State of Florida

Department of Transportation

CADD Manual

(Production Criteria)

TOPIC NUMBER: 625-050-001

Effective Date: February 9, 2015

ENGINEERING / CADD SYSTEMS OFFICE

TALLAHASSEE, FLORIDA

http://www.dot.state.fl.us/ecso/

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Contents

Chapter 1

INTRODUCTION

1.1 PURPOSE

The ***CADD Manual*** addresses the requirements to utilize Computer Aided Design and Drafting (CADD) for production, delivery and processing of digital project data for the Florida Department of Transportation (Department). In addition to software and configuration requirements, it identifies tools, techniques, applications, standards and procedures that are used to produce quality CADD products.

The ***CADD Manual*** establishes minimum CADD production standards, procedures and support required to ensure a, consistent and predicable CADD data set for the Department's projects. CADD standards must be in compliance with Department policies, procedures and standards for information technology resources. The ***CADD Manual*** also serves to provide professional services administrators, project managers, consultants, in-house designers, and others a procedure which will be incorporated by reference into scopes and other contract documents for services.

1.2 AUTHORITY

Subsection 20.23(4)(a), Florida Statutes (F.S.)

Section 334.048(3) Legislative Intent to Department Management Accountability and Monitoring Systems, Florida Statutes (F.S.)

1.3 SCOPE

The ***CADD Manual*** is to be used by all personnel producing projects for the Department. It is to be included in all contracts requiring engineering plans preparation utilizing CADD. This manual will affect all offices of the Department and all consultants, contractors and others who utilize CADD applications or engineering data produced by these applications. The material presented herein is monitored as a critical requirement to meet the Department's CADD Quality Assurance objectives.

1.4 DEFINITIONS

CADD - (Acronym for Computer Aided Design and Drafting) Software and methods used to analyze, design and represent transportation facilities graphically on the computer. CADD facilitates the visual presentation of Engineering Data.

Statewide CADD Coordinator – Individual in the Central Office responsible for coordinating amongst the Districts to implement a uniform policy and standards for CADD operations for the Department.

CADD Manager - The CADD Manager is responsible for (1) support of the core CADD software products in the work units and (2) a variety of engineering data services functions including but not limited to the receipt, acceptance, and management of electronic or digital deliveries of project data.

CADD Support - The technical and operational support necessary to ensure that a production environment is maintained within the Department, which includes:

a) Selection, development and distribution of production CADD software, related procedures, criteria and standard operating instructions,

b) Providing training opportunities to CADD users.

c) Managing Engineering Data produced with the CADD software,

d) Statewide procurement of: CADD software, training services, and software development assistance.

CADD TAC - (Acronym for Technical Advisory Committee) A discipline-based group sanctioned by the Statewide CADD Coordinator consisting of District and Central Office representatives charged to meet and work on statewide technical issues dealing with CADD applications, procedures, testing, training, and implementation.

Engineering Data - Those digital files which support or represent the intent of the engineering design.

1.5 ORGANIZATION

The Department's Engineering / CADD Systems Office (ECSO), with input from the districts and industry, will develop and maintain procedures and standards for the Department's CADD production and related activities.

The following chapters are included:

Chapter 1 **Introduction***:* Describes and implements the *CADD Manual*.

Chapter 2 **Computer Systems**: Establishes the minimum requirements for procurement, maintenance and technical support of the Department's CADD systems.

Chapter 3 **CADD Production Standards**: Defines the critical CADD Production Standards to be used in the production of the Department's CADD projects.

Chapter 4 **CADD Production Procedures**: Establishes minimum requirements for the production of the Department's CADD projects in accordance with the Department's plans preparation procedures and practices.

Chapter 5 **Delivery Procedure**: Establishes the minimum requirements and functions necessary for the Department's CADD delivery, describing how electronic data is to be delivered, archived and made available to customers.

Chapter 6 **Support**: Establishes the primary components of the Department's CADD support structure and services, including the statewide training, and defines applications and tools supported by the ECSO.

Chapter 7 **Software Development and Distribution**: Establishes how the Department's CADD software is developed, tested, approved and distributed.

Chapter 8 **Quality Assurance**: Establishes the bases for Quality Assurance (QA) monitoring of the Department's District CADD functions, including the areas of responsibility, frequency of monitoring and reporting methods.

1.6 REFERENCES

Florida Administrative Code, Chapter 1B-26.003(10)

This document provides standards for record (master) copies of public records which reside in electronic recordkeeping systems.

Information Technology Resource User's Manual, Topic No. 325-000-002

This document contains the standards and guidelines related to information technology resources.

1.7 REVISIONS AND ADDITIONS

CADD Manual holders are encouraged to submit comments and suggestions for improvements to this manual. The Suggestion and Comment sheet at the end of this chapter or the ECSO email link listed on the sheet may be used to provide feedback. All proposed revisions and additions, either in draft or final form, will be reviewed by all offices affected by the Manual.

Chapter 1 of this manual is the only chapter subject to the Executive Review Process. This chapter authorizes the development and implementation of the ***CADD Manual***. The remaining chapters will be updated and approved by the Statewide CADD Coordinator with input from the Districts and offices within the Central Office that may be affected. The intent is to be able to make technical revisions to the manual in a timely manner. Substantive revisions that result in policy change will be coordinated with the Executive Committee ***in*** accordance with ***Procedure No. 025-020-002, Standard Operating System***.

All revisions and updates will be coordinated with the Forms and Procedures Office prior to distribution to ensure conformance with and incorporation into the Department's Standard Operating System.

1.7.1 CADD Manager Responsibility

District CADD Managers will interface between the users of CADD and the ECSO to facilitate input, revisions and additions to this manual. It is the CADD Manager's responsibility to ensure that all offices affected by this manual are informed of the Department's CADD policies, procedures, and standards. The CADD Manager will forward District recommendations for changes to CADD policies, procedures, and standards to the Statewide CADD Coordinator for consideration and processing through the CADD TACs.

1.7.2 CADD TAC Responsibility

Disciplines utilizing CADD are represented by a CADD TAC. Each District and the Central Office are represented on the TACs by knowledgeable and proficient CADD users. The purpose of these TACs is to continually improve the CADD procedures, process, standards, and identify users' needs. End User and CADD Manager input for revisions and additions to the ***CADD Manual*** are processed through the TACs. The chairperson will forward committee recommendations to the Statewide CADD Coordinator and copy the District CADD Manager.

1.8 DISTRIBUTION

The ***CADD Manual*** is distributed in electronic form and may be downloaded from the ECSO website:

http://www.dot.state.fl.us/ecso/downloads/publications/publications.shtm

1.9 TRAINING

Training issues and opportunities are identified within the applicable chapters.

1.10 FORMS

Forms required for use with this manual are identified at the end of each chapter where applicable.

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION
SUGGESTION AND COMMENTS
CADD Manual

NAME OF FDOT DEPARTMENT / FIRM & ADDRESS:

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NAME OF PERSON(S) RESPONSIBLE FOR SUGGESTIONS / COMMENTS:

_____

_____

TELEPHONE NO: ( ) _____ - _____

FAX NO: ( ) _____ - _____

E-MAIL: _____

SUGGESTIONS OR COMMENTS:

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(Comments or Suggestions may be attached as marked up copies of pages from the manual.)

Comments or Suggestions or Questions may be submitted to:

E-mail: ecso.support@dot.state.fl.us

Mail: **FLORIDA DEPARTMENT OF TRANSPORTATION**
ENGINEERING / CADD SYSTEMS OFFICE
605 SUWANNEE STREET, MS 69
TALLAHASSEE, FLORIDA 32399-0450

Phone: **ENGINEERING / CADD SYSTEMS OFFICE**
(850) 414-4711

Chapter 2

COMPUTER SYSTEMS

2.1 PURPOSE

This chapter establishes the minimum requirements for procurement, maintenance and technical support of the Florida Department of Transportation (Department's) Computer Aided Design and Drafting (CADD) systems.

2.2 SCOPE

These requirements apply to all computer technology and services within the responsibility of the Engineering / CADD Systems Office (ECSO), the CADD Managers of each District, Office of Information Systems (OIS), and Information Technology (IT) personnel assigned to support the CADD program.

2.3 DEFINITIONS

CADD Hardware: The workstations, servers, printers, plotters and all other computer equipment used in the Department's production effort.

CADD Software: Any software procured, developed, distributed and supported by ECSO.

OIS IT Personnel Supporting CADD: OIS IT personnel assigned to support the CADD program to perform the role of management and related tasks of the Department's IT infrastructure.

2.4 REFERENCES

Information Technology Resource User's Manual, Topic No. 325-000-002

This document contains the standards, guidelines, and requirements related to information technology resources.

2.5 PROCUREMENT OF CADD HARDWARE AND SOFTWARE

The CADD Managers and OIS IT personnel evaluate the needs for computer hardware to provide recommendations for procurement of any of the Department's CADD hardware where appropriate, and do so in accordance with ***Information Technology Resource User's Manual, Topic No. 325-000-002.*** The ECSO participates with OIS in the development of the Information Technology Resource Standards and evaluation of hardware to be procured for use in CADD.

The ECSO, in conjunction with the Technical Advisory Committees (TACs) and CADD Managers, review the statewide CADD software needs to support the Department's production efforts.

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Chapter 3

CADD PRODUCTION STANDARDS

3.1 PURPOSE

This chapter defines the Florida Department of Transportation (Department's) critical Computer Aided Design & Drafting (CADD) Production Standards to be used in the production of the Department's CADD projects.

3.2 SCOPE

These Production Standards apply to all projects produced by and for the Department using CADD in addition to the criteria, standards and procedures of the various disciplines within the Department.

3.3 DEFINITIONS

The following definitions relate to electronically generated project data and deliverables. For the definition of other common terms and acronyms used in this Manual, refer to the respective Chapters.

Component – A categorization of design plans as defined in Chapters 2 & 3 of the Department's Plans Preparation Manual, Vol. 2. The list of plans components for Digital Delivery is comprised of the following:

1. Roadway Plans
2. Signing and Pavement Marking Plans
3. Signalization Plans
4. Intelligent Transportation System (ITS) Plans
5. Lighting Plans
6. Landscape Plans
7. Architectural Plans
8. Structures Plans
9. Toll Facility Plans

The plans components do not directly correspond to the project's directory structure. For example, drainage files have a \drainage folder below the root level project folder, but may be included as part of the Roadway Plans Component.

Design File – MicroStation or AutoCAD file.

Engineering Data –Those electronic files that represent the critical geometric and quantitative controls or other data supporting the graphical representation of a project.

Font Library – A file in which text characters styles, symbols, or patterns are stored.

Global Origin – Origin location of the Cartesian coordinate system in the design plane coordinates (UORs) for MicroStation files. When design plane positions are specified or reported in working units, they are relative to the global origin.

Graphics Design File –An electronic CAD file that conforms to MicroStation® (DGN) or AutoCAD® (DWG) graphics formats same as Design File.

Level/Layer – Data in the design file segregated into drawing levels or layers.

Level Symbology – A setting that, when turned on, causes all elements on a particular level to be displayed with the same element symbology, such as Color, Line Style, and Line Weight.

Line Style – Part of the symbology of an element: for example, whether a line is represented a solid or continuous, composed of dashes, dots and dashes, and so on. Each element has its own line style.

Line Weight – An index that designates the thickness of the lines used to draw or plot a graphic element. Each element has its own line weight.

Master Units – The largest unit in common use in a design file, usually represented in US Survey Feet.

Project Directory – The parent / root directory for a project data set containing all project component directories and ancillary data.

Supporting CADD Files – Any file, including Resource Files (such as fonts, line styles, pen tables, cell/block libraries, etc.) required to produce the printable sheet images of a plan set.

Symbol – A character placed from a MicroStation symbol font.

Symbology – See level symbology.

Text Attributes/Properties – The color, weight, font, height and width of text.

Text Element – Text in design files as a distinct type of element.

Units of Resolution (UORs) – The distance between adjacent points in a MicroStation design plane. There are a very large number of fixed discrete positions or UORs along each coordinate axis that are defined as real world coordinates by master units and sub-units (collectively, working units).

Working Area – Size, in working units square, of design plane.

Working Units – The real-world units in MicroStation that the design plane is configured to, such as US Survey Feet.

3.4 REFERENCES

Plans Preparation Manual Vol. I & II, Topic Nos. 625-000-007/625-000-008

This manual provides engineering criteria and guidelines to be used in the development of Roadway designs and plans preparation for roads on the State Highway System.

Facilities Design Manual (Topic No. 625-020-016)

This manual describes the Department's guidelines and requirements for providing professional Architectural/Engineering (A/E) consulting services for building facility projects for the Department.

Design Standards (Topic No. 625-010-003)

These indexes provide standard drawings to support the various engineering obligations for designing, specifying, estimating, constructing, inspecting, testing, accepting, operating, maintaining and monitoring the roads on the State Highway System including Standard Abbreviations.

Structures Manual (Topic No. 625-020-018)

This manual provides the structures personnel with guidelines for the development of uniform structural design and plans preparation.

3.5 CADD RESOURCE AND SUPPORT FILES

The Department has developed CADD Standards for the production of Florida transportation systems plans to be delivered with the aid of the CADD Software suite. The Engineering / CADD Systems Office (ECSO) manages and coordinates these CADD Standards through the customization within the Department's approved design software and automated tools contained in the CADD Software suites. This section documents and defines the Department's Resource and Support Files that are included in the CADD Software suite.

The Department's CADD Software suite includes standard design libraries/templates to propagate the CADD Standards definitions of levels/layers and symbology (color, line styles/linetypes, weights), multi-line styles, text styles, dimension styles, cells, element templates, menu customizations, customized tools, tool boxes, and tasks for both Bentley and Autodesk platforms.

The software versions and standards used on projects will be current with the available versions supported by ECSO at the time of project commencement, unless otherwise specified in the project's Scope of Services. Exceptions will be approved by the Department's Project Manager and will be documented and delivered as part of the project. The Department highly recommended that projects maintain concurrency with the latest supported software versions available and published at:

http://www.dot.state.fl.us/ecso/main/Version/CurrentVersions.shtm

Standard resources definitions for CADD drawings are consistent between the MicroStation and AutoCAD. The following are examples of platform conventions:

MicroStation	AutoCAD equivalent
File name	File name
Level name	Layer name
Cell Library	Block Drawing
Cell name	Block name
Line Style	Linetype
Line Weight	Line Thickness
Color	Color
Seed file	Template file

3.5.1 Supporting Database Resources

The Department's CADD Software Suite includes a GEOPAK Design and Computation (D&C) Manager database file, *FDOTXXX.ddb*, located at *\FDOTXXX\geopak\databases\ folder.* This database is set up specifically to create drawing elements and attach pay item data according to the Department's CADD Standards. Likewise, for AutoCAD Civil3D projects, *AECMerge.xml* delivered with the FDOTXXXX.C3D State Kit serves a similar function and is located in the \FDOTXXXX.C3D\Data\PayItemData\ folder.

These resources may need to be modified for project specific items or to comply with District standards. If the GEOPAK D&C Manager *FDOTXXX.ddb* database is customized, the user will save this custom database into the project directory in the *\symb* project sub-folder. Saving the database to the project directory is important to ensure the modified database will be delivered with the project. Likewise a modified copy of Civil 3D *AECMerge.XML* file will be saved to the local project folder.

When modifying project specific database resources, use the following naming convention:

[Project Financial Project Identification Number][Discipline Designation].ddb

Where *Discipline Designation* would be one of the following:

dr	(drainage)
its	(intelligent transportation system)
lnd	(landscape)
lt	(lighting)
rdwy	(roadway)
sg	(signalization)
sp	(signing and pavement markings)
util	(utilities)

Example: A modified standard DDB, ***19728125201sg.ddb*** would be stored in ***\19728125201\symb*** subfolder of the aforementioned project.

3.5.2 Seed / Template Files

3.5.2.1 MicroStation Seed Files

MicroStation uses “seed” files to create all graphic design files. Working units and global origin are two of the most important settings in the seed file. Working units are expressed as master units and sub-units. All Standard Seed Files for MicroStation have been defined based on master unit of “Survey Feet” with a sub unit of “Survey Inches.” The global origin is located at the center of the design plane for all seed files.

The resolution is defined per the master unit and determines the size (working area) of the design plane, which will encompass an area large enough for any State Plane coordinate zone in Florida. The resolution is set to 304800 UORs per Survey Foot.

3.5.2.2 AutoCAD Template Files

AutoCAD uses “template” files to create all graphic design files. Working units are Survey Feet and coordinates should be set for the project State Plane Zone projection. Templates are color table based AutoCAD drawings.

3.6 CADD STANDARD RULES

The Department’s level/symbology CADD Standards for projects define Standard Level/Layer Names with specific “ByLevel” Color, Style and Weight Symbology for graphic elements for both Bentley and Autodesk platforms. These level/symbology CADD Standards are grouped to define specific CADD Standard Rules which are associated to each of the Department’s CADD Standard Filenames as it relates to a given discipline or purpose.

Note The individual Discipline sections found in Chapter 4 provide complete listings of respective CADD Standard File Names with associated CADD Standard Rule.

These CADD Standard Rules facilitate the Quality Control (QC) software to check each of the project design files for compliancy to the specification found in these Rules.

Note Appendix A of this Manual records the complete listing of the Department’s CADD Standard Rules and the associated CADD Standard Levels and Symbology.

- ***The Department's CADD Standard Rules & Descriptions:***

Standard Rule	Description
algnrd	Alignment Design
autosp	AutoTURN
cliprd	Clip Border
drdtrd	Drainage Detail
drexrd	Drainage Existing
drmprd	Drainage Map
drprrd	Drainage Proposed
drxsrd	Drainage Cross Section
dsgnld	Landscaping Design
dsgnlt	Lighting Design
dsgnrd	Roadway Design
dsgnsg	Signalization Design
dsgnsp	Signing & Pavement Marking Design
dtmrd	Digital Terrain (Proposed)
gdtmrd	Digital Terrain (Existing)
geotech	Geotechnical
gswksp	GuidSIGN
irrgld	Irrigation
itssp	Intelligent Transportation System
keysht	Key Sheets

Standard Rule	Description
msarsp	Mast Arm Details
open	All Levels and Symbology Accepted
pdxsrd	Pond Cross Section
planrd	Roadway Plan Sheet
plprrd	Roadway Plan/Profile Sheet
qtdsrd	Quantity Computation
rdxsrd	Roadway Cross Section
rdxssp	Signing & Pavement Cross Section
rwdtrd	Right of Way Detail for Roadway
rweng10	Right of Way
spst10	Structural
survrd	Survey Development Model
tcdsrd	Traffic Control
topord	Existing Topography for Roadway
typdrd	Typical Section Data
typsrd	Typical Section Sheets
utadrd	Utilities Adjustment
utexrd	Utilities Existing
utprrd	Utilities Proposed

3.7 LEVELS/LAYERS AND SYMBOLOGY

The Department's CADD Software suite includes standard design libraries/templates to propagate the CADD Standards definitions of levels/layers and symbology (color, line styles/linetypes, weights). The design libraries for MicroStation are located in the FDOTSS3\RESOURCES\Dgnlibs folder and the templates for AutoCAD Civil 3D are located in the FDOT2015.C3D\Data\Templates\ folder.

The Department's CADD Software suite also includes a *MasterStandards.xlsx* file documenting these CADD Standards for use in the Department developed productivity tools for both MicroStation and AutoCAD Civil 3D platforms, such as QCInspector (QC checking of design files during the Department's plans preparation process). The *MasterStandards.xlsx* file is located in the FDOTSS3\APPS\ustnQCInspector folder for MicroStation *and FDOT2015.C3D\APPS\QCInspector* folder for AutoCAD Civil 3D.

Note Appendix A of this Manual records the complete listing of the Department's CADD Standard Rules and the associated CADD Standard Levels and Symbology as documented in the MasterStandards.xlsx file.

- ***The Department's CADD standard design libraries for MicroStation:***

Type	Design Library Name (DGNLIB)
Civil_Cells	FDOT_Approach.dgnlib
Civil_Cells	FDOT_Circulatory.dgnlib
Civil_Cells	FDOT_CurbTransitions.dgnlib
Civil_Cells	FDOT_Driveways.dgnlib
Civil_Cells	FDOT_Intersections.dgnlib
Civil_Cells	FDOT_Ponds.dgnlib
Civil_Cells	FDOT_SidewalkCurbRamps.dgnlib
Civil_Cells	FDOT_Templates.dgnlib
Features	FDOT_CivilFeatures_RD.dgnlib
Features	FDOT_CivilFeatures_RW.dgnlib
Features	FDOT_CivilFeatures_ST.dgnlib
Features	FDOT_CivilFeatures_TC.dgnlib
Features	FDOT_CivilFeatures_TP.dgnlib
Features	FDOT_CivilFeatures_UT.dgnlib
Features	FDOT_ElementTemplates.dgnlib
Features	FDOT_SUDA_Feature_Defs.dgnlib
Features	FDOT_SUE_Utils.dgnlib

Type	Design Library Name (DGNLIB)
Features	FDOT_SurveyFeatures_RD.dgnlib
Features	FDOT_SurveyFeatures_RW.dgnlib
Features	FDOT_Util_ElementTemplates.dgnlib
General	FDOT_DesignGeometricsCriteria.dgnlib
General	FDOTtoolboxes.dgnlib
General	GeoTech.dgnlib
Levels	countymappinglevels.dgnlib
Levels	fdot_common_levels.dgnlib
Levels	fdot_v8_levels.dgnlib
Levels	photogrammetry.dgnlib
Levels	rwlevels.dgnlib
Levels	strlevels.dgnlib
Levels	survey_levels.dgnlib
Levels	v7_levels.dgnlib
Styles	FDOT_PrintStyles.dgnlib
Styles	FDOT_Styles.dgnlib
Styles	rwtyles.dgnlib

- ***The Department's CADD standard design templates for AutoCAD Civil 3D:***

Template	Description
algnrd.dwg	Alignment Design
autosp.dwg	AutoTURN
cliprd.dwg	Clip Border
digitalsignature.dwg	Digital Delivery
drdtrd.dwg	Drainage Detail
drexrd.dwg	Drainage Existing
drmprd.dwg	Drainage Map
drprrd.dwg	Drainage Proposed
drxsrd.dwg	Drainage Cross Section
dsgnld.dwg	Landscaping Design
dsgnlt.dwg	Lighting Design
dsgnrd.dwg	Roadway Design
dsgnsg.dwg	Signalization Design
dsgnsp.dwg	Signing & Pavement Marking Design
dtmrd.dwg	Digital Terrain (Proposed)
gdtmrd.dwg	Digital Terrain (Existing)
geotech.dwg	Geotechnical
gswksp.dwg	GuidSIGN
irrgld.dwg	Irrigation
itssp.dwg	Intelligent Transportation System

Template	Description
keysht.dwg	Key Sheets
msarsp.dwg	Mast Arm Details
open.dwg	All Levels & Symbology Accepted
pdxsrd.dwg	Pond Cross Section
planrd.dwg	Roadway Plan Sheet
plprrd.dwg	Roadway Plan/Profile Sheet
qtdsrd.dwg	Quantity Computation
rdxsrd.dwg	Roadway Cross Section
rdxssp.dwg	Signing & Pavement Cross Section
rwdtrd.dwg	Right of Way Detail for Roadway
rweng10.dwg	Right of Way
spst10.dwg	Structural
survrd.dwg	Survey Development Model
tcdsrd.dwg	Traffic Control
topord.dwg	Existing Topography for Roadway
typdrd.dwg	Typical Section Data
typsrd.dwg	Typical Section Sheets
utadrd.dwg	Utilities Adjustment
utexrd.dwg	Utilities Existing
utprrd.dwg	Utilities Proposed

3.7.1 Levels and Layers

The Department's standard design libraries/templates define Standard Levels/Layers for each Discipline. Designers will use these Standard Levels/Layers in the Department's plans production of all CADD design files. The following is Department's basic level / layer naming convention:

- The format of the Level / Layer Name is: ***object_sv*** *(max. 18 characters)*

  Where: (***object*** = element type)_ (***s*** = state)(***v*** = view)

(S)tate Designations	**(V)iew Designations**
p (proposed)	**p** (plan)
d (drafting element)	**r** (profile)
e (existing)	**x** (cross section)
	m (model)

Note Level / layer Names with no "_sv" portion in the name are assumed to be: _pp (proposed plan).
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 for "gas" related items
gas_px	- Proposed cross section view elements for "gas" related items

Each Standard Level is classified as either Non-Critical or Critical for purposes of the QC process to verify compliancy of design files in both the Bentley and Autodesk platforms.

- ***Non-Critical*** Levels are only checked in the QC process for valid Standard Level Names.
- ***Critical*** Levels are relied upon/used by downstream applications or other disciplines typically to be consistent, predictable and repeatable (CPR) and are checked in the QC process for valid Standard Level Names along with ByLevel settings for Symbology (Color, Line Style, Weight).

The CADD Standard Rules, recorded in the *MasterStandards.xlsx* and documented in Appendix A, contain a Critical Level column that defines each level with the following designations:

[blank] **-** Denotes Non-Critical Levels where ONLY valid Standard Level Name is checked in the QC process.

X - Denotes Critical Levels where valid Standard Level Name and ByLevel setting for Symbology (color, line style, and weight) is checked in the QC process.

3 digit string - Denotes Critical Level with partial checking in the QC process on whether to check (1= true) or not to check (0=false) specific symbology components (Color, Linestyle, Weight)

(**1st digit** = *Color*, **2nd digit** = *Linestyle*, **3rd digit** = *Weight*)

Example: 100 – Denotes check only color (common for structures files)
010 – Denotes check only line style
101 – Denotes check both color & weight, but not line style

3.7.2 Color

The Department's Standard Color Table (*FDOTColor.tbl*) for MicroStation was created to allow users to visually identify elements in shared files and for consistency in color plotting. The Standard Color Table is a modified version of the default MicroStation color table (*color.tbl*) which defines 256 colors. The most important aspect for the standardization of colors is the color number that is applied to both MicroStation and AutoCAD elements.

The Department's Standard Color Table customizes various colors, 0 through 166, as defined in the following table. The Standard Color Table (*FDOTColor.tbl*) is preset by the FDOT Workspace variable MS_DEFCTBL and attached in the Standard Seed Files. Some Department disciplines use the MicroStation default color table, or their own customized color table, in place of the Standard Color Table. These are defined in the discipline specific sections of Chapter 4 of this Manual.

Note The following apply to AutoCAD colors as well. Structures discipline uses the Bentley supplied color table.

MicroStation Color	AutoCAD Color non-Structures (fdotcolor.tbl)	AutoCAD Color Structures (color.tbl)
0	7 (255,255,255)	7 (255,255,255)
1	5 (0,0,255)	5 (0,0,255)
2	3 (0,255,0)	3 (0,255,0)
3	1 (255,0,0)	1 (255,0,0)
4	2 (255,255,0)	2 (255,255,0)
5	6 (255, 0,255)	6 (255, 0,255)
6	255,165,0	255,127,0
7	4 (0,255,255)	4 (0,255,255)
8	148,0,211	64,64,64
9	140,88,44	192,192,192
10	200,176,125	254,0,96
11	192,192,192	160,224,0
12	255,192,203	0,254,160
13	0,100,0	128,0,160
14	176,176,176	176,176,176
15	0,240,240	0,240,240
16	240,240,240	240,240,240
17	0,0,240	0,0,240
18	0,240,0	0,240,0
19	240,0,0	240,0,0
20	225,225,225	240,240,225
21	240,0,240	240,0,240
22	240,122,0	240,122,0
23	0,240,240	0,240,240
24	240,240,240	240,240,240
25	0,0,240	0,0,240
26	0,240,0	0,240,0

MicroStation Color	AutoCAD Color non-Structures (fdotcolor.tbl)	AutoCAD Color Structures (color.tbl)
27	240,0,0	240,0,0
28	240,240,0	240,240,0
29	240,0,240	240,0,240
30	240,122,0	240,122,0
31	0,255,255	0,255,255
32	225,225,225	225,225,225
33	0,0,225	0,0,225
34	225,225,0	225,225,0
35	225,0,0	225,0,0
36	225,225,0	225,225,0
37	225,0,225	225,0,225
38	225,117,0	225,117,0
39	0,225,225	0,225,225
46	225,117,0	225,117,0
55	0,210,210	0,210,210
68	195,195,0	195,195,0
71	0,195,195	0,195,195
84	180,180,0	180,180,0
86	180,102,0	180,102,0
99	165,0,0	165,0,0
100	165,165,0	165,165,0
142	135,87,0	135,87,0
150	120,82,0	120,82,0
152	120,120,120	120,120,120
154	0,120,0	0,120,0
157	120,0,120	120,0,120
255	250 (0,0,0)	250 (0,0,0)

Note Color 255 is used as the background color (usually black).

3.7.3 Line Weight

Line weight for MicroStation is defined by a numerical index within the range of 0 to 31 that designates the stroke width (or thickness) of the line used to draw and print a graphic element. Each element has its own line weight. The standard line thickness (width) of a printed graphic element is in inches on the paper. Some printers may require an adjustment of these weights.

Printed output from the design file must be of a quality legible on 2nd generation copies. Line weights / thicknesses in the following table are represented in inches and are default settings (also set in the Department delivered print drivers). These may need to be adjusted depending on hardware to produce the required quality of printed documents.

The following tables define weights for both MicroStation and AutoCAD platforms.

MicroStation/AutoCAD Line Weight Mapping			
MS Weight	*MS Plot(inches)*	*AutoCAD inches*	*AutoCAD mm*
0	0.003	0.004	0.09
1	0.006	0.006	0.15
2	0.009	0.008	0.20
3	0.012	0.012	0.30
4	0.015	0.014	0.35
5	0.018	0.016	0.40
6	0.021	0.021	0.53
7	0.024	0.024	0.60
8	0.027	0.028	0.70
9	0.030	0.031	0.80
10	0.033	0.035	0.90
11	0.036	0.035	0.90
12	0.039	0.039	1.00
13	0.042	0.042	1.06
14	0.045	0.047	1.20
15	0.048	0.047	1.20
16	0.051	0.055	1.40
17	0.054	0.055	1.40
18	0.057	0.055	1.40
19	0.106	0.083	2.11
20	0.105	0.083	2.11
21	0.110	0.083	2.11
22	0.115	0.083	2.11
23	0.120	0.083	2.11
24	0.125	0.083	2.11
25	0.130	0.083	2.11
26	0.135	0.083	2.11
27	0.140	0.083	2.11
28	0.145	0.083	2.11
29	0.150	0.083	2.11
30	0.155	0.083	2.11

Available AutoCAD Line Weights	
inches	*mm*
0	0.000
0.002	0.050
0.004	0.090
0.005	0.130
0.006	0.150
0.007	0.180
0.008	0.200
0.01	0.250
0.012	0.300
0.014	0.350
0.016	0.400
0.02	0.500
0.021	0.530
0.024	0.600
0.028	0.700
0.031	0.800
0.035	0.900
0.039	1.000
0.042	1.060
0.047	1.200
0.055	1.400
0.062	1.580
0.079	2.000
0.083	2.110

3.7.4 Line Styles/Linetypes

Line style/linetype is part of the symbology of graphic elements. It defines a line's appearance as being solid, continuous dashes, dots and dashes, with embedded characters or symbols, and so on. Each element has its own line style. An element can be set to a Standard Line Style/Linetype or to a Custom Line Style/Linetype.

The Department includes Standard Custom Line Styles / Linetypes resource files in both the CADD Software suite for Bentley and the FDOT State Kit for AutoCAD. The Department will be perpetuating these into anticipated future CADD Software releases. Users will not modify the Department's Standard Custom Line Style / Linetypes resource files.

FDOT Custom Line Style Resource Files for MicroStation
FDOT_3D.rsc
FDOT_MOT.rsc
FDOT_Rdwy.rsc
FDOT_Road.rsc
FDOT_ROW.rsc
FDOT_Striping.rsc
FDOT_Utilities.rsc

FDOT Custom Linetype Resource Files for AutoCAD
FDOT.LIN

Standard MicroStation line styles are based on output device coordinates; therefore are not truly "what you see is what you get", as are custom line styles. Use custom line styles instead of MicroStation Patterning. When using custom line styles, it is important to set the correct active custom line style scale.

Note Only FDOT line style resource ".RSC" files should be used in MicroStation.

Custom line styles are complex and contain patterns of line segments and/or symbols. Some examples of custom line styles are tree lines, fence lines, guardrail, etc. If non-standard custom line styles are required, the resource file defining them must be delivered in the project directory structure, or the custom line style definitions must be embedded in the design file.

Note The user must not create conflicting custom line styles/linetypes with the same name as a Department Standard Line Style/Linetype. User created resource files must be unique in name and copied to the \symb sub-directory of the FDOT Project directory structure.

For named styles, the MicroStation Line Style name and AutoCAD Linetype should match the Department's DGN Linetypes stored in the AutoCAD State Kit's *FDOT.lin* file located in the *FDOTXXX.C3D\Support\linetype* folder.

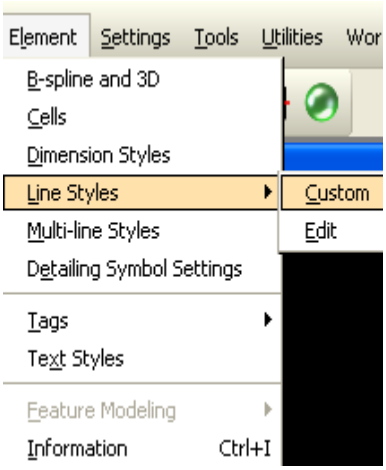
MicroStation Line Style	AutoCAD Linetype
0	Continuous
1	DGN1
2	DGN2
3	DGN3
4	DGN4
5	DGN5
6	DGN6
7	DGN7

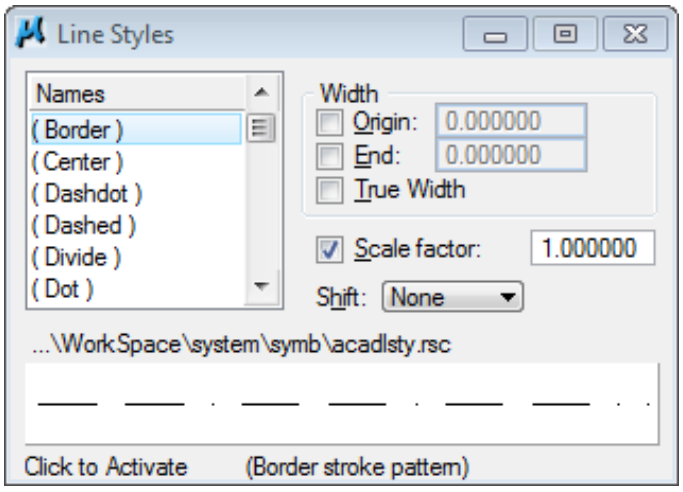
- ***Standard Line Style/Linetype Measurements for Printing***

———— 0	style(0) = continuous
---------- 1	style(1) = (0.02, 0.04), for ACAD - DGN1
- - - - - - 2	style(2) = (0.08, 0.04), for ACAD - DGN2
— — — 3	style(3) = (0.15, 0.05), for ACAD - DGN3
—·—·— 4	style(4) = (0.200, 0.053, 0.03, 0.053), for ACAD – DGN4
- - - - - - 5	style(5) = (0.056, 0.056), for ACAD - DGN5
—··—··— 6	style(6) = (0.32, 0.056, 0.048, 0.056, 0.048,0.056), for ACAD – DGN6
—— —— 7	style(7) = (0.59, 0.053, 0.03, 0.053), for ACAD – DGN7

- ***To set custom line style scale, select the MicroStation menu option:***

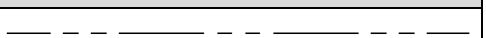
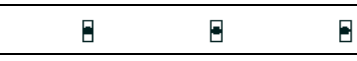
Element > Line Styles > Custom.

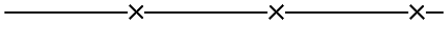
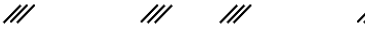
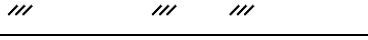
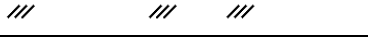
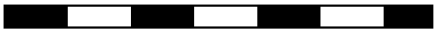
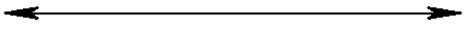
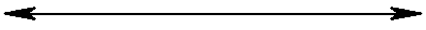




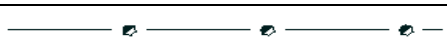
3.7.4.1 Custom Line Styles

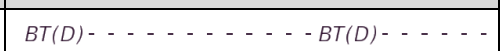
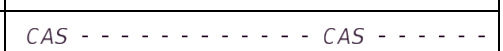
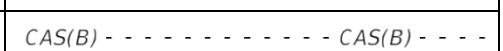
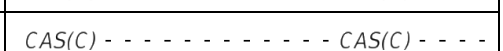
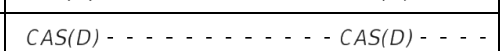
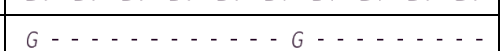
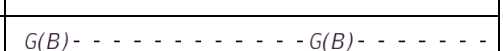
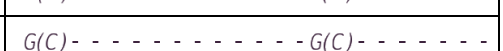
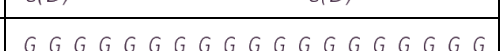
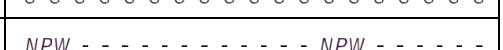
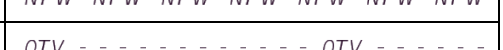
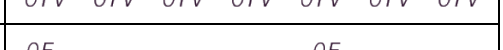
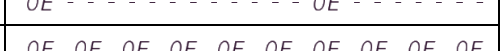
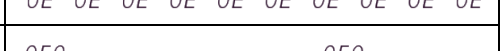
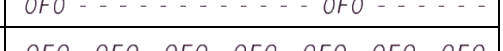
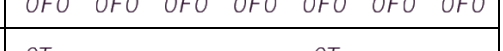
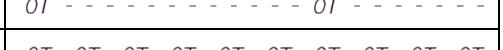
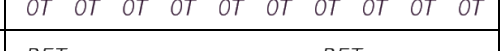
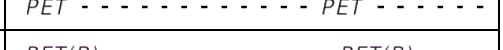
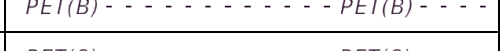
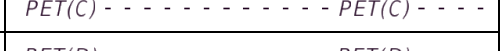
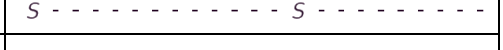
Note *MicroStation Line Styles containing leaders and some complex striping are not created as AutoCAD linetypes in the FDOT State Kit for Civil 3D. The Place Block Group and Pavement Marking tool can create additional striping for AutoCAD.

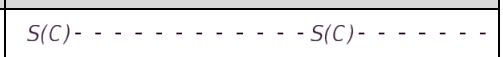
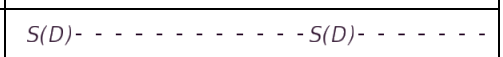
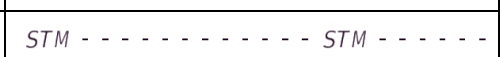
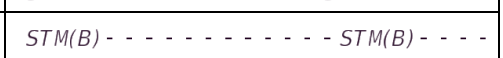
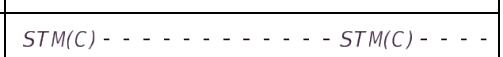
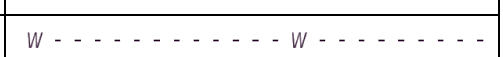
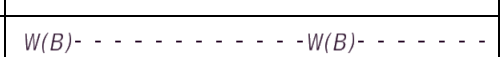
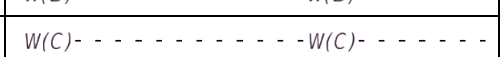
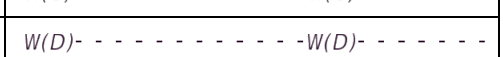
Name	Description	Sample Image
{Chain Double-Dash}	Default MicroStation	
{Curtain}	Default MicroStation	
MOT-Attenuator	Attenuator	
MOT-Barricade-100Gap	Barricade100’ Gap	
MOT-Barricade-15Gap	Barricade15’ Gap	
MOT-Barricade-30Gap	Barricade30’ Gap	
MOT-Barricade-50Gap	Barricade50’ Gap	
MOT-ChannelDevPed	Channelizing Device Pedestrian	
MOT-Cone-25Gap	Cone 25’ Gap	
MOT-Cone-50Gap	Cone 50’ Gap	
MOT-Drum-100Gap	Drum 100' Gap	
MOT-Drum-15Gap	Drum 15' Gap	
MOT-Drum-30Gap	Drum 30' Gap	
MOT-Drum-50Gap	Drum 50' Gap	
MOT-Sign-200Gap	Sign 200' Gap	
MOT-Sign-400Gap	Sign 400' Gap	
MOT-Sign-500Gap	Sign 500' Gap	
PM-Delineator-300Gap*	Delineator Point 300’ Gap	
PM-Delineator-40Gap*	Delineator Point 40’ Gap	
PM-RPM-1.5Gap*	Reflective Pavement Markers 1.5’ Gap	
PM-RPM-10Gap*	Reflective Pavement Markers 10’ Gap	
PM-RPM-20Gap*	Reflective Pavement Markers 20’ Gap	
PM-RPM-30Gap*	Reflective Pavement Markers 30’ Gap	
PM-RPM-40Gap*	Reflective Pavement Markers 40’ Gap	
PM-RumbleSkip	Rumble Strip Skip	
PM-RumbleSolid	Rumble Strip Solid	
PM-Stripe-10'_20’Skip	10’/30’ Contrast Skip Stiping	
PM-Stripe-10' Crosswalk	Crosswalk 10ft Component	
PM-Stripe-6' Crosswalk	Crosswalk 6ft Component	
PM-Stripe-RumbleStripeLeft	Rumble Striping Left	

Name	Description	Sample Image
PM-Stripe-RumbleStripeRight	Rumble Striping Right	
PM-Stripe-VibratoryLeft	Vibratory Line Left	
PM-Stripe-VibratoryRight	Vibratory Line Right	
PM-Stripe-YieldLarge	Yield Large	
PM-Stripe-YieldSmall	Yield Triangle Component	
RD-CableBarrier	Cable Barrier	
RD-DirectionalBore	Directional Bore	
RD-Fence	Fence Line	
RD-Fence-Left	Fence Left	
RD-Fence-Right	Fence Right	
RD-Guardrail-Double	Guardrail Double	
RD-Guardrail-Left	Guardrail Left	
RD-Guardrail-Right	Guardrail Right	
RD-LaneLine-Existing	Lane Line Existing	
RD-PavedShldr 10'	Paved Shoulder Pattern 10’	
RD-PavedShldr 12'	Paved Shoulder Pattern 12’	
RD-PavedShldr 15'	Paved Shoulder Pattern 15’	
RD-PavedShldr 2'	Paved Shoulder Pattern 2’	
RD-PavedShldr 4'	Paved Shoulder Pattern 4’	
RD-PavedShldr 5'	Paved Shoulder Pattern 5’	
RD-PavedShldr 6'	Paved Shoulder Pattern 6’	
RD-PavedShldr 8'	Paved Shoulder Pattern 8’	
RD-Railroad-Existing	Railroad Existing	
RD-Railroad-Proposed	Railroad Proposed	
RD-TreeLine	Tree Line	
RD-Wetland-Existing	Wetland Existing	
RD-Wetland-Proposed	Wetland Proposed	
RW-ArrowTie*	Dimension Existing	
RW-CityLimit-Type1	City Limit	
RW-CityLimit-Type2	City Limit	
RW-CountyLine	County Line	
RW-Dimension-Type1*	Dimension Type 1	
RW-Dimension-Type2*	Dimension Type 2	

Name	Description	Sample Image
RW-Easement	Easement Stroke	
RW-EasementCL-Existing	Existing Easement Centerline	
RW-Existing	Existing Right of Way	
RW-GrantLine	Government: Grant Line	
RW-Leader*	Arrow	
RW-LeaderLeft*	Begin End Leader Left	
RW-LeaderRight*	Begin End Leader Right	
RW-License	License (Agreement)	
RW-LimitedAccess-Existing	Existing Limited Access	
RW-LimitedAccess-Proposed	Proposed Limited Access	
RW-LimitsofConst	Limits of Construction	
RW-Nat/StPark/Forest-Type1	National or State Forest Park	
RW-Nat/StPark/Forest-Type2	National or State Forest Park Hash	
RW-NonVehicularAccess	Non-Vehicular Access Line	
RW-PerpetualEasement	Perpetual Easement	
RW-PropertyLine	Property Line	
RW-Proposed	Proposed Right of Way	
RW-QuarterSection	Quarter Section	
RW-RailroadBL	RailRoad	
RW-SectionLine	Section Line	
RW-StateLine	Government: State Line	
RW-Subdiv-Double*	Subdivision Boundary Arrows Double	
RW-Subdiv-DoubleLeft*	Subdivision Boundary Arrows Two Left	
RW-Subdiv-DoubleLeftOnly*	Subdivision Boundary Arrows Two Left Only	
RW-Subdiv-DoubleRight*	Subdivision Boundary Arrows Two Right	
RW-Subdiv-DoubleRightOnly*	Subdivision Boundary Arrows Two Right Only	
RW-Subdiv-Single*	Subdivision Boundary Arrows	
RW-Subdiv-SingleLeft*	Subdivision Boundary Arrows Single Left	
RW-Subdiv-SingleRight*	Subdivision Boundary Arrows Single Right	
RW-TemporaryEasement	Easements Temporary	
RW-TIITFMurphyResLine	Safe Upland TIITF - Murphy Reservation	
RW-TownshipRange	Township Range	
RW-WaterMapBoundary	Major Water Mapping Boundary	

Name	Description	Sample Image
SG-Cable	Signal Cable	
SG-Conduit-Type1	Conduit Type 1	
SG-Conduit-Type2	Conduit Type 2	
SG-ConduitAG-Proposed	Conduit – Above Ground	
SG-ConduitBM-Proposed	Conduit – Bridge Mount	
SG-ConduitDB-Proposed	Conduit – Directional Bore	
SG-ConduitJB-Proposed	Conduit – Jack & Bore	
SG-ConduitOT-Proposed	Conduit – Open Trench	
SG-InterconCable-Existing	Interconnect Cable Existing	
SG-InterconCable-Proposed	Interconnect Cable Proposed	
SWP-HayBales	Hay Bales	
SWP-RockBags	Rock Bag Symbols	
SWP-SiltFence	Silt Fence	
SWP-TurbidityBarrier-Type1	Turbidity Barrier Type 1	
SWP-TurbidityBarrier-Type2	Turbidity Barrier Type 2	
UT-BuriedCable-Existing	Buried Cable TV Existing	BTV - - - - - - - - - - - - BTV - - - - - -
UT-BuriedCable-Existing(B)	Buried Cable TV Existing Type B	BTV(B) - - - - - - - - - - - - BTV(B) - - - -
UT-BuriedCable-Existing(C)	Buried Cable TV Existing Type C	BTV(C) - - - - - - - - - - - - BTV(C) - - - -
UT-BuriedCable-Existing(D)	Buried Cable TV Existing Type D	BTV(D) - - - - - - - - - - - - BTV(D) - - - -
UT-BuriedCable-Proposed	Buried Cable TV Proposed	BTV BTV BTV BTV BTV BTV BTV
UT-BuriedElec-Existing	Buried Electric Existing	BE - - - - - - - - - - - - BE - - - - - - -
UT-BuriedElec-Existing(B)	Buried Electric Existing Type B	BE(B) - - - - - - - - - - - - BE(B) - - - - - -
UT-BuriedElec-Existing(C)	Buried Electric Existing Type C	BE(C) - - - - - - - - - - - - BE(C) - - - - - -
UT-BuriedElec-Existing(D)	Buried Electric Existing Type D	BE(D) - - - - - - - - - - - - BE(D) - - - - - -
UT-BuriedElec-Proposed	Buried Electric Proposed	BE BE BE BE BE BE BE BE BE BE
UT-BuriedFiberOptic-Existing	Buried Fiber Optic Existing	BFO - - - - - - - - - - - - BFO - - - - - -
UT-BuriedFiberOptic-Existing(B)	Buried Fiber Optic Existing Type B	BFO(B) - - - - - - - - - - - - BFO(B) - - - -
UT-BuriedFiberOptic-Existing(C)	Buried Fiber Optic Existing Type C	BFO(C) - - - - - - - - - - - - BFO(C) - - - -
UT-BuriedFiberOptic-Existing(D)	Buried Fiber Optic Existing Type D	BFO(D) - - - - - - - - - - - - BFO(D) - - - -
UT-BuriedFiberOptic-Proposed	Buried Fiber Optic Proposed	BFO BFO BFO BFO BFO BFO BFO
UT-BuriedTel-Existing	Buried Telephone Existing	BT - - - - - - - - - - - - BT - - - - - - -
UT-BuriedTel-Existing(B)	Buried Telephone Existing Type B	BT(B) - - - - - - - - - - - - BT(B) - - - - - -
UT-BuriedTel-Existing(C)	Buried Telephone Existing Type C	BT(C) - - - - - - - - - - - - BT(C) - - - - - -

Name	Description	Sample Image
UT-BuriedTel-Existing(D)	Buried Telephone Existing Type D	
UT-BuriedTel-Proposed	Buried Telephone Proposed	
UT-Casing-Existing	Encasement Existing	
UT-Casing-Existing(B)	Encasement Existing Type B	
UT-Casing-Existing(C)	Encasement Existing Type C	
UT-Casing-Existing(D)	Encasement Existing Type D	
UT-Casing-Proposed	Encasement Proposed	
UT-Duct-Proposed	Duct Proposed	
UT-Gas-Existing	Gas Existing	
UT-Gas-Existing(B)	Gas Existing Type B	
UT-Gas-Existing(C)	Gas Existing Type C	
UT-Gas-Existing(D)	Gas Existing Type D	
UT-Gas-Proposed	Gas Proposed	
UT-NonPotableWater-Existing	Non-Potable Water Existing	
UT-NonPotableWater-Existing(B)	Non-Potable Water Existing Type B	
UT-NonPotableWater-Existing(C)	Non-Potable Water Existing Type C	
UT-NonPotableWater-Existing(D)	Non-Potable Water Existing Type D	
UT-NonPotableWater-Proposed	Non-Potable Water Proposed	
UT-OverheadCable-Existing	Overhead Cable TV Existing	
UT-OverheadCable-Proposed	Overhead Cable TV Proposed	
UT-OverheadElec-Existing	Overhead Electric Existing	
UT-OverheadElec-Proposed	Overhead Electric Proposed	
UT-OverheadFiberOptic-Existing	Overhead Fiber Optic Existing	
UT-OverheadFiberOptic-Propopsed	Overhead Fiber Optic Proposed	
UT-OverheadTel-Existing	Overhead Telephone Existing	
UT-OverheadTel-Proposed	Overhead Telephone Proposed	
UT-Petroleum-Existing	Petroleum Existing	
UT-Petroleum-Existing(B)	Petroleum Existing Type B	
UT-Petroleum-Existing(C)	Petroleum Existing Type C	
UT-Petroleum-Existing(D)	Petroleum Existing Type D	
UT-Petroleum-Proposed	Petroleum Proposed	
UT-Sanitary-Existing	Sanitary Existing	
UT-Sanitary-Existing(B)	Sanitary Existing Type B	

Name	Description	Sample Image
UT-Sanitary-Existing(C)	Sanitary Existing Type C	
UT-Sanitary-Existing(D)	Sanitary Existing Type D	
UT-Sanitary-Proposed	Sanitary Proposed	
UT-Steam-Existing	Steam Existing	
UT-Steam-Existing(B)	Steam Existing Type B	
UT-Steam-Existing(C)	Steam Existing Type C	
UT-Steam-Existing(D)	Steam Existing Type D	
UT-Steam-Proposed	Steam Proposed	
UT-Water-Existing	Water Existing	
UT-Water-Existing(B)	Water Existing Type B	
UT-Water-Existing(C)	Water Existing Type C	
UT-Water-Existing(D)	Water Existing Type D	
UT-Water-Proposed	Water Proposed	

3.8 CELL LIBRARIES / BLOCK DRAWINGS

Cells / Blocks are frequently used as repeated components of drawings made up of complex symbols, notations, details, or parts that can be inserted into one or many drawings. Cells are defined and stored in MicroStation design files called a Cell Libraries with *.cel* file extensions and in AutoCAD are called Blocks Drawings. (Multiple block collections stored in drawings will be referred to as "Block Libraries") with a .DWG file extensions.

Cells / Blocks have been grouped by disciplinary usage into the Department's Standard Cell Libraries delivered with the CADD Software suite for Bentley located under the FDOTXXX\RESOURCES\Cell subfolder and Block Drawings delivered in the FDOT State Kit for AutoCAD located under the FDOTXXXX.C3D\Data\Blocks subfolder.

The Department's Standard Cell Libraries / Block Drawings are listed in the following table:

Note AutoCAD Block Drawings can be accessed via AutoCAD's Design Center.

MicroStation CELL LIBRARIES	AutoCAD BLOCK DRAWINGS	DESCRIPTION
alphabet.cel	*(Not Applicable)*	Alphabet & Numbers
arrows.cel	arrows.dwg	Distance & GuidSIGN Arrows
(Not Applicable)	BoreHOLE.dwg	Bore Holes
Drain3D.cel	*(Not Applicable)*	Drainage (3 Dimensional)
DrainXS.cel	DrainXS.dwg	Drainage Structure Cross Sections
(Not Applicable)	Driveway.dwg	Driveways
drplan.cel	drplan.dwg	Drainage Proposed
drplan_ex.cel	drplan_ex.dwg	Drainage Existing
ftpsigns.cel	ftpsigns.dwg	Florida Traffic Plans Signs
geotech.cel	geotech.dwg	Geotechnical
its.cel	its.dwg	Intelligent Transportation Systems Signs
Landscape.cel	Landscape.dwg	Landscape
Lighting.cel	Lighting.dwg	Lighting
Mutcd.cel	mutcd.dwg	Manual on Uniform Traffic Control Devices
PavementMarkings.cel	pavementMarkings.dwg	Pavement Markings
Photogrammetry.cel	Photo.dwg	Photogrammetry
Roadway.cel	Roadway.dwg	Roadway
row.cel	ROW.dwg	Right of Way
rweng.cel	rweng.dwg	Survey Symbols for Right of Way
Seals.cel	Seals.dwg	Professional Seals for Digital Signatories
(Not Applicable)	Sheet Border.dwg	Sheet Borders
Signalization.cel	Signalization.dwg	Signalization
SignalPoles.cel	SignalPoles.dwg	Signal Poles
syeng.cel	syeng.dwg	Survey Symbols for Roadway
TollPlaza.cel	TollPlaza.dwg	Toll Plaza Signs
tplabels.cel	tplabels.dwg	Traffic Plans Labels
TrafficControl.cel	TrafficControl.dwg	Traffic Control
ttf_v8semi-standards.cel	Semi-Standards.dwg	Structures Semi-standards
ttf_v8structures.cel	Structures.dwg	Structures
TypicalSection.cel	TypicalSections. dwg	Typical Sections
utilities.cel	utilities.dwg	Utilities
Utilities3D.cel	*(Not Applicable)*	Utilities (3 Dimensional)
v8structurespatterns.cel	*(Not Applicable)*	Patterns for Structures
XMSuperSection.cel	*(Not Applicable)*	Structures for Super sections
xsections.cel	*(Not Applicable)*	Cross Sections

3.9 TEXT

The Department delivers a set of True Type Font (TTF) files to ensure text uniformity between applications supporting TTF fonts and legibility of CADD drawings. The Department's CADD Software delivers a set of proportional and uniformed spaced True Type Font files using vertical and slanted characters, the detail of which is reflected in the following table. These font files have additional characters added into the gaps of the Unicode definition so engineering symbols like: ℄, ℻, ℔, Δ and fraction combinations are supported in the fonts directly. The classical MicroStation based *zdotfont.rsc* and *structuresfont.rsc* resource files are also delivered with the CADD Software to maintain legacy usage files predating the use of True Type fonts.

MicroStation can utilize fonts contained within MicroStation RSC, AutoCAD SHX, and True Type Font files. MicroStation will read multiple font resource files according to the paths set by the MS_FONTPATH configuration variable in the selected workspace, and True Types Fonts registered with the Windows operating system. Within a MicroStation design file, font resources are compiled into a list of fonts from all the resource files that are found. The *MstnFontConfig.xml* file located by the MS_FONTCONFIGFILE variable determines if duplicate font names are displayed in font selection and lists how to resolve duplicate font names.

3.9.1 True Type Fonts (TTF)

The Department's TTF files contain special characters used by designers that are not normally found in standard publishing fonts. (*See the Unicode mapping standard: **http://www.unicode.org/charts/***)

Note If the Department's TTF files are registered with the Windows operating system, the fonts may be used in any standard Windows program like Word, Excel, or other applications supporting TTF.

Font	Description
FDOT	Standard slanted proportional spaced font used for most annotations
FDOT Bold	Bold version of the FDOT font
FDOT Heavy	Heavier Bold version of the FDOT font
FDOT Imprint	Chiseled font used mainly within the FDOT sheet border
FDOT Imprint Bold	Bold version of FDOTImprint font
FDOT Mono	Standard mono-spaced font used mainly in tables to keep characters aligned vertically
FDOT Mono Bold	Bold version of FDOTMono font
FDOT Mono Heavy	Heavier Bold version of FDOTMono font
FDOT Vert	Non-slanted proportional spaced version of FDOT font used mainly by Right Of Way discipline
FDOT Vert Bold	Bold version of FDOTVert font used mainly by ROW
FDOT Vert Heavy	Heavier Bold version of FDOTVert font used mainly by ROW
FDOT Vert Mono	Mono-spaced version for FDOTVert font used mainly in tables used mainly by ROW
FDOT Vert Mono Bold	Bold version of FDOTVertMono font used mainly by ROW
FDOT Vert Mono Heavy	Heavier Bold version of FDOTVertMono font used mainly by ROW

3.9.2 Legacy MicroStation Fonts

The fonts within *zdotfont.rsc* resource file are no longer in use, but must be maintained for backward compatibility purposes in legacy drawings.

3.9.3 Size and Spacing

The Department employs standard text sizes to ensure uniformity and legibility on CADD drawings and for plotted output. The appropriate text size is dependent on the plot scale selected. Since the most important issue with text is legibility, the font, weight and text size may vary as necessary. Text line spacing should be, on average, three-fourths of the text height.

The Department's CADD Software provides several Text Levels and Text Styles for designers to choose as a starting point to create text to fit their needs. Text Levels can be identified by the naming convention beginning with "Text".

The following table should be used as a guideline for standard text size definitions for plans at given scales.

- ***Text for B-Size Plans (11" x 17" paper)***

Scale	1"=1'	1"=20'	1"=40'	1"=50'	1"=100'	1"=200'	1"=400'	1"=500'
Minimum	0.06	1.2	2.4	3	6	12	24	30
Desired	0.07	1.4	2.8	3.5	7	14	28	35
Maximum	0.10	2	4	5	10	20	40	50

- ***Text for D-Size Maps (24" x 36" paper)***

Scale	1"=1'	1"=20'	1"=40'	1"=50'	1"=100'	1"=200'	1"=400'	1"=500'
Minimum	0.08	1.6	3.2	4	8	16	32	40
Desired	0.10	2	4	5	10	20	40	50

3.10 MICROSTATION PRINT RESOURCE FILES

The Department's CADD Software supplies MicroStation print configuration example files to generate prints to scale using the sheet cells (also provided with the CADD Software) on specific printers. All print configuration files supplied have raster printing enabled. These print configuration files are examples due to various site-specific configurations and the types of printers that might be encountered.

The table below lists the print configuration file names and the type of printer on which it was developed and tested. Each printer has its own printable area on the paper for which it can print. For this reason, if a specific printer is not listed below but is used to generate prints, the print configuration file may require modification by the user.

PRINT RESOURCE FILES	PRINTER	DESCRIPTION
36x24.pro	N/A	Controls postscript image/print output
Color.plt		Color 11x17 (Raster Capable) Uses FDOT.TBL pen table and PSCRIPT.PRO prolog file.
Color_FDOTPDF.pltcfg	N/A	Creates a color PDF file. (Raster Capable) Uses FDOT.TBL pen table.
Color_Keysheet.pltcfg	ANY	To be used when printing key sheets containing maps with filled shapes.
FDOT.tbl	N/A	Pen table that also enters username, date time, and sheet border path.
FDOT_GrayExisting.tbl	N\A	Pen table that enters username, date time, sheet border path, and applies gray scale to files named like: TOPO*, UTEX*, and DREX*
FDOTbatchplt.spc	N/A	Batch print specification file customized for the Department's print configuration files. (Only used with old Batch Print dialog). This print configuration file is being replaced with Print Styles in MicroStation V8i)
FDOTPDF.plt	N/A	Creates a .PDF file. (Raster Capable) Uses FDOT.TBL pen table.
FDOTprinter.plt	Windows Printer	Copy of Bentley's PRINTER.PLT with weights and styles set to CADD standards. Uses FDOT.TBL pen table.
HP1055.plt	HP 1055 CM	Monochrome 36x24 (Raster Capable) Uses 36x24.PRO prolog file.
HP1055C.plt	HP 1055 CM	Color 36x24 (Raster Capable) Uses 36x24.PRO prolog file.
HP5000.plt	HP 5000 GN	Monochrome 11x17 (Raster Capable) Uses FDOT.TBL pen table and HPTTABL1.PRO prolog file.
HP5000Legal.plt	HP 5000 GN	Monochrome 8.5x14 (Raster Capable) Uses FDOT.TBL pen table and HPTLEGAL.PRO prolog file.
HP5000Letter.plt	HP 5000 GN	Monochrome 8.5x11 (Raster Capable) Uses FDOT.TBL pen table and HPTLETTER.PRO prolog file.
hpglrtl.pltcfg	Large Format	Intended for use when printing large format monochrome sheets. (Raster Capable)
hpglrtl_c.pltcfg	Large Format	Intended for use when printing large format color sheets. (Raster Capable)
PostScript.plt	N/A	Creates postscript image file. (Raster Capable) Uses FDOT.TBL pen table and HPTTABL1.PRO prolog file.
Postscript36x24.plt	N/A	Creates postscript image file. (Raster Capable) Uses FDOT.TBL pen table and 36x24.PRO prolog file.
pscript.pro	N/A	Controls postscript image/print output
XeroxN40.plt	XEROX Docuprint N4025	Monochrome 11x17 (Raster Capable) Uses FDOT.TBL pen table and HPTTABL1.PRO prolog file.

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Chapter 4

CADD PRODUCTION PROCEDURES

4.1 PURPOSE

This chapter establishes the minimum requirements for the production of the Florida Department of Transportation's (Department's) Computer Aided Design and Drafting (CADD) projects in accordance with the Department's plans preparation procedures and practices.

4.2 SCOPE

These procedures are applicable to the CADD applications utilized by and for the Department in the production process. They are intended to complement and support the policies, procedures and standards of the Department in accordance with ***Procedure No. 025-020-002, Standard Operating System***.

4.3 ACCOUNTABILITY

These procedures do not exempt the professional from performing responsible engineering, surveying and mapping or architecture. The policies and procedures of the Department and appropriate professional practice take precedence when providing professional services for the Department. The professional will have final responsibility for the accuracy of all input and output of CADD applications.

4.4 DEFINITIONS

Bid Set: A file set consisting of a data sub-set derived from the Project Data Set (Project CD) containing only those files needed for the advertisement and letting of a project. The files needed for the Bid Set remain in their source folders derived from the Project Data set. The SetMaker application can be used to create the Bid Set from the project data set for classical Electronic Delivery projects. For Digital Delivery projects, the data delivered is usually compiled manually.

Note After the June 2015 letting, only Digital Delivery projects will be accepted.

CADD Production: The development of projects utilizing CADD applications, software and discipline processes.

CES: Cost Estimating System. The Department's program for estimating construction cost for projects.

Change Report: For Classical Electronic Delivery projects where an Index is produced, this is an HTML report created by the Project 'Delta' application containing information about sheet-specific differences between a secured project data set and a revised project data set. It is a comparison between the indexes (ProjectIndex.XML) of an earlier delivery of a project and a contemporary delivery of a project. Also see Revision Report. For Digital Delivery projects, this report is not produced.

Digital Delivery: A contemporary method to deliver project data which relies upon creating a ZIP of project data, Portable Document Format (PDF) files of Plans and Specifications, which are signed and sealed with a Digital Signature (as opposed to Professional Electronic Data Delivery System (PEDDS)). Digital Delivery streamlines the production process because no Index is produced or maintained nor the software used for those processes.

Note After June 2015 letting, only Digital Delivery projects will be accepted.

Electronic Delivery: The classical method of project data delivery which relies on producing and maintaining an Index, and securing that data with PEDDS.

Electronic Delivery Indexer (EDI): An application used to build an index for a set of plans for classical Electronic Delivery projects. EDI also helps develop the project Journals, and helps produce printed document image files of the plans sheets.

Electronic Journal: Electronic file(s) that document development, correspondence, decisions made, methodology used, exceptions to standards, and other descriptive information about the project. The Electronic Journal includes details that will give future users insight about the project data.

File Checker: An application to assist with the verification of Quality Control (QC) compliance to Electronic Delivery standards, such as folder structure, file naming, etcetera.

Hash Code: See Message Digest.

Index: An XML file (ProjectIndex.XML) created by EDI or Sheet Set Organizer (SSO) that contains metadata concerning all print image files that have been identified as sheets and the design files from where they were produced. This file resides at the root folder of the project.

Note Digital Delivery projects do not require an Index.

Journal: See Electronic Journal.

Letting: The process of advertising, selection, and award of a contract for the construction of a project.

Letting CD: The compact disk or other media prepared for the letting process consisting of plans, specifications, and a front-end "kiosk" application that offers easy access to bidding documents. Letting CDs are produced for Electronic Delivery projects, however they are not for Digital Delivery.

Manifest Document: A wet-ink signed (not sealed) paper document, output by PEDDS, used to secure a PEDDS Manifest file (Manifest.XML) which also references the Signature files in a project. Manifest Documents are not produced for Digital Delivery.

Manifest File: The XML file (Manifest.XML), used by PEDDS to define and secure the entire contents of the project folder for Electronic Delivery. This file resides in the project's _meta_info sub-folder. The Manifest file lists the project's files by their relative URL and SHA-1 hash-codes.

Message Digest: Often referred to as a hash code, represented as an alphanumeric string of hexadecimal characters (0–9, A–F) that is generated by a one-way cryptographic hashing algorithm (federal SHA-1) and is used by PEDDS to uniquely identify a file based solely upon the file's contents.

PEDDS: An application used to secure a project or sub-sets of files signed/sealed by a signatory. PEDDS is used for Electronic Delivery, not Digital Delivery.

PEDDS Information: The electronic files and paper documents created by PEDDS to secure the delivery and sign / seal selected files within that Electronic Delivery.

Plans Change: **(**Plans Preparation Manual (PPM) Vol. 1, Chapter 20 definition) Modification to a set of plans, after the Estimates department has changed the Control Group, but before the plans are sent to the Department's Central Office.

Project: Projects are identified by the Department through the Financial Project Identification Number (FPID) which becomes the name of the project's root data folder and related project identification information. Multiple deliveries can occur for a single project, each representing the status of the project at the time of delivery.

Project Component: All electronic files that represent and support a delivery by a discipline as part of a project.

Project Component Folder: The data structure and organization of electronic files on storage media, as a sub-folder of the project's root folder.

Project Data Set: All of the electronic files used or produced during the development of the project in the Project Folder.

ProjectDelta: An application used to reveal file changes after revisions and corrections. ProjectDelta reports any differences between the indexes of two different deliveries of the same project. ProjectDelta creates the Revision Report (Deltandx#.htm) and Change Report, where # is the revision number. ProjectDelta is not used on Digital Delivery projects.

Project Folder: The parent folder containing all project component Folders and ancillary data (see Project Root Folder).

Project Index File: A file that lists and briefly describes critical files contained in a delivery. The Project Index file is part of the Electronic Project Delivery, and not used in Digital Delivery.

Project Key: An alphanumeric character string (a Global Unique Identifier (GUID)), generated at the time of project creation that uniquely identifies a project. This number is unique across all project deliveries of the same project. This number is printed by PEDDS on the Manifest report.

Project Manager: The person responsible for ensuring that the scope of work is accomplished for a project and the receipt, acknowledgment, validation and acceptance of the project data.

Project Root Folder: The file system folder that contains all of the projects' files and folders. The project root folder should not contain files that do not pertain to the project, nor should files that are part of the project reside outside of the project root folder, or one of its sub-folders.

qSheet: A printing application used to print all or part of an indexed project sheet set. qSheet uses the Project Index (ProjectIndex.XML) and Revision Reports (Deltandx#.htm) as input. qSheet is not used for Digital Delivery projects.

Reference File: A design file that is attached to and viewed simultaneously with the active design file.

Resolution: The number of addressable points across a given area. For example, plotter resolution is measured in lines or dots per inch, while screen resolution is usually given with two numbers indicating the number of pixels across the width and height of the largest image that can be displayed. MicroStation design files also have a user-definable resolution.

Root Certificate: Cryptographic information installed on a computer that identifies the Certificate Authority and allows the identity of the Signatory to be validated against the identity records held by the Certificate Authority. This process usually requires a connection to the Internet.

Seed File: A predefined settings file used to create a new design file or cell library.

Seed Project: A predefined folder structure that contains all folders listed further in this chapter, as well as other project configuration files. The "seed" is the beginning structure of a project which gets populated with data as the project development occurs.

Set Maker: An application to extract a project subset from a secure project delivery.

Note This application is not used in Digital Delivery projects, as it relies upon both an index and the source project data set to be secured by PEDDS.

SHA-1 Hash Standard: United States Secure Hash Algorithm 1 (SHA-1) is a secure hash standard which produces a unique code representing a data file. The SHA-1 is called "secure" because it is computationally infeasible to find two files of different content which produce the same hash.

Sheet Index: See Index.

Sheet Index Report: For classical Electronic Delivery, an HTML report (Sheetndx#.HTM) which is derived from the Index (ProjectIndex.XML). The original delivery file name is Sheetndx.htm. For subsequent deliveries, the report file is named Sheetndx#.HTM, where # is the revision number, and resides in the project's root folder. For Digital Delivery projects this report is not produced.

Sheet Navigator: An application which runs inside MicroStation, allowing users to browse and open MicroStation files containing sheets for verification or editing. Its purpose is to 'tag' sheets with data that supports later processes for both Indexing and Printing. It is a foundation utility for delivery processes and should be run against every MicroStation design file containing sheets.

Sheet Set Organizer: An application which runs in conjunction with AutoCAD Sheet Set Manager. Its purpose is to combine and organize .DST files created by Sheet Set Manager. It updates fields with data that supports later indexing and printing. It is a foundation utility for subsequent delivery processes using AutoCAD Civil 3D, ensuring sheet data can be extracted properly.

Strung Project: Two or more projects let in the same contract. For classical Electronic Delivery, Bid Set CD subsets for those projects may be assembled into a folder structure representing the Strung Project. An application called 'StrungProject' is provided to help perform this function.

Note Project CD datasets (contrast with Bid Sets CD subsets) are never merged for stringing – only Bid Set subsets extracted from Project CD datasets.

Digital Delivery simplifies the delivery – each Subset of a Strung Project is delivered separately. The StrungProject application is not used and data between *Lead* and *Goes-With* projects are never intermingled.

Standard Operating Instructions: Instructions for operating CADD applications intended to help guide the user in CADD production activities.

4.5 REFERENCES

Standard Operating System, Topic No. 025-020-002

Plans Preparation Manual Vol. I & II, Topic Nos. 625-000-007/625-000-008

4.6 CADD RESOURCES

The CADD Manual is produced and maintained by Engineering / CADD Systems Office (ECSO). ECSO updates and distributes the CADD Manual in conjunction with CADD Software releases. It is the responsibility of CADD Managers to provide the latest CADD software and resources.

4.7 STANDARD PROJECT FOLDER

The data for each of the Department's projects is organized and delivered using a standard folder structure defined in this chapter. This promotes consistency, predictability and repeatability (CPR). To ensure the uniqueness of the project folder name, the project folder root folder will be named the Department's FPID, using all eleven digits. New projects should be created using tools developed and provided by the ECSO, and delivered with the CADD Software. The Department provides an application called FileChecker to help confirm folder structures and file names.

4.7.1 Electronic Delivery versus Digital Delivery Projects

In August of 2003, The Department directed that all plans prepared with CADD would be delivered electronically. The classical Electronic Delivery process and the tools available to support that process were required. Several of the following chapters will describe the more efficient Digital Delivery processes and deliverables in contrast to the classical Electronic Delivery.

Note The June 2015 letting will be the last projects accepted using the classical Electronic Delivery processes.

4.7.2 Create Project

The Create Project application creates the project folder structure and prompts the user for additional project specific information. This project structure is a copy of the Department's standard folder structure created under the project folder FPID name as defined in this chapter. The project folder contains standard sub-folders for defined disciplines, PEDDS data, along with support and resource files specific to the project.

For classical Electronic Delivery projects, when a sub-folder is not used in a specific project, the unused sub-folder in the standard folder structure will remain intact. The _meta_info sub-folder contains the files created and used by PEDDS and used by the Florida Department of Transportation (FDOT) Workspace to establish the top level of the project folder structure. Therefore only one _meta_info sub-folder will exist anywhere in a project's folder structure.

Digital Delivery projects allow unused sub-folders of the project folder to be deleted. Sub-folders have a purpose for the file content they will receive. For example, a cell library developed for a specific project has a dedicated holding sub-folder named \Cell in the standard project folder structure. Digital Delivery projects do not use PEDDS for Signing and Sealing, instead relying upon certificate based Digital Signatures. Regardless, the _meta_info sub-folder will remain in the project folder and used by the FDOT Workspace to establish the top level of the project folder structure.

Note Specification Only Projects will not have a _meta_info sub-folder. See Section 4.28.

4.7.3 Discipline Sub-Folders

The discipline sub-folders are defined for the division of work by file ownership. Roadway designers would typically place their files (the files they create and "own") under the *Roadway* sub-folder, Surveyors under the *Survey* sub-folder, and so forth. In some cases, disciplines may have work that overlaps with other areas of a design.

For example, if a roadway designer develops the drainage sheets, the files produced would, by the above convention, go in the *Roadway* folder rather than the \Drainage folder as the "Roadway" designer is the owner of the work. However, if so desired, the files could be put in the *Drainage* sub-folder, but file management permissions (for access control systems such as TIMS, ProjectWise, etc.) must be taken into consideration.

4.7.3.1 Custom Sub-Folders

In some cases, it is desirable to create "non-standard" or custom sub-folders for additional segregation of work. This is common when multiple parties work on a single discipline design and the data must be managed and merged, or when subdivision of the files into additional folders just makes sense. These additional sub-folders can be created under the discipline specific standard project sub-folders to accommodate these circumstances, but are not to be created under the root folder for the project. **These custom sub-folders will adhere to the restrictions for sub-folder names as defined below:**

Certain characters are not recognized by some programs for sub-folder names and must be avoided. Limited alphanumeric characters, dashes (-), and underscores (_) are the only permissible characters. Spaces are not to be used in any folder or file name for the Department's projects. Folder names must not exceed 16 characters.

Examples of characters that should NEVER be used in sub-folder (or file) names include: &, %, |, $, ?, <, >, !, and so forth (even if permissible by the Windows Operating System (OS). Some characters represent escape sequences to certain programs and will cause problems.

Full path lengths are also generally limited to 255 characters total. Overall path length must be taken into account when creating folder (and file) names and limit the number of sub-folder levels below the project level. Remember that the computer (or application) must resolve the full Universal Naming Convention (UNC) path length, even if you have a path mapped to a logical drive letter during development which could exceed the 255 character limit for some applications. Try to keep your custom folder and file names as concise as possible.

4.7.3.2 Engineering Data sub-folders

Each discipline sub-folder contains an additional sub-folder named \eng_data. These sub-folders are designated to hold the sheet image files of the plan sheets if printed for that discipline and the QC reports (produced by the QC tools).

Note In a Digital Delivery, plan sheets will usually not be printed to the \eng_data sub-folder, but instead printed directly to a multi-sheet PDF of the plans (stored in the root folder of the project). If there are no files in the sub-folders, then those sub-folders can be omitted in Digital Delivery.

4.7.4 Standard Project Folder Structure

The Department's standard project folder structure and file naming conventions are based on the anticipated workflow of the Department's projects and the separation of work.

- For classical Electronic Delivery projects, none of the sub-folders shown in the following table are to be renamed or deleted. The standard folder structure with all subdirectories will be delivered with the Project CD delivery.
- For Digital Delivery projects, any unused (empty) sub-folder can be deleted when delivered with the exception of the _meta_info sub-folder.

The following table displays the standard project folder structure with descriptive purpose:

Folder Names	Purpose
Project Name (FPID)	Root Project Folder: - - For Digital Delivery projects, this contains: *fpid*-PLANS.PDF - - For Classical Electronic Delivery Project, this contains: Project.pdf, FileChecker.htm, ProjectIndex.xml, SheetInfo.xml, SheetNDX.htm, etc.
_meta_info	Files used by the PEDDS application (and the FDOT Workspace)
_Shortcuts	Data shortcuts (data for Civil 3D projects only - not used by MicroStation)
\3DDeliverables	Copies of specific Design Files for Contractor convenience for 3D models, includes LandXML files of critical geometrics and surfaces
\admin	Administrative documents (email, correspondence, etc.)
\eng_data	* Typically contain prints of plan sheets (Electronic Delivery only) and QC reports
\arch	Architectural design files
\eng_data	*
\brinspect	Bridge Inspection files
\eng_data	*
\calculations	Summary Table Excel files and any associated quantity backup data
\Cell (Block)	Project specific cell libraries (or project block libraries created for Civil 3D)
\concepts	Various preliminary concepts
\eng_data	*
\const	Construction files (i.e.: "As-builts")
\eng_data	*
\data	Project data files (i.e.: journals, material backgrounds for rendering, pen tables, print configuration files, etc.)
\drainage	Drainage calculation and design files
\eng_data	*
\emo	Environmental Management files
\eng_data	*
\estimates	Estimates files
\eng_data	*
\geotech	Geotechnical data files
\eng_data	*
\ITS	Intelligent Transportation Systems design files
\eng_data	*
\landscp	Landscape design files
\eng_data	*
\lighting	Lighting design files
\eng_data	*

Folder Names	Purpose
\maint	Maintenance department (This is not Maintenance of Traffic).
\eng_data	*
\material	Other Materials data files
\eng_data	*
\out	Other miscellaneous Output files
\permits	Permits for various items (i.e.: ponds, driveways, mailboxes, etc.)
\eng_data	*
\planning	Planning files
\eng_data	*
\preestim	Preliminary estimates files
\eng_data	*
\roadway	Roadway design files
\eng_data	*
\rwmap	Right of Way Mapping files
\eng_data	*
\seed	Project specific seed files
\signals	Signalization design files
\eng_data	*
\signing	Signing and Pavement Marking design files
\eng_data	*
\specs	Source files used to create the Specifications Package*
\eng_data	*
\struct	Structure calculations and design files
\eng_data	*
\survey	Survey database and surveying design files
\eng_data	*
\symb	Project specific resource files for fonts and custom line styles
\trafops	Traffic Operations data files
\eng_data	*
\utils	Utility data and design files
\eng_data	*

4.8 STANDARD FILE NAMES

This section describes the file naming conventions used for all graphical design files, standard input files, and criteria files. In the event a particular file type needed for the project is not addressed herein, consult with either the Project Manager or the District CADD Manager to determine the proper file name to use.

The Department identifies standard graphic files as “critical” or “non-critical.” Critical files are frequently used in downstream applications, shared across disciplines, and used in quantifying pay items. These critical files must meet a minimum compliancy threshold for CADD symbology as detailed in Chapter 8. Standard file names are discipline specific and are detailed within the respective discipline sections later in this chapter. Filenames will not contain spaces or special characters, with the exception of the underscore “_” or dash “-“characters.

4.8.1 Standard Design File Naming Convention

The Department utilizes standard naming conventions for design files and provides automated tools that depend on these naming conventions being met. The naming convention confers information to the downstream user about the data contained in the design file.

- ***Standard design file names should follow this format: AAAABB##.ext***

AAAA = Abbreviated File Description,
BB = Discipline Denotation,
= Sequence Number (padded integer, i.e. “00”, “01”, “02” …
“99”, used to sequence additional files of the same Description/Discipline),
.**ext** = File extension indicating the type of file.

For Example: The first proposed Roadway cross section file would be named – *rdxsrd01.dgn*

The first six (6) characters of the standard design file naming convention discussed above are also critical for QC software and symbology filters. If it is necessary to add additional descriptive information in the design filename, this descriptive information should be inserted after the discipline denotation “BB” and preceding the sequence number “##”. Doing so should be only on rare occasion.

For Example: *rdxsrd_rampA_01.dgn*, indicating this proposed cross section file includes ramp A.

Very large projects might necessitate the need to exceed two digit sequence numbers (100+); otherwise the sequence should be limited to two digits. The Department delivers a Create Files application to assist in producing design files with the proper naming convention.

4.8.2 Print Image File Naming Convention

MicroStation projects use Sheet Navigator as an interactive application to extract the sheet and title block data from design files containing sheets. The source design file name and data extracted from those files yields resulting PDF file names (and defines the sheet’s relationship to which plans component of the project). Sheet Navigator uses the *SheetInfo.xml* control file to provide the component order for sheets also using their location in the project folder structure, and in conjunction with the sheet number prefix. The *Sheetinfo.xml* control file defines the standard search criteria to identify sheets in a project and is located in the CADD Software \mdlapps sub-folder.

AutoCAD Civil 3D projects use a similar tool called SSO. SSO also uses the source design file name, and data extracted from the sheet layouts in drawings assigned to AutoCAD’s Sheet Set Manager (.DST) files for names, and organizes plans components of the project.

For classical Electronic Delivery, it is required for one print image file to be produced for each sheet in a plans set. This is necessary because under Electronic Delivery, Florida Board rules requires each sheet of the plans to be individually signed and sealed.

For Digital Delivery, multi-sheet files representing the plans have been sanctioned by the Boards and may be signed and sealed with single or multiple digital signatures. Florida Boards clarified their rules regarding notice of accountability within electronic files that are signed and sealed by multiple Signatories. Provisions were made to resolve any potential ambiguity regarding who is responsible for content by using a Signature Sheet (see the DEPARTMENT’S PPM, Volume 2, Chapter 30). PDF files are the required format for producing an electronic image of plans for Digital Delivery.

4.8.2.1 Sheet Numbers

Sheet numbers used in the title blocks of plan sheets can be composed of multiple parts using the syntax: **AAA-####Z.**

- **AAA** Represents the sheet number prefix, using multiple alpha characters. Refer to the ***Department’s Plans Preparation Manual*** and ***Structures Manual***.
- ####**(Z)** Defines the numeric order of the sheets within the Project Component. The optional (Z) suffix allows for the insertion of appended sheets after the project has started. A single alpha character suffix, A-Z, is added for each subsequent sheet inserted.

(Examples: S-001A, S-001B, PNC-01, A-15, A-16, T-1, T-2, and 1, 2, 3, etc.).

Structures and Architecture disciplines have extended the sheet numbering schema and the respective discipline instructions should be consulted for additional guidance. These are found in their respective sections later in this Chapter. The following shows how Sheet Navigator interprets sheet number prefixes to discern what plans component sheets belongs to:

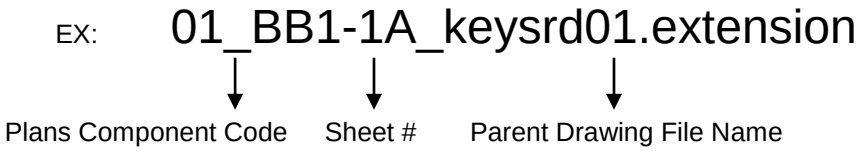
Prefix	Component
[No prefix]	Roadway Plans - *(Typically - only an integer is used for sheet number)*
CTL	Roadway Plans - Project Survey Control Sheets
GR	Roadway Plans - Soil Survey and Report of Core Borings
SQ	Roadway Plans - Summary of Quantities
TR	Roadway Plans - Tree Survey Sheets
UTV	Roadway Plans - Verified Utility Locate Sheets
IT	Intelligent Transportation System (ITS) Plans
GI	Intelligent Transportation System (ITS) Plans - Soil Survey and Report of Core Borings
LD	Landscape Plans
L	Lighting Plans
GL	Lighting Plans - Soil Survey and Report of Core Borings
T	Signalization Plans
PTM	Signalization Plans - Portable Traffic Monitoring Site Sheets
GT	Signalization Plans - Soil Survey and Report of Core Borings
S	Signing and Pavement Marking Plans
GS	Signing and Pavement Marking Plans - Soil Survey and Report of Core Borings
Begins with "A"	Architectural Plans
Begins with “B”	Structures Plans
Begins with "U"	Utility Work by Highway Contractor Agreement Plans

Roadway plans are typically the primary component of the Department’s Project plans set containing multiple plans components and can have non-prefixed sheet numbers (1, 2, 3, etc.). Other disciplines can be the primary plans component only in the absence of a Roadway plan component.

For example: A Lighting only project may omit the plans component prefix and use the numbering format of 1, 2, 3, etc., although this practice is strongly discouraged.

4.8.2.2 Print Image File Naming Format

EDI / SSO applications implement a file naming scheme for PDF files that removes ambiguity about which sheet the file represents (regardless of the sheet-numbering scheme used in the design file) and supports more complex sheet numbering being expected by some disciplines. This applies to classical Electronic Delivery projects, as Digital Delivery projects do not require individual sheet image files to be delivered. If individual sheets are printed, even if a Digital Delivery is elected, the format file naming convention will be followed as shown below:



Note Image file extension will be .PS for PostScript files, .PDF for Portable Document files, .TIF for Tagged Image Format files, etc. Note that PDF is the preferred file format.

- **Plans Component Code** - [01] The first two numbers represent the Plans Component with zero (0) padding used as place holder (for file name sorting purposes).

  The DEPARTMENT'S Standard Plans Component codes (corresponding to the PPM components) are as follows:

  01 – Roadway Plans

  02 – Signing and Pavement Marking Plans

  03 – Signalization Plans

  04 – Intelligent Transportation System (ITS) Plans

  05 – Lighting Plans

  06 – Landscaping Plans

  07 – Architectural Plans

  08 – Structures Plans

  09 – Utility Work by Highway Contractor Agreement Plans

  10 – Right of Way Maps

  11 – Utility Joint Participation Agreement Plans

  12 – Toll Facility Plans

  99 – Unknown

- **Sheet #** After the Plans Component Code, an underscore (_) is inserted as a separator, followed by the actual sheet number (BB1-1A) appearing in the title block of the sheet.
- **Parent Drawing File Name** After the Sheet #, an underscore (_) is inserted as a separator followed by the name of the source design file (keysrd01).

4.8.3 Standard File Name Extensions

Extension	File Description	Saved-in Folder
.3pc	3 Port Criteria Files	Most appropriate discipline folder
.pdf	Files for Sheet Image Files	Discipline folder's \eng_data sub-folder, if Classical Electronic Delivery
.pdf	Files for the PLANS	Root project folder for *fpid*-PLANS.pdf for Digital Delivery
.pdf	Files for the SPECS	\specs sub-folder for *fpid*-SPECS.pdf
.dxf	AutoCAD ASCII Drawing Interchange File	Most appropriate discipline folder
.dwg	AutoCAD Design Files	Most appropriate discipline folder
.dst	AutoCAD Drawing Sheet Set	\eng_data sub-folder for the discipline
.dwt	AutoCAD Drawing Template	\seed sub-folder of the project
.lin	AutoCAD Linetype	\symb sub-folder of the project
.pc3	AutoCAD Printer Configuration	Most appropriate discipline folder or \symb sub-folder of the project
.shx	AutoCAD Shape Compiled	\symb sub-folder of the project
.shp	AutoCAD Shape Files are ASCII Files	\symb sub-folder of the project
.stb	AutoCAD Plot Style Tables	Most appropriate discipline folder or \symb sub-folder of the project
.csv	Comma Separated Values	Most appropriate discipline folder

Extension	File Description	Saved-in Folder
.gpk	Coordinate Geometry Database Files	Most appropriate discipline folder
.alg	Corridor Modeling Alignment Database	Most appropriate discipline folder
.xlp	Corridor Modeling Cross Section Labeling Preference File	Most appropriate discipline folder
.xin	Corridor Modeling Drafting Standards	Most appropriate discipline folder
.rdp	Corridor Modeling Roadway Design Preference File	Most appropriate discipline folder
.ird	Corridor Modeling Roadway Designer Database	Most appropriate discipline folder
.dtm	Corridor Modeling Surface Database	Most appropriate discipline folder
.itl	Corridor Modeling Template Library	Most appropriate discipline folder
.hmr	Descartes Raster Image Files	Most appropriate discipline folder
.edi	Electronic Delivery Index Settings Files	Project Root folder
.gpk	GEOPAK COGO Database	Most appropriate discipline folder
.x	GEOPAK Criteria Files	Most appropriate discipline folder
.ddb	GEOPAK D&C Manager Database Files	Most appropriate discipline folder
.gdf	GEOPAK Drainage File	Most appropriate discipline folder
.dlb	GEOPAK Drainage Library	Most appropriate discipline folder
.inp	GEOPAK Input Files	Most appropriate discipline folder
.prj	GEOPAK Project Manager Project File	Most appropriate discipline folder
.tin	GEOPAK Surface Database	Most appropriate discipline folder
.gif	Graphics Interchange Format	Most appropriate discipline folder
.jpeg, .jpg	Joint Photographic Experts Group	Most appropriate discipline folder
.log	Log File	Most appropriate discipline folder
.xls(x)	Microsoft Excel Spreadsheets	Most appropriate discipline folder
.doc(x)	Microsoft Word Documents	Most appropriate discipline folder
.rsc	MicroStation & GEOPAK Resource Files	\eng_data sub-folder for discipline
.cel	MicroStation Cell Libraries	\cell sub-folder of the project folder
.dgn	MicroStation Design Files	Most appropriate discipline folder
.tbl	MicroStation Pen Tables	\eng_data sub-folder for discipline
.plt	MicroStation Print Drivers	\eng_data sub-folder for discipline
.pset	MicroStation Print Organizer Print Set	Most appropriate discipline folder
.pcf	MicroStation Project Configuration	Project Root folder
.dgnlib	MicroStation Standards Database	\symb if copied to local project
.sid	Multi-resolution Seamless Image Database	Most appropriate discipline folder
.ps	Postscript Sheet Image Files	\eng_data sub-folder for discipline
.xcp	QC Exception Files	\eng_data sub-folder for discipline
.txt	QC Reports, QC ”Folder Name”	\eng_data sub-folder for discipline
.tif	Tagged Image File	Most appropriate discipline folder
.htm, .html	Web Pages	Project Root folder and \data sub-folder
	XML Files	Most appropriate discipline folder

4.8.4 Duplicate Files

There will be no duplicate CADD (.DGN, DWG, etc.) design file names within a project folder structure. This is necessary to ensure proper reference attachments in CADD files**.** The FileChecker application can be used to help find duplicate filenames within the project folder structure.

MicroStation and AutoCAD, as part of their search sequence, will use the first occurrence of a file name found.

Duplicate file names for sources can corrupt data references. Always use the “relative path” option, never “full” or “no path” when attaching references.

