

SECTION 01 00 01

SUMMARY OF WORK

PART 1: GENERAL

1.01 WORK UNDER THIS CONTRACT

- A. Furnish all labor, materials (except as herein noted), equipment and means to construct the project and other Work as described in the Contract Documents and shown on the Drawings. The Work includes, but is not limited to, the following:
1. Pavement removal, including saw cutting, as required.
 2. Construction and maintenance of bridges and other structures as required for traffic control.
 3. Furnishing of flagmen, traffic warning and control as required.
 4. Sheeting, bracing and support of trench and adjoining ground where necessary.
 5. Furnish and install pipe restraint as required.
 6. Handling drainage and water removal.
 7. Guarding the site and materials.
 8. Unloading, loading, hauling, distributing, laying and testing the pipe and appurtenances.
 9. Furnishing materials not provided by the owner to the site (see section 1.03).
 10. Rearranging sewer lateral and other pipes and ducts where necessary.
 11. Excavation and backfilling of trenches and pits.
 12. Restoration of paved and concrete surfaces including curbing.
 13. Removal of surplus excavated material and debris.
 14. Installation of required pipe, fittings and appurtenances
 15. Performance of vacuum/ pressure and leakage tests.
 16. Grout abandon facilities.
 17. Site cleaning.
 18. Maintenance of street or other surfaces for the required period of time.
 19. Ground restoration and planting.
 20. Submit schedules, shop drawings and as-built records.
 21. Erosion and sediment control.
 22. Call for locates
 23. Permits as required by Owner
 24. Mandrel Testing
- B. Please refer to the Standard General Conditions of the Construction Contract for definitions of the Owner, Contractor, Engineer and other terminology that may be used in this specification.
- C. The above general outline of principal features does not in any way limit the responsibility of the Contractor to perform all Work and furnish the required materials, equipment, labor and means as shown or required by the Contract Documents.

- D. Materials, equipment, labor, etc., obviously a part of the Work and necessary for the proper operation and installation of same, although not specifically indicated in the Contract Documents, shall be provided as if called for in detail without additional cost to the Owner.

1.02 LOCATIONS

- A. Work is to be performed on Owner's property and/or public rights-of-ways or easements shown on the drawings and described in the Specifications. Work shall be performed by the Contractor within these limits.
- B. It is the obligation and responsibility of the Contractor to determine the exact limitations of the rights-of-way and/or easements and any conditions limiting or affecting the use of the right of way by the Owner and/or the Contractor. All agreements respecting rights-of-way and the easements that are available to the Owner can be made available upon request. The Contractor agrees to indemnify and hold harmless the Owner against any claims made by any property owner, including any claim that the Contractor has failed to keep Contractor work, equipment, materials, or workmen within the limits authorized by the right-of-way and/or easement or any claim that the Contractor has failed to comply with any condition or requirement, or agreement respecting the right-of-way and/or easement.
- C. Some of the locations shown or described in the Contract Documents, such as lateral connections, are approximate and it is the responsibility of the contractor for pinpointing the exact locations.

PART 2: PRODUCTS

1.02 WORK BY OWNER

- A. Owner or the Owner's Resident Project Representative (RPR) shall perform certain items of Work related to this project which include the following
 - 1. Mark locations of existing laterals, valves, mains, etc.
 - 2. Other work, if any, as described below.
 - A. Operate all existing valves necessary to shut-off and reactivate the existing pipelines
 - B. Communicate with customers regarding project
 - C. ?

1.03 OWNER FURNISHED PRODUCTS

- A. All products shall be provided by Contractor unless specifically stated in contract documents.
- B. Owner's Responsibilities:

1. Arrange for and deliver Owner reviewed shop drawings, product data, and samples, to Contractor.
2. Arrange and pay for product delivery to site.
3. On delivery, inspect products jointly with Contractor.
4. Submit claims for transportation damage and replace damaged, defective, or deficient items.
5. Arrange for manufacturers' warranties.

C. Contractor's Responsibilities:

1. Review Owner reviewed shop drawing's product data, and samples.
2. Receive and unload products at site; inspect for completeness or damage, jointly with Owner.
3. Handle, store, install and finish products.
4. Repair or replace items damaged after receipt.
5. Arrange for manufacturers inspections, service, start-up services and training.

