. Flood and Earthquake Insurance shall be required as part of the Builder’s Risk Policy, and the minimum required policy limits shall be not less than 10% of the full amount of the contract. If Boiler and Machinery Insurance is required by the contract documents or by law, the Jurisdiction shall purchase the Boiler and Machinery Insurance if the Jurisdiction is required to purchase the Builder’s Risk Insurance. If Boiler and Machinery Insurance coverage is included in the Jurisdiction’s Builders Risk Insurance policy, it may be used to satisfy the Boiler and Machinery Insurance requirement to the extent such coverage specifically covers such objects during installation, testing, and until final acceptance by the Jurisdiction.

3. Installation Floater: On the remainder of these contracts where Builder’s Risk Insurance is not applicable to a contract by definition and an Installation Floater is applicable by definition, the Contractor shall purchase and maintain an Installation Floater for the duration of the contract. This Installation Floater shall cover 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, and shall include coverage for hoisting and rigging. The Installation Floater shall be maintained until final acceptance of the work by the Jurisdiction. If the Contractor’s Installation Floater covering the equipment and work has any deductible, the Contractor shall be responsible to pay the cost associated with the deductible. If Boiler and Machinery Insurance is required by the contract or by law, the Contractor shall purchase the Boiler and Machinery Insurance; the Installation Floater may be used to satisfy this requirement to the extent the Boiler and Machinery Insurance coverage specifically covers such objects during installation, testing, and until final acceptance by the Jurisdiction.

D. Boiler and Machinery Insurance: When required by the contract documents or by law, Boiler and Machinery Insurance shall specifically cover such insured objects during installation, testing, 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. A Builders Risk Insurance policy or an Installation Floater, when also required by the contract documents or by law, may satisfy this requirement as indicated in 1070, 3.05 A.1, 2. and 3. above. If Boiler and Machinery Insurance is required by the contract documents or by law, the Contractor shall purchase the Boiler and Machinery Insurance. However, if the contract requires the Jurisdiction to purchase the Builder’s Risk Insurance, the Jurisdiction shall also purchase the Boiler and Machinery Insurance.

M. Installation Floater: See Section 1070, 3.05, A.3 above.

1070, 3.06 ENDORSEMENT NAMING JURISDICTION AS AN ADDITIONAL INSURED / CANCELLATION AND MATERIAL CHANGE/ GOVERNMENTAL IMMUNITIES ENDORSEMENT: Under C. delete the first full paragraph regarding the Cancellation and Material Change Endorsement language and replace it with the following:

Thirty (30) days Advance Written Notice of Cancellation, ten (10) days Written Notification of Cancellation due to non-payment of premium and forty-five (45) days Advance Written Notification of Non-Renewal 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.
ENDORSEMENT NAMING JURISDICTION AS AN ADDITIONAL INSURED / CANCELLATION AND MATERIAL CHANGE/ GOVERNMENTAL IMMUNITIES

ENDORSEMENT: Replace first sentence under E. with the following: If allowed, as specified in Section 1070, 3.02 Insurance Requirements A, 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:

1070, 3.07 PROOF OF INSURANCE: Add the following sentence at the end of A: “Mail Certificate of Insurance to: Engineering Department, City of Des Moines, City Hall, 400 Robert D. Ray Drive, Des Moines, IA 50309.”

SECTION 1080 – PROSECUTION AND PROGRESS

1080, 1.03 WORK PROGRESS AND SCHEMULE: Add the following new D:

D. No person shall operate or permit the operation of any tools or equipment in construction, drilling or demolition work or in preventive maintenance work for public service utilities between the hours of 10:00 p.m. and 7:00 a.m. without the written permission of the Engineer.

1080, 1.09 EXTENSION OF TIME, B. – Request for Extension of Time: Add the following sentence before the last sentence in the first paragraph: “The request for an extension of time is the sole and exclusive remedy of the Contractor for the events listed below.

SECTION 1090 – MEASUREMENT AND PAYMENT

1090, 1.02 SCOPE OF PAYMENT, Add the following D.

D. If the Contractor fails to notify the Engineer or the Engineers representative prior to commencing work on various stages of work on the project, the work completed without notifying the City may not be compensated.

1090, 1.04 PAYMENT FOR CHANGE ORDERS, C.: Replace with the following:

C. The percentage markup to be allowed to the Contractor for extra work performed by a subcontractor shall include all overhead, profit, bond, and all subcontractor markups for changes in work and 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.

To include the markup on the change order, the Contractor shall, at the request of the Engineer, furnish evidence satisfactory to the Engineer of the cost (rate or rates) paid for such bond, insurance, and tax. This may include, at the request of the Engineer, a bond rider for the performance bond.

1090, 1.05 PROGRESS PAYMENTS, B. Retainage: Delete B. in its entirety and replace with the following B.

B. Retainage: The Jurisdiction shall retain from each monthly progress payment 3% of the amount determined to be due according to the estimate of the Engineer. Early release of retained funds may be requested by the Contractor according to Iowa Code Section 573.28.
SECTION 2010 – EARTHWORK, SUBGRADE, AND SUBBASE

2010, 3.06 SUBGRADE PREPARATION, A. Uniform Composition: 1. Subgrade Compaction in Fill Sections: Add the following new e.

e. Proof roll subgrade as specified in Section 3.06, B. to locate soft or yielding areas prior to placement of top six-inch lift.

2010, 3.06 SUBGRADE PREPARATION, A. Uniform Composition: 2. Subgrade Compaction in Cut Sections: Add the following new d.

d. Prior to scarify, mix, and re-compact the bottom six inches of subgrade (paragraph 2.b above), proof roll subgrade as specified in Section 3.06, B to locate soft or yielding areas.

2010, 3.07 SUBGRADE TREATMENT, A. Lime, Cement, Fly Ash, or Asphalt: Add the following new 3.

3. The Contractor shall comply with the following conditions when incorporating the subgrade treatments.

a. The Contractor shall not begin stabilization work if the following weather conditions are to happen within 24 hours after stabilization:

   Temperature expected to drop below 40°F within the first 24 hours of incorporation unless approved by the Engineer.
   Rain.
   Wind speeds of 15 mph or greater unless approved by the Engineer prior to stabilization work.

b. The subgrade treatment shall not be incorporated into frozen subgrade conditions.

c. The deviation from target range will not exceed 0.5% ± the approved mix design rate.

d. Contractor shall use a reclaiming machine with computerized water proportioning system that measures and applies the water directly into the mixing chamber when the machine is in motion. The treatment chemicals will be distributed via computerized vane feeder on the subgrade prior to mixing to minimize loss of treatment chemicals as dust. Dumping or blowing of treatment chemicals onto the subgrade will not be allowed.

e. During the compaction operation, no section shall be left undisturbed for longer than 30 minutes during compaction operations.

SECTION 3010 – TRENCH EXCAVATION AND BACKFILL

2010, 3.02 ROCK OR UNSTABLE SOILS IN TRENCH BOTTOM: Delete B. and replace with the following new B.

B. The Engineer will review the contractor’s request for the need for over-excavation and trench foundation stabilization and authorize the work prior to installation of pipes and structures.
3010, 3.05 PIPE BEDDING AND BACKFILL, E. Final Trench Backfill: 3. Class I and Class II Backfill Material: Delete a. and replace with the following new a.

a. Compact to at least 65% relative density within right-of-way or under any paved surface or within two feet thereof.

3010, 3.05 PIPE BEDDING AND BACKFILL, E. Final Trench Backfill: 4. Class III and Class IVA Backfill Material: Delete a. and replace with the following new a.

a. Compact to at least 95% of Standard Proctor Density within right-of-way or under any paved surface or within two feet thereof.

SECTION 4010 SANITARY SEWERS

4010, 3.06 SANITARY SEWER SERVICE STUBS, C: Add the following new 7:

7. Mark the location of all sanitary sewer service stubs at the time of installation by a two-inch wide detectable marking tape installed at a depth of 18 inches to 24 inches below finished grade, directly over the service stub, for its entire length and brought up to the surface at the end of the service stub adjacent to the post marking the stub location. The tape shall be green in color and marked “Sanitary Sewer Service Stub Buried Below”.

4010, 3.10 SANITARY SEWER CLEANOUT: Delete in its entirety and replace with the following:

Cleanouts are not allowed on sanitary sewer mains in the City of Des Moines. Figure 4010.203 shall apply to services only.

SECTION 4020 – STORM SEWERS

4020, 2.01 STORM SEWERS, Parts A-L: Reinforced Concrete Pipe or Polypropylene Pipe shall be required for storm sewer construction in the Right-Of-Way or Public Easement areas. Minimum size of storm sewer pipe in the Right-Of-Way and Public Easement areas shall be 15-inch minimum diameter.

SECTION 4030 – PIPE CULVERTS

4030, 2.01 Pipe Culverts, Parts A-D: Reinforced Concrete Pipe shall be required for pipe culvert construction in the Right-Of-Way or Public Easement areas. Minimum size of pipe culverts in the Right-Of-Way and Public Easement areas shall be 15-inch minimum diameter.

SECTION 4040 – SUBDRAINS AND FOOTING DRAIN COLLECTORS

4040, 2.01 FOOTING DRAIN COLLECTORS: Use material for pipe and fittings complying with the current Adopted Edition of the Uniform Plumbing Code (UPC). In addition to the materials identified in the UPC, the pipe shall comply with ASTM D 3034, SDR 23.5 pipe will be allowed.

