



PUBLIC IMPROVEMENTS CONTRACT DOCUMENTS

2023 TRAFFIC SIGNAL REPLACEMENT CONTRACT 1

ACTIVITY ID

042022008

PLAN FILE NO.

648-270/315

CITY COUNCIL APPROVAL

APPROVAL DATE

January 9, 2023

ROLL CALL NO.

CONTRACT NO.

CONTRACTOR

CONTRACT AMOUNT

\$

ENGINEERING DEPARTMENT

Steven L. Naber, P.E.

Des Moines City Engineer

Funding Information

Object Code 543060

Organization No C038EG

Project No TR091

ENGINEERING DEPARTMENT
CITY OF DES MOINES, IOWA

2023 Traffic Signal Replacement Contract 1

Activity ID 042022008

The following documents are part of this contract:

Document

Instructions to Bidders

Official Publications

Proposal

Bid Bond

Contract

Performance, Payment and Maintenance Bond

Addenda:

Special Provisions:

Bidding Requirements

Contractual Requirements

Technical Specifications

Supplemental Specifications:

General Supplemental Specifications to the SUDAS Standard
Specifications, 2022 Edition

March 21, 2022

Supplemental Specification for Traffic Signage

October 6, 2022

PROJECT ENGINEER: Matthew Becker, P.E.

Phone Number: (515) 283-4026

INSTRUCTIONS TO BIDDERS

Activity ID 042022008
Project Name 2023 Traffic Signal Replacement Contract 1
Fed/St. Project No.

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

I. BID SECURITY

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

II. SUBMISSION OF THE PROPOSAL AND IDENTITY OF BIDDER

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

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

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

- B. **All pages of the Proposal must be returned.** The following documents shall be completed, signed and returned in the Proposal envelope.

PROPOSAL - Complete each of the following parts:

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

<u>ITEM NO.</u>	<u>DESCRIPTION OF ATTACHMENT</u>
1.	Reciprocal Resident Bidder and Labor Force
2.	General
3.	Completion Provisions

- Part G - Identity of Bidder.

The Bidder shall sign the proposal. The signature on the proposal and all proposal attachments must be an original signature in ink signed by the same individual who is the Company Owner or an authorized Officer of the Company; copies or facsimile of any signature will not be accepted. The **Bidder Status Form** (PROPOSAL Part F Item 2B), is required by the Iowa Labor Commissioner, pursuant to Iowa Admin. Code rule 875-156.2(1). The Bidder must complete and submit the **Bidder Status Form**, signed by an authorized representative of the Bidder, with their bid proposal. Under Iowa Admin. Code rule 875-156.2(1), failure to provide the **Bidder Status Form** with the bid may result in the bid being deemed non-responsive and may result in the bid being rejected. The **Worksheet: Authorization to Transact Business** from the Labor Commissioner is included on page 3 of 3 of the Instructions to Bidders, to assist Bidders in completing the **Bidder Status Form**.

C. Out-of-State Contractors:

1. Pursuant to Section 91C.7 of the Iowa Code, an out-of-state contractor, before commencing a contract in excess of five thousand dollars in value in Iowa, shall file a bond with the Division of Labor Services of the Iowa Department of Workforce Development. The contractor should contact 515-242-5871 for further information. Prior to contract execution, the City Engineer may forward a copy of this contract to the Iowa Department of Workforce Development as notification of pending construction work. It is the contractor's responsibility to comply with said Section 91C.7 before commencing this work.
2. Prior to entering into contract, the designated low bidder, if it be a corporation organized under the laws of a state other than Iowa, shall file with the Engineer a certificate from the Secretary of the State of Iowa showing that it has complied with all the provisions of Chapter 490 of the Code of Iowa, or as amended, governing foreign corporations. For further information contact the Iowa Secretary of State Office at 515-281-5204.

III. GENERAL

- A. **All bid documents must be submitted as printed. No alterations, additions, or deletions are permitted.** If the Bidder notes a requirement in the contract documents that the Bidder believes will require a conditioned or unsolicited alternate bid, the Bidder must immediately notify the Engineer in writing. The Engineer will issue any necessary interpretation by an addendum.
- B. Additional information regarding addenda, plan holders, bid tabulations, etc. can be found on the Engineering Department web site at <http://www.dmgov.org/Departments/Engineering/Pages/BidsContracts.aspx>.

Worksheet: Authorization to Transact Business

This worksheet may be used to help complete Part A of the Resident Bidder Status Form. If at least one of the following describes your business, you are authorized to transact business in Iowa.

- Yes___ No___ My business is currently registered as a contractor with the Iowa Division of Labor.
- Yes___ No___ My business is a sole proprietorship and I am an Iowa resident for Iowa income tax purposes.
- Yes___ No___ My business is a general partnership or joint venture. More than 50 percent of the general partners or joint venture parties are residents of Iowa for Iowa income tax purposes.
- Yes___ No___ My business is an active corporation with the Iowa Secretary of State and has paid all fees required by the Secretary of State, has filed its most recent biennial report, and has not filed articles of dissolution.
- Yes___ No___ My business is a corporation whose articles of incorporation are filed in a state other than Iowa, the corporation has received a certificate of authority from the Iowa secretary of state, has filed its most recent biennial report with the secretary of state, and has neither received a certificate of withdrawal from the secretary of state nor had its authority revoked.
- Yes___ No___ My business is a limited liability partnership which has filed a statement of qualification in this state and the statement has not been canceled.
- Yes___ No___ My business is a limited liability partnership which has filed a statement of qualification in a state other than Iowa, has filed a statement of foreign qualification in Iowa and a statement of cancellation has not been filed.
- Yes___ No___ My business is a limited partnership or limited liability limited partnership which has filed a certificate of limited partnership in this state, and has not filed a statement of termination.
- Yes___ No___ My business is a limited partnership or a limited liability limited partnership whose certificate of limited partnership is filed in a state other than Iowa, the limited partnership or limited liability limited partnership has received notification from the Iowa secretary of state that the application for certificate of authority has been approved and no notice of cancellation has been filed by the limited partnership or the limited liability limited partnership.
- Yes___ No___ My business is a limited liability company whose certificate of organization is filed in Iowa and has not filed a statement of termination.
- Yes___ No___ My business is a limited liability company whose certificate of organization is filed in a state other than Iowa, has received a certificate of authority to transact business in Iowa and the certificate has not been revoked or canceled.

NOTICE TO BIDDERS

CITY OF DES MOINES PUBLIC IMPROVEMENT PROJECT

Time and Place for Filing Sealed Proposals. Sealed bids for the work comprising each improvement as stated below must be filed at or before 11:00 a.m. on December 13, 2022, in the office of the City Clerk, 1st Floor, City Hall, 400 Robert D. Ray Drive, Des Moines, Iowa, 50309.

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

Time and Place Sealed Proposals Will be Opened and Considered. Sealed proposals will be opened and bids tabulated at 11:00 a.m., on December 13, 2022, in the City Council Chambers, 2nd Floor, City Hall, 400 Robert D. Ray Drive, Des Moines, Iowa, for consideration by the City Council (Council) at its meeting on January 9, 2023. 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 November 21, 2022, from the City Engineer's Office, 2nd Floor, City Hall, 400 Robert D. Ray Drive, Des Moines, Iowa 50309, at no cost, phone (515-283-4573).

Preference for Iowa Products and Labor. By virtue of statutory authority, preference will be given to products and provisions grown and coal produced within the State of Iowa, and to Iowa domestic labor, to the extent lawfully required under Iowa statutes.

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

General Nature of Public Improvement.

2023 Traffic Signal Replacement Contract 1, 042022008

This project includes replacement of existing traffic signals, Portland Cement Concrete (PCC) sidewalks, PCC curb and gutter and median, pavement removal, pavement markings, and other incidental items; all in accordance with the contract documents, including Plan File No. 648-270/315, located along Army Post Road, and other locations directed by the Engineer, in Des Moines, Iowa.

This project shall be fully completed not later than September 30, 2024, and in accordance with the Completion Provisions.

Engineer's Construction Estimate. \$900,000.00

Preletting Conference.

NOTICE OF PUBLIC HEARING

CITY OF DES MOINES PUBLIC IMPROVEMENT PROJECT

Public Hearing on Proposed Contract Documents and Estimated Costs for Improvement. A public hearing will be held by the City Council on the proposed contract documents (plans, specifications and form of contract) on file in the City Engineer's Office, and estimated cost for each improvement at its meeting on January 9, 2023, at 5:00 p.m., in the City Council Chambers, 2nd Floor, City Hall, 400 Robert D. Ray Drive, Des Moines, Iowa. Please check the posted agenda in advance of the January 9, 2023 meeting for any update on the manner in which the public hearing will be conducted to comply with COVID-19 social distancing and safety guidelines. The City Council Meetings are open to all individuals regardless of disability. To better serve you, please notify the City Clerk at least three business days in advance, when possible, should special accommodations be required.

General Nature of Public Improvement

2023 Traffic Signal Replacement Contract 1, 042022008

This project includes replacement of existing traffic signals, Portland Cement Concrete (PCC) sidewalks, PCC curb and gutter and median, pavement removal, pavement markings, and other incidental items; all in accordance with the contract documents, including Plan File No. 648-270/315, located along Army Post Road, and other locations directed by the Engineer, in Des Moines, Iowa

Published in the Des Moines Register
December 21, 2022

****ALL SECTIONS OF THE PROPOSAL MUST BE COMPLETED WHERE APPLICABLE
AND ALL PAGES RETURNED, OR THE BID WILL NOT BE ACCEPTED.****

ENGINEERING DEPARTMENT
CITY OF DES MOINES, IOWA



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:

2023 Traffic Signal Replacement Contract 1, 042022008

This project includes replacement of existing traffic signals, Portland Cement Concrete (PCC) sidewalks, PCC curb and gutter and median, pavement removal, pavement markings, and other incidental items; all in accordance with the contract documents, including Plan File No. 648-270/315, located along Army Post Road, and other locations directed by the Engineer, in 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.

BASE BID CONTRACTS: The bidder must provide any bid price(s), the total base bid price, any alternate price (s), and the total base bid plus any add-alternates if there are alternates on the proposal on Proposal Attachment: Part C - Bid Items, Quantities, and Prices. The total base bid plus any alternates selected by the Jurisdiction shall be used for comparison of bids. The total base bid plus any add-alternates shall be used for determining the sufficiency of the bid security.

PROPOSAL: PART D - GENERAL

The Bidder hereby acknowledges that the Jurisdiction, in advertising for public bids for this project, reserves the right to:

1. Reject any or all bids. Award of the contract, if any, to be to the lowest responsible, responsive bidder; and
2. Reject any or all alternates in determining the items to be included in the contract. Designation of the lowest responsible, responsive bidder to be based on comparison of the total bid plus any selected alternates; and
3. Make such alterations in the contract documents or in the proposal quantities as it determines necessary in accordance with the contract documents after execution of the contract. Such alterations shall not be considered a waiver of any conditions of the contract documents, and shall not invalidate any of the provisions thereof; and

The Bidder hereby agrees to:

1. Enter into a contract, if this proposal is selected, in the form approved by the Jurisdiction and provide the following documents:
 - Proof of registration with the Iowa Division of Labor in accordance with Chapter 91C of the Iowa Code by providing a valid Registration Number,
 - Proof of insurance by a Certificate(s) of Insurance,
 - A performance, maintenance, and payment bond; and
2. Forfeit bid security, not as a penalty but as liquidated damages, upon failure to enter into such contract and/or to furnish said documents and information as requested in Item 1 above acceptable to the Des Moines City Engineer; and
3. Commence the work on this project on or after the date a written Notice to Proceed is issued by the Jurisdiction, and to fully complete the project not later than September 30, 2024, and in accordance with the Completion Provisions; and to pay liquidated damages for noncompliance with said completion provisions at the rate of Five Hundred and 00/100 (\$500.00) for each calendar day thereafter that the work remains incomplete.

PROPOSAL: PART E - NON-COLLUSION AFFIDAVIT

The Bidder hereby certifies:

1. That this proposal is not affected by, contingent on, or dependent on any other proposal submitted for any improvement with the Jurisdiction; and
2. That no individual employed by the Bidder has employed any person to solicit or procure the work on this project, nor will any employee of the Bidder make any payment or agreement for payment of any compensation in connection with the procurement of this project; and
3. That no part of the bid price received by the Bidder was paid or will be paid to any person, corporation, firm, association, or other organization for soliciting the bid, other than the payment of their normal compensation to persons regularly employed by the Bidder whose services in connection with the construction of the project were in the regular course of their duties for the Bidder; and

4. That this proposal is genuine and not collusive or sham; that the Bidder has not colluded, conspired, connived or agreed, directly or indirectly, with any bidder or person, to put in a sham bid or to refrain from bidding, and has not in any manner, directly or indirectly, sought, by agreement or collusion, or communication or conference, with any person, to fix the bid price of the Bidder or of any other bidder, and that all statements in this proposal are true; and
5. That the individual(s) executing this proposal have the authority to execute this proposal on behalf of the Bidder.

PROPOSAL: PART F - ADDITIONAL REQUIREMENTS

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

ITEM NO.	<u>DESCRIPTION OF ATTACHMENT</u>
1.	Reciprocal Resident Bidder and Labor Force
2.	General
3.	Completion Provisions

PROPOSAL: PART G - IDENTITY OF BIDDER

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

☐ Individual,
Sole Proprietorship

☐ Partnership

☐ Corporation

☐ Limited Liability Company

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

☐ Other

By

Bidder

Signature

Name (Print/Type)

Title

Street Address

City, State, Zip Code

Telephone Number / Email Address

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

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

NOTE: The signature on this proposal must be an original signature in ink; copies or facsimile of any signature will not be accepted.

This is a unit bid price contract. The bidder must provide all unit prices, the amount, the total construction cost, any alternate price(s), and the total construction cost plus any add-alternates if there are alternates on the proposal. The total construction cost plus any 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.