1.04 WORK SEQUENCE

- A. Work shall be scheduled, sequenced and performed in a manner that minimizes disruption to the public and plant operations and shall not interrupt or affect the Water Company's ability to operate and maintain service of the existing facility. During the construction periods coordinate construction schedule and operations with the Owner and or Owners Representative.
- B. Allow for construction and schedule constraints in preparing the construction schedules required under Section 01 00 04-Submittals. The schedule shall include the Contractors activities necessary to satisfy all constraints included and referenced in the Contract Documents.

The Contractor is responsible for sequencing the work. It is a requirement that the Contractor's sequence result in the minimum number and duration of total or partial outages.

1.05 CHANGE PROCEDURES

- A. The Engineer may issue to Contractor a Proposal Request which includes a detailed description of a proposed change with supplementary or revised drawings and specifications, a change in Contract Times for executing the change and the period of time during which the requested price will be considered valid. Contractor will prepare and submit an estimate within 15 working days. The estimate shall contain a detailed breakdown of the labor, equipment, material, subcontract, equipment rental, contingencies, overhead, and profit costs associated with the requested change. The estimate shall also include any requested adjustments to Contract Times including the window of time the Owner has to render a decision on the matter.

1.06 DEFINED TERMS

- A. Terms used in these Specifications which are defined in the General Conditions of the Contract Documents shall have the meanings assigned to them in the General Conditions.

1.07 ABBREVIATIONS

- A. Where any of the following abbreviations are used in the Contract Documents, they shall have the meaning set forth opposite each.

AASHTO	American Association of State Highway and Transportation Officials
ACI	American Concrete Institute
AFBMA	Anti-Friction Bearing Manufacturers Association
AGA	American Gas Association
AGMA	American Gear Manufacturers Association
IEEE	Institute of Electrical and Electronics Engineers, Inc.
AISC	American Institute of Steel Construction
AMCA	Air Moving and Conditioning Association
ANS	American National Standard
ANSI	American National Standards Institute
API	American Petroleum Institute
ASCE	American Society of Civil Engineers
ASHRAE	American Society of Heating, Refrigerating and Air Conditioning Engineers
ASME	American Society of Mechanical Engineers
ASTM	American Society for Testing and Materials
AWPA	American Wood-Preservers' Association
AWWA	American Water Works Association
CS	Commercial Standard
IBR	Institute of Boiler and Radiator Manufacturers
IPS	Iron Pipe Size
JIC	Joint Industry Conference Standards

NBS	National Bureau of Standards
NEC	National Electrical Code; Latest Edition
NEMA	National Electrical Manufacturers Association
NFPA	National Fire Protection Association
SMACNA	Sheet Metal and Air Conditioning Contractors National Association, Inc.
Fed.Spec.	Federal Specifications issued by the Federal Supply Service of the General Services Administration, Washington, D.C.
125lb ANS 250lb ANS	American National Standard for Cast-Iron Pipe Flanges and Flanged Fittings, Designation B16.1-1975, for the appropriate class
AWG	American or Brown and Sharpe Wire Gage
NPT	National Pipe Thread
OS&Y	Outside Screw and Yoke
Stl.WG	U.S. Steel Wire, Washburn and Moen, American Steel and Wire or Roebling Gage
UL	Underwriters' Laboratories
USS Gage	United States Standard Gage
WOG	Water, Oil, Gas
WSP	Working Steam Pressure

PART 2: PRODUCTS

Not Used.

PART 3: EXECUTION

3.01 FIELD SURVEY WORK

A.

Lay out the Work in accordance with Paragraph 4.4 of the General Conditions. Owner will provide reference points as noted on the plans.

- B. If a discrepancy between the information as presented in the Contract Drawings and any existing survey grid work, bench marks, structures, etc., notify the Engineer immediately. New construction shall not commence until accurate control base lines and bench marks have been established.

