Washington County
MARYLAND
DIVISION OF ENGINEERING

Addendum No. 1

To: Interested Parties

From: John Van Riper, Project Engineer
Division of Engineering

Date: Monday August 12, 2019

Project: Parking Facility for 49 Jonathan Street

Acknowledge receipt of this **Addendum No. 1** by signing in the space provided below and returning with your Bid.

Failure to sign and return with your bid may subject the Bidder to disqualification. This **Addendum No. 1** forms a part of the Bid Documents, its supplements and modifies them as outlined herein.

This **Addendum No. 1** consists of 39 pages, including this page.

I hereby acknowledge receipt of **Addendum No. 1**:

By: _____ Date _____
Signed Name

_____
Typed Name

_____
Title

For (Firm): _____

Addendum No. 1

Parking Facility for 49 Jonathan Street

Date Issued: Monday, August 12, 2019

Bids Due: Friday, August 23, 2019 11:00 a.m., local time

The following addendum material is hereby made a part of the Bid Documents. Please note the following changes, information, and/or instructions in connection with the proposed work and submit proposals accordingly.

John E. Van Riper, Project Engineer

By Authority of:
Board of County Commissioners
Washington County, Maryland

Pam Mohn, P.E.
Chief of Design
Division of Engineering

Addendum No. 1

Item 1.01 Pre-Bid Meeting Minutes: Held Wednesday, August 7, 2019. Ten (10) total pages of meeting minutes are included herein as follows: Pre-Bid Conference Meeting Minutes (3 pages) (Attachment"A"); Pre-bid Agenda (1 page) (Attachment "B"); Pre-bid Sign-In Sheet (1 page) (Attachment "C"), and Exhibits (5 Pages) (Attachment D) all of which shall be incorporated into the Contract Document as attached.

Item 1.02 Revised and updated Bid Forms (Attachment "E") and Special Provisions (Attachment "F") are included as Attachments. Replace the Bid Forms for Section 700 in their entirety with those included in Attachment "E". These items shall be incorporated into the Contract Document as attached.

Attachment A

Pre-Bid Conference Meeting Minutes

Washington County
MARYLAND
DIVISION OF ENGINEERING

PARKING FACILITY FOR 49 JONATHAN STREET

County Contract No. MS-PF-267-28

Pre-Bid Meeting Minutes
Wednesday, August 7, 2019 at 11:00 a.m.

A Pre-Bid Conference Meeting for the referenced project was held at the Washington County Administrative Annex Building, located at 80 West Baltimore Street, Hagerstown, Maryland. The Sign in Sheet is Attachment No. 1, the Meeting Agenda is Attachment No. 2, and Project Exhibits are Attachment No. 3. Comments from the meeting are as follows:

PB1. Welcome/Introductions

-Introductions were conducted and the meeting Agenda (Attachment B) and sign-in sheet (Attachment "C") were circulated to all attendees.

PB2. Project Overview

-The project involves construction of a new parking lot located adjacent to 49 Jonathan Street widening of Wareham Alley, landscaping for 117 W. Franklin Street Parking Lot, and sidewalk work along Jonathan street for 100 W. Washington Street. The project consists of concrete removal, grading, paving, concrete curbing, concrete sidewalks, inlet and pipe installation and landscaping.

PB3. Project Classification

-The project Classification is Cost Group Class "B" $100,001 Up to $500,000.

PB4. Invitation to Bid, Time of Completion & Liquidated Damages

-Bids are due Friday, August 23, 2019 at 11:00 at which time they will be opened publicly.
-The detached set of bid forms included with the purchase of bid documents shall be used in submitting contractor bids. All bid submittals envelopes must be marked accordingly.
-A bid security in the amount of 5% of the total bid price made payable to the Board of County Commissioners of Washington County, Maryland shall accompany each submitted bid.
-Any questions plan holders have in regards to the project can be submitted to the Division of Engineering by Wednesday, August 14, 2019 at 4:30 pm through email (**ecbidquestions@washco-md.net**) or fax (**240-313-2401**)
-This is a 60 consecutive calendar day contract.
-Anticipated Notice to Proceed is September 23, 2019 with a completion date of November 22, 2019
-Liquidated Damages are in the amount of $250.00 for each consecutive calendar day that the contract extends beyond the scheduled completion date.
-Bid are irrevocable and may not be withdrawn for 90 days following Bid Opening.

