

ADDENDUM NO. 5  
TO THE BIDDING DOCUMENTS  
for the construction of the  
4th Street Pump Station and Gatewell, 2nd Street Floodwall South  
Fargo, North Dakota  
Work Package 42A.1/42A.3, Contract No. WP-42A.1/42A.3

Date: October 22, 2014  
CH2M HILL Project No. 435534/WP-42A.1/42A.3  
HMG Project No. 1014-210

**To All Planholders and/or Prospective Bidders:**

The following changes, additions, and/or deletions are hereby made a part of the Contract Documents for the construction of 4th Street Pump Station and Gatewell, 2nd Street Floodwall South, Fargo, North Dakota, Work Package 42A.1/42A.3, dated September 2014 as fully and completely as if the same were fully set forth therein:

PART 3, SPECIFICATIONS

1. SECTION 01 22 13 MEASUREMENT AND PAYMENT:

- a. Paragraph 1.06.C., following "... measured in place", ADD "... , unless otherwise indicated".
- b. Paragraph 1.06.E., CONTRACT NO. 1 – GENERAL CONSTRUCTION table, Items 0121, 0122, and 0124 through 0133 were modified.
- c. Paragraph 1.06.E., CONTRACT NO. 4 – COMBINED GENERAL CONSTRUCTION, ELECTRICAL CONSTRUCTION, AND MECHANICAL CONSTRUCTION table, Items 0121, 0122, and 0124 through 0133 were modified.
- d. REPLACE SECTION 01 22 13 MEASUREMENT AND PAYMENT in its entirety with SECTION 01 22 13 MEASUREMENT AND PAYMENT included with Addendum No. 5.

2. SECTION 22 10 00.00 10, VERTICAL PUMPS, AXIAL-FLOW AND MIXED-FLOW IMPELLER-TYPE:

- a. Paragraph 2.3.9.2 Couplings, DELETE the paragraph text in its entirety and replace with the following:

Pump and motor shafts and pump shaft sections shall be coupled together by manufacturer's standard method and be capable of transmitting the forces and torques involved. Coupling halves shall be maintained concentric with each other, to within 0.002 inch. Shaft coupling nut, if used, shall be retained by fitted bolts, and all tolerances specified for the coupling shall apply. Pump shaft sections shall be joined together with sleeve-type couplings capable of taking rotation in either direction. Threads, except on fasteners, shall not be employed in construction of sleeve-type couplings. Couplings, including keys and fasteners, shall be constructed of stainless steel materials. The finished shaft assembly shall be concentric about shaft centerline to within 0.004 inch. Shop assemble couplings and pump shaft and inspect for compliance with contract requirements. After inspection, match mark parts, including fitted bolts, to their mating pieces.

- b. Paragraph 2.4.1.1 General, DELETE the first sentence in its entirety and replace with the following:

Provide each pump with lubrication from one (1) of two (2) electric motor-driven pressure lubrication systems, as shown on the drawings.


3. SECTION 35 20 16.53, VERTICAL LIFT GATES:

- a. Paragraph 2.4.1 Operation Tests, DELETE the paragraph text in its entirety and replace with the following:

The operation of the shop-assembled gate assembly shall be tested by opening and closing the gate several times by use of the operation machinery. The force used to operate the gate shall be the minimum required to open and close the gate. Since the sill of the embedded gate frame is not full supported during the operation tests, special precaution shall be taken to prevent the application of excessive force on the gate leaf and frame when the gate is closed.

All Bidders shall acknowledge receipt and acceptance of this Addendum No. 5 in the Addenda Acknowledgement Form. Addenda Acknowledgement Form submitted without acknowledgment or without this Addendum will be considered in nonconformance.

Houston-Moore Group, LLC

  
Project Engineer

Appended hereto and part of Addendum No. 5:

1. SECTION 01 22 13 MEASUREMENT AND PAYMENT

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the state of North Dakota. Responsible for Specification Sections 23 00 00, 23 03 00.00 20, 23 05 48.00 40, 23 05 93, 23 07 00, 23 08 00.00 10, 23 09 33.00 40, 23 23 00, 23 31 13.00 40, 23 82 46.00 40, 33 08 55, 33 52 10, 33 S6 10 and 33 58 00.

This document was originally issued and sealed by Jeffrey A. Lewis, Registration No. PE-9245, on July 25, 2014 and the original document is stored at CH2M HILL ENGINEERING, INC., Fargo, ND.

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I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the state of North Dakota. Responsible for Specification Sections 02 41 00, 02 82 16.00 20, 03 22 70.01 13, 22 00 00, 22 10 00.00 10, 22 10 00.00 10A, 22 14 29.00 40, 31 23 33.00 13, 32 12 16, 32 92 19.01 13, 35 05 40.17, 35 20 16.53, 40 05 13, 35 31 19.00 13, 41 22 23.19, and 46 20 20.

This document was originally issued and sealed by Kenneth T. Demmons, Registration No. PE-8979, on July 25, 2014 and the original document is stored at CH2M HILL ENGINEERING, INC., Fargo, ND.

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I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the state of North Dakota. Responsible for Specification Sections 03 11 13.00 10, 03 15 00.00 10, 03 20 00.00 10, 03 30 00.00 10, 03 35 00.00 10, 03 39 00.00 10, 03 45 33, 05 12 00, 05 50 13, 05 50 14 and 31 00 00.00 14.

This document was originally issued and sealed by Svein K. Magnussen, Registration No. PE-9375, on July 25, 2014 and the original document is stored at CH2M HILL ENGINEERING, INC., Fargo, ND.

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I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Registered Architect under the laws of the state of North Dakota. Responsible for Specification Sections 03 33 00, 04 20 00, 05 51 33, 05 72 00, 06 10 00, 07 11 13, 07 14 00, 07 19 00, 07 21 13, 07 22 00, 07 53 23, 07 60 00, 07 92 00, 08 11 16, 08 60 45, 08 71 00, 08 81 00, 08 91 00, 09 06 90, 09 90 00, 10 14 00.20, 10 44 16.

This document was originally issued and sealed by James C. Adrian Jr., R. A., License No. 2444, on July 25, 2014 and the original document is stored at CH2M HILL ENGINEERING, INC., Fargo, ND.

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I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the state of North Dakota. Responsible for Specification Sections 26 00 00.00 20, 26 20 00, 26 23 00.00 40, 26 29 01.00 10, 26 32 15.00 10, 26 36 00.00 10, 26 41 00, 26 51 00, 26 56 00, 33 56 10, 33 58 00, 33 71 02, 40 95 00, 40 95 00A and 40 95 00B.

This document was originally issued and sealed by Kevin K. Themes, Registration No. PE-9499, on July 25, 2014 and the original document is stored at CH2M HILL ENGINEERING, INC., Fargo, ND.

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I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the state of North Dakota. Responsible for Specification Section 31 00 00.00 13.

This document was originally issued and sealed by Randy G. Engelstad, Registration No. PE-6676, on July 25, 2014 and the original document is stored at CH2M HILL ENGINEERING, INC., Fargo, ND.

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I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the state of North Dakota. Responsible for Specification Section 35 20 14.

This document was originally issued and sealed by Jeremy L. McLaughlin, Registration No. PE-4883, on July 25, 2014 and the original document is stored at CH2M HILL ENGINEERING, INC., Fargo, ND.

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This document was originally issued and sealed by the above professionals, and the original document is stored at CH2M HILL ENGINEERING, INC., Fargo, ND.

**END OF ADDENDUM**

**SECTION 01 22 13**  
**MEASUREMENT AND PAYMENT**

**PART 1 GENERAL**

1.01 REFERENCES

- A. The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by basic designation only.
  - 1. National Institute Of Standards And Technology (NIST): NIST HB 44 (2010) Specifications, Tolerances, and Other Technical Requirements for Weighing and Measuring Devices.

1.02 SUBMITTALS

- A. Schedule of Estimated Progress Payments:
  - 1. Submit initial with first Application for Payment.
  - 2. Submit adjustments thereto with each monthly Application for Payment.
- B. Applications for Payment.
- C. Final Application for Payment.
- D. Delivery tickets.

1.03 SCHEDULE OF ESTIMATED PROGRESS PAYMENTS

- A. Show estimated payment requests throughout Contract Times aggregating to initial Contract Price.
- B. Base estimated progress payments on initially acceptable progress schedule. Adjust to reflect subsequent adjustments in progress schedule and Contract Price as reflected by modifications to the Contract Documents.

1.04 APPLICATION FOR PAYMENT

- A. Use Application for Payment form provided as a Supplement to this Section. Execute certification by an authorized officer of Contractor.
- B. Preparation:
  - 1. Round values to nearest dollar.
  - 2. Include separate line item for each Change Order executed prior to date of submission.

3. Provide further breakdown of such as requested by Owner's Representative.

#### 1.05 MEASUREMENT—GENERAL

- A. If the quantity of a unit priced item varies by more than 20 percent above or below the quantity indicated in the Schedule of Unit Prices, and this variance in price causes the total Contract Price to vary by more than 5 percent of the total Contract amount, the Contractor, Owner's Representative, or Owner may request an equitable adjustment in the unit price of the item. The requesting party shall provide documentation as to why the cost should be adjusted and by how much. If the other parties deny the adjustment the requesting party may file a claim under the Contract Agreement as applicable.

