

## **DIVISION 1**



**CITY OF EAST PROVIDENCE  
AILANTHUS AVENUE PARKING LOT AND PLAYGROUND PROJECT  
SPECIFICATIONS  
REQUEST FOR PROPOSALS  
RFP EP22/23-10  
BID OPENING THURSDAY MARCH 30, 2023 AT 11:30AM**

**SECTION 01010**

**SUMMARY OF WORK**

**PART 1 GENERAL**

**1.01 SECTION INCLUDES**

A. Work covered by the Contract, listing of Owner, Project location, Engineer. Sequence requirements, the Contractor's use of the premises and Owner's occupancy requirements.

**1.02 WORK COVERED BY CONTRACT DOCUMENTS**

A. The work includes, but is not necessarily limited to:

- Removal of existing cement concrete sidewalk
- Installation of new playground
- Installation of bituminous pavement parking lot
- Installation of new cement concrete sidewalk
- Installation of new cement concrete wheelchair ramps
- Removal of subgrade material and replacement with gravel borrow base course material
- Installation of new granite curb and bituminous berm
- Installation of sediment forebay and Infiltration Basin
- Installation of pavement markings
- All other incidental items included in the contract documents

B. All work done under this contract shall be in conformance with the Rhode Island Department of Transportation Standard Specifications for Road and Bridge Construction, amended March 2018, with all revisions and the State and Federal Special Provisions included in the Contract Documents. Standard details for this project are Rhode Island Standard Details, 1998 edition, with all revisions or the City of East Providence Standard Details. All traffic control devices and signage to be in accordance with the U.S. Department of Transportation Federal Highway Administration Manual on Uniform Traffic Control Devices (MUTCD), latest edition at time of Bid.

C. References within the Standard Specifications to RIDOT, the Department, or the Engineer shall, for the purposes of this Contract, be construed to mean the City of East Providence or its designated representative.

### 1.03 OWNER

A. City of East Providence, Rhode Island

145 Taunton Ave

East Providence RI 02914

Telephone: (401) 435-7701

Contact: Daniel Borges

### 1.04 PROJECT LOCATION

A. Map 311-Block 15-Parcel 3 – Southwest corner of Ailanthus Ave and Pawtucket Ave

### 1.05 ENGINEER

A. BETA Group, Inc.

701 George Washington Highway

Lincoln, Rhode Island 02865

Telephone: 401-333-2382

Fax: 401-333-9225

Contact: Benjamin Boynton, P.E.

### 1.06 WORK SEQUENCE

A. In order that Work may be conducted with minimum inconvenience to the public and, work under this Contract may be coordinated with other work which may be under construction or contemplated, and that work under the Contract may conform to conditions which it has been undertaken or conditions attached to a right-of-way or particular location for this work, the Engineer may determine the point or points and time or times when portions of work will commence or be carried on and may issue orders pertaining to the work sequence, relative to the rate of progress on several portions of the work.

B. All trench work shall be covered at the end of the work day with either temporary bituminous patching or steel plates to ensure public safety.

## 1.07 CONTRACTOR USE OF PREMISES

- A. The Contractor's use of premises shall be within the limits shown on the Drawings and as defined in Section 00500 – Contract Agreement, for the performance of the Work.
- B. The Contractor shall assume full responsibility for security of all materials and equipment on the site, including those of his subcontractor's.
- C. If directed by the Owner, the Contractor shall move any stored items that interfere with operations of the Owner.
- D. Obtain and pay for use of additional storage or work areas if needed to perform the Work.

## 1.08 OWNER OCCUPANCY REQUIREMENTS

- A. Unless otherwise specifically approved, all roadways within the project area must remain in full service at all times throughout the duration of the project unless otherwise approve by the City. Also, access to properties must be maintained.

PART 2      PRODUCTS

NOT USED

PART 3      EXECUTION

NOT USED

END OF SECTION

## SECTION 01025

### MEASUREMENT AND PAYMENT

#### PART 1 GENERAL

##### 1.01 SUMMARY

###### A. Section Includes

1. Measurement and payment criteria applicable to the Work performed under a unit price and/or lump sum payment method of Items listed in the BID.

###### B. RELATED SECTIONS

1. Section 00300 - Bid
2. Section 00500 - Agreement
3. Section 01026 - Schedule of Values

##### 1.02 UNIT QUANTITIES SPECIFIED

A. Quantities and measurements indicated in SECTION 00300 are for bidding and contract purposes only. Quantities and measurements supplied or placed in the Work and verified by the Engineer shall determine payment.

B. If the actual Work requires more or fewer quantities than those quantities indicated, provide the required quantities at the unit price contracted.

##### 1.03 MEASUREMENTS OF QUANTITIES

A. Measurement by Volume: Measured by cubic dimension using mean length, width and height or thickness.

B. Measurement by Area: Measured by square dimension using mean length and width or radius.

C. Linear Measurement: Measured by linear dimension, along the horizontal projection of the centerline or mean chord.

D. At appropriate points in this text, specifications are given with respect to measuring or estimating certain quantities and the sums due for the same. Except as otherwise provided, the Engineer shall determine the appropriate method for measuring and computing each quantity, and for estimating the sums due for the various kinds of work and material, using such methods, tools and degrees of precision as are suitable for the particular measurement, Item or computation. When so requested by the Engineer, assistance in measuring or determining quantities, shall be provided by furnishing the help of unskilled laborers on the site, by furnishing copies of invoices, or by other means.

- E. For estimating quantities in which the computations of areas by analytic and geometric methods would be laborious, as determined by the Engineer, it is stipulated and agreed that the planimeter shall be considered an instrument of precision adapted to the measurement of such areas and may be used for this purpose.

#### 1.04 UNIT PRICES

- A. Payment will be computed on the basis of the unit price bid in SECTION 00300 for each Item and the quantity of units completed. Unit prices are to include cost of all necessary materials, labor, equipment, overhead, profit and other applicable costs. (See Par. 1.06, this Section.)

#### 1.05 LUMP SUM PRICES

- A. Payment will be computed on the basis of the percentage of work completed on each Item in the contract BID as determined by the Engineer. Lump sum prices are to include the cost of all necessary materials, labor, equipment, overhead, profit and other applicable costs. (See Par. 1.06, this Section.)
- B. The Contractor's breakdown (submit under SECTION 01026) of the lump sum bid will be used only as a guide to determine the percentage of completion.

#### 1.06 PRICES INCLUDE

- A. The prices stated in the Proposal include full compensation not only for furnishing all the labor, equipment and material needed for, and for performing the work, but also for assuming all risks of any kind for expenses arising by reason of the nature of the soil, ground water, or the action of the elements; for all excavation and backfilling; for the removal of and delay or damage occasioned by trees, stumps, pipes, ducts, timber, masonry or other obstacles; for removing, protecting, repairing, or restoring, without cost to the Owner, all pipes, ducts, drains, sewers, culverts, conduits, curbs, gutters, walks, fences, tracks, or other obstacles, road pavements and other ground surfacing whether shown on plans or not for draining, damming, pumping or otherwise handling and removing, without damage to the work or to other parties, and without needless nuisance, all water or sewage from whatever source which might affect the work or its progress, or be encountered in excavations made for the work; for all signs, fencing, lighting, watching, guarding, temporary surfacing, bridging, snow removal, etc., necessary to maintain and protect travel on streets, walks and private ways; for making all provisions necessary to maintain and protect buildings, fences, poles, trees, structures, pipes, ducts and other public or private property affected or endangered by the work; for the repair or replacement of such things if injured by neglect of such provisions for removing all surplus or rejected materials as may be directed; for replacing, repairing and maintaining the surfaces of streets, highways, public and private lands if and where disturbed by work performed under the Contract or by negligence in the performance of work under the Contract; for furnishing the requisite filling materials in case of any deficiency or lack of suitable materials; for obtaining all permits and licenses and complying with the requirements thereof, including the cost of furnishing any security needed in connection therewith;

- for protection against inclement or cold weather; for all expenses incurred by or on account of the suspension; interruption or discontinuance of work; for the cost of the surety bond and adequate insurance; for all taxes, fees, union dues, etc., for which the Contractor may be or become liable, arising out of his operations incidental to the Contract; for providing equipment on the site and off site; for providing a field office and its appurtenances and for all general and incidental expenses; for tools, implements and equipment required to build and put into good working order all work contemplated by the Contract; for maintaining and guaranteeing the same as provided; and for fulfilling all obligations assumed by the Contractor under the Contract and its related documents.
- B. The Owner shall pay, and the Contractor shall receive the prices stipulated in the BID made a part hereof as full compensation for everything performed and for all risks and obligations undertaken by the Contractor under and as required by the Contract.
  - C. The prices for those Items which involve excavation shall include compensation for disposal of surplus excavated material and handling water.

#### 1.07 PAYMENT

- A. In general, payment will be made for all Contract work satisfactorily completed through the end of the previous month. The payment will include any additional work which has been completed and approved and change order work agreed upon by the Owner and Contractor which has been completed and approved (See SECTION 00500).
- B. Each application for payment will indicate the total of a minimum percent retainage as defined in SECTION 00500, held by the Owner on the total of all work completed under the contract and approved for payment to-date.
- C. Monthly applications for payment may also indicate reduction or increase of the total Contract price when an approved change order results in a net reduction or net increase in the cost and quantity of work to be performed under the Contract.
- D. Special billings and charges against the Contract as credit or payment to the Owner, that are not for change order work, may be subtracted from monies due on any monthly application for payment but shall not serve to reduce the total Contract price.
- E. Final payment for Work governed by unit prices will be made on the basis of the actual measurements and quantities accepted by the Engineer multiplied by the unit price for work which is incorporated in or made necessary by the Work.

1.08 METHOD OF MEASUREMENT AND BASIS OF PAYMENT

- A. All bid items listed below are applicable for all roadways included in the Contract Documents.

**BID ITEM NO. 201.0321 CLEARING AND GRUBBING**

A. METHOD OF MEASUREMENT

1. The quantity of clearing and grubbing to be paid for under this item shall be measured by the square yard as measured by the actual area cleared and grubbed, as directed by the Engineer.

B. BASIS OF PAVEMENT

1. The unit price for this item shall include full compensation for all labor, equipment, materials and incidentals needed to complete the following:
- a. Removal of all trees as directed (diameter of 9" and under)
  - b. Removal of all brush, dead, dying, and diseased trees, previously fallen trees, branches, stumps, and other debris within the designated area.
  - c. Other work, whether direct or incidental, associated with clearing and grubbing not specifically included for payment under other bid items.

**BID ITEM NO. 201.0403 REMOVE AND DISPOSE SIDEWALKS**

A. METHOD OF MEASUREMENT

1. The quantity of remove and dispose sidewalks to be paid for under this item shall be measured per square yard, based on the actual area of existing sidewalk removed and disposed, as indicated on the Drawings or as otherwise directed by the Engineer.

B. BASIS OF PAYMENT

1. The unit price for this item shall include full compensation for all labor, equipment, materials and incidentals needed to complete the following:
- a. Excavation, removal and legally disposing of the existing sidewalk; including any sawcutting of the existing pavements and removal and disposal of all existing pavements, including any existing bituminous concrete and concrete base or reinforced concrete base, and masonry;
  - b. Any and all other work, whether direct or incidental, associated with removing and disposing drain structures not specifically identified herein.

**BID ITEM NO. 201.0409 REMOVE AND DISPOSE FLEXIBLE PAVEMENT**

A. METHOD OF MEASUREMENT



1. The quantity of remove and dispose flexible pavement to be paid for under this item shall be measured per square yard, based on the actual area of existing pavement removed and disposed, as indicated on the Drawings or as otherwise directed by the Engineer.

**B. BASIS OF PAYMENT**

1. The unit price for this item shall include full compensation for all labor, equipment, materials and incidentals needed to complete the following:
  - a. Excavation, removal and legally disposing of the existing pavement; including any sawcutting of the existing pavements and removal and disposal of all existing pavements, including any existing bituminous concrete and concrete base or reinforced concrete base, and masonry;
  - b. Any and all other work, whether direct or incidental, associated with removing and disposing drain structures not specifically identified herein.

**BID ITEM NO. 201.0419 REMOVE AND DISPOSE FENCE**

**A. METHOD OF MEASUREMENT**

1. The quantity of remove and dispose fence to be paid for under this item shall be measured by the linear foot taken along the centerline of the removed and disposed fence.

**B. BASIS OF PAYMENT**

1. The unit price for this item shall include full compensation for all labor, equipment, materials and incidentals needed to complete the following:
  - a. Excavation, removal, and legally disposing of the existing fence;
  - b. The work shall include any temporary excavation support, furnishing and installing gravel backfill material including compacting the material as specified;
  - c. Removing and legally disposing of any foundations;
  - d. Any and all other work, whether direct or incidental, associated with the removal and disposal of the existing fence not specifically identified herein.

