

SECTION 01110 – GENERAL REQUIREMENTS**PART 1 GENERAL****1.1 GENERAL**

1. General: The work to be performed hereunder shall include the furnishing of all labor, materials, tools, transportation, supplies, equipment and appurtenances necessary for the complete and satisfactory construction of the water or sewer facility to Augusta County Service Authority's (the Authority or ACSA) Standards and satisfaction.

1.2 REFERENCES

1. General: The work shall comply with the most recent standards or tentative standards as published at the date of the contract.
2. Inclusion: The referenced standards in their latest editions form a part of these specifications to the extent specified herein.
3. Precedence: It is the intent of these Design and Construction Standards that the work be in conformance with referenced standards but under no circumstances shall those referenced standards take precedence over the plans and specifications. In any case of conflict, the Authority's Representative shall be notified immediately.

1.3 SUBMITTALS

1. General: Submittals for shop drawings, operation and maintenance manuals of all operating equipment, Certificates of Inspections, Approvals, Warranties and Guarantees of Equipment, etc. will be required when applicable; applicability of submittals required will be determined on a case-by-case basis but shall generally include meter vaults and pumping stations. Submittals and/or manufacturer supply tickets for developer work being dedicated to the Authority shall be submitted upon request. All submittals for pumping stations shall be submitted in an organized three ring binder containing all submittals required for the work for ease of review.
2. Shop drawings: When required, the Owner/Contractor shall provide shop drawings for the Authority's approval to show compliance with the Design and Construction Standards. Any differences or variations between the Design and Construction Standards and the submittal shall be noted by the Owner/Contractor and documentation provided which justifies the difference. The Owner/Contractor shall provide all manufacturers' data pertinent to the submittal, clearly showing which portions of the contents are being provided for review. Unacceptable submittals shall be revised and resubmitted as necessary until compliance with the Design and Construction Standards is achieved. If the Owner/Contractor fails to provide an acceptable submittal during the second review, the Owner/Contractor will be responsible for all fees associated with additional engineering reviews in accordance with the Fee Schedule.
 - 1) Scale and Measurements: Shop plans/drawings shall be to a scale sufficiently large to show all pertinent aspects of the item.
 - 2) Identification of Submittals:
 - a) Numbering: All submittals shall be consecutively numbered. Resubmittals shall cite the original submittal number for reference.
 - b) Transmittal: Each submittal shall be accompanied by a transmittal letter showing all the information required for identification and checking, including the appropriate Design and Construction Standards sections.

- c) Submittal Log: The Owner/Contractor shall maintain a submittal log for the duration of the Work that indicates current status of all submittals. The submittal log shall be available to the Authority's Engineer at all times for their review.
- 3) Submission Procedures: The Owner/Contractor shall provide a minimum of 3 copies of each submittal to the Authority's Engineer within 30 days of notice to proceed. The Authority's Engineer will retain 1 copy, the Authority's Representative receives 1 copy, and the Owner/Contractor receives the remaining copy. Any equipment installed without approved submittals may be subject to removal and/or replacement.
- 4) Review Comments: Submittals will be stamped by the Authority's Engineer in one of the following ways:
 - a) "Approved" - No exceptions are taken, subject to compliance with the Design and Construction Standards.
 - b) "Approved as Noted" - Minor corrections are noted and a resubmittal is not required, subject to compliance with the corrections and the Design and Construction Standards.
 - c) "Disapproved" - The submittal material, method or system is totally rejected and does not meet the intent of the Design and Construction Standards.
 - d) "Correct & Resubmit" - Revision prior to resubmittal is required.
 - e) "No Action Taken" - Reason will be noted on returned submittal.
- 5) Responsibility: Review by the Authority's Engineer does not relieve the Owner/Contractor from responsibility for errors, which may result from the submitted data.
- 6) Revisions: All revisions requested by the Authority's Engineer will be required. If the Owner/Contractor is considering any additional required revision, he shall notify the Authority's Representative of the revisions.

1.4 APPROVED PLANS

1. Construction of any water or sewer facility, and all their appurtenances and accessories, shall be in strict conformance with the final approved set of plans and/or specifications. No work shall be undertaken without a set of approved plans on the job site. It shall be the Contractor's responsibility to obtain a set of approved plans from the Owner/Developer.
2. In the event that an applicant desires to deviate from the plans and/or specifications which have been approved for construction by the ACSA or to make any changes or revisions therein, the applicant shall make such request to the ACSA in writing and state the reasons for the request. Revised plans, specifications and other substantiating data, shall accompany the request in such manner, form and quantity as was required for the original application.

1.5 PERMITS

1. The Owner/Contractor shall obtain all permits required for construction.

1.6 MATERIALS

1. Materials to be used in construction shall be in accordance with these Design and Construction Standards and the Approved Products List in Section D.

1.7 DELIVERY, STORAGE AND HANDLING

1. General: The Owner/Contractor shall take the necessary measures to protect the materials as required.
2. Manufacturer's Recommendations: The Owner/Contractor shall comply with the manufacturer's recommendations on product handling, storage and protection.
3. Delivery: The Owner/Contractor shall be responsible for making all the arrangements for the delivery, unloading, receiving, and storage of materials.
4. Packaging: Products shall be delivered to the job site in their manufacturer's original container with labels intact and legible. Damaged materials shall be immediately replaced at no additional cost to the Authority. The Authority's Representative may reject, as non-complying, any materials that do not bear the proper identification such as manufacturer, grade, quality and other pertinent information.
5. Storage: The Owner/Contractor shall store all products and materials in a protected location to prevent any damage or deterioration due to moisture, freezing temperatures or other detrimental conditions.

