PUBLIC IMPROVEMENTS
CONTRACT DOCUMENTS

DRAKE AND BATES PARKS WATER PLAYGROUNDS

ACTIVITY ID
112020002

PLAN FILE NO.
616-082/115

CITY COUNCIL APPROVAL

APPROVAL DATE
April 6, 2020

ROLL CALL NO.

CONTRACT NO.

CONTRACTOR

CONTRACT AMOUNT
$0.00

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

Funding Information
Object Code 543080
Organization No. C040PK99
Project No. PK034
ENGINEERING DEPARTMENT
CITY OF DES MOINES, IOWA

Drake and Bates Parks Water Playgrounds

Activity ID 11-2020-002

The following documents are part of this contract:

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

Special Provisions:
Bidding Requirements
Technical Specifications
Supplemental Specifications:
General Supplemental Specifications to SUDAS, 2019 Edition  April 22, 2019
Supplemental Specification for Tree Protection  March 24, 2017

PROJECT ENGINEER:  Matt Radermacher, P.E.
Phone Number:  (515) 283-4076
INSTRUCTIONS TO BIDDERS

Activity ID  11-2020-002
Project Name  Drake and Bates Parks Water Playgrounds

The work comprising the above referenced project shall be constructed in accordance with the SUDAS Standard Specifications, 2019 Edition; and as further modified by the supplemental specifications and special provisions included in the contract documents. The Des Moines City Engineer is the Engineer. The terms used in the contract documents are defined in said SUDAS Standard Specifications. The City of Des Moines is the Contracting Authority on this project and shall hereinafter be referred to as the "Jurisdiction". Before submitting your bid, please review the SUDAS Standard Specifications, in particular, Division 1 - General Provisions and Covenants, including the sections regarding proposal requirements, bonding, contract execution and insurance requirements. Please be certain that all documents have been properly completed and submit them to the City Clerk, 1st Floor, City Hall, 400 Robert D. Ray Drive, Des Moines, Iowa, 50309.

I. BID SECURITY

The bid security must be in the minimum amount of 10% of the total bid amount including all add alternates (do not deduct the amount of deduct-alternates). Bid security shall be as defined in Section 26.8 of the Iowa Code and shall be in the form of a cashier's check or certified check drawn on a state-chartered or federally chartered bank, or a certified share draft drawn on a state-chartered or federally chartered credit union, or a bid bond executed by a corporation authorized to contract as a surety in Iowa or satisfactory to the Jurisdiction. The bid bond must be submitted on the enclosed Bid Bond form (DSM Urban 04/20/98) as no other bid bond forms are acceptable. All signatures on the bid bond must be original signatures in ink; facsimile (fax) of any signature on the bid bond is not acceptable. Bid security other than said bid bond shall be made payable to the City of Des Moines. "Miscellaneous Bank Checks", and personal checks, as well as "Money Orders" and "Traveler's Checks" issued by persons, firms or corporations licensed under Chapter 533B of the Iowa Code, are not acceptable bid security. **NOTE: If the Bidder submits Bid Security in the form of a Bid Bond, and the Bidder wishes to have their Bid Bond returned to them after an approved contract and bond has been executed or after there is a rejection of all bids (in accordance with Iowa Code 26.10), the Bidder shall include a self-addressed envelope with the Bid Bond.**

II. SUBMISSION OF THE PROPOSAL AND IDENTITY OF BIDDER

A. The proposal shall be sealed in an envelope, properly identified as the Proposal with the project title and the name and address of the bidder, and deposited with the Jurisdiction at or before the time and at the place provided in the Notice to Bidders. It is the sole responsibility of the bidder to see that its proposal is delivered to the Jurisdiction prior to the time for opening bids, along with the appropriate bid security sealed in the separate envelope identified as Bid Security and attached to the outside of the bid proposal envelope. Any proposal received after the scheduled time for the receiving of proposals will be returned to the bidder unopened and will not be considered. Bidders must either utilize the two envelopes provided with the Bidding documents, or Bidders provide their own two envelopes, for their proposals and bid security for submission of their bids.

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

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

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

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

- Part G - Identity of Bidder.

The Bidder shall sign the proposal. The signature on the proposal and all proposal attachments must be an original signature in ink signed by the same individual who is the Company Owner or an authorized Officer of the Company; copies or facsimile of any signature will not be accepted. The **Bidder Status Form** (PROPOSAL Part F Item 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](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 March 24, 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 March 24, 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 April 6, 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 March 09, 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.
Drake and Bates Parks Water Playgrounds, 11-2020-002
The improvements include the construction of water splash pads at Drake and Bates Parks, installation of water service line, drainage line, water spray features, Portland Cement Concrete (PCC) paving, PCC sidewalk, PCC beam curb, electrical work, earthwork, and restoration, all in accordance with contract documents, including Plan File Nos. 616-082/115, at Drake Park located at 2300 Drake Park Avenue and Bates Park located at 330 Clark Street, Des Moines, Iowa.

This project shall be fully completed not later than May 15, 2021.

Engineer’s Construction Estimate. $1,234,000.00

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 April 6, 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

Drake and Bates Parks Water Playgrounds, 11-2020-002
The improvements include the construction of water splash pads at Drake and Bates Parks, installation of water service line, drainage line, water spray features, Portland Cement Concrete (PCC) paving, PCC sidewalk, PCC beam curb, electrical work, earthwork, and restoration, all in accordance with contract documents, including Plan File Nos. 616-082/115, at Drake Park located at 2300 Drake Park Avenue and Bates Park located at 330 Clark Street, Des Moines, Iowa.

Published in the Des Moines Register
March 18, 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:

Drake and Bates Parks Water Playgrounds, 11-2020-002

The improvements include the construction of water splash pads at Drake and Bates Parks, installation of water service line, drainage line, water spray features, Portland Cement Concrete (PCC) paving, PCC sidewalk, PCC beam curb, electrical work, earthwork, and restoration, all in accordance with contract documents, including Plan File Nos. 616-082/115, at Drake Park located at 2300 Drake Park Avenue and Bates Park located at 330 Clark Street, Des Moines, Iowa

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.

PROPOSAL Page 1 of 4 Pages
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 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 May 15, 2021; 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:

<table>
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<td>2.</td>
<td>General</td>
</tr>
</tbody>
</table>
PROPOSAL: PART G - IDENTITY OF BIDDER

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

☐ Individual,
   Sole Proprietorship

☐ Partnership

☐ Corporation

☐ Limited Liability Company

☐ Joint-venture: all parties must join in
   and execute all documents

☐ Other

By

Bidder

Signature

Name (Print/Type)

Title

Street Address

City, State, Zip Code

Telephone Number / Email Address

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

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

NOTE: The signature on this proposal must be an original signature in ink;
copies or facsimile of any signature will not be accepted.
PROPOSAL ATTACHMENT: PART C - BID ITEMS, QUANTITIES AND PRICES: 1 of 2

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 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>
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<tr>
<th>ITEM</th>
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<th>UNITS</th>
<th>ESTIMATED QUANTITY</th>
<th>UNIT PRICE</th>
<th>AMOUNT</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>CLEARING AND GRUBBING</td>
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<td>1.00</td>
<td>$_________</td>
<td>$_________</td>
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<tr>
<td>2</td>
<td>TOPSOIL, ON-SITE</td>
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<td>3</td>
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<td>4</td>
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<tr>
<td>5</td>
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<td>CLEANOUT, 6&quot;, TYPE A</td>
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<td>$_________</td>
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<td>WATER SERVICE, WATER FOUNTAIN</td>
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Proposal for: Drake and Bates Parks Water Playgrounds
<table>
<thead>
<tr>
<th>ITEM</th>
<th>DESCRIPTION</th>
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<th>QUANTITY</th>
<th>UNIT PRICE</th>
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<td>$________</td>
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<td>1.00</td>
<td>$________</td>
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<td>$________</td>
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TOTAL CONSTRUCTION COST $________

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

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

To be completed by resident bidders

Part B

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

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

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

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

You may attach additional sheet(s) if needed.

To be completed by non-resident bidders

Part C

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

2. Does your company's home state or foreign country offer preferences to bidders who are residents? Yes__No__

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

You may attach additional sheet(s) if needed.

To be completed by all bidders

Part D

I certify that the statements made on this document are true and complete to the best of my knowledge and I know that my failure to provide accurate and truthful information may be 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, 2019 Edition, and as further modified by the supplemental specifications and special provisions included in the contract documents.

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

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

Drake and Bates Parks Water Playgrounds, 11-2020-002
The improvements include the construction of water splash pads at Drake and Bates Parks, installation of water service line, drainage line, water spray features, Portland Cement Concrete (PCC) paving, PCC sidewalk, PCC beam curb, electrical work, earthwork, and restoration, all in accordance with contract documents, including Plan File Nos. 616-082/115, at Drake Park located at 2300 Drake Park Avenue and Bates Park located at 330 Clark Street, Des Moines, Iowa

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.
ENGINEERING DEPARTMENT
CITY OF DES MOINES, IOWA

CONTRACT NO.
DATE
ROLL CALL NO.

