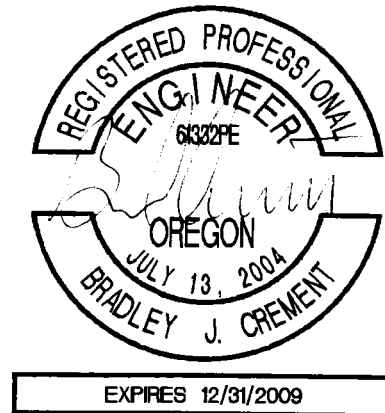

City of Coos Bay
Coos County, Oregon

VOLUME 2 - CONTRACT DOCUMENTS
TECHNICAL SPECIFICATIONS

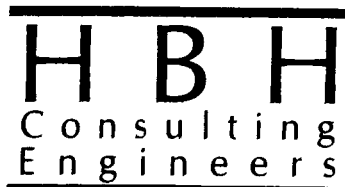
FOR THE CONSTRUCTION OF

Pump Station #5

September 2009
Project No. 2007-070



Prepared By:



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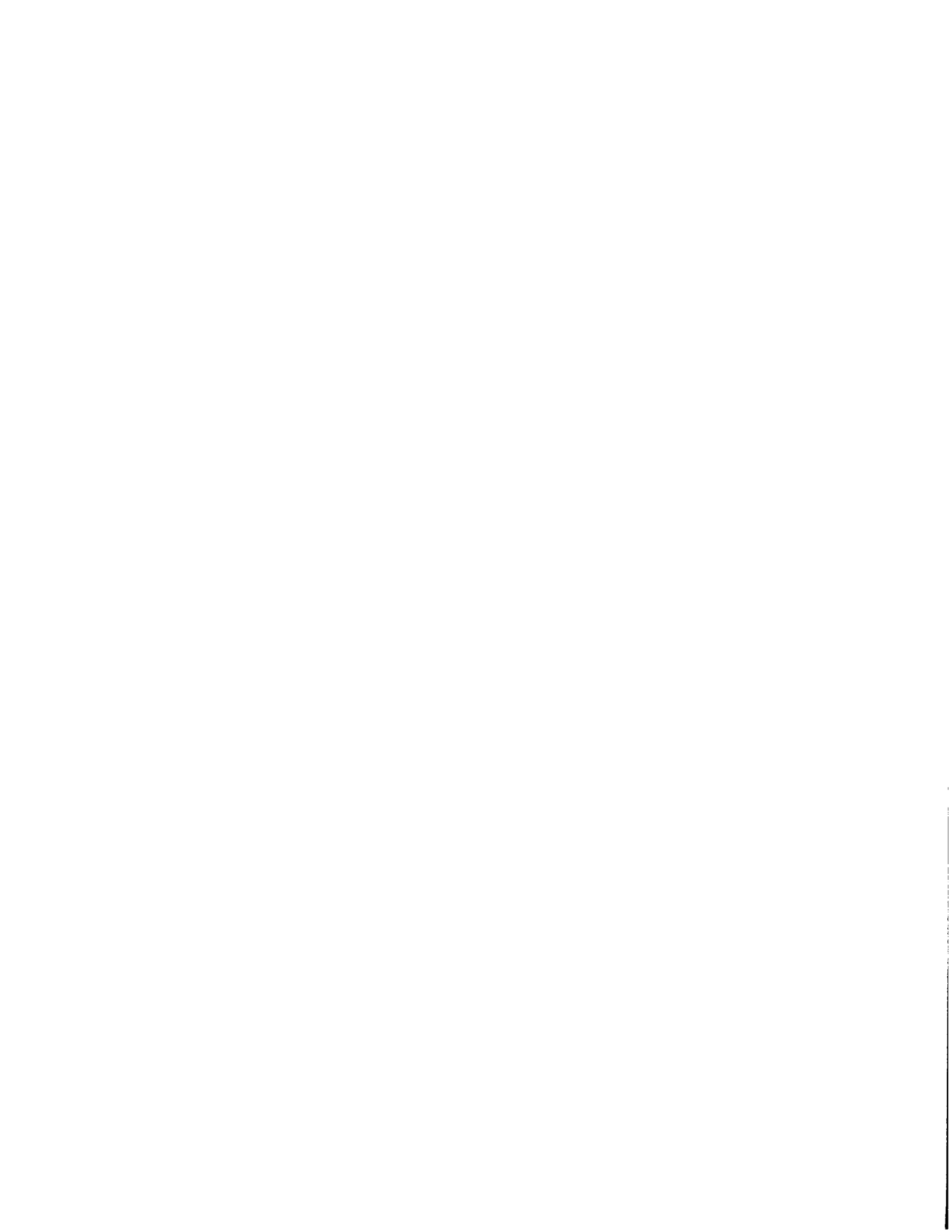
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SECTION 01010 – SUMMARY OF WORK

