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BuildingName
The Description of the Project
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SPECIFICATION DIVISION 1

NUMBER SECTION DESCRIPTION

DIVISION 01 GENERAL REQUIREMENTS
SECTION 336200 – PROJECT QUALITY ASSURANCE/QUALITY CONTROL (QA/QC) FOR TUNNEL PROJECTS

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DIVISION 01 GENERAL REQUIREMENTS

SECTION 336200 – PROJECT QUALITY ASSURANCE/QUALITY CONTROL (QA/QC) FOR TUNNEL PROJECTS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, Standard General and Supplementary General Conditions, Division 01 Specification Sections, and other applicable Specification Sections, in particular the Related Sections listed below, apply to this Section.

B. Related Sections:

1. Section 013100 – Project Management and Coordination.
2. Section 013300 – Submittal Procedures.
3. Section 017823 – Operation and Maintenance Manuals.
4. Section 336330 - Utility Tunnels - Steam & Condensate Distribution Systems

C. Testing, QA/QC, operation and maintenance manual, and Owner training requirements referenced in the other Technical Specification Sections apply to this Section.

1.2 SUMMARY

A. Contractor shall coordinate with and support all QA/QC activities required for the project. Contractor shall be responsible for their portion of the work as part of the overall system QA/QC process. The QA/QC activities will be coordinated by the University's QA/QC Authority. Perform the QA/QC activities as outlined in Part 3, "Execution".

B. Perform QA/QC activities on the following:

1. Division 33: Systems and equipment include, but are not limited to:
   a. Tunnel piping, valves, expansion joints, and loops.
   b. Steam and condensate systems.

1.3 SUBMITTALS

A. Provide the QA/QC Authority with the lists, forms, drawings, plans, reports, and manuals described in Part 3, "Execution".

PART 2 - PRODUCTS (NOT APPLICABLE)

PART 3 - EXECUTION

3.1 QUALITY ASSURANCE/QUALITY CONTROL (QA/QC) ACTIVITIES

A. Attend QA/QC meetings which shall be conducted as part of the project's regular construction meetings.

B. The QA/QC Authority will maintain a QA/QC Manual. The General Contractor shall obtain all documentation related to the QA/QC effort, and submit same to the QA/QC Authority for approval.

1. The QA/QC Manual will be used to store documents produced during the QA/QC process.
2. Each Contractor shall provide their own contact information and a complete list of trade contractor, major manufacturer and major supplier contact information for inclusion in the QA/QC Manual.
3. The Contractor shall assist the Owner's QA/QC Authority in performing all QA/QC activities required on this project. The types of activities performed by QA/QC Authority include but are not limited to:
   a. Pre-Weld Inspections
   b. Post Weld Inspections.
   c. Anchor Bolt Inspections
   d. Expansion Joint Inspections.
   e. Guide Alignment Inspections.
4. Contractor shall provide one copy of the following documents to the QA/QC Authority for inclusion in the QA/QC Manual:
   a. Manufacturers' factory test reports.
   b. Field inspection and test reports.
   c. Complete Travelers Package.
   d. Weld Maps.
   e. Mill & Welder Certifications.
   f. Tests required by other specification sections.

C. During the shop drawing submittal process, Contractor shall submit one set of shop drawings for all systems and system components included in the QA/QC process to the QA/QC Authority for review.

1. Submit the shop drawings at the same time they are submitted to the A/E for review.

D. Provide advance notification of the following activities:

1. At least 2 weeks advance notice of weld x-rays. The QA/QC Authority must witness x-ray tests.
2. At least 2 weeks advance notice of pipe flushing and cleaning. The QA/QC Authority must witness flushing and cleaning.
3. Coordinate and schedule all required QA/QC system inspections, include but are not limited to:
   a. welds, alignments, etc. with QA/QC agent.

END OF SECTION 336200