PB5. Special Provisions

-Two pay items will be added to the Special Provisions to account for the work that pertains to the ornamental fence and pillars associated with landscaping at 117 W. Franklin Street Lot. See Attachment E and F of Addendum No. 1.

-Trash and debris clean-up at the side of 49 Jonathan Street building will be incidental to the landscaping item No. 701 "PLACING FURNISHED TOPSOIL, 4" DEPTH" found in the Special Provisions

PB6. Exhibits

-The County reviewed the location map identifying the areas in which work will be performed and identified areas in which close attention must be paid during traffic control operations. Work being performed at or along Wareham Alley must allow for access of County employees to and from the parking lot at the rear of 100 W. Washington Street at all times.

-Milling and overlay work required on Wareham Alley is to be performed on Saturday or Sunday as to not disrupt access to the adjacent County parking lots.

-While performing sidewalk work along Jonathan Street in which ornamental fence is present, the contractor is responsible for ensuring no damage is incurred to the fence or posts during construction. Any repairs required will be paid for at the contractor's expense.

PB7. Permits

-Contractor is required to obtain any construction permits from the City of Hagerstown prior to construction.

-Permit is required for the lane closure on Franklin Street to perform the water meter disconnect. The County will facilitate acquisition of the permit for the lane closure on Franklin Street prior to work on the water meter being performed.

PB8. Questions

Q1: Will the landscaping take place during normal working hours?

A1: The landscaping will have to be performed in and around vehicles during normal working hours. The lot will be unoccupied during the evenings and on weekends for easier construction

Q2: What item is the trash clean up part of?

A2: The trash cleanup along the side of 49 Jonathan Street is incidental to the Landscaping item No. 701 - PLACING FURNISHED TOPSOIL, 4" DEPTH

Q3: What about the heating element lines located under the brick?

A3: There are no heating element lines located under the brick behind 100 W. Washington Street and there are no future plans to add lines.

PB9. Addenda and Interpretations

-Submit additional bid inquiries in writing by 4:30 P.M. on Wednesday, August 14, 2019. via email at ecbidquestions@washco-md.net; or faxed to (240)313-2401.

-Contract Addenda will be issued to all plan holders via email and will also be uploaded to EMaryland Marketplace. Addenda will include minutes from today's pre-bid conference meeting.

PB 10. Bid Due Date & Location

-Sealed bid properly designated are due by 11:00 A.M., Friday, August 23, 2019, after which time they will be publicly opening in a conference room located at 80 W. Baltimore Street, Hagerstown Maryland 21740. Bidders are encouraged to attend the public bid opening.

PB 12. Meeting Adjournment

-The meeting was adjourned at 11:28 am.

Attachment B

Pre-Bid Conference Meeting Agenda

Washington County
MARYLAND
DIVISION OF ENGINEERING

Parking Facility for 49 Jonathan Street

County Contract No. MS-PF-267-28

Pre-Bid Meeting Agenda
Wednesday, August 7, 2019 at 11:00 a.m.

PB1. Welcome/Introductions

PB2. Project Overview

PB3. Invitation to Bid, Time of Completion & Liquidated Damages

PB4. Special Provisions

PB5. Exhibits

PB6. Permits

PB7. Questions

PB8. Addenda and Interpretations
-Email: ecbidquestions@washco-md.net;
-Fax No: (240)313-2401.