PART 1 GENERAL

1.01 WORK SUMMARY

- A. The Contractor shall furnish all labor, equipment, and materials necessary to complete all work in accordance with the Contract Documents.
- B. The work shall be performed within the City of Coos Bay, Coos County, Oregon.
- C. The scope of work for the project is summarized below:

Pump Station #5

- 1. Obtain all permits as required. Coordinate with public utilities and agencies.
- 2. Furnish and install new pre-manufactured concrete wetwell as indicated on the Plans. Wetwell is a triplex configuration, approximately 18 feet deep to wetwell bottom.
- 3. Furnish and install new valve vault with isolation plug valves, check valves and pressure gauges.
- 4. Furnish and install new manhole to intercept existing 12-inch influent pipe and redirect to new wetwell.
- 5. Furnish and install new 12-inch pvc influent pipe from existing pipe at the new manhole to new wetwell.
- 6. Furnish and install new Flygt submersible pumps, guide bars and all required pump accessories and controls.
- 7. Furnish and install new site piping, valves, fittings and appurtenances as indicated on the Plans or in Specifications. Includes: flowmeter, vault, and tie-in to the exiting 6" AC forcemain.
- 8. As an alternate to connecting to the existing forcemain, furnish and install new 8" HDPE forcemain from the site piping to the existing discharge location as indicated on the plans.
- 9. Furnish and construct new control building for new controls and housing of the new genset provided per the contract. Building to be constructed of CMU with metal roof with door and louvers as shown on the drawings and specified by the contract documents.
- 10. Furnish and install complete electrical and control system, including all required wiring, conduit, enclosures, supply transformers, vault, emergency standby generator, automatic transfer switch, VFD's, and all other components required for a complete installation.
- 11. Demolition and abandonment of existing wetwell, building and forcemain as indicated on Plans. Salvage all reusable materials as specified and provide to Owner.
- 12. Provide temporary pumping facilities as required to maintain service.