4040, 2.02 TYPE 1 SUBDRAINS (LONGITUDINAL SUBDRAIN), C. Corrugated Polyethylene Tubing and Fittings (Corrugated PE): Delete Type C and Type CP. Only Type S or Type SP are allowed in the City of Des Moines.

4040, 2.03 TYPE 2 SUBDRAINS (COMBINATION SUBDRAIN/FOOTING DRAIN COLLECTOR), B.3. HDPE Pipe: Delete Type CP. Only Type SP is allowed in the City of Des Moines.
FOOTING DRAIN SERVICE STUBS - Add this new 2.09 and the following note: Use material for pipe and fittings complying with the current Adopted Edition of the Uniform Plumbing Code (UPC). In addition to the materials identified in the UPC, the use of SDR 23.5 pipe will be allowed.

FOOTING DRAIN COLLECTORS, C: Add the following new 3:

3. Type B cleanouts should be used for footing drain collectors less than 5 feet in depth in the City of Des Moines. Footing drain collectors greater than 5 feet deep, a Type A cleanout shall be used.

FOOTING DRAIN SERVICE STUBS: Add the following new D and E.

D. Mark the location of all footing drain service stubs at the time of installation by a two-inch wide detectable marking tape installed at a depth of 18 inches to 24 inches below finished grade, directly over the service stub, for its entire length and brought up to the surface at the end of the service stub adjacent to the post marking the stub location. The tape shall be green in color and marked “Footing Drain Service Stub Buried Below”.

E. ABS, PVC and SDR 23.5 pipe shall be installed with a minimum bedding of 4” below and up all side with 3/8” clean smooth gravel or a bedding product approved by the Engineer.

FOOTING DRAIN SERVICE STUBS: Add the following new Note 7 to Figure 4040.232.

7. Type B cleanouts should be used for footing drain collectors or combination subdrain/footing drain collectors less than 5 feet in depth in the City of Des Moines. Footing drain collectors greater than 5 feet deep, a Type A cleanout shall be used.

SECTION 4060 – CLEANING, INSPECTION, AND TESTING OF SEwers

VIDEO INSPECTION, A. General: Delete 1. and replace with the following new 1.

1. Conduct video inspection of all new and rehabilitated sanitary sewers, storm sewers, pipe culverts, and footing drain collectors after all backfill and compaction operations are completed, but prior to paving, unless otherwise specified in the contract documents.

SECTION 6010 – STRUCTURES FOR SANITARY AND STORM SEwers

6010, PARTS 1, 2, 3, and Figures: Unless specifically noted as precast construction on the construction drawings, all square or rectangular shaped intakes and manholes shall be cast-in-place. Circular precast intakes and manholes are allowed in the City of Des Moines.

6010, 2.03, B. REINFORCEMENT: Add the following second sentence: All reinforcement for cast-in-place structures shall be epoxy coated.

6010, 2.09 MANHOLE OR INTAKE ADJUSTMENT RINGS (Grade Rings): Add the following new C.

C. Manhole adjustment rings are not required to have pre-formed or pre-drilled holes for the anchor bolts.

6010, 2.10 CASTINGS (Ring, Cover, grate, and Extensions), D. Casting Types: 2. - Intakes: Delete b. and replace it with the following b.

b. Castings shall include design shown in this General Supplemental for lids on Type E, F, and G storm sewer castings shown for Figure 6101.602. The casting design is shown in the figure titled Storm Sewer Lid For the City of Des Moines.
6010, 2.13 STEPS: Delete entire Section as manhole steps are not allowed in the City of Des Moines.

6010, 2.15 ANCHOR BOLTS AND WASHERS, B. Diameter: Delete B. and replace it with the following B.: Provide bolts and washers 1/8 inch smaller than hole or slot in the casting frame but not less than 7/8 inch diameter.

6010, 3.01 GENERAL REQUIREMENTS FOR INSTALLATION OF MANHOLES AND INTAKES, J. Castings: Delete J. and replace with the following J.: Install the type of casting specified in the contract documents and adjust to proper grade. Where a manhole or intake is to be in a paved area, adjust the casting to match the slope of the finished surface. When castings with a bolt down cover (Type C or D) are specified, attach casting frame to the structure with four anchor bolts.

6010, 3.03 ADDITIONAL REQUIREMENTS FOR PRECAST CONCRETE STRUCTURES, Add new F. following:

F. Field Modification of Precast Structures: Significant modifications to precast structures to adjust elevations to field conditions will not be allowed. Significant modifications include, but are not limited to, excessive saw cutting of precast structures. Any field modifications to the precast structure shall be approved by the Engineer, or the Engineer’s representative, or the precast structure will not be accepted.

SECTION 7010 – PORTLAND CEMENT CONCRETE PAVEMENT

7010, 1.08 MEASUREMENT AND PAYMENT, Add new N. following:

N. Cold Weather Protection: When any type of additional protection described in 7010.3.04.A is necessary, additional payment will be made as extra work at the rate of $1.00 per square yard of surface protected. Payment will be limited to protection within the contract period. Protection necessary after November 15 will be paid only when the Engineer authorizes the work.

7010, 3.01 EQUIPMENT, A. Batching and Mixing Equipment, 2. Batching, Add new d. following:

d. Volumetric batching for Portland Cement Concrete will not be allowed unless authorized by the Engineer.

7010, 3.01 EQUIPMENT, C. Concrete Placement Equipment, 7. Concrete Saws, Add the following new 1:

1. Saw cutting operations shall be dustless in accordance with OSHA regulations.

7010, 3.02 PAVEMENT CONSTRUCTION, E. Bar and Reinforcement Placement: Add the following new 5:

5. PCC pavement slabs with manhole castings, with or without boxouts, shall have reinforcement similar to PV-103 around the castings.

7010, 3.07 QUALITY CONTROL, D. Pavement Thickness: Add the following as the first sentences under 1: Coring of pavement will not be required by the City of Des Moines if depth checks of the plastic thickness of the pavement are within one-half inch of the design thickness. If the variance exceeds one-half inch this section shall apply.

7010, FIGURE 7010.101, JOINTS: On Sheet 2 of 8 under ‘C’ Joint in Curb add the following: The entire curb shall be sealed with Joint Sealant Material.
7010, FIGURE 7010.101, JOINTS: On Sheet 3 of 8 delete Note 11 and replace with the following Note 1:

11. Sawing and sealing of the joint is required. See Detail D-2. On Sheet 3 of 8 Joint Types KT-1, KT-2, and KT-3 shall not be used.

7010, FIGURE 7010.901, PCC PAVEMENT JOINTING: Add Note 6 with the following:

6. All new roadway pavements shall be a minimum width of 27 feet back to back with parking on one side and 33 feet with parking on two sides.

SECTION 7020 – HOT MIX ASPHALT PAVEMENT

7020, 3.01 HMA PAVEMENT, Add the following new H.:

H. The paver shall be capable of paving a minimum continuous width of twenty (20) foot wide strip without seam. Pavers in tandem will be acceptable; however, an adequate number of personnel shall be available to operate both pavers simultaneously.

7020, FIGURE 7020.901, HMA PAVEMENT: Add Note 3 with the following:

3. All new roadway pavements shall be a minimum width of 27 feet back to back with parking on one side and 33 feet with parking on two sides.

SECTION 7021 – HOT MIX ASPHALT OVERLAYS

7020, 3.01 HMA PAVEMENT, Add the following new C.:

C. The paver shall be capable of paving a minimum continuous width of twenty (20) foot wide strip without seam. Pavers in tandem will be acceptable; however, an adequate number of personnel shall be available to operate both pavers simultaneously.

SECTION 7030 – SIDEWALKS, SHARED USE PATHS, AND DRIVEWAYS

7030, 1.08 MEASUREMENT AND PAYMENT, Add new J. following:

J. Cold Weather Protection: When any type of additional protection described in 7010.3.04.A is necessary, additional payment will be made as extra work at the rate of $1.00 per square yard of surface protected. Payment will be limited to protection within the contract period. Protection necessary after November 15 will be paid only when the Engineer authorizes the work.

7030, 2.07 DETECTABLE WARNINGS: Add the following sentence at the end: Only cast iron detectable warnings are allowed in the City of Des Moines.

7030, 3.04 PCC SIDEWALKS, SHARED USE PATHS, AND DRIVEWAYS, A. Form Setting: Add the following new 6:

6. The turning space for a sidewalk or shared use path shall be formed separately from the adjoining ramps and sidewalk or shared use path.
7030, 3.04 PCC SIDEWALKS, SHARED USE PATHS, AND DRIVEWAYS, B. Concrete Pavement Placement, 1. Shared Use Path: Add the following sentence at the end: “When the Portland Cement Concrete is delivered to the project on the prepared subgrade or subbase, the loads shall be limited to 5 tons for single axle vehicles or 10 tons for tandem axle or larger vehicles.”

Add the following new 4:

4. Volumetric batching for Portland Cement Concrete will not be allowed unless authorized by the Engineer.

7030, 3.04 PCC SIDEWALKS, SHARED USE PATHS, AND DRIVEWAYS, B. Concrete Pavement Placement, 2. Sidewalk: Add the following new g:

g. The turning space for a sidewalk or shared use path shall be placed separately from the adjoining ramps and sidewalk or shared use path.