PB 9. Bid Due Date & Location

PB 10. Meeting Adjournment

Attachment C
Pre-Bid Sign in Sheet

DATE: Wednesday August 7, 2019, 11:00 a.m. local time

CONTRACT NO.: MS-PF-267-28
PROJECT NO. 28-267

WASHINGTON COUNTY ENGINEERING

ATTENDANCE SIGN-IN SHEET *FOR* PRE-BID CONFERENCE

FOR

PARKING FACILITY FOR 49 JONATHAN STREET

Representative Name, Title	Firm/Agency	Phones, Office & Cell /Fax /E-mail
John E. Van Riper, Project Engineer	Washington County MD Division of Engineering	O: 240.313.2408 Fax: 240.313.2401 jvanriper@washco-md.net
Blair Reynolds Project Manager	Washington County MD Division of Engineering	O: 240.313.2420 Fax: 240.313.2401 breynolds@washco-md.net
Greg Jones Project CAD Technician	Washington County MD Division of Engineering	O: 240.313.2409 Fax: 240.313.2401 gjones@washco-md.net
Don Pyatt Estimator	Huntzberry Brothers Inc. 21536 Chewsville Rd Smithsburg MD	(301)739-8036 don@huntzberrybrothers.com
Jimmy Rowland Will Hawfield Foreman	Outdoor Contractors 14703 Indian Springs rd Hancock MD	301-582-4997 Jim@outdoorContractors.com
Ryan Dougall L.W Wolfe Enterprises Estimator/PM	L.W Wolfe Enterprises 10730 Baltimore National Pike Myersville, MD 21773	301-293-2351 rdougall.lwwolfe@gmail.com

Attachment D

EXHIBITS

Parking Facility for 49 Jonathan Street Work


Wareham Pl
07/19/2019


CITY CENTER
07/19/2019


07/19/2019


07/19/2019


07/19/2019


07/19/2019


07/19/2019


07/19/2019

Attachment E
Revised Bid Forms

ITEM	CODE	QUANTITY	UNIT	ITEM DESCRIPTION	UNIT PRICE		ITEM TOTAL	
101		LUMP SUM	L.S.	MOBILIZATION	_____	___	_____	___
102		LUMP SUM	L.S.	MAINTENANCE OF TRAFFIC	_____	___	_____	___
103		LUMP SUM	L.S.	CONSTRUCTION STAKEOUT	_____	___	_____	___
104		500	L.F.	TEMPORARY ORANGE CONSTRUCTION FENCE	_____	___	_____	___
End Category 100								
Contract No. MS-PF-267-28								
Addendum 1					Total This Sheet		_____	___

ITEM	CODE	QUANTITY	UNIT	ITEM DESCRIPTION	UNIT PRICE		ITEM TOTAL	
201		400	C.Y.	UNCLASSIFIED EXCAVATION	_____	___	_____	___
202		100	C.Y.	CONTINGENT UNSUITABLE MATERIAL EXCAVATION	_____	___	_____	___
203		27	L.F.	REMOVAL OF EXISTING CONCRETE WALL	_____	___	_____	___
204		60	S.Y.	REMOVAL OF EXISTING SIDEWALK AND CURB	_____	___	_____	___
205		90	S.Y.	REMOVAL OF EXISTING SIDEWALK	_____	___	_____	___
206		25	S.Y.	REMOVAL OF EXISTING DRIVEWAY ENTRANCE	_____	___	_____	___
207		50	S.Y.	REMOVAL OF EXISTING CONCRETE SURFACE	_____	___	_____	___
					Total This Sheet		_____	___

End Category 200
Contract No. MS-PF-267-28
Addendum 1

ITEM	CODE	QUANTITY	UNIT	ITEM DESCRIPTION	UNIT PRICE		ITEM TOTAL	
301		LUMP SUM	L.S.	REMOVAL OF EXISTING INLET AND PIPE	_____	___	_____	___
302		100	C.Y.	SELECTED BACKFILL	_____	___	_____	___
303		22	L.F.	REINFORCED CONCRETE PIPE, CLASS IV	_____	___	_____	___
304		1	EACH	MODIFIED WR INLET	_____	___	_____	___
305		50	CY	CONTINGENT SELECT BACKFILL USING CRUSHER RUN AGGREGATE CR-6	_____	___	_____	___
306		1	EACH	CONCRETE DRAINAGE SWALE	_____	___	_____	___
308		LUMP SUM	L.S.	EROSION AND SEDIMENT CONTROL	_____	___	_____	___

End Category 300
Contract No. MS-PF-267-28
Addendum 1

Total This Sheet _____ ___

ITEM	CODE	QUANTITY	UNIT	ITEM DESCRIPTION	UNIT PRICE		ITEM TOTAL	
401		LUMP SUM	L.S.	REMOVAL OF EXISTING CHAIN LINK FENCE	_____	___	_____	___
402		LUMP SUM	L.S.	REMOVAL OF EXISTING WATER METER TILE AND DISCONNECT AT WATER MAIN	_____	___	_____	___
End Category 400 **Contract No. MS-PF-267-28** **Addendum 1**				Total This Sheet			_____	___