1.8 COORDINATION

1. General: The Owner/Contractor shall notify the owner or tenant of such property upon which work is to be performed in advance of commencing work thereon, and in the event of the necessity of disrupting utility or other services to such property, he shall notify the appropriate official in charge of such utility or other services and arrange for the disruption and restoration of such service in a manner which will result in a minimum of inconvenience to parties concerned.

1.9 UNDERGROUND UTILITIES

1. General: All construction operations in the vicinity of other utilities shall be performed with sufficient care to prevent damage to these utilities. Prior to construction operations the Owner/Contractor shall contact "Miss Utility" of Virginia by calling 1-800-552-7001 to verify location of their utilities in the field. This shall be done in accordance with Chapter 890, Underground Utility Damage Prevention Act and specifically Section 56-265.17 of the Virginia Code. If damage occurs, repairs shall be made in accordance with the requirements of the utility company.
2. Existing Utilities: If damage to existing utilities occurs during construction, the Owner/Contractor shall report the damage immediately to the utility owner and shall immediately, at the Owner/Contractor's expense, if due to Owner/Contractor's negligence, repair or arrange for repair of the damaged utilities to the satisfaction of the utility owner.

1.10 CONSTRUCTION ON STATE HIGHWAYS AND STREETS

1. The Virginia Department of Transportation requires a permit for work to be performed in State Rights-of-Way. Provision for obtaining such permits are set forth in the Manual on Permits, Virginia Department of Transportation, Richmond, Virginia, latest revision. The Contractor is responsible for acquiring all

necessary permits. No work will be approved by the Authority that has not been accepted or approved as satisfactory by the Department of Transportation.

1.11 CONSTRUCTION ON RAILROAD RIGHT-OF-WAY

1. Local railway companies require permits for any construction within the confines of their right-of-way limits or properties. All requirements relative to design and construction must be met prior to approval by the Authority, and a notice or verification of meeting such requirements shall be submitted to the Authority. The Owner/Contractor or Developer will be responsible for acquiring the necessary permit(s) allowing work to be done in the railroad right-of-way.

1.12 RECORD PLANS

1. After completion of construction of the water and/or sewer facilities from approved plans on any project previously classified, and after final inspection; the developer or owner responsible for the construction shall prepare record plans. Record plans shall be prepared using CAD and two sets shall be submitted, one on mylar film and one on bond paper, to the Authority. On Authority funded projects, the Contractor shall submit neat red-line as-built drawings to Engineer. The Engineer shall be responsible for preparation and submittal of record drawings in accordance with these Standards.
2. Record information shall be based on accurate, field-obtained information, to show actual conditions of the finished construction. The record plans shall show all revised and permanent changes to the plans and/or specifications.
3. The record plans shall include all previously mentioned plan sheet requirements including the following:
 - 1) Water Line Construction
 - a) Scale accurately and locate on the plan sheet, the line and all installed fittings, such as elbows, tees, crosses, and reducers, and all cradle, encasement, service connections, or special construction.
 - b) Show exact measurements and location of all valve boxes, fire hydrants, meter boxes, blow-offs, blind or blank-flanged fittings and plugged termination of lines.
 - c) The measurements taken for these locations shall be taken from at least two reasonable adjacent and available, fixed and permanent objects such as fire hydrants, centers of sanitary or storm sewer manhole covers, corners of buildings, power poles, etc. (If a power pole is used, the I.D. number shall be recorded on the record drawings.)
 - 2) Sewer Line Construction
 - a) Scale accurately and locate all manhole inverts and top casting elevations and annotate numerically the exact elevations of the same as determined by field survey after construction.
 - b) Scale accurately the length and grade of all lines between manholes, and annotate numerically the exact lengths and grades of all lines, as determined after construction.
 - c) Scale accurately and locate concrete cradles, encasements, or special construction.
 - d) Scale accurately and locate the sewer service laterals and cleanouts including invert elevation in reference to top of cleanout.
 - 3) Pumping Stations, and all other Comparable Construction and Building Structures

- a) Record plans and specifications shall accurately indicate all approved deviations and changes regarding changes in location, type of equipment used, and material used.
- b) Accurate listings of the name of the manufacturer of all operating equipment installed, together with model or style numbers, ratings, capacities, and other pertinent information shall be provided as part of the record plans.
- c) A minimum of three complete sets of shop drawings and operation and maintenance manuals shall be submitted in accordance with 2.5 - Submittals, as a part of the record plans on the project. This shall include all operating equipment, and all Certificates of Inspections, Approvals, Warranties and Guarantees of Equipment. A listing of materials and installations, required by the approved project specifications, shall be submitted as a part of the record plans.

1.13 WARRANTY PERIOD

1. The Owner/Contractor will be responsible for any maintenance and repairs as a result of construction or material defects of said facilities for one year from the date of final acceptance by the Authority. During this one year period, a bond may be required by the County. If a bond is held by the County, it will be released one year after formal acceptance of the facilities, and the Authority will assume maintenance of the facility. The one year period shall not begin until all acceptance documents required by the Authority have been submitted and approved by the Authority. These documents shall include, but not be limited to Operation and Maintenance Manuals and Record Plans.

END OF SECTION