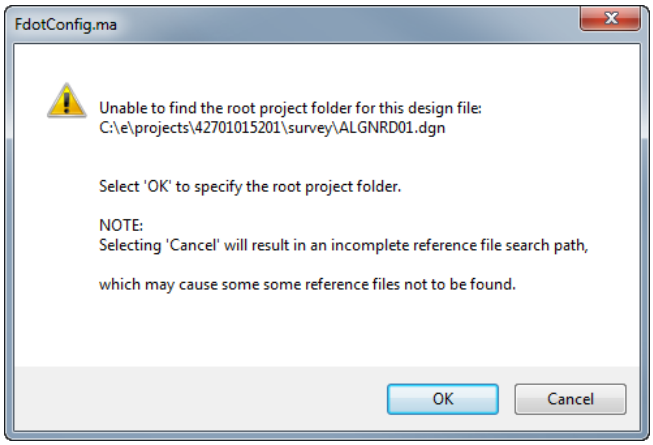
4.9 REFERENCE FILES

A reference file can be a MicroStation design file, an AutoCAD design file, a raster image file (such as a SID, TIF, or HMR), or a PDF. A reference file is attached as a “background file” to an active design file being edited, thus allowing multiple users to share the information in the reference file without the need to copy the reference file(s) into the active design file folder, or copy the referenced file’s content into the active design file.

Important	Under no circumstances should the “absolute” or “full path” be used when attaching a reference file. Use relative referencing - ALWAYS. All reference files for the project must reside within the project folder structure.

In MicroStation reference paths are managed by an application (FDOTConfig) that is run at startup of any MicroStation file opened in the FDOT Workspace. This application looks for the _meta_info folder and then moves up one folder to set the parent folder of the project. It then dynamically sets the MicroStation configuration variable, MS_RFDIR, to search downward from the parent folder through all the found sub-folders to identify any reference files. Therefore all design files for a project must reside within the Department’s standard folder structure or its sub-folders in order to be located as a reference file.

If the _meta_info subfolder does not exist, when a file is opened in MicroStation in an FDOT Workspace, the user will be prompted to define the parent folder of the project to enable the application to set the search path for reference files. See the following image.



- If Cancel is selected, any reference to the models of files located in different sub-folders will not be displayed because the MS_RFDIR variable could not be populated automatically.
- If OK is selected, the user will be given the opportunity to define the root of the project. The user navigates to the root of the project, named for the Financial Project Identification Number.

Important:	If duplicate file names exist in the sub-folders of the project, MicroStation will attach the first matching filename it finds in the path. Therefore, duplicate file names are prohibited.

4.10 CADD FILE SHARING

There are times when disciplines share files with other disciplines, such as the case where Roadway must differentiate between existing edge of pavement to be replaced and that to remain. This is because the elements representing existing edge of pavement often span several plan sheets. **If a discipline requires information from another discipline, the needed design file(s) or individual models will be referenced from the original folder, not copied**.

For example, the Signing and Pavement marking design file (*DSGNSP*) references the Roadway design file (*DSGNRD*) and the Topography file (*TOPORD*). These files should not be copied into the Signing and Pavement Marking discipline sub-folder.

Note If there is a specific justification to copy a file into another folder, the filename must be modified to reflect the discipline file name usage. For example, topord01.dgn (from the .\survey sub-folder) would become toposp01.dgn, if copied to the .\signing sub-folder, or as a minimum the sequence number would change to ensure that there is no doubt the copied file differs from the original file.

The data producer is responsible to ensure that up-to-date content of the original file is always reflected in their design file. Making copies of design files to different locations is strongly discouraged for this reason.

4.11 PROJECT INDEXING AND JOURNALING

Project indexing is for the classical Electronic Delivery process. Project Journaling is for both classical Electronic Delivery and Digital Delivery processes.

4.11.1 Index Guidelines and Format

The Department's Project Index files will be produced and delivered only for classical Electronic Delivery projects. Digital Delivery Projects do not rely upon the Project Index.

The Department provides the software tool, EDI, to produce Project Indexes in the required formats for MicroStation projects. Since the Project Index files are text based in XML formats.

For AutoCAD Civil 3D projects, the SSO application is provided and creates: *Projectindex.xml, Sheetndx.htm,* and the *Project.PDF*.

The purpose of the Project Index is to document delivered project print sheet image files and their source design files belonging to the plan set. The Project Index is then used by downstream programs to produce a PDF of the overall plans set and for other purposes.

The indexes noted above include:

- Index.XML - This is a comprehensive index of file attribute meta-data produced by the EDI which contains all indexed data as mined from graphics design files, or user input attribute data for the graphics files of the project. This file is placed by software in the root folder of the project. This file is not required of Digital Delivery projects.
- ProjectIndex.XML - This is the primary index of all plan sheets and their associated files produced by either the EDI, or SSO applications. From this index, an HTML report can be produced (*Sheetndx.htm*) that is used as an interface to the plans image files by persons who do not have the DEPARTMENT'S Electronic Delivery software loaded, such as contractors, the public, etc. This file is also placed in the root folder of the project. This file is not required of Digital Delivery projects.

- **ProjectFiles.HTM** - This is a report of project files (documentation) and their "EDMS" comments included with the delivery, produced by EDI. EDMS comments are additional metadata added by data producers including file descriptions during documentation processes. *Projectfiles.htm* differs from *Index.XML*, in that for many files of a standard file names EDI will look up what the file type represents and include that in the documentation for that file. *Projectfiles.htm* is placed in the root folder of the project. This file is not required of Digital Delivery Projects.

The Department's EDI application provides the following:

- Mining of attribute data from design files being indexed, which includes properties, such as global origin, working units, attached reference files, etc. Design files containing plan sheets have additional sheet index information, such as sheet number, title, etc. Sheet Navigator application is called to pass this sheet index data to EDI.

Note EDI relies upon data produced by Sheet Navigator, the Department provided software process running in the MicroStation environment which tags sheets in the MicroStation DGN file. If Sheet Navigator has not been executed, the sheets within the design file have not been tagged. Though a manual method is provided in EDI to enter/edit sheet information, the manual method for building the index is significantly more time consuming, and therefore not recommended. The main purpose of the manual edit function is to provide additional or corrective data that will add intelligence about a file or sheet.

- Provides the interface to the Journals, which are Rich Text Format (RTF) files, (changed from XML format in previous EDI releases). Allows users to manually record comment data to the attribute index files using EDI as the interface.

Note Since EDI would not be used in a Digital Delivery, an EDI Journal would not get produced. Any Project documentation the design / development team wishes to include should be done by whatever means that team has at their disposal.

- Produces the index of plans sheets (*Sheetndx.htm*) used in the advertisement for letting, which also uses *ProjectIndex.XML* as input.
- Produces an index of files (*ProjectFiles.XML*) with the option to save a report in HTML format (*ProjectFiles.htm*).
- Produces a single file (*Project.PDF*), containing all indexed sheets in the project found in the project root folder.
- Provides for batch printing of sheets to the specified formats in this Handbook.

4.11.2 Journal Guidelines and Format

Project documentation is delivered to detail project data, design aspects, processes and decisions made during the life of the project that would be communicated to a down-stream user.

The Project Journal file(s) may be delivered with the project documentation to document the activities of a given professional discipline, or may be created to document a particular design activity (i.e. creating cross sections), or be the personal journal of a user/designer. Journal file entries should document methods employed, procedures used, decisions made, problems encountered, fixes included or other issues encountered during the design process. A Journal will be produced for both Electronic Delivery, and Digital Delivery projects.

For example: If custom line styles were created, the justification for the custom line style and the resource file name containing the custom line style should be documented in the Journal. Any information that would help in the regeneration of CADD files and/or prints should be recorded. The geometry information, database, controlling alignment, profile names, relevant survey and cross section information and the methodology used to obtain the final geometric controls in the CADD product should be recorded.

For Digital Delivery projects, a Journal can be delivered as either MS Word (.DOC or .DOCX) or PDF formats.

For classical Electronic Delivery projects EDI includes functionality to create and maintain Journals in RTF format. These Journal files are stored in the \data sub-folder of the project. The EDI Journal tool provides the following functionality:

- Creates / edits a journal file through a dialog box. The journal file can be viewed with a standard editor or by the journal tool.
- Provides for automated text entry.
- Allows pre-loaded text inserts (a type of pick list) with user and company information. Each journal entry is date stamped.
- Provides for adding custom (re-usable) text inserts.
- Allows for the storage and viewing of images attached to Journals.

Note The indexing and journaling tools mentioned in this chapter are documented in the applications themselves.

4.12 PRINTS

All print images are to be generated from the native MicroStation or AutoCAD graphic design files for both classical Electronic Delivery and a Digital Delivery. All print images are produced to scale to match the native application.

Note Not all printer hardware will print paper sheets exactly to scale, even if the source image file is to scale.

The Department's standard sheet borders are defined for each discipline. Sample print drivers are also provided to generate "drawn to scale" print images. Standard sheet borders delivered with the CADD Software comply with the Department's sheet formats, as defined in the PPM and other controlling procedure, and reflect the file name, folder path and the date and time of the print.

4.12.1 Print Borders

The Department's standard sheets have a print border embedded in the each sheet. The Department's predefined search criterion is illustrated in the table below.

Note *PlotBorder_dp* and *ShtPlotBorder_c* are the current print border level symbologies used in the CADD Software.

	Border 1	Border 2	Border 3	Border 4	Border 5
Type	Shape	Shape			Shape
Level	PlotBorder_dp	PlotBorderSht	PlotShape	ShtPlotBorder_c	51
Color	BYLEVEL	BYLEVEL	BYLEVEL	BYLEVEL	3

Note Typical print border size for 11x17 prints: 16.5" x 10.6".

4.12.2 Print Image Files

The PDF print drivers are provided by both Bentley and Autodesk platforms as a primary print format. Therefore, the Department requires the PDF file format. When PDF files are produced, the user must ensure that no encryption or other PDF security is embedded in the PDF (see Document Restriction Summary in the Security Tab of the PDF file properties).

4.12.3 Foreign Plan Sheets

In some cases, users have no choice but to scan pre-existing hardcopy foreign plan sheets to create electronic sheet files. For example, some plan sheets may already exist as hardcopies and were signed & sealed conventionally by wet ink signature and impression seal. This can occur when either pre-existing plans are incorporated into the delivery, or a professional discipline does not have legal authority to sign and seal their plans electronically. In such cases, those plans should be scanned at minimum of 300 DPI resolution (or higher if warranted), to PDF, or Group-4 Tagged Image File Format (TIFF), according to **State of Florida Electronic Records and Records Management Practices.** When scanning, use the lightest contrast setting possible such that reprints from the electronic scans have a minimum of scanned artifacts and speckling and will print legibly.

Note File naming of the scanned sheet files should closely follow the conventions described in Chapter 4.8.

If scanning hardcopy plans that bear a raised seal, then the raised seal should be shaded / burnished before scanning so the seal appears clearly in the scanned image. Scanned existing plan sheets already signed and sealed on paper will not be re-signed and sealed electronically - with either PEDDS or Digital Signature. However, they may be signed-only (not sealed) by a responsible party to take accountability only for their inclusion within a contemporary plans set (using the appropriate qualifiers or exculpatory language).

4.12.4 Print Drivers

The print drivers and the sheets provided with the CADD Software are used to generate prints to scale.

All Bentley print drivers now have raster printing enabled. These drivers are called “examples,” due to the various site-specific configurations and types of printers that may be encountered. The print drivers have been tested and work with the printers for which they were developed.

AutoCAD does not set printer driver files at all, but uses Page Setups and Plot Style tables.

Each printer has its own “printable” area defined for a paper size which may differ slightly from printer model to printer model. It is the sole responsibility of the person performing the prints to ensure hardcopy printing is operating acceptably for their hardware.

Note See the Chapter 3, Section 3.10 of this Manual for a list of the Department’s delivered print drivers.

4.12.4.1 MicroStation Half-Toning

The color 20 is used to define half-toning in the printer driver files supplied by the Department. Half-toning of the minor grid lines on the cross section sheets, the profile portion of the plan/profile sheet and the profile sheet has been approved by the Department as shown in the ***PPM, Volume II Exhibits***. The Department’s Project Manager must approve half-toning of any other graphical elements in the design file.

Some of the Department’s districts have specified the half-toning of certain reference files from one discipline to another. For example, the topography file could be half-toned when referenced to the proposed design. This must be approved on a per district basis. A pen table can be set up to equate any referenced file to color 20, thus half-toning the entire reference file at print time.

4.12.4.2 Quality and Reproduction

Printed output from the design files and plan sheet image files must be legible and of a quality to be reproducible on 2nd generation copies. Line weights as defined in Chapter 3, Section 3.7.3 of this Manual are default settings in the print drivers or the Department’s plot style tables in AutoCAD, but may need to be adjusted, depending on printer hardware, to product the required quality of printed documents.

4.12.5 Professional of Record Note

For those sheets that are electronically signed and sealed by a Professional Engineer, the following note will be placed legibly on the sheet.

Note See the PPM; Volume 1, Chapter 19, section 19.2.2, for further information.

"NOTICE: THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE SIGNED AND SEALED UNDER RULE 61G15-23.003, F.A.C."

Note For additional information about Professional of Record Note please also see the PPM; Volume 2, Chapter 30.

The Rule number referenced is determined by the discipline of the professional that is signing and sealing (i.e., for Surveyors, this Rule is 5J-17.062, F.A.C.; for Geologists, this Rule is 61G16-2.005, F.A.C.; for Landscape Architects, this Rule is 61G10-11.011, F.A.C.; for Registered Architects, this Rule is 61G1-16.005, F.A.C.).

4.13 RIGHT OF WAY (R/W) MAPPING STANDARDS

This chapter will describe the minimum CADD requirements for R/W Mapping operations.

4.13.1 Standard File Names

The Department utilizes standard naming conventions for all of its files and provides automated tools that depend on this naming convention. The naming convention confers data information to the downstream customer.

Standard file names should follow this format: AAAABB##.ex*t*

Where **AAAA** = *abbreviated file description*, **BB** = *Discipline Denotation, ## =Sequence number.*

Note See Section 4.8 of this document for more information about Standard File Names.

The following table defines the R/W Mapping File Name Standards Name with each file including sequential numbering. Standard Model names are also provided, however, it is not mandatory to use more than the default model.

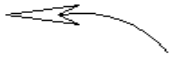
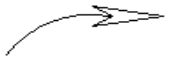
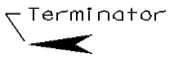
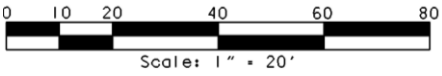
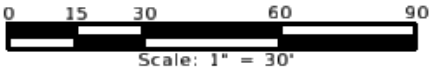
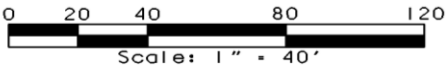
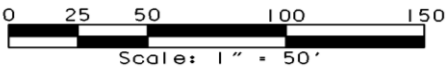
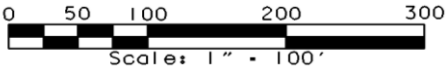
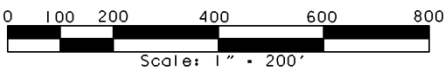
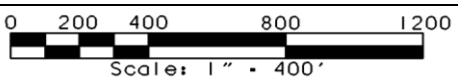
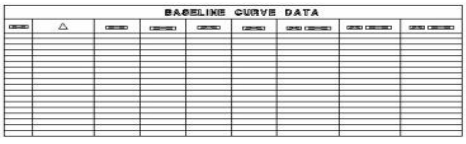
Note See Appendix A for the complete listing of level/symbologies standards for each applicable CADD Standard Rule.

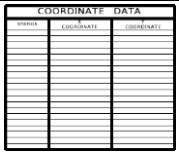
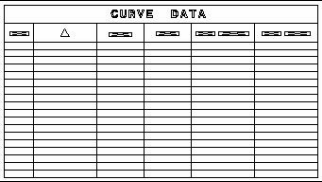
Critical	File Name	Model	File Description	Rule File	MicroStation Seed File	Civil 3D Template File
	CS%%%%%%%##	default	Control Survey Master Design File (%...% Enter 7 digit No.)	rweng10	rwseed2d.dgn	rweng10.dwt
X	CSCOVR##	default	Control Survey Cover Sheet	rweng10	rwseed2d.dgn	rweng10.dwt
X	CSDETL##	default	Control Survey Detail Sheet	rweng10	rwseed2d.dgn	rweng10.dwt
X	CSKEYM##	default	Control Survey Key Map Sheet	rweng10	rwseed2d.dgn	rweng10.dwt
	CTLSRD##	default	Survey Project Network Control Sheets	open	rwseed2d.dgn	rweng10.dwt
	MM%%%%%%%##	default	Maintenance Map Master Design File (%...% Enter 7 digit No.)	rweng10	rwseed2d.dgn	rweng10.dwt
X	MMCOVR##	default	Maintenance Map Cover Sheet	rweng10	rwseed2d.dgn	rweng10.dwt
X	MMDETL##	default	Maintenance Map Detail Sheet	rweng10	rwseed2d.dgn	rweng10.dwt
X	MMKEYM##	default	Maintenance Map Key Map Sheet	rweng10	rwseed2d.dgn	rweng10.dwt
	RW%%%%%%%##	default	R/W Master Detail Design File (%...% Enter 7 digit No.)	rweng10	rwseed2d.dgn	rweng10.dwt
X	RWCOVR##	default	R/W Cover Sheet	rweng10	rwseed2d.dgn	rweng10.dwt
X	RWDETL##	default	R/W Detail Sheet	rweng10	rwseed2d.dgn	rweng10.dwt

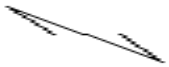
Critical	File Name	Model	File Description	Rule File	MicroStation Seed File	Civil 3D Template File
X	RWFACS##	default	R/W Cover Sheet FA Project	rweng10	rwseed2d.dgn	rweng10.dwt
X	RWKEYM##	default	R/W Key Map Sheet	rweng10	rwseed2d.dgn	rweng10.dwt
X	RWPNCTAB##	default	R/W Project Network Control Tabulation Sheet	rweng10	rwseed2d.dgn	rweng10.dwt
X	RWPR##	default	R/W Parcel Sketch Sheet (11"x17" Landscape)	rweng10	rwseed2d.dgn	rweng10.dwt
X	RWPS##	default	R/W Parcel Sketch Sheet (8.5"x11" Portrait)	rweng10	rwseed2d.dgn	rweng10.dwt
X	RWSPS##	default	R/W Specific Purpose Survey Sheet	rweng10	rwseed2d.dgn	rweng10.dwt
X	RWTAB##	default	R/W Tabulation Sheet	rweng10	rwseed2d.dgn	rweng10.dwt
	SIGNRW##	default	Digital Signatures (Multi)	rweng10	rwseed2d.dgn	digitalsignature.dwt
	TOPORW##	default	ROW Mapping file containing existing Topography for mapping purposes only	open	rwseed2d.dgn	TOPORW.DWT

4.13.2 R/W Cell Library

Note R/W cell library is ROW.CEL. R/W cells must be placed with the True Scale toggle set to "ON".

ELEMENT	TYPE	SYMBOL	Macro
ARROW TERMINATOR LEFT (Place on ByLevel of Text Element Relative Toggle "ON")	C = ARRWLG		Place Delineator
ARROW TERMINATOR RIGHT (Place on ByLevel of Text Element Relative Toggle "ON")	C = ARRWRG		Place Delineator
LINE TERMINATOR@POINT G = Graphic type cell	C =ARRLT		Place Delineator
LINE TERMINATOR@POINT G = Graphic type cell	C =ARRRT		Place Delineator
BAR SCALE 1" = 20'	C = BS20		Place Bar Scale
BAR SCALE 1" = 30'	C = BS30		Place Bar Scale
BAR SCALE 1" = 40'	C = BS40		Place Bar Scale
BAR SCALE 1" = 50'	C = BS50		Place Bar Scale
BAR SCALE 1" = 100'	C = BS100		Place Bar Scale
BAR SCALE 1" = 200'	C = BS200		Place Bar Scale
BAR SCALE 1" = 400'	C = BS400		Place Bar Scale
BASELINE CURVE DATA BOX (Used with GEOPAK Table Tutorial)	C = BLBOX		

ELEMENT	TYPE	SYMBOL	Macro
BASELINE SYMBOL	C = BL		
CENTERLINE SYMBOL	C = CL		
Block Number Double	C= BLOCKNUMBERD		
Block Number Single	C= BLOCKNUMBERS		
CONCRETE MONUMENT OPEN	C = MONSQ		
CONCRETE MONUMENT SOLID	C = MONSQS		
CONCRETE R/W MONUMENT (R/W MONUMENTATION MAP)	C = MON		
COORDINATE DATA BOX (Used with GEOPAK Table Tutorial)	C = COORD		
CURVE DATA BOX (Used with GEOPAK Table Tutorial)	C = CURBOX		
CURVE DATA (English) (Used with GEOPAK Table Tutorial)	C = CDATA	CURVE P.I. STA. Δ = D = T = L = R = P.C. STA. P.T. STA.	
NORTH ARROW	C = NOARR		
PARCEL BUBBLE 100	C = PB100		
PARCEL BUBBLE 700	C = PB700		
PARCEL BUBBLE 800	C = PB800		
PARCEL BUBBLE 900	C = PB900		
PERMANENT R/W MONUMENT (R/W MONUMENTATION MAP)	C = PRWM		
PROPERTY LINE HOOK	C= PLHOOK		
PROPERTY LINE HOOK	C= PLHTOP		

ELEMENT	TYPE	SYMBOL	Macro
PROPERTY LINE HOOK	C =PLHBOT		
PROPERTY LINE SYMBOL	C = PL		
ROD MONUMENT OPEN	C = MONRD		
ROD MONUMENT SOLID	C = MONRDS		
SEGMENTED CURVE CHORD DIST./BEARING (Used with GEOPAK Table Tutorial)	C = SEGCUR		
SPRING LINE (Place on Symbology of Assoc. Element)	C=SPRING		Place SpringLine

4.13.3 Level/Layer and Symbology Standards

Refer to the Standard Rule Tables in Appendix A for the listing of the R/W (RWENG10) elements and their symbologies. The list of elements shown may not contain all of the elements that appear within a R/W map, as this list would be extensive. The elements shown are those that are required for specific types of R/W maps.

All R/W Levels are 'Critical' levels, meaning that the attributes: Level, Color, Style and Weight will all be checked for QC compliancy. The exception is for Text levels, where the Style attribute will be set as Non-Critical and excluded from compliance checking.

Note R/W elements must match the standard symbology for the R/W file they reside in. Non-R/W elements will be drawn in the symbology of their intended file type. For example: edge of pavement drawn in RWDETL01.DGN would be given the symbology as if drawn for DSGNRD01.DGN. All R/W level symbologies must use ByLevel settings.

4.13.4 R/W Workspace

The Department's CADD Software incorporates features for R/W Mapping Standards compliance to assist R/W Mapping for Department projects. The ***FDOT Right-of-Way Mapping*** training manual is also provided to outline these tools and can be accessed from the ECSO website:

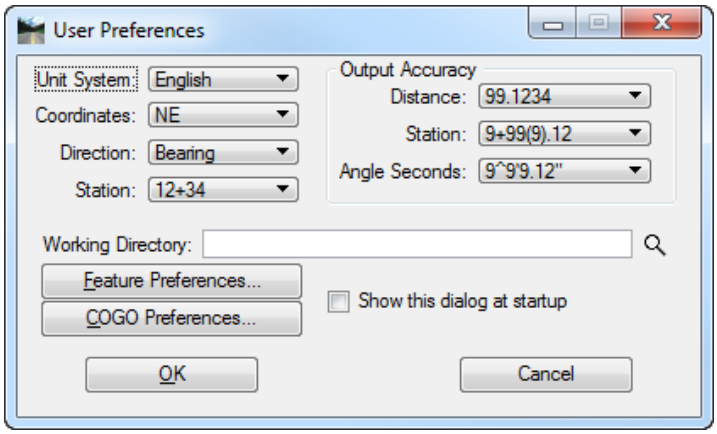
http://www.dot.state.fl.us/ecso/downloads/documentation/RightofWayMapping/RightofWayMapping.shtm

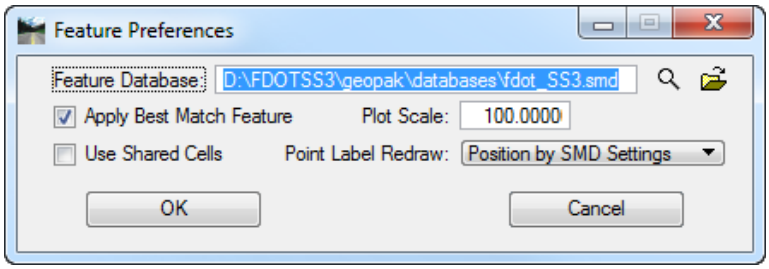
Note FDOT State Kit for Civil 3D includes the same content in the R/W template, rweng10.dwt.

4.13.5 GEOPAK Feature Preferences

GEOPAK uses feature attributes to plot elements in the design file. These Feature attributes are defined in a Survey Database (*database fdot_SS3rw.smd*), and should automatically be attached when using the CADD Software. The GEOPAK configuration variable GPK_SURVMNGR_SMDFILE controls this.

The user can verify which database is being used or change to another database from the GEOPAK User Preferences dialog. This dialog can be accessed by selecting the MicroStation menu option **GEOPAK > Road > User Preferences**. Select the **Feature Preference…** button to display the Feature Preference dialog shown below.





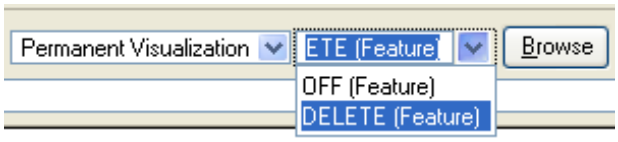
The Feature Preference dialog shows the attached .SMD file. A different working database can be located and attached if desired.

Plot Scale defines the scale at which linear elements such as custom line styles and cells will be plotted. It is important that the user set this prior to plotting elements into the design file project from the Coordinate Geometry dialog.

There are three **Visualization** settings on the Coordinate Geometry dialog used to control plotting of feature elements into the design file:

- **Disable Visualization** – When active no elements are visualized during the COGO session.
- **Temporary Visualization** – When active elements utilizing the feature symbology (or default symbology if no feature is present) are displayed during the COGO session.
- **Permanent Visualization** – When active elements utilizing the feature symbology (or default symbology if no feature is present) are displayed during the COGO session. Upon exiting the COGO session the elements remain in the design file.

There are two **Feature** settings on the Coordinate Geometry dialog used to control plotting of feature elements into the design file:



- **OFF (Feature)** When the Off option is set, any element subsequently stored does not have a Feature attached.
- **DELETE (Feature)** The Delete Feature deletes any feature on subsequent commands, or does not attach features to newly stored elements.

4.14 ENVIRONMENTAL MANAGEMENT STANDARDS

The Environmental Management Office (EMO) has responsibility for the project development phase. The intent is to give latitude and discretion in performing project analysis, project development, preliminary engineering, public involvement and environmental required tasks while maintaining the necessary level of CADD standards for the products of EMO.

The Project Development and Environmental Clearance process is oriented to presenting the project to the permitting and regulatory agencies, politicians and the general public in a format which is clear and easy to understand. Production plans do not become important until after Location and Design Concept Acceptance is obtained. The goal is to create a presentation that is useful to the plans development process, but public presentation is the primary concern.

4.14.1 Standard File Names

The Department utilizes standard naming conventions and provides automated tools that depend on this naming convention being met. The naming convention confers data information to the downstream customer.

- ***Standard design file names should follow this format: AAAABB##.ext***

Where **AAAA** = *abbreviated file description*, **BB** = *Discipline Denotation, ## =Sequence number.*

Note See Section 4.8 for more information about Standard File Names.

The following table defines the EMO File Name with each file including sequential numbering. Standard Model names are also provided, however, it is not mandatory to use more than the default model, unless otherwise specified.

Note See Appendix A for the complete listing of level/symbologies standards for each applicable CADD Standard Rule.

File Type	Critical	File Name	Model Name	File Description	Standard Rule	MicroStation Seed File	Civil 3D Template File
Borders & Sheets		BDBREM##	default	Border Sheet Reference File for Bridge Hydraulic Sheet	planrd	fdotseed2d.dgn	
Borders & Sheets		BDPLEM##	default	Border Sheet Reference File for Plan Sheet	planrd	fdotseed2d.dgn	
Borders & Sheets		BDPPEM##	default	Border Sheet Reference File for Plan & Profile Sheet	plprrd	fdotseed2d.dgn	
Borders & Sheets		BDPREM##	default	Border Sheet Reference File for Profile Sheet	plprrd	fdotseed2d.dgn	
Borders & Sheets	X	BDXSEM##	rdxsrd	Border Sheet Reference File for Cross-Section Sheet	rdxsrd	fdotseedxs.dgn	
Borders & Sheets		GNNTEM##	default	General Notes	planrd	fdotseed2d.dgn	planrd.dwt
Borders & Sheets		LDPREM##	default	Lateral Ditch Plan / Profile Sheet	plprrd	fdotseed2d.dgn	plprrd.dwt
Borders & Sheets		PLANEM##	default	Plan Sheet	planrd	fdotseed2d.dgn	planrd.dwt
Borders & Sheets		PLAYEM##	default	Project Layout Sheets	planrd	fdotseed2d.dgn	planrd.dwt
Borders & Sheets		PLPREM##	default	Plan & Profile Sheets	plprrd	fdotseed2d.dgn	plprrd.dwt
Borders & Sheets		PRDSEM##	default	Project Profile Layout	planrd	fdotseed2d.dgn	planrd.dwt
Borders & Sheets		PROFEM##	default	Profile Sheets	plprrd	fdotseed2d.dgn	plprrd.dwt
Clipping		CLIPEM##	default	Clip Borders	cliprd	fdotseed2d.dgn	cliprd.dwt

File Type	Critical	File Name	Model Name	File Description	Standard Rule	MicroStation Seed File	Civil 3D Template File
Clipping		MTPLEM##	default	Motif file for plan sheets	planrd	fdotseed2d.dgn	planrd.dwt
Clipping		MTPREM##	default	Motif file for profile sheets	plprrd	fdotseed2d.dgn	planrd.dwt
Cross Sections	X	LDXSEM##	rdxsrd Rdxsrd Pattrd Xsshrd	Lateral Ditch Cross-Sections Lateral Ditch Cross-Sections Lateral Ditch Pattern Lines Lateral Ditch Shapes	rdxsrd	fdotseedxs.dgn	rdxsrd.dwt
Cross Sections	X	PDXSEM##	Rdxsrd_shg Rdxsrd Pattrd Xsshrd	Lateral Ditch Cross Section Sheets Pond Cross-Sections Pond Pattern Lines Pond Shapes	pdxsrd	fdotseedxs.dgn	pdxsrd.dwt
Cross Sections	X	RDXSEM##	Rdxsrd_shg Rdxsrd Pattrd Xsshrd	Pond Cross Section Sheets Roadway Cross-Sections Roadway Pattern Lines Roadway Shapes	rdxsrd	fdotseedxs.dgn	rdxsrd.dwt
Existing DTM		GDTMEM##	default	Digital Terrain Model / TIN Model - 3D	gdtmrd	fdotseed3d.dgn	dtmrd.dwt
Existing Topography		TOPOEM##	default	Topography-Existing (Utility & Drainage not included)	topord	fdotseed2d.dgn	topord.dwt
Key Sheets		KEYSEM##	default	Key Sheet	keysht	fdotseedkeymap.dgn	keysht.dwt
Project Network Control		PNCSEM##	default	Survey Project Network Control Sheets	planrd	fdotseed2d.dgn	ctlsrd.dwt
Proposed Design		ALGNEM##	algnrd	Alignment Layout	algnrd	fdotseed2d.dgn	algnrd.dwt
Proposed Design		BKSWEM##	default	Back of Sidewalk Profiles	plprrd	fdotseed2d.dgn	plprrd.dwt
Proposed Design		CURCEM##	default	Curve or Coordinate Data Sheet	planrd	fdotseed2d.dgn	planrd.dwt
Proposed Design	X	DSGNEM##	default	Proposed Design	dsgnrd	fdotseed2d.dgn	dsgnrd.dwt
Proposed Design		DSPFEM##	default	Proposed Profile	plprrd	fdotseed2d.dgn	plprrd.dwt
Proposed Design		GCTREM##	default	Contours 2D	dtmrd	fdotseed2d.dgn	dtmrd.dwt
Proposed Design		INTDEM##	default	Intersection/Interchange Details	planrd	fdotseed2d.dgn	planrd.dwt
Proposed Design		INTPEM##	default	Intersection/Interchange Profiles	plprrd	fdotseed2d.dgn	plprrd.dwt
Proposed Design		MITGEM##	default	Mitigation Areas	planrd	fdotseed2d.dgn	planrd.dwt
Proposed Design		PDPLEM##	default	Pond Design	drprrd	fdotseed2d.dgn	drmprd.dwt
Proposed Design	X	QTDSEM##	default	Quantity Computation Shapes/Calculations	qtdsrd	fdotseed2d.dgn	qtdsrd.dwt
Proposed Design	X	QUANEM##	default	Quantity Computation Details	qtdsrd	fdotseed2d.dgn	qtdsrd.dwt
Proposed Design		RWDTEM##	default	R/W Details for Roadway	rwdtrd	fdotseed2d.dgn	rwdrd.dwt
Proposed Design		SCGREM##	default	Selective Clearing & Grubbing Sheet	planrd	fdotseed2d.dgn	planrd.dwt

File Type	Critical	File Name	Model Name	File Description	Standard Rule	MicroStation Seed File	Civil 3D Template File
Proposed Design		SIGNEM##	default	Digital Signatures (Multi)	open	fdotseed2d.dgn	digitalsignature.dwt
Proposed Design		SWPPEM##	default	Storm Water Pollution Prevention Plan	planrd	fdotseed2d.dgn	planrd.dwt
Proposed Design		TEXTEM##	default	Text Labels & Miscellaneous Descriptions	planrd	fdotseed2d.dgn	
Proposed Design		WETLEM##	default	Wetlands Delineation Sheet	planrd	fdotseed2d.dgn	planrd.dwt
Special Details		SPDTEM##	default	Special Details Sheet	open	fdotseed2d.dgn	typsrd.dwt
Summary Boxes / Tables		BRHYEM##	default	Bridge Hydraulics Recommendation Sheet	planrd	fdotseed2d.dgn	planrd.dwt
Summary Boxes / Tables		BXCLEM##	default	Box Culvert Wingwall Design & Special Details	drdtrd	fdotseed2d.dgn	drdtrd.dwt
Summary Boxes / Tables		CESSEM##	default	Summary of Pay Item Sheets	planrd	fdotseed2d.dgn	planrd.dwt
Summary Boxes / Tables		SUMQEM##	default	Summary of Quantities Sheets	planrd	fdotseed2d.dgn	planrd.dwt
Traffic Control		TCDSEM##	default	Traffic Control Design	tcdsrd	fdotseed2d.dgn	tcdsrd.dwt
Traffic Control		TCDTEM##	default	Traffic Control Detail Sheet	tcdsrd	fdotseed2d.dgn	tcdsrd.dwt
Traffic Control		TCGNEM##	default	Traffic Control General Note Sheets	planrd	fdotseed2d.dgn	planrd.dwt
Traffic Control		TCPLEM##	default	Traffic Control Plan Sheets	tcdsrd	fdotseed2d.dgn	tcdsrd.dwt
Traffic Control		TCTYEM##	default	Traffic Control Typical Section Sheets	tcdsrd	fdotseed2d.dgn	tcdsrd.dwt
Typical Sections		TYPDEM##	default	Typical Data Sheet	typdrd	fdotseed2d.dgn	typdrd.dwt
Typical Sections		TYPSEM##	default	Typical Section Sheets & Details	typsrd	fdotseed2d.dgn	typsrd.dwt
Utilities		UTADEM##	default	Utility Adjustment Sheets	utadrd	fdotseed2d.dgn	utadrd.dwt
Utilities		UTEXEM##	default	Utilities - Existing	utexrd	fdotseed2d.dgn	utexrd.dwt
Utilities	X	UTPREM##	default	Utilities - Proposed	utprrd	fdotseed2d.dgn	utprrd.dwt
Verified Utilities		SBVHEM##	default	Summary of Verified Utilities (2D)	planrd	fdotseed2d.dgn	planrd.dwt
Verified Utilities		UTVHEM##	default	Survey of Verified Utilities (2D)	utexrd	fdotseed2d.dgn	utexrd.dwt

4.15 SURVEY STANDARDS

This chapter describes the minimum CADD requirements for Survey operations.

4.15.1 Level/Layer and Symbology Standards

Symbology Standards that apply to the Department's 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 Standard Rules which are associated to each valid Standard Filename of each Discipline for the purpose of performing the Quality Control check for the Department's Standards compliancy of each Project design file. Appendix A provides a listing of all Department CADD Standard Rules with associated Levels and Symbology.

4.15.2 Standard File Names

The Department utilizes standard naming conventions and provides automated tools that depend on this naming convention being met. The naming convention confers data information to the downstream customer.

- ***Standard design file names should follow this format: AAAABB##.ext***

Where **AAAA** = *abbreviated file description*, **BB** = *Discipline Denotation, ##* =*Sequence number.*

Note See Section 4.8 for more information about Standard File Names.

The following table defines the Survey file names with each file including sequential numbering. Standard model names are also provided, however, it is not mandatory to use more than the default model.

Note See Appendix A for the complete listing of level/symbologies standards for each applicable CADD Standard Rule.

File Type	Critical File	File Name	Model Name	File Description	Standard Rule	MicroStation Seed File	Civil 3D Template File
Drainage	X	DREXRD##	default	Drainage Structures - Existing	drexrd	fdotseed2d.dgn	drexrd.dwt
Existing DTM		GDTMRD##	default	Digital Terrain Model / TIN Model - 3D	gdtmrd	fdotseed3d.dgn	dtmrd.dwt
Existing Topography	X	TOPORD##	default	Topography - Existing	topord	fdotseed2d.dgn	topord.dwt
Existing Topography		TREERD##	default	Tree Survey Sheet	topord	fdotseed2d.dgn	topord.dwt
Existing Utilities	X	UTEXRD##	default	Utilities - Existing	utexrd	fdotseed2d.dgn	utexrd.dwt
Project Network Control		CTLSRD##	default	Survey Project Network Control Sheets	planrd	fdotseed2d.dgn	ctlsrd.dwt
Survey Development	See note below	SURVRD##	default	Survey Development Model for 3D Design	survrd	fdotseed3d.dgn	survey.dwt
Verified Utilities	X	UTVHRD##	default	Survey of Verified Utilities (3D version of UTEXRD.dgn)	utexrd	fdotseed3d.dgn	utexrd.dwt

Note The SURVRD file is a critical file for Bentley SS3 Corridor Modeling (3D) projects only.

4.15.3 Data Files Created by Survey

Additional geometry input files are also created for delivery to design. For example: files of existing points, profiles, chains, surfaces, etc., should be created in LandXML format. All data delivered to the Department should be placed under the \survey discipline folder, which the Department's standard folder structure is included for this purpose. Additional sub-folders may be created under the \survey discipline folder to segregate and further organize data. For example: the case where a CAiCE project is placed within the project folder structure under the \survey discipline folder for delivery.

Note See Section 4.7 for requirements for creating additional sub-folders.

4.15.4 Resource Files

CAiCE and GEOPAK use a feature table to look-up appropriate element symbology for given objects, defined by their "feature" found in the survey. Civil 3D uses similar technology.

For CAiCE, the feature table is found in the folder named x:\FDOTSS3\CAiCE\FTB**,** where "***x***" is the workstation drive letter.

The CAiCE feature table correlates the level numbers (200+ through 9xxx) used in CAiCE to the level names corresponding to the MicroStation DGN file, the SMD features used by GEOPAK Survey and the layer names in the description key/figure prefix database used by Civil 3D. This table is placed in the \CAiCE\FTB\ folder.

A corresponding feature table with an *.ftm* extension is also loaded to the x:\FDOTSS3\CAiCE\FTB\ folder to control symbology on alignment chains (Geometry Chains with stationing). This table is used by the **Settings > Object Display > Geometry Chains** command in CAiCE to control the proper symbology of alignment stationing, station tics, and station labels based upon scale.

Note The name of the *.ftm* feature table must match the name of the active *.ftb* feature table in use during a CAiCE session.

- ***Feature List Files***

Feature List files; *FDOTTOPO.lis*, *FDOTDran.lis*, and *FDOTUtil.lis*, are also installed into the x:\FDOTSS3\CAiCE\FTB\ folder to assist the user in creating the CAiCE screen graphics containing the appropriate data for producing the three typical graphics files required by design, *TOPORD00.dgn*, *DREXRD00.dgn*, and *UTEXRD00.dgn*. These List files are listings of the feature codes that belong in the respective design files. Consult your CAiCE documentation on the use of List files.

Note A Department CAiCE application, Theme Viewer, can accomplish a similar function to using CAiCE list files.

- ***CAiCE Cell Library***

MicroStation Cell libraries cannot be used or attached by CAiCE directly. The MicroStation cell library is translated to CAiCE's own version of a cell library (*.CCL versus MicroStation *.CEL).

- ***CAiCE Translation Table***

A CAiCE Translation Table, *Edgntype.tbl*, is another resource file provided for CAiCE that maps CAiCE line styles to MicroStation custom line styles. This table is in the CADD Software Install at the x:\FDOTSS3\CAiCE\DGN\ subfolder.

Note To have compatibility with MicroStation long name cells and levels, two files, DGNCell.TBL and DGNLevel.tbl, must reside under your \CAiCE\DGN\V8 folder.

➢ ***Additional CAiCE Tables and Cell Libraries***

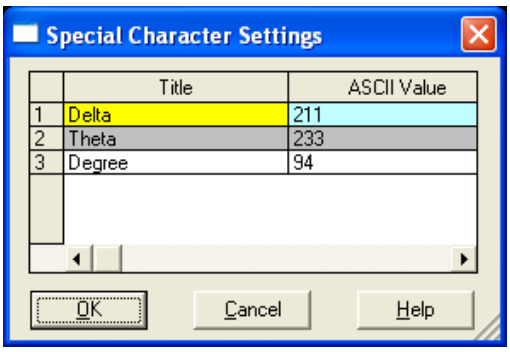
Additional CAiCE feature tables and cell libraries are also provided for existing topography files, created for Right-of-Way mapping purposes. Mapping uses additional consolidation of certain monument symbols and has other symbolization requirements. The tables and cell libraries included are:

- **FDOT_SS3RW.FTB -** Feature table containing the topography features used in ROW Mapping
- **FDOT_SS3RW.FTM -** Corresponding table for controlling alignment / chain symbology and bearing / distance chain labeling (attaches automatically when FDOT_SS3RW.FTB is attached)
- **RWENG_SS3.CCL -** CAiCE format of the cell library for use in ROW mapping
- **RWENG_SS3.CEL -** MicroStation format of the topo cell library for use in ROW mapping

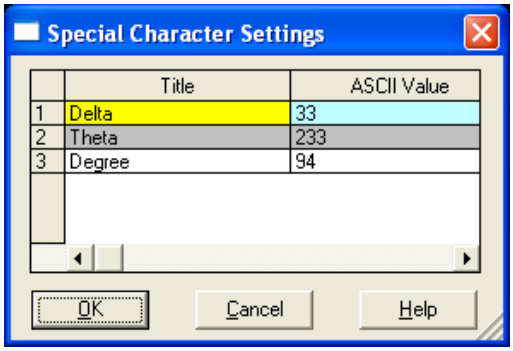
➢ ***CAiCE Special Characters***

CAiCE does not support True Type Fonts. CAiCE Font(s) 48 & 58 will have to be manually replaced by True Type Fonts in MicroStation if the CDG2V8 Macro is used for importing CAiCE data.

- **CAiCE font 48 and translating to MicroStation -** Font 48 does not use the standard ASCII table for all special characters. In particular, the degree symbol (°) for MicroStation requires that CAiCE place the hat symbol (^) in CAiCE text strings so MicroStation will look correct when data is translated to MicroStation graphics. To force CAiCE to substitute the (^) for the degree (°), CAiCE needs to be set by selecting the menu options: **Settings > Special Characters** and set the ASCII value of 94 to represent degrees as shown in the figure to the right.



- **Right of Way project font 58 in MicroStation** - If exporting to a Right of Way map, CAiCE needs to be set by selecting the menu items: Settings > Special Characters and set the ASCII value 33 to the Delta symbol as shown in the figure to the right.



4.15.5 GEOPAK and Bentley Survey

For GEOPAK, the Survey application uses a feature table called *fdot_ss3.smd*. This feature table is installed into the x:\FDOTSS3\geopak\databases\ folder by the CADD Software Install routine ('x' is the drive letter where the CADD Software is installed). The *fdot_ss3.smd* should be used when processing field measurement .OBS files, importing CAiCE KCP files, reading GEOPAK Input files and visualizing features with the Survey Display dialogue box or the COGO Navigator. The *fdot_ss3rw.smd* feature table is the Right of Way counterpart feature table and should be used when importing or visualizing Right of Way features or products such as the *TOPORW##.dgn* file.

Bentley Survey (formally known as Data Acquisition) uses a XML version of the GEOPAK SMD files named *Survey_display.xml* and *ROW_Display.xml*. Both feature files can be found in the x:*FDOTSS3\geopak\databases\ folder and are imbedded in the FDOT_SurveyFeatures_RD.dgnlib and FDOT_SurveyFeatures_RW.dgnlib respectively. It is NOT necessary to attach these feature files when working within the FDOT workspace*.

> ***Note*** Civil 3D DESCRIPTI0N KEYS for translating point objects are found imbedded in the individual templates provided in the Department's Civil 3D State Kit and are not separate resource files. The FIGURE PREFIX DATABASE for translating chains into Civil 3D figures is delivered as part of the Department's State Kit for Civil 3D.

Both GEOPAK and CAiCE use the similar cell libraries for survey graphics. The cell libraries (*syeng.cel* for Roadway design and *rweng.cel* for Right of Way) should be referenced from the x:\FDOTSS3\RESOURCES\Cell folder. (x:\FDOT2015.C3D\DATA\BLOCKS\ROW.DWG for AutoCAD)

4.15.6 CIVIL 3D

Standard survey files developed for Autodesk workflows are created by using the FDOT2015.C3D software in conjunction with the Department's standard surveying templates provided by the FDOT2015.C3D software install routine. These standard surveying templates are installed into the x:\FDOT2015.C3D\Data\Templates\ folder by the FDOT2015.C3D software Install routine ('x' is the drive letter where the FDOT2015.C3D software is installed).

The LandXMLGrouper is also provided by the FDOT2015.C3D software install routine. The LandXMLGrouper routine presorts XML files exported from EFB or CAiCE into point and figure groups that can be used for building standard surveying deliverables similar to the CAiCE theme viewer.

> ***Note*** Civil 3D surveying deliverables must be developed within Civil 3D to be compatible with Autodesk workflows. Surfaces and Alignments are specific formats within Civil 3D. Point objects and figures (chains) are also specific to Civil 3D. Converting Surveying deliverable MicroStation DGN files to DWG or vice versa will not create an acceptable deliverable in the current workflows for either Bentley or Autodesk products.

4.15.7 Survey Data

The Department's ***Surveying Procedure***, Topic 550-030-101 and the ***Surveying Handbook*** governs the requirements for survey procedure for the Department's projects. These documents are available at: **http://www.dot.state.fl.us/surveyingandmapping/doc_pubs.shtm**

4.15.8 County Mapping

The production of County Maps is an internal function of the Department's Surveying and Mapping Office. This documentation refers to the graphical symbology standards used for the production of those maps. For information regarding file naming conventions and other standards in use during the production of the Department's County maps, contact the Geographic Mapping Office in the Department's Surveying and Mapping Office at (850) 414-4111.

File Type	Description	Color	Line Style	Weight	Cell
All	Adjacent County and State Text				
All	Airport Names				
All	Airport Runways			6	
All	Airports Commercial				cscapt
All	Airports Commercial				cap
All	Airports Landing Strip or Private Airport				cslstp
All	Airports Landing Strip or Private Airport				ldarsp
All	Airports Military				csmfld
All	Airports Military				milffad
All	Backdrop	30			
All	Backdrop	60			
All	Bay				2
All	Bay Text				2
All	Bayou and Harbor etc.				3
All	Bayou and Harbor etc. Text				3
All	Boundary Section Lines (hidden)	31			
All	Bridges			0	
All	Bridges			1	
All	Bridges Interstate	1			
All	Bridges and Drawbridges County Highways	4			
All	Bridges and Drawbridges County Highways Text	8			
All	Bridges and Drawbridges Local Roads				
All	Bridges and Drawbridges Local Roads Text	18			
All	Bridges and Drawbridges State Highways	3			
All	Bridges and Drawbridges State Highways Text	7			
All	Bridges and Drawbridges Toll Roads	5			
All	Bridges and Drawbridges Toll Roads Text	5			
All	Bridges and Drawbridges US Highways	2			
All	Bridges and Drawbridges US Highways Text	6			
All	Bridges Interstate Text	4			
All	Cities Incorporated Area			0	
All	Cities Incorporated Linear Boundaries			1	
All	City Streets			1	
All	Coastal Waterway				csicw
All	Coastal Waterway Text				10
All	College or University	71			
All	College or University Text	30			8
All	Communities and Subdivisions Names without Post Office				3
All	Communities Names with Post Office				2
All	Connecting Roads			2	
All	Coordinate ticks Lat Longs				csotic
All	Coordinate ticks State Plane				csstic
All	County Boundary		7	6	
All	County Parks	70			
All	County Parks Text	148			10

File Type	Description	Color	Line Style	Weight	Cell
All	County Roads Related Text				
All	County Route Divided Highway Outline and Fill				
All	County Routes Highway Center Lines			3	
All	County Routes Ramps			2	
All	County Seat				cscose
All	County Seat Names			4	
All	County Seat Names			6	
All	Culture			0	
All	Culture			1	
All	Culture			2	
All	Culture Text				1
All	Cut Border				
All	Extended Township Lines	43	3	2	
All	Forbes Purchase		3	3	
All	Forbes Purchase Section lines		3	0	
All	Forbes Purchase Township and Range Lines		3	2	
All	Geographic Features Text			1	
All	Heliports				csheli
All	Intermittent Ponds				1
All	Intermittent Ponds Text				8
All	Interstate Divided Highway Outline and Fill				
All	Interstate Highway Center Lines			3	
All	Interstate Ramps			2	
All	Interstates Related Text				
All	Islands				
All	Islands Text Coastal (Keys etc)			2	
All	Islands Text Inland (Hammocks and Ridges etc)				1
All	Lakes and Ponds				
All	Lakes and Ponds Text				9
All	Land Grant Boundaries		4	0	
All	Legend				
All	Local Roads Divided Highway Outline and Fill				
All	Local Roads Improved	11		1	
All	Local Roads Paved	11		2	
All	Local Roads Related Cells				cslgf0
All	Local Roads Related Cells				cslgf1
All	Local Roads Related Cells				cslgf2
All	Local Roads Related Cells				cslgf3
All	Local Roads Related Cells				cslgf4
All	Local Roads Related Cells				csp1
All	Local Roads Related Cells				csp2
All	Local Roads Related Cells				cspnf1
All	Local Roads Related Cells				cspnf2
All	Local Roads Related Cells				cspsf1
All	Local Roads Related Cells				cspsf2
All	Local Roads Related Text				
All	Local Roads Unimproved	10		1	
All	Mangroves				mg
All	Mangroves				csman1
All	Mangroves				smg
All	Map Border				
All	Map Border Text and Cells				
All	Map Information Text and Cells				

File Type	Description	Color	Line Style	Weight	Cell
All	Map Information Text and Cells				
All	Masks for Road Features				
All	Masks for Text				
All	Military Bases	66			
All	Military Bases Text	146			7
All	Narrow Canals		5		
All	Narrow Canals		5		
All	Narrow Canals		5		
All	Narrow Canals Text				7
All	Narrow River Creek and Branch and Slough	12		1	
All	Narrow River Creek and Branch and Slough	12		1	
All	Narrow River Creek and Branch and Slough	12		1	
All	Narrow River Creek and Branch and Slough Text				6
All	National Forest	65			
All	National Forest Text	44			1
All	National Park	69			
All	National Park Text	44			2
All	National Wildlife Refuge and Preserve	75			
All	National Wildlife Refuge and Preserve Text	144			3
All	Ocean and Gulf				1
All	Ocean and Gulf Text				1
All	Other Incorporated Names			2	
All	Other Incorporated Names			3	
All	Other Survey Related Text				3
All	Planning Number Interstates				cssir1
All	Planning Number Interstates				cssir2
All	Planning Number Interstates				cssir3
All	Planning Number US Highways				cssus1
All	Planning Number US Highways				cssus2
All	Planning Number US Highways				cssus3
All	Planning Number US Highways				cssus1
All	Planning Number US Highways				cssus2
All	Planning Number US Highways				cssus3
All	Populations				1
All	Quad Borders				
All	Railroad Stations				csrsta
All	Railroads	3			
All	Railroads Text				
All	Road shields County Roads				cs1crs
All	Road shields County Roads				cs2crs
All	Road shields County Roads				cs3crs
All	Road shields County Roads				cs4crs
All	Road shields Interstates				cs1irs
All	Road shields Interstates				cs2irs
All	Road shields Interstates				cs3irs
All	Road shields State Highways				cs1srs
All	Road shields State Highways				cs2srs
All	Road shields State Highways				cs3srs
All	Road shields Toll roads				cs1trs
All	Road shields Toll roads				cs2trs
All	Road shields Toll roads				cs3trs
All	Road shields Toll roads				cstps
All	Road shields US Highways				cs1urs

File Type	Description	Color	Line Style	Weight	Cell
All	Road shields US Highways				cs2urs
All	Road shields US Highways				cs3urs
All	Road shields US Highways Alternate				cs1usa
All	Road shields US Highways Alternate				cs2usa
All	Road shields US Highways Alternate				cs3usa
All	Road shields US Highways Business				cs1usb
All	Road shields US Highways Business				cs2usb
All	Road shields US Highways Business				cs3usb
All	Seaplane facility				csseap
All	Section Lines		0	0	
All	Section Numbers				1
All	State Boundary		6	6	
All	State Capital				cscptl
All	State Forest	67			
All	State Forest Text	145			4
All	State Park	14			
All	State Park Text	145			5
All	State Prisons	124			
All	State Prisons Text	124			9
All	State Roads Related Text				
All	State Route Divided Highway Outline and Fill				
All	State Routes Highway Center Lines			3	
All	State Routes Ramps			2	
All	State Survey Lines		1	1	
All	State Wildlife Refuge and Preserve	72			
All	State Wildlife Refuge and Preserve	74			
All	State Wildlife Refuge and Preserve Text	147			6
All	Street Related Text				
All	Strip Mining Area	117			
All	Survey by Others		2	1	
All	Survey Correction Text within map				4
All	Swamps				sw3
All	Swamps	15			
All	Swamps Text	45			
All	Toll Divided Highway Outline and Fill				
All	Toll Highway Center Lines			3	
All	Toll Ramps			2	
All	Toll roads Related Text				
All	Town Centers				cscctr
All	Township and Range lines		0	2	
All	Township and Range Tics				csttic
All	Township and Range Text				2
All	Triangulation Station				cstria
All	Triangulation Station				trista
All	Triangulation Station Text	97			2
All	Un-Inventoried Roads and Features				
All	US Highways Related Text				
All	US Route Divided Highway Outline and Fill				
All	US Routes Highway Center Lines			3	
All	US Routes Ramps			2	
All	Wide Rivers and Canals	12		1	4
All	Wide Rivers and Canals Text				5
All	Wildlife Management Area Text	94			11

4.16 DRAINAGE STANDARDS

The purpose of this chapter is to provide CADD Standards for the Department's projects generated by Roadway Design and Drainage Design. (See also Section 4.18 of this Chapter for Roadway Standards)

4.16.1 Standard File Names

The Department utilizes standard naming conventions and provides automated tools that depend on this naming convention being met. The naming convention confers data information to the downstream customer.

- ***Standard design file names should follow this format: AAAABB##.ext***

Where **AAAA** = *abbreviated file description*, **BB** = *Discipline Denotation, ##* =*Sequence number.*

Note See Section 4.8 for more information about Standard File Names.

The following table defines the Drainage File names with each file including sequential numbering. Standard model names are also provided. Since most Drainage files are shared with Roadway, the two groups must coordinate the creation and ownership of these files.

Note See Appendix A for the complete listing of level/symbologies standards for each applicable CADD Standard Rule.

File Type	Critical	File Name	Model Name	File Description	Standard Rule	MicroStation Seed File	Civil 3D Template File
Borders & Sheets		BDDMRD##	default	Border Sheet Reference File for Drainage Map Sheet	planrd	fdotseed2d.dgn	
Borders & Sheets		LDPRRD##	default	Lateral Ditch Plan / Profile Sheet	plprrd	fdotseed2d.dgn	plprrd.dwt
Cross Sections	X	DRXSRD##	rdxsrd Pattrd Xsshrd Rdxsrd_shg	Drainage Structure Cross Sections Drainage Structure Pattern Lines Drainage Structure Shapes Drainage Structure Cross Section Sheets	drxsrd	fdotseedxs.dgn	drxsrd.dwt
Cross Sections	X	LDXSRD##	Rdxsrd Pattrd Xsshrd Rdxsrd_shg	Lateral Ditch XSections, Pattern Line & Shapes Lateral Ditch Pattern Lines Lateral Ditch Shapes Lateral Ditch Cross Section Sheets	rdxsrd	fdotseedxs.dgn	rdxsrd.dwt
Cross Sections	X	PDXSRD##	rdxsrd Pattrd Xsshrd Rdxsrd_shg	Pond Cross Sections Pond Pattern Lines Pond Shapes Pond Cross Section Sheets	pdxsrd	fdotseedxs.dgn	pdxsrd.dwt
Drainage		DRDTRD##	default	Drainage Detail Sheet	drdtrd	fdotseed2d.dgn	drdtrd.dwt
Drainage		DREXRD##	default	Drainage Structures - Existing	drexrd	fdotseed2d.dgn	drexrd.dwt
Drainage		DRFLRD##	default	Drainage Flood Data Form	drprrd	fdotseed2d.dgn	drprrd.dwt
Drainage		DRMPRD##	default	Drainage Map	drmprd	fdotseed2d.dgn	drmprd.dwt
Drainage		DROMRD##	default	Drainage Optional Materials Tabulation	planrd	fdotseed2d.dgn	planrd.dwt
Drainage	X	DRPRRD##	default	Drainage Structures - Proposed	drprrd	fdotseed2d.dgn	drprrd.dwt
Proposed Design		PDPLRD##	default	Pond Design	drprrd	fdotseed2d.dgn	drmprd.dwt
Proposed Design		SWPPRD##	default	Storm Water Pollution Prevention Plan	plprrd	fdotseed2d.dgn	plprrd.dwt

File Type	Critical	File Name	Model Name	File Description	Standard Rule	MicroStation Seed File	Civil 3D Template File
Proposed Design		TEXTDR##	default	Text Labels & Miscellaneous Descriptions	planrd	fdotseed2d.dgn	
Proposed Design		WETLRD##	default	Wetlands Delineation for Drainage	planrd	fdotseed2d.dgn	planrd.dwt
Summary Boxes /Tables		BRHYRD##	default	Bridge Hydraulics Recommendation Sheet	planrd	fdotseed2d.dgn	planrd.dwt
Summary Boxes /Tables		BXCLRD##	default	Box Culvert Wing wall Design and Special Details	drdtrd	fdotseed2d.dgn	drdtrd.dwt
Summary Boxes /Tables		SUMDRD##	default	Summary of Drainage Structures	planrd	fdotseed2d.dgn	planrd.dwt

4.16.2 File Sharing and Merging

Every project utilizes the standard folder structure regardless of the project requirements. Data for each discipline is maintained in its sub-folder. If a discipline requires information from another discipline, the needed file(s) will be referenced from the original folder, not copied.

4.16.3 Resource Files

ECSO provides software resources for Drainage plans preparation using GEOPAK and Civil 3D. Some Districts utilize other Drainage analysis and design applications, such as Automated Storm Sewer Analysis and Design (ASAD). The Drainage databases produced by drainage design applications will be delivered with the project.

4.16.4 Engineering Data

The Drainage discipline folder contains the additional sub-folder named \eng_data designated to contain the following:

- Image files of the plan sheets for the drainage design, if applicable
- Quality Control Reports
- Engineering Data output files including Drainage network(s) LandXML as applicable
- Drainage Reports, including drainage databases used for reports
- All supplemental hand calculations (scanned and saved in PDF format)
- Other data pertinent to the overall drainage design

4.16.5 Packaging

Listed below are files created by Roadway that are to be treated as Drainage files:

- **DRDTRD##.DGN -** Drainage Detail Sheets
- **DREXRD##.DGN -** Drainage Existing Structures
- **DRFLRD##.DGN -** Flood Data Form
- **DRMPRD##.DGN -** Drainage Map, if required in the PPM) included in the final submittal
- **DRPRRD##.DGN -** Drainage Proposed Structures
- **DRXSRD##.DGN -** Drainage Structure Cross Sections
- **SUMDRD##.DGN -** Summary of Drainage Structures

4.17 ROADWAY STANDARDS

CADD Standards for component plans are defined in their respective chapters. See the Department's PPM Volume 2 for the Sequence of Plans Preparation and the definition of component plans.

4.17.1 Standard File Names

The Department utilizes standard naming conventions and provides automated tools that depend on this naming convention being met. The naming convention confers data information to the downstream customer.

- ***Standard design file names should follow this format: AAAABB##.ext***

Where **AAAA** = *abbreviated file description*, **BB** = *Discipline Denotation, ##* =S*equence number.*

Note See Section 4.8 for more information about Standard File Names.

The following table defines the Roadway File names with each file including sequential numbering. Standard model names are also provided. Since most Drainage files are shared with Roadway, the two groups must coordinate the creation and ownership of these files.

The file types listed in the following table may be used by other disciplines, and the first four characters of the file name are consistent between disciplines, but the fifth and sixth characters vary to reflect the discipline name. Each discipline chapter details their Standard File Names. Standard Model names are also provided in the table, however, it is not mandatory to use more than the default model, with the exception of those listed in this table.

Note See Appendix A for the complete listing of level/symbologies standards for each applicable CADD Standard Rule.

File Type	Critical	File Name	Model Name	File Description	Standard Rule	MicroStation Seed File	Civil 3D Template File
Borders & Sheets		BDBRRD##	default	Border Sheet Reference File for Bridge Hydraulic Sheet	planrd	fdotseed2d.dgn	
Borders & Sheets		BDDMRD##	default	Border Sheet Reference File for Drainage Map Sheet	planrd	fdotseed2d.dgn	
Borders & Sheets		BDPLRD##	default	Border Sheet Reference File for Plan Sheet	planrd	fdotseed2d.dgn	
Borders & Sheets		BDPPRD##	default	Border Sheet Reference File for Plan/Profile Sheet	plprrd	fdotseed2d.dgn	
Borders & Sheets		BDPRRD##	default	Border Sheet Reference File for Profile Sheet	plprrd	fdotseed2d.dgn	
Borders & Sheets		BDXSRD##	rdxsrd	Border Sheet Reference File for Cross-Section Sheet	rdxsrd	fdotseedxs.dgn	
Borders & Sheets		GNNTRD##	default	Project Notes	planrd	fdotseed2d.dgn	planrd.dwt
Borders & Sheets		LDPRRD##	default	Lateral Ditch Plan / Profile Sheet	plprrd	fdotseed2d.dgn	plprrd.dwt
Borders & Sheets		PLANRD##	default	Plan Sheet	planrd	fdotseed2d.dgn	planrd.dwt
Borders & Sheets		PLAYRD##	default	Project Layout Sheets	planrd	fdotseed2d.dgn	planrd.dwt
Borders & Sheets		PLPRRD##	default	Plan & Profile Sheets	plprrd	fdotseed2d.dgn	plprrd.dwt
Borders & Sheets		PRDSRD##	default	Project Profile Layout	plprrd	fdotseed2d.dgn	plprrd.dwt
Borders & Sheets		PROFRD##	default	Profile Sheets	plprrd	fdotseed2d.dgn	plprrd.dwt
Clipping		CLIPRD##	default	Clip Borders	cliprd	fdotseed2d.dgn	cliprd.dwt
Clipping		MTPLRD##	default	Motif file for plan sheets	planrd	fdotseed2d.dgn	planrd.dwt
Clipping		MTPRRD##	default	Motif file for profile sheets	plprrd	fdotseed2d.dgn	planrd.dwt
Cross Sections		AMGMRD##	default	Automated Machine Guidance Model (3D)	open	fdotseed3d.dgn	dtmrd.dwt

File Type	Critical	File Name	Model Name	File Description	Standard Rule	MicroStation Seed File	Civil 3D Template File
Cross Sections		GKLNRD##	default	Geopak Lines for Existing Features	topord	fdotseed2d.dgn	
Cross Sections		DRXSRD##	Rdxsrd Pattrd Xsshrd Rdxsrd _shg	Drainage Structure XSections,Pattern Lines & Shapes Drainage Structure Pattern Lines Drainage Structure Shapes Drainage Structure Cross Section Sheets	drxsrd	fdotseedxs.dgn	drxsrd.dwt
Cross Sections	X	LDXSRD##	rdxsrd Pattrd Xsshrd Rdxsrd _shg	Lateral Ditch Cross-Sections Lateral Ditch Pattern Lines Lateral Ditch Shapes Lateral Ditch Cross Section Sheets	rdxsrd	fdotseedxs.dgn	rdxsrd.dwt
Cross Sections	X	PDXSRD##	Rdxsrd Pattrd Xsshrd Rdxsrd _shg	Pond XSections,Pattern Lines & Shapes Pond Pattern Lines Pond Shapes Pond Cross Section Sheets	pdxsrd	fdotseedxs.dgn	pdxsrd.dwt
Cross Sections	X	RDXSRD##	rdxsrd Pattrd Xsshrd Rdxsrd _shg	Roadway Cross-Sections Roadway Pattern Lines Roadway Shapes Roadway Cross Section Sheets	rdxsrd	fdotseedxs.dgn	rdxsrd.dwt
Drainage		DRDTRD##	default	Drainage Detail Sheet	drdtrd	fdotseed2d.dgn	drdtrd.dwt
Drainage		DREXRD##	default	Drainage Structures - Existing	drexrd	fdotseed2d.dgn	drexrd.dwt
Drainage		DRFLRD##	default	Drainage Flood Data Form	drprrd	fdotseed2d.dgn	drprrd.dwt
Drainage		DRMPRD##	default	Drainage Map	drmprd	fdotseed2d.dgn	drmprd.dwt
Drainage		DROMRD##	default	Drainage Optional Materials Tabulation	planrd	fdotseed2d.dgn	planrd.dwt
Drainage	X	DRPRRD##	default	Drainage Structures - Proposed	drprrd	fdotseed2d.dgn	drprrd.dwt
Existing DTM		GDTMRD##	default	Digital Terrain Model / TIN Model - 3D	gdtmrd	fdotseed3d.dgn	dtmrd.dwt
Existing Topography		TOPOEM##	default	Topography-Existing (Locations for Environmental Concerns)	topord	fdotseed2d.dgn	topord.dwt
Existing Topography	X	TOPORD##	default	Topography-Existing (Utility & Drainage not included)	topord	fdotseed2d.dgn	topord.dwt
Key Sheets		KEYSRD##	default	Key Sheet	keysht	fdotseedkeymap.dgn	keysht.dwt
Project Network Control		CTLSRD##	default	Survey Project Network Control Sheets	planrd	fdotseed2d.dgn	ctlsrd.dwt
Proposed Design		ALGNRD##	algnrd	Alignment Layout	algnrd	fdotseed2d.dgn	algnrd.dwt
Proposed Design		BKSWRD##	default	Back of Sidewalk Profiles	plprrd	fdotseed2d.dgn	plprrd.dwt
Proposed Design	X	CORRRD##	default	Corridor Design Model	dsgnrd	fdotseed2d.dgn	dsgnrd.dwt
Proposed Design		CURCRD##	default	Curve or Coordinate Data Sheet	planrd	fdotseed2d.dgn	planrd.dwt
Proposed Design	X	DSGNRD##	default	Proposed Design	dsgnrd	fdotseed2d.dgn	dsgnrd.dwt
Proposed Design		DSPFRD##	default	Proposed Profile	plprrd	fdotseed2d.dgn	plprrd.dwt
Proposed Design		GCTRRD##	default	Contours 2D	dtmrd	fdotseed2d.dgn	dtmrd.dwt
Proposed Design		INTDRD##	default	Intersection/Interchange Details	planrd	fdotseed2d.dgn	plprrd.dwt

File Type	Critical	File Name	Model Name	File Description	Standard Rule	MicroStation Seed File	Civil 3D Template File
Proposed Design		INTPRD##	default	Intersection/Interchange Profiles	plprrd	fdotseed2d.dgn	plprrd.dwt
Proposed Design		MITGRD##	default	Mitigation Areas	planrd	fdotseed2d.dgn	planrd.dwt
Proposed Design		PDPLRD##	default	Pond Design	drprrd	fdotseed2d.dgn	drmprd.dwt
Proposed Design	X	QTDSRD##	default	Quantity Computation Shapes/Calculations	qtdsrd	fdotseed2d.dgn	qtdsrd.dwt
Proposed Design	X	QUANRD##	default	Quantity Computation Details	qtdsrd	fdotseed2d.dgn	qtdsrd.dwt
Proposed Design	X	RDTMRD##	default	Proposed Digital Terrain Surface Model	dtmrd	fdotseed2d.dgn	dtmrd.dwt
Proposed Design		RWDTRD##	default	Right of Way Details for Roadway	rwdtrd	fdotseed2d.dgn	rwdrd.dwt
Proposed Design		SCGRRD##	default	Selective Clearing & Grubbing Sheet	planrd	fdotseed2d.dgn	planrd.dwt
Proposed Design		SIGNRD##	default	Digital Signatures (Multi)	open	fdotseed2d.dgn	digitalsignature.dwt
Proposed Design		SWPPRD##	default	Storm Water Pollution Prevention Plan	plprrd	fdotseed2d.dgn	plprrd.dwt
Proposed Design		TEXTDR##	default	Text Labels & Miscellaneous Descriptions	planrd	fdotseed2d.dgn	
Proposed Design		TEXTRD##	default	Text Labels & Miscellaneous Descriptions	planrd	fdotseed2d.dgn	
Proposed Design		WETLRD##	default	Wetlands Delineation Sheet	planrd	fdotseed2d.dgn	planrd.dwt
Special Details		CSINRD##	default	Concrete Slab Inventory	planrd	fdotseed2d.dgn	planrd.dwt
Special Details		SPDTRD##	default	Special Details Sheet	open	fdotseed2d.dgn	typsrd.dwt
Summary Boxes / Tables		BRHYRD##	default	Bridge Hydraulics Recommendation Sheet	planrd	fdotseed2d.dgn	planrd.dwt
Summary Boxes / Tables		BXCLRD##	default	Box Culvert Wingwall Design & Special Details	drdtrd	fdotseed2d.dgn	drdtrd.dwt
Summary Boxes / Tables		CESSRD##	default	Summary of Pay Item Sheets	planrd	fdotseed2d.dgn	planrd.dwt
Summary Boxes / Tables		SUMDRD##	default	Summary of Drainage Structures	planrd	fdotseed2d.dgn	planrd.dwt
Summary Boxes / Tables		SUMQRD##	default	Summary of Quantities Sheets	planrd	fdotseed2d.dgn	planrd.dwt
Traffic Control	X	TCDSRD##	default	Traffic Control Design	tcdsrd	fdotseed2d.dgn	tcdsrd.dwt
Traffic Control		TCDTRD##	default	Traffic Control Detail Sheet	tcdsrd	fdotseed2d.dgn	tcdsrd.dwt
Traffic Control		TCGNRD##	default	Traffic Control General Note Sheets	planrd	fdotseed2d.dgn	planrd.dwt
Traffic Control		TCPLRD##	default	Traffic Control Plan Sheets	tcdsrd	fdotseed2d.dgn	tcdsrd.dwt
Traffic Control		TCTYRD##	default	Traffic Control Typical Section Sheets	typsrd	fdotseed2d.dgn	typsrd.dwt
Typical Sections		TYPDRD##	default	Typical Data Sheet	typdrd	fdotseed2d.dgn	typdrd.dwt
Typical Sections		TYPSRD##	default	Typical Section Sheets & Details	typsrd	fdotseed2d.dgn	typsrd.dwt
Utilities		UTADRD##	default	Utility Adjustment Sheets	utadrd	fdotseed2d.dgn	utadrd.dwt
Utilities	X	UTEXRD##	default	Utilities - Existing	utexrd	fdotseed2d.dgn	utexrd.dwt
Utilities	X	UTPRRD##	default	Utilities - Proposed	utprrd	fdotseed2d.dgn	utprrd.dwt
Verified Utilities		SBVHRD##	default	Summary of Verified Utilities (2D)	planrd	fdotseed2d.dgn	planrd.dwt
Verified Utilities		UTVHRD##	default	Survey of Verified Utilities (2D)	utexrd	fdotseed2d.dgn	utexrd.dwt
Verified Utilities		UTVHRD##	default	Survey of Verified Utilities (3D version of utexrd.dgn)	utexrd	fdotseed3d.dgn	utexrd.dwt

4.17.2 Engineering Data

The \roadway discipline folder contains the additional sub-folder named \eng_data designated to contain the following:

- Image files of the plan sheets, if applicable for Electronic Delivery projects
- Quality Control Reports
- Engineering Data output files, including LandXML files of the points, alignments, profiles, sections, surfaces, pipe networks and Multiline files
- Roadway design Reports, including any databases used for report generation
- All supplemental hand calculations (scanned and saved in PDF format)
- Other data pertinent to the overall roadway design

4.18 SIGNING & PAVEMENT MARKING STANDARDS

Signing and Pavement Marking Plans are usually a component set of plans (see Section 4.19 Roadway Standards). However, if the Signing and Pavement Marking Plans are the lead plan set, then the standards set in Section 4.19 Roadway Standards, pertaining to elements that are specific to the lead plan set, will apply to the Signing and Pavement Marking plan set (i.e., Traffic Control files and elements, preliminary estimate sheets, etc.).

The Department's projects requiring minor Signing and Pavement Marking construction work may include these features detailed on sheets in the Roadway Plans. If this is the case, the Signing and Pavement Markings element symbology standards apply. However, an exception to the Standard Rules must be created and documented in the Roadway discipline journal file.

When prepared as component plans, Signing and Pavement Parking plans will 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 will be numbered consecutively, with sheet numbers prefixed by the letter "S".

4.18.1 Standard File Names

The Department utilizes standard naming conventions and provides automated tools that depend on this naming convention being met. The naming convention confers data information to the downstream customer.

- ***Standard design file names should follow this format: AAAABB##.ext***

Where **AAAA** = *abbreviated file description*, **BB** = *Discipline Denotation, ##* =S*equence number.*

Note See Section 4.8 for more information about Standard File Names.

The following table defines the Signing and Pavement Marking File names with each file including sequential numbering. Standard model names are also provided.

The file types listed in the following table may be used by other disciplines, and the first four characters of the file name is consistent between disciplines, but the fifth and sixth characters vary to reflect the discipline name. Each discipline chapter details their Standard File Names. Standard Model names are also provided in the table, however, it is not mandatory to use more than the default model, with the exception of those listed in this table.

Note See Appendix A for the complete listing of level/symbologies standards for each applicable CADD Standard Rule.

File Type	Critical	File Name	Model Name	File Description	Standard Rule	MicroStation Seed File	Civil 3D Template File
Borders & Sheets		BDPLSP##	default	Border for Plan Sheets when sheet is referenced	planrd	fdotseed2d.dgn	
Borders & Sheets		BDXSSP##	rdxsrd	Border for Cross Section Sheet when sheet is referenced	rdxssp	fdotseedxs.dgn	
Borders & Sheets		GNNTSP##	default	General Notes	planrd	fdotseed2d.dgn	planrd.dwt
Borders & Sheets		PLANSP##	default	Plan Sheet	planrd	fdotseed2d.dgn	planrd.dwt
Clipping		CLIPSP##	default	Clip Borders	cliprd	fdotseed2d.dgn	cliprd.dwt
Clipping		MTPLSP##	default	Motif file for plan sheets	planrd	fdotseed2d.dgn	planrd.dwt
Clipping		MTPRSP##	default	Motif file for profile sheets	plprrd	fdotseed2d.dgn	planrd.dwt
Cross Sections	X	RDXSSP##	rdxsrd	Cross-Sections	rdxssp	fdotseedxs.dgn	rdxssp.dwt
Existing Topography		TOPOSP##	default	Topography - Existing	topord	fdotseed2d.dgn	topord.dwt
Key Sheets		KEYSSP##	default	Key Sheet	keysht	fdotseedkeymap.dgn	keysht.dwt
Proposed Design		AUTOSP##	default	AutoTurn Turning Radius Data	autosp	fdotseed2d.dgn	autosp.dwt
Proposed Design	X	DSGNSP##	default	Proposed Design	dsgnsp	fdotseed2d.dgn	dsgnsp.dwt
Proposed Design		SAPMSP##	default	Layout as a Typical Design or Passing Zone	dsgnsp	fdotseed2d.dgn	dsgnsp.dwt
Proposed Design		SIGNSP##	default	Digital Signatures (Multi)	open	fdotseed2d.dgn	digitalsignature.dwt
Proposed Design		TEXTSP##	default	Text Labels & Miscellaneous Descriptions	planrd	fdotseed2d.dgn	
Special Details		GSWKSP##	default	Guide Sign Work Sheet & Details	gswksp	fdotseed2d.dgn	gswksp.dwt
Special Details		MSARSP##	default	Mast Arm Detail for Signing	msarsp	fdotseed2d.dgn	msarsp.dwt
Special Details		SPDTSP##	default	Special Details - Miscellaneous	open	fdotseed2d.dgn	typsrd.dwt
Special Details		SPSGSP##	default	Special Sign Details for Overhead	open	fdotseed2d.dgn	typsrd.dwt
Summary Boxes /Tables		CESSSP##	default	Summary of Pay Item Sheets	planrd	fdotseed2d.dgn	planrd.dwt
Summary Boxes /Tables		TABQSP##	default	Tabulation of Quantity Sheets	planrd	fdotseed2d.dgn	planrd.dwt

4.18.2 Sign Design

The Draw Sign program is a MicroStation application that draws sign panels and posts and determines the corresponding pay item of the assembly based on the wind load and post properties. The Draw Sign program requires use of the GEOPAK and GEOPAK Design and Computation (D&C) Manager database (*FDOTSS3.ddb*) to provide automated pay item association.

The Department's Signs application included in the State Kit for Civil 3D, provides similar functionality. It requires the project's pay item database (payitemdb.xml), also used by Entity Manager, to provide automated pay item associations.

4.18.3 GuidSIGN

GuidSIGN is the standard sign design software used by the Department. However, using GuidSIGN is not required and other sign design programs available in the industry may be used. The Department's Level/Symbology Standards will still be met regardless of the software used.

GuidSIGN is a tool to create sign panels. Sign panel design and creation require two (2) separate files: *GSWKSP##.dgn (DWG)* for sign panel design and the worksheet and the *DSGNSP##.dgn (DWG)* file for sign panel placement on the project. There is no limit in the number of sign panels that can be placed in a file.

In addition to the GuidSIGN worksheet design file, required for all non-standard sign designs by the PPM, a DXF output file of the sign for use by a sign cutting shop will be delivered for the creation of the physical sign panel.

4.18.4 AutoTURN

AutoTURN is the standard turn radius design software used by the Department. However, using AutoTURN is not required. Other vehicle wheel path design software available in the industry may be used for designing the turning movements of roadway intersections. The Department also uses Autodesk Vehicle Tracking. The Department's Level/Symbology Standards will still be met regardless of the software used.

4.19 SIGNALS STANDARDS

Signalization Plans are usually a component set of plans (see Section 4.19 Roadway Standards). However, if the Signalization Plans are the lead plan set, then the standards set in Section 4.19 Roadway Standards, pertaining to elements that are specific to the lead plan set will apply to the Signalization plan set (i.e., Traffic Control files and elements, preliminary estimate sheets, etc.)

The Department's 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 Level/Symbology Standards within this Section will still apply. However, an exception to the Standard Rules must be created and documented in the Roadway discipline journal file.

When prepared as component plans, Signalization Plans will be assembled as a separate plan set complete with a key sheet, tabulation of quantities and all other relevant signalization sheets. The sheets will be numbered consecutively, with sheet numbers prefixed by the letter "T". The Signalization Plans show the construction details, signal phasing and other relevant data.

4.19.1 Standard File Names

The Department utilizes standard naming conventions and provides automated tools that depend on this naming convention being met. The naming convention confers data information to the downstream customer.

- ***Standard design file names should follow this format: AAAABB##.ext***

Where **AAAA** = *abbreviated file description*, **BB** = *Discipline Denotation, ## =Sequence number.*

Note See Section 4.8 for more information about Standard File Names.

The following table defines the Signalization File names with each file including sequential numbering. Standard model names are also provided.

The file types listed in the following table may be used by other disciplines, and the first four characters of the file name are consistent between disciplines, but the fifth and sixth characters vary to reflect the discipline name. Each discipline chapter details their Standard File Names. Standard Model names are also provided in the table, however, it is not mandatory to use more than the default model, with the exception of those listed in this table.

Note See Appendix A for the complete listing of level/symbologies standards for each applicable CADD Standard Rule.

File Type	Critical	File Name	Model Name	File Description	Standard Rule	MicroStation Seed File	Civil 3D Template File
Borders & Sheets		BDPLSG##	default	Border Sheet Reference File for Plan Sheets	planrd	fdotseed2d.dgn	
Borders & Sheets		GNNTSG##	default	General Notes Sheet	planrd	fdotseed2d.dgn	planrd.dwt
Borders & Sheets		PLANSG##	default	Plan Sheet	dsgnsg	fdotseed2d.dgn	dsgnsg.dwt
Clipping		CLIPSG##	default	Clip Borders	cliprd	fdotseed2d.dgn	cliprd.dwt
Clipping		MTPLSG##	default	Motif file for plan sheets	planrd	fdotseed2d.dgn	planrd.dwt
Clipping		MTPRSG##	default	Motif file for profile sheets	plprrd	fdotseed2d.dgn	planrd.dwt
Existing Topography		TOPOSG##	default	Topography - Existing	topord	fdotseed2d.dgn	topord.dwt
Key Sheets		KEYSSG##	default	Key Sheet	keysht	fdotseedkeymap.dgn	keysht.dwt
Proposed Design	X	DSGNSG##	default	Proposed Design & Signal information	dsgnsg	fdotseed2d.dgn	dsgnsg.dwt
Proposed Design		SIGNSG##	default	Digital Signatures (Multi)	open	fdotseed2d.dgn	digitalsignature.dwt
Proposed Design		TEXTSG##	default	Text Labels & Miscellaneous Descriptions	planrd	fdotseed2d.dgn	
Special Details		GSWKSG##	default	Guide Sign Work Sheet & Details	gswksp	fdotseed2d.dgn	gswksp.dwt
Special Details		SSDTSG##	default	Special Details for Signs & Miscellaneous Items	dsgnsg	fdotseed2d.dgn	dsgnsg.dwt
Special Details		VHLPSG##	default	Special Loop Details & Instructions	dsgnsg	fdotseed2d.dgn	dsgnsg.dwt
Summary Boxes / Tables		CESSSG##	default	Summary of Pay Items	planrd	fdotseed2d.dgn	planrd.dwt
Summary Boxes / Tables		MSSGSG##	default	Mast Arm Detail & Tables	dsgnsg	fdotseed2d.dgn	dsgnsg.dwt
Summary Boxes / Tables		PLDTSG##	default	Pole Tabulation & Details for All Types	dsgnsg	fdotseed2d.dgn	dsgnsg.dwt
Summary Boxes / Tables		TABQSG##	default	Tabulation of Quantity Sheets	planrd	fdotseed2d.dgn	planrd.dwt

4.20 HIGHWAY LIGHTING STANDARDS

Highway Lighting Plans are usually a component set of plans (see Section 4.19 Roadway Standards). However, if the Highway Lighting Plans are the lead plan set, then the standards set in Section 4.19, Roadway Standards, pertaining to elements that are specific to the lead plan set will apply to the Highway Lighting plan set (i.e., Traffic Control files and elements, preliminary estimate sheets, etc.).

When prepared as component plans, Highway Lighting Plans will be assembled as a separate plan set complete with a key sheet, tabulation of quantities and all other relevant lighting sheets. The sheets will be numbered consecutively, with sheet numbers prefixed by the letter “L”.

4.20.1 Standard File Names

The Department utilizes standard naming conventions and provides automated tools that depend on this naming convention being met. The naming convention confers data information to the downstream customer.

- ***Standard design file names should follow this format: AAAABB##.ext***

Where **AAAA** = *abbreviated file description*, **BB** = *Discipline Denotation, ##* =*Sequence number.*

Note See Section 4.8 for more information about Standard File Names.

The following table defines the Highway Lighting File names with each file including sequential numbering. Standard model names are also provided.

The file types listed in the following table may be used by other disciplines, and the first four characters of the file name are consistent between disciplines, but the fifth and sixth characters vary to reflect the discipline name. Each discipline chapter details their Standard File Names. Standard Model names are also provided in the table, however, it is not mandatory to use more than the default model, with the exception of those listed in this table.

Note See Appendix A for the complete listing of level/symbologies standards for each applicable CADD Standard Rule.

File Type	Critical	File Name	Model Name	File Description	Standard Rule	MicroStation Seed File	Civil 3D Template File
Borders & Sheets		BDPLLT##	default	Border Sheet Plan	planrd	fdotseed2d.dgn	
Borders & Sheets		GNNTLT##	default	General Notes	planrd	fdotseed2d.dgn	planrd.dwt
Borders & Sheets		PLANLT##	default	Plan Sheet	planrd	fdotseed2d.dgn	planrd.dwt
Clipping		CLIPLT##	default	Clip Borders	cliprd	fdotseed2d.dgn	cliprd.dwt
Clipping		MTPLLT##	default	Motif file for plan sheets	planrd	fdotseed2d.dgn	planrd.dwt
Clipping		MTPRLT##	default	Motif file for profile sheets	plprrd	fdotseed2d.dgn	planrd.dwt
Existing Topography		TOPOLT##	default	Topography - Existing	topord	fdotseed2d.dgn	topord.dwt
Key Sheets		KEYSLT##	default	Key Sheet	keysht	fdotseedkeymap.dgn	keysht.dwt
Proposed Design	X	DSGNLT##	default	Proposed Design	dsgnlt	fdotseed2d.dgn	dsgnlt.dwt
Proposed Design		SIGNLT##	default	Digital Signatures (Multi)	open	fdotseed2d.dgn	digitalsignature.dwt
Proposed Design		TEXTLT##	default	Text Labels & Miscellaneous Descriptions	planrd	fdotseed2d.dgn	
Special Details		CNPLLT##	default	Special Pole Detail Sheets (All Types)	dsgnlt	fdotseed2d.dgn	dsgnlt.dwt
Special Details		JCDTLT##	default	Jacking Detail Sheet	open	fdotseed2d.dgn	typsrd.dwt
Special Details		LUDTLT##	default	Luminaire & Foundation Detail Sheet (All Types)	dsgnlt	fdotseed2d.dgn	dsgnlt.dwt
Special Details		SRPTLT##	default	Service Point Detail Sheets	open	fdotseed2d.dgn	typsrd.dwt
Summary Boxes / Tables		CESSLT##	default	Summary of Pay Item Sheets	planrd	fdotseed2d.dgn	planrd.dwt
Summary Boxes / Tables		PLDTLT##	default	Pole Data Sheets	open	fdotseed2d.dgn	typsrd.dwt
Summary Boxes / Tables		TABQLT##	default	Tabulation of Quantity Sheets	planrd	fdotseed2d.dgn	planrd.dwt

4.20.2 AGI32 Lighting Software

AGI32 Lighting Software is the standard Lighting Design software used by the Department. However, using AGI32 is not required. Other Lighting design software available in the industry may be used for the Lighting Design. If AGI32 is not used, the Department's Level/Symbology Standards will still be met to be compliant with CADD Standard Rules and Digital Delivery.

4.21 LANDSCAPE STANDARDS

Landscape means any vegetation, mulches, irrigation systems and any site amenities, such as, street furniture, decorative paving, fences and lighting (excluding public utility streets and area lighting). Landscape plans may be a component set of plans (see Section 4.19 Roadway Standards), or be prepared independently.

The Department's Projects with minor Landscaping may include landscaping features on separate sheets in the Roadway Plans set or landscaping features may be detailed on the Roadway plans sheets.

When prepared as component plans, Landscape Plans will be assembled as a separate plan set complete with a key sheet, tabulation of quantities and all other relevant Landscape sheets. The sheets will be numbered consecutively with the sheet numbers prefixed by the letters "LD".

A complete set of Landscape plans may include the following:

1. Key Sheet
2. Tabulation of Quantities
3. Planting Sheets
4. Irrigation Layout
5. Details Sheet
6. Other relevant plan sheets as required Pay Items Notes, General Notes or Maintenance Notes and Schedules.

These sub-components should be listed on the Landscape Plans Key Sheet under the "Components of Contract Plan Sets" heading.

4.21.1 Standard File Names

The Department utilizes standard naming conventions and provides automated tools that depend on this naming convention being met. The naming convention confers data information to the downstream customer.

- ***Standard design file names should follow this format: AAAABB##.ext***

Where **AAAA** = *abbreviated file description*, **BB** = *Discipline Denotation, ## =Sequence number.*

Note See Section 4.8 for more information about Standard File Names.

The following table defines the Landscaping File names with each file including sequential numbering. Standard model names are also provided.

The file types listed in the following table may be used by other disciplines, and the first four characters of the file name are consistent between disciplines, but the fifth and sixth characters vary to reflect the discipline name. Each discipline chapter details their Standard File Names. Standard Model names are also provided in the table, however, it is not mandatory to use more than the default model, with the exception of those listed in this table.

Note See Appendix A for the complete listing of level/symbologies standards for each applicable CADD Standard Rule.

File Type	Critical	File Name	Model Name	File Description	Standard Rule	MicroStation Seed File	Civil 3D Template File
Borders & Sheets		BDPLLD##	default	Border Referencing for Sheet Plan	planrd	fdotseed2d.dgn	
Borders & Sheets		GNNTLD##	default	General Notes	planrd	fdotseed2d.dgn	planrd.dwt
Borders & Sheets		PLANLD##	default	Plan Sheet	planrd	fdotseed2d.dgn	planrd.dwt
Borders & Sheets		PLAYLD##	default	Project Layout Sheet	planrd	fdotseed2d.dgn	planrd.dwt
Clipping		CLIPLD##	default	Clip Borders	cliprd	fdotseed2d.dgn	cliprd.dwt
Clipping		MTPLLD##	default	Motif file for plan sheets	planrd	fdotseed2d.dgn	planrd.dwt
Clipping		MTPRLD##	default	Motif file for profile sheets	plprrd	fdotseed2d.dgn	planrd.dwt
Existing Topography		TOPOLD##	default	Topography - Existing	topord	fdotseed2d.dgn	topord.dwt
Key Sheets		KEYSLD##	default	Key Sheet	keysht	fdotseedkeymap.dgn	keysht.dwt
Proposed Design	X	DSGNLD##	default	Proposed Landscape (Planting) Design	dsgnld	fdotseed2d.dgn	dsgnld.dwt
Proposed Design		HSDTLD##	default	Hardscape details	planrd	fdotseed2d.dgn	planrd.dwt
Proposed Design		IRRGLD##	default	Proposed Irrigation Design	irrgld	fdotseed2d.dgn	irrgld.dwt
Proposed Design		SIGNLD##	default	Digital Signatures (Multi)	open	fdotseed2d.dgn	digitalsignature.dwt
Proposed Design		TMOTLD##	default	Technical Maintenance Plan	dsgnld	fdotseed2d.dgn	dsgnld.dwt
Special Details		DETLLD##	default	Details	open	fdotseed2d.dgn	spdtrd.dwt
Special Details		GRDTLD##	default	Proposed Grading	planrd	fdotseed2d.dgn	planrd.dwt
Summary Boxes / Tables		CESSLD##	default	Summary of Pay Items	planrd	fdotseed2d.dgn	planrd.dwt
Summary Boxes / Tables		TABQLD##	default	Tabulation of Quantity Sheets	planrd	fdotseed2d.dgn	planrd.dwt

Note Hardscape Design files will use the same symbology standards as the Landscape Design file.