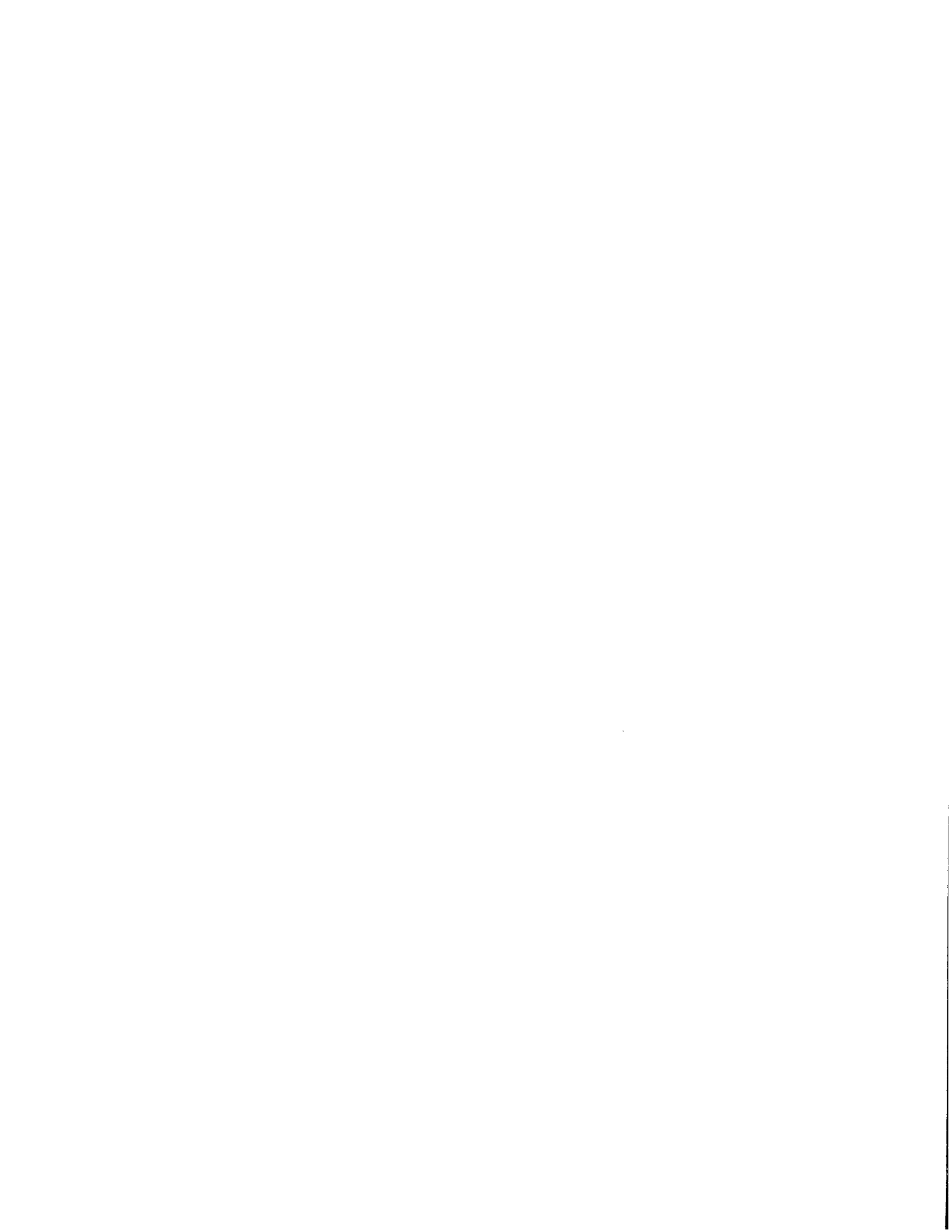
13. Provide site improvements as shown in Plans, including: street entrance, bollards, indicated AC pavement, compacted gravel surface, perimeter fence and gates.
 14. Perform start-up and testing of system.
- D. Work shall not begin until Engineer has issued the *Notice to Proceed* to the Contractor(s).
 - E. Contractor shall coordinate his work per Section 01040.
 - F. The Contractor shall be responsible for obtaining all necessary permits required for the completion of the work. The coordination, and all other aspects of local, County, State, or Federal permits, as applicable, shall be borne by the Contractor. The permit fees shall be a pass-through cost for the Contractor. The City will pay all permitting fees, Contractor shall submit invoice for permit fees to City for reimbursement.
 - G. Contractor shall verify actual dimensions from equipment manufacturers and actual site measurements. Compare all contract drawings and actual equipment dimensions and locations before placing equipment. Conflicts must be resolved prior to placing materials.

1.02 WORK PROGRESS

- A. It is the intent of these Contract Documents that the work proceeds in a systematic manner so that a minimum of inconvenience to the public results in the progression of the work. Suitable equipment will be required to properly execute the work with the least amount of disruption to services and access. Contractor shall contain operations to within the site property boundaries or to suitable and prearranged staging areas.
- B. All shutdowns of any station processes will require coordination with and pre-approval by the City. If, for any reason, work will result in the disruption of the ability to pump sewage from the wetwell and through the forcemain, at least 7 (seven) working days advance notice must be given to the Owner to allow them to make proper arrangements. Contractor shall coordinate with owner and provide temporary pumps, pipeline or other means, as necessary, to ensure that levels in the wetwell do not exceed maximum allowable limits as established by the owner.
- C. Order and schedule delivery of materials in ample time to avoid delays in construction. If an item is found to be unavailable, notify the Engineer immediately to permit the Engineer's selection of suitable substitute. Timely delivery of all materials and equipment is Contractor's responsibility. No extensions in Contract Time will be allowed due to delays caused by late delivery of items. Availability of items should be determined during bidding.
- D. The Contractor shall protect the work and materials from damage due to the nature of the work, the elements, carelessness of others, or from any other cause until the completion and final acceptance of the work. All loss or damages arising out of the nature of the work to be performed under these Contract Documents, or from any unseen obstruction or defects which may be encountered in the execution of the work, or from the action of the elements, shall be sustained by the Contractor.
- E. The Contractor shall remove completely all materials designated for removal, to the extent specified and/or indicated in the drawings. For such materials, removal, hauling, disposal (including providing disposal location), and applicable precautions are entirely the Contractor's responsibility. Allow no excess accumulation of non-reusable material at job site(s).