**BID ITEM NO. 201.0608 REMOVE AND STOCKPILE DIRECTIONAL REGULATORY AND WARNING SIGNS**

**A. METHOD OF MEASUREMENT**

1. The quantity of remove and stockpile signs to be paid for under this item shall be measured per each of the directional regulatory and warning signs actually removed and stockpiled as directed by the Engineer.

**B. BASIS OF PAYMENT**

1. The unit price for this item shall include full compensation for all labor, equipment, materials and incidentals needed to complete the following:
  - a. Excavation, removal, and stockpiling to a location determined by the Engineer of the existing signs;
  - b. The work shall include any temporary excavation support, furnishing and installing gravel backfill material including compacting the material as specified;
  - c. Any and all other work, whether direct or incidental, associated with the removal and stockpiling of the existing signs not specifically identified herein.

**BID ITEM NO. 202.0300**

**UNCLASSIFIED EXCAVATION**

**A. METHOD OF MEASUREMENT**

1. The quantity of unclassified excavation to be paid for under this item shall be measured per cubic yard, based on the total number of cubic yards of materials excavated and either re-used in the Work or disposed of at an off-site location which are not incidental to the performance of other work items.

**B. BASIS OF PAYMENT**

1. The unit price for this item shall include full compensation for all labor, equipment, materials and incidentals needed to complete the following:
  - a. Excavation of all materials (except rock), including but not limited to silt, sand, gravel or other soils, berms, curbs, and any other materials;
  - b. Stockpiling and re-handling excavated materials for reuse on other portions of this project, or removing and legally disposing of excavated materials at an off-site location (the Contractor shall locate and secure an acceptable disposal site for all excess materials);
  - c. Any and all other work, whether direct or incidental, associated with excavation of unclassified materials not specifically identified herein.

**BID ITEM NO. 202.0201**

**ROCK EXCAVATION MECHANICAL**

**A. METHOD OF MEASUREMENT**

1. The quantity of rock excavation and disposal to be paid for under this item shall be measured per cubic yard, based on the total number of cubic yards of rock removed, measured in place before excavation, within the payment limits indicated on the Drawings and as defined in the Specifications, unless rock excavation beyond such limits has been authorized in writing by the Engineer, in which case, measurements shall be made to the authorized limits.

**A. BASIS OF PAYMENT**

1. The unit price for this item shall include full compensation for all labor, equipment, materials and incidentals needed to complete the following:

- a. Removal and proper disposal of boulders in excess of 1 C.Y. in volume (measurement and volume determination to be made by Engineer);
  - b. Breaking or fracturing of solid contiguous rock by mechanical means (rock hammer, jackhammer); blasting of rock shall not be allowed under any circumstances;
  - c. Excavation of all broken rock to the authorized limits as determined by the Engineer;
  - d. Replacement of excavated rock with sand, gravel or crushed stone as specified and detailed on the Drawings, at the direction of the Engineer;
  - e. Proper disposal of excavated rock at an off-site location;
  - f. Any and all other work, whether direct or incidental, associated with the excavation and disposal of rock not specifically identified herein.
2. Where rock is encountered, it shall be uncovered but not excavated until measurements have been made by the Engineer, unless in the opinion of the Engineer, satisfactory measurements can be made in some other manner.
  3. Excavated rock which has not yet been disposed of shall not be included for payment.

**BID ITEM NO. 202.0700**

**COMMON BORROW**

**A. METHOD OF MEASUREMENT**

1. The quantity of common borrow to be paid for under this item shall be measured per cubic yard, based on the total number of cubic yards of common borrow installed, complete-in-place, as directed by the Engineer.

**B. BASIS OF PAYMENT**

1. The unit price for this item shall include full compensation for all labor, equipment, materials and incidentals needed to complete the following:
  - a. Furnishing, placing, fine grading and compacting common borrow to the relative density required for the specific location or application for which it is being used.
  - b. Any and all other work, whether direct or incidental, associated with furnishing and placing common borrow not specifically identified herein.
2. Common borrow outside the limits of normal excavation shall be furnished, placed, and compacted at the Contractor's expense, and no payment under this item will be made for such material.
3. Common borrow used to backfill rock excavations will not be measured for payment under this Item but shall be included in the unit price for "Rock Excavation Mechanical."

**BID ITEM NO. 204.0100****TRIMMING AND FINE GRADING****A. METHOD OF MEASUREMENT**

1. The quantity of trimming and fine grading measured shall be equal to the actual amount of graded and compacted material measured by the square yard, complete in place, to the payment limits indicated on the drawings or as directed by the Engineer. In addition to those areas defined in the contract documents, work under this Item shall include fine grading and compacting of subgrade areas at temporary pavement trenches, full depth roadway reconstruction areas, driveway and parking lot full depth construction locations, in areas of sidewalk and wheelchair ramp construction, in adjacent areas where existing curb is removed and reset, in adjacent areas where new curb is installed, in landscape areas where existing pavement is to be removed and replaced with loam and seed, and as directed by the Owner.

**B. BASIS OF PAYMENT**

1. Work done under the trimming and fine grading item shall be paid for by the contract unit price per square yard which shall constitute full compensation for trimming, grading, and compacting to the relative density and grades required for the specific locations or application for which it is being used.

**BID ITEM NO. 206.0301****COMPOST FILTER SOCK****A. METHOD OF MEASUREMENT**

1. The quantity of compost filter sock shall be measured in place by the foot of filter sock installed, approved, and maintained.

**B. BASIS OF PAYMENT**

1. Compost filter sock shall be paid for at the contract unit price per foot, complete in place, which price shall include all labor, materials, equipment and incidental costs required to complete the work, including but not limited to stakes and tube fabric, compost mulch wedge along top of tubes, removal and disposal of fabric and stakes, removal of accrued debris during construction, and raking and seeding of compost.

**BID ITEM NO. 209.0200****SACK INSERT CATCH BASIN INLET PROTECTION****A. METHOD OF MEASUREMENT**

1. Catch basin inserts shall be measured per each, complete in place.

**B. BASIS OF PAYMENT**

1. Catch basin inserts shall be measured and paid for at the Contract unit price per each which price and payment shall constitute full compensation for furnishing, placing,

relocating, maintaining, removing and disposing the silt sack including all materials, labor, equipment, tools, appurtenances, and incidentals necessary to satisfactorily complete this item of work, complete in place.

**BID ITEM NO. 269.4000 BMP 1**

**A. METHOD OF MEASUREMENT**

1. The quantity of infiltration basin construction to be paid for under this item shall be paid for on a lump sum basis.

**B. BASIS OF PAYMENT**

1. The unit price for this item shall include full compensation for all labor, equipment, materials and incidentals needed to complete the following:
  - a. Excavation of all materials within infiltration basin and sediment forebay limits to the grades required by the plans;
  - b. Stockpiling and rehandling of excavated materials for use on other portions of the project;
  - c. Removing and legally disposing of all excess material at a legal off-site location;
  - d. Furnishing and installing the overflow pipe, complete-in-place, including all excavation, disposal of material, crushed stone for pipe bedding material, gravel borrow backfill, compacting materials as specified, and all incidental work not specifically included for payment under other items;
  - e. Furnishing and installing concrete headwalls, complete-in-place, including all excavation, disposal of materials, gravel borrow backfill, compacting materials as specified, and all incidental work not specifically included for payment under other items;
  - f. Implementing safety precautions, including designing and implementing excavation support;
  - g. Designing, furnishing, installing, operating, maintaining, and removing temporary dewatering systems required to lower and control water levels and hydrostatic pressures during construction, as well as the appropriate disposal of pumped water;
  - h. Furnishing and installing riprap pads and forebays according to the specifications and details;
  - i. Furnishing and installing granite curb overflow weirs, set to the elevations shown on the plans, including any backfill material;
  - j. Furnishing and installing biodegradable jute mesh and temporary seeding;
  - k. Furnishing and installing ASTM C-33 concrete sand to the depths and grades shown on the plans;
  - l. Furnishing and installing gravel borrow fill material, as required;
  - m. Furnishing and installing loam, seed, and plantings as shown on the plans;
  - n. Trimming and fine grading to the lines and grades called for on the plans;
  - o. Removal and replacement of fencing, sidewalks, landscaping including bushes, plantings, mulch, and other associated property restorations disturbed by the Contractor's operations;

- p. Other work, whether direct or incidental, associated with the furnishing and installation of the infiltration basin and forebay not specifically identified herein.

**BID ITEM NO. 302.0100**

**GRAVEL BORROW SUBBASE COURSE**

**A. METHOD OF MEASUREMENT**

1. The quantity of gravel borrow to be paid for under this item shall be measured per cubic yard, based on the total number of cubic yards of gravel borrow installed, complete-in-place, as directed by the Engineer.

**B. BASIS OF PAYMENT**

1. The unit price for this item shall include full compensation for all labor, equipment, materials and incidentals needed to complete the following:
  - a. Furnishing, placing, fine grading and compacting gravel borrow to the relative density required for the specific location or application for which it is being used.
  - b. Any and all other work, whether direct or incidental, associated with furnishing and placing gravel borrow not specifically identified herein.
2. Gravel borrow outside the limits of normal excavation shall be furnished, placed, and compacted at the Contractor's expense, and no payment under this item will be made for such gravel.
3. Gravel borrow used to backfill rock excavations will not be measured for payment under this Item but shall be included in the unit price for "Rock Excavation Mechanical."

**BID ITEM NO. 401.2000**

**CLASS 12.5 HMA**

**BID ITEM NO. 401.3000**

**CLASS 9.5 HMA**

**A. METHOD OF MEASUREMENT**

1. The quantity of hot mix asphalt pavement course to be paid for under this item shall be equal to the actual amount of pavement, furnished and installed to the depths indicated, measured by the ton of hot mix asphalt pavement actually installed, as indicated on the Drawings or as directed by the Engineer. The quantity shall be determined only by weight slips that have been properly countersigned by the Engineer at the time of delivery.

**B. BASIS OF PAYMENT**

1. The quantity of hot mix asphalt pavement to be paid for under this item shall be equal to the actual amount of pavement, furnished and installed to the depths indicated, measured by the ton of hot mix asphalt pavement actually installed, as indicated on the Drawings or as directed by the Engineer.

2. The unit price for hot mix asphalt shall constitute full compensation for furnishing and installing the bituminous base course and bituminous surface course.
3. The unit price shall include sawcutting, removal and disposal of any temporary pavement, grading and compaction of the gravel base course; special compaction requirements; matching existing pavement; casting and valve box adjustments; applying required prime coats and tack coats; hand work necessary for driveways; and constructing the pavement complete, as specified and as indicated on the Drawings and not specifically included for payment under other items.

**BID ITEM NO. 403.0300                      ASPHALT EMULSION TACK COAT**

**A. METHOD OF MEASUREMENT**

1. Asphalt Emulsion Tack Coat, as required by the plans or these specifications, will be measured by the square yard.

**B. BASIS OF PAYMENT**

1. Asphalt Emulsion for Tack Coat will be paid for at the contract unit price per square yard of applied tack coat under this item. Payment shall include sweeping existing surfaces and applying the tack coat to all required surfaces at the specified rate in accordance with Section 02500.

**BID ITEM NO. 701.0512                      REINFORCED CONCRETE PIPE M 170 CLASS IV  
12 INCH**

**A. METHOD OF MEASUREMENT**

1. The quantities of gravity drain pipes to be paid for under these items shall be measured by the linear foot along the horizontal projection of the centerline of the completed drain, excluding the length of manholes and catch basins, measured to the limits of the manhole inside diameter or the catch basin inside face of wall.

**B. BASIS OF PAYMENT**

1. The unit prices for these items shall include full compensation for all labor, equipment, materials and incidentals needed to complete the following:
  - a. Furnishing and installing the gravity drains, complete-in-place, including all excavation, excavation support, disposal of material, furnishing and installing gravel borrow backfill, crushed stone for pipe bedding/backfill material, compacting materials as specified, filter fabric and all incidental work not specifically included for payment under other items;
  - b. Excavation shall also include any sawcutting of the existing pavements and removal and disposal of all existing pavements, including any existing bituminous concrete, masonry or concrete walls or reinforced concrete base (if encountered);

- c. Protection and support of existing utilities, maintaining flows of all utilities, and repairing and/or replacing damaged or impacted existing utilities not specifically included for payment under other items;
- d. Implementing safety precautions, including designing and implementing excavation support;
- e. Designing, furnishing, installing, operating, maintaining and removing temporary dewatering systems required to lower and control water levels and hydrostatic pressures during construction, as well as the appropriate disposal of pumped water;
- f. Furnishing and installing tees, cleanouts and other adapters or couplings required to install the system complete-in-place, as specified and indicated on the Drawings;
- g. Connecting new gravity drains to the new/existing gravity drain structures or system, including all excavation, modifications to existing structures (including but not limited to form work, coring, cutting, concrete work, masonry and bricks), modifying and/or removing existing pipe (all materials and sizes), and furnishing and installing adapters and couplings;
- h. Any and all other work, whether direct or incidental, associated with the furnishing and installation of the gravity drains not specifically identified herein.

