

Section 2

Drawing File Organization

2.1 **Standard File Requirements.** The standard requirements listed below are to provide additional guidance not shown in the A/E/C Standard ERDC/ITL TR-01-06.

2.1.1 *Units.* All Files shall be prepared with a units definition file. The units definition file shall contain US survey feet and US survey inch unless the Project Engineer requires metric file for work outside the Continental United States.

2.1.3 *Layer/Level Names.* Appendix F of this document supplements the A/E/C CADD Standard Appendix A “Model File Layer/Level Names” of ERDC/ITL TR-01-06 with additional model files, levels, colors, and weights required by Jacksonville District.

2.1.4 *Plotted Drawings Files.* Every final plotted drawing sheet shall have its own separate electronic sheet file. The electronic sheet file shall be made up of design data for each sheet.

2.1.5 *Border File.* Only one border file shall be used for each specific project.

2.2 **Electronic Drawing File Naming Conventions.** Naming conventions for electronic drawing files (both model files and sheet files) indicate contents of a drawing without actually displaying the file. They also provide a convenient and clear structure for organizing drawing files within project directories.

2.2.1 *Model File Naming Convention.* A model file contains the physical components of civil work elements (e.g., structural culvert, mechanical riser diagram, etc.). Model files are drawn at full scale and typically represent plans, elevations, sections, etc. The character-naming field shown in figure 2-1 has Project Description, Hyphen Separator Field, Discipline Designator, Model File Type and User Definable Field.

2.2.1.1 *The Project Description.* The project description is a field is a field that is a short representation of the project name.

2.2.1.2 *Discipline Designer.* Following the Project Code, the first two-character field represents the *Discipline Designator*. The allowable characters for the first character in the Discipline Designator are listed in Table 2-3 of the A/E/C Standard Chapter 2 “Drawing File Organization”. The second character of the Discipline Designator field is always a hyphen “-”.

2.2.1.3 *Model Field Type.* The Model Type Field is a two- character field that represents the model file type. The Model Field Types are listed in Table 2-2 of A/E/C Standard Chapter 2 “Drawing File Organization”.

Appended Table 2-2A

2.2.1.4 *User Definable Field.* Following the model field type is four-character field defined by the user.