#### 1.06 MEASUREMENT BY WEIGHT

- A. Materials paid for by weight will be measured by weighing each truck load on an approved scale before being placed in the work. Scales shall be of sufficient length to permit simultaneous weighing of all axle loads and shall be sensitive to a change in load of 0.2 percent throughout the range of the scale. The scale's accuracy shall conform to the applicable requirements of NIST HB 44 and shall be certified by a scale servicing company or by an inspector of the State Inspection Bureau. Each load shall be accompanied by a delivery ticket certified by the weighmaster. Furnish delivery tickets to the Owner's Representative. As a minimum, each ticket shall contain the following information:
  1. Date and time.
  2. Vehicle number.
  3. Gross weight.
  4. Vehicle tare weight.
  5. Net weight.
  6. Signature of weighmaster.
  7. Signature of Contractor's receiver.
- B. Weigh vehicles empty used to haul material being paid for by weight daily with full fuel tanks and at such additional times as required by Owner's Representative. Each vehicle shall bear a plainly legible identification mark.
- C. Materials that are specified for measurement by cubic yard will be measured in place, unless otherwise indicated.
- D. Units of measure shown on Bid Form to be as follows, unless specified otherwise.

<b>Item</b>	<b>Method of Measurement</b>
CY	Cubic Yards—Field Measure of volume by Owner’s Representative
EA	Each—Field Count by Owner’s Representative
GAL	Gallons—Measurement by volume from delivery tickets.
LBS	Pounds—Measurement by weight from delivery tickets.
LF	Linear Foot—Field Measure by Owner’s Representative to the nearest whole foot or calculated from horizontal stationing shown on the Drawings.
LS	Lump Sum—Unit is one; no measurement will be made
SF	Square Feet—Field Measure of area by Owner’s Representative
SY	Square Yards—Field Measure of area by Owner’s Representative
TN	Ton—In vehicle weight by delivery ticket

- E. Work Item Descriptions: Work item descriptions are provided below for the work items listed in Bid Form. The price bid for each work item shall cover costs in connection with the Work, including furnishing labor, materials, equipment, supplies, and appurtenances; providing construction plant equipment and tools; performing necessary labor and supervision to fully complete the Work as described and specified in the Contract Documents; and overhead and profit. Related work not specifically identified in the work item descriptions is considered incidental and a subsidiary obligation of the Contractor and costs in connection therewith shall be included in the price bid for work items. Typical incidental items may include, but are not limited to, construction administration, communications, and coordination with Owner, Owner’s Representative, land owners, regulatory agencies, and other stakeholders, and quality control.

<b>CONTRACT NO. 1 – GENERAL CONSTRUCTION</b>			
<b>No.</b>	<b>Item</b>	<b>Description</b>	<b>Payment</b>
0001	Mobilization (LS)	Includes costs associated with preparatory work and operations, including: movement of personnel, equipment, and supplies, establishment of offices, Contractor’s buildings, facilities necessary for work on the Project, costs associated with obtaining bid, performance, and payment bonds in accordance with the contract requirements; and other work and operations which must be performed, or costs incurred, before beginning work on the Project site. Mobilization is limited to a maximum of 5 percent of the total bid.	Payment shall be made at completion of first full month after Notice to Proceed.

**CONTRACT NO. 1 – GENERAL CONSTRUCTION**

<b>No.</b>	<b>Item</b>	<b>Description</b>	<b>Payment</b>
0002	Remove Sanitary Sewer Manhole (EA)	Includes costs associated with the removal and disposal of existing sanitary sewer manholes.	Reference City of Fargo Standard Specification 1050
0003	F&I Pipe SDR 26 - 10" Dia PVC (LF)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of the sanitary sewer pipe.	Reference City of Fargo Standard Specification 1200
0004	Remove Sanitary Sewer Pipe All Sizes All Types (LF)	Includes costs associated with the removal and disposal of existing sanitary sewer pipes of all sizes and types.	Reference City of Fargo Standard Specification 1050
0005	Rem & Repl Sanitary Sewer Casting - Floating Manhole (EA)	Includes costs necessary to adjust sanitary sewer castings to the proper line and grade.	Reference City of Fargo Standard Specification 2400
0006	Sanitary Sewer Manhole (EA)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of the sanitary sewer manholes.	Reference City of Fargo Standard Specification 1200
0007	Sanitary Sewer Exterior Drop Manhole (EA)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of the sanitary sewer exterior drop manhole.	Reference City of Fargo Standard Specification 1200
0008	F&I 5" Hydrant (EA)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of the hydrants.	Reference City of Fargo Standard Specification 1300
0009	Salvage Hydrant (EA)	Includes costs necessary to salvage the existing hydrant.	This item shall be paid for at the contract unit price for the bid item based on each existing fire hydrant that is removed and salvaged.
0010	F&I Pipe C900 DR 18 - 6" Dia PVC (LF)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of the water main pipe.	Reference City of Fargo Standard Specification 1300
0011	F&I Pipe C900 DR 18 - 10" Dia PVC (LF)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of the water main pipe.	Reference City of Fargo Standard Specification 1300
0012	Remove Watermain Pipe All Sizes All Types (LF)	Includes costs associated with the removal and disposal of existing water main pipes of all sizes and types.	Reference City of Fargo Standard Specification 1050
0013	F&I Gate Valve 6" Dia (EA)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of the water main gate valve.	Reference City of Fargo Standard Specification 1300



<b>CONTRACT NO. 1 – GENERAL CONSTRUCTION</b>			
<b>No.</b>	<b>Item</b>	<b>Description</b>	<b>Payment</b>
0014	F&I Gate Valve 10" Dia (EA)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of the water main gate valve.	Reference City of Fargo Standard Specification 1300
0015	Watermain Fittings (LBS)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of the water main fittings.	Reference City of Fargo Standard Specification 1300
0016	F&I Overflow Structure (EA)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of the storm sewer overflow structure.	This item shall be paid for at the contract unit price for the bid item based on each storm sewer overflow structure installed.
0017	F&I Manhole 4' Dia Reinf Conc (EA)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of the storm sewer structure.	Reference City of Fargo Standard Specification 1500
0018	F&I Manhole 5' Dia Reinf Conc (EA)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of the storm sewer structure.	Reference City of Fargo Standard Specification 1500
0019	F&I Manhole 6' Dia Reinf Conc (EA)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of the storm sewer structure.	Reference City of Fargo Standard Specification 1500
0020	F&I Manhole 7' Dia Reinf Conc (EA)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of the storm sewer structure.	Reference City of Fargo Standard Specification 1500
0021	F&I Manhole Type E Reinf Conc (EA)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of the storm sewer structure.	Reference City of Fargo Standard Specification 1500
0022	F&I Manhole Type E Reinf Conc (ST-4) (EA)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of the storm sewer structure.	This item shall be paid for at the contract unit price for the installed bid item "F&I Manhole Type E Reinf Conc (ST-4)".
0023	F&I Manhole Type E Reinf Conc (ST-3) (EA)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of the storm sewer structure.	This item shall be paid for at the contract unit price for the installed bid item "F&I Manhole Type E Reinf Conc (ST-3)".

**CONTRACT NO. 1 – GENERAL CONSTRUCTION**

<b>No.</b>	<b>Item</b>	<b>Description</b>	<b>Payment</b>
0024	F&I Manhole Type E Reinf Conc (ST-2) (EA)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of the storm sewer structure.	This item shall be paid for at the contract unit price for the installed bid item "F&I Manhole Type E Reinf Conc (ST-2)".
0025	F&I Manhole Type E Reinf Conc (ST-1) (EA)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of the storm sewer structure.	This item shall be paid for at the contract unit price for the installed bid item "F&I Manhole Type E Reinf Conc (ST-1)".
0026	Remove Storm Sewer Manhole (EA)	Includes costs associated with the removal and disposal of existing storm sewer manholes.	Reference City of Fargo Standard Specification 1050
0027	F&I Inlet - Manhole (MHI) 4' Dia Reinf Conc (EA)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of the storm sewer structure.	Reference City of Fargo Standard Specification 1500
0028	F&I Inlet - Manhole (MHI) 6' Dia Reinf Conc (EA)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of the storm sewer structure.	Reference City of Fargo Standard Specification 1500
0029	F&I Inlet - Single Box (SBI) Reinf Conc (EA)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of the storm sewer single box inlet structure.	Reference City of Fargo Standard Specification 1500
0030	F&I Inlet - Double Box (DBI) Reinf Conc (EA)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of the storm sewer double box inlet structure.	Reference City of Fargo Standard Specification 1500
0031	F&I Inlet - Special (SPI) Reinf Conc (EA)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of the storm sewer special inlet structure.	Reference City of Fargo Standard Specification 1500
0032	Riprap (Outlet) (CY)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of the storm sewer riprap.	This item shall be paid for at the contract unit price for the bid item based on cubic yards of riprap installed.
0033	Box Culvert End Section with Grate (EA)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of the storm sewer box culvert end section with grate.	This item shall be paid for at the contract unit price for the bid item based on each box culvert end section installed.
0034	Plug Pipe 33" DIA. (EA)	Includes costs associated to plug storm sewer pipe.	Reference City of Fargo Standard Specification 1050
0035	Plug Pipe 72" DIA. (EA)	Includes costs associated to plug storm sewer pipe.	Reference City of Fargo Standard Specification 1050

