PUBLIC IMPROVEMENTS CONTRACT DOCUMENTS

2020 HMA RESURFACING PROGRAM CONTRACT 1

ACTIVITY ID PLAN FILE NO.
062019015 614-030/058

CITY COUNCIL APPROVAL

APPROVAL DATE ROLL CALL NO.
February 24, 2020

CONTRACT NO.

CONTRACTOR CONTRACT AMOUNT

$0.00

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

Funding Information
Object Code 543060
Organization No. C038PW99
Project No. ST217
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
- Contractual Requirements
- Technical Specifications

Supplemental Specifications:
- General Supplemental Specifications to SUDAS, 2019 Edition
- Supplemental Specifications for Tree Protection

PROJECT ENGINEER: Matthew Becker, P.E.

Phone Number: (515) 283-4026
INSTRUCTIONS TO BIDDERS

Activity ID 06-2019-015
Project Name 2020 HMA Resurfacing Program Contract 1
Fed/St. Project No.

The work comprising the above referenced project shall be constructed in accordance with the SUDAS Standard Specifications, 2014 Edition, dated October 15, 2013; 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-altternates). 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 bond 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.

INSTRUCTION TO BIDDERS: Page 1 of 3 Pages
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 2B), 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.dmgov.org/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.
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 January 28, 2020, 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 January 28, 2020, 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 February 24, 2020. 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 January 13, 2020, 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.
2020 HMA Resurfacing Program Contract 1, 06-2019-015
The improvements include furnishing labor, equipment, and materials all in accordance with the contract plans and documents, including Plan File Nos. 614-030/058, at the following locations all within the City of Des Moines, Iowa:

Full depth removal of existing pavement, installation of modified subbase and Hot Mix Asphalt (HMA), and other incidental items; in accordance with the contract documents, at the following locations:
Rittenhouse Street – S.W. 22nd Street to S.W. 28th Street
North Valley Drive – 56th Street to Muskegee Avenue

Scarification of existing asphalt streets, furnish and place Hot Mix Asphalt (HMA), furnish and place pavement markings, and other incidental items; in accordance with the contract documents, at the following locations:
Echo Valley Drive from S.W. 42nd Street to Norwalk City Limits
S.E. 1st Street – Indianola Avenue to Scott Avenue
Hull Avenue – E. 14th Street to Dixon Street
Guthrie Avenue – I-235 to Hubbell Avenue.

This project shall be fully completed not later than October 9, 2020, and in accordance with the Completion Provisions.

Engineer's Construction Estimate, $1,900,000.00

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 February 24, 2020, at 5:00 p.m., in the City Council Chambers, 2nd Floor, City Hall, 400 Robert D. Ray Drive, Des Moines, Iowa. 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

2020 HMA Resurfacing Program Contract 1, 06-2019-015
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Guthrie Avenue – I-235 to Hubbell Avenue

Published in the Des Moines Register
January 5, 2020
PROPOSAL

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:

2020 HMA Resurfacing Program Contract 1, 06-2019-015

The improvements include furnishing labor, equipment, and materials all in accordance with the contract plans and documents, including Plan File Nos. 614-030/058, at the following locations all within the City of Des Moines, Iowa:

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Guthrie Avenue – I-235 to Hubbell 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 before a date to be specified in a written notice to proceed by the Jurisdiction, and to fully complete the project not later than October 9, 2020, 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 dollars ($500.00) for each calendar day thereafter that the work remains incomplete.
PROPOSAL: PART E - NON-COLLUSION AFFIDAVIT

The Bidder hereby certifies:

1. That this proposal is not affected by, contingent on, or dependent on any other proposal submitted for any improvement with the Jurisdiction; and

2. That no individual employed by the Bidder has employed any person to solicit or procure the work on this project, nor will any employee of the Bidder make any payment or agreement for payment of any compensation in connection with the procurement of this project; and

3. That no part of the bid price received by the Bidder was 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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</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 add-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.

