

6 Tri-Service A/E/C CADD Standard Implementation Tools

CADD users throughout the Tri-Services have indicated a need for customized shortcuts or utilities to facilitate efficient production of architectural and engineering CADD documents. Since the distribution of Release 1.4 of the Tri-Service A/E/C CADD Standard, users have been requesting tools to implement this detailed standard.

To meet this demand, the Tri-Service CADD/GIS Technology Center has been developing applications for both AutoCAD and MicroStation that will help in implementing the CADD Standard (i.e., the user will rarely have to refer to the standard document when developing CADD files).

The MicroStation-based tool (called Workspace) is distributed in three components: the Workspace generator, the Workspace itself, and a standard compliance checker. The generator creates the workspace tools (palettes, icons, etc.) using a Microsoft Access database that contains all the information within the hundreds of level/layer tables in the CADD Standard. Using a “generator” gives system administrators the ability to edit the Access database and rerun the generator to create a Workspace that meets site-specific needs. The Workspace (Figure 36) allows the user to select the type of model or sheet file he/she wants to create (e.g., Architectural Floor Plan), and a palette of the various items that can be placed in that type of file is generated (e.g., doors, windows, etc.). The user then selects the

specific type of item required (e.g., full height doors, partial height doors, door symbols, etc.) and the workspace sets the proper level settings (e.g., level number, color, line weight, line style).

The final part of the workspace is the checker (Figure 37). The checker can evaluate individual CADD files to determine if they are in compliance with the A/E/C CADD Standard. The checker records which elements are not in compliance and can locate those elements for the user within the file.

The AutoCAD counterpart to the MicroStation Workspace is the CE-CADD application developed by the U.S. Coast Guard. CE-CADD is an add-on application for AutoCAD Release 14 and currently implements the Coast Guard’s CADD Standard. Through an agreement with the Coast Guard, the Tri-Service CADD/GIS Technology Center is modifying the CE-CADD software to implement the Tri-Service A/E/C CADD Standard. It is anticipated that the revised CE-CADD software will be available in the early part of FY 2000.

Further information on these implementation tools can be obtained from the Tri-Service CADD/GIS Technology Center web site at <http://tsc.wes.army.mil>.

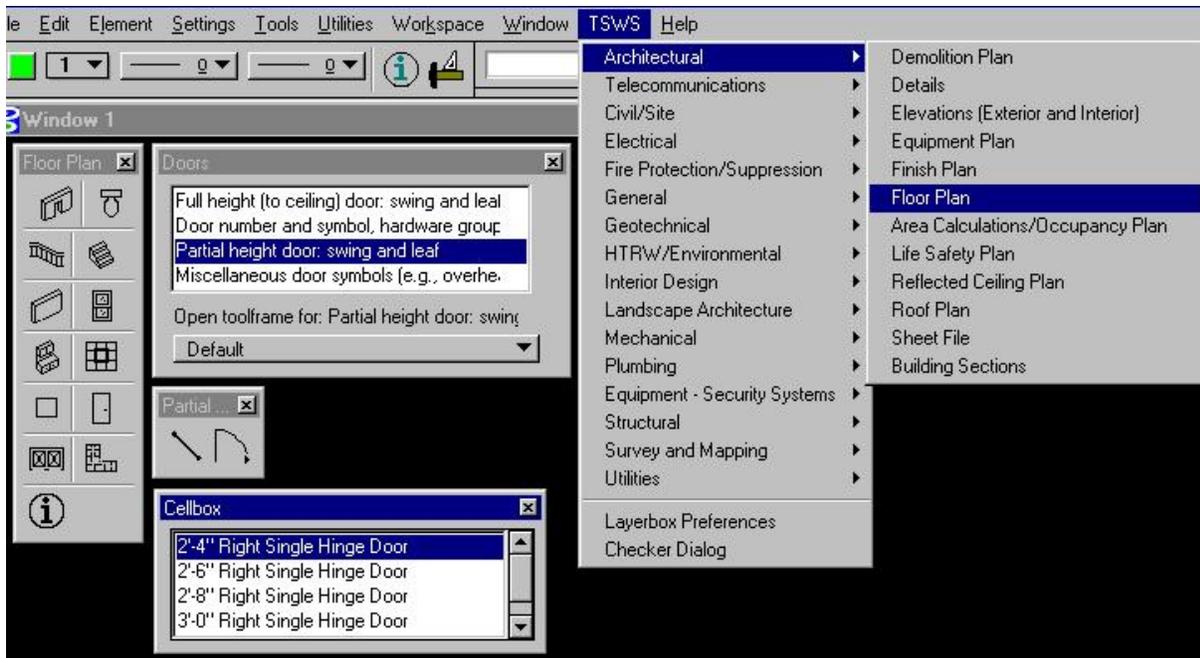


Figure 36. MicroStation workspace

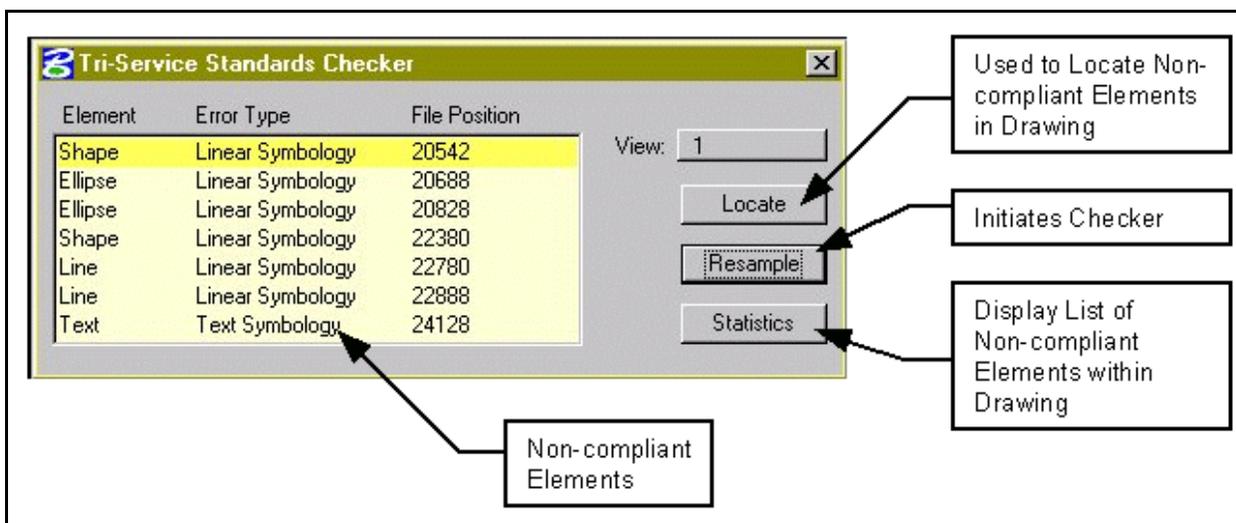


Figure 37. Workspace checker