ITEM	CODE	QUANTITY	UNIT	ITEM DESCRIPTION	UNIT PRICE		ITEM TOTAL	
501		650	S.Y.	6" GRADED AGGREGATE BASE COURSE	_____	___	_____	___
502		100	TON	HOT MIX ASPHALT SUPERPAVE SURFACE, 9.5mm	_____	___	_____	___
503		75	TON	HOT MIX ASPHALT SUPERPAVE BASE, 12.5mm	_____	___	_____	___
504		120	TON	HOT MIX ASPHALT SUPERPAVE BASE, 19.0mm	_____	___	_____	___
505		175	L.F.	SAW CUTTING	_____	___	_____	___
506		LUMP SUM	L.S.	PAVEMENT MARKINGS	_____	___	_____	___
507		500	S.Y.	MILLING HOT MIX ASPHALT PAVEMENT 2" DEPTH	_____	___	_____	___
508		100	L.F.	CONTINGENT: PAVING FABRIC FOR JOINT REPAIR	_____	___	_____	___
					Total This Sheet		_____	___

End Category 500
Contract No. MS-PF-267-28
Addendum 1

ITEM	CODE	QUANTITY	UNIT	ITEM DESCRIPTION	UNIT PRICE		ITEM TOTAL	
601		280	L.F.	6" CONCRETE CURB	_____	___	_____	___
602		75	L.F.	6" CONCRETE CURB AND GUTTER	_____	___	_____	___
603		1525	S.F.	CONCRETE SIDEWALK	_____	___	_____	___
604		350	S.F.	CONCRETE DRIVEWAY ENTRANCE	_____	___	_____	___
605		1	EACH	HANDICAP SIDEWALK RAMP	_____	___	_____	___
606		10	S.F.	CAST-IN-PLACE REPLACEABLE DETECTABLE WARNING SURFACES	_____	___	_____	___
				Total This Sheet			_____	___

End Category 600
Contract No. MS-PF-267-28.
Addendum 1

ITEM	CODE	QUANTITY	UNIT	ITEM DESCRIPTION	UNIT PRICE		ITEM TOTAL	
701		250	S.Y.	PLACING FURNISHED TOPSOIL, 4" DEPTH	_____	___	_____	___
702		800	S.Y.	TURFGRASS ESTABLISHMENT	_____	___	_____	___
703		2	EACH	MORAIN HONEYLOCUST (GLEDITSIA TRIACANTHOS)	_____	___	_____	___
704		10	EACH	YOSHINO CHERRY (PRUNUS YEODENSIS)	_____	___	_____	___
705		8	EACH	GOLDFLAME SPIREA (SPIRES JAPONICA)	_____	___	_____	___
706		3	EACH	AUTUMN BLAZE RED MAPLE (ACER REDBRUM)	_____	___	_____	___
707		2	EACH	BLUE PRINCE HOLLY (ILEX MESERVAEAE)	_____	___	_____	___
708		8	EACH	BLUE PRINCESS HOLLY (ILEX MESERVAEAE)	_____	___	_____	___
					Total This Sheet		_____	___

ITEM	CODE	QUANTITY	UNIT	ITEM DESCRIPTION	UNIT PRICE		ITEM TOTAL	
709		53	EACH	ELIJAH BLUE FESCUE (FESTUCA GLAUCA)	_____	___	_____	___
710		32	EACH	JAPANESE BARBERRY (BERBERIS THUNBERGII)	_____	___	_____	___
711		3	EACH	JAPANESE LILAC (SYRINGA RETICULATE)	_____	___	_____	___
712		42	EACH	LILYTURF (LIRIOPE MUSCARI)	_____	___	_____	___
713		6	EACH	SERVICEBERRY (AMELANCHIER GRANDFLORA)	_____	___	_____	___
714		7	EACH	JAPANESE SILVER GRASS VARIEGATED (MISCANTHUS SINENSIS)	_____	___	_____	___
715		8	EACH	MAIDEN GRASS (MISCANTHUS SINENSIS)	_____	___	_____	___
716		285	L.F.	DECORATIVE METAL FENCE AND GATES	_____	___	_____	___
					Total This Sheet		_____	___