<b>CONTRACT NO. 1 – GENERAL CONSTRUCTION</b>			
<b>No.</b>	<b>Item</b>	<b>Description</b>	<b>Payment</b>
0036	Plug Pipe 78" DIA. (EA)	Includes costs associated to plug storm sewer pipe.	Reference City of Fargo Standard Specification 1050
0037	F&I Pipe 18" Dia Reinf Conc (LF)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of the storm sewer pipe.	Reference City of Fargo Standard Specification 1500
0038	F&I Pipe 24" Dia Reinf Conc (LF)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of the storm sewer pipe.	Reference City of Fargo Standard Specification 1500
0039	F&I Pipe 30" Dia Reinf Conc (LF)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of the storm sewer pipe.	Reference City of Fargo Standard Specification 1500
0040	F&I Pipe 36" Dia Reinf Conc (LF)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of the storm sewer pipe.	Reference City of Fargo Standard Specification 1500
0041	F&I Pipe 48" Dia Reinf Conc (LF)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of the storm sewer pipe.	Reference City of Fargo Standard Specification 1500
0042	F&I Pipe 54" Dia Reinf Conc (LF)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of the storm sewer pipe.	Reference City of Fargo Standard Specification 1500
0043	F&I Pipe 72" Dia Reinf Conc (LF)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of the storm sewer pipe.	Reference City of Fargo Standard Specification 1500
0044	F&I Pipe 12" Dia PVC (LF)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of the storm sewer pipe.	Reference City of Fargo Standard Specification 1500
0045	Remove Storm Sewer Pipe All Sizes All Types (LF)	Includes costs associated with the removal and disposal of existing storm sewer pipes of all sizes and types.	Reference City of Fargo Standard Specification 1050
0046	30" Flapgate (EA)	Includes costs associated with the installation of the storm sewer flapgate.	This item shall be paid for at the contract unit price per each installed 30" flapgate.
0047	54" Flapgate (EA)	Includes costs associated with the installation of the storm sewer flapgate.	This item shall be paid for at the contract unit price per each installed 54" flapgate.
0048	F&I Pipe w/GB 30" Dia Reinf Conc (LF)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of the storm sewer pipe with gravel backfill.	Reference City of Fargo Standard Specification 1500
0049	F&I Pipe w/GB 36" Dia Reinf Conc (LF)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of the storm sewer pipe with gravel backfill.	Reference City of Fargo Standard Specification 1500

**CONTRACT NO. 1 – GENERAL CONSTRUCTION**

<b>No.</b>	<b>Item</b>	<b>Description</b>	<b>Payment</b>
0050	F&I Pipe w/GB 54" Dia Reinf Conc (LF)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of the storm sewer pipe with gravel backfill.	Reference City of Fargo Standard Specification 1500
0051	F&I Box Culvert 8'x5' Wide Reinf Conc Cast in Place with depth of fill 1' to 10' (LF)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of the storm sewer box culvert.	Reference City of Fargo Standard Specification 1500
0052	F&I Box Culvert 8'x5' Wide Reinf Conc Cast in Place with depth of fill 10' to 31' (LF)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of the storm sewer box culvert.	Reference City of Fargo Standard Specification 1500
0053	F&I Box Culvert 8'x5' Wide Reinf Conc Precast (LF)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of the storm sewer box culvert.	Reference City of Fargo Standard Specification 1500
0054	Remove Pavement All Thicknesses All Types (SY)	Includes costs associated with the removal and disposal of existing pavement of all thicknesses and types.	Reference City of Fargo Standard Specification 1050
0055	Subgrade Preparation (SY)	Includes furnishing materials, equipment, labor and performing operations necessary for subgrade preparation.	Reference City of Fargo Standard Specification 2000
0056	F&I Woven Geotextile (SY)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of woven geotextile fabric.	Reference City of Fargo Standard Specification 2050
0057	F&I Class 5 Agg - 6" Thick (SY)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of class 5 aggregate.	Reference City of Fargo Standard Specification 2070
0058	F&I Class 5 Agg - 7" Thick (SY)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of class 5 aggregate.	Reference City of Fargo Standard Specification 2070
0059	F&I Class 5 Agg - 8" Thick (SY)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of class 5 aggregate.	Reference City of Fargo Standard Specification 2070
0060	F&I Class 5 Agg - 12" Thick (SY)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of class 5 aggregate.	Reference City of Fargo Standard Specification 2070
0061	F&I Crushed Conc - 6" Thick (SY)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of crushed concrete.	Reference City of Fargo Standard Specification 2070
0062	F&I Curb & Gutter Standard (Type II) (LF)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of curb and gutter.	Reference City of Fargo Standard Specification 2100

<b>CONTRACT NO. 1 – GENERAL CONSTRUCTION</b>			
<b>No.</b>	<b>Item</b>	<b>Description</b>	<b>Payment</b>
0063	Remove Curb & Gutter (LF)	Includes costs associated with the removal and disposal of existing curb and gutter.	Reference City of Fargo Standard Specification 1050
0064	F&I Pavement 6" Thick Reinf Conc (SY)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of reinforced concrete pavement.	Reference City of Fargo Standard Specification 2100
0065	F&I Pavement 7" Thick Reinf Conc (SY)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of reinforced concrete pavement.	Reference City of Fargo Standard Specification 2100
0066	F&I Pavement 9" Thick Doweled Conc (SY)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of doweled concrete pavement.	Reference City of Fargo Standard Specification 2100
0067	F&I Sidewalk 4" Thick Reinf Conc (SY)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of reinforced concrete sidewalk.	Reference City of Fargo Standard Specification 2300
0068	Remove Sidewalk All Thicknesses All Types (SY)	Includes costs associated with the removal and disposal of existing sidewalk of all thickness and types.	Reference City of Fargo Standard Specification 1050
0069	Temp Construction Entrance (EA)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of temporary construction entrances.	Reference City of Fargo Standard Specification 3300
0070	Traffic Control - Type 1 (LS)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of traffic control.	Reference City of Fargo Standard Specification 4100
0071	F&I Aggregate for Asph Pavement Class 29 (TN)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of aggregate for asphalt pavement.	Reference City of Fargo Standard Specification 2400
0072	F&I Asphalt Cement PG 58-28 (GAL)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of asphalt cement.	Reference City of Fargo Standard Specification 2400
0073	F&I Impressed 4" Thick Reinf Conc (SY)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of impressed reinforced concrete.	Reference City of Fargo Standard Specification 2300
0074	F&I Det Warn Panels Cast Iron (SF)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of detectable warning panels cast iron.	Reference City of Fargo Standard Specification 2300
0075	F&I Sign Assembly (EA)	Includes furnishing materials, equipment, labor and performing operations necessary	Reference City of Fargo Standard Specification 4300

**CONTRACT NO. 1 – GENERAL CONSTRUCTION**

<b>No.</b>	<b>Item</b>	<b>Description</b>	<b>Payment</b>
		for the installation of sign assembly.	
0076	Relocate Sign Assembly (EA)	Includes costs associated with the number of locations at which a sign assembly has been reset.	Reference City of Fargo Standard Specification 4300
0077	F&I Engineering Grade (SF)	Includes costs associated for the engineering grade sheeting and aluminum panel.	Reference City of Fargo Standard Specification 4300
0078	F&I Diamond Grade Cubed (SF)	Includes costs associated for the diamond grade cubed sheeting and aluminum panel.	Reference City of Fargo Standard Specification 4300
0079	F&I High Intensity Prismatic (SF)	Includes costs associated for the high intensity prismatic sheeting and aluminum panel.	Reference City of Fargo Standard Specification 4300
0080	F&I Flexible Delineator (EA)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of flexible delineators.	This item shall be paid for at the contract unit price per each installed flexible delineator.
0081	F&I Grooved Plastic Film Message (SF)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of grooved plastic film message.	Reference City of Fargo Standard Specification 4000
0082	F&I Grooved Plastic Film 4" Wide (LF)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of grooved plastic film.	Reference City of Fargo Standard Specification 4000
0083	F&I Grooved Plastic Film 24" Wide (LF)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of grooved plastic film.	Reference City of Fargo Standard Specification 4000
0084	Paint Epoxy Message (SF)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of the painted epoxy message.	Reference City of Fargo Standard Specification 4000
0085	Paint Epoxy Line 4" Wide (LF)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of the painted epoxy line.	Reference City of Fargo Standard Specification 4000
0086	Paint Epoxy Line 8" Wide (LF)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of the painted epoxy line.	Reference City of Fargo Standard Specification 4000
0087	Paint Epoxy Line 24" Wide (LF)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of the painted epoxy line.	Reference City of Fargo Standard Specification 4000
0088	Obliterate Pavement Markings (SF)	Includes costs associated for the obliteration of pavement markings.	Reference City of Fargo Standard Specification 4000