Activity ID 04-2022-008

ITEM	DESCRIPTION	UNITS	ESTIMATED	UNIT	AMOUNT
			QUANTITY	PRICE	
1	TYPE A SIGNS, SHEET ALUMINUM	SF	47.00	\$ _____	\$ _____
2	SIGN POST, PERFORATED SQUARE, STEEL TUBE POST	LF	133.00	\$ _____	\$ _____
3	PAVEMENT, PCC, 8"	SY	447.00	\$ _____	\$ _____
4	CURB AND GUTTER, 2.5 FT.	LF	242.40	\$ _____	\$ _____
5	CONCRETE MEDIAN	SY	209.00	\$ _____	\$ _____
6	HMA OVERLAY, 2"	SY	237.00	\$ _____	\$ _____
7	* REMOVAL OF SIDEWALK	SY	149.50	\$ _____	\$ _____
8	* REMOVAL OF CURB	LF	256.20	\$ _____	\$ _____
9	SIDEWALK, PCC, 4 IN.	SY	152.00	\$ _____	\$ _____
10	SIDEWALK, PCC, 6 IN.	SY	26.00	\$ _____	\$ _____
11	DETECTABLE WARNING	SF	100.00	\$ _____	\$ _____
12	* PAVEMENT REMOVAL	SY	447.00	\$ _____	\$ _____
13	* TRAFFIC SIGNALIZATION	LS	1.00	\$ _____	\$ _____
14	PAINTED PAVEMENT MARKINGS, DURABLE, EPOXY	STA	72.40	\$ _____	\$ _____
15	PAINTED SYMBOLS AND LEGENDS	EA	18.00	\$ _____	\$ _____
16	* PAVEMENT MARKINGS, REMOVED	STA	14.30	\$ _____	\$ _____
17	* SYMBOLS AND LEGENDS, REMOVED	EA	5.00	\$ _____	\$ _____
18	* GROOVES CUT FOR PAVEMENT MARKINGS	STA	72.40	\$ _____	\$ _____
19	* GROOVES CUT FOR SYMBOLS AND LEGENDS	EA	18.00	\$ _____	\$ _____
20	* TEMPORARY TRAFFIC CONTROL	LS	1.00	\$ _____	\$ _____
21	* SOD	SQ	20.00	\$ _____	\$ _____
22	* FILTER SOCKS, 9 IN.	LF	400.00	\$ _____	\$ _____
23	* FILTER SOCKS, REMOVAL	LF	400.00	\$ _____	\$ _____
24	* INLET PROTECTION DEVICE, INSTALLATION	EA	4.00	\$ _____	\$ _____
25	* INLET PROTECTION DEVICE, MAINTENANCE	EA	4.00	\$ _____	\$ _____
26	* CONSTRUCTION SURVEY	LS	1.00	\$ _____	\$ _____
27	* MOBILIZATION	LS	1.00	\$ _____	\$ _____
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 - ADDITIONAL REQUIREMENTS
ITEM 2 - GENERAL**

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

Alternate Sales Tax:

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

2. The Bidder hereby acknowledges that the City of Des Moines in advertising for public bids for this work reserves the right to give a limited notice to proceed of a duration not longer than three months. This limited notice to proceed shall be given where all necessary right-of-way has not yet been acquired. The limited notice to proceed will allow construction to proceed as far as possible and 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](http://www.dmgov.org/Departments/Engineering/PDF/Contract%20Compliance%20Program%20(June%202017).pdf) or from the City Engineer's Office.
 - To comply with any and all applicable provisions of the Des Moines Human Rights Ordinance, Chapter 62, of the Des Moines Municipal Code.
 - Not to discriminate against any employees, or applicants for employment, on the basis of age, race, religion, creed, color, sex, sexual orientation, national origin, ancestry, disability, familial status or gender identity.
 - To include this provision in all subcontracts for this project.
4. The City's Overall Annual DBE/TSB Goal for this project is 6.03%, which represents a target that the City would like to achieve in including DBE/TSB participation on City contracts; and is not a mandatory goal for this project. The Certified Directory of DBEs is available at the following website <https://secure.iowadot.gov/DBE/Directory/Index/>. The Certified Directory of TSBs is available at the following website <https://iowaeda.dynamics365portals.us/tsb-search/>

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

The Bidder hereby agrees to commence and complete the work in accordance with the attached Completion Provisions.

**PROPOSAL ATTACHMENT: PART F – ADDITIONAL REQUIREMENTS
ITEM 3 – COMPLETION PROVISIONS**

The Bidder hereby agrees to:

1. Commence the work on the project on or after a date to be specified in a written Notice to Proceed by the City and to fully complete the project by September 30, 2024; and to pay liquidated damages for noncompliance with said completion provision in the amount of five hundred and no/100 dollars (\$500.00) for each calendar day thereafter.
2. Complete work in compliance with the intermediate completion period as described below.

SW 9th St & Army Post Rd: Once work starts at this location, complete all work as described in the plans within Sixty (60) Working Days; and pay liquidated damages for noncompliance with said completion provision in the amount of five hundred and no/100 dollars (\$500.00) for each working day thereafter.

E. Army Post Rd & east entrance of Southridge Mall: Once work starts at this location, complete all work as described in the plans within Fifty (50) Working Days; and pay liquidated damages for noncompliance with said completion provision in the amount of five hundred and no/100 dollars (\$500.00) for each working day thereafter.

Both Locations: Contractor shall have all work completed no later than July 31, 2024, except for permanent turf establishment, which shall be completed no later than September 30, 2024; and pay liquidated damages for noncompliance with said completion provision in the amount of five hundred and no/100 dollars (\$500.00) for each working day thereafter.

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



BID BOND

KNOW ALL BY THESE PRESENTS:

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

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

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

2023 Traffic Signal Replacement Contract 1, 042022008

This project includes replacement of existing traffic signals, Portland Cement Concrete (PCC) sidewalks, PCC curb and gutter and median, pavement removal, pavement markings, and other incidental items; all in accordance with the contract documents, including Plan File No. 648-270/315, located along Army Post Road, and other locations directed by the Engineer, in 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____

<p>SURETY:</p> <p>_____</p> <p>Surety Company</p> <p>By _____</p> <p>Signature Attorney-in-Fact/Officer</p> <p>_____</p> <p>Name of Attorney-in-Fact/Officer</p> <p>_____</p> <p>Company Name</p> <p>_____</p> <p>Company Address</p> <p>_____</p> <p>City, State Zip Code</p> <p>_____</p> <p>Company Telephone Number</p>	<p>PRINCIPAL:</p> <p>_____</p> <p>Bidder</p> <p>By _____</p> <p>Signature</p> <p>_____</p> <p>Name</p> <p>_____</p> <p>Title</p> <p>_____</p> <p>Address</p> <p>_____</p> <p>City, State Zip Code</p> <p>_____</p> <p>Telephone Number</p>
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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.

1/9/2023

CONTRACT

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

_____, hereinafter the "Contractor".

WITNESSETH:

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

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

2023 Traffic Signal Replacement Contract 1, 042022008

This project includes replacement of existing traffic signals, Portland Cement Concrete (PCC) sidewalks, PCC curb and gutter and median, pavement removal, pavement markings, and other incidental items; all in accordance with the contract documents, including Plan File No. 648-270/315, located along Army Post Road, and other locations directed by the Engineer, in 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 after the date a written Notice to Proceed is issued by the Jurisdiction and to fully complete the project not later than September 30, 2024, and in accordance with the Completion Provisions; and to pay liquidated damages for noncompliance with completion provisions in the amount of Five Hundred and 00/100 dollars (\$500.00), for each calendar day thereafter that the work remains incomplete.

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

<p>JURISDICTION:</p> <p>By _____ T. M. Franklin Cownie, Mayor</p> <p>(Seal) ATTEST:</p> <p>_____ Laura Baumgartner, City Clerk</p> <p>FORM APPROVED BY:</p> <p>_____ Kathleen Vanderpool, Deputy City Attorney</p>	<p>CONTRACTOR:</p> <p>_____ Contractor</p> <p>By _____ Signature</p> <p>_____ Title</p> <p>_____ Street Address</p> <p>_____ City, State - Zip Code</p> <p>_____ Telephone Number / Email Address</p>
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CONTRACTOR PUBLIC REGISTRATION INFORMATION To Be Provided By:

1. All Contractors: The Contractor's Public Registration Number, issued by the Iowa Commissioner of Labor pursuant to Section 91C.5 of the Iowa Code, is as follows:
Number
2. Out-of-State Contractors:
 - A. Pursuant to Section 91C.7 of the Iowa Code, an out-of-state contractor, before commencing a contract in excess of five thousand dollars in value in Iowa, shall file a bond with the division of labor services of the department of workforce development. The contractor should contact 515-242-5871 for further information. Prior to contract execution, the City Engineer may forward a copy of this contract to the Iowa Department of Workforce Development as notification of pending construction work. It is the contractor's responsibility to comply with said Section 91C.7 before commencing this work.
 - B. Prior to entering into contract, the designated low bidder, if it be a corporation organized under the laws of a state other than Iowa, shall file with the Engineer a certificate from the Secretary of the State of Iowa showing that it has complied with all the provisions of Chapter 490 of the Code of Iowa, or as amended, governing foreign corporations. For further information contact the Iowa Secretary of State Office at 515-281-5204.

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

CORPORATE ACKNOWLEDGEMENT

State of _____)
_____) SS
_____ County)

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

Notary Public in and for the State _____
My commission
expires _____

CONTRACT ATTACHMENT: ITEM 1: GENERAL

1. The Contractor acknowledges and agrees:
 - To comply with the Equal Employment Opportunity Program included in the City of Des Moines Contract Compliance Program, which is available at the following website [http://www.dmgov.org/Departments/Engineering/PDF/Contract%20Compliance%20Program%20\(June%202017\).pdf](http://www.dmgov.org/Departments/Engineering/PDF/Contract%20Compliance%20Program%20(June%202017).pdf) or from the City Engineer's Office.
 - To comply with any and all applicable provisions of the Des Moines Human Rights Ordinance, Chapter 62, of the Des Moines Municipal Code.
 - Not to discriminate against any employees, or applicants for employment, on the basis of age, race, religion, creed, color, sex, sexual orientation, national origin, ancestry, disability, familial status or gender identity.
 - To include this provision in all subcontracts for this project.
2. The Contractor agrees to comply with the requirements of the City of Des Moines Contract Compliance Program as referenced in the proposal. Final acceptance of the project will not be made until the Contractor has submitted to the City Engineer a notarized summary of payments to and scope of work by all DBE/TSB subcontractors.
3. The City of Des Moines Master Construction Safety Packet (Safety Plan) is available at <http://www.dmgov.org/Departments/Engineering/PDF/MasterConstructionSafetyPacket.pdf> and is also available upon request from the Engineering Department. The Engineering Department will make available a copy of the City of Des Moines Safety Plan to the Contractor when the contract is awarded. The Contractor understands and agrees that said Safety Plan is for the Contractor's information only and that it is the Contractor's sole responsibility to provide, or make available, this safety information to all its Subcontractors.
4. The Contractor understands and agrees that the construction of the work included in this contract is by its nature dangerous work. The Contractor agrees:
 - That the Contractor should have a safety program; however, the Contractor need not submit a safety program to the City of Des Moines, and City of Des Moines staff will not review or approve the Contractor's safety program. The City of Des Moines assumes that the Contractor will maintain a safe worksite; however, City of Des Moines staff will not intrude in the Contractor's responsibility for safety issues.
 - That until the work is accepted by the Jurisdiction; the work shall be in the custody of and under the charge, care, and control of the Contractor.
 - That the Contractor is responsible for the project area or work site.
 - That the Contractor is solely responsible for the safety of everyone on its work site.
 - That it is the Contractor's sole responsibility to provide as safe a working site as possible given the nature of the work.
 - That it is the Contractor's responsibility to notify and advise its employees, subcontractors, suppliers, and everyone on the worksite of the dangers associated with the work, and provide them with appropriate safety information to protect them from those dangers.
5. The Contractor acknowledges and agrees that no contract shall be binding upon the City of Des Moines until said contract has been executed by the Bidder, and shall have been approved by the City Council and executed by the Mayor and attested to by the City Clerk.

6. The Contractor agrees that sixty (60) days shall constitute a reasonable time within which it shall be required to make progress payments or final payment to subcontractors after each subcontractor's satisfactory performance of its work, all as required by Section 573.12 2.b.(2) of the Code of Iowa.

This contract is awarded and executed for completion of the work specified in the contract documents for the bid price tabulated below as proposed by the contractor in its proposal submitted in accordance with notice to bidders and notice of public hearing. All quantities are subject to revision by the Jurisdiction. Quantity changes which amount to twenty (20) percent or less of the amount bid shall not affect the unit bid price of that item.

Activity ID 04-2022-008

ITEM	DESCRIPTION	ESTIMATED		UNIT PRICE	AMOUNT
		UNITS	QUANTITY		
1	TYPE A SIGNS, SHEET ALUMINUM	SF	47.00		
2	SIGN POST, PERFORATED SQUARE, STEEL TUBE POST	LF	133.00		
3	PAVEMENT, PCC, 8"	SY	447.00		
4	CURB AND GUTTER, 2.5 FT.	LF	242.40		
5	CONCRETE MEDIAN	SY	209.00		
6	HMA OVERLAY, 2"	SY	237.00		
7	* REMOVAL OF SIDEWALK	SY	148.50		
8	* REMOVAL OF CURB	LF	255.20		
9	SIDEWALK, PCC, 4 IN.	SY	152.00		
10	SIDEWALK, PCC, 6 IN.	SY	26.00		
11	DETECTABLE WARNING	SF	100.00		
12	* PAVEMENT REMOVAL	SY	447.00		
13	* TRAFFIC SIGNALIZATION	LS	1.00		
14	PAINTED PAVEMENT MARKINGS, DURABLE EPOXY	STA	72.40		
15	PAINTED SYMBOLS AND LEGENDS	EA	18.00		
16	* PAVEMENT MARKINGS, REMOVED	STA	14.30		
17	* SYMBOLS AND LEGENDS, REMOVED	EA	5.00		
18	* GROOVES CUT FOR PAVEMENT MARKINGS	STA	72.40		
19	* GROOVES CUT FOR SYMBOLS AND LEGENDS	EA	18.00		
20	* TEMPORARY TRAFFIC CONTROL	LS	1.00		
21	* SOD	SQ	20.00		
22	* FILTER SOCKS, 9 IN.	LF	400.00		
23	* FILTER SOCKS, REMOVAL	LF	400.00		
24	* INLET PROTECTION DEVICE, INSTALLATION	EA	4.00		
25	* INLET PROTECTION DEVICE, MAINTENANCE	EA	4.00		
26	* CONSTRUCTION SURVEY	LS	1.00		
27	* MOBILIZATION	LS	1.00		
TOTAL CONSTRUCTION COST					

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

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

CONTRACT ATTACHMENT: ITEM 3 – COMPLETION PROVISIONS

The Contractor hereby agrees to:

1. Commence the work on the project on or after a date to be specified in a written Notice to Proceed by the City and to fully complete the project by September 30, 2024; and to pay liquidated damages for noncompliance with said completion provision in the amount of five hundred and no/100 dollars (\$500.00) for each calendar day thereafter.
2. Complete work in compliance with the intermediate completion period as described below.

SW 9th St & Army Post Rd: Once work starts at this location, complete all work as described in the plans within Sixty (60) Working Days; and pay liquidated damages for noncompliance with said completion provision in the amount of five hundred and no/100 dollars (\$500.00) for each working day thereafter.

E. Army Post Rd & east entrance of Southridge Mall: Once work starts at this location, complete all work as described in the plans within Fifty (50) Working Days; and pay liquidated damages for noncompliance with said completion provision in the amount of five hundred and no/100 dollars (\$500.00) for each working day thereafter.

Both Locations: Contractor shall have all work completed no later than July 31, 2024, except for permanent turf establishment, which shall be completed no later than September 30, 2024; and pay liquidated damages for noncompliance with said completion provision in the amount of five hundred and no/100 dollars (\$500.00) for each working day thereafter.

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

PERFORMANCE, PAYMENT & MAINTENANCE BOND

KNOW ALL BY THESE PRESENTS:

That we, _____, as Principal (the "Contractor" or "Principal"), and _____, as Surety, are held and firmly bound unto the City of Des Moines, as Obligee (the "Jurisdiction"), and to all persons who may be injured by any breach of any of the conditions of this Bond

in the penal sum of _____ dollars (\$ _____), lawful money of the United States, for the payment of which sum, well and truly to be made, we bind ourselves, our heirs, legal representatives and assigns, jointly and severally, firmly by these presents.

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

2023 Traffic Signal Replacement Contract 1, 042022008

This project includes replacement of existing traffic signals, Portland Cement Concrete (PCC) sidewalks, PCC curb and gutter and median, pavement removal, pavement markings, and other incidental items; all in accordance with the contract documents, including Plan File No. 648-270/315, located along Army Post Road, and other locations directed by the Engineer, in 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.
5. The Contractor and every Surety on this Bond shall be deemed and held bound, any contract to the contrary notwithstanding, to the following provisions:
- A. That no provision of this Bond or of any other contract shall be valid which limits to less than five years after the acceptance of the work under the Contract the right to sue on this Bond.