- F. Contractor is responsible for the protection of all existing improvements that are to remain in place. This includes, but is not necessarily limited to: existing utilities, roads, driveways, drainage ditches, culverts, shrubbery, trees, fence and structures. Temporary enclosures, walls, covers, or other protection shall be provided and maintained by the Contractor as required. Contractor shall cooperate with the owners of such improvements, and shall restore and/or replace all damaged items as directed, without any additional expense to the Owner or payments to the Contractor.

END OF SECTION



SECTION 01028 – CHANGE ORDER PROCEDURE

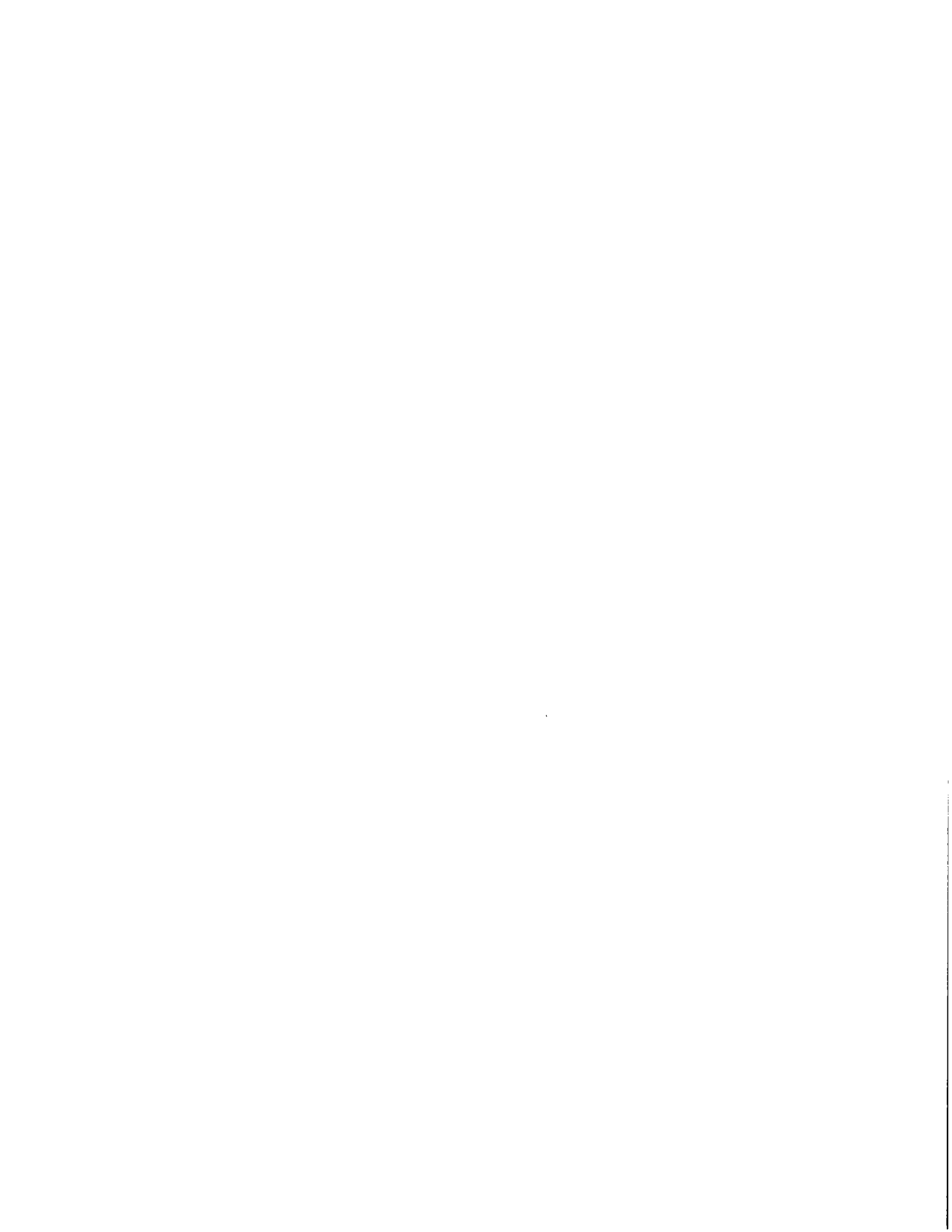
1.01 SUMMARY

- A. All changes to the project will require a change order including: changes in the Scope of Work, in the Contract Sum, in the Contract Time of Completion, or any combination thereof, or other. Change orders will be signed by the Owner, Engineer, and the Contractor.
- B. See also applicable sections of the General Conditions and applicable portions of the Supplementary General Conditions.
- C. Work outside the scope of the original Contract Document intent will not be paid for by Owner or Engineer unless an approved Change Order precedes such work.

1.02 PROCESSING CHANGE ORDERS

- A. Change Orders will be numbered in sequence and dated. The Change Order will describe the changes and will be signed by the Owner, Engineer and the Contractor. All signatures are required before a Change Order becomes effective. Requests for estimates for possible changes are not to be considered Change Orders or direction to proceed with the proposed changes.
- B. Change Orders will be prepared by the Engineer.
- C. Contractor may request that the Owner consider a Change Order by sending a written Change Order Request to both Owner and Engineer to initiate the Change Order process. Any increase in cost or time requested by Contractor shall be reasonable and based on the provisions in the Contract Documents.
- D. When requested, Contractor shall provide written evidence substantiating cost changes including receipts for materials, cost proposals from suppliers, and wage forms showing labor used for a particular change.
- E. Change orders will be processed using the form shown in Section 00553.
- F. Change order may include changes for costs, time, material selections, or other changes to the Contract Documents as necessary.