7030, 3.04 PCC SIDEWALKS, SHARED USE PATHS, AND DRIVEWAYS, F. Jointing: 4. Isolation Joints: Delete b. and replace it with the following new b.

b. For a sidewalk constructed with a driveway, install a ½” expansion joint on the property side of the sidewalk and a ½” expansion joint on the street side of the sidewalk.

7030, 3.05 HMA SHARED USE PATHS AND DRIVEWAYS: Add the following second sentence: When Hot Mix Asphalt is delivered to the project on the prepared subgrade or subbase, the loads shall be limited to 5 tons for single axle vehicles or 10 tons for tandem axle or larger vehicles.

7030, FIGURE 7030.101, CONCRETE DRIVEWAY, TYPE A: Delete the references to “E Joint” on the property side of the sidewalk and “C or E Joint” on the street side of the sidewalk, and replace with “install a ½” expansion joint on the property side of the sidewalk and a ½” expansion joint on the street side of the sidewalk”. In addition, install a ½” expansion joint in the sidewalk at the extension of both edges of the driveway. Delete 7 and replace with the following 7; “Install a ½” expansion joint at the back of curb.”

7030, FIGURE 7030.102, CONCRETE DRIVEWAY, TYPE B: Delete the references to “E Joint” on the property side of the sidewalk and “C or E Joint” on the street side of the sidewalk, and replace with “install a ½” expansion joint on the property side of the sidewalk and a ½” expansion joint on the street side of the sidewalk”. In addition, install a ½” expansion joint in the sidewalk at the extension of both edges of the driveway.

7030, FIGURE 7030.201, CLASSES OF SIDEWALKS: The detail for CLASS A SIDEWALK shall be revised to delete the “4” min.” thickness dimension of the sidewalk and replace with “5” min.”.

7030, FIGURE 7030.202, CURB DETAILS FOR CLASS A SIDEWALK: On Detail 3 delete the note “Sealed ‘E’ joint” and replace it with the following note “Sealed ‘B’ joint”. On Detail 1, 2, and 3 delete the “4 min.” thickness dimension of the sidewalk and replace with “5” min.”.

SECTION 8030 – TEMPORARY TRAFFIC CONTROL

8030, Add new 3.04.A – Traffic Control Deficiency Deduction

A. Traffic Control Deficiency Deduction. When the Engineer is notified, or determines a traffic control deficiency exists, he/she will notify and direct the Contractor to correct the deficiency within a specified time. The specified time, which begins upon notification to the Contractor, will be from ½ hour to 12 hours based upon the urgency of the situation and nature of the deficiency as determined by the Engineer.
A traffic control deficiency may be any lack of repair, maintenance, or non-compliance with the traffic control plan. A traffic control deficiency may also be also applied to situations where corrective action is not an option such as the use of non-certified flaggers for short term operations; working with lane closures beyond the time allowed in the contract; or failure to perform required contract obligations such as traffic control surveillance.

If a Contractor fails to correct a traffic control deficiency within the specified time, a daily monetary deduction from the pay item for Traffic Control will be imposed for each calendar day or fraction thereof the deficiency exists. The calendar days(s) will begin with the notification to the Contractor and end with the Engineer’s acceptance of the correction. The daily monetary deduction will be $2,500. For those deficiencies where corrective action was not an option, this monetary deduction will be immediate.

SECTION 9010 – SEEDING

9010, 3.02 – AREA OF SEEDING: Add A. and B.

A. Mobilize within 72 hours of a written order with sufficient labor, equipment, and materials to seeding work as ordered or approved by Engineer. Complete work within 7 calendar days of a written order.

B. Failure to mobilize and complete work within such time period, will result in a deduction of $750.00 per calendar day from payment due under the contract, except when Engineer extends such time period.

SECTION 9020 – SODDING

9020, 3.03 – SOD INSTALLATION: Delete A. and replace it with the following new A.

A. Do not install sod between the dates of June 1 and August 31, unless authorized by the Engineer.

B. Mobilize within 72 hours of a written order with sufficient labor, equipment, and materials to sod installation as ordered or approved by Engineer. Complete work within 7 calendar days of a written order.

C. Failure to mobilize and complete work within such time period, will result in a deduction of $750.00 per calendar day from payment due under the contract, except when Engineer extends such time period.

SECTION 9040 – EROSION AND SEDIMENT CONTROL

9040, 1.03 – SUBMITTALS: Add the following sentences: The Jurisdiction will not approve the contractor’s Stormwater Pollution Prevention Plan (SWPPP) or revisions to the SWPPP; instead, the Jurisdiction will only review and comment on the SWPPP and any revisions. The contractor shall submit to the Engineer a copy of the Iowa Department of Natural Resources authorization prior to the Jurisdiction’s issuance of the Notice to Proceed for the work.

9040, 1.08 – MEASUREMENT FOR PAYMENT, A. Stormwater Pollution Prevention Plan (SWPPP): Delete A. in its entirety and replace with the following A.

A. **Stormwater Pollution Prevention**: Item will be paid for as a lump sum for the project based on the following formula: 30% of the bid amount after review of the SWPPP by the Engineer and filing a Notice of Intent by the contractor, an additional 20% of the bid amount when 25% of the total original contract amount is earned, an additional 20% of the bid amount when 50% of the total original contract amount is earned, an additional 20% of the bid amount when 75% of the total original contract amount is earned, and the remaining 10% of the bid amount upon filing the Notice of Discontinuation by the contractor. Item shall include the following activities and work:

1. **Stormwater Pollution Prevention Plan (SWPPP) Preparation**: Item includes reviewing and preparation of any modifications necessary to the general SWPPP provided by the Jurisdiction based on the Contractor’s proposed scheduling and construction methods, filing a Notice of Intent for coverage of the project under the Iowa DNR NPDES General Permit No. 2, and
payment of associated NPDES permit fees. The Jurisdiction will publish the Public Notice of Storm Water Discharge and provide an affidavit of publication to the contractor.

2. **Management:** Item includes all work required to comply with the administrative provisions of the Iowa DNR NPDES General Permit No. 2; including record keeping, documentation, updating the SWPPP, filing the Notice of Discontinuation, etc. Item also includes weekly inspections required to satisfy the provisions of General Permit No. 2, unless otherwise stated in the contract documents.

3. **Inspection:** Item includes inspection of the disturbed areas, and erosion and sediment control measures performed by the contractor, at least once every seven (7) calendar days until the disturbed areas have been stabilized with a perennial vegetative cover of sufficient density to preclude erosion.

4. **Additional Erosion and Sediment Control Measures:** Item includes the cost of erosion and sediment control measures included in the contractor’s modifications to the general SWPPP provided by the Jurisdiction that are either not included as bid items on the proposal or exceed 20% of the proposal unit quantity for the measure, as well as replacement of these measures if needed. The contractor will be paid at the unit bid price for additional erosion and sediment control measures constructed that are included in the contractor’s modifications to the general SWPPP provided by the Jurisdiction when the quantity of these additional measures is less than or equal to 20% of the contract quantity for the measure.

**9040, 3.01 – SWPPP PREPARATION:** Delete in its entirety and replace with the following.

A. Review and prepare any modifications necessary to the general SWPPP provided by the Jurisdiction based on the Contractor’s proposed scheduling and construction methods. Prepare a Stormwater Pollution Prevention Plan (SWPPP) according to the requirements of the Iowa DNR NPDES General Permit No. 2.

B. Have the SWPPP prepared by an individual experienced in erosion and sediment control.

C. Ensure that controls utilized in the SWPPP conform to the type and quantity of erosion and sediment controls shown in the contract documents. See 9040, 1.08, 4 above for measurement for payment of any erosion and sediment control measure used that is not shown in the contract documents or exceeds 20% of the contract quantity for the measure.

D. Submit the completed SWPPP to the Engineer for review and comment prior to filing the Notice of Intent.

E. The Jurisdiction will publish the Public Notice of Storm Water Discharge, as required by the NPDES General Permit No. 2 and provide an affidavit of publication to the contractor.

F. File the Notice of Intent and fee, as required by the NPDES General Permit No. 2.

G. Prior to beginning grading, excavation, or clearing and grubbing operations, all erosion and sediment control measures identified in the SWPPP shall be installed or constructed.

**9040, 3.02 – SWPPP MANAGEMENT:** Delete C. in its entirety and replace with the following C.

C. Submit all SWPPP revisions to the Engineer for review and comment.

**SECTION 9080 – CONCRETE STEPS AND HANDRAIL**

**9080, 2.01 – MATERIALS, B. Reinforcing Steel:** Add the following sentence at the end: “All reinforcement shall be epoxy coated.”
SUPPLEMENTAL SPECIFICATION
FOR
WATER SERVICES
Effective Date: April 1, 2014

This project will be constructed in accordance with the SUDAS Standard Specifications as referenced in the contract documents and as further revised by this Supplemental Specification.

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FIGURES

WS-1  Stop Box Relocation
WS-2  Lower Water Service
WS-3  Minimum Clearance Between Water Service and Structure
WS-4  Relocate Water Service in Conflict with New Sewer
WS-5  Adjusting Stop Box to New Grade

1. DESCRIPTION

This work shall consist of checking the depth, lowering, relocating and replacing water services and related items such as stop boxes, valves and taps.

2. MATERIALS

All materials used shall meet the requirements of the City of Des Moines plumbing code and the Des Moines Water Works Rules and Regulations.