<table>
<thead>
<tr>
<th>ITEM</th>
<th>DESCRIPTION</th>
<th>ESTIMATED QUANTITY</th>
<th>UNIT PRICE</th>
<th>AMOUNT</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Subgrade Preparation</td>
<td>SY 3454.00</td>
<td>$_______</td>
<td>$_______</td>
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<tr>
<td>2</td>
<td>Subgrade Treatment, Cement</td>
<td>TON 50.00</td>
<td>$_______</td>
<td>$_______</td>
</tr>
<tr>
<td>3</td>
<td>Subgrade Treatment, Geogrid, Type 3</td>
<td>SY 3454.00</td>
<td>$_______</td>
<td>$_______</td>
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<tr>
<td>4</td>
<td>Subbase, Modified Subbase, 6&quot;</td>
<td>SY 3454.00</td>
<td>$_______</td>
<td>$_______</td>
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<tr>
<td>5</td>
<td>Storm Sewer, Trenched, DIP, 12&quot;</td>
<td>LF 50.00</td>
<td>$_______</td>
<td>$_______</td>
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<tr>
<td>6</td>
<td>Storm Sewer, Trenched, RCP, 10&quot;</td>
<td>LF 10.00</td>
<td>$_______</td>
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<td>7</td>
<td>Subdrain, 6&quot;</td>
<td>LF 2220.00</td>
<td>$_______</td>
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<td>8</td>
<td>Subdrain Outlets and Connections, CMP, 6&quot;</td>
<td>EACH 8.00</td>
<td>$_______</td>
<td>$_______</td>
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<tr>
<td>9</td>
<td>New Stop Box Housing</td>
<td>EACH 1.00</td>
<td>$_______</td>
<td>$_______</td>
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<tr>
<td>10</td>
<td>New Stop Box Rod</td>
<td>EACH 1.00</td>
<td>$_______</td>
<td>$_______</td>
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<tr>
<td>11</td>
<td>Remove &amp; Replace SW-501 Intake</td>
<td>EACH 2.00</td>
<td>$_______</td>
<td>$_______</td>
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<tr>
<td>12</td>
<td>Remove &amp; Replace SW-507 Intake</td>
<td>EACH 2.00</td>
<td>$_______</td>
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<td>13</td>
<td>Manhole Adjustment, PCC Diamond</td>
<td>EACH 17.00</td>
<td>$_______</td>
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<tr>
<td>14</td>
<td>Intake Adjustment</td>
<td>EACH 2.00</td>
<td>$_______</td>
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<td>15</td>
<td>Cleaning and Preparation of Base</td>
<td>MILE 2.11</td>
<td>$_______</td>
<td>$_______</td>
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<tr>
<td>16</td>
<td>HMA LT Base, 3/4&quot; Mix, PG 59-28S</td>
<td>TON 1225.00</td>
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<tr>
<td>17</td>
<td>HMA LT Surface, 56&quot; Mix, No Fric, PG 59-28S</td>
<td>TON 4100.00</td>
<td>$_______</td>
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<tr>
<td>18</td>
<td>HMA ST Surface, 56&quot; Mix, No Fric, PG 59-28H</td>
<td>TON 3025.00</td>
<td>$_______</td>
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</tr>
<tr>
<td>19</td>
<td>* Removal of Sidewalk, Shared Use Path, or Driveway</td>
<td>SY 40.00</td>
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<tr>
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<td>Sidewalk, 5&quot; PCC, Class 'B'</td>
<td>SY 750.00</td>
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<td>21</td>
<td>Sidewalk, Through Driveways, 6&quot; PCC</td>
<td>SY 10.00</td>
<td>$_______</td>
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<td>22</td>
<td>Sidewalk, ADA Compliant Ramp, 6&quot; PCC</td>
<td>SY 75.00</td>
<td>$_______</td>
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<tr>
<td>23</td>
<td>Detectable Warnings - Cast Iron</td>
<td>SF 75.00</td>
<td>$_______</td>
<td>$_______</td>
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<tr>
<td>24</td>
<td>Remove &amp; Replace Curb and Gutters</td>
<td>LF 20.00</td>
<td>$_______</td>
<td>$_______</td>
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<tr>
<td>25</td>
<td>* Saw Curb - Horizontal</td>
<td>LF 20.00</td>
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<td>26</td>
<td>Driveway, 6&quot; PCC</td>
<td>SY 15.00</td>
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<td>27</td>
<td>Patch, Full Depth PCC</td>
<td>SY 50.00</td>
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<td>$_______</td>
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<td>28</td>
<td>Patch, Full Depth HMA</td>
<td>SY 50.00</td>
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<tr>
<td>ITEM</td>
<td>DESCRIPTION</td>
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<td>UNIT PRICE</td>
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<tr>
<td>29</td>
<td>Subbase Over-excavation</td>
<td>TON</td>
<td>100.00</td>
<td></td>
</tr>
<tr>
<td>30</td>
<td>HMA Partial Depth Patches</td>
<td>SF</td>
<td>950.00</td>
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<tr>
<td>31</td>
<td>Pavement Scarification</td>
<td>SY</td>
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<td>32</td>
<td>Pavement Removal</td>
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<td>5224.00</td>
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<tr>
<td>33</td>
<td>Loop Detector, Replacement, 6' by 8'</td>
<td>EACH</td>
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<tr>
<td>34</td>
<td>Loop Detector, Replacement, 6' by 20'</td>
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<tr>
<td>35</td>
<td>Major Handhole Adjustment, Type I Precast Concrete Handhole</td>
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<td>36</td>
<td>Major Handhole Adjustment, Type II, III, or IV Polymer Concrete Handhole</td>
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<td>37</td>
<td>Painted Pavement Marking, Waterborne or Solvent based</td>
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<td>38</td>
<td>Durable Pavement Markings, Epoxy</td>
<td>STA</td>
<td>7.25</td>
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<td>39</td>
<td>Inlay Tape Marking, Profile Marking Tape</td>
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<td>40</td>
<td>Permanent Tape Markings</td>
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<td>14.28</td>
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<td>41</td>
<td>Painted Symbols and Legend, Waterborne or Solvent based</td>
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<td>42</td>
<td>Precut Symbols and Legends</td>
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<td>43</td>
<td>Pavement Markings Removed</td>
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<td>44</td>
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<td>45</td>
<td>Grooves Cut for Pavement Markings</td>
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<td>Grooves Cut for Symbols and Legends</td>
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<td>47</td>
<td>Traffic Control</td>
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<td>48</td>
<td>Flagger, Uniformed Police Officer</td>
<td>DAY</td>
<td>20.00</td>
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<tr>
<td>49</td>
<td>Flagger, Certified</td>
<td>DAY</td>
<td>20.00</td>
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<tr>
<td>50</td>
<td>Traffic Control, Portable Dynamic Message Signs</td>
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<td>30.00</td>
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<td>51</td>
<td>Remove and Reinstall Sign</td>
<td>EACH</td>
<td>1.00</td>
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<td>52</td>
<td>Hydraulic Seeding</td>
<td>SQ</td>
<td>50.00</td>
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<td>53</td>
<td>Tree Protection Fence</td>
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<tr>
<td>54</td>
<td>Mobilization</td>
<td>LS</td>
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<tr>
<td>55</td>
<td>Maintenance of Solid Waste Collection</td>
<td>LS</td>
<td>1.00</td>
<td></td>
</tr>
</tbody>
</table>