- B. That as used herein, the phrase "all outlay and expense" is not to be limited in any way, but shall include the actual and reasonable costs and expenses incurred by the Jurisdiction including interest, benefits and overhead as applicable. Accordingly, "all outlay and expense" would include but not be limited to all contract or employee expense, all equipment usage or rental, materials, testing, outside experts, attorneys fees (including overhead expenses of the Jurisdiction's staff attorneys), and all costs and expenses of litigation as they are incurred by the Jurisdiction. It is intended the Contractor and Surety will defend and indemnify the Jurisdiction on all claims made against the Jurisdiction on account of Contractor's failure to perform as required in the Contract and Contract Documents, that all agreements and promises set forth in the Contract and Contract Documents, in approved change orders, and in this Bond will be fulfilled, and that the Jurisdiction will be fully indemnified so that it will be put into the position it would have been in had the Contract been performed in the first instance as required.
- C. In the event the Jurisdiction incurs any "outlay and expense" in defending itself with respect to any claim as to which the Contractor or Surety should have provided the defense, or in the enforcement of the promises given by the Contractor in the Contract, Contract Documents, or approved change orders, or in the enforcement of the promises given by the Contractor and Surety in this Bond, the Contractor and Surety agree that they will make the Jurisdiction whole for all such outlay and expense, provided that the Surety's obligation under this Bond shall not exceed 125% of the penal sum of this Bond.

In the event that any actions or proceedings are initiated with respect to this Bond, the parties agree that the venue thereof shall be Polk County, State of Iowa. If legal action is required by the Jurisdiction to enforce the provisions of this Bond or to collect the monetary obligation accruing to the benefit of the Jurisdiction, the Contractor and Surety agree, jointly and severally, to pay the Jurisdiction all outlay and expense incurred by the Jurisdiction. All rights, powers, and remedies of the Jurisdiction hereunder shall be cumulative and not alternative and shall be in addition to all rights, powers and remedies given to the Jurisdiction, by law. The Jurisdiction may proceed against the Surety for any amount guaranteed hereunder whether action is brought against the Contractor or whether or not the Contractor is joined in the action.

NOW THEREFORE, the condition of this obligation is such that if the Principal shall faithfully perform all of the promises of the Principal, as set forth and provided in the Contract, in the Contract Documents, and in this Bond, then this obligation shall be null and void, otherwise it shall remain in full force and effect.

When a word, term, or phrase is used in this Bond, it shall be interpreted or construed first as defined in this Bond, the Contract, or the Contract Documents; second, if not defined in the Bond, Contract, or Contract Documents, it shall be interpreted or construed as defined in applicable provisions of the Iowa Code; third, if not defined in the Iowa Code, it shall be interpreted or construed according to its generally accepted meaning in the construction industry; and fourth, if it has no generally accepted meaning in the construction industry, it shall be interpreted or construed according to its common or customary usage.

Failure to specify or particularize shall not exclude terms or provisions not mentioned and shall not limit liability hereunder. The Contract and Contract Documents are hereby made a part of this Bond.

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

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
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NOTE:

1. All signatures on this performance, payment & maintenance bond must be original signatures in ink; copies or facsimile of any signature will not be accepted.
2. This bond must be sealed with the Surety's raised, embossed seal.
3. The Certificate or Power of Attorney accompanying this bond must be valid on its face and sealed with the Surety's raised, embossing seal.
4. The name and signature of the Surety's Attorney-in-Fact/Officer entered on this bond must be exactly as listed on the Certificate or Power of Attorney accompanying this bond.
5. This bond form must be utilized as printed; no additions/deletions/alterations are permitted, other than providing the required information.

**ENGINEERING DEPARTMENT
CITY OF DES MOINES, IOWA**

**SPECIAL PROVISION
BIDDING REQUIREMENTS
ON**

**2023 TRAFFIC SIGNAL REPLACEMENT CONTRACT 1
ACTIVITY ID 04-2022-008**

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, January 6, 2022. Completed documents in accordance with the contract documents and acceptable to the City of Des Moines Engineering and Legal Departments will be presented to the City Council for award of this contract on Monday, January 9, 2022. This would allow construction to begin upon issuance of the Notice to Proceed by the City Engineer.

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

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

2) CONTRACT COMPLIANCE PROGRAM

The current Contract Compliance Program for the City of Des Moines is available for viewing [https://www.dsm.city/document_center/Engineering%20and%20Traffic%20Forms%20and%20Documents/ENG-Regulations/Contract%20Compliance%20Program%20\(June%202017\).pdf?pdf=Contract%20Compliance%20Program%20\(June%202017\)&t=1571326713167](https://www.dsm.city/document_center/Engineering%20and%20Traffic%20Forms%20and%20Documents/ENG-Regulations/Contract%20Compliance%20Program%20(June%202017).pdf?pdf=Contract%20Compliance%20Program%20(June%202017)&t=1571326713167). The June 2017 Contract Compliance Program includes:

- a. EEO Program – Complaints of discrimination in violation of the Des Moines Human Rights Ordinance, or corresponding state or federal law, should still be filed with the appropriate city, state, or federal agency. If a Contractor is found by one of these agencies to be engaging in illegal discrimination, the Contractor will be in breach of its contract with the City of Des Moines and appropriate action will be taken.
- b. DBE/TSB Program: Certification – The City of Des Moines' program is a DBE/TSB Program whereby both certified DBEs and certified TSBs are equally eligible under the program. All DBEs shall be certified by the Iowa Department of Transportation (IDOT),

and the Certified Directory of DBEs is available at the following website <https://secure.iowadot.gov/DBE/Directory/Index/>.

All TSBs shall be certified by the Iowa Economic Development Authority, and the Certified Directory of TSBs is available at the following website <https://iowaeda.microsoftcrmpartals.com/tsb-search/>. The TSB website allows the user to search by name or other keyword. If the user enters the keyword "CONST" in the space next to **Service Description** and clicks **SEARCH**, the database will provide a listing of all TSBs that have identified various forms of construction as their type of work. The Directories will not be printed in the contract documents. Copies of the DBE and TSB Directories are available from the Engineering Department upon request.

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

3) ALTERNATE SALES AND USE TAX

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

ENGINEERING DEPARTMENT
CITY OF DES MOINES, IOWA

**SPECIAL PROVISION
CONTRACTUAL REQUIREMENTS
ON**

**2023 TRAFFIC SIGNAL REPLACEMENT CONTRACT 1
ACTIVITY ID 04-2022-008**

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ENGINEERING DEPARTMENT
CITY OF DES MOINES, IOWA

**SPECIAL PROVISION
CONTRACTUAL REQUIREMENTS FOR
SUBMISSION OF PAYROLL RECORDS
ON**

**2023 TRAFFIC SIGNAL REPLACEMENT CONTRACT 1
ACTIVITY ID 04-2022-008**

The City may request Contractor to provide verifiable payroll records of the Contractor and its subcontractors to the Engineer on this project, which shall not include the full social security number of the employees. The Contractor will notify each subcontractor of this Submission of Payroll Records Special Provision.

**SPECIAL PROVISION
CONTRACTUAL REQUIREMENTS
FOR STARTING DATE
ON**

**2023 TRAFFIC SIGNAL REPLACEMENT CONTRACT 1
Activity ID 04-2022-008**

STARTING DATE – PROPERTY ACCESS SCHEDULE

At the time of award for this contract, the City will not yet control all of the property interests needed for construction of this project. Upon award of the contract, a Limited Notice to Proceed will be issued to exclude access to any properties listed below for which the City has not taken possession of the property interests required to construct this project. Construction access to the following properties is anticipated to be available according to the following schedule:

<u>Owner</u>	<u>Address</u>	<u>Stations</u>	<u>Anticipated Access</u>
4 G PROPERTIES LLC	915 ARMY POST RD	51+80 To 52+31	06-01-2023
DLE FOUR WAY LC	904 ARMY POST RD	51+80 To 52+33	06-01-2023
HURD QUALITY LLC	849 ARMY POST RD	53+16 To 53+60	06-01-2023
HURD KETTLESTONE LLC	850 ARMY POST RD	53+25 To 53+64	06-01-2023
MACERICH SOUTHRIDGE MALL	1113 E ARMY POST RD	121+31 To 121+42	06-01-2023
MACERICH SOUTHRIDGE MALL	1201 E ARMY POST RD	122+08 To 122+87	06-01-2023

Failure of the City to meet the above schedule shall not constitute a basis for additional compensation to Contractor, but may be a justification for extending the completion date if it affects the controlling work operation as determined by a critical path method determination.

ENGINEERING DEPARTMENT
CITY OF DES MOINES, IOWA

**SPECIAL PROVISION
TECHNICAL SPECIFICATIONS FOR
TRAFFIC SIGNALIZATION
ON**

**2023 TRAFFIC SIGNAL REPLACEMENT CONTRACT 1
ACTIVITY ID 04-2022-008**

PART 2 – PRODUCTS

2.01 UNDERGROUND

C. Wiring and Cable:

6. Fiber Optic Cable and Accessories:

- p. Fiber Optic Termination Unit (DELETE AND REPLACE):** Contractor shall provide and install a fiber optic termination unit in the proposed cabinet(s). The unit shall be a rack mount, drawer type enclosure that is dust and moisture repellent. The unit shall provide easy front access with removable rear tray for easy rear access and shall have a maximum dimension of 3.5 inches (H) x 18.5 inches (W) x 11.25 inches (D). The size of the unit shall be adequate for the number of fibers, proper winding area, and splices. The unit shall provide for cable entry from the side and be capable of accommodating up to 48 connections. All fibers entering the traffic signal controller cabinet shall be terminated in the fiber optic termination unit within the traffic controller cabinet.
 - q. Connectors (DELETE AND REPLACE):** Only SC or LC type connectors of ceramic ferrule and Physical Contact end finish shall be used to terminate fibers to equipment. SC, LC or mechanical connectors shall not be used to splice cables. All multimode fibers shall be terminated with ST connectors. All single mode fibers shall be terminated with LC connectors. Maximum attenuation per connector shall be 0.75 dB.
 - t. Splices/Splice Enclosures (DELETE AND REPLACE):** Fiber optic cable runs shall be continuous without splice between controller cabinets, unless otherwise specified. Ends of continuous fiber cable runs and/or traffic signal controller branch circuit points will be fusion spliced in an outside plant splice enclosure located in handholes as shown on plans. Enclosure shall accept a minimum of six cables and provide adequate number of trays to splice all fibers. All fiber cables shall enter the enclosure at one end. Enclosure shall be watertight and re-enterable using gel-compressed cable connections and a re-enterable gasket. Maximum attenuation per splice: 0.3dB.
- 7. (ADD) Pull Tape:** All conduit shall include one, ½ inch wide, polyester cable pulling tape with a minimum 1200 lb. tensile strength when installation is complete. All conduits shall include a tracer wire as specified in the Wiring and Cable section.

2.02 DETECTION

- A. Inductive Loop Vehicle Detector (ADD):** All loop detectors in new pavement shall be preformed. No saw-cut loops will be accepted in new pavement.
 - 1. Cables**
 - c. Loop Detector Lead-in Cable (ADD):** Detector lead-in cable shall be No. 14AWG.

CITY OF DES MOINES TRAFFIC SIGNALIZATION SPECIAL PROVISION TO THE 2019 EDITION
OF THE IOWA STATEWIDE URBAN STANDARD SPECIFICATIONS FOR PUBLIC IMPROVEMENTS

exceptions to this specification may be allowed, provided these exceptions are detailed on the certification.

B. Warranty:

1. All 2070 ATC controllers and auxiliary equipment furnished under this specification shall be provided with a standard industry warranty. Any parts found to be defective shall, upon concurrence of the defect by the manufacturer, be replaced free of charge.

C. Delivery and Coordination:

1. A minimum of one week prior to the scheduled "turn-on", the Contractor or supplier shall deliver the necessary components to the Traffic Signal Shop located at 1551 E Martin Luther King Jr Parkway. It is the responsibility of the deliverer to call ahead to schedule delivery.
2. The City of Des Moines will install the 1C CPU module and verify the specified software and timings. Should any controllers be found faulty at the shop, the person/company who delivered the equipment will be contacted. The Signal Shop is not responsible for trouble shooting this equipment nor is any part of this process intended to replace "burn-in" responsibility of the manufacturer.
3. The Contractor/Supplier is responsible for picking up the controller(s) from the Signal Shop and is solely responsible for bringing the controller(s) to full operation at the intersection(s). No assistance will be provided by the Signal crew once the software is working correctly and the signal timings have been verified in the Signal Shop. Having a knowledgeable representative at the project site(s) when the controller(s) is ready to be turned on is paramount to the safety and efficiency of this operation.

c. Controller Chassis:

- A. The ATC Controller Chassis shall comply with TEES 2009 with latest Errata and be listed on Caltrans Qualified Products List. The product shall be McCain 2070LX or City of Des Moines Project Manager approved equal.
- B. Controller Chassis shall be equipped with Linux Operating System with serial motherboard.
- C. ATC Controller Chassis Microprocessors shall be Freescale Power QUICC II Pro.
- D. ATC Controller Chassis shall include the following memory:
 1. 16MB Flash memory
 2. 128MB DDR RAM (expandable)
 3. 2MB Non-volatile SRAM
- E. ATC Controller Chassis shall include Backup Real-Time Clock (RTC).
- F. ATC Controller Chassis shall include the following Communication Interfaces:
 1. Two SDLC ports
 2. Four asynchronous Serial ports
 3. ENET 1: 100 Base-T Ethernet switch, 1 uplink port, and 3 additional port
 4. ENET 2: 100 Base-T Ethernet port dedicated for local communications
 5. Two USB ports
- G. ATC Controller Chassis shall include a Front Panel Interface with:
 1. One Display: 8 lines x 40 characters

C. Coordination

1. 250 free or coordinated patterns
2. Automatic or manual permissive
3. Fixed or floating force off
4. Reference beginning or end of green
5. Change virtually all operational parameters by pattern
6. 16 phase sequence selection by pattern

D. Cabinet Inputs and Outputs

1. Support all cabinet types
2. Individually assignable input and output functions (I/O mapping)
3. Internal multi-input Boolean logic gates with delay, extend and latch, and flashing output features
4. 16 generic alarm inputs
5. 16 special functions
6. External pattern selection
7. Pulsing preempt and transit priority input discrimination

E. Detection

1. 128 local/system detectors
2. Single or dual detector speed calculation
3. Phase assignments configurable per detector, multiple phases per detector
4. Direct detector actuation for vehicle and pedestrian overlaps
5. All NTCIP detector options
6. Delay and extend timing
7. Alternate passage, minimum green and pedestrian timing detection
8. Vol/Occ configurable per detector
9. Detector failure monitoring configurable by time-of-day
10. Connect directly to video detection

F. Communications

1. Support all industry standard communication
2. Fully NTCIP 1201 and 1202 compliant (mandatory and optional objects)
3. NTCIP MIB and block objects for all vendor-specific parameters
4. Data validation during download
5. Network time client and/or server
6. GPS, WWV, NMEA, and NTP time synchronization
7. California AB3418E with master function for time and pattern broadcast
8. USB for database upload/download, firmware upgrades, log retrieval
9. Peer to peer sharing of I/O between intersections
10. Web browser support
11. Connected vehicle SPaT interface

G. Preemption

1. 8 preemption sequences
2. Each sequence configurable for railroad or emergency vehicle operation
3. Definable priority and linking
4. User configurable overlap enable/disable during all preempt intervals

h. (DELETE AND REPLACE) Each cabinet shall be provided with devices to protect the control equipment from surges and over voltages. This shall include incoming power lines, the Input File, the Output File, and communication lines. Each inductive loop detector input wire shall be protected with a 30V MOV with (30 Joule Rating) P/n ERZ-C20 KE 470 or equal. The output of all load switch outputs shall be protected with a 150V MOV (80 Joule Rating). P/n ERZ-C20 DK 241U or equal. The MOVs shall be connected from the AC positive field terminal to the chassis ground. For the 332A or 332D cabinet, appropriate input surge protection shall be mounted on the Lower Input Termination Panel (LIP). The power distribution assembly (PDA#2) of each controller cabinet shall include a surge protection unit on the AC Service Input. The protector shall be installed between the applied line voltage and earth ground. The surge protector shall be capable of reducing the effect of lightning transient voltages applied to the AC line. The protection device shall be a two stage series parallel device. It shall include the following features and functions:

- A. Maximum AC line voltage: 140 VAC.
- B. Twenty pulses of peak current, each of which will rise in 8 microseconds and fall in 20 microseconds to 1/2 the peak: 20,000 Amperes.
- C. The protector shall be provided with the following terminals:
 1. Main line (AC line first stage terminal).
 2. Main Neutral (AC Neutral input terminal).
 3. Equipment Line Out (AC Line second stage output terminal, 10 Amps.).
 4. Equipment Neutral Out (Neutral terminal to protected equipment).
 5. GND (Earth connection).
 6. The Main AC line in and the Equipment Line out terminals shall be separated by a 200 Microhenry (minimum) inductor rated to handle 10 Amp AC Service. The first stage clamp shall be between Main Line and Ground terminals.
 7. The second stage clamp shall be between Equipment Line out and Equipment Neutral.
 8. The protector for the first and second stage clamp must have a MOV or similar solid state device rated at 20 KA and be of a completely solid stage design (i.e., no gas discharge between tubes allowed).
 9. The Main Neutral and Equipment Neutral Out shall be connected together internally and shall have an MOV similar solid state device or gas discharge tubes rated at 20 KA between Main Neutral and Ground terminals.
 10. Peak clamp voltage: 350 Volts at 20 KA (Voltage measured between Equipment Line Out and Equipment Neutral Out terminals. Current applied between Main Line and Ground Terminals with Ground and Main Neutral terminals externally tied together.). Voltage shall never exceed 350 volts.
 11. The Protector shall be epoxy encapsulated in a flame retardant material.
 12. Continuous service current, 10 Amps at 120 VAC RMS.
 13. The Equipment Line Out shall provide power to the Type 170 and to the 24 V power supply.
 14. Provide communications line protector with a mounting connector for incoming and outgoing communication line.