END OF SECTION

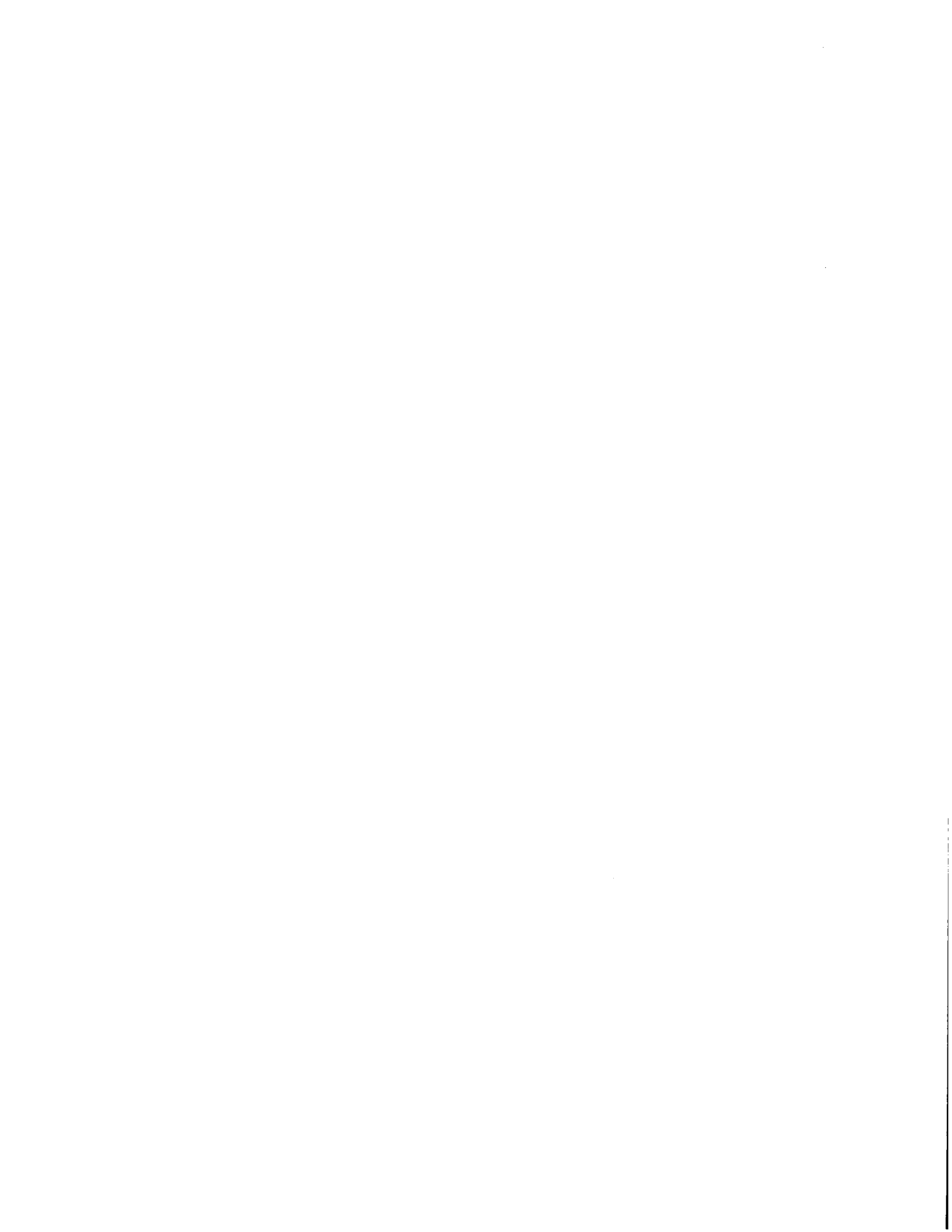


SECTION 01040 – COORDINATION

1.01 SUMMARY

- A. Contractor shall coordinate work with the Owner, manufacturers, appropriate agencies and utilities, and others as necessary.
- B. Permit and maintain access for the Owner to all facilities that are in service or may require maintenance, including the wetwell and control room.
- C. Coordinate with Owner and Utilities to determine the locations of underground piping, vaults, valves and other items that could be damaged during construction.
- D. Construct all work in a systematic manner. Maintain system function, with temporary pumps or other approved means, until the new pump station is fully tested, approved and on line.
- E. Cleanup and restoration work shall be completed in conjunction with the construction of each part of the project. Contractor shall make every reasonable effort to maintain the project site clean and free of excess excavation, dirt, debris, and other materials.
- F. The level of sewage in the existing wet well shall not be allowed to rise above high level limit as established by the owner. See Section 01010.
- G. We have made preliminary contact with Coos Bay – North Bend Water board for relocating the water meter, Verizon for relocating the cross connect cabinet, and Pacific Corp for relocating the utility pole on site. However, the contractor is responsible for scheduling and coordinating with the utilities.

END OF SECTION



SECTION 01041 – PROTECTION OF EXISTING IMPROVEMENTS

1.01 GENERAL

- A. Where Contractor's operations are near utility systems, structures, or are adjacent to other property, no work shall be started until Contractor has made all arrangements necessary for protection thereof have been made. Contractor shall exercise all possible precautions to prevent damage to existing structures, improvements, and underground utilities that are to remain.
