

## DIVISION 1 GENERAL REQUIREMENTS

### SECTION 01 7839

#### PROJECT RECORD DOCUMENTS

##### PART 1 – GENERAL

###### 1.01 Summary

- A. Section Includes: Administrative and procedural requirements for Project Record Documents.
- B. Project Record Documents required include:
  - 1. Marked-up copies of Drawings
  - 2. Marked-up copies of Shop Drawings
  - 3. Newly prepared Drawings
  - 4. Marked-up copies of Specifications, Addenda, Change Orders and CCDs
  - 5. Marked-up Product Data submittals
  - 6. Record Samples
  - 7. Field records for variable and concealed conditions
  - 8. Record information on Work that is recorded only schematically
- C. Specific Project Record Documents requirements that expand requirements of this Section may be included in individual Sections of Divisions 02 through 33.
- D. Also comply with any applicable As-Built BIM and related requirements under Section 01 3554 (BIM Requirements).
- E. General Project closeout requirements are included in Section 01 7700 (Closeout Procedures).
- F. Maintenance of Documents and Samples:
  - 1. Store Project Record Documents and Samples in the field office apart from Contract Documents used for construction.
  - 2. Do not permit Project Record Documents to be used for construction purposes.
  - 3. Maintain Project Record Documents in good order and in a clean, dry, legible condition.
  - 4. Make Documents and Samples available at all times for inspection by Owner.

###### 1.02 Project Record Drawings

- A. Mark-up Procedure: During the construction period, maintain a set of blue-line or black-line prints of Contract (final) Drawings and Shop Drawings for Project Record Documents purposes. Label each document (on first sheet or page) "PROJECT RECORD" in 2-inch high printed letters. Keep record documents current. Note: A reference by number to a Change Order, CCD, RFI, RFQ, RFP, Field Order or other such document is not acceptable as sufficient record information on any record document. Do not permanently conceal any Work until required information has been recorded.
  - 1. Mark these Drawings to indicate the actual installation where the installation varies appreciably from the installation shown originally. Give particular attention to information on concealed elements that would be difficult to identify or measure and record later. Items required to be marked include but are not limited to:
    - a. Dimensional changes to the Drawings
    - b. Revisions to details shown on the Drawings
    - c. Depths of various elements of foundation in relation to main floor level or survey datum

- d. Horizontal and vertical location of underground utilities and appurtenances referenced to permanent surface improvements
  - e. Location of internal utilities and appurtenances concealed in construction referenced to visible and accessible features of structure
  - f. Locations of underground work, points of connection with existing utilities, changes in direction, valves, manholes, catch basins, capped stub outs, invert elevations, and similar items
  - g. Actual numbering of each electrical circuit
  - h. Field changes of dimension and detail
  - i. Revisions to routing of piping and conduits
  - j. Revisions to electrical circuitry
  - k. Actual equipment locations
  - l. Duct size and routing
  - m. Changes made by Change Order or CCD
  - n. Details not on original Contract Drawings
2. Mark completely and accurately Project Record Drawing prints of Contract Drawings or Shop Drawings, whichever is the most capable of showing actual physical conditions. Where Shop Drawings are marked, show cross-reference on Contract Drawings location.
  3. Mark Project Record Drawing sets with red, erasable colored pencil; use other colors to distinguish between changes for different categories of the Work at the same location.
  4. Mark important additional information that was either shown schematically or omitted from original Drawings.
  5. Note CCD numbers; alternate numbers, Change Order numbers, and similar identification.
  6. Responsibility for Mark-up: Where feasible, the individual or entity who obtained Project Record Drawing data, whether the individual or entity is the installer, Subcontractor, or similar entity, is required to prepare the mark-up on Project Record Drawings.
    - a. Accurately record information in an understandable and legible drawing technique.
    - b. Record data as soon as possible after it has been obtained. In the case of concealed installations, record and check the mark-up prior to concealment.
- B. Preparation of Record Drawings: Immediately prior to inspection for Certification of Substantial Completion, review completed marked-up Project Record Drawings with Owner. When authorized, prepare a full set of correct transparencies of Contract Drawings and Shop Drawings.
1. Incorporate changes and additional information previously marked on print sets. Erase, redraw, and add details and notations where applicable. Identify and date each Drawing; include the printed designation "PROJECT RECORD DRAWING" in a prominent location on each Drawing.
  2. Refer instances of uncertainty to Owner for resolution.
  3. Distribution: Whether or not changes and additional information were recorded, organize and bind original marked-up set of prints that were maintained during the construction period into manageable sets. Bind the set with durable paper cover sheets, with appropriate identification, including titles, dates, and other information on cover sheets.
- C. Distribution of Marked-Up Drawings: Submit the marked-up Project Record Drawings set to Owner for Owner's records.
- D. Shop Drawings and Samples: Maintain as record documents; legibly annotate Shop Drawings and Samples to record changes made after review.
- E. In addition to requirements of this Section, comply with any supplemental requirements of Divisions 2 through 33.

