

Definitions of standard details and example drawings & designs

Standard Details (“ST-”) are CAD corollaries to Master Spec Sections — templates of repeatable design (or legends) of design and construction expectations. They are intended to be copied into project sheets and finalized there (e.g., square bracket choices made, and designers notes considered), or used in BIM models. Editing expectations are the same as the specs (see ESM Ch. 1, §Z10 Att. F, Specifications). They are provided as AutoCAD .dwg files along with a pdf for easy viewing.

ST Numbering: In the character string (“ST-XXXXY-Z”), the XXXXY generally refers to the ESM chapter section to which the equipment most relates; for example, ST-G2010-1 under Civil relates to the G20 section of ESM Ch. 3 (specifically the G2010 subsection of it). The “-1” is a sequence number for uniqueness now or in the future.

Example Drawings (e.g., numbered “X-YYYY,” becoming “EX-X-YYYY”) depict acceptable content and format for various construction drawing types such as electrical one-lines, floor plans of record, and various other diagrams. Projects must meet these expectations; however, the systems depicted are fictitious and not templates to be used like the ST series. As such, only pdfs are provided.

Numbering: In the string “X-YYYY”, the X is generally the Discipline Code for the sheet given by CAD Standards Manual Section 209, §2.0 (e.g., A=Architectural, M=Mechanical). YYYY generally refers to the Sheet Type designator, for example, the 6YYY series is for diagrams, so 6000, 6001, and so on (or similar) is used for uniqueness. Thus, the LANL ID roughly corresponds to how a project’s similar sheet might be identified in a drawing package. Notes: Example Drawing numbers are gradually being prefaced with “EX.” Also, for electrical, not all existing numbers follow the CAD sheet approach but are being made to do so over time.

Example Designs are a multi-sheet set (as opposed to a single-drawing-type example) illustrating a package that met expectations (e.g., completeness, quality, formality, professionalism). While the package was acceptable when issued, one should not assume that all aspects of it would be acceptable today — expectations change with time, including required codes and standards, title blocks, and other matters.