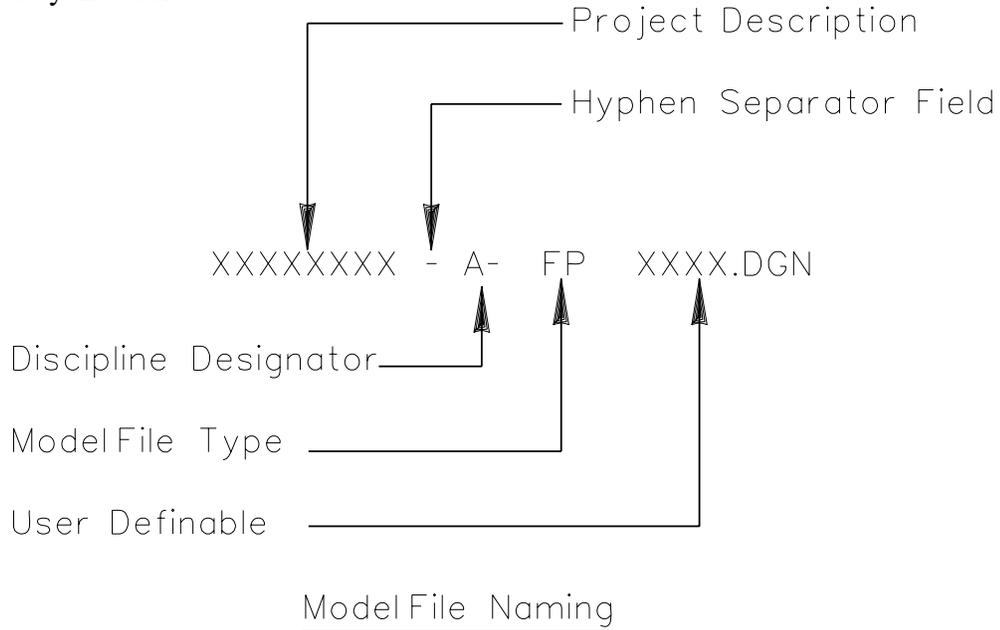


Figure 2-1

2.2.2 Sheet File Naming Convention. A sheet model file is related to a ready to plot CAD drawing. A sheet file has a combination of model files referenced to it with sheet specific text and symbols. The sheet file character-naming field shown in figure 2-2 is composed of a P2 Code, Hyphen Separator Field, Project Description, Hyphen Separator Field, Design Designator with Level 2 Designator, Sheet Type Designator, Sheet Sequence Number, and a User Definable Field.

2.2.2.1 *P 2 Code.* The first field required by this supplement to the A/E/C CAD Standard ERDC/ITL TR-01-06, is the P2 code that consists of six characters.

2.2.2.2 *The Project Description.* The project description is a field is short representation of the project name.

2.2.2.3 *Discipline Designator with Level 2 Designators.* The *Discipline Designator with Level 2 Designator* is a two-character field. The Discipline Designator with Level 2 Designator are listed in table 2-3 of A/E/C CADD Standard Chapter 2 “Drawing File Organization” and the appended Civil related types to the A/E/C CADD Standard are listed below in table 2-3A.

Appended A/E/C Table 2-3A			
<i>Discipline Designators with Level 2 Designators</i>			
Discipline	Designator	Description	Content
Electrical			
	EC	Cathodic Protection	Cathodic protection systems
	EG	Grounding & Lighting	Devices interior and exterior grounding. Lightning protection
Structural			
	SR	Structural Reinforcement	Concrete reinforcement and anchors
	ST	Superstructure	Walls, decks, abutments, gates and weirs
	SM	Components	Gates, armor, bulkheads, and railings
Telecommunications			
	TS	SCADA & Automation	SCADA systems and equipment Supervisory control and remote control for items such as Pump Stations, etc.

Appended Table 2-3A

2.2.2.4 *Sheet Type Designator*. The sheet type is a one-character field listed in table 2-4 of the A/E/C CADD Standard Chapter 2 “Drawing File Organization” ERDC/ITL TR-01-6. Occasionally, more than one model type (e.g., plan, elevation, detail) will be represented in one sheet file. If this is the case, the dominant model type determines the sheet type designator.

2.2.2.5 *Sheet Sequence Number*. The sheet sequence number is normally a two-character *Sheet Sequence Number* (01-99). If more than 99 sheets are required for one discipline's drawings, the user should follow the sheet sequence number guidance of the A/E/C CADD Standard.

2.2.2.6 *User Definable*. Following the model file field type field is three-character field defined by the user.