4.22 STRUCTURES STANDARDS

The use and generation of CADD files by Structures in regards to the Department's Projects will be in accordance with the general standards for all disciplines, unless superseded by instructions contained within this section.

The following table defines the resource files and features used for the FDOT Structures Workspace.

Feature	Bentley	Autodesk
Color Table	Color.tbl	*Not Applicable*
Font Files	FDOT*.ttf	FDOT*.ttf
Level Definitions	Strslevels.dgnlib	StructuresTemplateDetail.dwt StructuresTemplatePlan.dwt
Main Cell/Block Library	TTF_V8Structures.cel	Structures.dwg
Models Allowed	Yes	*Not Applicable*
QC Rule	Spst10	Spst10
Seed/Template Files	StructuresSeed.dgn StructuresSeed3d.dgn	StructuresTemplateDetail.dwt StructuresTemplatePlan.dwt
Text / Dimension Styles Definitions	Strslevels.dgnlib	StructuresTemplateDetail.dwt StructuresTemplatePlan.dwt

4.22.1 Standard File Names

The Department utilizes standard naming conventions for all of its CADD files and provides automated tools that depend on this naming convention. The naming convention confers data and information to the downstream customer.

- ***Standard file names for Bridges should follow this format: B#AAAA…##.[ext]***

Where:

B# = Bridge Plans Sequence Number,
AAAA… = Abbreviated File Description,
= Sequence Number.

For Example: First EndBent sheet of Bridge 1 in a plan set would be named *B1EndBent01.dgn*

Files created by Structures remain in the \struct discipline folder, the sheet numbers will be prefixed with the target discipline's sheet prefixes.

Note See Volume 2, Chapter 3 of the Structures Detailing Manual for complete details on Electronic Delivery Compliant sheet numbering instructions.

http://www.dot.state.fl.us/structures/StructuresManual/CurrentRelease/StructuresManual.shtm

Use the FDOT Menu option **Actions > Create File/Project** application to ensure files are named to the Department Standards.

Files containing Data Table cells (previously semi-standards) should be named *B#DataTable##.dgn* and should be placed in the plans with the corresponding component detail sheet. Files marked as Geotech are listed to show the order of placement within the Structures plans component only. All Geotech files should be located in the \Geotech discipline folder and should follow Geotech Standards listed in Section 4.25.

Existing Bridge plan sheets will be submitted in PDF format and manually inserted into the plans using sheet numbers as provided in the following table. Existing Bridge Plans should not be submitted in DGN format.

The following table defines the Structures Standard File Names for Department Projects and each file name will include sequence numbering. The Sheet Order is the default order, but may be modified to suit project specific requirements

.

Note See Appendix A for the complete listing of level/symbologies standards for each applicable CADD Standard Rule.

Structures Plans Naming Convention and Numbering Convention					
Sheet Order	File Name	Suggested Sheet Title	Sheet Prefix	Drawing Prefix *	As-Built Plans System - Structure Type
** - Optional ** - Lead or Component Key Sheet ## - Sheet Sequence Number*					
1	B#KeySheet.dgn	Bridge Key Sheet **	B-##	*	Key Sheet
2	B#Index.dgn	Index of Sheets	B-##	*	Gen. Notes, Index of Bridge Sheets, Pay Item Notes
3	B#TRNSPORTStructures.dgn	Summary of Pay Items Sheet (For Structures only projects)	B-##, …	*	Gen. Notes, Index of Bridge Sheets, Pay Item Notes
4	B#SumOfQuantities.dgn	Summary of Structures Quantities	B#-##	*	(See Section 18.2)
5	B#GeneralNotes.dgn	General Notes	B#-##	*	Gen. Notes, Index of Bridge Sheets, Pay Item Notes
6	B#PlanElev.dgn	Plan and Elevation	B1-##,B2-##, …	*	Plan and Elevation
7	B#VertCurveSuperEL.dgn	Profile Grade & Superelevation Transition	B1-##,B2-##, …	*	Plan and Elevation
8	B#BridgeHydro.dgn	Bridge Hydraulic Recommendations	B1-##,B2-##, …	*	Bridge Hydraulic Recommendation Sheet
9	B#ConstNotes.dgn	Construction Notes	B1-##,B2-##, …	*	Miscellaneous Details
10	B#ConstDet.dgn	Construction Details	B1-##,B2-##, …	*	Miscellaneous Details
11	B#ConstSeq.dgn	Construction Sequence	B1-##,B2-##, …	*	Miscellaneous Details
12	B#RemoveExist.dgn	Removal of Existing Structures	B1-##,B2-##, …	*	Miscellaneous Details
13	B#BridgeSection.dgn	Section Through Bridge	B1-##,B2-##, …	*	Miscellaneous Details
14	B#FoundLay.dgn	Foundation Layout	B1-##,B2-##, …	*	Foundation Layout
15	B#PileData.dgn	Pile Data Table	B1-##,B2-##, …	*	Foundation Layout
16	B#PileDet.dgn	Pile Details	B1-##,B2-##, …	*	Foundation Layout
17	B#DrillShaft.dgn	Drilled Shaft Data Table	B1-##,B2-##, …	*	Foundation Layout
18	B#DrillShaftDeT.dgn	Drilled Shaft Details	B1-##,B2-##, …	*	Intermediate Bents or Piers
19	B#Footing.dgn	Footing	B1-##,B2-##, …	*	Intermediate Bents or Piers
20	B#FootingDet.dgn	Footing Details	B1-##,B2-##, …	*	Intermediate Bents or Piers
21	B#EndBent.dgn	End Bent	B1-##,B2-##, …	*	End Bents Details
22	B#EndBentDet.dgn	End Bent Details	B1-##,B2-##, …	*	End Bents Details
23	B#IntBent.dgn	Intermediate Bent	B1-##,B2-##, …	*	Intermediate Bents or Piers
24	B#IntBentDet.dgn	Intermediate Bent Details	B1-##,B2-##, …	*	Intermediate Bents or Piers
25	B#Pier.dgn	Pier	B1-##,B2-##, …	*	Intermediate Bents or Piers
26	B#PierDet.dgn	Pier Details	B1-##,B2-##, …	*	Intermediate Bents or Piers
27	B#BeamLay.dgn	Beam Layout	B1-##,B2-##, …	*	Superstructure Sheets
28	B#BeamLayAASHTO.dgn	AASHTO Beam Layout	B1-##,B2-##, …	*	Superstructure Sheets
29	B#BeamLayBulbT.dgn	Bulb-T Beam Layout	B1-##,B2-##, …	*	Superstructure Sheets
30	B#BeamLayFub.dgn	Florida U-Beam Layout	B1-##,B2-##, …	*	Superstructure Sheets
31	B#BeamLayInvT.dgn	Inverted T Beam Layout	B1-##,B2-##, …	*	Superstructure Sheets
32	B#BeamLayT.dgn	T Beam Layout	B1-##,B2-##, …	*	Superstructure Sheets
33	B#PrestSlab.dgn	Prestressed Slab Units	B1-##,B2-##, …	*	Superstructure Sheets

Structures Plans Naming Convention and Numbering Convention					
Sheet Order	File Name	Suggested Sheet Title	Sheet Prefix	Drawing Prefix *	As-Built Plans System - Structure Type
34	B#TypicalSection.dgn	Typical Section Through Bridge Deck	B1-##,B2-##, …	*	Superstructure Sheets
35	B#FinishGrEL.dgn	Finish Grade Elevations	B1-##,B2-##, …	*	Superstructure Sheets
36	B#Camber.dgn	Camber Diagrams	B1-##,B2-##, …	*	Superstructure Sheets
37	B#FramingPlan.dgn	Framing Plan	B1-##,B2-##, …	*	Superstructure Sheets
38	B#Superst.dgn	Superstructure	B1-##,B2-##, …	*	Superstructure Sheets
39	B#SuperstDet.dgn	Superstructure Details	B1-##,B2-##, …	*	Superstructure Sheets
40	B#ClosureJoint.dgn	Closure Joint Details	B1-##,B2-##, …	*	Beam Sheets
41	B#CrossFrameDet.dgn	Cross Frame Details	B1-##,B2-##, …	*	Beam Sheets
42	B#DiaphragmDet.dgn	Diaphragm Details	B1-##,B2-##, …	*	Beam Sheets
43	B#ErectSeq.dgn	Erection Sequence	B1-##,B2-##, …	*	Beam Sheets
44	B#ErectProced.dgn	Erection Procedure for Launching Girder	B1-##,B2-##, …	*	Beam Sheets
45	B#FieldSplice.dgn	Bolted Field Splice	B1-##,B2-##, …	*	Beam Sheets
46	B#FieldSpliceDet.dgn	Bolted Field Splice Details	B1-##,B2-##, …	*	Beam Sheets
47	B#FloorBeam.dgn	Floor Beams	B1-##,B2-##, …	*	Beam Sheets
48	B#SteelGirder.dgn	Steel Girder	B1-##,B2-##, …	*	Beam Sheets
49	B#SteelDet.dgn	Steel Girder Details	B1-##,B2-##, …	*	Beam Sheets
50	B#Stiffener.dgn	Stiffener Details	B1-##,B2-##, …	*	Beam Sheets
51	B#BearingDet.dgn	Bearing Details	B1-##,B2-##, …	*	Superstructure Sheets
52	B#PierPTDet.dgn	Precast Pier Post-Tensioning Details	B1-##,B2-##, …	*	Superstructure Sheets
53	B#SegDimCap.dgn	Pier Cap Segment Dimensions	B1-##,B2-##, …	*	Superstructure Sheets
54	B#TransPTPier.dgn	Pier Transverse Post-Tensioning	B1-##,B2-##, …	*	Superstructure Sheets
55	B#SegLayout.dgn	Segment Layout	B1-##,B2-##, …	*	Superstructure Sheets
56	B#JointCoord.dgn	Segment Joint Coordinates	B1-##,B2-##, …	*	Superstructure Sheets
57	B#SegDimBox.dgn	Segment Dimensions	B1-##,B2-##, …	*	Superstructure Sheets
58	B#ReinfSeg.dgn	Segment Reinforcing	B1-##,B2-##, …	*	Superstructure Sheets
59	B#SegDimDev.dgn	Deviation Segment Dimensions	B1-##,B2-##, …	*	Superstructure Sheets
60	B#ReinfDevSeg.dgn	Deviation Segment Reinforcing	B1-##,B2-##, …	*	Superstructure Sheets
61	B#SegDimPier.dgn	Pier Segment Dimensions	B1-##,B2-##, …	*	Superstructure Sheets
62	B#ReinfPierSeg.dgn	Pier Segment Reinforcing	B1-##,B2-##, …	*	Superstructure Sheets
63	B#SegDimAbut.dgn	Abutment Segment Dimensions	B1-##,B2-##, …	*	Superstructure Sheets
64	B#ReinfAbutSeg.dgn	Abutment Segment Reinforcing	B1-##,B2-##, …	*	Superstructure Sheets
65	B#ReinfClosureSeg.dgn	Closure Segment Reinforcing	B1-##,B2-##, …	*	Superstructure Sheets
66	B#BulkheadSeg.dgn	Bulkhead Segment Details	B1-##, B2-##, …	*	Superstructure Sheets
67	B#LongPT.dgn	Longitudinal Post-Tensioning Layout	B1-##,B2-##, …	*	Superstructure Sheets
68	B#ContinuityTend.dgn	Continuity Tendon Layout	B1-##,B2-##, …	*	Superstructure Sheets
69	B#FuturePTLay.dgn	Future Post-Tensioning Layout	B1-##,B2-##, …	*	Superstructure Sheets
70	B#PTDet.dgn	Post-Tensioning Details	B1-##,B2-##, …	*	Superstructure Sheets
71	B#PTQuantities.dgn	Post-Tensioning Quantities	B1-##,B2-##, …	*	Superstructure Sheets

Structures Plans Naming Convention and Numbering Convention					
Sheet Order	File Name	Suggested Sheet Title	Sheet Prefix	Drawing Prefix *	As-Built Plans System - Structure Type
72	B#TendonCurveDet.dgn	Tendon Curvature Details	B1-##,B2-##, …	*	Superstructure Sheets
73	B#TransPTAbut.dgn	Abutment Segment Transverse Post-Tensioning	B1-##,B2-##, …	*	Superstructure Sheets
74	B#TransTendonDet.dgn	Transverse Post-Tensioning Details	B1-##,B2-##, …	*	Superstructure Sheets
75	B#SegConstSeq.dgn	Construction Sequence (PT)	B1-##,B2-##, …	*	Superstructure Sheets
76	B#BearingPads.dgn	Neoprene Bearing Pads	B1-##,B2-##, …	*	Superstructure Sheets
77	B#BearingPlates.dgn	Beveled Bearing Plates	B1-##,B2-##, …	*	Superstructure Sheets
78	B#PotBearing.dgn	Pot Bearing Details	B1-##,B2-##, …	*	Superstructure Sheets
79	B#JackingDet.dgn	Jacking Details	B1-##,B2-##, …	*	Superstructure Sheets
80	B#ExpJointDet.dgn	Expansion Joint Details	B1-##,B2-##, …	*	Superstructure Sheets
81	B#SlidingPlate.dgn	Traffic / Pedestrian Railing Sliding Plate Assembly	B1-##,B2-##, …	*	Superstructure Sheets
82	B#ApproachSlab.dgn	Approach Slab	B1-##,B2-##, …	*	Miscellaneous Details
83	B#ConduitDet.dgn	Utility Conduit Details	B1-##,B2-##, …	*	Miscellaneous Details
84	B#JunctionBox.dgn	Junction Box	B1-##,B2-##, …	*	Miscellaneous Details
85	B#DrainDet.dgn	Drain Details	B1-##,B2-##, …	*	Miscellaneous Details
86	B#LadderDet.dgn	Ladder Details	B1-##,B2-##, …	*	Miscellaneous Details
87	B#MiscDet.dgn	Miscellaneous Details	B1-##,B2-##, …	*	Miscellaneous Details
88	B#SidewalkDet.dgn	Sidewalk Details	B1-##,B2-##, …	*	Miscellaneous Details
89	B#SurfaceFinish.dgn	Surface Finish Details	B1-##,B2-##, …	*	Miscellaneous Details
90	B#FenderSystem.dgn	Fender System	B1-##,B2-##, …	*	Miscellaneous Details
91	B#FenderDet.dgn	Fender Details	B1-##,B2-##, …	*	Miscellaneous Details
92	B#RiprapRubble.dgn	Rubble Riprap	B1-##,B2-##, …	*	Miscellaneous Details
93	B#SlopeProtectionConcrete.dgn	Concrete Slope Protection	B1-##,B2-##, …	*	Miscellaneous Details
94	B#ScourPlan.dgn	Plan View of Scour Protection	B1-##,B2-##, …	SP-##	Miscellaneous Details
95	B#BotContourMap.dgn	Bottom Contour Map	B1-##,B2-##, …	SP-##	Miscellaneous Details
96	B#ScourProf.dgn	Profile of Scour Protection	B1-##,B2-##, …	SP-##	Miscellaneous Details
97	B#ScourDetail.dgn	Scour Protection Details	B1-##,B2-##, …	SP-##	Miscellaneous Details
98	B#RiprapSand.dgn	Sand Cement Riprap	B1-##,B2-##, …	SP-##	Miscellaneous Details
99	B#MiscStrTempBridge.dgn	Temporary Bridge Details	B1-##,B2-##, …	*	Miscellaneous Details
100	B#AccessOpen.dgn	Access Opening	B1-##,B2-##, …	*	Miscellaneous Details
101	B#MaintLight.dgn	Maintenance Lighting Plan	B1-##,B2-##, …	*	Miscellaneous Details
102	B#MaintLightDet.dgn	Maintenance Lighting Details	B1-##,B2-##, …	*	Miscellaneous Details
103	B#Handrail.dgn	Handrail	B1-##,B2-##, …	*	Miscellaneous Details
104	B#CompTestSetup.dgn	Compression Test Setup	B1-##,B2-##, …	LT-##	Miscellaneous Details
105	B#DrillShaftLT123.dgn	Drilled Shaft Load Test Sites 1,2&3	B1-##,B2-##, …	LT-##	Miscellaneous Details
106	B#LTSumDrillShaft.dgn	Drilled Shaft Load Test Program Summary	B1-##,B2-##, …	LT-##	Miscellaneous Details
107	B#InstruDet.dgn	Instrumentation Details	B1-##,B2-##, …	LT-##	Miscellaneous Details
108	B#LateralLT.dgn	Lateral Load Test Details	B1-##,B2-##, …	LT-##	Miscellaneous Details
109	B#LTFrame.dgn	Load Test Frame Configuration	B1-##,B2-##, …	LT-##	Miscellaneous Details

Structures Plans Naming Convention and Numbering Convention					
Sheet Order	File Name	Suggested Sheet Title	Sheet Prefix	Drawing Prefix *	As-Built Plans System - Structure Type
110	B#LTBraceDet.dgn	Load Test Reaction Girder Bracing Details	B1-##,B2-##, …	LT-##	Miscellaneous Details
111	B#LTGirderDet.dgn	Load Test Reaction Girder Details	B1-##,B2-##, …	LT-##	Miscellaneous Details
112	B#OsterbergCell.dgn	Osterberg Cell 3000 ton Load Testing Device	B1-##,B2-##, …	LT-##	Miscellaneous Details
113	B#LTSumPile.dgn	Pile Load Test Program Summary	B1-##,B2-##, …	LT-##	Miscellaneous Details
114	B#PlatformDet.dgn	Service Platform Deck and Frame Details	B1-##,B2-##, …	LT-##	Miscellaneous Details
115	B#StatnamicLT.dgn	Statnamic Load Test Details	B1-##,B2-##, …	LT-##	Miscellaneous Details
116	B#RebarList.dgn	Reinforcing Bar List	B1-##,B2-##, …		Reinforcing Bar List
117	B#BP-Notes.dgn	Bascule Pier Notes	B1-##,B2-##, …	BP-##	Movable Bridge - Structural
118	B#BP-Plan.dgn	Bascule Pier Plan	B1-##,B2-##, …	BP-##	Movable Bridge - Structural
119	B#BP-Elevations.dgn	Bascule Pier Elevations	B1-##,B2-##, …	BP-##	Movable Bridge - Structural
120	B#BP-Sections.dgn	Bascule Pier Sections	B1-##,B2-##, …	BP-##	Movable Bridge - Structural
121	B#BP-StlFraming.dgn	Bascule Pier Steel Framing	B1-##,B2-##, …	BP-##	Movable Bridge - Structural
122	B#BP-Details.dgn	Bascule Pier Details	B1-##,B2-##, …	BP-##	Movable Bridge - Structural
123	B#BP-Misc.dgn	Bascule Pier Miscellaneous	B1-##,B2-##, …	BP-##	Movable Bridge - Structural
124	B#BP-Quantities.dgn	Bascule Pier Quantities	B1-##,B2-##, …	BP-##	Movable Bridge - Structural
125	B#BP-Reinforcing.dgn	Bascule Pier Reinforcing	B1-##,B2-##, …	BP-##	Movable Bridge - Structural
126	B#BP-Barlist.dgn	Bascule Pier Bar Lists	B1-##,B2-##, …	BP-##	Movable Bridge - Structural
127	B#RP-Notes.dgn	Rest Pier Notes	B1-##,B2-##, …	RP-##	Movable Bridge - Structural
128	B#RP-Plan.dgn	Rest Pier Plan	B1-##,B2-##, …	RP-##	Movable Bridge - Structural
129	B#RP-Elevations.dgn	Rest Pier Elevations	B1-##,B2-##, …	RP-##	Movable Bridge - Structural
130	B#RP-Sections.dgn	Rest Pier Sections	B1-##,B2-##, …	RP-##	Movable Bridge - Structural
131	B#RP-StlFraming.dgn	Rest Pier Steel Framing	B1-##,B2-##, …	RP-##	Movable Bridge - Structural
132	B#RP-Details.dgn	Rest Pier Details	B1-##,B2-##, …	RP-##	Movable Bridge - Structural
133	B#RP-Misc.dgn	Rest Pier Miscellaneous	B1-##,B2-##, …	RP-##	Movable Bridge - Structural
134	B#RP-Quantities.dgn	Rest Pier Quantities	B1-##,B2-##, …	RP-##	Movable Bridge - Structural
135	B#RP-Reinforcing.dgn	Rest Pier Reinforcing	B1-##,B2-##, …	RP-##	Movable Bridge - Structural
136	B#RP-Barlist.dgn	Rest Pier Bar Lists	B1-##,B2-##, …	RP-##	Movable Bridge - Structural
137	B#BL-Notes.dgn	Bascule Leaf Notes	B1-##,B2-##, …	BL-##	Movable Bridge - Structural
138	B#BL-SpanLockDet.dgn	Bascule Leaf Span Lock Details	B1-##,B2-##, …	BL-##	Movable Bridge - Structural
139	B#BL-SpanLockPlan.dgn	Bascule Leaf Span Lock Plan	B1-##,B2-##, …	BL-##	Movable Bridge - Structural
140	B#BL-Sections.dgn	Bascule Leaf Sections	B1-##,B2-##, …	BL-##	Movable Bridge - Structural
141	B#BL-ClearDiagram.dgn	Bascule Leaf Clearance Diagram	B1-##,B2-##, …	BL-##	Movable Bridge - Structural
142	B#BL-ForceDiagram.dgn	Bascule Leaf Force Diagram	B1-##,B2-##, …	BL-##	Movable Bridge - Structural
143	B#BL-FramePlan.dgn	Bascule Leaf Framing Plan	B1-##,B2-##, …	BL-##	Movable Bridge - Structural
144	B#BL-Girders.dgn	Bascule Leaf Main Girders	B1-##,B2-##, …	BL-##	Movable Bridge - Structural
145	B#BL-FloorBeams.dgn	Bascule Leaf Floor Beams	B1-##,B2-##, …	BL-##	Movable Bridge - Structural
146	B#BL-Strings.dgn	Bascule Leaf Stringers	B1-##,B2-##, …	BL-##	Movable Bridge - Structural
147	B#BL-Bracing.dgn	Bascule Leaf Bracing	B1-##,B2-##, …	BL-##	Movable Bridge - Structural

Structures Plans Naming Convention and Numbering Convention					
Sheet Order	File Name	Suggested Sheet Title	Sheet Prefix	Drawing Prefix *	As-Built Plans System - Structure Type
148	B#BL-CantBracket.dgn	Bascule Leaf Cantilever Bracket	B1-##,B2-##, …	BL-##	Movable Bridge - Structural
149	B#BL-TrunGirder.dgn	Bascule Leaf Trunnion Girder	B1-##,B2-##, …	BL-##	Movable Bridge - Structural
150	B#BL-CounterWeight.dgn	Bascule Leaf Counter Weight	B1-##,B2-##, …	BL-##	Movable Bridge - Structural
151	B#BL-CntrWghtGirder.dgn	Bascule Leaf Counter Weight Girder	B1-##,B2-##, …	BL-##	Movable Bridge - Structural
152	B#BL-Deck.dgn	Bascule Leaf Deck	B1-##,B2-##, …	BL-##	Movable Bridge - Structural
153	B#BL-Details.dgn	Bascule Leaf Misc. Details	B1-##,B2-##, …	BL-##	Movable Bridge - Structural
154	B#BL-JointAssembly.dgn	Bascule Leaf Joint Assemblies	B1-##,B2-##, …	BL-##	Movable Bridge - Structural
155	B#BL-SideWalk.dgn	Bascule Leaf Sidewalk	B1-##,B2-##, …	BL-##	Movable Bridge - Structural
156	B#BL-TraffRail.dgn	Bascule Leaf Traffic Railing	B1-##,B2-##, …	BL-##	Movable Bridge - Structural
157	B#BL-PedRail.dgn	Bascule Leaf Pedestrian Railing	B1-##,B2-##, …	BL-##	Movable Bridge - Structural
158	B#BL-AccPlatforms.dgn	Bascule Leaf Access Platforms	B1-##,B2-##, …	BL-##	Movable Bridge - Structural
159	B#MechNotes.dgn	Mechanical Notes	B1-##,B2-##, …	BM-##	Movable Bridge - Mechanical
160	B#MechPlan.dgn	Mechanical Plan	B1-##,B2-##, …	BM-##	Movable Bridge - Mechanical
161	B#MechElev.dgn	Mechanical Elevation	B1-##,B2-##, …	BM-##	Movable Bridge - Mechanical
162	B#MechDet.dgn	Mechanical Details	B1-##,B2-##, …	BM-##	Movable Bridge - Mechanical
163	B#MechSect.dgn	Mechanical Sections	B1-##,B2-##, …	BM-##	Movable Bridge - Mechanical
164	B#MiscMechDet.dgn	Miscellaneous Mechanical Details	B1-##,B2-##, …	BM-##	Movable Bridge - Mechanical
165	B#PinionDet.dgn	Pinion Details	B1-##,B2-##, …	BM-##	Movable Bridge - Mechanical
166	B#TrunAssem.dgn	Trunnion Assembly	B1-##,B2-##, …	BM-##	Movable Bridge - Mechanical
167	B#TrunDet.dgn	Trunnion Details	B1-##,B2-##, …	BM-##	Movable Bridge - Mechanical
168	B#DriveAssem.dgn	Drive Assembly	B1-##,B2-##, …	BM-##	Movable Bridge - Mechanical
169	B#GateAssem.dgn	Gate Assembly	B1-##,B2-##, …	BM-##	Movable Bridge - Mechanical
170	B#HydraNote.dgn	Hydraulic Notes	B1-##,B2-##, …	BM-##	Movable Bridge - Mechanical
171	B#HydraCylDet.dgn	Hydraulic Cylinder Details	B1-##,B2-##, …	BM-##	Movable Bridge - Mechanical
172	B#HydraSchem.dgn	Hydraulic Schematic	B1-##,B2-##, …	BM-##	Movable Bridge - Mechanical
173	B#ElecNotes.dgn	Electric Notes	B1-##,B2-##, …	BE-##	Movable Bridge - Electrical
174	B#CCTVDet.dgn	CCTV Details	B1-##,B2-##, …	BE-##	Movable Bridge - Electrical
175	B#CommLayout.dgn	Communications Layout	B1-##,B2-##, …	BE-##	Movable Bridge - Electrical
176	B#ConduitRiser.dgn	Conduit Riser	B1-##,B2-##, …	BE-##	Movable Bridge - Electrical
177	B#ControlDesk.dgn	Control Desk	B1-##,B2-##, …	BE-##	Movable Bridge - Electrical
178	B#DriveDiag.dgn	Drive Diagram	B1-##,B2-##, …	BE-##	Movable Bridge - Electrical
179	B#ElecFloorplan.dgn	Electrical Floor Plan	B1-##,B2-##, …	BE-##	Movable Bridge - Electrical
180	B#GeneratorDet.dgn	Generator Details	B1-##,B2-##, …	BE-##	Movable Bridge - Electrical
181	B#Grounding.dgn	Grounding and Lighting Protection	B1-##,B2-##, …	BE-##	Movable Bridge - Electrical
182	B#IOpoints.dgn	Input Output Points, PLC	B1-##,B2-##, …	BE-##	Movable Bridge - Electrical
183	B#LadderLogic.dgn	Ladder Logic, PLC	B1-##,B2-##, …	BE-##	Movable Bridge - Electrical
184	B#OpSeq.dgn	Operating Sequence Flowchart	B1-##,B2-##, …	BE-##	Movable Bridge - Electrical
185	B#PanelBoardSch.dgn	Panel Board Schedule	B1-##,B2-##, …	BE-##	Movable Bridge - Electrical

Structures Plans Naming Convention and Numbering Convention					
Sheet Order	File Name	Suggested Sheet Title	Sheet Prefix	Drawing Prefix *	As-Built Plans System - Structure Type
186	B#SingleLine.dgn	Single Line Diagram	B1-##,B2-##, …	BE-##	Movable Bridge - Electrical
187	B#SubCableDet.dgn	Submarine Cable Details	B1-##,B2-##, …	BE-##	Movable Bridge - Electrical
188	B#SurgeSup.dgn	Surge Suppression Details	B1-##,B2-##, …	BE-##	Movable Bridge - Electrical
189	B#ElecMachLayout.dgn	Electrical Machinery Layout	B1-##,B2-##, …	BE-##	Movable Bridge - Electrical
190	B#MiscElecDet.dgn	Miscellaneous Electrical Details	B1-##,B2-##, …	BE-##	Movable Bridge - Electrical
191	B#Legend.dgn	Symbol Legend	B1-##,B2-##, …	BE-##	Movable Bridge - Electrical
192	B#MCC.dgn	Motor Control Center	B1-##,B2-##, …	BE-##	Movable Bridge - Electrical
193	B#ThreeLineDiag.dgn	Three Line Diagram	B1-##,B2-##, …	BE-##	Movable Bridge - Electrical
194	B#TrafCtrlDet.dgn	Traffic Control Details	B1-##,B2-##, …	BE-##	Movable Bridge - Electrical
195	B#NaviLightDet.dgn	Navigation Lighting System Details	B1-##,B2-##, …	BE-##	Miscellaneous Details
196	B#TowerDet.dgn	Control Tower Details	B1-##,B2-##, …	BT-##	Miscellaneous Details
197	B#TowerLighting.dgn	Control Tower Lighting	B1-##,B2-##, …	BT-##	Miscellaneous Details
198	B#TowerLayout.dgn	Tower, Lighting and Pier Layout	B1-##,B2-##, …	BT-##	Miscellaneous Details
199	B#Plumbing.dgn	Plumbing	B1-##,B2-##, …	BT-##	Miscellaneous Details
200	B#WorkID.dgn	Work Identification Sheet	B1-##,B2-##, …	BT-##	Miscellaneous Details
201	B#SitePlan.dgn	Site Plan for Rest Area	B1-##,B2-##, …	BT-##	Miscellaneous Details
202	B#CatwalkDet.dgn	Catwalk Details	B1-##,B2-##, …	BT-##	Miscellaneous Details
203	B#PedBridgeDataTable##.dgn	Pedestrian Bridge Data	BP-##	*	Pedestrian Bridge Sheets
204	B#WallControl.dgn	Wall Control Drawing	BW-##	W1-##,W2-##, …	Retaining Wall Sheets
205	B#Bulkhead.dgn	Bulkhead	BW-##	W1-##,W2-##, …	Retaining Wall Sheets
206	B#BulkheadDet.dgn	Bulkhead Details	BW-##	W1-##,W2-##, …	Retaining Wall Sheets
207	B#CrashWall.dgn	Crash Wall	BW-##	W1-##,W2-##, …	Retaining Wall Sheets
208	B#SheetPileWallAnch.dgn	Anchored Sheet Pile Wall	BW-##	W1-##,W2-##, …	Retaining Wall Sheets
209	B#SheetPileWallCant.dgn	Cantilever Sheet Pile Wall	BW-##	W1-##,W2-##, …	Retaining Wall Sheets
210	B#MSEwall.dgn	MSE Wall	BW-##	W1-##,W2-##, …	Retaining Wall Sheets
211	B#RetainingWall.dgn	Retaining Wall	BW-##	W1-##,W2-##, …	Retaining Wall Sheets
212	B#SheetPileWall.dgn	Sheet Pile Retaining Wall	BW-##	W1-##,W2-##, …	Retaining Wall Sheets
213	B#SheetPileWallST.dgn	Steel Sheet Pile Retaining Wall	BW-##	W1-##,W2-##, …	Retaining Wall Sheets
214	B#SheetPileWallConc.dgn	Concrete Sheet Pile Retaining Wall	BW-## / none	W1-##,W2-##, …	Retaining Wall Sheets
215	B#NoiseWall.dgn	Noise Wall	BW#-## / none	SB1-##, SB2-##, ...	
	WallControl.dgn	Wall Control Drawing *(Non-Bridge Related)*	BW-##	W1-##,W2-##, …	Retaining Wall Sheets
	Bulkhead.dgn	Bulkhead (Non-Bridge Related)	BW-##	W1-##,W2-##, …	Retaining Wall Sheets
	BulkheadDet.dgn	Bulkhead Details (Non-Bridge Related)	BW-##	W1-##,W2-##, …	Retaining Wall Sheets
	CrashWall.dgn	Crash Wall (Non-Bridge Related)	BW-##	W1-##,W2-##, …	Retaining Wall Sheets
	SheetPileWallAnch.dgn	Anchored Sheet Pile Wall *(Non-Bridge Related)*	BW-##	W1-##,W2-##, …	Retaining Wall Sheets
	SheetPileWallCant.dgn	Cantilever Sheet Pile Wall *(Non-Bridge Related)*	BW-##	W1-##,W2-##, …	Retaining Wall Sheets
	MSEwall.dgn	MSE Wall (Non-Bridge Related)	BW-##	W1-##,W2-##, …	Retaining Wall Sheets
	RetainingWall.dgn	Retaining Wall (Non-Bridge Related)	BW-##	W1-##,W2-##, …	Retaining Wall Sheets

Structures Plans Naming Convention and Numbering Convention					
Sheet Order	File Name	Suggested Sheet Title	Sheet Prefix	Drawing Prefix *	As-Built Plans System - Structure Type
	SheetPileWall.dgn	Sheet Pile Retaining Wall *(Non-Bridge Related)*	BW-##	W1-##,W2-~~##~~, …	Retaining Wall Sheets
	SheetPileWallST.dgn	Steel Sheet Pile Retaining Wall *(Non-Bridge Related)*	BW-##	W1-##,W2-~~##~~, …	Retaining Wall Sheets
	SheetPileWallConc.dgn	Concrete Sheet Pile Retaining Wall *(Non-Bridge Related)*	BW-## / none	W1-##,W2-~~##~~, …	Retaining Wall Sheets
	NoiseWall.dgn	Noise Wall (Non-Bridge Related)	BW#-## / none	SB1-##, SB2-##, ...	
216	B#MiscStr.dgn B#MiscStrClvt.dgn B#MiscStrHighMast.dgn B#MiscStrMastarm.dgn B#MiscStrOHSign.dgn	Varies Culvert High Mast Light Poles Mastarms Overhead Sign Structures	B#-## / none		
217	B#ExistingPlans.pdf	Existing Bridge Plans	BX#-##	BX-##	Existing Bridge Sheets
218	B#DataTableLoadRating.dgn	Load Rating Charts	B1-##,B2-~~##~~, …	*	Load Rating Charts
Varies	B#DataTable##.dgn	(Design Standards) Data Tables	B#-##	*	(Varies – See Section 18.2)
	B#Preliminary.dgn	Preliminary Plan and Elevation			
	StrBorder.dgn	Referencing Structures Borders			
	MiscStr.dgn	Varies			
	MiscStrClvt.dgn	Culvert			
	MiscStrMastarm.dgn	Mastarms			
	MiscStrHighMast.dgn	High Mast Light Poles			
	MiscStrOHSign.dgn	Overhead Sign Structures			
	SIGNST.dgn	Digital Signatures (Multi)			

4.22.2 Resource Files

Files created for the Structures discipline will use the resource files included with the Department's CADD Software packages. All files created for Structures Plans sheets will be created from the supplied Structures Seed or Template files.

The Structures Seed file for the FDOT Structures Workspace differs from other Seed files in both working units and unit labeling.

The *StrLevels.dgnlib* library file contains the definitions for Levels, Text, & Dimension styles.

> ***Note*** For V8 format MicroStation files, working units DO NOT define design plane size, only the method of measurement. Therefore, the design plane is the same size for all seed files.

4.22.3 Engineering Data

Engineering Data to be delivered with each project will be located in the *eng_data* folder and include:

- ASCII files containing Q/C reports
- Image files of all Structures Plan sheets (for Electronic Delivery only)
- All computer input and output files used in the design (in native file formats for the software used and printed to PDF format)
- All supplemental design hand calculations (scanned and saved in PDF or TIFF file formats)

Create separate sub-folders under the *struct* folder for each bridge and/or structure in the project. Name these sub-folders using the sheet prefix and bridge numbers (when applicable). Locate the MicroStation design files for each bridge under the named sub-folder and create a *eng_data* sub-folder in each, for the Engineering Data (e.g.*...\struct\B\eng_data; \struct\B1-######\eng_data*).

Print the sheet image PDF files from the graphics design files. Print image files of all other output files from the design and/or analysis programs. If the project requires electronic signing and sealing (for and Electronic Deliver project), all the sheet image files located in the *eng_data* sub-folder will be electronically signed & sealed. Otherwise a PDF of the structures plans will follow the conventions of Digital Delivery.

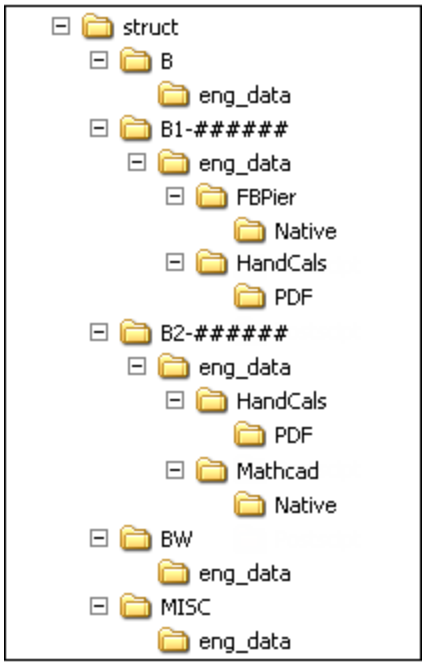
Computer input and output files include files used for all aspects of bridge, retaining wall, and/or miscellaneous structures design. These include, but are not limited to files generated from the following computer programs:

- FDOT Structural Software (listed in **CADD Customer Support Guide**)
- GTStrudl
- STADD
- RISA
- Mathcad Spreadsheets
- Excel Spreadsheets
- FBPier
- LEAP Software
- BD2
- MDX
- BC
- Adapt

Create a sub-folder in the \struct\B#-#####\eng_data sub-folder for each bridge and/or structure in the project and then create a sub-folder for each program used, with two sub-folders, \PDF and \Native.

Place the appropriate input and output files in each sub-folder. Only sign and seal these PDF files when required by Contract.

Scan any supplemental hand calculations used in the design and save the files in either PDF or TIFF formats. Create a sub-folder in the …\struct\B#-######\eng_data sub-folder called \HandCals, with two sub-folders, \PDF and \PDF (or TIFF), and place the appropriate files in each sub-folder.



4.22.4 Level and Symbology Standards

For the FDOT Structures Workspace, element Level/Symbology Standards are defined in the *StrLevels.dgnlib* Structures Level Library and will be selected from the MicroStation level picker. Each level contains a defined color, line weight, line style, and plot property. Color will remain set to BYLEVEL ***(except where indicated with ** in the table below)***, line weight & line style may be modified as needed.

User created Levels ARE NOT acceptable. If additional Levels are needed, contact the Structures Design Office. The Level named “Default” is not QC compliant and is not to be used for drawing elements. If a discrepancy occurs, the *StrLevels.dgnlib* Structures Level Library supersedes the symbology table on the following pages.

4.22.5 Borders and Scales

- **Borders:**

Draw all elements at "Full Size" completely before placing text or dimensions. After drawing all elements, determine the "Overall" Border scale required. Scale any details up or down as required at this time. Select the appropriate Border scale from the Structures Menu and place the Border Cell. Sheets that reside in the Structures Component of the plan set will use the Structures Border cell “Sheet-Border”. Sheets requiring Structures design that reside within other discipline components of the plan set (Roadway, Lighting, etc.) will use the Border Roadway w/Initials cell “Sheet-Rdwy”. In the FDOT Workspace, once the border scale is set, the Annotation Scale should be set via Structures Menu at the matching scale.

Select the text style from the Structures Menu, then place Text and Dimensions. It is helpful to show the scale of the drawing and related details inside the display area of the file, but outside of the Sheet Border area. This is helpful to all users who work on the file.

➢ **Scales:**

The following chart is intended to aid the user in determining the appropriate scale for placing the border and text on a drawing based on the actual size of the drawing. Calculations are based on a 9.60" x 15.40" drawing area inside the border.

- **Architect's Scales**

Drawing Scale	Active Scale (AS)	Height (FT.)	Width (FT.)
1/16" = 1'	192	153.59	246.39
3/32" = 1'	128	102.40	164.26
1/8" = 1'	96	76.80	123.20
3/16" = 1'	64	51.20	82.13
1/4" = 1'	48	38.40	61.60
3/8" = 1'	32	25.60	41.07
½" = 1'	24	19.20	30.80
3/4" = 1'	16	12.80	20.53
1" = 1'	12	9.60	15.40
1 ½" = 1'	8	6.40	10.27
3" = 1'	4	3.20	5.13
6" = 1'	2	1.60	2.57
1 = 1	1	.80	1.28

FORMULAS: Architect's Scale:

AS = 12 / Drawing Scale *(Ex. 1/4" = .25 in., then 12 / .25 = 48, Therefore AS = 48)*

W = Sheet Width (in.) / Drawing Scale *(Ex.1/4" = .25 in., then 15.36/ .25 = 61.44, Therefore W = 61.44)*

H = Sheet Height (in.) / Drawing Scale *(Ex. 1/4" = .25 in., then 9.72 / .25 = 38.88, Therefore H = 38.88)*

- **Engineer's Scales**

Drawing Scale	Active Scale (AS)	Height (FT.)	Width (FT.)
1" = 500'	6000	4799.81	7699.69
1" = 400'	4800	3839.85	6159.75
1" = 300'	3600	2879.88	4619.82
1" = 250'	3000	2399.90	3849.85
1" = 200'	2400	1919.92	3079.88
1" = 150'	1800	1439.94	2309.91
1" = 120'	1440	1161.95	1847.93
1" = 100'	1200	959.96	1539.94
1" = 80'	960	767.97	1231.95
1" = 60'	720	575.98	923.96
1" = 50'	600	479.98	769.97
1" = 40'	480	383.98	615.98
1" = 30'	360	287.99	461.98
1" = 20'	240	191.99	307.99
1" = 15'	180	143.99	230.99
1" = 10'	120	96.00	153.99

FORMULAS: Engineer's Scale:

AS = 12 x Drawing Scale *(Ex. 1"=500', then 12 x 500 = 6000, Therefore AS = 6000)*
W = Sheet Width (in.) x Drawing Scale *(Ex. 1"=500', then 15.36 x 500 = 7680, Therefore W = 7680)*
H = Sheet Height (in.) x Drawing Scale *(Ex. 1"=500', then 9.72 x 500 = 4860, Therefore H = 4860)*

4.22.6 Text Sizes and Weights

For the FDOT Structures Workspace, Annotation = 0.0063 x (Annotation Scale). The use of annotation scale allows the text and dimensioning to be rescaled easily via the **Scale > Annotation Scale** Structures Menu items.

The Structures Design Office (SDO) uses special, custom fonts in its drawings and CADD programs; specifically, the FDOT and FDOTMono true type fonts (ttf). These fonts are stored in the *FDOT.ttf* and *FDOTMono.ttf* files supplied with the Department's CADD Software.

The *zDOTFont.rsc* and *StructuresFont.rsc* resource files are delivered in the CADD Software suite providing support for legacy MicroStation fonts 168, 169, 68, and 69. Legacy MicroStation fonts should not be used for new production work.

The Structures Menu provides all needed text sizes. The minimum Annotation Text size after plotting will be .0063'. All Standard Text Sizes may be selected from the Structures Menu.

TITLE	FONT	SIZE (Ft)
Revisions Initials	FDOT FDOT	.0050 .0058
Annotation/Table Data	FDOT	.0063
View/Sheet/Sect Titles	FDOTBold	.0080
Large	FDOTBold	.0084
Larger	FDOTBold	.0100

Note Sizes shown are at 1:1 ratio.

4.22.7 Colors

Colors depend on the color table attached to the design file. Therefore, it is important that "*color.tbl*" provided by Bentley (shipped with MicroStation) is attached to all structures design files.

4.22.8 Special Symbols

Special symbol characters are provided in the Department's true type font files. These characters may be accessed via the Insert Symbol tool provided in the MicroStation Text Editor/Word Processor dialog.

These characters include, but are not limited to: fractions, mathematical symbols, survey symbols, boring symbols, Greek letters, Super/Sub Scripts.

4.22.9 Dimension Settings

Dimension styles are defined in the MicroStation *strslevels.dgnlib*. Styles are provided for Dimensioning and Notes for various terminators and leaders. Make every effort to use automatic dimensioning with element association enabled. In AutoCAD, use the dimension styles defined in the Structures templates.

4.22.10 Reference Files

Information from other disciplines such as Roadway, Utilities, etc. should not be copied into Structures design files, as they will be flagged as invalid by the QC Software and adversely affect the Standards Compliance Report.

When it is necessary to use or present this type of information, reference it into the Structures design file using relative paths.

4.22.11 Existing Bridge Plans

The January 2014 Structures Detailing Manual Chapter 3. 3.1 B it states the following:

> *"At the end of the plan set, place all existing bridge sheets for Structures Detailing Manual Topic No. 625-020-018 3 - Composition of Plan Set January 2014 3-2 Structures Manual Home each bridge in one PDF file named "B1ExistingPlans.pdf" for the first bridge (number sheets sequentially "BX1-1", "BX1-2", etc.) and "B2ExistingPlans.pdf" for the second bridge, etc."*

Traditionally existing Bridge Plans have been made as a part of the contract documents and therefore should be made part of the plans set. Likewise the PDF file(s) representing the existing Bridge Plans would reside in the \struct project folder.

4.23 UTILITIES STANDARDS

This chapter defines guidelines for sharing data between the District Offices and the Utility Agency/Owner (UAO).

4.23.1 Utility File Coordination Options

There are three options available for the UAO to share files with the Department:

- Exchange of graphic files (DGN or DWG) – the preferred option
- Create American Standard Code for Information Interchange (ASCII) files
- Import of Geographic Information System (GIS) data

➢ ***Sharing of Graphic Files***

Graphic design files are created to the Department's CADD Standards and returned to the District for review. The UAO will use these files as references to create the existing or proposed utility files. These files (existing or proposed) would also be submitted back to the District. It is the District's responsibility to coordinate with the UAO for delivery of graphic files. For AutoCAD DWG files, all line work for utilities should be preferably in 3D and saved as polylines or figure line objects.

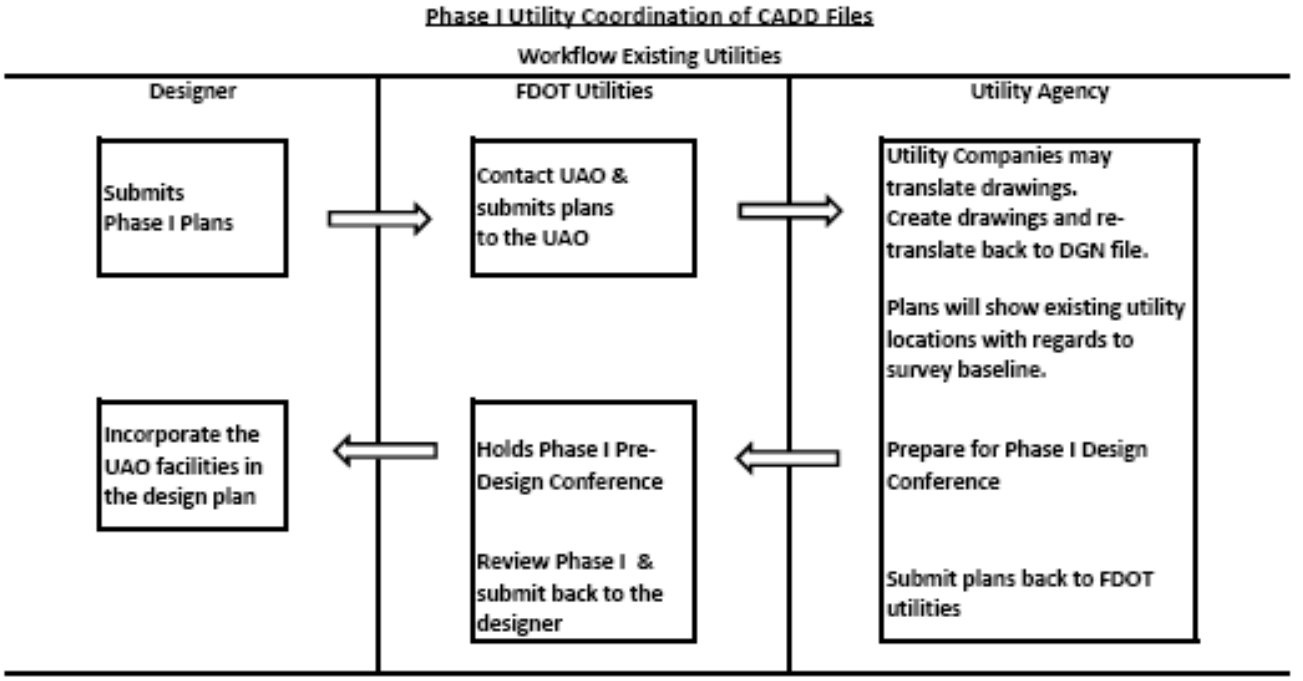
➢ ***ASCII Input File***

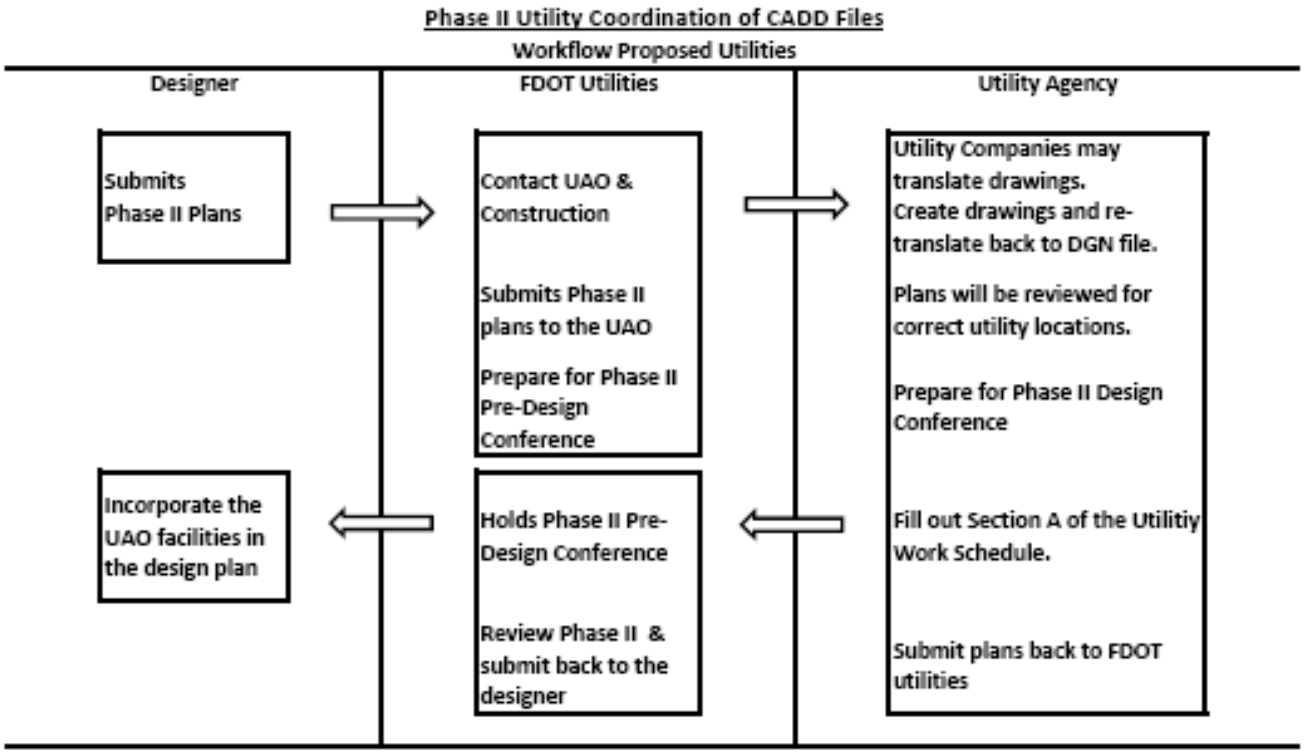
The second option is the ASCII file that can be created from existing or proposed utilities. The ASCII file format will be either LandXML or GEOPAK input format for Station/Offset/Elevation or Northing/Easting/Elevation (State Plane coordinates). These files will contain information pertinent to the location of the utility, as well as the type of utility and where it is located referenced to the (survey baseline) alignment or state plane coordinates.

➢ ***Geographic Information System (GIS) File***

In the event that a UAO maintains a GIS database of utility data, that data may be exchanged in GIS shape files.

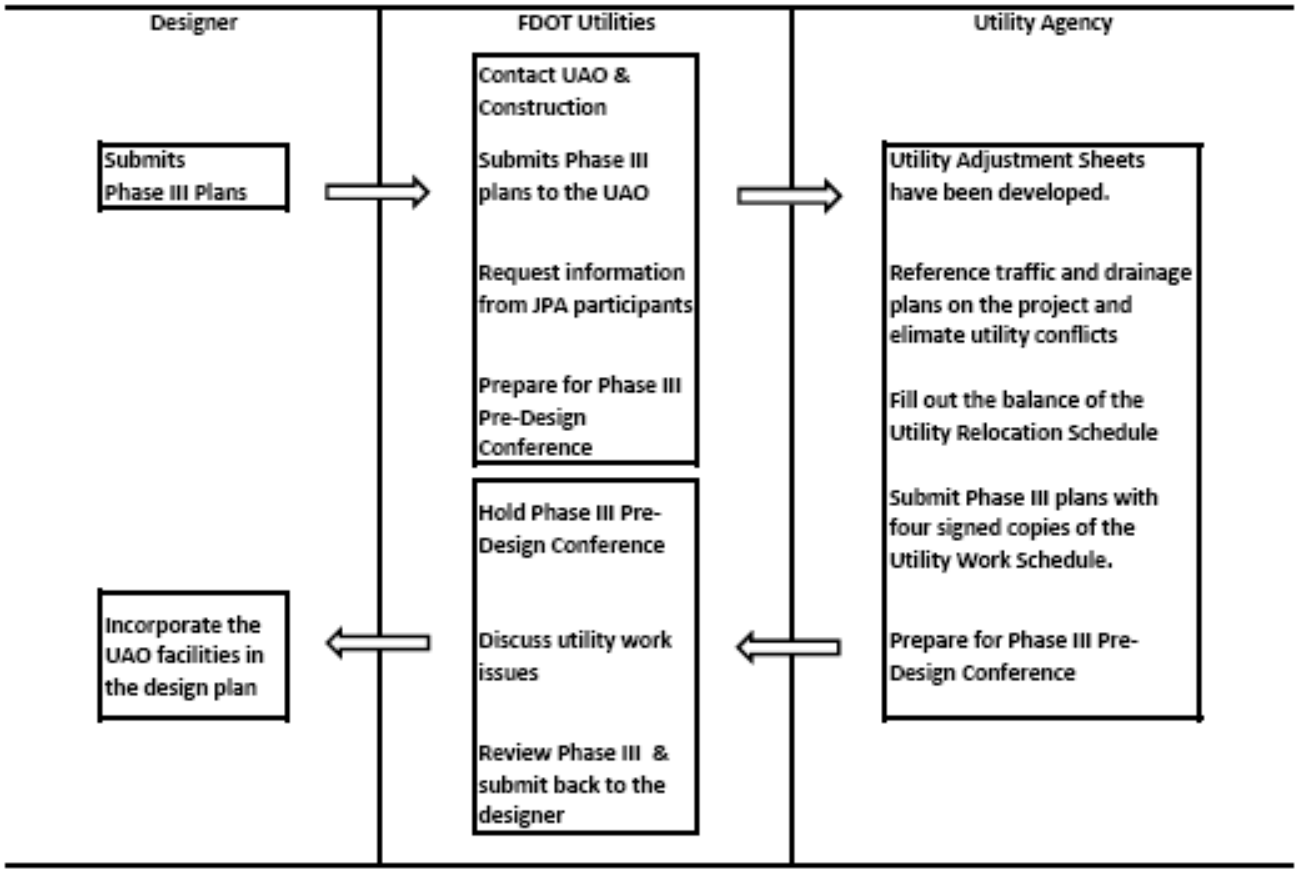
4.23.2 Utility Coordination





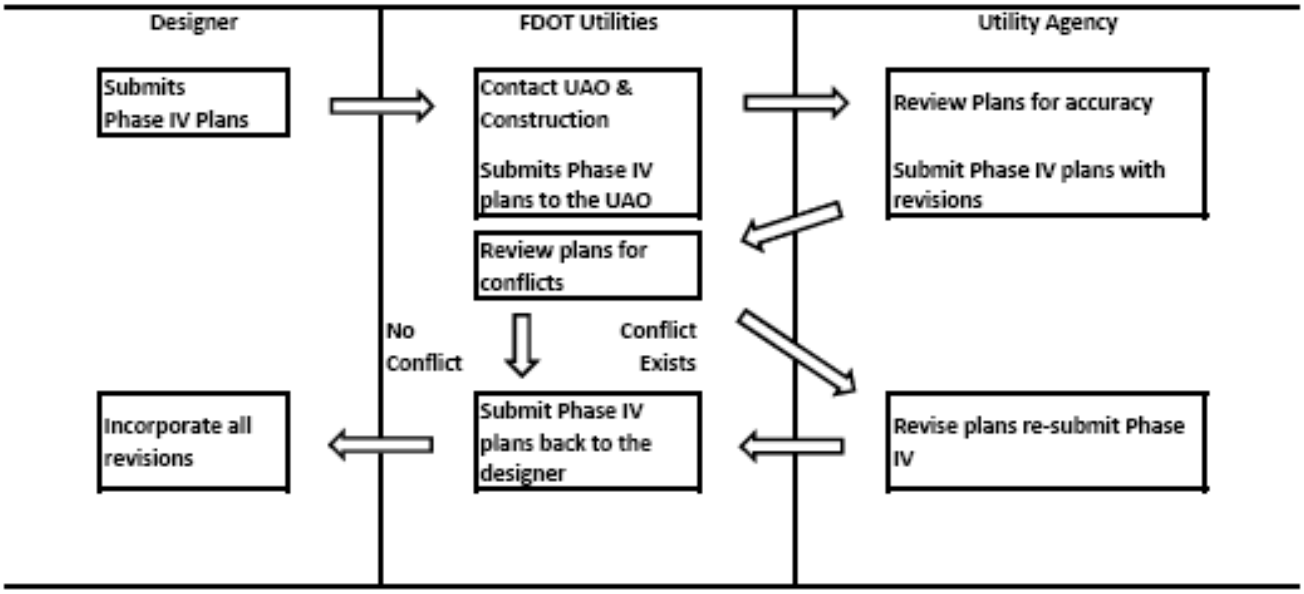
Phase III Utility Coordination of CADD Files

Workflow Final Review Utilities



Phase IV Utility Coordination of CADD Files

Workflow Final Revisions Utilities



4.23.3 Exchange of Graphic Files

After the Department's District Utilities Office (via Utility Coordinator) has received the current phase submittal from the Designer, they will contact the involved utilities and notify them of the phase submittal. The UAO will then receive the phase documents from the Department that will contain the Roadway Plans, the necessary CADD files and any Utility Relocation Agreements and Schedules. The required electronic files include the proposed roadway design; the existing topography, the existing and proposed R/W and the existing utilities gathered from the survey and previously supplied data.

No editing of any files provided by the Department will be accepted. The UAO will be placing data into newly created files. File naming standards will be maintained at all times.

4.23.4 Standard File Names

The Department utilizes standard naming conventions for all of its files and provides automated tools that depend on this naming convention. The naming convention confers data information to the downstream customer of the files.

- ***Standard file names should follow this format: AAAABB##.ext***

Where **AAAA** = *abbreviated file description*, **BB** = *Discipline Denotation, ##* =S*equence number.*

Note See Section 4.8 of this Chapter for more information about Standard File Names.

If the Utility work is accomplished by a Highway Contractor as a separate contract (UWHC plans), the discipline designation for the file name is "UW".

For example, a MicroStation graphics file for utility adjustment would be named: *utad**uw**01.dgn*.

If the Utility adjustments are included in the Roadway Plan set the discipline designation for the file name is "RD". For example, a utility adjustment file name would be *utad**rd**01.dgn*. See Section 4.19 Roadway Standards for the Utilities Standard File Names defined for use by Roadway Design.

The following table defines the Utility File names with each file including sequential numbering. Standard model names are also provided.

Note See Appendix A for the complete listing of level/symbologies standards for each applicable CADD Standard Rule.

File Type	Critical	File Name	Model Name	File Description	Standard Rule	MicroStation Seed File	Civil 3D Template File
Borders & Sheets		BDPLUW##	default	UWHC Border Sheet Reference File for Plan Sheets	planrd	fdotseed2d.dgn	
Borders & Sheets		GNNTUW##	default	UWHC General Notes	planrd	fdotseed2d.dgn	planrd.dwt
Borders & Sheets		PLANUW##	default	UWHC Plan Sheet	planrd	fdotseed2d.dgn	planrd.dwt
Borders & Sheets		PLPRUW## (UTEXRD##)	default	UWHC Plan & Profile Sheet	plprrd	fdotseed2d.dgn	plprrd.dwt
Borders & Sheets		PROFUW##	default	UWHC Profile Sheet	plprrd	fdotseed2d.dgn	plprrd.dwt
Clipping		CLIPUW##	default	UWHC Clip Borders	cliprd	fdotseed2d.dgn	cliprd.dwt
Clipping		MTPLUW##	default	UWHC Motif file for plan sheets	planrd	fdotseed2d.dgn	planrd.dwt
Clipping		MTPRUW##	default	UWHC Motif file for profile sheets	plprrd	fdotseed2d.dgn	planrd.dwt
Existing Topography		TOPOUW##	default	Topography - Existing (No Utilities or Drainage included)	topord	fdotseed2d.dgn	topord.dwt
Key Sheets		KEYSUW##	default	UWHC Key Sheet	keysht	fdotseedkeymap.dgn	keysht.dwt
Proposed Design		TEXTUW##	default	UWHC Text Labels & Miscellaneous Descriptions	planrd	fdotseed2d.dgn	
Utilities		UTADUW## (UTADRD##)	default	UWHC Utility Adjustment Sheet	utadrd	fdotseed2d.dgn	utadrd.dwt
Utilities		UTDTUW##	default	UWHC Special Details	open	fdotseed2d.dgn	typsrd.dwt
Utilities	X	UTEXUW## (UTEXRD##)	default	UWHC Utilities – Existing	utexrd	fdotseed2d.dgn	utexrd.dwt
Utilities	X	UTPRUW## (UTPRRD##)	default	UWHC Utilities – Proposed	utprrd	fdotseed2d.dgn	utprrd.dwt
Verified Utilities		SBVHUW##	default	UWHC Summary of Verified Utilities (2D)	planrd	fdotseed2d.dgn	planrd.dwt
Verified Utilities	X	UTVHUW##	default	UWHC Survey of Verified Utilities (3D version of UTEXRD.dgn)	utexrd	fdotseed3d.dgn	utexrd.dwt

4.23.5 Utility Work by Highway Contractor Agreement Plans

Major highway construction elements such as pavement areas, bridges, drainage structures, right of way, lane widths, control of access limits and highway-straight-line numbers should appear in the Utility Work by Highway Contractor Agreement Plans.

The Department's plans marked by the UAO will use the following color code:

- ***Red:*** Existing utilities either (a) To be removed or relocated horizontally or (b) to be placed out-of-service (deactivated) but left in place.
- ***Green:*** Existing utilities to remain in place with no adjustment.
- ***Brown:*** Either (a) Existing utilities to be adjusted vertically but to remain in the same horizontal alignment, or (b) Completely new utilities to be installed.

One set of the plans should be returned to the Department with each copy of the Utility Agreement.

4.23.6 ASCII Files of Utility Data

ASCII Files of utility data are to be exchanged in the LandXML format which is ubiquitous with most civil design and GIS software. Information about LandXML can be found at: **http://www.LandXML.org.**

- ***The File Naming Convention for this ASCII files will be:***
  - *utilex##.xml* for Existing Utilities
  - *utilpr##.xml* for Proposed Utilities
- ***Alternately, ASCII files of utility data may be provided in the format below. The File Naming Convention for this ASCII files will be:***
  - *utilex##.inp* for Existing Utilities. Note .inp extension for GEOPAK input
  - *utilpr##.inp* for Proposed Utilities. Note .inp extension for GEOPAK input

  Where ## will be a sequencing number (01, 02, 03 etc.).

Each electronic ASCII report file will be stored on media according to the Department's CADD Deliverable Standards. If the provider does not have capability to deliver in LandXML format, a GEOPAK Input format file will also be an acceptable substitute. When delivery is made in GEOPAK Input format, the ASCII report will be accompanied by a printed hardcopy.

Provided are four examples of GEOPAK input files. Two examples are of Station/Offset and two are of Northing/Easting, each with and without explicit elevations or depth of cover.

4.23.6.1 ASCII Header Convention

These files will follow a standard format and its header is described below:

- Name: Utility Owner's Name.
- Date: Month, Day, Year (optional: Time).
- Proj: Project Financial Number
- Type: Type of Utility (Existing or Proposed).
- File: Filename
- Cont: Utility Owner's Contact Person responsible for the report.
- Note: Any Additional Information that will describe the utility.

4.23.6.2 Format of Station and Offset ASCII File

The Station Offset Report method consists of generating a report, which will locate key utility points along a defined alignment. The report will store those points in the form of a utility chain.

- **Example of Point Location:**

  LOC 10020 ON CHA blsr54 STA 18+89.760 OFF -8.534 $BT100
  Format of the Command:

  LOCATE n ON CHAIN name STA station OFF offset $description

  - LOC Initiates the locate command.
  - *n* Determines the utility point number (begin with 10,000).
  - *ON* Determines how to locate the utility point.
  - *CHAIN* Initiates the read chain name command.
  - *name* Describes the chain name, usually of the survey baseline, that is provided by the Department.
  - *STA* Initiates the find station command.
  - *Station* Display's the utility point's station location.
  - *OFF* Initiates the offset distance command.
  - *offset* The offset distance value, "+" for positive to the right and "-" for negative to the left, to the chain.
  - *$description* The description has two options, the first shows the EL option with a defined elevation and the feature code, the second shows the feature code and a defined depth of cover.

- **Example of Station Offset Option 1, Defined Elevation:**

  LOC 10029 ON CHA blsr54 STA 19+79.818 OFF -8.530 $ EL 2.806000 BT100

  The above statement locates point 10029 on chain blsr54 at station19+79.818 left 8.530 at elevation 2.80600 as a feature BT100 or Buried Telephone 100 pair.

- **Example of Station Offset Option 2, Fixed Depth of Cover:**

  LOC 10020 ON CHA blsr54 STA 18+89.760 OFF -8.534 $ BT12

  The above statement locates point 10020 on chain blsr54 at station 18+89.760 left 8.534 as a feature BT12 or Buried Telephone 12 pair. In the header of the file, there is a line that states the depth of cover. "All elevations assume a 0.750 meter depth of cover."

- **The Store Chain Command:**

  The store chain command will store a range of points as a utility chain. It provides the point range, the chain name and the feature that describe the utility chain. The format is shown below:

  - Command STO CHA BT50A 10020 - 10023 $ BT50 list: BT1 - BT4
  - *Format* STORE CHAIN name list $description
  - Store Initiates the Store Chain Command.
  - *Chain* Initiates the Read Chain Name Command.
  - *Name* Names the Utility Chain (BT12 etc.).
  - *Range* Defines a range of stores utility points.
  - *$ Comment* Initiates a comment insertion.
  - *Description* Describes list of utility point numbers, which make the utility chain.

4.23.6.3 Format of Northing and Easting ASCII File

The Northing and Easting report method consists of generating a report which stores key utility points according to their relative State Plane Coordinates (X, Y, and Z) and stores this information in the form of a utility chain.

- **The store point command is shown below:**

  - Command S 10020 N 430059.370000 E 127421.085000 EL 2.513 $ BT100
  - Format Store n N northing E easting EL elevation $description
  - S Initiates the Store Point command.
  - n Defines the utility point number (above 10,000).
  - N Initiates the read Northing command.
  - Northing Establishes the Y, horizontal coordinate.
  - E Initializes the read Easting command.
  - Easting Establishes the X, horizontal coordinate.
  - EL Initiates either the read elevation command or uses a defined depth of cover.
  - Elevation The Elevation argument has two options, the EL option with a defined read elevation. Second option is a defined depth of cover.
  - Description This describes the utility feature code.

- **Example of Nothing Easting Option 1, Defined Elevation:**

  S 10020 N 430059.370000 E 127421.085000 EL 2.513000 $ BT12

  The above statement stores the point 10020 at 127421.085000/430059.370000 (X, Y) at elevation 2.513000 with a feature code of BT12 (Buried Telephone 12 pair).

- **Example of Northing Easting Option 2, Fixed Depth of Cover:**

  S 10020 N 430059.370000 E 127421.085000 $ BT12

  The above statement stores the point 10020 at 127421.085000/430059.370000 (X, Y) at a given depth of cover with a feature code of BT12 (Buried Telephone 12 pair).

- **The Store Chain Command:**

  The store chain command will store a range of points as a utility chain. It provides the point range, chain name and the feature that describes the utility chain. The format is shown below:

  - Command STO CHA BT50A 10020 - 10023 $ BT50 list: BT1 - BT4
  - Format STORE CHAIN name list $ description
  - Store Initiates the Store Chain Command.
  - Chain Initiates the Read Chain Name Command.
  - Name Names the Utility Chain (BT12 etc.).
  - Range Defines a range of stores utility points.
  - $ Comment Initiates a comment insertion.
  - Description Describes the list of utility point numbers, which make the utility chain.

4.23.6.4 ASCII Input File Examples

- **Northing Easting, no elevation**

```
$************************************************************$
$************ Name: General Telephone Company **************$
$************ Date: Nov 5, 1999 08:00:00      **************$
$************ Proj: c:\proj\14570\1519        **************$
$************ Type: Existing Buried Telephone **************$
$************ File: utilex04.inp (Metric)     **************$
$************ Cont: Alex Bell (813) 975-6000  **************$
$ Note: All elevations assume a 0.750 meter depth of cover $
$************************************************************$
S 10020 N 430059.370000  E 127421.085000  $ BT1
S 10021 N 430059.342000  E 127420.188000  $ BT2
S 10022 N 430058.733000  E 127420.235000  $ BT3
S 10023 N 430058.772000  E 127421.112000  $ BT4
S 10024 N 430025.015000  E 127425.677000  $ BT5
S 10025 N 430024.463000  E 127425.921000  $ BT6
S 10026 N 430024.120000  E 127425.150000  $ BT7
S 10027 N 430024.711000  E 127424.906000  $ BT8
S 10028 N 430010.203000  E 127442.371000  $ BT9
S 10029 N 430010.404000  E 127441.806000  $ BT10
S 10030 N 430009.593000  E 127441.488000  $ BT11
S 10031 N 430009.365000  E 127442.088000  $ BT12
S 10032 N 430011.003000  E 127472.172000  $ BT13
S 10033 N 430010.111000  E 127472.198000  $ BT14
S 10034 N 430010.091000  E 127471.575000  $ BT15
S 10035 N 430010.963000  E 127471.555000  $ BT16
S 10036 N 429939.130000  E 127431.218000  $ BT17
S 10037 N 429939.202000  E 127432.171000  $ BT18
S 10038 N 429940.582000  E 127432.122000  $ BT19
S 10039 N 429940.518000  E 127431.231000  $ BT20
S 10040 N 429974.677000  E 127481.061000  $ BT25
S 10041 N 429974.731000  E 127481.671000  $ BT26
S 10042 N 429973.882000  E 127481.730000  $ BT27
S 10043 N 429973.821000  E 127481.144000  $ BT28
$ BT50 list: BT1-BT4
STO CHA BT50A 10020-10023
$ BT75 list: BT17-BT20
STO CHA BT75A 10036-10039
$ BT100 list: BT5-BT8
STO CHA BT100A 10024-10027
$ BT200 list: BT9-BT12
STO CHA BT200A 10028-10031
$ BT300 list: BT13-BT16
STO CHA BT300A 10032-10035
$ BT400 list: BT25-BT28
STO CHA BT400A 10040-10043
```

- **Northing and Easting Example with Elevation**

```
$*********************************************************$
$************ Name: General Telephone Company ************$
$************ Date: Nov 5, 1999 08:00:00      ************$
$************ Proj: c:\proj\14570\1519        ************$
$************ Type: Existing Buried Telephone ************$
$************ File: utilex03.inp (Metric)     ************$
$************ Cont: Alex Bell (813) 975-6000  ************$
$*********************************************************$
S 10020 N 430059.370000  E 127421.085000  EL 2.513000  $ BT1
S 10021 N 430059.342000  E 127420.188000  EL 2.532000  $ BT2
S 10022 N 430058.733000  E 127420.235000  EL 2.533000  $ BT3
S 10023 N 430058.772000  E 127421.112000  EL 2.502000  $ BT4
S 10024 N 430025.015000  E 127425.677000  EL 2.483000  $ BT5
S 10025 N 430024.463000  E 127425.921000  EL 2.470000  $ BT6
S 10026 N 430024.120000  E 127425.150000  EL 2.517000  $ BT7
S 10027 N 430024.711000  E 127424.906000  EL 2.530000  $ BT8
S 10028 N 430010.203000  E 127442.371000  EL 2.793000  $ BT9
S 10029 N 430010.404000  E 127441.806000  EL 2.806000  $ BT10
S 10030 N 430009.593000  E 127441.488000  EL 2.800000  $ BT11
S 10031 N 430009.365000  E 127442.088000  EL 2.788000  $ BT12
S 10032 N 430011.003000  E 127472.172000  EL 2.564000  $ BT13
S 10033 N 430010.111000  E 127472.198000  EL 2.576000  $ BT14
S 10034 N 430010.091000  E 127471.575000  EL 2.563000  $ BT15
S 10035 N 430010.963000  E 127471.555000  EL 2.551000  $ BT16
S 10036 N 429939.130000  E 127431.218000  EL 2.310000  $ BT17
S 10037 N 429939.202000  E 127432.171000  EL 2.250000  $ BT18
S 10038 N 429940.582000  E 127432.122000  EL 2.286000  $ BT19
S 10039 N 429940.518000  E 127431.231000  EL 2.266000  $ BT20
S 10040 N 429974.677000  E 127481.061000  EL 2.671000  $ BT25
S 10041 N 429974.731000  E 127481.671000  EL 2.639000  $ BT26
S 10042 N 429973.882000  E 127481.730000  EL 2.698000  $ BT27
S 10043 N 429973.821000  E 127481.144000  EL 2.679000  $ BT28
$ BT50 list: BT1-BT4
STO CHA BT50A 10020-10023
$ BT75 list: BT17-BT20
STO CHA BT75A 10036-10039
$ BT100 list: BT5-BT8
STO CHA BT100A 10024-10027
$ BT200 list: BT9-BT12
STO CHA BT200A 10028-10031
$ BT300 list: BT13-BT16
STO CHA BT300A 10032-10035
$ BT400 list: BT25-BT28
STO CHA BT400A 10040-10043
```

- **Station Offset Example with Assumed Depth of Cover**

```
$************************************************************$
$************ Name: General Telephone Company  ************$
$************ Date: Nov 5, 1999 08:00:00       ************$
$************ Proj: c:\proj\14570\1519         ************$
$************ Type: Existing Buried Telephone  ************$
$************ File: utilex02.inp (Metric)      ************$
$************ Cont: Alex Bell (813) 975-6000   ************$
$ Note: All elevations assume a 0.750 meter depth of cover $
$************************************************************$
LOC 10020 ON CHA blsr54 STA 18+89.760 OFF -8.534  $ BT1
LOC 10021 ON CHA blsr54 STA 18+99.818 OFF -8.530  $ BT2
LOC 10022 ON CHA blsr54 STA 19+09.018 OFF -8.524  $ BT3
LOC 10023 ON CHA blsr54 STA 19+19.018 OFF -8.540  $ BT4
LOC 10024 ON CHA blsr54 STA 19+29.760 OFF -8.534  $ BT5
LOC 10025 ON CHA blsr54 STA 19+39.818 OFF -8.530  $ BT6
LOC 10026 ON CHA blsr54 STA 19+49.018 OFF -8.524  $ BT7
LOC 10027 ON CHA blsr54 STA 19+59.018 OFF -8.540  $ BT8
LOC 10028 ON CHA blsr54 STA 19+69.760 OFF -8.534  $ BT9
LOC 10029 ON CHA blsr54 STA 19+79.818 OFF -8.530  $ BT10
LOC 10030 ON CHA blsr54 STA 19+89.018 OFF -8.524  $ BT11
LOC 10031 ON CHA blsr54 STA 19+99.018 OFF -8.540  $ BT12
LOC 10032 ON CHA blsr54 STA 20+09.760 OFF -8.534  $ BT13
LOC 10033 ON CHA blsr54 STA 20+19.818 OFF -8.530  $ BT14
LOC 10034 ON CHA blsr54 STA 20+29.018 OFF -8.524  $ BT15
LOC 10035 ON CHA blsr54 STA 20+39.018 OFF -8.540  $ BT16
LOC 10036 ON CHA blsr54 STA 19+49.760 OFF +8.534  $ BT17
LOC 10037 ON CHA blsr54 STA 19+59.818 OFF +8.530  $ BT18
LOC 10038 ON CHA blsr54 STA 19+69.018 OFF +8.524  $ BT19
LOC 10039 ON CHA blsr54 STA 19+79.018 OFF +8.540  $ BT20
LOC 10040 ON CHA blsr54 STA 19+89.760 OFF +8.534  $ BT25
LOC 10041 ON CHA blsr54 STA 19+99.818 OFF +8.530  $ BT26
LOC 10042 ON CHA blsr54 STA 20+09.018 OFF +8.524  $ BT27
LOC 10043 ON CHA blsr54 STA 20+19.018 OFF +8.540  $ BT28
$ BT50 list: BT1-BT4
STO CHA BT50A 10020-10023
$ BT75 list: BT17-BT20
STO CHA BT75A 10036-10039
$ BT100 list: BT5-BT8
STO CHA BT100A 10024-10027
$ BT200 list: BT9-BT12
STO CHA BT200A 10028-10031
$ BT300 list: BT13-BT16
STO CHA BT300A 10032-10035
$ BT400 list: BT25-BT28
STO CHA BT400A 10040-10043
```

- **Station Offset Example with Elevation**

```
$*********************************************************$
$************ Name: General Telephone Company ************$
$************ Date: Nov 5, 1999 08:00:00      ************$
$************ Proj: c:\proj\14570\1519        ************$
$************ Type: Existing Buried Telephone ************$
$************ File: utilex01.inp (Metric)     ************$
$************ Cont: Alex Bell (813) 975-6000  ************$
$*********************************************************$
LOC 10020 ON CHA blsr54 STA 18+89.760 OFF -8.534   $ EL 2.513000  BT1
LOC 10021 ON CHA blsr54 STA 18+99.818 OFF -8.530   $ EL 2.532000  BT2
LOC 10022 ON CHA blsr54 STA 19+09.018 OFF -8.524   $ EL 2.533000  BT3
LOC 10023 ON CHA blsr54 STA 19+19.018 OFF -8.540   $ EL 2.502000  BT4
LOC 10024 ON CHA blsr54 STA 19+29.760 OFF -8.534   $ EL 2.483000  BT5
LOC 10025 ON CHA blsr54 STA 19+39.818 OFF -8.530   $ EL 2.470000  BT6
LOC 10026 ON CHA blsr54 STA 19+49.018 OFF -8.524   $ EL 2.517000  BT7
LOC 10027 ON CHA blsr54 STA 19+59.018 OFF -8.540   $ EL 2.530000  BT8
LOC 10028 ON CHA blsr54 STA 19+69.760 OFF -8.534   $ EL 2.793000  BT9
LOC 10029 ON CHA blsr54 STA 19+79.818 OFF -8.530   $ EL 2.806000  BT10
LOC 10030 ON CHA blsr54 STA 19+89.018 OFF -8.524   $ EL 2.800000  BT11
LOC 10031 ON CHA blsr54 STA 19+99.018 OFF -8.540   $ EL 2.788000  BT12
LOC 10032 ON CHA blsr54 STA 20+09.760 OFF -8.534   $ EL 2.564000  BT13
LOC 10033 ON CHA blsr54 STA 20+19.818 OFF -8.530   $ EL 2.576000  BT14
LOC 10034 ON CHA blsr54 STA 20+29.018 OFF -8.524   $ EL 2.563000  BT15
LOC 10035 ON CHA blsr54 STA 20+39.018 OFF -8.540   $ EL 2.551000  BT16
LOC 10036 ON CHA blsr54 STA 19+49.760 OFF +8.534   $ EL 2.310000  BT17
LOC 10037 ON CHA blsr54 STA 19+59.818 OFF +8.530   $ EL 2.250000  BT18
LOC 10038 ON CHA blsr54 STA 19+69.018 OFF +8.524   $ EL 2.286000  BT19
LOC 10039 ON CHA blsr54 STA 19+79.018 OFF +8.540   $ EL 2.266000  BT20
LOC 10040 ON CHA blsr54 STA 19+89.760 OFF +8.534   $ EL 2.671000  BT25
LOC 10041 ON CHA blsr54 STA 19+99.818 OFF +8.530   $ EL 2.639000  BT26
LOC 10042 ON CHA blsr54 STA 20+09.018 OFF +8.524   $ EL 2.698000  BT27
LOC 10043 ON CHA blsr54 STA 20+19.018 OFF +8.540   $ EL 2.679000  BT28
$ EL 2.000000 BT50 list: BT1-BT4
STO CHA BT50A 10020-10023
$ EL 2.000000 BT75 list: BT17-BT20
STO CHA BT75A 10036-10039
$ EL 2.000000 BT100 list: BT5-BT8
STO CHA BT100A 10024-10027
$ EL 2.000000 BT200 list: BT9-BT12
STO CHA BT200A 10028-10031
$ EL 2.000000 BT300 list: BT13-BT16
STO CHA BT300A 10032-10035
$ EL 2.000000 BT400 list: BT25-BT28
STO CHA BT400A 10040-10043
```

4.23.7 Utility Scanned Images

If the Utilities are handled through a Joint Utility Agreement and electronic files are not provided to the District for the Utility plans, the paper plans must be scanned. The format must be a published format with a minimum resolution of 300DPI. The required formats are PDF or Group 4 TIFF.

4.24 GEOTECHNICAL STANDARDS

Geotechnical Plans are included in the Roadway Plan Set as Soil Survey, Soil Boring and Bridge Data Sheets.

4.24.1 Standard File Names

The Department utilizes standard naming conventions for all of its files and provides automated tools that depend on this naming convention. The naming convention confers data information to the downstream customer.

- ***Standard file names should follow this format: AAAABB##.ext***

Where **AAAA** = *abbreviated file description*, **BB** = *Discipline Denotation, ## =Sequence number.*

Note See Section 4.8 of this document for more information about Standard File Names.

Files that are associated with specific bridges will be prepended with a B# prefix corresponding to the appropriate bridge number.

Note See Section 4.23 Structures Standards of this Chapter for bridge specific filenames & sheet numbering requirements.

The following table defines the Geotechnical Standard File Names for Department projects. Each file name will include sequence numbering. Standard Model names are also provided.

Note See Appendix A for the complete listing of level/symbologies standards for each applicable CADD Standard Rule.

File Type	Critical	File Name	Model Name	File Description	Standard Rule	MicroStation Seed File	Civil 3D Template File
Geotech		clvgeo##	default	Box Culvert Auger & SPT Borings	geotech	fdotseed2d.dgn	geotech.dwt
Geotech		ltgeo##	default	Lighting Borings	geotech	fdotseed2d.dgn	geotech.dwt
Geotech		mtgeo##	default	Mitigation Borings	geotech	fdotseed2d.dgn	geotech.dwt
Geotech		pdgeo##	default	Pond Borings	geotech	fdotseed2d.dgn	geotech.dwt
Geotech		rdgeo##	default	Augers Borings	geotech	fdotseed2d.dgn	geotech.dwt
Geotech		rdssgeo##	default	Roadway Soil Survey Sheet	geotech	fdotseed2d.dgn	geotech.dwt
Geotech		sggeo##	default	Signal SPT Borings	geotech	fdotseed2d.dgn	geotech.dwt
Geotech		sngeo##	default	Signs SPT Borings	geotech	fdotseed2d.dgn	geotech.dwt
Roadway		cptgeo##	default	CPT Soundings	geotech	fdotseed2d.dgn	geotech.dwt
Roadway		msewgeo##	default	MSE Wall SPT Borings	geotech	fdotseed2d.dgn	geotech.dwt
Roadway		nwgeo##	default	Noise Wall SPT Borings	geotech	fdotseed2d.dgn	geotech.dwt
Roadway		rtwgeo##	default	Retaining Wall SPT Borings	geotech	fdotseed2d.dgn	geotech.dwt
Roadway		spgeo##	default	Sheet Pile Wall SPT Borings	geotech	fdotseed2d.dgn	geotech.dwt
Structures		B#BORING##	default	Report of Core Borings	geotech	StructuresSeed.dgn	StructuresTemplatePlan.dwt
Structures		B#CPTGEO##	default	CPT Soundings	geotech	StructuresSeed.dgn	StructuresTemplatePlan.dwt
Structures		B#MSEWGEO##	default	MSE Wall SPT Borings	geotech	StructuresSeed.dgn	StructuresTemplatePlan.dwt
Structures		B#NWGEO##	default	Noise Wall SPT Borings	geotech	StructuresSeed.dgn	StructuresTemplatePlan.dwt
Structures		B#RTWGEO##	default	Retaining Wall SPT Borings	geotech	StructuresSeed.dgn	StructuresTemplatePlan.dwt
Structures		B#SPGEO##	default	Sheet Pile Wall SPT Borings	geotech	StructuresSeed.dgn	StructuresTemplatePlan.dwt

4.24.2 Engineering Data

Engineering Data delivered with each project will be located in the *eng_data sub*- folder and include:

- ASCII files containing Q/C reports
- PDF Image files of all Geotechnical Plan sheets (for Electronic Delivery only)
- All computer input and output files used in the design (in native file formats for the software used and printed to PDF format)
- All supplemental design hand calculations (scanned and saved in PDF or TIFF file formats)
- Soil boring data

Print the sheet image PDF files from the graphics design files. Print image files of all other output files from the design and/or analysis programs. If the project requires electronic signing and sealing (for and Electronic Deliver project), all the sheet image files located in the *eng_data* sub-folder will be electronically signed & sealed. Otherwise the PDF of the plan sheets will follow the conventions of Digital Delivery.

Computer input and output files include files used for all aspects of analysis and design. Geotechnical information will also be delivered in CSV Format as shown in the examples below. The Department has adopted the following standard file naming convention for CSV file imports for the Geotechnical Utility in GEOPAK:

- **Borehole** - *Boreholetpk.brh* - Borehole location data, seasonal high water & design high water data.
- **Material -** *Material.mtl* - Strata Data and Core data.

Standard Penetration Test (SPT) boring information may be drawn using the Department's Report a Core Boring Tool.

➢ **Example: Boreholetpk.brh**

Format:
borehole_name,alignment_name,station,offset,water_elev_type,water_elev_0,water_elev_0_date,water_elev_24,water_elev_24_date

Examples:
Borehole-01,CLCON,78+00.00,15,DOC,3,8/9/2007,5,8/10/2007
Borehole-02,CLCON,80+00.00,3,DOC,2,8/20/2007,4,8/21/2007
Borehole-03,CLCON,83+00.00,3,DOC,3,8/23/2007,5,8/24/2007
Borehole-04,CLCON,85+00.00,4,DOC,2,8/24/2007,4,8/25/2007

➢ **Example: Material.mtl**

Format: *borehole_name,material_name,doc_or_se,type_of_elev*

Examples:
Borehole-01,1,10,DOC
Borehole-02,1,5,DOC
Borehole-02,2,7,DOC
Borehole-02,3,9,DOC
Borehole-03,1,3,DOC
Borehole-03,2,6,DOC
Borehole-04,1,2,DOC
Borehole-04,2,5,DOC
Borehole-04,3,7,DOC
Borehole-04,4,10,DOC

4.24.3 Soil Survey

The plans will include the information about the soil classification on the soil survey sheet and by showing the boring data soil boxes on the cross section sheets.

4.24.4 Soil Boring Data

The soil boring data will be provided to the Roadway designer in a format to facilitate the drawing of the data on the cross section sheets.

Note For help and instructions on specific functions and use of GEOPAK's Geotechnical Tool, refer to the GEOPAK help file.

4.25 CONSTRUCTION STANDARDS

The use and generation of CADD files by Construction will be in accordance with the general standards applied to all disciplines.

4.25.1 Standard File Names

The Department utilizes standard naming conventions for all of its files and provides automated tools that depend on this naming convention. The naming convention confers data information to the downstream customer.

- ***Standard file names should follow this format: AAAABB##.ext***

Where **AAAA** = *abbreviated file description*, **BB** = *Discipline Denotation, ##* =S*equence number.*

Note See Section 4.8 of this document for more information about Standard File Names

The standard file names defined by the design discipline will be applied for CADD files generated in Constriction, except the portion defining the discipline will be "CN" instead of "RD". Example: *DSGNRD01.DGN* will be *DSGNCN01.DGN*.

Standard Model names are also provided, however, it is not mandatory to use more than the default model, with the exception of those listed in this table.

Note See Appendix A for the complete listing of level/symbologies standards for each applicable CADD Standard Rule.

File Type	Critical	File Name	Model Name	File Description	Standard Rule	MicroStation Seed File	Civil 3D Template File
Cross Sections	X	PDXSCN##	rdxsrd	Pond Cross Sections	rdxsrd	fdotseedxs.dgn	rdxsrd.dwt
Cross Sections	X	RDXSCN##	rdxsrd	Roadway Cross Sections	rdxsrd	fdotseedxs.dgn	rdxsrd.dwt
Drainage	X	DREXCN##	default	Drainage Structures - Existing	drexrd	fdotseed2d.dgn	drexrd.dwt
Drainage	X	DRPRCN##	default	Drainage Structures - Proposed	drprrd	fdotseed2d.dgn	drprrd.dwt
Drainage	X	DRXSCN##	rdxsrd	Drainage Structure Cross Sections	rdxsrd	fdotseedxs.dgn	rdxsrd.dwt
Existing Topography		TOPOCN##	default	Topography - Existing	topord	fdotseed2d.dgn	topord.dwt
Proposed Design	X	DSGNCN##	default	Proposed Design	dsgnrd	fdotseed2d.dgn	dsgnrd.dwt
Proposed Design	X	DSPFCN##	default	Proposed Profile	plprrd	fdotseed2d.dgn	plprrd.dwt
Proposed Design		SIGNCN##	default	Digital Signatures (Multi)	open	fdotseed2d.dgn	digitalsignature.dwt
Proposed Design	X	TEXTCN##	default	Text Labels & Miscellaneous Descriptions	planrd	fdotseed2d.dgn	
Traffic Control	X	TCDSCN##	default	Traffic Control Design	tcdsrd	fdotseed2d.dgn	tcdsrd.dwt
Utilities	X	UTEXCN##	default	Utilities - Existing	utexrd	fdotseed2d.dgn	utexrd.dwt
Utilities	X	UTPRCN##	default	Utilities - Proposed	utprrd	fdotseed2d.dgn	utprrd.dwt

4.26 INTELLIGENT TRANSPORTATION SYSTEMS STANDARDS

Intelligent Transportation Systems (ITS) Plans are usually a component set of plans. The Department's Projects with minor ITS involvement may include these features on various applicable sheets in the Roadway plans set. They can also be shown in the Signalization plans set or on applicable Signalization sheets.

