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## Chapter 15 - Signals Standards

### CADD Production Criteria Handbook

#### 15.1 GENERAL

Signalization Plans are usually a component set of plans (see Chapter 13, Section 13.1). However, if the Signalization Plans are the lead plan set, then the standards set in Chapter 13, Roadway Standards, pertaining to elements that are specific to the lead plan set shall apply to the Signalization plan set (i.e., Traffic Control files and elements, preliminary estimate sheets, etc.) Projects requiring minor signalization construction work may include these features detailed on sheets in the Roadway Plans. If this is the case, the Signalization element symbology standards within this chapter shall still apply. However, an exception to the QC rule files must be created and documented in the Roadway discipline journal file. When prepared as component plans, they shall be assembled as a separate plan set complete with a key sheet, tabulation of quantities and all other relevant signing and pavement marking sheets. The sheets shall be numbered consecutively, with sheet numbers prefixed by the letter "T". The Signalization Plans show the construction details, signal phasing and other relevant data.

#### 15.2 STANDARD FILE NAMES

Florida Department of Transportation (FDOT) utilizes standard naming conventions for all of its files. Some of the automation implemented in various tools provided by FDOT depends on naming conventions being met. More importantly, the naming convention confers information to the downstream customer of the data.

Standard file names should follow this format: **AAAABB##.ext**  
Where **AAAA** = *abbreviated file description*, **BB** = *Discipline Denotation*, **##** = *Sequence number*.

**Note:** Please see CADD Production Criteria Handbook (CPCH) Chapter 4 for more information.

The following table defines the Signals File Name Standards in regards to FDOT Projects with the understanding that each file name will include sequential numbering. If the need arises to create a file type defined by another discipline, use the first 4 characters of the standard file name and append the Signalization of Signals filename designation (SG) as the fifth and sixth characters, followed by the file sequence numbers. An example is toposg01.dgn.

File Type	File Name	Model Name	File Description	Rule File	Seed File	Critical File
Borders & Sheets	BDPLSG.dgn	Default	Border Sheet Reference file for Plan Sheet	planrd.rul	\$(MX_SEEDIR)fdotseed2d.dgn	
Clip Borders	CLIPSG.dgn	Default	Clip Borders	cliprd.rul	\$(MX_SEEDIR)fdotseed2d.dgn	
Proposed Design	DSGNSG.dgn	Default	Proposed Design and Signal information	dsgnsg.rul	\$(MX_SEEDIR)fdotseed2d.dgn	X
Borders & Sheets	GNNTSG.dgn	Default	General Notes Sheet	planrd.rul	\$(MX_SEEDIR)fdotseed2d.dgn	
Special Details	GSWKSG.dgn <sup>1</sup>	Default	Guide Sign Work Sheet and Details	gswksp.rul	\$(MX_SEEDIR)fdotseed2d.dgn	
Key Sheets	KEYSSG.dgn	Default	Key Sheet	keysht.rul	\$(MX_SEEDIR)fdotseedkeymap.dgn	

File Type	File Name	Model Name	File Description	Rule File	Seed File	Critical File
Summary Boxes / Tables	MSSGSG.dgn	Default	Mast Arm Detail and Tables	dsgnsg.rul	\$(MX_SEEDIR)fdotseed2d.dgn	
Clipping	PLAN_MOTIFMTP LSG.dgn	Default	Motif file for plan sheets	planrd.rul	\$(MX_SEEDIR)fdotseed2d.dgn	
Clipping	PROFILE_MOTIF MTPRSG.dgn	Default	Motif file for profile sheets	plprrd.rul	\$(MX_SEEDIR)fdotseed2d.dgn	
Borders & Sheets	PLANS.G.dgn	Default	Plan Sheet	dsgnsg.rul	\$(MX_SEEDIR)fdotseed2d.dgn	
Summary Boxes / Tables	PLDTSG.dgn	Default	Pole Tabulation and Details for All Types	dsgnsg.rul	\$(MX_SEEDIR)fdotseed2d.dgn	
Special Details	SSDTSG.dgn	Default	Special Details for Sign and Miscellaneous Items	dsgnsg.rul	\$(MX_SEEDIR)fdotseed2d.dgn	
Summary Boxes / Tables	TABQSG.dgn	Default	Tabulation Quantity Sheet	planrd.rul	\$(MX_SEEDIR)fdotseed2d.dgn	
Proposed Design	TEXTSG.dgn	Default	Text Label and Miscellaneous Description	planrd.rul	\$(MX_SEEDIR)fdotseed2d.dgn	
Existing Topography	TOPOSG.dgn	Default	Topography - Existing	topord.rul	\$(MX_SEEDIR)fdotseed2d.dgn	
Special Details	VHLPSG.dgn	Default	Special Loop Details and Instructions	dsgnsg.rul	\$(MX_SEEDIR)fdotseed2d.dgn	