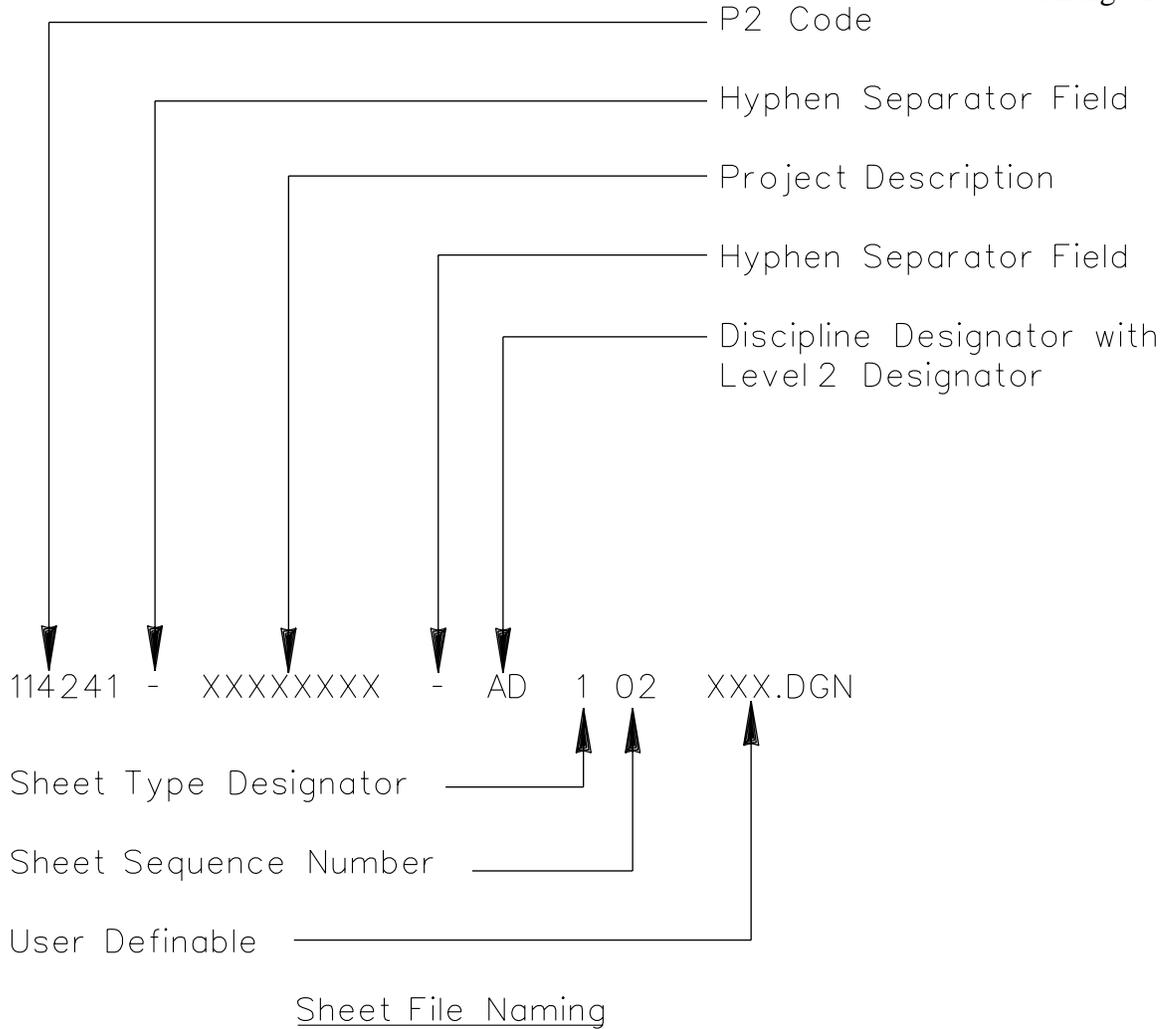


Figure 2-2

2.3 Use of Sheet Files and Model Files. CADD files consist of two distinct types, model files and sheet files. An example is shown below of a sheet file with model files shown on figures 2-3 to 2-6. The example represents a sheet file that has a model project border referenced to the sheet file and model files referenced to the sheet file for the drawing.