4.26.1 Standard File Names

The Department utilizes standard naming conventions for all of its files and provides automated tools that depend on this naming convention being met. The naming convention confers data information to the downstream customer.

- ***Standard file names should follow this format: AAAABB##.ext***

Where **AAAA** = *abbreviated file description*, **BB** = *Discipline Denotation, ## =Sequence number.*

Note See Section 4.8 of this Chapter for more information about Standard File Names.

The following table defines the ITS standard file names for Department projects. Each file name will include sequential numbering. Standard model names are also provided, however, it is not mandatory to use more than the default model, with the exception of those listed in this table.

Note See Appendix A for the complete listing of level/symbologies standards for each applicable CADD Standard Rule.

File Type	Critical	File Name	Model Name	File Description	Standard Rule	MicroStation Seed File	Civil 3D Template File
Borders & Sheets		BDPLIT##	default	Border Sheet Reference Model for Plan Sheet	planrd	fdotseed2d.dgn	
Borders & Sheets		BDXSIT##	rdxsrd	Border Cross-Section Sheet when Referenced	rdxsrd	fdotseedxs.dgn	
Borders & Sheets		GNNTIT##	default	General Notes	planrd	fdotseed2d.dgn	planrd.dwt
Borders & Sheets		PLANIT##	default	Plan Sheet	planrd	fdotseed2d.dgn	planrd.dwt
Borders & Sheets		PLAYIT##	default	Plan Layout Sheets	planrd	fdotseed2d.dgn	planrd.dwt
Borders & Sheets		SPLYIT##	default	Splice Layout Sheets	planrd	fdotseed2d.dgn	planrd.dwt
Clipping		CLIPIT##	default	Clip Borders	cliprd	fdotseed2d.dgn	cliprd.dwt
Clipping		MTPLIT##	default	Motif file for plan sheets	planrd	fdotseed2d.dgn	planrd.dwt
Clipping		MTPRIT##	default	Motif file for profile sheets	plprrd	fdotseed2d.dgn	planrd.dwt
Cross Sections	X	SSXSIT##	rdxsrd	Sign Support Cross-Sections	rdxssp	fdotseedxs.dgn	rdxssp.dwt
Key Sheets		KEYSIT##	default	Key Sheet	keysht	fdotseedkeymap.dgn	keysht.dwt
Proposed Design	X	DSGNIT##	default	Proposed Signalization Design & information	itssp	fdotseed2d.dgn	itssp.dwt
Proposed Design	X	DSLTIT##	default	Proposed Lighting Design	itssp	fdotseed2d.dgn	itssp.dwt
Proposed Design	X	DSPMIT##	default	Proposed Signing & Pavement Marking Design	itssp	fdotseed2d.dgn	itssp.dwt
Proposed Design		INTDIT##	default	Intersection / Interchange Details	planrd	fdotseed2d.dgn	planrd.dwt
Proposed Design		SIGNIT##	default	Digital Signatures (Multi)	open	fdotseed2d.dgn	digitalsignature.dwt
Proposed Design		TEXTIT##	default	Text Labels & Miscellaneous Descriptions	planrd	fdotseed2d.dgn	
Special Details		GSWKIT##	default	Guide Sign Work Sheet & Details	gswksp	fdotseed2d.dgn	gswksp.dwt
Special Details		JCDTIT##	default	Jacking Detail Sheet	open	fdotseed2d.dgn	typsrd.dwt
Special Details		LUDTIT##	default	Luminaire Detail Sheet (All Types)	open	fdotseed2d.dgn	planrd.dwt

File Type	Critical	File Name	Model Name	File Description	Standard Rule	MicroStation Seed File	Civil 3D Template File
Special Details		NWDTIT##	default	Communications Network Details	open	fdotseed2d.dgn	typsrd.dwt
Special Details		NWLYIT##	default	Communications Network Layout/Block diagram	open	fdotseed2d.dgn	typsrd.dwt
Special Details		SGDTIT##	default	Special Signal Details	open	fdotseed2d.dgn	typsrd.dwt
Special Details		SPDTIT##	default	Splice Diagrams	open	fdotseed2d.dgn	typsrd.dwt
Special Details		SPSGIT##	default	Dynamic Message Sign Detail for Overhead Signs	open	fdotseed2d.dgn	typsrd.dwt
Special Details		SRPTIT##	default	Service Point Detail Sheets	itssp	fdotseed2d.dgn	itssp.dwt
Special Details		SSDTIT##	default	Special Sign Details & Miscellaneous Details	planrd	fdotseed2d.dgn	planrd.dwt
Special Details		VHDTIT##	default	Vehicle Detector Details & Instructions	itssp	fdotseed2d.dgn	itssp.dwt
Summary Boxes / Tables		CESSIT##	default	Summary of Pay Items	planrd	fdotseed2d.dgn	planrd.dwt
Summary Boxes / Tables	X	MSSGIT##	default	Mast Arm Detail and Tables	itssp	fdotseed2d.dgn	itssp.dwt
Summary Boxes / Tables		PLDTIT##	default	Pole Tabulation & Details for All Types	open	fdotseed2d.dgn	spdtrd.dwt
Summary Boxes / Tables		SLBRIT##	default	Soil Borings for Poles & Overhead Structures	geotech	fdotseed2d.dgn	planrd.dwt
Summary Boxes / Tables		TABQIT##	default	Tabulation Quantity Sheet	planrd	fdotseed2d.dgn	planrd.dwt
Traffic Control		TCDTIT##	default	Traffic Control Design Sheet	itssp	fdotseed2d.dgn	itssp.dwt
Utilities		UTADIT##	default	Utility Adjustment Sheets	utadrd	fdotseed2d.dgn	utadrd.dwt

4.27 ARCHITECHURAL STANDARDS

Architectural plans consist of all sheets pertaining to Architectural (Building) design, and their component plans. These plans may be comprised of any/all of:

- General Plans
- Hazardous Materials Plans
- Survey Plans (Following the Survey CADD Standards)
- Geotechnical Plans (Following the Geotechnical CADD Standards)
- Civil Plans (Following the Roadway CADD Standards)
- Landscape Plans (Following the Landscape CADD Standards)
- Structural Plans
- Architectural Plans
- Interior Plans
- Fire Protection Plans
- Plumbing Plans
- Mechanical Plans
- Electrical Plans

The bullets above represent an Architectural plan set on a Department Project where the building is the focal point of the project. Architectural (often referred to as “Building”) projects within the Right of Way typically do not include Survey, Civil, Geotechnical, or Landscape plans. These disciplines are normally included in the Roadway Plans. However, when present in the Architectural plans, the Department’s CADD Standards of the appropriate discipline will be used.

Bascule Bridge Control House Architectural plans are to be prepared using the Department’s Structures CADD Standards.

4.27.1 Adopted CADD File Format

The Department has adopted AutoCAD as the Standard platform format for Architectural projects. All CADD files for Architectural plan sets, including those disciplines within the building (i.e. plumbing, mechanical, electrical and structural) will be submitted in AutoCAD (*.dwg)* format. Plans outside the building envelope will follow the Department's CADD Standard format for the discipline as defined in their respective Sections.

4.27.2 Adopted CADD Standards

The Department has adopted the National CAD Standards as the standard format for Building Projects. This Section is a synopsis of the National CAD Standards. More information can be found at:

National CAD Standard
National Institute of Building Sciences
1090 Vermont Ave., NW, Suite 700
Washington, D.C. 20005-4905
(202) 289-7800
Website: **http://www.nationalcadstandard.org/ncs6/**

National Cad Standard also includes chapters from the following organizations:

U.S.CADD/GIS Technology Center
US Army Engineer Research and Development Center
Attn: CEERD-ID (S. Spangler)
3909 Halls Ferry Road
Vicksburg, MS 39180-6199
Website: **http://www.erdc.usace.army.mil/**

CAD Layer Guidelines
American Institute of Architects (AIA)
1735 New York Ave, NW
Washington, D.C. 20006
Website: **www.aia.org**

Uniform Drawing System (UDS)
Construction Specifications Institute
601 Madison Street
Alexandria, Va. 22314-1791
800-689-2900
Website: **http://www.csinet.org**

4.27.3 Architectural Projects

Architectural standards apply to the building and building related disciplines outlined in the following list of project types.

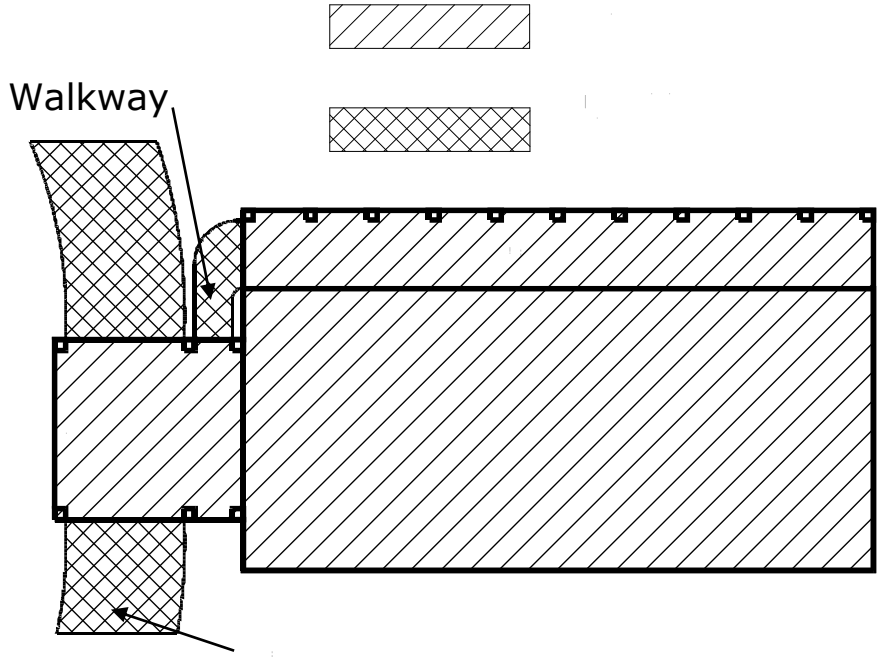
- **Building Projects:**
  - Work Program Projects
    - Rest Areas
    - Weigh Stations
  - Fixed-Capital Outlay (FCO) Projects
    - Office Buildings
    - Construction & Maintenance Facilities
    - Other 'Off Right Of Way (ROW)' Facilities

4.27.4 Delineation between Architectural & Engineering Plans

- **Delineation Line at 'foot print' of Building:**
  - Face of Exterior Wall
  - Area enclosed by buildings Columns and/or Walls; i.e. Porticos, Carports, covered Walkways and Covered Patios
  - Roof and Building Overhangs

Use AutoCAD *inside* the Delineation Line. Items inside the Delineation Line Includes 'Building-Oriented' Facilities & Equipment that are typically designed by an Architect, including but not limited to, picnic shelters, planters which are part of the building and site furniture in covered areas.

CADD Delineation Example



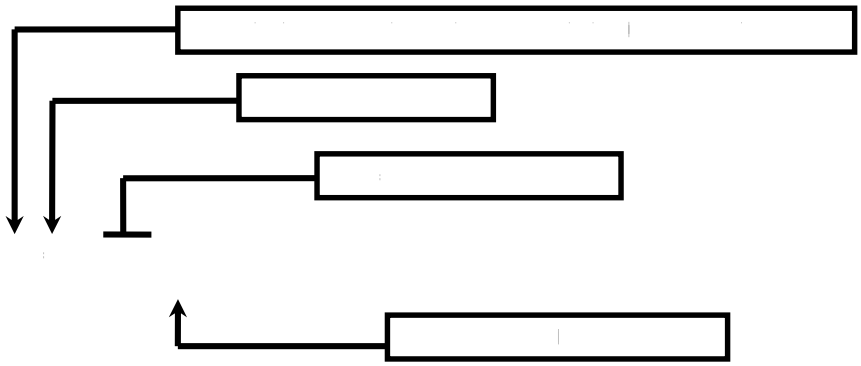
Items outside the delineation or "foot print" of Building will be produced and submitted following the CADD standards for their discipline as defined in their respective chapters, including but not limited to:

- Pavement
  - Driveways, Parking, Sidewalks
- Landscape Plans
- Site Utilities
  - Electrical, Water, Sanitary Sewer, Storm Sewer, Drainage
- Site Fencing and Walls

4.27.5 Standard File Names

AutoCAD files are 3D for large plans, elevations or sections that contain the physical building components (walls, doors, water piping, beams…). These files are drawn in Model Space at full scale. These files are referenced in whole or part into sheet files where text and dimensions are added, then printed.

- ***Naming Components:***
  - Architectural Projects Identifier
  - Discipline Codes
  - Drawing Type Codes (General and Discipline related)
  - File Sequence Number



Note Architectural Projects Identifier: A _-_ _ _.dwg
Add "A" before Discipline Code as published in National CAD Standards. This distinguishes Building drawings from Roadway and Structures Plans.

Examples: Project Identifiers, Codes and File Sequence Numbers. For more detailed information refer to National CADD Standards.

- **Architectural Project Identifier**

  A _-_ _ _.dwg Architectural, this differentiates architectural building projects from bridges and roadway projects.

- **Discipline Code**

  _ E-_ _ _.dwg ..... Electrical
  _ M-_ _ _.dwg ..... Mechanical
  _ P-_ _ _.dwg ..... Plumbing
  ETC.

- **Drawing Type Code** *(general and discipline related)*

  _-FP _.dwg ..... Floor Plan
  _-DP _.dwg ..... Dimension Plan
  _ -XP _.dwg ..... Existing Plan
  ETC.

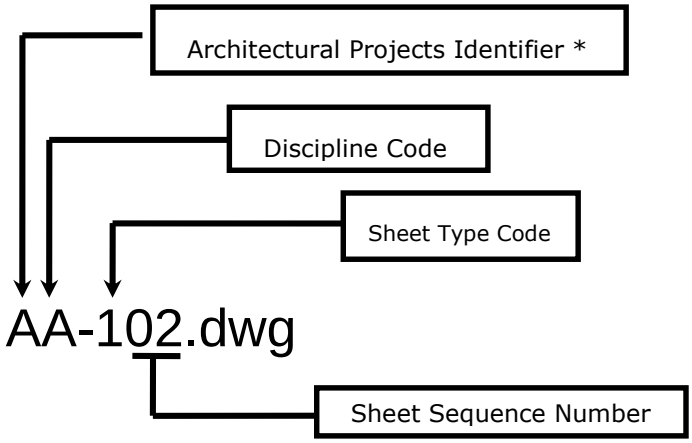
- **File Sequence Number**

  _ _-_ _ 1.dwg ..... 1st drawing file in sequence
  _ _-_ _ 2.dwg ..... 2nd drawing file in sequence
  _ _-_ _ 3.dwg ..... 3rd drawing file in sequence

4.27.6 Standard Sheet File Names

A sheet file is a border sheet with dimensions and/or text added to a portion of a referenced model space file. Plotted sheet files make up the plans set.

- ***Naming Components***
  - Architectural Projects Identifier
  - Discipline Code
  - Sheet Type Code
  - Sheet Sequence Number



Examples: Project Identifiers, Codes and Sheet File Sequence Numbers. For more detailed information refer to National CAD Standards.

- **Architectural Project Identifier**

A _-_ _ _.dwg ..... Architectural, this differentiates Architectural building projects from bridges and Roadway projects.

- **Discipline Code**

_ E-_ _ _.dwg ..... Electrical
_ M-_ _ _.dwg ..... Mechanical
_ P-_ _ _.dwg ..... Plumbing

- **Drawing Type Code** *(general and discipline related)*

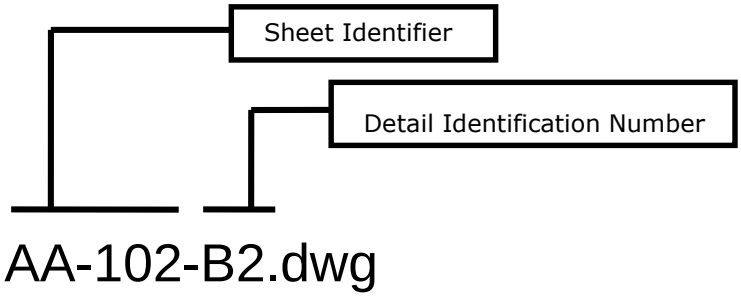
_ _-1 _ _.dwg ..... Floor Plan
_ _-2 _ _.dwg ..... Elevation
_ _-3 _ _.dwg ..... Sections

- **File Sequence Number**

_ _-_ 01.dwg ..... 1st sheet in sequence
_ _-_ 02.dwg ..... 2nd sheet in sequence
_ _-_ 03.dwg ..... 3rd sheet in sequence

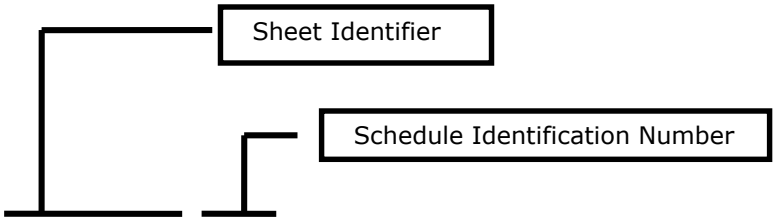
- ***Detail File Name Format***

The Detail File Name includes the sheet identifier and the detail identification number. Sheet Identifier is the sheet file that the detail is placed in. The detail identification number represents the location of the detail within the sheet file border.



- ***Schedule File Name Format***

The Schedule File Name includes the sheet identifier and the schedule identification number. Sheet Identifier is the sheet file that the detail is placed in. The detail identification number represents the location of the schedule within the sheet file border.



4.27.7 Engineering Data

The Architectural discipline folder contains an additional sub-folder named **\eng_data**. This sub-folder is designated to contain the sheet image files (PDF's) of the plan sheets for the Architecture design, quality control reports, ASCII Engineering Data output files and other data pertinent to the overall design.

4.27.8 Layers and Symbology

Refer to the National CAD Standards and Layer Symbology produced by the U.S.CADD/GIS Technology Center, US Army Engineer Research and Development Center for Symbology standards. These standards include space file names, sheet file names, detail file names, schedule file names, abbreviations, symbols, layers, linetypes and text styles.

All drawings will be drawn at Full Scale 1:1 in Modelspace using Architectural Units. Text and dimensions should be added in Modelspace. The Titleblock Sheet should be in Paperspace and viewport scaled for scalable plotting.

4.27.9 Architectural Scale Chart

The following chart is intended to aid the user in determining the appropriate scale for placing the border and text on a drawing based on the actual size of the drawing. Calculations are based on a 9 1/2" x 15 1/2" drawing area inside the border.

Drawing Scales for Sheets			
Note: Sheet files will be assembled in paper space & plotted at 1:1			
Architectural Scales		**Engineering Scales**	
Drawing Scale	**Plot Scale**	**Drawing Scale**	**Plot Scale**
Full size	1	1” = 5’	60
6” = 1’-0”	2	1” = 10’	120
3” = 1’-0”	4	1” = 20’	240
1 ½” = 1’-0”	8	1” = 30’	360
1” = 1’-0”	12	1” = 40’	480
¾” = 1’-0”	16	1” = 50’	600
½” = 1’-0”	24	1” = 100’	1200
3/8” = 1’-0”	32	1” = 200’	2400
¼” = 1’-0”	48	1” = 500’	6000
3/16" = 1'-0"	64	1” = 1000’	12000
1/8” = 1’-0”	96	1” = 1250’	15000
3/32" = 1'-0"	128	1” = 2500’	30000
1/16” = 1’-0”	192	1” = 5000’	60000

- **FORMULAS:**

  AS = 12 x Drawing Scale, Ex. 1" = 10', then 12 x 10 = 120, Therefore AS = 120.

4.27.10 Text Type, Size and Line Weight

Use the following table to determine the appropriate line weight for each text height. Text line weights are applicable for text places in model and sheet files. Text heights in this chart are used for text in sheet files that are places in paper space.

Text Type	Line Weight (In) All Scales	Height (In) 1:1 Scale
Special Small/Revisions	0.007 in	3/32”
Annotation	0.010 in	1/8”
View/Sheet/Sect Titles	0.014 in	5/32”
Large	0.020 in	3/16”

Note Sizes shown are a 1:1 ratio.

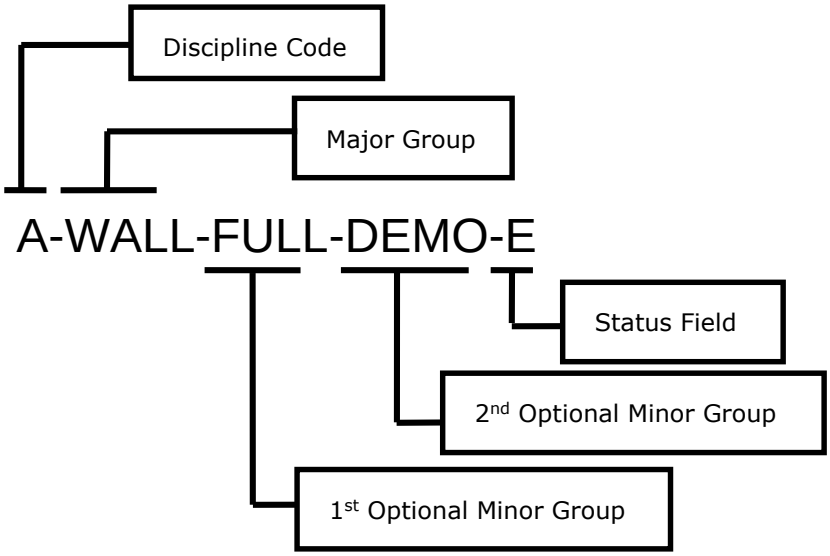
The following charts are intended to aid the user in determining the appropriate text size when placing common text. Scale for placing the border and text on a drawing based on the actual size of the drawing. Calculations are based on a 9 1/2" x 15 1/2" drawing area inside the border.

Text Size for Sheets Using Architectural Scales				
Note	For text placed in model files, text in paper space at 1:1			
Drawing Scale	**Text Size**			
	3/32"	1/8"	5/32"	3/16"
Full size	3/32"	1/8"	5/32"	3/16"
6” = 1’-0”	3/16"	1/4"	5/16"	3/8"
3” = 1’-0”	3/8"	1/2"	5/8"	3/4"
1 ½” = 1’-0”	3/4"	1"	1 1/4"	1 1/2"
1” = 1’-0”	1 1/8"	1 1/2"	1 7/8"	2 1/4"
¾” = 1’-0”	1 1/2"	2"	2 1/2"	3"
½” = 1’-0”	2 1/4"	3"	3 3/4"	4 1/2"
3/8” = 1’-0”	3"	4"	5"	6"
¼” = 1’-0”	4 1/2"	6"	7 1/2"	9"
3/16" = 1'-0"	6"	8"	10"	1'
1/8” = 1’-0”	9"	1'-0"	1-3"	1'-6"
3/32" = 1'-0"	1'	1-4"	1'-8"	2'
1/16” = 1’-0”	1'-6"	2'	2'-6"	3'

Text Size for Sheets Using Engineering Scales				
Note	For text placed in model files, text in paper space at 1:1			
Drawing Scale	**Text Size**			
	3/32"	1/8"	5/32"	3/16"
1” = 5’	5 5/8"	7 1/2"	9 3/8"	11 1/4"
1” = 10’	11 1/4"	1'-3"	1'-6 3/4"	1'-10 1/2"
1” = 20’	1'-10 1/2"	2'-6"	3'-1 1/2"	3'-9"
1” = 30’	2'-9 3/4"	3'-9"	4'-8 1/4"	5'-7 1/2"
1” = 40’	3'-9 1/2"	5'	6'-3"	7'-6"
1” = 50’	4'-8 1/4"	6'-3"	7'-9 3/4"	9'-4 1/2"
1” = 100’	9'-4 1/2"	12'-6"	15'-7 1/2"	18'-9"
1” = 200’	18'-9"	25'	31'3"	37'-6"
1” = 500’	46'-10 1/2"	62'-6"	78'-1 1/2"	93'-9"
1” = 1000’	93'-9"	125'	156'-3"	187'-6"
1” = 1250’	117'-2 1/4"	156'-3"	195'-3 3/4"	234'-4 1/2"
1” = 2500’	234'-4 1/2"	306'-6"	390'-7 1/2"	468'-9"
1” = 5000’	468'-9"	625'	781'-3"	937'-6"

4.27.11 Layer Names

All layer names will follow the format detailed in the National CAD Standards. Below is a brief description of the layer naming convention.



- ***Examples: Codes, Groups and Fields***

  - **Discipline Code**

A-_ _ _ _-_ _ _ _-_ Architectural
E-_ _ _ _-_ _ _ _-_ Electrical
F-_ _ _ _-_ _ _ _-_ Fire Protection
M-_ _ _ _-_ _ _ _-_ Mechanical
ETC.

  - **Major Group**

-WALL- _ _ _-_ Walls
-DOOR- _ _ _-_ Doors
-LITE- _ _ _-_ Lighting fixtures
-COLS- _ _ _-_ Columns
ETC.

  - **1st Optional Minor Group**

_-_ _ _ _-FULL-_ Full height
_-_ _ _ _-DIMS-_ Dimension
ETC.

  - **2nd Optional Minor Group**

_-_ _ _ _-_ _ _ _-IDEN-_ Identification
_-_ _ _ _-_ _ _ _-PATT-_ Pattern
ETC.

  - **Status Field**

_-_ _ _ _-_ _ _ _-N New work
_-_ _ _ _-_ _ _ _-D Demolition
_-_ _ _ _-_ _ _ _-T Temporary work
_-_ _ _ _-_ _ _ _-F Future work
ETC.

4.27.12 File Structure

The DOT uses a specific folder structure for all electronic submittals.

4.27.13 Signing and Sealing

The Florida Department of Business and Professional Regulation (BPR) approved Architects to electronically sign and seal Plans and Specifications. Architects may use either Electronic Signature or Digital Signature. See Chapter 5 for more information.

Helpful link:

Florida Statutes Part 1 ELECTRONIC SIGNATURES Chapters 668.001-668.006

4.27.14 Submittal

The Office of Design has defined procedures for Structure As-built retention in a memorandum. Drawing files used to create a project will be submitted on the required media.

4.28 SPECIFICATION STANDARDS

Specifications will be prepared in accordance with Specifications Package Preparation Procedure (Topic Number 630-010-005) and the Specifications Handbook coordinated through the District Specifications Offices and available on the Specifications website:

http://www.dot.state.fl.us/specificationsoffice/PackagePreparation/Default.shtm

4.28.1 Standard File Names

4.28.1.1 Classical Electronic Delivery

Specification file naming convention for classical Electronic Delivery submittals is: *fpid*.pdf, where: *fpid* = full (11digit) Financial Project Identification Number. That file is to be located in the \specs sub-folder. Supplement file naming convention for classical Electronic Delivery submittals is: *fpid*SUPP#.pdf, where:

- ***fpid*** = full (11digit) Financial Project Identification Number without dashes,
- **SUPP** = Identifier
- # = sequential numbering of the supplements: 1, 2, 3, etc.

Original Delivery	***Supplement1***	***Supplement2***
fpid.PDF	*fpid*SUPP1.PDF	*fpid*SUPP2.PDF

4.28.1.2 Digital Delivery

For Digital Delivery Bid Sets, the Specification files are copied from the \specs sub-folder structure for delivery. Specification file naming convention for Digital Delivery submittals is: *fpid*-SPECS[-].pdf, where:

- ***fpid*** = full (11digit) Financial Project Identification Number without dashes.
- **SPECS** = item description
- **[-]** = any additional naming specific to the project (optional)

Supplement file naming convention for Digital Delivery submittals is:
fpid-SPECS-SUPP##[-].pdf, where:

- ***fpid*** = full (11digit) Financial Project Identification Number without dashes,
- **SPECS** = item description
- **SUPP** = Identifier
- **##** = sequential numbering of the supplements: 01, 02, 03, etc.
- **[-]** = any additional naming specific to the project (optional)
- **BOE#** = Bases of Estimates – Pay Item number
- **TSP** = Technical Special Provision

Original Delivery	***Supplement1***	***Supplement2***
fpid-SPECS[-].PDF	*fpid*-SPECS-SUPP01[-].PDF	*fpid*-SPECS-SUPP02[-].PDF
fpid-SPECS-TSP[BOE#][-].PDF	*fpid*-SPECS-TSP[BOE#]-SUPP01[-].PDF	*fpid*-SPECS-TSP[BOE#]-SUPP02[-].PDF

For Example: Begin with the *FPID* number, then the item description (SPECS), then supplement number (SUPP##), and finally any naming [-] specific to the project (optional).

This file naming convention allows project files to collate as sorted and combined in a single folder. Text, numbers and dashes are allowed. Characters that interfere with operating system path specifications or XML paths must be excluded, such as underline and spaces and (/ \ . : , < & # >).

4.28.2 Resource Files

Statewide implemented specifications files are distributed by the State Specifications Office through the District Specifications Offices.

4.28.3 Technical Special Provisions

When the use of a Technical Special Provision (TSP) is authorized by the District Specifications Office, the PDF of the TSP file(s) is individually signed and sealed (electronically or manually) and also becomes part of the overall project's Specifications package.

For classical Electronic Delivery, each TSP file(s) must be created and separately signed and sealed with an individual signatory using PEDDS.

For Digital Delivery, certificate based Digital Signature will be used.

In both classical Electronic Delivery and Digital Delivery, the TSP must include the electronic statement incorporated on the TSP cover page. When a TSP is manually signed and sealed, it must be scanned in grey scale for seal visibility and no electronic statement is needed.

When TSPs are combined into the overall Specification package, the Signatory(s) of the TSPs do not have to re-sign the combined documents.

For Digital Delivery, add the image of the seal to the cover page of each TSP. The individual files for each TSP will be digitally signed and sealed.

4.28.4 File Structure (Specs Only Projects)

- Specifications Folder Structure
- Supplemental Specifications Folder Structure
- Technical Special Provisions (TSP)*

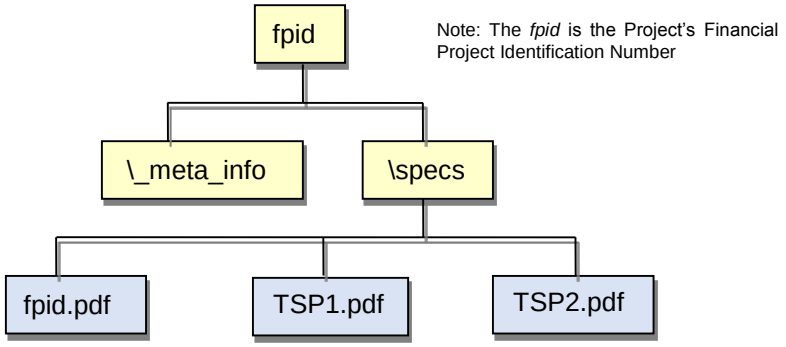
Note If a TSP is applicable to the project, then the folder for TSP(s) would apply to both the Project CD and Bid CD data set. Multiple TSP files may exist in the delivery.

4.28.4.1 Classical Electronic Delivery

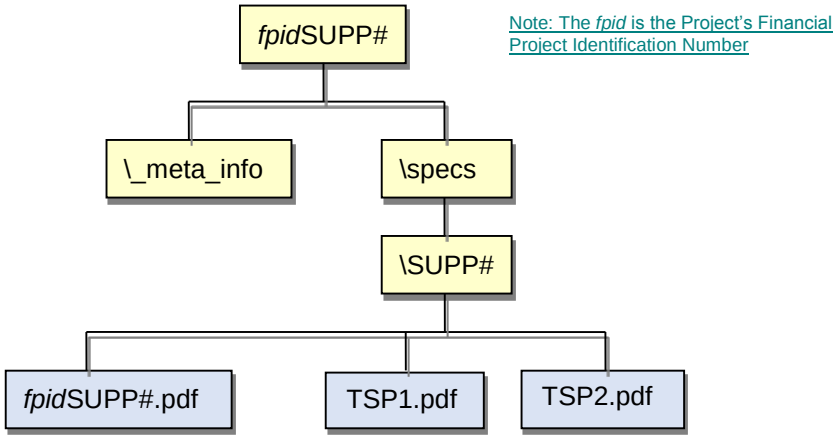
1. Create the project folder using all eleven digits of *fpid* No. (i.e., 12345678900).
2. Inside the created (project) \FPID folder, create a \specs sub-folder. This is where the Specifications package file (*fpid*.pdf) is placed.
3. Sign and seal the Specifications package file (*fpid*.pdf) with PEDDS. This utilizes the _meta_info sub-folder under the root Project folder (where the \specs sub-folder also resides).
4. For Supplements, continue to use the ORIGINAL \FPID folder created in Step 1. Delete all files in the \specs sub-folder. If PEDDS was used, delete all signatory files in the _meta_info sub-folder.
5. For Supplements, create a \supp# sub-folder under the \specs sub-folder. This is where the Supplement package file (*fpid*SUPP#.pdf) is placed.
6. For Classical Electronic Delivery, sign and seal the Supplement package file (*fpid*SUPP#.pdf) with PEDDS.

Note **DO NOT** re-submit the entire Specification package for a Supplemental.

Example of a Specifications Package Folder Structure



Example of a Supplemental Specifications Package Folder Structure



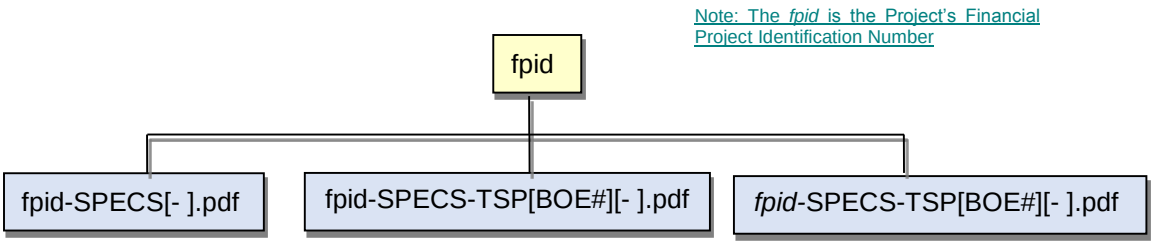
4.28.4.2 Digital Delivery

The Specification Package is delivered as *fpid*-SPECS.pdf. Subsequent TSPs are delivered as *fpid*-SPECS-TSP[BOE#].pdf as shown in Chapter 5.8.

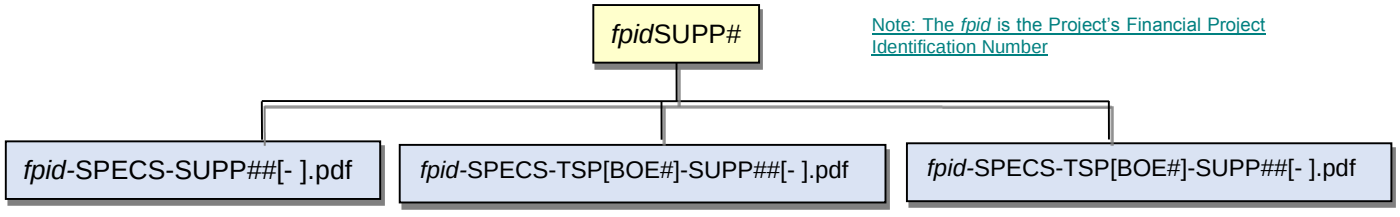
1. Create the project folder using all eleven digits of *fpid* No. (i.e., 12345678900).
2. Inside the created (project) \FPID folder. This is where the Specifications package file (*fpid*-SPECS[-].pdf) is placed.
3. Digital Delivery does not use PEDDS and the _meta_info sub-folder is not required.
4. For Supplements, continue to use the ORIGINAL \FPID folder created in Step 1.
5. For Supplements. This is where the Supplement package file (*fpid*-SPECS-SUPP##[-].pdf) is placed.
6. For Digital Delivery, use digital signature to sign and seal the Supplement package file (*fpid*-SPECS-SUPP##[-].pdf).

Note **DO NOT** re-submit the entire Specification package for a Supplemental.

Example of a
Specifications Only Package
Folder Structure



Example of a
Supplemental Specifications Only
Package Folder Structure



Chapter 5

DELIVERY PROCEDURE

5.1 PURPOSE

This chapter establishes the minimum requirements and functions necessary for the Florida Department of Transportation (Department) CADD delivery, describing how electronic data is to be delivered and made available to customers.

5.2 SCOPE

This chapter covers the Department's functions to receive, authenticate, integrate, package, and distribute electronic project data including the CADD delivery.

5.3 DEFINITIONS

Authentication: For Electronic Signature (as with Professional's Electronic Data Delivery System (PEDDS)) it's the process of comparing the message digests (SHA-1 Hash Codes generated by the PEDDS application) of the PEDDS Manifest file (Manifest.XML) and PEDDS Signature files to those appearing on the signed Manifest Document (paper) or Signatory Documents (paper).

For Digital Signature, Authentication is also the process where Digital Signatures are compared with identity data held by the issuer of a Digital Certificate to validate the identify of a Signatory; and that a document that has been signed with a Digital Signature has not been modified. For Digital Signature this is usually an automated process of the document software (such as with Adobe Reader or Acrobat) which usually provides feedback to the user that the file being examined is signed, the signatures are valid, and the document is unmodified since the Signatory signed it.

Certificate Authority: The 3rd party entity that issues the Digital Certificate to the professional signatory and who can validate the identity of the signatory.

Classical Electronic Delivery: The original method of data delivery specified prior to the 2013 release of the CADD Production Criteria Handbook. This delivery methodology involved printing each plan sheet as a separate file, creating an index of those sheet files, signing and sealing each sheet separately (using Electronic Signature using the PEDDS application), and producing several files associated with and derived from that index.

Compliance Certification Worksheet: A document that contains the data producers' written assurances that items required by the Department's Computer Aided Drafting and Design (CADD) Manual are included in the delivered project data and that certain Quality Control functions were performed.

Composite PDF: A document containing all of the plan sheet images composing the plans set in their index order. This document must be in Adobe Portable Document Format (PDF) format and reside in the project's root directory.

For Classical Electronic Delivery projects, it is named 'Project.PDF' - for an original delivery. For Digital Delivery projects, it is named *fpid*-PLANS[-].PDF (where *fpid* is the projects' Financial Project Identification Number and *[-]* is any additional naming specific to the project).

For Classical Electronic Delivery projects, the Composite PDF is not usually signed, or signed and sealed. For Digital Delivery projects, the Composite PDF of the plans is signed and sealed with a certificate based Digital Signatures.

For Classical Electronic Delivery projects - during revisions, a second PDF is produced for the contractor called Revision#.pdf, which is a subset of Project#.pdf containing only those sheets revised for that revision number. For Digital Delivery projects, this file is named *fpid*-PLANS-REV##[-].pdf.

Delivery: A set of electronic files secured by PEDDS, plus additional project data. Digital Delivery is a simpler method. See Classical Electronic Delivery and compare with Digital Delivery.

Delivery Key: The message digest (SHA-1 hash code) used to reference the delivery. The delivery key is the hash code of the Manifest file itself, produced by the PEDDS software.

Digital Certificate: In cryptography, a digital certificate uses a digital signature to bind together a public key with an identity — information such as the name of a person or an organization, their address, and so forth. The certificate can be used to verify that a public key belongs to an individual. The signatures on a certificate are attestations by the certificate signer that the identity information and the public key belong together.

The type of Digital Certificates used for the Department's design work must meet the Federal Governments' Access Certificates for Electronic Services (ACES) program. The Department currently uses IdenTrust (**http://www.identrust.com/government/index.html**) to provide those digital certificates.

Digital Delivery: The contemporary method of delivery that relies upon the composite PDF of the plans and specifications being produced and delivered by more direct means of the users choice, no production of an index (nor the associated files or reports), and Digital Signature as the principal means to secure the composite PDFs of the plans and specifications files.

Digital Signature: Cryptographic data applied to an electronic file which is unique to the signatory, and is very difficult to forge. In addition, the digital signature assures that any changes made to the data or electronic file that has been signed cannot go undetected. A Digital Signature is much the same as a conventional handwritten signature that identifies a person signing the document. While traditional signatures are on paper, every digital signature stores information that will identify the person signing. There can also be information about changes made to a digitally signed document since the first signature was applied. In Digital Delivery, Digital Signatures are applied to Signature Sheet(s) in the plans or may be applied to documents that Professional(s) of Records are taking responsibility for.

Document Image File: An electronic file from which a printable hardcopy could be produced. For classical Electronic Delivery these would represent the individual print files of each sheet of the plans set which would also be Signed and Sealed with PEDDS. For Digital Delivery these files are not required, and only the Composite PDF of the whole plans set, or any necessary subdivision of that Composite is required. In Digital Delivery the Composite is Digitally Signed with a Digital Signature.

Electronic Signature: The process of associating a wet-ink signed document with an electronic file, and involves the production of a Signature Document securing the electronic file and any data referenced by either the Signature Document or the file. By signing the Signature Document, the Signatory is "electronically" signing all files listed in the signature file. The PEDDS application implements Electronic Signature.

PDF Portfolio: A PDF portfolio is a container file that can hold a variety of files assembled that can be of different formats and created from different applications. PDF portfolios support collections of PDF, JPG, TIFF, GIFF, BMP, PNG, and Text files. Portfolios are created by PDF editing software like Acrobat®, Bluebeam Revu® and similar software. Portfolios have been used to include related documents such as Technical Special Provisions along with Specifications in the Specs package (*fpid*-SPECS[-].pdf) for Digital Deliveries. Care should be taken to adhere to the subdivision guidelines for PDF creation as described in section 5.12.2.

Project CD: Media (CD, DVD, USB, etc.) containing all data associated with a project.

Revision: Vol. 1, Section 20.4 of the PPM defines a design revision as a modification to the PS&E Package/Bid Set after it has been accepted by Central Office Project Review.

Revision Report: An HTML report created by the 'ProjectDelta' application containing information about sheet-specific file differences between a secured, delivered file set (Project CD) and a new, corrected file set. This report is named 'Deltandx#.htm', where # is the revision number, and is placed in the root folder of the project. This report is a comparison between the indexes (ProjectIndex.XML) of an earlier delivery of a project, and a contemporary delivery of a project. Also see Change Report. Revision Reports are not produced for Digital Delivery projects.

Revision Set: The set of files that denote changes from one delivery to the next, as well as the Revision Report (Deltandx#.htm) that helps define them. The classical Electronic Delivery Revision Report is not produced for Digital Delivery. For Digital Delivery projects, the Revision Set includes only the changed files from one revision to the next.

Securing Files: The act of using PEDDS to update the project's Manifest.XML file with the contemporary listing of project files and SHA-1 hash codes that in turn will allow PEDDS to validate secured files. This process produces the Manifest Document. In Digital Signature, files are secured when they are digitally signed.

Sheet: Classical Electronic Delivery applications recognize a sheet as a discreet image file representing a page or sheet in the plans that is listed in the project index. A sheet must belong to a plans component and also be found in a defined discipline sub-folder of the project.

For Digital Delivery projects, a sheet is simply a page in a multipage PDF (*fpid*-PLANS[-].PDF for an original delivery, or *fpid*-PLANS-*REV##[-]*.PDF for revisions).

Signatory: The person or professional who secures files in a delivery using a signature file and document or a Digital Signature. If the signatory is a professional, signatures will be governed by the rules defined by the Florida Boards of Professional Regulation. A professional may have multiple signatories for a project as needed by the revision process. See 'Revision Set' for more details.

Signatory File: Defines / lists files that a Signatory signs, or signs and seals. Signatory files are created by PEDDS and stored in the project's _meta_info sub-folder. The signatory file lists each file selected by the Signatory to sign/sign and seal by the file's relative URL to the project's root folder, and includes the selected file(s) SHA-1 hash code.

A professional Signatory may have multiple signatory files for their work within a project. The Signature Document secures the legal record and must be hand in hand with the data; otherwise, the data representing the legal record can never be truly authenticated. Digital Signature does not use a Signature Document.

Signature Document: In Electronic Signature, a wet-ink signed or signed-and-sealed paper document produced by PEDDS and used to secure a signatory file. By signing the Signature Document, the Signatory is "electronically" signing all files listed in the signature file.

Signature Sheet(s): The Digital Delivery process uses a Signature Sheet to define a professional's area of responsibility for those portions of the document being digitally signed. Signature Sheet(s) as in the case of a plans set is one or more sheets following a Key sheet which bears the digital signatures of the Professional(s) of Records. The Signature Sheet is a convenient location for placing a digital signature appearance. By placing a digital signature on the signature sheet of a

plans set, the Professional(s) of Record associates his/her professional signature with the entire plan set (for example: 61G15-23.003(4)). Therefore Space will be provided on the signature sheet for a scope delineating the extent of the Professional's responsibility and an index of the specific sheets in the plan set for which the Professional is accepting responsibility (also 61G15-30.003 Minimum Requirements for Engineering Documents).

Signing: Acts of securing a file or set of files under a signature file (for Electronic Signature) without the benefit of signing-and-sealing under the Florida Boards of Professional Regulation rules. This implies that the Signatory is signing with a signature type intended to sign only, and not as a Professional of Record. Note that Digital Signature makes no distinction between Signing, or Signing and Sealing, and the context of the activity and any exculpatory language included at the time of signing will establish the intent of the Signatory.

Signing and Sealing: The act of securing a set of files based on the rules defined by the Florida Boards of Professional Regulation governing signing and sealing of electronic files. For Electronic Signature, these rules provide for:

- A signature file that defines the type of professional that is signing and sealing (i.e., engineer, surveyor, geologist, landscape architect, etc.)
- The professional's name, license number, and scope of work for the signature
- The list of files selected — each file listed is defined by its relative URL to the project, the SHA-1 hash-code for each file, and any qualifiers the Signatory has indicated regarding the scope of responsibility, usability, or reliability for any of the files selected

  Signing and Sealing a file adds file information to the Signatory's signatory file, and generates the Signatory Report. Signing and sealing is not complete until the professional wet-ink signs, dates, and seals the Signatory Report.

In contrast, Digital Signature relies upon Public Key Infrastructure to embed secure data into a file the Signatory is signing, or signing and sealing. Any restriction upon the scope of responsibility, usability, or reliability of the file being signed must show with the appearance of the digital signature in that document.

Sub-Consultant: A consultant, separate from the primary consultant, who performs work for a project under the hire of a prime consultant.

Sub-Delivery: A delivery of files made by a sub consultant to a consultant, prime consultant or project manager.

Sub-Project: A project that is combined and let with other projects as part of a strung project. These sub-projects are also referred as 'Lead' and 'Goes-with' projects. The 'Lead' sub-project is the first project in the strung project and all others are 'Goes-with' projects.

For Classical Electronic Delivery, sub-projects may be combined with the StrungProject application, binding them under a single Strung project directory structure.

Digital Delivery simplifies the delivery – Each Subset is delivered separately. The StrungProject application is not used, and data subsets of Lead and Goes-with projects are never combined.

Subset: For Classical Electronic Delivery projects, a set of files that is entirely derived from a secure Project CD. 'SetMaker' is an application used to create subsets from secured Project CD data sets. Sub-Projects are Subsets of Lead and Goes-with projects.

For Digital Delivery, Subsets are extracted manually by the user, as the Digital process has no index (or perhaps PEDDS data) to work with.

Validation: For Electronic Delivery using PEDDS, the comparison of SHA-1 hash codes recorded in the project's Manifest file against those hash codes calculated from the contemporary delivery. Validation tests to determine if the project file set was altered since the project was secured.

Validation is also done in Digital Signature; however the validating application will compare hashes embedded cryptically within the file against ones calculated "on the fly" to see if a document has changed. For Digital Signature the Validation also extends to the hosting application verifying the identity of Signatory by using the Root Certificate to make contact with the Certificate Authority over the internet and checking identity records to ascertain the authenticity of the Signatory.

5.4 REFERENCES

Plans Preparation Manual Vol. I & II, Topic Nos. 625-000-007/625-000-008

5.5 RECEIPT AND ACCEPTANCE OF ELECTRONIC DATA

The Project Manager is responsible for ensuring that the terms of the scope of services of a project have been met, including the assurance that the Department's Quality Control requirements were fulfilled during production of the electronic data.

- ***Receipt of Data***

The Project Manager will receive electronic data under a letter of transmittal.

- ***Authentication***

Upon receipt of the delivery media, the Department will authenticate the project data using the signed (and sealed) documents provided with the Electronic Delivery, or will open files Digitally Signed and validate them.

- ***Acceptance***

The Project Manager ensures that the delivery is checked for completeness and meets the terms, conditions and requirements outlined herein. Once the delivery has been determined to be compliant, a record of acceptance will be made.

5.6 ENGINEERING DATA SERVICES

Engineering Data Services is a function or functions within the Department for handling and re-distributing engineering and CADD data, including consolidation, packaging, archiving, and distribution of data belonging to a project.

- ***Contract Packaging***

Engineering Data Services will coordinate regarding contract packaging requirements for a delivery for a letting found in the ***Plans Preparation Manual Vol. I & II, Topic No.625-000-007 & 625-000-008***

- ***Archive and Security of Data***

Engineering Data Services will insure prescribed safeguards for the data have been met and the archival package for data includes all electronic data available for a project. The data will be preserved where it can be retrieved at future date meeting or exceeding records retention standards set for such data.

5.7 PUBLICATION AND DISTRIBUTION

Engineering Data Services is responsible for publication and distribution of electronic data in accordance with procedures or requests, including but not limited to publishing electronic data to different media.

5.8 CLASSICAL ELECTRONIC vs DIGITAL DELIVERY

The classical Electronic Delivery, summarized previously, utilizes Electronic Signature to secure files so defined in ***Florida Statutes 668.003*** and ***61G15-21.003 Florida Administrative Code*** (for Professional Engineers - other Boards of Professional regulation have similar requirements). The Department supplies a software application called PEDDS to implement Electronic Signature.

Digital Delivery is also defined in ***Florida Statutes 668.003***, but instead uses a Digital Signature to secure files. Digital Signature is a "paperless" process that relies upon the intrinsic ability of the files themselves to encode cryptographic security features using a Digital Certificate issued to the Professional of Record.

The Bid Set, defined in Chapter 4, is a subset of the project dataset files and differs with the delivery process chosen, Classical Electronic Delivery or Digital Delivery, as indicated below:

Classical Electronic Delivery Bid Set	***Digital Delivery Bid Set***
Project.PDF represents the plans and is retained in the project \root folder. Individual sheet image files are created and signed and sealed with an Electronic Signature for each sheet in the plans set.	*fpid*-PLANS[-].PDF is a composite of all plan sheets and delivered separate from the project folder structure. This file is signed and sealed with Digital Signature. Revisions to this file are named *fpid*-PLANS-REV##[-].PDF.
The Specifications file is named *fpid.PDF* and retained in the \Specs subfolder of the project.	The Specifications file is named *fpid*-SPECS[-].PDF and delivered separate from the project folder structure. The Supplemental Specifications file is named: *fpid*-SPECS-SUPP##[-].PDF. This file is signed and sealed with Digital Signature.
Does not include CADD Data or Engineering Data files	Includes a ZIP file (*fpid*-CADD[-].ZIP) of the Project Directory structure containing the CADD files (Native DGN's or DWG's of the platform used to design the project) and supporting data files from which the final plans were developed. This file is the only file delivered outside and separate from the project folder structure (the project folder structure contains all the files in the delivery to the Department). *fpid*-CADD[-].ZIP is not signed and sealed. See more on this file later in this Chapter.
SetMaker is used to create this Bid Set from the Project dataset.	*fpid*-CADD[-].ZIP replaces the Bid Set in the former Electronic Delivery and is created manually. See more about *fpid*-CADD[-].ZIP later in this chapter.

Note The fpid-CADD[-].ZIP will be made available to contractor for bidding during the advertisement period. The existing naming convention standards and standard directory structure are to be preserved in the delivered fpid-CADD[-].ZIP for Bid Sets with some exceptions:

- Empty project folders/directories will be removed from the *fpid*-CADD[-].ZIP internal directory structure.
- Files that are redacted by the designer that are not deemed useful to the contractor for creating an accurate bid, or necessary for constructing the project are not included in *fpid*-CADD[-].ZIP.

The goal is to provide the data to encourage Automated Machine Guidance in Construction and more accurate bidding. Advertising projects with the Engineering Data (i.e. LandXML of the route geometrics including: points, alignments, profiles, sections, and surfaces of the pre-construction existing ground, and the as-designed proposed surfaces is desired. Other forms of 3D, 4D, and 5D models may also be included. Because *fpid*-CADD[-].ZIP does not represent the entire Digital Delivery, certain tools should not be run against the contents of *fpid*-CADD[-].ZIP, such as FileChecker, which should only be run against the full Project CD folder structure and NOT simply the contents of *fpid*-CADD[-].ZIP.

The Bid Set retains the same folder structure as the project dataset for those folders containing files (all empty folders are automatically removed by the SetMaker application designed for this task in Electronic Delivery). *fpid*-CADD[-].ZIP for Digital Delivery essentially replaces the Electronic Delivery Bid Set CD.

Note Refer to Chapter 4.28, Specifications Standards - Technical Special Provisions (TSPs) in the Bid Set.

5.8.1 Production Deliverable Files

For Digital Delivery projects, the Bid Set that will be made available to bidders will include: *fpid*-PLANS[-].PDF, *fpid*-SPECS[-].PDF, *fpid*-CADD[-].ZIP.

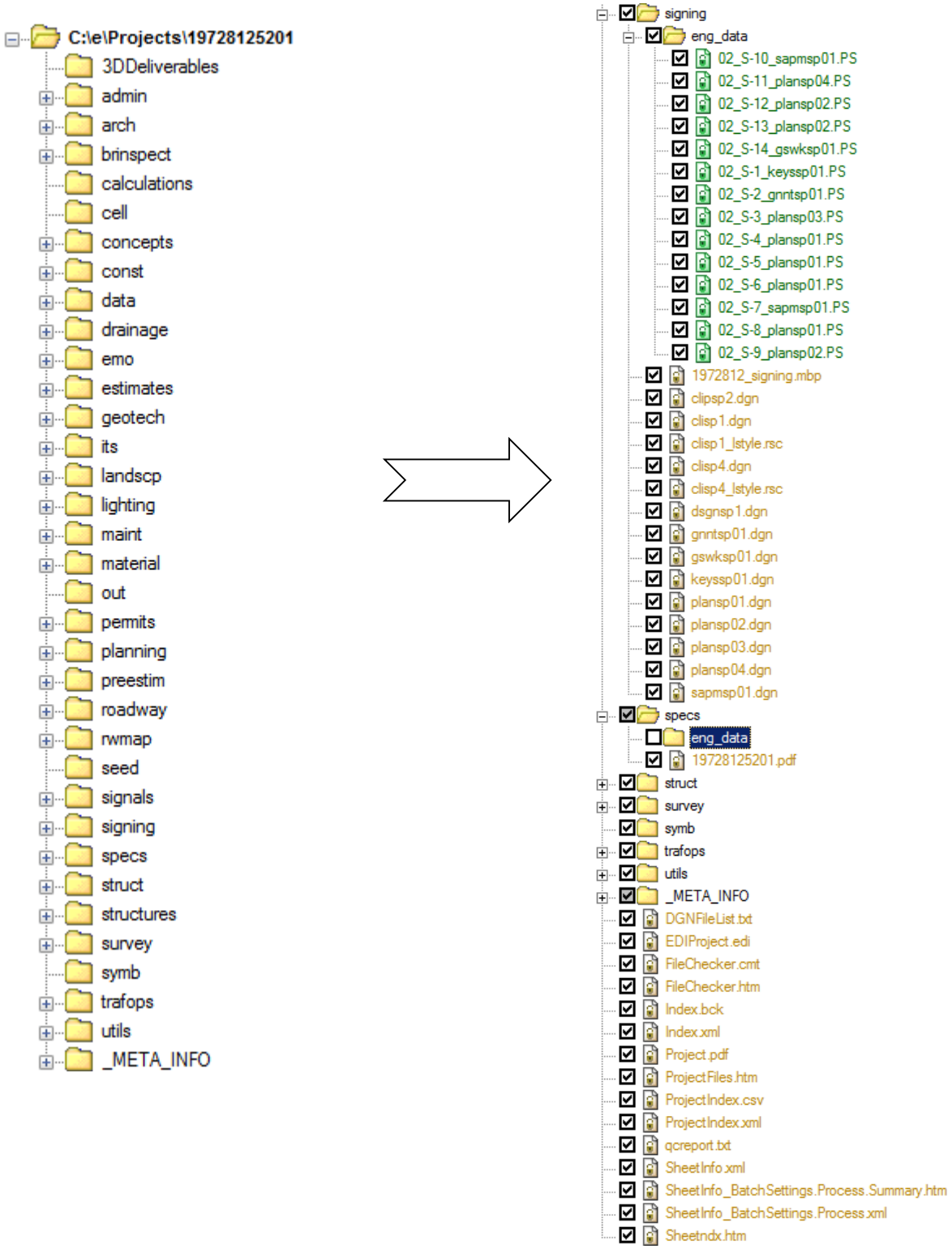
The *fpid*-CADD[-].ZIP file contains the project directory structure and delivered as a separate file outside of the project directory where the remaining files for the project are found. This is to avoid unnecessary duplication of data within the project directory. The designer will determine which files should remain inside the *fpid*-CADD[-].ZIP file to support the plans and facilitate the contractor constructing the project through automated means.

As a minimum, the *fpid*-CADD[-].ZIP should include:

- CADD Drawing Files
- Engineering Data Files *(described later in this chapter and prior chapters)*
- Summary of Quantity Sheet Backup Drawings *(such as, shapes and area identifications)*
- 3D Deliverable Files *(for the contractor described later)*

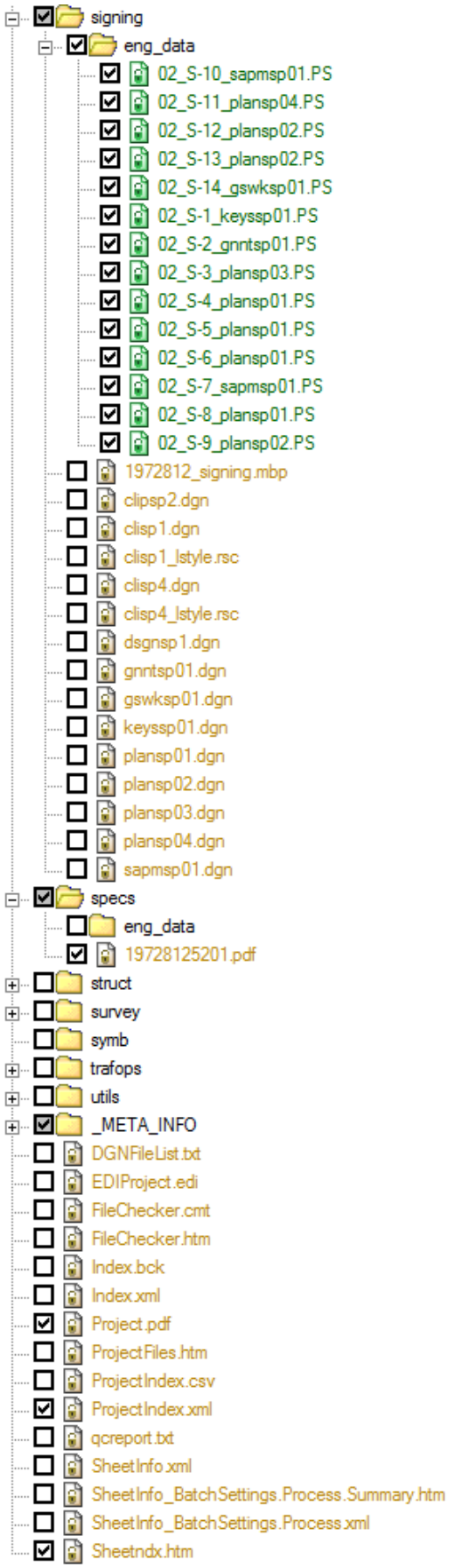
5.9 PROJECT DIRECTORY / BID SET EXAMPLES

The following images are taken from the SetMaker application. A project dataset directory structure is shown on the left hand side. The right hand image expands the directory structure and shows files for Classical Electronic Delivery that would be included in the project dataset delivery.



The image shows the selection from the SetMaker application which defines the files (boxes checked) that are to be included in the Bid Set for a Classical Electronic Delivery. Files that were not necessary for the advertisement of an Electronic Delivery project, nor folders that do not contain data are not included.

Note File selection for the fpid-CADD[-].ZIP for Digital Delivery differs from the Classical Electronic Delivery Bid CD shown above. For example, the Postscript sheet image files would not even be produced for Digital Delivery.



5.10 FILE NAME CONVENTIONS FOR DELIVERY

5.10.1 Classical Electronic Delivery Projects

For Classical Electronic Delivery the following table illustrates the file names used in each successive revision:

Original Delivery	***Revision 1/ Supplement1***	***Revision 2/ Supplement1***	***Revision 3/ Supplement2***
ProjectIndex.XML	ProjectIndex.XML	ProjectIndex.XML	ProjectIndex.XML
Project.PDF	Project1.PDF	Project2.PDF	Project3.PDF
Sheetndx.HTM	Sheetndx1.HTM	Sheetndx2.HTM	Sheetndx3.HTM
	Deltandx1.HTM	Deltandx2.HTM	Deltandx3.HTM
	Revison1.PDF	Revision2.PDF	Revision3.PDF
ProjectFiles.HTM	ProjectFiles.HTM	ProjectFiles.HTM	ProjectFiles.HTM
fpid.PDF TSP1.PDF, TSP2.PDF…	*fpid*SUPP01.PDF	*fpid*SUPP01.PDF	*fpid*SUPP02.PDF

Note Multiple TSP files may exist in the delivery.

5.10.2 Digital Delivery Projects

For Digital Delivery the following table illustrates the file names used for each successive revision (for the Bid Set):

Original Delivery	***Revision 1/ Supplement1***	***Revision 2/ Supplement1***
fpid-CADD[-].ZIP	*fpid*-CADD-REV01[-].ZIP	*fpid*-CADD-REV02[-].ZIP
fpid-PLANS[-].PDF	*fpid*-PLANS-REV01[-].PDF	*fpid*-PLANS-REV02[-].PDF
fpid-SPECS[-].PDF *fpid*-SPECS-TSP[BOE#][-].PDF	*fpid*-SPECS-SUPP01[-].PDF *fpid*-SPECS-TSP[BOE#]-SUPP01[-].PDF	*fpid*-SPECS-SUPP01[-].PDF *fpid*-SPECS-TSP[BOE#]-SUPP01[-].PDF

- **Example File Names using the Digital Delivery naming convention:**

Original Delivery	*Revision 1/ Supplement1*	*Revision 2/ Supplement1*
12345678901-CADD.zip	12345678901-CADD-REV01.zip	12345678901-CADD-REV02.zip
12345678901-CADD-ConsultA.zip	12345678901-CADD-REV01-ConsultA.zip	12345678901-CADD-REV02-ConsultA.zip
12345678901-CADD-ConsultB.zip	12345678901-CADD-REV01-ConsultB.zip	12345678901-CADD-REV02-ConsultB.zip
12345678901-PLANS.pdf	12345678901-PLANS-REV01.pdf	12345678901-PLANS-REV02.pdf
12345678901-PLANS-ROADWAY.pdf	12345678901-PLANS-REV01-ROADWAY.pdf	12345678901-PLANS-REV02-ROADWAY.pdf
12345678901-PLANS-SIGNING.pdf	12345678901-PLANS-REV01-SIGNING.pdf	12345678901-PLANS-REV02-SIGNING.pdf
12345678901-SPECS.pdf	12345678901-SPECS-SUPP01.pdf	12345678901-SPECS-SUPP01.pdf
12345678901-SPECS-TSP560-A.pdf	12345678901-SPECS-TSP560-SUPP01-A.pdf	12345678901-SPECS-TSP560-SUPP01-A.pdf

The file name convention is intended to start with more general information on the left of the name and move to the more specific one reads right. Text, numbers and dashes are allowed in file names. Characters that interfere with operating system path specifications or XML interpretation must be avoided, such as underlines and spaces along with characters such as: (/ \ . : ;, < & # >").

For Example: The file names in the table above begin with the Financial Project Identification Number (*fpid)* number, entering all 11 digits; then the item description (i.e. PLANS, SPECS, ASBUILT, etc.), then revision or supplement number (REV## or SUPP##), and finally any naming text following the dash [-] specific to additional details the file *(optional)* to help the reader better understand the file's content.

5.11 PRE-PRODUCTION

Pre-production activities involve the creation of a "seed" project to provide a framework for meeting the Department's CADD standards and delivery requirements. Activities include the creation of the project directory structure. The project must begin correctly so the Department's standards for Delivery can be met.

The Department's CADD software suites suite contains a tool to help create a project directory structure with the appropriate project information. The newly generated project directory structure and its content are referred to as the "seed project".

For creating a "seed project" the Create Project application can be used to enter key financial, administrative and location data into the project as project identification information. This project identification information is contained in an XML file format (*ProjectID.xml*) stored in the \eng_data sub-folder of the project. The Department will need to assist consultants and help provide the information to the consultant.

5.12 PRODUCTION

During the production phase, tasks are performed prior to the creation of the media for delivery of the data meeting the Department's Delivery requirements. The Department provides several applications and resources to aid the user to meet the Department's specific requirements.

➢ **A broad summary of tasks performed during the Production Phase include:**

- Follow the directory structure and file naming requirements for Delivery.
- Produce CADD design files to the Department's CADD Standards, using the workspaces and resources provided. Assemble any non-standard user created CADD resources, such as custom created cell libraries, etc. in appropriate folders and document their use.
- Document all approved deviations from the Department's CADD Standards in the project journal file(s) including the documentation of important applications and methods used and decisions made during design. This is important for downstream users of the data to follow in the footsteps.
- Create required Engineering Data and output files.
- Generate Quality Control (QC) Reports for all design files using the CADD QC tool provided. These reports help indicate compliance to file naming and CADD element symbology standards.
- Merge any external project files into the project folder structure, including all files from sub-consultants, external reference files, scanned images for sheets (if any) and specifications documents.
- Bundle any non-standard graphics dependent resource files into the project sub-folders:
  - \symb - to include user created fonts, shape files and/or line styles
  - \cell - to include project specific / user created cell or block drawings
- Check for any duplication of files and resolve. Remove non-essential file duplication. Remove non-essential "junk" files.
- Review the project for completeness, accuracy, and compliance with delivery standards. The application FileChecker is provided to help assist with this task.
- Create any files needed to support 3D/4D/5D modeling as required by the scope and to communicate design intention for the contractor.

5.12.1 Classical Electronic Delivery Projects

For Classical Electronic Delivery projects, the designer will create and maintain the project Index and journal files. A summary of Classical Electronic Delivery tasks (in addition to the General tasks) during the Production Phase include:

- For MicroStation, use the Sheet Navigator application to test and account for each design file containing sheets is properly identified and tagged with sheet administrative data, unless the source of the sheet is external to MicroStation (i.e. a scanned file). Likewise, for AutoCAD Civil 3D, use the Sheet Set Organizer is used to accomplish a similar function.
- Create final plot images files from graphic design files containing the sheets.
- Use the Electronic Deliver Indexer (EDI) or Sheet Set Organizer (SSO) applications to create the Project Indexes of plan sheets and files. EDI and SSO are also used to batch plot sheets to image files.
- Use EDI or SSO to create final versions of the Index reports, including an HTML format version for use in the letting. If the project represents a revision, create the Revision Report (Deltandx#.htm) using the ProjectDelta.
- Use EDI or SSO to create the composite Acrobat file (Project#.PDF) of all the plan sheets. If the project represents a revision, create the revision PDF (Revision#.pdf) containing those sheets that were revised.
- Electronically sign and/or Sign and Seal files (plan sheets and specifications files, engineering reports, etc.), as required, using PEDDS.
- Secure the entire Project dataset with PEDDS for secure delivery of all project data to the Department.
- Create the Secured Project CD-ROM (or DVD-ROM) with the appropriate labels and the required checklist (include PEDDS documents if Electronic Signing and Sealing was used).
- If required by the District, create the Bid Set dataset using the SetMaker application.
- If the project is a Strung Project, use the Strung Project application to create the Strung Data Set from Bid Set data sets created in the previous step. Secure the Strung Project delivery with PEDDS.
- Create Bid Set CD-ROM, as required, with the appropriate labels and PEDDS documents.
- Authenticate hardcopy media (CD-ROM, DVD-ROM, Etc.) with PEDDS to ensure the data is readable and represents the secured project delivery.

5.12.2 Digital Delivery Projects

Digital Delivery does not require a Project Index or the use of the tools used to maintain the Project Index, but requires *fpid*-PLANS.PDF file(s) to be produced, journal files, etc. Also, Digital Delivery projects use certificate based Digital Signature to secure files such as *fpid*-PLANS.PDF by the Professional(s) of Record.

➢ **Important *considerations when producing the fpid-PLANS.PDF:***

- For MicroStation, use the Sheet Navigator application to account for each design file containing sheets and that they are properly identified and tagged with sheet administrative data - unless the source of the sheet is external to MicroStation (i.e. a scanned file). Likewise, for AutoCAD Civil 3D, use the Sheet Set Organizer is used to accomplish a similar function.
- Use MicroStation Print Organizer (or equivalent), or AutoCAD Sheet Set Organizer (SSO) to create plan sheets and print files. Both may be used to help batch print sheets to PDF files.
- File size of the PDF files being produced must be considered. The larger the PDF files, the more difficult they are to manage, particularly if they have to be transmitted over the Internet (as when the advertisement takes place).
- Produce *fpid*-PLANS[-].PDF in Black and White or Grayscale, unless color is required from that file. Production of the PDF in color enlarges the file size considerably. All plans sheets will be produced in the PDF in the same orientation, preferably Landscape, with the title block displaying at the bottom of the sheet.
- The number of plan sheets in PDF files also effects file size. If the overall PDF plans set exceeds approximately 700 sheets, then the Department recommends subdividing the *fpid*-PLANS[-].PDF files into smaller sections, preferably by Plans Component.
- For example: *fpid*-PLANS-Roadway.PDF, *fpid*-PLANS-Signalization.PDF, etc., where the Component name is appended to the PDF containing that Key Sheet and Component sheets.

Not only will the resulting PDF files be smaller, but each of these separate component files of the plans set will Digitally Sign and Seal faster and multiple Signatories will be administered more easily. Separate PDF files may be combined as a PDF Portfolio.

Warning! *When subdividing fpid-PLANS[-].PDF into smaller components, the Designer must carefully consider the utilization of the results by the Contractor and attempt to keep the PDF in as few files as possible for management. Over segmentation of the PDF, especially if those segments are out of natural plans index order, only leads to more difficulty consuming the plans data.*

➢ **Additional Digital Delivery tasks during the Production Phase include:**

- Create *fpid*-PLANS[-].PDF for the original delivery, and *fpid*-PLANS-REV##[-].PDF for subsequent revisions.
- Use certificate based Digital Signature to sign/seal plans, specifications, and any other germane reports or data. If XML data is to be signed, such as a LandXML or the model, the Department delivers a tool called FDOT XML Signer to do so.
- Make certain the Engineering Data is produced and included in the *fpid*-CADD.ZIP (see later in this Chapter).
- Files and data must be manually put together to create the Bid Set. Each “Lead” and “Goes-with” Project dataset and Bid Set data is delivered separately. The StrungProject application is not used for Digital Delivery. Each “lead” and “Goes-with” will have its own *fpid*-PLANS[-].PDF, *fpid*-CADD.ZIP, and so on.

5.12.3 Engineering Data

In addition to the delivery of the files produced during the course of the Project deliverable, the Department's CADD Manual requires the inclusion of certain Engineering Data files for critical geometrics in the design. These can include the alignments, profiles, cross sections, and surfaces. Critical geometric items, like the centerlines and profiles of the proposed mainline roadway, side streets, special ditches, utilities, etc., will be included.

- ***Delivery Standards for Engineering Data***

The required formats for Engineering Data files for a project as part of the Delivery includes LandXML, which covers basic route geometry element types, and is readable by the Department's software systems, from both Bentley and Autodesk. The Department supports LandXML as a means of delivering critical geometrics to down stream consumers, and LandXML is a preferred format by known construction AMG equipment and software.

The LandXML format defines data exchange format for roadway geometrics including:

Point data
Curve data
Spiral data
Alignments (with station equations)
Cross Sections (surface and design sections)
Profiles
Pipe Newtorks
Terrain Model Surfaces
Survey Data.

Note LandXML is also widely supported by many civil engineering software. Read more about LandXML at: **http://www.LandXML.org**

- ***Cross Sections***

Although LandXML defines a specification for the exchange of cross section data, the Department has legacy systems (Multiline) that do not support LandXML cross sections (and functional sections within the Department that do not use contemporary CADD software). Therefore for MicroStation projects, the designer will create and deliver cross sections in a text file format called Multi-line GEN. This format includes existing ground terrain, bottom of the proposed template, etc., to define materials set forth in the Department's Design Standards Indexes 500 and 505. For Civil 3D projects, a detailed materials report for cross sections shall be provided.

Note Users are strongly encouraged to reference the Multi-Line application on the State Construction Office website at: **State Construction Office Downloads**.

The *Multi-Line General File format* can represent cross section points, alignment station equations, horizontal offsets and limits. The ASCII text file format of a Multi-line GEN file is documented in the following pages.

Comments Section of a GEN File:

This section of the surface definition contains records that are comment in nature. The information that should be included in these comments is:

- Definition of what each Limits Table represents
- Definition of what the surface or surface feature code represents
- Definition of the Alignment and Profile (if applicable) that is referenced by the Cross Section data. The geometry of the alignment is not contained in the GEN file, so adequate description needs to be documented to establish the proper relationships for an end-user of the data.

Example of Comments section of a GEN file:

```
$ These are cross sections for Centerline US9A
$ This data is in ENGLISH units
$ Limits Table A is Federal Aid Participation limits
$ Surface EXIST is Pre-Construction Existing Ground
$ Horizontal Alignment is CHAIN SR9A1 found in US9A.XML
$ Feature of Surface EXIST is feature code EXIST
```

Notes on the format above:

- Keyword “$” precedes any remarks needed
- Description of any included Limits Tables
- Description of any surfaces included (i.e. Surface EXIST)
- Alignment referenced by the cross section data
- Feature code assignments
- Other comments as necessary

Station Equation Section of a GEN File:

If station equations are present in the cross sections, an EQUATIONS table must be present defining the region over which those station equations apply. A new station equation region is started when a station equation is introduced into the alignment, where the ahead stationing differs from the back stationing at the given cross section.

Example of Equations section:

```
EQUATIONS
EQ R1    23+50.000   23+10.000
EQ R2    24+76.000   24+90.000
EQ R3    53+22.000   53+55.250
END EQUATIONS
```

Notes on the format above:

- Keyword “EQUATIONS” to start station equation section
- 1st station equation region “1” begins at station 23+50 back, 23+10 ahead
- 2nd station equation region ”2” begins at station 24+76 back, 24+90 ahead
- 3rd station equation region "3" begins at station 53+33 back, 53+55 ahead
- Keyword “END EQUATIONS” to end station equation section

Limits Table Section of a GEN File:

If the project has lateral limits represented in the cross sections (such as excavation limits, construction limits, R/W, etc.), these limits will be represented in a LIMITS table. The LIMITS table represents a pair of offsets at a particular cross section where a limit or pair of limits exists. A new LIMITS table will be included for each set of limits produced for a particular cross section or set of cross sections.

Example of Limits section:

```
LIMITS TABLE A
LI  23+00.000          -42.000     39.000
LI  24+00.000 R1       -46.000     34.000
LI  25+00.000 R2       -46.000     34.000
LI  54+00.000 R3       -50.000     30.000
END LIMITS
```

Notes on the format above:

- Keyword “LIMITS TABLE” to indicate offset limits
- Limits are defined with keyword “LI” followed by station and region. The leftmost offset is first (negative if left of centerline, positive if right) and rightmost is next. If more than one set of limits are needed per station, a second limits table (In this case “LIMITS TABLE B”) may be required.
- Keyword “END LIMITS” indicates the end of the end of limits table.

Cross Section Data of a GEN File

The cross section for each surface represented is introduced with the command GROUND followed by the surface definition in offset elevation pairs. For each type of surface (i.e. Existing Ground, Proposed Template, Subsoil Excavation, etc.), a GROUND section will appear in the format covering the station range for which that surface applies. Line Types are used to define the type of surface for which the data applies:

Standard Surface Descriptions	Line type
Roadway Sub-Design Template	A
Original Borrow Terrain	B
Tolerance Line	C
Original Channel Terrain	D
Extra Depth Subsoil	E
Final Roadway	F
Final Subsoil	G
High	H
Final Borrow	J
Final Channel	K
Low	L
Channel Template	O
Pre-Construction Roadway Terrain	P
Roadway Template Bottom of Base	R
Roadway Template Top of Surface	S
Original Roadway Terrain	T
Unassigned	I, M, N, Q, U, V, W, X , Y

For a given station on a particular surface, the station, the region that the station falls in, and the points on the cross section (represented by offset-elevation pairs) are entered on a line, proceeding left to right in offset order.

- Points are ordered left-most offset to right-most offset as read left to right along the line.
- White space separates the offset, elevation and the adjacent offset/elevation pairs (other points on the cross section).
- Offsets left of centerline are indicated by a minus sign “-” in front of the offset. Offsets right of centerline are unsigned.
- A zero offset point (centerline) is not necessary, but is highly recommended to leave no ambiguity concerning how to interpolate the centerline elevation at a given station.
- Maximum line-length is 132 characters; the format allows multiple lines to include all of the offset elevation pairs (points) necessary for a given surface on a particular cross section.
- Each surface definition must be provided in the complete format as shown. Only station EQUATIONS and LIMITS table sections may be omitted from a surface definition if they do not exist for the given cross sections.

Example of Cross Section Data (in this case existing Ground sections):

```
GROUND EXISTING GROUND SURFACE
XS 23+00.000     -60.000 21.300  .000 18.300   50.000 16.700
XS 24+00.000 R1  -50.000 17.000  .000 16.300   30.000 14.000
XS 24+00.000 R1   50.000 22.000
XS 25+00.000 R2  -50.000 17.000  .000 15.800   30.000 14.300
XS 26+00.000 R2  -50.000 17.000  .000 15.600   30.000 14.600
XS 27+00.000 R2  -50.000 17.000  .000 15.900   30.000 14.800
XS 28+00.000 R2  -50.000 17.000  .000 16.300   30.000 15.100
XS 28+00.000 R2   50.000 19.000   75.000 16.300
XS 28+50.000 R2  -50.000 17.000  .000 16.500   30.000 15.400
XS 29+00.000 R2  -50.000 17.000  .000 16.800   30.000 14.800
XS 30+00.000 R2  -50.000 17.000  .000 16.300   30.000 14.500
XS 31+00.000 R2  -50.000 17.000  .000 16.100   30.000 14.300
XS 32+00.000 R2  -50.000 17.000  .000 15.800   30.000 14.700
XS 33+00.000 R2  -50.000 17.000  .000 15.600   30.000 14.300
END GROUND
```

Notes on the format above:

- Each surface defined in the cross section will have its own set of data in the format as shown.
- Keyword “GROUND” will be followed by comments identifying the surface or Line Type in the previous table.
- Keyword "XS" followed by station, region, and offset, elevation pairs (up to 132 characters per line)
- Keyword “END GROUND” indicating end of cross sections

Other GROUND sections should be included for the finish surface of the proposed roadway, as well as the bottom of the base, sub grade, and any other soil layers that must be excavated (A4, A6, A8, etc.).

Other GROUND sections might start like the following, indicating the surface being represented by the data:

```
GROUND MULTILINE DATA LINE TYPE R      ← Roadway Template Bottom of Base
GROUND MULTILINE DATA LINE TYPE T      ← Original Terrain
```

➢ ***Quantity Files***

Engineering Data supporting Quantity calculations will be delivered according to the guidelines and formats defined by the ***Construction Project Administration Manual (CPAM) Topic 700-000-000*** found at: **http://www.dot.state.fl.us/construction/manuals/cpam/CPAMManual.shtm**

5.12.4 3D Deliverables - Data for Machine Control in Construction

Three dimensional (3D) design and modeling is used to facilitate Automated Machine Guidance (AMG). Both Bentley and Autodesk provide 3D design tools and have been augmented through the Department's workspaces for the Department's Projects and help support exporting data usable in AMG processes. AMG technology can reduce time and cost of construction because of greater productivity by equipment operators, fewer grade checks are needed, greener construction (less fuel and equipment wear), greater safety, less rework, and less survey staking required. Contractors invest in AMG for safety, productivity, and to stay competitive. The benefits of 3D design and AMG are well documented on the Federal Highway Administration web pages here: **http://www.fhwa.dot.gov/construction/3d/**

In general, projects characterized by the following are the best candidates for modeling and AMG:

- Projects with large amounts of earthwork or paving, including new corridors or significant reconstruction. Resurfacing projects involving variable cross slope and superelevation correction are also good candidates. When scoping projects, preliminary design and planning should question why 3D design should not be used, rather than if it should.
- Projects with a good GPS environment for receiving satellite signals, or enough line of sight for using total station and laser controlled systems. The Department's Florida Public Reference Network provides statewide GPS coverage:

  http://www.dot.state.fl.us/surveyingandmapping/FPRN.shtm

- Projects with designs based on an accurate existing ground Digital Terrain Models (DTM).

3D Design workflow must start at the beginning of the project to create the needed files from survey, and is contingent upon data being tied to an AMG field usable coordinate system. The overall reduction of construction costs by modeling and AMG should be realized. The 3D workflow enables the project development team to visualize potential impacts and promote intense collaboration during the planning and design process. Discovering design errors by inspection of the 3D models will reduce costly change orders during construction.

The use of modeling will require conversion of CADD data and other model data to AMG formats. This conversion is the responsibility of the contractor, as the contractor may have special needs that the designer may not anticipate. However the formats of data delivered as prescribed by this Manual should enable successful translation by the contractor.

The electronic files delivered with the contract documents are provided as a courtesy to the contractor. The Contracts Administration Office releases this CADD data with accompanying exculpatory language stating the contractor cannot use the data as a basis for claims. Contractors will be completely responsible for any data conversions or derived from model data provided by designer. Post-design services may employ a designer to convert model data to needed AMG formats, or refine the models to meet contractor specific needs. Since the intention of the Department is to encourage 3D modeling and AMG in construction, means for accountability and certification of 3D models will be forthcoming.

5.12.4.1 Types of Modeling Data Needed

- **Control**

  The survey control for the design of the project needs to be clearly transmitted to the contractor, including the coordinate system and datum of that control. This is important because the contractor must calibrate his AMG equipment to that control upon which the design model is tied. The State Surveying and Mapping Office provides instructions for establishment and densification of field survey control, and the State Construction Office's developmental specification 005 has further guidance for AMG operations.

- **Alignments/PGLs**

As described in Section 5.12, LandXML file(s) of the controlling alignments and profiles that represent the controlling geometrics of the project will be delivered and can be extracted from other CADD files delivered. These tie all other data provided directly to the contract plans set. The data must be in the coordinate system of the control that can resolve to the field and be in harmony with all the other data that will be provided.

- **Surfaces**

Surfaces created during design using CADD software indicate the designer's intent. Surfaces representing existing conditions at the time of the survey used for design (the pre-design existing (Ground) surface), as well as the finished construction (Top) surface will be delivered. LandXML Triangular Irregular Network (TIN) surfaces would typically be delivered for most projects and the same surfaces also delivered as 3D graphics files in their native CADD systems. Surfaces represented by LandXML files can become unwieldy for larger projects (surfaces should be represented in LandXML files of less than 500 MB per surface-file), so it may be necessary to subdivide a project's surface data into logical sections when delivering large LandXML surface files.

For Example: A relatively small TIN surface (32,208 points, 63,462 triangles) can be represented as a LandXML file of approximately 4.99 MB. So a LandXML file of approximately 100 times this data content could be manageable as LandXML. Since LandXML is text, it will also compress significantly when creating a ZIP to deliver the data (for example, a 50 Megabyte LandXML file of a TIN surface will ZIP down to approximately 10 Megabytes for delivery).

Surfaces delivered in contemporary MicroStation DGN or AutoCAD DWG 3D graphics formats (meeting the Department's CADD standards for symbology) are most usable when each surface is separated into their own drawing files. Points and Break lines should be contained in the surface files.

Note If the native to CADD system used to produce those surfaces mentioned above stores surface data in alternative formats, as such the case with GEOPAK: i.e. a .TIN, a GEOPAK .DAT, or an InROADS / GEOPAK Roadway Modeler .DTM, then those files must also be delivered.

Surfaces may also be needed in more common formats used in the software in the contracting industry. Contractors have communicated a preference for AutoCAD 3D graphics formats (3D DWG and 3D DXF) which are exportable by both Bentley and Autodesk tools. Some contractors have also communicated the need for finished top surfaces to be "smoother" and be represented differently than in TIN formats. These finished surfaces can be exported in alternate 3D representations called "mesh," "grid," or "lattice" surfaces depending upon which design platform is used.

- **Break Lines**

Hard surface breaks must be respected during construction (i.e. edges of pavement, shoulder breaks, etc.) and need to be provided to enhance the surface data. These aid the field AMG equipment operator during grading and string-less staking operations by preventing the "shaving" that could occur as the equipment transitions the break.

- **Denigrating Geometry**

When finishing drawings, 2D & 3D controlling geometry is to be represented by basic vector geometry types such as lines, arcs, polylines, etc. This Geometry should not be combined into Blocks or Cells which destroys any original design intelligence.

5.12.4.2 3D Deliverables Supporting AMG for 3D Projects

The following table describes the file to be provided for use in construction on all the Department's Projects utilizing 3D design techniques. These are usually copies of files produced in the ordinary course of 3D design CADD work and copied to a convenient location for contractor usage. The Department provides a tool called Create3DDeliverables to aid designers copying \ renaming the files for the contractor.

3D DELIVERABLES SUPPORTING AMG for 3D PROJECTS	
File Name *(put in .\3DDeliverables)*	**Description**
Design Alignments and Profiles	
AMG-ALGN##.xml	All Alignments and Profiles extracted from the .\Roadway\ALGNRD, PROF or model files..\Roadway\DSGNRD OR CORRRD file in LandXML format.
2D Proposed Planimetrics Design	
AMG-2DSGN##.dwg/dgn	2D proposed Roadway design extracted from the .\Roadway\DSGNRD file. (Production of this file for construction is at the designer's discretion.)
AMG-2DRPR##.dwg/dgn	2D proposed Drainage design extracted from the .\Roadway\DRPRRD file. (Production of this file for construction is at the designer's discretion.)
AMG-2PDPL##.dwg/dgn	2D proposed Pond design extracted from the .\Roadway\PDPLRD file. (Production of this file for construction is at the designer's discretion.)
2D Existing Survey *(Note: These are being considered to merge into a single survey Planimetrics file)*	
AMG-2TOPO##.dwg/dgn	2D proposed existing Topography extracted from the .\Survey\TOPORD file. (Production of this file for construction is at the designer's discretion.)
AMG-2DREX##.dwg/dgn	2D proposed existing Drainage extracted from the .\Survey\DREXRD file. (Production of this file for construction is at the designer's discretion.)
AMG-2UTEX##.dwg/dgn	2D proposed existing Utilities extracted from the .\Survey\UTEXRD file. (Production of this file for construction is at the designer's discretion.)
3D Existing Survey Surfaces	
AMG-3SURFACEEX##.xml	3D existing terrain surface to be exported from the .\Survey\GDTMRD file as LandXML format. (Production of this file for construction is at the designer's discretion. This file will be produced if the 3D Existing Surface dwg/dgn file(s) are not produced.)
AMG-3SURFACEEX##. dwg/dgn	3D existing terrain surface to be exported from the .\Survey\GDTMRD file. (Production of this file for construction is at the designer's discretion. This file will be produced if the 3D Existing Surface LandXML file(s) are not produced.)
3D Proposed Surfaces	
AMG-3SURFACEPR##.xml	3D proposed finished (top) surface to be exported as LandXML format from the .\Roadway\AMGMRD file. (Production of his file for construction is at the designer's discretion. This file will be produced if the 3D Proposed Break line(s) dwg/dgn file is not produced.)
3D Proposed Break Lines	
AMG-3DSGN##.dwg/dgn	3D proposed Roadway design extracted from the .\Roadway\DSGNRD file. (Production of this file for construction is at the designer's discretion. This file will be produced if the 3D Proposed Surface(s) LandXML file(s) is not produced. Geometric elements should be in vector.)

Note All LandXML .xml files will use the 1.2 schema or newer.

5.12.5 Maximum Corridor Frequency Interval Spacing for 3D Design

Design software used by the Department's samples the 3D corridor models at user defined intervals in order to create surfaces. To ensure reasonable fidelity in surface models for AMG operations, maximum intervals are described below:

Note The designer may choose to sample more frequently to more accurately represent his design model in the exported surface files, although there is limiting return (larger files and poorer computer performance) if sampling too frequently. The designer must balance these competing consequences when deciding appropriate sampling frequency for their projects.

Facility	Design Speed < 45 MPH	Design Speed > 45 MPH
Rural Sections	maximum corridor interval	
Tangents	20 feet	20 feet
Curves	10 feet	10 feet
Intersections	5 feet	5 feet
Urban Sections	maximum corridor interval	
Tangents	10 feet	20 feet
Curves	5 feet	10 feet
Intersections	2 feet	5 feet

Additional sampling intervals may be needed at critical regions in horizontal geometry stations (i.e. PC's, PT's), superelevation transition locations, and at profile geometry critical locations (i.e. PVC's, PVT's, and profile high/low points). The designer must also add sampling at other critical regions along the corridor, such as change of typical section, critical drainage locations, approach and interior to intersections, median crossovers, etc.

5.12.6 Quality Control of Corridor Models and Extracted Surface

3D Design is intended to produce output of a corridor model from which surfaces may be derived. It is incumbent upon the designer to verify these corridor and surface models representing the design intent so the resulting models and data derived from them can be relied upon by downstream users, especially the contractor Section 5.12.5 describes minimum sampling intervals for developing corridor models based upon facility and design speed; however more frequent sampling may be required to achieve the desired accuracy or resolution of the 3D model.

There are several methods that can be used to check the quality of the proposed models and surfaces, and many checks rely upon visualization techniques on the data. These can include:

- Visual Inspection through examining the models/surfaces using 3D perspective views and orbits. The Z (elevation) can sometimes be exaggerated during these operations to show discontinuity in the surface where problems might lie.
- Visual Inspection through examining the models/surfaces using drive and fly through animation. Other simulation techniques can be employed also.
- Contouring the surface models and examining the resulting contours.
- Surface display rendered/stylized as triangles or as faceted lattices/grids. In some software these views can be shaded indicating slope or elevation change. Surface analysis of models shaded to indicate a variety of surface conditions such as slope or elevation change.
- Cross Section and Profile Extraction – Do these corroborate the contract plans? Equally, are plan sections and profiles contemporary with the model?