**BID ITEM NO. 702.0517**

**FRAME AND GRATE, STANDARD 6.3.2**

**A. METHOD OF MEASUREMENT**

1. The quantity of Frame and Grate to be paid for under this item shall be measured per each, based on the actual number of frame and grates installed, complete-in-place, as indicated on the Drawings or as otherwise directed by the Engineer.

**B. BASIS OF PAYMENT**

1. The unit price shall include full and complete compensation for installing frames and grates as directed by the Engineer, including any required rebuilding and/or remodeling of the brick or cone of the drainage structure, at the locations shown on the Drawings or as otherwise directed by the Engineer, and all other materials, tools, equipment, labor and incidentals necessary to complete the work.

**BID ITEM NO. 702.0605**

**PRECAST CATCH BASIN 4' DIAMETER  
STANDARD 4.4.0**

**A. METHOD OF MEASUREMENT**

1. The quantity of precast concrete catch basins to be paid for under this item shall be measured per each, based on the actual number of precast concrete catch basins installed, complete-in-place, as indicated on the Drawings or as otherwise directed by the Engineer.

**B. BASIS OF PAYMENT**



1. The unit price for this item shall include full compensation for all labor, equipment, materials and incidentals needed to complete the following:
  - a. Furnishing and installing, complete-in-place, precast concrete catch basins, including temporary excavation support, dewatering, excavation and disposal of material, furnishing and installing bedding materials, furnishing and installing catch basin hoods, base sections, flat slab tops, backfill with gravel borrow, and all other work and materials required to complete the work as indicated on the Drawings and as specified;
  - b. Where applicable, the unit price for this item shall also include full compensation for furnishing all labor, equipment, materials and incidentals necessary for installing new granite curb inlets or aprons as indicated on the Drawings or as directed by the Engineer, including excavation, backfill, compaction, bedding material, concrete formwork and placement of concrete, matching line and grade of existing curb, and all other work incidental to installation of the new granite curb inlets and not specifically included for payment under other items;
  - c. Any and all other work, whether direct or incidental, associated with the construction of the precast concrete catch basins not specifically identified herein.

**BID ITEM NO. 709.0200**

**CONCRETE HEADWALLS FOR PIPE CULVERTS  
STANDARD 2.1.0**

**A. METHOD OF MEASUREMENT**

1. Concrete headwall shall be measured for payment per each, based on the actual number of concrete headwalls installed, complete-in-place as indicated on the plans or as directed by the Engineer.

**B. BASIS OF PAYMENT**

1. Concrete headwall shall be paid for per each, which price shall include all labor, materials, equipment and incidentals necessary to complete the work as specified and shown on the plans.
2. Unclassified excavation, backfill, crushed stone, fine grading, gravel borrow, and all other equipment, materials and incidental costs necessary to provide a complete, fully operational concrete headwall as specified herein and as shown on the plans.
3. No separate payments will be made for excavation, backfill, stone, but all costs shall be included in the item price bid.
4. Headwalls within the infiltration basin area will be included within the lump sum of Bid Item No. 269.4000. No separate payment will be made.

**BID ITEM NO. 713.8300**

**ADJUST GAS GATE BOXES TO GRADE**

**A. METHOD OF MEASUREMENT**

1. The payment for work under this item, will be measured per Each gate box adjusted, complete in place.

**B. BASIS OF PAYMENT**

1. The number of gate boxes to be paid for under this Item shall be equal to the actual number of gate boxes adjusted.
2. The unit prices shall constitute full compensation for sawcutting, excavating, adjusting the casting to finish grade, furnishing and installing gate boxes and covers if the gate box or cover are damaged during the course of the work, including all restraint devices required and as directed by the Engineer required to complete the work, and all work not specifically included for payment under other items.

**BID ITEM NO. 903.9901**

**4' CHAIN LINK FENCE WITH 12" CAST IN PLACE  
CONCRETE CURB FOUNDATION**

**A. METHOD OF MEASUREMENT**

1. The quantity of 4' chain link fence to be paid for under these items shall be measured by the linear foot along the horizontal projection of the centerline of the completed fence.

**B. BASIS OF PAYMENT**

1. The unit prices for these items shall include full compensation for all labor, equipment, materials and incidentals needed to complete the following:
  - a. Furnishing and installing the 4' chain link fence, complete-in-place, including all excavation, excavation support, disposal of material, furnishing and installing gravel borrow backfill, 12" wide cement concrete foundation, compacting materials as specified, filter fabric and all incidental work not specifically included for payment under other items;
  - b. Excavation shall also include any sawcutting of the existing pavements and removal and disposal of all existing pavements, including any existing bituminous concrete, masonry or concrete walls or reinforced concrete base (if encountered);
  - c. Designing, furnishing, installing, operating, maintaining and removing temporary dewatering systems required to lower and control water levels and hydrostatic pressures during construction, as well as the appropriate disposal of pumped water;
  - d. Any and all other work, whether direct or incidental, associated with the furnishing and installation of the gravity drains not specifically identified herein.

**BID ITEM NO. 905.0110**

**PROTLAND CEMENT CONCRETE SIDEWALK  
MONOLITHIC STANDARD 43.1.0**

**A. METHOD OF MEASUREMENT**

1. Cement Concrete Sidewalks will be measured in cubic yards.

**B. BASIS OF PAYMENT**

1. The quantity of concrete sidewalks to be paid for under this item shall be measured by the number of cubic yards of concrete actually placed in accordance with the Drawings and/or as directed by the Engineer.
2. The unit price shall constitute full and complete compensation for all labor, materials and equipment, including expansion joint material, reinforcement, and all other incidentals required to finish the work, complete and accepted by the Engineer.
3. The unit price shall include saw cutting, trimming and fine grading gravel sub base, formwork, placing concrete, finishing, properly curing and protecting the fresh concrete, and resetting of curb boxes and castings all as required to construct the Work and not specifically included for payment under other items.
4. Gravel will be paid for at the contract unit price per cubic yard under Item 302.0100, Gravel Borrow Subbase.
5. Excavation will be paid for at the contract unit price per cubic yard under Item 202.0300, Unclassified Excavation.

**BID ITEM NO. 906.0110**

**GRANITE CURB, QUARRY SPLIT STRAIGHT,  
STANDARD 7.3.0**

**BID ITEM NO. 906.0111**

**GRANITE CURB, QUARRY SPLIT CIRCULAR,  
STANDARD 7.3.0**

**A. METHOD OF MEASUREMENT**

1. The length of curb shall be as measured per linear foot, along the front arris of the curb, except that where the curb is set on a curve having a radius of 10 feet or less, the measurement will be made along the curb at the lowest exposed level after completion of shoulder or pavement.

**B. BASIS OF PAYMENT**

1. Curb will be paid for at the contract unit price per linear foot under the item for the particular type of curb, complete in place. Curved granite curb shall include all curb (except curb corners), cut to specified radius and set on curve. The price of the curbing will include compensation for all excavation, furnishing and installing the granite curb, sawcutting, gravel borrow, cement concrete for the foundations as well

as any and all other work required to furnish and install granite curb not specifically identified herein.

**BID ITEM NO. 906.0120                      GRANITE      WHEELCHAIR      RAMP      CURB  
STANDARDS 7.3.3, 43.3.0, AND 43.3.1**

**A. METHOD OF MEASUREMENT**

1. Granite wheelchair ramp curb will be measured per each, based on the actual number of wheelchair ramps installed, complete in place.

**B. BASIS OF PAYMENT**

1. The unit price shall constitute full and complete compensation for all labor, materials and equipment, including expansion joint material, reinforcement, and all other incidentals required to finish the work, complete and accepted by the Engineer.
2. The unit price shall include saw cutting, trimming and fine grading gravel sub base, formwork, placing concrete, finishing, properly curing and protecting the fresh concrete, installation of ADA required detectable warning devices (RIDOT standard), furnishing and installing granite transition curb of varying lengths (with gravel borrow and cement concrete foundation as required) to construct an ADA accessible ramp, and resetting of curb boxes and castings all as required to construct the Work and not specifically included for payment under other items.
3. Gravel will be paid for at the contract unit price per cubic yard Item 302.0100, Gravel Borrow Subbase.
4. Excavation will be paid for at the contract unit price per cubic yard under Item 202.0300, Unclassified Excavation.

**BID ITEM NO. 936.0110                      MOBILIZATION**

**A. METHOD OF MEASUREMENT**

1. This item shall be paid for at the contract unit price bid per lump sum.
2. The lump sum price for this item shall not exceed five percent (5%) of the total amount of the bid, excluding this item.
3. A maximum of fifty percent (50%) of the Mobilization & Demobilization lump sum shall be payable in the initial payment requisition. The balance of the lump sum shall be payable upon completion of the project, after all temporary items and measures have been removed and suitably disposed of and final restoration has been completed.

**B. BASIS OF PAYMENT**

1. The lump sum price for this item shall include full compensation for all labor, equipment, materials and incidentals needed to complete the following:
  - a. Initiating and administering the contract, including but not limited to furnishing performance and payment bonds and all other securities and insurances required, project meetings, securing of all necessary permits, etc., for providing all other materials, supplies, tools, equipment, labor, financing, supervision, temporary structures, and any and all other administrative expenses incurred in carrying out the work and furnishing the materials, keeping records and preparing required reports, and assuming risks, which have not been included in the prices in other items of the Bid Proposal;
  - b. Costs, exclusive of the cost of materials, for mobilizing all machinery, plant, tools, and other equipment necessary to carry on and complete the work;
  - c. Establishing and maintaining survey controls for the construction layout of the overall project by a qualified professional, using appropriate means and methods to insure the accuracy of the layout, as specified and/or as directed by the Engineer;
  - d. Re-establishing all benchmarks, concrete bounds, iron pins, and all permanent property boundary markers;
  - e. Coordinating and scheduling the use of uniformed traffic persons including tracking or verifying hours worked by traffic persons;
  - f. Costs for all material testing and quality control testing required by the Contract Documents;
  - g. Furnishing, installing and removal of construction access as directed by the Engineer.
  - h. Furnishing and spreading calcium chloride and/or water in order to control (minimize) dust at the Work areas;
  - i. Costs for demobilizing all machinery, plant, tools, and other equipment used to perform the work upon completion of the project;
  - j. Costs for performing final cleanup of the project area, exclusive of specific restoration to be paid for under other items.

**BID ITEM NO. 937.0200**

**MAINTENANCE AND MOVEMENT TRAFFIC PROTECTION**

**A. METHOD OF MEASUREMENT**

1. Traffic Protection shall be paid for on a lump sum basis.
2. A maximum of fifty percent (50%) of the traffic control lump sum shall be payable in the initial payment requisition. The balance of the lump sum shall be payable upon completion of the project, after all temporary items and measures have been removed and suitably disposed of and final restoration has been completed.

**B. BASIS OF PAYMENT**

1. The lump sum for this item shall include full compensation for all labor, equipment, materials and incidentals needed to complete the following:

- a. Fabricating, furnishing, erecting, maintaining, removing and relocating the traffic management devices for the overall project, complete-in-place, as directed by the Engineer;
- b. Providing additional traffic management devices to provide a clear and visible traffic control through the project area, if required;
- c. The Contractor shall be required to reposition the traffic control devices as many times as necessary to ensure the safe passage of vehicular traffic and pedestrians. Supplemental signs and traffic control devices directing traffic around and/or through the work zones shall be supplied as operations require or as directed by the Engineer. Payment for these traffic control measures shall be included as part of this item and no additional payment will be made.
- d. At a minimum, traffic control shall include the following:

<u>Quantity</u>	<u>Description</u>
2	Road Work Ahead sign
2	One-Lane Road Ahead sign
2	Police Officer Ahead sign
2	End Road Work sign
10	Reflectorized Drum

These signs shall be modified as necessary to reflect the actual work and roadway conditions at all times. The Contractor shall be responsible for making the determination as to which signs are appropriate.

- e. Other work, whether direct or incidental, associated with the traffic control not specifically identified herein.

**BID ITEM NO. L01.0102                      LOAM BORROW 4 INCHES DEEP**

**A. METHOD OF MEASUREMENT**

- 1. The quantity of loam borrow shall be measured by the number of square yards of loam borrow installed with a minimum depth of 4 inches, complete-in-place, in accordance with the Plans and/or as directed by the Engineer.

**B. BASIS OF PAYMENT**

- 1. The unit price for this item shall include full compensation for all labor, equipment, materials and incidentals needed to complete the following:
  - a. Trimming and fine grading the sub base;
  - b. Placing loam borrow;
  - c. Resetting or replacement of all signposts and resetting of curb boxes and castings in loamed and seeded areas;
  - d. Any and all other work, whether direct or incidental, associated with the furnishing and installing loam borrow not specifically identified herein.