Contract No. MS-PF-267-28
Addendum 1

ITEM	CODE	QUANTITY	UNIT	ITEM DESCRIPTION	UNIT PRICE		ITEM TOTAL	
717		2	EACH	MAIN ENTRANCE BRICK PILLAR	_____	___	_____	___

End Category 700
Contract No. MS-PF-267-28
Addendum 1

Total This Sheet _____ ___

ITEM	CODE	QUANTITY	UNIT	ITEM DESCRIPTION	UNIT PRICE		ITEM TOTAL	
801		8	S.F.	PERMANENT TRAFFIC SIGNS	_____	___	_____	___

End Category 800
Contract No. MS-PF-267-28
Addendum 1

Total This Sheet _____ ___

Attachment F
Revised Special Provisions

Item No. 716 - DECORATIVE METAL FENCE AND GATES

PART 1 - GENERAL

1.1 SUMMARY

A. Introduction: Specifications have been developed using DSI (Digger Specialties Inc.) specifications for their Courtyard 1000 Series Aluminum Fencing. Approved equals will be accepted.

B. Work Results:

1. Provide aluminum fence. Refer to project drawings.

C. Principal Products:

1. Fence posts.
2. Fence rails.
3. Fence post caps.
4. Fence rail pickets.

1.2 ADMINISTRATIVE REQUIREMENTS

A. Coordination: Coordinate Work with project Landscaping contractors

1.3 ACTION SUBMITTALS

A. Product Data: Manufacturer's product lines for fencing assembled from standard components.

1. Include construction details, material descriptions, dimensions of individual components and profiles, and finishes.
2. Include rated capacities, furnished specialties, and accessories.

B. Shop Drawings:

1. Include plans, elevations, sections, and foundation details.
2. Include details of equipment assemblies. Indicate dimensions, weights, loads, required clearances, method of field assembly, components, and location and size of each field connection.

1.4 INFORMATIONAL SUBMITTALS

A. Qualification Data: For manufacturer and Installer.

B. Sample Warranty: For manufacturer's warranty.

C. Welding Certificates.

1.5 CLOSEOUT SUBMITTALS

A. Cleaning Instructions.

1.6 QUALITY ASSURANCE

A. Manufacturer Qualifications: A fencing system manufacturer who is a member in good standing with PCI and AAMA.

B. Mockups: Mockups are not required for this project.

1.7 DELIVERY, STORAGE, AND HANDLING

A. Delivery and Acceptance Requirements: Deliver materials to site in manufacturer's original, unopened containers and packaging, with labels clearly identifying product name and manufacturer.

B. Storage and Handling Requirements:

1. Store and handle materials in accordance with manufacturer's instructions.
2. Keep materials in manufacturer's original, unopened containers and packaging until installation.
3. Store materials in clean, dry area.
4. Keep materials dry.
5. Protect materials and finish during storage, handling, and installation to prevent damage.

1.8 WARRANTY

A. Manufacturer's Warranty: Manufacturer agrees to repair or replace components of fencing and gate system that fail in materials or workmanship within specified warranty period.

1. Warranty does not include the failures caused by the following:

a. Damage caused by faulty installation, or from improper application.
b. Damage attributable to fire, violent storms, earthquake or other Acts of God, accidents, vandalism, or other casualties, impact of objects, or exposure to atmospheric pollutants or conditions other than natural weather processes.
c. Damage or discoloration due to misuse, abuse, abrasion (including sand abrasion), and improper storage or to alteration of the material by paints, chemicals, or other substances not recommended for fencing system.
d. Any materials not supplied by fencing system manufacturer.
e. Cost of installation or removal, freight, labor and similar costs.
f. Any incidental or consequential damages.

g. Installations where the atmosphere is influenced by bodies of salt water (or other contaminant conditions) must adhere to the fencing system manufacturer's cleaning and maintenance guidelines.