- "Rain Drop" analysis to see where water distributed over a surface would flow or accumulate if the surface were treated as if it were impervious.
- Represent roadway elements as wire-frame / solid bodies, where they can be examined for conflict or "interference" relative to neighboring or crossing elements.
- Use of temporary dimensioning and labels to test the models elements for appropriate length, elevation, slope, etcetera.
- Design criteria can also be checked for critical standards such as sight distance, K-value, rate curvature, cross slope, curve widening, and etcetera.

Note Visualization can be embellished with applications of various rendering materials, lighting, and shading.

5.12.7 Merging External Project Files

Files must be merged into the main project directory structure prior to the project delivery. These include CADD system dependency files, and files provided from outside sources, such as those produced by sub-consultants.

➢ **CADD System Dependency Files:**

Certain CADD references might reside external to the project directory during the production phase. Before delivery to the Department, these files must be placed in the appropriate locations within the Department's project directory structure. It is strongly recommended that these files be included in the project directory structure early on in the project development and verified that referencing functions work properly.

Note Reference files must also be attached without the "save full path" option, and should be located by their relative paths from the root of the project directory. Reference paths in dependent files must not be broken.

For printing purposes, any user created custom line style / type, font resource, and cell / block library files used for the project must be included with the project in the sub-directory \symb. In addition, any external design files that are referenced, such as sheet border files, must be copied to the project directory. This allows the view or recreation of prints matching the original delivery for future customers of the data.

Note The designer does not need to include the Department's standard CADD resources delivered in the Department's CADD Software (MicroStation or AutoCAD resources). However, the Department's CADD Software version information must be provided in the project journal.

➢ **Files from Outside Sources:**

Files that come from an outside source include files produced by a sub-consultant. Files from sub-consultants will be delivered to the primary consultant, or the Department's designer, following the same requirements for Delivery.

➢ **Merging Previously Digitally Signed Documents:**

Once a document is signed using a digital certificate, the document is valid when it is completely unaltered. Merging two or more documents together, even if those documents are signed and completely valid independently, produce a completely new document; thus an altered document. When merging previously signed documents, the Adobe (or similar) software will strip off all digital signatures that have been applied. In situations where it is necessary to merge previously digitally signed documents, retain the original signed documents from which the merged document is produced. If it is necessary for the merged document to be signed, then it must be signed by the original signatories or their successors.

5.12.8 Reviewing the Project

A base submittal checklist found in Section 5.12.12 may be employed to help the producer consider critical items in the review for delivery. The Department's CADD Software Suite provides tools (including QC Inspector and FileChecker) to help ensure quality control which helps enable a successful review, but it is incumbent on the producer of the data to use due diligence and make sure all delivery requirements are met.

Note Some the Department's Districts have their own supplemental checklists. Contact your District Project Manager for additional District specific Supplemental Delivery requirements.

- **Example: Some items to review might include:**

  - Take particular care to look for missing sheets, gaps in the sheet numbering, or duplicate sheet numbering, etc.
  - Take particular care to find multiple files in the project directory structure with the same file name, but different content. Likewise, find files with the same content, but different filenames.
  - Make certain the Electronic Plan Note appears on plan sheets indicating the source of the official record (Sheet Navigator can assist with the placement of this note).
  - For Classical Electronic Delivery, the project should be further reviewed, beyond Sheet Navigator, with the Electronic Delivery Indexer (EDI) application.
  - For Classical Electronic Delivery, ascertain whether an sheet image file (.PS, .PDF, or .TIF format) is available for each sheet in the electronic plans.
  - For Digital Delivery, ascertain whether the *fpid*-PLANS[-].PDF contains all sheets, in a properly indexed order, and is scaled and rotated properly.
  - For Classical Electronic Delivery, it is also important to review the Comments about particular files using the Electronic Delivery Indexer application. These comments should supplement the documentation in your Project Journal(s).
  - Double-check that the Project Journal(s) are complete and accurate.

The Department's tools mentioned above should be used to find and resolve potential issues, but they are only tools to aid the producer in their Delivery! It is the responsibility of the producer to perform a thorough review. This document will not prescribe every potential item that might be checked.

5.12.9 Sign and Seal Project Files

5.12.9.1 Classical Electronic Delivery with PEDDS

The requirements for signing and sealing information stored in electronic files have been defined by the Boards of Professional Regulation and Volume I, Chapter 19 of the Department's Plans Preparation Manual. Note the Utility Accommodation Manual has additional guidance about what plans components are signed and sealed by a Utility Company.For each professional in responsible charge who signs and seals files in a project, the PEDDS program generates:

- Signature File - defines the files that are being signed and sealed (this is an XML format file stored in the _meta_info directory of the project). The Signature file identifies files signed by the professional Signatory - including the file's SHA-1 hash code, and any qualifiers (conditions) the Signatory placed on the signing of a particular file.
- Signature Document - (a paper report) generated after a Signatory elects to sign and seal selected files. This document is printed, signed, dated, and sealed with a physical seal approved by the respective Boards of Professional Regulation. This document secures the files listed in the Signature file to be signed and sealed by the professional, using the SHA-1 hash code computed for the signature file itself. If a non-licensed Signatory selects files to sign (typically using his/her driver's license number), then the Signature Document is printed, signed and dated, but is not sealed with a physical seal.

The Signature Document must be preserved and protected and must never be lost or separated from the data it is associated with. Without this document the associated data cannot be truly authenticated and thus, cannot be considered a legal record.

5.12.9.2 Digital Delivery with Digital Signature

Digital Signatures used for signing the Department's documents must comply with Florida Administrative Code governing the specific discipline for the professional signing those documents. Digital Delivery projects will use Digital Signature instead of PEDDS (Electronic Signature).

An Access Certificate for Electronics Services (ACES) digital certificate will be used to ensure identity, authenticity and accountability in citizen-to-government, business-to-government, and government-to-government electronic transactions. An ACES digital certificate is an electronic identity issued by a Certification Authority that establishes an individual's identity per the Federal Government Services Administration (GSA) standards when using electronic transactions. There is several 3rd party Certificate Authorities that issue ACES certificates. The Department is currently using ACES certificates issued by IdenTrust: **http://www.identrust.com/fdot/index.html**

When applying Digital Signatures, many software applications allow the signature to have an "appearance." As a minimum, use an appearance with the text name of the Signatory and the date-time stamp at the instant of signing. Do not include any additional watermark or overlay. Do not include an image of the "wet ink" signature of the Signatory (a violation of Board rules). Do not include company logos, or other images within the Digital Signature appearance. The reason (text) for signing may be placed in a text block within the drawing where more space is available. The image of an impression seal may also be included, but is not part of the Digital Signature itself. For the Department's Plans, graphics are provided in Cells / Blocks that contain seals and may be found in Seals.cel /Seals.dwg.

Please refer to the Department's ***Plans Preparation Manual, Volume II Chapter 30*** for examples: **http://www.dot.state.fl.us/rddesign/PPMManual/2014/Volume2/V2Chap30.pdf**

> ***Note*** Finished sheets digitally Signed and Sealed will bear the electronic signature note as shown in the Department's ***Plans Preparation Manual*** exhibits. The note should not be applied to sheets during the early course of plans preparation to minimize confusion by a recipient that a sheet may already be signed and sealed when it has not. The note must be applied before signing and sealing and final delivery.

5.12.9.3 Multiple Signature Sheets for Digital Signature

In situations where there are multiple signatories for a plan set where there are too many to list on a single signature sheet, multiple signature sheets may be added to the plan set. All signature sheets for a given component will be placed successively after the component key sheet.

5.12.9.4 Managing Digital Certificates

ACES Digital Certificates uniquely identify an individual. As such, these certificates must be closely guarded against unauthorized usage. Digital Certificates used for signing and sealing must be "Under the sole control of the person using it", as stated in Florida Administrative Code 61G15-23.003(2)(c) and others. Install certificates using "High" security options and disallow exportation of certificates from the primary Professional of Record (POR) workstation. The POR may not "delegate" the use of a digital certificate by sharing a certificate, sharing a password, or otherwise compromising sole possession and use of the certificate.

5.12.10 Securing the Project for Delivery

For Classical Electronic Delivery projects, PEDDS includes a process to secure the complete project directory, including all contained files for delivery. This securing process is run after all the project files are finished (and for electronic signature after all signature files have been created, printed, and the Signature Documents are signed, dated, and sealed).

The process of securing a project for delivery creates a Manifest Document containing the computed hash code of the Manifest File (Manifest.XML - which lists all files in the project with their individual hashes), thus securing ALL the files in the project directory. The Manifest Document is printed, signed, and dated (but is not sealed), by a project manager (or data manager), and delivered to the Department along with the media containing the complete project submittal.

PEDDS and its paper reports received with the project will be used by the Department to authenticate a project. The Authentication Report generated by the authentication process in PEDDS will be compared against the Manifest and Signature documents submitted with the delivery. If the project submitted is found to generate the same hash codes, the delivery will be considered authenticated.

For Digital Delivery projects, PEDDS is not needed. Digitally signed documents have the security key information embedded in the files themselves. Digitally signed files are secured and authenticated using commercially available software (Adobe, Bluebeam, etc.).

5.12.11 Media Requirements for Delivery

All electronic projects submitted to the Department will be on write protected physical media (CD-ROM or DVD-ROM) unless otherwise approved by the Department's Project Manager. Use only 1st Class archival quality writable media. If the project is too large to fit on one CD/DVD, then the process for delivery to the Department's must be reviewed with the Department's Project Manager before splitting the project on multiple CD/DVDs or choosing an alternate media. If approved by the Department, other means of transmission of data, such as File Transfer Protocol (ftp) or File Transfer Appliance (FTA) is acceptable.

- ***All Project media must have a Project Identification Label with the following required:***

- Financial Project ID Number of Project
- Project Description *(including County and State Road numbers, local road designation)*
- Firm or District Performing the Work
- Name of the Department and Consultant Project Manager(s)
- Creation Date of the Media
- Disk (#) of (Total #) *(if multiple ROMs are needed)*
- Delivery Type Label *(Project CD, Bid Set CD, etc.)*
- Anticipated Letting Date for the Project

Note Prior to submission to the Department, Project data on approved media should be authenticated with PEDDS to ensure no changes were introduced during the media production process.

With the increase of storage capacity and more cost efficiency of USB removable memory drives (thumb drives), use of this media will grow in popularity for deliveries. If used, the physical drive will be labeled with the project identification (*fpid* number and District as a minimum) and include on the media's root folder (not project folder) a text file of the project identification label information and transmittal letter containing the same.

5.12.12 Compliance Certification

All Department Project deliveries will be to the Department's Project Manager, unless an alternate agreement is reached, along with a Compliance Certification Checklist Report (or similar document).

Note Department's Districts may use a more comprehensive form in their QA process than the following form.

Compliance Certification Checklist Report

All electronic data submittals are to be transmitted to the Department's Project Manager. The following questions will be addressed before submittal, and this or a similar checklist given to the Project Manager along with the submittal.

- ☐ 1. Have project journal(s) been created containing all necessary project information?
- ☐ 2. Is the listing of the software packages and versions used to create all delivered files included in the journal?
- ☐ 3. Are all the native files generated by the CADD/Design software in checklist item 2 included in the delivery package?
- ☐ 4. Are design graphics files compliant with the Department's CADD Standards for directory structure, file naming, and element symbology?
- ☐ 5. Does the submittal include all user-created CADD System resource files (line styles, fonts, etc.) that may have been used with the project?
- ☐ 6. Has the QC software been run against the graphics design files? Are the resultant QC Reports of compliance included in the delivery submittal? Has FileChecker been run to help verify directory structure, file naming standard, etc.?
- ☐ 7. Have the prescribed engineering data files been created and submitted for the control, alignments, profiles, and surfaces in the formats? Is this information stored in the appropriate directories?
- ☐ 8. Where Multi-line (GEN) general file format files created and included for the surfaces representing the cross sections?
- ☐ 9. Have images for the plans been checked and included for all sheets in the plan set? PDF format? Checked for sheet size, scale, and rotation/orientation?
- ☐ 10. Are the files representing the plans, referenced by Chapter 19 of the Department's Plans Preparation Manual, signed and sealed? Is the Electronic Plan Note on each sheet?
- ☐ 11. If Classical Electronic Delivery, has the entire delivery been secured with PEDDS? Has the resulting Manifest Document been signed?
- ☐ 12. If Electronic Signature is used, are hardcopy reports of the PEDDS documents included, printed and signed? This includes the signed and initialed Manifest Documents and all signed Signatory Documents. If Digital Signature is used, are the correct files signed with the appropriate Digital Certificate and independently validated? If IdenTrust is not the Certificate Authority, does the Department have the root certificate installed for the certificate Authority used?
- ☐ 13. Has the final media for submission been properly labeled and re-checked to make sure the data is readable and can be authenticated?
- ☐ 14. For Classical Electronic Delivery, has a *Project.PDF* file been included that contains all sheets that are defined by the delivery's index?
- ☐ 15. For Classical Electronic Delivery, has an index report *SheetNDX.htm* file been included that links all sheets that are defined by the delivery's index for the plans?
- ☐ 16. For projects that were scoped for 3D design deliverables, have the 3D surface models (Ground and Top) been delivered in one of the formats prescribed?

FPID: _____

Date of Scope: _____

Certified by EOR: _____

5.13 POST-PRODUCTION

The "Post-Production Phase" involves the review and acceptance of a Delivery, and making that Delivery available to the Department's internal services for posting. Functions include the receipt and authentication of the delivery media, and placement of the project data into systems designed for general access to the data.

For Classical Electronic Delivery projects, upon receipt of the secured Delivery package and the accompanying documents, it will be authenticated using PEDDS by the Department's designated representative before accepting project data. The Compliance Certification Checklist Report(s) will also be reviewed for completion. For Digital Delivery projects, the signed files will be opened and authenticated.

Note Following the requirements within this Manual does not guarantee an acceptable work product, as this procedure does not address the quality of the engineering or survey work performed.

Once the Delivery is accepted, the electronic project will be imported into the Department's file management systems for subsequent use. Copies of the submittal media may be distributed among various stakeholders, such as Construction and Maintenance.

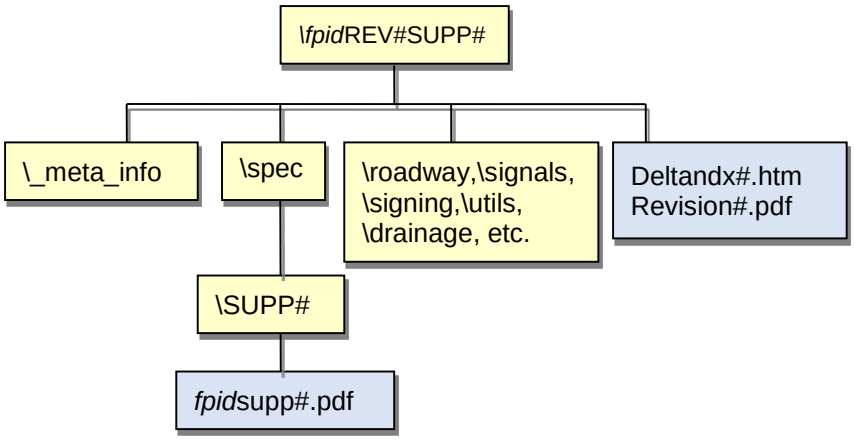
5.14 REVISIONS

5.14.1 Classical Electronic Delivery

Revisions are modifications after the Delivery has been accepted by Project Review. Central Office or District plans processing units require the revised "Bid Set" data submittal to use a specific directory naming convention for revisions and / or supplements for Classical Electronic Delivery. This convention can be created with the SetMaker tool, but the user must be aware of the conventions (it's not automatic).

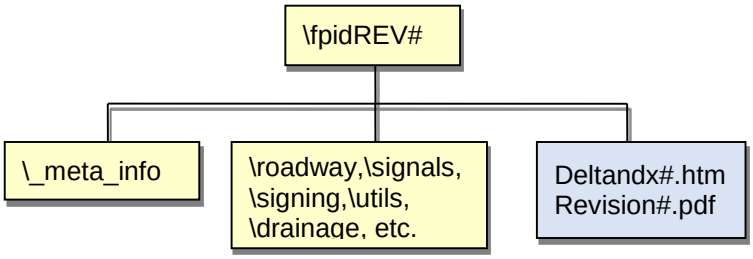
Note Project root folder renaming does not apply for the "Project CD" submissions (that directory name NEVER changes, regardless of which revision); only the subsets created for revisions and/or supplements ("Bid Set CD") have their root folders renamed.

- ***When both a plans revision and specifications change (supplement) are needed, the directory structure (and content) for the "Bid Set" subset for the revision 1 and supplement 1 is shown below:***

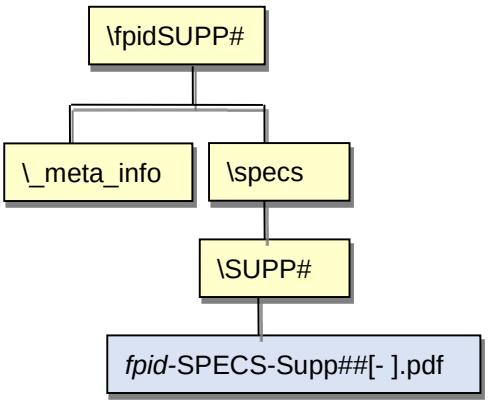


Note A complete "Project CD" deliverable, named the original project name, is usually required to be submitted with each contemporary revision to the project. The directory naming conventions shown in these diagrams apply only to "Bid Set" subsets extracted from those revised "Project CD" submissions on Classical Electronic Delivery projects.

- ***If there are Plans Revisions Only to a Classical Electronic Delivery, the following directory structure would be used:***



- ***If there are Specifications Supplements Only, the following directory structure would be used:***



- ***The Root Directory Name for "Bid Set CD" datasets created for a revision and/or supplement:***

Event	*Project CD*	*Plans & Specs (Revision) CD*
Original Delivery	*fpid*	*fpid*
Revision 1	*fpid*	*fpid*REV1
Supplement 1	*fpid*	*fpid*SUPP1
Revision 2	*fpid*	*fpid*REV2
Revision 3 and Supplement 2	*fpid*	*fpid*REV3SUPP2

Note When preparing the revision, do not over plot any signed and sealed file from an earlier delivery – doing so will make the Signatory of those files not Authenticate in PEDDS.

5.14.2 Revised Digital Delivery Bid Sets

Revisions to Digital Delivery Projects require the files that have changed since the previous delivery. The designer will deliver a complete contemporary project data set with the revision, however the bid set contained in: *fpid*-CADD-REV01[-].ZIP, *fpid*-PLANS-REV01[-].PDF, and/or *fpid*-SPECS-SUPP01[-].PDF & *fpid*-SPECS-TSP[BOE#]-SUPP01[-].PDF, will only contain the files that have changed in the revision/supplement. A delivery media with the complete Project directory structure with all contemporary files will also be delivered along with the *fpid*-CADD-REV01[-].ZIP, *fpid*-PLANS-REV01[-].PDF, and/or *fpid*-SPECS-SUPP01[-].PDF & *fpid*-SPECS-TSP[BOE#]-SUPP01[-].PDF files.

5.15 STRUNG PROJECTS

Classical Electronic Delivery of “strung projects” involves the act of combining two or more independent and secured project data sub-sets (Bid Sets) together. Stringing projects involves combining the data in a way that the end-user of the data (typically a contractor) can reasonably navigate “lead” and “goes-with” sub-project data comprising the strung project.

Users must be familiar with the process of creating “Bid Set” data sub-sets from “Project” datasets. These must be created prior to project stringing. An application named StrungProject is included in the Electronic Delivery application suite for this operation.

Digital Delivery differs, in that each “lead” and “goes-with” project is delivered as separate datasets, and never combined or intermingled. The StrungProject application is not needed for Digital Delivery.

5.16 RE-LET PROJECTS AND ROLL BACK REVISIONS

In rare cases, projects must be re-let. If no revisions have occurred to the project that must be re-Let, the Department will simply re-advertise and Let the project with the submitted Project CD or Bid Set CD data. However, if a revision has been applied to the project to be re-Let, then the revision is no longer germane and the re-Let project is essentially an original letting all over again. In this case, the data producer may be asked to roll back the revision indexing as if the delivery were an original delivery. This could involve updating the plan sheets to remove the revision enumerations - potentially removing the notations a revision has even occurred.

Note The changes to plans that were once identified as a revision are now considered simply a plan change.

5.17 DESIGN BUILD PROJECTS

The Scope of Services between the designer and contractor defines the deliverables to one another. If either party is bound by agreement to make a delivery of data to the Department, then the guidance for Digital Delivery herein should be applied.

Chapter 6

SUPPORT

6.1 PURPOSE

This chapter establishes the primary components of the Florida Department of Transportation (Department) Computer Aided Design and Drafting (CADD) support structure and services, including the statewide training, and defines the applications and tools supported by the Engineering / CADD Systems Office (ECSO).

6.2 SCOPE

This procedure establishes the hierarchy of CADD-related support roles and responsibilities from the peer level to the statewide level of the ECSO, the District CADD support function, and the Technical Advisory Committees (TAC).

6.3 REFERENCES

Engineering / CADD Systems Office Customer Support Guide

6.4 COMPONENTS OF CADD SUPPORT

The Department supports a core group of Engineering / CADD software products for in-house production as specified herein. Consultant support is generally limited to the Department developed CADD software modules, interfaces, and configurations. The statewide support is coordinated through the ECSO. A list of the current versions of the supported products, with some accompanying technical documentation, is available from the ECSO website:

http://www.dot.state.fl.us/ecso/main/Version/CurrentVersions.shtm

Most of the core CADD software products are commercial programs that the Department has purchased a license to use. Note that the Department makes no warranty, expressed or implied, as to the documentation, functionality or performance of these or other Department developed programs described herein.

The primary components of the Engineering / CADD Support structure include: Systems Support, Operational Support, and Training.

6.4.1 Systems Support

ECSO manages and coordinates the testing, selection, procurement, and maintenance of CADD applications. This component is coordinated with the district CADD Managers and Office of Information Systems (OIS) and/or OIS Information Technology (IT) personnel assigned to support CADD.

6.4.2 Operational Support

ECSO manages and coordinates the development, enhancement and support of the CADD software applications used by the engineering community to perform the Department's CADD production. This component is coordinated with assistance from the district CADD Managers and/or OIS IT personnel assigned to support CADD.

6.4.3 Training

ECSO manages and coordinates the provision of CADD technical materials and education to assist in maintaining user proficiency. This component is coordinated with assistance from the district CADD Managers and/or OIS IT personnel assigned to support CADD.

6.5 HIERARCHY OF CADD SUPPORT

The CADD statewide support structure provides for the handling of support at different levels for each of the Support Components. Users will seek support at the lowest level before escalating a support request to the next level..

The Department's CADD ***Customer Support Guide*** also outlines the escalating hierarchical support structure and provides detailed product information for the user to access support and assistance for each. The ***Customer Support Guide*** can be downloaded from the ECSO Publication website:

http://www.dot.state.fl.us/ecso/downloads/publications/CADDSupportGuide/CADDSupport.shtm

6.5.1 Systems Support

- **First Level:**
  - The First Level of Systems Support is the District staff. The District CADD IT contact or CADD Manager is the primary liaison with Central Office for addressing CADD systems issues. District CADD systems support activities involving the CADD Manager and/or OIS IT personnel include the following: Assist with identifying the users' hardware and software needs.
  - Distribute and setup equipment and CADD software.
  - Provide input for the statewide procurement.
  - Provide day-to-day technical support of the computer hardware and CADD software systems used in the District.
- **Second Level:**
  - The Second Level of Systems Support is the OIS staff. The OIS support responsibilities include the following: Manage the budget for procurement of CADD hardware.
  - Procure CADD hardware and maintenance.
  - Provide inventory management associated with the statewide CADD hardware.
  - Provide as-needed technical support of the hardware.

6.5.2 Operational Support

- **First Level:**

The First Level of Operational Support is *Peer Support*.

- **Second Level:**

The Second Level of Operational Support is through the *Technical Advisory Committee (TAC) Members Support*, who represents the districts and disciplines on task teams to communicate and resolve support issues of statewide interest.

- **Third Level:**

The Third Level of Operational Support is the *District Support Staff*, including, but not limited to, CADD Managers, CADD IT contacts, and engineering services personnel. These support personnel, collectively, are responsible for supporting the core CADD software products for each respective district.

- **Fourth Level:**

The Fourth Level of Operational Support is the *ECSO Support Staff*. The ECSO is responsible for the Department's application development, enhancements, and support. ECSO will provide support assistance or will procure required services as necessary, coordinating support requests, including those to CADD software vendors.

6.5.3 Training Support

ECSO manages and coordinates the statewide CADD training program for the Department's personnel. The CADD training program may encompass the core CADD Software and CADD production procedures as set forth herein.

The District CADD Managers, District and Unit Training Coordinators, and/or OIS IT personnel assigned to support CADD are responsible for respective District CADD training coordination.

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Chapter 7

SOFTWARE DEVELOPMENT AND DISTRIBUTION

7.1 PURPOSE

This chapter establishes how Florida Department of Transportation (Department) Computer Aided Design and Drafting (CADD) software is developed, tested, approved and distributed.

7.2 SCOPE

This chapter applies to all of the Department's supported CADD Software products procured or developed to produce the Department's projects and covers the steps used to develop, test, approve and distribute these CADD Software products. This CADD Software is the responsibility of the Engineering / CADD Systems Office (ECSO) and other designated offices.

7.3 DEFINITIONS

Alpha Testing: Initial testing of CADD software products or enhancements by the development staff and testing by the support staff outside of the development environment.

Beta Testing: Secondary testing of CADD software products performed in a production-like environment by end-users.

Beta Testing Coordinator: An individual responsible for facilitating the beta testing of CADD software.

7.4 DEVELOPMENT

Development encompasses new CADD software applications, enhancements to existing CADD software (added features), and the maintenance releases (bug fixes) of CADD software. Development is based upon needs identification and may include the purchase of commercial software when appropriate. Need Identification

CADD software needs are communicated to the ECSO by user requests or by Technical Advisory Committee(s) (TACs). The ECSO also identifies needs based upon experiences with CADD support activities and the evolution of trends in the CADD software industry.

Development request specifications compiled by ECSO may be coordinated with the appropriate TAC(s), CADD Managers and OIS IT personnel assigned to support CADD.

7.4.1 Development or Acquisition

The Statewide CADD Coordinator will decide whether to develop CADD software in-house, contract for development services, or purchase a CADD software commodity. The ECSO will keep the user community informed as to procurement status (including training and implementation schedules) of major CADD development projects of statewide interest.

7.5 SOFTWARE UPDATES

The Department's Computer Aided Design and Drafting (CADD) Software is upgraded periodically and as needed to issue enhancements and fixes. Updates occur for major releases (generally released when major upgrades to platform CADD software by our vendors becomes available), or when major upgrades to the Department's design standards are implemented. Interim Maintenance Releases and Hot fixes (released as required) are available for download from the ECSO internet website. Notification of new releases and updates are posted on the ECSO website, via the Department's Contact Mailer, during training sessions, and notified through other venues as appropriate.

The Department supports both PowerGEOPAK (or MicroStation and GEOPAK Suite) and Autodesk's AutoCAD Civil 3D as the standard graphics and roadway design platforms. Regardless whether Bentley's or Autodesk's design software is used, an effort has been made in this manual to maintain similar standards and deliverables so the resulting product is consistent, predictable, and repeatable (CPR).

7.6 SOFTWARE TESTING

ECSO, or the designated office, performs alpha testing of CADD software products during software development as required. Beta testing is to be performed prior to the general release of CADD software. The ECSO will track the progress of Beta testing.

When alpha testing demonstrates CADD software is believed to be in working order for the features intended, the software will be beta tested by end users prior to release. The "beta testing coordinator," from the ECSO or the designated office, will facilitate these activities.

The beta testing by any of the Department's disciplines shall only be initialized following review and approval by either the CADD Manager or CADD IT contacts.

The request for approval to proceed with beta testing, based on the appropriate recommendation, will be initialized by ECSO.

7.6.1 Beta Testing Coordinator

Each major CADD Application shall have a primary support contact assigned by the ECSO. This person, or their delegate, may also serve as the Beta Testing Coordinator and will be responsible for:

- Participating as an alpha tester for the developer
- The Beta Testing Coordinator shall participate in alpha testing of the CADD software, discussions and review of alpha test results with the developer and other support staff members to determine the readiness of the product for beta testing.
- Requesting approval to proceed with beta testing
- The Beta Testing Coordinator will coordinate with ECSO for the appropriate recommendation for Beta testing to proceed or recommend additional alpha testing.
- Coordinating the production of preliminary documentation
- The Beta Testing Coordinator will make available any documentation required to support the beta testing.
- Coordinating the identification of the beta testers
- The Beta Testing Coordinator, with assistance of CADD Managers and OIS IT personnel assigned to support CADD, will solicit Beta testers from the Department and the consultant user community.
- Hosting Beta Testing Orientation / Training

- If necessary, the Beta Testing Coordinator will host an orientation / training session for the beta testers to acquaint them with the software and other issues relevant to the beta testing process, such as reporting test results, beta software updates, and additional training that may be required.
- Testing Process and Reporting
- The Beta Testing Coordinator will work with the testers and members of the development staff to define the testing process and the reporting method.
- Notification and Distribution to Testers
- The Beta Testing Coordinator will notify the CADD Manager or CADD IT contacts that testing materials are ready for distribution. The coordination and distribution of materials to testers will be their responsibility. Where appropriate, ECSO may also distribute testing materials to Beta testers.
- Compilation of Beta Test Results
- The Beta Testing Coordinator is responsible to compile the results of Beta testing so a recommendation may be formulated for production.

7.7 TAC REVIEW AND RECOMMENDATION

ECSO may coordinate with the TACs seeking recommendation for distribution and production use after conclusion of Beta testing.

7.8 CADD PRODUCT APPROVAL AND DISTRIBUTION

Major CADD Software releases are approved by ECSO and notification to the Technology Services and Support Managers are made using the Software Distribution Notification Application (SDNA). ECSO may also use other means of notification for CADD Managers, CADD IT Contacts and Consultants.

The CADD Managers and/or CADD IT Contacts are responsible for distributing the approved software for production use to the end users. External distribution will be at the discretion of ECSO.

Notification and statewide distribution of the Department's CADD Software releases and upgrades for installation on the Department's hardware is made by ECSO to the designated CADD IT contacts in the districts using the Enterprise Application known as the SDNA. The District Technology Services and Support Manager (TSSM) and the Department's CADD Managers are copied during these notices. They are responsible for management of the software, distribution of licenses, and installation and maintenance on district servers and workstations. In most cases, users are expected to operate the most contemporary version of the Department's CADD Software release on Department projects, unless otherwise exempted by either the project's Scope of Services or a written exemption by the Department's Project Manager.

Consultants can acquire the Department's CADD Software, fixes and upgrades from the ECSO internet website: **http://www.dot.state.fl.us/ecso/downloads/software/software.shtm**

7.9 MINIMUM SYSTEM REQUIREMENTS

The current Department's CADD Software was developed and tested for the Department's standard workstation configurations. This standard configuration is published in the ***Adopted Information Technology Resource Standards*** and is available from the Department's Office of Information Systems (OIS) intranet website.

The Department's CADD Software is developed and tested using the software listed on ECSO Current Version website: **http://www.dot.state.fl.us/ecso/main/Version/CurrentVersions.shtm**.

Other software configurations may operate with the Department's CADD Software; however no substantial testing has been performed on any other configuration. Use and support of the Department's CADD Software on other configurations are the sole responsibility of the user.

7.10 TRANSLATION OF FILES

The Department requires MicroStation .DGN format (V8 and higher) or AutoCAD .DWG format (2014 or higher for authorized Civil 3D projects) for the delivery of all graphics design files, except as specifically defined in subsequent CADD Manual chapters for specific disciplines. In addition, MicroStation (or AutoCAD) will be used for the production of the Sheet Image files used to represent the plans sheets produced as required by ***Chapter 3*** of the ***CADD Manual*** and outlined in ***Chapter 6*** of this document**.** It is the intention of the Department to print each plan sheet to the appropriate output using the native CADD system's printing engine, so that output may be reproducible as necessary.

The data producer is solely responsible for any translation required for delivery to the Department. The accuracy of translation of the graphics design files and adherence to the standards and specifications contained herein, including the validity of the geometric elements, is the sole responsibility of the person performing the translation.

Chapter 8

QUALITY ASSURANCE

8.1 PURPOSE

This chapter establishes the basis for Quality Assurance (QA) monitoring of the Florida Department of Transportation (Department) District Computer Aided Design and Drafting (CADD) functions, including the areas of responsibility, frequency of monitoring and reporting methods.

Offices under the direction of the Department's Chief Engineer are responsible for determining the critical QA requirements for their functional areas and develop plans to monitor those requirements. The Engineering/CADD Systems Office (ECSO) defines the critical Quality requirements for deliverables in this Manual. These include standard file formats and components for data delivery, adherence to a standard project directory structure, file naming conventions and CADD Standards for electronic plans. ECSO also establishes a QA monitoring plan for CADD in the Department to facilitate compliance with these deliverable requirements.

The Department's standards require that graphical elements in all critical design files which are shared across disciplines, or used in quantity calculations for pay items, or used in automation by downstream applications meet a minimum of 95% threshold compliance for standard level symbology. The threshold percentage is the number of graphical elements in the design file on the prescribed level symbology divided by the total number of elements in that design file. If critical files do not meet threshold requirements, a written variance from the Department's Project Manager with supporting documentation shall be included within the project Journal. A minimum 80% threshold compliance for level symbology for non-critical design files is acceptable.

Every design file shall meet the threshold of compliance as defined in any CADD Quality Control (QC) plan or scope of work approved by the Districts. Within these compliance thresholds requirements, the Department provides an allowance for up to ten (10) exceptions to prescribed level symbology standards. A Standard Rule defines the prescribed level symbology of a design file. An allowable exception is a deviation from standards defined in a Standard Rule for a given project directory. For example, if a municipality required a special symbology for an element needed that was not covered in a Standard Rule, that element could be drawn on the special symbology, and all occurrences of that symbology would be counted as only one exception. The Department provides a tool, QCInspector, for both Bentley and Autodesk platforms to examine and report CADD file compliance.

8.2 AUTHORITY

Section 20.23(3), Florida Statutes (F.S.) states that the Department shall ensure quality and monitor implementation of policies and procedures.

Quality Assurance and Quality Control Policy, Topic No. 001-260-001 states that it is the policy of the Department to use a systematic but flexible approach to Quality Assurance (QA) and Quality Control (QC) to monitor work processes to implement laws, rules, procedures, policies and standards. This is intended to ensure compliance and quality performance by the Central Office and District units responsible for the delivery of transportation products, services and information.

8.3 SCOPE

Each central office function has the responsibility of monitoring the implementation of policies, procedures and standards established for their respective processes. This Manual applies to all CADD functions and will be monitored.

8.4 REFERENCES

Section 20.23(3), Florida Statutes (F.S.)

Quality Assurance and Quality Control Policy, Topic No. 001-260-001

8.5 DEFINITIONS

Critical Area: Those steps in the CADD process where significant problems may be introduced unless the production criteria and standards are followed.

Critical Requirement: A decision, standard or process operation that will substantially and negatively affect the quality of the product or results if omitted or not performed to the expected level.

Compliance Indicator: Evidence that the critical requirements which are being applied are producing the desired result.

Monitoring Plan: A QA work plan for CADD developed with District input that identifies what, where, when and how monitoring, reporting, tracking and follow up are to be performed.

Quality Assurance (QA): The planned, coordinated and continued activities performed to measure processes against predetermined critical requirements.

Quality Control (QC): The planned, integrated activities performed during work processes to ensure completeness, accuracy, proper decision making, and conformance with all other valid requirements.

Quality Control (QC) Reports: Reports that must be included with the final project delivery, including the Compliance Certification Worksheet and all reports listed therein. Some reports are produced by software within the Department's CADD Software suite.

8.6 QA MONITORING PLAN

The QA Monitoring Plan identifies the critical areas of CADD to be monitored, critical requirements and the criteria to measure process compliance. Compliance indicators will be used by the ECSO to determine how well the process is performing.

The monitoring plan provides the method for monitoring CADD processes, the frequency of team visits, the method for reporting and sharing monitored results with the districts, and the method for tracking and eliminating non-compliance issues.

The plan covers the major delivery requirements in this Manual, but users are reminded that quality CADD production is the result of performing many individual CADD activities correctly and in accordance with the current criteria and standards.

The ***CADD Quality Assurance Monitoring Plan*** is published on the Department's SharePoint per Department policy.

8.7 ACCOUNTABILITY

District production units will follow the procedures for preparing plans and maps. Each district will establish quality compliance indicators for all projects and monitor performance and compliance using those indicators. Consultants are agents of the Department and are responsible for the quality of projects they prepare. They will comply with the Department's ***CADD Manual*** and will perform QC activities to ensure the completeness and accuracy of services performed for the Department.

8.8 QUALITY ASSURANCE (QA) REVIEWS

CADD QA Reviews will be conducted per Department requirements. The ECSO will report the results of these reviews to the District Secretary. Measuring compliance with the critical requirements as outlined in the ***CADD Quality Assurance Monitoring Plan*** will be the purpose of these reviews.

8.9 PRESERVATION

Provenance and uninterrupted legal record of the project data must occur, whether it be by product or management practice. Therefore it is important that both the data producer and the Department make a sensible effort to ensure the documents supporting the signing and sealing of files electronically or digitally by a professional signatory and the securing of the delivery be preserved in a manner consistent with those responsibilities under the rules of the Boards of Professional Regulation in Florida.

The Department will maintain the paper copies of PEDDS Signature and Manifest documents until it is determined how these records may be preserved in other media that meets the requirements of the Florida Boards of Professional Regulation.

Regulated transactions such as the development and submission of engineering plans, specifications, reports, surveys, etc., require high assurance when signing documents. When documents are distributed electronically it is important that recipients can:

- Verify document authenticity – confirming the identity of each person signing the document
- Verify document integrity – confirming that the document has not been altered

Certificate-based signatures provide both of these security services. The Department has chosen to use certificate-based digital signature infrastructure using third party certificate authorities to provide independent identity validation. Once certificate-based digital IDs are acquired by professional Signatories, PDF software can be used to sign PDF files and validate files received from others. In addition the Department provides a tool, XML Signer, to digitally sign any XML based file with a Digital Certificate. Likewise, any applications that support Digital Signature with public key infrastructure can be used to sign their respective files.

Digital Signature allows one to:

- **Sign documents:**
  - Sign PDF files using certificate IDs
  - Place a signature box anywhere on the appropriate page or sheet
  - Add multiple signatures to a document or page
  - Add a time stamp to the document
  - Certify a document with a visible (or hidden) signature to enable recipients to verify authenticity with or without seeing a visible signature on the currently viewed page
  - Automatically embed certificate data to support long-term validation

- **Validate Documents:**
  - Validate all signatures, confirming the identity of everyone signing the document
  - Validate document integrity by tracking all previously signed versions of a document to verify changes made during the document's lifecycle
- **Set Privileges and Permissions for Others:**
  - Certify a document while leaving portions available for form filling, additional signatures, or comments
  - Encrypt a PDF document with a Certificate ID to restrict editing or copying.

8.10 DELIVERY PROCESS MANAGEMENT

Each district is responsible for having a management plan for quality control of the Delivery with the expectation that quality control plans comply with this Manual.

8.11 QUALITY CONTROL (QC) – DATA PRODUCERS' ROLE

Each district shall maintain an established review process to determine and report the quality and compliance levels of project data.

The Department provides tools to help ensure the creation of a standard project directory structure, standard file names and the standard symbology for all design files. The Department provides QC software to check a design file's adherence to the Department's level-symbology standards at any time during the production phase of the project. Tools are listed below:

- FileChecker - Provides reporting for certain portions of the Delivery compliance with standards and business rules.
- QC Software – The *QC Inspector* contains tools used to check, correct and report the compliancy of elements within any design file against the Department's CADD Standards. All checking and reporting is performed in real time and the results recorded into reporting documents that are saved to the current active project.

8.12 QUALITY ASSURANCE (QA) – CENTRAL OFFICE ROLE

The CADD Quality Assurance Reviews (QAR) is to monitor the districts' individual QC Plans. QA also encourages continuous improvement through sharing both ideas and improved technology advances.

Note Districts will be expected to ensure that their own Process Management Plan is in place for Delivery and that projects comply with that process.

8.12.1 QA Reports

The QAR of the districts' will be conducted periodically following the CADD QA monitoring plan. Reports are distributed to the District Secretaries and other affected offices.

Appendix A – CADD Standard Rule Tables

ALGNRD - Alignment Design

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	ByLevel Weight
	algnrd	ActivePointCell_dp	Active Point Cell	4	0	10
	algnrd	AdhocPoint_dp	Adhoc Points Placed by SheetInfo	0	4 / 0	0
	algnrd	BaselineSurvey	Baseline Survey	0	0	2
	algnrd	CLConst_dp	Center Line of Construction	0	0	2
	algnrd	ClipBorder_dp	CLIP Border and Civil 3D View Frame	3	0	0
	algnrd	ClipDrawingBound_dp	CLIP Drawing Boundary	3	3 / 0	0
	algnrd	COGO_dp	COGO Information	3	0	1
	algnrd	ConstLines	Construction Lines and References	1	0	0
	algnrd	ConstLines_pm	Construction Lines	4	0	0
	algnrd	CurveData_dp	Curve & Coordinate Data Elements incl PC, PT, PI symbols	4	0	2
	algnrd	CurveDataLabel_dp	Curve Data Labels PC,PI, PT	0	0	2
	algnrd	DimLines_dp	Dimension Lines, Corresponding Terminators, Equation Lines	0	0	1
X	algnrd	EaseLicLine	Easement License Agreement Line	5	6 / DGN6	0
	algnrd	GridMaj_dp	Grid Lines Major in Profile and Cross Section	3	0	1
	algnrd	GridMin_dp	Grid Lines Minor in Profile and Cross Section	0	0	0
	algnrd	GridMinSub_dp	Grid Lines Minor Sub in Cross Section Sheets	20	0	0
	algnrd	ImageAttachment_dp	Image AttachmentstAttachments	0	0	0
	algnrd	LeaderLine_dp	Leader Line and terminator with Text	0	0	1
	algnrd	Logo_dp	Consultant Engineer of Record Logo	0	0	1
	algnrd	MatchLines_dp	Match Lines with Text, Arrows for Station Notations	1	0	2
	algnrd	Miscellaneous0	Undefined proposed item - co blue wt 0	1	0	0
	algnrd	Miscellaneous1	Undefined proposed item - co blue wt 1	1	0	1
	algnrd	Miscellaneous2	Undefined proposed item - co blue wt 2	1	0	2
	algnrd	Miscellaneous3	Undefined proposed item - co green wt 0	2	0	0
	algnrd	Miscellaneous4	Undefined proposed item - co green wt 1	2	0	1
	algnrd	Miscellaneous5	Undefined proposed item - co green wt 2	2	0	2
	algnrd	Miscellaneous6	Undefined proposed item - co red wt 0	3	0	0
	algnrd	Miscellaneous7	Undefined proposed item - co red wt 1	3	0	1
	algnrd	Miscellaneous8	Undefined proposed item - co red wt 2	3	0	2
	algnrd	Miscellaneous9	Undefined proposed item - co red wt 3	3	0	3
	algnrd	NonPlottingEle_dp	Non plotting items such as construction elements and type 66 elements	4	0	0
	algnrd	NorthArw_dp	North Arrows	0	0	2
	algnrd	PayItem_dp	Pay Item Number Label Elements	4	0	2
X	algnrd	PlotBorder_dp	Plot Border	3	0	0
	algnrd	PointLocator_ep	Point Locator Symbol	4	0	0
	algnrd	ReferencePt_dp	Survey and Construction Reference Point Details and Elements	4	0	2
	algnrd	RoadwayMisc	Roadway Miscellaneous Items	4	0	2
	algnrd	Scale_dp	Bar Scale, Scale Label Elements	0	0	2
	algnrd	Scratch1_dp	A scratch level for temporary or informational items	4	0	0

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	ByLevel Weight
	algnrd	Scratch2_dp	A scratch level for temporary or informational items	5	0	0
	algnrd	ScratchEle_dp	Level for Draft Elements, Temporary Elements, Etc. Do Not Plot	3	0	0
	algnrd	ScratchEle2_dp	Level for Draft Elements, Temporary Elements, Etc. Do Not Plot	4	0	0
	algnrd	SheetBorder_dp	Sheet Border	1	0	4
	algnrd	SheetLines_dp	Sheet Lines	1	0	2
	algnrd	SheetLinesMisc1_dp	Sheet Lines	1	0	0
	algnrd	SheetLinesMisc2_dp	Sheet Lines	2	0	2
	algnrd	SheetLinesMisc3_dp	Sheet Lines	3	0	2
	algnrd	SheetLinesMisc4_dp	Sheet Lines	4	0	2
	algnrd	SpecialDetails	Special Details	6	0	1
	algnrd	StationTicL_dp	Station Tic Marks (Large) and Text	0	0	2
	algnrd	StationTicS_dp	Station Tic Marks (Small) and Text	0	0	2
	algnrd	SumBoxBorder_dp	Summary Boxes Borders	4	0	3
	algnrd	SumBoxLines_dp	Summary Boxes Lines and Miscellaneous Items	4	0	1
	algnrd	SumBoxLinesMin_dp	Summary Boxes Lines Minor Line and Miscellaneous Items	4	0	0
	algnrd	Tables_dp	Data Tables and All Autodesk Tables	0	0	1
	algnrd	TextBLStation	Text - B/L Station and Tics	0	0	2
	algnrd	TextConstEle	Text - Construction Element	0	0	1
	algnrd	TextCurveData	Text - Curve Data Note	0	0	2
	algnrd	TextDetails	Text - Detail Notes	4	0	2
	algnrd	TextElevLabel	Elevation Labels	4	0	0
	algnrd	TextLabel	Text - Label	0	0	2
	algnrd	TextLandscape	Text - Landscape Labels	0	0	1
	algnrd	TextMajor	Text - Major	0	0	5
	algnrd	TextMinor	Text - Minor	0	0	0
	algnrd	TextMisc	Text - Miscellaneous	0	0	1
	algnrd	TextNotes	Text - Notes	4	0	1
	algnrd	TextProfLabel	Text - Profile, Horizontal and Vertical Axis Labels	0	0	2
	algnrd	TextProjLabel	Text - Begin and End Project label with leader lines	1	0	2
	algnrd	TextPtLabel	Point Labels	4	0	0
	algnrd	TextShtNo	Text - Sheet Number	0	0	2
	algnrd	TextSurveyLabel	Survey Text Labels	0	0	0
	algnrd	TextTables	Text - KeysheetKey sheet Indexes and Table Data	4	0	2
	algnrd	TextTitle	Text - Title	0	0	3
	algnrd	TextXSElev	Text - Cross Section Elevations	2	0	1
	algnrd	Viewport	Viewport (For AutoCAD Use)	3	0	0
	algnrd	Xreference01_dp	Reference Files (For AutoCAD Use)	0	0	1
	algnrd	Xreference02_dp	Reference Files (For AutoCAD Use)	0	0	1
	algnrd	Xreference03_dp	Reference Files (For AutoCAD Use)	0	0	1
	algnrd	Xreference04_dp	Reference Files (For AutoCAD Use)	0	0	1
	algnrd	XSCell	GEOPAK Cross Section Cell/Block and Profile Cell/Block	8	0	1

AUTOSP - AutoTURN

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
	autosp	ActivePointCell_dp	Active Point Cell	4	0	10
	autosp	AdhocPoint_dp	Adhoc Points Placed by SheetInfo	0	4 / 0	0
	autosp	ATDims	AutoTurn Profile Dimensions, Tire Envelope	1	0	1
	autosp	ATText	AutoTurn Profile and TT Dimensions, Annotation, TT Overhang	0	0	1
	autosp	ATVHP	AutoTurn Temporary Profile for Building Custom Type	1	0	1
	autosp	COGO_dp	COGO Information	3	0	1
	autosp	ConstLines	Construction Lines and References	1	0	0
	autosp	ConstLines_pm	Construction Lines	4	0	0
	autosp	DimLines_dp	Dimension Lines, Corresponding Terminators, Equation Lines	0	0	1
X	autosp	EaseLicLine	Easement License Agreement Line	5	6 / DGN6	0
	autosp	GridMaj_dp	Grid Lines Major in Profile and Cross Section	3	0	1
	autosp	GridMin_dp	Grid Lines Minor in Profile and Cross Section	0	0	0
	autosp	GridMinSub_dp	Grid Lines Minor Sub in Cross Section Sheets	20	0	0
	autosp	ImageAttachment_dp	Image AttachmentstAttachments	0	0	0
	autosp	LeaderLine_dp	Leader Line and terminator with Text	0	0	1
	autosp	Logo_dp	Consultant Engineer of Record Logo	0	0	1
	autosp	MatchLines_dp	Match Lines with Text, Arrows for Station Notations	1	0	2
	autosp	Miscellaneous0	Undefined proposed item - co blue wt 0	1	0	0
	autosp	Miscellaneous1	Undefined proposed item - co blue wt 1	1	0	1
	autosp	Miscellaneous2	Undefined proposed item - co blue wt 2	1	0	2
	autosp	Miscellaneous3	Undefined proposed item - co green wt 0	2	0	0
	autosp	Miscellaneous4	Undefined proposed item - co green wt 1	2	0	1
	autosp	Miscellaneous5	Undefined proposed item - co green wt 2	2	0	2
	autosp	Miscellaneous6	Undefined proposed item - co red wt 0	3	0	0
	autosp	Miscellaneous7	Undefined proposed item - co red wt 1	3	0	1
	autosp	Miscellaneous8	Undefined proposed item - co red wt 2	3	0	2
	autosp	Miscellaneous9	Undefined proposed item - co red wt 3	3	0	3
	autosp	NonPlottingEle_dp	Non plotting items such as construction elements and type 66 elements	4	0	0
	autosp	PayItem_dp	Pay Item Number Label Elements	4	0	2
X	autosp	PlotBorder_dp	Plot Border	3	0	0
	autosp	PointLocator_ep	Point Locator Symbol	4	0	0
	autosp	ReferencePt_dp	Survey and Construction Reference Point Details and Elements	4	0	2
	autosp	RoadwayMisc	Roadway Miscellaneous Items	4	0	2
	autosp	Scratch1_dp	A scratch level for temporary or informational items	4	0	0
	autosp	Scratch2_dp	A scratch level for temporary or informational items	5	0	0
	autosp	ScratchEle_dp	Level for Draft Elements, Temporary Elements, Etc. Do Not Plot	3	0	0
	autosp	ScratchEle2_dp	Level for Draft Elements, Temporary Elements, Etc. Do Not Plot	4	0	0
	autosp	SheetBorder_dp	Sheet Border	1	0	4

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
	autosp	SheetLines_dp	Sheet Lines	1	0	2
	autosp	SheetLinesMisc1_dp	Sheet Lines	1	0	0
	autosp	SheetLinesMisc2_dp	Sheet Lines	2	0	2
	autosp	SheetLinesMisc3_dp	Sheet Lines	3	0	2
	autosp	SheetLinesMisc4_dp	Sheet Lines	4	0	2
	autosp	SpecialDetails	Special Details	6	0	1
	autosp	SumBoxBorder_dp	Summary Boxes Borders	4	0	3
	autosp	SumBoxLines_dp	Summary Boxes Lines and Miscellaneous Items	4	0	1
	autosp	SumBoxLinesMin_dp	Summary Boxes Lines Minor Line and Miscellaneous Items	4	0	0
	autosp	Tables_dp	Data Tables and All Autodesk Tables	0	0	1
	autosp	TextBLStation	Text - B/L Station and Tics	0	0	2
	autosp	TextConstEle	Text - Construction Element	0	0	1
	autosp	TextCurveData	Text - Curve Data Note	0	0	2
	autosp	TextDetails	Text - Detail Notes	4	0	2
	autosp	TextElevLabel	Elevation Labels	4	0	0
	autosp	TextLabel	Text - Label	0	0	2
	autosp	TextLandscape	Text - Landscape Labels	0	0	1
	autosp	TextMinor	Text - Minor	0	0	0
	autosp	TextMisc	Text - Miscellaneous	0	0	1
	autosp	TextNotes	Text - Notes	4	0	1
	autosp	TextProfLabel	Text - Profile, Horizontal and Vertical Axis Labels	0	0	2
	autosp	TextProjLabel	Text - Begin and End Project label with leader lines	1	0	2
	autosp	TextPtLabel	Point Labels	4	0	0
	autosp	TextShtNo	Text - Sheet Number	0	0	2
	autosp	TextSurveyLabel	Survey Text Labels	0	0	0
	autosp	TextTables	Text - KeysheetKey sheet Indexes and Table Data	4	0	2
	autosp	TextTitle	Text - Title	0	0	3
	autosp	TextXSElev	Text - Cross Section Elevations	2	0	1
	autosp	TurningEle_dp	Miscellaneous Turning Radius Elements	4	0	1
	autosp	TurningRadius_dp	Turning Radius Line	3	3 / DGN3	1
	autosp	Vehicle	Vehicle for Calculating Turning Radius	7	0	2
	autosp	Viewport	Viewport (For AutoCAD Use)	3	0	0
	autosp	Xreference01_dp	Reference Files (For AutoCAD Use)	0	0	1
	autosp	Xreference02_dp	Reference Files (For AutoCAD Use)	0	0	1
	autosp	Xreference03_dp	Reference Files (For AutoCAD Use)	0	0	1
	autosp	Xreference04_dp	Reference Files (For AutoCAD Use)	0	0	1
	autosp	XSCell	GEOPAK Cross Section Cell/Block and Profile Cell/Block	8	0	1
	autosp	XSPt_ep	Cross Section Point, Station	2	1 / DGN1	0

CLIPRD - Clip Border

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
	cliprd	ActivePointCell_dp	Active Point Cell	4	0	10
	cliprd	AdhocPoint_dp	Adhoc Points Placed by SheetInfo	0	4 / 0	0
	cliprd	ClipBorder_dp	CLIP Border and Civil 3D View Frame	3	0	0
	cliprd	ClipDrawingBound_dp	CLIP Drawing Boundary	3	3 / 0	0
	cliprd	Cloud_dp	Construction Cloud	7	0	2
	cliprd	COGO_dp	COGO Information	3	0	1
	cliprd	ConstArea_dp	Construction Area Crosshatch	0	0	1
	cliprd	ConstLimits	Construction Limits	3	RW-LimitsofConst	2
	cliprd	ConstLines	Construction Lines and References	1	0	0
	cliprd	ConstLines_pm	Construction Lines	4	0	0
	cliprd	DimLines_dp	Dimension Lines, Corresponding Terminators, Equation Lines	0	0	1
X	cliprd	EaseLicLine	Easement License Agreement Line	5	6 / DGN	0
	cliprd	GridMaj_dp	Grid Lines Major in Profile and Cross Section	3	0	1
	cliprd	GridMin_dp	Grid Lines Minor in Profile and Cross Section	0	0	0
	cliprd	GridMinSub_dp	Grid Lines Minor Sub in Cross Section Sheets	20	0	0
	cliprd	ImageAttachment_dp	Image AttachmentstAttachments	0	0	0
	cliprd	LeaderLine_dp	Leader Line and terminator with Text	0	0	1
	cliprd	Logo_dp	Consultant Engineer of Record Logo	0	0	1
	cliprd	MatchLines_dp	Match Lines with Text, Arrows for Station Notations	1	0	2
	cliprd	Miscellaneous0	Undefined proposed item - co blue wt 0	1	0	0
	cliprd	Miscellaneous1	Undefined proposed item - co blue wt 1	1	0	1
	cliprd	Miscellaneous2	Undefined proposed item - co blue wt 2	1	0	2
	cliprd	Miscellaneous3	Undefined proposed item - co green wt 0	2	0	0
	cliprd	Miscellaneous4	Undefined proposed item - co green wt 1	2	0	1
	cliprd	Miscellaneous5	Undefined proposed item - co green wt 2	2	0	2
	cliprd	Miscellaneous6	Undefined proposed item - co red wt 0	3	0	0
	cliprd	Miscellaneous7	Undefined proposed item - co red wt 1	3	0	1
	cliprd	Miscellaneous8	Undefined proposed item - co red wt 2	3	0	2
	cliprd	Miscellaneous9	Undefined proposed item - co red wt 3	3	0	3
	cliprd	NonPlottingEle_dp	Non plotting items such as construction elements and type 66 elements	4	0	0
	cliprd	NorthArw_dp	North Arrows	0	0	2
	cliprd	PayItem_dp	Pay Item Number Label Elements	4	0	2
X	cliprd	PlotBorder_dp	Plot Border	3	0	0
	cliprd	PointLocator_ep	Point Locator Symbol	4	0	0
	cliprd	ReferencePt_dp	Survey and Construction Reference Point Details and Elements	4	0	2
	cliprd	RoadwayMisc	Roadway Miscellaneous Items	4	0	2
	cliprd	Scale_dp	Bar Scale, Scale Label Elements	0	0	2

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
	cliprd	Scratch1_dp	A scratch level for temporary or informational items	4	0	0
	cliprd	Scratch2_dp	A scratch level for temporary or informational items	5	0	0
	cliprd	ScratchEle_dp	Level for Draft Elements, Temporary Elements, Etc. Do Not Plot	3	0	0
	cliprd	ScratchEle2_dp	Level for Draft Elements, Temporary Elements, Etc. Do Not Plot	4	0	0
	cliprd	SheetBorder_dp	Sheet Border	1	0	4
	cliprd	SheetLines_dp	Sheet Lines	1	0	2
	cliprd	SheetLinesMisc1_dp	Sheet Lines	1	0	0
	cliprd	SheetLinesMisc2_dp	Sheet Lines	2	0	2
	cliprd	SheetLinesMisc3_dp	Sheet Lines	3	0	2
	cliprd	SheetLinesMisc4_dp	Sheet Lines	4	0	2
	cliprd	SpecialDetails	Special Details	6	0	1
	cliprd	SumBoxBorder_dp	Summary Boxes Borders	4	0	3
	cliprd	SumBoxLines_dp	Summary Boxes Lines and Miscellaneous Items	4	0	1
	cliprd	SumBoxLinesMin_dp	Summary Boxes Lines Minor Line and Miscellaneous Items	4	0	0
	cliiprd	Tables_dp	Data Tables and All Autodesk Tables	0	0	1
	cliprd	TextBLStation	Text - B/L Station and Tics	0	0	2
	cliprd	TextConstEle	Text - Construction Element	0	0	1
	cliprd	TextCurveData	Text - Curve Data Note	0	0	2
	cliprd	TextDetails	Text - Detail Notes	4	0	2
	cliprd	TextElevLabel	Elevation Labels	4	0	0
	cliprd	TextLabel	Text - Label	0	0	2
	cliprd	TextLandscape	Text - Landscape Labels	0	0	1
	cliprd	TextMajor	Text - Major	0	0	5
	cliprd	TextMinor	Text - Minor	0	0	0
	cliprd	TextMisc	Text - Miscellaneous	0	0	1
	cliprd	TextNotes	Text - Notes	4	0	1
	cliprd	TextProfLabel	Text - Profile, Horizontal and Vertical Axis Labels	0	0	2
	cliprd	TextProjLabel	Text - Begin and End Project label with leader lines	1	0	2
	cliprd	TextPtLabel	Point Labels	4	0	0
	cliprd	TextShtNo	Text - Sheet Number	0	0	2
	cliprd	TextSurveyLabel	Survey Text Labels	0	0	0
	cliprd	TextTables	Text - KeysheetKey sheet Indexes and Table Data	4	0	2
	cliprd	TextTitle	Text - Title	0	0	3
	cliprd	TextXSElev	Text - Cross Section Elevations	2	0	1
	cliprd	Viewport	Viewport (For AutoCAD Use)	3	0	0
	cliprd	Xreference01_dp	Reference Files (For AutoCAD Use)	0	0	1
	cliprd	Xreference02_dp	Reference Files (For AutoCAD Use)	0	0	1
	cliprd	Xreference03_dp	Reference Files (For AutoCAD Use)	0	0	1
	cliprd	Xreference04_dp	Reference Files (For AutoCAD Use)	0	0	1
	cliprd	XSCell	GEOPAK Cross Section Cell/Block and Profile Cell/Block	8	0	1

DRDTRD - Drainage Detail

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
	drdtrd	ActivePointCell_dp	Active Point Cell	4	0	10
	drdtrd	AdhocPoint_dp	Adhoc Points Placed by SheetInfo	0	4 / 0	0
X	drdtrd	ArtificialCovering	Artificial Coverings	10	0	2
X	drdtrd	Berm	Berm (Top, Front, or Back)	10	0	2
X	drdtrd	BoxCulvert	Box Culvert	10	0	2
X	drdtrd	Canal	Canal	7	0	1
X	drdtrd	CatchBasin	Catch Basin	10	0	2
	drdtrd	Cloud_dp	Construction Cloud	7	0	2
	drdtrd	COGO_dp	COGO Information	3	0	1
	drdtrd	ConstArea_dp	Construction Area Crosshatch	0	0	1
	drdtrd	ConstLimits	Construction Limits	3	RW-LimitsofConst	2
	drdtrd	ConstLines	Construction Lines and References	1	0	0
	drdtrd	ConstLines_pm	Construction Lines	4	0	0
	drdtrd	ContoursMinor	Contour Lines Minor (Proposed)	4	0	2
X	drdtrd	DesiltingPipes	De-silting Pipes	10	0	2
	drdtrd	DimLines_dp	Dimension Lines, Corresponding Terminators, Equation Lines	0	0	1
X	drdtrd	Ditch	Ditch Top	7	6 / DGN6	1
X	drdtrd	DitchBot	Ditch Bottom	10	0	2
	drdtrd	DitchProfLt_er	Ditch Profile Left (Existing)	8	3 / DGN3	1
	drdtrd	DitchProfLt_pr	Ditch Profile Left	8	0	1
	drdtrd	DitchProfMdn_er	Ditch Profile Median (Existing)	10	3 / DGN3	1
	drdtrd	DitchProfMdn_pr	Ditch Profile Median	10	0	1
	drdtrd	DitchProfRt_er	Ditch Profile Right (Existing)	9	3 / DGN3	1
	drdtrd	DitchProfRt_pr	Ditch Profile Right	9	0	1
	drdtrd	DrainDivideArw	Drainage Divide Arrow	0	0	1
	drdtrd	DrainDivides00	Drainage Divides	10	2 / DGN2	4
	drdtrd	DrainDivides00_ep	Drainage Divides (Existing)	9	2 / DGN2	4
	drdtrd	DrainDivides01	Drainage Divides	10	2 / DGN2	4
	drdtrd	DrainDivides01_ep	Drainage Divides (Existing)	9	2 / DGN2	4
	drdtrd	DrainDivides02	Drainage Divides	10	2 / DGN2	4
	drdtrd	DrainDivides02_ep	Drainage Divides (Existing)	9	2 / DGN2	4
	drdtrd	DrainDivides03	Drainage Divides	10	2 / DGN2	4
	drdtrd	DrainDivides03_ep	Drainage Divides (Existing)	9	2 / DGN2	4
	drdtrd	DrainDivides04	Drainage Divides	10	2 / DGN2	4
	drdtrd	DrainDivides04_ep	Drainage Divides (Existing)	9	2 / DGN2	4
	drdtrd	DrainDivides05	Drainage Divides	10	2 / DGN2	4
	drdtrd	DrainDivides05_ep	Drainage Divides (Existing)	9	2 / DGN2	4
	drdtrd	DrainDivides06	Drainage Divides	10	2 / DGN2	4
	drdtrd	DrainDivides06_ep	Drainage Divides (Existing)	9	2 / DGN2	4
	drdtrd	DrainDivides07	Drainage Divides	10	2 / DGN2	4
	drdtrd	DrainDivides07_ep	Drainage Divides (Existing)	9	2 / DGN2	4

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
	drdtrd	DrainDivides08	Drainage Divides	10	2 / DGN2	4
	drdtrd	DrainDivides08_ep	Drainage Divides (Existing)	9	2 / DGN2	4
	drdtrd	DrainDivides09	Drainage Divides	10	2 / DGN2	4
	drdtrd	DrainDivides09_ep	Drainage Divides (Existing)	9	2 / DGN2	4
	drdtrd	DrainMisc	Miscellaneous Drainage Items	10	0	2
X	drdtrd	DrainStruct_pr	Drainage Structures (All Types)	10	0	2
X	drdtrd	EaseLicLine	Easement License Agreement Line	5	6 / DGN6	0
X	drdtrd	EasePerpLine	Easement Lines Perpetual	4	RW-PerpetualEasement	1
X	drdtrd	EaseTempLine	Easement Lines Temporary	6	RW-TemporaryEasement	0
X	drdtrd	EdgeDrain	Edge Drain, Material and Outlet Pipe	10	0	2
X	drdtrd	Endwall	Endwall (All Types)	10	0	2
	drdtrd	Fence_ex	Fence Lines on Cross Sections (Existing)	6	3 / DGN3	1
X	drdtrd	FES	Flared End Sections	10	0	2
X	drdtrd	FlapGate	Flap Gates	10	0	2
X	drdtrd	FlowLine	Flow Line	10	0	2
	drdtrd	FlowLine_pr	Flow Line (Roadway Profile View)	0	0	2
X	drdtrd	FrenchDrain	French Drain	10	0	2
X	drdtrd	GovSectionLine_ep	Section Lines	10	RW-SectionLine	2
X	drdtrd	GovTwpRgeLine_ep	Township / Range Lines	10	RW-TownshipRange	2
	drdtrd	GPKDrBack_dp	Back Point on Drainage Cells	2	2 / 0	2
	drdtrd	GPKDrBottom_dp	Bottom Point on Drainage Cells	3	3 / 0	2
	drdtrd	GPKDrCellIns_dp	Cell Insertion Point on Drainage Cells	4	4 / 0	2
	drdtrd	GPKDrCentroid_dp	Point on Centroid for Drainage	7	7 / 0	2
	drdtrd	GPKDrElv	Location point for drainage cells	5	5 / 0	2
	drdtrd	GPKDrFront_dp	Front Point on Drainage Cells	1	1 / 0	2
	drdtrd	GPKDrPipe_dp	Point on Drainage Pipe	6	6 / 0	2
	drdtrd	GPKDrPipeCir_dp	Point on Pipe Circular	6	6 / 0	0
	drdtrd	GradeLine_er	Grade Line Profile (Existing)	2	2 / DGN2	1
	drdtrd	GradeLine_pr	Grade Line Profile	5	0	2
	drdtrd	GradeLineCtr_dp	Grade Line Profile Center (shown in plan view)	5	0	0
	drdtrd	GradeLineCtr_pr	Grade Line Profile Center	5	0	2
	drdtrd	GradeLineLt_dp	Grade Line Profile Left (shown in plan view)	1	0	0
	drdtrd	GradeLineLt_er	Grade Line Profile Left (Existing)	1	2 / DGN2	1
	drdtrd	GradeLineLt_pr	Grade Line Profile Left	1	0	2
	drdtrd	GradeLineRt_dp	Grade Line Profile Right (shown in plan view)	4	0	0
	drdtrd	GradeLineRt_er	Grade Line Profile Right (Existing)	4	2 / DGN2	1
	drdtrd	GradeLineRt_pr	Grade Line Profile Right	4	0	2
	drdtrd	GradeSecPat	Grade Section Patterns	0	0	0
	drdtrd	GridMaj_dp	Grid Lines Major in Profile and Cross Section	3	0	1
	drdtrd	GridMin_dp	Grid Lines Minor in Profile and Cross Section	0	0	0
	drdtrd	GridMinSub_dp	Grid Lines Minor Sub in Cross Section Sheets	20	0	0
	drdtrd	ImageAttachment_dp	Image AttachmentstAttachments	0	0	0
X	drdtrd	InletBottomJ	Inlet Bottom Type J	10	0	1

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
X	drdtrd	InletBottomP	Inlet Bottom Type P	10	0	1
X	drdtrd	InletClosedFlume	Closed Flume Inlet	10	0	2
X	drdtrd	InletCurb	Curb Inlet (All Types)	10	0	2
X	drdtrd	InletDBI	Ditch Bottom Inlet (All Types)	10	0	2
X	drdtrd	InletGutter	Gutter Inlet (All Types)	10	0	2
X	drdtrd	InletMedian	Median Barrier Inlet	10	0	2
X	drdtrd	InletProt	Rock Bags and Sand Bagging	10	SWP-RockBags	2
X	drdtrd	LARWLine	Limited Access Right of Way	4	RW-LimitedAccess-Proposed	2
X	drdtrd	LARWLine_ep	Limited Access Right of Way (Existing)	4	RW-LimitedAccess-Existing	1
	drdtrd	LeaderLine_dp	Leader Line and terminator with Text	0	0	1
	drdtrd	Logo_dp	Consultant Engineer of Record Logo	0	0	1
X	drdtrd	Manhole	Manhole (Drainage and Unknown)	10	0	2
X	drdtrd	MES	Mitered End Section	10	0	2
	drdtrd	Miscellaneous0	Undefined proposed item - co blue wt 0	1	0	0
	drdtrd	Miscellaneous1	Undefined proposed item - co blue wt 1	1	0	1
	drdtrd	Miscellaneous2	Undefined proposed item - co blue wt 2	1	0	2
	drdtrd	Miscellaneous3	Undefined proposed item - co green wt 0	2	0	0
	drdtrd	Miscellaneous4	Undefined proposed item - co green wt 1	2	0	1
	drdtrd	Miscellaneous5	Undefined proposed item - co green wt 2	2	0	2
	drdtrd	Miscellaneous6	Undefined proposed item - co red wt 0	3	0	0
	drdtrd	Miscellaneous7	Undefined proposed item - co red wt 1	3	0	1
	drdtrd	Miscellaneous8	Undefined proposed item - co red wt 2	3	0	2
	drdtrd	Miscellaneous9	Undefined proposed item - co red wt 3	3	0	3
	drdtrd	NonPlottingEle_dp	Non plotting items such as construction elements and type 66 elements	4	0	0
	drdtrd	Patternlines_ep	Cross Section Chain	2	1 / DGN1	0
	drdtrd	PatternLines1_dp	Pattern Lines and Sample Lines (Civil 3D) for Cross Sections	3	0	2
	drdtrd	PatternLines2_dp	Pattern Lines for XSections Cross Sections alternate for side streets, critical Cross Sections or drainage structures	4	0	2
	drdtrd	PatternLines3_dp	Pattern Lines for XSectionsCross Sections alternate for side streets, critical Cross Sections or drainage structures	5	0	2
	drdtrd	PayItem_dp	Pay Item Number Label Elements	4	0	2
	drdtrd	Permit1	Permit 1 Wetlands, Mitigation Sites, Planting Areas	1	0	1
	drdtrd	Permit2	Permit 2 Wetlands, Mitigation Sites, Planting Areas	2	0	1
	drdtrd	Permit3	Permit 3 Wetlands, Mitigation Sites, Planting Areas	4	0	1
	drdtrd	PipeCulvert_ep	Pipe Culvert	10	3 / DGN3	1
X	drdtrd	PipeCulvert_pr	Pipe Culvert in Profile	3	0	2
X	drdtrd	PipeCulvert_px	Pipe Culvert for Cross Section View	10	0	2
X	drdtrd	PipeCulvertCD	Pipe Culvert Cross Drain	10	0	2
X	drdtrd	PipeCulvertGD	Pipe Culvert Gutter Drain	11	0	2
X	drdtrd	PipeCulvertSD	Pipe Culvert Side Drain	12	0	2
X	drdtrd	PipeCulvertSS	Pipe Culvert Storm Sewer	9	0	2
X	drdtrd	PlotBorder_dp	Plot Border	3	0	0
	drdtrd	PointLocator_ep	Point Locator Symbol	4	0	0
X	drdtrd	Pond_px	Pond Lines on Cross Sections	2	0	2

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
X	drdtrd	PondSideSlope	Pond Side Slope	0	0	2
X	drdtrd	PropertyLine_ep	Property Lines	3	0	0
	drdtrd	ReferencePt_dp	Survey and Construction Reference Point Details and Elements	4	0	2
X	drdtrd	RetentionArea	Retention Area	2	0	2
X	drdtrd	RipRap	Rip Rap, Rubble	4	0	2
X	drdtrd	RockGravelStone	Rock, Gravel, Stone, Boulders, Etc.	1	0	2
X	drdtrd	RWLine	Right of Way Lines	4	RW-Proposed	2
X	drdtrd	RWLine_ep	Right of Way Lines (Existing)	3	RW-Existing	1
	drdtrd	Scratch1_dp	A scratch level for temporary or informational items	4	0	0
	drdtrd	Scratch2_dp	A scratch level for temporary or informational items	5	0	0
	drdtrd	ScratchEle_dp	Level for Draft Elements, Temporary Elements, Etc. Do Not Plot	3	0	0
	drdtrd	ScratchEle2_dp	Level for Draft Elements, Temporary Elements, Etc. Do Not Plot	4	0	0
101	drdtrd	SedimentBarrier	Synthetic Bales and Staked Silt Fences	10	SWP-HayBales	2
101	drdtrd	SedimentBarrier	Synthetic Bales and Staked Silt Fences	10	SWP-SiltFence	2
X	drdtrd	SedimentBasin	Sediment Basin Index 101	10	0	2
X	drdtrd	SedimentBasin_ep	Sediment Basin Index 101 (Existing)	10	3 / DGN3	1
	drdtrd	SheetBorder_dp	Sheet Border	1	0	4
	drdtrd	SheetLines_dp	Sheet Lines	1	0	2
	drdtrd	SheetLinesMisc1_dp	Sheet Lines	1	0	0
	drdtrd	SheetLinesMisc2_dp	Sheet Lines	2	0	2
	drdtrd	SheetLinesMisc3_dp	Sheet Lines	3	0	2
	drdtrd	SheetLinesMisc4_dp	Sheet Lines	4	0	2
X	drdtrd	SlideGate	Slide Gate	10	0	2
X	drdtrd	Slopes	Slopes (Top, Bottom)	9	3 / DGN3	0
X	drdtrd	SlopeStakes1	Slope Stakes 1	4	1 / DGN1	3
X	drdtrd	SlopeStakes2	Slope Stakes 2	1	1 / DGN1	3
X	drdtrd	SlottedDrainPipe	Slotted Drain Pipe	10	0	1
X	drdtrd	SlottedStormSewer	Storm Sewer Slotted or Perforated	10	0	2
	drdtrd	SpecialDetails	Special Details	6	0	1
	drdtrd	SpecialDetails_px	Special Details_XS	6	0	1
X	drdtrd	Spillway	Spillway/ Flume/ Slope Drain	10	0	2
X	drdtrd	StormSewer	Storm Sewer (All Types), Drain Pipes and Spouts	10	0	2
	drdtrd	SumBoxBorder_dp	Summary Boxes Borders	4	0	3
	drdtrd	SumBoxLines_dp	Summary Boxes Lines and Miscellaneous Items	4	0	1
	drdtrd	SumBoxLinesMin_dp	Summary Boxes Lines Minor Line and Miscellaneous Items	4	0	0
	drdtrd	Tables_dp	Data Tables and All Autodesk Tables	0	0	1
X	drdtrd	TerrainLine_ex	Existing Ground Line for Multiline	5	0	1
	drdtrd	TextAlert	Text - An Alert Label to Highlight a Problem	3	0	2
	drdtrd	TextBLStation	Text - B/L Station and Tics	0	0	2
	drdtrd	TextConstEle	Text - Construction Element	0	0	1
	drdtrd	TextCurveData	Text - Curve Data Note	0	0	2
	drdtrd	TextDetails	Text - Detail Notes	4	0	2
	drdtrd	TextElevLabel	Elevation Labels	4	0	0

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
	drdtrd	TextLabel	Text - Label	0	0	2
	drdtrd	TextLandscape	Text - Landscape Labels	0	0	1
	drdtrd	TextMajor	Text - Major	0	0	5
	drdtrd	TextMinor	Text - Minor	0	0	0
	drdtrd	TextMisc	Text - Miscellaneous	0	0	1
	drdtrd	TextNotes	Text - Notes	4	0	1
	drdtrd	TextProfLabel	Text - Profile, Horizontal and Vertical Axis Labels	0	0	2
	drdtrd	TextProjLabel	Text - Begin and End Project label with leader lines	1	0	2
	drdtrd	TextPtLabel	Point Labels	4	0	0
	drdtrd	TextShtNo	Text - Sheet Number	0	0	2
	drdtrd	TextSurveyLabel	Survey Text Labels	0	0	0
	drdtrd	TextTables	Text - KeysheetKey sheet Indexes and Table Data	4	0	2
	drdtrd	TextTitle	Text - Title	0	0	3
	drdtrd	TextXSElev	Text - Cross Section Elevations	2	0	1
X	drdtrd	Trench	Storm Sewer Trench	10	0	2
X	drdtrd	TurbidityBarrier1	Turbidity Barrier 1 (floating)	10	SWP-TurbidityBarrier-Type1	2
	drdtrd	TurbidityBarrier1_ep	Turbidity Barrier (Floating) (Existing)	10	1 / DGN1	2
X	drdtrd	TurbidityBarrier2	Turbidity Barrier 2 (staked)	10	SWP-TurbidityBarrier-Type2	2
	drdtrd	TurbidityBarrier2_ep	Turbidity Barrier (Staked) (Existing)	10	1 / DGN1	2
X	drdtrd	UnderDrain	Underdrains (All Types)	10	0	2
X	drdtrd	UnderDrainOP	Underdrain Outlet Pipes	10	0	2
	drdtrd	Viewport	Viewport (For AutoCAD Use)	3	0	0
	drdtrd	Wetland	Wetland Boundary	2	RD-Wetland-Proposed	1
	drdtrd	Xreference01_dp	Reference Files (For AutoCAD Use)	0	0	1
	drdtrd	Xreference02_dp	Reference Files (For AutoCAD Use)	0	0	1
	drdtrd	Xreference03_dp	Reference Files (For AutoCAD Use)	0	0	1
	drdtrd	Xreference04_dp	Reference Files (For AutoCAD Use)	0	0	1
	drdtrd	XSCell	GEOPAK Cross Section Cell/Block and Profile Cell/Block	8	0	1
X	drdtrd	XSExtendGrdLine_ex	Extend Ground Lines for Cross Sections (Existing)	21	2 / DGN2	1
X	drdtrd	XSGrdLine_ex	Ground Lines for Cross Sections (Existing)	2	2 / DGN2	1
X	drdtrd	XSGrdLine_px	Roadway Ground Lines on Cross Sections	1	0	2
	drdtrd	XSPt_ep	Cross Section Point, Station	2	1 / DGN1	0
X	drdtrd	YardDrain	Yard Drain	10	3 / DGN3	1

DREXRD - Existing Drainage

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight	Point / Line	Feature
	drexrd	Basins_ep	Sediment Basin, Retention Pond	10	3 / DGN3	1	L	BAS
	drexrd	BoxCulvert_ep	Box Culvert	10	3 / DGN3	1	L	BXC
	drexrd	ConstLines	Construction Lines and References	1	0	0		
	drexrd	ConstLines_pm	Construction Lines	4	0	0		
	drexrd	CrossDrain_ep	Underdrains and Cross drains	10	3 / DGN3	1	L	UD
	drexrd	Ditch_ep	Ditch (Top, Bottom and Flow Lines)	7	6 / DGN6	0	L	DTCH
	drexrd	DitchPavt_ep	Ditch Pavement	0	1 / DGN1	0	L	DTCHP
	drexrd	DrainMisc_ep	Catch Basins	10	3 / DGN3	1	L	CB
	drexrd	DrainMisc_ep	Drainage Pipes and Spouts	10	3 / DGN3	1	L	DRNP
	drexrd	DrainMisc_ep	Drainage Junction Box	10	3 / DGN3	1	L	JB
	drexrd	DrainMisc_ep	Special Drainage Feature (Describe)	10	3 / DGN3	1	L	SPD
	drexrd	DrainMisc_ep	Spillways, Flumes or Scuppers	10	3 / DGN3	1	L	SPL
	drexrd	DrainMisc_ep	Yard Drain	10	3 / DGN3	1	L	YD
	drexrd	EndTreat_ep	Flared End Section	10	3 / DGN3	1	L	FES
	drexrd	EndTreat_ep	Mitered End Section	10	3 / DGN3	1	L	MES
	drexrd	EndTreat_ep	Straight Endwall	10	3 / DGN3	1	L	SEW
	drexrd	EndTreat_ep	Special Endwall	10	3 / DGN3	1	L	SPEW
	drexrd	EndTreat_ep	U-Type Endwall	10	3 / DGN3	1	L	UEW
	drexrd	EndTreat_ep	Winged End wall	10	3 / DGN3	1	L	WEW
	drexrd	ImageAttachment_dp	Image AttachmentstAttachments	0	0	0		
	drexrd	InletBottom_ep	Drainage Structure Bottoms	10	3 / DGN3	1	L	DRNB
	drexrd	InletCurb_ep	Curb Inlets	10	3 / DGN3	1	L	CINL
	drexrd	InletCurb_ep	Median Inlets	10	3 / DGN3	1	L	MEDI
	drexrd	InletDBI_ep	Ditch Bottom Inlet	10	3 / DGN3	1	L	DTCHI
	drexrd	InletGutter_ep	Gutter Inlets (All Types)	10	3 / DGN3	1	L	GI
	drexrd	LeaderLine_dp	Leader Line and terminator with Text	0	0	1		
	drexrd	ManholeCovUnk_ep	Manhole Cover (Unknown)	0	1 / DGN1	1	P	MH
	drexrd	ManholeSW_ep	Manhole (Storm Water)	10	1 / DGN1	0	P	MHD
	drexrd	PipeCulvert_ep	Pipe Culvert	10	3 / DGN3	1	L	PCULV
	drexrd	StormSewer_ep	Storm Sewer (all sizesAll Sizes), Drain Pipes and Spouts	10	3 / DGN3	1	L	STS
	drexrd	Tables_dp	Data Tables and All Autodesk Tables	0	0	1		
	drexrd	TextMisc	Text - Miscellaneous	0	0	1		
	drexrd	TextNotes	Text - Notes	4	0	1		
	drexrd	UnderDrain_ep	Under Drain Box	10	3 / DGN3	0	P	UDBX
	drexrd	Viewport	Viewport (For AutoCAD Use)	3	0	0		
	drexrd	Xreference01_dp	Reference Files (For AutoCAD Use)	0	0	1		
	drexrd	Xreference02_dp	Reference Files (For AutoCAD Use)	0	0	1		
	drexrd	Xreference03_dp	Reference Files (For AutoCAD Use)	0	0	1		
	drexrd	Xreference04_dp	Reference Files (For AutoCAD Use)	0	0	1		

DRMPRD - Drainage Map

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
	drmprd	ActivePointCell_dp	Active Point Cell	4	0	10
	drmprd	AdhocPoint_dp	Adhoc Points Placed by SheetInfo	0	4 / 0	0
X	drmprd	ArtificialCovering	Artificial Coverings	10	0	2
	drmprd	Assembly_dp	Civil 3D Assemblies and Subassemblies	4	0	2
	drmprd	BaselineSurvey	Baseline Survey	0	0	2
X	drmprd	Berm	Berm (Top, Front, or Back)	10	0	2
X	drmprd	BoxCulvert	Box Culvert	10	0	2
X	drmprd	Canal	Canal	7	0	1
X	drmprd	CatchBasin	Catch Basin	10	0	2
	drmprd	CLConst_dp	Center Line of Construction	0	0	2
	drmprd	Cloud_dp	Construction Cloud	7	0	2
	drmprd	COGO_dp	COGO Information	3	0	1
	drmprd	ConstArea_dp	Construction Area Crosshatch	0	0	1
	drmprd	ConstLimits	Construction Limits	3	RW-LimitsofConst	2
	drmprd	ConstLines	Construction Lines and References	1	0	0
	drmprd	ConstLines_pm	Construction Lines	4	0	0
	drmprd	Corridors_dp	Civil 3D Corridors	0	0	2
	drmprd	CurveData_dp	Curve & Coordinate Data Elements incl. PC, PT, PI symbols	4	0	2
	drmprd	CurveDataLabel_dp	Curve Data Labels PC,PI, PT	0	0	2
X	drmprd	DesiltingPipes	DesiltingDe-silting Pipes	10	0	2
	drmprd	DimLines_dp	Dimension Lines, Corresponding Terminators, Equation Lines	0	0	1
X	drmprd	Ditch	Ditch Top	7	6 / DGN6	1
X	drmprd	DitchBot	Ditch Bottom	10	0	2
	drmprd	DitchProfLt_er	Ditch Profile Left (Existing)	8	3 / DGN3	1
	drmprd	DitchProfLt_pr	Ditch Profile Left	8	0	1
	drmprd	DitchProfMdn_er	Ditch Profile Median (Existing)	10	3 / DGN3	1
	drmprd	DitchProfMdn_pr	Ditch Profile Median	10	0	1
	drmprd	DitchProfRt_er	Ditch Profile Right (Existing)	9	3 / DGN3	1
	drmprd	DitchProfRt_pr	Ditch Profile Right	9	0	1
	drmprd	DrainAlert_px	Alert Symbology for Structural Elements on Cross Sections	3	0	2
	drmprd	DrainDivideArw	Drainage Divide Arrow	0	0	1
	drmprd	DrainDivides00	Drainage Divides	10	2 / DGN2	4
	drmprd	DrainDivides00_ep	Drainage Divides (Existing)	9	2 / DGN2	4
	drmprd	DrainDivides01	Drainage Divides	10	2 / DGN2	4
	drmprd	DrainDivides01_ep	Drainage Divides (Existing)	9	2 / DGN2	4
	drmprd	DrainDivides02	Drainage Divides	10	2 / DGN2	4
	drmprd	DrainDivides02_ep	Drainage Divides (Existing)	9	2 / DGN2	4
	drmprd	DrainDivides03	Drainage Divides	10	2 / DGN2	4
	drmprd	DrainDivides03_ep	Drainage Divides (Existing)	9	2 / DGN2	4
	drmprd	DrainDivides04	Drainage Divides	10	2 / DGN2	4
	drmprd	DrainDivides04_ep	Drainage Divides (Existing)	9	2 / DGN2	4
	drmprd	DrainDivides05	Drainage Divides	10	2 / DGN2	4

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
	drmprd	DrainDivides05_ep	Drainage Divides (Existing)	9	2 / DGN2	4
	drmprd	DrainDivides06	Drainage Divides	10	2 / DGN2	4
	drmprd	DrainDivides06_ep	Drainage Divides (Existing)	9	2 / DGN2	4
	drmprd	DrainDivides07	Drainage Divides	10	2 / DGN2	4
	drmprd	DrainDivides07_ep	Drainage Divides (Existing)	9	2 / DGN2	4
	drmprd	DrainDivides08	Drainage Divides	10	2 / DGN2	4
	drmprd	DrainDivides08_ep	Drainage Divides (Existing)	9	2 / DGN2	4
	drmprd	DrainDivides09	Drainage Divides	10	2 / DGN2	4
	drmprd	DrainDivides09_ep	Drainage Divides (Existing)	9	2 / DGN2	4
	drmprd	DrainMisc	Miscellaneous Drainage Items	10	0	2
X	drmprd	DrainStruct_pr	Drainage Structures (All Types)	10	0	2
X	drmprd	EaseLicLine	Easement License Agreement Line	5	6 / DGN6	0
X	drmprd	EasePerpLine	Easement Lines Perpetual	4	RW-PerpetualEasement	1
X	drmprd	EaseTempLine	Easement Lines Temporary	6	RW-TemporaryEasement	0
X	drmprd	EdgeDrain	Edge Drain, Material and Outlet Pipe	10	0	2
X	drmprd	Endwall	Endwall (All Types)	10	0	2
	drmprd	Fence_ex	Fence Lines on Cross Sections (Existing)	6	3 / DGN3	1
X	drmprd	FES	Flared End Sections	10	0	2
X	drmprd	FlapGate	Flap Gates	10	0	2
X	drmprd	FlowLine	Flow Line	10	0	2
	drmprd	FlowLine_pr	Flow Line (Roadway Profile View)	0	0	2
X	drmprd	FlowPaths	Time of Concentration Flow Paths	10	1 / DGN1	1
X	drmprd	FrenchDrain	French Drain	10	0	2
X	drmprd	Gabions	Gabion Baskets or Mats	10	0	2
X	drmprd	Gabions_ep	Gabion Baskets or Mats (Existing)	10	1 / DGN1	2
X	drmprd	GovTwpRgeLine_ep	Township / Range Lines	10	RW-TownshipRange	2
	drmprd	GPKDrBack_dp	Back Point on Drainage Cells	2	2 / 0	2
	drmprd	GPKDrBottom_dp	Bottom Point on Drainage Cells	3	3 / 0	2
	drmprd	GPKDrCellIns_dp	Cell Insertion Point on Drainage Cells	4	4 / 0	2
	drmprd	GPKDrCentroid_dp	Point on Centroid for Drainage	7	7 / 0	2
	drmprd	GPKDrElv	Location point for drainage cells	5	5 / 0	2
	drmprd	GPKDrFront_dp	Front Point on Drainage Cells	1	1 / 0	2
	drmprd	GPKDrPipe_dp	Point on Drainage Pipe	6	6 / 0	2
	drmprd	GPKDrPipeCir_dp	Point on Pipe Circular	6	6 / 0	0
	drmprd	GradeLine_er	Grade Line Profile (Existing)	2	2 / DGN2	1
	drmprd	GradeLine_pr	Grade Line Profile	5	0	2
	drmprd	GradeLineCtr_dp	Grade Line Profile Center (shown in plan view)	5	0	0
	drmprd	GradeLineCtr_pr	Grade Line Profile Center	5	0	2
	drmprd	GradeLineLt_dp	Grade Line Profile Left (shown in plan view)	1	0	0
	drmprd	GradeLineLt_er	Grade Line Profile Left (Existing)	1	2 / DGN2	1
	drmprd	GradeLineLt_pr	Grade Line Profile Left	1	0	2
	drmprd	GradeLineRt_dp	Grade Line Profile Right (shown in plan view)	4	0	0
	drmprd	GradeLineRt_er	Grade Line Profile Right (Existing)	4	2 / DGN2	1
	drmprd	GradeLineRt_pr	Grade Line Profile Right	4	0	2

