

SECTION 020100 - SITEWORK – GENERAL REQUIREMENTS

PART 1 - GENERAL

1.1 SCOPE OF WORK

- A. Site work includes the work shown and reasonably inferred from the drawings, technical specifications, and contract documents. Provide materials, labor, equipment and supervision required to perform the work complete.
- B. The scope of site work includes, but is not limited to the following:
 - 1. Construction staking and other construction engineering required to control the work.
 - 2. Erosion and sedimentation control construction.
 - 3. Temporary groundwater control.
 - 4. Site preparation, including stripping and undercutting unsuitable subgrade soils, demolition, and removal from the project lands of materials not to be used for construction.
 - 5. Site grading, including excavation, filling, compaction, and preparation of subgrades for paving. Site grading includes importing material, stockpiling and hauling from stockpiles, and other work necessary to construct embankments and excavations as shown and specified.
 - 6. Construction of building pads and staging areas.
 - 7. Coordination of temporary utilities.
 - 8. Installation of the complete site drainage system complete, including building roof drain laterals.
 - 9. Installation of the complete water distribution and sanitary sewer system complete, including service laterals.
 - 10. Construction of curbs.
 - 11. Construction of paving.
 - 12. Striping and traffic control.
 - 13. Backfilling curbs and islands with approved soils for planting.
 - 14. Backfilling walls.
 - 15. Installation and coordination of temporary warning signs, directional signs, barricades and fences required to direct, control and protect the public throughout the construction period.
 - 16. Coordination of installation of light poles, irrigation systems, and associated conduits.

1.2 SAFETY

- A. Safety & Protection: Initiate, maintain, and supervise safety precautions and programs in connection with the Work. Take necessary precautions for the safety of, and provide the necessary protection to prevent damage, injury or loss to employees on the job and other persons or organizations.
- B. Safe trench construction is mandatory. Lay back slopes or shore as necessary.
- C. Control traffic during operations on existing streets.
- D. Erect and maintain barricades, fences, and other physical blockages sufficient to exclude the public from construction areas.

1.3 PROTECTION OF ADJACENT LANDS

- A. Limit construction to areas so indicated on the drawings and designated by the Owner. Protect areas beyond the construction which are subject to the effect or byproduct of the construction effort.
- B. Make special effort to prevent soil erosion and sediment transport onto adjacent lands. Restore disturbance to areas outside the designated construction limits to a satisfactory condition, as determined by the Owner at no cost to the Owner.
- C. Take precautionary measures to prevent damage to the adjoining public street system. Clean mud or debris deposited as a result of this construction.
- D. Perform construction on the right-of-way or on other properties not in possession of the Owner in strict accordance with the terms of the permits or easements. Obtain copies of permit and easement conditions affecting the work.

1.4 CONSTRUCTION ENGINEERING

- A. Provide construction staking, dimensional control, and related construction engineering for phases of the Work.

1.5 GEOTECHNICAL ENGINEERING

- A. Geotechnical quality control services will be performed by a geotechnical engineering firm (referred to as the Geotechnical Engineer) retained by the Owner.
- B. Provide in cooperation with the Geotechnical Engineer, as a minimum, monitoring and testing services of earthwork, drainage, utility construction, site preparation and demucking, underdrain construction, and pavement construction. Report results of tests verbally on completion of the work and provide daily written reports at the job site.
 - 1. Fill Placement: Monitor placement of fill for suitability of fill materials, uniformity of compaction operations, and compliance with aspects of these Specifications. Test soil fill for compliance with compaction requirements. Monitor rock fill for appropriate placement procedures, particle size, and lift thickness.
 - 2. Stripping and Demucking: Evaluate subgrades upon which fill is to be placed prior to fill placement. Monitor conditions and make appropriate recommendations. In the event of unstable subgrades, soil bridging, or provide stabilization stone as required. Discuss with the Owner, who will then authorize the procedure to be used.
 - 3. Underdrains: Monitor underdrain construction for compliance with the plans and specifications. If unforeseen conditions which impact the design and construction of underdrains are encountered, make appropriate recommendations to the Owner.
 - 4. Underground Utilities: Monitor installation of underground utilities and structures for compliance to specifications for materials, procedures, and workmanship. Evaluate the suitability of the subgrade upon which the pipes are to be constructed. Issue appropriate recommendations if unsuitable conditions are detected.
 - 5. Backfilling: Monitor backfills and test to evaluate compliance with the specifications.
 - 6. Retaining Walls: Provide monitoring and testing services during construction of retaining walls. The actual scope of these services will be dependent upon the type of wall used. Comply with the practice recommended by the designer of the wall system.

7. Pavements: Monitor preparation and proofrolling of the soil subgrade upon which pavements are to be constructed. When unstable soils are encountered, recommend appropriate remedial action to the Owner, who will then direct the Contractor as to the course of action. Monitor construction of the pavement system. Test thickness, gradations, and compactions of base course and surface course.

1.6 RESPONSIBILITY OF THE CONTRACTOR

- A. The Contractor is responsible for compliance with the Contract Documents. Monitoring and testing by the Geotechnical Engineer does not infer acceptance of responsibility by the Geotechnical Engineer, the Architect, the Engineer, or the Owner. When monitoring and testing indicates that construction does not meet Specification requirements, rework to obtain compliance.

1.7 AS-BUILT PLANS

- A. Maintain "Contractor's mark-up as-built" plans of construction. Certify the accuracy and completeness of these plans and deliver to the Owner.
- B. Prepare as-built plans of construction to be dedicated to Governmental entities and deliver in a form that is acceptable to the receiving agency.
- C. As-built topographic maps of detention structures may be required by governmental jurisdictions. If required, provide a topographic survey sufficient to confirm structure volume as well as dimensions and deviations of outlet structures.
- D. Retain a registered surveyor to certify as-built surveys required by governmental jurisdictions.

END OF SECTION 020100