2. Warranty Period: 30-year Limited Warranty from date of Substantial Completion.

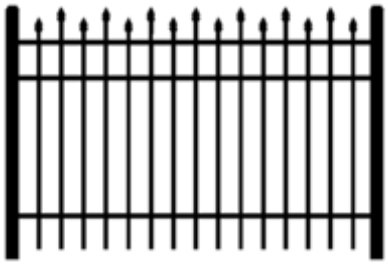
PART 2 - PRODUCTS

2.1 MANUFACTURERS, ALUMINUM FENCING SYSTEM DESCRIPTIONS

A. Basis-of-Design Product: Subject to compliance with requirements, provide product indicated on Drawings, Digger Specialties, Inc.; CourtYard 1132 Series Fencing or approved equal

2.2 COMMERCIAL ALUMINUM FENCING SYSTEM DESCRIPTION

A. Fencing System Description: 3-Rail with Alternating Spear Points fencing system.



1. Heights: 72 inches in the Generator Security Fence area, 48 inches in the add alternate section along Jonathan Street. This is shown on the drawings.
2. Post Spacing: As indicated on drawings
3. Standard Posts: 2.5-inch square by 0.065 inch thick
4. Heavy Duty Posts: 2.5-inch square by 0.125 inch thick
5. Gate Posts: 2.5-inch square by 0.125 inch thick
6. Post Caps, Flat: 2.5 inches
7. Rails: 1.125 inches wide by 1 inch high
8. Pickets: 0.75-inch square by 0.053 inch thick
9. Picket Spacing: Evenly spaced with no clear space between pickets greater than 4 inches.
10. Picket Finials: Spear
11. Decorative Elements: Provide the following accessory items:

    a. Short Pickets

2.3 PERFORMANCE REQUIREMENTS

A. Thermal Movements: Allow for thermal movements from ambient and surface temperature changes.

1. Temperature Change: 120 deg F, ambient; 180 deg F material surfaces)

B. Regulatory Requirements: Comply with applicable provisions in the U.S. Architectural & Transportation Barriers Compliance Board's ADA-ABA Accessibility Guidelines for Buildings and Facilities and ICC A117.1 gate access designated as accessible.

2.4 ALUMINUM

A. Aluminum, General: Provide alloy and temper recommended by aluminum producer and finisher for type of use and finish indicated, and with not less than the strength and durability properties of alloy and temper designated below for each aluminum form required.

B. Provide aluminum of the following alloys, according to ASTM B 221, as required to meeting performance requirements:

1. Posts: 6063-T6.
2. Plates: 6063-T6.
3. Rails: 6063-T6.
4. Pickets: 6063-T6 or 6063-T52.

2.5 GATES

A. Manually operated, double swinging gate as shown on the drawings and a pedestrian gate with panic bar, lock and mesh backing as shown on the drawings.

B. Construction: 3-sided rigid frame with top rail

1. Provide diagonal gate framing member to provide additional stiffening if necessary.

C. Top Rail Configuration: Flat gate top rail.

D. Height: To match fence as indicated on the drawings

2.6 FENCE ACCESSORIES

A. General: Provide manufacture’s standard accessories as required for complete fencing system as indicated on the drawings and as required to comply with performance requirements.

B. Caps: Square, aluminum cap trim, size to correspond to specified posts.

1. Type: Plain, low pyramidal (flat) cap.

2. Approximate Dimensions: 2.75 inches wide by 1.00 inch high.

C. Brackets and Mounts: Manufacturer's standard die cast or extruded aluminum brackets and mounts designed to support fencing rail members at fencing posts and at walls.

D. Base Trim Sleeve: Manufacturer's standard die cast, zinc base trim, size to correspond to specified posts, of pattern indicated on the Drawings.

E. Picket Finials: Spear

1. Quad Finials: Three dimensional, cast aluminum, spear shaped, picket cap ornament with 4 blade edges.

a. Color: Black.

F. Decorative Elements:

1. Short Pickets: Provide pickets of both standard and shorter lengths arranged in uniform, alternating pattern within all fencing sections.

2.7 GATE ACCESSORIES

A. Hinges: Heavy duty, aluminum barrel hinge with stainless steel internal rod or approved equal

1. Quantity: 2 hinges per gate leaf.
2. Maximum Size Gate Leaf: 16 feet wide by 8 feet tall

B. Latches: Stainless steel gravity latch with eye for padlock.

C. Bolts: Barrel bolt.

2.8 FASTENERS

A. General: Type 304 stainless-steel fasteners.

1. Provide exposed fasteners with finish matching appearance, including color and texture, of fencing.

B. Fasteners for Anchoring Fencing to Other Construction: Select fasteners of type, grade, and class required to produce connections suitable for anchoring fencing to other types of construction indicated and capable of withstanding design loads.