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
	drmprd	GradeSecPat	Grade Section Patterns	0	0	0
	drmprd	GridMaj_dp	Grid Lines Major in Profile and Cross Section	3	0	1
	drmprd	GridMin_dp	Grid Lines Minor in Profile and Cross Section	0	0	0
	drmprd	GridMinSub_dp	Grid Lines Minor Sub in Cross Section Sheets	20	0	0
	drmprd	ImageAttachment_dp	Image AttachmentstAttachments	0	0	0
X	drmprd	InletClosedFlume	Closed Flume Inlet	10	0	2
X	drmprd	InletCurb	Curb Inlet (All Types)	10	0	2
X	drmprd	InletDBI	Ditch Bottom Inlet (All Types)	10	0	2
X	drmprd	InletGutter	Gutter Inlet (All Types)	10	0	2
X	drmprd	InletMedian	Median Barrier Inlet	10	0	2
X	drmprd	InletProt	Rock Bags and Sand Bagging	10	SWP-RockBags	2
	drmprd	KeyShtMisc	Key sheet Miscellaneous Items	0	0	2
X	drmprd	LARWLine	Limited Access Right of Way	4	RW-LimitedAccess-Proposed	2
X	drmprd	LARWLine_ep	Limited Access Right of Way (Existing)	4	RW-LimitedAccess-Existing	1
	drmprd	LeaderLine_dp	Leader Line and terminator with Text	0	0	1
	drmprd	Logo_dp	Consultant Engineer of Record Logo	0	0	1
X	drmprd	Manhole	Manhole (Drainage and Unknown)	10	0	2
	drmprd	MatchLines_dp	Match Lines with Text, Arrows for Station Notations	1	0	2
X	drmprd	MES	Mitered End Section	10	0	2
	drmprd	Miscellaneous0	Undefined proposed item - co blue wt 0	1	0	0
	drmprd	Miscellaneous1	Undefined proposed item - co blue wt 1	1	0	1
	drmprd	Miscellaneous2	Undefined proposed item - co blue wt 2	1	0	2
	drmprd	Miscellaneous3	Undefined proposed item - co green wt 0	2	0	0
	drmprd	Miscellaneous4	Undefined proposed item - co green wt 1	2	0	1
	drmprd	Miscellaneous5	Undefined proposed item - co green wt 2	2	0	2
	drmprd	Miscellaneous6	Undefined proposed item - co red wt 0	3	0	0
	drmprd	Miscellaneous7	Undefined proposed item - co red wt 1	3	0	1
	drmprd	Miscellaneous8	Undefined proposed item - co red wt 2	3	0	2
	drmprd	Miscellaneous9	Undefined proposed item - co red wt 3	3	0	3
	drmprd	NonPlottingEle_dp	Non plotting items (construction elements and type 66 elements)	4	0	0
	drmprd	NorthArw_dp	North Arrows	0	0	2
	drmprd	PayItem_dp	Pay Item Number Label Elements	4	0	2
	drmprd	Permit1	Permit 1 Wetlands, Mitigation Sites, Planting Areas	1	0	1
	drmprd	Permit2	Permit 2 Wetlands, Mitigation Sites, Planting Areas	2	0	1
	drmprd	Permit3	Permit 3 Wetlands, Mitigation Sites, Planting Areas	4	0	1
	drmprd	PipeCulvert_ep	Pipe Culvert	10	3 / DGN3	1
X	drmprd	PipeCulvert_pr	Pipe Culvert in Profile	3	0	2
X	drmprd	PipeCulvert_px	Pipe Culvert for Cross Section View	10	0	2
X	drmprd	PipeCulvertCD	Pipe Culvert Cross Drain	10	0	2
X	drmprd	PipeCulvertGD	Pipe Culvert Gutter Drain	11	0	2
X	drmprd	PipeCulvertSD	Pipe Culvert Side Drain	12	0	2
X	drmprd	PipeCulvertSS	Pipe Culvert Storm Sewer	9	0	2
X	drmprd	PlotBorder_dp	Plot Border	3	0	0
	drmprd	PointLocator_ep	Point Locator Symbol	4	0	0

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
X	drmprd	Pond_px	Pond Lines on Cross Sections	2	0	2
X	drmprd	PondSideSlope	Pond Side Slope	0	0	2
X	drmprd	PropertyLine_ep	Property Lines	3	0	0
	drmprd	ReferencePt_dp	Survey and Construction Reference Point Details and Elements	4	0	2
X	drmprd	RetentionArea	Retention Area	2	0	2
X	drmprd	RipRap	Rip Rap, Rubble	4	0	2
X	drmprd	RockGravelStone	Rock, Gravel, Stone, Boulders, Etc.	1	0	2
X	drmprd	RWLine	Right of Way Lines	4	RW-Proposed	2
X	drmprd	RWLine_ep	Right of Way Lines (Existing)	3	RW-Existing	1
	drmprd	Scale_dp	Bar Scale, Scale Label Elements	0	0	2
	drmprd	Scratch1_dp	A scratch level for temporary or informational items	4	0	0
	drmprd	Scratch2_dp	A scratch level for temporary or informational items	5	0	0
	drmprd	ScratchEle_dp	Level for Draft Elements, Temporary Elements, Etc. Do Not Plot	3	0	0
	drmprd	ScratchEle2_dp	Level for Draft Elements, Temporary Elements, Etc. Do Not Plot	4	0	0
101	drmprd	SedimentBarrier	Synthetic Bales and Staked Silt Fences	10	SWP-HayBales	2
101	drmprd	SedimentBarrier	Synthetic Bales and Staked Silt Fences	10	SWP-SiltFence	2
X	drmprd	SedimentBasin	Sediment Basin Index 101	10	0	2
X	drmprd	SedimentBasin_ep	Sediment Basin Index 101 (Existing)	10	3 / DGN3	1
	drmprd	SheetBorder_dp	Sheet Border	1	0	4
	drmprd	SheetLines_dp	Sheet Lines	1	0	2
	drmprd	SheetLinesMisc1_dp	Sheet Lines	1	0	0
	drmprd	SheetLinesMisc2_dp	Sheet Lines	2	0	2
	drmprd	SheetLinesMisc3_dp	Sheet Lines	3	0	2
	drmprd	SheetLinesMisc4_dp	Sheet Lines	4	0	2
X	drmprd	SlideGate	Slide Gate	10	0	2
X	drmprd	Slopes	Slopes (Top, Bottom)	9	3 / DGN3	0
X	drmprd	SlopeStakes1	Slope Stakes 1	4	1 / DGN1	3
X	drmprd	SlopeStakes2	Slope Stakes 2	1	1 / DGN1	3
X	drmprd	SlottedDrainPipe	Slotted Drain Pipe	10	0	1
X	drmprd	SlottedStormSewer	Storm Sewer Slotted or Perforated	10	0	2
	drmprd	SpecialDetails	Special Details	6	0	1
	drmprd	SpecialDetails_px	Special Details_XS	6	0	1
X	drmprd	Spillway	Spillway/ Flume/ Slope Drain	10	0	2
	drmprd	StationTicL_dp	Station Tic Marks (Large) and Text	0	0	2
	drmprd	StationTicS_dp	Station Tic Marks (Small) and Text	0	0	2
X	drmprd	StormSewer	Storm Sewer (All Types), Drain Pipes and Spouts	10	0	2
	drmprd	SumBoxBorder_dp	Summary Boxes Borders	4	0	3
	drmprd	SumBoxLines_dp	Summary Boxes Lines and Miscellaneous Items	4	0	1
	drmprd	SumBoxLinesMin_dp	Summary Boxes Lines Minor Line and Miscellaneous Items	4	0	0
	drmprd	Tables_dp	Data Tables and All Autodesk Tables	0	0	1
X	drmprd	TerrainLine_ex	Existing Ground Line for Multiline	5	0	1
	drmprd	TextAlert	Text - An Alert Label to Highlight a Problem	3	0	2
	drmprd	TextBLStation	Text - B/L Station and Tics	0	0	2
	drmprd	TextConstEle	Text - Construction Element	0	0	1

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
	drmprd	TextCurveData	Text - Curve Data Note	0	0	2
	drmprd	TextDetails	Text - Detail Notes	4	0	2
	drmprd	TextElevLabel	Elevation Labels	4	0	0
	drmprd	TextLabel	Text - Label	0	0	2
	drmprd	TextLandscape	Text - Landscape Labels	0	0	1
	drmprd	TextMajor	Text - Major	0	0	5
	drmprd	TextMinor	Text - Minor	0	0	0
	drmprd	TextMisc	Text - Miscellaneous	0	0	1
	drmprd	TextNotes	Text - Notes	4	0	1
	drmprd	TextProfLabel	Text - Profile, Horizontal and Vertical Axis Labels	0	0	2
	drmprd	TextProjLabel	Text - Begin and End Project label with leader lines	1	0	2
	drmprd	TextPtLabel	Point Labels	4	0	0
	drmprd	TextShtNo	Text - Sheet Number	0	0	2
	drmprd	TextSurveyLabel	Survey Text Labels	0	0	0
	drmprd	TextTables	Text - KeysheetKey sheet Indexes and Table Data	4	0	2
	drmprd	TextTitle	Text - Title	0	0	3
	drmprd	TextXSElev	Text - Cross Section Elevations	2	0	1
X	drmprd	Trench	Storm Sewer Trench	10	0	2
X	drmprd	TurbidityBarrier1	Turbidity Barrier 1 (floating)	10	SWP-TurbidityBarrier-Type1	2
	drmprd	TurbidityBarrier1_ep	Turbidity Barrier (Floating) (Existing)	10	1 / DGN1	2
X	drmprd	TurbidityBarrier2	Turbidity Barrier 2 (staked)	10	SWP-TurbidityBarrier-Type2	2
	drmprd	TurbidityBarrier2_ep	Turbidity Barrier (Staked) (Existing)	10	1 / DGN1	2
X	drmprd	UnderDrain	Underdrains (All Types)	10	0	2
X	drmprd	UnderDrainOP	Underdrain Outlet Pipes	10	0	2
	drmprd	Viewport	Viewport (For AutoCAD Use)	3	0	0
	drmprd	Wetland	Wetland Boundary	2	RD-Wetland-Proposed	1
	drmprd	Xreference01_dp	Reference Files (For AutoCAD Use)	0	0	1
	drmprd	Xreference02_dp	Reference Files (For AutoCAD Use)	0	0	1
	drmprd	Xreference03_dp	Reference Files (For AutoCAD Use)	0	0	1
	drmprd	Xreference04_dp	Reference Files (For AutoCAD Use)	0	0	1
	drmprd	XSCell	GEOPAK Cross Section Cell/Block and Profile Cell/Block	8	0	1
X	drmprd	XSExtendGrdLine_ex	Extend Ground Lines for Cross Sections (Existing)	21	2 / DGN2	1
X	drmprd	XSGrdLine_ex	Ground Lines for Cross Sections (Existing)	2	2 / DGN2	1
X	drmprd	XSGrdLine_px	Roadway Ground Lines on Cross Sections	1	0	2
X	drmprd	YardDrain	Yard Drain	10	3 / DGN3	1

DRPRRD - Drainage Proposed

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
	drprrd	ActivePointCell_dp	Active Point Cell	4	0	10
	drprrd	AdhocPoint_dp	Adhoc Points Placed by SheetInfo	0	4 / 0	0
X	drprrd	ArtificialCovering	Artificial Coverings	10	0	2
X	drprrd	Berm	Berm (Top, Front, or Back)	10	0	2
	drprrd	BoundaryLineImp	Boundary Lines - Impervious	11	0	2
	drprrd	BoundaryLineP	Boundary Lines - Pervious	9	0	2
X	drprrd	BoxCulvert	Box Culvert	10	0	2
X	drprrd	BuildingRes1	Boundaries of Single Family Residential Buildings	1	0	2
X	drprrd	BuildingRes2	Boundaries of Multi-Family Residential Buildings	1	0	2
X	drprrd	Canal	Canal	7	0	1
X	drprrd	CatchBasin	Catch Basin	10	0	2
	drprrd	CLConst_dp	Center Line of Construction	0	0	2
	drprrd	ClipBorder_dp	CLIP Border and Civil 3D View Frame	3	0	0
	drprrd	ClipDrawingBound_dp	CLIP Drawing Boundary	3	3 / 0	0
	drprrd	COGO_dp	COGO Information	3	0	1
	drprrd	ConstLines	Construction Lines and References	1	0	0
	drprrd	ConstLines_pm	Construction Lines	4	0	0
X	drprrd	DesiltingPipes	DesiltingDe-silting Pipes	10	0	2
	drprrd	DimLines_dp	Dimension Lines, Corresponding Terminators, Equation Lines	0	0	1
X	drprrd	Ditch	Ditch Top	7	6 / DGN6	1
X	drprrd	DitchBot	Ditch Bottom	10	0	2
	drprrd	DitchProfLt_er	Ditch Profile Left (Existing)	8	3 / DGN3	1
	drprrd	DitchProfLt_pr	Ditch Profile Left	8	0	1
	drprrd	DitchProfMdn_er	Ditch Profile Median (Existing)	10	3 / DGN3	1
	drprrd	DitchProfMdn_pr	Ditch Profile Median	10	0	1
	drprrd	DitchProfRt_er	Ditch Profile Right (Existing)	9	3 / DGN3	1
	drprrd	DitchProfRt_pr	Ditch Profile Right	9	0	1
	drprrd	DrainAlert_px	Alert Symbology for Structural Elements on Cross Sections	3	0	2
	drprrd	DrainDivideArw	Drainage Divide Arrow	0	0	1
	drprrd	DrainDivides00	Drainage Divides	10	2 / DGN2	4
	drprrd	DrainDivides00_ep	Drainage Divides (Existing)	9	2 / DGN2	4
	drprrd	DrainDivides01	Drainage Divides	10	2 / DGN2	4
	drprrd	DrainDivides01_ep	Drainage Divides (Existing)	9	2 / DGN2	4
	drprrd	DrainDivides02	Drainage Divides	10	2 / DGN2	4
	drprrd	DrainDivides02_ep	Drainage Divides (Existing)	9	2 / DGN2	4
	drprrd	DrainDivides03	Drainage Divides	10	2 / DGN2	4
	drprrd	DrainDivides03_ep	Drainage Divides (Existing)	9	2 / DGN2	4
	drprrd	DrainDivides04	Drainage Divides	10	2 / DGN2	4
	drprrd	DrainDivides04_ep	Drainage Divides (Existing)	9	2 / DGN2	4
	drprrd	DrainDivides05	Drainage Divides	10	2 / DGN2	4
	drprrd	DrainDivides05_ep	Drainage Divides (Existing)	9	2 / DGN2	4
	drprrd	DrainDivides06	Drainage Divides	10	2 / DGN2	4
	drprrd	DrainDivides06_ep	Drainage Divides (Existing)	9	2 / DGN2	4

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
	drprrd	DrainDivides07	Drainage Divides	10	2 / DGN2	4
	drprrd	DrainDivides07_ep	Drainage Divides (Existing)	9	2 / DGN2	4
	drprrd	DrainDivides08	Drainage Divides	10	2 / DGN2	4
	drprrd	DrainDivides08_ep	Drainage Divides (Existing)	9	2 / DGN2	4
	drprrd	DrainDivides09	Drainage Divides	10	2 / DGN2	4
	drprrd	DrainDivides09_ep	Drainage Divides (Existing)	9	2 / DGN2	4
	drprrd	DrainMisc	Miscellaneous Drainage Items	10	0	2
X	drprrd	DrainStruct_pr	Drainage Structures (All Types)	10	0	2
X	drprrd	EaseLicLine	Easement License Agreement Line	5	6 / DGN6	0
X	drprrd	EasePerpLine	Easement Lines Perpetual	4	RW-PerpetualEasement	1
X	drprrd	EaseTempLine	Easement Lines Temporary	6	RW-TemporaryEasement	0
X	drprrd	EdgeDrain	Edge Drain, Material and Outlet Pipe	10	0	2
X	drprrd	Endwall	Endwall (All Types)	10	0	2
X	drprrd	Fence	Fence	6	RD-Fence	1
X	drprrd	FES	Flared End Sections	10	0	2
X	drprrd	FlapGate	Flap Gates	10	0	2
X	drprrd	FlowLine	Flow Line	10	0	2
	drprrd	FlowLine_pr	Flow Line (Roadway Profile View)	0	0	2
X	drprrd	FlowPaths	Time of Concentration Flow Paths	10	1 / DGN1	1
X	drprrd	FrenchDrain	French Drain	10	0	2
X	drprrd	Gabions	Gabion Baskets or Mats	10	0	2
X	drprrd	Gabions_ep	Gabion Baskets or Mats (Existing)	10	1 / DGN1	2
X	drprrd	GovTwpRgeLine_ep	Township / Range Lines	10	RW-TownshipRange	2
	drprrd	GPKDrBack_dp	Back Point on Drainage Cells	2	2 / 0	2
	drprrd	GPKDrBottom_dp	Bottom Point on Drainage Cells	3	3 / 0	2
	drprrd	GPKDrCellIns_dp	Cell Insertion Point on Drainage Cells	4	4 / 0	2
	drprrd	GPKDrCentroid_dp	Point on Centroid for Drainage	7	7 / 0	2
	drprrd	GPKDrElv	Location point for drainage cells	5	5 / 0	2
	drprrd	GPKDrFront_dp	Front Point on Drainage Cells	1	1 / 0	2
	drprrd	GPKDrPipe_dp	Point on Drainage Pipe	6	6 / 0	2
	drprrd	GPKDrPipeCir_dp	Point on Pipe Circular	6	6 / 0	0
	drprrd	GradeLine_er	Grade Line Profile (Existing)	2	2 / DGN2	1
	drprrd	GradeLine_pr	Grade Line Profile	5	0	2
	drprrd	GradeLineCtr_dp	Grade Line Profile Center (shown in plan view)	5	0	0
	drprrd	GradeLineCtr_pr	Grade Line Profile Center	5	0	2
	drprrd	GradeLineLt_dp	Grade Line Profile Left (shown in plan view)	1	0	0
	drprrd	GradeLineLt_er	Grade Line Profile Left (Existing)	1	2 / DGN2	1
	drprrd	GradeLineLt_pr	Grade Line Profile Left	1	0	2
	drprrd	GradeLineRt_dp	Grade Line Profile Right (shown in plan view)	4	0	0
	drprrd	GradeLineRt_er	Grade Line Profile Right (Existing)	4	2 / DGN2	1
	drprrd	GradeLineRt_pr	Grade Line Profile Right	4	0	2
	drprrd	GradeSecPat	Grade Section Patterns	0	0	0
	drprrd	ImageAttachment_dp	Image AttachmentstAttachments	0	0	0
X	drprrd	InletBottomJ	Inlet Bottom Type J	10	0	1
X	drprrd	InletBottomP	Inlet Bottom Type P	10	0	1

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
X	drprrd	InletClosedFlume	Closed Flume Inlet	10	0	2
X	drprrd	InletCurb	Curb Inlet (All Types)	10	0	2
X	drprrd	InletDBI	Ditch Bottom Inlet (All Types)	10	0	2
X	drprrd	InletGutter	Gutter Inlet (All Types)	10	0	2
X	drprrd	InletMedian	Median Barrier Inlet	10	0	2
X	drprrd	InletProt	Rock Bags and Sand Bagging	10	SWP-RockBags	2
X	drprrd	LARWLine	Limited Access Right of Way	4	RW-LimitedAccess-Proposed	2
X	drprrd	LARWLine_ep	Limited Access Right of Way (Existing)	4	RW-LimitedAccess-Existing	1
	drprrd	LeaderLine_dp	Leader Line and terminator with Text	0	0	1
X	drprrd	Manhole	Manhole (Drainage and Unknown)	10	0	2
X	drprrd	MES	Mitered End Section	10	0	2
	drprrd	Miscellaneous0	Undefined proposed item - co blue wt 0	1	0	0
	drprrd	Miscellaneous1	Undefined proposed item - co blue wt 1	1	0	1
	drprrd	Miscellaneous2	Undefined proposed item - co blue wt 2	1	0	2
	drprrd	Miscellaneous3	Undefined proposed item - co green wt 0	2	0	0
	drprrd	Miscellaneous4	Undefined proposed item - co green wt 1	2	0	1
	drprrd	Miscellaneous5	Undefined proposed item - co green wt 2	2	0	2
	drprrd	Miscellaneous6	Undefined proposed item - co red wt 0	3	0	0
	drprrd	Miscellaneous7	Undefined proposed item - co red wt 1	3	0	1
	drprrd	Miscellaneous8	Undefined proposed item - co red wt 2	3	0	2
	drprrd	Miscellaneous9	Undefined proposed item - co red wt 3	3	0	3
	drprrd	NonPlottingEle_dp	Non plotting items (construction elements and type 66 elements)	4	0	0
	drprrd	NorthArw_dp	North Arrows	0	0	2
	drprrd	PayItem_dp	Pay Item Number Label Elements	4	0	2
	drprrd	Permit1	Permit 1 Wetlands, Mitigation Sites, Planting Areas	1	0	1
	drprrd	Permit2	Permit 2 Wetlands, Mitigation Sites, Planting Areas	2	0	1
	drprrd	Permit3	Permit 3 Wetlands, Mitigation Sites, Planting Areas	4	0	1
	drprrd	PipeCulvert_ep	Pipe Culvert	10	3 / DGN3	1
X	drprrd	PipeCulvert_pr	Pipe Culvert in Profile	3	0	2
X	drprrd	PipeCulvert_px	Pipe Culvert for Cross Section View	10	0	2
X	drprrd	PipeCulvertCD	Pipe Culvert Cross Drain	10	0	2
X	drprrd	PipeCulvertGD	Pipe Culvert Gutter Drain	11	0	2
X	drprrd	PipeCulvertSD	Pipe Culvert Side Drain	12	0	2
X	drprrd	PipeCulvertSS	Pipe Culvert Storm Sewer	9	0	2
	drprrd	PointLocator_ep	Point Locator Symbol	4	0	0
X	drprrd	PondSideSlope	Pond Side Slope	0	0	2
X	drprrd	PropertyLine_ep	Property Lines	3	0	0
	drprrd	ReferencePt_dp	Survey and Construction Reference Point Details and Elements	4	0	2
X	drprrd	RetentionArea	Retention Area	2	0	2
X	drprrd	RipRap	Rip Rap, Rubble	4	0	2
X	drprrd	RockGravelStone	Rock, Gravel, Stone, Boulders, Etc.	1	0	2
X	drprrd	RWLine	Right of Way Lines	4	RW-Proposed	2
X	drprrd	RWLine_ep	Right of Way Lines (Existing)	3	RW-Existing	1
	drprrd	Scale_dp	Bar Scale, Scale Label Elements	0	0	2
	drprrd	Scratch1_dp	A scratch level for temporary or informational items	4	0	0

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
	drprrd	Scratch2_dp	A scratch level for temporary or informational items	5	0	0
	drprrd	ScratchEle_dp	Level for Draft Elements, Temporary Elements, Etc. Do Not Plot	3	0	0
	drprrd	ScratchEle2_dp	Level for Draft Elements, Temporary Elements, Etc. Do Not Plot	4	0	0
101	drprrd	SedimentBarrier	Synthetic Bales and Staked Silt Fences	10	SWP-HayBales	2
101	drprrd	SedimentBarrier	Synthetic Bales and Staked Silt Fences	10	SWP-SiltFence	2
X	drprrd	SedimentBasin	Sediment Basin Index 101	10	0	2
X	drprrd	SedimentBasin_ep	Sediment Basin Index 101 (Existing)	10	3 / DGN3	1
X	drprrd	SlideGate	Slide Gate	10	0	2
X	drprrd	Slopes	Slopes (Top, Bottom)	9	3 / DGN3	0
	drprrd	Slopes_ep	Natural Slopes, Levees, Dikes, Dams, Embankment (Top or Bottom)	9	3 / DGN3	0
X	drprrd	SlopeStakes1	Slope Stakes 1	4	1 / DGN1	3
X	drprrd	SlopeStakes2	Slope Stakes 2	1	1 / DGN1	3
X	drprrd	SlottedDrainPipe	Slotted Drain Pipe	10	0	1
X	drprrd	SlottedStormSewer	Storm Sewer Slotted or Perforated	10	0	2
X	drprrd	Spillway	Spillway/ Flume/ Slope Drain	10	0	2
	drprrd	StationTicL_dp	Station Tic Marks (Large) and Text	0	0	2
	drprrd	StationTicS_dp	Station Tic Marks (Small) and Text	0	0	2
X	drprrd	StormSewer	Storm Sewer (All Types), Drain Pipes and Spouts	10	0	2
	drprrd	Tables_dp	Data Tables and All Autodesk Tables	0	0	1
	drprrd	TextAlert	Text - An Alert Label to Highlight a Problem	3	0	2
	drprrd	TextBLStation	Text - B/L Station and Tics	0	0	2
	drprrd	TextConstEle	Text - Construction Element	0	0	1
	drprrd	TextCurveData	Text - Curve Data Note	0	0	2
	drprrd	TextDetails	Text - Detail Notes	4	0	2
	drprrd	TextElevLabel	Elevation Labels	4	0	0
	drprrd	TextLabel	Text - Label	0	0	2
	drprrd	TextLandscape	Text - Landscape Labels	0	0	1
	drprrd	TextMajor	Text - Major	0	0	5
	drprrd	TextMinor	Text - Minor	0	0	0
	drprrd	TextMisc	Text - Miscellaneous	0	0	1
	drprrd	TextNotes	Text - Notes	4	0	1
	drprrd	TextProfLabel	Text - Profile, Horizontal and Vertical Axis Labels	0	0	2
	drprrd	TextProjLabel	Text - Begin and End Project label with leader lines	1	0	2
	drprrd	TextPtLabel	Point Labels	4	0	0
	drprrd	TextShtNo	Text - Sheet Number	0	0	2
	drprrd	TextSurveyLabel	Survey Text Labels	0	0	0
	drprrd	TextTables	Text - KeysheetKey sheet Indexes and Table Data	4	0	2
	drprrd	TextTitle	Text - Title	0	0	3
	drprrd	TextXSElev	Text - Cross Section Elevations	2	0	1
X	drprrd	Trench	Storm Sewer Trench	10	0	2
X	drprrd	TurbidityBarrier1	Turbidity Barrier 1 (floating)	10	SWP-TurbidityBarrier-Type1	2
	drprrd	TurbidityBarrier1_ep	Turbidity Barrier (Floating) (Existing)	10	1 / DGN1	2
X	drprrd	TurbidityBarrier2	Turbidity Barrier 2 (staked)	10	SWP-TurbidityBarrier-Type2	2
	drprrd	TurbidityBarrier2_ep	Turbidity Barrier (Staked) (Existing)	10	1 / DGN1	2
X	drprrd	UnderDrain	Underdrains (All Types)	10	0	2

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
X	drprrd	UnderDrainOP	Underdrain Outlet Pipes	10	0	2
	drprrd	Viewport	Viewport (For AutoCAD Use)	3	0	0
	drprrd	Wetland	Wetland Boundary	2	RD-Wetland-Proposed	1
	drprrd	Xreference01_dp	Reference Files (For AutoCAD Use)	0	0	1
	drprrd	Xreference02_dp	Reference Files (For AutoCAD Use)	0	0	1
	drprrd	Xreference03_dp	Reference Files (For AutoCAD Use)	0	0	1
	drprrd	Xreference04_dp	Reference Files (For AutoCAD Use)	0	0	1
	drprrd	XSCell	GEOPAK Cross Section Cell/Block and Profile Cell/Block	8	0	1
X	drprrd	YardDrain	Yard Drain	10	3 / DGN3	1

DRXSRD - Drainage Cross Section

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
	drxsrd	ActivePointCell_dp	Active Point Cell	4	0	10
	drxsrd	AdhocPoint_dp	Adhoc Points Placed by SheetInfo	0	4 / 0	0
	drxsrd	BaselineSurvey	Baseline Survey	0	0	2
X	drxsrd	Berm_px	Berm (Top, Front, or Back) for Cross Sections	10	0	2
X	drxsrd	Bridge_px	Bridge Component for Cross Sections - Component Property	0	0	2
X	drxsrd	CandG_ex	Curb and Gutter for Cross Sections (All Types) (Existing)	4	2 / DGN2	1
X	drxsrd	CandG_px	Curb and Gutter for Cross Sections (All Types)	4	0	2
X	drxsrd	CandGBase_px	Curb and Gutter Base on Cross Sections	3	0	1
X	drxsrd	CATVBur_ex	Cable TV and Miscellaneous on Cross Sections (Existing)	6	2 / DGN2	1
X	drxsrd	CATVBur_px	Cable TV and Miscellaneous on Cross Sections	6	0	1
	drxsrd	CLConst_dp	Center Line of Construction	0	0	2
	drxsrd	Cloud_dp	Construction Cloud	7	0	2
	drxsrd	COGO_dp	COGO Information	3	0	1
X	drxsrd	Concrete_px	Concrete Boundary Lines on Cross Sections	0	0	2
X	drxsrd	Conduit_ex	Conduit and Encasements on Cross Sections (Existing)	3	2 / DGN2	1
X	drxsrd	Conduit_px	Conduit and Encasements on Cross Sections	3	0	1
	drxsrd	ConstArea_dp	Construction Area Crosshatch	0	0	1
	drxsrd	ConstLimits	Construction Limits	3	RW-LimitsofConst	2
	drxsrd	ConstLines	Construction Lines and References	1	0	0
	drxsrd	ConstLines_pm	Construction Lines	4	0	0
	drxsrd	CurveData_dp	Curve & Coordinate Data Elements incl. PC, PT, PI symbols	4	0	2
	drxsrd	CurveDataLabel_dp	Curve Data Labels PC,PI, PT	0	0	2
	drxsrd	DimLines_dp	Dimension Lines, Corresponding Terminators, Equation Lines	0	0	1
X	drxsrd	Ditch_px	Ditch Top for Cross Sections	7	0	2
X	drxsrd	DitchBot_px	Ditch Bottom for Cross Sections	10	0	2
X	drxsrd	DitchPavt_px	Ditch Pavement for Cross Sections	3	0	3
	drxsrd	DrainAlert_px	Alert Symbology for Structural Elements on Cross Sections	3	0	2
	drxsrd	DrainMisc_ex	All types of miscellaneous drainage elements (Existing)	10	3 / DGN3	1
X	drxsrd	DrainStruct_ex	All Drainage Structures for Cross Sections (Existing)	10	3 / DGN3	1

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
X	drxsrd	DrainStruct_px	Misc Drainage Structures and Elements for XSectionsCross Sections	10	0	2
X	drxsrd	Driveway_ex	Driveway Lines on Cross Sections - Existing	7	2 / DGN2	2
X	drxsrd	Driveway_px	Driveway Lines on Cross Sections	7	0	2
X	drxsrd	DrivewayBase_px	Proposed Driveway Sub-grade	3	0	2
	drxsrd	Earthwork1_px	Earthwork (color 0)	0	0	1
	drxsrd	Earthwork2_px	Earthwork (color 1)	1	0	1
	drxsrd	Earthwork3_px	Earthwork (color 2)	2	0	1
	drxsrd	Earthwork4_px	Earthwork (color 3)	3	0	1
	drxsrd	Earthwork5_px	Earthwork (color 4)	4	0	1
X	drxsrd	EaseLicLine	Easement License Agreement Line	5	6 / DGN6	0
X	drxsrd	EaseLine_ep	Easement Lines (Existing)	1	RW-Easement	1
X	drxsrd	EasePerpLine_px	Easement Lines Perpetual on Cross Sections	4	RW-PerpetualEasement	12
X	drxsrd	EaseTempLine_px	Easement Lines Temporary on Cross Sections	6	RW-TemporaryEasement	0
X	drxsrd	Endwall_px	Endwall for Cross Sections	10	0	2
	drxsrd	ExcavationLimits_dp	Excavation Limits on Cross Sections	0	0	1
	drxsrd	Fence_ex	Fence Lines on Cross Sections (Existing)	6	3 / DGN3	1
X	drxsrd	Fence_px	Fence Lines on Cross Sections	6	RD-Fence	2
X	drxsrd	FES_px	Flared End Sections for Cross Sections	10	0	2
X	drxsrd	FOCBur_ex	Fiber Optics Cable (Buried) for XSectionsCross Sections (Existing)	6	2 / DGN2	1
X	drxsrd	FOCBur_px	Fiber Optics Cable (Buried) for XSectionsCross Sections	6	0	1
X	drxsrd	Gas_ex	Gas Pipe and Fittings, Misc for Xsections Cross Sections (Existing)	4	2 / DGN2	1
X	drxsrd	Gas_px	Gas Pipe and Fittings, Misc for XsectionsCross Sections	4	0	1
	drxsrd	GeotechFillPatt1	Geotechnical Fill Pattern - (earth, wood, muck, concrete, rock, riprap) as defined in project	3	0	0
	drxsrd	GeotechFillPatt1_px	Geotechnical Fill Pattern - (earth, wood, muck, concrete, rock, riprap) as defined in project	3	0	0
	drxsrd	GeotechFillPatt2	Geotechnical Fill Pattern - clay, sand	0	1 / DGN1	0
	drxsrd	GeotechFillPatt2_px	Geotechnical Fill Pattern - clay, sand	0	1 / DGN1	0
	drxsrd	GeotechFillPatt3	Geotechnical Fill Pattern - shell	3	1 / DGN1	0
	drxsrd	GeotechFillPatt3_px	Geotechnical Fill Pattern - shell	3	1 / DGN1	0
	drxsrd	GeotechFillPatt4	Geotechnical Fill Pattern - sand	4	0	0
	drxsrd	GeotechFillPatt4_px	Geotechnical Fill Pattern - sand	4	0	0
	drxsrd	GeotechFillPatt5	Geotechnical Fill Pattern - coquina	1	0	1
	drxsrd	GeotechFillPatt5_px	Geotechnical Fill Pattern - coquina	1	0	1
	drxsrd	GeotechFillPatt6	Geotechnical Fill Pattern - limestone	2	0	0
	drxsrd	GeotechFillPatt6_px	Geotechnical Fill Pattern - limestone	2	0	0
	drxsrd	GeotechFillPatt7	Geotechnical Fill Pattern - gravel	6	0	0
	drxsrd	GeotechFillPatt7_px	Geotechnical Fill Pattern - gravel	6	0	0
	drxsrd	GeotechFillPatt8	Geotechnical Fill Pattern - silt	0	0	1
	drxsrd	GeotechFillPatt8_px	Geotechnical Fill Pattern - silt	0	0	1
	drxsrd	GeotechMisc	Miscellaneous Geotechnical Elements	0	0	1
	drxsrd	GPKDrBack_dp	Back Point on Drainage Cells	2	2 / 0	2
	drxsrd	GPKDrBottom_dp	Bottom Point on Drainage Cells	3	3 / 0	2
	drxsrd	GPKDrCellIns_dp	Cell Insertion Point on Drainage Cells	4	4 / 0	2
	drxsrd	GPKDrCentroid_dp	Point on Centroid for Drainage	7	7 / 0	2

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
	drxsrd	GPKDrElv	Location point for drainage cells	5	5 / 0	2
	drxsrd	GPKDrFront_dp	Front Point on Drainage Cells	1	1 / 0	2
	drxsrd	GPKDrPipe_dp	Point on Drainage Pipe	6	6 / 0	2
	drxsrd	GPKDrPipeCir_dp	Point on Pipe Circular	6	6 / 0	0
	drxsrd	GridMaj_dp	Grid Lines Major in Profile and Cross Section	3	0	1
	drxsrd	GridMin_dp	Grid Lines Minor in Profile and Cross Section	0	0	0
	drxsrd	GridMinG_dp	Grid Lines Minor Sub 2 in Cross Section Sheets	20	0	0
	drxsrd	GridMinSub_dp	Grid Lines Minor Sub in Cross Section Sheets	20	0	0
X	drxsrd	Guardrail_ex	Guardrail Lines on Cross Sections - Existing	0	2 / DGN2	2
X	drxsrd	GuardrailPanel_px	Guardrail Component Property and Model Break Line for 3D Guardrail Panels	11	0	1
X	drxsrd	GuardrailPost_px	Guardrail Component Property and Model Break Line for 3D Guardrail Posts	10	0	0
	drxsrd	ImageAttachment_dp	Image AttachmentstAttachments	0	0	0
X	drxsrd	Inlet_px	Inlets on Cross Sections	10	0	2
X	drxsrd	InletBottom_px	Inlet Bottom on Cross Sections (All Types)	10	0	2
	drxsrd	KeyShtMisc	Key sheet Miscellaneous Items	0	0	2
X	drxsrd	LARWLine_ex	Limited Access Right of Way on Cross Sections (Existing)	4	RW-LimitedAccess-Existing	1
X	drxsrd	LARWLine_px	Limited Access ROW Lines on Cross Sections	4	RW-LimitedAccess-Proposed	2
X	drxsrd	LateralLimits_px	Lateral Limits for Cross Sections	6	0	2
	drxsrd	LeaderLine_dp	Leader Line and terminator with Text	0	0	1
	drxsrd	Logo_dp	Consultant Engineer of Record Logo	0	0	1
X	drxsrd	Manhole_px	Manhole on Cross Sections	10	0	2
X	drxsrd	MES_px	Mitered End Section on Cross Sections	10	0	2
	drxsrd	Miscellaneous0	Undefined proposed item - co blue wt 0	1	0	0
	drxsrd	Miscellaneous1	Undefined proposed item - co blue wt 1	1	0	1
	drxsrd	Miscellaneous2	Undefined proposed item - co blue wt 2	1	0	2
	drxsrd	Miscellaneous3	Undefined proposed item - co green wt 0	2	0	0
	drxsrd	Miscellaneous4	Undefined proposed item - co green wt 1	2	0	1
	drxsrd	Miscellaneous5	Undefined proposed item - co green wt 2	2	0	2
	drxsrd	Miscellaneous6	Undefined proposed item - co red wt 0	3	0	0
	drxsrd	Miscellaneous7	Undefined proposed item - co red wt 1	3	0	1
	drxsrd	Miscellaneous8	Undefined proposed item - co red wt 2	3	0	2
	drxsrd	Miscellaneous9	Undefined proposed item - co red wt 3	3	0	3
	drxsrd	NonPlottingEle_dp	Non plotting items such as construction elements and type 66 elements	4	0	0
	drxsrd	Patternlines_ep	Cross Section Chain	2	1 / DGN1	0
	drxsrd	PatternLines1_dp	Pattern Lines and Sample Lines (Civil 3D) for Cross Sections	3	0	2
	drxsrd	PatternLines2_dp	Pattern Lines for XSectionsCross Sections alternate for side streets, critical Cross Sections or drainage structures	4	0	2
	drxsrd	PatternLines3_dp	Pattern Lines for XSectionsCross Sections alternate for side streets, critical Cross Sections or drainage structures	5	0	2
X	drxsrd	PavedMedianBase_px	Proposed Paved Median SubgradeSub-grade	3	0	2
	drxsrd	PavtAsph_ep	Asphalt Pavement Edge	0	3 / DGN3	1
X	drxsrd	PavtAsphalt_px	Asphalt Pavement for Cross Sections and Components in Models	1	0	2
X	drxsrd	PavtBase_ex	Base Material for Cross Sections (All Types) (Existing)	3	3 / DGN3	1
X	drxsrd	PavtBase_px	Base Material for Cross Sections (All Types)	3	0	2
X	drxsrd	PavtConcrete_px	Concrete Pavement for Cross Sections and Components in Models	0	0	2

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
X	drxsrd	PavtMilling_px	Asphalt Milling Lines on Cross Sections	7	0	2
X	drxsrd	PavtMisc_px	Miscellaneous Pavement on Cross Sections	1	0	2
X	drxsrd	PavtOverbuild_px	Pavement Overbuild Areas on Cross Sections - Component Property	4	0	2
X	drxsrd	PavtOverlay_px	Pavement Overlay for Cross Sections - Component Property	1	0	2
X	drxsrd	PavtOverlay1_px	Pavement Overlay for Cross Sections - Component Property	14	0	2
X	drxsrd	PavtOverlay2_px	Pavement Overlay for Cross Sections - Component Property	7	0	2
X	drxsrd	PavtStabilization_px	Stabilization for Cross Sections	5	2 / DGN2	2
	drxsrd	PayItem_dp	Pay Item Number Label Elements	4	0	2
	drxsrd	PipeCulvert_ep	Pipe Culvert	10	3 / DGN3	1
X	drxsrd	PipeCulvert_pr	Pipe Culvert in Profile	3	0	2
X	drxsrd	PipeCulvert_px	Pipe Culvert for Cross Section View	10	0	2
X	drxsrd	PlotBorder_dp	Plot Border	3	0	0
	drxsrd	PointLocator_ep	Point Locator Symbol	4	0	0
X	drxsrd	Pond_px	Pond Lines on Cross Sections	2	0	2
X	drxsrd	Power_ex	Power on Cross Sections (Existing)	3	2 / DGN2	1
X	drxsrd	Power_px	Power on Cross Sections	3	0	1
X	drxsrd	PropertyLine_ep	Property Lines	3	0	0
X	drxsrd	PvtAnalysisCrown_px	Pavement Analysis Crowning - Component Property	7	0	1
X	drxsrd	PvtAnalysisFail_px	Pavement Analysis Failure - Component Property	3	0	1
X	drxsrd	PvtAnalysisMax_px	Pavement Analysis Acceptable Maximum Range - Component Property	5	0	1
X	drxsrd	PvtAnalysisMin_px	Pavement Analysis Acceptable Minimum Range - Component Property	4	0	1
X	drxsrd	PvtAnalysisOptiml_px	Pavement Analysis Optimal - Component Property	2	0	1
X	drxsrd	Railing_px	Proposed Railing Components and XS Shapes	9	0	2
	drxsrd	ReferencePt_dp	Survey and Construction Reference Point Details and Elements	4	0	2
	drxsrd	RegionBdry_dp	Boundary Line for Regions in Corridor Design (Autodesk)	0	0	0
X	drxsrd	RipRap_px	Rip Rap, Rubble on Cross Sections	4	1 / DGN1	2
X	drxsrd	RumbleStrip1	Rumble Strips Continuous Array	0	PM-RumbleSolid	2
X	drxsrd	RumbleStrip2	Rumble Strips Skip Array	0	PM-RumbleSkip	2
X	drxsrd	RWLine	Right of Way Lines	4	RW-Proposed	2
X	drxsrd	RWLine_ep	Right of Way Lines (Existing)	3	RW-Existing	1
X	drxsrd	RWLine_ex	ROW Lines on Cross Sections (Existing)	3	RW-Existing	1
X	drxsrd	RWLine_px	ROW Lines on Cross Sections	4	RW-Proposed	2
X	drxsrd	SanitaryFM_ex	Force Main Lines on Cross Sections (Existing)	2	2 / DGN2	1
X	drxsrd	SanitaryFM_px	Force Main Lines on Cross Sections	2	0	1
X	drxsrd	SanitarySewer_ex	Sanitary Sewer Lines on Cross Sections (Existing)	10	2 / DGN2	0
X	drxsrd	SanitarySewer_px	Sanitary Sewer Lines on Cross Sections	2	0	1
X	drxsrd	SanitarySewerEff_px	Sanitary Effluent for Cross Sections	9	0	0
	drxsrd	Scratch1_dp	A scratch level for temporary or informational items	4	0	0
	drxsrd	Scratch2_dp	A scratch level for temporary or informational items	5	0	0
	drxsrd	ScratchEle_dp	Level for Draft Elements, Temporary Elements, Etc. Do Not Plot	3	0	0
	drxsrd	ScratchEle2_dp	Level for Draft Elements, Temporary Elements, Etc. Do Not Plot	4	0	0
	drxsrd	SheetBorder_dp	Sheet Border	1	0	4
	drxsrd	SheetLines_dp	Sheet Lines	1	0	2
	drxsrd	SheetLinesMisc1_dp	Sheet Lines	1	0	0
	drxsrd	SheetLinesMisc2_dp	Sheet Lines	2	0	2

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
	drxsrd	SheetLinesMisc3_dp	Sheet Lines	3	0	2
	drxsrd	SheetLinesMisc4_dp	Sheet Lines	4	0	2
X	drxsrd	ShldrBase_px	Bottom of Proposed Paved Shoulder Base	3	0	2
X	drxsrd	ShldrBaseTop_px	Top of Proposed Paved Shoulder Base	3	0	2
X	drxsrd	ShldrMilling_px	Shoulder Milling Component for Cross Sections - Component Property	7	0	2
X	drxsrd	ShldrOverbuild_px	Shoulder Overbuild - Component Property	4	0	1
X	drxsrd	ShldrOverlay_px	Shoulder Overlay - Component Property	1	0	1
X	drxsrd	ShldrPaved_px	Paved Shoulder Lines on Cross Sections	1	0	2
X	drxsrd	ShldrUnpaved_px	Grass Shoulder Lines on Cross Sections	2	0	2
X	drxsrd	Sidewalk_ex	Sidewalk Elements in Cross Sections (Existing)	0	2 / DGN2	1
X	drxsrd	Sidewalk_px	Sidewalk Elements in Cross Sections	0	0	2
	drxsrd	SidewalkBack_er	Back of Sidewalk Line Profile (Existing)	2	2 / DGN2	1
	drxsrd	SidewalkBack_pr	Back of Sidewalk Line Profile	5	0	2
X	drxsrd	SidewalkBase_px	Proposed Sidewalk SubgradeSub-grade	3	0	2
X	drxsrd	Slopes_px	Slope Lines on Cross Sections	9	0	2
X	drxsrd	SoilBoxes_px	Soil Boxes and Borings for Cross Sections	4	0	1
	drxsrd	SpecialDetails_px	Special Details_XS	6	0	1
	drxsrd	StationTicL_dp	Station Tic Marks (Large) and Text	0	0	2
	drxsrd	StationTicS_dp	Station Tic Marks (Small) and Text	0	0	2
X	drxsrd	StreetLights_px	Street Lights for Cross Sections	3	0	1
	drxsrd	Structure_px	Signal and Sign Structures on Cross Sections	0	0	2
X	drxsrd	SubDsgn_px	Sub Design for Cross Sections including sub base	4	0	1
X	drxsrd	Subsoil_px	Subsoil Or Undercut for Cross Sections	4	0	2
X	drxsrd	SubsoilFinal_px	Subsoil Final for Multiline	18	0	1
X	drxsrd	SubsoilProp_px	Subsoil Proposed for Multiline	8	0	1
	drxsrd	SumBoxBorder_dp	Summary Boxes Borders	4	0	3
	drxsrd	SumBoxLines_dp	Summary Boxes Lines and Miscellaneous Items	4	0	1
	drxsrd	SumBoxLinesMin_dp	Summary Boxes Lines Minor Line and Miscellaneous Items	4	0	0
	drxsrd	Tables_dp	Data Tables and All Autodesk Tables	0	0	1
X	drxsrd	TeleBur_ex	Telephone for Cross Sections (Buried - Miscellaneous - Existing)	6	2 / DGN2	1
X	drxsrd	TeleBur_px	Telephone for Cross Sections (Buried) (Miscellaneous)	6	0	1
X	drxsrd	TemplateBottom_px	Bottom of Template for Multiline	6	0	1
X	drxsrd	TemplateFinal_px	Final Template for Multiline	2	0	1
X	drxsrd	TemplateTop_px	Top of Template for Multiline	7	0	1
X	drxsrd	TerrainLine_ex	Existing Ground Line for Multiline	5	0	1
	drxsrd	TextAlert	Text - An Alert Label to Highlight a Problem	3	0	2
	drxsrd	TextBLStation	Text - B/L Station and Tics	0	0	2
	drxsrd	TextConstEle	Text - Construction Element	0	0	1
	drxsrd	TextCurveData	Text - Curve Data Note	0	0	2
	drxsrd	TextDetails	Text - Detail Notes	4	0	2
	drxsrd	TextElevLabel	Elevation Labels	4	0	0
	drxsrd	TextGeotech	Text for soil borings and labels	0	0	2
	drxsrd	TextLabel	Text - Label	0	0	2
	drxsrd	TextLandscape	Text - Landscape Labels	0	0	1
	drxsrd	TextMajor	Text - Major	0	0	5

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
	drxsrd	TextMinor	Text - Minor	0	0	0
	drxsrd	TextMisc	Text - Miscellaneous	0	0	1
	drxsrd	TextNotes	Text - Notes	4	0	1
	drxsrd	TextProfLabel	Text - Profile, Horizontal and Vertical Axis Labels	0	0	2
	drxsrd	TextPtLabel	Point Labels	4	0	0
	drxsrd	TextShtNo	Text - Sheet Number	0	0	2
	drxsrd	TextSurveyLabel	Survey Text Labels	0	0	0
	drxsrd	TextTables	Text - KeysheetKey sheet Indexes and Table Data	4	0	2
	drxsrd	TextTitle	Text - Title	0	0	3
	drxsrd	TextXSBL_dp	Cross Section Baseline Labels	0	0	2
	drxsrd	TextXSDrain_ex	Existing Drainage Labels	10	0	2
	drxsrd	TextXSDrain_px	Proposed Drainage Labels	10	0	2
	drxsrd	TextXSElev	Text - Cross Section Elevations	2	0	1
	drxsrd	TextXSElev_ex	Existing cross section elevations	2	0	1
	drxsrd	TextXSElev_px	Proposed cross section elevations	0	0	1
	drxsrd	TextXSGPKPts_dp	Points Labeled on Cross Sections	4	0	0
	drxsrd	TextXSNotes_dp	Cross Section Notes	0	0	2
	drxsrd	TextXSSlope_dp	Cross Section Slope Labels (rise:run format)	0	0	2
	drxsrd	TextXSSlopePvt_dp	Cross Section Pavement Slope Labels	0	0	2
X	drxsrd	TrafSeparator_ex	Traffic Separator (All Types) on Cross Sections (Existing)	6	2 / DGN2	1
X	drxsrd	TrafSeparator_px	Traffic Separator (All Types) on Cross Sections	6	0	2
X	drxsrd	TrafSeparatorBase_px	Proposed Traffic Separator SubgradeSub-grade	3	0	2
	drxsrd	TypicalMisc	Typical Miscellaneous Items	0	0	2
	drxsrd	Utility_er	Existing Utilities in Profile View	3	2 / DGN2	1
	drxsrd	Utility_pr	Proposed Utilities in Profile View	3	0	2
	drxsrd	UtilsMisc_ex	Miscellaneous Utility Items on Cross Sections (Existing)	8	2 / DGN2	1
	drxsrd	UtilsMisc_px	Miscellaneous Utility Items on Cross Sections	8	0	1
	drxsrd	Vehicle	Vehicle for Calculating Turning Radius	7	0	2
	drxsrd	Viewport	Viewport (For AutoCAD Use)	3	0	0
	drxsrd	VoidArea_dx	Void Area_XS	1	0	0
X	drxsrd	WallBarrier_ex	Barrier Wall for Cross Section (Existing)	6	3 / DGN3	1
X	drxsrd	WallBarrier_px	Barrier Wall for Cross Section	6	0	2
X	drxsrd	WallFooter_px	Wall Footer (Concrete) - For Component symbology/material on all wall footers/leveling pads	2	0	1
X	drxsrd	WallGravBase_px	Proposed Gravity Wall Sub-grade	3	0	2
X	drxsrd	WallGravity_px	Gravity Wall for Cross Sections	11	0	2
X	drxsrd	WallMedianBase_px	Proposed Median Wall Sub-grade	3	0	2
X	drxsrd	WallRetain_px	Retaining Walls on Cross Sections	6	0	1
X	drxsrd	WallShldrBase_px	Proposed Shoulder Wall Sub-grade	3	0	2
X	drxsrd	Water_ex	Water for Cross Sections (Existing)	1	2 / DGN2	1
X	drxsrd	Water_px	Water for Cross Sections	1	0	1
X	drxsrd	WaterNP_px	Raw Water Pipes for Cross Sections	1	0	1
	drxsrd	Wetland_ex	Wetland Boundary for Cross Sections (Existing)	2	RD-Wetland-Existing	1
	drxsrd	WetlandEdge_ep	Edge of Mangrove, Wetlands (Marsh or Swamp)	2	RD-Wetland-Existing	0
	drxsrd	Xreference01_dp	Reference Files (For AutoCAD Use)	0	0	1

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
	drxsrd	Xreference02_dp	Reference Files (For AutoCAD Use)	0	0	1
	drxsrd	Xreference03_dp	Reference Files (For AutoCAD Use)	0	0	1
	drxsrd	Xreference04_dp	Reference Files (For AutoCAD Use)	0	0	1
X	drxsrd	XSBaseTop_px	Top of Proposed Base	3	0	2
	drxsrd	XSCell	GEOPAK Cross Section Cell/Block and Profile Cell/Block	8	0	1
X	drxsrd	XSExtendGrdLine_ex	Extend Ground Lines for Cross Sections (Existing)	21	2 / DGN2	1
X	drxsrd	XSGrdLine_ex	Ground Lines for Cross Sections (Existing)	2	2 / DGN2	1
X	drxsrd	XSGrdLine_px	Roadway Ground Lines on Cross Sections	1	0	2
	drxsrd	XSMisc_ex	Roadway Miscellaneous Items on Cross Sections (Existing)	4	3 / DGN3	1
	drxsrd	XSMisc_px	Cross Section Miscellaneous Items	0	0	2
	drxsrd	XSPt_ep	Cross Section Point, Station	2	1 / DGN1	0
	drxsrd	XSShapeDep01_dp	Cross Section Shape Dependent	11	0	2
	drxsrd	XSShapeDep02_dp	Cross Section Shape Dependent	12	0	2
	drxsrd	XSShapeDep03_dp	Cross Section Shape Dependent	13	0	2
	drxsrd	XSShapeDep04_dp	Cross Section Shape Dependent	14	0	2
	drxsrd	XSShapeDep05_dp	Cross Section Shape Dependent	15	0	2
	drxsrd	XSShapeDep06_dp	Cross Section Shape Dependent	16	0	2
	drxsrd	XSShapeDep07_dp	Cross Section Shape Dependent	17	0	2
	drxsrd	XSShapeDep08_dp	Cross Section Shape Dependent	18	0	2
	drxsrd	XSShapeDep09_dp	Cross Section Shape Dependent	19	0	2
	drxsrd	XSShapeDep10_dp	Cross Section Shape Dependent	20	0	2
	drxsrd	XSShapeIndep01_dp	Cross Section Shape Independent	1	0	2
	drxsrd	XSShapeIndep02_dp	Cross Section Shape Independent	2	0	2
	drxsrd	XSShapeIndep03_dp	Cross Section Shape Independent	3	0	2
	drxsrd	XSShapeIndep04_dp	Cross Section Shape Independent	4	0	2
	drxsrd	XSShapeIndep05_dp	Cross Section Shape Independent	5	0	2
	drxsrd	XSShapeIndep06_dp	Cross Section Shape Independent	6	0	2
	drxsrd	XSShapeIndep07_dp	Cross Section Shape Independent	7	0	2
	drxsrd	XSShapeIndep08_dp	Cross Section Shape Independent	8	0	2
	drxsrd	XSShapeIndep09_dp	Cross Section Shape Independent	9	0	2
	drxsrd	XSShapeIndep10_dp	Cross Section Shape Independent	10	0	2
X	drxsrd	XSTypical_px	Roadway Pavement Typical on Cross Sections	1	0	2

DSGNLD - Landscaping Design

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
	dsgnld	ActivePointCell_dp	Active Point Cell	4	0	10
	dsgnld	AdhocPoint_dp	Adhoc Points Placed by SheetInfo	0	4 / 0	0
	dsgnld	BillboardDim	Billboard Dimension	0	0	2
	dsgnld	BillboardHt	Billboard Height	0	0	2
	dsgnld	BillboardLoc	Billboard Location	0	0	2
	dsgnld	BillboardVeg	Billboard Vegetation Area	6	1 / DGN1	1
	dsgnld	BillboardZone	Billboard View Zone	3	3 / DGN3	4
	dsgnld	ClearSight_dp	Clear Sight Lines and Limits	3	4 / DGN4	2
	dsgnld	ClearZone_dp	Clear Zone Elements	3	1 / DGN1	1
	dsgnld	COGO_dp	COGO Information	3	0	1
	dsgnld	ConstLines	Construction Lines and References	4	0	0
	dsgnld	ConstLines_pm	Construction Lines	4	0	0
	dsgnld	DimLines_dp	Dimension Lines, Corresponding Terminators, Equation Lines	0	0	1
X	dsgnld	DitchBankArea	Ditch Bank Areas for Landscape	1	0	1
X	dsgnld	EaseLicLine	Easement License Agreement Line	5	6 / DGN6	0
X	dsgnld	Fertilizer	Fertilizer	11	0	1
X	dsgnld	Flower	Flower Edge / Flower Symbol	2	0	1
	dsgnld	GroundCover	Groundcover Edge Symbol	2	0	1
	dsgnld	GroundCoverHatch	Groundcover Hatch Pattern	2	0	0
X	dsgnld	HandWaterArea	Hand Watering Area	1	0	0
X	dsgnld	HerbicideArea	Area to Receive Herbicide	5	0	1
	dsgnld	ImageAttachment_dp	Image AttachmentstAttachments	0	0	0
	dsgnld	LandscapeAccs	Landscape Accessories (Barbeque Grill, Bike Rack etc.)	1	0	1
	dsgnld	LandscapeBlder	Landscape Boulders and Cobble	4	0	2
	dsgnld	LandscapeBlock	Landscape Concrete Blocks, Patterns and Walls	3	0	1
	dsgnld	LandscapeFills	Fills and Rock Sections	4	0	1
	dsgnld	LandscapeMisc	Landscaping Miscellaneous Items	3	0	2
	dsgnld	LeaderLine_dp	Leader Line and terminator with Text	0	0	1
X	dsgnld	Luminaire	Luminaires (Decorative - All Types)	2	0	1
X	dsgnld	MaintArea	Maintenance Areas for Landscape	10	0	2
	dsgnld	Miscellaneous0	Undefined proposed item - co blue wt 0	1	0	0
	dsgnld	Miscellaneous1	Undefined proposed item - co blue wt 1	1	0	1
	dsgnld	Miscellaneous2	Undefined proposed item - co blue wt 2	1	0	2
	dsgnld	Miscellaneous3	Undefined proposed item - co green wt 0	2	0	0
	dsgnld	Miscellaneous4	Undefined proposed item - co green wt 1	2	0	1
	dsgnld	Miscellaneous5	Undefined proposed item - co green wt 2	2	0	2
	dsgnld	Miscellaneous6	Undefined proposed item - co red wt 0	3	0	0
	dsgnld	Miscellaneous7	Undefined proposed item - co red wt 1	3	0	1
	dsgnld	Miscellaneous8	Undefined proposed item - co red wt 2	3	0	2
	dsgnld	Miscellaneous9	Undefined proposed item - co red wt 3	3	0	3
X	dsgnld	MowingAreaLarge	Mowing and Maintenance Areas for Large Machine	2	0	2

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
X	dsgnld	MowingAreaSmall	Mowing and Maintenance Areas	68	0	1
X	dsgnld	Mulch	Mulch Area	10	0	1
X	dsgnld	NaturalArea	Natural Landscape Areas	30	0	1
X	dsgnld	NoMaint	Maintained by Others	7	0	1
	dsgnld	NonPlottingEle_dp	Non plotting items such as construction elements and type 66 elements	4	0	0
	dsgnld	Pavers	Pavers - Brick and Block	5	0	1
	dsgnld	PayItem_dp	Pay Item Number Label Elements	4	0	2
X	dsgnld	PlantingArea	Plant Areas, Patterns and Boundary Elements	13	0	0
	dsgnld	PointLocator_ep	Point Locator Symbol	4	0	0
	dsgnld	ReferencePt_dp	Survey and Construction Reference Point Details and Elements	4	0	2
X	dsgnld	RockGravelStone	Rock, Gravel, Stone, Boulders, Etc.	1	0	2
	dsgnld	Scratch1_dp	A scratch level for temporary or informational items	4	0	0
	dsgnld	Scratch2_dp	A scratch level for temporary or informational items	5	0	0
	dsgnld	ScratchEle_dp	Level for Draft Elements, Temporary Elements, Etc. Do Not Plot	3	0	0
	dsgnld	ScratchEle2_dp	Level for Draft Elements, Temporary Elements, Etc. Do Not Plot	4	0	0
X	dsgnld	Shrub	Shrubs	2	0	1
X	dsgnld	SlopeArea	Slope Areas for Landscape	3	0	1
X	dsgnld	StakingArea	Staking Area	14	0	1
	dsgnld	StreetFurniture	Benches, Trash Receptacles, Bus Stop Covers, etc.	4	0	1
X	dsgnld	StreetLights	Street Lights	2	0	1
	dsgnld	Tables_dp	Data Tables and All Autodesk Tables	0	0	1
	dsgnld	TextAlert	Text - An Alert Label to Highlight a Problem	3	0	2
	dsgnld	TextBLStation	Text - B/L Station and Tics	0	0	2
	dsgnld	TextConstEle	Text - Construction Element	0	0	1
	dsgnld	TextCurveData	Text - Curve Data Note	0	0	2
	dsgnld	TextDetails	Text - Detail Notes	4	0	2
	dsgnld	TextElevLabel	Elevation Labels	4	0	0
	dsgnld	TextLabel	Text - Label	0	0	2
	dsgnld	TextLandscape	Text - Landscape Labels	0	0	1
	dsgnld	TextMajor	Text - Major	0	0	5
	dsgnld	TextMinor	Text - Minor	0	0	0
	dsgnld	TextMisc	Text - Miscellaneous	0	0	1
	dsgnld	TextNotes	Text - Notes	4	0	1
	dsgnld	TextProfLabel	Text - Profile, Horizontal and Vertical Axis Labels	0	0	2
	dsgnld	TextProjLabel	Text - Begin and End Project label with leader lines	1	0	2
	dsgnld	TextPtLabel	Point Labels	4	0	0
	dsgnld	TextShtNo	Text - Sheet Number	0	0	2
	dsgnld	TextSurveyLabel	Survey Text Labels	0	0	0
	dsgnld	TextTables	Text - KeysheetKey sheet Indexes and Table Data	4	0	2
	dsgnld	TextTitle	Text - Title	0	0	3
	dsgnld	TextXSElev	Text - Cross Section Elevations	2	0	1
X	dsgnld	Tree	Trees, Tree Line Pattern	2	0	1
X	dsgnld	TreeGrate	Tree Grate	5	0	1
X	dsgnld	TreeMaintArea	Area Designation for Tree Sheering and Pruning	6	0	1

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
X	dsgnld	TreeProtection	Tree Protection Symbol	5	0	2
	dsgnld	Viewport	Viewport (For AutoCAD Use)	3	0	0
X	dsgnld	WeedArea	Weeding Area	11	0	0
	dsgnld	Xreference01_dp	Reference Files (For AutoCAD Use)	0	0	1
	dsgnld	Xreference02_dp	Reference Files (For AutoCAD Use)	0	0	1
	dsgnld	Xreference03_dp	Reference Files (For AutoCAD Use)	0	0	1
	dsgnld	Xreference04_dp	Reference Files (For AutoCAD Use)	0	0	1
	dsgnld	XSCell	GEOPAK Cross Section Cell/Block and Profile Cell/Block	8	0	1

DSGNLT - Lighting Design

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
	dsgnlt	ActivePointCell_dp	Active Point Cell	4	0	10
	dsgnlt	AdhocPoint_dp	Adhoc Points Placed by SheetInfo	0	4 / 0	0
	dsgnlt	Cloud_dp	Construction Cloud	7	0	2
	dsgnlt	COGO_dp	COGO Information	3	0	1
X	dsgnlt	ConduitAG	Conduit – Above Ground	4	SG-ConduitSMAG-Proposed	1
X	dsgnlt	ConduitBM	Conduit – Bridge Mount	5	SG-ConduitBM-Proposed	1
X	dsgnlt	ConduitDB	Conduit – Directional Bore	2	SG-ConduitDB-Proposed	1
X	dsgnlt	ConduitJB	Conduit – Jack & Bore Under Rail	3	SG-ConduitJB-Proposed	1
X	dsgnlt	ConduitOT	Conduit – Open Trench	1	SG-ConduitOT-Proposed	1
	dsgnlt	ConstArea_dp	Construction Area Crosshatch	0	0	1
	dsgnlt	ConstLimits	Construction Limits	3	RW-LimitsofConst	2
	dsgnlt	ConstLines	Construction Lines and References	1	0	0
	dsgnlt	ConstLines_pm	Construction Lines	4	0	0
	dsgnlt	DimLines_dp	Dimension Lines, Corresponding Terminators, Equation Lines	0	0	1
X	dsgnlt	EaseLicLine	Easement License Agreement Line	5	6 / DGN6	0
	dsgnlt	GridMaj_dp	Grid Lines Major in Profile and Cross Section	3	0	1
	dsgnlt	GridMin_dp	Grid Lines Minor in Profile and Cross Section	0	0	0
	dsgnlt	GridMinSub_dp	Grid Lines Minor Sub in Cross Section Sheets	20	0	0
	dsgnlt	ImageAttachment_dp	Image AttachmentstAttachments	0	0	0
X	dsgnlt	InterconCable	Cable Interconnect	1	SG-InterconCable-Proposed	1
X	dsgnlt	InterconCable_ep	Interconnect Cable (Existing)	1	SG-InterconCable-Existing	0
X	dsgnlt	JunctBoxA	Junction Boxes (Aerial)	3	0	1
X	dsgnlt	JunctBoxA_ep	Junction Boxes (Aerial) (Existing)	3	1 / DGN1	0
	dsgnlt	LeaderLine_dp	Leader Line and terminator with Text	0	0	1
	dsgnlt	LightingMisc	Lighting Miscellaneous Items	4	0	2
X	dsgnlt	LightingSP	Lighting Service Points	0	0	1
X	dsgnlt	LoadCenter	Load Center	2	0	1
X	dsgnlt	LoadCenter_ep	Load Center (Existing)	2	5 / DGN5	0
	dsgnlt	Logo_dp	Consultant Engineer of Record Logo	0	0	1

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
X	dsgnlt	Luminaire	Luminaires (Decorative - All Types)	2	0	1
	dsgnlt	Miscellaneous0	Undefined proposed item - co blue wt 0	1	0	0
	dsgnlt	Miscellaneous1	Undefined proposed item - co blue wt 1	1	0	1
	dsgnlt	Miscellaneous2	Undefined proposed item - co blue wt 2	1	0	2
	dsgnlt	Miscellaneous3	Undefined proposed item - co green wt 0	2	0	0
	dsgnlt	Miscellaneous4	Undefined proposed item - co green wt 1	2	0	1
	dsgnlt	Miscellaneous5	Undefined proposed item - co green wt 2	2	0	2
	dsgnlt	Miscellaneous6	Undefined proposed item - co red wt 0	3	0	0
	dsgnlt	Miscellaneous7	Undefined proposed item - co red wt 1	3	0	1
	dsgnlt	Miscellaneous8	Undefined proposed item - co red wt 2	3	0	2
	dsgnlt	Miscellaneous9	Undefined proposed item - co red wt 3	3	0	3
	dsgnlt	NonPlottingEle_dp	Non plotting items such as construction elements and type 66 elements	4	0	0
	dsgnlt	PayItem_dp	Pay Item Number Label Elements	4	0	2
X	dsgnlt	PlotBorder_dp	Plot Border	3	0	0
	dsgnlt	PointLocator_ep	Point Locator Symbol	4	0	0
X	dsgnlt	PoleConc	Concrete Strain Pole	0	0	2
X	dsgnlt	PoleConc_ep	Concrete Strain Pole (Existing)	0	2 / DGN2	1
X	dsgnlt	PoleFound	Pole Foundation	0	0	2
X	dsgnlt	PoleLight	Light Pole	2	0	1
X	dsgnlt	PoleLight_ep	Light Pole (Existing)	2	2 / DGN2	1
X	dsgnlt	PoleLightHM	High Mast Light Pole	3	0	1
X	dsgnlt	PoleLightHM_ep	High Mast Light Pole (Existing)	2	2 / DGN2	1
	dsgnlt	PoleLightID	Light Pole Location / ID	4	0	1
X	dsgnlt	PolePower	Power Pole w/ Transformer	3	0	2
X	dsgnlt	PoleShared	Power Pole Electric (Above Ground) Shared w/ Transformer	3	0	2
X	dsgnlt	PoleSteelStrain	Steel Strain Pole	0	0	2
X	dsgnlt	PoleSteelStrain_ep	Steel Strain Pole (Existing)	0	2 / DGN2	1
X	dsgnlt	PoleTel	Telephone Pole	6	0	2
X	dsgnlt	PoleUtil	Utility Pole	0	0	2
X	dsgnlt	PoleWoodStrain	Wood Strain Pole	0	0	2
X	dsgnlt	PoleWoodStrain_ep	Wood Strain Pole (Existing)	0	2 / DGN2	1
X	dsgnlt	PullBox	Pull Boxes (All Types)	3	0	1
	dsgnlt	ReferencePt_dp	Survey and Construction Reference Point Details and Elements	4	0	2
X	dsgnlt	SawCuts	Saw Cuts	3	3 / DGN3	0
	dsgnlt	Scratch1_dp	A scratch level for temporary or informational items	4	0	0
	dsgnlt	Scratch2_dp	A scratch level for temporary or informational items	5	0	0
	dsgnlt	ScratchEle_dp	Level for Draft Elements, Temporary Elements, Etc. Do Not Plot	3	0	0
	dsgnlt	ScratchEle2_dp	Level for Draft Elements, Temporary Elements, Etc. Do Not Plot	4	0	0
	dsgnlt	SheetBorder_dp	Sheet Border	1	0	4
	dsgnlt	SheetLines_dp	Sheet Lines	1	0	2
	dsgnlt	SheetLinesMisc1_dp	Sheet Lines	1	0	0
	dsgnlt	SheetLinesMisc2_dp	Sheet Lines	2	0	2
	dsgnlt	SheetLinesMisc3_dp	Sheet Lines	3	0	2
	dsgnlt	SheetLinesMisc4_dp	Sheet Lines	4	0	2

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
	dsgnlt	SumBoxBorder_dp	Summary Boxes Borders	4	0	3
	dsgnlt	SumBoxLines_dp	Summary Boxes Lines and Miscellaneous Items	4	0	1
	dsgnlt	SumBoxLinesMin_dp	Summary Boxes Lines Minor Line and Miscellaneous Items	4	0	0
	dsgnlt	Tables_dp	Data Tables and All Autodesk Tables	0	0	1
	dsgnlt	TextAlert	Text - An Alert Label to Highlight a Problem	3	0	2
	dsgnlt	TextBLStation	Text - B/L Station and Tics	0	0	2
	dsgnlt	TextConstEle	Text - Construction Element	0	0	1
	dsgnlt	TextCurveData	Text - Curve Data Note	0	0	2
	dsgnlt	TextDetails	Text - Detail Notes	4	0	2
	dsgnlt	TextElevLabel	Elevation Labels	4	0	0
	dsgnlt	TextLabel	Text - Label	0	0	2
	dsgnlt	TextLandscape	Text - Landscape Labels	0	0	1
	dsgnlt	TextMajor	Text - Major	0	0	5
	dsgnlt	TextMinor	Text - Minor	0	0	0
	dsgnlt	TextMisc	Text - Miscellaneous	0	0	1
	dsgnlt	TextNotes	Text - Notes	4	0	1
	dsgnlt	TextProfLabel	Text - Profile, Horizontal and Vertical Axis Labels	0	0	2
	dsgnlt	TextProjLabel	Text - Begin and End Project label with leader lines	1	0	2
	dsgnlt	TextPtLabel	Point Labels	4	0	0
	dsgnlt	TextShtNo	Text - Sheet Number	0	0	2
	dsgnlt	TextSurveyLabel	Survey Text Labels	0	0	0
	dsgnlt	TextTables	Text - KeysheetKey sheet Indexes and Table Data	4	0	2
	dsgnlt	TextTitle	Text - Title	0	0	3
	dsgnlt	TextXSElev	Text - Cross Section Elevations	2	0	1
	dsgnlt	Viewport	Viewport (For AutoCAD Use)	3	0	0
	dsgnlt	Xreference01_dp	Reference Files (For AutoCAD Use)	0	0	1
	dsgnlt	Xreference02_dp	Reference Files (For AutoCAD Use)	0	0	1
	dsgnlt	Xreference03_dp	Reference Files (For AutoCAD Use)	0	0	1
	dsgnlt	Xreference04_dp	Reference Files (For AutoCAD Use)	0	0	1
	dsgnlt	XSCell	GEOPAK Cross Section Cell/Block and Profile Cell/Block	8	0	1

DSGNRD - Roadway Design

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
	dsgnrd	ActivePointCell_dp	Active Point Cell	4	0	10
	dsgnrd	AdhocPoint_dp	Adhoc Points Placed by SheetInfo	0	4 / 0	0
	dsgnrd	ArchSite_ep	Archeological Site	2	0	1
X	dsgnrd	ArtificialCovering	Artificial Coverings	10	0	2
	dsgnrd	Assembly_dp	Civil 3D Assemblies and Subassemblies	4	0	2
	dsgnrd	ATDims	AutoTurn Profile Dimensions, Tire Envelope	1	0	1
X	dsgnrd	Attenuator	Attenuation Systems	6	MOT-Attenuator	1

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
X	dsgnrd	AttenuatorTM	Attenuator Truck Mount	6	0	2
	dsgnrd	ATText	AutoTurn Profile and TT Dimensions, Annotation, TT Overhang	0	0	1
	dsgnrd	ATVHP	AutoTurn Temporary Profile for Building Custom Type	1	0	1
	dsgnrd	BaselineSurvey	Baseline Survey	0	0	2
X	dsgnrd	Berm	Berm (Top, Front, or Back)	10	0	2
X	dsgnrd	Berm_pm	Berm - Component Point Property and Model Break Line Above Ground	10	0	1
X	dsgnrd	BikeLaneColorPavt	Green Bike Lane Pavement	2	0	2
X	dsgnrd	Bollard	Concrete filled pipe bollards	11	0	2
X	dsgnrd	Bottom_pm	All Component Bottom Point Property and Model Break Line	0	0	1
X	dsgnrd	Bridge	Bridge	0	0	2
X	dsgnrd	Bridge_pm	Bridge - Component Point Property and Model Break Line Above Ground	2	0	1
X	dsgnrd	Bridge_px	Bridge Component for Cross Sections - Component Property	0	0	2
X	dsgnrd	BridgeAppSlab	Bridge Approaches and Slabs	0	0	2
X	dsgnrd	BridgeBot_pm	Bridge Bottom - Component Point Property and Model Break Line Under Ground	2	0	1
X	dsgnrd	BridgePiers	Bridge Piers	0	0	2
X	dsgnrd	Building	Buildings	1	0	2
X	dsgnrd	CableBarrier	Cable Barrier	0	RD-CableBarrier	2
X	dsgnrd	CableBarrier_px	Cable Barrier for Cross Sections	0	0	2
X	dsgnrd	Canal	Canal	7	0	1
X	dsgnrd	CandG_ex	Curb and Gutter for Cross Sections (All Types) (Existing)	4	2 / DGN2	1
X	dsgnrd	CandG_px	Curb and Gutter for Cross Sections (All Types)	4	0	2
X	dsgnrd	CandGBase_px	Curb and Gutter Base on Cross Sections	3	0	1
X	dsgnrd	CATVBur_ex	Cable TV and Miscellaneous on Cross Sections (Existing)	6	2 / DGN2	1
X	dsgnrd	CATVBur_px	Cable TV and Miscellaneous on Cross Sections	6	0	1
	dsgnrd	CLConst_dp	Center Line of Construction	0	0	2
X	dsgnrd	ClearingGrubbing	Clearing and Grubbing Limits and Quantity Items	4	0	1
	dsgnrd	ClearZone_dp	Clear Zone Elements	3	1 / DGN1	1
	dsgnrd	ClipBorder_dp	CLIP Border and Civil 3D View Frame	3	0	0
	dsgnrd	ClipDrawingBound_dp	CLIP Drawing Boundary	3	3 / 0	0
	dsgnrd	Cloud_dp	Construction Cloud	7	0	2
	dsgnrd	COGO_dp	COGO Information	3	0	1
X	dsgnrd	Concrete	Concrete Areas (All Types plus miscellaneous)	0	0	2
X	dsgnrd	Concrete_px	Concrete Boundary Lines on Cross Sections	0	0	2
X	dsgnrd	ConcSlabs	Concrete Slabs	0	0	2
X	dsgnrd	Conduit_ex	Conduit and Encasements on Cross Sections (Existing)	3	2 / DGN2	1
X	dsgnrd	Conduit_px	Conduit and Encasements on Cross Sections	3	0	1
	dsgnrd	ConstArea_dp	Construction Area Crosshatch	0	0	1
	dsgnrd	ConstLimits	Construction Limits	3	RW-LimitsofConst	2
	dsgnrd	ConstLines	Construction Lines and References	1	0	0
	dsgnrd	ConstLines_pm	Construction Lines	**4**	0	**0**
	dsgnrd	ContoursMajor	Contour Lines Major (Proposed)	3	0	2
	dsgnrd	ContoursMajor_ep	Contour Lines Major (Existing)	3	1 / DGN1	1
	dsgnrd	ContoursMinor	Contour Lines Minor (Proposed)	4	0	2
	dsgnrd	ContoursMinor_ep	Contour Lines Minor (Existing)	4	1 / DGN1	1

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
	dsgnrd	ControlZone_dp	Control Zone	3	1 / DGN1	2
	dsgnrd	Core	Core test hole	9	1 / DGN1	1
X	dsgnrd	CorrHndlStg1_dp	Corridor Handle Display Setting for Corridor Design Stage 1	0	0	1
X	dsgnrd	CorrHndlStg2_dp	Corridor Handle Display Setting for Corridor Design Stage 2	4	0	1
X	dsgnrd	CorrHndlStg3_dp	Corridor Handle Display Setting for Corridor Design Stage 3	3	0	1
	dsgnrd	Corridor_dp	Civil 3D Corridors	0	0	2
X	dsgnrd	Curb_pm	Curb - Component Point Property and Model Break Line	4	0	1
X	dsgnrd	CurbBack	Back of Curb	4	0	1
X	dsgnrd	CurbBase_pm	Curb Base Top - Component Point Property and Model Break Line	3	0	1
X	dsgnrd	CurbFace	Curb and Gutter (Face)	4	0	1
X	dsgnrd	CurbFlowLine_pm	Curb Flow Line - Component Point Property and Model Break Line	4	0	1
X	dsgnrd	CurbRamp	Curb Cut Ramp	8	0	1
X	dsgnrd	CurbRampWarning	Detectable Warnings on Curb Ramps	4	0	2
	dsgnrd	CurveData_dp	Curve & Coordinate Data Elements incl PC, PT, PI symbols	4	0	2
	dsgnrd	CurveDataLabel_dp	Curve Data Labels PC,PI, PT	0	0	2
X	dsgnrd	Cut_pm	Tie to Ground in Cut - Component Point Property and Model Break Line	3	0	1
	dsgnrd	DimLines_dp	Dimension Lines, Corresponding Terminators, Equation Lines	0	0	1
X	dsgnrd	Ditch	Ditch Top	7	6 / DGN6	1
X	dsgnrd	Ditch_px	Ditch Top for Cross Sections	7	0	2
X	dsgnrd	DitchBot	Ditch Bottom	10	0	2
X	dsgnrd	DitchBot_pm	Ditch Bottom - Component Point Property and Model Break Line	10	0	1
X	dsgnrd	DitchBot_px	Ditch Bottom for Cross Sections	10	0	2
X	dsgnrd	DitchPavt	Ditch Pavement Including Quantity Shapes	3	0	1
X	dsgnrd	DitchPavt_pm	Ditch Pavement Top - Component Point Property and Model Break Line	3	0	1
X	dsgnrd	DitchPavt_px	Ditch Pavement for Cross Sections	3	0	3
	dsgnrd	DitchProfLt_er	Ditch Profile Left (Existing)	8	3 / DGN3	1
	dsgnrd	DitchProfLt_pr	Ditch Profile Left	8	0	1
	dsgnrd	DitchProfMdn_er	Ditch Profile Median (Existing)	10	3 / DGN3	1
	dsgnrd	DitchProfMdn_pr	Ditch Profile Median	10	0	1
	dsgnrd	DitchProfRt_er	Ditch Profile Right (Existing)	9	3 / DGN3	1
	dsgnrd	DitchProfRt_pr	Ditch Profile Right	9	0	1
X	dsgnrd	DitchTop_pm	Ditch Top - Component Point Property and Model Break Line	9	0	1
	dsgnrd	DrainAlert_px	Alert Symbology for Structural Elements on Cross Sections	3	0	3
	dsgnrd	DrainMisc_ex	All types of miscellaneous drainage elements (Existing)	10	3 / DGN3	1
X	dsgnrd	DrainStruct_ex	All Drainage Structures for Cross Sections (Existing)	10	3 / DGN3	1
	dsgnrd	DrainStruct_pr	Drainage Structures (All Types)	10	0	2
X	dsgnrd	DrainStruct_px	Misc Drainage Structures and Elements for XSections	10	0	2
	dsgnrd	Driveway	Driveway (Drive, Lane, Turnouts)	7	0	2
X	dsgnrd	Driveway_ex	Driveway Lines on Cross Sections - Existing	7	2 / DGN2	2
X	dsgnrd	Driveway_pm	Component Point Property and Model Break Line	7	0	1
X	dsgnrd	Driveway_px	Driveway Lines on Cross Sections	7	0	2
X	dsgnrd	DrivewayBase_px	Proposed Driveway Subgrade	3	0	2
	dsgnrd	DTM	Digital Terrain Model, TIN Model Elements (Proposed)	1	0	2
	dsgnrd	DTM_ep	Digital Terrain Model, TIN Model Elements (Existing)	2	0	1

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
X	dsgnrd	DTM_ex	Digital Terrain Model for Cross Sections (Existing)	2	1 / DGN1	1
X	dsgnrd	DTM_px	Digital Terrain Model for Cross Sections (Proposed)	1	0	0
X	dsgnrd	DTMBotMesh	Bottom Surface TIN/DTM of the Proposed Cooridor	60	0	1
X	dsgnrd	DTMTopMesh	Top Surface TIN/DTM of the Proposed Cooridor	20	0	1
X	dsgnrd	DTMTriangles	DTM Triangles (Proposed)	1	0	2
X	dsgnrd	DTMTriangles_ep	DTM Triangles (Existing)	2	0	1
X	dsgnrd	DTMSource	Digital Terrain, Source Feature (Proposed)	0	0	2
X	dsgnrd	DTMSource_ep	Digital Terrain, Source Feature (Existing)	0	1 / DGN1	1
X	dsgnrd	DTMVertices	Digital Terrain Model, Triangle Vertices (Proposed)	0	0	2
X	dsgnrd	DTMVertices_ep	Digital Terrain Model, Triangle Vertices (Existing)	0	0	1
	dsgnrd	Earthwork1_px	Earthwork (color 0)	0	0	1
	dsgnrd	Earthwork2_px	Earthwork (color 1)	1	0	1
	dsgnrd	Earthwork3_px	Earthwork (color 2)	2	0	1
	dsgnrd	Earthwork4_px	Earthwork (color 3)	3	0	1
	dsgnrd	Earthwork5_px	Earthwork (color 4)	4	0	1
X	dsgnrd	EaseLicLine	Easement License Agreement Line	5	6 / DGN6	0
X	dsgnrd	EaseLine_ep	Easement Lines (Existing)	1	RW-Easement	1
X	dsgnrd	EasePerpLine	Easement Lines Perpetual	4	RW-PerpetualEasement	12
X	dsgnrd	EasePerpLine_px	Easement Lines Perpetual on Cross Sections	4	RW-PerpetualEasement	2
X	dsgnrd	EaseTempLine	Easement Lines Temporary	6	RW-TemporaryEasement	0
X	dsgnrd	EaseTempLine_ep	Easement Lines Temporary (Existing)	6	RW-TemporaryEasement	1
X	dsgnrd	EaseTempLine_px	Easement Lines Temporary on Cross Sections	6	RW-TemporaryEasement	0
X	dsgnrd	Endwall_px	Endwall for Cross Sections	10	0	2
	dsgnrd	EnvImpact_ep	Locations for PortentialPotential Environmental Concerns	3	0	1
	dsgnrd	ExcavationLimits_dp	Excavation Limits on Cross Sections	0	0	1
X	dsgnrd	Fence	Fence	6	RD-Fence	1
	dsgnrd	Fence_ex	Fence Lines on Cross Sections (Existing)	6	3 / DGN3	1
X	dsgnrd	Fence_pm	Fence - Component Point Property and Model Break Line Above Ground	6	0	1
	dsgnrd	Fence_px	Fence Lines on Cross Sections	6	RD-Fence	2
X	dsgnrd	FenceLt	Fence Limited Access Left	6	RD-Fence-Left	1
X	dsgnrd	FenceRt	Fence Limited Access Right	6	RD-Fence-Right	1
X	dsgnrd	FES_px	Flared End Sections for Cross Sections	10	0	2
X	dsgnrd	Fill_pm	Tie to Ground in Fill - Component Point Property and Model Break Line	1	0	1
	dsgnrd	FlowArrow	Digital Terrain Model, Triangle Flow Arrows (Proposed)	10	0	2
	dsgnrd	FlowArrow_ep	Digital Terrain Model, Triangle Flow Arrows)	10	0	2
	dsgnrd	FlowLine_pr	Flow Line (Roadway Profile View)	0	0	2
X	dsgnrd	FlowPaths	Time of Concentration Flow Paths	10	1 / DGN1	1
X	dsgnrd	FOCBur_ex	Fiber Optics Cable (Buried) for XSections (Existing)	6	2 / DGN2	1
X	dsgnrd	FOCBur_px	Fiber Optics Cable (Buried) for XSections	6	0	1
X	dsgnrd	Gabions	Gabion Baskets or Mats	10	0	2
X	dsgnrd	Gabions_ep	Gabion Baskets or Mats (Existing)	10	1 / DGN1	2
X	dsgnrd	Gas_ex	Gas Pipe and Fittings, Misc for Xsections (Existing)	4	2 / DGN2	
X	dsgnrd	Gas_px	Gas Pipe and Fittings, Misc for Xsections	4	0	

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
	dsgnrd	GeotechFillPatt1	Geotechnical Fill Pattern - (earth, wood, muck, concrete, rock, riprap) as defined in project	3	0	
	dsgnrd	GeotechFillPatt1_px	Geotechnical Fill Pattern - (earth, wood, muck, concrete, rock, riprap) as defined in project	3	0	
	dsgnrd	GeotechFillPatt2	Geotechnical Fill Pattern - clay, sand	0	1 / DGN1	
	dsgnrd	GeotechFillPatt2_px	Geotechnical Fill Pattern - clay, sand	0	1 / DGN1	
	dsgnrd	GeotechFillPatt3	Geotechnical Fill Pattern - shell	3	1 / DGN1	
	dsgnrd	GeotechFillPatt3_px	Geotechnical Fill Pattern - shell	3	1 / DGN1	
	dsgnrd	GeotechFillPatt4	Geotechnical Fill Pattern - sand	4	0	
	dsgnrd	GeotechFillPatt4_px	Geotechnical Fill Pattern - sand	4	0	
	dsgnrd	GeotechFillPatt5	Geotechnical Fill Pattern - coquina	1	0	
	dsgnrd	GeotechFillPatt5_px	Geotechnical Fill Pattern - coquina	1	0	
	dsgnrd	GeotechFillPatt6	Geotechnical Fill Pattern - limestone	2	0	
	dsgnrd	GeotechFillPatt6_px	Geotechnical Fill Pattern - limestone	2	0	
	dsgnrd	GeotechFillPatt7	Geotechnical Fill Pattern - gravel	6	0	
	dsgnrd	GeotechFillPatt7_px	Geotechnical Fill Pattern - gravel	6	0	
	dsgnrd	GeotechFillPatt8	Geotechnical Fill Pattern - silt	0	0	
	dsgnrd	GeotechFillPatt8_px	Geotechnical Fill Pattern - silt	0	0	
	dsgnrd	GeotechMisc	Miscellaneous Geotechnical Elements	0	0	
X	dsgnrd	GovTwpRgeLine_ep	Township / Range Lines	10	RW-TownshipRange	2
	dsgnrd	GPKDrBack_dp	Back Point on Drainage Cells	2	2 / 0	2
	dsgnrd	GPKDrBottom_dp	Bottom Point on Drainage Cells	3	3 / 0	2
	dsgnrd	GPKDrCellIns_dp	Cell Insertion Point on Drainage Cells	4	4 / 0	2
	dsgnrd	GPKDrCentroid_dp	Point on Centroid for Drainage	7	7 / 0	2
	dsgnrd	GPKDrElv	Location point for drainage cells	5	5 / 0	2
	dsgnrd	GPKDrFront_dp	Front Point on Drainage Cells	1	1 / 0	2
	dsgnrd	GPKDrPipe_dp	Point on Drainage Pipe	6	6 / 0	2
	dsgnrd	GPKDrPipeCir_dp	Point on Pipe Circular	6	6 / 0	0
	dsgnrd	GradeLine_er	Grade Line Profile (Existing)	2	2 / DGN2	1
	dsgnrd	GradeLine_pr	Grade Line Profile	5	0	2
	dsgnrd	GradeLineCtr_dp	Grade Line Profile Center (shown in plan view)	5	0	0
	dsgnrd	GradeLineCtr_pr	Grade Line Profile Center	5	0	0
	dsgnrd	GradeLineLt_dp	Grade Line Profile Left (shown in plan view)	1	0	0
	dsgnrd	GradeLineLt_er	Grade Line Profile Left (existing)	1	2 / DGN2	0
	dsgnrd	GradeLineLt_pr	Grade Line Profile Left	1	0	0
	dsgnrd	GradeLineRt_dp	Grade Line Profile Right (shown in plan view)	4	0	0
	dsgnrd	GradeLineRt_er	Grade Line Profile Right (existing)	4	2 / DGN2	0
	dsgnrd	GradeLineRt_pr	Grade Line Profile Right	4	0	0
	dsgnrd	GradeSecPat	Grade Section Patterns	0	0	0
X	dsgnrd	Grass	Grass, Seeding and Mulching Areas	2	1 / DGN1	2
	dsgnrd	GridMaj_dp	Grid Lines Major in Profile and Cross Section	3	0	1
	dsgnrd	GridMin_dp	Grid Lines Minor in Profile and Cross Section	0	0	0
	dsgnrd	GridMinG_dp	Grid Lines Minor Sub 2 in Cross Section Sheets	20	0	0
	dsgnrd	GridMinSub_dp	Grid Lines Minor Sub in Cross Section Sheets	20	0	0