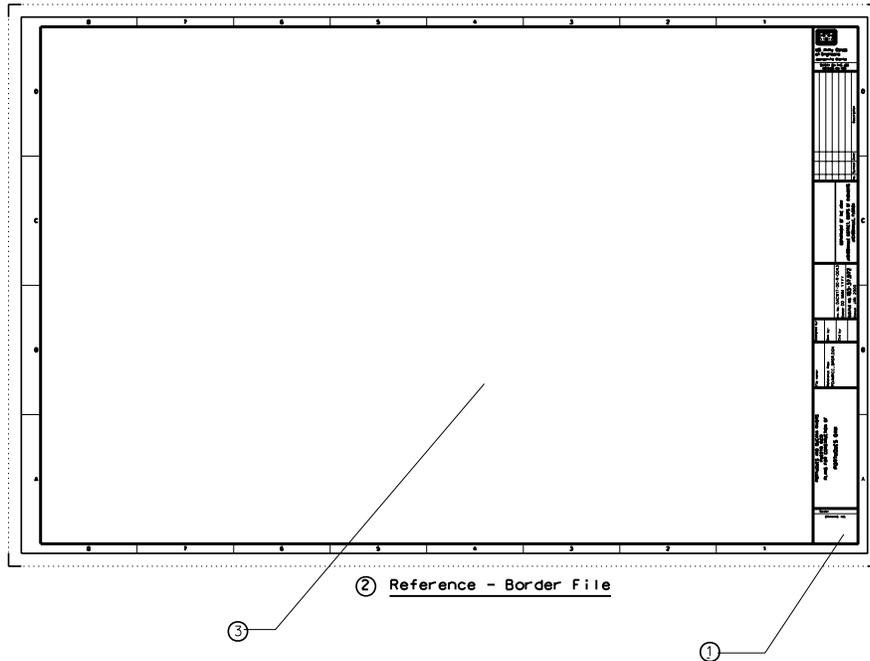


Figure 2-3

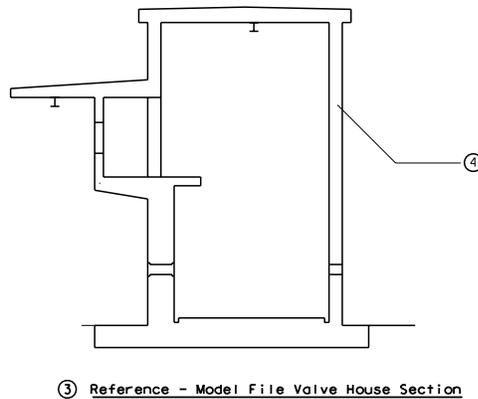
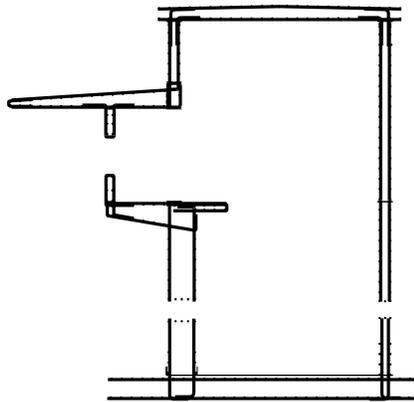
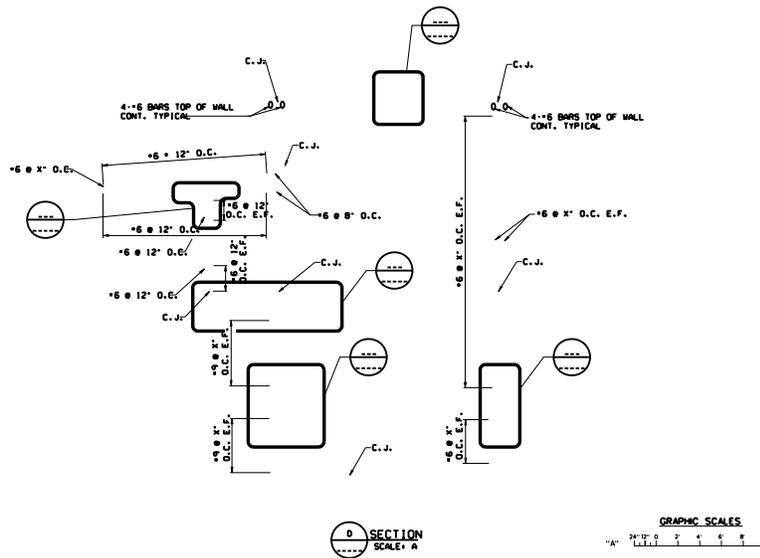


Figure 2-4



④ Reference - Model File Reinforcement Section

Figure 2-5



① Sheet File

Figure 2-6

Notes:

1. The referenced Project Border file no. 2 shown in figure 2-3 is referenced to the sheet file no. 1 shown on figure 2-6.
2. The model file Valve House Cross Section no. 3 shown on figure 2-4 is referenced to the Sheet file no. 1 shown on figure 2-6.
3. The Model file Valve House Reinforcing no. 4 shown on figure 2-5 is referenced to the Sheet file no. 1 shown on figure 2-6.