**BID ITEM NO. L02.0102**

**RESIDENTIAL SEEDING (TYPE 2)**

**A. METHOD OF MEASUREMENT**

1. The quantity of residential seeding shall be measured by the number of square yards, surface measurement, of the area in which seed has been installed, complete-in-place, in accordance with the Plans and/or as directed by the Engineer.

**B. BASIS OF PAYMENT**

1. The unit price for this item shall include full compensation for all labor, equipment, materials and incidentals needed to complete the following:
  - a. Furnishing and placing seed, lime and fertilizer;
  - b. Protecting and maintaining the loamed and seeded area until such time as an acceptable level of grass growth has been established;
  - c. Resetting or replacement of all signposts and resetting of curb boxes and castings in loamed and seeded areas;
  - d. Any and all other work, whether direct or incidental, associated with the restoration of vegetated areas not specifically identified herein.

**BID ITEM NO. L05.0506**

**JUTE MESH**

**A. METHOD OF MEASUREMENT**

1. The quantity of jute mesh shall be measured by the number of square yards, surface measurement, of the area in which jute mesh has been installed, complete-in-place, in accordance with the Plans and/or as directed by the Engineer.

**B. BASIS OF PAYMENT**

1. The unit price for this item shall include full compensation for all labor, equipment, materials and incidentals needed to furnish and install staking, biodegradable jute mesh, and temporary seeding to stabilize slopes during construction.

**BID ITEM NO. L09.9910**

**LANDSCAPE PLANTING AREA 1**

**BID ITEM NO. L09.9911**

**LANDSCAPE PLANTING AREA 2**

**A. METHOD OF MEASUREMENT**

1. The quantity of landscape planting areas shall be measured per lump sum, complete-in-place, in accordance with the Plans and/or as directed by the Engineer.

**B. BASIS OF PAYMENT**

2. The unit price for this item shall include full compensation for all labor, equipment, materials and incidentals needed to furnish plants, trees, seed, mulch, soil

amendments, all layout and installation of all landscape plantings, including all preparation, trimming, fine grading, fertilization, grass seeding operations, and any and all work considered incidental and not specifically identified herein, complete and accepted in place.

**BID ITEM NO. L11.0102                      TREE PLANT PROTECTION DEVICE**

**A. METHOD OF MEASUREMENT**

1. Where the plans show specific, individual trees to remain and where grading or other disturbance is shown within the drip line of these trees or where the Engineer determines that an individual tree must be protected, these trees shall be protected and paid for per each tree protected.

**B. BASIS OF PAYMENT**

1. Compensation for tree plant protection devices will be paid for at the contract unit price per each under this item. This item shall include full compensation for all labor, equipment, materials, and incidentals for the satisfactory completion of the work, including the services of a certified arborist, water and fertilizer, and the subsequent removal and satisfactory disposal of the protective materials upon completion of the contract.

**BID ITEM NO. T15.0100                      DIRECTIONAL REGULATORY AND WARNING SIGNS**

**A. METHOD OF MEASUREMENT**

1. Signs will be measured per square foot of signage actually installed, complete in place, including the foundation, excavation, backfilling and compaction for foundations and the structural supports.

**B. BASIS OF PAYMENT**

1. Signs will be paid for at the unit price per square foot for directional regulatory and warning signs, which price shall include all full compensation for designing, furnishing and erecting the supports, including construction of the concrete bases, steel reinforcement and anchor bolts, furnishing and installing post assembly, furnishing and installing the signage, and all excavation, gravel backfill, and all incidental costs required to complete the work.



**BID ITEM NO. T15.0200****REMOVE AND RELOCATE DIRECTIONAL  
REGULATORY AND WARNING SIGNS****A. METHOD OF MEASUREMENT**

1. Removing and relocating signs will be measured per each sign actually removed and reset, complete in place, including the foundation, excavation, backfilling and compaction for foundations and the structural supports.

**B. BASIS OF PAYMENT**

1. Payment for work to be done under this item will be by the unit price bid per each, which will be full compensation for the satisfactory removal, stockpiling and resetting of existing posts, installation of new post and concrete base, and for all excavation and backfill, and for furnishing all labor, tools, equipment and any other incidentals to complete the work. The contract unit price shall also include excavation and disposal of existing foundations and the supplying and placing of compacted gravel backfill where foundations and posts are removed and restoration of surface for which no additional payment will be made. If posts are damaged during excavation and determined by the Engineer to be unfit for reuse, the Contractor shall replace the sign at no additional cost to the Owner.

**BID ITEM NO. T20.2406****6 INCH WHITE FINAL EPOXY RESIN PAVEMENT  
MARKINGS****A. METHOD OF MEASUREMENT**

1. Markings are to be paid for on the actual length of reflectorized, epoxy lines applied under the various items of the Contract. The lengths of solid lines will be obtained by:
  - a. Calculation from established base line stations or
  - b. Use of a measuring wheel or
  - c. Vehicle odometer readings.
2. The length of broken lines (except for broken lines less than 10 feet, the actual length shall be used) will be obtained by using 1/4 of the results obtained above for solid lines.

**B. BASIS OF PAYMENT**

1. Permanent Pavement Markings will be paid for at the contract unit price per foot which shall include full compensation for furnishing all labor, materials and equipment required or incidental to satisfactorily complete the work. The cost of maintaining and protecting traffic during marking operations shall be included in the bid price. No payment will be made for the repair or replacement of defective pavement markings.

**BID ITEM NO. T20.3410**

**FINAL EPOXY RESIN PAVEMENT MARKING  
WORD (“ONLY”, “STOP”, “YIELD”, “AHEAD”,  
“XING”, “SCHOOL”, OR OTHER) STANDARD  
20.1.0**

**A. METHOD OF MEASUREMENT**

1. Markings are to be paid under this item shall be measured per each.

**B. BASIS OF PAYMENT**

1. Permanent Pavement Markings will be paid for at the contract unit price per foot which shall include full compensation for furnishing all labor, materials and equipment required or incidental to satisfactorily complete the work. The cost of maintaining and protecting traffic during marking operations shall be included in the bid price. No payment will be made for the repair or replacement of defective pavement markings.

**BID ITEM NO. 999.1000**

**TOT LOT PLAYGROUND**

**A. METHOD OF MEASUREMENT**

1. The Tot Lot playground shall be paid for on a lump sum basis.

**B. BASIS OF PAYMENT**

1. The unit price for this item shall include full compensation for all labor, equipment, materials and incidentals needed to complete the following:
  - a. Excavation of all materials within the playground limits to the grades required by the plans;
  - b. Stockpiling and rehandling of excavated materials for use on other portions of the project;
  - c. Removing and legally disposing of all excess material at a legal off-site location;
  - d. Furnishing and installing playground equipment as called for on the plans and in the specifications, including the installation of all cement concrete foundations;
  - e. Furnishing and installing wood fiber playground safety surface, including compacting the material as specified to the depths and grades shown on the plans;
  - f. Furnishing and installing crushed stone subbase, including compacting the material as specified to the depths and grades shown on the plans;
  - g. Furnishing and installing permeable filter fabric as shown on the plans;
  - h. Furnishing and installing the underdrain pipe, complete-in-place, including all excavation, disposal of material, crushed stone for pipe bedding material, gravel borrow backfill, compacting materials as specified, furnishing and installing cleanouts, furnishing and installing flared end systems, and all incidental work not specifically included for payment under other items;
  - i. Implementing safety precautions, including designing and implementing excavation support;

- j. Designing, furnishing, installing, operating, maintaining, and removing temporary dewatering systems required to lower and control water levels and hydrostatic pressures during construction, as well as the appropriate disposal of pumped water;
- k. Furnishing and installing biodegradable jute mesh and temporary seeding;
- l. Furnishing and installing common borrow backfill, as required;
- m. Furnishing and installing loam, seed, and plantings as shown on the plans;
- n. Trimming and fine grading to the lines and grades called for on the plans;
- o. Removal and replacement of fencing, sidewalks, landscaping including bushes, plantings, mulch, and other associated property restorations disturbed by the Contractor's operations;
- p. Other work, whether direct or incidental, associated with the furnishing and installation of the playground not specifically identified herein.

PART 2 PRODUCTS NOT USED

PART 3 EXECUTION NOT USED

END OF SECTION

## SECTION 01035

### MODIFICATION PROCEDURES

#### PART 1 GENERAL

##### 1.01 SUMMARY

###### A. Section Includes

1. Procedures for making modifications to the Contract by change orders or other means.

###### B. Related Sections

1. Document 00500 - Agreement

##### 1.02 CHANGE ORDERS

- A. In general Change Orders will be issued for modification of Contract documents which will incorporate changes in the Contract requirements, including additions or deletions in the Work; for unforeseen field conditions which will necessitate changes in the Work; changes in code provisions or other requirements of federal, state or local authority requiring changes in the Work; changes in the availability of products or for incorporating new products into the work and for changes directed by the Engineer for the benefit of the Owner.
- B. Authority to execute Change Orders shall be that of the Engineer and not of the Contractor. Changes Orders will, in general, originate by a "Change Order Proposal Request" or by issuance of a "Construction Change Authorization".
- C. Unless authorized by the Engineer, no work shall be performed that is involved in the change until a formal Change Order is issued.
- D. To initiate a Change Order, the Engineer will forward a Change Order proposal request describing the proposed changes and if required, include additional or revised drawings and specifications soliciting a formal quotation of cost and time to complete the proposed Change Order work. Upon reaching mutual agreement on the cost and time, the Engineer will sign his approval of the Change Order and submit it to the Contractor for his full signature of acceptance.

1.03 FIELD ORDERS

- A. The Engineer may, to avoid costly removal of, or alterations to, present on-going work, issue a Work Directive Change authorizing the Contractor to proceed, subject to later negotiation of the price of the change.

1.04 PRICE AGREEMENTS

- A. Prices agreed upon to cover the Change Orders may be either by mutual acceptance of a lump sum or by unit prices as stated in the Contract bid proposal or actual direct cost plus a percentage for overhead, profit and other expenses consistent with Section 00500 – Contract Agreement.
- B. Work done by a subcontractor entitles the General Contractor a percentage of the sum of the actual direct cost, not including the subcontractor’s overhead and profit, consistent with Section 00500 – Contract Agreement.
- C. Method for computing the cost of the change shall be based on the net additional increase. No overhead and profit shall be deducted from prices for changes deleting work.
- D. The Change Order form document shall indicate the net adjustment (+/-) to the total Contract price as a result thereof including extension or reduction of time when applicable.

PART 2 PRODUCTS

NOT USED

PART 3 EXECUTION

NOT USED

END OF SECTION

SECTION 01040

COORDINATION

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Requirements for coordinating the various parts of Work under this Contract.

1.02 REQUIREMENTS

- A. Coordinate scheduling, submittals, and Work of the various Sections of specifications to assure efficient and orderly sequence of installation of interdependent construction elements.
- B. Coordinate completion and cleanup of Work of separate Sections in preparation for Substantial Completion.
- C. After Owner occupancy of premises, coordinate access to site for correction of defective Work and Work not in accordance with Contract Documents, to minimize disruption of Owner's activities.
- D. Coordinate work with all utility companies necessary for completion of work under this contract.
  - 1. East Providence Water Department  
Jim Marvel  
401-435-7741
  - 2. National Grid – Gas  
James Paulette  
401-465-8580
  - 3. National Grid – Electric  
Sean McGovern  
401-255-2498
  - 4. East Providence Wastewater Department  
Thomas Azevedo  
401-433-6363

E. Coordinate work with all other interested parties necessary for completion of work under this contract.

1. City of East Providence Public Works Department  
Daniel Borges  
401-435-7701

PART 2 PRODUCTS NOT USED

PART 3 EXECUTION NOT USED

END OF SECTION

## SECTION 01045

### CUTTING, CORING AND PATCHING

#### PART 1 GENERAL

##### 1.01 SUMMARY

###### A. Section Includes

1. Requirements and limitations for cutting, coring and rough and finish patching of holes and openings in existing construction.

###### B. Related Sections

1. Section 01300 – Submittals

##### 1.02 SUBMITTALS

###### A. In accordance with Section 01300 submit written request in advance of cutting or alteration which affects the following:

1. Structural integrity of any element of Project.
2. Integrity of weather-exposed or moisture-resistant element.
3. Efficiency, maintenance, or safety of any operational element.
4. Visual qualities of sight exposed elements.
5. Work of Owner or separate contractor.

###### B. Include in request:

1. Identification of Project.
2. Location and description of affected work.
3. Necessity for cutting or alteration.
4. Description of proposed work, and products to be used.
5. Alternatives to cutting and patching.
6. Effect on work of Owner or separate contractor.
7. Written permission of affected separate contractor.
8. Date and time work will be executed.

###### C. Should conditions of the Work, or schedule, indicate a required change of materials or methods for cutting and patching, notify the Engineer and secure his written permission and the required Change Order prior to proceeding.