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
X	dsgnrd	Guardrail	Guardrail	0	0	2
X	dsgnrd	Guardrail_ex	Guardrail Lines on Cross Sections - Existing	0	2 / DGN2	2
X	dsgnrd	Guardrail3dDbl_pm	Guardrail Component Point Property & Model Break Line for 3D Guardrail Posts	9	3D-Guardrail-Double / 0	0
X	dsgnrd	Guardrail3dLt_pm	Guardrail Component Point Property & Model Break Line for 3D Guardrail Posts	9	3D-Guardrail-Left / 0	0
X	dsgnrd	Guardrail3dRt_pm	Guardrail Component Point Property & Model Break Line for 3D Guardrail Posts	9	3D-Guardrail-Right / 0	0
X	dsgnrd	GuardrailBRLt	Guardrail Bridge Left	0	RD-Guardrail-Left	1
X	dsgnrd	GuardrailBRRt	Guardrail Bridge Right	0	RD-Guardrail-Right	1
X	dsgnrd	GuardrailDbl	Guardrail Double Face	0	RD-Guardrail-Double	1
X	dsgnrd	GuardrailEndAch	Guardrail End Anchorage	0	0	1
X	dsgnrd	GuardrailLt	Guardrail Left	0	RD-Guardrail-Left	1
X	dsgnrd	GuardrailModThrieDbl	Guardrail Modified Thrie Beam Double Face	0	RD-Guardrail-Double	1
X	dsgnrd	GuardrailModThrieLt	Guardrail Modified Thrie Beam Left	0	RD-Guardrail-Left	1
X	dsgnrd	GuardrailModThrieRt	Guardrail Modified Thrie Beam Right	0	RD-Guardrail-Right	1
X	dsgnrd	GuardrailPanel_pm	Guardrail Component Point Property and Model Break Line for Guardrail Panels	11	0	1
X	dsgnrd	GuardrailPanel_px	Guardrail Component Property and Model Break Line for 3D Guardrail Panels	11	0	1
X	dsgnrd	GuardrailPost_pm	Guardrail Component Point Property & Model Break Line for 3D Guardrail Posts	10	0	1
X	dsgnrd	GuardrailPost_px	Guardrail Component Property and Model Break Line for 3D Guardrail Posts	10	0	0
X	dsgnrd	GuardrailPRDbl	Guardrail Double Face w/ Pipe Rail	0	RD-Guardrail-Double	1
X	dsgnrd	GuardrailPRLt	Guardrail Left w/ Pipe Rail	0	RD-Guardrail-Left	1
X	dsgnrd	GuardrailPRRt	Guardrail Right w/ Pipe Rail	0	RD-Guardrail-Right	1
X	dsgnrd	GuardrailRRDbl	Guardrail Double Face w/ Rub Rail	0	RD-Guardrail-Double	1
X	dsgnrd	GuardrailRRLt	Guardrail Left w/ Rub Rail	0	RD-Guardrail-Left	1
X	dsgnrd	GuardrailRRRt	Guardrail Right w/ Rub Rail	0	RD-Guardrail-Right	1
X	dsgnrd	GuardrailRt	Guardrail Right	0	RD-Guardrail-Right	1
X	dsgnrd	GuardrailThrieDbl	Guardrail Thrie Beam Double Face	0	RD-Guardrail-Double	1
X	dsgnrd	GuardrailThrieLt	Guardrail Thrie Beam Left	0	RD-Guardrail-Left	1
X	dsgnrd	GuardrailThriePRLt	Guardrail Thrie Beam Left w/ Pipe Rail	0	RD-Guardrail-Left	1
X	dsgnrd	GuardrailThriePRRt	Guardrail Thrie Beam Right w/ Pipe Rail	0	RD-Guardrail-Right	1
X	dsgnrd	GuardrailThrieRt	Guardrail Thrie Beam Right	0	RD-Guardrail-Right	1
	dsgnrd	HardscapeDetails	Paving Details, Fence Railing, Stamped Asphalt	4	0	2
	dsgnrd	ImageAttachment_dp	Image AttachmentstAttachments	0	0	0
X	dsgnrd	Inlet_px	Inlets on Cross Sections	10	0	2
X	dsgnrd	InletBottom_px	Inlet Bottom on Cross Sections (All Types)	10	0	2
X	dsgnrd	InletProt	Rock Bags and Sand Bagging	10	SWP-RockBags	2
	dsgnrd	KeyShtMisc	Key sheet Miscellaneous Items	0	0	2
	dsgnrd	LaneLine	Lane Lines (Defines Changes in Pavement Cross Slope – Non-Plotting)	4	3 / DGN3	2
X	dsgnrd	LARWLine	Limited Access Right of Way	4	RW-LimitedAccess-Proposed	2
X	dsgnrd	LARWLine_ep	Limited Access Right of Way (Existing)	4	RW-LimitedAccess-Existing	1
	dsgnrd	LARWLine_ex	Limited Access Right of Way on XSections (Existing)	4	RW-LimitedAccess-Existing	1
	dsgnrd	LARWLine_px	Limited Access ROW Lines on Cross Sections	4	RW-LimitedAccess-Proposed	2
X	dsgnrd	LateralLimits_px	Lateral Limits for Cross Sections	6	0	2
	dsgnrd	LeaderLine_dp	Leader Line and terminator with Text	0	0	1
	dsgnrd	Logo_dp	Consultant Engineer of Record Logo	0	0	1
X	dsgnrd	Mailbox	Mailboxes	8	0	1

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
X	dsgnrd	Manhole_px	Manhole on Cross Sections	10	0	2
	dsgnrd	MatchLineMask_dp	Mask Area for Match Line Overlap Areas (Autodesk)	0	0	0
	dsgnrd	MatchLines_dp	Match Lines with Text, Arrows for Station Notations	1	0	2
X	dsgnrd	MedianCrown_pm	Median Crown - Component Point Property and Model Break Line	9	0	1
X	dsgnrd	MES_px	Mitered End Section on Cross Sections	10	0	2
	dsgnrd	Miscellaneous0	Undefined proposed item - co blue wt 0	1	0	0
	dsgnrd	Miscellaneous1	Undefined proposed item - co blue wt 1	1	0	1
	dsgnrd	Miscellaneous2	Undefined proposed item - co blue wt 2	1	0	2
	dsgnrd	Miscellaneous3	Undefined proposed item - co green wt 0	2	0	0
	dsgnrd	Miscellaneous4	Undefined proposed item - co green wt 1	2	0	1
	dsgnrd	Miscellaneous5	Undefined proposed item - co green wt 2	2	0	2
	dsgnrd	Miscellaneous6	Undefined proposed item - co red wt 0	3	0	0
	dsgnrd	Miscellaneous7	Undefined proposed item - co red wt 1	3	0	1
	dsgnrd	Miscellaneous8	Undefined proposed item - co red wt 2	3	0	2
	dsgnrd	Miscellaneous9	Undefined proposed item - co red wt 3	3	0	3
	dsgnrd	NonPlottingEle_dp	Non plotting items such as construction elements and type 66 elements	4	0	0
	dsgnrd	NorthArw_dp	North Arrows	0	0	2
	dsgnrd	Patternlines_ep	Cross Section Chain	2	1 / DGN1	0
	dsgnrd	PatternLines1_dp	Pattern Lines and Sample Lines (Civil 3D) for Cross Sections	3	0	2
	dsgnrd	PatternLines2_dp	Pattern Lines for XSectionsCross Sections alternate for side streets, critical Cross Sxsections or drainage structures	4	0	2
	dsgnrd	PatternLines3_dp	Pattern Lines for XSectionsCross Sections alternate for side streets, critical xsectionsCross Sections or drainage structures	5	0	2
X	dsgnrd	PavedMedianBase_px	Proposed Paved Median Subgrade	3	0	2
	dsgnrd	Pavers	Pavers - Brick and Block	5	0	1
	dsgnrd	PavtAsph_ep	Asphalt Pavement Edge	0	3 / DGN3	1
X	dsgnrd	PavtAsphalt	Asphalt Pavement Edge Line and Quantity Shapes	0	0	2
X	dsgnrd	PavtAsphalt_pm	Asphalt Pavement Edge Line - Component Point Property and Model Break Line	0	0	1
X	dsgnrd	PavtAsphalt_px	Asphalt Pavement for Cross Sections and Components in Models	1	0	2
X	dsgnrd	PavtBase	Base Material (All Types)	3	0	2
X	dsgnrd	PavtBase_ex	Base Material for Cross Sections (All Types) (Existing)	3	3 / DGN3	1
X	dsgnrd	PavtBase_pm	Pavement Base Top - Component Point Property and Model Break Line	3	0	1
X	dsgnrd	PavtBase_px	Base Material for Cross Sections (All Types)	3	0	2
	dsgnrd	PavtBreak_dp	Line Defining a Pavement Slope Break	0	0	1
X	dsgnrd	PavtBreak_pm	Break in Slope or Lane on Pavement - Component Point Property and Model Break Line	0	0	1
X	dsgnrd	PavtConcrete	Concrete Pavement Edge Line and Quantity Shapes	10	0	2
X	dsgnrd	PavtConcrete_pm	Component Point Property and Model Break Line	0	0	1
X	dsgnrd	PavtConcrete_px	Concrete Pavement for Cross Sections and Components in Models	0	0	2
X	dsgnrd	PavtConcreteSC	Concrete Pavement Edge Line and Quantity Shapes	9	0	1
	dsgnrd	PavtCrown	Pavement Crown	16	0	2
X	dsgnrd	PavtCrown_pm	Pavement Crown - Component Point Property and Model Break Line	16	0	1
X	dsgnrd	PavtFrictionCourse	Asphalt Concrete Friction Course	4	0	2
	dsgnrd	PavtMilling	Milling and Resurfacing Limits and Quantity Shapes	1	0	2

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
X	dsgnrd	PavtMilling_pm	Asphalt Milling - Component Point Property and Model Break Line	7	0	1
X	dsgnrd	PavtMilling_px	Asphalt Milling Lines on Cross Sections	7	0	2
	dsgnrd	PavtMisc	Asphalt Miscellaneous Material	1	0	1
X	dsgnrd	PavtMisc_pm	Miscelaneous Pavement - Component Point Property and Model Break Line	1	0	1
X	dsgnrd	PavtMisc_px	Miscellaneous Pavement on Cross Sections	1	0	2
X	dsgnrd	PavtOverbuild_pm	Pavement Overbuild - Component Point Property and Model Break Line	1	0	1
X	dsgnrd	PavtOverbuild_px	Pavement Overbuild Areas on Cross Sections - Component Property	4	0	2
X	dsgnrd	PavtOverlay_pm	Pavement Overlay - Component Point Property and Model Break Line	1	0	1
X	dsgnrd	PavtOverlay_px	Pavement Overlay for Cross Sections - Component Property	1	0	2
X	dsgnrd	PavtOverlay1_px	Pavement Overlay for Cross Sections - Component Property	14	0	2
X	dsgnrd	PavtOverlay2_px	Pavement Overlay for Cross Sections - Component Property	7	0	2
X	dsgnrd	PavtStabilization	Stabilization Material Lines and Shapes	9	0	2
X	dsgnrd	PavtStabilization_px	Stabilization for Cross Sections	5	2 / DGN2	2
	dsgnrd	PavtXover_ep	Crossovers and Detours (Temporary)	0	3 / DGN3	0
	dsgnrd	PayItem_dp	Pay Item Number Label Elements	4	0	2
	dsgnrd	Permit1	Permit 1 Wetlands, Mitigation Sites, Planting Areas	1	0	1
	dsgnrd	Permit2	Permit 2 Wetlands, Mitigation Sites, Planting Areas	2	0	1
	dsgnrd	Permit3	Permit 3 Wetlands, Mitigation Sites, Planting Areas	4	0	1
X	dsgnrd	Piling	Piling Piers or Column	8	0	2
	dsgnrd	PipeCulvert_ep	Pipe Culvert	10	3 / DGN3	1
X	dsgnrd	PipeCulvert_pr	Pipe Culvert in Profile	3	0	2
X	dsgnrd	PipeCulvert_px	Pipe Culvert for Cross Section View	10	0	2
X	dsgnrd	PlotBorder_dp	Plot Border	3	0	0
	dsgnrd	PointLocator_ep	Point Locator Symbol	4	0	0
X	dsgnrd	Pond_px	Pond Lines on Cross Sections	2	0	2
X	dsgnrd	PondSideSlope	Pond Side Slope	0	0	2
X	dsgnrd	Power_ex	Power on Cross Sections (Existing)	3	2	1
X	dsgnrd	Power_px	Power on Cross Sections	3	0	1
X	dsgnrd	PropertyLine_ep	Property Lines	3	0	0
X	dsgnrd	PvtAnalysisCrown_pm	Pavement Analysis Crowning - Point Property	7	0	1
X	dsgnrd	PvtAnalysisCrown_px	Pavement Analysis Crowning - Component Property	7	0	1
X	dsgnrd	PvtAnalysisFail_pm	Pavement Analysis Failure - Point Property	3	0	1
X	dsgnrd	PvtAnalysisFail_px	Pavement Analysis Failure - Component Property	3	0	1
X	dsgnrd	PvtAnalysisMax_pm	Pavement Analysis Acceptable Maximum Range - Point Property	5	0	1
X	dsgnrd	PvtAnalysisMax_px	Pavement Analysis Acceptable Maximum Range - Component Property	5	0	1
X	dsgnrd	PvtAnalysisMin_pm	Pavement Analysis Acceptable Minimum Range - Point Property	4	0	1
X	dsgnrd	PvtAnalysisMin_px	Pavement Analysis Acceptable Minimum Range - Component Property	4	0	1
X	dsgnrd	PvtAnalysisOptiml_pm	Pavement Analysis Optimal - Point Property	2	0	1
X	dsgnrd	PvtAnalysisOptiml_px	Pavement Analysis Optimal - Component Property	2	0	1
X	dsgnrd	Railing	All Proposed Railings; Piperail, Guiderail, Handrail used for Pedestrian and Bicycles	9	0	2
X	dsgnrd	Railing_pm	Railing Top - Component Point Property and Model Break Line	9	0	1
X	dsgnrd	Railing_px	Proposed Railing Components and XS Shapes	9	0	2
	dsgnrd	RailroadDetails	Railroad Crossing Details	3	0	2

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
	dsgnrd	RailroadXing	Railroad Crossing Elements	11	0	0
	dsgnrd	ReferencePt_dp	Survey and Construction Reference Point Details and Elements	4	0	2
	dsgnrd	RegionBdry_dp	Boundary Line for Regions in Corridor Design (Autodesk)	0	0	0
X	dsgnrd	RetentionArea	Retention Area	2	0	2
X	dsgnrd	RipRap	Rip Rap, Rubble	4	0	2
X	dsgnrd	RipRap_px	Rip Rap, Rubble on Cross Sections	4	1 / DGN1	
	dsgnrd	RoadwayMisc	Roadway Miscellaneous Items	4	0	2
X	dsgnrd	RumbleStrip1	Rumble Strips Continuous Array	0	PM-RumbleSolid	2
X	dsgnrd	RumbleStrip2	Rumble Strips Skip Array	0	PM-RumbleSkip	2
X	dsgnrd	RWLine	Right of Way Lines	4	RW-Proposed	2
X	dsgnrd	RWLine_ep	Right of Way Lines (Existing)	3	RW-Existing	1
	dsgnrd	RWLine_ex	ROW Lines on Cross Sections (Existing)	3	RW-Existing	
	dsgnrd	RWLine_px	ROW Lines on Cross Sections	4	RW-Proposed	
X	dsgnrd	SanitaryFM_ex	Force Main Lines on Cross Sections (Existing)	2	2 / DGN2	
X	dsgnrd	SanitaryFM_px	Force Main Lines on Cross Sections	2	0	
X	dsgnrd	SanitarySewer_ex	Sanitary Sewer Lines on Cross Sections (Existing)	10	2 / DGN2	
X	dsgnrd	SanitarySewer_px	Sanitary Sewer Lines on Cross Sections	2	0	
X	dsgnrd	SanitarySewerEff_px	Sanitary Effluent for Cross Sections	9	0	
X	dsgnrd	SawCuts	Saw Cuts	3	3 / DGN3	0
	dsgnrd	Scale_dp	Bar Scale, Scale Label Elements	0	0	2
	dsgnrd	Scratch1_dp	A scratch level for temporary or informational items	4	0	0
	dsgnrd	Scratch2_dp	A scratch level for temporary or informational items	5	0	0
	dsgnrd	ScratchEle_dp	Level for Draft Elements, Temporary Elements, Etc. Do Not Plot	3	0	0
	dsgnrd	ScratchEle2_dp	Level for Draft Elements, Temporary Elements, Etc. Do Not Plot	4	0	0
101	dsgnrd	SedimentBarrier	Synthetic Bales and Staked Silt Fences	10	SWP-HayBales	2
101	dsgnrd	SedimentBarrier	Synthetic Bales and Staked Silt Fences	10	SWP-SiltFence	2
X	dsgnrd	SedimentBasin	Sediment Basin Index 101	10	0	2
X	dsgnrd	SedimentBasin_ep	Sediment Basin Index 101 (Existing)	10	3 / DGN3	1
	dsgnrd	SheetBorder_dp	Sheet Border	1	0	4
	dsgnrd	SheetLines_dp	Sheet Lines	1	0	2
	dsgnrd	SheetLinesMisc1_dp	Sheet Lines	1	0	0
	dsgnrd	SheetLinesMisc2_dp	Sheet Lines	2	0	2
	dsgnrd	SheetLinesMisc3_dp	Sheet Lines	3	0	2
	dsgnrd	SheetLinesMisc4_dp	Sheet Lines	4	0	2
X	dsgnrd	ShldrBase_pm	Shoulder Base Top - Component Point Property and Model Break Line	3	0	1
X	dsgnrd	ShldrBase_px	Bottom of Proposed Paved Shoulder Base	3	0	2
X	dsgnrd	ShldrBaseTop_px	Top of Proposed Paved Shoulder Base	3	0	2
	dsgnrd	ShldrHatch	Paved Shoulder Hatch Pattern	1	0	1
X	dsgnrd	ShldrMilling_pm	Shoulder Milling - Component Point Property and Model Break Line	7	0	1
X	dsgnrd	ShldrMilling_px	Shoulder Milling Component for Cross Sections - Component Property	7	0	2
X	dsgnrd	ShldrOverbuild_px	Shoulder Overbuild - Component Property	4	0	1
X	dsgnrd	ShldrOverlay_px	Shoulder Overlay - Component Property	1	0	1
X	dsgnrd	ShldrPavBreak_pm	Shoulder Pavement Roll Over Break - Component Point Property and Model Break Line	1	0	1

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
X	dsgnrd	ShldrPaved	Paved Shoulder Line	1	0	1
X	dsgnrd	ShldrPaved_pm	Shoulder Pavement - Component Point Property and Model Break Line	1	0	1
X	dsgnrd	ShldrPaved_px	Paved Shoulder Lines on Cross Sections	1	0	2
X	dsgnrd	ShldrUnpavBreak_pm	Shoulder Unpaved Roll Over Break - Component Point Property and Model Break Line	2	0	1
X	dsgnrd	ShldrUnpaved	Unpaved Shoulder Line	0	0	0
X	dsgnrd	ShldrUnpaved_px	Grass Shoulder Lines on Cross Sections	2	0	2
X	dsgnrd	Sidewalk_ex	Sidewalk Elements in Cross Sections (Existing)	0	2 / DGN2	1
X	dsgnrd	Sidewalk_pm	Sidewalk - Component Point Property and Model Break Line	0	0	1
X	dsgnrd	Sidewalk_px	Sidewalk Elements in Cross Sections	0	0	2
X	dsgnrd	SidewalkBack	Sidewalk Back	2	0	1
	dsgnrd	SidewalkBack_er	Back of Sidewalk Line Profile (Existing)	2	2 / DGN2	1
	dsgnrd	SidewalkBack_pr	Back of Sidewalk Line Profile	5	0	2
X	dsgnrd	SidewalkBase_px	Proposed Sidewalk Subgrade	3	0	2
X	dsgnrd	SidewalkConc	Sidewalk Concrete Shape	0	0	2
X	dsgnrd	SidewalkFront	Sidewalk Front	1	0	1
X	dsgnrd	Slopes	Slopes (Top, Bottom)	9	3 / DGN3	0
X	dsgnrd	Slopes_px	Slope Lines on Cross Sections	9	0	2
X	dsgnrd	SlopesBreak_pm	Slopes - Component Point Property and Model Break Line	9	0	1
X	dsgnrd	SlopeStakes1	Slope Stakes 1	4	1 / DGN1	3
X	dsgnrd	SlopeStakes2	Slope Stakes 2	1	1 / DGN1	3
X	dsgnrd	SnglStaHndl_dp	Single Station Handle Display Setting for All Design Stages	44	0	1
X	dsgnrd	Sod	Performance Sod	2	0	2
X	dsgnrd	SoilBoring	Soil Boring Elements	5	0	1
	dsgnrd	SoilBoringLoc_dp	Soil Boring Location Symbol	4	0	2
	dsgnrd	SoilBoxes_dp	Soil Boxes	4	0	1
X	dsgnrd	SoilBoxes_px	Soil Boxes and Borings for Cross Sections	4	0	1
	dsgnrd	SpecialDetails	Special Details	6	0	1
X	dsgnrd	SpecialDetails_px	Special Details_XS	6	0	1
	dsgnrd	StationTicL_dp	Station Tic Marks (Large) and Text	0	0	2
	dsgnrd	StationTicS_dp	Station Tic Marks (Small) and Text	0	0	2
	dsgnrd	StreetLights_px	Street Lights for Cross Sections	3	0	1
X	dsgnrd	StructuralCourse	Asphaltic Concrete Structural Course	6	0	2
	dsgnrd	Structure	Structures	0	0	2
	dsgnrd	Structure_px	Signal and Sign Structures on Cross Sections	0	0	2
X	dsgnrd	SubDsgn_px	Sub Design for Cross Sections including subbase	4	0	1
X	dsgnrd	Subsoil_px	Subsoil Or Undercut for Cross Sections	4	0	2
X	dsgnrd	SubsoilFinal_px	Subsoil Final for Multiline	18	0	1
X	dsgnrd	SubsoilProp_px	Subsoil Proposed for Multiline	8	0	1
	dsgnrd	SumBoxBorder_dp	Summary Boxes Borders	4	0	3
	dsgnrd	SumBoxLines_dp	Summary Boxes Lines and Miscellaneous Items	4	0	1
	dsgnrd	SumBoxLinesMin_dp	Summary Boxes Lines Minor Line and Miscellaneous Items	4	0	0
X	dsgnrd	Tables_dp	Data Tables and All Autodesk Tables	0	0	1
X	dsgnrd	TeleBur_ex	Telephone for Cross Sections (Buried - Miscellaneous - Existing)	6	2 / DGN2	1

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
X	dsgnrd	TeleBur_px	Telephone for Cross Sections (Buried) (Miscellaneous)	6	0	1
X	dsgnrd	TemplateBottom_px	Bottom of Template for Multiline	6	0	1
X	dsgnrd	TemplateFinal_px	Final Template for Multiline	2	0	1
X	dsgnrd	TemplateTop_px	Top of Template for Multiline	7	0	1
X	dsgnrd	TerrainLine_ex	Existing Ground Line for Multiline	5	0	1
	dsgnrd	TextAlert	Text - An Alert Label to Highlight a Problem	3	0	2
	dsgnrd	TextBLStation	Text - B/L Station and Tics	0	0	2
	dsgnrd	TextConstEle	Text - Construction Element	0	0	1
	dsgnrd	TextCurveData	Text - Curve Data Note	0	0	2
	dsgnrd	TextDetails	Text - Detail Notes	4	0	2
	dsgnrd	TextElevLabel	Elevation Labels	4	0	0
	dsgnrd	TextGeotech	Text for soil borings and labels	0	0	2
	dsgnrd	TextLabel	Text - Label	0	0	2
	dsgnrd	TextLandscape	Text - Landscape Labels	0	0	1
	dsgnrd	TextMajor	Text - Major	0	0	5
	dsgnrd	TextMinor	Text - Minor	0	0	0
	dsgnrd	TextMisc	Text - Miscellaneous	0	0	1
	dsgnrd	TextNotes	Text - Notes	4	0	1
	dsgnrd	TextProfLabel	Text - Profile, Horizontal and Vertical Axis Labels	0	0	2
	dsgnrd	TextProjLabel	Text - Begin and End Project label with leader lines	1	0	2
	dsgnrd	TextPtLabel	Point Labels	4	0	0
	dsgnrd	TextShtNo	Text - Sheet Number	0	0	2
	dsgnrd	TextSurveyLabel	Survey Text Labels	0	0	0
	dsgnrd	TextTables	Text - KeysheetKey sheet Indexes and Table Data	4	0	2
	dsgnrd	TextTitle	Text - Title	0	0	3
	dsgnrd	TextXSBL_dp	Cross Section Baseline Labels	0	0	2
	dsgnrd	TextXSDrain_ex	Existing Drainage Labels	10	0	2
	dsgnrd	TextXSDrain_px	Proposed Drainage Labels	10	0	2
	dsgnrd	TextXSElev	Text - Cross Section Elevations	2	0	1
	dsgnrd	TextXSElev_ex	Existing cross section elevations	2	0	1
	dsgnrd	TextXSElev_px	Proposed cross section elevations	0	0	1
	dsgnrd	TextXSGPKPts_dp	Points labeled on cross sections	4	0	0
	dsgnrd	TextXSNotes_dp	Cross Section Notes	0	0	2
	dsgnrd	TextXSSlope_dp	Cross Section Slope Labels (rise:run format)	0	0	2
	dsgnrd	TextXSSlopePvt_dp	Cross Section Pavement Slope Labels	0	0	2
X	dsgnrd	TmpDrpHndlStg1_dp	Template Drop Handle Display Setting for Corridor Design Stage 1	14	0	1
X	dsgnrd	TmpDrpHndlStg2_dp	Template Drop Handle Display Setting for Corridor Design Stage 2	10	0	1
X	dsgnrd	TmpDrpHndlStg3_dp	Template Drop Handle Display Setting for Corridor Design Stage 3	6	0	1
X	dsgnrd	TrafSeparator	Traffic Separator (All Types)	6	0	1
X	dsgnrd	TrafSeparator_ex	Traffic Separator (All Types) on Cross Sections (Existing)	6	2 / DGN2	1
X	dsgnrd	TrafSeparator_pm	Traffic Separator Top - Component Point Property and Model Break Line	6	0	1
X	dsgnrd	TrafSeparator_px	Traffic Separator (All Types) on Cross Sections	6	0	2
X	dsgnrd	TrafSeparatorBase_px	Proposed Traffic Separator Subgrade	3	0	2
X	dsgnrd	TranstionHndl_dp	Transition Handle Display Setting for All Design Stages	29	0	1

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
X	dsgnrd	TurbidityBarrier1	Turbidity Barrier 1 (floating)	10	SWP-TurbidityBarrier-Type1	2
	dsgnrd	TurbidityBarrier1_ep	Turbidity Barrier (Floating) (Existing)	10	1 / DGN1	2
X	dsgnrd	TurbidityBarrier2	Turbidity Barrier 2 (staked)	10	SWP-TurbidityBarrier-Type2	2
	dsgnrd	TurbidityBarrier2_ep	Turbidity Barrier (Staked) (Existing)	10	1 / DGN1	2
X	dsgnrd	Turf	Performance TrufTurf	100	0	2
	dsgnrd	TurningEle_dp	Miscellaneous Turning Radius Elements	4	0	1
	dsgnrd	TurningRadius_dp	Turning Radius Line	3	3 / DGN3	1
	dsgnrd	TypicalMisc	Typical Miscellaneous Items	0	0	2
	dsgnrd	Utility_er	Existing Utilities in Profile View	3	2 / DGN2	1
	dsgnrd	Utility_pr	Proposed Utilities in Profile View	3	0	2
	dsgnrd	UtilsMisc_ex	Miscellaneous Utility Items on Cross Sections (Existing)	8	2 / DGN2	1
	dsgnrd	UtilsMisc_px	Miscellaneous Utility Items on Cross Sections	8	0	1
	dsgnrd	Vehicle	Vehicle for Calculating Turning Radius	7	0	2
	dsgnrd	Viewport	Viewport (For AutoCAD Use)	3	0	0
	dsgnrd	VoidArea_dx	Void Area_XS	1	0	0
X	dsgnrd	WallBarrier	Barrier Wall All Types	6	0	2
X	dsgnrd	WallBarrier_ex	Barrier Wall for Cross Section (Existing)	6	3 / DGN3	2
X	dsgnrd	WallBarrier_pm	Barrier Wall Top - Component Point Property and Model Break Line	6	0	1
X	dsgnrd	WallBarrier_px	Barrier Wall for Cross Section	6	0	2
X	dsgnrd	WallFooter_pm	Wall Footer Top - Component Point Property and Model Break Line	2	0	1
X	dsgnrd	WallFooter_px	Wall Footer (Concrete) - For Component symbology/material on all wall footers/leveling pads	2	0	1
X	dsgnrd	WallGravBase_px	Proposed Gravity Wall Subgrade	3	0	2
X	dsgnrd	WallGravity	Gravity Wall	11	0	1
X	dsgnrd	WallGravity_pm	Gravity Wall Top - Component Point Property and Model Break Line	11	0	1
X	dsgnrd	WallGravity_px	Gravity Wall for Cross Sections	11	0	2
X	dsgnrd	WallMedianBase_px	Proposed Median Wall Subgrade	3	0	2
X	dsgnrd	WallNoise	Noise Wall All Types	11	0	2
X	dsgnrd	WallRetain	Retaining Wall System	6	0	1
X	dsgnrd	WallRetain_pm	Retaining Wall Top - Component Point Property and Model Break Line	6	0	1
X	dsgnrd	WallRetain_pr	Retaining Wall Profile	9	0	2
X	dsgnrd	WallRetain_px	Retaining Walls on Cross Sections	6	0	1
X	dsgnrd	WallShldrBase_px	Proposed Shoulder Wall Subgrade	3	0	2
X	dsgnrd	Water_ex	Water for Cross Sections (Existing)	1	2 / DGN2	1
X	dsgnrd	Water_px	Water for Cross Sections	1	0	1
X	dsgnrd	WaterNP_px	Raw Water Pipes for Cross Sections	1	0	1
	dsgnrd	Wetland	Wetland Boundary	2	RD-Wetland-Proposed	1
	dsgnrd	Wetland_ex	Wetland Boundary for Cross Sections (Existing)	2	RD-Wetland-Existing	1
	dsgnrd	WetlandEdge_ep	Edge of Mangrove, Wetlands (Marsh or Swamp)	2	RD-Wetland-Existing	0
	dsgnrd	Widening	Widening Patterns and Miscellaneous Elements	1	0	1
	dsgnrd	Xreference01_dp	Reference Files (For AutoCAD Use)	0	0	1
	dsgnrd	Xreference02_dp	Reference Files (For AutoCAD Use)	0	0	1
	dsgnrd	Xreference03_dp	Reference Files (For AutoCAD Use)	0	0	1
	dsgnrd	Xreference04_dp	Reference Files (For AutoCAD Use)	0	0	1

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
X	dsgnrd	XSBaseTop_px	Top of Proposed Base	3	0	2
	dsgnrd	XSCell	GEOPAK Cross Section Cell/Block and Profile Cell/Block	8	0	1
X	dsgnrd	XSExtendGrdLine_ex	Extend Ground Lines for Cross Sections (Existing)	21	2 / DGN2	1
X	dsgnrd	XSGrdLine_ex	Ground Lines for Cross Sections (Existing)	2	2 / DGN2	1
X	dsgnrd	XSGrdLine_px	Roadway Ground Lines on Cross Sections	1	0	2
	dsgnrd	XSMisc_ex	Roadway Miscellaneous Items on Cross Sections (Existing)	4	3 / DGN3	1
	dsgnrd	XSMisc_px	Cross Section Miscellaneous Items	0	0	2
	dsgnrd	XSPt_ep	Cross Section Point, Station	2	1 / DGN1	0
	dsgnrd	XSShapeDep01_dp	Cross Section Shape Dependent	11	0	2
	dsgnrd	XSShapeDep02_dp	Cross Section Shape Dependent	12	0	2
	dsgnrd	XSShapeDep03_dp	Cross Section Shape Dependent	13	0	2
	dsgnrd	XSShapeDep04_dp	Cross Section Shape Dependent	14	0	2
	dsgnrd	XSShapeDep05_dp	Cross Section Shape Dependent	15	0	2
	dsgnrd	XSShapeDep06_dp	Cross Section Shape Dependent	16	0	2
	dsgnrd	XSShapeDep07_dp	Cross Section Shape Dependent	17	0	2
	dsgnrd	XSShapeDep08_dp	Cross Section Shape Dependent	18	0	2
	dsgnrd	XSShapeDep09_dp	Cross Section Shape Dependent	19	0	2
	dsgnrd	XSShapeDep10_dp	Cross Section Shape Dependent	20	0	2
	dsgnrd	XSShapeIndep01_dp	Cross Section Shape Independent	1	0	2
	dsgnrd	XSShapeIndep02_dp	Cross Section Shape Independent	2	0	2
	dsgnrd	XSShapeIndep03_dp	Cross Section Shape Independent	3	0	2
	dsgnrd	XSShapeIndep04_dp	Cross Section Shape Independent	4	0	2
	dsgnrd	XSShapeIndep05_dp	Cross Section Shape Independent	5	0	2
	dsgnrd	XSShapeIndep06_dp	Cross Section Shape Independent	6	0	2
	dsgnrd	XSShapeIndep07_dp	Cross Section Shape Independent	7	0	2
	dsgnrd	XSShapeIndep08_dp	Cross Section Shape Independent	8	0	2
	dsgnrd	XSShapeIndep09_dp	Cross Section Shape Independent	9	0	2
	dsgnrd	XSShapeIndep10_dp	Cross Section Shape Independent	10	0	2
X	dsgnrd	XSTypical_px	Roadway Pavement Typical on Cross Sections	1	0	2

DSGNSG - Signalization Design

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
	dsgnsg	ActivePointCell_dp	Active Point Cell	4	0	10
	dsgnsg	AdhocPoint_dp	Adhoc Points Placed by SheetInfo	0	4 / 0	0
	dsgnsg	BaselineSurvey	Baseline Survey	0	0	2
	dsgnsg	CLConst_dp	Center Line of Construction	0	0	2
	dsgnsg	Cloud_dp	Construction Cloud	7	0	2
	dsgnsg	COGO_dp	COGO Information	3	0	1
X	dsgnsg	Conduit	Conduit for Utilities and Encasements	3	SG-Conduit-Type1	1

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
X	dsgnsg	ConduitAG	Conduit – Above Ground	4	SG-ConduitAG-Proposed	1
X	dsgnsg	ConduitBM	Conduit – Bridge Mount	5	SG-ConduitBM-Proposed	1
X	dsgnsg	ConduitDB	Conduit – Directional Bore	2	ConduitDB-Proposed	1
X	dsgnsg	ConduitJB	Conduit – Jack & Bore Under Rail	3	SG-ConduitJB-Proposed	1
X	dsgnsg	ConduitOT	Conduit – Open Trench	1	SG-ConduitOT-Proposed	1
	dsgnsg	ConstArea_dp	Construction Area Crosshatch	0	0	1
	dsgnsg	ConstLimits	Construction Limits	3	RW-LimitsofConst	2
	dsgnsg	ConstLines	Construction Lines and References	1	0	0
	dsgnsg	ConstLines_pm	Construction Lines	4	0	0
X	dsgnsg	Controller	Controller and Accessories	0	0	2
X	dsgnsg	Controller_ep	Controller and Accessories (Existing)	0	2 / DGN2	1
X	dsgnsg	ControllerAcess	Controller Accessories	0	0	1
X	dsgnsg	ControllerB	Controller - Base Mounted	0	0	2
X	dsgnsg	ControllerB_ep	Controller - Base Mounted (Existing)	0	2 / DGN2	1
X	dsgnsg	ControllerP	Controller Pole Mount	0	0	2
X	dsgnsg	ControllerP_ep	Controller Pole Mount (Existing)	0	2 / DGN2	1
	dsgnsg	CurveData_dp	Curve & Coordinate Data Elements incl PC, PT, PI symbols	4	0	2
	dsgnsg	CurveDataLabel_dp	Curve Data Labels PC,PI, PT	0	0	2
X	dsgnsg	Delineator	Delineators (All Types)	4	0	1
X	dsgnsg	Detector	Detector Cabinet, Button and Misc Assemblies	3	0	2
X	dsgnsg	DetectorVeh	Detector Vehicle Assemblies (All Types)	3	0	1
	dsgnsg	DimLines_dp	Dimension Lines, Corresponding Terminators, Equation Lines	0	0	1
X	dsgnsg	EaseLicLine	Easement License Agreement Line	5	6 / DGN6	0
X	dsgnsg	ElectPS	Electrical Power Service Miscellaneous	3	0	1
X	dsgnsg	ElectPSB	Electrical (Buried)	3	UT-BuriedElec-Proposed	2
X	dsgnsg	ElectPSO	Electrical Outlet	3	0	1
X	dsgnsg	ElectServWire	Electrical Service Wire	3	0	2
X	dsgnsg	FOCBur	Fiber Optics Cable (Buried)	6	UT-BuriedFiberOptic-Proposed	1
X	dsgnsg	Generator	Emergency Generator	0	0	2
	dsgnsg	GridMaj_dp	Grid Lines Major in Profile and Cross Section	3	0	1
	dsgnsg	GridMin_dp	Grid Lines Minor in Profile and Cross Section	0	0	0
	dsgnsg	GridMinSub_dp	Grid Lines Minor Sub in Cross Section Sheets	20	0	0
	dsgnsg	GSBWFill	GuidSign Black and White Fill Level for GuidSign Cells	0	0	1
	dsgnsg	GSColorFill	GuidSign Color Fill Level for GuidSign Cells	2	0	1
	dsgnsg	GSDims	GuidSign Dimensions	0	0	1
	dsgnsg	GSOutline	GuidSign Outline Level for GuidSign Cells	0	0	2
	dsgnsg	GSSign	GuidSign Panel and Tag	7	0	0
X	dsgnsg	GuyWire	Guy Wire	3	0	0
	dsgnsg	ImageAttachment_dp	Image AttachmentstAttachments	0	0	0
	dsgnsg	InRoadLight	In-Roadway Light Assembly	0	0	2
X	dsgnsg	Insulator	Insulator, Fiberglass	3	0	4
X	dsgnsg	InterconCable	Cable Interconnect	1	SG-InterconCable-Proposed	1
X	dsgnsg	InterconCable_ep	Interconnect Cable (Existing)	1	SG-InterconCable-Existing	0
X	dsgnsg	JunctBox	Junction Boxes, Service Cabinet (Elec/Tel)	3	0	1

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
	dsgnsg	JunctBox_ep	Junct. BoxJunction Box / Service Cabinet (Elec/Tel)	3	1 / DGN1	1
X	dsgnsg	JunctBoxA	Junction Boxes (Aerial)	3	0	1
X	dsgnsg	JunctBoxA_ep	Junction Boxes (Aerial) (Existing)	3	1 / DGN1	0
	dsgnsg	LaneDirArrow	Lane Directional Arrow	0	0	1
	dsgnsg	LeaderLine_dp	Leader Line and terminator with Text	0	0	1
X	dsgnsg	LoadCenter	Load Center	2	0	1
X	dsgnsg	LoadCenter_ep	Load Center (Existing)	2	5 / DGN5	0
	dsgnsg	Logo_dp	Consultant Engineer of Record Logo	0	0	1
X	dsgnsg	LoopLI	Loop Lead-In	3	0	1
X	dsgnsg	LoopLI_ep	Loop Lead-In (Existing)	3	2 / DGN2	0
X	dsgnsg	Loops	Loop Assembly (All Types)	2	0	2
X	dsgnsg	Loops_ep	Loop Assembly (All Types) (Existing)	2	2 / DGN2	2
	dsgnsg	MatchLines_dp	Match Lines with Text, Arrows for Station Notations	1	0	2
X	dsgnsg	MessengerWire	Messenger Wire	3	0	1
	dsgnsg	Miscellaneous0	Undefined proposed item - co blue wt 0	1	0	0
	dsgnsg	Miscellaneous1	Undefined proposed item - co blue wt 1	1	0	1
	dsgnsg	Miscellaneous2	Undefined proposed item - co blue wt 2	1	0	2
	dsgnsg	Miscellaneous3	Undefined proposed item - co green wt 0	2	0	0
	dsgnsg	Miscellaneous4	Undefined proposed item - co green wt 1	2	0	1
	dsgnsg	Miscellaneous5	Undefined proposed item - co green wt 2	2	0	2
	dsgnsg	Miscellaneous6	Undefined proposed item - co red wt 0	3	0	0
	dsgnsg	Miscellaneous7	Undefined proposed item - co red wt 1	3	0	1
	dsgnsg	Miscellaneous8	Undefined proposed item - co red wt 2	3	0	2
	dsgnsg	Miscellaneous9	Undefined proposed item - co red wt 3	3	0	3
	dsgnsg	NonPlottingEle_dp	Non plotting items such as construction elements and type 66 elements	4	0	0
	dsgnsg	NorthArw_dp	North Arrows	0	0	2
X	dsgnsg	ObjectMarker	Object and Reflective Markers	3	0	1
X	dsgnsg	OverheadSign	Overhead Sign Panels	0	0	2
X	dsgnsg	OverheadSign_ep	Overhead Sign Panels (Existing)	0	3 / DGN3	1
X	dsgnsg	OverheadStr	Mast Arm, Truss Assemblies, Signal Arms and Supports	0	0	2
X	dsgnsg	OverheadStr_ep	Mast Arm, Truss Assemblies, Signal Arms and Supports (Existing)	0	3 / DGN3	1
X	dsgnsg	PavtMessage	Pavement Message (All types)(All Types)	0	0	1
X	dsgnsg	PavtMessage_ep	Pavement Message (Existing - All types)(All Types)	0	2 / DGN2	0
	dsgnsg	PayItem_dp	Pay Item Number Label Elements	4	0	2
X	dsgnsg	PedDetector	Pedestrian Detector	0	0	2
X	dsgnsg	Pedestal	Pedestal	1	0	1
X	dsgnsg	Pedestal_ep	Pedestal (Existing)	1	2 / DGN2	1
X	dsgnsg	PedHead	Pedestrian Head (All Types)	1	0	1
X	dsgnsg	PedHead_ep	Pedestrian Head (All Types) (Existing)	0	2 / DGN2	1
X	dsgnsg	PlotBorder_dp	Plot Border	3	0	0
X	dsgnsg	PMCeramic	Pavement Markers Ceramic	0	0	1
	dsgnsg	PMMisc	Pavement Marking Miscellaneous Items	0	0	2
X	dsgnsg	PMStripe12B	Pavement Marking Traffic Stripe 12in Black	3	0	4
X	dsgnsg	PMStripe12W	Pavement Marking Traffic Stripe 12in White	0	0	4

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
X	dsgnsg	PMStripe12W(3-9)	Pavement Marking 3/9 Skip Traffic Stripe 12in White	0	0 / PM-Stripe-SKIP 3-9	4
X	dsgnsg	PMStripe12Y	Pavement Marking Traffic Stripe 12in Yellow	4	0	4
X	dsgnsg	PMStripe16B	Pavement Marking Traffic Stripe 16in Black	3	0	5
X	dsgnsg	PMStripe16W	Pavement Marking Traffic Stripe 16in White	0	0	5
X	dsgnsg	PMStripe16Y	Pavement Marking Traffic Stripe 16in Yellow	4	0	5
X	dsgnsg	PMStripe18B	Pavement Marking Traffic Stripe 18in Black	3	0	6
X	dsgnsg	PMStripe18W	Pavement Marking Traffic Stripe 18in White	0	0	6
X	dsgnsg	PMStripe18Y	Pavement Marking Traffic Stripe 18in Yellow	4	0	6
X	dsgnsg	PMStripe24W	Pavement Marking Traffic Stripe 24in White	0	0	7
X	dsgnsg	PMStripe24Y	Pavement Marking Traffic Stripe 24in Yellow	4	0	7
X	dsgnsg	PMStripe6B	Pavement Marking Traffic Stripe 6in Black	3	0	2
X	dsgnsg	PMStripe6B(10-30)	Pavement Marking 10/30 Skip Traffic Stripe 6in Black	3	0 / PM-Stripe-SKIP 10-30	2
X	dsgnsg	PMStripe6Bl	Pavement Marking Traffic Stripe 6in Blue	1	0	2
X	dsgnsg	PMStripe6DY	Pavement Marking Traffic Stripe 6in Double Yellow	4	0	2
X	dsgnsg	PMStripe6W	Pavement Marking Traffic Stripe 6in White	0	0	2
X	dsgnsg	PMStripe6W(10-30)	Pavement Marking 10/30 Skip Traffic Stripe 6in White	0	0 / PM-Stripe-SKIP 10-30	2
X	dsgnsg	PMStripe6W(2-4)	Pavement Marking 2/4 Skip Traffic Stripe 6in White	0	0 / PM-Stripe-SKIP 2-4	2
X	dsgnsg	PMStripe6W(3-9)	Pavement Marking 3/9 Skip Traffic Stripe 6in White	0	0 / PM-Stripe-SKIP 3-9	2
X	dsgnsg	PMStripe6W(6-10)	Pavement Marking 6/10 Skip Traffic Stripe 6in White	0	0 / PM-Stripe-SKIP 6-10	2
X	dsgnsg	PMStripe6Y	Pavement Marking Traffic Stripe 6in Yellow	4	0	2
X	dsgnsg	PMStripe6Y(10-30)	Pavement Marking 10/30 Skip Traffic Stripe 6in Yellow	4	0 / PM-Stripe-SKIP 10-30	2
X	dsgnsg	PMStripe6Y(2-4)	Pavement Marking 2/4 Skip Traffic Stripe 6in Yellow	4	0 / PM-Stripe-SKIP 2-4	2
X	dsgnsg	PMStripe6Y(6-10)	Pavement Marking 6/10 Skip Traffic Stripe 6in Yellow	4	0 / PM-Stripe-SKIP 6-10	2
X	dsgnsg	PMStripe8B	Pavement Marking Traffic Stripe 8in Black	3	0	3
X	dsgnsg	PMStripe8W	Pavement Marking Traffic Stripe 8in White	0	0	3
X	dsgnsg	PMStripe8W(3-9)	Pavement Marking 3/9 Skip Traffic Stripe 8in White	0	0 / PM-Stripe-SKIP 3-9	2
X	dsgnsg	PMStripe8Y	Pavement Marking Traffic Stripe 8in Yellow	4	0	3
X	dsgnsg	PMStripeVibeWL	Pavement Marking Auditory and Vibratory 6in White (Left)	0	PM-Stripe-VibratoryLeft / PM-Stripe-Vibratory	2
X	dsgnsg	PMStripeVibeWR	Pavement Marking Auditory and Vibratory 6in White (Right)	0	PM-Stripe-VibratoryRight / PM-Stripe-Vibratory	2
X	dsgnsg	PMStripeVibeYL	Pavement Marking Auditory and Vibratory 6in Yellow (Left)	4	PM-Stripe-VibratoryLeft / PM-Stripe-Vibratory	2
X	dsgnsg	PMStripeVibeYR	Pavement Marking Auditory and Vibratory 6in Yellow (Right)	4	PM-Stripe-VibratoryRight / PM-Stripe-Vibratory	2
	dsgnsg	PointLocator_ep	Point Locator Symbol	4	0	0
X	dsgnsg	PoleConc	Concrete Strain Pole	0	0	2

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
X	dsgnsg	PoleConc_ep	Concrete Strain Pole (Existing)	0	2 / DGN2	1
X	dsgnsg	PoleFound	Pole Foundation	0	0	2
X	dsgnsg	PoleLight	Light Pole	2	0	1
X	dsgnsg	PoleLight_ep	Light Pole (Existing)	2	2 / DGN2	1
X	dsgnsg	PoleLightHM	High Mast Light Pole	3	0	1
X	dsgnsg	PoleLightHM_ep	High Mast Light Pole (Existing)	2	2 / DGN2	1
	dsgnsg	PoleLightID	Light Pole Location / ID	4	0	1
X	dsgnsg	PolePower	Power Pole w/ Transformer	3	0	2
X	dsgnsg	PoleShared	Power Pole Electric (Above Ground) Shared w/ Transformer	3	0	2
X	dsgnsg	PoleSteelStrain	Steel Strain Pole	0	0	2
X	dsgnsg	PoleSteelStrain_ep	Steel Strain Pole (Existing)	0	2 / DGN2	1
X	dsgnsg	PoleTel	Telephone Pole	6	0	2
X	dsgnsg	PoleUtil	Utility Pole	0	0	2
X	dsgnsg	PoleWoodStrain	Wood Strain Pole	0	0	2
X	dsgnsg	PoleWoodStrain_ep	Wood Strain Pole (Existing)	0	2 / DGN2	1
X	dsgnsg	PullBox	Pull Boxes (All Types)	3	0	1
	dsgnsg	PullBox_ep	Wiring Pull Box	3	1 / DGN1	1
	dsgnsg	ReferencePt_dp	Survey and Construction Reference Point Details and Elements	4	0	2
X	dsgnsg	SawCuts	Saw Cuts	3	3 / DGN3	0
	dsgnsg	Scale_dp	Bar Scale, Scale Label Elements	0	0	2
	dsgnsg	Scratch1_dp	A scratch level for temporary or informational items	4	0	0
	dsgnsg	Scratch2_dp	A scratch level for temporary or informational items	5	0	0
	dsgnsg	ScratchEle_dp	Level for Draft Elements, Temporary Elements, Etc. Do Not Plot	3	0	0
	dsgnsg	ScratchEle2_dp	Level for Draft Elements, Temporary Elements, Etc. Do Not Plot	4	0	0
	dsgnsg	SheetBorder_dp	Sheet Border	1	0	4
	dsgnsg	SheetLines_dp	Sheet Lines	1	0	2
	dsgnsg	SheetLinesMisc1_dp	Sheet Lines	1	0	0
	dsgnsg	SheetLinesMisc2_dp	Sheet Lines	2	0	2
	dsgnsg	SheetLinesMisc3_dp	Sheet Lines	3	0	2
	dsgnsg	SheetLinesMisc4_dp	Sheet Lines	4	0	2
X	dsgnsg	SignalCable	Signal Cable	3	SG-Cable	1
X	dsgnsg	SignalCableAccs	Signal Cable Accessories	0	0	2
X	dsgnsg	SignalDetail	Signal Details	0	0	1
	dsgnsg	SignalHead	Signal Head Section Details	2	0	1
X	dsgnsg	SignalHead_ep	Signal Head Section Details (Existing)	2	2 / DGN2	0
	dsgnsg	SignalMisc	Signal Miscellaneous Equipment	3	0	1
X	dsgnsg	SignalSOP	S.O.P. Box and Movements	0	0	2
X	dsgnsg	SignalSym	Signal Head Symbols	0	0	1
X	dsgnsg	SignalSym_ep	Signal Head Symbols (Existing)	3	2 / DGN2	0
X	dsgnsg	SignCantilever	Sign Symbol Cantilever	0	0	1
X	dsgnsg	SignCantilever_ep	Sign Symbol Cantilever (Existing)	0	2 / DGN2	0
	dsgnsg	SignDetail	Sign Details	0	0	2
X	dsgnsg	SignDMS	Dynamic Message Sign	0	0	1
	dsgnsg	SignLettersAZ	Alphabet Cell Library Letter A-Z Numbers 0-9	0	0	0

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
	dsgnsg	SignMisc	Miscellaneous Sign Symbols	1	0	2
	dsgnsg	SignMisc_ep	Miscellaneous Sign Symbols (Existing)	1	1 / DGN1	1
X	dsgnsg	SignPanel	Sign Panels - Regulatory	0	0	2
X	dsgnsg	SignPanel_ep	Sign Panel Elements (Existing)	0	2 / DGN2	1
X	dsgnsg	SignPanelBorder	Sign Panel Border on Sign Details	0	0	1
X	dsgnsg	SignPanelC	Sign Panels - Civil	1	0	2
X	dsgnsg	SignPanelDetRed	Sign Panel Details in Red	3	0	2
X	dsgnsg	SignPanelG	Sign Panels - Guide	2	0	2
X	dsgnsg	SignPanelI	Sign Panels - Special Interest	9	0	2
X	dsgnsg	SignPanelT	Sign Panels - Construction	6	0	2
X	dsgnsg	SignPanelW	Sign Panels - Warning	4	0	2
X	dsgnsg	SignSpanwire	Span Wire Signing Assembly	2	0	1
X	dsgnsg	SignSpanwire_ep	Span Wire Signing Assembly (Existing)	2	2 / DGN2	1
X	dsgnsg	SignSpecial	Special Signs / Guide Signs	2	0	2
X	dsgnsg	SignSupport	Ground Mounted Sign Support Symbol (All Types)	1	0	1
X	dsgnsg	SignSymbol_px	Sign Structure and Foundation on Cross Sections	4	0	2
X	dsgnsg	SignTruss	Sign Symbol Truss	3	0	1
X	dsgnsg	SignTruss_ep	Sign Symbol Truss (Existing)	3	2 / DGN2	1
	dsgnsg	SpecialDetails	Special Details	6	0	1
	dsgnsg	StationTicL_dp	Station Tic Marks (Large) and Text	0	0	2
	dsgnsg	StationTicS_dp	Station Tic Marks (Small) and Text	0	0	2
	dsgnsg	SumBoxBorder_dp	Summary Boxes Borders	4	0	3
	dsgnsg	SumBoxLines_dp	Summary Boxes Lines and Miscellaneous Items	4	0	1
	dsgnsg	SumBoxLinesMin_dp	Summary Boxes Lines Minor Line and Miscellaneous Items	4	0	0
	dsgnsg	Tables_dp	Data Tables and All Autodesk Tables	0	0	1
	dsgnsg	TextBLStation	Text - B/L Station and Tics	0	0	2
	dsgnsg	TextConstEle	Text - Construction Element	0	0	1
	dsgnsg	TextCurveData	Text - Curve Data Note	0	0	2
	dsgnsg	TextDetails	Text - Detail Notes	4	0	2
	dsgnsg	TextElevLabel	Elevation Labels	4	0	0
	dsgnsg	TextLabel	Text - Label	0	0	2
	dsgnsg	TextLandscape	Text - Landscape Labels	0	0	1
	dsgnsg	TextMajor	Text - Major	0	0	5
	dsgnsg	TextMinor	Text - Minor	0	0	0
	dsgnsg	TextMisc	Text - Miscellaneous	0	0	1
	dsgnsg	TextNotes	Text - Notes	4	0	1
	dsgnsg	TextProfLabel	Text - Profile, Horizontal and Vertical Axis Labels	0	0	2
	dsgnsg	TextProjLabel	Text - Begin and End Project label with leader lines	1	0	2
	dsgnsg	TextPtLabel	Point Labels	4	0	0
	dsgnsg	TextShtNo	Text - Sheet Number	0	0	2
	dsgnsg	TextSurveyLabel	Survey Text Labels	0	0	0
	dsgnsg	TextTables	Text - KeysheetKey sheet Indexes and Table Data	4	0	2
	dsgnsg	TextTitle	Text - Title	0	0	3
	dsgnsg	TextXSElev	Text - Cross Section Elevations	2	0	1

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
	dsgnsg	Viewport	Viewport (For AutoCAD Use)	3	0	0
	dsgnsg	Xreference01_dp	Reference Files (For AutoCAD Use)	0	0	1
	dsgnsg	Xreference02_dp	Reference Files (For AutoCAD Use)	0	0	1
	dsgnsg	Xreference03_dp	Reference Files (For AutoCAD Use)	0	0	1
	dsgnsg	Xreference04_dp	Reference Files (For AutoCAD Use)	0	0	1
	dsgnsg	XSCell	GEOPAK Cross Section Cell/Block and Profile Cell/Block	8	0	1

DSGNSP - Signing and Pavement Marking Design

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
	dsgnsp	ActivePointCell_dp	Active Point Cell	4	0	10
	dsgnsp	AdhocPoint_dp	Adhoc Points Placed by SheetInfo	0	4 / 0	0
	dsgnsp	BaselineSurvey	Baseline Survey	0	0	2
X	dsgnsp	BikeLaneColorPavt	Green Bike Lane Pavement	2	0	2
	dsgnsp	CLConst_dp	Center Line of Construction	0	0	2
	dsgnsp	Cloud_dp	Construction Cloud	7	0	2
	dsgnsp	COGO_dp	COGO Information	3	0	1
X	dsgnsp	ConduitAG	Conduit – Above Ground	4	SG-ConduitAG-Proposed	1
X	dsgnsp	ConduitBM	Conduit – Bridge Mount	5	SG-ConduitBM-Proposed	1
X	dsgnsp	ConduitDB	Conduit – Directional Bore	2	SG-ConduitDB-Proposed	1
X	dsgnsp	ConduitJB	Conduit – Jack & Bore Under Rail	3	SG-ConduitJB-Proposed	1
X	dsgnsp	ConduitOT	Conduit – Open Trench	1	SG-ConduitOT-Proposed	1
	dsgnsp	ConstArea_dp	Construction Area Crosshatch	0	0	1
	dsgnsp	ConstLimits	Construction Limits	3	RW-LimitsofConst	2
	dsgnsp	ConstLines	Construction Lines and References	1	0	0
	dsgnsp	ConstLines_pm	Construction Lines	4	0	0
X	dsgnsp	CrossWalk1	Emphasis Crosswalk 6ft High	0	PM-Stripe-6’ Crosswalk	4
X	dsgnsp	CrossWalk2	Emphasis Crosswalk 10ft High	0	PM-Stripe-10’ Crosswalk	4
	dsgnsp	CurveData_dp	Curve & Coordinate Data Elements incl PC, PT, PI symbols	4	0	2
	dsgnsp	CurveDataLabel_dp	Curve Data Labels PC,PI, PT	0	0	2
X	dsgnsp	Delineator	Delineators (All Types)	4	0	1
	dsgnsp	DimLines_dp	Dimension Lines, Corresponding Terminators, Equation Lines	0	0	1
X	dsgnsp	DirArrowsPavt	Pavement Marking Directional Arrows	0	0	1
X	dsgnsp	EaseLicLine	Easement License Agreement Line	5	6 / DGN6	0
	dsgnsp	GridMaj_dp	Grid Lines Major in Profile and Cross Section	3	0	1
	dsgnsp	GridMin_dp	Grid Lines Minor in Profile and Cross Section	0	0	0
	dsgnsp	GridMinSub_dp	Grid Lines Minor Sub in Cross Section Sheets	20	0	0
	dsgnsp	GSBWFill	GuidSign Black and White Fill Level for GuidSign Cells	0	0	1
	dsgnsp	GSColorFill	GuidSign Color Fill Level for GuidSign Cells	2	0	1
	dsgnsp	GSDims	GuidSign Dimensions	0	0	1
	dsgnsp	GSOutline	GuidSign Outline Level for GuidSign Cells	0	0	2

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
	dsgnsp	GSSign	GuidSign Panel and Tag	7	0	0
	dsgnsp	ImageAttachment_dp	Image AttachmentstAttachments	0	0	0
	dsgnsp	InRoadLight	In-Roadway Light Assembly	0	0	2
	dsgnsp	LaneDirArrow	Lane Directional Arrow	0	0	1
	dsgnsp	LeaderLine_dp	Leader Line and terminator with Text	0	0	1
	dsgnsp	Logo_dp	Consultant Engineer of Record Logo	0	0	1
	dsgnsp	MatchLines_dp	Match Lines with Text, Arrows for Station Notations	1	0	2
X	dsgnsp	MetalButtons	Metal Buttons	0	0	2
	dsgnsp	Miscellaneous0	Undefined proposed item - co blue wt 0	1	0	0
	dsgnsp	Miscellaneous1	Undefined proposed item - co blue wt 1	1	0	1
	dsgnsp	Miscellaneous2	Undefined proposed item - co blue wt 2	1	0	2
	dsgnsp	Miscellaneous3	Undefined proposed item - co green wt 0	2	0	0
	dsgnsp	Miscellaneous4	Undefined proposed item - co green wt 1	2	0	1
	dsgnsp	Miscellaneous5	Undefined proposed item - co green wt 2	2	0	2
	dsgnsp	Miscellaneous6	Undefined proposed item - co red wt 0	3	0	0
	dsgnsp	Miscellaneous7	Undefined proposed item - co red wt 1	3	0	1
	dsgnsp	Miscellaneous8	Undefined proposed item - co red wt 2	3	0	2
	dsgnsp	Miscellaneous9	Undefined proposed item - co red wt 3	3	0	3
	dsgnsp	NonPlottingEle_dp	Non plotting items (construction elements and type 66 elements)	4	0	0
	dsgnsp	NorthArw_dp	North Arrows	0	0	2
X	dsgnsp	ObjectMarker	Object and Reflective Markers	3	0	1
X	dsgnsp	OverheadSign	Overhead Sign Panels	0	0	2
X	dsgnsp	OverheadSign_ep	Overhead Sign Panels (Existing)	0	3 / DGN3	1
X	dsgnsp	OverheadStr	Mast Arm, Truss Assemblies, Signal Arms and Supports	0	0	2
X	dsgnsp	OverheadStr_ep	Mast Arm, Truss Assemblies, Signal Arms and Supports (Existing)	0	3 / DGN3	1
	dsgnsp	Pavemk_ep	Pavement Markings (all)	0	2 / DGN2	0
X	dsgnsp	PavtMessage	Pavement Message (All types)(All Types)	0	0	1
X	dsgnsp	PavtMessage_ep	Pavement Message (Existing - All types)(All Types)	0	2 / DGN2	0
	dsgnsp	PayItem_dp	Pay Item Number Label Elements	4	0	2
X	dsgnsp	PlotBorder_dp	Plot Border	3	0	0
X	dsgnsp	PMCeramic	Pavement Markers Ceramic	0	0	1
	dsgnsp	PMMisc	Pavement Marking Miscellaneous Items	0	0	2
X	dsgnsp	PMStripe(10-10-20)	Pavement Marking 10/10/20 Skip Traffic Stripe 6in Contrast	0	PM-Stipe-10'_20'Skip / PM-Stripe-SKIP 10-10-20	2
X	dsgnsp	PMStripe12B	Pavement Marking Traffic Stripe 12in Black	3	0	4
X	dsgnsp	PMStripe12W	Pavement Marking Traffic Stripe 12in White	0	0	4
X	dsgnsp	PMStripe12W(3-9)	Pavement Marking 3/9 Skip Traffic Stripe 12in White	0	0 / PM-Stripe-SKIP 3-9	4
X	dsgnsp	PMStripe12Y	Pavement Marking Traffic Stripe 12in Yellow	4	0	4
X	dsgnsp	PMStripe16B	Pavement Marking Traffic Stripe 16in Black	3	0	5
X	dsgnsp	PMStripe16W	Pavement Marking Traffic Stripe 16in White	0	0	5
X	dsgnsp	PMStripe16Y	Pavement Marking Traffic Stripe 16in Yellow	4	0	5
X	dsgnsp	PMStripe18B	Pavement Marking Traffic Stripe 18in Black	3	0	6
X	dsgnsp	PMStripe18W	Pavement Marking Traffic Stripe 18in White	0	0	6

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
X	dsgnsp	PMStripe18Y	Pavement Marking Traffic Stripe 18in Yellow	4	0	6
X	dsgnsp	PMStripe24W	Pavement Marking Traffic Stripe 24in White	0	0	7
X	dsgnsp	PMStripe24Y	Pavement Marking Traffic Stripe 24in Yellow	4	0	7
X	dsgnsp	PMStripe6B	Pavement Marking Traffic Stripe 6in Black	3	0	2
X	dsgnsp	PMStripe6B(10-30)	Pavement Marking 10/30 Skip Traffic Stripe 6in Black	3	0 / PM-Stripe-SKIP 10-30	2
X	dsgnsp	PMStripe6Bl	Pavement Marking Traffic Stripe 6in Blue	1	0	2
X	dsgnsp	PMStripe6DY	Pavement Marking Traffic Stripe 6in Double Yellow	4	0	2
X	dsgnsp	PMStripe6W	Pavement Marking Traffic Stripe 6in White	0	0	2
X	dsgnsp	PMStripe6W(10-30)	Pavement Marking 10/30 Skip Traffic Stripe 6in White	0	0 / PM-Stripe-SKIP 10-30	2
X	dsgnsp	PMStripe6W(2-4)	Pavement Marking 2/4 Skip Traffic Stripe 6in White	0	0 / PM-Stripe-SKIP 2-4	2
X	dsgnsp	PMStripe6W(3-9)	Pavement Marking 3/9 Skip Traffic Stripe 6in White	0	0 / PM-Stripe-SKIP 3-9	
X	dsgnsp	PMStripe6W(6-10)	Pavement Marking 6/10 Skip Traffic Stripe 6in White	0	0 / PM-Stripe-SKIP 6-10	2
X	dsgnsp	PMStripe6Y	Pavement Marking Traffic Stripe 6in Yellow	4	0	2
X	dsgnsp	PMStripe6Y(10-30)	Pavement Marking 10/30 Skip Traffic Stripe 6in Yellow	4	0 / PM-Stripe-SKIP 10-30	2
X	dsgnsp	PMStripe6Y(2-4)	Pavement Marking 2/4 Skip Traffic Stripe 6in Yellow	4	0 / PM-Stripe-SKIP 2-4	2
X	dsgnsp	PMStripe6Y(6-10)	Pavement Marking 6/10 Skip Traffic Stripe 6in Yellow	4	0 / PM-Stripe-SKIP 6-10	2
X	dsgnsp	PMStripe8B	Pavement Marking Traffic Stripe 8in Black	3	0	3
X	dsgnsp	PMStripe8W	Pavement Marking Traffic Stripe 8in White	0	0	3
X	dsgnsp	PMStripe8W(3-9)	Pavement Marking 3/9 Skip Traffic Stripe 8in White	0	0 / PM-Stripe-SKIP 3-9	2
X	dsgnsp	PMStripe8Y	Pavement Marking Traffic Stripe 8in Yellow	4	0	3
X	dsgnsp	PMStripe9C(10-30)	Pavement Marking 10/30 Skip Traffic Stripe 9in Contrast	0	0 / PM-Stripe-SKIP 10-30	2
X	dsgnsp	PMStripeRumbleCL	Center Line Rumble Stripes (Use to Quantify Rumble Strips - NonPlotting)	4	PM-Stripe-RumbleStripeLeft / PM-Stripe-RumbleStripe	2
X	dsgnsp	PMStripeRumbleWL	Rumble Stripes (6" White Thermoplastic Over Rumble Strips - Left)	0	PM-Stripe-RumbleStripeLeft / PM-Stripe-RumbleStripe	2
X	dsgnsp	PMStripeRumbleWR	Rumble Stripes (6" White Thermoplastic Over Rumble Strips - Right)	0	PM-Stripe-RumbleStripeRight / PM-Stripe-RumbleStripe	2
X	dsgnsp	PMStripeRumbleYL	Rumble Stripes (6" Yellow Thermoplastic Over Rumble Strips - Left)	4	PM-Stripe-RumbleStripeLeft / PM-Stripe-RumbleStripe	2
X	dsgnsp	PMStripeRumbleYR	Rumble Stripes (6" Yellow Thermoplastic Over Rumble Strips - Right)	4	PM-Stripe-RumbleStripeRight / PM-Stripe-RumbleStripe	2
X	dsgnsp	PMStripeVibeWL	Pavement Marking Auditory and Vibratory 6in White (Left)	0	PM-Stripe-VibratoryLeft / PM-Stripe-Vibratory	2
X	dsgnsp	PMStripeVibeWR	Pavement Marking Auditory and Vibratory 6in White (Right)	0	PM-Stripe-VibratoryRight / PM-Stripe-Vibratory	2
X	dsgnsp	PMStripeVibeYL	Pavement Marking Auditory and Vibratory 6in Yellow (Left)	4	PM-Stripe-VibratoryLeft /	2

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
					PM-Stripe-Vibratory	
X	dsgnsp	PMStripeVibeYR	Pavement Marking Auditory and Vibratory 6in Yellow (Right)	4	PM-Stripe-VibratoryRight / PM-Stripe-Vibratory	2
X	dsgnsp	PMYieldL	Special Marking Area Yield Lines Large	0	PM-Stripe-YieldLarge	2
X	dsgnsp	PMYieldS	Special Marking Area Yield Lines Small	0	PM-Stripe-YieldSmall	2
	dsgnsp	PointLocator_ep	Point Locator Symbol	4	0	0
	dsgnsp	ReferencePt_dp	Survey and Construction Reference Point Details and Elements	4	0	2
X	dsgnsp	ReflPaintWht	Reflective Paint - Island Nose (White)	0	0	3
X	dsgnsp	ReflPaintYel	Reflective Paint - Island Nose (Yellow)	4	0	3
X	dsgnsp	RPM_ep	Reflective Pavement Markers (Existing)	2	2 / DGN2	1
X	dsgnsp	RPM1	Raised Pavement Markers, White	0	0	2
X	dsgnsp	RPM2	Raised Pavement Markers, White - Red	3	0	2
X	dsgnsp	RPM3	Raised Pavement Markers, Yellow	4	0	2
X	dsgnsp	RPM4	Raised Pavement Markers, Yellow - Yellow	9	0	2
X	dsgnsp	RPM5	Raised Pavement Markers, Yellow - Red	6	0	2
X	dsgnsp	RPM6	Raised Pavement Markers, Blue	1	0	2
X	dsgnsp	SawCuts	Saw Cuts	3	3 / DGN3	0
	dsgnsp	Scale_dp	Bar Scale, Scale Label Elements	0	0	2
	dsgnsp	Scratch1_dp	A scratch level for temporary or informational items	4	0	0
	dsgnsp	Scratch2_dp	A scratch level for temporary or informational items	5	0	0
	dsgnsp	ScratchEle_dp	Level for Draft Elements, Temporary Elements, Etc. Do Not Plot	3	0	0
	dsgnsp	ScratchEle2_dp	Level for Draft Elements, Temporary Elements, Etc. Do Not Plot	4	0	0
	dsgnsp	SheetBorder_dp	Sheet Border	1	0	4
	dsgnsp	SheetLines_dp	Sheet Lines	1	0	2
	dsgnsp	SheetLinesMisc1_dp	Sheet Lines	1	0	0
	dsgnsp	SheetLinesMisc2_dp	Sheet Lines	2	0	2
	dsgnsp	SheetLinesMisc3_dp	Sheet Lines	3	0	2
	dsgnsp	SheetLinesMisc4_dp	Sheet Lines	4	0	2
X	dsgnsp	SignCantilever	Sign Symbol Cantilever	0	0	1
X	dsgnsp	SignCantilever_ep	Sign Symbol Cantilever (Existing)	0	2 / DGN2	0
	dsgnsp	SignDetail	Sign Details	0	0	2
	dsgnsp	SignLettersAZ	Alphabet Cell Library Letter A-Z Numbers 0-9	0	0	0
	dsgnsp	SignMisc	Miscellaneous Sign Symbols	1	0	2
	dsgnsp	SignMisc_ep	Miscellaneous Sign Symbols (Existing)	1	1 / DGN1	1
X	dsgnsp	SignPanel	Sign Panels - Regulatory	0	0	2
X	dsgnsp	SignPanel_ep	Sign Panel Elements (Existing)	0	2 / DGN2	1
X	dsgnsp	SignPanelBorder	Sign Panel Border on Sign Details	0	0	1
X	dsgnsp	SignPanelC	Sign Panels - Civil	1	0	2
X	dsgnsp	SignPanelDetRed	Sign Panel Details in Red	3	0	2
X	dsgnsp	SignPanelG	Sign Panels - Guide	2	0	2
X	dsgnsp	SignPanelI	Sign Panels - Special Interest	9	0	2
X	dsgnsp	SignPanelT	Sign Panels - Construction	6	0	2
X	dsgnsp	SignPanelW	Sign Panels - Warning	4	0	2
	dsgnsp	SignSingle_ep	Sign (Single Support)	3	2 / DGN2	0

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
X	dsgnsp	SignSpanwire	Span Wire Signing Assembly	2	0	1
X	dsgnsp	SignSpanwire_ep	Span Wire Signing Assembly (Existing)	2	2 / DGN2	1
X	dsgnsp	SignSpecial	Special Signs / Guide Signs	2	0	2
X	dsgnsp	SignSupport	Ground Mounted Sign Support Symbol (All Types)	1	0	1
	dsgnsp	SignSupport_ep	Trusses and Cantilevers for Overhead Signs	0	3 / DGN3	1
X	dsgnsp	SignSymbol_px	Sign Structure and Foundation on Cross Sections	4	0	2
X	dsgnsp	SignTruss	Sign Symbol Truss	3	0	1
X	dsgnsp	SignTruss_ep	Sign Symbol Truss (Existing)	3	2 / DGN2	1
	dsgnsp	SpecialDetails	Special Details	6	0	1
	dsgnsp	StationTicL_dp	Station Tic Marks (Large) and Text	0	0	2
	dsgnsp	StationTicS_dp	Station Tic Marks (Small) and Text	0	0	2
	dsgnsp	SumBoxBorder_dp	Summary Boxes Borders	4	0	3
	dsgnsp	SumBoxLines_dp	Summary Boxes Lines and Miscellaneous Items	4	0	1
	dsgnsp	SumBoxLinesMin_dp	Summary Boxes Lines Minor Line and Miscellaneous Items	4	0	0
	dsgnsp	Tables_dp	Data Tables and All Autodesk Tables	0	0	1
	dsgnsp	TextBLStation	Text - B/L Station and Tics	0	0	2
	dsgnsp	TextConstEle	Text - Construction Element	0	0	1
	dsgnsp	TextCurveData	Text - Curve Data Note	0	0	2
	dsgnsp	TextDetails	Text - Detail Notes	4	0	2
	dsgnsp	TextElevLabel	Elevation Labels	4	0	0
	dsgnsp	TextLabel	Text - Label	0	0	2
	dsgnsp	TextLandscape	Text - Landscape Labels	0	0	1
	dsgnsp	TextMajor	Text - Major	0	0	5
	dsgnsp	TextMinor	Text - Minor	0	0	0
	dsgnsp	TextMisc	Text - Miscellaneous	0	0	1
	dsgnsp	TextNotes	Text - Notes	4	0	1
	dsgnsp	TextProfLabel	Text - Profile, Horizontal and Vertical Axis Labels	0	0	2
	dsgnsp	TextProjLabel	Text - Begin and End Project label with leader lines	1	0	2
	dsgnsp	TextPtLabel	Point Labels	4	0	0
	dsgnsp	TextShtNo	Text - Sheet Number	0	0	2
	dsgnsp	TextSurveyLabel	Survey Text Labels	0	0	0
	dsgnsp	TextTables	Text - KeysheetKey sheet Indexes and Table Data	4	0	2
	dsgnsp	TextTitle	Text - Title	0	0	3
	dsgnsp	TextXSElev	Text - Cross Section Elevations	2	0	1
	dsgnsp	Viewport	Viewport (For AutoCAD Use)	3	0	0
	dsgnsp	Xreference01_dp	Reference Files (For AutoCAD Use)	0	0	1
	dsgnsp	Xreference02_dp	Reference Files (For AutoCAD Use)	0	0	1
	dsgnsp	Xreference03_dp	Reference Files (For AutoCAD Use)	0	0	1
	dsgnsp	Xreference04_dp	Reference Files (For AutoCAD Use)	0	0	1
	dsgnsp	XSCell	GEOPAK Cross Section Cell/Block and Profile Cell/Block	8	0	1

DTMRD - Digital Terrain (Proposed)

Critical	Rule	Level Name	Level Description	Bylevel Color	ByLevel Style / LineType	Bylevel Weight
	dtmrd	ActivePointCell_dp	Active Point Cell	4	0	10
	dtmrd	AdhocPoint_dp	Adhoc Points Placed by SheetInfo	0	4 / 0	0
	dtmrd	BreakLine_dp	Break Lines	0	0	1
	dtmrd	COGO_dp	COGO Information	3	0	1
	dtmrd	ConstLines	Construction Lines and References	1	0	0
	dtmrd	ConstLines_pm	Construction Lines	4	0	0
	dtmrd	ContoursMajor	Contour Lines Major (Proposed)	3	0	2
	dtmrd	ContoursMinor	Contour Lines Minor (Proposed)	4	0	2
	dtmrd	DimLines_dp	Dimension Lines, Corresponding Terminators, Equation Lines	0	0	1
	dtmrd	DTM	Digital Terrain Model, TIN Model Elements (Proposed)	1	0	2
	dtmrd	DTM_px	Digital Terrain Model for Cross Sections (Proposed)	1	0	0
	dtmrd	DTMSource	Digital Terrain Model, Source Feature (Proposed)	0	0	2
	dtmrd	DTMTriangles	Digital Terrain Model, Triangles (Proposed)	1	0	2
	dtmrd	DTMVertices	Digital Terrain Model, Triangle Vertices (Proposed)	2	0	1
X	dtmrd	FlowArrow	Digital Terrain Model, Triangle Flow Arrows (Proposed)	10	0	2
	dtmrd	GridMaj_dp	Grid Lines Major in Profile and Cross Section	3	0	1
	dtmrd	GridMin_dp	Grid Lines Minor in Profile and Cross Section	0	0	0
	dtmrd	GridMinSub_dp	Grid Lines Minor Sub in Cross Section Sheets	20	0	0
	dtmrd	ImageAttachment_dp	Image AttachmentstAttachments	0	0	0
	dtmrd	LeaderLine_dp	Leader Line and terminator with Text	0	0	1
	dtmrd	Miscellaneous0	Undefined proposed item - co blue wt 0	1	0	0
	dtmrd	Miscellaneous1	Undefined proposed item - co blue wt 1	1	0	1
	dtmrd	Miscellaneous2	Undefined proposed item - co blue wt 2	1	0	2
	dtmrd	Miscellaneous3	Undefined proposed item - co green wt 0	2	0	0
	dtmrd	Miscellaneous4	Undefined proposed item - co green wt 1	2	0	1
	dtmrd	Miscellaneous5	Undefined proposed item - co green wt 2	2	0	2
	dtmrd	Miscellaneous6	Undefined proposed item - co red wt 0	3	0	0
	dtmrd	Miscellaneous7	Undefined proposed item - co red wt 1	3	0	1
	dtmrd	Miscellaneous8	Undefined proposed item - co red wt 2	3	0	2
	dtmrd	Miscellaneous9	Undefined proposed item - co red wt 3	3	0	3
	dtmrd	NonPlottingEle_dp	Non plotting items such as construction elements and type 66 elements	4	0	0
	dtmrd	PayItem_dp	Pay Item Number Label Elements	4	0	2
	dtmrd	ReferencePt_dp	Survey and Construction Reference Point Details and Elements	4	0	2
	dtmrd	Scratch1_dp	A scratch level for temporary or informational items	4	0	0
	dtmrd	Scratch2_dp	A scratch level for temporary or informational items	5	0	0
	dtmrd	ScratchEle_dp	Level for Draft Elements, Temporary Elements, Etc. Do Not Plot	3	0	0
	dtmrd	ScratchEle2_dp	Level for Draft Elements, Temporary Elements, Etc. Do Not Plot	4	0	0
	dtmrd	Tables_dp	Data Tables and All Autodesk Tables	0	0	1
	dtmrd	TextBLStation	Text - B/L Station and Tics	0	0	2
	dtmrd	TextConstEle	Text - Construction Element	0	0	1
	dtmrd	TextCurveData	Text - Curve Data Note	0	0	2
	dtmrd	TextDetails	Text - Detail Notes	4	0	2

Critical	Rule	Level Name	Level Description	Bylevel Color	ByLevel Style / LineType	Bylevel Weight
	dtmrd	TextElevLabel	Elevation Labels	4	0	0
	dtmrd	TextLabel	Text - Label	0	0	2
	dtmrd	TextLandscape	Text - Landscape Labels	0	0	1
	dtmrd	TextMajor	Text - Major	0	0	5
	dtmrd	TextMinor	Text - Minor	0	0	0
	dtmrd	TextMisc	Text - Miscellaneous	0	0	1
	dtmrd	TextNotes	Text - Notes	4	0	1
	dtmrd	TextProfLabel	Text - Profile, Horizontal and Vertical Axis Labels	0	0	2
	dtmrd	TextProjLabel	Text - Begin and End Project label with leader lines	1	0	2
	dtmrd	TextPtLabel	Point Labels	4	0	0
	dtmrd	TextShtNo	Text - Sheet Number	0	0	2
	dtmrd	TextSurveyLabel	Survey Text Labels	0	0	0
	dtmrd	TextTables	Text - KeysheetKey sheet Indexes and Table Data	4	0	2
	dtmrd	TextTitle	Text - Title	0	0	3
	dtmrd	TextXSElev	Text - Cross Section Elevations	2	0	1
	dtmrd	Viewport	Viewport (For AutoCAD Use)	3	0	0
	dtmrd	VoidArea_dx	Void Area_XS	1	0	0
	dtmrd	Voids_dp	Voids	11	3 / DGN3	1
	dtmrd	Xreference01_dp	Reference Files (For AutoCAD Use)	0	0	1
	dtmrd	Xreference02_dp	Reference Files (For AutoCAD Use)	0	0	1
	dtmrd	Xreference03_dp	Reference Files (For AutoCAD Use)	0	0	1
	dtmrd	Xreference04_dp	Reference Files (For AutoCAD Use)	0	0	1
	dtmrd	XSCell	GEOPAK Cross Section Cell/Block and Profile Cell/Block	8	0	1

GDTMRD - Digital Terrain (Existing)

Critical	Rule	Level Name	Level Description	Bylevel Color	ByLevel Style / LineType	Bylevel Weight
	gdtmrd	ContoursMajor_ep	Contour Lines Major (Existing)	3	1 / DGN1	1
	gdtmrd	ContoursMinor_ep	Contour Lines Minor (Existing)	4	1 / DGN1	1
	gdtmrd	DTM_ep	Digital Terrain Model, TIN Model Elements (Existing)	2	0	1
	gdtmrd	DTM_ex	Digital Terrain Model for Cross Sections (Existing)	2	1 / DGN1	1
	gdtmrd	DTMSource_ep	Digital Terrain, Source Feature (Existing)	0	1 / DGN1	1
	gdtmrd	DTMTriangles_ep	DTM Triangles (Existing)	2	0	1
	gdtmrd	DTMVertices_ep	Digital Terrain Model, Triangle Vertices (Existing)	0	0	1
X	gdtmrd	FlowArrow_ep	Digital Terrain Model, Triangle Flow Arrows (Existing)	10	0	1

GEOTECH - Geotechnical

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
	geotech	ActivePointCell_dp	Active Point Cell	4	0	10
	geotech	AdhocPoint_dp	Adhoc Points Placed by SheetInfo	0	4 / 0	0
	geotech	COGO_dp	COGO Information	3	0	1
	geotech	ConstLines	Construction Lines and References	1	0	0
	geotech	ConstLines_pm	Construction Lines	4	0	0
	geotech	Dimension	Dimension Lines (Structures)	0	0	0
	geotech	DimLines_dp	Dimension Lines, Corresponding Terminators, Equation Lines	0	0	1
X	geotech	EaseLicLine	Easement License Agreement Line	5	6 / DGN6	0
	geotech	GeotechFillPatt1	Geotechnical Fill Pattern - (earth, wood, muck, concrete, rock, riprap) as defined in project	3	0	0
	geotech	GeotechFillPatt2	Geotechnical Fill Pattern - clay, sand	0	1 / DGN1	0
	geotech	GeotechFillPatt3	Geotechnical Fill Pattern - shell	3	1 / DGN1	0
	geotech	GeotechFillPatt4	Geotechnical Fill Pattern - sand	4	0	0
	geotech	GeotechFillPatt5	Geotechnical Fill Pattern - coquina	1	0	1
	geotech	GeotechFillPatt6	Geotechnical Fill Pattern - limestone	2	0	0
	geotech	GeotechFillPatt7	Geotechnical Fill Pattern - gravel	6	0	0
	geotech	GeotechFillPatt8	Geotechnical Fill Pattern - silt	0	0	1
	geotech	GeotechMisc	Miscellaneous Geotechnical Elements	0	0	1
	geotech	GridMaj_dp	Grid Lines Major in Profile and Cross Section	3	0	1
	geotech	GridMin_dp	Grid Lines Minor in Profile and Cross Section	0	0	0
	geotech	GridMinG_dp	Grid Lines Minor Sub 2 in Cross Section Sheets	20	0	0
	geotech	GridMinSub_dp	Grid Lines Minor Sub in Cross Section Sheets	20	0	0
	geotech	ImageAttachment_dp	Image AttachmentstAttachments	0	0	0
	geotech	LeaderLine_dp	Leader Line and terminator with Text	0	0	1
	geotech	Logo_dp	Consultant Engineer of Record Logo	0	0	1
	geotech	Miscellaneous0	Undefined proposed item - co blue wt 0	1	0	0
	geotech	Miscellaneous1	Undefined proposed item - co blue wt 1	1	0	1
	geotech	Miscellaneous2	Undefined proposed item - co blue wt 2	1	0	2
	geotech	Miscellaneous3	Undefined proposed item - co green wt 0	2	0	0
	geotech	Miscellaneous4	Undefined proposed item - co green wt 1	2	0	1
	geotech	Miscellaneous5	Undefined proposed item - co green wt 2	2	0	2
	geotech	Miscellaneous6	Undefined proposed item - co red wt 0	3	0	0
	geotech	Miscellaneous7	Undefined proposed item - co red wt 1	3	0	1
	geotech	Miscellaneous8	Undefined proposed item - co red wt 2	3	0	2
	geotech	Miscellaneous9	Undefined proposed item - co red wt 3	3	0	3
	geotech	NonPlottingEle_dp	Non plotting items such as construction elements and type 66 elements	4	0	0
	geotech	NorthArw_dp	North Arrows	0	0	2
	geotech	Patterning	All; any Patterning	3	0	1
	geotech	Patternlines_ep	Cross Section Chain	2	1 / DGN1	0
	geotech	PatternLines1_dp	Pattern Lines and Sample Lines (Civil 3D) for Cross Sections	3	0	2
	geotech	PatternLines2_dp	Pattern Lines for XSectionsCross Sections alternate for side streets, critical xsectionsCross Sections or drainage structures	4	0	2

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
	geotech	PatternLines3_dp	Pattern Lines for XSectionsCross Sections alternate for side streets, critical xsectionsCross Sections or drainage structures	5	0	2
	geotech	PayItem_dp	Pay Item Number Label Elements	4	0	2
X	geotech	PlotBorder_dp	Plot Border	3	0	0
	geotech	PointLocator_ep	Point Locator Symbol	4	0	0
	geotech	ReferencePt_dp	Survey and Construction Reference Point Details and Elements	4	0	2
	geotech	Scale_dp	Bar Scale, Scale Label Elements	0	0	2
	geotech	Scratch1_dp	A scratch level for temporary or informational items	4	0	0
	geotech	Scratch2_dp	A scratch level for temporary or informational items	5	0	0
	geotech	ScratchEle_dp	Level for Draft Elements, Temporary Elements, Etc. Do Not Plot	3	0	0
	geotech	ScratchEle2_dp	Level for Draft Elements, Temporary Elements, Etc. Do Not Plot	4	0	0
	geotech	SheetBorder_dp	Sheet Border	1	0	4
	geotech	SheetLines_dp	Sheet Lines	1	0	2
	geotech	SheetLinesMisc1_dp	Sheet Lines	1	0	0
	geotech	SheetLinesMisc2_dp	Sheet Lines	2	0	2
	geotech	SheetLinesMisc3_dp	Sheet Lines	3	0	2
	geotech	SheetLinesMisc4_dp	Sheet Lines	4	0	2
X	geotech	SoilBoring	Soil Boring Elements	5	0	1
	geotech	SoilBoringLoc_dp	Soil Boring Location Symbol	4	0	2
	geotech	SoilBoxes_dp	Soil Boxes	4	0	1
X	geotech	SoilBoxes_px	Soil Boxes and Borings for Cross Sections	4	0	1
	geotech	SumBoxBorder_dp	Summary Boxes Borders	4	0	3
	geotech	SumBoxLines_dp	Summary Boxes Lines and Miscellaneous Items	4	0	1
	geotech	SumBoxLinesMin_dp	Summary Boxes Lines Minor Line and Miscellaneous Items	4	0	0
	geotech	Tables_dp	Data Tables and All Autodesk Tables	0	0	1
	geotech	TextAlert	Text - An Alert Label to Highlight a Problem	3	0	2
	geotech	TextBLStation	Text - B/L Station and Tics	0	0	2
	geotech	TextConstEle	Text - Construction Element	0	0	1
	geotech	TextCurveData	Text - Curve Data Note	0	0	2
	geotech	TextDetails	Text - Detail Notes	4	0	2
	geotech	TextElevLabel	Elevation Labels	4	0	0
	geotech	TextGeotech	Text for soil borings and labels	0	0	2
	geotech	TextLabel	Text - Label	0	0	2
	geotech	TextLandscape	Text - Landscape Labels	0	0	1
	geotech	TextMajor	Text - Major	0	0	5
	geotech	TextMinor	Text - Minor	0	0	0
	geotech	TextMisc	Text - Miscellaneous	0	0	1
	geotech	TextNotes	Text - Notes	4	0	1
	geotech	TextProfLabel	Text - Profile, Horizontal and Vertical Axis Labels	0	0	2
	geotech	TextProjLabel	Text - Begin and End Project label with leader lines	1	0	2
	geotech	TextPtLabel	Point Labels	4	0	0
	geotech	TextShtNo	Text - Sheet Number	0	0	2
	geotech	TextStructures	Structures Text	0	0	0
	geotech	TextSurveyLabel	Survey Text Labels	0	0	0
	geotech	TextTables	Text - KeysheetKey sheet Indexes and Table Data	4	0	2

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
	geotech	TextTitle	Text - Title	0	0	3
	geotech	TextXSElev	Text - Cross Section Elevations	2	0	1
	geotech	Viewport	Viewport (For AutoCAD Use)	3	0	0
X	geotech	Water	Water Line	1	UT-Water-Proposed	2
	geotech	Xreference01_dp	Reference Files (For AutoCAD Use)	0	0	1
	geotech	Xreference02_dp	Reference Files (For AutoCAD Use)	0	0	1
	geotech	Xreference03_dp	Reference Files (For AutoCAD Use)	0	0	1
	geotech	Xreference04_dp	Reference Files (For AutoCAD Use)	0	0	1
	geotech	XSCell	GEOPAK Cross Section Cell/Block and Profile Cell/Block	8	0	1

GSWKSP - GuidSIGN

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
	gswksp	ActivePointCell_dp	Active Point Cell	4	0	10
	gswksp	AdhocPoint_dp	Adhoc Points Placed by SheetInfo	0	4 / 0	0
	gswksp	COGO_dp	COGO Information	3	0	1
	gswksp	ConstLines	Construction Lines and References	**1**	0	**0**
	gswksp	ConstLines_pm	Construction Lines	**4**	0	**0**
	gswksp	DimLines_dp	Dimension Lines, Corresponding Terminators, Equation Lines	0	0	1
X	gswksp	EaseLicLine	Easement License Agreement Line	5	6 / DGN6	0
	gswksp	GridMaj_dp	Grid Lines Major in Profile and Cross Section	3	0	1
	gswksp	GridMin_dp	Grid Lines Minor in Profile and Cross Section	0	0	0
	gswksp	GridMinSub_dp	Grid Lines Minor Sub in Cross Section Sheets	20	0	0
	gswksp	GSBWFill	GuidSign Black and White Fill Level for GuidSign Cells	0	0	1
	gswksp	GSColorFill	GuidSign Color Fill Level for GuidSign Cells	2	0	1
	gswksp	GSDims	GuidSign Dimensions	0	0	1
	gswksp	GSOutline	GuidSign Outline Level for GuidSign Cells	0	0	2
	gswksp	GSSign	GuidSign Panel and Tag	7	0	0
	gswksp	ImageAttachment_dp	Image AttachmentstAttachments	0	0	0
	gswksp	KeyShtMisc	Key sheet Miscellaneous Items	0	0	2
	gswksp	LeaderLine_dp	Leader Line and terminator with Text	0	0	1
	gswksp	Logo_dp	Consultant Engineer of Record Logo	0	0	1
	gswksp	Miscellaneous0	Undefined proposed item - co blue wt 0	1	0	0
	gswksp	Miscellaneous1	Undefined proposed item - co blue wt 1	1	0	1
	gswksp	Miscellaneous2	Undefined proposed item - co blue wt 2	1	0	2
	gswksp	Miscellaneous3	Undefined proposed item - co green wt 0	2	0	0
	gswksp	Miscellaneous4	Undefined proposed item - co green wt 1	2	0	1
	gswksp	Miscellaneous5	Undefined proposed item - co green wt 2	2	0	2
	gswksp	Miscellaneous6	Undefined proposed item - co red wt 0	3	0	0
	gswksp	Miscellaneous7	Undefined proposed item - co red wt 1	3	0	1
	gswksp	Miscellaneous8	Undefined proposed item - co red wt 2	3	0	2
	gswksp	Miscellaneous9	Undefined proposed item - co red wt 3	3	0	3