3. CONSTRUCTION

A. Permits, Licenses, and Inspections.

1. All work shall comply with the requirements of the City of Des Moines Plumbing Code and the Des Moines Water Works Rules and Regulations. The Contractor shall obtain all permits, pay all fees, and schedule all plumbing inspections as required by the City of Des Moines Permit and Development Office. All work shall be done by a plumber licensed in the City of Des Moines.

2. Prior to starting any work on a project (preconstruction) and after all construction is complete (post construction) the Engineer shall arrange with Des Moines Water Works for an inspection of all water...
service stop boxes within the project limits. The Contractor will be required to attend both inspections and assist with exposing the stop boxes. The preconstruction inspection will document defects to existing stop boxes. The post construction inspection will verify that the stop boxes have been installed/adjusted/protected to the requirements of this specification.

B. Water Service Tap:

1. A new water service tap is required if the existing tap is either 1/2" or 3/4" and not insulated.

2. Excavate and prepare the site in accordance with Des Moines Water Works Rules and Regulations.

3. Schedule Des Moines Water Works to install the service tap, and pay all Des Moines Water Works fees for the installation.

4. Backfill and compact the excavation site in accordance with Section 3.L.

C. Relocate Water Service Stop Box:

1. Relocate stop box, as shown in Figure WS-1, from its existing location to the new location shown on the plans or as designated by the Engineer.

2. When the existing stop box is not as indicated on the plans, the relocation shall be verified by the Engineer before proceeding with the work.

D. Check Depth of Water Service:

1. Excavate water service, measure and assure that existing water service is a minimum of 60 inches below the finished grade and not in conflict with proposed sewers, walls, and other structures.

2. If the depth of the service is not adequate, the service shall be lowered in accordance with the plans, and this specification.

E. Lower Water Service:

1. Lower existing water service that meets plumbing code standards to provide a minimum of 60 inches of earth cover and to provide minimum clearances at proposed sewers, walls, and structures as shown in Figures WS-2, WS-3, and WS-4.

2. Replace stop box and pipe and fittings if required.

F. Lower Water Service with New Copper:

1. Replace services that do not meet plumbing code standards with new 1-inch copper tubing from the water main to and including the
stop box. If the work area extends beyond the stop box, replace service to the limits of the work area.

2. Lower to provide a minimum of 60 inches earth cover and to provide minimum clearances at proposed sewers, walls, and structures as shown in Figures WS-2, WS-3 and WS-4.

G. New Water Service:

1. At locations where plumbing code standards require that the existing water service must be reconstructed in conjunction with relocating water services or relocating stop boxes, and in locations where a new water main is installed, a new water service shall be constructed from the water main to and including the stop box.

2. The new service shall be constructed to provide a minimum of 60 inches of earth cover and to provide minimum clearances at proposed sewers, walls, and structures as shown in Figures WS-2, WS-3, and WS-4.

3. Utilize the existing corporation tap on the water main if allowed (see water service tap) and provide all new materials required.

H. Relocate Water Service:

1. Relocate the existing water service that meets plumbing code standards when there is conflict with sewer construction as shown in Figure WS-4.

2. Relocate Stop Box if required.

I. Disconnect Water Service:

1. Disconnect abandoned water service or water service stubs.

2. Abandon in accordance with the requirements of the City of Des Moines Plumbing Code and Des Moines Water Works Rules and Regulations. The water services shall be cut at the corporation stop and the stop closed. The stop box consisting of the stem and riser shall be completely removed.

J. Adjust Stop Box to New Grade:

1. Adjust all stop boxes within the project limits to finish grade as per Figure WS-5.

2. Stop box caps that are located in a new PCC sidewalk or driveway shall be protected to prevent adhesion of the stop box cap to the new PCC sidewalk or driveway. A ½ inch thick, flexible, polyethylene, closed cell expansion joint material (zip strip or approved equal) shall be installed under the stop box cap to prevent adhesion to the bottom of the cap. The top of the stop box cap shall also be protected to prevent concrete adhesion. A permanent or temporary sleeve shall be placed on or around the stop box cap to prevent adhesion to the side of the stop box cap. After the new PCC
sidewalk or driveway has been placed, the contractor shall remove any temporary sleeves.

K. Flushing and Testing:

1. Flush and test the service in accordance with requirements of the City of Des Moines Plumbing Code and Des Moines Water Works Rules and Regulations.

L. Backfilling:

1. Place backfill in the trench immediately after water service work has been completed and inspected.

2. Within street right-of-way, compact each lift to at least 95% of maximum Standard Proctor Density, otherwise compact to at least 90%.

3. In areas 3 feet or more below pavement structure, place backfill in lifts no thicker than 8 inches.

4. In areas less than 3 feet below pavement structure, place backfill in lifts no thicker than 6 inches.

5. Terminate backfill at 8 inches below finish grade in areas to remain unpaved, and to subgrade elevation in areas to be paved. Place 8 inches of topsoil in unpaved areas.

6. Dispose of surplus and unsuitable materials.

7. Hydraulic compaction is not allowed.

4. METHOD OF MEASUREMENT

A. General

1. No separate measurement will be made for excavation, backfill and compaction, except as follows:


   b. Where excavated material is found to be unsuitable for backfill and cannot be made suitable in the opinion of Engineer, it shall be replaced with suitable backfill material. Suitable backfill replacement material located within the project limits will not be measured and paid separately. For replacement material furnished by the Contractor from outside the project limits, see Section 3010 of SUDAS Standard Specifications and General Supplemental Specifications.

B. Relocate Water Service Stop Box

1. The Engineer will count each separate Water Service Stop Box
relocated, except as described below.

2. Stop boxes relocated in conjunction with "New Water Service", "Lower Water Service," or "Lower Water Service with New Copper" will not be counted.

C. New Stop Box Housing and New Stop Box Rod.

1. The Engineer will count the number of each item completed as described in Figure WS-5.

D. Check Depth of Water Service

1. The Engineer will count the number of Check Depth Water Services as follows:

   a. Water services which are checked for depth and do not require lowering, relocation, replacement with a new service, or stop box relocation will be counted.

   b. Water services which are checked for depth and found to require lowering, relocation, replacement with a new service, or stop box relocation will not be counted.

   c. Water services checked for depth that are located in an individual trench will be counted individually.

   d. Multiple water services checked for depth that are located in one trench will be counted as one check depth (measurement will be made for first service checked and additional measurement will be not be made for subsequent services in the same trench).


1. The Engineer will count the number of each item completed for each size of water service as follows:

   a. Water services that are located in an individual trench will be counted individually.

   b. Multiple water services are located in one trench will be counted as 1 each for the first service and each additional water service located in the same trench shall be counted as ½ each.

5. BASIS OF PAYMENT

A. General

1. The cost of permits, fees, excavation, removal of unsuitable soil, backfill, testing and disinfection shall be considered incidental to this work.
B. Relocate Water Service Stop Box

1. Payment will be made at the unit bid price for each Relocate Water Service Stop Box completed. Bid price shall include all work and materials required to move the stop box from its existing location to its new location. The bid price shall assume the following:
   a. Existing ground key stop shall remain in place.
   b. New ground key stop with connections shall be installed.
   c. Where required, a new service box stem and rod shall be installed.

2. Stop boxes relocated in conjunction with “New Water Service”, “Lower Water Service,” or “Lower Water Service with New Copper” will be considered incidental to those items and not be counted for separate payment.

C. New Stop Box Housing and New Stop Box Rod

1. Payment will be made at the unit bid price for each item of work completed. Bid price shall include all work and materials required to complete the work.

D. Check Depth of Water Service

1. Payment will be made at the unit bid price for each Check Depth of Water Service completed. Bid price shall include all work and materials required to complete the work.

E. Lower Water Service, Lower Water Service with Copper, New Water Service

1. Payment will be made at the unit bid price for each item of work completed. Bid price shall include all work and materials required to complete the work. The bid price shall include a new stop box and any additional pipe and fittings required.

F. Relocate Water Service

1. Payment will be made at the unit bid price for Relocate Water Service completed. Bid price shall include all work and materials required to complete the work. The bid price shall include any additional pipe and fittings required.

G. Disconnect Water Service, Water Service Tap

1. Payment will be made at the unit bid price for each item completed. Bid price shall include all work and materials required to complete the specified work on the water service. Removal and replacement of the street pavement, sidewalks, and driveways are paid under separate bid items.
NOTES

1. THE STOP BOX LOCATION SHALL MEET THE FOLLOWING REQUIREMENTS:
   INSTALL BETWEEN 1' AND 6' FROM THE RIGHT-OF-WAY LINE.
   INSTALL A MINIMUM OF 24" AWAY FROM ANY FENCE OR WALL.
   DO NOT INSTALL IN A DRIVEWAY, SIDEWALK, OR AN ALTERNATE LOCATION
   UNLESS APPROVED BY THE ENGINEER.

