

# California High-Speed Train Project



## Request for Proposal for Design-Build Services

RFP No.: HSR 11-16  
Book 3, Part C, Subpart 2

CADD Manual

**Note:**

This document contains an update to Page 2 and 5 of the document released in Addendum 1 titled *AD.1 B3 - Pt C.2 - CHSTP CADD Manual*

## 1.0 INTRODUCTION

### 1.1 PURPOSE OF GUIDELINES DOCUMENT

The purpose of this guidelines document is to establish uniform policies and procedures for the Design, Drafting, and Management of electronic files and information for the California High-Speed Train Project (CHSTP) drawing delivery process.

The guidelines document presents the methods and standards to be used to develop CADD drawings for the CHSTP and are intended to provide a means to maintain consistency and uniformity in the presentation of contract drawings and to organize the electronic database in a manner that can be easily accessed and utilized across the project disciplines and geographic regions and utilized throughout the duration of the project.

The guidelines are to be adhered to throughout the project development process in order to provide a consistent set of organized drawings that contain sufficient information to clearly convey the design intent.

Special situations that require a deviation from the CADD guidelines must be presented to the CHSTP CADD manager for suggestions and solutions via the CHSTP CADD Standards request form discussed in Appendix A of this manual.

### 1.2 MINIMUM SYSTEM REQUIREMENTS

#### 1.2.1 Sheet Production

The CHSTP standard CADD production platform shall be Bentley's MicroStation V8i (Select Series 1 or higher). Information regarding the system requirements for this production platform can be found on the Bentley website, link shown below:

[http://ftp2.bentley.com/dist/collateral/docs/microstation/microstation\\_product\\_data\\_sheet.pdf](http://ftp2.bentley.com/dist/collateral/docs/microstation/microstation_product_data_sheet.pdf)

#### 1.2.2 Design Files

The CHSTP standard vertical design platform shall be Bentley's Power InRoads and Power Rail Track. Information regarding the system requirements for this design platform can be found on the Bentley website, link shown below:

Power Rail Track: <http://www.bentley.com/en-US/Products/Power+Rail+Track/>

Power InRoads: <http://www.bentley.com/en-US/Products/Power+inroads>

### 1.3 GENERAL INFORMATION

#### 1.3.1 ProjectSolve Document Management System

The CHSTP management team has established ProjectSolve as its primary document management system. Its' purpose includes centralizing and maintaining all necessary documents between the management and design teams. Links to folders and files managed within ProjectSolve can be found throughout this document.

A formal request is required for any/all parties that need access to the CHSTP ProjectSolve site. The workflow shown has been established to streamline the process of granting new users permission to the site.



### 1.3.6 Hard Copy Deliverables

Hard Copy files shall be available for transmittal in the following format:

- Black and white on recycled white copy paper for half size copies. Full size sets printed on 24lb bond plotter paper
- Each paper copy submittal shall be accompanied by a PDF submittal for each of the plan set packages.

Plot size is dependent on the submittal and shall be prepared as shown in the below chart:

Drawing submittal	PDF Half (11x17)	PDF Full (22x34)
15% Record Set	x	
Preliminary Design for Procurement	x	
Construction Design Drawings	x	x
Ready for Construction (RFC)	x	x
As-Built	x	x

### 1.3.7 Electronic “Soft” Copy Deliverables

Electronic CADD files deliverables shall be available for transmittal with the following requirements:

- MicroStation V8i design files (DGN) format
- One model per DGN file

DGN requirements are dependent on the submittal and shall be prepared as shown in the below chart:

Drawing submittal	DGNs merged	DGNs unmerged	GIS (programmatic assets)
15% Record Set		x	x
Preliminary Design for Procurement		x	x
Construction Design Drawings		x	x
Ready for Construction (RFC)	x	x	x
As-Built	x		x