## PART 2 PRODUCTS

### 2.01 MATERIALS

- A. Concrete and grout for rough patching shall be as specified in Division 3 of this Specification.
- B. Materials for finish patching shall be equal to those of adjacent construction.
- C. For replacement of items removed, use materials complying with pertinent sections of these specifications.
- D. Sealing cored holes in sewer manholes and other structures to be with a resilient seal similar to Kor-N-Seal made by National Pollution Control Systems, Inc., Nashua, NH or similar product.

## PART 3 EXECUTION

### 3.01 GENERAL:

- A. All cutting and coring shall be performed in such a manner as to limit the extent of patching.
- B. All holes cut through concrete and masonry walls, slabs or arches shall be core drilled unless otherwise approved in writing to the Engineer. No structural members shall be cut without approval of the Engineer and all such cutting shall be done in a manner directed by the Engineer. No holes may be drilled in beams or other structural members without obtaining prior approval. All work shall be performed by craftsmen skilled in this type of work.
- C. If holes are cored through floor slabs they shall be drilled from below the slab.
- D. Rough patching shall be such as to bring the cut or cored area flush with existing construction unless otherwise shown. Finish patching shall match the color, texture and finish of existing surfaces as approved.

### 3.02 EXAMINATION

- A. Site Verification of Conditions
  1. Inspect existing conditions, including elements subject to movement or damage during cutting, excavating, patching, and backfilling.
  2. After uncovering the work, inspect conditions affecting installation of new work.
  3. If uncovered conditions are not as anticipated, immediately notify the Engineer.

4. Do not proceed until unsatisfactory conditions are corrected.

### 3.03 PREPARATION

#### A. Protection

1. Provide required protection including, but not necessarily limited to, shoring, bracing, and support to maintain structural integrity of the Work.
2. Perform cutting and demolition by methods which will prevent damage to portions of the Work.

#### B. Surface Preparation

1. Provide proper surfaces to receive installation of repair and new work.

### 3.04 CORING:

- A. Coring shall be performed with an approved non-impact rotary tool with diamond core drills. Size of holes shall be suitable for pipe, conduit, sleeves, equipment or mechanical seals to be installed.
- B. All equipment shall conform to OSHA standards and specifications pertaining to plugs, noise and fume pollution, wiring and maintenance.
- C. Provide protection for existing equipment, utilities and critical areas against water or other damage caused by drilling operation.
- D. Slurry or tailings resulting from coring operations shall be vacuumed or otherwise removed from the area following drilling.

### 3.05 CUTTING:

- A. Cutting shall be performed with a concrete wall saw and diamond saw blades of proper size.
- B. Provide for control of slurry generated by sawing operation on both sides of wall.
- C. The cutting of a reinforced concrete wall shall be done so as not to damage the bond between the concrete and the reinforcing steel left in structure. The cut shall be made so that steel neither protrudes nor is recessed from face of the cut.
- D. Adequate bracing of area to be cut shall be installed prior to start of cutting. Check area during sawing operations for partial cracking and provide additional bracing as required to prevent a release or toppling of cut area during sawing operations.
- E. Provide equipment of adequate size to remove cut panel.

### 3.06 FIELD QUALITY CONTROL

- A. In addition to other requirements specified, upon the Engineer's request uncover work to provide for inspection by the Engineer of covered work, and remove samples of installed materials for testing.
- B. Do not cut or alter work performed under separate contracts without the Engineer's written permission.

### 3.07 ADJUSTING

- A. Perform fitting and adjusting of products to provide finished installation complying with the specified tolerances and finishes.

END OF SECTION

## SECTION 01050

### FIELD ENGINEERING

#### PART 1 GENERAL

##### 1.01 SECTION INCLUDES

- A. Survey work and other field engineering responsibilities of the Contractor.

##### 1.02 REQUIREMENTS

- A. The Contractor shall be responsible for layout of the work and the establishing of lines and grades.
- B. Establish elevations, lines, levels, reference marks, batter boards, etc., required during the progress of the Work. Verify such marks by instrument to confirm accuracy.
- C. Locate and protect survey control and reference points.
- D. Make, check, and be responsible for all measurements and dimensions necessary for the proper construction of the Work.
- E. The Engineer will be permitted to check the lines, elevations, reference marks, batter boards, etc., set by the Contractor. The Contractor shall correct any errors found in lines, elevations, reference marks, batter boards, etc. Such a check shall not be construed as approval of the Contractor's work and shall not relieve or diminish the responsibility of the Contractor for the accurate construction and completion of the Work.
- F. Control datum for survey as shown on Drawings.

##### 1.03 QUALITY ASSURANCE

###### A. Qualifications

- 1. Employ a Civil Engineer or Land Surveyor registered within the State of Rhode Island, acceptable to the Engineer.

###### B. Certifications

- 1. Submit certificate signed by the Contractor's Engineer or Land Surveyor stating elevations and locations of the Work are in conformance with the Contract Documents.

PART 2 PRODUCTS

NOT USED

PART 3 EXECUTION

NOT USED

END OF SECTION

## SECTION 01060

### REGULATORY REQUIREMENTS

#### PART 1 GENERAL

##### 1.01 SECTION INCLUDES

- A. Building codes, Mechanical codes, and Electrical codes, Regulations, Permits and Fees applicable to the project.

##### 1.02 PERMITS BY CONTRACTOR

- A. The Contractor shall secure all necessary permits from the state, city or town authorities having jurisdiction, for digging of trenches in the streets or highways and all other building and construction operations requiring permits.

##### 1.03 CODES

- A. The Contractor shall conform to the requirements of and pay all fees imposed by local and State Building Authorities having jurisdiction over the Work. The Contractor is responsible to conform to all building, mechanical, electrical and plumbing code requirements.
- B. The Contractor shall conform to the latest requirements of the following codes:
  - 1. Federal, State and Municipal Laws
  - 2. Rhode Island State Building Codes, National Building Code Regulation SBC-1
  - 3. Rhode Island State Building Codes, Plumbing Code Regulation SBC-3
  - 4. Rhode Island State Building Codes, Mechanical Code Regulation SBC-4
  - 5. Rhode Island State Building Codes, Electrical Code Regulation SBC-5
  - 6. Any prevailing rules and regulations pertaining to adequate protection and/or guarding of any moving parts or otherwise hazardous locations.

##### 1.04 FEES

- A. The cost of all permits secured by the Contractor shall be borne by him and shall be considered as having been included in the price or prices stated in the Bid. Copies of all required permits shall be filed with the Engineer prior to starting work for which a permit is required.

PART 2 PRODUCTS

NOT USED

PART 3 EXECUTION

NOT USED

END OF SECTION

## SECTION 01067

### STATE OF RHODE ISLAND AND FEDERAL REQUIREMENTS

#### PART 1 GENERAL

##### 1.01 SECTION INCLUDES

- A. RHODE ISLAND SALES AND USE TAX
- B. HISTORICAL ARTICLES
- C. PREVAILING MINIMUM WAGE RATES
- D. EXCERPTS FROM RHODE ISLAND LAWS
- E. REQUIREMENTS FOR MINORITY BUSINESS ENTERPRISE, EQUAL OPPORTUNITY AND NONDISCRIMINATION

##### 1.02 RHODE ISLAND SALES AND USE TAX

- A. Materials and equipment purchased for installation under this Contract are exempt from the Rhode Island Sales Tax. The Contractor shall file for exemption on behalf of the Owner, with the State of Rhode Island Department of Taxation as required by law. The exemption from the Sales Tax shall be taken into account by the Contractor during bidding.

##### 1.03 HISTORICAL ARTICLES

- A. During the life of this Contract, the Contractor is herewith required to immediately notify the following organizations in the event that any articles such as "charcoal," "bone," "shell," "cultural objects - fire cracked stones or stone flaking material" or any other such related items of historical significance are discovered.
  - 1. Owner
  - 2. Local Historical Society
  - 3. Rhode Island Historical Commissioner
  - 4. Engineer

##### 1.04 PREVAILING MINIMUM WAGE RATES

- A. Local prevailing minimum wage rates apply to this project. It is the responsibility of the Contractor before bid openings to request, if necessary, any additional information on local prevailing Wage Rates for those tradespeople who are not covered by the applicable local Wage Decision, but who may be employed for the proposed work under this Contract.



- B. The attention of the Contractor is also directed to Specification Subsection 00700, 1.19 in regards to the requirements for certified payrolls. The Contractor shall routinely prepare and submit as a part of the required certified payrolls the "PRIME CONTRACTOR'S OVERALL PAYROLL CERTIFICATION" form.
- C. The Contractor is required to adhere to the requirements of the Davis-Bacon Act.

1.05 EXCERPTS FROM RHODE ISLAND LAWS

- A. The Contractor and each of his subcontractors shall especially note his obligations to comply with the following statues or excerpts therefrom and any current revisions thereof contained in the General Laws of Rhode Island.
- B. These laws reflect changes made through the end of the 1992 legislative session. While every attempt at accuracy has been made, these are not certified true copies of these laws. The responsibility for compliance with all applicable provisions of Rhode Island laws relating to bidding, award, and performance of public works contracts is the Contractor's. Certified true and complete copies of any Rhode Island laws and regulations may be obtained from the Office of the Rhode Island Secretary of State.

R.I.G.L.

Title, Chapter, Section                      EXCERPT

5-6-2    WORK FOR WHICH LICENSE REQUIRED

"No person, firm, or corporation shall enter into, engage in, or work at the business of installing wire, conduits, apparatus, fixtures and other appliances for carrying or using electricity for light, heat or other purpose, unless such person, firm or corporation shall have received a license and a certificate therefore, issued by the State Board of Examiners of Electricians."

28-26-6                      LICENSE REQUIRED FOR OPERATION OF HOISTING  
MACHINERY - PUBLIC CONTRACTS

"No persons shall operate or be in direct charge of a hoisting or excavation gasoline, steam, diesel, electric or compressed air hoist, shovel, crane, excavator, of five horsepower or more without obtaining a license to do so as provided in this chapter. No user or agent of use of any such described steam, gasoline, diesel, electric or compressed air hoisting machinery shall permit it to be operated unless it is operated by a duly licensed person as hereinafter provided by this chapter.

Every contract in the construction of public works by the State, or by any City of Town, or by persons contracting therewith for such construction, shall contain a clause embodying the provisions of this section."

## Chapter 116

From Chapter 116 of the General Laws of Rhode Island, 1938, relative to the conditions precedent, etc., to carrying on business within this State by foreign corporations:

"The certificate and power of attorney mentioned in the General Corporation Law, properly filled out, subscribed and sworn to, and accompanied by a certified copy of the Charter, articles of association or other similar organization papers, together with all amendments thereto, must be filed in the office of the Secretary of State by all foreign corporations intending to carry on business within this State, or for a foreign corporation to enforce in the courts of this State any contract made within the State."

Detailed information regarding Chapter 116 of the General Laws of Rhode Island, 1938, relative to the conditions precedent, etc., to carrying on business within this State for foreign corporations may be obtained from the Secretary of State, State House, Smith Street, Providence, Rhode Island.

### 1.06 REQUIREMENTS FOR MINORITY BUSINESS ENTERPRISE, EQUAL OPPORTUNITY AND NONDISCRIMINATION

- A. Contracts for work under the bid (proposal) will obligate the contractors and subcontractors not to discriminate in employment practices.
- B. The Contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, age, handicap, or national origin. The Contractor shall take affirmative action to ensure that applicants are employed and the employees are treated during employment without regard to their race, color, religion, sex, age, handicap, or national origin. Such actions shall include, but not be limited to, the following: employment, upgrading, demotions, or transfers; recruitment or recruitment advertising, selection for training including apprenticeship; and participation in recreational and educational activities. The Contractor agrees to post in conspicuous places available to employees and applicants for employment, notice to be provided, setting forth the provisions of this non-discrimination clause. The Contractor will cause the foregoing provisions to be inserted in all subcontracts for any work covered by this Contract so that such provisions will be binding upon each subcontractor and upon subcontractors for standard commercial supplies or raw materials.
- C. The Contractor shall keep such records and submit such reports concerning the racial and ethnic origin of applicants for employment and employees as the Owner may require as consistent with Federal and State law.
- D. The Contractor agrees to comply with such rules, regulations, or guidelines as the State of Rhode Island may issue to implement these requirements. The Contractor further warrants that it will comply with, Title VI of the Civil rights Act of 1964, 42 U.S.C. 200d to d4.

- E. Contractors shall comply with the provisions of the General Laws of Rhode Island and attention is called to Title 37, Chapter 13, Section 1-16, relative to the payment of wages, obligations and charges by Contractors on public works projects. Non-resident Contractors are subject to Section 44-1-6 of the RI General Laws, as amended, regarding OUT-OF-STATE CONTRACTORS.
  
- F. The Contractor will be required to comply with Equal Opportunity Requirements and to abide by the prevailing wage rates for Public Works Projects for all employees on the job. It is the responsibility of contractors to inform themselves as to the local labor conditions, overtime compensation, health and welfare contributions, labor supply and prospective changes or adjustment of wage rates. Information is available at the Department of Labor.
  