WATER SERVICE STATUS                      CONTRACTOR’S RESPONSIBILITY                     COMPENSATION

1. STOP BOX DOES NOT REQUIRE RELOCATION.  ADJUST TO FINISH GRADE AS PER FIGURE WS-5.  SEE FIGURE WS-5

2. STOP BOX REQUIRES RELOCATION. SERVICE COMPLIES WITH THE PLUMBING CODE.  RELOCATE STOP BOX.  BID ITEM—"RELOCATE STOP BOX"

3. NEW STOP BOX REQUIRED IN CASE 2 ABOVE.  INSTALL NEW STOP BOX.  INCIDENTAL TO "RELOCATE STOP BOX"

4. STOP BOX REQUIRES RELOCATION BUT PLUMBING CODE STANDARDS WILL NOT ALLOW SIMPLE RELOCATION.  CONSTRUCT NEW WATER SERVICE AND INSTALL NEW STOP BOX AT SPECIFIED LOCATION.  BID ITEM —"NEW WATER SERVICE"

5. EXISTING TAP 1/2" OR 3/4" AND NOT INSULATED IN CASE 4 ABOVE.  PROVIDE NEW 1" TAP  BID ITEM — "WATER SERVICE TAP"

REV. DATE BY
01/03/12

DATE: 05-25-00

Figure: WS-1

Sheet 1 of 1
NOTE: WHEN WATER SERVICES ARE LOWERED, THEY SHALL BE LOWERED OR RELOCATED TO AVOID CONFLICT WITH PROPOSED SEWERS, WALLS AND OTHER STRUCTURES.

### WATER SERVICE STATUS

1. CHECK DEPTH—SERVICE HAS MINIMUM 60" OF EARTH COVER TO FINISH GRADE.

2. CHECK DEPTH—SERVICE HAS LESS THAN 60" OF EARTH TO FINISH GRADE AND SERVICE COMPLIES WITH PLUMBING CODE.

3. CHECK DEPTH—SERVICE HAS LESS THAN 60" OF EARTH COVER TO FINISH GRADE BUT PLUMBING CODE STANDARDS WILL NOT ALLOW EXISTING PIPE TO BE LOWERED OR REUSED.

4. NEW STOP BOX REQUIRED IN CASE 2 OR 3 ABOVE

5. EXISTING TAP 1/2" OR 3/4" AND NOT INSULATED IN CASE 3 ABOVE.

### CONTRACTOR'S RESPONSIBILITY

- BACKFILL AND COMPACT INSPECTION EXCAVATION.
- LOWER SERVICE.
- LOWER SERVICE WITH NEW COPPER PIPE.
- INSTALL NEW STOP BOX
- PROVIDE NEW 1" TAP

### COMPENSATION

- BID ITEM: "CHECK DEPTH OF WATER SERVICE"
- BID ITEM: "LOWER WATER SERVICE"
- BID ITEM: "LOWER WATER SERVICE WITH NEW COPPER"
- INCIDENTAL TO APPLICABLE BID ITEM IN CASE 2 OR 3
- BID ITEM: "WATER SERVICE TAP"
SUPPLEMENTAL SPECIFICATIONS FOR WATER SERVICES

SECTION

WATER SERVICE

60" MIN

SECTION

WATER SERVICE

60" MIN

24" MIN.

PLAN VIEW

STRUCTURE

30" MIN

SECTION A-A

A

FINISH GRADE

60" MIN

30"

IF SERVICE MUST BE LOCATED IN AREA OF PIPE, ALSO PROVIDE PIPE CLEARANCE (SEE FIGURE WS-4)

MINIMUM CLEARANCE BETWEEN WATER SERVICE AND STRUCTURE

FIGURE: WS-3

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DATE: 05-25-00

Supplemental Specifications for Water Services

Page 9 of 11
**SUPPLEMENTAL SPECIFICATIONS FOR WATER SERVICES**

**ZONE OF CONFLICT DEFINED - AREA FROM 6" BELOW THE BOTTOM OF THE SPECIFIED BEDDING TO 12" ABOVE THE TOP OF PIPE.**

**WATER SERVICE STATUS**

1. Service located outside of both the zone of conflict & special condition zone & has more than 60" of of earth cover to finish grade. Provide protection, if damaged repair in compliance with the plumbing code.

2. Service located in zone of conflict, complies with the plumbing code and is not specified to be lowered. Relocate below sewer as detailed above.

3. Service located in zone of conflict but plumbing code standards will not allow simple relocation thereof. Construct new water service, provide minimum clearance of sewer as detailed above.

4. Service is located in special condition zone and has more than 60" of of earth cover to finish grade. Insulate service within the trench limits.

5. Service is located above the zone of conflict and has less than 60" of of earth cover to finish grade. Relocate or reconstruct as specified in 2 and 3 above whichever case applies.

6. Service required to be lowered as well as relocated. Lower service - provide minimum clearance to sewer pipe as above.

5. Existing tap 1/2" or 3/4" and not insulated in case 3 above. Provide new 1" tap.

* Conditions - existing line is lead, less than 1" dia. or galvanized.

**CONTRACTOR'S RESPONSIBILITY**

**COMPENSATION**

Incidental to other work

Bid item - "relocation of water service"

Bid item - "new water service"

Incidental to other work

As in 2 or 3 above whichever applies.

As in 2 or 3 above whichever applies.

Bid item - "lower water service" or "lower water service with new copper" whichever applies.

Bid item - "water service tap"

**REV. DATE BY**

01/03/12

RELocate WATER SERVICE IN CONFLICT WITH NEW SEWER

**DATE:** 05-25-00

**FIGURE:** WS-4

**SHEET 1 CF 1**
SUPPLEMENTAL SPECIFICATIONS FOR WATER SERVICES

NORMAL INSTALLATION

STOP BOX ADJUSTED TO NEW GRADE

NOTES:

1. RAISING THE HOUSING IS ACCOMPLISHED BY REMOVING THE CAP, INSTALLING A PIPE COUPLING AND USING A PIPE NIPPLE (TBE) OF A PROPER LENGTH OR INSTALL CURB STOP BOX REPAIR COUPLING TO BRING THE CAP TO THE NEW GRADE.

2. TO LOWER THE HOUSING IT MAY BE NECESSARY TO CUT AND RETHREAD THE HOUSING AT THE NEW GRADE OR INSTALL CJRB STOP BOX REPAIR COUPLING AND REPLACE THE CAP. THE TOP OF THE ROD MUST BE A MINIMUM OF 12" BELOW THE TOP OF THE HOUSING.

STOP BOX STATUS

1. TOP OF EXISTING HOUSING MATCHES FINISHED GRADE. NO ADJUSTMENT REQUIRED.

2. EXISTING HOUSING NEEDS ADJUSTED TO FINISH GRADE. HOUSING IS IN GRADE SUITABLE CONDITION TO ADJUST.

3. EXISTING HOUSING NEEDS ADJUSTED TO FINISH GRADE. HOUSING IS TOO ADJUST TO FINISHED GRADE DETERIORATED TO ADJUST.

4. TOP OF EXISTING ROD IS NOT WITHIN SPECIFIED DISTANCE TO FINISHED GRADE IN EITHER CASE 2 OR 3 ABOVE.

5. NEW STOP BOX IS INSTALLED AS PART OF OTHER PLUMBING WORK.

CONTRACTOR'S RESPONSIBILITY

1. PROVIDE PROTECTION. REPLACE OR REPAIR IF DAMAGED BY CONSTRUCTION.

2. ADJUST HOUSING TO FINISHED GRADE. HOUSING IS IN GRADE SUITABLE CONDITION TO ADJUST.

3. INSTALL NEW HOUSING AND ADJUST TO FINISHED GRADE.

4. INSTALL NEW ROD SO THE TOP OF ROD IS WITHIN THE SPECIFIED DISTANCE TO FINISHED GRADE.

5. ADJUST HOUSING AND ROD TO THE REQUIREMENTS SHOWN IN THIS FIGURE.

COMPENSATION

INCIDENTAL TO OTHER WORK

INCIDENTAL TO OTHER WORK

BID ITEM: "NEW STOP BOX HOUSING"

BID ITEM: "NEW STOP BOX ROD"

INCIDENTIAL TO INSTALLATION OF THE STOP BOX

REV. DATE BY ADJUSTING STOP BOX TO NEW GRADE FIGURE: WS-5

DATE: 02-92 SHEET 1 OF 1

Supplemental Specifications for Water Services
SUPPLEMENTAL SPECIFICATION
FOR
TRAFFIC SIGNAGE
Effective Date: September 20, 2021

This project will be constructed in accordance with the SUDAS Standard Specifications as referenced in the contract documents and as further revised by this Supplemental Specification.

PART 1  GENERAL

1.01   SECTION INCLUDES

   A. Traffic Signs and Sign Posts

1.02   DESCRIPTION OF WORK

   Includes the requirements for the removal and installation of traffic control signs and sign posts.

1.03   SUBMITTALS

   Comply with Division 1 – General Provisions and Covenants as well as the following:

   A. Submit a list of sign sheeting materials, post materials, and associated hardware proposed for use on the project.

   B. Submit all proposed sign layouts prior to manufacturing.

1.04   SUBSTITUTIONS

   Comply with Division 1 – General Provisions and Covenants.

1.05   DELIVERY, STORAGE, AND HANDLING

   Comply with Division 1 – General Provisions and Covenants.

1.06   SCHEDULING AND CONFLICTS

   Comply with Division 1 – General Provisions and Covenants.

1.07   SPECIAL REQUIREMENTS

   None.

1.08   MEASUREMENT AND PAYMENT

   A. Remove and Reinstall Sign, as per plan:

      1. Measurement: Each sign removed and reinstalled will be counted.

      2. Payment: Payment will be at the unit price for each sign removed and reinstalled.

Supplemental Specifications for Traffic Signage
3. **Includes**: Unit price includes, but is not limited to, all material, equipment, and labor required to remove and reinstall existing sign and sign post.

**B. Removal of Sign and Sign Post:**

1. **Measurement**: Each sign and sign post removed will be counted.

2. **Payment**: Payment will be at the unit price for each sign and sign post removed.