**CONTRACT NO. 1 – GENERAL CONSTRUCTION**

<b>No.</b>	<b>Item</b>	<b>Description</b>	<b>Payment</b>
0089	Temp Fence - Safety (LF)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of temporary safety fence.	This item shall be paid for at the contract unit price for the bid item based on the lineal feet of temporary fence installed.
0090	Remove Fence (LF)	Includes costs associated for the removal of fence of any type.	This item shall be paid for at the contract unit price for the bid item based on the lineal feet of fence removed.
0091	Temp Pumping (LS)	Includes costs associated for temporary pumping.	This item shall be paid for as a lump sum price for any temporary pumping needed for the duration of the project.
0092	Clear & Grub (LS)	Includes costs associated for clearing and grubbing.	Reference City of Fargo Standard Specification 1050
0093	Remove Tree (EA)	Includes costs associated for tree removal and disposal.	Reference City of Fargo Standard Specification 1050
0094	Silt Fence - Standard (LF)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of standard silt fence.	Reference City of Fargo Standard Specification 3300
0095	Floating Silt Fence (LF)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of floating silt fence.	This item shall be paid for at the contract unit price for the bid item based on the lineal feet of floating silt fence installed.
0096	Sediment Control Log 6" to 8" Dia (LF)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of sediment control logs.	Reference City of Fargo Standard Specification 3300
0097	Inlet Protection - New Inlet (EA)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of new inlet protection.	Reference City of Fargo Standard Specification 3300
0098	Inlet Protection - Existing Inlet (EA)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of existing inlet protection.	Reference City of Fargo Standard Specification 3300
0099	Salvage Signal Standard (EA)	Includes costs associated for salvaging existing signal.	Reference City of Fargo Standard Specification 4200
0100	Lighting System (LS)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of the street lighting system.	This item shall be paid for as a lump sum price for the installation of the street lighting system.

**CONTRACT NO. 1 – GENERAL CONSTRUCTION**

<b>No.</b>	<b>Item</b>	<b>Description</b>	<b>Payment</b>
0101	Propane Tanks Remove and Replace (LS)	Includes furnishing materials, equipment, labor and performing operations necessary for the removal and installation of propane tanks.	This item shall be paid for as a lump sum price for the removal and installation of the propane tanks.
0102	Replace Unsalvageable Bollards (EA)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of unsalvageable bollards.	This item shall be paid for at the contract unit price based on each installed bollard.
0103	Revise Flashing Beacon System (LS)	Includes furnishing materials, equipment, labor and performing operations necessary for revising the flashing beacon system.	This item shall be paid for as a lump sum price for the revision of the flashing beacon system.
0104	Revise Traffic Control System (LS)	Includes furnishing materials, equipment, labor and performing operations necessary for revising the traffic control system.	This item shall be paid for as a lump sum price for the item "Revise Traffic Control System".
0105	F&I Bus Shelter (EA)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of the bus shelter.	This item shall be paid for at the contract unit price for the bid item based on each bus shelter installed.
0106	F&I Sheet Piling – Steel (SF)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of sheet piling for the floodwall.	This item shall be paid for at the contract unit price based on the square feet of steel sheet piling installed.
0107	Topsoil - Strip (CY)	Includes costs associated for topsoil stripping on the project site.	Reference City of Fargo Standard Specification 1050
0108	Topsoil - Spread (CY)	Includes costs associated for topsoil spreading on the project site.	Reference City of Fargo Standard Specification 2000
0109	Embankment (CY)	Includes costs associated for embankment on the project site.	Reference City of Fargo Standard Specification 2000
0110	Embankment Import (CY)	Includes costs associated for embankment import on the project site.	Reference City of Fargo Standard Specification 3600
0111	Excavation (CY)	Includes costs associated for excavation on the project site.	Measurement of excavation volume will be by number of cubic yards in its original location and shall be paid at the contract unit price per cubic yard.
0112	Grading North of 2nd St S and West of 4th St S (LS)	Includes costs associated for grading on site north of 2nd St S and the area west of 4th St S.	This item shall be paid for as a lump sum price for any grading north of 2nd St S and west of 4th St S.



<b>CONTRACT NO. 1 – GENERAL CONSTRUCTION</b>			
<b>No.</b>	<b>Item</b>	<b>Description</b>	<b>Payment</b>
0113	Mulching Type 1 - Hydro (SY)	Includes furnishing materials, equipment, labor and performing operations necessary for mulching type 1.	Reference City of Fargo Standard Specification 3100
0114	Seeding Type B (SY)	Includes furnishing materials, equipment, labor and performing operations necessary for seeding type b.	Reference City of Fargo Standard Specification 3100
0115	Overseeding (SY)	Includes furnishing materials, equipment, labor and performing operations necessary for overseeding.	This item shall be paid for at the contract unit price for the bid item based on the square yards of overseeding performed.
0116	Weed Control Type B (SY)	Includes furnishing materials, equipment, labor and performing operations necessary for weed control type b.	Reference City of Fargo Standard Specification 3100
0117	Removable Floodwall (LS)	Includes furnishing materials, equipment, labor and performing operations necessary for the removable floodwall.	This item shall be paid for as a lump sum price for the installation of removable floodwall.
0118	F&I Floodwall Reinf Bars – Steel (LBS)	Includes furnishing materials, and labor to place, tie, and support reinforcing bars (non-coated) for floodwall.	Payment made will be made based on pounds (LBS) of reinforcing steel placed for floodwall.
0119	F&I Floodwall Reinf Bars - Epoxy Coated Steel (LBS)	Includes furnishing materials, and labor to place, tie, and support reinforcing bars (epoxy-coated) for floodwall.	Payment made will be made based on pounds (LBS) of reinforcing steel placed for floodwall.
0120	F&I Floodwall - Structural Conc (CY)	Includes furnishing materials and labor to place, consolidate, cure, and finish structural concrete for floodwall.	Payment will be made based on cubic yards (CY) of concrete placed based on volume calculated from the Drawings.
0121	F&I Floodwall – Misc. (LS)	Includes furnishing materials and labor for all aspects of the floodwall not included in Items 0117, 0118, 0119, and 0120, including excavation, backfill, non-structural concrete cap, forms, form-liner, form stripping, waterstop, sealant, and other items required for a complete flood wall.	Payment will be made on estimated percent complete.

**CONTRACT NO. 1 – GENERAL CONSTRUCTION**

<b>No.</b>	<b>Item</b>	<b>Description</b>	<b>Payment</b>
0122	Demolition-Pump Stations, Storm Sewers, Force Mains (LS)	Includes furnishing materials, equipment, labor and performing operations necessary for demolition, removal, disposal, or salvage, of existing structures, equipment and abandoned utilities.	Payment will be made on estimated percent complete.
0123	Force Mains and Sump Pump Discharge (LS)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of force mains and sump pump discharge and associated fittings, including, but not limited to, excavation, bedding, and backfill. Connection to Pump Station is included in Pump Station. Connection to Gatewell is included in Gatewell - Structural.	Payment will be made on estimated percent complete.
0124	Pump Station (LS)	Includes furnishing materials, equipment, labor and performing operations necessary for the complete construction of the pump station, including earthwork, structural concrete and masonry, structural steel, roofing system, exterior architecture, interior and exterior finishes, doors and windows, and concrete pads for stormwater pumps, sump pumps, electrical gear, interior process piping, associated fittings, couplings and valves and appurtenances, including pipe supports and wall sleeves. Item also includes connection of forcemains and sump pump discharge pipes to Pump Station.	Payment will be made on estimated percent complete.
0125	Stormwater Pumps and Motors (LS)	Includes furnishing stormwater pumps and motors, and installation on equipment pads included in Pump Station. Item also includes ancillary devices including but not limited to bearing lubrication systems and associated piping.	10 percent of payment will be made on approval of Shop Drawings, 50 percent on delivery site, and 40 percent on completion of installation.
0126	Sump Pumps (LS)	Includes furnishing sump pumps and motors, and retrieval system complete, and installation on equipment pads included in Pump Station wetwell.	10 percent of payment will be made on approval of Shop Drawings, 50 percent on delivery site, and 40 percent on completion of installation.
0127	Trash Racks and Miscellaneous Metals (LS)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of the trash racks and miscellaneous metals in Pump Station. Item also includes trash rake to be mounted on each rack and jib crane for rake operation.	Payment will be made on estimated percent complete.