- C. Throughout the course of the project, set all additional stakes which are needed for offset stakes, reference points, slope stakes, pavement and curb line and grade stakes, stakes for structures, sewers, utilities, roadway drainage, pipe underdrains, paved gutter, fence, culverts, or other structures, supplementary bench marks, and any other horizontal or vertical controls necessary to secure a correct layout and construction of the work. Stakes for line and grade for pavements, curbs, storm drains, sewers, etc., shall be set at twenty-five (25) foot maximum intervals. Base lines shall be staked in such manner as to clearly define them for the project.
- D. The finished work shall conform to the lines, grades, elevations and dimensions called for in the Contract Documents. The Work shall be subject to checking by the Engineer, but any inspection or checking of Contractor's layout by the Engineer and the acceptance of all or part of it shall not relieve the Contractor of his responsibility to secure the proper dimensions, grades, elevations and locations on the several parts of the Work. The Contractor shall exercise care in the preservation of stakes, monuments and bench marks and shall have them reset at his expense when they are lost or displaced.
- E. Prior to the commencement of any Work activity, the contractor shall survey and layout the Work to be performed and advise the Engineer of any conflicts, obstructions, concerns, etc. that will prevent completion of such work in accordance with the requirements of the Contract Documents. If the Contractor fails to conduct such survey and layout or if the survey and layout fails to identify a conflict, obstruction, etc., which it reasonably should have, and a conflict, obstruction, concern, etc., is discovered, the Contractor shall bear the cost of any standby time for labor and/or equipment which occurs pending the Engineer's direction and the cost of rework of any Work installed which is affected by the conflict, obstruction, etc.
- F. Where the dimensions and locations of existing structures are of importance in the installation or connection of any part of the Work, verify such dimensions and locations in the field before the fabrication of any material or equipment that is dependent on the correctness of such information.

3.02 COORDINATION AND MEETINGS

- A. Coordinate work, to phase the construction operations, and provide, install and maintain any temporary connections necessary to prevent interference to operation of Owner's facilities. Any construction work requiring the shutdown of facilities must be scheduled and performed only at such times as shall be authorized by the Owner. Such Work must be completed during the specific periods authorized by the Owner. It may be necessary that Work will be performed during several shutdown periods and/or during periods of premium time payment to accomplish the desired construction. All costs to perform the Contractor's Work, including premium time payments, shall be borne by the Contractor and are included in the Contract Price
- B. Additionally:
 - 1. Coordinate scheduling, submittals, and work of the various sections of specifications to assure efficient and orderly sequence of installation

of interdependent construction elements, with provisions for accommodating items installed later.

2. Verify the utility requirement characteristics of operating equipment are compatible with building utilities. Coordinate work of various sections having interdependent responsibilities for installing, connecting to, and placing in service, such equipment.
3. Coordinate space requirements and installation of mechanical and electrical work which are indicated diagrammatically on drawings. Follow routing shown for pipes, ducts, and conduit, as closely as practicable; place runs parallel with line of building. Utilize spaces efficiently to maximize accessibility for other installations, for maintenance, and for repairs.
4. In finished areas except as otherwise indicated, conceal pipes, ducts, and wiring within the construction. Coordinate locations of fixtures and outlets with finish elements.
5. Coordinate completion and clean up of Work of separate sections in preparation for substantial completion and for portions of Work designated for Owner's partial occupancy.
6. 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.

C. Job Progress Meetings

Progress meetings will generally be held monthly or as specified by the Owner. Contractor's attendance shall be required.

1. Schedule - The Engineer will establish the meeting place, time and date, notify participants and administer the meeting. Contractor shall notify major subcontractors and suppliers, as appropriate.
2. Attendance
 - a. Engineer and/or resident project representative.
 - b. Contractor's project manager and project superintendent
 - c. Owner's representative
 - d. Subcontractor, as appropriate to the agenda
 - e. Suppliers, as appropriate to the agenda
 - f. Other parties as determined by Engineer and/or Owner
3. Minutes - Engineer will prepare and distribute copies to participants and Owner for review at the next meeting

3.03 REGULATORY REQUIREMENTS

Make necessary arrangements for obtaining and identifying all costs in connection with mandated third party inspections in accordance with Paragraph 13.5 of the General Conditions when the Work is to be done in the third party's transportation or utility right of way and an inspector must be assigned to the Project during the construction of the Work.

--END OF SECTION--