3. **Includes**: Unit price includes, but is not limited to, all materials, equipment, and labor required to remove and salvage existing sign and sign post.

**C. Type A Signs, Sheet Aluminum:**

1. **Measurement**: Measurement will be in square feet of sheet aluminum signage installed.

2. **Payment**: Payment will be at the unit price per square feet of sheet aluminum signage installed.

3. **Includes**: Unit price includes, but is not limited to all materials, hardware, equipment, and labor required to manufacture and install traffic control signage per plans.

**D. Sign Post, Round, Steel Post:**

1. **Measurement**: Measurement will be in linear feet of round, steel sign post installed.

2. **Payment**: Payment will be at the unit price per linear feet of round, steel sign post installed.

3. **Includes**: Unit price includes, but is not limited to all materials, hardware, equipment, and labor required to install round, steel sign post per plans.

**E. Sign Post, Perforated Square, Steel Tube Post:**

1. **Measurement**: Measurement will be in linear feet of perforated, square steel tube post installed.

2. **Payment**: Payment will be at the unit price per linear feet of perforated, square steel tube post installed.

3. **Includes**: Unit price includes, but is not limited to materials, hardware, equipment, and labor required to install perforated, square steel tube post per plans.

**PART 2 – PRODUCTS**

**2.01 SIGN MATERIALS**

**A. General:**

All sign blanks shall be aluminum alloy 6061-T6 conversion coated with Alodine 1200. 5052-H38 alloy is an acceptable alternative.

1. All blanks shall be 0.080 inches thick will the following exceptions:
   a. If either the length or width dimension of a sign is 36 inches or greater, the blank shall be 0.125 inches thick.
b. Eighteen inch street name signs shall be 0.125 inches thick.

2. Blanks shall be finished free of any surface or edge burrs, cut marks, or other irregularities.

3. Standard signs shall be pre-drilled with standard hardware holes (0.375 inch diameter) and have no burrs or excess material retained in or around the hole. Holes placement and radii shall conform to the Standard Highway Signs Manual, current edition.

4. A diagram showing the location of holes for specialty signs will be provided prior to catalog cut submittal.

5. 18 inch and 24 inch street name signs shall not be pre-drilled. 8 inch and 12 inch signs shall be drilled as shown below in the Street Name Sign Hole Punch Detail.

   Sign faces shall be firmly attached to the aluminum sign blanks, with no air bubbles, wrinkles, creases, tears or other surface blemishes. The faces shall be neatly trimmed to match the edge of the sign blank.

B. Sheet Requirements:

   All traffic control signs shall be made of ASTM D4956 Type XI (3M Diamond Grade DG3 or equal) reflective sheeting with a ten year performance warranty with the following exceptions:

   1. Pedestrian pushbutton and parking prohibition signs (including no parking, loading zone, handicap, etc.) shall be made of ASTM D4956 Type I (3M Engineer Grade Prismatic or equal) reflective sheeting with a seven year performance warranty.

   2. Construction signs shall be made of ASTM D4956 Type IV (3M High Intensity Prismatic or equal) reflective sheeting with a ten year performance warranty.

   3. Material for specialty signs will be specified at the time of order.

   All warning signs shall be made with fluorescent yellow sheeting unless otherwise specified. All pedestrian, bicycle and school crossing signs shall be fluorescent yellow-green sheeting unless otherwise specified.

C. Street Name Signs:

   1. All street name signs shall be single-sided

   2. The length of the street name sign shall be in 6 inch increments and will vary based on the legend.

   3. Lettering shall be white and the background shall be blue or green transparent, acrylic film with pressure sensitive adhesive for application over reflective sheeting (“EC” film). The background color will be specified at the time of order.


   5. All 18 inch and 12 inch signs shall have a white border as shown in the attached detail.

   6. Letter size and spacing shall conform to the MUTCD and the attached details. In cases where descending lower-case letters (g, j, p, q, and y) cannot be accommodated on the
specified blank, the City will work with the manufacturer to modify the letter size or blank size.

7. A shop drawing showing the sign legend, sign length, letter heights and spacing shall be submitted for one 18 inch, 12 inch and 8 inch street name sign prior to making the sign.

8. 18 inch and 12 inch street name signs shall be made of ASTM D4956 Type XI (3M Diamond Grade or equal) reflective sheeting with a ten year performance warranty. Eight (8) inch street name signs shall be made of ASTM D4956 Type IV (3M High Intensity Prismatic or equal) reflective sheeting with a ten year performance warranty.

2.02 POST MATERIALS

A. Round, Steel Post: Steel posts shall be 2 inch round galvanized post, Schedule 40.

B. Perforated Square Tube Post: posts shall be 1 ¼ inch square, 14 gauge galvanized steel, perforated post.

PART 3 – EXECUTION

3.01 SIGN INSTALLATION

A. Mounting Height: The mounting height of the sign shall be seven feet to bottom of sign measured from top of grade. When multiple signs are located on one pole/post, the height to the bottom of the lowest sign must seven feet. Gap between signs must be one inch.

B. Lateral Offset: Signs posts shall be located so the minimum distance from the face of curb to the near edge of the sign is two feet. Lateral distance may be adjusted for utility conflicts. Sign shall not overhang the curb.

3.02 SIGN MOUNTING HARDWARE

A. Sign Installed on Square Posts: When signs are installed on square perforated posts, the following hardware shall be used as shown in the installation detail:

1. 5/16 inch zinc-plated, Grade A bolt, 2 ½ inches long.
2. 5/16 inch stainless steel flat washer, 0.75 inch outside diameter (OD).
3. 5/16 inch nylon washer with one inch outside diameter.
4. 5/16 inch zinc-plated nut.

B. Sign Installed on Round Posts: When signs are installed on round posts, the following hardware shall be used as shown in the installation detail:

1. 5/16 inch stainless steel flat washer, 0.75 inch outside diameter (OD).
2. 5/16 inch nylon washer with one inch outside diameter.
3. 5/16 inch zinc-plated nut.
4. Aluminum interlocking brackets for 2 3/8 inch OD posts with 1 ½ inch long zinc-plated, Grade A bolts, 5/16 inch diameter.
C. **Sign Installed on Wood Utility Pole:** When signs are installed on wood utility poles the following hardware shall be used as shown in the installation detail:

1. 5/16 inch zinc-plated, Grade A lag bolt, 2 ½ inches long.
2. 5/16 inch stainless steel flat washer, 0.75 inch outside diameter (OD).
3. 5/16 inch nylon washer with one inch outside diameter.

The use of banding on wood poles is not allowed.

D. **Sign Installed on Steel Streetlight Poles – Side of Pole Mounted:** When signs are side-of-pole mounted on steel streetlight poles the following hardware shall be used as shown in the installation detail:

1. Type 201 stainless banding, 5/8 inch wide and 0.030 inches thick.
2. Type 201 stainless steel buckles, 5/8 inch wide.
3. 5/16 inch stainless steel flat washer, 0.75 inch outside diameter (OD).
4. 5/16 inch nylon washer with one inch outside diameter.
5. Single bolt flared leg stainless steel bracket.
6. 5/16 inch hex head 18-8 stainless steel bolt, 5/8 inch long, fully threaded.

E. **Sign Installed on Traffic Signal/Sign Mast Arm:** When signs are installed on traffic signal or sign mast arm poles, the following hardware shall be used:

1. An articulated serrated bracket assembly that includes top, middle, and bottom sign mounting brackets and provides a rigid-mount for the traffic sign.
2. All necessary hardware for a complete installation on a mast arm shall be included.
3. The mounting assembly shall be of a cable type.
4. Approval of other bracket supports shall be based on specifications and/or test data about their physical properties and performance properties.

All pedestrian pushbutton signs shall be mounted to the signal pole using stainless steel bolts. Bolts shall be 5/16 inch flanged with plastic washer. Holes shall be drilled and tapped.

F. **Street Name Sign Installation on Posts:** When signs are post mounted signs should be mounted back-to-back as appropriate. The following hardware shall be used as shown in the installation detail:

1. 5/16 inch zinc-plated, Grade A bolt, 2 ½ inches long
2. 5/16 inch stainless steel flat washer, 0.75 inch outside diameter (OD)
3. 5/16 inch nylon washer with one inch outside diameter
4. 5/16 inch zinc-plated nut
5. 1/2 inch I.D. x 1-9/16 inch long CPVC Plastic Spacer

3.03 **POST ASSEMBLIES AND INSTALLATION**

A. **General:** Posts shall be of a length to meet the bury requirements identified in the plan details and to extend to the top of the highest mounted sign.
B. **Median Installation:** When sign posts are installed within concrete medians the following post and anchors shall be used and installed per the detail shown in the construction plans:

1. 1 ¾ inch square, 14 gauge galvanized steel, perforated post.
2. 2 inch square, 12 gauge galvanized steel, perforated breakaway anchor – 36 inch long.
3. 2 ¾ inch square, 12 gauge galvanized steel, perforated breakaway anchor – 36 inch long.

C. **Concrete Installation – Embedded:** When round posts are embedded in concrete the following post and Speed-E-Roc grout shall be used per the detail shown in the construction plans:

1. 2 inch round galvanized post, Schedule 40.
2. Grout.

D. **Concrete Installation – Plate-mounted:** Where posts are installed on bridge decks or in concrete areas where embedment is not possible, a 6 inch square, 3/8 inch thick steel plate shall be continuously welded to the bottom of the pole.