**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.
PROPOSAL ATTACHMENT: PART F - ADDITIONAL REQUIREMENTS
ITEM 1 - RECIPROCAL RESIDENT BIDDER AND LABOR FORCE

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

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: Page 2 of 3 Pages
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, 2014 Edition, dated October 15, 2013, 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 practical on the right-of-way, which has been acquired.

3. The Bidder hereby acknowledged 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.

4. The City’s Overall Annual DBE/TSB Goal for calendar year 2020 is 5.94%, 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 before a date to be specified in a written Notice to Proceed by the City and to fully complete the project by October 9, 2020; 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. Complete work in compliance with the intermediate completion period as described below.

   North Valley Drive: Once work starts on North Valley Drive, complete all work as described in the plans within Thirty (30) Working Days; and pay liquidated damages for noncompliance with said completion provision in the amount of five hundred and no/100 dollars ($500.00) for each working day thereafter.

   Rittenhouse Street: Once work starts on Rittenhouse Street, complete all work as described in the plans within Forty (40) Working Days; and pay liquidated damages for noncompliance with said completion provision in the amount of five hundred and no/100 dollars ($500.00) for each working day thereafter.

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:

2020 HMA Resurfacing Program Contract 1, 06-2019-015
The improvements include furnishing labor, equipment, and materials all in accordance with the contract plans and documents, including Plan File Nos. 614-030/058, at the following locations all within the City of Des Moines, Iowa:

Full depth removal of existing pavement, installation of modified subbase and Hot Mix Asphalt (HMA), and other incidental items; in accordance with the contract documents, at the following locations:
Rittenhouse Street – S.W. 22nd Street to S.W. 28th Street
North Valley Drive – 56th Street to Muskogee Avenue

Scarification of existing asphalt streets, furnish and place Hot Mix Asphalt (HMA), furnish and place pavement markings, and other incidental items; in accordance with the contract documents, at the following locations:
Echo Valley Drive from S.W. 42nd Street to Norwalk City Limits
S.E. 1st Street – Indianola Avenue to Scott Avenue
Hull Avenue – E. 14th Street to Dixon Street
Guthrie Avenue – I-235 to Hubbell 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.
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, 2014 Edition, dated October 15, 2013; 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:

2020 HMA Resurfacing Program Contract 1, 06-2019-015
The improvements include furnishing labor, equipment, and materials all in accordance with the contract plans and documents, including Plan File Nos. 614-030/058, at the following locations all within the City of Des Moines, Iowa:

- Full depth removal of existing pavement, installation of modified subbase and Hot Mix Asphalt (HMA), and other incidental items; in accordance with the contract documents, at the following locations:
  - Rittenhouse Street – S.W. 22nd Street to S.W. 28th Street
  - North Valley Drive – 56th Street to Muskogee Avenue

- Scarification of existing asphalt streets, furnish and place Hot Mix Asphalt (HMA), furnish and place pavement markings, and other incidental items; in accordance with the contract documents, at the following locations:
  - Echo Valley Drive from S.W. 42nd Street to Norwalk City Limits
  - S.E. 1st Street – Indianola Avenue to Scott Avenue
  - Hull Avenue – E. 14th Street to Dixon Street
  - Guthrie Avenue – I-235 to Hubbell Avenue

The Contractor agrees to perform said work for and in consideration of the Jurisdiction's payment of the bid amount of $____________, 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 before a date to be specified in a written notice to proceed by the Jurisdiction and to fully complete the project not later than October 9, 2020, and in accordance with the Completion Provisions; and to pay liquidated damages for noncompliance with said completion provisions 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.