4/6/2020

CONTRACT

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

WITNESSETH:

The Contractor hereby agrees to complete the work comprising the below referenced improvement as specified in the contract documents, which are officially on file with the Jurisdiction, in the Des Moines City Engineer's Office. This contract includes all contract documents. The work under this contract shall be constructed in accordance with the SUDAS Standard Specifications, 2019 Edition; and as further modified by the supplemental specifications and special provisions included in said contract documents, and the Contract Attachments attached hereto. The Des Moines City Engineer is the Engineer. The Contractor further agrees to complete the work in strict accordance with said contract documents, and to guarantee the work as required by law, for the time required in said contract documents, after its acceptance by the Jurisdiction.

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

Drake and Bates Parks Water Playgrounds, 11-2020-002
The improvements include the construction of water splash pads at Drake and Bates Parks, installation of water service line, drainage line, water spray features, Portland Cement Concrete (PCC) paving, PCC sidewalk, PCC beam curb, electrical work, earthwork, and restoration, all in accordance with contract documents, including Plan File Nos. 616-082/115, at Drake Park located at 2300 Drake Park Avenue and Bates Park located at 330 Clark Street, Des Moines, Iowa

The Contractor agrees to perform said work for and in consideration of the Jurisdiction's payment of the bid amount of ________________________________ dollars ($ ________________) which amount shall constitute the required amount of the performance, payment, and maintenance bond. The Contractor hereby agrees to commence work under this contract on or before a date to be specified in a written notice to proceed by the Jurisdiction and to fully complete the project not later than May 15, 2021; 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.

SUDAS 04/25/2016

CONTRACT Page 1 of 3 Pages
IN WITNESS WHEREOF, the Parties hereto have executed this instrument, in triplicate on the date first shown written.

JURISDICTION:

By

T. M. Franklin Cowrie, Mayor

(Seal)

ATTEST:

P. Kay Cmelik, City Clerk

FORM APPROVED BY:

Kathleen Vanderpool, Deputy City Attorney

CONTRACTOR:

By

Contractor

Signature

Title

Street Address

City, State - Zip Code

/ Telephone Number / Email Address

CONTRACTOR PUBLIC REGISTRATION INFORMATION To Be Provided By:

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

2. Out-of-State Contractors:

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

   B. Prior to entering into contract, the designated low bidder, if it be a corporation organized under the laws of a state other than Iowa, shall file with the Engineer a certificate from the Secretary of the State of Iowa showing that it has complied with all the provisions of Chapter 490 of the Code of Iowa, or as amended, governing foreign corporations. For further information contact the Iowa Secretary of State Office at 515-281-5204.

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

State of ____________________________ )
_____________________________ County )

SS

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

_____________________________________________
Notary Public in and for the State of ____________________________

My commission expires ____________________________
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
     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
   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.

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TOTAL CONSTRUCTION COST

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

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

Drake and Bates Parks Water Playgrounds, 11-2020-002

The improvements include the construction of water splash pads at Drake and Bates Parks, installation of water service line, drainage line, water spray features, Portland Cement Concrete (PCC) paving, PCC sidewalk, PCC beam curb, electrical work, earthwork, and restoration, all in accordance with contract documents, including Plan File Nos. 616-082/115, at Drake Park located at 2300 Drake Park Avenue and Bates Park located at 330 Clark Street, Des Moines, Iowa

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.

Witnes our hands, in triplicate, this __________ day of ______________________, 20__

PRINCIPAL:

__________________________
Contractor

By ____________________________
Signature

__________________________
Title

FORM APPROVED BY:

__________________________
Kathleen Vanderpool
Deputy City Attorney

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

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, April 3, 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, April 6, 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, April 3, 2020; the amount of the Bidder's bid security may become the property of the City and may be retained--not as a penalty but as liquidated damages. The award of the contract may then, at the discretion of the City, be made to the next-lowest responsible Bidder, or the work may be re-advertised or may be constructed by the City in any legal manner. Notice to Proceed will not be issued until the Contractor's insurance is in compliance with the specifications.

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

2) CONTRACT COMPLIANCE PROGRAM


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

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

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

3) ALTERNATE SALES AND USE TAX

Section 1020, 1.08, B, of the General Supplemental Specifications shall apply to this contract. The Bidder should not include sales tax in the bid pursuant to Iowa Code. A sales tax exemption certificate will be available for all material purchased for incorporation in the project. Complete information on qualifying materials and supplies can be found at www.state.ia.us/tax, the Iowa Department of Revenue and Finance’s (IDRF) web site. Links are found in the Business Taxes and Local Government categories. Contact the IDRF at idrf@idrf.state.ia.us if you have questions on this requirement.
SPECIAL PROVISION
TECHNICAL SPECIFICATIONS
ON
DRAKE AND BATES PARKS WATER PLAYGROUNDS
ACTIVITY ID: 11-2020-002

INDEX

1. LIMESTONE BOULDERS
2. NON-SKID RUBBERIZED COATING
3. Poured-in-Place Rubber Surfacing
4. Shelters
5. Splash Pads
TECHNICAL SPECIFICATIONS
FOR
LIMESTONE BOULDERS

PART 1 -- GENERAL

1.1 SECTION INCLUDES
A. Limestone blocks

1.2 MEASUREMENT AND PAYMENT
A. Limestone boulder border as indicated on the plans, complete-in-place will be measured and paid as per LF of boulder border installed complete. Unit bid price shall include, but not limited to, furnish and install all items necessary to complete boulder border complete including steel pins, limestone boulders, and minor shaping to fit.

1.3 RELATED WORK
A. None

1.4 SUBMITTALS
A. Product Data: Provide data on stone units including chemical analysis.
B. Submit 3 samples 6 inches by 6 inches showing, color range, vein direction, markings, surface finish of each product specified.

PART 2 -- PRODUCTS

2.1 STONE PRODUCT
A. Supplier
   1. Iowa Landscape Supply
      4041 E 16th St., Des Moines, IA 50313
      Phone: 515-262-2367

B. Product
   1. Larger Iowa Buff Wallstone from Iowa Landscape Supply
   2. Finish
      a. Splitface front, back, and sides
      b. Bedface top and bottom
   3. Meet dimensional requirements indicated in the drawings

C. Or Approved Equal

D. Owner to review and approve stone from contractors submitted samples.
PART 3 -- EXECUTION

3.1 PREPERATION

A. Stone shall be brushed free of dust and foreign matter.
B. Wet stone sufficiently to take up surface absorption

3.2 SETTING SPLITFACE STONE

A. Lay stone in accordance with manufacturer's instructions, approved shop drawings and/or plans and details
B. Execute splitface stonework by skilled mechanics and employ skilled stone fitters at site to do necessary shaping as stones are set.
C. Stone is to be selected so colors are evenly distributed throughout the job.

3.3 CLEANING

A. Keep stone work as clean as possible as work progresses. Upon completion, clean stone thoroughly with water and fiber brushes. Thoroughly rinse when complete with clean water. Do NOT use acids, detergents, or wire brushes.

***END OF SECTION***
TECHNICAL SPECIFICATIONS
FOR
NON-SKID RUBBERIZED COATING

Part I GENERAL
1.01 SUMMARY

A. Section Includes: Non-Skid Flooring Surface

B. Related Sections: Division 2 Sitework Sections: Materials and Methods, Excavation, Concrete Paving, Sub-Drainage, Storm Drainage, Fencing, Splash Pad.

1.02 REFERENCES

American Society for Testing and Materials (ASTM):

1. ASTM D4541-95 Pull Off Adhesion Tests
2. ASTM-F-510 Wear Testing
3. ASTM-D-2794 Impact Resistance
4. ASTM-F-609 Coefficient of Friction Test

1.03 SYSTEM DESCRIPTION

Performance requirements: Provide a single pack, water based, cross linked, UV resistant polyurethane coating which cures in to a tough, textured coating with abrasion, chemical resistance and non-slip properties.

1.04 SUBMITALS

A. General: Submit listed submittals in accordance with Condition of the Contract and Division 1 Submittal Procedures Section.

B. Product Data: Submit manufacturers product data and installation instructions.

C. Submit manufacturers standard verification samples of 9" x 9" minimum.

D. Quality Assurance/Control Submittals: Submit Certificate of qualifications of the flooring surface installer.

E. Closeout Submittals: Submit the Warranty documents specified herein.
1.05 QUALITY ASSURANCE

A. Qualifications: Utilize an installer approved and trained by the manufacturer of the flooring surface system, having experience with other projects of the scope and scale of the work described in this section.

