

SECTION 01 78 39  
PROJECT RECORD DOCUMENTS

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes: Administrative and procedural requirements for project record documents, including the following:
1. Record Drawings.
  2. Final Coordination Drawings as Record Documents.
  3. Record Specifications.
  4. Record Product Data.
  5. Miscellaneous record submittals.

1.2 CLOSEOUT SUBMITTALS

- A. Record Drawings: Comply with the following:
1. Number of Copies: Submit clean set(s) of marked up record prints.
    - a. Initial Submittal:
      - 1) Unless otherwise agreed to in writing by the Architect, submit one paper copy and an electronic annotated PDF file of marked up record prints in a complete set.
      - 2) Architect will indicate whether general scope of changes, additional information recorded, and quality of drafting are acceptable.
    - b. Final Submittal:
      - 1) Unless otherwise agreed to in writing by the Architect, submit one clean paper copy set of marked up record prints.
      - 2) Submit annotated PDF electronic files of annotated record Drawings with text search capabilities enabled.
      - 3) Provide each drawing sheet, whether or not changes and additional information were recorded.
- B. Final Coordination Drawings as Record Documents: Comply with the following:
1. Final Coordination Drawings: Comply with the following:
    - a. Number of Copies: Submit clean set(s) of marked up record prints.
      - 1) Initial Submittal:
        - a) Submit one PDF electronic copy set of coordination drawing prints, and the electronic BIM file from which the prints are made. Drawing prints shall include all plans, reflected ceiling plan, enlarged plans and sections as derived by the Contractors for Coordination utilized in the project after clash detection and revisions have been made.

- b) Architect will indicate whether general scope of changes, additional information recorded, and quality of drafting are acceptable.
      - 2) Final Submittal:
        - a) Submit final PDF electronic copies of drawings with any adjustments noted in the Architect's review.
        - b) Submit final BIM file with any adjustments noted in the Architect's review.
  - C. Record Specifications: Submit one annotated paper copy and an annotated PDF electronic files of Project's Specifications, including addenda and contract modifications.
    - 1. Configure bookmark directory organized first by Division and then by Specification Section number and title, electronically linked to each Section.
    - 2. Include final versions of all Sections amended by Addendum or other Modification.
  - D. Record Product Data: Submit one paper copy and an annotated PDF electronic files and directories of each submittal.
    - 1. Where record Product Data are required as part of operation and maintenance manuals, submit duplicate marked up Product Data as a component of manual.
  - E. Miscellaneous Record Submittals: Refer to the individual Specification Sections for miscellaneous recordkeeping requirements and submittals in connection with various construction activities. Submit one paper copy and an annotated PDF electronic files and directories of each submittal.
  - F. Reports: Submit written report monthly indicating items incorporated into project record documents concurrent with progress of the work, including revisions, concealed conditions, field changes, product selections, and other notations incorporated.
- 1.3 BURDEN OF ACCURACY
- A. The burden of accuracy is the responsibility of the Contractor who shall bear costs of damages incurred by Owner due to inaccuracies or incompleteness of submitted Record Documents for the period of time following Substantial Completion defined by Agreement and the Conditions of the Contract.
- 1.4 RECORD DRAWINGS
- A. Record Prints: Maintain one set of marked up paper copies of the Contract Drawings and Shop Drawings, incorporating new and revised drawings as modifications are issued.
    - 1. Preparation: Mark record prints to show the actual installation where installation varies from that shown originally. Require individual or entity who obtained record data, whether individual or entity is Installer, subcontractor, or similar entity, to provide information for preparation of corresponding marked-up record prints.
      - a. Give particular attention to information on concealed elements that would be difficult to identify or measure and record later.

- b. Accurately record information in an acceptable drawing technique.
  - c. Record data as soon as possible after obtaining it.
  - d. Record and check the markup before enclosing concealed installations.
  - e. Cross reference record prints to corresponding photographic documentation.
2. Content: Types of items requiring marking include, but are not limited to, the following:
    - a. Dimensional changes to Drawings.
    - b. Revisions to details shown on Drawings.
    - c. Depths of foundations.
    - d. Locations and depths of underground utilities.
    - e. Revisions to routing of piping and conduits.
    - f. Revisions to electrical circuitry.
    - g. Actual equipment locations.
    - h. Duct size and routing.
    - i. Locations of concealed internal utilities.
    - j. Changes made by Change Order or Construction Change Directive.
    - k. Changes made following Architect's written orders.
    - l. Details not on the original Contract Drawings.
    - m. Field records for variable and concealed conditions.
    - n. Record information on the Work that is shown only schematically.
  3. Mark the Contract Drawings and Shop Drawings completely and accurately. Use personnel proficient at recording graphic information in production of marked-up record prints.
  4. Mark record sets with erasable, red colored pencil. Use other colors to distinguish between changes for different categories of the work at same location.
  5. Mark important additional information that was either shown schematically or omitted from original Drawings.
  6. Note Construction Change Directive numbers, alternate numbers, Change Order numbers, and similar identification, where applicable.
- B. Record Digital Data Files: Immediately before inspection for Certificate of Substantial Completion, review marked up record prints with Architect. When authorized, prepare a full set of corrected digital data files of the Contract Drawings:
1. Revit files shared with contractor are already at LOD 300. Do not reduce. Coordination drawings require LOD 400 to show conduits and piping. Format: Revit RVT, Current Version utilized by the Architect of Record, building information model (BIM) at LOD 300 or greater, operating in Microsoft Windows operating system.
  2. Incorporate changes and additional information previously marked on record prints. Delete, redraw, and add details and notations where applicable.
  3. Refer instances of uncertainty to Architect for resolution.
  4. Architect will furnish Contractor with one set of digital data files of the Contract Drawings for use in recording information.
    - a. See Section 01 31 00 for requirements related to use of Architect's digital data files.