<table>
<thead>
<tr>
<th>JURISDICTION:</th>
<th>CONTRACTOR:</th>
</tr>
</thead>
<tbody>
<tr>
<td>By</td>
<td>Contractor</td>
</tr>
<tr>
<td>T. M. Franklin Cownie, Mayor</td>
<td></td>
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<tr>
<td>(Seal)</td>
<td>By</td>
</tr>
<tr>
<td>ATTEST:</td>
<td>Signature</td>
</tr>
<tr>
<td>P. Kay Cmelik, City Clerk</td>
<td></td>
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<tr>
<td>FORM APPROVED BY:</td>
<td>Title</td>
</tr>
<tr>
<td>Kathleen Vanderpool, Deputy City Attorney</td>
<td></td>
</tr>
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</table>

**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 ____________________________ )
____________________________________ ) SS
____________________________________ County )

On this __________ day of ___________, 20 __________, before me, the undersigned, a Notary Public in and for
the State of ___________, personally appeared ____________ and ____________, to me
known, who, being by me duly sworn, did say that they are the ____________________________, and
__________________________, respectively, of the corporation executing the foregoing instrument;
that (no seal has been procured by) (the seal affixed thereto is the seal of) the corporation; that said instrument was signed
(and sealed) on behalf of the corporation by authority of this Board of Directors; that
__________________________ acknowledged the execution of the instrument to be the voluntary act and deed of the
corporation, by it and by them voluntarily executed.

________________________________________
Notary Public in and for the State of

My commission expires ____________________________
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 notice of public hearing. All quantities are subject to revision by the Jurisdiction. Quantity changes which amount to twenty (20) percent or less of the amount bid shall not affect the unit bid price of that item.

<table>
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<tr>
<th>ITEM</th>
<th>DESCRIPTION</th>
<th>UNITS</th>
<th>ESTIMATED QUANTITY</th>
<th>UNIT PRICE</th>
<th>AMOUNT</th>
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<td>SY</td>
<td>3454.00</td>
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<td>2</td>
<td>* Subgrade Treatment, Cement</td>
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<td>3</td>
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<td>6</td>
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<td>7</td>
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<td>2220.00</td>
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<td>8</td>
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<td>9</td>
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<td>13</td>
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<td>2.00</td>
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<td>15</td>
<td>* Cleaning and Preparation of Base</td>
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<td>16</td>
<td>HMA LT Base, 3/4&quot; Mix, PG 58-2BS</td>
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<td>17</td>
<td>HMA LT Surface, 1/2&quot; Mix, No Fric, PG 58-2BS</td>
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<td>18</td>
<td>HMA ST Surface, 1/2&quot; Mix, No Fric, PG 58-2BH</td>
<td>TON</td>
<td>2025.00</td>
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<td>19</td>
<td>* Removal of Sidewalk, Shared Use Path, or Driveway</td>
<td>SY</td>
<td>40.00</td>
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<td>Sidewalk, 4&quot; PCC, Class 'B'</td>
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<td>Sidewalk, Through Driveways, 6&quot; PCC</td>
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<td>Sidewalk, ADA Compliant Ramp, 6&quot; PCC</td>
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<td>23</td>
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<td>SF</td>
<td>76.00</td>
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<td>24</td>
<td>Remove &amp; Replace Curb and Gutter</td>
<td>LF</td>
<td>20.00</td>
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<td>25</td>
<td>* Saw Curb - Horizontal</td>
<td>LF</td>
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<td>26</td>
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<td>27</td>
<td>Patch, Full Depth PCC</td>
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<td>Patch, Full Depth HMA</td>
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<td>Subbase Over-excavation</td>
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<td>Durable Pavement Markings, Epoxy</td>
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<td>*Grooves Cut for Pavement Markings</td>
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<td>47</td>
<td>*Traffic Control</td>
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<td>48</td>
<td>*Flagger, Uniformed Police Officer</td>
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<td>49</td>
<td>*Flagger, Certified</td>
<td>DAY</td>
<td>20.00</td>
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<tr>
<td>50</td>
<td>*Traffic Control, Portable Dynamic Message Signs</td>
<td>DAY</td>
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<td>51</td>
<td>Remove and Reinstall Sign</td>
<td>EACH</td>
<td>1.00</td>
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<tr>
<td>52</td>
<td>*Hydraulic Seeding</td>
<td>SQ</td>
<td>50.00</td>
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<td>53</td>
<td>*Tree Protection Fence</td>
<td>LF</td>
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<td>54</td>
<td>*Mobilization</td>
<td>LS</td>
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<td>55</td>
<td>*Maintenance of Solid Wast Collection</td>
<td>LS</td>
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</table>

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 before a date to be specified in a written Notice to Proceed by the City and to fully complete the project by October 9, 2020; 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. Complete work in compliance with the intermediate completion period as described below.
   
   North Valley Drive: Once work starts on North Valley Drive, complete all work as described in the plans within Thirty (30) Working Days; and pay liquidated damages for noncompliance with said completion provision in the amount of five hundred and no/100 dollars ($500.00) for each working day thereafter.

   Rittenhouse Street: Once work starts on Rittenhouse Street, complete all work as described in the plans within Forty (40) Working Days; and pay liquidated damages for noncompliance with said completion provision in the amount of five hundred and no/100 dollars ($500.00) for each working day thereafter.