E. **Grass Installation:** When sign posts are installed within grass the following post and anchors shall be used and installed per the detail shown in the construction plans:

1. 1 ¾ inch square, 14 gauge galvanized steel, perforated post.
2. 2 inch square, 12 gauge galvanized steel, perforated breakaway anchor – 36 inch long.

Where round posts are specified for grass installation, a two inch round galvanized, schedule 40 post shall be used. An eight inch triangular gusset made of 14 gauge carbon steel shall be welded to the bottom of the pole per the detail shown in the construction plans.
### 12 INCH STREET NAME SIGN DETAILS

**Named Street Name Sign with Border and Descending Stroke**

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<th>D</th>
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Colors:  
- Legend, Border: White, 3M Diamond Grade (DG3) Sheeting  
- Background: Green, 3M ElectroCut Film  
- Background (Alternate): Blue or other specified, 3M ElectroCut Film

**Named Street Name Sign with Border**

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
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<tr>
<td>Varies in 6&quot; Increments</td>
<td>12</td>
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Colors:  
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- Background: Green, 3M ElectroCut Film  
- Background (Alternate): Blue or other specified, 3M ElectroCut Film

**Numbered Street Name Sign with Border**

<table>
<thead>
<tr>
<th>A</th>
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<tr>
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<td>12</td>
<td>0.5</td>
<td>3</td>
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<td>4.8</td>
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<td>3.5 (MIN)</td>
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<tr>
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Colors:  
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- Background: Green, 3M ElectroCut Film  
- Background (Alternate): Blue or other specified, 3M ElectroCut Film
8 INCH STREET NAME SIGN DETAILS

Named Street Name Sign without Border and Descending Stroke

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>D</th>
<th>E</th>
<th>F</th>
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<tr>
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<td>8</td>
<td>2.5</td>
<td>4B</td>
<td>3B</td>
<td>3.5</td>
<td>2 (MIN)</td>
<td>2.5</td>
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Colors:
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- Background: Green, 3M ElectroCut Film
- Background (Alternate): Blue or other specified, 3M ElectroCut Film

Named Street Name Sign without Border

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<tr>
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- Background: Green, 3M ElectroCut Film
- Background (Alternate): Blue or other specified, 3M ElectroCut Film

Numbered Street Name Sign without Border

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- Background: Green, 3M ElectroCut Film
- Background (Alternate): Blue or other specified, 3M ElectroCut Film
OVERHEAD STREET NAME SIGN DETAILS

Address Detail

Overhead Street Name Sign with Block Address and Descending Stroke

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>B</th>
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Overhead Street Name Sign with Block Address

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SUPPLEMENTAL SPECIFICATION
FOR
TREE PROTECTION
Effective Date: March 24, 2017

This project will be constructed in accordance with the SUDAS Standard Specifications as referenced in the contract documents and as further revised by this Supplemental Specification.

PART 1 – GENERAL

1.01 SECTIONS INCLUDES

A. Installation of Tree Protection Measures
B. Damage to Protected Trees
C. Inspection and Documentation

1.02 DEFINITION OF TERMS AND ABBREVIATIONS

Work Zone Protected Tree
A tree of any size that is located within the project’s work zone and is to remain in place at the completion of the project.

Border Protected Tree
A tree of any size that is located outside the project work zone, but has branches extending over the work area, or whose trunk is located within 10’ of the edge of the work area.

Tree Protection Limit
The area around a tree, as defined in the Tree Protection Plan, in which no construction activity or materials storage is allowed. If the tree protection limit is not defined in the Tree Protection Plan, it shall be considered to be equal to the Critical Root Radius.

dbh: Diameter at breast height
The diameter of a tree trunk in inches measured at a height of 4.5 feet above the natural ground level.

CRR: Critical Root Radius
Expressed in feet equal to the dbh in inches. (The CRR of a tree with a 12” dbh is 12’) This is the desired distance from the tree trunk at which fencing is installed and no construction activity is allowed.
1.03 DESCRIPTION OF WORK

A. The Contractor shall not damage any trees and shrubs which are not part of the removal plan, regardless of whether installation of tree protection measures is required or not. The contract documents shall designate individual trees and/or areas of the project that require installation of tree protection measures as defined in this supplemental specification. The Engineer may add, delete or revise the areas that require tree protection at any time prior to or during the project construction period. This Section includes the deduction of payment to the Contractor for damage to a tree or unauthorized removal of a tree.

B. The Contractor shall install all tree protection measures before the commencement of any construction activities. Construction activity includes but is not limited to, driving on the site in any vehicle, grading, excavation, import and storage of materials.

1.04 MEASUREMENT AND PAYMENT

A. The Tree Protection Plan shall be included in the contract documents and management of the plan shall be incidental to the contract.

B. Tree Protection Fence: Tree protection fence shall be measured along the fence at the bottom of the mesh fabric. The Contractor shall be paid the contract unit price per linear foot of tree protection fence installed. The height of tree protection fencing shall be identified in the contract documents. This payment shall be full compensation for furnishing all materials, equipment, and labor to perform installation, maintenance, and removal of fencing. If other types of fence, such as silt fence for border trees, is installed and functions as tree protection fence, measurement and payment will not be made for this fence as tree protection fence.

C. Tree Trunk Protection: The Contractor shall be paid the contract unit price per each for tree trunk protection installed. This payment shall be full compensation for furnishing all materials, equipment, and labor to perform installation, maintenance, and removal of trunk protection.

D. For each occurrence of tree protection fencing not installed as per the approved Tree Protection Plan or not properly maintained as described in Section 3.02A, and for each occurrence of intrusion into the Tree Protection Zone, $600 per day shall be deducted from the amount due the Contractor:

The condition of any tree damaged by the Contractor will be evaluated by the City Forester. The Contractor shall be required to repair damage to the tree as directed by the City Forester. This could include, but not be limited to trimming and pruning of the branches and roots in accordance with the current edition of the American National Standards Institute (ANSI) A300 Standards for Tree Care Operations, Part 1, Pruning. In addition to repairing the damage, a price adjustment of $300 for a tree 6-inch or less in diameter, $500 for a 6 to 12-inch or less diameter tree; and $750 for a tree greater than 12-inches in diameter. The price adjustments are per tree damaged by the Contractor.
E. When the City Forester determines the damaged tree needs to be removed, the Contractor shall remove the tree and stump, and restore the sod area. Repair and removal of damaged trees shall be completed at no cost to the City. The Contractor shall also compensate the City for the replacement cost of any damaged tree that is removed, per the City Forester's assessment. The Contractor shall also be liable to the owner of any tree located on private property that must be removed due to damage, for the full value of the tree. Documentation of such payment shall be provided to the City.

PART 2 – PRODUCTS

2.01 ORANGE MESH TREE PROTECTION FENCE

A. Fabric shall meet the following material requirements:

1. Height of 72” (±2 inches) or height of 48” (±2 inches) as specified in the bid item.
2. Remain flexible down to 0º F and constructed of orange plastic mesh containing ultraviolet stabilizers to prevent degradation.
3. Minimum tensile strength of 250 pounds per foot in the longitudinal direction and 150 pounds per foot in the vertical direction.
4. Maximum aperture opening of a nominal 4.5 square inches.
5. Maximum porosity of 55% for the safety fence surface area.
6. Available in rolls of at least 50 feet in length to minimize fence joints for an individual fence location.

B. Fence posts shall meet the following requirements:

1. Use T-section steel posts, 8’ length for 6’ high fence, or 6’ length for 4’ high fence.
2. Equip posts with lugs or other approved means to prevent the fence fabric from moving vertically.
3. Use posts that weigh no less than 1.3 pounds per foot, exclusive of anchor plate.
4. Provide each post with a steel anchor plate of adequate size, firmly attached.
5. Install at an 8’ maximum spacing for 6’ high fence, or 6’ maximum spacing for 4’ high fence, or as required to prevent fence fabric from sagging.

2.02 TREE TRUNK PROTECTION

A. When tree construction operations are required in close proximity to a tree, defined as any activity within the Critical Root Radius, the Contractor shall install tree trunk protection.
1. Wrap the tree trunk with dimensional lumber either 2” x 4, 6, 8, or 10 (actual thickness is 1.5”). Depending upon the trunk diameter, the tree length, and size of tree, dimensional lumber shall be approximately 8’ long, but necessary length will depend on the existing tree and associated construction activity.

2. Secure the lumber against the trunk with metal, plastic, or polyester bands, a minimum 3/8” width, at a minimum of two locations to securely hold the protective dimensional lumber against the trunk of the tree. The bands shall be secured with a tensioner under slight pressure to ensure their long term positioning for the duration of the contract. The bands shall be stapled to the wooden uprights at several points around the circumference so they don’t slide down. If trees are protected for more than one year, an inspection is required to determine if the tree has begun pushing outward on the protection. If the bands are too tight they shall be replaced with new bands under the appropriate tension.

PART 3 – EXECUTION

3.01 TREE PROTECTION PLAN

A. The Contractor shall use the Tree Protection Plan in the contract documents or submit an alternate to the installation of tree protection, such as the installation of silt fencing along border trees, if such alternates provide acceptable tree protection. The Engineer shall have the sole authority for acceptance or rejection of alternates. Alternate plans may also take into consideration preliminary brush removal. No mechanical grading or vegetation removal may take place within 6’ of a tree trunk without approval of the Engineer and the City Forester.