- b. Switch Pack:** Each vehicular and each pedestrian phase shall be provided with a separate switch pack.
 - c. Isolator:** A Model 242 Two-Channel Isolator shall be provided to introduce stop timing to the controller from the conflict monitor and the manual flash switch.
 - d. Conflict Monitor:** The Model 2010ECLip (w/ Ethernet Port) Monitor Unit shall be provided. The conflict monitor provided shall have broad fault coverage, full intersection display, event logging and RMS voltage reporting. It shall include support for flashing yellow arrow operation. The monitor shall include an Ethernet port for communication with a personal computer or traffic management center. Downloadable information shall include monitor status, event logs, and fiver signal sequence history logs, which are stored in the monitor's nonvolatile memory.
 - e. Power Supply:** A "PDA-2" Power Distribution Assembly shall be provided.
 - f. Shelf:** A standard print shelf drawer shall be provided and installed above the input file.
- 4. (ADD) Locate Boxes:** An outdoor-rated, single gang box to house communications / interconnect tracer wire shall be installed on the exterior of the controller cabinet. The location on the cabinet shall be determined by the project engineer. The locate box shall be constructed of die-cast aluminum with a die-cast zinc weatherproof cover and self-closing lid. The box shall be 2 ¾ inches x 4 ½ inches x 2 5/8 inches D. A 12 inch long ground wire shall be attached to a lug within the box.
- D. (ADD) Ethernet Switch:** The Contractor shall coordinate the installation of an Ethernet switch with the City. The City shall provide the following:
 - 1. Configured Ethernet Switch
 - 2. Small Form Factor Pluggables (SFPs)The Contractor shall provide the following:
 - 1. Jumpers
 - 2. All other equipment necessary to install and integrate Ethernet switch in to the traffic signal cabinet.The Contractor shall coordinate with the City Traffic Signal Shop at the onset of the project.

2. **Pole Design (ADD):** The contractor shall provide designs for all concrete bases where mast arms are longer than 70 feet or when it is called for on the plans. The cost for the design shall be considered as part of the cost of the mast arm pole. This design would then be used as a substitute for footing design as shown on the signal detail sheet of the plans. The use of the ground rod and the number of conduits as indicated on the signal detail sheet of the plans shall remain the same.
4. **(ADD) Pole Finish:** This section specifies requirements for certain items on the project; including signal poles, signal pole mast arms, light poles, light pole mast arms, and luminaires, as specified on the plans.
 - a. **Quality Control:** The galvanizing, wet paint process, powder coating, and/or finish painting facilities shall be owned and operated by the pole manufacturer to ensure a quality coating system.
 - b. **Packaging:** Prior to shipment, small poles shall be wrapped in 0.188 inch thick Ultraviolet-inhibiting plastic backed foam. Larger poles shall be cradled in a 1.0 inch rubberized foam base.
 - c. **Field Repair Procedures:** Where factory applied finishes/coatings have become damaged or abraded due to handling, transport, installation, welding or other circumstances, they shall be repaired by the field painting crew or miscellaneous metal contractor. All damaged areas shall be thoroughly wire brushed. All dirt, oil, grease, or other contaminants shall be removed in accordance with SSPC-SP1 and SP5. Touch-up paint supplied by the galvanizer or steel fabricator, identical in color and composition to that used in the plant, shall be applied to all prepared surfaces to a dry film thickness of at least 4.0 mils.
 - d. **Method of Measurement and Basis of Payment:** Combination/Top Finishing/Coating shall be considered incidental to the price bid per each pole and shall be considered incidental to the lump sum bid for the traffic signal system.

D. Traffic Signal Pedestal Poles:

1. Materials:

c. Pedestal Base:

- 2) **Base (DELETE AND REPLACE):** Minimum weight of 20 pounds with a four bolt pattern uniformly spaced on a 13-3/4 inch diameter bolt circle. Meet or exceed AASHTO breakaway requirements.

F. Traffic Signs:

2. **Sign Mounting Brackets (DELETE AND REPLACE):** All signs shall be supplied with a sign bracket. The traffic sign bracket shall be an articulated serrated bracket assembly that includes top, middle, and bottom sign mounting brackets and provides a rigid-mount for the traffic sign. All necessary hardware for a complete installation on a mast arm shall be included. The mounting assembly shall be of a cable type. Approval of other bracket supports shall be based on specifications and/or test data about their physical properties and performance properties.

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

returned to the manufacturer. Undamaged replacement signs shall then be promptly sent, at no extra cost to the City of Des Moines.

2.06 (ADD) STREETLIGHTING

A. Luminaires: When specified for on the plans, Contractor shall supply and install luminaires and the luminaires shall be Autobahn Series wattage equivalent as shown in the plans.

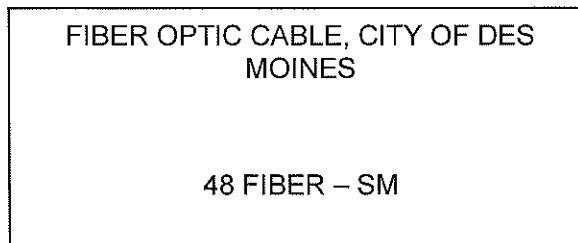
- 100 watt equivalent = ATB0 20BLEDE53 MVOLT R2
- 150 watt equivalent = ATB0 20BLEDE10 MVOLT R2
- 250 watt equivalent = ATB2 40BLEDE10 MVOLT R2

B. Disconnect: Contractor shall provide and install a disconnect breaker in the signal cabinet for the streetlighting. The disconnect shall be a QOU120 or approved equal.

9. Fiber Optic Cable and Accessories:

- d. (DELETE AND REPLACE)** At each handhole or through point and at the cabinet, the cable shall be visibly and durably marked or tagged with the type of cable (single mode or multi-mode), the fiber count, and "FIBER OPTIC CABLE, CITY OF DES MOINES". Additionally, each cable shall be marked with the adjacent intersection of origin and destination. In cases where cables are spliced in a splice enclosure only the intersection of origin is needed.

Example:



- g. (DELETE AND REPLACE)** Slack shall be left in each handhole, at the top of any conduit riser, in each junction box, in each controller cabinet, and at each equipment rack or other point of termination. Slack in handholes shall be 100 feet in Type III and Type IV handholes, 50 feet in Type I and Type II handholes, and 10 feet in 18 inch handholes. This slack cable requirement may be deleted where existing handholes or through points lack sufficient area to maintain the minimum bend requirements. Where slack has been deleted, extra slack equal to the amount that would have been distributed in the through points shall be equally divided between the two controller cabinets and shall be in addition to the slack mandated at the cabinets. Slack in each handhole type shall be provided as designated on the plans. Slack cable shall be coiled and the coils bound at three points around the coil perimeter and supported in their static storage position.
- i. (ADD)** All fibers, unless stated otherwise in the plans, shall be terminated in the fiber optic termination unit. The enclosure shall be mounted on an EIA 19 inch rack in an area that does not interfere with the normal maintenance of the cabinet electronics. The field cable shall be secured to the enclosure in a manner that does not degrade the fiber optic cable but insures a firm and secure mount. Sufficient lengths of every loose fiber shall be coiled within the enclosure to provide spare distance and reach the fiber interface panel. Spiral wrap each individual fiber in the fan out kit. Each fiber shall be labeled on the bulkhead by direction and intersection of origin.

9. **(ADD)** Bonding of standards and pedestals shall be by means of a bonding strap attached to an anchor bolt or to 1 inch, or longer, brass or bronze bolt installed in the lower portion of the shaft.
10. **(ADD)** The service meter and socket shall be bonded to a ground electrode by use of a ground clamp and a No. 6 AWG copper wire.
11. **(ADD)** Bonding of metallic conduit in concrete pull boxes and manholes shall be by means of galvanized grounding bushings and bonding jumpers. Where there is a change, at a pull box or manhole, from non-metallic conduit to metallic conduit, the grounding wire in the non-metallic conduit shall be bonded to the metallic conduit. Saddle clamps are not acceptable.
12. **(ADD)** Existing ungrounded metal poles on which cabinets are mounted shall be grounded by means of a driven ground rod.
13. **(ADD)** The interconnect cable shield shall be bonded to the controller ground buss at one controller termination point for each interconnect run.

3.02 DETECTION

A. Detector Loop Cable Installation:

4. **(DELETE AND REPLACE)** Install detector loop cable without damage. Place three turns of the detector loop cable into the saw cut, unless otherwise specified in the plans. Seal the ends of the tubing at the time of placement to prevent entrance of moisture.

3.04 CABINET AND CONTROLLER

A. Controller, Cabinet, and Auxiliary Equipment:

3. **(ADD)** The aluminum rack edge shall be labeled for each detector amplifier, load switch, and isolator.
4. **(ADD)** The cabinet shall be oriented with the back of the cabinet toward the intersection such that the signal heads can be viewed while facing the controller unless otherwise directed by the project engineer.

3.05 POLES, HEADS, AND SIGNS

A. Vehicle and Pedestrian Traffic Signal Heads:

5. **(ADD)** All mast-arm mounted traffic signal heads shall have backplates. Universally adjustable brackets and cable banding shall be used to mount all pole-mounted and mast arm-mounted overhead signals. All overhead displays located on each mast arm shall have each red indication set at approximately the same elevation, unless otherwise directed by the Engineer. All optically limited signal heads shall be properly masked to limit their field of view as directed by the Engineer.

CITY OF DES MOINES TRAFFIC SIGNALIZATION SPECIAL PROVISION TO THE 2019 EDITION
OF THE IOWA STATEWIDE URBAN STANDARD SPECIFICATIONS FOR PUBLIC IMPROVEMENTS

(ADD) PART 4 – ADDITIONAL BIDDING ATTACHMENTS

4.01 SCHEDULE OF UNIT PRICES

NO.	ITEM	QUANTITY	UNIT	UNIT PRICE	AMOUNT
1	TYPE 332A SIGNAL CONTROLLER, CABINET, AND ACCESSORIES	2	EA	\$	\$
2	SIGNAL FACE, 3-SECTION HEAD WITH TUNNEL VISORS, 12" LED (RYG), POLE MOUNTED	8	EA	\$	\$
3	SIGNAL FACE, 3-SECTION HEAD WITH TUNNEL VISORS, 12" LED WITH BACKPLATE (RYG), MAST ARM MOUNTED	15	EA	\$	\$
4	SIGNAL FACE, 3-SECTION HEAD WITH TUNNEL VISORS, 12" LED WITH BACKPLATE (R,S,Y,FY LEFT ARROW), MAST ARM MOUNTED	8	EA	\$	\$
5	SIGNAL FACE, 4-SECTION HEAD WITH TUNNEL VISORS, 12" LED WITH BACKPLATE (R,S,Y,FY,G LEFT ARROW), MAST ARM MOUNTED	16	EA	\$	\$
6	PEDESTRIAN SIGNAL FACE, POLE MOUNTED	8	EA	\$	\$
7	ELECTRICAL SERVICE	2	EA	\$	\$
8	PRECAST CONCRETE HANDHOLE, TYPE I	4	EA	\$	\$
9	PRECAST CONCRETE HANDHOLE, TYPE III	4	EA	\$	\$
10	POWER - 1c #8	420	LF	\$	\$
11	SIGNAL CABLE - 16c #14	2510	LF	\$	\$
12	SIGNAL CABLE - 7c #14	500	LF	\$	\$
13	SIGNAL CABLE - 5c #14	1020	LF	\$	\$
14	SIGNAL CABLE - 2c #14 (PUSHBUTTONS)	1365	LF	\$	\$
15	DETECTOR CABLE - 2c #14 (DETECTOR LEAD-IN)	2805	LF	\$	\$
16	DETECTOR CABLE - 1c #14 (DETECTOR LOOP)	780	LF	\$	\$
17	DETECTOR SAW CUT	340	LF	\$	\$
18	STREET LIGHTING POWER CABLE - 1c #8	1860	LF	\$	\$
19	VIDEO CABLE	410	LF	\$	\$
20	RADAR CABLE	870	LF	\$	\$
21	PTZ CABLE	80	LF	\$	\$
22	TRACER - 1c #10	3015	LF	\$	\$
23	GROUND - 1c #6	1410	LF	\$	\$
24	PULL TAPE	2580	LF	\$	\$
25	3" PVC (SCH 80), PUSHED	1345	LF	\$	\$
26	2" PVC (SCH 80), TRENCHED	540	LF	\$	\$
27	3" PVC (SCH 80), TRENCHED	485	LF	\$	\$
28	POLE FOOTING - 3' DIA X 14' DEPTH	2	EA	\$	\$
29	POLE FOOTING - 3' DIA X 16' DEPTH	3	EA	\$	\$
30	POLE FOOTING - 3.5' DIA X 18' DEPTH	3	EA	\$	\$
31	PEDESTRIAN SIGNAL PUSHBUTTON AND ASSEMBLY, NON APS	8	EA	\$	\$
32	PEDESTAL POLE FOOTING - 2' DIA X 3' DEPTH	5	EA	\$	\$
33	PUSH BUTTON POLE FOOTING - 1.5' DIA X 3' DEPTH	2	EA	\$	\$
34	CONCRETE CABINET FOOTING	2	EA	\$	\$
35	SIGNAL POLE - GALVANIZED STEEL W/ 50' MAST ARM	1	EA	\$	\$
36	SIGNAL POLE - GALVANIZED STEEL W/ 65' MAST ARM	2	EA	\$	\$
37	COMBINATION SIGNAL POLE / LUMINAIRE ARM - GALVANIZED STEEL W/ 40' MAST ARM	1	EA	\$	\$
38	COMBINATION SIGNAL POLE / LUMINAIRE ARM - GALVANIZED STEEL W/ 45' MAST ARM	2	EA	\$	\$
39	COMBINATION SIGNAL POLE / LUMINAIRE ARM - GALVANIZED STEEL W/ 55' MAST ARM	1	EA	\$	\$
40	COMBINATION SIGNAL POLE / LUMINAIRE ARM - GALVANIZED STEEL W/ 65' MAST ARM	1	EA	\$	\$
41	POWER STRIP	2	EA	\$	\$
42	LED LUMINAIRE LIGHT FIXTURE, AUTOBAHN SERIES ATB2	6	EA	\$	\$
43	PEDESTAL POLE	5	EA	\$	\$
44	PUSH BUTTON POLE	2	EA	\$	\$
45	SIGNAL POLE TRANSFORMER BASE, GALVANIZED	8	EA	\$	\$
46	TRAFFIC SIGN - D3-1 (SW 9TH ST SIGN)	2	EA	\$	\$
47	TRAFFIC SIGN - D3-1 (ARMY POST RD SIGN)	6	EA	\$	\$
48	TRAFFIC SIGN - D3-1 (E ARMY POST RD SIGN)	6	EA	\$	\$
49	TRAFFIC SIGN - D3-1 (<- S UNION ST SIGN)	1	EA	\$	\$
50	TRAFFIC SIGN - D3-1 (S UNION ST -> SIGN)	1	EA	\$	\$
51	TRAFFIC SIGN - D3-1 (<- CHAFFEE RD SIGN)	1	EA	\$	\$
52	TRAFFIC SIGN - D3-1 (CHAFFEE RD -> SIGN)	1	EA	\$	\$
53	TRAFFIC SIGN - D3-1 (SE 5TH ST SIGN)	2	EA	\$	\$
54	TRAFFIC SIGN - R3-5L (LEFT TURN ONLY)	6	EA	\$	\$
55	TRAFFIC SIGN - R3-5R (RIGHT TURN ONLY)	2	EA	\$	\$
56	TRAFFIC SIGN - R10-3L (PEDESTRIAN PUSHBUTTON)	5	EA	\$	\$
57	TRAFFIC SIGN - R10-3R (PEDESTRIAN PUSHBUTTON)	3	EA	\$	\$
58	TRAFFIC SIGN - S1-1 (SCHOOL CROSSING)	2	EA	\$	\$
59	VIDEO DETECTION (GRIDSMAST)	2	EA	\$	\$
60	RADAR DETECTION (MS SEDCO)	4	EA	\$	\$
61	PTZ CAMERA	1	EA	\$	\$
62	TRAFFIC SIGNAL REMOVAL - SW 9TH ST/ARMY POST RD INTERSECTION	1	EA	\$	\$
63	TRAFFIC SIGNAL REMOVAL - SOUTHRIDGE MALL ENT./ARMY POST RD INTERSECTION	1	EA	\$	\$