### **1.03 Project Record Specifications**

- A. During the construction period, maintain one copy of the Project Specifications, including addenda and modifications issued, for Project Record Documents purposes.
- B. Mark the Project Record Specifications to indicate the actual installation where the installation varies substantially from that indicated in Specifications and Modifications issued. Note related Project Record Drawing information, where applicable. Give particular attention to substitutions, selection of product options, Change Order and Construction Change Directive work, and information on concealed installation that would be difficult to identify or measure and record later.
  - 1. In each Specification Section where products, materials or units of equipment are specified or scheduled, mark the copy with the proprietary name and model number of the product furnished.
  - 2. Record the name of the manufacturer, catalog number, supplier and installer, and other information necessary to provide a record of selections made and to document coordination with Project Record Product Data submittals and maintenance manuals.
  - 3. Note related Project Record Product Data, where applicable, for each principal product specified, indicate whether Project Record Product Data has been submitted in maintenance manual instead of submitted as Project Record Product Data.
  - 4. Upon completion of mark-up, submit Project Record Specifications to Owner for Owner's records.

### **1.04 Additional Requirements for Final Project Record Documents**

- A. Note all changes for the final Project Record Documents and provide one set of mylar reproduces, one set of revised Specifications and one set of disks or CDs to be submitted to Owner.
- B. After Substantial Completion and before Final Completion, carefully transfer all data shown on the job set of Record Drawings to the corresponding computer files, coordinating the information as required.
- C. Clearly indicate at each affected detail and other drawings a full description of changes made during construction, and the actual location of items as previously specified.
- D. "Cloud" all affected areas.
- E. Stamp each Record Drawing with the following information:
  - 1. Project Record Document.
  - 2. Prepared by: Design-Build Team's name, permanent address.
  - 3. Date prepared.
  - 4. Design-Build Team's signature.
  - 5. Owner Contract Number.

### **1.05 Project Record Product Data**

- A. During the construction period, maintain one copy of each Project Record Product Data submittal for Project Record Document purposes.
  - 1. Mark Project Record Product Data to indicate the actual product installation where the installation varies substantially from that indicated in Project Record Product Data submitted. Include significant changes in the product delivered to the Site, and changes in manufacturer's instructions and recommendations for installation.

2. Give particular attention to information on concealed products and installations that cannot be readily identified and recorded later.
  3. Note related Change Orders and mark-up of Project Record Drawings, where applicable.
  4. Upon completion of mark-up, submit a complete set of Project Record Product Data to Owner for Owner's records.
  5. Where Project Record Product Data is required as part of maintenance manuals, submit marked-up Project Record Product Data as an insert in the manual, instead of submittal as Project Record Product Data.
  6. Design-Build Team is responsible for mark-up and submittal of Project Record Product Data for its own Work.
- B. Material, Equipment, and Finish Data:
1. Provide data for primary materials, equipment and finishes as required under each Specification Section.
  2. Submit two sets prior to final inspection, bound in 8-1/2 inches by 11 inches three-ring binders with durable plastic covers; provide typewritten table of contents for each volume.
  3. Arrange by Specification Section number and give names, addresses, and telephone numbers of Subcontractors and suppliers. List:
    - a. Trade names.
    - b. Model or type numbers.
    - c. Assembly diagrams.
    - d. Operating instructions.
    - e. Cleaning instructions.
    - f. Maintenance instructions.
    - g. Recommended spare parts.
    - h. Product data.

#### **1.06 Miscellaneous Project Record Submittals**

- A. Refer to Bridging Documents and other Specification Sections for miscellaneous record keeping requirements and submittals in connection with various construction activities. Immediately prior to Substantial Completion, complete miscellaneous records and place in good order, properly identified and bound or filed, ready for use and reference. Submit to the Owner for Owner's records. Categories of requirements resulting in miscellaneous records include, but are not limited to, the following:
1. Field records on excavations and foundations
  2. Field records on underground construction and similar work
  3. Survey showing locations and elevations of underground lines
  4. Invert elevations of drainage piping
  5. Surveys establishing building lines and levels
  6. Authorized measurements utilizing unit prices or allowances
  7. Records of plant treatment
  8. Ambient and substrate condition tests
  9. Certifications received in lieu of labels on bulk products
  10. Batch mixing and bulk delivery records
  11. Testing and qualification of tradespersons
  12. Documented qualification of installation firms
  13. Load and performance testing
  14. Inspections and certifications by governing authorities
  15. Leakage and water-penetration tests
  16. Fire resistance and flame spread test results
  17. Final inspection and correction procedures

**1.07 Recording**

- A. Post changes and modifications to the Contract Documents as they occur. Do not wait until the end of the Project. Owner may periodically review Project Record Documents to assure compliance with this requirement.

**1.08 Submittal**

- A. At completion of Project, deliver Project Record Documents to Owner.
- B. Accompany submittal with transmittal letter containing:
  - 1. Date
  - 2. Project title and number
  - 3. Design-Build Team's name and address
  - 4. Number and title of each Project Record Document
  - 5. Certification that each document as submitted is complete and accurate, and signature of Design-Build Team or Design-Build Team's authorized representative.

**PART 2 – PRODUCTS – NOT USED**

**PART 3 – EXECUTION – NOT USED**

**END OF SECTION**