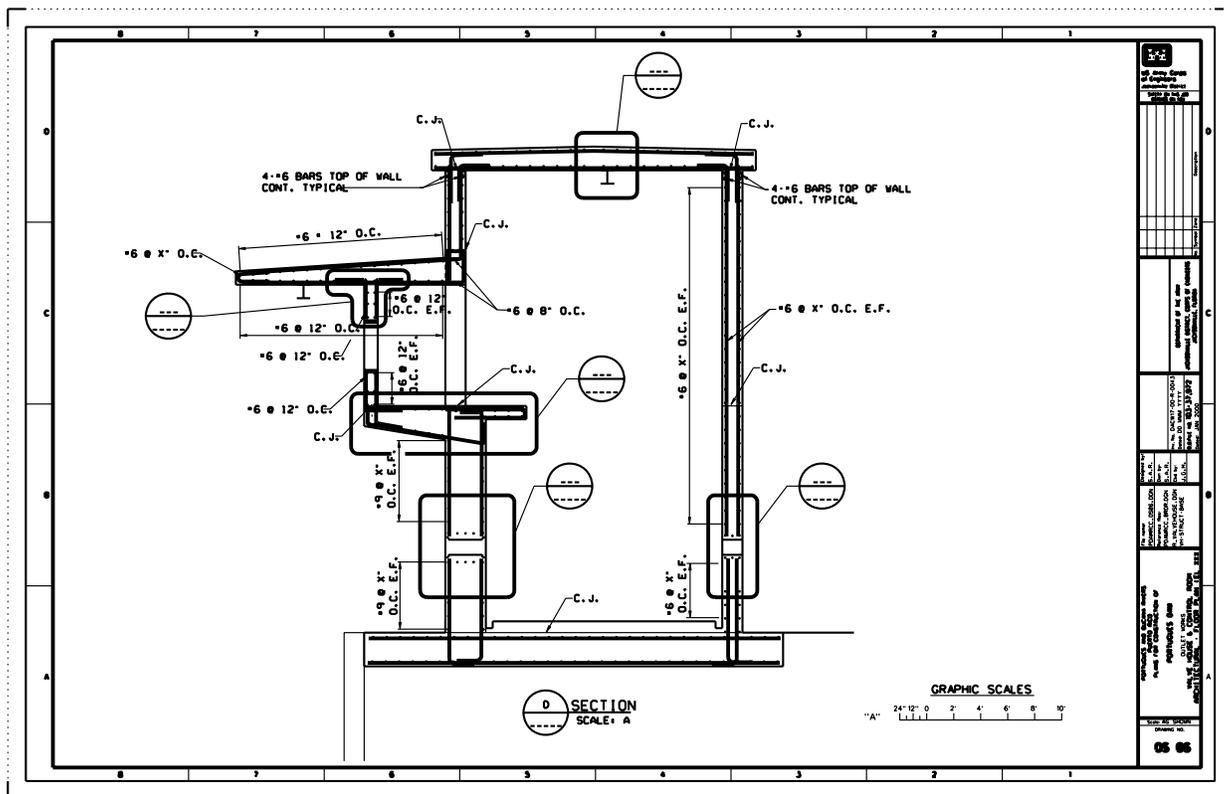


Figure 2-7

Figure 2-7 represents the sheet file figure 2-6, where the model files shown on figures 2-3 to 2-5 have been referenced into the sheet file.