TOTAL LUMP SUM TO FURNISH AND INSTALL TRAFFIC SIGNALS

\$

Approved:

City Traffic Engineer

Date

**CITY OF DES MOINES GENERAL SUPPLEMENTAL
SPECIFICATIONS TO THE
SUDAS STANDARD SPECIFICATIONS, 2022 EDITION**
Effective Date: March 21, 2022



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

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

Said SUDAS Standard Specifications are hereby amended as follows:

SECTION 1010 – DEFINITIONS

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

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

SECTION 1020 – PROPOSAL REQUIREMENTS AND CONDITIONS

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

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

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

- B. When unit prices are requested in the proposal form, the quantities indicated on the proposal form are approximate only, and do not constitute a warranty or guarantee by the Jurisdiction as to the actual quantities involved in the work. Such quantities are to be used for the purpose of comparison of bids and determining the amount of bid security, contract, and performance, payment, and maintenance bond. In the event of discrepancies between unit prices and unit price extensions listed in a bidder's proposal, unit prices shall govern and unit price extensions shall be corrected, as necessary, for agreement with unit prices; except in the case of an obvious, serious, clerical error where the Engineer is able to determine the bidder's intent from the proposal; in which case, the Jurisdiction may waive irregularities that are in best interest of the Jurisdiction, as long as the integrity of the bid process can be maintained. The Jurisdiction expressly reserves the right to increase or decrease the quantities during construction as outlined in Section 1040, 1.06 - Increase or Decrease of Work, and to make reasonable changes in design, provided such changes do not materially change the intent of the contract. The amount of work to be paid for shall be based upon the actual quantities performed.

**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

set forth herein. Before disturbing the site at which the latent or subsurface condition is alleged to exist, the Contractor shall give the Engineer the opportunity to inspect the same.

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

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

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

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

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

2. After inspection by the Engineer, the Jurisdiction may, in its discretion, authorize the Contractor to proceed with or abandon the work. The Contractor shall resume construction operations pending a decision regarding its claim by the Jurisdiction. Failure of the Contractor to give written notice within three working days of discovering the conditions and to give the Engineer full opportunity to inspect the condition before disturbing the site shall be deemed a waiver by the Contractor of all claims for extra compensation arising out of the alleged condition.
3. Latent or subsurface conditions that do not materially differ from those shown on the plans shall not form the basis for additional compensation. No additional compensation or extension of time shall be provided for conditions that do not materially differ, regardless of the nature of the condition encountered.

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

A. Basis of Claim for Extra Compensation:

1. In any case where the Contractor believes extra compensation is due for work or material beyond the scope of the Work under the contract and not ordered by the Engineer as Extra Work as defined in Section 1010, 1.03, the Contractor shall provide written notice to the Engineer, as set forth herein, of its intention to make claim for such extra compensation within thirty (30) days of discovering the circumstances regarding the claim and before beginning the work on which the claim is based (hereinafter referred to as a "Claim").

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

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

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

- 1) Expressly state that it is a request for a contract change under Section 1040, 1.10;
 - 2) Expressly state the reason the Contractor believes extra compensation is due;
 - 3) Identify the underlying work or material that Contractor claims is beyond the scope of the Work under the contract and not ordered by the Engineer as Extra Work as defined in Section 1010, 1.03;
 - 4) Identify any work that will be impacted.
- b. For claims less than \$50,000 the Contractor shall notify the Project Engineer by written notice sent as set forth above or sent by email providing the same detail as identified in a.1) through 4) above. Under no circumstances will a text message, verbal communication or any other informal communication be considered acceptable or satisfactory written notice required by this section.

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

2. The Jurisdiction shall not be responsible for damages attributable to the performance, nonperformance, or delay, of any other contractor, governmental agency, utility agency, firm, corporation, or individual authorized to do work on the project, except if such damages result from negligence on the part of the Jurisdiction, its Engineer, or any of its officers or employees.
3. For any Claim, if such written notification is not given, or if after such written notification is given the Engineer is not allowed facilities for keeping strict account of actual costs as defined for force-account construction, the Contractor thereby agrees to waive the Claim for extra compensation for such work. Such written notice by the Contractor, and the fact the Engineer has kept account of the cost as aforesaid, shall not be construed as establishing the validity of the Claim.
4. The Claim, when filed, shall be in writing and in sufficient detail to permit auditing and an evaluation by the Jurisdiction. The Claim shall be supported by such documentary evidence as the Contractor has available and shall be verified by affidavit of the Contractor or other person having knowledge of the facts.

- B. Presentation and Consideration of Claim:** If the Contractor wishes an opportunity to present its Claim in person, the Claim shall be accompanied by a written request to do so. Where the Contractor asks an opportunity to present its Claim in person, the Jurisdiction, within thirty (30) calendar days of the filing of the Claim, shall fix a time and place for a meeting between the Contractor and the Jurisdiction or its designated representatives or representative. The Jurisdiction shall, within a reasonable time after the filing of the Claim or the meeting above

referred to, whichever is later, rule upon the validity of the Claim and notify the Contractor, in writing, of its ruling together with the reasons therefore. In case the Claim is found to be just, in whole or in part, it shall be allowed and paid to the extent so found.

- C. Request for Claim Review:** In the event a Contractor's Claim as outlined in the above procedure in Sections 1040, 1.10(A) and (B) has been disallowed, in whole or in part, the Contractor may, within thirty (30) calendar days from the date the ruling of the Jurisdiction is mailed, make a written request to the Jurisdiction that its Claim or Claims be submitted to a board of review. The written request shall be either (i) personally delivered, (ii) sent by certified mail, return receipt requested, or (iii) delivered by a nationally recognized prepaid overnight courier service (receipt requested) addressed as follows:

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

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

D. Board of Review:

1. The Board shall have jurisdiction to pass upon questions involving compensation to the Contractor for work actually performed or materials furnished and upon claims for extra compensation that have not been allowed by the Jurisdiction. The Board's jurisdiction shall not extend to matters exclusively reserved to the Engineer, to a determination of quality of workmanship or materials furnished, or to an interpretation of the intent of the Plans and Specifications except as to matters of compensation. Jurisdiction of the Board shall not extend to setting aside or modifying the terms or requirements of the contract.
2. Following the timely written demand for review of the Claim and the decision of the Jurisdiction to grant the request, a board of review shall be appointed to review the Claim. The board of review shall consist of three (3) members as follows: the Engineer, or designated representative; and two persons to be appointed by the Engineer (hereinafter the "Board").
3. The Board shall set a date for the Contractor to present its Claim for review within sixty (60) days of the date the Jurisdiction issued its decision granting the Contractor's request for review. The presentation before the Board shall not be in accordance with the Iowa rules of civil procedure and the Contractor shall not have the right to conduct discovery or compel the testimony of witnesses as part of the presentation. The Contractor shall submit three (3) copies of a written Claim summary and all documents it considers to be relevant to its Claim at least fourteen (14) days prior to the date set for the presentation before the Board. The presentation before the Board is intended to be an informal process to allow the Contractor to further explain its Claim and why it believes it is entitled to additional compensation. The Board reserves the right to impose such rules as it deems reasonably necessary to allow for a fair and efficient presentation.
4. Following the presentation before the Board, the Board shall render a written decision regarding the Claim within twenty (20) days of the presentation. In the event the Board renders a decision in favor of the Contractor for some or all of the Claim, the Contractor and the Jurisdiction shall promptly proceed in good faith to prepare a change order consistent with the decision of the Board. If the Board denies the Claim, in part or in full, the Contractor's

sole and exclusive remedy is to demand final resolution of the Claim that has been denied subject to the procedure provided below.

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

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

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

1. Arbitration.

- (a) If the Jurisdiction elects to use binding arbitration for final resolution of the Claim, the sole and exclusive remedy for final resolution of the Claim shall be binding arbitration (the "Arbitration"). The Arbitration shall be submitted to a single arbitrator as is mutually agreed upon by the Contractor and Jurisdiction. If the Contractor and Jurisdiction cannot agree upon a single arbitrator within twenty-one (21) days of the date of the Jurisdiction's notification to the Contractor of the Jurisdiction's decision to pursue binding arbitration, the Arbitration shall be submitted to a three (3) member panel appointed as follows: the Contractor shall appoint one arbitrator; the Jurisdiction shall appoint one arbitrator; and the third arbitrator shall be chosen by the first two appointed arbitrators (for the sake of convenience, the arbitrator, or arbitrators as the case may be, shall be referred to hereinafter as the "Arbitrator"). The parties agree to work toward appointment of a three (3) member Arbitration panel within twenty-one (21) days after not being able to agree on a single arbitrator. The Arbitration shall be conducted in general accord with the Construction Industry Arbitration Rules of the American Arbitration Association then in effect. The parties reserve the right to alter and amend the rules for the Arbitration as they may mutually agree in writing.
- (b) The Arbitrator shall have jurisdiction to pass upon questions involving compensation to the Contractor for work actually performed or materials furnished and upon claims for extra compensation that have not been allowed by the Jurisdiction. The Arbitrator's jurisdiction shall not extend to matters exclusively reserved to the Engineer, to a determination of quality of workmanship or materials furnished, or to an interpretation of the intent of the Plans and Specifications, except as to matters of compensation. Jurisdiction of the Arbitrator shall not extend to setting aside or modifying the terms or requirements of the contract.

- (c) Subject to agreement of the parties and the Arbitrator, the parties shall work in good faith to schedule the Arbitration and allow for the decision of the Arbitrator within two hundred forty (240) days after appointment of the Arbitrator.
- (d) The Arbitrator shall render a written decision within twenty (20) days after the Claim has been fully submitted. For Arbitrations before more than one arbitrator, the decision of a majority of the panel shall govern. The Arbitrator's decision shall provide a basis for the findings and legal conclusions and shall determine how the cost of the proceedings shall be borne by the parties.
- (e) The decision of the Arbitrator shall be binding and final. There shall be no further appeal or judicial review, except under the limited circumstances as allowed by Iowa law.

2. Litigation.

- (a) If the Jurisdiction elects not to use arbitration as the means to reach final resolution of the claim, then the sole and exclusive remedy for final resolution of the Claim shall be litigation which must be brought in Iowa District Court in and for the County where the Jurisdiction is located or in the United States District Court in and for the District where the Jurisdiction is located.
- (b) To the fullest extent permitted by law, Contractor and Jurisdiction hereto waive any right each may have to a trial by jury in respect of litigation directly or indirectly arising out of or in connection with this Agreement.

SECTION 1050 – CONTROL OF WORK

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

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

SECTION 1060 – CONTROL OF MATERIALS

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

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

SECTION 1070 – LEGAL RELATIONS AND RESPONSIBILITY TO THE PUBLIC

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

The Contractor shall procure and pay for all necessary permits and licenses for the construction of the work and for temporary excavations, obstructions, enclosures, and street openings arising from the construction and completion of the work described in the Contract Documents. The Contractor shall be responsible for all violations of the law for any cause in connection with the construction of the work or caused by the obstruction of roads, streets, highways or sidewalks, and shall give all requisite notices to the Jurisdiction or other public authorities in connection therewith.

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 in the Forms and Documents section at the Engineering page on the City of Des Moines website at:
https://www.dsm.city/document_center/Engineering%20and%20Traffic%20Forms%20and%20Documents/ENG-Publications/MasterConstructionSafetyPacket.pdf?pdf=Master%20Construction%20Safety%20Packet&t=1580921434169 and is also available upon request from the Engineering Department. The Engineering Department will make available a copy of the City of Des Moines Master Construction Safety Plan to the Contractor when the contract is awarded. Said Safety Plan is for the Contractor's information only and it is the Contractor's sole responsibility to provide, or make available, this safety information to all its Subcontractors.

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

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

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

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

- (a) If the Jurisdiction elects not to use arbitration as the means to reach final resolution of the claim or fails to notify Contractor in writing within thirty (30) days of its election, then the sole and exclusive remedy for final resolution of the Claim shall be litigation which must be brought in Iowa District Court in and for the County where the Jurisdiction is located or in the United States District Court in and for the District where the Jurisdiction is located.
- (b) To the fullest extent permitted by law, Contractor and Jurisdiction hereto waive any right each may have to a trial by jury in respect of litigation directly or indirectly arising out of or in connection with this Agreement.

- B. Contractor further consents that it will require its subrogees and assigns to enter into an agreement to comply with the terms of Section, 1.12, and consent to the jurisdiction of either the Iowa District Court in and for the County where the Jurisdiction is located or the United States District Court in and for the District where the Jurisdiction is located, as to any causes of action brought against it arising out of this contract or any work performed under it by Contractor or its subcontractors, and further agrees, on behalf of itself, its subrogees and assigns, to waive any and all objections to the jurisdiction of said court as to any such cause of action. Contractor shall make such consent a condition of the retention of subrogees and assigns.

1070, 2.10 DUST CONTROL: Add the following paragraph:

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

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

- A. The contractor shall not purchase liability insurance in the name of the jurisdiction unless such purchase is allowed by special provision.

1070, 3.02 INSURANCE REQUIREMENTS, C. 2. Commercial General Liability Insurance: Revise the following limits on the Commercial General Liability Insurance:

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

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

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

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

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

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

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

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

- B. Except to the extent caused by or resulting from the negligent act or omission of the Jurisdiction or the Jurisdiction’s employees, consultants, agents or other for whom the Jurisdiction is responsible, to the fullest extent permitted by law, the Contractor shall defend, indemnify, and hold harmless the Jurisdiction and its officers, agents, employees, and consultants from and against all claims, damages, losses, and expenses, including but not limited to, attorney’s fees, arising out of or resulting from the performance or prosecution of the work by the Contractor, its subcontractors, agents, or employees; or arising from any neglect, default, or mismanagement or omissions by the Contractor, its subcontractors or consultants, suppliers, third parties, or the agents, officers, or employees of any of them in the performance of any duties imposed by the contract or by law; provided any such claim, damage, loss, or expense:
1. is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property (other than the work itself) including economic damages and the loss of use resulting therefrom, and
 2. is caused in whole or in part by any act or omission of the Contractor, its subcontractors or consultants, suppliers, third parties, or the agents, officers, or employees of any of them, or anyone for whose acts any of them may be liable.

