

SECTION 01400

QUALITY CONTROL

1. PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Quality Assurance and Control of Installation.
- B. References.
- C. Field samples.
- D. Inspection and Testing Laboratory Services.
- E. Manufacturer's Field Services and Reports.
- F. Benchmarks and Control Elevations.

1.2 RELATED SECTIONS

- A. Section 01300 - Submittals: Submission of manufacturer's instructions and certificates.
- B. Section 01600 - Material and Equipment: Requirements for material and product quality.

1.3 QUALITY ASSURANCE/CONTROL OF INSTALLATION

- A. Monitor quality control over suppliers, manufacturers, Products, services, site conditions, and workmanship, to produce Work of specified quality.
- B. Comply fully with manufacturer's instructions, including each step in sequence.
- C. If the manufacturer's instructions conflict with Contract Documents, request clarification from Engineer before proceeding.
- D. 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.
- E. Perform Work by persons qualified to produce workmanship of specified quality.
- F. Secure products in place with positive anchorage devices designed and sized to withstand stresses, vibration, physical distortion or disfigurement.

1.4 REFERENCES

- A. Conform to reference standard by date of issue current on date of Contract Documents.
- B. Obtain copies of standards when required by Contract Documents.
- C. If the specified reference standards conflict with Contract Documents, request clarification from Engineer before proceeding.

- D. 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.

1.5 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 in individual Sections to be removed, clear area after field sample has been accepted by Engineer and storm sewer installation.

1.6 INSPECTION AND TESTING LABORATORY SERVICES

- A. Notify Materials Testing Agent and Engineer 48 hours prior to scheduled construction inspection days and material testing.
- B. Construction inspection will be provided for drain crossing installations and as determined necessary by Engineer for open drain excavation.
- C. Owner will pay for services to perform construction inspection and material testing according to specifications.
- D. Inspections, tests, and other services specified in individual specification Sections will be performed by the Engineer, as required.
- E. Make arrangements with Engineer and pay for additional samples and tests required for Contractor's use.
- F. Retesting required because of non-conformance to specified requirements shall be performed. Payment for retesting will be charged to the Contractor by deducting construction inspection or material testing charges from the Contract Price.
- G. Survey shots of the dredging will be conducted to determine amount excavated.
- H. The Engineer will perform inspections, tests, and other services specified in individual specification Sections and as required by the Owner.
- I. Reports will be submitted by the Engineer to the Owner, in duplicate, indicating observations and results of tests and indicating compliance or non-compliance with Contract Documents.
- J. Cooperate with the Engineer and the Owner; furnish samples of materials, design mix, equipment, tools, storage and assistance as requested.
- K. Notify Engineer 48 hours prior to expected time for operations requiring services.
- L. Make arrangements with Engineer and pay for additional samples and tests required for Contractor's use.

1.7 MANUFACTURERS' FIELD SERVICES AND REPORTS

- A. When specified in individual specification Sections, require material or product suppliers or manufacturers to provide qualified staff personnel to observe Site conditions, conditions of surfaces and installation, quality of workmanship, and to initiate instructions when necessary.
- B. Individuals to report observations and site decisions or instructions given to applicators or installers that are supplemental or contrary to manufacturer's written instructions.
- C. Submit report within 30 days of observation to the Engineer for review.

1.8 BENCHMARKS AND CONTROL ELEVATIONS

- A. Elevations for proposed Work shall be set from bench marks established for this Project.
- B. Verify elevations of existing features against Project benchmarks.
- C. Notify Engineer of conflicts in elevations, which affect the proposed Work.

END OF SECTION