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 "Contractor" 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:

2020 HMA Resurfacing Program Contract 1, 06-2019-015
The improvements include furnishing labor, equipment, and materials all in accordance with the contract plans and documents, including Plan File Nos. 614-030/058, at the following locations all within the City of Des Moines, Iowa:

Full depth removal of existing pavement, installation of modified subbase and Hot Mix Asphalt (HMA), and other incidental items; in accordance with the contract documents, at the following locations:
Rittenhouse Street – S.W. 22nd Street to S.W. 28th Street
North Valley Drive – 56th Street to Muskogee Avenue
Scarification of existing asphalt streets, furnish and place Hot Mix Asphalt (HMA), furnish and place pavement markings, and other incidental items; in accordance with the contract documents, at the following locations:
Echo Valley Drive from S.W. 42nd Street to Norwalk City Limits
S.E. 1st Street – Indianola Avenue to Scott Avenue
Hull Avenue – E. 14th Street to Dixon Street
Guthrie Avenue – I-235 to Hubbell 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 ________________________________________ dollars ($ ________________), 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.

   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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<td>FORM APPROVED BY:</td>
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<tr>
<td></td>
</tr>
<tr>
<td>Kathleen Vanderpool</td>
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<td>Deputy City Attorney</td>
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<tr>
<td>City, State Zip Code</td>
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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.
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, February 21, 2020. 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, February 24, 2020. 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, February 21, 2020; the amount of the Bidder’s bid security may become the property of the City and may be retained—neither 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

The current Contract Compliance Program for the City of Des Moines is available for viewing [link to document]. The June 2017 Contract Compliance Program includes:

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.iowadot.gov/DBE/Directory/Index/.

All TSBs shall be certified by the Iowa Economic Development Authority, and the Certified Directory of TSBs is available at the following website https://iowaeda.microsoftcrmportals.com/tsb-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
CONTRACTUAL REQUIREMENTS
FOR FLAGGERS, UNIFORMED POLICE OFFICER
ON
2020 HMA RESURFACING PROGRAM CONTRACT 1

ACTIVITY ID 06-2019-015

1) GENERAL

The Contractor shall use Uniformed Police Officer(s) for flagging services for lane closures without MUTCD traffic control devices and/or for securing open building sites and/or as determined by the City’s Project Engineer.

The Contractor shall contact Jon Nablo at 515-777-6980 (24-hour voice mail) a minimum of 48 hours in advance of needing service to schedule Uniformed Police Officer(s). Should the Contractor not receive a response from Officer Pat Hickey within nine (9) business hours (business hours mean between 8:00 A.M. and 5:00 P.M.), the Contractor shall notify the Engineer immediately.

Effective January 1, 2016, the hourly rate for Uniformed Police service will be charged at $45.00 per hour, with a three (3) hour minimum. Christmas Day, New Year’s Eve Day, New Year’s Day, Memorial Day, Independence Day, Labor Day, and Thanksgiving Day, are considered major holidays and shall be paid at the premium rate of two times (2x) the normal rate. When the Contractor provides less than 48 hours of notice in scheduling, the hourly rate charged for Uniformed Police service will be an additional $10.00 per hour. The City cannot guarantee availability of Uniformed Police service when less than 48 hours of scheduling notice is provided by the Contractor.

Cancellation of a Uniformed Police service due to inclement weather shall be made no later than 12 hours prior to the scheduled date/time of service, but no later than 7:00 P.M. the day before the scheduled service. Cancellation of service due to inclement weather less than 12 hours prior to date/time of service or later than 7:00 P.M. the day before the scheduled service is subject to a cancellation fee of $135 per officer per shift.

Cancellation of a Uniformed Police service for reasons other than inclement weather prior to a scheduled date/time of service must be made no later than 48 hours prior to the scheduled date/time of service. Cancellation of service less than 48 hours prior to date/time of service is subject to a cancellation fee of $135 per officer per shift.

Emergency scheduling or cancellation of Uniformed Police services shall be coordinated with the Project Engineer. Emergency is defined as an unforeseen condition or utility issue as approved by the Engineer. Emergency scheduling or cancellation shall not be subject to an additional hourly service rate or a cancellation fee and shall be initiated by the Engineer to Jon Nablo. Emergency scheduling of Uniformed Police service shall remain the responsibility of the Contractor.

2) METHOD OF MEASUREMENT AND BASIS OF PAYMENT

Work shall be paid at a rate of $550.00 per day for Flagger, Uniformed Police Officer when performing flagging services as approved by the Engineer. Half day increments shall be the method of measurement for Flagger, Uniformed Police Officer. Holiday service shall be measured at two times (2x) per day. The Contractor shall collect and keep, as records for payment, the invoices received from the Uniformed Police Officer(s) for services performed. Payment shall be made within one (1) week from the date of service by an agreed to means between the Contractor and Jon Nablo.
SPECIAL PROVISION
TECHNICAL SPECIFICATIONS
FOR
CEMENT STABILIZED SUBGRADE
ON
2020 HMA RESURFACING PROGRAM CONTRACT 1

ACTIVITY ID: 06-2019-015

A. GENERAL PROVISIONS
The Contractor shall follow all provisions herein when performing bid item CEMENT STABILIZED SUBGRADE.

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.

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

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<tr>
<td>PORTLAND CEMENT, TYPE I</td>
<td>2010, 1.08, H and 2010, 2.04, C</td>
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<tr>
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C. EQUIPMENT
Equipment used in the construction of CEMENT STABILIZED SUBGRADE shall meet the following specifications.