Such obligation shall not be construed to negate, abridge, or otherwise reduce any other right or obligation of indemnity that would otherwise exist as to any party or person described in this subsection.

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

- B. Contractor shall cause each of its subcontractors, consultants, suppliers, third parties, or the agents of any of them, to carry insurance sufficient to cover all loss to such materials, tools, motor vehicles, and equipment. All insurance carried by the Contractor, or its subcontractors, consultants, suppliers, third parties or the agents of any of them, covering risk of loss or damage to materials, tools, motor vehicles, and equipment used in the performance of the Work, shall provide a waiver of subrogation against the Jurisdiction, as specified in Section 1070, 3.02 Insurance Requirements, C.8. To the extent that any subcontractors, consultants, suppliers, third parties or the agents of any of them, do not provide such coverage, any uninsured loss shall be the sole responsibility of the Contractor.

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

- A. Property Insurance Required: The Contractor shall purchase and maintain property insurance, being either Builder's Risk Insurance or an Installation Floater, for the period of the contract until final acceptance of the work by the Jurisdiction, on all construction contracts where a building, electrical, mechanical, or plumbing permit is required by the permitting entity.
- 1. Builder's Risk Insurance by Contractor: On contracts for construction of new buildings or on contracts when Builder's Risk Insurance is applicable to the contract by definition, the Contractor shall purchase and maintain Builder's Risk Insurance for the duration of the contract; unless the Jurisdiction states by special provision that the Jurisdiction shall purchase and maintain the Builder's Risk Insurance. This property insurance, Builder's Risk Insurance, provided by the Contractor shall be in the amount of the initial bid amount, or in an amount equal to the estimated value of actual building construction, whichever is less, as well as applicable modifications thereto for the entire work at the site on a replacement cost basis. Such property insurance shall be maintained, unless otherwise provided in the contract documents or otherwise agreed in writing by all persons and entities who are beneficiaries of such insurance, until final acceptance of the work by the Jurisdiction. The insurance shall include interests of the Jurisdiction, the Contractor, subcontractors, and sub-subcontractors in the work. If the Contractor's property insurance covering the work has any deductible, the Contractor shall be responsible to pay the cost associated with the deductible. Flood and Earthquake Insurance shall be required as part of the Builder's Risk Policy, and the minimum required policy limits shall be not less than 10% of the full amount of the contract. If Boiler and Machinery Insurance is required by the contract documents or by law, the Contractor shall purchase the Boiler and Machinery Insurance if the Contractor is required to purchase the Builder's Risk Insurance. If Boiler and Machinery Insurance coverage is included in the Contractor's Builders Risk Insurance policy, it may be used to satisfy the Boiler and Machinery Insurance requirement to the extent such coverage specifically covers such objects during installation, testing, and until final acceptance by the Jurisdiction.
- 2. Builder's Risk Insurance by the Jurisdiction: When stated in the special provisions, the Jurisdiction shall purchase and maintain property insurance, a.k.a. Builder's Risk Insurance in the amount of the initial bid amount, or in an amount equal to the estimated value of actual building construction, whichever is less, as well as applicable modifications thereto for the entire work at the site on a replacement cost basis. Such property insurance shall be maintained, unless otherwise provided in the contract documents or otherwise agreed in writing by all persons and entities who are beneficiaries of such insurance, until final acceptance of the work by the Jurisdiction. The insurance shall include interests of the Jurisdiction, the Contractor, subcontractors, and sub-subcontractors in the work. The Jurisdiction will determine an appropriate deductible for the property insurance covering the

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

3. Installation Floater: On the remainder of these contracts where Builder's Risk Insurance is not applicable to a contract by definition and an Installation Floater is applicable by definition, the Contractor shall purchase and maintain an Installation Floater for the duration of the contract. This Installation Floater shall cover all materials, fixtures, equipment, and supplies provided for the job. Such insurance shall be on an "*all risk*" form in an amount equal to the maximum value of such materials, equipment, or supplies covered on the job site, off-premises at any temporary storage location, or in transit, and shall include coverage for hoisting and rigging. The Installation Floater shall be maintained until final acceptance of the work by the Jurisdiction. If the Contractor's Installation Floater covering the equipment and work has any deductible, the Contractor shall be responsible to pay the cost associated with the deductible. If Boiler and Machinery Insurance is required by the contract or by law, the Contractor shall purchase the Boiler and Machinery Insurance; the Installation Floater may be used to satisfy this requirement to the extent the Boiler and Machinery Insurance coverage specifically covers such objects during installation, testing, and until final acceptance by the Jurisdiction.

- D. Boiler and Machinery Insurance: When required by the contract documents or by law, Boiler and Machinery Insurance shall specifically cover such insured objects during installation, testing, and until final acceptance by the Jurisdiction; this insurance shall include interest of the Jurisdiction, Contractor, subcontractors, and sub-subcontractors in the work, and the Jurisdiction and Contractor shall be named insureds. A Builders Risk Insurance policy or an Installation Floater, when also required by the contract documents or by law, may satisfy this requirement as indicated in 1070, 3.05 A.1, 2. and 3. above. If Boiler and Machinery Insurance is required by the contract documents or by law, the Contractor shall purchase the Boiler and Machinery Insurance. However, if the contract, requires the Jurisdiction to purchase the Builder's Risk Insurance, the Jurisdiction shall also purchase the Boiler and Machinery Insurance.

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

1070, 3.06 ENDORSEMENT NAMING JURISDICTION AS AN ADDITIONAL INSURED / CANCELLATION AND MATERIAL CHANGE/ GOVERNMENTAL IMMUNITIES

ENDORSEMENT: Under C. delete the first full paragraph regarding the Cancellation and Material Change Endorsement language and replace it with the following:

Thirty (30) days Advance Written Notice of Cancellation, ten (10) days Written Notification of Cancellation due to non-payment of premium and forty-five (45) days Advance Written Notification of Non-Renewal shall be sent to the Jurisdiction at the office and attention of the Certificate Holder. This endorsement supersedes the standard cancellation statement on the Certificate of Insurance to which this endorsement is attached.

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, 1.02 SCOPE OF PAYMENT, Add the following D.

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

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

- C. The percentage markup to be allowed to the Contractor for extra work performed by a subcontractor shall include all overhead, profit, bond, and all subcontractor markups for changes in work and shall be in accordance with the following:
 - 1. 10% of the first \$50,000 with a \$100 minimum.
5% of the portion over \$50,000.

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

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

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

SECTION 2010 – EARTHWORK, SUBGRADE, AND SUBBASE

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

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

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

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

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

- 3. The Contractor shall comply with the following conditions when incorporating the subgrade treatments.
 - a. The Contractor shall not begin stabilization work if the following weather conditions are to happen within 24 hours after stabilization:

Temperature expected to drop below 40°F within the first 24 hours of incorporation unless approved by the Engineer.

Rain.

Wind speeds of 15 mph or greater unless approved by the Engineer prior to stabilization work.

- b. The subgrade treatment shall not be incorporated into frozen subgrade conditions.
 - c. The deviation from target range will not exceed 0.5% ± the approved mix design rate.
 - d. Contractor shall use a reclaimer machine with computerized water proportioning system that measures and applies the water directly into the mixing chamber when the machine is in motion. The treatment chemicals will be distributed via computerized vane feeder on the subgrade prior to mixing to minimize loss of treatment chemicals as dust. Dumping or blowing of treatment chemicals onto the subgrade will not be allowed.
 - e. During the compaction operation, no section shall be left undisturbed for longer than 30 minutes during compaction operations.

SECTION 3010 – TRENCH EXCAVATION AND BACKFILL

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 or Polypropylene Pipe shall be required for storm sewer construction in the Right-Of-Way or Public Easement areas. Minimum size of storm sewer pipe in the Right-Of-Way and Public Easement areas shall be 15-inch minimum diameter.

SECTION 4030 – PIPE CULVERTS

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

SECTION 4040 – SUBDRAINS AND FOOTING DRAIN COLLECTORS

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

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

4040, 2.03 TYPE 2 SUBDRAINS (COMBINATION SUBDRAIN/FOOTING DRAIN COLLECTOR), B.3. HDPE Pipe: Delete Type CP. Only Type SP is allowed in the City of Des Moines.

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

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

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

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

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

- b. Castings shall include design shown in this General Supplemental for lids on Type E, F, and G storm sewer castings shown for Figure 6101.602. The casting design is shown in the figure titled Storm Sewer Lid For the City of Des Moines.

6010, 2.13 STEPS: Delete entire Section as manhole steps are not allowed in the City of Des Moines.

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

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

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

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

SECTION 7010 – PORTLAND CEMENT CONCRETE PAVEMENT

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

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

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

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

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

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

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

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

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

7010, FIGURE 7010.101, JOINTS: On Sheet 2 of 8 under 'C' Joint in Curb add the following: The entire curb shall be sealed with Joint Sealant Material.

7010, FIGURE 7010.101, JOINTS: On Sheet 3 of 8 delete Note 11 and replace with the following Note 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 7021 – HOT MIX ASPHALT OVERLAYS

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

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

SECTION 7030 – SIDEWALKS, SHARED USE PATHS, AND DRIVEWAYS

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

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

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

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

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

7030, 3.04 PCC SIDEWALKS, SHARED USE PATHS, AND DRIVEWAYS, B. Concrete Pavement Placement, 1. Shared Use Path: Add the following sentence at the end: “When the Portland Cement Concrete is delivered to the project on the prepared subgrade or subbase, the loads shall be limited to 5 tons for single axle vehicles or 10 tons for tandem axle or larger vehicles.”

Add the following new 4:

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

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

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

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

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

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

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

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

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

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

SECTION 8030 – TEMPORARY TRAFFIC CONTROL

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

A. Traffic Control Deficiency Deduction. When the Engineer is notified, or determines a traffic control deficiency exists, he/she will notify and direct the Contractor to correct the deficiency within a specified time. The specified time, which begins upon notification to the Contractor, will be from ½ hour to 12 hours based upon the urgency of the situation and nature of the deficiency as determined by the Engineer.

A traffic control deficiency may be any lack of repair, maintenance, or non-compliance with the traffic control plan. A traffic control deficiency may also be applied to situations where corrective action is not an option such as the use of non-certified flaggers for short term operations; working with lane closures beyond the time allowed in the contract; or failure to perform required contract obligations such as traffic control surveillance.

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

SECTION 9010 – SEEDING

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

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

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

SECTION 9020 – SODDING

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

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

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

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

SECTION 9040 – EROSION AND SEDIMENT CONTROL

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

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

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

- 1. Stormwater Pollution Prevention Plan (SWPPP) Preparation:** Item includes reviewing and preparation of any modifications necessary to the general SWPPP provided by the Jurisdiction based on the Contractor's proposed scheduling and construction methods, filing a Notice of Intent for coverage of the project under the Iowa DNR NPDES General Permit No. 2, and

payment of associated NPDES permit fees. The Jurisdiction will publish the Public Notice of Storm Water Discharge and provide an affidavit of publication to the contractor.

2. **Management:** Item includes all work required to comply with the administrative provisions of the Iowa DNR NPDES General Permit No. 2; including record keeping, documentation, updating the SWPPP, filing the Notice of Discontinuation, etc. Item also includes weekly inspections required to satisfy the provisions of General Permit No. 2, unless otherwise stated in the contract documents.
3. **Inspection:** Item includes inspection of the disturbed areas, and erosion and sediment control measures performed by the contractor, at least once every seven (7) calendar days until the disturbed areas have been stabilized with a perennial vegetative cover of sufficient density to preclude erosion.
4. **Additional Erosion and Sediment Control Measures:** Item includes the cost of erosion and sediment control measures included in the contractor's modifications to the general SWPPP provided by the Jurisdiction that are either not included as bid items on the proposal or exceed 20% of the proposal unit quantity for the measure, as well as replacement of these measures if needed. The contractor will be paid at the unit bid price for additional erosion and sediment control measures constructed that are included in the contractor's modifications to the general SWPPP provided by the Jurisdiction when the quantity of these additional measures is less than or equal to 20% of the contract quantity for the measure.

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

- A. Review and prepare any modifications necessary to the general SWPPP provided by the Jurisdiction based on the Contractor's proposed scheduling and construction methods. Prepare a Stormwater Pollution Prevention Plan (SWPPP) according to the requirements of the Iowa DNR NPDES General Permit No. 2.
- B. Have the SWPPP prepared by an individual experienced in erosion and sediment control.
- C. Ensure that controls utilized in the SWPPP conform to the type and quantity of erosion and sediment controls shown in the contract documents. See 9040,1.08, 4 above for measurement for payment of any erosion and sediment control measure used that is not shown in the contract documents or exceeds 20% of the contract quantity for the measure.
- D. Submit the completed SWPPP to the Engineer for review and comment prior to filing the Notice of Intent.
- E. The Jurisdiction will publish the Public Notice of Storm Water Discharge, as required by the NPDES General Permit No. 2 and provide an affidavit of publication to the contractor.
- F. File the Notice of Intent and fee, as required by the NPDES General Permit No. 2.
- G. Prior to beginning grading, excavation, or clearing and grubbing operations, all erosion and sediment control measures identified in the SWPPP shall be installed or constructed.

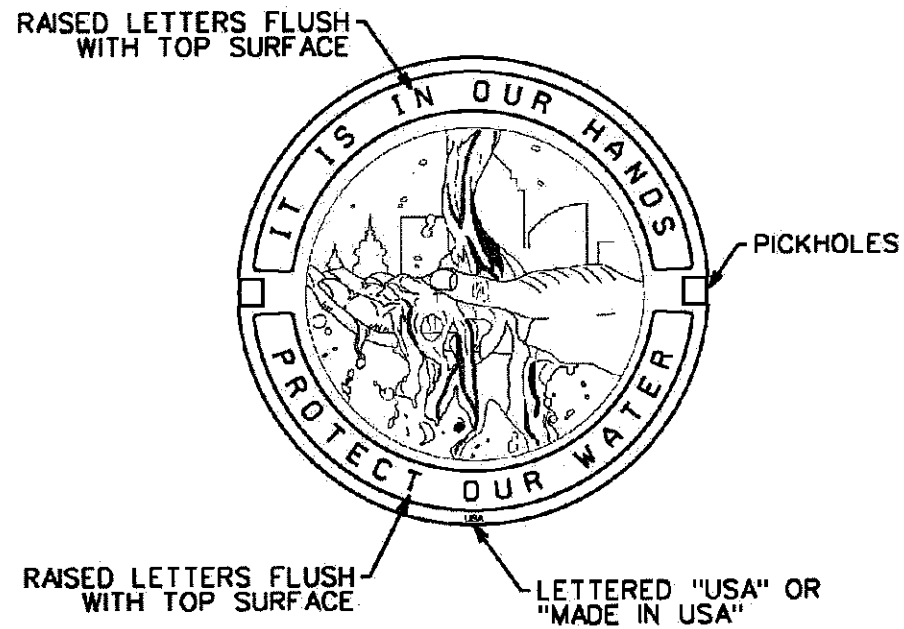
9040, 3.02 – SWPPP MANAGEMENT: Delete C. in its entirety and replace with the following C.

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

SECTION 9080 – CONCRETE STEPS AND HANDRAIL

9080, 2.01 – MATERIALS, B. Reinforcing Steel: Add the following sentence at the end: "All reinforcement shall be epoxy coated."