- G. The attention of the Contractor is directed to the fact that this Contract is subject to both Federal and State requirements regarding Minority Business Enterprises (MBE) and Woman's Business Enterprises (WBE) participation. The Contractor hereby agrees to ensure compliance with all Federal and State MBE/WBE requirements to provide maximum opportunity for such participation.

PART 2 PRODUCTS

NOT USED

PART 3 EXECUTION

NOT USED

END OF SECTION

## SECTION 01090

### REFERENCE STANDARDS

#### PART 1 GENERAL

##### 1.01 SECTION INCLUDES

- A. Reference material, abbreviations, and terms used in the Construction Documents and establishes edition dates and complete titles for standards referenced elsewhere in the Specifications.

##### 1.02 QUALITY ASSURANCE

- A. For products or workmanship specified by association, trade, or Federal Standards, comply with requirements of the standard, except when more rigid requirements are specified or are required by applicable codes.
- B. Obtain copies of standards when required by Contract Documents.
- C. Maintain copy at jobsite during submittals, planning, and progress of the specific work, until Substantial Completion.
- D. Should specified reference standards conflict with Contract Documents, request clarification from Architect/Engineer before proceeding.
- E. The contractual relationship of the parties to the Contract shall not be altered from the Contract Documents by mention or inference otherwise in any reference document.

##### 1.03 SCHEDULE OF REFERENCES

AA	Aluminum Association 818 Connecticut Ave. N.W. Washington, DC 20006
AASHTO	American Association of State Highway and Transportation Officials 444 North Capitol Street, N.W. Washington, DC 20001
ACI	American Concrete Institute Box 19150 Reford Station Detroit, MI 48219
AFBMA	Anti-Friction Bearing Manufacturers Association

AGC	Associated General Contractors of America 1956 E Street, N.W. Washington, DC 20006
AGM	American Gear Manufacturers Association
AI	Asphalt Institute Asphalt Institute Building College Park, MD 20740
AISC	American Institute of Steel Construction 400 North Michigan Avenue Eighth Floor Chicago, IL 60611
AISI	American Iron and Steel Institute 1000 16 <sup>th</sup> Street, N.W. Washington, DC 20036
AMCA	Air Movement and Control Association 30 West University Drive Arlington Heights, IL 60004
ANS	American National Standard
ANSI	American National Standards Institute 1430 Broadway New York, NY 10018
API	American Petroleum Institute
ARI	Air-Conditioning and Refrigeration Institute 1501 Wilson Boulevard Arlington, VA 22209
ASCE	American Society of Civil Engineers 345 East 47 <sup>th</sup> Street New York, NY 10017
ASHRAE	American Society of Heating, Refrigerating and Air Conditioning Engineers 1791 Tullie Circle, N.E. Atlanta, GA 30329

ASME	American Society of Mechanical Engineers 345 East 47th Street New York, NY 10017
ASPA	American Sod Producers Association 4415 West Harrison Street Hillside, IL 60162
ASTM	American Society for Testing and Materials 1916 Race Street Philadelphia, PA 19103
AWG	American or Brown and Sharpe Wire Gage
AWPA	American Wood-Preservers' Association 7735 Old Georgetown Road Bethesda, MD 20014
AWS	American Welding Society
AWWA	American Water Works Association 6666 West Quincy Avenue Denver, CO 80235
BIA	Brick Institute of America 11490 Commerce Park Drive Reston, VA 22091
CS	Commercial Standard
EJCDC	Engineers' Joint Contract Document Committee American Consulting Engineers Council 1015 15 <sup>th</sup> Street, N.W. Washington, DC 20005
FM	Factory Mutual System 1151 Boston-Providence Turnpike PO Box 688 Norwood, Massachusetts 02062
Fed Spec.	Federal Specification General Services Administration Specification and Consumer Information Distribution Section (WFSIS) Washington Navy Yard, Bldg. 197 Washington, DC 20407

IBR	Institute of Boiler and Radiator Manufacturers
ICBO	International Conference of Building Officials 5360 S. Workman Mill Road Whittier, CA 90601
IPS	Iron Pipe Size
JIC	Joint Industry Conference Standards
MIL	Military Specification Naval Publications and Forms Center 5801 Tabor Avenue Philadelphia, PA 19120
NASSCO	National Association of Sewer Service Companies 101 Wymore Road, Suite 521 Altamonte, FL 32714
NBS	National Bureau of Standards
NCMA	National Concrete Masonry Association PO Box 781 Herndon, VA 22070
NCPWB	National Certified Pipe Welding Bureau
NEMA	National Electrical Manufacturers' Association 2101 'L' Street, N.W. Washington, DC 20037
NFPA	National Fire Protection Association Battery March Park Quincy, MA 02269
NPT	National Pipe Thread
OS&Y	Outside screw and yoke
PCA	Portland Cement Association 5420 Old Orchard Road Skokie, IL 60077

SMACNA	Sheet Metal and Air Conditioning Contractors' National Assoc. 8224 Old Court House Road Vienna, VA 22180
Stl. WG	U.S. Steel Wire Washburn and Moen, American Steel and Wire or Roebling Gage
UL	Underwriters' Laboratories, Inc. 333 Pfingston Road Northbrook, IL 60062
USS Gage	United States Standard Gage
125-lb. ANS	American National Standard for Cast-Iron Pipe Flanges and Flange
250-lb. ANS	Fittings, Designation B16.1-1975, for the appropriate class

#### 1.04 EDITION DATES

- A. Reference to publications and reference material shall be understood to mean the latest edition, unless stated otherwise.

#### PART 2 PRODUCTS

NOT USED

#### PART 3 EXECUTION

NOT USED

END OF SECTION



## SECTION 01300

### SUBMITTALS

#### PART 1 GENERAL

##### 1.01 SECTION INCLUDES

- A. Requirements for submission of schedules and shop drawings.

##### 1.02 PROGRESS SCHEDULE

- A. Within fourteen (14) calendar days after execution of the Contract Documents, the Contractor shall submit to the Engineer for review a construction progress schedule conforming to requirements specified. This schedule should show the proposed dates of commencement and completion of each of the various subdivisions of work required under this Contract and the anticipated monthly percentage of completion based on the total contract price. The Contractor shall be responsible for updating and/or revising this schedule whenever directed by the Engineer throughout the duration of the Contract.
- B. Special attention is directed to the requirement that the Contractor shall start the Work, as specified under this Contract, no later than thirty (30) calendar days after the execution of the Contract Documents, unless otherwise directed by the Owner. The Contractor shall comply with all pre-construction requirements as specified. The Owner reserves the right to delay the commencement of the Work or any part thereof if the specified requirements as determined by the Engineer have not been satisfied. The Owner further reserves the right to limit or, delay construction, or certain activities thereof, in certain areas of the Contract should the Owner deem it to be in the public's best interest and/or safety to do so.
- C. The Contractor shall contact the appropriate town or city authorities concerning any public or semi-public events that may occur during the construction period that may affect construction. The Contractor alone shall be responsible for arranging his construction sequence to conform to any restrictions these events may impose. No claims for extras will be allowed because of any delay, extra materials handling, extra excavation, etc. caused by the imposed restrictions. However, additional time may be granted for completion of the work to compensate for delays caused by said restrictions.

##### 1.03 SHOP DRAWINGS

- A. Submit six (6) copies of all shop and working drawings of concrete reinforcement, structural details, piping layout, wiring, materials fabricated especially for the Contract, and materials and equipment for which such drawings are specifically requested.

- B. A maximum of two (2) submittals of each shop drawing will be reviewed by the Engineer. If more submittals are required due to the Contractor's neglect or failure to fulfill the requirements of the Contract plans and specifications, or to make corrections or modifications required by the Engineer in the review of the first two submittals, the Engineer will review the submittal and the Contractor will be responsible for the cost of the review, as determined by the Owner based on the Engineer's documentation of time and rates for additional services established in the Engineering Agreement between the Owner and the Engineer.
- C. If resubmittals on shop and working drawings are required, the Engineer will retain three (3) copies and three (3) copies will be returned to the Contractor. When resubmittals are returned to the Engineer, six copies of the complete submittal shall again be required.
- D. Such drawings shall show the principal dimensions, weight, structural and operating features, space required, clearances, type and/or brand of finish or shop coat, grease fittings, etc., depending on the subject of the drawing. When the dimensions are of particular importance, or when specified, the drawings shall be certified by the manufacturer or fabricator as correct for the Contract.
- E. When so specified or if considered by the Engineer to be acceptable, manufacturer's specifications, catalog data, descriptive matter, illustrations, etc., may be submitted in place of shop and working drawings.
- F. The Contractor shall be responsible for the prompt and timely submittal of all shop and working drawings to eliminate delay to the Work due to the absence of such drawings. All shop and working drawings must be submitted to the Engineer within thirty (30) calendar days prior to incorporation into the Work, unless otherwise permitted by the Engineer. **Prior to the submittal of any shop drawings, the Contractor shall submit a schedule of proposed shop drawing transmittals.** The schedule shall identify the subject matter of each transmittal, the corresponding specification section number and the proposed date of submission. Prior to and during the progress of the Work the schedule shall be revised and resubmitted as requested by the Engineer.
- G. No material or equipment shall be purchased or fabricated for the Contract until the required shop and working drawings have been submitted as hereinabove provided and reviewed for conformance to the Contract requirements. All such materials and equipment and the work involved in their installation or incorporation into the Work shall then be as shown in and represented by said drawings.
- H. Until the necessary review has been made, the Contractor shall not proceed with any portion of the Work (such as the construction of foundations) for which review is required.

- I. All shop and working drawings shall be submitted to the Engineer by and/or through the Contractor, who shall be responsible for obtaining shop and working drawings from his subcontractors and returning reviewed drawings to them. All shop and working drawings shall be prepared on standard size, 24 inch by 36 inch sheets, except those which are made by changing existing standard shop and working drawings. All drawings shall be clearly marked with the names of the Owner, Contractor, and building, equipment, or structure to which the drawing applies, and shall be suitable numbered. Submitted shop drawings shall be accompanied by a letter of transmittal, completed by the Contractor as approved by the Engineer.
- J. Only drawings which have been checked and corrected by the fabricator should be submitted to the Contractor by his subcontractors and vendors. Prior to submitting drawings to the Engineer, the Contractor shall check thoroughly all such drawings to satisfy himself that the subject matter thereof conforms to the Drawings and Specifications in all respects. All drawings which are correct shall be marked with the date, checker's name, and indication of the Contractor's approval, and then shall be submitted to the Engineer; other drawings shall be returned for correction.
- K. If a shop drawing shows any deviation from the Contract requirements, the Contractor shall make specific mention of the deviations in his letter of transmittal.
- L. The review of shop and working drawings by the Engineer will be general only, and nothing contained in this Section shall relieve, diminish or alter in any respect the responsibilities of the Contractor under the Contract Documents and in particular, the specific responsibility of the Contractor for details of design and dimensions necessary for proper fitting and construction of the work as required by the Contract and for achieving the result and performance as specified. The Contractor shall be responsible for errors and omissions in shop drawings.
- M. Should the Contractor submit equipment that requires modifications to the structures, piping, electrical conduit, wires, appurtenances, or layouts etc., either existing or as detailed on the Drawings, he shall also submit details of the proposed modifications. If such equipment and modifications are accepted, the Contractor, at no additional cost to the Owner, shall do the work necessary to make such modifications.
- N. The Contractor shall furnish additional copies of shop drawings or catalog cuts when so requested.

PART 2 PRODUCTS

NOT USED

PART 3 EXECUTION

NOT USED

END OF SECTION

SECTION 01400  
QUALITY CONTROL

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Requirements for Contractor's quality control of products, suppliers, manufacturers, services, site conditions, and workmanship, to produce Work of specified quality.

1.02 QUALITY ASSURANCE/CONTROL OF INSTALLATION

- A. Comply fully with manufacturers' instructions, including each step in sequence.
- B. Should manufacturers' instructions conflict with Contract Documents, request clarification from Engineer before proceeding.
- C. Comply with specified standards as a minimum quality for the Work except when more stringent tolerances, codes, or specified requirements indicate higher standards or more precise workmanship.
- D. Perform work by persons qualified to produce workmanship of specified quality.
- E. Secure Products in place with positive anchorage devices designed and sized to withstand stresses, vibration, physical distortion or disfigurement.

1.03 FIELD SAMPLES

- A. Install field samples at the site as required by individual specifications sections for review.
- B. Acceptable samples represent a quality level for the Work.
- C. Where field sample is specified to be removed, clear area only after field sample has been accepted by the Engineer.

1.04 CERTIFIED WELDERS

- A. Structural welds shall be made only by operators who have been qualified by tests, as prescribed in the "Standard Qualification Procedure" of the American Welders Society, to perform the type of work required.