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

1. Capability of pushing a supply tanker or distributor via interlocking hitch.
2. 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.
3. The WATER applied directly into the mixing chamber.
4. A machine able to uniformly mix material into a uniform gradation.
5. A machine able to make "on the fly" changes to quantities of materials being added to the subgrade, regardless of the machine's speed.
6. Machine must be able to measure liquid volumes and include automated nozzle cleaning and partial spray bar use.
7. 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.
8. 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.
9. 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.
10. Any damage caused by the Contractor's equipment riding on the subgrade shall be repaired at the Contractor's expense.

D. CONSTRUCTION OF CEMENT STABILIZED SUBGRADE

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.

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.

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.

4. COMPACTATION
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 sheepsfoot/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.

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.

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 CEMENT STABILIZED SUBGRADE.

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

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.
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1. Scope of Work

The work shall include the construction of sidewalks and/or ADA compliant sidewalk ramps found to be defective from an inspection by the City of Des Moines Engineering Department. The inspection areas are located throughout the corporate limits of the City of Des Moines. 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. Each list contains work sites in several geographical areas and neighborhoods, including along residential, commercial, and/or arterial streets. 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 within one hundred (100) working days and 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.

2. Construction Specifications

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

3. 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.
4. **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.

5. **Inspection**

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

6. **Notification to Adjoining Properties**

The Contractor shall provide an approved door hanger with the name and phone number of the Contractor’s contact person to all adjoining properties 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. The Contractor shall coordinate sidewalk removal and replacement at commercial driveways so that access is available at all times.

7. **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.

A period of seven (7) calendar days will be allowed to complete removal, replacement, cleanup, and restoration at any specific work site location where brick pavers are 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 sidewalks will be properly backfilled, seeded and swept clean with a broom. Refer to "SUDAS Standard Specifications," Section 7030, for additional requirements.

8. **Restoration of Parking and Unpaved Driveways**

All backfill shall be clean topsoil. Disturbed areas adjacent to the new sidewalk 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 construction and the cost included with the unit bid price. If additional areas are graded with prior approval of the Construction Inspections Supervisor or Project 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.

**Individual site completion requirements:** Any restoration not completed in current sod/seed dates will be completed in following sod/seed dates within ten (10) working days, otherwise liquidated damages will be assessed. Liquidated damages of one hundred dollars ($100) per day, per site shall be assessed after five (5) working days for each completion provision not met.

9. **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."
The cost of traffic control shall be included in the price bid per square yard of sidewalk, driveway, or ramp reconstructed. 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 relocate or remove any City of Des Moines traffic control signs. The Contractor shall contact the City of Des Moines Traffic and Transportation Division at 283-4974 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 City has replaced the permanent traffic control sign.

10. 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.

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 Warnings – Cast Iron

Only cast iron detectable warnings shall be used on this project. Detectable warnings placed on a radius shall be manufactured for radial installations. Detectable warnings shall not be cut in the field without prior approval by the Engineer.

14. Brick Sidewalk and Approach Replacement / Installation

At locations noted on the provided list of work sites, and/or at the direction of the Engineer, the contractor shall reconstruct defective, existing brick sidewalks with a brick sidewalk constructed on either a sand base, or a concrete base. If the existing brick sidewalk is constructed on a soil or aggregate base, the reconstructed sidewalk shall be placed on a sand base. If the existing brick sidewalk is constructed on a concrete or asphalt base, the reconstructed sidewalk shall be placed on a concrete base. All brick sidewalk sections through driveways and/or alleyways shall be reconstructed on a concrete base. All brick driveway and/or alleyway approaches that are to be reconstructed with bricks shall be placed on a concrete base. Brick pavers shall be placed in the same pattern as the existing sidewalk at each site. The cost of crushed rock backfill along the sidewalk edge through unpaved driveways shall be incidental to the price bid per square yard of brick sidewalk.

• Brick Sidewalk with Sand Base:

Prior to placement of the bedding sand, the surface of the prepared subgrade shall not deviate by more than 3/8 in. from the bottom edge of a 48 in. straight edge laid in any direction. The Contractor shall ensure that the prepared subgrade is protected from damage due to inundation from surface water. No traffic shall be allowed to cross the prepared subgrade. If required, tree root grinding shall be completed prior to final grading of the prepared subgrade. The upper surface of the prepared subgrade shall be sufficiently well graded and compacted to prevent infiltration of the bedding sand into the subgrade both during construction and throughout its service life. Under no circumstances shall further construction proceed until the prepared subgrade has been inspected by the Engineer. Only approved brick edge restraints shall be used and incorporated to the manufacturer’s specifications.

Approved bedding sand material shall be spread evenly over the prepared subgrade and screeded to a nominal 1 in. thickness, not exceeding 1-1/2 in. thickness. The screeded bedding sand should not be disturbed, including compaction by rain. Do not use the bedding sand to fill depressions in the prepared subgrade. The screeded bedding sand shall be carefully maintained in a loose condition, and protected against incidental compaction, both prior to and following the screed. Any incidentally compacted bedding sand or screeded bedding sand left overnight shall be loosened before further brick pavers are placed. Under no circumstances shall the bedding sand be screeded in advance of the brick paver laying pace to an extent that paver placement will not be completed on that day.

