

II. ARCHITECTURAL/ENGINEERING DOCUMENT DELIVERABLES

2.09 Closeout Documents

- A. The A/E, no later than six (6) months prior to substantial completion, shall insure that the General Contractor provides one (1) preliminary set of mechanical, electrical, plumbing O&M Manuals for review by the Project Representative, and the University's Operation Personnel; and provide instructions on adjustment and maintenance of products.
- B. The A/E, no later than 60 days after the Substantial Completion, shall make reasonable changes including all work incorporated by addendum, change orders and modifications by the contractor on the original documents to serve as Record Drawings for the Work, and shall generate a spec book from these record documents.
- C. A/E shall deliver to owner all required closeout documents, including two (2) copies of each of the following: O&M manuals, test reports, photo records, warranties, specs, product submittal data if not included in maintenance manuals in Microsoft Word format and as a hardcopy. A/E shall also provide one copy of final record documents in digital form (AutoCAD and Revit), and one copy printed on paper. The original contractor as-built drawings shall also be submitted to the University.
- D. All close-out documents shall be delivered as soon after substantial completion as possible, but no later than 60 days after substantial completion.
- E. Cad File Delivery
 1. AutoCAD Standards: All files should utilize AIA AutoCAD standards.
 2. Delivery Format: All AutoCAD files should be "e-transmitted" if possible and included on a CD or flash drive with a relative directory structure. Please verify that all file references (blocks, fonts, etc.) work properly within the context of the CD and do not reference network drives or local directories which are not included on the disk.
 3. File Format: All drawing files should be in AutoCAD (latest version of .dwg) format or older. Files produced in other applications should be verified for compatibility and formatting within AutoCAD prior to delivery.
 4. X-Refs: All x-ref files shall be bound to the drawings.
 5. Purged Files: All files should be purged of any unused data as well as any references to unused x-ref files.
 6. Custom Files: All custom files (fonts, *.shx files, linetypes, hatch patterns) not included with the standard AutoCAD installation should be included and properly referenced.
 7. Plot Files: Include any plot files (*.CTB, *.PC2, *.PCP) used in the drawings on the CD.
 8. File Names: File names shall reflect record drawings index sheet.

9. All civil, utility, grading and site plans for all utility discipline electronic files must be submitted in AutoCAD using the campus standard coordinate system (Grid: Texas State Plane, South Central, NAD83, feet) (Vertical: NAVD 88, MSL).
 10. The record set Revit model should be “e-Transmitted” and detached from the central model. Referenced Revit, AutoCAD, trade models and related files should be included. All sheets included in the construction documents should be present in their respective Revit files.
 11. See exhibit “TXST BIM-FM Requirements - 2.B—close-out procedures” from construction standards section “2.02 A/E Deliverables” for full list of final handover deliverables of BIM and COBie data.
- F. The A/E, to the best of his knowledge, shall provide written certification that no asbestos or lead containing materials have been installed on the Project. Certified Asbestos Letter with CSI breakdown of specifications as backup
 - G. The floor plans shall have correct room names and room numbers as designed in the interior sign documents, as well as, each room shall have the indicated square footage.
 - H. A/E shall not be relieved of responsibility when files are delivered, if the files do not meet established requirements or are defective. The University shall verify all materials received and the A/E shall be notified if not complete.
 - I. A/E to deliver the RAS Final inspection report to the University.