- B. Pipe welds shall be made only by operators who have been qualified by the National Certified Pipe Welding Bureau and each operator's qualification record shall be submitted to the Engineer before any work is performed.
- C. Shop welding shall be in accordance with the "Code for Welding in Building Construction".

PART 2 PRODUCTS

NOT USED

PART 3 EXECUTION

NOT USED

END OF SECTION

## SECTION 01410

### TESTING LABORATORY SERVICES

#### PART 1 GENERAL

##### 1.01 SUMMARY

###### A. Section Includes

1. Qualification, duties and responsibilities of testing laboratories.
2. Coordination and scheduling responsibilities of the Contractor.

###### B. Related Sections

1. Section 01600 - Materials and Equipment

##### 1.02 PAYMENT PROCEDURES

###### A. Initial Testing

1. Testing will be performed as required by the Engineer.

###### B. Retesting

1. When initial tests indicate noncompliance with the Contract Documents, subsequent retesting occasioned by the noncompliance shall be performed by the same testing agency.

###### C. Contractors Convenience Testing

1. Inspecting and testing performed exclusively for the Contractor's quality control purpose and for conformance with the specifications shall be the sole responsibility of the Contractor.

##### 1.03 REFERENCES

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

1. E329, Agencies Engaged in Construction Inspection and/or Testing

##### 1.04 REQUIREMENTS

###### A. Work included:

1. Cooperate with the Owner's selected testing agency and all others responsible or testing and inspecting the Work.
2. Provide other testing and inspecting as specified to be furnished by the Contractor in this Section and/or elsewhere in the Contract Documents.
3. Where no testing requirements are described, but the Owner directs testing, the Contractor shall provide testing under the requirements of this Specification.

B. Work not included:

1. Selection of testing laboratory: The Owner will select a qualified independent testing laboratory.

## 1.05 QUALITY ASSURANCE

A. Qualifications

1. The testing laboratory will be qualified to the Owner's approval in accordance with ASTM E329.

B. Regulatory requirements

1. Testing, when required, will be in accordance with all pertinent codes and regulations and with selected standards of the American Society for Testing and Materials.
2. Regulatory Requirements Inspections and tests required by codes or ordinances, or by a plan approved authority, and which are made by a legally constituted authority, shall be the responsibility of and shall be paid for by the Contractor, unless otherwise provided in the Contract Documents.

## 1.06 DELIVERY, STORAGE, AND HANDLING

A. Comply with pertinent provisions of Section 01600 - Materials and Equipment.

- B. Promptly process and distribute, to the Engineer, required copies of test reports and instructions to assure necessary retesting and replacement of materials with the least possible delay in progress of the Work.

## 1.07 SCHEDULING

A. Establishing schedule

1. By advance discussion with the testing laboratory selected by the Owner, determine the time required for the laboratory to perform its tests and to issue each of its findings.
2. Provide all required time within the construction schedule.
3. Coordinate testing activity with the appropriate testing laboratory.

B. Revising schedule

1. When changes of construction schedule are necessary during construction, coordinate all such changes with the testing laboratory as required.

C. Adherence to schedule

1. When the testing laboratory is ready to test according to the established schedule, but is prevented from testing or taking specimens due to incompleteness of the Work, all extra charges for testing attributable to the delay may be back-charged to the Contractor and shall not be borne by the Owner.

PART 2 PRODUCTS

NOT USED

PART 3 EXECUTION

3.01 FIELD QUALITY CONTROL

A. Site Tests

1. Representatives of the testing laboratory shall have access to the Work at all times and at all locations where the Work is in progress. Provide facilities for such access to enable the laboratory to perform its functions properly.
2. All specimens and samples for testing, unless otherwise provided in the Contract Documents, shall be taken by the testing personnel. All sampling equipment and personnel will be provided by the testing laboratory. All deliveries of specimens and samples to the testing laboratory will be performed by the testing laboratory.
3. Sieve and Proctor analysis are required for all in-situ aggregate to be used in the Work. Sieve and Proctor analysis to be stamped and signed by a Professional Engineer registered in the State of Rhode Island.
4. Sieve analysis are required for all aggregate and soils delivered to the job site to be used in the Work. Sieve analysis to be stamped and signed by a Professional Engineer registered in the State of Rhode Island. Contractor responsible for sieve analysis for this purpose.
5. Sample all imported soils and aggregates at a minimum frequency of one (1) per one thousand cubic yards each to verify materials free of contamination. The material shall be tested for the following: volatile organic compounds (VOC's) (EPA method 8260), Poly-Nuclear Aromatic Hydrocarbons (PAH's) (EPA method 8270), total Petroleum Hydrocarbons ((TPH), and RCRA 8 Metals.
6. If identified by Engineer and based on results of field testing, soil compaction testing for paved areas shall be performed for every 3,000 square feet of roadway,



but no less than two tests per street. Soil compaction testing to be performed for every 50 linear feet of excavated trench repair.

7. Asphalt compaction testing each day permanent bituminous concrete is placed. Testing shall be provided for every 150 linear feet of road, minimum two tests per road.

END OF SECTION

## SECTION 01560

### TEMPORARY CONTROLS

#### PART 1 GENERAL

##### 1.01 SECTION INCLUDES

- A. Requirements for cleaning, maintenance of the site, barriers and fences required during construction.

##### 1.02 CLEANING DURING CONSTRUCTION

- A. Unless otherwise specified under the various trade Sections of the Specifications, the General Contractor shall perform clean-up operations during construction as herein specified.
  - 1. Control accumulation of waste materials and rubbish; periodically dispose of off-site. Bear all costs, including fees resulting from disposal.
  - 2. Clean interior areas prior to start finish work and maintain areas free of dust and other contaminants during finishing operations.
  - 3. Maintain project in accordance with all local, State and Federal Regulatory Requirements.
  - 4. Store volatile wastes in covered metal containers, and remove from premises.
  - 5. Prevent accumulation of wastes that create hazardous conditions.
  - 6. Provide adequate ventilation during use of volatile or noxious substances
- B. Conduct cleaning and disposal operations to comply with local ordinances and anti-pollution laws.
  - 1. Do not burn or bury rubbish and waste materials on site.
  - 2. Do not dispose or volatile wastes such as mineral spirits, oil, or paint thinner in storm or sanitary drains.
  - 3. Do not dispose of wastes into streams or waterways.
  - 4. Use only those materials which will not create hazards to health or property and which will not damage surfaces.
  - 5. Use only those cleaning materials and methods recommended by manufacturer of surface material to be cleaned.
  - 6. Execute cleaning to ensure that the buildings, the sites, and adjacent properties are maintained free from accumulations of waste materials and rubbish and wind blown debris, resulting from construction operations.

7. Provide on-site containers for collection of waste materials, debris, and rubbish.
8. Remove waste materials, debris, and rubbish from the site periodically and dispose of at legal disposal areas off the construction site.
9. Handle material in a controlled manner with as little handling as possible. Do not drop or throw materials from heights.
10. Schedule cleaning operations so that dust and other contaminants resulting from cleaning process will not damage surrounding surfaces.
11. During its progress, the work and the adjacent areas affected thereby shall be kept cleaned up and all rubbish, surplus materials, and unneeded construction equipment shall be removed and all damage repaired so that the public and property owners will be inconvenienced as little as possible.
12. Where material or debris has washed or flowed into or been placed in existing watercourses, ditches, gutters, drains, pipes, structures, work done under this contract, or elsewhere during the course of the Contractor's operations, such material or debris shall be entirely removed and satisfactorily disposed of during the progress of the work, and the ditches, channels, drains, pipes, structures, and work, etc. shall, upon completion of the work, be left in a clean and neat condition.

#### 1.03 DUST CONTROL

- A. Provide adequate means for the purpose of preventing dust caused by construction operations throughout the period of the construction contract.
- B. This provision does not supersede any specific requirements for methods of construction or applicable general conditions or performance obligations of the General Contractor.

#### 1.04 EROSION AND SEDIMENT CONTROL

- A. Plan and execute construction by methods to control surface drainage from cuts and fills, from borrow and waste disposal areas. Prevent erosion and sedimentation.
- B. Minimize amount of bare soil exposed at one time.
- C. Provide temporary measures such as berms, dikes, and drains, to prevent water flow.
- D. Construct fill and waste areas by selective placement to avoid erosive surface silts for clays.
- E. Periodically inspect earthwork to detect evidence of erosion and sedimentation; promptly apply corrective measures.

F. Construct sediment control devices for discharge from dewatering trenches.

G. Construct all sedimentation control devices shown on the plans.

#### 1.05 NOISE CONTROL

A. Develop and maintain a noise-abatement program and enforce strict discipline over all personnel to keep noise to a minimum.

B. Execute construction work by methods and by use of equipment which will reduce excess noise.

1. Equip air compressors with Silencers, and power equipment with mufflers.

2. Manage vehicular traffic and scheduling to reduce noise.

#### 1.06 POLLUTION CONTROL

A. Special care shall be taken to prevent contamination or muddying up or interfering in any way with the stream flows, if any along the line of work. No waste matter of any kind will be allowed to discharge into the stream flows or impounded water of any pools or other bodies of water.

#### 1.07 SURFACE WATER CONTROL

A. Take all precautions to prevent damage to the work or equipment by high waters or by storms. The Engineer with the approval of the Owner may prohibit the carrying out of any work at any time when in his judgement, high water or storm conditions are unfavorable or not suitable, or at any time, regardless of the weather, when proper precautions are not being taken to safeguard previously constructed work or work in progress.

B. In case of damage caused by the failure of the Contractor to take adequate precautions, the Contractor shall repair or replace equipment damaged and shall make such repairs or rebuild such parts of the damaged work, as the Engineer may require, at no additional expense to the Owner.

#### 1.08 BARRIERS AND ENCLOSURES

A. Fences and Barricades

1. Provide and maintain temporary fences, barriers, lights, guardrails, and barricades as indicated in the Contract Documents, or as necessary to secure the Work and adjacent property, and protect persons and property.

2. Obtain necessary approvals and permits and provide temporary expedients as necessary to accommodate tasks requiring items mentioned herein.

B. Protection of Trees

1. The Contractor shall take care not to harm trees along the sides of roads or within the existing facility in which the construction work is to be done or trees on adjacent lands except as indicated on the drawings or with the written permission of the Owner and any other owner of the trees involved. Care shall be taken not to cut tree roots so as to harm the growth of trees to remain.
2. If, in the opinion of the Engineer, any trees damaged during construction can be repaired, the Contractor shall satisfactorily repair same at no further cost to the Owner.
3. If, in the opinion of the Engineer, any tree damaged during construction cannot be repaired and should be removed, the Contractor shall satisfactorily remove and replace, in kind, same at no further cost to the Owner.

PART 2 PRODUCTS

NOT USED

PART 3 EXECUTION

NOT USED

END OF SECTION

## SECTION 01570

### TRAFFIC REGULATIONS

#### PART 1 GENERAL

##### 1.01 SECTION INCLUDES

- A. Requirements for traffic control for the duration of the Contract.

##### 1.02 REFERENCES

- A. This specification includes requirements of additional specifications as listed. The Contractor shall perform the Work in accordance with requirements of the referenced specification in addition to the requirements of this Specification Section 01570.
- B. The Contractor shall obtain and familiarize himself with all requirements of these specifications.
  - 1. Rhode Island Department of Transportation Standard Specification for Road and Bridge Construction, including all addenda issued by the State of Rhode Island Department of Public Works. (referred to as the Standard Specification).
  - 2. The most recent version of the Manual on uniform Traffic Control Devices (MUTCD)

##### 1.03 PERFORMANCE REQUIREMENTS

- A. Contractor shall have the sole responsibility for the maintenance and protection of traffic.
- B. An authorized representative of the Contractor shall be available on a 24-hour basis for the duration of the Contract for the purpose of correcting construction related impediments or hazards.

##### 1.04 SUBMITTALS

- A. Shop Drawings
  - 3. In accordance with SECTION 01300 – SUBMITTALS, submit a traffic plan delineating requirements of this section, the Contract Drawings, and the City of East Providence requirements.
  - 4. Traffic control plans shall detail all typical work zones and detours.

## 1.05 SITE CONDITIONS

- A. Replace at no cost to the City of East Providence pavement markings, legends and lane arrows removed or damaged by the construction operation.
- B. Restore temporary detours to original condition.
- C. Replace traffic signal loops damaged during construction within 72 hours.

## 1.06 SCHEDULING

- A. There shall be no time limitations on construction operations except those hours and locations where noise regulations may apply and except as required for the maintenance of traffic as required by the Town of Bristol.
- B. Keep closing of travel lanes to a minimum.
- C. Notify Town departments 48 hours prior to construction operations on travel ways.
  - 1. Police Department
  - 2. Fire Department
  - 3. Department of Public Works

## PART 2 PRODUCTS

### 2.01 TRAFFIC CONTROL DEVICES

- A. In accordance with the Standard Specification.