B. Certifications: Certification by manufacturer that installer is an approved applicator of the flooring system.

1.06 DELIVERY, STORAGE, & HANDLING

A. General: Comply with Division 1 Product Requirement Section.

B. Delivery: Deliver materials in manufacturers original, unopened, undamaged containers with identification labels intact.

C. Storage & Protection: Store materials protected from exposure to harmful environmental conditions and at a minimum temperature of 40 degrees F (4 degrees C) and a maximum temperature of 90 degrees F (32 degrees C).

1.07 PROTECTIVE/SITE CONDITIONS

Environmental Requirements: Install flooring surface system when minimum ambient temperature is 40 degrees F (4.4 degree C) and maximum ambient temperature is 90 degrees F (32 degrees C). Do not install in steady or heavy rain or freezing conditions.

1.08 WARRANTY

A. Project Warranty: Refer to Conditions of the Contract for project warranty provisions.

B. Manufacturer’s Warranty: Submit for Owner's acceptance, manufacturers standard warranty document executed by authorized company official. Manufacturer’s warranty is in addition to, and not a limitation of, other rights Owner may have under contract documents.

PART 2 PRODUCTS

2.01 RECREATIONAL AND HIGH TRAFFIC FLOORING SYSTEM

A. Manufacturer:
   Ultra Tuff Manufacturing Inc
   8845 SE Robwyn St, Hobe Sound, FL 33455 (Administrative)
   340 Denny Ct, Ste A - Montrose, CO 81401 (Mfg)
   Telephone: (877) 252-9457; Fax: (970) 240-8963
   Email: info@tuffcoat.net; website: www.tuffcoat.net

02795-2

NON-SKID SAFETY SURFACE
B. Proprietary Products/Systems
   Non-Skid Flooring system, including the following:
   1. Primer Tuff Coat Water Based Epoxy Concrete & Wood Primer - CP-10 or
      Water Based Metal Primer for Bare Metal – MP-10
   2. UT-100 Tuff Coat Rubberized Non Skid Coating or UT-100AQ for full
      submersion water applications Tuff Coat Rubberized Non Skid Coating:
      a. Material: a mixture of cross-linking urethanes, acrylics and co-
         polymers, utilizing recycled rubber crumb as an aggregate.
      b. Thickness: Dry Mils: 30-35; Wet Mils: 50-60
      c. Coverage: 40-45 SF in 2 coats per gallon.
      d. Color: As shown on drawings.

2.02 PRODUCT SUBSTITUTIONS

Substitutions: No substitutions permitted.
Specifier Note: Specify proportions and procedures for site mixing materials. Mixing is
the preparation of materials for use and is considered to be part of the manufacturing
process.

2.03 MIXES
Required mix proportions by weight: 31-60% Urethane/Acrylic Copolymer; 10-29%
Rubber Crumb; 31-60% Water.

PART 3 EXECUTION

3.01 MANUFACTURERS INSTRUCTIONS
A. Comply with the instruction and recommendations of the flooring system manufacturer.

3.02 EXAMINATION
A. Site Verification of Conditions: Verify that substrate conditions are suitable for
installation of the flooring system.
B. Do not proceed with installation until suitable conditions are corrected.

3.03 PREPARATION OF CONCRETE
A. CONCRETE CLEANING
   1. Clean and Degrease all surfaces with Zep Purple Degreaser or similar. Do
      not use any solvent base products to clean any surface that receives the Tuff
      Coat.
CONCRETE FINISH

2. The concrete should be hand troweled, with a brush/broom finish to ensure adequate porosity for adhesion. New concrete needs at least 28 days to cure properly, prior to primer application. Unless the new concrete is dry, adhesion problems will be experienced.

3. To make concrete porous then acid etching or shot blasting is necessary. Make sure to use a light acid etch using 2 parts muriatic acid to 1-part water and to remove all remaining acid with soap and water and scrub brush. (If all acid is not properly removed, you will not obtain adhesion).

4. Concrete should be completely clean and dry.

5. Patch all imperfections, cracks, etc., with concrete patch filler and flexible joint fillers. DO NOT USE SILICONE PRODUCTS. The Product will not adhere to silicone.

6. Prime with CP-10 as per manufacturer’s instructions. When primer has properly cured, perform test patch to insure adhesion.

3.04 INSTALLATION

A. Types of Applications.

1. Roller Application
   a. Use Ultra Tuff Texture Roller, only available from Tuff Coat Manufacturing Inc or a Tuff Coat Distributor. Other rollers may not pick up and spread the product evenly. The roller must be capable of lifting the rubber crumb within the product, to the surface. This will not occur using soft paint rollers.
   b. Soak roller in water - remove excess water prior to application.
   c. Roll Tuff Coat directly from a 5-gallon bucket. Make sure to completely saturate roller with product, leaving no bare spots on roller.
   d. Apply the first coat as a thin coat. Re-saturate roller each pass. Make 4 - 5 consecutive passes in the same direction, with each pass right next to the other. When applying, roll in one direction first, then roll in the opposite direction in order to properly blend the product and create a uniform textured surface.
e. Once an area is covered, run the roller very lightly over it to ensure even distribution and blending of color and rubber crumb.
f. When touch dry, apply two further subsequent coats.
g. Do not apply too thick to avoid "mud cracking".

2. Spray Application
   a. Mask off area as needed
      i. Use only the spray gun recommended or supplied by Tuff Coat Superior brand "Spraying Mantis" hand held Hopper gun or equivalent. Or for larger projects
      ii. Graco brand "Tex-Spray Compact" or equivalent
   b. Attach spray gun to a compressor airline giving pressure of at least 40 psi.
   c. Spray water out of the gun to prime.
   d. Before starting the job, spray a few short bursts away from the surface to test that everything is working properly.
   e. Holding gun approximately 12-24" away from surface, spray an even, light coat over the entire surface. DO NOT APPLY TOO THICK.
   f. Keep spray gun at a 90-degree angle to the surface.
   g. Spray gun should make a slight "spitting" sound. This is a characteristic of the guns and is necessary for an even texture. The product will self-level.
   h. When surface becomes touch dry, spray subsequent coats.
   i. While spraying, be careful not to blow rubber crumb away from the area you are working on as this can accumulate in other areas of the job and prevent the polyurethane from bonding with the substrate.
   j. If the rubber is bouncing back at you, lower the pressure or hold the gun further from the surface.
   k. The further away from the surface you hold the gun, the greater the texture, the closer, the finer.
   l. Remove any over spray immediately with cloth and water.

B. Application Temperature and Curing Time
   1. Under normal working conditions the product will be touch dry within 1 hour and can be subjected to light foot traffic within 24 hours. Full curing time only affects the amount of time required to wait before subjecting the surface to cleaning, heavy loads and chemical exposure. Surface can be subjected to normal loads well before this minimum time requirement.
   2. The coating should not be subjected to cleaning, heavy loads or chemical exposure until fully cured after 7 days, less in hot-humid conditions, more in cold, dry weather. Dry times in this manual are based on a temperature of 77 degrees Fahrenheit and 50% humidity. The product should not be used under 40 degrees Fahrenheit. Do not allow product to freeze.
   3. DO NOT USE ANY SOLVENTS, SOLVENT BASED ALCOHOLS, THINNERS OR LACQUERS, TO THIN THE PRODUCT.
3.05 PROTECTION

Protect the installed surface from damage resulting from subsequent construction activity on the site

3.06 STORAGE AND REPAIR

A. To store partially used cans, seal can well (airtight) and place in cool, dry place. The contents should be usable for at least 12 months. DO NOT LET FREEZE.

B. The evaporation of the water within the product will cause the product to cure. If some water content has evaporated, reconstitution with clean water may restore product viability if the curing process within the can is not too advanced.

3.07 REPAIRING

In the event that the Product is damaged, it can easily be repaired, or over coated, due to self-bonding.

1. Remove all damaged product. Use a sharp knife as a utility knife to make a well-defined area such as a square and eliminate uneven edges
2. Sand area with 36 or 40 grit sandpaper so that the new application can get a good grip. Slightly bevel the edges of the existing product so that the new product can fill in the cutout area and go slightly onto the existing product.
3. Clean area with water.
4. Test for adhesion first, before completing job. Then apply the product to the affected area.

3.08 MAINTENANCE

A. Most general floor cleaners have been tested and will work well. Recommended examples include: Simple Green, TSP, Laundry Detergents, Citrus Orange Cleaners, Commercial Degreasers.

B. **DO NOT** USE BLEACH, BLEACH PRODUCTS OR CAUSTICS.

C. For best results, use a stiff bristled deck brush to agitate cleaner on the surface.

D. Rinse surface thoroughly to remove all residue.

E. Surfaces can also be cleaned with use of automatic scrubbers. These are machines which, in one pass, put down the washing solution, scrub the floor with a light pad, and vacuum up the dirty water. It should be pointed out that the pad pressure used in the scrubber must be light and need only be sufficient for the pad to make light contact with the floor.