<b>CONTRACT NO. 1 – GENERAL CONSTRUCTION</b>			
<b>No.</b>	<b>Item</b>	<b>Description</b>	<b>Payment</b>
0128	Sluice Gates and Wall Thimbles (LS)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of the sluice gates and wall thimbles in Pump Station, and Gatewell. Item also includes gate operators and actuators.	10 percent of payment will be made on approval of Shop Drawings, 50 percent on delivery site, and 40 percent on completion of installation.
0129	Generator Building - Structural and Architectural (LS)	Includes furnishing materials, equipment, labor and performing operations necessary for the complete construction of the generator building and fuel storage area including earthwork, structural concrete and masonry, structural steel, roofing system, exterior architecture, interior and exterior finishes, doors and windows, and concrete pads for generator and fuel storage tank.	Payment will be made on estimated percent complete.
0130	Gatewell Structural (LS)	Includes furnishing materials, equipment, labor and performing operations necessary for the complete construction of the gatewell structure including earthwork, structural concrete and masonry, and structural steel, Item also includes connection of forcemains and sump discharge pipes to gatewell.	Payment will be made on estimated percent complete.
0131	Gatewell - Miscellaneous Metals (LS)	Includes furnishing materials, equipment, labor and performing operations necessary for the miscellaneous metals for the gatewell including, but not limited to, railings, ladders, landings, and flap gates. Sluice gates and wall thimbles are included in Sluice Gates and Wall Thimbles.	Payment will be made on estimated percent complete.
0132	Sheetpiling (Pump Station) (LS)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation and removal of sheetpiling for pump station construction.	Payment will be made on estimated percent complete.
0133	Health and Safety (LS)	Lump Sum Price bid includes labor, equipment, and materials necessary to prepare, implement, and monitor the Health and Safety Plan and prepare required monitoring reports.	Payment will be made based on percentage of Contract Time elapsed at the time of Payment Application

**CONTRACT NO. 2 – ELECTRICAL CONSTRUCTION**

<b>No.</b>	<b>Item</b>	<b>Description</b>	<b>Payment</b>
0001	Mobilization (LS)	Includes costs associated with preparatory work and operations, including: movement of personnel, equipment, and supplies, establishment of offices, Contractor's buildings, facilities necessary for work on the Project, costs associated with obtaining bid, performance, and payment bonds in accordance with the contract requirements; and other work and operations which must be performed, or costs incurred, before beginning work on the Project site. Mobilization is limited to a maximum of 5 percent of the total bid.	Payment shall be made at completion of first full month after Notice to Proceed.
0002	Diesel Generator (LS)	Includes furnishing the diesel generator, and installation on equipment pad included in Generator Building – Structural and Architectural.	10 percent of payment will be made on approval of Shop Drawings, 50 percent on delivery site, and 40 percent on completion of installation.
0003	Switchboard SWBDA, Motor Control Center MCLA, Automatic Transfer Switch, Panel HP1 (LS)	Includes furnishing switchboard SWBDA, Motor Control Center MCLA, Automatic Transfer Switch, Panel HP1, and installation on equipment pads included in Pump Station.	10 percent of payment will be made on approval of Shop Drawings, 50 percent on delivery site, and 40 percent on completion of installation.
0004	Electrical-Interior (LS)	Includes furnishing materials, equipment, labor and performing operations necessary to provide interior conduits, conductors, control wiring, connections, switches, lighting, and other items necessary to provide a functioning system.	Payment will be made on estimated percent complete.
0005	Electrical-Exterior (LS)	Includes furnishing materials, equipment, labor and performing operations necessary to provide exterior ductbanks, conduits, conductors, control wiring, connections, switches, lighting and other items necessary to provide a functioning system.	Payment will be made on estimated percent complete.
0006	Instrumentation and Controls (LS)	Includes furnishing and installing PLCs and instrumentation and making connections necessary to provide a functioning system.	Payment will be made on estimated percent complete.
0007	Programming (LS)	Includes furnishing programming necessary to provide a functioning system.	Payment will be made on estimated percent complete.
0008	Health and Safety (LS)	Lump Sum Price bid includes labor, equipment, and materials necessary to prepare, implement, and monitor the Health and Safety Plan and prepare required monitoring reports.	Payment will be made based on percentage of Contract Time elapsed at the time of Payment Application

<b>CONTRACT NO. 3 – MECHANICAL CONSTRUCTION</b>			
<b>No.</b>	<b>Item</b>	<b>Description</b>	<b>Payment</b>
0001	Mobilization (LS)	Includes costs associated with preparatory work and operations, including: movement of personnel, equipment, and supplies, establishment of offices, Contractor's buildings, facilities necessary for work on the Project, costs associated with obtaining bid, performance, and payment bonds in accordance with the contract requirements; and other work and operations which must be performed, or costs incurred, before beginning work on the Project site. Mobilization is limited to a maximum of 5 percent of the total bid.	Payment shall be made at completion of first full month after Notice to Proceed.
0002	HVAC – General (LS)	Includes furnishing materials, equipment, labor and performing operations necessary to provide HVAC systems for Pump Station, and Generator Bldg. – Structural and Architectural, including vent and engine muffler for Diesel Generator.	Payment will be made on estimated percent complete.
0003	Plumbing-Gener al (LS)	Includes furnishing materials, equipment, labor and performing operations necessary to provide general plumbing (non-process) for Pump Station, and Generator Bldg. – Structural and Architectural.	Payment will be made on estimated percent complete.
0004	Generator Accessories, Fuel Storage, and Fuel System (LS)	Includes furnishing materials, equipment, labor and performing operations necessary to provide fuel storage and fuel system. Fuel storage tank to be installed on equipment pad provided in Generator Bldg. – Structural and Architectural.	Payment will be made on estimated percent complete.
0005	Health and Safety (LS)	Lump Sum Price bid includes labor, equipment, and materials necessary to prepare, implement, and monitor the Health and Safety Plan and prepare required monitoring reports.	Payment will be made based on percentage of Contract Time elapsed at the time of Payment Application

<b>CONTRACT NO. 4 – COMBINED GENERAL CONSTRUCTION, ELECTRICAL CONSTRUCTION, AND MECHANICAL CONSTRUCTION</b>			
<b>No.</b>	<b>Item</b>	<b>Description</b>	<b>Payment</b>
0001	Mobilization (LS)	Includes costs associated with preparatory work and operations, including: movement of personnel, equipment, and supplies, establishment of offices, Contractor's buildings, facilities necessary for work on the Project, costs associated with obtaining bid, performance, and payment bonds in accordance with the contract	Payment shall be made at completion of first full month after Notice to Proceed.

**CONTRACT NO. 4 – COMBINED GENERAL CONSTRUCTION, ELECTRICAL  
CONSTRUCTION, AND MECHANICAL CONSTRUCTION**

No.	Item	Description	Payment
		requirements; and other work and operations which must be performed, or costs incurred, before beginning work on the Project site. Mobilization is limited to a maximum of 5 percent of the total bid.	
0002	Remove Sanitary Sewer Manhole (EA)	Includes costs associated with the removal and disposal of existing sanitary sewer manholes.	Reference City of Fargo Standard Specification 1050
0003	F&I Pipe SDR 26 - 10" Dia PVC (LF)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of the sanitary sewer pipe.	Reference City of Fargo Standard Specification 1200
0004	Remove Sanitary Sewer Pipe All Sizes All Types (LF)	Includes costs associated with the removal and disposal of existing sanitary sewer pipes of all sizes and types.	Reference City of Fargo Standard Specification 1050
0005	Rem & Repl Sanitary Sewer Casting - Floating Manhole (EA)	Includes costs necessary to adjust sanitary sewer castings to the proper line and grade.	Reference City of Fargo Standard Specification 2400
0006	Sanitary Sewer Manhole (EA)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of the sanitary sewer manholes.	Reference City of Fargo Standard Specification 1200
0007	Sanitary Sewer Exterior Drop Manhole (EA)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of the sanitary sewer exterior drop manhole.	Reference City of Fargo Standard Specification 1200
0008	F&I 5" Hydrant (EA)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of the hydrants.	Reference City of Fargo Standard Specification 1300
0009	Salvage Hydrant (EA)	Includes costs necessary to salvage the existing hydrant.	This item shall be paid for at the contract unit price for the bid item based on each existing fire hydrant that is removed and salvaged.
0010	F&I Pipe C900 DR 18 - 6" Dia PVC (LF)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of the water main pipe.	Reference City of Fargo Standard Specification 1300
0011	F&I Pipe C900 DR 18 - 10" Dia PVC (LF)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of the water main pipe.	Reference City of Fargo Standard Specification 1300
0012	Remove Water Main Pipe All Sizes All Types (LF)	Includes costs associated with the removal and disposal of existing water main pipes of all sizes and types.	Reference City of Fargo Standard Specification 1050

