

## SECTION 01 78 39

### PROJECT RECORD DOCUMENTS

#### PART 1 – GENERAL

##### 1.01 SUMMARY

- A. This Section sets forth requirements and procedures for the Contractor to maintain updated Project Record Documents required under the Contract and to submit updated record documents and As-Built documentation to the City Representative.
- B. Related Sections include:
  - 1. Section 01 33 00 – Submittal Procedures
  - 2. Section 01 77 00 – Closeout Procedures

##### 1.02 GENERAL REQUIREMENTS

- A. The Contractor shall be responsible for maintaining up-to-date record drawings and documentation. The Contractor shall make the up-to-date record drawings and documentation available for regular inspection by the City Representative.
- B. Following completion of the Contract work, the Contractor is responsible for submitting As-Built drawings meeting the requirements of the Specifications.
- C. The Contractor shall maintain in an orderly, clean, completed, indexed and easily accessed filing for all record documents including, but not limited to: Drawings, Specifications, Addenda, Change Orders, RFI's, Clarifications, Field Orders, approved shop drawings, samples and other submittals, clearly marked to record accurately the Work as actually constructed ("As-Built"), including changes, adjustments and other information relative to the Work.
- D. References herein to "As-Built Drawings," "As-Built Markup Drawings" or "As-Built Documents" are intended for inclusion within the generally used terminology of Contractor's As-Built Drawings or Documents.
- E. Definitions:
  - 1. As-Built Drawings: The general terminology used to refer to the City's permanent record of final, approved-as-constructed-or-installed construction details, or to any of the sources utilized (e.g., Construction Drawings, Contractor's As-Built Drawings, Conformed As-Built Drawings, Record Drawings, Main and Side Sewer post-construction television, etc.) in the development, approval and documentation of those details.

2. Conformed As-Built Drawings: The digitized “As-Built” Drawings incorporating all the mark-ups in the approved Contractor’s “As-Built” Drawings, “As-Built” Shop Drawings, and Field Sketches in a “read only” format. The City shall retain the “Conformed As-Built” Drawings for reference, maintenance, and future additions or modifications to the existing facilities.
3. Construction Drawings: The Updated Conformed Contract Documents stamped “Record Drawings” that the Contractor secures from the City Representative following Notice to Proceed, which the Contractor marks up to show all changes that are made during the construction period.
4. Contractor’s As-Built Drawings: The final version of the Construction Drawings that reflect the actual field conditions of the project details. The Contractor’s “As-Built” Drawings entail Updated Conformed Drawings reflecting and incorporating all the changes made through Requests For Information (RFI), Change Orders (CO’s), “As-Built” (approved) Shop Drawings, field sketches and marked details.

## **PART 2 – PRODUCTS (Not Used)**

## **PART 3 – EXECUTION**

### **3.01 REQUIREMENTS**

- A. The Contractor shall keep an accurately marked, up-to-date set of As-Built drawings for the work actually installed. Accurately indicate on record or As-Built drawings all site conditions, locations of utilities, changes and details as specified herein, and as approved by the City Representative.
  1. Contractor’s As-Built Drawings, main sewer post-construction inspection video DVDs and side sewer/culvert inspection video DVDs and associated log sheets shall be submitted after the work has been completed at each location to the City Representative.
- B. The Contractor shall record as the work progress changes to the Construction Drawings including, but not limited to, the following information relative to the Work:
  1. Field changes or adjustments in the final location or in the final dimensions or details of the Contract work relative to actual existing site conditions.
  2. Changes resulting from requests for information.
  3. Changes made by Change Order work.
  4. Locations of utilities and appurtenances referenced to permanent, accessible features of the Work.

5. Details not included on the original Contract Drawings but incorporated into the work by reference to approved shop drawings, product data, samples, calculations or other submittal.
  6. Contractor's As-Built Drawings shall include the location of items embedded in concrete such as conduit, cable, junction boxes, piping, rebar, etc.
  7. Completed Contractor's As-Built Drawings prepared to the required level of detail as outlined and listed in Article 3.01B of this Section.
- C. Upon completion of the work at each location, furnish to the City Representative the completed Contractor's As-Built Drawings showing all requirements listed herein, the main sewer post-construction inspection DVD and the side sewer/culvert inspection DVDs including associated log sheets. The Record or As-Built details shall be drawn by the Contractor directly onto full-size copies of the affected design drawings and shall include all intermediate changes previously submitted for the City Representative's approval.