F. Heavy scrubbing will negatively affect the coated surface.

END OF SECTION
TECHNICAL SPECIFICATIONS
FOR
POURED-IN-PLACE RUBBER SURFACING

PART 1 – GENERAL

1.01 SUMMARY

A. Section Includes: Poured-in-Place Playground Surfacing System: Super-7 (when aromatic urethane for the top surface is specified) with a 7-year warranty & Extreme-10 (when aliphatic urethane for the top surface is specified) with a 10-year warranty.


1.02 REFERENCES

A. American Society for Testing and Materials (ASTM):


1.03 SYSTEM DESCRIPTION

A. Performance Requirements: Provide a 2-layer rubber-urethane playground surfacing system which has been designed, manufactured and installed to meet the following criteria:

1. Shock Attenuation (ASTM F1292):

b. Head Injury Criteria: Less than 1000.


3. Tensile Strength (ASTM D412): 60 psi (413 kPa).

4. Tear Resistance (ASTM D624): 140%.

5. Water Permeability: 0.4 gal/yd²/second.


1.04 SUBMITTALS

A. General: Submit listed submittals in accordance with Conditions of the Contract and Division 1 Submittal Procedures Section.

B. Product Data: Submit manufacturer’s product data and installation instructions.

C. Verification Samples: Submit manufacturer’s standard verification samples of 9” x 9” (229 x 229 mm) minimum.

D. Quality Assurance/Control Submittals: Submit the following:
   1. Certificate of qualifications of the playground surfing installer.

E. Closeout Submittals: Submit the following:
   1. Warranty documents specified herein.

1.05 QUALITY ASSURANCE

A. Qualifications: Utilize an installer approved and trained by the manufacturer of the playground surfacing system, having experience with other projects of the scope and scale of the work described in this section.

B. Certifications: Certification by manufacturer that installer is an approved applicator of the playground surfacing system.

C. International Play Equipment Manufacturers Association (IPEMA) certified.

1.06 DELIVERY, STORAGE & HANDLING

A. General: Comply with Division 1 Product Requirement Section.

B. Delivery: Deliver materials in manufacturer’s original, unopened, undamaged containers with identification labels intact.
C. Storage and Protection: Store materials protected from exposure to harmful environmental conditions and at a minimum temperature of 40 degrees F (4 degrees C) and a maximum temperature of 90 degrees F (32 degrees C).

1.07 PROJECT/SITE CONDITIONS

A. Environmental Requirements: Install surfacing system when minimum ambient temperature is 40 degrees F (1 degree C) and maximum ambient temperature is 90 degrees F (32 degrees C). Do not install in steady or heavy rain.

1.08 WARRANTY

A. Project Warranty: Refer to Conditions of the Contract for project warranty provisions.

B. Manufacturer’s Warranty: Submit, for Owner’s acceptance, manufacturer’s standard warranty document executed by authorized company official. Manufacturer’s warranty is in addition to, and not a limitation of, other rights Owner may have under contract documents.

C. Proper drainage is critical to the longevity of the PlayBound Poured-in-Place surfacing system. Inadequate drainage will cause premature breakdown of the poured system in affected areas; and void the warranty.

D. Warranty Period: Extreme-10 (aliphatic urethane top surface is specified): 10 years from date of completion of work.

PART 2 – PRODUCTS

2.01 Poured-in-Place Playground Surfacing System

A. Manufacturer: Surface America, Inc.

1. Contact: PO Box 157, Williamsville, NY 14231; Telephone: (800) 999-0555, (716) 632-8413; Fax: (716) 632-8324; E-mail: info@surfaceamerica.com; website: http://www.surfaceamerica.com.

B. Proprietary Products/Systems. Poured-in-place playground surfacing system, including the following:

1. PlayBound Poured-In-Place Primer:

2. PlayBound Poured-in-Place Basemat:
   a. Material: Blend of 100% recycled SBR (styrene butadiene rubber) and urethane.
   b. Thickness: 3" (76 mm) for 8’ critical fall height.
   c. Formulation Components: Blend of strand and granular material.

3. PlayBound Poured-In-Place Top Surface:
a. Material: Blend of recycled EPDM (ethylene propylene diene monomer) rubber and aliphatic urethane binder.

b. Thickness: Nominal 1/2" (12.7 mm), minimum 3/8" (9.5 mm), maximum 5/8" (15.9 mm).

c. Colors: To be selected by owner from manufacturer's standard colors.
   1. Three color variations, pattern to be provided by owner.
   2. Color mix ratio: 70% color, 30% black

d. Dry Static Coefficient of Friction (ASTM D2047): 1.0.

e. Wet Static Coefficient of Friction (ASTM D2047): 0.9.


g. Wet Skid Resistance (ASTM E303): 57.

**2.02 PRODUCT SUBSTITUTIONS**

A. Substitutions: Proposed substitutions must be submitted to owner for approval prior to commencement of construction and must meet all specifications of this section.

**2.03 MIXES**

A. Required mix proportions by weight:

   1. Basemat: 16+%) urethane (as ratio: 14% urethane divided by 86% rubber). 14% urethane, 86% rubber (based on entire rubber & urethane mix).

   2. Top Surface: 22% urethane (ratio: 18% urethane divided by 82% rubber). 18% urethane, 82% rubber (based on entire rubber & urethane mix).

**PART 3 – EXECUTION**

**3.01 MANUFACTURER’S INSTRUCTIONS**

A. Comply with the instructions and recommendations of the playground surfacing manufacturer.

**3.02 EXAMINATION**

A. Substrate preparation must be in accordance with surfacing manufacturer’s specification. New asphalt must be fully cured – up to 30 days. New concrete must be fully cured – up to 7 days.

B. Proper drainage is critical to the longevity of the PlayBound Poured-in-Place surfacing system. Inadequate drainage will cause premature breakdown of the poured system in affected areas; and void the warranty.
C. Ensure proper installation of catch basin in concrete base. Follow manufacturer recommendations for catch basin type and installation techniques.

3.03 PREPARATION

A. Surface Preparation: Using a brush or short nap roller, apply primer to the substrate perimeter and any adjacent vertical barriers such as playground equipment support legs, curbs or slabs that will contact the surfacing system at the rate of 300 ft2/gal (7.5 m2/L).

3.04 INSTALLATION

A. Do not proceed with playground surfacing installation until all applicable site work, including substrate preparation, fencing, playground equipment installation and other relevant work, has been completed.

B. Basemat Installation:

1. Using screeds and hand trowels, install the basemat at a consistent density of 29 pounds, 1 ounce per cubic foot (466 kg/m3) to the specified thickness.

2. Allow basemat to cure for sufficient time so that indentations are not left in the basemat from applicator foot traffic or equipment.

3. Do not allow foot traffic or use of the basemat surface until it is sufficiently cured.

C. Primer Application: Using a brush or short nap roller, apply primer to the basemat perimeter and any adjacent vertical barriers such as playground equipment support legs, curbs or slabs that will contact the surfacing system at the rate of 300 ft2/gal (7.5 m2/L).

D. Top Surface Installation:

1. Using a hand trowel, install top surface at a consistent density of 58 pounds, 9 ounces per cubic foot (938 kg/m3) to a nominal thickness of 1/2" (12.7 mm).

2. Allow top surface to cure for a minimum of 48 hours.

3. At the end of the minimum curing period, verify that the top surface is sufficiently dry and firm to allow foot traffic and use without damage to the surface.

4. Do not allow foot traffic or use of the surface until it is sufficiently cured.

3.05 PROTECTION

A. Protect the installed playground surface from damage resulting from subsequent construction activity on the site through final acceptance of the project.
TECHNICAL SPECIFICATIONS
FOR
SHELTERS

PART 1 - GENERAL
[reference CSI 2004 MasterFormat™ Division 10
(Specialties Manufacturers) category 7300 (Protective Covers)]

1.1 DESCRIPTION OF PRODUCTS

A. REK 16x24 (Bates Park Shelter) with standing seam (SS) over tongue-and-groove.

1. ROOF SLOPE: 12/4.
2. Minimum Clearance Height (MCH): 7.5 ft. Minimum clearance height under the structure indicates the lowest height of a member from finish grade for clearance under the structure. This is generally the clearance under roof eave or frame, whichever is lower.

B. RAM 16x24 (Drake Park Shelter) with asphalt shingle (AS) over tongue-and-groove.

1. ROOF SLOPE: 12/4.
2. Minimum Clearance Height (MCH): 7.5 ft. Minimum clearance height under the structure indicates the lowest height of a member from finish grade for clearance under the structure. This is generally the clearance under roof eave or frame, whichever is lower.