Brick pavers shall be clean and free of foreign material before being placed. All chipped, damaged, or discolored pavers shall be replaced. All pavers shall be placed so that the smooth face is facing up, exposed and visible to the public. Gaps along the edge of the paved areas shall be filled with pavers cut with a double blade paver splitter, or a wet masonry saw to keep dust to a minimum. Joint spacing shall be uniform and consistent to ensure the desired pattern is maintained throughout the paved area.

Upon completion of setting the brick pavers, the entire area must be swept clean of all debris for inspection and to ensure pavers are not damaged during compaction. Only approved brick paver joint sand shall be used and incorporated to the manufacturer’s specifications.

• Brick Sidewalk with Concrete Base:

Comply with SUDAS Standard Specification 7030. If an existing concrete or HMA base is revealed after removal of the brick sidewalk pavers, the Engineer shall decide if the reconstructed
sidewalk can be placed upon the existing base. If the reconstructed brick sidewalk is placed upon an existing concrete, or HMA base, measurement and payment of the brick sidewalk at that location will be by the square yard at the established contract price for Brick Sidewalk with Sand Base. The concrete base shall be formed and poured on subgrade only after being inspected and approved by the Engineer.

15. Brick Sidewalk Materials

• **Brick Pavers**: The Contractor shall remove and salvage the existing brick pavers to the greatest extent possible. The Contractor shall take special care when removing the existing sidewalk, as the goal of the City is to salvage as many bricks as possible for reuse at each site. All extraneous material shall be cleaned from the salvaged bricks, and the bricks shall be stockpiled and stored on site for reuse in the work. The Contractor shall dispose of all broken or damaged bricks off site. If additional brick pavers are needed to complete the work, a supply of salvaged brick pavers is available for contractor pick-up at the City of Des Moines Public Works Supply Yard at 903 SE 22nd Street.

• **Bedding Sand for Compacted Sand Base**: Common fill sand will not be allowed for use as the compacted sand base. The Contractor shall submit for approval in writing the supplier and/or source of the manufactured crushed stone sand to be used as the compacted sand base prior to construction.

• **Brick Edge Restraints**: Plastic edge restraints will not be allowed for use on the work. The Contractor shall submit for approval in writing the supplier and type of edge restraints to be used prior to construction.

• **Sand/Cement Filler in Joints**: Common fill sand will not be allowed for use as the joint filler. Only no haze high performance polymeric sand meeting ASTM C144, and specifically designed and manufactured for brick sidewalk installation shall be used on the work. The Contractor shall submit for approval in writing the supplier and type of the brick paver joint sand to be used prior to construction.

• **HMA Setting Bed for Concrete Base**: The Contractor shall submit for approval in writing the supplier and type of the HMA Setting Bed to be used prior to construction. Refer to SUDAS Specification 7030.

• **Tack Coat or Neoprene Adhesive for Concrete Base**: The Contractor shall submit for approval in writing the supplier and type of the Tack Coat or Neoprene Adhesive to be used prior to construction. Refer to SUDAS Specification 7030.

16. Brick Sidewalk Removal, Salvage, and Delivery

At locations noted on the provided list of work sites, and/or at the direction of the Engineer, the contractor shall remove, clean, and stack the salvaged sidewalk bricks onto pallets, and deliver the bricks to the Public Works Supply Yard at 903 SE 22nd Street. The SY cost of this item includes all materials, equipment, and labor required to complete the work.

17. PCC Driveways and Alleys

All existing concrete driveways and driveway approaches shall be reconstructed with PCC, 6-inches thick. All existing concrete commercial driveway and alley approaches shall be reconstructed with PCC, 7-inches thick.

18. 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:

1. Scratched or gouged bark.
2. Broken branches.
3. Visible compaction of soil within the tree drip line.
4. Storage of materials within the tree drip line.
5. Operation of equipment on the sod area without approved protective measures (typically plywood) within the tree drip line.
6. Parking of vehicles or equipment on the sod area within the tree drip line.
7. 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.

19. 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. 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.

20. Measurement and Payment

The unit bid price for the construction of curb ramps and sidewalks shall include the cost of full depth saw cutting and the removal of the existing curb ramp and/or sidewalk, and the installation of the new 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, are complete.

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.
STANDARD CITY LOOP DETECTOR DETAILS

SECTION A-A

BIKE LANE LOOP DETECTOR

LOOP DETECTOR
22. **Major Handhole Adjustment**

Major handhole adjustment includes raising or lowering the entire existing traffic handhole structure to meet new sidewalk grades. Minor adjustments to the top of the Type I precast concrete handhole or casting shall be incidental. Existing conduits, wiring and fiber shall be protected. See attached Traffic Handhole Detail for handhole sizes and descriptions.

**TRAFFIC HANDHOLE DETAILS**

![Diagram of handholes]

- **TYPE I HANDHOLE**
- **TYPE II PRE-CAST POLYMER CONCRETE HANDHOLE**
- **TYPE III PRE-CAST POLYMER CONCRETE HANDHOLE**
This project will be constructed in accordance with the SUDAS Standard Specifications, 2019 Edition, which were adopted by the City of Des Moines on April 22, 2019, under Roll Call No. 19-0621, as amended by these City of Des Moines General Supplemental Specifications.