3.02 INSTALLATION AND MAINTENANCE OF TREE PROTECTION MEASURES

A. After approval of the Tree Protection Plan by the Engineer, and prior to starting construction work, the Contractor shall install the tree protection fencing or other approved measures in accordance with the Tree Protection Plan. Install fence posts according to 2.01.A or as required to prevent sagging. Securely attach the fence so it is in a vertical position without sagging. Locate and place the fence supports so they are not a safety hazard. Clearly mark with paint the trees to be removed in accordance with the Tree Protection Plan. No construction activity shall commence until the tree protection fencing measures and the trees marked for removal have been reviewed on site by the Engineer or construction observer. Phasing of the installation of tree protection measures will only be allowed if shown on the approved Tree Protection Plan. Repair or replace any tree protection fence that is damaged, not in a vertical position or no longer providing the intended protection.
B. When specified by the contract, the Contractor shall construct tree trunk protection around each tree specified. These methods will be required in specific situations to protect a tree trunk.

3.03 DAMAGES TO TREES

A. Contractor shall notify the city of any damage to trees not designated for removal, including border protected trees. Damages include but are not limited to:

1. Scratched or gouged bark.
2. Broken branches.
3. Compaction of soil within the specified tree protection limits.
4. Storage of materials within a tree’s critical root radius.
5. Operation of equipment within the specified tree protection limits.
6. Parking of vehicles or equipment within a tree’s critical root radius.
7. Spilling of harmful substances around or within a tree’s critical root radius.

3.04 INSPECTION AND DOCUMENTATION

A. The Contractor shall periodically inspect the tree protection fencing, repair any deficiencies, and update the Tree Protection Plan. All updates shall be submitted to the Engineer for approval. A copy of the current Tree Protection Plan shall be available on the construction site.

B. If any tree not designated for removal is damaged or removed, the Contractor shall notify the construction observer or Engineer with 48 hours.
TYPICAL TREE PROTECTION FENCING - WORK ZONE AREA

Figure TP-1

Note 1: Spacing as required to prevent sagging, 8' maximum.

Fence supports

4' or 6' orange construction fence

Installs signs as follows:

For individual tree protection locations:
Install at least two signs at each location and at a maximum spacing of 18' on center.

For linear tree protection locations:
Install a sign at each end of the tree projection fence and at a maximum spacing of 50' on center.

dbh = Diameter at breast height, the diameter of tree trunk in inches at height of 4.5' above natural ground.

CRR = Critical root radius is the distance in feet equal to the dbh in inches. This is the desired distance from the tree trunk at which fencing is installed.

Black letters on orange background

KEEP OUT TREE PROTECTION ZONE
UP TO $600 PENALTY

Sign detail
Min. sign dimensions:
Laminated cardboard - 11" x 7"
Metal - 12" x 18"

4' or 6' orange construction fence to protect tree or group of trees

Work zone limit

Work area

Tree drip line

Tree trunk

Critical root radius

Diameter at breast height

Supplemental Specification for Tree Protection
BLACK LETTERS ON ORANGE BACKGROUND

KEEP OUT
TREE PROTECTION ZONE
UP TO $600 PENALTY

SIGN DETAIL
MIN. SIGN DIMENSIONS:
LAMINATED CARDBOARD - 11" x 17"
METAL - 12" x 18"

dbh = DIAMETER AT BREAST HEIGHT,
THE DIAMETER OF TREE TRUNK
IN INCHES AT HEIGHT OF 4.5'
ABOVE NATURAL GROUND.

CRR = CRITICAL ROOT RADIUS IS THE
DISTANCE IN FEET EQUAL TO
THE dbh IN INCHES. THIS IS THE
DESIRED DISTANCE FROM THE
TREE TRUNK AT WHICH FENCING
IS INSTALLED.

4' OR 6' ORANGE CONSTRUCTION FENCE
TO PROTECT TREE OR GROUP OF TREES

FENCE SUPPORTS

NOTE 1: SPACING AS REQUIRED TO PREVENT SAGGING, 8" MAXIMUM

INSTALL SIGNS AS FOLLOWS:
FOR INDIVIDUAL TREE PROTECTION LOCATIONS:
INSTALL AT LEAST TWO SIGNS AT EACH LOCATION
AND AT A MAXIMUM SPACING OF 18" ON CENTER.

FOR LINEAR TREE PROTECTION LOCATIONS:
INSTALL A SIGN AT EACH END OF THE TREE
PROTECTION FENCE AND AT A MAXIMUM SPACING OF
50' ON CENTER.

TYPICAL TREE PROTECTION FENCING - BORDER AREA

FIGURE TP-2
SUPPLEMENTAL SPECIFICATION
FOR
PROJECT SIGN
Effective Date: September 25, 2019

This project will be constructed in accordance with the SUDAS Standard Specifications as referenced in the contract documents and as further revised by this Supplemental Specification.

1. DESCRIPTION
   This item covers the supplying, installation, and maintenance of a project information sign.

2. MATERIALS
   2.1 SIGNBOARD. The sign shall be 48 inches high by 96 inches wide (large), or 36” high by 36” wide (small), and shall be constructed of 5/8 inch-thick Medium-density overlay plywood, Grade MDO.

   2.2 POSTS. Two (2) posts will be required for each sign. For large signs these posts shall be from pressure treated weather resistant lumber and shall not be less than four inches by four inches (nominal). The posts shall be a minimum of ten feet in length. Steel posts may be used for small signs.

   2.3 BOLTS. A minimum of four 3/8" bolts (including one nut and two flat washers per bolt) are required for attaching the signboard to the posts. Bolts shall be of a "rust proof" type.

3. CONSTRUCTION AND INSTALLATION
   3.1 NUMBER AND LOCATION. The Contractor shall furnish the number of project sign required in the contract documents. The sign(s) shall be installed at a location designated by the Engineer.

   3.2 DATE FOR INSTALLATION. The sign shall be installed in advance of the start of any actual construction operations.

   3.3 SETTING POSTS. The posts for large signs shall be placed not less than three feet in the ground. The posts for small signs may be installed on temporary skids. The sign shall be installed so the outside edges of the posts are flush with the outside edges of the sign and so that the bottom of the sign is three feet above the ground. The sign shall be set plumb and level.

   3.4 WORDING. The wording shall be in accordance with the Project Sign drawing. Prior to fabrication, the Contractor shall submit a final drawing of the 4’ x 8’ project sign, complete with proposed wording, for approval by the engineer.

   3.5 PAINT. Paint shall be gloss oil enamel paint supplied by Pittsburgh Paint matching the following color schedule or approved equal:
<table>
<thead>
<tr>
<th>3' x 3' Project Sign</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Content Background</td>
<td>White</td>
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<tr>
<td>Content Eorder</td>
<td>Black</td>
</tr>
<tr>
<td>“City of”</td>
<td>75% Black</td>
</tr>
<tr>
<td>“Des Moines”</td>
<td>Pantone 187C</td>
</tr>
<tr>
<td>Bridge &amp; Sky</td>
<td>Pantone 2935C</td>
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</tbody>
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<tr>
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<td>Content Surround</td>
<td>Pantone 166C</td>
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<td>Content Eorder</td>
<td>Black</td>
</tr>
<tr>
<td>“City of”</td>
<td>75% Black</td>
</tr>
<tr>
<td>“Des Moines”</td>
<td>Pantone 187C</td>
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<tr>
<td>Bridge &amp; Sky</td>
<td>Pantone 2935C</td>
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<td>Labels</td>
<td>Pantone 166C</td>
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<td>Data</td>
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3.6 PAINTING. The complete sign (front, back and edges excluding posts) shall be given two coats of gloss oil enamel, content background color. The letters on the sign shall be painted with one coat of gloss oil enamel in the style shown on the Project Sign Drawing. Colors will match the schedule in 3.5.

3.7 VINYL OPTION. Vinyl letters and symbols may be substituted for painted letters and symbols. The background shall be applied as specified in Section 3.6. The vinyl material shall be 3M Scotchcal Series 220/Series 225 or approved equal and applied per the manufacturers specifications. Colors shall match schedule in Section 3.5.

4. CONDITION AND MAINTENANCE

The condition of the sign before installation shall be subject to the approval of the Engineer. The Contractor shall be responsible for maintaining the sign in acceptable condition throughout the duration of the project.

5. DISPOSITION AT END OF PROJECT

The project sign shall be removed by and will become the property of the Contractor at the completion of the project. The Engineer will notify the Contractor to remove the sign, the sign shall be removed within 7 calendar days of notification from the Engineer.

6. MEASUREMENT AND PAYMENT

Each size sign installed will be counted. Payment will be at the contract unit price for each size of sign. Payment is full compensation for furnishing the sign, posts, hardware, and labor for installation, maintenance and removal of the sign.
PROJECT SIGN SMALL - STANDARD
(Sign Dimensions: 3'x3')
PROJECT SIGN LARGE - STANDARD
(Sign Dimensions: 4' x 8'
ROADWAY IMPROVEMENTS

PAID BY GAMING REVENUES IN PARTNERSHIP WITH:
CITY OF DES MOINES
POLK COUNTY
PRAIRIE MEADOWS
RACE TRACK & CASINO RACI

FOR INFORMATION CALL (283-4931)

PROJECT SIGN SMALL - GAMING

(Sign Dimensions: 3'x3')
YOUR LOCAL OPTION SALES & SERVICE TAX AT WORK

CITY OF DES MOINES
YOUR
STORMWATER
SERVICE CHARGE
AT WORK

CITY OF DES MOINES