- B. Approximate locations of known underground utilities are shown on the Plans. Exact location or extent of such utilities is not guaranteed, and utilities may exist which are not shown on the Plans. Contractor shall call for utility locates prior to any digging. Contractor shall also pothole as required ahead of the work to verify the location and depths of affected utilities. No additional compensation will be given for such work or for utilities being different than shown on the plans.
- C. The Contractor shall be solely and directly responsible to the owner's and operator's of such properties and services for any damage, injury, expense, loss, inconvenience, delay, suits, actions, or claims of any character brought because of any injuries or damage which may result from the carrying out of the work to be done under this Contract.
- D. Restoration of Existing Improvements. Except as shown on the Plans or as provided elsewhere in these specifications, the Contractor shall, at their own expense, repair and/or replace all utilities, services, landscaping, structures, substructures and other improvements damaged by the operations associated with this project, as directed. These repairs and replacements shall all be suitable and proper for intended use and in every respect acceptable to the Owner, Engineer and appropriate governing body or owner of such improvement. At minimum, restoration will be required to match the existing adjacent structure/improvement in thickness, finish, quality, quantity, and aesthetics.
- E. In the event of interruption of domestic water, electric, telephone, sewer, or other utility services, the Contractor shall promptly notify the proper authority and the Owner. The Contractor shall cooperate with the proper authority in restoration of service as promptly as possible and shall bear all costs of repair. In no case shall interruption of any water, sewer, or utility service be allowed to exist outside working hours unless prior approval is received from said authority and Owner.