C. Fasteners for Interconnecting Fencing Components:

1. Provide concealed fasteners for interconnecting fencing components and for attaching them to other work, unless exposed fasteners are unavoidable or are the standard fastening method for fencing indicated.

2.9 MISCELLANEOUS MATERIALS

A. Bituminous Paint: Cold-applied asphalt emulsion complying with ASTM D 1187/D 1187M.

B. Nonshrink, Nonmetallic Grout: Factory-packaged, nonstaining, noncorrosive, nongaseous grout complying with ASTM C 1107/C 1107M. Provide grout specifically recommended by manufacturer for interior and exterior applications.

C. Anchoring Cement: Factory-packaged, nonshrink, nonstaining, hydraulic-controlled expansion cement formulation for mixing with water at Project site to create pourable anchoring, patching, and grouting compound.

1. Water-Resistant Product: At exterior locations provide formulation that is resistant to erosion from water exposure without needing protection by a sealer or waterproof coating and that is recommended by manufacturer for exterior use.

D. Concrete: MDOT MSHA Standards in 902.10, Mix No. 2. Measurement and Payment of concrete is incidental to the cost of the fence

E. Reinforcing: Aluminum extrusions and plates as required to comply with performance requirements.

F. Shims: Stainless steel, ASTM A 666, Type 304

2.10 FABRICATION

A. General: Fabricate fencing to comply with requirements indicated for design, dimensions, member sizes and spacing, details, finish, and anchorage.

B. Cut, drill, and punch aluminum cleanly and accurately. Remove burrs and ease edges to a radius of approximately 1/32 inch unless otherwise indicated. Remove sharp or rough areas on exposed surfaces.

C. Fabricate connections that are exposed to weather in a manner that excludes water. Provide weep holes where water may accumulate.

D. Form Changes in Direction as Follows:

1. By bending to manufacturer’s standard radius.
2. Do not use prefabricated elbow insert fittings.

E. For changes in direction made by bending, use jigs to produce uniform curvature for each repetitive configuration required. Maintain cross section of member throughout entire bend without buckling, twisting, cracking, or otherwise deforming exposed surfaces of components.

F. Brackets, Flanges, Fittings, and Anchors: Provide wall brackets, flanges, miscellaneous fittings, and anchors to interconnect fencing members to other work unless otherwise indicated.

G. Provide inserts and other anchorage devices for connecting fencing to concrete or masonry work.

1. Coordinate anchorage devices with supporting structure.

2.11 ALUMINUM FINISHES

A. Powder-Coat Finish: AAMA 2604 except with a minimum dry film thickness of 1.5 mils. Comply with coating manufacturer's written instructions for cleaning, conversion coating, and applying and baking finish.

1. Color: Black

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine area, substrates, and conditions for compliance with requirements for site work, landscaping, utility installation, paving, walks, installation tolerances and other conditions affecting performance of the Work.

B. Confirm locations of property lines and setbacks.

C. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

A. Stake out property lines and lines of fencing, including locations of posts and gates.

B. Flag locations of underground utilities crossed by fencing and within 5 feet of fencing.

3.3 INSTALLATION, GENERAL

A. Install fencing according to fencing manufacturer’s written instructions.

B. Perform cutting, drilling, and fitting required for installing fencing.

C. Set fencing accurately in location, alignment, and elevation; measured from established lines and levels and free of rack.

1. Do not weld, cut, or abrade surfaces of fencing components that are coated or finished after fabrication and that are intended for field connection by mechanical or other means without further cutting or fitting.
2. Set posts plumb within a tolerance of 1/16 inch in 3 feet.
3. Align rails so variations from level for horizontal members and variations from parallel with rake indicated on Drawings for sloping members do not exceed 1/4 inch in 12 feet.

D. Control of Corrosion: prevent galvanic action and other forms of corrosion by insulating metals and other materials from direct contact with incompatible materials.

1. Coat, with a heavy coat of bituminous paint, concealed surfaces of aluminum that are in contact with grout, concrete, masonry, wood, or dissimilar metals.

E. Adjust fencing before anchoring to ensure matching alignment at abutting joints.

F. Fastening to In-Place Construction: Use anchorage devices and fasteners where necessary for securing fencing and for properly transferring loads to in-place construction.