LID SHALL BE USED FOR TYPE E, TYPE F, AND TYPE G APPLICATIONS AS REFERENCED BY SUDAS FIGURE 6010.602.



MATERIAL: CAST GRAY IRON ASTM A-48, CLASS 35B
FINISH: NO PAINT

TITLE:	STORM SEWER LID FOR THE CITY OF DES MOINES, IOWA
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**SUPPLEMENTAL SPECIFICATION
FOR
TRAFFIC SIGNAGE**

Effective Date: September 20, 2021

Updated: October 6, 2022



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

PART 1 – GENERAL

1.01 SECTION INCLUDES

- A. Traffic Signs and Sign Posts

1.02 DESCRIPTION OF WORK

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

1.03 SUBMITTALS

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

- A. Submit a list of sign sheeting materials, post materials, and associated hardware proposed for use on the project.
- B. Submit all proposed sign layouts prior to manufacturing.

1.04 SUBSTITUTIONS

Comply with Division 1 – General Provisions and Covenants.

1.05 DELIVERY, STORAGE, AND HANDLING

Comply with Division 1 – General Provisions and Covenants.

1.06 SCHEDULING AND CONFLICTS

Comply with Division 1 – General Provisions and Covenants.

1.07 SPECIAL REQUIREMENTS

None.

1.08 MEASUREMENT AND PAYMENT

A. Remove and Reinstall Sign, as per plan:

1. **Measurement:** Each sign removed and reinstalled will be counted.
2. **Payment:** Payment will be at the unit price for each sign removed and reinstalled.
3. **Includes:** Unit price includes, but is not limited to, all material, equipment, and labor required to remove and reinstall existing sign and sign post.

B. Removal of Sign and Sign Post:

1. **Measurement:** Each sign and sign post removed will be counted.
2. **Payment:** Payment will be at the unit price for each sign and sign post removed.
3. **Includes:** Unit price includes, but is not limited to, all materials, equipment, and labor required to remove and salvage existing sign and sign post.

C. Type A Signs, Sheet Aluminum:

1. **Measurement:** Measurement will be in square feet of sheet aluminum signage installed.
2. **Payment:** Payment will be at the unit price per square feet of sheet aluminum signage installed.
3. **Includes:** Unit price includes, but is not limited to all materials, hardware, equipment, and labor required to manufacture and install traffic control signage per plans.

D. Sign Post, Round, Steel Post:

1. **Measurement:** Measurement will be in linear feet of round, steel sign post installed.
2. **Payment:** Payment will be at the unit price per linear feet of round, steel sign post installed.
3. **Includes:** Unit price includes, but is not limited to all materials, hardware, equipment, and labor required to install round, steel sign post per plans.

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

1. **Measurement:** Measurement will be in linear feet of perforated, square steel tube post installed.
2. **Payment:** Payment will be at the unit price per linear feet of perforated, square steel tube post installed.
3. **Includes:** Unit price includes, but is not limited to materials, hardware, equipment, and labor required to install perforated, square steel tube post per plans.

F. Meter Post, Round, Steel Post:

1. **Measurement:** Measurement will be in linear feet of round, steel sign post installed.
2. **Payment:** Payment will be at the unit price per linear feet of round, steel sign post installed.
3. **Includes:** Unit price includes, but is not limited to all materials, hardware, equipment, and labor required to install round, steel sign post per plans.

PART 2 – PRODUCTS

2.01 SIGN MATERIALS

A. General:

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

1. All blanks shall be 0.080 inches thick with the following exceptions:
 - a. If either the length or width dimension of a sign is 36 inches or greater, the blank shall be 0.125 inches thick.
 - b. Eighteen inch street name signs shall be 0.125 inches thick.
2. Blanks shall be finished free of any surface or edge burrs, cut marks, or other irregularities.
3. Standard signs shall be pre-drilled with standard hardware holes (0.375 inch diameter) and have no burrs or excess material retained in or around the hole. Holes placement and radii shall conform to the Standard Highway Signs Manual, current edition.
4. A diagram showing the location of holes for specialty signs will be provided prior to catalog cut submittal.
5. 18 inch and 24 inch street name signs shall not be pre-drilled. 8 inch and 12 inch signs shall be drilled as shown below in the Street Name Sign Hole Punch Detail.

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

B. Sheeting Requirements:

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

1. Pedestrian pushbutton and parking prohibition signs (including no parking, loading zone, handicap, etc.) shall be made of ASTM D4956 Type I (3M Engineer Grade Prismatic or equal) reflective sheeting with a seven year performance warranty.
2. Construction signs shall be made of ASTM D4956 Type IV (3M High Intensity Prismatic or equal) reflective sheeting with a ten year performance warranty.
3. Material for specialty signs will be specified at the time of order.

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

C. Street Name Signs:

1. All street name signs shall be single-sided

2. The length of the street name sign shall be in 6 inch increments and will vary based on the legend.
3. Lettering shall be white and the background shall be blue or green transparent, acrylic film with pressure sensitive adhesive for application over reflective sheeting ("EC" film). The background color will be specified at the time of order.
4. Lettering shall be Series B as outlined in the Standard Highway Signs Manual.
5. All 18 inch and 12 inch signs shall have a white border as shown in the attached detail.
6. Letter size and spacing shall conform to the MUTCD and the attached details. In cases where descending lower-case letters (g, j, p, q, and y) cannot be accommodated on the specified blank, the City will work with the manufacturer to modify the letter size or blank size.
7. A shop drawing showing the sign legend, sign length, letter heights and spacing shall be submitted for one 18 inch, 12 inch and 8 inch street name sign prior to making the sign.
8. 18 inch and 12 inch street name signs shall be made of ASTM D4956 Type XI (3M Diamond Grade or equal) reflective sheeting with a ten year performance warranty. Eight (8) inch street name signs shall be made of ASTM D4956 Type IV (3M High Intensity Prismatic or equal) reflective sheeting with a ten year performance warranty.

2.02 POST MATERIALS

- A. Round, Steel Post:** Steel posts shall be 2 inch round galvanized post, Schedule 40.
- B. Perforated Square Tube Post:** posts shall be 1 ¾ inch square, 14-gauge galvanized steel, perforated post.

PART 3 – EXECUTION

3.01 SIGN INSTALLATION

- A. Mounting Height:** The mounting height of the sign shall be seven feet to bottom of sign measured from top of grade. When multiple signs are located on one pole/post, the height to the bottom of the lowest sign must seven feet. Gap between signs must be one inch.
- B. Lateral Offset:** Signs posts shall be located so the minimum distance from the face of curb to the near edge of the sign is two feet. Lateral distance may be adjusted for utility conflicts. Sign shall not overhang the curb.

3.02 SIGN MOUNTING HARDWARE

- A. Sign Installed on Square Posts:** When signs are installed on square perforated posts, the following hardware shall be used as shown in the installation detail:
 1. 5/16 inch zinc-plated, Grade A bolt, 2 ½ inches long.
 2. 5/16 inch stainless steel flat washer, 0.75 inch outside diameter (OD).
 3. 5/16 inch nylon washer with one inch outside diameter.
 4. 5/16 inch zinc-plated nut.

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

1. 5/16 inch stainless steel flat washer, 0.75 inch outside diameter (OD).
2. 5/16 inch nylon washer with one inch outside diameter.
3. 5/16 inch zinc-plated nut.
4. Aluminum interlocking brackets for 2 3/8 inch OD posts with 1 ½ inch long zinc-plated, Grade A bolts, 5/16 inch diameter.

C. Sign Installed on Wood Utility Pole: When signs are installed on wood utility poles the following hardware shall be used as shown in the installation detail:

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

The use of banding on wood poles is not allowed.

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

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

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

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

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

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

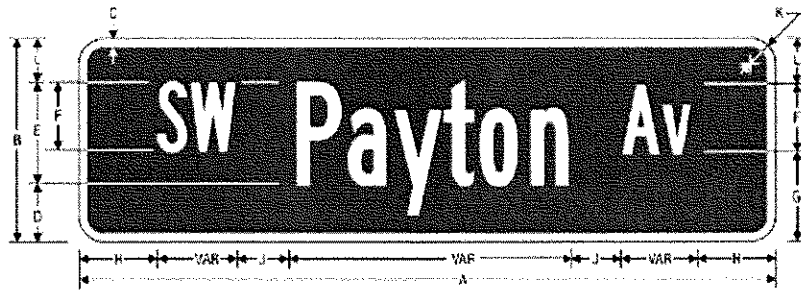
1. 5/16 inch zinc-plated, Grade A bolt, 2 ½ inches long
2. 5/16 inch stainless steel flat washer, 0.75 inch outside diameter (OD)
3. 5/16 inch nylon washer with one inch outside diameter
4. 5/16 inch zinc-plated nut
5. 1/2 inch I.D. x 1-9/16 inch long CPVC Plastic Spacer

3.03 POST ASSEMBLIES AND INSTALLATION

- A. General:** Posts shall be of a length to meet the bury requirements identified in the plan details and to extend to the top of the highest mounted sign.
- B. Median Installation:** When sign posts are installed within concrete medians the following post and anchors shall be used and installed per the detail shown in the construction plans:
1. 1 ¾ inch square, 14 gauge galvanized steel, perforated post.
 2. 2 inch square, 12 gauge galvanized steel, perforated breakaway anchor – 36 inch long.
 3. 2 ¼ inch square, 12 gauge galvanized steel, perforated breakaway anchor – 36 inch long.
- C. Concrete Installation – Embedded:** When round posts are embedded in concrete the following post and Speed-E-Roc grout shall be used per the detail shown in the construction plans:
1. 2 inch round galvanized post, Schedule 40.
 2. Grout.
- D. Concrete Installation – Plate-mounted:** Where posts are installed on bridge decks or in concrete areas where embedment is not possible, a 6 inch square, 3/8 inch thick steel plate shall be continuously welded to the bottom of the pole.
- E. Grass Installation:** When sign posts are installed within grass the following post and anchors shall be used and installed per the detail shown in the construction plans:
1. 1 ¾ inch square, 14 gauge galvanized steel, perforated post.
 2. 2 inch square, 12 gauge galvanized steel, perforated breakaway anchor – 36 inch long.

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

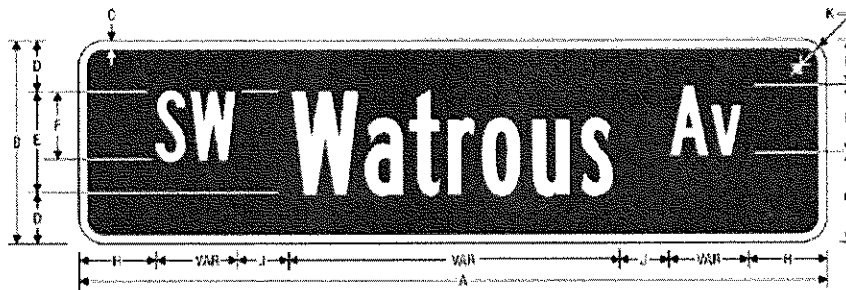
12 INCH STREET NAME SIGN DETAILS



Named Street Name Sign with Border and Descending Stroke

A	B	C	D	E	F	G	H	J	K	L
Varies in 6" Increments	12	0.5	3.5	6 B	4 B	5.5	3.5 (MIN)	3	1.5	2.5

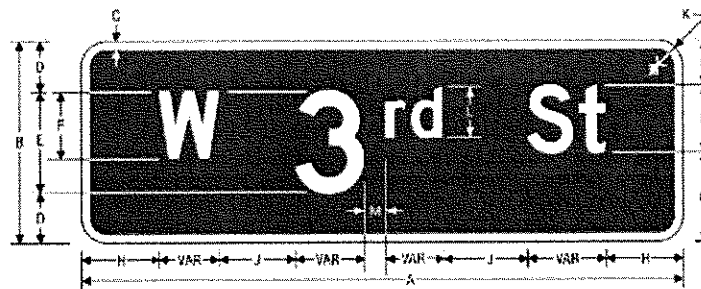
Colors: Legend, Border White, 3M Diamond Grade (DG3) Sheeting
 Background Green, 3M ElectroCut Film
 Background (Alternate) Blue or other specified, 3M ElectroCut Film



Named Street Name Sign with Border

A	B	C	D	E	F	G	H	J	K
Varies in 6" increments	12	0.5	3	6 B	4 B	5	3.5 (MIN)	3	1.5

Colors: Legend, Border White, 3M Diamond Grade (DG3) Sheeting
 Background Green, 3M ElectroCut Film
 Background (Alternate) Blue or other specified, 3M ElectroCut Film

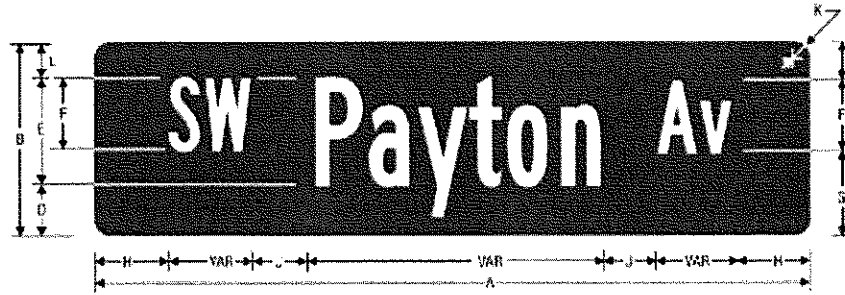


Numbered Street Name Sign with Border

A	B	C	D	E	F	G	H	J	K	L	M
Varies in 6" Increments	12	0.5	3	6 B	4 B	5	3.5 (MIN)	3	1.5	3	1
Varies in 6" Increments	18	0.75	3	12 B	6 B	9	4.75 (MIN)	4	1.875	5	2

Colors: Legend, Border White, 3M Diamond Grade (DG3) Sheeting
 Background Green, 3M ElectroCut Film
 Background (Alternate) Blue or other specified, 3M ElectroCut Film

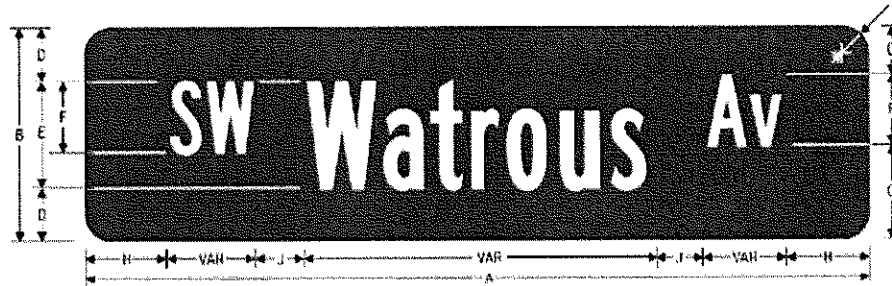
8 INCH STREET NAME SIGN DETAILS



Named Street Name Sign without Border and Descending Stroke

A	B	C	D	E	F	G	H	I	J	K	L
Varies in 6" increments	8	2.5	4 B	3 B	3.5	2 (MIN)	2.5	1	1.5		

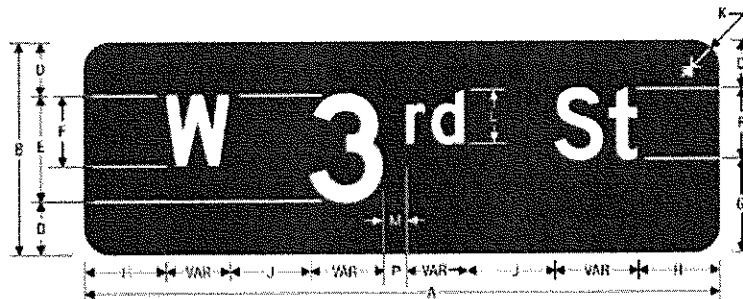
Colors: Legend, Border White, 3M High Intensity Prismatic (HIP) Sheeting
 Background Green, 3M ElectroCut Film
 Background (Alternate) Blue or other specified, 3M ElectroCut Film