<sup>1</sup> Symbology standards for guide signs, special signs and sign details as specified in Chapter 14 shall apply.

### 15.3 RESOURCE FILES

Engineering/CADD Systems Office (ECSO) provides standard resource files for Computer Aided Design and Drafting (CADD) Signalization Plans, which use MicroStation and GEOPAK to produce an electronic project data delivery. If a custom line style or font is needed, it must either be embedded in the active design file or the corresponding resource file must be copied to the \SYMB sub-directory of the FDOT project directory structure and included as part of the electronic delivery of the project. The justification for the non-standard line style or font must be noted in the journal file.

### 15.4 ENGINEERING DATA

The Signals discipline directory contains an additional sub-directory named **leng\_data**. This sub-directory is designated to contain the following:

- PostScript image files of the Signalization plan sheets
- Quality Control Reports
- ASCII Engineering Data output files
- All computer input and output files (PostScript and Native File Formats) used for design of the signal structures
- All supplemental hand calculations (scanned and saved in PDF and PostScript Formats)
- Other data pertinent to the overall signalization design

## 15.5 PROFESSIONALS' ELECTRONIC DATA DELIVERY SYSTEM (PEDDS)

PEDDS shall be used to Secure and Authenticate project data. When projects are received, the FDOT authenticates the data on the delivered CD. Each time data is transmitted to or received by FDOT the data shall be secured and authenticated. PEDDS shall also be used to authenticate any project specific data received as part of a delivery from an outside source or discipline. For example, an electronic delivery to Roadway from Survey or EMO should be secured and authenticated. Roadway shall electronically secure all files for delivery.

## 15.6 SYMBOLOGY STANDARDS

Symbology Standards that apply to FDOT Projects are set up under a listing of Standard Level Names with specific ByLevel Color, Style and Weight attributes. These levels are grouped under specific Rule Files which are associated to each valid Standard Filename of each Discipline for the purpose of performing the Quality Control check for FDOT Standard compliancy of each FDOT project design file. Section 15.2 of this chapter provides for the complete Standard File Name listing with associated Rule File.

**Note:** Refer to Chapter 3 FDOT Resource and Support Files to review the Level names listing for each associated Rule File.

The following are the basic level naming convention rules to follow to always know what level an element should be placed on:

- 1) Level Names have 18 maximum characters.
- 2) The format of the name is: **object\_sv**

<b>object</b> (represents element type)	<b>s</b> (represents state)	<b>v</b> (represents view)
	<u>states</u>	<u>views</u>
	<b>p</b> (proposed)	<b>x</b> (cross section)
	<b>d</b> (drafting element)	<b>r</b> (profile)
	<b>e</b> (existing)	<b>p</b> (plan) (DTM is the same as plan)

**Note:** Level Names without including the “\_sv” portion in the name are assumed proposed plan view elements.

Example: With this information one can determine the following about the Level names below:

gas	- Proposed Plan view elements for “gas” related items
gas_ep	- Existing Plan view elements
gas_px	- Proposed cross section view elements