3.4 FENCING CONNECTIONS

A. Nonwelded Connections: Use mechanical or adhesive joints for permanently connecting fencing components. Seal recessed holes of exposed locking screws using plastic cement filler colored to match finish of fencing.

3.5 ANCHORING POSTS

A. Poured Footing Installation: Excavate foundation hole for posts and fill with concrete.

1. Minimum Foundation Dimension:

   a. Depth: As indicated on the Drawings
   b. Diameter: As indicated on the Drawings

2. Set fence post in excavated footing and brace it as required to secure it and hold it plumb and in line with line of fencing.

3. Pour concrete to within 6 inches (150 mm) of top.

   a. Cover top of footing with soil no less than 24 hours after pouring concrete.

3.6 ATTACHING FENCING

A. Anchor fencing ends at walls with round flanges anchored to wall construction and welded to fencing ends or connected to fencing ends using non welded connections.

B. Anchor fencing ends to metal surfaces with flanges bolted to metal surfaces and welded to fencing ends or connected to fencing ends using non welded connections.

C. Attach fencing to wall with wall brackets except where end flanges are used

D. Locate brackets as indicated or, if not indicated, at spacing required to support structural loads.

1. Maximum Spacing: 6 feet center to center of posts.

E. Secure wall brackets and fencing end flanges to building construction as follows:

1. For concrete and solid masonry anchorage, use drilled-in expansion shields and hanger or lag bolts.
2. For hollow masonry anchorage, use toggle bolts.

3.7 GATE INTALLATION

Special Provisions

A. General: Install gates according to fencing manufacturer's written instructions:

B. Install gate level, plumb, and true in alignment with established lines and grade and with fencing and without distortion or interference.

C. Attach hardware using tamper-resistant or concealed fasteners.

1. Adjust and lubricated hardware for smooth operation.

3.8 ADJUSTING AND CLEANING

A. Adjust hardware and moving parts to function smoothly and lubricate as recommended by manufacturer.

B. Clean fencing system by washing thoroughly with clean water and soap and rinsing with clean water.

3.9 PROTECTION

A. Protect finishes of fencing from damage during construction period with temporary protective coverings approved by fencing manufacturer. Remove protective coverings at time of Substantial Completion.

END OF ITEM

Item No. 717 –MAIN ENTRANCE BRICK PILLAR

.01 DESCRIPTION: This work shall consist of the construction the main entrance brick pillar along Franklin Street as shown on the plans and as directed by the engineer.

.02 MATERIALS:

No. 57 Aggregate	MDOT SHA Section 901
Mortar Sand	MDOT SHA Section 901
Curing Compound	MDOT SHA Section 902
Portland Cement Concrete	MDOT SHA Section 902, Mix No. 3
Mortar	MDOT SHA Section 903
Grout	MDOT SHA Section 903
Reinforcement Steel	MDOT SHA Section 908
Decorative Metal Fence AND GATES	Refer to Item 716 – DECORATIVE METAL FENCE

.03 CONSTRUCTION:

Construction of the Main Entrance Brick Pillars for the Parking Lot Located at 117 W. Franklin Street. Construction of the pillars should be done in accordance to the contract drawings and as directed by the Engineer. Each Pillar shall consist of constructing 1'-4" x 1'-4" x 5'-0" cast in place Mix No. 3 concrete with No. 6 bent steel reinforcement spaced at 12" c/c and #4 Rebar Horizontal Cross ties spaced 12" c/c as detailed in the Contract Documents. Also the wall shall be finished with cement capping with 2 inch overhang on each side as shown on the Contract Documents. Footing shall be plain cement concrete 3'-8" x 3'-8". Red Bricks shall surround the concrete on the outside stacked in a pattern shown in the Contract Documents. Brick shall tie in with concrete wall via concrete backing ties. Decorative Metal Fence shall tie in on the side of the brick as shown on the Contract Documents.

.04 MEASUREMENT AND PAYMENT: Inlet will be measured and paid for at the Contract unit price per each**.** Measurement includes all excavation, concrete, precast units, reinforcement, brick ties, No. 57 aggregate, grade and slope adjustments, backfill and for all material, labor, equipment, tools, and incidentals necessary to complete the work. All excavation and additional borrow necessary to to establish a firm foundation for construction of the brick pillar shall be included in this item.

END OF SECTION