1.2 REFERENCES

A. REFERENCE STANDARDS:

1. AISC - American Institute of Steel Construction Manual of Steel Construction.
3. AWS - American Welding Society.
4. LEED - Leadership in Energy and Environmental Design.
5. OSHA - Occupational Safety and Health Administration Steel Erection Standard 29 CFR 1926 Subpart R-Steel Erection.
6. PCI - Powder Coating Institute.
7. SSPC - The Society for Protective Coatings.

1.3 SUBMITTALS

A. GENERAL SUBMITTAL:

Submit two (2) sets of submittal drawings and two (2) sets of calc books, both signed and sealed by a Professional Engineer licensed in the State of Iowa.

B. PRODUCT DESIGN REQUIREMENTS:

The building shall meet the following design requirements as shown on the drawings:

2. Ground Snow Load (P_g): See drawings.

C. SUBMITTAL REQUIREMENTS:

Calculations and Submittal drawings shall include, at a minimum:

1. Calculations:
   a. References to building codes and design manuals used for calculations.
   b. Identification of lateral force resisting system.
   c. Formulas used for determining snow, wind, and seismic loads to specific project location.
   d. Three dimensional modeling input, model geometry, and analysis results.
   e. Member design results and controlling load combinations.
   f. Connection design for structural bolts, welds, plate thicknesses, and anchorage to the foundation.
   g. Foundation designs shall include the required combinations of gravity and lateral loads.

2. Submittal Drawings:
   a. Anchor bolt layout.
   b. Foundation design.
   c. Three dimensional views of frame.
   d. Member sizes and locations.
   e. Structural connection details, including bolt sizes and plate thicknesses.
   f. Roof trim and connection details for installation clarity.

D. FOUNDATION DESIGN:

1. The shelter shall be set on foundations designed by manufacturer.
2. Foundation materials shall be provided by contractor.
3. Owner shall provide manufacturer with complete information about the site including soil bearing capacity and lateral load capacity.
4. If soil data are not provided, foundations will be designed to the minimum values identified in the governing building code.

E. ANCHOR BOLTS:

Anchor bolts shall be provided by manufacturer.

1.4 QUALITY ASSURANCE

A. MANUFACTURER QUALIFICATIONS:

1. Minimum of (10) years in the shelter construction industry.
2. Full time on-staff Licensed Engineer.
3. Full time on-staff AWS Certified Associate Welding Inspector.
4. Full time on-staff Quality Assurance Manager.
5. Full time on-staff LEED AP.
6. All welders AWS Certified.
7. Manufacturer owned and controlled finishing system to include shot blast, pretreatment, primer, and top coat.
8. Published Quality Management System.
10. Annual audit of powder coat finish system by Third Party Agency (PCI).

B. MANUFACTURER’S CERTIFICATIONS:

1. PCI 4000 S Certified, Certification thru Powder Coating Institute for original equipment manufacturers (OEMs) to evaluate process on entire finish system to add powder coat over steel.
2. City of Los Angeles, CA Approved Fabricator Type I Steel.
3. Clark County, NV Approved Fabricator steel.
4. City of Houston, TX Approved Fabricator Structural Steel and Structural Insulated Panels.
5. Miami Dade County Certificate of Competency for Structural Steel and Miscellaneous Metal Products and Assemblies.
6. State of Utah Approved Fabricator for Medium and High Strength Steel.
7. City of Riverside, CA Approved Fabricator Type I Steel.
8. City of Phoenix, AZ Approved Steel Fabricator.

C. INSTALLER QUALIFICATIONS:

Installer shall be classified as a Certified Installer as defined and certified by the shelter manufacturer.

1.5 FIELD OR SITE CONDITIONS

A. Foundations shall be at the same elevation unless specifically noted otherwise on the drawings.

1.6 MANUFACTURER WARRANTY

A. Shelter must have a (10) year limited warranty on steel frame members.
B. Shelter must have a (10) year limited warranty on paint system.
C. Bates Park Shelter
   1. Pass through warranty of Metal Roof manufacturer shall be provided upon request.
D. Drake Park Shelter
   1. Pass through warranty of Shingle manufacturer shall be provided upon request.

PART 2 - PRODUCTS

2.1 SHELTER SYSTEM AND MATERIALS

A. MANUFACTURERS:

1. Acceptable Manufacturer: Poligon, a Product of PorterCorp, 4240 N 136th Ave., Holland, MI 49424; 616.399.1963; E-mail: info@poligon.com; www.poligon.com. Receive pricing from Mark
Boland at 800-798-7589.

2. The product shall be designed, produced, and finished at a facility operated and directly supervised by the supplier who has a minimum of (10) years in the business of making pre-manufactured shelters.

B. SUBSTITUTION LIMITATIONS:

1. Substitutions must be approved a minimum of (10) days before bid. All approved manufacturers shall be notified in writing before the bid date and shall not be allowed to bid without written notification.
2. Alternate suppliers must meet the qualifications and provide proof of certifications listed under Section 1.4 QUALITY ASSURANCE.
3. Alternate suppliers must provide an equivalent paint system to Poligon’s Poli-5000 listed under Section 2.1 C. 8. FINISHES.
4. Staff members’ cumulative experience in fabrication will not be an acceptable alternative for manufacturer’s experience in the shelter construction industry.

C. PRODUCT REQUIREMENTS AND MATERIALS:

1. GENERAL: The pre-engineered package shall be pre-cut unless otherwise noted and pre-fabricated which will include all parts necessary to field construct the shelter. The shelter shall be shipped knocked down to minimize shipping expenses. Field labor will be kept to a minimum by pre-manufactured parts. Onsite welding is not necessary.

2. REINFORCED CONCRETE:
   a. Concrete shall have minimum 28-day compressive strength of 3,000 psi and slump of 4" (+/- 1"), unless otherwise noted on the drawings.
   b. Reinforcing shall be ASTM A615, grade 60.

3. STEEL COLUMNS:
   a. Hollow structural steel tube minimum ASTM A500 grade B with a minimum wall thickness of 3/16".
   b. Unless columns are direct buried, columns shall be anchored directly to concrete foundation with a minimum of four anchor rods to meet OSHA requirement 1926.755(a)(1).

4. STRUCTURAL FRAMING:
   a. Bates Park Shelter:
      Hollow Structural Steel tube minimum ASTM500 grade B. “I” beams, tapered columns, or open channels shall not be accepted for primary beams. Frame will have a hot dip galvanized finish.
   a. Drake Park Shelter:
      Hollow Structural Steel tube minimum ASTM500 grade B. “I” beams, tapered columns, or open channels shall not be accepted for primary beams. Frame will have a standard poli-5000 finish. Color to be selected by owner from manufacturer’s standard color chart.

5. COMPRESSION MEMBERS:

City of Des Moines
Drake Park and Bates Park Water Playgrounds
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Technical Specification for Shelters
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Compression rings of structural channel or welded plate minimum ASTM A36 or compression tubes or structural steel tube minimum ASTM A500 grade B shall only be used.

6. CONNECTION REQUIREMENTS:

   a. Anchor bolts shall be ASTM F1554 (Grade 36) unless otherwise noted.
   b. Structural fasteners shall be zinc plated ASTM A325 high strength bolts and A563 high strength nuts.
   c. Structural fasteners shall be hidden within framing members wherever possible.
   d. No field welding shall be required to construct the shelter.
   e. All welds shall be free of burrs and inconsistencies.
   f. Exposed fasteners shall be powder coated by manufacturer prior to shipment to match frame or roof colors as applicable.
   g. Manufacturer shall provide extra structural and roofing fasteners.

7. ROOFING MATERIALS:

   a. PRIMARY ROOF DECK: FACTORY PRE-STAINED TONGUE AND GROOVE (TG):
      1) T&G shall be of 2×6 tongue and groove, Hem Fir, Select Structural KD 15. Factory stained. Color to be selected by owner from manufacturer’s standard color chart.
      2) Manufacturer shall supply 30 pound felt and drip edge if both primary and secondary roofs are being supplied by the manufacturer.
      3) Contractor shall cut T&G down to required lengths.
   b. SECONDARY ROOF SYSTEM:
      1) Bates Park Shelter: Standing Seam Metal Roofing (SS):
         a) Standing seam metal roofing to be 24-gauge galvalume 16” wide with ribs 1-3/4” high.
         b) Roof surface shall be painted with Kynar 500. Color to be selected by owner from manufacturer’s standard color chart. Ceiling surface shall be Valspar PMA0507 Off-White Backer.
         c) Angles shall be cut in the field.
         d) Metal roofing trim shall match the color of the roof and shall be factory made of 26 gauge Kynar 500 painted steel.
         e) Trim shall include panel ridge caps, hip caps, eave trim, splice channels, rake trim, roof peak cap, and corner trim as applicable for model selected. Trim may need to be cut to length and notched. Installation drawings shall have detailed information on how to cut and affix roof trim.
         f) Ridge, hip, and valley caps shall be pre-formed with a single central bend to match the roof pitch and shall be hemmed on the sides.
         g) Roof peak cap shall be pre-manufactured.
         h) Manufacturer shall supply painted screws and butyl tape.
      2) Drake Park Shelter: Asphalt Shingles (AS):
         Asphalt shingles shall be ASTM D3018 Type 1 and ASTM D3462 with a 25-year limited warranty or better. Color to be selected by owner from manufacturer’s standard color chart.

