

APPENDIX A0022.1
CAD / GIS OFFICE
DOCUMENT SUBMITTAL REQUIREMENTS

Drawing Requirements during Review Phases for all Disciplines:

- UCB Project number (all drawing sheets and pages in Specifications)
- Design Submittal and Date (SD, DD, CD, etc.)
- Sheet Number and Description (all sheets)
- If the project is a building-based project, show the UCB official Building Name and Building Number (all sheets). If you do not know this information, please request it from FMCAD@colorado.edu
- Sheet Index that accurately reflects drawings set
- All building additions or renovation projects must use the /an existing building grid as shown in the official CU CAD building floor plans or reference it in a new grid if one is created for the project. If the building floor plan is missing a grid, please request one from the CAD office at FMCAD@colorado.edu

GIS Requirements for Site and Utility Drawings:

- All site drawings must be **properly geolocated**, able to be referenced into the CAD Campus Map (for a copy of the campus map please email the CAD office at FMCAD@colorado.edu) at a base point of 0,0 or provide geolocation information to allow us to correctly geolocate the file in the GIS.
- If a **site survey** is performed by a Land Surveyor or Civil Engineer, the CAD / GIS office requires the drawings to be submitted in both CAD and PDF format. If GIS was used to prepare the survey, a shapefile is also required. These drawings can be submitted directly to FMCAD@colorado.edu.

Room Numbering:

- If room numbers are impacted by your project, revised or proposed room numbers should be included at SD phase using [PANS](#) (Property Asset Numbering System) documentation as a guideline.
- *Room numbers should be finalized by the end of DD* (with exceptions for minor changes).
- Room numbers issued by the CAD Office and/or Office of Space Optimization (OSO) during a review phase are considered the official room numbers. If there is a discrepancy between these room numbers and those shown on the project drawings it is the responsibility of the Project Delivery Team to make the necessary adjustments to ensure that signage, keys/locks, equipment, and OIT assets align with the room numbers issued by CAD or OSO.
- If a change happens during construction that impacts room numbering, it is imperative that CAD or OSO are notified and given the opportunity to review any room number change.

Permit / Construction Set: We require the Architectural Floor Plans (in .DWG format) and Civil Site Plan with the building footprint (for a new building or addition, in .DWG format) to be submitted along with the stamped FOR CONSTRUCTION 100%CD set (HDS and PD&C projects).

Close-Out Requirements: For *all* projects whether drawings generated in-house or by external consultants, and for both HDS and PD&C projects, please submit the following to FMCAD@colorado.edu at close-out (cc CU Project PM/PC):

- All model files (if models were used for drawing creation) in Revit format, or Civil files prepared in Civil 3D.
 - Prior to exporting a Revit file to a .DWG file, all shadows, fills, high-detail settings, textures, etc. must be turned off.
- Record Drawings

If you have questions regarding or not addressed by this document, please email us at FMCAD@colorado.edu
Referenced documents, guides, and additional resources can be found on our website [CAD/GIS Website](#)

- Matching PDF and DWG files for all sheets from the project. These RECORD sheets must meet the criteria of a RECORD drawing (see AIA Drawing Definitions below). **The sheets must include the words “Record or Record Document” in the title block.**
- Drawing sheets (both PDF’s and DWG’s) must be **individual** files (not bound PDFs; No tabbed drawings in DWG files) with the **sheet number** as the filename (e.g., A100.PDF and A100.DWG).
- Any and all references to Project **Alternates** *must be marked as Accepted/Not Accepted on sheets* (including notes, references, schedules, sheet indices, etc.). Any and all references to **alternates** in project models and project specifications must also be marked as Accepted/Not Accepted.
- All drawing sheets must be submitted in both .DWG format as well as in PDF format. Drawing content must be identical between the DWG file and PDF file, or the drawings will be rejected.
- DWG files must NOT depend on any other files (external references, attached images, stamps, etc. must be bound or pasted into the .DWG file).
- Complete set of contractor As-Built drawings (redlines) in PDF format.
- Shop drawings and Specifications - Project specifications must be in PDF format and OCR searchable. UCB project number, Record stamp or text to be included on each page.
- O&Ms (Housing & Dining Services projects submit to FMCAD@colorado.edu, all others submit to CU PC/PM).
- If a survey was performed for the project, either by a licensed Land Surveyor or Civil Engineer, these must be submitted as a stand-alone document to the CAD / GIS office. As noted previously, these drawings must be submitted in CAD and PDF format, as well as a shapefile if created in GIS.

Summary of AIA Drawing Definitions:

As-Built Drawings (redlines): As-built drawings prepared by the contractor. They show, in red ink, on-site changes to the original construction documents.

Record Drawings: Record drawings are prepared by the design professional and reflect on-site changes the contractor noted in the as-built drawings. They are often compiled as a set of on-site changes made for the owner per the owner-architect contract.