### **3.02 PROCEDURES**

- A. The City Representative will provide the Contractor a complete set of all Contract Documents including one (1) set of full-size unmarked Contract Drawings. Contractor shall affix a "Record Drawing" stamp for the incorporation of detailed As-Built changes or corrections and subsequent certification of those corrections by the City Representative. All Contract Documents/Drawings provided to the Contractor for his markup documentation of the As-Built conditions shall be stamped "Record Drawing" by the Contractor. The Contractor shall record all changes on the "Record Drawing" stamped set, which will be submitted regularly for inspection to the City Representative.
- B. Contractor shall delegate responsibility for maintenance, coordination and accuracy of the Contractor's As-Built Drawings to one person on Contractor's staff.
- C. The City's inspector shall check, initial and date the corrected Record Drawings to signify that they reflect the field conditions.
- D. If the stamped Contractor's As-Built Drawings are not submitted, or accurate or complete, the City Representative will recommend that monthly progress payment be withheld.
- E. The City Representative will sign the corrected-as-marked Contractor's As-Built Drawings to indicate that he or she has reviewed the corrections for completeness, prior to forwarding them for transfer of the As-Built information into the City's permanent drawings files.

### **3.03 MAINTENANCE OF AS-BUILT DRAWINGS**

- A. Contractor shall store As-Built drawings apart from documents used for performing the work; keep in a dry, legible condition, and in good order. Contractor shall not use Contractor's As-Built Drawings for construction at the job site.
- B. Contractor shall record neatly on the Contractor's As-Built Drawings all changes made by clarifications, Change Orders, and other modifications to the Contract Documents made in accordance with Section 00 72 00 – General Conditions.
  - 1. Clearly describe changes on Drawings by note as required.
  - 2. Date all entries, calling attention to the entry by a “cloud” drawn around the area or areas affected.
  - 3. Record in each Specification section the manufacturer, trade name, catalog number and supplier of each product and equipment item incorporated into the Work.
  - 4. Refer to Article 3.01B of this Section for a listing of required As-Built information and level of As-Built detail to be incorporated into the Contractor's As-Built Drawings.
- C. Contractor shall show on the job set of Contractor's As-Built Drawings, by dimension accurate to within one (1) inch, the centerline of each run of conduits, circuits, piping, ducts, and similar items which are shown schematically on the Drawings but where the final physical arrangement is determined by the Contractor, subject to the City Representative's approval.
  - 1. The City Representative will issue a written waiver of the requirement for conversion of schematic layouts where, in the City Representative's judgment, such conversion serves no useful purpose.
  - 2. Contractor may request additional copies of previously-received unmarked drawings from the City Representative to supplement or supersede previously marked As-Built or record documents, when necessary to maintain clarity of As-Built information.
- D. Contractor shall keep Contractor's As-Built Drawings up-to-date during the entire progress of the work, and make available to the City at any time. Contractor shall update no more than five (5) working days after changes in the work are made, and submit them on a regular basis to the City Representative.

### **3.04 FINAL CONTRACTOR'S AS-BUILT DRAWINGS**

- A. Contractor shall carefully transfer change data, coordinating the changes as required, clearly describe the change on Drawings and details by note as required and date all entries, calling attention to each entry by drawing a “cloud” around the area or areas affected.

- B. Contractor shall make changes neatly, consistently, and with proper media to assure longevity and clear reproduction.

### **3.05 REVIEW AND SUBMITTAL**

- A. Contractor shall sign and date the completed Project Record Drawings and submit them to the City Representative for review prior to final payment as specified in Section 01 77 00 – Closeout Procedures.
- B. Contractor shall participate in review meetings as required, make required changes and promptly deliver the final Project Record Drawings to the City Representative.
  - 1. If a Contractor's As-Built Drawing is not approved by the City Representative, Contractor shall secure a new copy of that Drawing from the City Representative at the City's usual charge for reproduction and handling, and carefully transfer the change data to the new copy for the approval of the City Representative.

**END OF SECTION**