**CONTRACT NO. 4 – COMBINED GENERAL CONSTRUCTION, ELECTRICAL  
CONSTRUCTION, AND MECHANICAL CONSTRUCTION**

<b>No.</b>	<b>Item</b>	<b>Description</b>	<b>Payment</b>
0013	F&I Gate Valve 6" Dia (EA)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of the water main gate valve.	Reference City of Fargo Standard Specification 1300
0014	F&I Gate Valve 10" Dia (EA)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of the water main gate valve.	Reference City of Fargo Standard Specification 1300
0015	Watermain Fittings (LBS)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of the water main fittings.	Reference City of Fargo Standard Specification 1300
0016	F&I Overflow Structure (EA)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of the storm sewer overflow structure.	This item shall be paid for at the contract unit price for the bid item based on each storm sewer overflow structure installed.
0017	F&I Manhole 4' Dia Reinf Conc (EA)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of the storm sewer structure.	Reference City of Fargo Standard Specification 1500
0018	F&I Manhole 5' Dia Reinf Conc (EA)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of the storm sewer structure.	Reference City of Fargo Standard Specification 1500
0019	F&I Manhole 6' Dia Reinf Conc (EA)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of the storm sewer structure.	Reference City of Fargo Standard Specification 1500
0020	F&I Manhole 7' Dia Reinf Conc (EA)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of the storm sewer structure.	Reference City of Fargo Standard Specification 1500
0021	F&I Manhole Type E Reinf Conc (EA)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of the storm sewer structure.	Reference City of Fargo Standard Specification 1500
0022	F&I Manhole Type E Reinf Conc (ST-4) (EA)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of the storm sewer structure.	This item shall be paid for at the contract unit price for the installed bid item "F&I Manhole Type E Reinf Conc (ST-4)".
0023	F&I Manhole Type E Reinf Conc (ST-3) (EA)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of the storm sewer structure.	This item shall be paid for at the contract unit price for the installed bid item "F&I Manhole Type E Reinf Conc (ST-3)".
0024	F&I Manhole Type E Reinf Conc (ST-2) (EA)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of the storm sewer structure.	This item shall be paid for at the contract unit price for the installed bid item "F&I Manhole Type E Reinf Conc (ST-2)".

**CONTRACT NO. 4 – COMBINED GENERAL CONSTRUCTION, ELECTRICAL  
CONSTRUCTION, AND MECHANICAL CONSTRUCTION**

<b>No.</b>	<b>Item</b>	<b>Description</b>	<b>Payment</b>
0025	F&I Manhole Type E Reinf Conc (ST-1) (EA)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of the storm sewer structure.	This item shall be paid for at the contract unit price for the installed bid item "F&I Manhole Type E Reinf Conc (ST-1)".
0026	Remove Storm Sewer Manhole (EA)	Includes costs associated with the removal and disposal of existing storm sewer manholes.	Reference City of Fargo Standard Specification 1050
0027	F&I Inlet - Manhole (MHI) 4' Dia Reinf Conc (EA)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of the storm sewer structure.	Reference City of Fargo Standard Specification 1500
0028	F&I Inlet - Manhole (MHI) 6' Dia Reinf Conc (EA)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of the storm sewer structure.	Reference City of Fargo Standard Specification 1500
0029	F&I Inlet - Single Box (SBI) Reinf Conc (EA)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of the storm sewer single box inlet structure.	Reference City of Fargo Standard Specification 1500
0030	F&I Inlet - Double Box (DBI) Reinf Conc (EA)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of the storm sewer double box inlet structure.	Reference City of Fargo Standard Specification 1500
0031	F&I Inlet - Special (SPI) Reinf Conc (EA)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of the storm sewer special inlet structure.	Reference City of Fargo Standard Specification 1500
0032	Riprap (Outlet) (CY)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of the storm sewer riprap.	This item shall be paid for at the contract unit price for the bid item based on cubic yards of riprap installed.
0033	Box Culvert End Section with Grate (EA)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of the storm sewer box culvert end section with grate.	This item shall be paid for at the contract unit price for the bid item based on each box culvert end section installed.
0034	Plug Pipe 33" DIA. (EA)	Includes costs associated to plug storm sewer pipe.	Reference City of Fargo Standard Specification 1050
0035	Plug Pipe 72" DIA. (EA)	Includes costs associated to plug storm sewer pipe.	Reference City of Fargo Standard Specification 1050
0036	Plug Pipe 78" DIA. (EA)	Includes costs associated to plug storm sewer pipe.	Reference City of Fargo Standard Specification 1050



**CONTRACT NO. 4 – COMBINED GENERAL CONSTRUCTION, ELECTRICAL  
CONSTRUCTION, AND MECHANICAL CONSTRUCTION**

<b>No.</b>	<b>Item</b>	<b>Description</b>	<b>Payment</b>
0037	F&I Pipe 18" Dia Reinf Conc (LF)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of the storm sewer pipe.	Reference City of Fargo Standard Specification 1500
0038	F&I Pipe 24" Dia Reinf Conc (LF)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of the storm sewer pipe.	Reference City of Fargo Standard Specification 1500
0039	F&I Pipe 30" Dia Reinf Conc (LF)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of the storm sewer pipe.	Reference City of Fargo Standard Specification 1500
0040	F&I Pipe 36" Dia Reinf Conc (LF)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of the storm sewer pipe.	Reference City of Fargo Standard Specification 1500
0041	F&I Pipe 48" Dia Reinf Conc (LF)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of the storm sewer pipe.	Reference City of Fargo Standard Specification 1500
0042	F&I Pipe 54" Dia Reinf Conc (LF)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of the storm sewer pipe.	Reference City of Fargo Standard Specification 1500
0043	F&I Pipe 72" Dia Reinf Conc (LF)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of the storm sewer pipe.	Reference City of Fargo Standard Specification 1500
0044	F&I Pipe 12" Dia PVC (LF)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of the storm sewer pipe.	Reference City of Fargo Standard Specification 1500
0045	Remove Storm Sewer Pipe All Sizes All Types (LF)	Includes costs associated with the removal and disposal of existing storm sewer pipes of all sizes and types.	Reference City of Fargo Standard Specification 1050
0046	30" Flapgate (EA)	Includes costs associated with the installation of the storm sewer flapgate.	This item shall be paid for at the contract unit price per each installed 30" flapgate.
0047	54" Flapgate (EA)	Includes costs associated with the installation of the storm sewer flapgate.	This item shall be paid for at the contract unit price per each installed 54" flapgate.
0048	F&I Pipe w/GB 30" Dia Reinf Conc (LF)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of the storm sewer pipe with gravel backfill.	Reference City of Fargo Standard Specification 1500
0049	F&I Pipe w/GB 36" Dia Reinf Conc (LF)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of the storm sewer pipe with gravel backfill.	Reference City of Fargo Standard Specification 1500

**CONTRACT NO. 4 – COMBINED GENERAL CONSTRUCTION, ELECTRICAL  
CONSTRUCTION, AND MECHANICAL CONSTRUCTION**

<b>No.</b>	<b>Item</b>	<b>Description</b>	<b>Payment</b>
0050	F&I Pipe w/GB 54" Dia Reinf Conc (LF)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of the storm sewer pipe with gravel backfill.	Reference City of Fargo Standard Specification 1500
0051	F&I Box Culvert 8'x5' Wide Reinf Conc Cast in Place with depth of fill 1' to 10' (LF)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of the storm sewer box culvert.	Reference City of Fargo Standard Specification 1500
0052	F&I Box Culvert 8'x5' Wide Reinf Conc Cast in Place with depth of fill 10' to 31' (LF)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of the storm sewer box culvert.	Reference City of Fargo Standard Specification 1500
0053	F&I Box Culvert 8'x5' Wide Reinf Conc Precast (LF)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of the storm sewer box culvert.	Reference City of Fargo Standard Specification 1500
0054	Remove Pavement All Thicknesses All Types (SY)	Includes costs associated with the removal and disposal of existing pavement of all thicknesses and types.	Reference City of Fargo Standard Specification 1050
0055	Subgrade Preparation (SY)	Includes furnishing materials, equipment, labor and performing operations necessary for subgrade preparation.	Reference City of Fargo Standard Specification 2000
0056	F&I Woven Geotextile (SY)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of woven geotextile fabric.	Reference City of Fargo Standard Specification 2050
0057	F&I Class 5 Agg - 6" Thick (SY)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of class 5 aggregate.	Reference City of Fargo Standard Specification 2070
0058	F&I Class 5 Agg - 7" Thick (SY)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of class 5 aggregate.	Reference City of Fargo Standard Specification 2070
0059	F&I Class 5 Agg - 8" Thick (SY)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of class 5 aggregate.	Reference City of Fargo Standard Specification 2070
0060	F&I Class 5 Agg - 12" Thick (SY)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of class 5 aggregate.	Reference City of Fargo Standard Specification 2070