Named Street Name Sign without Border

A	B	C	D	E	F	G	H	I	J	K
Varies in 6" increments	8	2	4 B	3 B	3	2 (MIN)	2.5	1		

Colors: Legend, Border White, 3M High Intensity Prismatic (HIP) Sheeting
 Background Green, 3M ElectroCut Film
 Background (Alternate) Blue or other specified, 3M ElectroCut Film

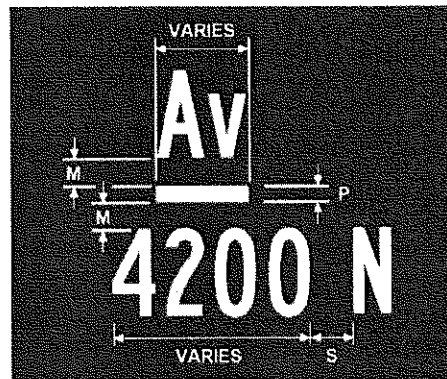
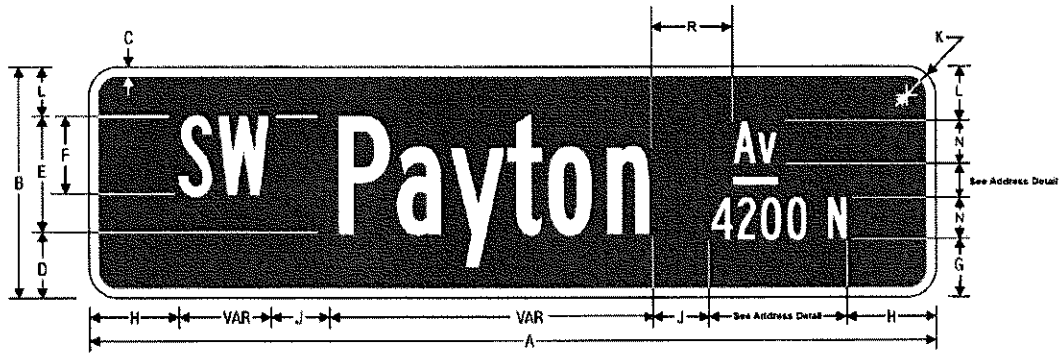


Numbered Street Name Sign without Border

A	B	C	D	E	F	G	H	I	J	K	L	M
Varies in 6" increments	8	2	4 B	3 B	3	2 (MIN)	2.5	1	2	0.75		

Colors: Legend, Border White, 3M High Intensity Prismatic (HIP) Sheeting
 Background Green, 3M ElectroCut Film
 Background (Alternate) Blue or other specified, 3M ElectroCut Film

OVERHEAD STREET NAME SIGN DETAILS

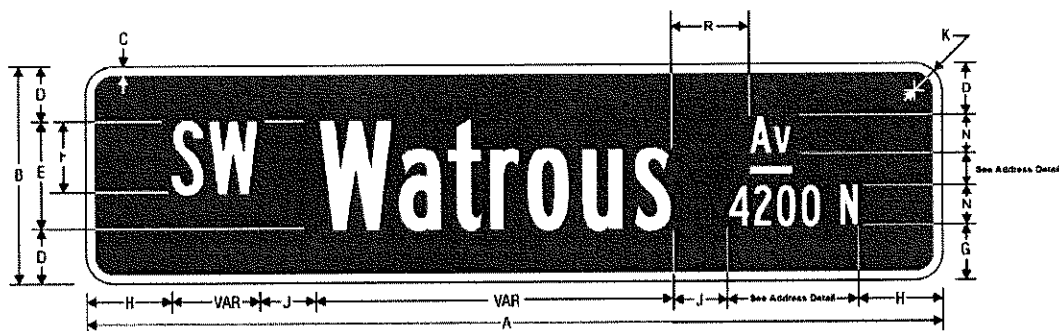


Address Detail

Overhead Street Name Sign with Block Address and Descending Stroke

A	B	C	D	E	F	G	H	J	K	L	M	N	P	R	S
Varies in 6" increments	24	1	7	12 B	6 B	7.75	5 (MIN)	4	2.25	5	1.25	4 B	0.75	6	2

Colors: Legend, Border White, 3M Diamond Grade (DG3) Sheeting
Background Green, 3M ElectroCut Film
Background (Alternate) Blue or other specified, 3M ElectroCut Film

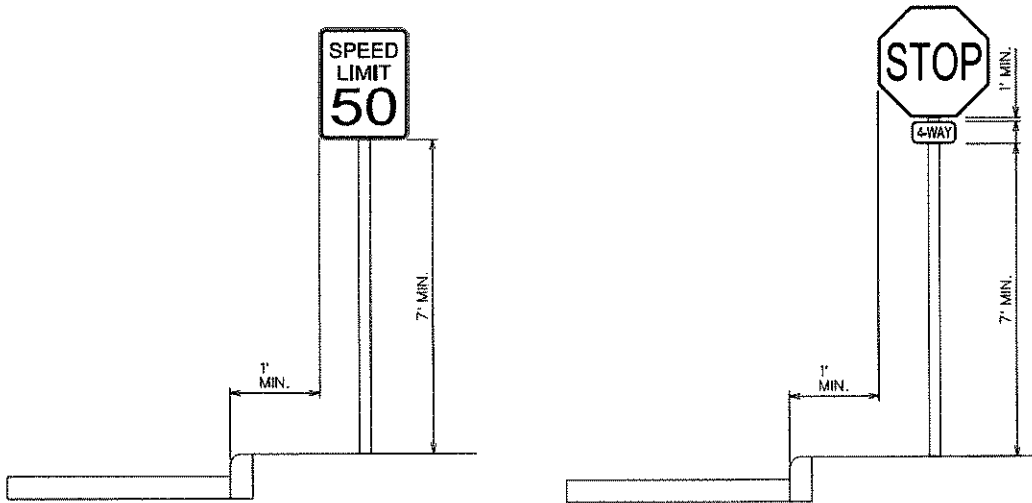


Overhead Street Name Sign with Block Address

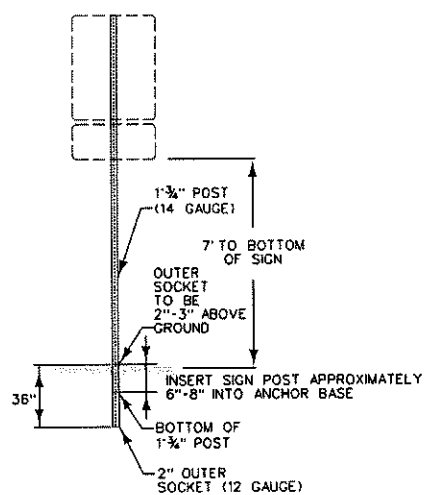
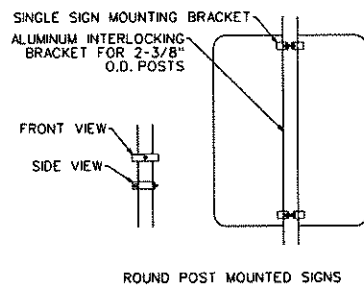
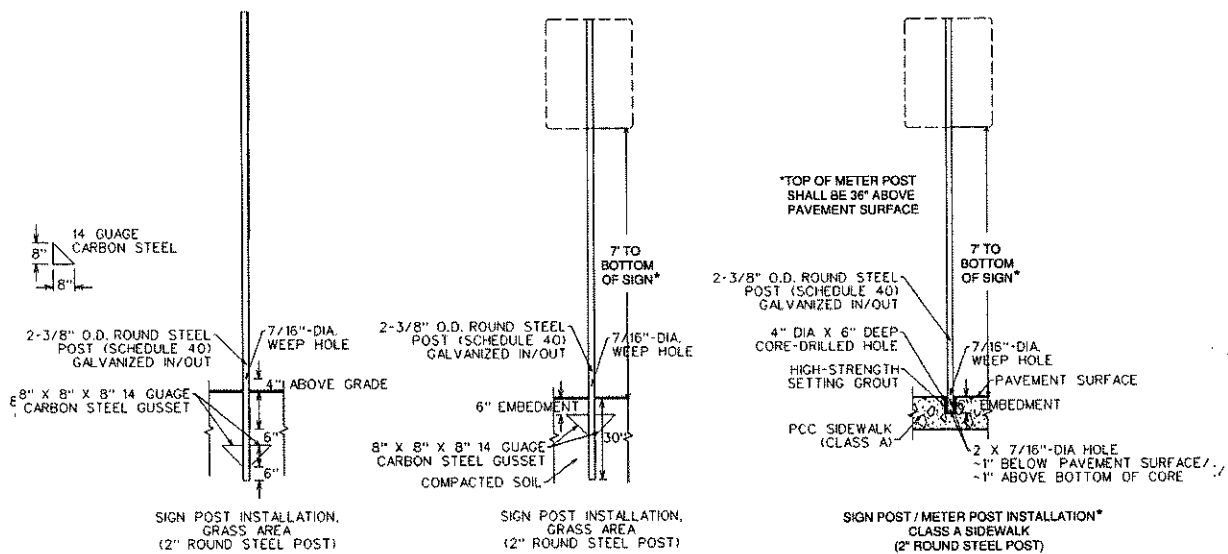
A	B	C	D	E	F	G	H	J	K	M	N	P	R	S
Varies in 6" increments	18	0.75	3	12 B	6 B	3.75	5 (MIN)	4	1.875	1.25	4 B	0.75	6	2

Colors: Legend, Border White, 3M Diamond Grade (DG3) Sheeting
Background Green, 3M ElectroCut Film
Background (Alternate) Blue or other specified, 3M ElectroCut Film

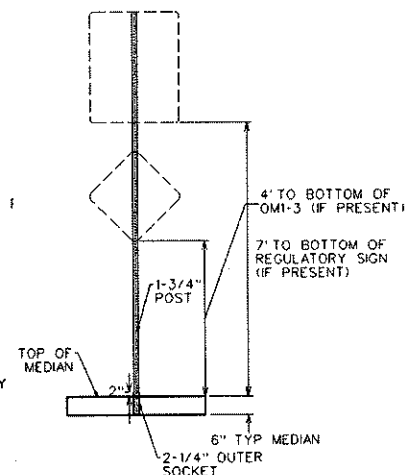
SIGN INSTALLATION DETAILS



TYPICAL SIGN INSTALLATION

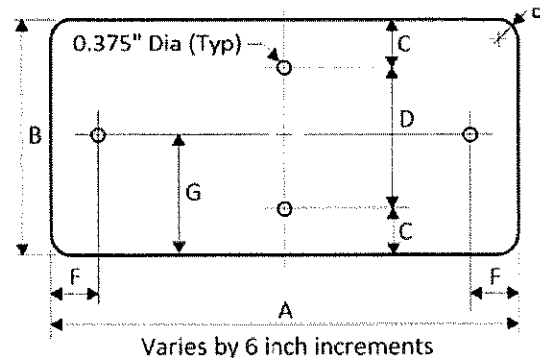
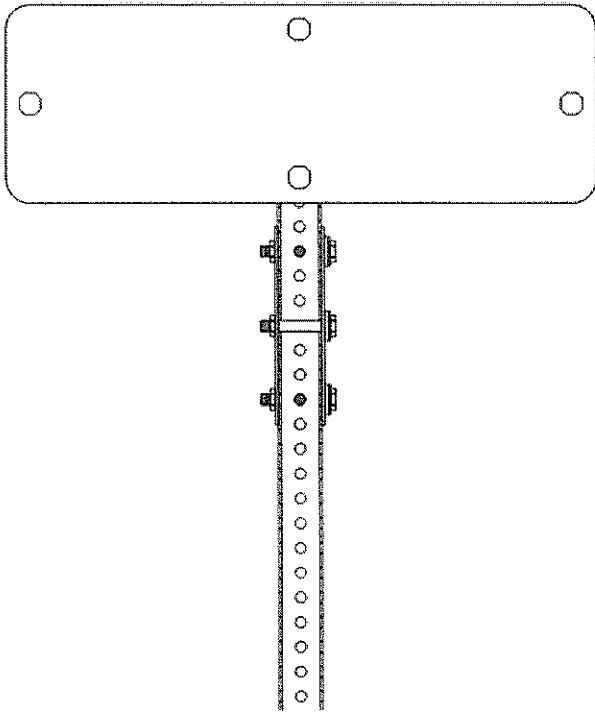


SIGN POST INSTALLATION GRASS AREAS
(SQUARE PERFORATED POST)



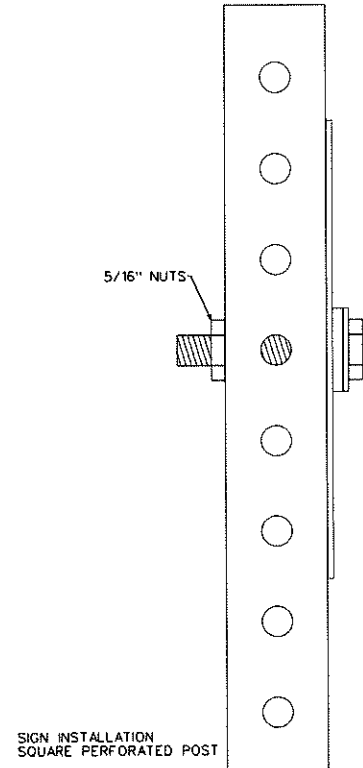
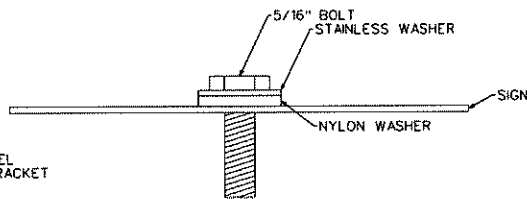
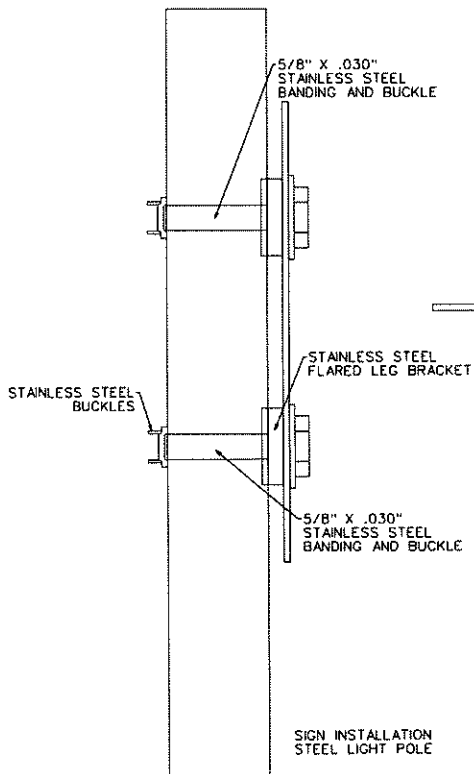
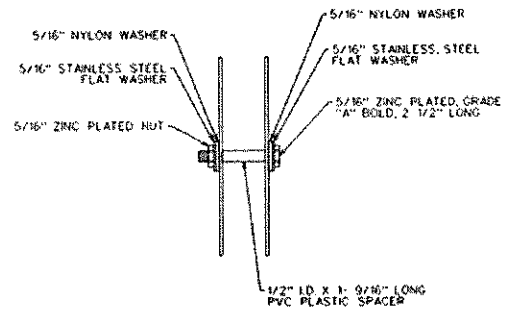
SIGN POST INSTALLATION,
RAISED PCC MEDIAN
SQUARE PERFORATED POST

SIGN DETAILS



Street Name Sign Hole Punch Detail

A	B	C	D	E	F	G
Varies by 6" increments (Min 24")	8	1	6	0.75	1	4
Varies by 6" increments (Min 30")	12	1.5	9	1.5	1.5	6



NOTE: ALL FASTENERS TO BE STAINLESS STEEL