8. FINISHES:

   a. STANDARD POLI-5000 FINISH:
1) Steel shall be cleaned, pretreated, and finished at a facility owned and directly supervised by the manufacturer.  
2) Steel shall be shot blasted to SSPC-SP10 near-white blast cleaning. SSPC-SP2 hand tool cleaning will not be an acceptable alternative.  
3) Parts shall be pretreated in a (3) stage iron phosphate or equal washer.  
4) Epoxy primer powder coat shall be applied to parts for superior corrosion protection.  
5) Top coat of Super Durable TGIC powder coat shall be applied over the epoxy primer.  
6) Finish shall not have any VOC emissions.  
7) Sample production parts shall have been tested and meet the following criteria:  
   a) Salt spray resistance per ASTM B 117/ ASTM D 1654 to 10,000 hours with no creep from scribe line and rating of 10.  
   b) Humidity resistance per ASTM D2247-02 to 5,000 hours with no loss of adhesion or blistering.  
   c) Color/UV resistance per ASTM G154-04 to 2,000 hours exposure, alternate cycles with results of no chalking, 75% color retention, color variation maximum 3.0 E variation CIE formula (before and after 2,000 hours exposure).  
8) The manufacturer shall be PCI 4000 S Certified  
9) Exposed fasteners for frame and ornamentation shall be powder coated to match structure.  

   a. HOT DIP GALVANIZED FINISH:  
      1) Steel members, fabrications and assemblies shall be galvanized after welding by the hot dip process in accordance with ASTM A123. The composition of metal in the galvanizing bath shall be no less than 98% zinc.  
      2) The galvanized coating shall be continuous, adherent, and free from any detrimental defect.  
      3) Appearance of galvanized members shall be consistent with ASTM A123.  

9. ACCESSORIES  

   a. ELECTRICAL ACCESS & CUTOUTS:  
      1) Electrical access to be provided through a 1 1/8” diameter hole in the column base plate and 3/8” diameter holes are provided through connection plates for wire access through columns, trusses, and into the compression ring/tube.  
      2) Electrical cutouts shall be provided in one (1) place for fixtures or wires. Coordinate locations with the project electrical engineer.  

PART 3 - EXECUTION  

3.1 INSTALLERS STORAGE AND HANDLING  

   A. Protect building products after arrival at destination from weather, sunlight, and damage.  
   B. Installer shall store product elevated to allow air circulation and to not introduce mold, fungi decay or insects to the product.  
   C. Product must be handled with protective straps or padded forks if lifting with mechanical equipment. Use of chain or cable to lift product into place will not be accepted and may void manufacturer’s warranty.
D. To curtail warping of lumber, all units shall remain packaged while being stored.

E. The secondary roof shall be installed immediately after the primary roof to prevent moisture damage to wood.

3.2 ERECTION

A. INSTALLATION:
   The shelter shall be erected by a Certified Installer who has a demonstrated ability to construct the shelter in the manner recommended by the shelter manufacturer.

B. GENERAL CONTRACTOR:
   Interface with other work is to be coordinated by the customer or the customer’s agent. Certain designs have electrical or other plumbing requirements that are not supplied by Poligon.

C. TOLERANCES:
   Tolerances on steel structural members are set according to AISC construction practices, abided in the factory, and cannot be increased. No field slotting or opening of holes will be allowed. It is therefore essential that contractors conform to the tolerances specified on the installation drawings for anchor bolt or column layout details.

D. OSHA COMPLIANCE:
   OSHA Compliance to Steel Erection Standard 29CFR 1926 Subpart R-Steel Erection.

3.3 REPAIR

A. Do not attempt any field changes without first contacting Poligon.

3.4 FIELD OR SITE QUALITY CONTROL

A. Field or Site Tests and Inspections are not required by Poligon but may be required by the customer or by the local building inspector.

***END OF SECTION***
TECHNICAL SPECIFICATIONS
FOR
SPASH PADS

Part 1 – GENERAL

1.1 SCOPE OF WORK

A. Under this Section, the Contractor shall be responsible for the installation of a recreational aquatic play area consisting of a concrete pad with water play features, water piping, electrical wiring, control system and installation of spray features. All work shall be performed as indicated on the specifications and include every aspect of work as obvious or implied and necessary to make the project complete and fully operational.

DRAKE PARK:
Splash pad size: 2,795 SF
Feature flow rate: 126 GPM
Apron size: 1,111 SF

BATES PARK:
Splash pad size: 2,543 SF
Feature flow rate: 131 GPM
Apron size: 1,191 SF

B. The owner has spent a considerable amount of time designing this splash pad based on a specific manufacture. Products and systems have been chosen for a specific size pad, budget, age appropriate activity, interactive value, style and look, color palettes, flow rate, durability, maintenance and ease of installation. Contractor should only use the specified manufacture for their base bid. The water spray features, prefabricated mechanical systems, design services and final commissioning shall be provided by Aquatix by Landscape Structures 6500 Carlson Drive, Eden Prairie, MN 55346, 1-877-632-0503.

C. Work included in this section.

1. Supply all products and materials based on Aquatix base bid design.
2. Supply complete installation drawings for review and approval by owner.
3. Health Department submission and review fee.
4. County and or City permitting submission and review fee.
5. Provide onsite project supervision for project construction and coordination.
6. On site temporary power, water, waste and trash removal services.
7. Site drainage as needed to prevent wash outs and damage to installation work.
8. Stripping of site vegetation and topsoil. These materials to be stock piled on site.
9. Installation and compaction of granular fill under splash pad.
10. Bulk excavation and backfilling of plumbing trenches.
11. Installation of all splash pad embed fixtures and route plumbing to equipment systems.
12. Installation of splash pad domestic, single pass systems.
15. Installation of Aquatix water structures onto splash pad.
16. Electrical power hookup to systems control panel and power distribution to activation device and any other system components.
17. Grounding requirements for splash pad reinforcement, embeds and systems.
18. Final hookup of waste piping from equipment systems and components.
19. Final clean-up of splash pad and equipment room prior to system startup.
20. Splash pad system startup and balancing by Aquatix certified technician.
21. Splash pad final site inspections as required by City, County and State Health Departments scheduling and overview.
22. Splash pad system operation instructions to owner’s personnel.
23. Provide (2) operation and maintenance manuals.

1.2 CODES AND ORDINANCES

A. All materials shall be in conformance with the City Standards, Uniform Building Codes, Uniform Plumbing Codes, Uniform National Plumbing Codes, and all other applicable codes and ordinances that govern the type of work. Nothing in the Plans and Specifications shall be construed to permit work not conforming to the applicable codes and ordinances.

B. Should any change in the Plans and Specifications be required to comply with the applicable codes and ordinances, the Contractor shall notify the Architect at the time of submitting his bid. After entering into the Contract, the contractor shall be held responsible for completing all work necessary to meet these codes and ordinances without additional cost to the Owner.

C. Should the Contractor perform any work that does not comply with all applicable codes and ordinances, he shall bear all costs arising in correcting the deficiencies.

D. Permits and Fees: The contractor shall obtain and pay for all permits and fees required.

1.3 QUALITY ASSURANCE

A. All products or items described herein shall be new, unless otherwise specified and shall be from the specified manufacturer. Products shall be complete in all respects and in perfect working order.

B. Manufacturer directions and detailed drawings shall be followed in all cases where the manufacturer of articles used in this contract furnish directions covering points not shown in the drawings.

C. All water play equipment, systems and design shall be from a single source manufacturer located in the United States of America.

D. All mechanical systems are to be pre-fabricated, pre-plumbed, pre-wired, pre-tested and UL listed as provided by the specified manufacturer.

E. To insure the highest quality of splash pad infrastructure construction, the following guidelines are required:

1. Sub-cut excavation under splash pad slab min. 18" for granular fill.
2. Construction of splash pad structure to be 5" thick, 4000 psi concrete with #4 bars spaced 12" o.c. each way. Concrete pad to have required expansion joints every 20' x 20', saw-cut joints every 10' x 10' and thickened profiles at edge of pad and at each structure / embed.
3. Construction of 5’ apron around perimeter of splash pad to be 4” thick, wire mesh reinforced, 3500 psi concrete. Apron to include expansion joint at perimeter edge of splash pad and needed saw-cut joints.

4. Schedule 80 PVC plumbing to be utilized for all splash pad mechanical system piping.

1.4 COORDINATION

A. The Contractor shall be charged with the responsibility of making arrangements for the coordination of delivery of all equipment to the job site.