## PART 3 EXECUTION

### 3.01 INSTALLATION OF TRAFFIC CONTROL DEVICES

- A. In accordance with the Standard Specification.

### 3.02 PROTECTION OF TRAFFIC

- A. Barricade trenches and roadway excavations at the end of each work period with temporary precast concrete barriers, properly lighted and marked to guide traffic to designated travel lane. Or other means acceptable to the Engineer and approved on the Traffic Plan.

- B. Maintain and protect traffic movements for the entire length of the project.
- C. Keep one lane of traffic open at all times except for brief stoppages dictated by the construction operation involving safety of vehicles in the travel lanes.
- D. Maintain access to business and private ways during construction operations as much as possible. The contractor shall coordinate access to private ways and parking restrictions within the roadways with the DPW Director, the resident engineer and the residents adjacent to the project prior to commencing work within the neighborhood block.
- E. Furnish sufficient number of signs, temporary precast concrete barriers, warning lights, drums and traffic cones to warn traffic of construction and guide traffic through the construction area.

### 3.03 TRAFFIC PERSONS

- A. Contractor shall procure the service of uniformed traffic persons as required to perform construction while safely managing the movement of non-construction traffic through active project areas. Contractor shall be responsible for determining the need for uniformed traffic persons over the course of the project, and shall schedule traffic persons in a timely fashion in advance of when said traffic persons will be needed.
- B. Traffic persons shall be City of East Providence police officers, unless otherwise authorized or required.
- C. Traffic persons used by the Contractor shall be compensated directly by the City of East Providence, based on the number of hours actually worked (both straight time and overtime) and the corresponding hourly rates for each time classification. Contractor shall be responsible for tracking or verifying hours worked by traffic persons on the project.
- D. The intent is to insure public safety by police direction of traffic. Police are not to serve as watchmen to protect the Contractor's equipment and materials, or to warn pedestrians of such hazards as open trenches.
- E. Nothing contained herein shall be construed as relieving the Contractor of any of his responsibilities for protection of persons and property under the terms of the Contract.

END OF SECTION



## SECTION 01600

### MATERIALS AND EQUIPMENT

#### PART 1 GENERAL

##### 1.01 SUMMARY

###### A. Section Includes

1. Requirements for delivery, storage, handling and installation of systems, materials, manufactured units, equipment, components, and accessories used in the work.

###### B. Related Sections

1. Section 01300 - Submittals

##### 1.02 DELIVERY

A. Refer to Specifications' Sections for requirements pertaining to delivery and handling of materials and equipment.

B. Transport products by methods to avoid product damage; deliver in undamaged condition in manufacturers' unopened containers or packaging, dry.

C. Provide equipment and personnel to handle products by methods to prevent soiling or damage.

D. Promptly inspect shipments to assure that products comply with requirements, that quantities are correct, and products are undamaged.

##### 1.03 STORAGE AND PROTECTION

A. Refer to Specifications' Sections for requirements pertaining to storage and protection of materials and equipment.

B. Store products in accordance with manufacturers' instruction, with seals and labels intact and legible. Store sensitive products in weather tight enclosures; maintain within temperature and humidity ranges required by manufacturers' instructions.

C. For exterior storage of fabricated products, place on sloped supports above ground. Cover products subject to deterioration with impervious sheet covering; provide ventilation to avoid condensation.

- D. Store loose granular materials on solid surfaces in a well-drained area; prevent mixing with foreign matter.
- E. Arrange storage to provide access for inspection. Periodically inspect to assure that products are undamaged, and are maintained under required conditions.

#### 1.04 INSTALLATION STANDARDS

- A. Comply with Specifications and referenced standards as minimum requirements.
- B. Components required to be supplied in quantity within a Specification Section shall be the same, and shall be interchangeable.
- C. Do not use materials and equipment removed from existing structures, except as specifically required, or allowed, by the Contract Documents.
- D. Perform work by persons qualified to produce workmanship of specified quality.
- E. Secure products in place with positive anchorage devices designed and sized to withstand stresses, vibration, and racking.
- F. When work is specified to comply with manufacturers' instructions, submit copies as specified in Section 01300 - Submittals, distribute copies to persons involved, and maintain one set in field office.
- G. Perform work in accordance with details of instructions and specified requirements.

#### PART 2 PRODUCTS

NOT USED

#### PART 3 EXECUTION

NOT USED

END OF SECTION

## SECTION 01700

### CONTRACT CLOSE-OUT

#### PART 1 GENERAL

##### 1.01 SECTION INCLUDES

- A. Requirements for specific administrative procedures, record keeping, close-out submittals, and forms used at substantial and final completion of the Work.
- B. Contractor shall satisfy all administrative requirements within the Contract Documents and the Requirements listed in this section prior to Contract Close-out.

##### 1.02 FINAL CLEANING

- A. On or before the completion of the work, the Contractor shall, unless otherwise especially directed or permitted in writing, tear down and remove all temporary buildings and structures built by him; shall remove all temporary works, tools, and machinery or other construction equipment furnished by him; shall remove all rubbish from any grounds which he has occupied; and shall leave the roads and all parts of the premises and adjacent property affected by his operations in a neat and satisfactory condition.
- B. The Contractor shall restore or replace, when and as directed, any public or private property damage by his work, equipment, or employees, to a condition at least equal to that existing immediately prior to the beginning of operations. To this end, the Contractor shall do as required, all necessary highway or driveway, walk and landscaping work. Suitable materials, equipment, and methods shall be used for such restoration. The restoration of existing property or structures shall be done as promptly as practicable as work progresses and shall not be left until the end of the contract period.
- C. Unless otherwise specified under the various Sections of the Specifications, the Contractor shall perform final cleaning operations as herein specified prior to final inspection.
- D. At completion of work, remove waste materials, rubbish tools, equipment, machinery and surplus materials, and clean all sight-exposed surfaces; leave project clean and ready for occupancy.
- E. Cleaning shall include all surfaces, interior and exterior in which the Contractor and all Subcontractors have had access whether existing or new.

- F. Refer to Sections of the Specifications for cleaning of specific products or work.
- G. Use only those materials which will not create hazards to health or property and which will not damage surfaces.
- H. Use only those cleaning materials and methods that are recommended by the manufacturer of surfaces material to be cleaned.
- I. Employ experienced workmen, or professional cleaners, for final cleaning operations.

### 1.03 PROJECT RECORD DOCUMENTS

- A. Project Record Documents also referred here as As-Built Drawings shall consist of all the contract drawings.
- B. The Contractor and all Subcontractors shall be required to maintain one set of As-Built Drawings, as the work relates to their Sections of the Specifications, at the site.
- C. As-Built Drawings shall be stored and maintained in the General Contractor's field office apart from other documents used for construction. The As-Built Drawings shall be maintained in a clean, dry, and legible condition and shall not be used for construction purposes.
- D. As-Built Drawings shall be available at all time for inspection by the Engineer. All deficiencies noted shall be promptly corrected.
- E. The following information shall be indicated on the As-Built Drawings for storm drain construction:
  - 1. Rim elevations on inlets, catch basins, manholes and other structures.
  - 2. Invert elevations of all pipes within inlets, catch basins, manholes, end sections, headwalls, culverts and other structures.
  - 3. Linear distance along drain from structure to structure, and branch connections, including size and type of pipe.
  - 4. Recalculated pipe slopes based on as-built elevations.
  - 5. Location of manholes, inlets, catch basins, outlets, headwalls, other structures and service line connections with 3 swing ties.
- F. At the end of each month and before payment for materials installed, the Contractor, and his Subcontractors, shall review As-Built Drawings for purpose of payment. If the changes in location of all installed elements are not shown on the as-built drawings and verified in the field, then the material shall not be considered as installed and payment will be withheld.

G. At the completion of the contract, each Subcontractor shall submit to the Contractor a complete set of his respective As-Built Drawings indicating all changes. After checking the above drawings, the Contractor shall certify in writing on the title sheet of the drawings that they are complete and correct and shall submit the As-Built Drawings to the Engineer.

1.04 WARRANTIES

A. Comply with requirements of Section 01740 Warranties.

1.05 FINAL INSPECTION

A. The Contractor shall submit written certification that:

1. Project has been inspected for compliance with Contract Documents.
2. Equipment and systems have been tested in the presence of the manufacturer's representative and are operational and satisfactory.
3. Project is completed, and ready for final inspection.

PART 2 PRODUCTS

NOT USED

PART 3 EXECUTION

NOT USED

END OF SECTION

## SECTION 01740

### WARRANTIES

#### PART 1 GENERAL

##### 1.01 SECTION INCLUDES

- A. General administrative and procedural requirements for warranties required by the Contract Documents, including manufacturers standard warranties on products and special warranties.

##### 1.02 SUBMITTAL

- A. Submit written warranties to the Owner prior to the date fixed by the Engineer for Substantial Completion. If the Certificate of Substantial Completion designates a commencement date for warranties other than a date of Substantial Completion for the Work, or a designed portion of the Work, submit written warranties upon request of the Owner.
- B. When a designated portion of the Work is completed and occupied or used by the Owner, by separate agreement with the Contractor during the construction period, submit properly executed warranties to the Owner prior to acceptance of this portion of the Work.
- C. Refer to individual Sections of Division 2 through 16 for specific content requirements, and particular requirements for submittal of special warranties.

##### 1.03 WARRANTY REQUIREMENT

- A. Related Damages and Losses: When correcting warranted Work that has failed, remove and replace other Work that has been damaged as a result of such failure or that must be removed and replaced to provide access for correction of warranted Work.
- B. Reinstatement of Warranty: When Work covered by a warranty has failed and been corrected by replacement or rebuilding, reinstate the warranty by written endorsement. The reinstated warranty shall be equal to the original warranty with an equitable adjustment for depreciation.
- C. Replacement Cost: Upon determination that Work covered by a warranty has failed, replace or rebuild the Work to an acceptable condition complying with requirements of Contract Documents. The Contractor is responsible for the cost of replacing or rebuilding defective Work regardless of whether the Owner has benefited from use of the Work through a portion of its anticipated useful service life.

- D. Owner's Recourse: Written warranties made to the Owner are in addition to implied warranties, and shall not limit the duties, obligations, rights and remedies otherwise available under the law, nor shall warranty periods be interpreted as limitations on time in which the Owner can enforce such other duties, obligations, rights, or remedies.
- E. Rejection of Warranties: The Owner reserves the right to reject warranties and to limit selections to products with warranties not in conflict with requirements of the contract Documents.
- F. Disclaimers and Limitations: Manufacturer's disclaimers and limitations on product warranties do not relieve the Contractor of the warranty on the Work that incorporates the products, nor does it relieve suppliers, manufacturers, and subcontractors required to countersign special warranties with the Contractor.

#### 1.04 DEFINITIONS

- A. Standard Product Warranties are preprinted written warranties published by individual manufacturers for particular products and are specifically endorsed by the manufacturer to the Owner.
- B. Special Warranties are written warranties required by or incorporated in the Contract Documents, either to extend time limits provided by standard warranties or to provide greater rights for the Owner.

#### PART 2 PRODUCTS

NOT USED

#### PART 3 EXECUTION

NOT USED

END OF SECTION

## SECTION 01800

### MAINTENANCE

#### PART 1 GENERAL

##### 1.01 SECTION INCLUDES

- A. Procedures for maintaining work completed under this Contract.

##### 1.02 MAINTENANCE PERIOD

- A. The general maintenance period for all construction or materials under this Contract shall be one (1) year subsequent to the date of the acceptance of the work by the Owner, or as provided by other sections of this Specification.
- B. If the Owner puts any structure or equipment to use prior to acceptance of all work under the Contract, the maintenance period for such structures or equipment shall be calculated from the time use begins.
- C. Contractor agrees to replace the material which does not conform to the Contract requirements, and to repair any damage of material or work without cost to the Owner, to satisfaction of Engineer, in conformance with Contract Documents provided orders for replacement and/or repairs are received in writing by the Contractor within the one year period.
- D. This Section shall in no way limit the duration of the Contractor's responsibility for the correction of any defect due to workmanship or materials provided by the Contractor which are not in compliance with the Contract Documents.

##### 1.03 ABUSE OF WORK

- A. Contractor is not obligated to perform work of replacement or repair that he may prove is required because of abuse by parties other than the Contractor, after the date the Owner puts to continuous use the work requiring replacements or repair, or after date the Owner has approved the Certificate of Completion.

##### 1.04 EMERGENCY REPAIRS

- A. If the Owner deems necessary, the Owner shall order replacement or repairs be undertaken within 24 hours.



- B. If the Contractor delays or fails to make the ordered replacement or repairs within the time specified, the Owner shall have the right to make such replacements or repairs and the expense shall be deducted from moneys due the Contractor, or moneys of the Contractor retained by the Owner.

PART 2 PRODUCTS

NOT USED

PART 3 EXECUTION

NOT USED

END OF SECTION