**CONTRACT NO. 4 – COMBINED GENERAL CONSTRUCTION, ELECTRICAL  
CONSTRUCTION, AND MECHANICAL CONSTRUCTION**

<b>No.</b>	<b>Item</b>	<b>Description</b>	<b>Payment</b>
0061	F&I Crushed Conc - 6" Thick (SY)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of crushed concrete.	Reference City of Fargo Standard Specification 2070
0062	F&I Curb & Gutter Standard (Type II) (LF)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of curb and gutter.	Reference City of Fargo Standard Specification 2100
0063	Remove Curb & Gutter (LF)	Includes costs associated with the removal and disposal of existing curb and gutter.	Reference City of Fargo Standard Specification 1050
0064	F&I Pavement 6" Thick Reinf Conc (SY)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of reinforced concrete pavement.	Reference City of Fargo Standard Specification 2100
0065	F&I Pavement 7" Thick Reinf Conc (SY)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of reinforced concrete pavement.	Reference City of Fargo Standard Specification 2100
0066	F&I Pavement 9" Thick Doweled Conc (SY)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of doweled concrete pavement.	Reference City of Fargo Standard Specification 2100
0067	F&I Sidewalk 4" Thick Reinf Conc (SY)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of reinforced concrete sidewalk.	Reference City of Fargo Standard Specification 2300
0068	Remove Sidewalk All Thicknesses All Types (SY)	Includes costs associated with the removal and disposal of existing sidewalk of all thickness and types.	Reference City of Fargo Standard Specification 1050
0069	Temp Construction Entrance (EA)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of temporary construction entrances.	Reference City of Fargo Standard Specification 3300
0070	Traffic Control - Type 1 (LS)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of traffic control.	Reference City of Fargo Standard Specification 4100
0071	F&I Aggregate for Asph Pavement Class 29 (TN)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of aggregate for asphalt pavement.	Reference City of Fargo Standard Specification 2400
0072	F&I Asphalt Cement PG 58-28 (GAL)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of asphalt cement.	Reference City of Fargo Standard Specification 2400
0073	F&I Impressed 4" Thick Reinf Conc (SY)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of impressed reinforced concrete.	Reference City of Fargo Standard Specification 2300

**CONTRACT NO. 4 – COMBINED GENERAL CONSTRUCTION, ELECTRICAL  
CONSTRUCTION, AND MECHANICAL CONSTRUCTION**

<b>No.</b>	<b>Item</b>	<b>Description</b>	<b>Payment</b>
0074	F&I Det Warn Panels Cast Iron (SF)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of detectable warning panels cast iron.	Reference City of Fargo Standard Specification 2300
0075	F&I Sign Assembly (EA)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of sign assembly.	Reference City of Fargo Standard Specification 4300
0076	Relocate Sign Assembly (EA)	Includes costs associated with the number of locations at which a sign assembly has been reset.	Reference City of Fargo Standard Specification 4300
0077	F&I Engineering Grade (SF)	Includes costs associated for the engineering grade sheeting and aluminum panel.	Reference City of Fargo Standard Specification 4300
0078	F&I Diamond Grade Cubed (SF)	Includes costs associated for the diamond grade cubed sheeting and aluminum panel.	Reference City of Fargo Standard Specification 4300
0079	F&I High Intensity Prismatic (SF)	Includes costs associated for the high intensity prismatic sheeting and aluminum panel.	Reference City of Fargo Standard Specification 4300
0080	F&I Flexible Delineator (EA)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of flexible delineators.	This item shall be paid for at the contract unit price per each installed flexible delineator.
0081	F&I Grooved Plastic Film Message (SF)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of grooved plastic film message.	Reference City of Fargo Standard Specification 4000
0082	F&I Grooved Plastic Film 4" Wide (LF)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of grooved plastic film.	Reference City of Fargo Standard Specification 4000
0083	F&I Grooved Plastic Film 24" Wide (LF)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of grooved plastic film.	Reference City of Fargo Standard Specification 4000
0084	Paint Epoxy Message (SF)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of the painted epoxy message.	Reference City of Fargo Standard Specification 4000
0085	Paint Epoxy Line 4" Wide (LF)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of the painted epoxy line.	Reference City of Fargo Standard Specification 4000
0086	Paint Epoxy Line 8" Wide (LF)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of the painted epoxy line.	Reference City of Fargo Standard Specification 4000
0087	Paint Epoxy Line 24" Wide (LF)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of the painted epoxy line.	Reference City of Fargo Standard Specification 4000

**CONTRACT NO. 4 – COMBINED GENERAL CONSTRUCTION, ELECTRICAL  
CONSTRUCTION, AND MECHANICAL CONSTRUCTION**

<b>No.</b>	<b>Item</b>	<b>Description</b>	<b>Payment</b>
0088	Obliterate Pavement Markings (SF)	Includes costs associated for the obliteration of pavement markings.	Reference City of Fargo Standard Specification 4000
0089	Temp Fence - Safety (LF)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of temporary safety fence.	This item shall be paid for at the contract unit price for the bid item based on the lineal feet of temporary fence installed.
0090	Remove Fence (LF)	Includes costs associated for the removal of fence of any type.	This item shall be paid for at the contract unit price for the bid item based on the lineal feet of fence removed.
0091	Temp Pumping (LS)	Includes costs associated for temporary pumping.	This item shall be paid for as a lump sum price for any temporary pumping needed for the duration of the project.
0092	Clear & Grub (LS)	Includes costs associated for clearing and grubbing.	Reference City of Fargo Standard Specification 1050
0093	Remove Tree (EA)	Includes costs associated for tree removal and disposal.	Reference City of Fargo Standard Specification 1050
0094	Silt Fence - Standard (LF)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of standard silt fence.	Reference City of Fargo Standard Specification 3300
0095	Floating Silt Fence (LF)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of floating silt fence.	This item shall be paid for at the contract unit price for the bid item based on the lineal feet of floating silt fence installed.
0096	Sediment Control Log 6" to 8" Dia (LF)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of sediment control logs.	Reference City of Fargo Standard Specification 3300
0097	Inlet Protection - New Inlet (EA)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of new inlet protection.	Reference City of Fargo Standard Specification 3300
0098	Inlet Protection - Existing Inlet (EA)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of existing inlet protection.	Reference City of Fargo Standard Specification 3300
0099	Salvage Signal Standard (EA)	Includes costs associated for salvaging existing signal.	Reference City of Fargo Standard Specification 4200

**CONTRACT NO. 4 – COMBINED GENERAL CONSTRUCTION, ELECTRICAL  
CONSTRUCTION, AND MECHANICAL CONSTRUCTION**

<b>No.</b>	<b>Item</b>	<b>Description</b>	<b>Payment</b>
0100	Lighting System (LS)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of the street lighting system.	This item shall be paid for as a lump sum price for the installation of the street lighting system.
0101	Propane Tanks Remove and Replace (LS)	Includes furnishing materials, equipment, labor and performing operations necessary for the removal and installation of propane tanks.	This item shall be paid for as a lump sum price for the removal and installation of the propane tanks.
0102	Replace Unsalvageable Bollards (EA)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of unsalvageable bollards.	This item shall be paid for at the contract unit price based on each installed bollard.
0103	Revise Flashing Beacon System (LS)	Includes furnishing materials, equipment, labor and performing operations necessary for revising the flashing beacon system.	This item shall be paid for as a lump sum price for the revision of the flashing beacon system.
0104	Revise Traffic Control System (LS)	Includes furnishing materials, equipment, labor and performing operations necessary for revising the traffic control system.	This item shall be paid for as a lump sum price for the item "Revise Traffic Control System".
0105	F&I Bus Shelter (EA)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of the bus shelter.	This item shall be paid for at the contract unit price for the bid item based on each bus shelter installed.
0106	F&I Sheet Piling – Steel (SF)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of sheet piling for the floodwall.	This item shall be paid for at the contract unit price based on the square feet of steel sheet piling installed.
0107	Topsoil - Strip (CY)	Includes costs associated for topsoil stripping on the project site.	Reference City of Fargo Standard Specification 1050
0108	Topsoil - Spread (CY)	Includes costs associated for topsoil spreading on the project site.	Reference City of Fargo Standard Specification 2000
0109	Embankment (CY)	Includes costs associated for embankment on the project site.	Reference City of Fargo Standard Specification 2000
0110	Embankment Import (CY)	Includes costs associated for embankment import on the project site.	Reference City of Fargo Standard Specification 3600
0111	Excavation (CY)	Includes costs associated for excavation on the project site.	Measurement of excavation volume will be by number of cubic yards in its original location and shall be paid at the contract unit price per cubic yard.

**CONTRACT NO. 4 – COMBINED GENERAL CONSTRUCTION, ELECTRICAL  
CONSTRUCTION, AND MECHANICAL CONSTRUCTION**

<b>No.</b>	<b>Item</b>	<b>Description</b>	<b>Payment</b>
0112	Grading North of 2nd St S and West of 4th St S (LS)	Includes costs associated for grading on site north of 2nd St S and the area west of 4th St S.	This item shall be paid for as a lump sum price for any grading north of 2nd St S and west of 4th St S.
0113	Mulching Type 1 - Hydro (SY)	Includes furnishing materials, equipment, labor and performing operations necessary for mulching type 1.	Reference City of Fargo Standard Specification 3100
0114	Seeding Type B (SY)	Includes furnishing materials, equipment, labor and performing operations necessary for seeding type b.	Reference City of Fargo Standard Specification 3100
0115	Overseeding (SY)	Includes furnishing materials, equipment, labor and performing operations necessary for overseeding.	This item shall be paid for at the contract unit price for the bid item based on the square yards of overseeding performed.
0116	Weed Control Type B (SY)	Includes furnishing materials, equipment, labor and performing operations necessary for weed control type b.	Reference City of Fargo Standard Specification 3100
0117	Removable Floodwall (LS)	Includes furnishing materials, equipment, labor and performing operations necessary for the removable floodwall.	This item shall be paid for as a lump sum price for the installation of removable floodwall.
0118	F&I Floodwall Reinf Bars – Steel (LBS)	Includes furnishing materials, and labor to place, tie, and support reinforcing bars (non-coated) for floodwall.	Payment made will be made based on pounds (LBS) of reinforcing steel placed for floodwall.
0119	F&I Floodwall Reinf Bars - Epoxy Coated Steel (LBS)	Includes furnishing materials, and labor to place, tie, and support reinforcing bars (epoxy-coated) for floodwall.	Payment made will be made based on pounds (LBS) of reinforcing steel placed for floodwall.
0120	F&I Floodwall - Structural Conc (CY)	Includes furnishing materials and labor to place, consolidate, cure, and finish structural concrete for floodwall.	Payment will be made based on cubic yards (CY) of concrete placed based on volume calculated from the Drawings.
0121	F&I Floodwall – Misc. (LS)	Includes furnishing materials and labor for all aspects of the floodwall not included in Items 0117, 0118, 0119, and 0120, including excavation, backfill, non-structural concrete cap, forms, form-liner, form stripping, waterstop, sealant, and other items required for a complete flood wall.	Payment will be made on estimated percent complete.