1.02 INTERFERING STRUCTURES, IMPROVEMENTS AND LANDSCAPING

- A. It shall be entirely the responsibility of the Contractor to locate and protect all existing structures, landscaping, and other improvements in advance of the work. Neither the Owner, Engineer, nor any of their officers or agents shall be responsible to the Contractor for damages as a result of any structures or improvements being located differently than indicated in the drawings, nor which exist and are not indicated on the drawings.
- B. If interfering power poles, telephone poles, transformers, guy wires, or anchors are encountered, the Contractor shall notify the affected utility and the Engineer at least seven (7) days in advance of construction to permit arrangements for protection or relocation of the structure. However, failure of utility to respond shall create no obligation on Owner, and Contractor shall protect all utilities against damage, or shall stand all costs involved thereof.

- C. Landscaping, Tree and Plant Protection. Provide adequate protection of existing landscaping against damage from construction operations, including all structures and vegetation. Protect roots, trunk and foliage of existing and new shrubs and trees from all damage including that possible from compaction and dust. Contractor shall be entirely responsible to remove and replace all property that is damaged by work related to the project. Contractor shall bear all costs associated with replacement of existing landscaping, and shall cooperate with the owner of such improvements, the Owner, and the Engineer in all protection and restoration/replacement that is required. In specific circumstances, Contractor may make special arrangements with property owners for removal of landscaping without replacement. Copies of written agreements for all such arrangements shall be furnished to the Engineer.
- D. When construction operations will affect the property of a private citizen (such as driveways, landscaping, etc.), even when such improvements are in the road right-of-way, the Contractor shall notify the owner of such property and the Owner, at least seven (7) days in advance of any affecting Work, so that any desired preparations can be made.

1.03 ROADS AND ACCESS

- A. All work shall be conducted to minimize damage to existing roadways, easements and parking lots, including limiting wheel loads to acceptable levels. At all times keep roadways, shoulders, and ditches free from excess materials and debris.
- B. Spillage of soil, dust, rock, mud, etc. on all roads (including State, County, City and private roads) used by the Contractor (and any working for Contractor) during construction, shall be prevented as much as possible. If spillage cannot be prevented, an hourly patrol shall be provided by the Contractor to police and sweep clean all spillage. At the conclusion of each workday, such traveled areas shall be left completely clean and free from all extraneous materials. Contractor is entirely responsible to prevent such spills and follow all related laws and regulations. If spillage of hazardous material occurs, Contractor shall immediately notify the proper authorities and remove the spill in the proper manner. Owner will not be liable for any additional costs due to spillage of any kind.
- C. All damaged gravel, concrete and/or asphaltic concrete surfaces shall be repaired as required to conditions acceptable to the governing body and Engineer. No cleated or crawl-type equipment shall be operated on paved surfaces. If crawl-type equipment must be used, adequate protection of the existing pavement should be used to prevent permanent scaring or damage to the surface.
- D. During construction the Contractor shall take necessary measures to avoid and abate excessive dust. Sprinkling of roadways and sites may be necessary and shall be conducted carefully to avoid over wetting while keeping dust to a minimum.
- E. Contractor is responsible for constructing, maintaining, and removing any additional access that Contractor deems necessary for the Work. Contractor must notify Owner and Engineer, and must obtain written consent from the governing body, prior to construction of additional access not shown on the drawings. All applicable regulations shall be followed in such access construction, including obtaining any required permits.

END OF SECTION

SECTION 01050 - FIELD ENGINEERING

1. GENERAL

- A. Construction Stakeout – Stakeout will not be provided by Engineer or Owner for this project. The Contractor shall be responsible for all project layout based upon the information provided on the plans and measurements to be made on site.
- B. Contractor shall maintain proper equipment on-site as necessary to ensure horizontal and vertical control and proper location of improvements.
- C. The Contractor will be solely responsible for laying out the work from this stakeout control, and no additional stakeout will be provided except at the expense of the Contractor.
- D. A cad file will be made available to the contractor for the use of construction staking by a surveyor at the contractors request and expense.

END OF SECTION