The SUDAS Standard Specifications, 2019 Edition, may be viewed at the Iowa SUDAS website 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.

*This highlighted language and Section 94-198 of the Municipal Code of the City of Des Moines are not the current law of the State of Iowa and not applicable to the City’s current bidding process.
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 changed conditions 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 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, grant 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 ten (10) 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:

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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. 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.

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.

1070, 2.02 CONVENIENCE AND SAFETY: E. Project Area or Work Site Safety: Add the following new 6.

6. The City of Des Moines, Engineering Department, Master Construction Safety Packet 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 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
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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. 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. 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, 2.16 READY MIX CONCRETE WASTE: New Section - Add the following 2.16:

2.16 READY MIX CONCRETE WASTE

Concrete trucks will be allowed to washout or discharge excess concrete only in specifically
designated areas which have been prepared to minimize contact between the concrete and storm water
discharge from the site. The hardened product from the concrete washout areas will be disposed of
by the Contractor as other non-hazardous waste materials or may be broken up and used on the site
for other appropriate uses.

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, 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, 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 plumbing 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. This property insurance covering the work will have a deductible of $5,000 for each occurrence, or as stated in the special provisions, which will be the responsibility of the Contractor. 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.

1070, 3.06 **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:
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, Iowa 50309.”

SECTION 1080 – PROSECUTION AND PROGRESS

1080, 1.03 WORK PROGRESS AND SCHEDULE: 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, 1.04 PAYMENT FOR CHANGE ORDERS, B: Add the following new 4:

4. Extra Work Performed by the Subcontractor: The percentage markup to be allowed to the Contractor for extra performed by a Subcontractor shall be a maximum of 10%.

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 c.

c. 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, 3.06 SUBGRADE PREPARATION, B. Subgrade Stability: Delete 1. in its entirety and replace with the following 1.

1. Perform proof rolling with a fully loaded single axle or tandem axle truck. Operate trucks at less than 10 mph. Make multiple passes for every lane. The subgrade will be considered to be unstable if, under the operation of the loaded truck, the surface shows yielding (soil wave in front of the loaded tires) or rutting of more than 2 inches, measured from the top to the bottom of the rut at the outside edges.
SECTION 3010 – TRENCH EXCAVATION AND BACKFILL

3010, 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 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.

4040, 2.09 **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.

4040, 3.02 **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.

4040, 3.03 **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.

4040, **FIGURE 4040.232, SUBDRAIN CLEANOUTS:** 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**

4060, 3.03 **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:** Delete all references in this entire section to “precast rectangular intakes”. Only circular precast intakes and manholes are allowed in the City of Des Moines. All square or rectangular shaped intakes and manholes shall be cast-in-place.

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.

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.

SECTION 7010 – PORTLAND CEMENT CONCRETE PAVEMENT

7010, 3.02 PAVEMENT CONSTRUCTION, E. Bar and Reinforcement Placement, 1. Tie Bars: Delete a. and replace it with the following a.

a. Place bars prior to vibration. Bars shall be supported by approved chairs. Placement in position by a machine is not allowed.

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, 3.02 PAVEMENT CONSTRUCTION, F. Concrete Pavement Placement: Delete 1. and replace it with the following 1.

1. Use paving machine for all full-width paving, pavement widening, and pavement reconstruction 100 feet or more in length.

7010, 3.07 CURB AND GUTTER CONSTRUCTION: Delete B. and replace it with the following B.

B. Use curb and gutter machine for all curb and gutter construction 100 feet or more in length.

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 11.

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 7030 – SIDEWALKS, SHARED USE PATHS, AND DRIVEWAYS

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.”

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 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.

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.”
LID SHALL BE USED FOR TYPE E, TYPE F, AND TYPE G APPLICATIONS AS REFERENCED BY SUDAS FIGURE 6010.062.

RAISED LETTERS FLUSH WITH TOP SURFACE

LETTERED "USA" OR "MADE IN USA"

STORM SEWER LID
FOR THE CITY OF DES MOINES, IOWA

MATERIAL: CAST GRAY IRON ASTM A-48, CLASS 35B
FINISH: NO PAINT
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 SECTION 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 0° 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.
**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.

**TYPICAL TREE PROTECTION FENCING - WORK ZONE AREA**

**NOTE 1:** SPACING AS REQUIRED TO PREVENT SAGGING, 8' MAXIMUM
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'
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DISTANCE IN FEET EQUAL TO
THE dbh IN INCHES. THIS IS THE
DESIRED DISTANCE FROM THE
TREE TRUNK AT WHICH FENCING
IS INSTALLED.

FENCE SUPPORTS
4' OR 6' ORANGE CONSTRUCTION FENCE

INSTALL SIGNS AS FOLLOWS:
FOR INDIVIDUAL TREE PROTECTION LOCATIONS:
INSTALL AT LEAST TWO SIGNS AT EACH LOCATION
AND AT A MAXIMUM SPACING OF 16' 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.

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

TYPICAL TREE PROTECTION FENCING - BORDER AREA

FIGURE TP-2