**CONTRACT NO. 4 – COMBINED GENERAL CONSTRUCTION, ELECTRICAL  
CONSTRUCTION, AND MECHANICAL CONSTRUCTION**

<b>No.</b>	<b>Item</b>	<b>Description</b>	<b>Payment</b>
0122	Demolition-Pump Stations, Storm Sewers, Force Mains (LS)	Includes furnishing materials, equipment, labor and performing operations necessary for demolition, removal, disposal, or salvage, of existing structures, equipment, and abandoned utilities.	Payment will be made on estimated percent complete.
0123	Force Mains and Sump Pump Discharge (LS)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of force mains and sump pump discharge and associated fittings, including, but not limited to, excavation, bedding, and backfill. Connection to Pump Station is included in Pump Station. Connection to Gatewell is included in Gatewell - Structural.	Payment will be made on estimated percent complete.
0124	Pump Station (LS)	Includes furnishing materials, equipment, labor and performing operations necessary for the complete construction of the pump station, including earthwork, structural concrete and masonry, structural steel, roofing system, exterior architecture, interior and exterior finishes, doors and windows, and concrete pads for stormwater pumps, sump pumps, electrical gear, interior process piping, associated fittings, couplings and valves and appurtenances, including pipe supports and wall sleeves. Item also includes connection of forcemains and sump pump discharge pipes to Pump Station.	Payment will be made on estimated percent complete.
0125	Stormwater Pumps and Motors (LS)	Includes furnishing stormwater pumps and motors, and installation on equipment pads included in Pump Station. Item also includes ancillary devices including but not limited to bearing lubrication systems and associated piping.	10 percent of payment will be made on approval of Shop Drawings, 50 percent on delivery site, and 40 percent on completion of installation.
0126	Sump Pumps (LS)	Includes furnishing sump pumps and motors, and retrieval system complete, and installation on equipment pads included in Pump Station wetwell.	10 percent of payment will be made on approval of Shop Drawings, 50 percent on delivery site, and 40 percent on completion of installation.
0127	Trash Racks and Miscellaneous Metals (LS)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of the trash racks and miscellaneous metals in Pump Station. Item also includes trash rake to be mounted on each rack and jib crane for rake operation.	Payment will be made on estimated percent complete.



**CONTRACT NO. 4 – COMBINED GENERAL CONSTRUCTION, ELECTRICAL  
CONSTRUCTION, AND MECHANICAL CONSTRUCTION**

<b>No.</b>	<b>Item</b>	<b>Description</b>	<b>Payment</b>
0128	Sluice Gates and Wall Thimbles (LS)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation of the sluice gates and wall thimbles in Pump Station, and Gatewell. Item also includes gate operators and actuators.	10 percent of payment will be made on approval of Shop Drawings, 50 percent on delivery site, and 40 percent on completion of installation.
0129	Generator Building - Structural and Architectural (LS)	Includes furnishing materials, equipment, labor and performing operations necessary for the complete construction of the generator building and fuel storage area including earthwork, structural concrete and masonry, structural steel, roofing system, exterior architecture, interior and exterior finishes, doors and windows, and concrete pads for generator and fuel storage tank.	Payment will be made on estimated percent complete.
0130	Gatewell Structural (LS)	Includes furnishing materials, equipment, labor and performing operations necessary for the complete construction of the gatewell structure including earthwork, structural concrete and masonry, and structural steel, Item also includes connection of forcemains and sump discharge pipes to gatewell.	Payment will be made on estimated percent complete.
0131	Gatewell - Miscellaneous Metals (LS)	Includes furnishing materials, equipment, labor and performing operations necessary for the miscellaneous metals for the gatewell including, but not limited to, railings, ladders, landings, and flap gates. Sluice gates and wall thimbles are included in Sluice Gates and Wall Thimbles.	Payment will be made on estimated percent complete.
0132	Sheetpiling (Pump Station) (LS)	Includes furnishing materials, equipment, labor and performing operations necessary for the installation and removal of sheetpiling for pump station construction.	Payment will be made on estimated percent complete.
0133	Health and Safety (LS)	Lump Sum Price bid includes labor, equipment, and materials necessary to prepare, implement, and monitor the Health and Safety Plan and prepare required monitoring reports.	Payment will be made based on percentage of Contract Time elapsed at the time of Payment Application
0134	Diesel Generator (LS)	Includes furnishing the diesel generator, and installation on equipment pad included in Generator Building – Structural and Architectural.	10 percent of payment will be made on approval of Shop Drawings, 50 percent on delivery site, and 40 percent on completion of installation.
0135	Switchboard SWBDA, Motor Control Center MCLA, Automatic Transfer Switch,	Includes furnishing switchboard SWBDA, Motor Control Center MCLA, Automatic Transfer Switch, Panel HP1, and installation on equipment pads included in Pump Station.	10 percent of payment will be made on approval of Shop Drawings, 50 percent on delivery site, and 40 percent on completion of installation.

<b>CONTRACT NO. 4 – COMBINED GENERAL CONSTRUCTION, ELECTRICAL CONSTRUCTION, AND MECHANICAL CONSTRUCTION</b>			
<b>No.</b>	<b>Item</b>	<b>Description</b>	<b>Payment</b>
	Panel HP1 (LS)		
0136	Electrical-Interior (LS)	Includes furnishing materials, equipment, labor and performing operations necessary to provide interior conduits, conductors, control wiring, connections, switches, lighting, and other items necessary to provide a functioning system.	Payment will be made on estimated percent complete.
0137	Electrical-Exterior (LS)	Includes furnishing materials, equipment, labor and performing operations necessary to provide exterior ductbanks, conduits, conductors, control wiring, connections, switches, lighting and other items necessary to provide a functioning system.	Payment will be made on estimated percent complete.
0138	Instrumentation and Controls (LS)	Includes furnishing and installing PLCs and instrumentation and making connections necessary to provide a functioning system.	Payment will be made on estimated percent complete.
0139	Programming (LS)	Includes furnishing programming necessary to provide a functioning system.	Payment will be made on estimated percent complete.
0140	HVAC – General (LS)	Includes furnishing materials, equipment, labor and performing operations necessary to provide HVAC systems for Pump Station, and Generator Bldg. – Structural and Architectural, including vent and engine muffler for Diesel Generator.	Payment will be made on estimated percent complete.
0141	Plumbing General (LS)	Includes furnishing materials, equipment, labor and performing operations necessary to provide general plumbing (non-process) for Pump Station, and Generator Bldg. – Structural and Architectural.	Payment will be made on estimated percent complete.
0142	Generator Accessories, Fuel Storage and Fuel System (LS)	Includes furnishing materials, equipment, labor and performing operations necessary to provide fuel storage and fuel system. Fuel storage tank to be installed on equipment pad provided in Generator Bldg. – Structural and Architectural.	Payment will be made on estimated percent complete.

1.07 NONPAYMENT FOR REJECTED OR UNUSED PRODUCTS

A. Payment will not be made for following:

1. Loading, hauling, and disposing of rejected material.
2. Quantities of material wasted or disposed of in manner not called for under Contract Documents.
3. Rejected loads of material, including material rejected after it has been placed by reason of failure of Contractor to conform to provisions of Contract Documents.

4. Material not unloaded from transporting vehicle.
5. Defective Work not accepted by Owner.
6. Material remaining on hand after completion of Work.

1.08 PARTIAL PAYMENT FOR STORED MATERIALS AND EQUIPMENT

- A. Partial Payment: Partial payments will be made for materials and equipment delivered and properly stored.
- B. Final Payment: Will be made only for products incorporated in Work; remaining products, for which partial payments have been made, shall revert to Contractor unless otherwise agreed, and partial payments made for those items will be deducted from final payment.

1.09 SUPPLEMENTS

- A. The supplements listed below, following “END OF SECTION,” are part of this specification.
  1. Form: Application for Payment.

**PART 2 PRODUCTS (NOT USED)**

**PART 3 EXECUTION (NOT USED)**

**END OF SECTION**