- b. Architect will provide data file layer information. Record markups in separate layers.
- C. Newly Prepared Record Drawings: Prepare new Drawings instead of preparing record Drawings where Architect determines that neither the original Contract Drawings nor Shop Drawings are suitable to show actual installation.
  1. New Drawings may be required when a Change Order is issued as a result of accepting an alternate, substitution, or other modification.
  2. Consult Architect for scale and scope of detailing and notations required to record the actual physical installation and its relation to other construction. Integrate newly prepared record Drawings into record Drawing sets; comply with procedures for formatting, organizing, copying, binding, and submitting.
- D. Format: Identify and date each record Drawing; include the designation "PROJECT RECORD DRAWING" in a prominent location.
  1. Record Prints: Organize hard record prints into manageable sets. Bind each set with durable paper cover sheets. Include identification on cover sheets.
  2. Format: Individual annotated PDF electronic files with comment function enabled.
  3. Record Digital Data Files: Organize digital data information into separate electronic files that correspond to each sheet of the Contract Drawings. Name each file with the sheet identification number and name. Include identification in each digital data file. Single files shall be utilized to create a final master file fully bookmarked for navigation.
  4. Identification: As follows:
    - a. Project name.
    - b. Date.
    - c. Designation "PROJECT RECORD DRAWINGS."
    - d. Name of Architect.
    - e. Name of Contractor.

#### 1.5 FINAL COORDINATION DRAWINGS AS RECORD DOCUMENTS

- A. Maintain and submit the Coordination Drawings file and a complete set of printed drawings as outlined in Section 01 31 00.
- B. As part of Record Documents, submit the electronic file and a complete set of printed drawings to the Owner through the Architect to supplement the Record Drawings. Submit the following items:
  1. BIM file as outlined in Section 01 31 00 at the Level Of Detail used for coordination by all Contractors and trades for this Project.
  2. Printed Drawings: Full set of plan, reflected ceiling plan, enlarged plans and sections as derived by the Contractors for Coordination. Provide 1 full size set of drawings without hand annotations nor being marred from field use.

## 1.6 RECORD SPECIFICATIONS

- A. Preparation: Mark electronic Specifications to indicate the actual product installation where installation varies from that indicated in Specifications, addenda, and contract modifications.
  - 1. Give particular information on concealed products and installations that cannot be readily identified and recorded later.
  - 2. Annotate Section Products Articles with the proprietary name and model number of products, materials, and equipment provided, including substitutions and product options selected.
  - 3. Record the name of manufacturer, supplier, Installer, and other information necessary to provide a record of selections made.
  - 4. Note related Change Orders, record Product Data, and record Drawings where applicable.
- B. Format: Submit record Specifications as annotated PDF electronic file.

## 1.7 RECORD PRODUCT DATA

- A. Recording: Maintain one copy of each submittal during the construction period for project record document purposes. Post changes and revisions to project record documents as they occur; do not wait until end of Project.
- B. Preparation: Mark Product Data to indicate the actual product installation where installation varies substantially from that indicated in Product Data submittal.
  - 1. Give particular attention to information on concealed products and installations that cannot be readily identified and recorded later.
  - 2. Include significant changes in the product delivered to Project site and changes in manufacturer's written instructions for installation.
  - 3. Note related Change Orders, record Specifications, and record Drawings where applicable.
- C. Format: Submit record Product Data as annotated PDF electronic file and a paper copy.
  - 1. Include record Product Data directory organized by Specification Section number and title, electronically linked to each item of record Product Data.

## 1.8 MISCELLANEOUS RECORD SUBMITTALS

- A. Assemble miscellaneous records required by other Specification Sections for miscellaneous record keeping and submittal in connection with actual performance of the work. Bind or file miscellaneous records and identify each, ready for continued use and reference.
- B. Format: Submit miscellaneous record submittals as PDF electronic file and a paper copy.
  - 1. Include miscellaneous record submittals directory organized by Specification Section number and title, electronically linked to each item of miscellaneous record submittals.

PART 2 - PRODUCTS  
Not used.

### PART 3 - EXECUTION

#### 3.1 RECORD DOCUMENTS

- A. Recording: Maintain one copy of each submittal during the construction period for project record document purposes. Post changes and modifications to the Documents as they occur. Do not wait until the end of the project. Architect will periodically review record documents to assure compliance
- B. Maintenance of Record Documents: Store record documents in the field office apart from the Contract Documents used for construction. Do not use project record documents for construction purposes. Maintain record documents in good order and in a clean, dry, legible condition, protected from deterioration and loss. Provide access to project record documents for Architect's reference during normal working hours.

END OF SECTION