B. The Contractor shall place order for all water feature equipment immediately after award of bid and approval of product submittals to ensure adequate time for manufacturing and shipping. If any materials or equipment are not ordered in time, additional costs made by equipment manufacturers to their equipment in time to meet delivery schedule together with any special handling costs, shall be borne by the Contractor. No project extension shall be granted due to improper lead time in ordering.

C. Contractor to coordinate with other contractors or subcontractors on this project.

1.5 EXPLANATION OF DRAWINGS

A. Drawings provided are schematic and not for construction.

B. Manufacturer to provide complete set of construction drawings per local codes, including: All design and construction drawings for splash pad project construction to consist of construction of concrete pad, mechanical system, electrical and control systems, embed spray fixtures / drain box installation details, water play structure assembly / Installation on concrete splash pad, equipment systems installation and hookups.

1.6 SUBMITTALS

A. Materials List

1. Complete materials list with data cut sheets (3 copies) shall be submitted prior to ordering or performing any work. Materials list shall include manufacturer’s name, product name, product cut sheet, specifications, finishes and description of all materials and equipment to be used.

B. Shop Drawings

1. Equipment manufacturer shall provide three (3) sets of complete splash pad design and construction documents and water feature product installation drawings indicating all materials, equipment and installation required.

C. Equipment, Operation and Maintenance Manuals (to be provided prior to system start-up)

1. Prepare and deliver (2) manuals with the following information to the construction manager
   a. Product cut sheets and parts sheets with all material and equipment installed. Include manufacturer’s name, location and phone numbers for each product.
   b. Complete operations and maintenance instructions for all products.
Part 2 – PRODUCTS

2.1 GENERAL

A. Contractor shall be responsible for purchasing all specialized water feature mechanical and electrical materials and tools for the splash pad and shall then furnish all components to the owner.

B. Materials not listed within these specifications but required for the complete installation of the feature mechanical and/or electrical systems, shall be furnished by the contractor.

C. Materials not specified herein, shall be provided in accordance with information shown on the drawings and the general provisions of this part of the specification.

2.2 SPECIFIED SPLASH PAD MATERIAL MANUFACTURER

A. The following is the manufacturer/supplier for specified splash pad system equipment listed in this specification unless otherwise noted.

Aquatix by Landscape Structures
6500 Carlson Drive
Eden Prairie, MN 55346

B. All splash pad water play equipment specified and supplied to the contractor shall be supplied by a single equipment supplier/manufacturer located in the United States of America.

C. The aquatic play products shall be suitable for installation in municipal and commercial aquatic facilities and public play areas.

D. Products shall be manufactured by a company that has at least ten (10) years of experience in the design and engineering of children’s aquatic play areas. The contractor or manufacturer must demonstrate meeting specifications by providing technical documents and drawings for review and approval by architect or owner.

E. The equipment supplier shall have previously supplied splash pad system designs, drawings and equipment, similar in size and complexity for at least ten (10) years.

2.3 MATERIAL MANUFACTURER WARRANTY

A. Warranty: Product warranty on all mechanical system components shall be a one year warranty against defects in workmanship and materials. Product warranty on all stainless steel shall be a twenty five year warranty against defects in workmanship and materials. All finishes on stainless steel structures shall have a two year warranty. Warranty period starts on date of shipment. Warranties exclude normal wear and tear, abuse, improper installation and maintenance.

B. Scope of Responsibility: The liability of the manufacturer under this warranty is limited to the replacement of defective materials within the warranty period.

2.4 WATER PLAY FEATURES
A. As shown on the drawings and as provided by Aquatix by Landscape Structures.

B. Water features have been chosen for a specific size, budget, age appropriate activity, interactive value, style and look of product, custom color palette, flow rate, durability, maintenance and ease of installation.

2.5 WATER FEATURE CONSTRUCTION

A. Structure Components: The manufacturer shall supply a complete assembly including: pipe structure, nozzle(s), product attachments, decorative acrylic panels, two piece base skirt, two piece collar, mounting system, gasket, hardware, and fasteners. All components to be ADA compliant and free of sharp edges, pinch points and protruding nozzles.

B. Stainless Steel Structures: Above grade water play structures to be fabricated of type 304L stainless steel designed to resist damage from wind speed of 100 mph and seismic Zone (4) classification. Structural tube to have standard 150# flanged connection on mounting base. Structures shall be surface mounted using epoxy anchor to concrete pad. Structures to be removable and interchangeable which allows them to be removable for winterization, maintenance, repair and swapping out products. Structure shape, size, function and design are specific to Aquatix by Landscape Structures.

C. Fiberglass Structures: Above ground water play structures to be fabricated from fiberglass reinforced polyester resin. Structures are designed to resist damage from wind speed of 100 mph and seismic Zone (4) classification. Structural tube to have standard 150# flanged connection on mounting base. Structures shall be surface mounted using epoxy anchor to concrete pad. Structures to be removable and interchangeable which allows them to be removable for winterization, maintenance, repair and swapping out products. Structure shape, size, function and design are specific to Aquatix by Landscape Structures.

D. Structure Mounting Systems: Structure to be anchored to a thickened concrete slab with 5/8 inch stainless steel studs. Studs to be drilled and anchored into place with fast setting two-part component adhesive per manufacturer installation instructions.

E. Structure Finishes: All structure finishes are to be a multi-step industrial grade Polyurethane finishing system that is non-toxic, compatible with treated water, impact resistant, abrasion resistant and corrosion resistant. UV stabilizers are to be added to the finish coat to provide color protection in indoor or outdoor installations. Colors and coordinated color palettes are specific to Aquatix by Landscape Structures.

F. Decorative Acrylic Panels: Acrylic panels to be fabricated from high quality, light weight, chemical resistant acrylic that has excellent outdoor stability. Colors and coordinated color palettes are specific to Aquatix by Landscape Structures.

G. Structure Base Skirt: Base skirt to be fabricated from fiberglass reinforced plastic with durable finish and fit over base mounting flange and mounting hardware. Base skirt to be a two piece fabrication with vandal proof stainless steel security fasteners for securing skirt to structure mounting flange. Colors and coordinated color palettes are specific to Aquatix by Landscape Structures.

H. Structure Collar: Collar to be fabricated from urethane with durable finish and fit over the base skirt with mounting hardware. The collar is a two piece fabrication with vandal proof stainless steel
security fasteners and e-clips for securing the collar to the base skirt. Colors and coordinated color palettes are specific to Aquatix by Landscape Structures.

I. Ground Spray Components: The manufacturer shall supply a complete assembly including: spray jet pod, non-slip cover plate, nozzle, vandal proof stainless steel hardware, and winterization cover plate. All components to be ADA compliant and free of sharp edges, pinch points and protruding nozzles.

J. Ground Spray Nozzles: To be fabricated of injection molded Kynar (PVDF) plastic, cast bronze or stainless steel. Nozzles to be debris and corrosion resistant to reduce clogging and necessary maintenance. Nozzles to be flush with the concrete.

K. Ground Spray Jet Pods: Jet pods to be fabricated of heavy-duty gas welded PVC or stainless steel. Jet pods to be designed to be completely encapsulated into thickened concrete slab. The face plate shall be removable for nozzle alignment and cleaning by using the supplied security key.

L. Ground Spray Cover Plate: The cover plate is to be constructed of a heavy-duty PVC plastic material with a colored, non-slip coating. The cover plate is to be secured to jet pod with tamper resistant stainless steel fasteners. Colors and coordinated color palettes are specific to Aquatix by Landscape Structures.

M. Ground Spray Winterization: Ground spray embeds shall come complete with winterization cover plate. All water to be evacuated from structure by either blowing out plumbing lines or by gravity draining back to valve vaults. Prior to plugging, use of a biodegradable swimming pool anti-freeze is recommended.

N. Ground Spray LED: To be fabricated of a stainless steel jet pod with an internal supply pipe with brass manual flow control valve. Jet to be illuminated by an internal LED light ring. Jet pod to have a decorative stainless steel grate cover.

O. Ground Spray Jumping LED: To be a Flush-Mounted 'Sequencing' type Nozzle/LED Light Assembly, consisting of a stainless steel niche body with integral water stop key flange, threaded inserts to accept eye-bolts and jamb-nuts (included) for installation, in conjunction with Installer provided 3/8" threaded rod, flat washers and nuts; Stainless Steel Grate and Nozzle insert with choice from desired water spray patterns, Rapid-acting 24VDC sequencing valve with cord, one 2" (F) N.P.T. threaded drain return connection, one 1" (F) N.P.T. threaded supply connection, internal balancing valve and two (2) 3/4" (F) N.P.T. conduit connections (one for sequence valve and one for LED light) and one 12VDC high output 'Donut Hole' LED light fixture with cord ('White' or 'RGB') recessed into the niche.

