State of California
DEPARTMENT OF TRANSPORTATION

California State Transportation Agency

Memorandum

Serious drought.
Help Save Water!

To: DISTRICT DIRECTORS
DEPUTY DIRECTORS
DIVISION CHIEFS

Date: September 19, 2014

File:

From: TIMOTHY CRAGGS
Chief
Division of Design

Subject: **MICROSTATION, CALTRANS STANDARD DRAFTING SOFTWARE**

MicroStation is the standard drafting software at Caltrans. Contract plans for all projects on the State Highway System (SHS) whether designed by the California Department of Transportation (Caltrans) or others, must be submitted in a MicroStation DGN file format. MicroStation is to be used for the drafting of all projects large or small (e.g. Minor B, etc) designed by Caltrans. As-Built plans must be complete for all projects on the SHS and finalized in the As-Awarded DGN files before creating the official As-Built plans as microfilm copies (see Section 4.3 of the CADD Users Manual). The CADD Users Manual provides the requirements for submitting contract plans for all advertised projects on the SHS, including the listing of Non Acceptable Formats, one of which is an AutoCad file (see Section 4.1 of the CADD Users Manual).

The February 27, 2014 memorandum "Implementation of Civil 3D", stated that the survey and roadway design portion of a project is now to be completed in the standard roadway design software for Caltrans employees, Civil 3D. It was not the intent of that memorandum to suggest that the Civil 3D software is replacing MicroStation. Nor should it be inferred that consultants must use Civil 3D. Consultants may use any roadway design software of their choosing. However electronic files for alignments, earthwork or digital terrain models required for construction or survey use must be submitted in the appropriate electronic files per Caltrans standards (Civil 3D format).

Contract plan sheets such as the Title sheet, Typical Cross Sections, details, plan view sheets, etc, are to use MicroStation. Civil 3D is used to create the Master Topographic file (part of the base map) that is utilized by design to be the background of all plan view sheets, such as the Layouts and Drainage (see Section 3.8 of the CADD Users Manual). Roadway designers use Civil 3D to design and create the Master Design file (the other part of the base map) which includes the geometrics of the highway, including alignments, profiles, cross slopes and superelevations. The Civil 3D files are to be exported to a MicroStation file to finalize the drafting and complete the presentation of all the contract plan sheets for advertising the project, as shown in the Plans Preparation Manual.

If you have questions, please contract Jesus Mora, Chief, Office of CADD & Engineering GIS Support, at (916) 227-2630 or Jeff Kepley, at (916) 227-2572.

Attachment(s)

(1) Section 3.8 of the CADD Users Manual (Master Files)
(2) Section 4.1 of the CADD Users Manual (For PS&E Submittal)
(3) Section 4.3 of the CADD Users Manual (As-Built Plans)

c: JBenton
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