P. Products Flow Rate Design: Feature flow rates are designed for interaction value and product function. Products must have designed flow rate and supply lines as specified.

2.6 MECHANICAL SYSTEM- DOMESTIC

A. Splash pad project design to consist of a single pass domestic water system to be housed in an above grade mechanical room/enclosure or in-ground vault located within fifty feet of splash pad. Domestic mechanical system shall be provided by Aquatix.

B. Domestic operating system to be designed per local codes and consist of all mechanical components necessary for a fully operating splash pad system.
C. Mechanical components: Splash pad manufacturer to supply a fully integrated domestic system consisting of: activation device, UL listed control panel, distribution manifold, and drain box. Mechanical enclosure or in-ground vault can be supplied by splash pad manufacturer on a per project basis.

Q. Activation Device: Activation device to consist of a low voltage proximity sensor enclosed within a foot activation device or Aquavator structure. Patrons touch the top of the structure to send a signal to the control panel to activate water flow. Aquavator to be a 4” diameter tubular structure with UV resistant finish. Aquavator to be provided with complete assembly including stainless steel tubular structure, acrylic accent, graphic face plate, two piece base skirt and two piece collar. Colors and coordinated color palettes are specific to Aquatix by Landscape Structures.

E. UL Listed Control Panel: Control panel to be a PLC interface UL listed and incorporate adjustable time clock controls to set hours of operation and set duration time of activated devices, individual controlled sequencing of spray events and activation bollard relay switches for splash pad system. Main power supply and connection to be provided by contractor.

F. Distribution Manifold: Distribution manifold to be a pre-plumbed water delivery system from feature water supply to water play features. Distribution manifold to be constructed of heavy-duty gas welded schedule 80 PVC materials. Distribution manifold to be pre-plumbed with manual flow control valves that regulate water flow levels to each water element and electric solenoid valves for sequencing of water play elements.

G. Drain Box: Drain box to consist of a 12” diameter plastic basin with grate top and 6” outlet. Each drain box has a nominal capacity of 120 gpm gravity supply.

H. Mechanical Enclosure: Mechanical enclosure to be powder coated steel with lockable access panels and anchoring that is completely internal for vandalism concerns and adjustable for mounting on uneven surfaces. Enclosure to be ASSE 1060 Certified.

Part 3 – EQUIVALENCIES CLAUSES

3.1 GENERAL

A. The owner has spent a considerable amount of time designing this splash pad based on a specific manufacture. Because Splash pad manufactures offer different products, systems and services all contractors to use the specified manufacturer for their base bid.

B. Alternate equipment bid to be submitted on a separate bid form in a separate envelope labeled “Alternate Splash Pad Equipment Bid”

C. All alternate equipment bids shall be accompanied by manufacturing drawings, submittals, performance data, warranty and plumbing and electrical schematics. No substitution or equivalency submitted will be considered if products to be considered are not part of manufacturer standard existing product line or a written proof that product has been manufactured previously by the manufacturer.

D. Bidding contractor will be required to submit full construction drawings for the splash pad project with alternate products and systems.
E. Bidding contractor will be required to cover any additional cost for installation of alternate products and systems.

F. The owner/consultant reserves the right to grant or deny approval for proposed substitutions without prejudice to his rights and his decision shall be final. The above conditions apply to this section independently of any other clauses on the subject found in this document.

Part 4 – EXECUTION

4.1 GENERAL

A. Carefully examine all the contract documents and requirements that affect the work of this section. Prior to starting any work, notify the owner of defects requiring correction.

B. Protect all materials and work completed from damage while completing this work.

C. Immediately after unloading specialty aquatic products, contractor to inspect all materials and notify Manufacturer of any damaged goods or missing parts.

D. Verify benchmark and spray pad location prior to layout.

E. If field measurements differ from the construction drawing dimensions, notification shall be given to the Owner, Architect or Manufacturer prior to proceeding with work.

F. Underground plumbing to be tested for water tightness prior to burying and placement of concrete. Air test must be witnessed and signed off by owner representative.

G. All products to be installed straight, plumb and level.

H. Contractor to thoroughly clean and flush out plumbing, water tank and splash pad surface prior to commissioning.

I. The manufacturer shall furnish the purchaser with at least two sets of complete installation and operating manuals and as built drawings. The installation manual will illustrate the installation of the entire system.

Part 5 – COMMISSIONING OF THE SPLASH PAD

5.1 GENERAL

A. Upon completion of construction, the contractor shall coordinate with Aquatix and the owner for training of splash pad operations and maintenance. An Aquatix technician to provide final inspection of systems installation, operations and to provide owner training.

B. If contractor has previous splash pad installation experience similar to this size and type of this project they may request to be an approved Aquatix certified contractor. To be certified the contractor must submit the following information to Aquatix:

1. (5) Referenced splash pad projects with owner contact information.
2. Resume of lead field supervisor experience in splash pad projects.
3. Conference call with Aquatix technical department to review project.

***END OF SECTION***
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.
**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 of its Claim.

**C. 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 Contactor 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:

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

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

1. Arbitration.

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

   (b) The Arbitrator shall have jurisdiction to pass upon questions involving compensation to the Contractor for work actually performed or materials furnished and upon claims for extra compensation that have not been allowed by the Jurisdiction. The Arbitrator’s jurisdiction shall not extend to matters exclusively reserved to the Engineer, to a determination of quality of workmanship or materials furnished, or to an interpretation of the intent of the Plans and Specifications, except as to matters of compensation. Jurisdiction of the Arbitrator shall not extend to setting aside or modifying the terms or requirements of the contract.

   (c) Subject to agreement of the parties and the Arbitrator, the parties shall work in good faith to schedule the Arbitration and allow for the decision of the Arbitrator within two hundred forty (240) days after appointment of the Arbitrator.
(d) The Arbitrator shall render a written decision within twenty (20) days after the Claim has been fully submitted. For Arbitrations before more than one arbitrator, the decision of a majority of the panel shall govern. The Arbitrator’s decision shall provide a basis for the findings and legal conclusions and shall determine how the cost of the proceedings shall be borne by the parties.

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

2. Litigation. 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](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
400 Robert D. Ray Drive
Des Moines, IA 50309-1891
Attention: Steve Naber, P.E., City Engineer

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

1. Arbitration

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

(b) Jurisdiction of the Arbitrator shall not extend to setting aside or modifying the terms or requirements of the contract.

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

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

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

2. Litigation. 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 Builder’s 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 Cancelation 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:
1070, 3.07 PROOF OF INSURANCE: Add the following sentence at the end of A: “Mail Certificate of Insurance to: Engineering Department, City of Des Moines, City Hall, 400 Robert D. Ray Drive, Des Moines, 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 BOLTSAND 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 ⅛” 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 F, TYPE F', TYPE F", AND "TYPE G APPLICATIONS AS REFERENCED BY SUDAS FIGURE 6005.9.02.

STORM SEWER LID
MATERIAL: CAST IRON RON ASTM A-48, CLASS 358
FINISH: NO PAINT
LETTED "USA" OR "MADE IN USA"

FOR THE CITY OF DES MOINES, IOWA

IN OUR HANDS
OUR WATER
PROTECT
IT IS FLUSH
WITH TOP SURFACE
RAISED LETTERS FLUSH WITH TOP SURFACE
PICKHOLES
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 0º F and constructed of orange plastic mesh containing ultraviolet stabilizers to prevent degradation.
3. Minimum tensile strength of 250 pounds per foot in the longitudinal direction and 150 pounds per foot in the vertical direction.
4. Maximum aperture opening of a nominal 4.5 square inches.
5. Maximum porosity of 55% for the safety fence surface area.
6. Available in rolls of at least 50 feet in length to minimize fence joints for an individual fence location.

B. Fence posts shall meet the following requirements:

1. Use T-section steel posts, 8’ length for 6’ high fence, or 6’ length for 4’ high fence.
2. Equip posts with lugs or other approved means to prevent the fence fabric from moving vertically.
3. Use posts that weigh no less than 1.3 pounds per foot, exclusive of anchor plate.
4. Provide each post with a steel anchor plat 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 or 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.
4' OR 6' ORANGE CONSTRUCTION FENCE TO PROTECT TREE OR GROUP OF TREES

**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.

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 60' ON CENTER.

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

**SIGN DETAIL**

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

**KEEP OUT TREE PROTECTION ZONE**
UP TO $600 PENALTY
**Supplemental Specifications for Tree Protection**

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**BORDER AREA**

**TYPICAL TREE PROTECTION FENCING - BORDER AREA**

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

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**BLACK LETTERS ON ORANGE BACKGROUND**

**KEEP OUT TREE PROTECTION ZONE**

UP TO $600 PENALTY

**SIGN DETAIL**

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

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

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

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**FIGURE TP-2**