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
	gswksp	NonPlottingEle_dp	Non plotting items such as construction elements and type 66 elements	4	0	0
	gswksp	NorthArw_dp	North Arrows	0	0	2
X	gswksp	ObjectMarker	Object and Reflective Markers	3	0	1
X	gswksp	OverheadSign	Overhead Sign Panels	0	0	2
X	gswksp	OverheadSign_ep	Overhead Sign Panels (Existing)	0	3 / DGN3	1
X	gswksp	OverheadStr	Mast Arm, Truss Assemblies, Signal Arms and Supports	0	0	2
X	gswksp	OverheadStr_ep	Mast Arm, Truss Assemblies, Signal Arms and Supports (Existing)	0	3 / DGN3	1
	gswksp	PayItem_dp	Pay Item Number Label Elements	4	0	2
X	gswksp	PlotBorder_dp	Plot Border	3	0	0
	gswksp	PointLocator_ep	Point Locator Symbol	4	0	0
	gswksp	ReferencePt_dp	Survey and Construction Reference Point Details and Elements	4	0	2
	gswksp	Scale_dp	Bar Scale, Scale Label Elements	0	0	2
	gswksp	Scratch1_dp	A scratch level for temporary or informational items	4	0	0
	gswksp	Scratch2_dp	A scratch level for temporary or informational items	5	0	0
	gswksp	ScratchEle_dp	Level for Draft Elements, Temporary Elements, Etc. Do Not Plot	3	0	0
	gswksp	ScratchEle2_dp	Level for Draft Elements, Temporary Elements, Etc. Do Not Plot	4	0	0
	gswksp	SheetLines_dp	Sheet Lines	1	0	2
	gswksp	SheetLinesMisc1_dp	Sheet Lines	1	0	0
	gswksp	SheetLinesMisc2_dp	Sheet Lines	2	0	2
	gswksp	SheetLinesMisc3_dp	Sheet Lines	3	0	2
	gswksp	SheetLinesMisc4_dp	Sheet Lines	4	0	2
X	gswksp	SignCantilever	Sign Symbol Cantilever	0	0	1
X	gswksp	SignCantilever_ep	Sign Symbol Cantilever (Existing)	0	2 / DGN2	0
	gswksp	SignDetail	Sign Details	0	0	2
	gswksp	SignLettersAZ	Alphabet Cell Library Letter A-Z Numbers 0-9	0	0	0
	gswksp	SignMisc	Miscellaneous Sign Symbols	1	0	2
	gswksp	SignMisc_ep	Miscellaneous Sign Symbols (Existing)	1	1 / DGN1	1
X	gswksp	SignPanel	Sign Panels - Regulatory	0	0	2
X	gswksp	SignPanel_ep	Sign Panel Elements (Existing)	0	2 / DGN2	1
X	gswksp	SignPanelBorder	Sign Panel Border on Sign Details	0	0	1
X	gswksp	SignPanelC	Sign Panels - Civil	1	0	2
X	gswksp	SignPanelDetRed	Sign Panel Details in Red	3	0	2
X	gswksp	SignPanelG	Sign Panels - Guide	2	0	2
X	gswksp	SignPanelI	Sign Panels - Special Interest	9	0	2
X	gswksp	SignPanelT	Sign Panels - Construction	6	0	2
X	gswksp	SignPanelW	Sign Panels - Warning	4	0	2
X	gswksp	SignSpanwire	Span Wire Signing Assembly	2	0	1
X	gswksp	SignSpanwire_ep	Span Wire Signing Assembly (Existing)	2	2 / DGN2	1
X	gswksp	SignSpecial	Special Signs / Guide Signs	2	0	2
X	gswksp	SignSupport	Ground Mounted Sign Support Symbol (All Types)	1	0	1
X	gswksp	SignSymbol_px	Sign Structure and Foundation on Cross Sections	4	0	2
X	gswksp	SignTruss	Sign Symbol Truss	3	0	1
X	gswksp	SignTruss_ep	Sign Symbol Truss (Existing)	3	2 / DGN2	1
	gswksp	SumBoxBorder_dp	Summary Boxes Borders	4	0	3
	gswksp	SumBoxLines_dp	Summary Boxes Lines and Miscellaneous Items	4	0	1

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
	gswksp	SumBoxLinesMin_dp	Summary Boxes Lines Minor Line and Miscellaneous Items	4	0	0
	gswksp	Tables_dp	Data Tables and All Autodesk Tables	0	0	1
	gswksp	TextBLStation	Text - B/L Station and Tics	0	0	2
	gswksp	TextConstEle	Text - Construction Element	0	0	1
	gswksp	TextCurveData	Text - Curve Data Note	0	0	2
	gswksp	TextDetails	Text - Detail Notes	4	0	2
	gswksp	TextElevLabel	Elevation Labels	4	0	0
	gswksp	TextLabel	Text - Label	0	0	2
	gswksp	TextLandscape	Text - Landscape Labels	0	0	1
	gswksp	TextMajor	Text - Major	0	0	5
	gswksp	TextMinor	Text - Minor	0	0	0
	gswksp	TextMisc	Text - Miscellaneous	0	0	1
	gswksp	TextNotes	Text - Notes	4	0	1
	gswksp	TextProfLabel	Text - Profile, Horizontal and Vertical Axis Labels	0	0	2
	gswksp	TextProjLabel	Text - Begin and End Project label with leader lines	1	0	2
	gswksp	TextPtLabel	Point Labels	4	0	0
	gswksp	TextShtNo	Text - Sheet Number	0	0	2
	gswksp	TextSurveyLabel	Survey Text Labels	0	0	0
	gswksp	TextTables	Text - KeysheetKey sheet Indexes and Table Data	4	0	2
	gswksp	TextTitle	Text - Title	0	0	3
	gswksp	TextXSElev	Text - Cross Section Elevations	2	0	1
	gswksp	Viewport	Viewport (For AutoCAD Use)	3	0	0
	gswksp	Xreference01_dp	Reference Files (For AutoCAD Use)	0	0	1
	gswksp	Xreference02_dp	Reference Files (For AutoCAD Use)	0	0	1
	gswksp	Xreference03_dp	Reference Files (For AutoCAD Use)	0	0	1
	gswksp	Xreference04_dp	Reference Files (For AutoCAD Use)	0	0	1
	gswksp	XSCell	GEOPAK Cross Section Cell/Block and Profile Cell/Block	8	0	1

IRRGLD - Irrigation

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
	irrgld	ActivePointCell_dp	Active Point Cell	4	0	10
	irrgld	AdhocPoint_dp	Adhoc Points Placed by SheetInfo	0	4/ 0	0
	irrgld	COGO_dp	COGO Information	3	0	1
	irrgld	ConstLines	Construction Lines and References	1	0	0
	irrgld	ConstLines_pm	Construction Lines	4	0	0
	irrgld	DimLines_dp	Dimension Lines, Corresponding Terminators, Equation Lines	0	0	1
	irrgld	DripSystem	Irrigation Drip System	1	0	2
X	irrgld	EaseLicLine	Easement License Agreement Line	5	6 / DGN6	0
	irrgld	ImageAttachment_dp	Image AttachmentstAttachments	0	0	0
X	irrgld	IrrigationHeads	Irrigation Heads (All Types)	5	0	2

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
X	irrgld	IrrigationLateral	Irrigation Lateral Line	7	0	1
X	irrgld	IrrigationLateralNP	Irrigation Lateral (Reclaimed)	12	0	1
X	irrgld	IrrigationMain	Irrigation Main Line	1	3 / DGN3	3
X	irrgld	IrrigationMainNP	Irrigation Main Line (Reclaimed)	8	3 / DGN3	3
	irrgld	IrrigationMisc	Irrigation Miscellaneous Items	0	0	2
X	irrgld	IrrigationMiscNP	Irrigation Equipment (Reclaimed)	8	0	1
X	irrgld	IrrigationSleeve	Irrigation Sleeve	6	5 / DGN5	1
	irrgld	IrrigationSprayPat	Irrigation Head Spray Pattern	1	1 / DGN1	1
	irrgld	LeaderLine_dp	Leader Line and terminator with Text	0	0	1
X	irrgld	MechanicalAccs	Mechanical Irrigation Items (valves, meters, pipe, clocks, back flow)	3	0	1
	irrgld	Miscellaneous0	Undefined proposed item - co blue wt 0	1	0	0
	irrgld	Miscellaneous1	Undefined proposed item - co blue wt 1	1	0	1
	irrgld	Miscellaneous2	Undefined proposed item - co blue wt 2	1	0	2
	irrgld	Miscellaneous3	Undefined proposed item - co green wt 0	2	0	0
	irrgld	Miscellaneous4	Undefined proposed item - co green wt 1	2	0	1
	irrgld	Miscellaneous5	Undefined proposed item - co green wt 2	2	0	2
	irrgld	Miscellaneous6	Undefined proposed item - co red wt 0	3	0	0
	irrgld	Miscellaneous7	Undefined proposed item - co red wt 1	3	0	1
	irrgld	Miscellaneous8	Undefined proposed item - co red wt 2	3	0	2
	irrgld	Miscellaneous9	Undefined proposed item - co red wt 3	3	0	3
	irrgld	NonPlottingEle_dp	Non plotting items such as construction elements and type 66 elements	4	0	0
	irrgld	PayItem_dp	Pay Item Number Label Elements	4	0	2
	irrgld	PointLocator_ep	Point Locator Symbol	4	0	0
	irrgld	ReferencePt_dp	Survey and Construction Reference Point Details and Elements	4	0	2
	irrgld	Scratch1_dp	A scratch level for temporary or informational items	4	0	0
	irrgld	Scratch2_dp	A scratch level for temporary or informational items	5	0	0
	irrgld	ScratchEle_dp	Level for Draft Elements, Temporary Elements, Etc. Do Not Plot	3	0	0
	irrgld	ScratchEle2_dp	Level for Draft Elements, Temporary Elements, Etc. Do Not Plot	4	0	0
	irrgld	Tables_dp	Data Tables and All Autodesk Tables	0	0	1
	irrgld	TextBLStation	Text - B/L Station and Tics	0	0	2
	irrgld	TextConstEle	Text - Construction Element	0	0	1
	irrgld	TextCurveData	Text - Curve Data Note	0	0	2
	irrgld	TextDetails	Text - Detail Notes	4	0	2
	irrgld	TextElevLabel	Elevation Labels	4	0	0
	irrgld	TextLabel	Text - Label	0	0	2
	irrgld	TextLandscape	Text - Landscape Labels	0	0	1
	irrgld	TextMajor	Text - Major	0	0	5
	irrgld	TextMinor	Text - Minor	0	0	0
	irrgld	TextMisc	Text - Miscellaneous	0	0	1
	irrgld	TextNotes	Text - Notes	4	0	1
	irrgld	TextProfLabel	Text - Profile, Horizontal and Vertical Axis Labels	0	0	2
	irrgld	TextProjLabel	Text - Begin and End Project label with leader lines	1	0	2
	irrgld	TextPtLabel	Point Labels	4	0	0
	irrgld	TextShtNo	Text - Sheet Number	0	0	2

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
	irrgld	TextSurveyLabel	Survey Text Labels	0	0	0
	irrgld	TextTables	Text - KeysheetKey sheet Indexes and Table Data	4	0	2
	irrgld	TextTitle	Text - Title	0	0	3
	irrgld	TextXSElev	Text - Cross Section Elevations	2	0	1
	irrgld	Viewport	Viewport (For AutoCAD Use)	3	0	0
	irrgld	Xreference01_dp	Reference Files (For AutoCAD Use)	0	0	1
	irrgld	Xreference02_dp	Reference Files (For AutoCAD Use)	0	0	1
	irrgld	Xreference03_dp	Reference Files (For AutoCAD Use)	0	0	1
	irrgld	Xreference04_dp	Reference Files (For AutoCAD Use)	0	0	1
	irrgld	XSCell	GEOPAK Cross Section Cell/Block and Profile Cell/Block	8	0	1

ITSSP - Intelligent Transportation System

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
	itssp	ActivePointCell_dp	Active Point Cell	4	0	10
	itssp	AdhocPoint_dp	Adhoc Points Placed by SheetInfo	0	4 / 0	0
	itssp	BaselineSurvey	Baseline Survey	0	0	2
X	itssp	CCTV	CC TV Camera and Accessories	4	0	1
X	itssp	CCTV_ep	CC TV Camera and Accessories (Existing)	4	0	0
X	itssp	CCTVAer	CC TV Cable - Aerial	6	UT-OverheadCable-Proposed	1
X	itssp	CCTVBur	CC TV Cable - Buried	5	UT-BuriedCable-Proposed	1
	itssp	CCTVMisc	CC TV Service Box and Miscellaneous	6	0	0
	itssp	CLConst_dp	Center Line of Construction	0	0	2
	itssp	Cloud_dp	Construction Cloud	7	0	2
	itssp	COGO_dp	COGO Information	3	0	1
X	itssp	ConduitAG	Conduit – Above Ground	4	SG-ConduitAG-Proposed	1
X	itssp	ConduitBM	Conduit – Bridge Mount	5	SG-ConduitBM-Proposed	1
X	itssp	ConduitDB	Conduit – Directional Bore	2	SG-ConduitDB-Proposed	1
X	itssp	ConduitJB	Conduit – Jack & Bore Under Rail	3	SG-ConduitJB-Proposed	1
X	itssp	ConduitOT	Conduit – Open Trench	1	SG-ConduitOT-Proposed	1
	itssp	ConstArea_dp	Construction Area Crosshatch	0	0	1
	itssp	ConstLimits	Construction Limits	3	RW-LimitsofConst	2
	itssp	ConstLines	Construction Lines and References	1	0	0
	itssp	ConstLines_pm	Construction Lines	4	0	0
X	itssp	Controller	Controller and Accessories	0	0	2
X	itssp	Controller_ep	Controller and Accessories (Existing)	0	2 / DGN2	1
X	itssp	ControllerAcess	Controller Accessories	0	0	1
X	itssp	ControllerB	Controller - Base Mounted	0	0	2
X	itssp	ControllerB_ep	Controller - Base Mounted (Existing)	0	2 / DGN2	1
X	itssp	ControllerP	Controller Pole Mount	0	0	2
X	itssp	ControllerP_ep	Controller Pole Mount (Existing)	0	2 / DGN2	1

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
X	itssp	CrossWalk1	Emphasis Crosswalk 6ft High	0	PM-Stripe-6' Crosswalk	4
X	itssp	CrossWalk2	Emphasis Crosswalk 10ft High	0	PM-Stripe-10' Crosswalk	4
	itssp	CurveData_dp	Curve & Coordinate Data Elements incl PC, PT, PI symbols	4	0	2
	itssp	CurveDataLabel_dp	Curve Data Labels PC,PI, PT	0	0	2
X	itssp	Delineator	Delineators (All Types)	4	0	1
X	itssp	Detector	Detector Cabinet, Button and Misc Assemblies	3	0	2
X	itssp	Detector_ep	Detector Cabinet, Button and Misc Assemblies (Existing)	3	2 / DGN2	1
X	itssp	DetectorVeh	Detector Vehicle Assemblies (All Types)	3	0	1
X	itssp	DetectorVeh_ep	Detector Vehicle Assemblies (All Types) (Existing)	3	2 / DGN2	0
	itssp	DimLines_dp	Dimension Lines, Corresponding Terminators, Equation Lines	0	0	1
X	itssp	DirArrowsPavt	Pavement Marking Directional Arrows	0	0	1
X	itssp	EaseLicLine	Easement License Agreement Line	5	6 / DGN6	0
X	itssp	ElectPS	Electrical Power Service Miscellaneous	3	0	1
X	itssp	ElectPSB	Electrical (Buried)	3	UT-BuriedElec-Proposed	2
X	itssp	ElectPSO	Electrical Outlet	3	0	1
X	itssp	ElectServWire	Electrical Service Wire	3	0	2
X	itssp	Fiber01Blue	Fiber Optic Buffer Tube, Blue	25	0	2
X	itssp	Fiber01Blue_ep	Fiber Optic Buffer Tube, Blue (Existing)	25	2 / DGN2	1
X	itssp	Fiber02Orange	Fiber Optic Buffer Tube, Orange	30	0	2
X	itssp	Fiber02Orange_ep	Fiber Optic Buffer Tube, Orange (Existing)	30	2 / DGN2	1
X	itssp	Fiber03Green	Fiber Optic Buffer Tube, Green	154	0	2
X	itssp	Fiber03Green_ep	Fiber Optic Buffer Tube, Green (Existing)	154	2 / DGN2	1
X	itssp	Fiber04Brown	Fiber Optic Buffer Tube, Brown	150	0	2
X	itssp	Fiber04Brown_ep	Fiber Optic Buffer Tube, Brown (Existing)	150	2 / DGN2	1
X	itssp	Fiber05Slate	Fiber Optic Buffer Tube, Slate	152	0	2
X	itssp	Fiber05Slate_ep	Fiber Optic Buffer Tube, Slate (Existing)	152	2 / DGN2	1
X	itssp	Fiber06White	Fiber Optic Buffer Tube, White	152	0	2
X	itssp	Fiber06White_ep	Fiber Optic Buffer Tube, White (Existing)	152	2 / DGN2	1
X	itssp	Fiber07Red	Fiber Optic Buffer Tube, Red	27	0	2
X	itssp	Fiber07Red_ep	Fiber Optic Buffer Tube, Red (Existing)	27	2 / DGN2	1
X	itssp	Fiber08Black	Fiber Optic Buffer Tube, Black	0	0	2
X	itssp	Fiber08Black_ep	Fiber Optic Buffer Tube, Black (Existing)	0	2 / DGN2	1
X	itssp	Fiber09Yellow	Fiber Optic Buffer Tube, Yellow	28	0	2
X	itssp	Fiber09Yellow_ep	Fiber Optic Buffer Tube, Yellow (Existing)	28	2 / DGN2	1
X	itssp	Fiber10Purple	Fiber Optic Buffer Tube, Purple	157	0	2
X	itssp	Fiber10Purple_ep	Fiber Optic Buffer Tube, Purple (Existing)	157	2 / DGN2	1
X	itssp	Fiber11Rose	Fiber Optic Buffer Tube, Rose	12	0	2
X	itssp	Fiber11Rose_ep	Fiber Optic Buffer Tube, Rose (Existing)	12	2 / DGN2	1
X	itssp	Fiber12Aqua	Fiber Optic Buffer Tube, Aqua	55	0	2
X	itssp	Fiber12Aqua_ep	Fiber Optic Buffer Tube, Aqua (Existing)	55	2 / DGN2	1
X	itssp	FiberSheath	Fiber Optic Sheath	0	0	2
X	itssp	FiberSpliceCap	Fiber Optic Splice Cap	0	0	2
X	itssp	FiberStripe	Fiber Optic Buffer Tube, Stripe	0	0	2
X	itssp	FOCBur	Fiber Optics Cable (Buried)	6	UT-BuriedFiberOptic-Proposed	1

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
X	itssp	Generator	Emergency Generator	0	0	2
X	itssp	Generator_ep	Emergency Generator (Existing)	0	2 / DGN2	1
	itssp	GridMaj_dp	Grid Lines Major in Profile and Cross Section	3	0	1
	itssp	GridMin_dp	Grid Lines Minor in Profile and Cross Section	0	0	0
	itssp	GridMinSub_dp	Grid Lines Minor Sub in Cross Section Sheets	20	0	0
	itssp	GSBWFill	GuidSign Black and White Fill Level for GuidSign Cells	0	0	1
	itssp	GSColorFill	GuidSign Color Fill Level for GuidSign Cells	2	0	1
	itssp	GSDims	GuidSign Dimensions	0	0	1
	itssp	GSOutline	GuidSign Outline Level for GuidSign Cells	0	0	2
	itssp	GSSign	GuidSign Panel and Tag	7	0	0
X	itssp	GuyWire	Guy Wire	3	0	0
X	itssp	HAR	Highway Advisory Radio Unit	3	0	2
X	itssp	HAR_ep	Highway Advisory Radio Unit (Existing)	3	2 / DGN2	1
X	itssp	HubEthernet	Ethernet Hub	1	0	1
X	itssp	HubWireless	Wireless Receiver and Transmitter	3	0	1
	itssp	ImageAttachment_dp	Image AttachmentstAttachments	0	0	0
X	itssp	Insulator	Insulator, Fiberglass	3	0	4
X	itssp	InterconCable	Cable Interconnect	1	SG-InterconCable-Proposed	1
X	itssp	InterconCable_ep	Interconnect Cable (Existing)	1	SG-InterconCable-Existing	0
	itssp	ITSDetail00	ITS Details	0	0	0
	itssp	ITSDetail01	ITS Details	0	0	1
	itssp	ITSDetail02	ITS Details	0	0	2
	itssp	ITSDetail10	ITS Details	1	0	0
	itssp	ITSDetail11	ITS Details	1	0	1
	itssp	ITSDetail12	ITS Details	1	0	2
	itssp	ITSDetail20	ITS Details	2	0	0
	itssp	ITSDetail21	ITS Details	2	0	1
	itssp	ITSDetail22	ITS Details	2	0	2
	itssp	ITSDetail30	ITS Details	3	0	0
	itssp	ITSDetail31	ITS Details	3	0	1
	itssp	ITSDetail32	ITS Details	3	0	2
X	itssp	ITSEquip00	ITS Equipment Racks	0	0	0
X	itssp	ITSEquip01	ITS Equipment Racks	0	0	1
X	itssp	ITSEquip02	ITS Equipment Racks	0	0	2
X	itssp	JunctBoxA	Junction Boxes (Aerial)	3	0	1
X	itssp	JunctBoxA_ep	Junction Boxes (Aerial) (Existing)	3	1 / DGN1	0
X	itssp	Kiosk	Kiosk	2	0	1
	itssp	LaneDirArrow	Lane Directional Arrow	0	0	1
	itssp	LeaderLine_dp	Leader Line and terminator with Text	0	0	1
	itssp	LightingMisc	Lighting Miscellaneous Items	4	0	2
X	itssp	LightingSP	Lighting Service Points	0	0	1
X	itssp	LoadCenter	Load Center	2	0	1
X	itssp	LoadCenter_ep	Load Center (Existing)	2	5 / DGN5	0
	itssp	Logo_dp	Consultant Engineer of Record Logo	0	0	1

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
X	itssp	LoopLI	Loop Lead-In	3	0	1
X	itssp	LoopLI_ep	Loop Lead-In (Existing)	3	2 / DGN2	0
X	itssp	Loops	Loop Assembly (All Types)	2	0	2
X	itssp	Loops_ep	Loop Assembly (All Types) (Existing)	2	2 / DGN2	2
X	itssp	Luminaire	Luminaires (Decorative - All Types)	2	0	1
X	itssp	MessengerWire	Messenger Wire	3	0	1
X	itssp	MetalButtons	Metal Buttons	0	0	2
	itssp	Miscellaneous0	Undefined proposed item - co blue wt 0	1	0	0
	itssp	Miscellaneous1	Undefined proposed item - co blue wt 1	1	0	1
	itssp	Miscellaneous2	Undefined proposed item - co blue wt 2	1	0	2
	itssp	Miscellaneous3	Undefined proposed item - co green wt 0	2	0	0
	itssp	Miscellaneous4	Undefined proposed item - co green wt 1	2	0	1
	itssp	Miscellaneous5	Undefined proposed item - co green wt 2	2	0	2
	itssp	Miscellaneous6	Undefined proposed item - co red wt 0	3	0	0
	itssp	Miscellaneous7	Undefined proposed item - co red wt 1	3	0	1
	itssp	Miscellaneous8	Undefined proposed item - co red wt 2	3	0	2
	itssp	Miscellaneous9	Undefined proposed item - co red wt 3	3	0	3
	itssp	NonPlottingEle_dp	Non plotting items such as construction elements and type 66 elements	4	0	0
	itssp	NorthArw_dp	North Arrows	0	0	2
X	itssp	ObjectMarker	Object and Reflective Markers	3	0	1
X	itssp	OverheadSign	Overhead Sign Panels	0	0	2
X	itssp	OverheadSign_ep	Overhead Sign Panels (Existing)	0	3 / DGN3	1
X	itssp	OverheadStr	Mast Arm, Truss Assemblies, Signal Arms and Supports	0	0	2
X	itssp	OverheadStr_ep	Mast Arm, Truss Assemblies, Signal Arms and Supports (Existing)	0	3 / DGN3	1
	itssp	Pavemk_ep	Pavement Markings (all)	0	2 / DGN2	0
X	itssp	PavtMessage	Pavement Message (All types)(All Types)	0	0	1
X	itssp	PavtMessage_ep	Pavement Message (Existing - All types)(All Types)	0	2 / DGN2	0
	itssp	PayItem_dp	Pay Item Number Label Elements	4	0	2
X	itssp	PedDetector	Pedestrian Detector	0	0	2
X	itssp	Pedestal	Pedestal	1	0	1
X	itssp	Pedestal_ep	Pedestal (Existing)	1	2 / DGN2	1
X	itssp	PedHead	Pedestrian Head (All Types)	1	0	1
X	itssp	PedHead_ep	Pedestrian Head (All Types) (Existing)	0	2 / DGN2	1
X	itssp	PlotBorder_dp	Plot Border	3	0	0
X	itssp	PMCeramic	Pavement Markers Ceramic	0	0	1
	itssp	PMMisc	Pavement Marking Miscellaneous Items	0	0	2
X	itssp	PMStripe12B	Pavement Marking Traffic Stripe 12in Black	3	0	4
X	itssp	PMStripe12W	Pavement Marking Traffic Stripe 12in White	0	0	4
X	itssp	PMStripe12W(3-9)	Pavement Marking 3/9 Skip Traffic Stripe 12in White	0	0 / PM-Stripe-SKIP 3-9	4
X	itssp	PMStripe12Y	Pavement Marking Traffic Stripe 12in Yellow	4	0	4
X	itssp	PMStripe16B	Pavement Marking Traffic Stripe 16in Black	3	0	5
X	itssp	PMStripe16W	Pavement Marking Traffic Stripe 16in White	0	0	5
X	itssp	PMStripe16Y	Pavement Marking Traffic Stripe 16in Yellow	4	0	5

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
X	itssp	PMStripe18B	Pavement Marking Traffic Stripe 18in Black	3	0	6
X	itssp	PMStripe18W	Pavement Marking Traffic Stripe 18in White	0	0	6
X	itssp	PMStripe18Y	Pavement Marking Traffic Stripe 18in Yellow	4	0	6
X	itssp	PMStripe24W	Pavement Marking Traffic Stripe 24in White	0	0	7
X	itssp	PMStripe24Y	Pavement Marking Traffic Stripe 24in Yellow	4	0	7
X	itssp	PMStripe6B	Pavement Marking Traffic Stripe 6in Black	3	0	2
X	itssp	PMStripe6B(10-30)	Pavement Marking 10/30 Skip Traffic Stripe 6in Black	3	0 / PM-Stripe-SKIP 10-30	2
X	itssp	PMStripe6Bl	Pavement Marking Traffic Stripe 6in Blue	1	0	2
X	itssp	PMStripe6DY	Pavement Marking Traffic Stripe 6in Double Yellow	4	0	2
X	itssp	PMStripe6W	Pavement Marking Traffic Stripe 6in White	0	0	2
X	itssp	PMStripe6W(10-30)	Pavement Marking 10/30 Skip Traffic Stripe 6in White	0	0 / PM-Stripe-SKIP 10-30	2
X	itssp	PMStripe6W(2-4)	Pavement Marking 2/4 Skip Traffic Stripe 6in White	0	0 / PM-Stripe-SKIP 2-4	2
X	itssp	PMStripe6W(3-9)	Pavement Marking 3/9 Skip Traffic Stripe 6in White	0	0 / PM-Stripe-SKIP 3-9	2
X	itssp	PMStripe6W(6-10)	Pavement Marking 6/10 Skip Traffic Stripe 6in White	0	0 / PM-Stripe-SKIP 6-10	2
X	itssp	PMStripe6Y	Pavement Marking Traffic Stripe 6in Yellow	4	0	2
X	itssp	PMStripe6Y(10-30)	Pavement Marking 10/30 Skip Traffic Stripe 6in Yellow	4	0 / PM-Stripe-SKIP 10-30	2
X	itssp	PMStripe6Y(2-4)	Pavement Marking 2/4 Skip Traffic Stripe 6in Yellow	4	0 / PM-Stripe-SKIP 2-4	2
X	itssp	PMStripe6Y(6-10)	Pavement Marking 6/10 Skip Traffic Stripe 6in Yellow	4	0 / PM-Stripe-SKIP 6-10	2
X	itssp	PMStripe8B	Pavement Marking Traffic Stripe 8in Black	3	0	3
X	itssp	PMStripe8W	Pavement Marking Traffic Stripe 8in White	0	0	3
X	itssp	PMStripe8W(3-9)	Pavement Marking 3/9 Skip Traffic Stripe 8in White	0	PM-Stripe-SKIP 3-9	2
X	itssp	PMStripe8Y	Pavement Marking Traffic Stripe 8in Yellow	4	0	3
X	itssp	PMStripeVibeWL	Pavement Marking Auditory and Vibratory 6in White (Left)	0	PM-Stripe-VibratoryLeft / PM-Stripe-Vibratory	2
X	itssp	PMStripeVibeWR	Pavement Marking Auditory and Vibratory 6in White (Right)	0	PM-Stripe-VibratoryRight / PM-Stripe-Vibratory	2
X	itssp	PMStripeVibeYL	Pavement Marking Auditory and Vibratory 6in Yellow (Left)	4	PM-Stripe-VibratoryLeft / PM-Stripe-Vibratory	2
X	itssp	PMStripeVibeYR	Pavement Marking Auditory and Vibratory 6in Yellow (Right)	4	PM-Stripe-VibratoryRight / PM-Stripe-Vibratory	2
	itssp	PointLocator_ep	Point Locator Symbol	4	0	0
X	itssp	PoleConc	Concrete Strain Pole	0	0	2
X	itssp	PoleConc_ep	Concrete Strain Pole (Existing)	0	2 / DGN2	1
X	itssp	PoleFound	Pole Foundation	0	0	2
X	itssp	PoleLight	Light Pole	2	0	1
X	itssp	PoleLight_ep	Light Pole (Existing)	2	2 / DGN2	1
X	itssp	PoleLightHM	High Mast Light Pole	3	0	1
X	itssp	PoleLightHM_ep	High Mast Light Pole (Existing)	2	2 / DGN2	1

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
	itssp	PoleLightID	Light Pole Location / ID	4	0	1
X	itssp	PolePower	Power Pole w/ Transformer	3	0	2
X	itssp	PoleShared	Power Pole Electric (Above Ground) Shared w/ Transformer	3	0	2
X	itssp	PoleSteelStrain	Steel Strain Pole	0	0	2
X	itssp	PoleSteelStrain_ep	Steel Strain Pole (Existing)	0	2 / DGN2	1
X	itssp	PoleTel	Telephone Pole	6	0	2
X	itssp	PoleUtil	Utility Pole	0	0	2
X	itssp	PoleWoodStrain	Wood Strain Pole	0	0	2
X	itssp	PoleWoodStrain_ep	Wood Strain Pole (Existing)	0	2 / DGN2	1
X	itssp	PullBox	Pull Boxes (All Types)	3	0	1
	itssp	ReferencePt_dp	Survey and Construction Reference Point Details and Elements	4	0	2
X	itssp	ReflPaintWht	Reflective Paint - Island Nose (White)	0	0	3
X	itssp	ReflPaintYel	Reflective Paint - Island Nose (Yellow)	4	0	3
X	itssp	RPM_ep	Reflective Pavement Markers (Existing)	2	2 / DGN2	1
X	itssp	RPM1	Raised Pavement Markers, White	0	0	2
X	itssp	RPM2	Raised Pavement Markers, White - Red	3	0	2
X	itssp	RPM3	Raised Pavement Markers, Yellow	4	0	2
X	itssp	RPM4	Raised Pavement Markers, Yellow - Yellow	9	0	2
X	itssp	RPM5	Raised Pavement Markers, Yellow - Red	6	0	2
X	itssp	RPM6	Raised Pavement Markers, Blue	1	0	2
X	itssp	SawCuts	Saw Cuts	3	3 / DGN3	0
	itssp	Scale_dp	Bar Scale, Scale Label Elements	0	0	2
	itssp	Scratch1_dp	A scratch level for temporary or informational items	4	0	0
	itssp	Scratch2_dp	A scratch level for temporary or informational items	5	0	0
	itssp	ScratchEle_dp	Level for Draft Elements, Temporary Elements, Etc. Do Not Plot	3	0	0
	itssp	ScratchEle2_dp	Level for Draft Elements, Temporary Elements, Etc. Do Not Plot	4	0	0
	itssp	SheetBorder_dp	Sheet Border	1	0	4
	itssp	SheetLines_dp	Sheet Lines	1	0	2
	itssp	SheetLinesMisc1_dp	Sheet Lines	1	0	0
	itssp	SheetLinesMisc2_dp	Sheet Lines	2	0	2
	itssp	SheetLinesMisc3_dp	Sheet Lines	3	0	2
	itssp	SheetLinesMisc4_dp	Sheet Lines	4	0	2
X	itssp	SignalCable	Signal Cable	3	SG-Cable / 0	1
X	itssp	SignalCableAccs	Signal Cable Accessories	0	0	2
X	itssp	SignalDetail	Signal Details	0	0	1
	itssp	SignalHead	Signal Head Section Details	2	0	1
X	itssp	SignalHead_ep	Signal Head Section Details (Existing)	2	2 / DGN2	0
	itssp	SignalMisc	Signal Miscellaneous Equipment	3	0	1
X	itssp	SignalSOP	S.O.P. Box and Movements	0	0	2
X	itssp	SignalSym	Signal Head Symbols	0	0	1
X	itssp	SignalSym_ep	Signal Head Symbols (Existing)	3	2 / DGN2	0
X	itssp	SignCantilever	Sign Symbol Cantilever	0	0	1
X	itssp	SignCantilever_ep	Sign Symbol Cantilever (Existing)	0	2 / DGN2	0
	itssp	SignDetail	Sign Details	0	0	2

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
	itssp	SignLettersAZ	Alphabet Cell Library Letter A-Z Numbers 0-9	0	0	0
	itssp	SignMisc	Miscellaneous Sign Symbols	1	0	2
	itssp	SignMisc_ep	Miscellaneous Sign Symbols (Existing)	1	1 / DGN1	1
X	itssp	SignPanel	Sign Panels - Regulatory	0	0	2
X	itssp	SignPanel_ep	Sign Panel Elements (Existing)	0	2 / DGN2	1
X	itssp	SignPanelBorder	Sign Panel Border on Sign Details	0	0	1
X	itssp	SignPanelC	Sign Panels - Civil	1	0	2
X	itssp	SignPanelDetRed	Sign Panel Details in Red	3	0	2
X	itssp	SignPanelG	Sign Panels - Guide	2	0	2
X	itssp	SignPanelI	Sign Panels - Special Interest	9	0	2
X	itssp	SignPanelT	Sign Panels - Construction	6	0	2
X	itssp	SignPanelW	Sign Panels - Warning	4	0	2
X	itssp	SignSpanwire	Span Wire Signing Assembly	2	0	1
X	itssp	SignSpanwire_ep	Span Wire Signing Assembly (Existing)	2	2 / DGN2	1
X	itssp	SignSpecial	Special Signs / Guide Signs	2	0	2
X	itssp	SignSupport	Ground Mounted Sign Support Symbol (All Types)	1	0	1
X	itssp	SignSymbol_px	Sign Structure and Foundation on Cross Sections	4	0	2
X	itssp	SignTruss	Sign Symbol Truss	3	0	1
X	itssp	SignTruss_ep	Sign Symbol Truss (Existing)	3	2 / DGN2	1
	itssp	SpecialDetails	Special Details	6	0	1
X	itssp	SpliceBox	Fiber Optic Splice Box	3	0	1
X	itssp	SpliceBox_ep	Fiber Optic Splice Box (Existing)	3	2 / DGN2	0
	itssp	StationTicL_dp	Station Tic Marks (Large) and Text	0	0	2
	itssp	StationTicS_dp	Station Tic Marks (Small) and Text	0	0	2
	itssp	SumBoxBorder_dp	Summary Boxes Borders	4	0	3
	itssp	SumBoxLines_dp	Summary Boxes Lines and Miscellaneous Items	4	0	1
	itssp	SumBoxLinesMin_dp	Summary Boxes Lines Minor Line and Miscellaneous Items	4	0	0
	itssp	Tables_dp	Data Tables and All Autodesk Tables	0	0	1
	itssp	TextBLStation	Text - B/L Station and Tics	0	0	2
	itssp	TextConstEle	Text - Construction Element	0	0	1
	itssp	TextCurveData	Text - Curve Data Note	0	0	2
	itssp	TextDetails	Text - Detail Notes	4	0	2
	itssp	TextElevLabel	Elevation Labels	4	0	0
	itssp	TextLabel	Text - Label	0	0	2
	itssp	TextLandscape	Text - Landscape Labels	0	0	1
	itssp	TextMajor	Text - Major	0	0	5
	itssp	TextMinor	Text - Minor	0	0	0
	itssp	TextMisc	Text - Miscellaneous	0	0	1
	itssp	TextNotes	Text - Notes	4	0	1
	itssp	TextProfLabel	Text - Profile, Horizontal and Vertical Axis Labels	0	0	2
	itssp	TextProjLabel	Text - Begin and End Project label with leader lines	1	0	2
	itssp	TextPtLabel	Point Labels	4	0	0
	itssp	TextShtNo	Text - Sheet Number	0	0	2
	itssp	TextSurveyLabel	Survey Text Labels	0	0	0

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
	itssp	TextTables	Text - KeysheetKey sheet Indexes and Table Data	4	0	2
	itssp	TextTitle	Text - Title	0	0	3
	itssp	TextXSElev	Text - Cross Section Elevations	2	0	1
X	itssp	TMC	Traffic Management Center	1	0	1
X	itssp	TollReader	Electronic Toll Reader	3	0	1
X	itssp	TollReader_ep	Electronic Toll Reader (Existing)	3	2 / DGN2	0
	itssp	Viewport	Viewport (For AutoCAD Use)	3	0	0
	itssp	Xreference01_dp	Reference Files (For AutoCAD Use)	0	0	1
	itssp	Xreference02_dp	Reference Files (For AutoCAD Use)	0	0	1
	itssp	Xreference03_dp	Reference Files (For AutoCAD Use)	0	0	1
	itssp	Xreference04_dp	Reference Files (For AutoCAD Use)	0	0	1
	itssp	XSCell	GEOPAK Cross Section Cell/Block and Profile Cell/Block	8	0	1

KEYSHT - Key Sheets

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
	keysht	ActivePointCell_dp	Active Point Cell	4	0	10
	keysht	AdhocPoint_dp	Adhoc Points Placed by SheetInfo	0	4 / 0	0
	keysht	BaselineSurvey	Baseline Survey	0	0	2
X	keysht	BoxCulvert	Box Culvert	10	0	2
	keysht	CLConst_dp	Center Line of Construction	0	0	2
	keysht	ClipBorder_dp	CLIP Border and Civil 3D View Frame	3	0	0
	keysht	ClipDrawingBound_dp	CLIP Drawing Boundary	3	3 / 0	0
	keysht	Cloud_dp	Construction Cloud	7	0	2
	keysht	COGO_dp	COGO Information	3	0	1
	keysht	ConstArea_dp	Construction Area Crosshatch	0	0	1
	keysht	ConstLimits	Construction Limits	3	RW-LimitsofConst	2
	keysht	ConstLines	Construction Lines and References	1	0	0
	keysht	ConstLines_pm	Construction Lines	4	0	0
	keysht	CurveData_dp	Curve & Coordinate Data Elements incl PC, PT, PI symbols	4	0	2
	keysht	CurveDataLabel_dp	Curve Data Labels PC,PI, PT	0	0	2
	keysht	DimLines_dp	Dimension Lines, Corresponding Terminators, Equation Lines	0	0	1
X	keysht	DrainStruct_pr	Drainage Structures (All Types)	10	0	2
X	keysht	EaseLicLine	Easement License Agreement Line	5	6 / DGN6	0
X	keysht	Endwall	Endwall (All Types)	10	0	2
X	keysht	FES	Flared End Sections	10	0	2
X	keysht	Flag	Orange Flag and / or Flagman	6	0	1
	keysht	FLMap1	Florida Map items - weight of 1	1	0	1
	keysht	FLMap2	Florida Map items - weight of 2	3	0	2
	keysht	FLMap3	Florida Map items - weight of 3	2	0	3
	keysht	FLMap4	Florida Map items - color 11 (Interstate)	11	0	3

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
	keysht	FLMap5	Florida Map items - style 7, wt. 5 (state line)	3	7 / DGN7	5
X	keysht	GovTwpRgeLine_ep	Township / Range Lines	10	RW-TownshipRange	2
	keysht	GradeLine_er	Grade Line Profile (Existing)	2	2 / DGN2	1
	keysht	GradeLine_pr	Grade Line Profile	5	0	2
	keysht	GradeLineCtr_dp	Grade Line Profile Center (shown in plan view)	5	0	0
	keysht	GradeLineCtr_pr	Grade Line Profile Center	5	0	2
	keysht	GradeLineLt_dp	Grade Line Profile Left (shown in plan view)	1	0	0
	keysht	GradeLineLt_er	Grade Line Profile Left (Existing)	1	2 / DGN2	1
	keysht	GradeLineLt_pr	Grade Line Profile Left	1	0	2
	keysht	GradeLineRt_dp	Grade Line Profile Right (shown in plan view)	4	0	0
	keysht	GradeLineRt_er	Grade Line Profile Right (Existing)	4	2 / DGN2	1
	keysht	GradeLineRt_pr	Grade Line Profile Right	4	0	2
	keysht	GradeSecPat	Grade Section Patterns	0	0	0
	keysht	GridMaj_dp	Grid Lines Major in Profile and Cross Section	3	0	1
	keysht	GridMin_dp	Grid Lines Minor in Profile and Cross Section	0	0	0
	keysht	GridMinSub_dp	Grid Lines Minor Sub in Cross Section Sheets	20	0	0
	keysht	ImageAttachment_dp	Image AttachmentstAttachments	0	0	0
X	keysht	InletBottomJ	Inlet Bottom Type J	10	0	1
X	keysht	InletBottomP	Inlet Bottom Type P	10	0	1
X	keysht	InletClosedFlume	Closed Flume Inlet	10	0	2
X	keysht	InletCurb	Curb Inlet (All Types)	10	0	2
X	keysht	InletDBI	Ditch Bottom Inlet (All Types)	10	0	2
X	keysht	InletGutter	Gutter Inlet (All Types)	10	0	2
X	keysht	InletMedian	Median Barrier Inlet	10	0	2
	keysht	KeyShtMisc	Key sheet Miscellaneous Items	0	0	2
	keysht	LaneDirArrow	Lane Directional Arrow	0	0	1
	Keysht	LaneLine	Lane Lines (Defines Changes in Pavement Cross Slope- Non-plotting)	4	3 / DGN3	2
	keysht	LeaderLine_dp	Leader Line and terminator with Text	0	0	1
	keysht	Logo_dp	Consultant Engineer of Record Logo	0	0	1
X	keysht	Manhole	Manhole (Drainage and Unknown)	10	0	2
	keysht	MapOutline_dp	Outline for key maps	0	0	5
	keysht	MatchLines_dp	Match Lines with Text, Arrows for Station Notations	1	0	2
X	keysht	MES	Mitered End Section	10	0	2
	keysht	Miscellaneous0	Undefined proposed item - co blue wt 0	1	0	0
	keysht	Miscellaneous1	Undefined proposed item - co blue wt 1	1	0	1
	keysht	Miscellaneous2	Undefined proposed item - co blue wt 2	1	0	2
	keysht	Miscellaneous3	Undefined proposed item - co green wt 0	2	0	0
	keysht	Miscellaneous4	Undefined proposed item - co green wt 1	2	0	1
	keysht	Miscellaneous5	Undefined proposed item - co green wt 2	2	0	2
	keysht	Miscellaneous6	Undefined proposed item - co red wt 0	3	0	0
	keysht	Miscellaneous7	Undefined proposed item - co red wt 1	3	0	1
	keysht	Miscellaneous8	Undefined proposed item - co red wt 2	3	0	2
	keysht	Miscellaneous9	Undefined proposed item - co red wt 3	3	0	3
	keysht	NonPlottingEle_dp	Non plotting items such as construction elements and type 66 elements	4	0	0

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
	keysht	NorthArw_dp	North Arrows	0	0	2
	keysht	PatternLines1_dp	Pattern Lines and Sample Lines (Civil 3D) for Cross Sections	3	0	2
	keysht	PatternLines2_dp	Pattern Lines for XSectionsCross Sections alternate for side streets, critical xsectionsCross Sections or drainage structures	4	0	2
	keysht	PatternLines3_dp	Pattern Lines for XSectionsCross Sections alternate for side streets, critical xsectionsCross Sections or drainage structures	5	0	2
	keysht	PayItem_dp	Pay Item Number Label Elements	4	0	2
X	keysht	PlotBorder_dp	Plot Border	3	0	0
	keysht	PointLocator_ep	Point Locator Symbol	4	0	0
	keysht	RailroadDetails	Railroad Crossing Details	3	0	2
	keysht	RailroadXing	Railroad Crossing Elements	11	0	0
	keysht	ReferencePt_dp	Survey and Construction Reference Point Details and Elements	4	0	2
	keysht	RoadwayMisc	Roadway Miscellaneous Items	4	0	2
	keysht	Scale_dp	Bar Scale, Scale Label Elements	0	0	2
	keysht	Scratch1_dp	A scratch level for temporary or informational items	4	0	0
	keysht	Scratch2_dp	A scratch level for temporary or informational items	5	0	0
	keysht	ScratchEle_dp	Level for Draft Elements, Temporary Elements, Etc. Do Not Plot	3	0	0
	keysht	ScratchEle2_dp	Level for Draft Elements, Temporary Elements, Etc. Do Not Plot	4	0	0
	keysht	SheetBorder_dp	Sheet Border	1	0	4
	keysht	SheetLines_dp	Sheet Lines	1	0	2
	keysht	SheetLinesMisc1_dp	Sheet Lines	1	0	0
	keysht	SheetLinesMisc2_dp	Sheet Lines	2	0	2
	keysht	SheetLinesMisc3_dp	Sheet Lines	3	0	2
	keysht	SheetLinesMisc4_dp	Sheet Lines	4	0	2
	keysht	StationTicL_dp	Station Tic Marks (Large) and Text	0	0	2
	keysht	StationTicS_dp	Station Tic Marks (Small) and Text	0	0	2
	keysht	SumBoxBorder_dp	Summary Boxes Borders	4	0	3
	keysht	SumBoxLines_dp	Summary Boxes Lines and Miscellaneous Items	4	0	1
	keysht	SumBoxLinesMin_dp	Summary Boxes Lines Minor Line and Miscellaneous Items	4	0	0
	keysht	Tables_dp	Data Tables and All Autodesk Tables	0	0	1
	keysht	TextBLStation	Text - B/L Station and Tics	0	0	2
	keysht	TextConstEle	Text - Construction Element	0	0	1
	keysht	TextCurveData	Text - Curve Data Note	0	0	2
	keysht	TextDetails	Text - Detail Notes	4	0	2
	keysht	TextElevLabel	Elevation Labels	4	0	0
	keysht	TextLabel	Text - Label	0	0	2
	keysht	TextLandscape	Text - Landscape Labels	0	0	1
	keysht	TextMajor	Text - Major	0	0	5
	keysht	TextMinor	Text - Minor	0	0	0
	keysht	TextMisc	Text - Miscellaneous	0	0	1
	keysht	TextNotes	Text - Notes	4	0	1
	keysht	TextProfLabel	Text - Profile, Horizontal and Vertical Axis Labels	0	0	2
	keysht	TextProjLabel	Text - Begin and End Project label with leader lines	1	0	2
	keysht	TextPtLabel	Point Labels	4	0	0

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
	keysht	TextShtNo	Text - Sheet Number	0	0	2
	keysht	TextSurveyLabel	Survey Text Labels	0	0	0
	keysht	TextTables	Text - KeysheetKey sheet Indexes and Table Data	4	0	2
	keysht	TextTitle	Text - Title	0	0	3
	keysht	TextXSElev	Text - Cross Section Elevations	2	0	1
	keysht	Viewport	Viewport (For AutoCAD Use)	3	0	0
	keysht	Xreference01_dp	Reference Files (For AutoCAD Use)	0	0	1
	keysht	Xreference02_dp	Reference Files (For AutoCAD Use)	0	0	1
	keysht	Xreference03_dp	Reference Files (For AutoCAD Use)	0	0	1
	keysht	Xreference04_dp	Reference Files (For AutoCAD Use)	0	0	1
	keysht	XSCell	GEOPAK Cross Section Cell/Block and Profile Cell/Block	8	0	1

MSARSP - Mast Arm Details

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
	msarsp	ActivePointCell_dp	Active Point Cell	4	0	10
	msarsp	AdhocPoint_dp	Adhoc Points Placed by SheetInfo	0	4 / 0	0
	msarsp	COGO_dp	COGO Information	3	0	1
X	msarsp	ConduitAG	Conduit – Above Ground	4	SG-ConduitAG-Proposed	1
X	msarsp	ConduitBM	Conduit – Bridge Mount	5	SG-ConduitBM-Proposed	1
X	msarsp	ConduitDB	Conduit – Directional Bore	2	SG-ConduitDB-Proposed	1
X	msarsp	ConduitJB	Conduit – Jack & Bore Under Rail	3	SG-ConduitJB-Proposed	1
X	msarsp	ConduitOT	Conduit – Open Trench	1	SG-ConduitOT-Proposed	1
	msarsp	ConstLines	Construction Lines and References	1	0	0
	msarsp	ConstLines_pm	Construction Lines	4	0	0
X	msarsp	Controller	Controller and Accessories	0	0	2
X	msarsp	Controller_ep	Controller and Accessories (Existing)	0	2 / DGN2	1
X	msarsp	ControllerAcess	Controller Accessories	0	0	1
X	msarsp	ControllerB	Controller - Base Mounted	0	0	2
X	msarsp	ControllerB_ep	Controller - Base Mounted (Existing)	0	2 / DGN2	1
X	msarsp	ControllerP	Controller Pole Mount	0	0	2
X	msarsp	ControllerP_ep	Controller Pole Mount (Existing)	0	2 / DGN2	1
X	msarsp	Detector	Detector Cabinet, Button and Misc Assemblies	3	0	2
X	msarsp	DetectorVeh	Detector Vehicle Assemblies (All Types)	3	0	1
	msarsp	DimLines_dp	Dimension Lines, Corresponding Terminators, Equation Lines	0	0	1
X	msarsp	EaseLicLine	Easement License Agreement Line	5	6 / DGN6	0
X	msarsp	ElectPS	Electrical Power Service Miscellaneous	3	0	1
X	msarsp	ElectPSB	Electrical (Buried)	3	UT-BuriedElec-Proposed	2
X	msarsp	ElectPSO	Electrical Outlet	3	0	1
X	msarsp	ElectServWire	Electrical Service Wire	3	0	2
X	msarsp	FOCBur	Fiber Optics Cable (Buried)	6	UT-BuriedFiberOptic-Proposed	1

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
X	msarsp	Generator	Emergency Generator	0	0	2
	msarsp	GridMaj_dp	Grid Lines Major in Profile and Cross Section	3	0	1
	msarsp	GridMin_dp	Grid Lines Minor in Profile and Cross Section	0	0	0
	msarsp	GridMinSub_dp	Grid Lines Minor Sub in Cross Section Sheets	20	0	0
X	msarsp	GuyWire	Guy Wire	3	0	0
	mrarsp	ImageAttachment_dp	Image AttachmentstAttachments	0	0	0
X	msarsp	Insulator	Insulator, Fiberglass	3	0	4
X	msarsp	InterconCable	Cable Interconnect	1	SG-InterconCable-Proposed	1
X	msarsp	InterconCable_ep	Interconnect Cable (Existing)	1	SG-InterconCable-Existing	0
X	msarsp	JunctBoxA	Junction Boxes (Aerial)	3	0	1
X	msarsp	JunctBoxA_ep	Junction Boxes (Aerial) (Existing)	3	1 / DGN1	0
	msarsp	LeaderLine_dp	Leader Line and terminator with Text	0	0	1
X	msarsp	LoadCenter	Load Center	2	0	1
X	msarsp	LoadCenter_ep	Load Center (Existing)	2	5 / DGN5	0
X	msarsp	LoopLI	Loop Lead-In	3	0	1
X	msarsp	LoopLI_ep	Loop Lead-In (Existing)	3	2 / DGN2	0
X	msarsp	Loops	Loop Assembly (All Types)	2	0	2
X	msarsp	Loops_ep	Loop Assembly (All Types) (Existing)	2	2 / DGN2	2
X	msarsp	MessengerWire	Messenger Wire	3	0	1
	msarsp	Miscellaneous0	Undefined proposed item - co blue wt 0	1	0	0
	msarsp	Miscellaneous1	Undefined proposed item - co blue wt 1	1	0	1
	msarsp	Miscellaneous2	Undefined proposed item - co blue wt 2	1	0	2
	msarsp	Miscellaneous3	Undefined proposed item - co green wt 0	2	0	0
	msarsp	Miscellaneous4	Undefined proposed item - co green wt 1	2	0	1
	msarsp	Miscellaneous5	Undefined proposed item - co green wt 2	2	0	2
	msarsp	Miscellaneous6	Undefined proposed item - co red wt 0	3	0	0
	msarsp	Miscellaneous7	Undefined proposed item - co red wt 1	3	0	1
	msarsp	Miscellaneous8	Undefined proposed item - co red wt 2	3	0	2
	msarsp	Miscellaneous9	Undefined proposed item - co red wt 3	3	0	3
	msarsp	NonPlottingEle_dp	Non plotting items (construction elements and type 66 elements)	4	0	0
	msarsp	NorthArw_dp	North Arrows	0	0	2
X	msarsp	ObjectMarker	Object and Reflective Markers	3	0	1
X	msarsp	OverheadSign	Overhead Sign Panels	0	0	2
X	msarsp	OverheadSign_ep	Overhead Sign Panels (Existing)	0	3 / DGN3	1
X	msarsp	OverheadStr	Mast Arm, Truss Assemblies, Signal Arms and Supports	0	0	2
X	msarsp	OverheadStr_ep	Mast Arm, Truss Assemblies, Signal Arms and Supports (Existing)	0	3 / DGN3	1
	msarsp	PayItem_dp	Pay Item Number Label Elements	4	0	2
X	msarsp	PedDetector	Pedestrian Detector	0	0	2
X	msarsp	Pedestal	Pedestal	1	0	1
X	msarsp	Pedestal_ep	Pedestal (Existing)	1	2 / DGN2	1
X	msarsp	PedHead	Pedestrian Head (All Types)	1	0	1
X	msarsp	PedHead_ep	Pedestrian Head (All Types) (Existing)	0	2 / DGN2	1
X	msarsp	PlotBorder_dp	Plot Border	3	0	0
	msarsp	PointLocator_ep	Point Locator Symbol	4	0	0

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
X	msarsp	PoleConc	Concrete Strain Pole	0	0	2
X	msarsp	PoleConc_ep	Concrete Strain Pole (Existing)	0	2 / DGN2	1
X	msarsp	PoleFound	Pole Foundation	0	0	2
X	msarsp	PoleLight	Light Pole	2	0	1
X	msarsp	PoleLight_ep	Light Pole (Existing)	2	2 / DGN2	1
X	msarsp	PoleLightHM	High Mast Light Pole	3	0	1
X	msarsp	PoleLightHM_ep	High Mast Light Pole (Existing)	2	2 / DGN2	1
	msarsp	PoleLightID	Light Pole Location / ID	4	0	1
X	msarsp	PolePower	Power Pole w/ Transformer	3	0	2
X	msarsp	PoleShared	Power Pole Electric (Above Ground) Shared w/ Transformer	3	0	2
X	msarsp	PoleSteelStrain	Steel Strain Pole	0	0	2
X	msarsp	PoleSteelStrain_ep	Steel Strain Pole (Existing)	0	2 / DGN2	1
X	msarsp	PoleTel	Telephone Pole	6	0	2
X	msarsp	PoleUtil	Utility Pole	0	0	2
X	msarsp	PoleWoodStrain	Wood Strain Pole	0	0	2
X	msarsp	PoleWoodStrain_ep	Wood Strain Pole (Existing)	0	2 / DGN2	1
X	msarsp	PullBox	Pull Boxes (All Types)	3	0	1
	msarsp	ReferencePt_dp	Survey and Construction Reference Point Details and Elements	4	0	2
X	msarsp	SawCuts	Saw Cuts	3	3 / DGN3	0
	msarsp	Scale_dp	Bar Scale, Scale Label Elements	0	0	2
	msarsp	Scratch1_dp	A scratch level for temporary or informational items	4	0	0
	msarsp	Scratch2_dp	A scratch level for temporary or informational items	5	0	0
	msarsp	ScratchEle_dp	Level for Draft Elements, Temporary Elements, Etc. Do Not Plot	3	0	0
	msarsp	ScratchEle2_dp	Level for Draft Elements, Temporary Elements, Etc. Do Not Plot	4	0	0
	msarsp	SheetBorder_dp	Sheet Border	1	0	4
	msarsp	SheetLines_dp	Sheet Lines	1	0	2
	msarsp	SheetLinesMisc1_dp	Sheet Lines	1	0	0
	msarsp	SheetLinesMisc2_dp	Sheet Lines	2	0	2
	msarsp	SheetLinesMisc3_dp	Sheet Lines	3	0	2
	msarsp	SheetLinesMisc4_dp	Sheet Lines	4	0	2
X	msarsp	SignalCable	Signal Cable	3	SG-Cable / 0	1
X	msarsp	SignalCableAccs	Signal Cable Accessories	0	0	2
X	msarsp	SignalDetail	Signal Details	0	0	1
	msarsp	SignalHead	Signal Head Section Details	2	0	1
X	msarsp	SignalHead_ep	Signal Head Section Details (Existing)	2	2 / DGN2	0
	msarsp	SignalMisc	Signal Miscellaneous Equipment	3	0	1
X	msarsp	SignalSOP	S.O.P. Box and Movements	0	0	2
X	msarsp	SignalSym	Signal Head Symbols	0	0	1
X	msarsp	SignalSym_ep	Signal Head Symbols (Existing)	3	2 / DGN2	0
X	msarsp	SignCantilever	Sign Symbol Cantilever	0	0	1
X	msarsp	SignCantilever_ep	Sign Symbol Cantilever (Existing)	0	2 / DGN2	0
	msarsp	SignDetail	Sign Details	0	0	2
	msarsp	SignLettersAZ	Alphabet Cell Library Letter A-Z Numbers 0-9	0	0	0
	msarsp	SignMisc	Miscellaneous Sign Symbols	1	0	2

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
	msarsp	SignMisc_ep	Miscellaneous Sign Symbols (Existing)	1	1 / DGN1	1
X	msarsp	SignPanel	Sign Panels - Regulatory	0	0	2
X	msarsp	SignPanel_ep	Sign Panel Elements (Existing)	0	2 / DGN2	1
X	msarsp	SignPanelBorder	Sign Panel Border on Sign Details	0	0	1
X	msarsp	SignSpanwire	Span Wire Signing Assembly	2	0	1
X	msarsp	SignSpanwire_ep	Span Wire Signing Assembly (Existing)	2	2 / DGN2	1
X	msarsp	SignSpecial	Special Signs / Guide Signs	2	0	2
X	msarsp	SignSupport	Ground Mounted Sign Support Symbol (All Types)	1	0	1
X	msarsp	SignSymbol_px	Sign Structure and Foundation on Cross Sections	4	0	2
X	msarsp	SignTruss	Sign Symbol Truss	3	0	1
X	msarsp	SignTruss_ep	Sign Symbol Truss (Existing)	3	2 / DGN2	1
	msarsp	SpecialDetails	Special Details	6	0	1
	msarsp	SumBoxBorder_dp	Summary Boxes Borders	4	0	3
	msarsp	SumBoxLines_dp	Summary Boxes Lines and Miscellaneous Items	4	0	1
	msarsp	SumBoxLinesMin_dp	Summary Boxes Lines Minor Line and Miscellaneous Items	4	0	0
	msarsp	Tables_dp	Data Tables and All Autodesk Tables	0	0	1
	msarsp	TextBLStation	Text - B/L Station and Tics	0	0	2
	msarsp	TextConstEle	Text - Construction Element	0	0	1
	msarsp	TextCurveData	Text - Curve Data Note	0	0	2
	msarsp	TextDetails	Text - Detail Notes	4	0	2
	msarsp	TextElevLabel	Elevation Labels	4	0	0
	msarsp	TextLabel	Text - Label	0	0	2
	msarsp	TextLandscape	Text - Landscape Labels	0	0	1
	msarsp	TextMajor	Text - Major	0	0	5
	msarsp	TextMinor	Text - Minor	0	0	0
	msarsp	TextMisc	Text - Miscellaneous	0	0	1
	msarsp	TextNotes	Text - Notes	4	0	1
	msarsp	TextProfLabel	Text - Profile, Horizontal and Vertical Axis Labels	0	0	2
	msarsp	TextProjLabel	Text - Begin and End Project label with leader lines	1	0	2
	msarsp	TextPtLabel	Point Labels	4	0	0
	msarsp	TextShtNo	Text - Sheet Number	0	0	2
	msarsp	TextSurveyLabel	Survey Text Labels	0	0	0
	msarsp	TextTables	Text - KeysheetKey sheet Indexes and Table Data	4	0	2
	msarsp	TextTitle	Text - Title	0	0	3
	msarsp	TextXSElev	Text - Cross Section Elevations	2	0	1
	msarsp	Viewport	Viewport (For AutoCAD Use)	3	0	0
	msarsp	Xreference01_dp	Reference Files (For AutoCAD Use)	0	0	1
	msarsp	Xreference02_dp	Reference Files (For AutoCAD Use)	0	0	1
	msarsp	Xreference03_dp	Reference Files (For AutoCAD Use)	0	0	1
	msarsp	Xreference04_dp	Reference Files (For AutoCAD Use)	0	0	1
	msarsp	XSCell	GEOPAK Cross Section Cell/Block and Profile Cell/Block	8	0	1

OPEN - All Levels and Symbology Accepted

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
	open		<< All Levels and Symbology Accepted >>			

PDXSRD - Pond Cross Section

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
	pdxsrd	ActivePointCell_dp	Active Point Cell	4	0	10
	pdxsrd	AdhocPoint_dp	Adhoc Points Placed by SheetInfo	0	4 / 0	0
	pdxsrd	BaselineSurvey	Baseline Survey	0	0	2
X	pdxsrd	Berm_px	Berm (Top, Front, or Back) for Cross Sections	10	0	2
X	pdxsrd	Bridge_px	Bridge Component for Cross Sections - Component Property	0	0	2
X	pdxsrd	CandG_ex	Curb and Gutter for Cross Sections (All Types) (Existing)	4	2 / DGN2	1
X	pdxsrd	CandG_px	Curb and Gutter for Cross Sections (All Types)	4	0	2
X	pdxsrd	CandGBase_px	Curb and Gutter Base on Cross Sections	3	0	1
X	pdxsrd	CATVBur_ex	Cable TV and Miscellaneous on Cross Sections (Existing)	6	2 / DGN2	1
X	pdxsrd	CATVBur_px	Cable TV and Miscellaneous on Cross Sections	6	0	1
	pdxsrd	CLConst_dp	Center Line of Construction	0	0	2
	pdxsrd	Cloud_dp	Construction Cloud	7	0	2
	pdxsrd	COGO_dp	COGO Information	3	0	1
	pdxsrd	Concrete_px	Concrete Boundary Lines on Cross Sections	0	0	2
X	pdxsrd	Conduit_ex	Conduit and Encasements on Cross Sections (Existing)	3	2 / DGN2	1
X	pdxsrd	Conduit_px	Conduit and Encasements on Cross Sections	3	0	1
	pdxsrd	ConstArea_dp	Construction Area Crosshatch	0	0	1
	pdxsrd	ConstLimits	Construction Limits	3	RW-LimitsofConst	2
	pdxsrd	ConstLines	Construction Lines and References	1	0	0
	pdxsrd	ConstLines_pm	Construction Lines	4	0	0
	pdxsrd	CurveData_dp	Curve & Coordinate Data Elements incl PC, PT, PI symbols	4	0	2
	pdxsrd	CurveDataLabel_dp	Curve Data Labels PC,PI, PT	0	0	2
	pdxsrd	DimLines_dp	Dimension Lines, Corresponding Terminators, Equation Lines	0	0	1
X	pdxsrd	Ditch_px	Ditch Top for Cross Sections	7	0	2
X	pdxsrd	DitchBot_px	Ditch Bottom for Cross Sections	10	0	2
X	pdxsrd	DitchPavt_px	Ditch Pavement for Cross Sections	3	0	3
	pdxsrd	DrainAlert_px	Alert Symbology for Structural Elements on Cross Sections	3	0	2
	pdxsrd	DrainMisc_ex	All types of miscellaneous drainage elements (Existing)	10	3 / DGN3	1
X	pdxsrd	DrainStruct_ex	All Drainage Structures for Cross Sections (Existing)	10	3 / DGN3	1
X	pdxsrd	DrainStruct_px	Misc Drainage Structures and Elements for XSectionsCross Sections	10	0	2
X	pdxsrd	Driveway_ex	Driveway Lines on Cross Sections - Existing	7	2 / DGN2	2
X	pdxsrd	Driveway_px	Driveway Lines on Cross Sections	7	0	2
X	pdxsrd	DrivewayBase_px	Proposed Driveway SubgradeSub-grade	3	0	2
	pdxsrd	Earthwork1_px	Earthwork (color 0)	0	0	1

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
	pdxsrd	Earthwork2_px	Earthwork (color 1)	1	0	1
	pdxsrd	Earthwork3_px	Earthwork (color 2)	2	0	1
	pdxsrd	Earthwork4_px	Earthwork (color 3)	3	0	1
	pdxsrd	Earthwork5_px	Earthwork (color 4)	4	0	1
X	pdxsrd	EaseLicLine	Easement License Agreement Line	5	6 / DGN2	0
X	pdxsrd	EaseLine_ep	Easement Lines (Existing)	1	RW-Easement	1
X	pdxsrd	EasePerpLine_px	Easement Lines Perpetual on Cross Sections	4	RW-PerpetualEasement	12
X	pdxsrd	EaseTempLine_px	Easement Lines Temporary on Cross Sections	6	RW-TemporaryEasement	0
X	pdxsrd	Endwall_px	Endwall for Cross Sections	10	0	2
	pdxsrd	ExcavationLimits_dp	Excavation Limits on Cross Sections	0	0	1
	pdxsrd	Fence_ex	Fence Lines on Cross Sections (Existing)	6	3 / DGN3	1
X	pdxsrd	Fence_px	Fence Lines on Cross Sections	6	RD-Fence	2
X	pdxsrd	FES_px	Flared End Sections for Cross Sections	10	0	2
X	pdxsrd	FOCBur_ex	Fiber Optics Cable (Buried) for XSectionsCross Sections (Existing)	6	2 / DGN2	1
X	pdxsrd	FOCBur_px	Fiber Optics Cable (Buried) for XSectionsCross Sections	6	0	1
X	pdxsrd	Gas_ex	Gas Pipe and Fittings, Misc for XsectionsCross Sections (Existing)	4	2 / DGN2	1
X	pdxsrd	Gas_px	Gas Pipe and Fittings, Misc for XsectionsCross Sections	4	0	1
	pdxsrd	GeotechFillPatt1	Geotechnical Fill Pattern - (earth, wood, muck, concrete, rock, riprap) as defined in project	3	0	0
	pdxsrd	GeotechFillPatt1_px	Geotechnical Fill Pattern - (earth, wood, muck, concrete, rock, riprap) as defined in project	3	0	0
	pdxsrd	GeotechFillPatt2	Geotechnical Fill Pattern - clay, sand	0	1 / DGN1	0
	pdxsrd	GeotechFillPatt2_px	Geotechnical Fill Pattern - clay, sand	0	1 / DGN1	0
	pdxsrd	GeotechFillPatt3	Geotechnical Fill Pattern - shell	3	1 / DGN1	0
	pdxsrd	GeotechFillPatt3_px	Geotechnical Fill Pattern - shell	3	1 / DGN1	0
	pdxsrd	GeotechFillPatt4	Geotechnical Fill Pattern - sand	4	0	0
	pdxsrd	GeotechFillPatt4_px	Geotechnical Fill Pattern - sand	4	0	0
	pdxsrd	GeotechFillPatt5	Geotechnical Fill Pattern - coquina	1	0	1
	pdxsrd	GeotechFillPatt5_px	Geotechnical Fill Pattern - coquina	1	0	1
	pdxsrd	GeotechFillPatt6	Geotechnical Fill Pattern - limestone	2	0	0
	pdxsrd	GeotechFillPatt6_px	Geotechnical Fill Pattern - limestone	2	0	0
	pdxsrd	GeotechFillPatt7	Geotechnical Fill Pattern - gravel	6	0	0
	pdxsrd	GeotechFillPatt7_px	Geotechnical Fill Pattern - gravel	6	0	0
	pdxsrd	GeotechFillPatt8	Geotechnical Fill Pattern - silt	0	0	1
	pdxsrd	GeotechFillPatt8_px	Geotechnical Fill Pattern - silt	0	0	1
	pdxsrd	GeotechMisc	Miscellaneous Geotechnical Elements	0	0	1
	pdxsrd	GPKDrBack_dp	Back Point on Drainage Cells	2	2 / 0	2
	pdxsrd	GPKDrBottom_dp	Bottom Point on Drainage Cells	3	3 / 0	2
	pdxsrd	GPKDrCellIns_dp	Cell Insertion Point on Drainage Cells	4	4 / 0	2
	pdxsrd	GPKDrCentroid_dp	Point on Centroid for Drainage	7	7 / 0	2
	pdxsrd	GPKDrElv	Location point for drainage cells	5	5 / 0	2
	pdxsrd	GPKDrFront_dp	Front Point on Drainage Cells	1	1 / 0	2
	pdxsrd	GPKDrPipe_dp	Point on Drainage Pipe	6	6 / 0	2
	pdxsrd	GPKDrPipeCir_dp	Point on Pipe Circular	6	6 / 0	0

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
	pdxsrd	GridMaj_dp	Grid Lines Major in Profile and Cross Section	3	0	1
	pdxsrd	GridMin_dp	Grid Lines Minor in Profile and Cross Section	0	0	0
	pdxsrd	GridMinG_dp	Grid Lines Minor Sub 2 in Cross Section Sheets	20	0	0
	pdxsrd	GridMinSub_dp	Grid Lines Minor Sub in Cross Section Sheets	20	0	0
X	pdxsrd	Guardrail_ex	Guardrail Lines on Cross Sections - Existing	0	2 / DGN2	2
X	pdxsrd	GuardrailPanel_px	Guardrail Component Property and Model Break Line for 3D Guardrail Panels	11	0	1
X	pdxsrd	GuardrailPost_px	Guardrail Component Property and Model Break Line for 3D Guardrail Posts	10	0	0
	pdxsrd	ImageAttachment_dp	Image AttachmentstAttachments	0	0	0
X	pdxsrd	Inlet_px	Inlets on Cross Sections	10	0	2
X	pdxsrd	InletBottom_px	Inlet Bottom on Cross Sections (All Types)	10	0	2
	pdxsrd	KeyShtMisc	Key sheet Miscellaneous Items	0	0	2
X	pdxsrd	LARWLine_ex	Limited Access Right of Way on XSectionsCross Sections (Existing)	4	RW-LimitedAccess-Existing	1
X	pdxsrd	LARWLine_px	Limited Access ROW Lines on Cross Sections	4	RW-LimitedAccess-Proposed	2
X	pdxsrd	LateralLimits_px	Lateral Limits for Cross Sections	6	0	2
	pdxsrd	LeaderLine_dp	Leader Line and terminator with Text	0	0	1
	pdxsrd	Logo_dp	Consultant Engineer of Record Logo	0	0	1
X	pdxsrd	Manhole_px	Manhole on Cross Sections	10	0	2
X	pdxsrd	MES_px	Mitered End Section on Cross Sections	10	0	2
	pdxsrd	Miscellaneous0	Undefined proposed item - co blue wt 0	1	0	0
	pdxsrd	Miscellaneous1	Undefined proposed item - co blue wt 1	1	0	1
	pdxsrd	Miscellaneous2	Undefined proposed item - co blue wt 2	1	0	2
	pdxsrd	Miscellaneous3	Undefined proposed item - co green wt 0	2	0	0
	pdxsrd	Miscellaneous4	Undefined proposed item - co green wt 1	2	0	1
	pdxsrd	Miscellaneous5	Undefined proposed item - co green wt 2	2	0	2
	pdxsrd	Miscellaneous6	Undefined proposed item - co red wt 0	3	0	0
	pdxsrd	Miscellaneous7	Undefined proposed item - co red wt 1	3	0	1
	pdxsrd	Miscellaneous8	Undefined proposed item - co red wt 2	3	0	2
	pdxsrd	Miscellaneous9	Undefined proposed item - co red wt 3	3	0	3
	pdxsrd	NonPlottingEle_dp	Non plotting items such as construction elements and type 66 elements	4	0	0
	pdxsrd	Patternlines_ep	Cross Section Chain	2	1 / DGN1	0
	pdxsrd	PatternLines1_dp	Pattern Lines and Sample Lines (Civil 3D) for Cross Sections	3	0	2
	pdxsrd	PatternLines2_dp	Pattern Lines for XSectionsCross Sections alternate for side streets, critical xsectionsCross Sections or drainage structures	4	0	2
	pdxsrd	PatternLines3_dp	Pattern Lines for XSectionsCross Sections alternate for side streets, critical xsectionsCross Sections or drainage structures	5	0	2
X	pdxsrd	PavedMedianBase_px	Proposed Paved Median SubgradeSub-grade	3	0	2
	pdxsrd	PavtAsph_ep	Asphalt Pavement Edge	0	3 / DGN3	1
X	pdxsrd	PavtAsphalt_px	Asphalt Pavement for Cross Sections and Components in Models	1	0	2
X	pdxsrd	PavtBase_ex	Base Material for Cross Sections (All Types) (Existing)	3	3 / DGN3	1
X	pdxsrd	PavtBase_px	Base Material for Cross Sections (All Types)	3	0	2
X	pdxsrd	PavtConcrete_px	Concrete Pavement for Cross Sections and Components in Models	0	0	2
X	pdxsrd	PavtMilling_px	Asphalt Milling Lines on Cross Sections	7	0	2
X	pdxsrd	PavtMisc_px	Miscellaneous Pavement on Cross Sections	1	0	2
X	pdxsrd	PavtOverbuild_px	Pavement Overbuild Areas on Cross Sections - Component Property	4	0	2

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
X	pdxsrd	PavtOverlay_px	Pavement Overlay for Cross Sections - Component Property	1	0	2
X	pdxsrd	PavtOverlay1_px	Pavement Overlay for Cross Sections - Component Property	14	0	2
X	pdxsrd	PavtOverlay2_px	Pavement Overlay for Cross Sections - Component Property	7	0	2
X	pdxsrd	PavtStabilization_px	Stabilization for Cross Sections	5	2 / DGN2	2
	pdxsrd	PayItem_dp	Pay Item Number Label Elements	4	0	2
	pdxsrd	PipeCulvert_ep	Pipe Culvert	10	3 / DGN3	1
X	pdxsrd	PipeCulvert_pr	Pipe Culvert in Profile	3	0	2
X	pdxsrd	PipeCulvert_px	Pipe Culvert for Cross Section View	10	0	2
X	pdxsrd	PlotBorder_dp	Plot Border	3	0	0
	pdxsrd	PointLocator_ep	Point Locator Symbol	4	0	0
X	pdxsrd	Pond_px	Pond Lines on Cross Sections	2	0	2
X	pdxsrd	Power_ex	Power on Cross Sections (Existing)	3	2 / DGN2	1
X	pdxsrd	Power_px	Power on Cross Sections	3	0	1
X	pdxsrd	PropertyLine_ep	Property Lines	3	0	0
X	pdxsrd	PvtAnalysisCrown_px	Pavement Analysis Crowning - Component Property	7	0	1
X	pdxsrd	PvtAnalysisFail_px	Pavement Analysis Failure - Component Property	3	0	1
X	pdxsrd	PvtAnalysisMax_px	Pavement Analysis Acceptable Maximum Range - Component Property	5	0	1
X	pdxsrd	PvtAnalysisMin_px	Pavement Analysis Acceptable Minimum Range - Component Property	4	0	1
X	pdxsrd	PvtAnalysisOptiml_px	Pavement Analysis Optimal - Component Property	2	0	1
X	pdxsrd	Railing_px	Proposed Railing Components and XS Shapes	9	0	2
	pdxsrd	ReferencePt_dp	Survey and Construction Reference Point Details and Elements	4	0	2
	pdxsrd	RegionBdry_dp	Boundary Line for Regions in Corridor Design (Autodesk)	0	0	0
X	pdxsrd	RipRap_px	Rip Rap, Rubble on Cross Sections	4	1 / DGN1	2
X	pdxsrd	RumbleStrip1	Rumble Strips Continuous Array	0	PM-RumbleSolid	2
X	pdxsrd	RumbleStrip2	Rumble Strips Skip Array	0	PM-RumbleSkip	2
X	pdxsrd	RWLine	Right of Way Lines	4	RW-Proposed	2
X	pdxsrd	RWLine_ep	Right of Way Lines (Existing)	3	RW-Existing	1
X	pdxsrd	RWLine_ex	ROW Lines on Cross Sections (Existing)	3	RW-Existing	1
X	pdxsrd	RWLine_px	ROW Lines on Cross Sections	4	RW-Proposed	2
X	pdxsrd	SanitaryFM_ex	Force Main Lines on Cross Sections (Existing)	2	2 / DGN2	1
X	pdxsrd	SanitaryFM_px	Force Main Lines on Cross Sections	2	0	1
X	pdxsrd	SanitarySewer_ex	Sanitary Sewer Lines on Cross Sections (Existing)	10	2 / DGN2	0
X	pdxsrd	SanitarySewer_px	Sanitary Sewer Lines on Cross Sections	2	0	1
X	pdxsrd	SanitarySewerEff_px	Sanitary Effluent for Cross Sections	9	0	0
	pdxsrd	Scratch1_dp	A scratch level for temporary or informational items	4	0	0
	pdxsrd	Scratch2_dp	A scratch level for temporary or informational items	5	0	0
	pdxsrd	ScratchEle_dp	Level for Draft Elements, Temporary Elements, Etc. Do Not Plot	3	0	0
	pdxsrd	ScratchEle2_dp	Level for Draft Elements, Temporary Elements, Etc. Do Not Plot	4	0	0
	pdxsrd	SheetBorder_dp	Sheet Border	1	0	4
	pdxsrd	SheetLines_dp	Sheet Lines	1	0	2
	pdxsrd	SheetLinesMisc1_dp	Sheet Lines	1	0	0
	pdxsrd	SheetLinesMisc2_dp	Sheet Lines	2	0	2
	pdxsrd	SheetLinesMisc3_dp	Sheet Lines	3	0	2
	pdxsrd	SheetLinesMisc4_dp	Sheet Lines	4	0	2

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
X	pdxsrd	ShldrBase_px	Bottom of Proposed Paved Shoulder Base	3	0	2
X	pdxsrd	ShldrBaseTop_px	Top of Proposed Paved Shoulder Base	3	0	2
X	pdxsrd	ShldrMilling_px	Shoulder Milling Component for Cross Sections - Component Property	7	0	2
X	pdxsrd	ShldrOverbuild_px	Shoulder Overbuild - Component Property	4	0	1
X	pdxsrd	ShldrOverlay_px	Shoulder Overlay - Component Property	1	0	1
X	pdxsrd	ShldrPaved_px	Paved Shoulder Lines on Cross Sections	1	0	2
X	pdxsrd	ShldrUnpaved_px	Grass Shoulder Lines on Cross Sections	2	0	2
X	pdxsrd	Sidewalk_ex	Sidewalk Elements in Cross Sections (Existing)	0	2 / DGN2	1
X	pdxsrd	Sidewalk_px	Sidewalk Elements in Cross Sections	0	0	2
	pdxsrd	SidewalkBack_er	Back of Sidewalk Line Profile (Existing)	2	2 / DGN2	1
	pdxsrd	SidewalkBack_pr	Back of Sidewalk Line Profile	5	0	2
X	pdxsrd	SidewalkBase_px	Proposed Sidewalk SubgradeSub-grade	3	0	2
X	pdxsrd	Slopes_px	Slope Lines on Cross Sections	9	0	2
X	pdxsrd	SoilBoxes_px	Soil Boxes and Borings for Cross Sections	4	0	1
	pdxsrd	SpecialDetails_px	Special Details_XS	6	0	1
	pdxsrd	StationTicL_dp	Station Tic Marks (Large) and Text	0	0	2
	pdxsrd	StationTicS_dp	Station Tic Marks (Small) and Text	0	0	2
X	pdxsrd	StreetLights_px	Street Lights for Cross Sections	3	0	1
	pdxsrd	Structure_px	Signal and Sign Structures on Cross Sections	0	0	2
X	pdxsrd	SubDsgn_px	Sub Design for Cross Sections including sub-base	4	0	1
X	pdxsrd	Subsoil_px	Subsoil Or Undercut for Cross Sections	4	0	2
X	pdxsrd	SubsoilFinal_px	Subsoil Final for Multiline	18	0	1
X	pdxsrd	SubsoilProp_px	Subsoil Proposed for Multiline	8	0	1
	pdxsrd	SumBoxBorder_dp	Summary Boxes Borders	4	0	3
	pdxsrd	SumBoxLines_dp	Summary Boxes Lines and Miscellaneous Items	4	0	1
	pdxsrd	SumBoxLinesMin_dp	Summary Boxes Lines Minor Line and Miscellaneous Items	4	0	0
	pdxsrd	Tables_dp	Data Tables and All Autodesk Tables	0	0	1
X	pdxsrd	TeleBur_ex	Telephone for Cross Sections (Buried - Miscellaneous - Existing)	6	2 / DGN2	1
X	pdxsrd	TeleBur_px	Telephone for Cross Sections (Buried) (Miscellaneous)	6	0	1
X	pdxsrd	TemplateBottom_px	Bottom of Template for Multiline	6	0	1
X	pdxsrd	TemplateFinal_px	Final Template for Multiline	2	0	1
X	pdxsrd	TemplateTop_px	Top of Template for Multiline	7	0	1
X	pdxsrd	TerrainLine_ex	Existing Ground Line for Multiline	5	0	1
	pdxsrd	TextAlert	Text - An Alert Label to Highlight a Problem	3	0	2
	pdxsrd	TextBLStation	Text - B/L Station and Tics	0	0	2
	pdxsrd	TextConstEle	Text - Construction Element	0	0	1
	pdxsrd	TextCurveData	Text - Curve Data Note	0	0	2
	pdxsrd	TextDetails	Text - Detail Notes	4	0	2
	pdxsrd	TextElevLabel	Elevation Labels	4	0	0
	pdxsrd	TextGeotech	Text for soil borings and labels	0	0	2
	pdxsrd	TextLabel	Text - Label	0	0	2
	pdxsrd	TextLandscape	Text - Landscape Labels	0	0	1
	pdxsrd	TextMajor	Text - Major	0	0	5
	pdxsrd	TextMinor	Text - Minor	0	0	0

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
	pdxsrd	TextMisc	Text - Miscellaneous	0	0	1
	pdxsrd	TextNotes	Text - Notes	4	0	1
	pdxsrd	TextProfLabel	Text - Profile, Horizontal and Vertical Axis Labels	0	0	2
	pdxsrd	TextProjLabel	Text - Begin and End Project label with leader lines	1	0	2
	pdxsrd	TextPtLabel	Point Labels	4	0	0
	pdxsrd	TextShtNo	Text - Sheet Number	0	0	2
	pdxsrd	TextSurveyLabel	Survey Text Labels	0	0	0
	pdxsrd	TextTables	Text - KeysheetKey sheet Indexes and Table Data	4	0	2
	pdxsrd	TextTitle	Text - Title	0	0	3
	pdxsrd	TextXSBL_dp	Cross Section Baseline Labels	0	0	2
	pdxsrd	TextXSDrain_ex	Existing Drainage Labels	10	0	2
	pdxsrd	TextXSDrain_px	Proposed Drainage Labels	10	0	2
	pdxsrd	TextXSElev	Text - Cross Section Elevations	2	0	1
	pdxsrd	TextXSElev_ex	Existing cross section elevations	2	0	1
	pdxsrd	TextXSElev_px	Proposed cross section elevations	0	0	1
	pdxsrd	TextXSGPKPts_dp	Points Labeled on Cross Sections	4	0	0
	pdxsrd	TextXSNotes_dp	Cross Section Notes	0	0	2
	pdxsrd	TextXSSlope_dp	Cross Section Slope Labels (rise:run format)	0	0	2
	pdxsrd	TextXSSlopePvt_dp	Cross Section Pavement Slope Labels	0	0	2
X	pdxsrd	TrafSeparator_ex	Traffic Separator (All Types) on Cross Sections (Existing)	6	2 / DGN2	1
X	pdxsrd	TrafSeparator_px	Traffic Separator (All Types) on Cross Sections	6	0	2
X	pdxsrd	TrafSeparatorBase_px	Proposed Traffic Separator SubgradeSub-grade	3	0	2
	pdxsrd	TypicalMisc	Typical Miscellaneous Items	0	0	2
	pdxsrd	Utility_er	Existing Utilities in Profile View	3	2 / DGN2	1
	pdxsrd	Utility_pr	Proposed Utilities in Profile View	3	0	2
	pdxsrd	UtilsMisc_ex	Miscellaneous Utility Items on Cross Sections (Existing)	8	2	1
	pdxsrd	UtilsMisc_px	Miscellaneous Utility Items on Cross Sections	8	0	1
	pdxsrd	Vehicle	Vehicle for Calculating Turning Radius	7	0	2
	pdxsrd	Viewport	Viewport (For AutoCAD Use)	3	0	0
	pdxsrd	VoidArea_dx	Void Area_XS	1	0	0
X	pdxsrd	WallBarrier_ex	Barrier Wall for Cross Section (Existing)	6	3 / DGN3	1
X	pdxsrd	WallBarrier_px	Barrier Wall for Cross Section	6	0	2
	pdxsrd	WallFooter_px	Wall Footer (Concrete) - For Component symbology/material on all wall footers/leveling pads	2	0	1
X	pdxsrd	WallGravBase_px	Proposed Gravity Wall Sub-grade	3	0	2
X	pdxsrd	WallGravity_px	Gravity Wall for Cross Sections	11	0	2
X	pdxsrd	WallMedianBase_px	Proposed Median Wall Sub-grade	3	0	2
X	pdxsrd	WallRetain_px	Retaining Walls on Cross Sections	6	0	1
X	pdxsrd	WallShldrBase_px	Proposed Shoulder Wall Sub-grade	3	0	2
X	pdxsrd	Water_ex	Water for Cross Sections (Existing)	1	2 / DGN2	1
X	pdxsrd	Water_px	Water for Cross Sections	1	0	1
X	pdxsrd	WaterNP_px	Raw Water Pipes for Cross Sections	1	0	1
	pdxsrd	Wetland_ex	Wetland Boundary for Cross Sections (Existing)	2	RD-Wetland-Existing	1
	pdxsrd	WetlandEdge_ep	Edge of Mangrove, Wetlands (Marsh or Swamp)	2	RD-Wetland-Existing	0

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
	pdxsrd	Xreference01_dp	Reference Files (For AutoCAD Use)	0	0	1
	pdxsrd	Xreference02_dp	Reference Files (For AutoCAD Use)	0	0	1
	pdxsrd	Xreference03_dp	Reference Files (For AutoCAD Use)	0	0	1
	pdxsrd	Xreference04_dp	Reference Files (For AutoCAD Use)	0	0	1
X	pdxsrd	XSBaseTop_px	Top of Proposed Base	3	0	2
	pdxsrd	XSCell	GEOPAK Cross Section Cell/Block and Profile Cell/Block	8	0	1
X	pdxsrd	XSExtendGrdLine_ex	Extend Ground Lines for Cross Sections (Existing)	21	2 / DGN2	1
X	pdxsrd	XSGrdLine_ex	Ground Lines for Cross Sections (Existing)	2	2 / DGN2	1
	pdxsrd	XSGrdLine_px	Roadway Ground Lines on Cross Sections	1	0	2
	pdxsrd	XSMisc_ex	Roadway Miscellaneous Items on Cross Sections (Existing)	4	3 / DGN3	1
	pdxsrd	XSMisc_px	Cross Section Miscellaneous Items	0	0	2
	pdxsrd	XSPt_ep	Cross Section Point, Station	2	1 / DGN1	0
	pdxsrd	XSShapeDep01_dp	Cross Section Shape Dependent	11	0	2
	pdxsrd	XSShapeDep02_dp	Cross Section Shape Dependent	12	0	2
	pdxsrd	XSShapeDep03_dp	Cross Section Shape Dependent	13	0	2
	pdxsrd	XSShapeDep04_dp	Cross Section Shape Dependent	14	0	2
	pdxsrd	XSShapeDep05_dp	Cross Section Shape Dependent	15	0	2
	pdxsrd	XSShapeDep06_dp	Cross Section Shape Dependent	16	0	2
	pdxsrd	XSShapeDep07_dp	Cross Section Shape Dependent	17	0	2
	pdxsrd	XSShapeDep08_dp	Cross Section Shape Dependent	18	0	2
	pdxsrd	XSShapeDep09_dp	Cross Section Shape Dependent	19	0	2
	pdxsrd	XSShapeDep10_dp	Cross Section Shape Dependent	20	0	2
	pdxsrd	XSShapeIndep01_dp	Cross Section Shape Independent	1	0	2
	pdxsrd	XSShapeIndep02_dp	Cross Section Shape Independent	2	0	2
	pdxsrd	XSShapeIndep03_dp	Cross Section Shape Independent	3	0	2
	pdxsrd	XSShapeIndep04_dp	Cross Section Shape Independent	4	0	2
	pdxsrd	XSShapeIndep05_dp	Cross Section Shape Independent	5	0	2
	pdxsrd	XSShapeIndep06_dp	Cross Section Shape Independent	6	0	2
	pdxsrd	XSShapeIndep07_dp	Cross Section Shape Independent	7	0	2
	pdxsrd	XSShapeIndep08_dp	Cross Section Shape Independent	8	0	2
	pdxsrd	XSShapeIndep09_dp	Cross Section Shape Independent	9	0	2
	pdxsrd	XSShapeIndep10_dp	Cross Section Shape Independent	10	0	2
X	pdxsrd	XSTypical_px	Roadway Pavement Typical on Cross Sections	1	0	2

PLANRD - Roadway Plan Sheet

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
	planrd	ActivePointCell_dp	Active Point Cell	4	0	10
	planrd	AdhocPoint_dp	Adhoc Points Placed by SheetInfo	0	4 / 0	0
	planrd	BaselineSurvey	Baseline Survey	0	0	2
	planrd	CLConst_dp	Center Line of Construction	0	0	2
	planrd	ClipBorder_dp	CLIP Border and Civil 3D View Frame	3	0	0
	planrd	ClipDrawingBound_dp	CLIP Drawing Boundary	3	3 / 0	0
	planrd	Cloud_dp	Construction Cloud	7	0	2
	planrd	COGO_dp	COGO Information	3	0	1
	planrd	ConstArea_dp	Construction Area Crosshatch	0	0	1
	planrd	ConstLimits	Construction Limits	3	RW-LimitsofConst	2
	planrd	ConstLines	Construction Lines and References	1	0	0
	planrd	ConstLines_pm	Construction Lines	**4**	0	**0**
	planrd	CurveData_dp	Curve & Coordinate Data Elements incl PC, PT, PI symbols	4	0	2
	planrd	CurveDataLabel_dp	Curve Data Labels PC,PI, PT	0	0	2
	planrd	DimLines_dp	Dimension Lines, Corresponding Terminators, Equation Lines	0	0	1
X	planrd	EaseLicLine	Easement License Agreement Line	5	6 / DGN6	0
	planrd	FLMap1	Florida Map items - weight of 1	1	0	1
	planrd	FLMap2	Florida Map items - weight of 2	3	0	2
	planrd	FLMap3	Florida Map items - weight of 3	2	0	3
	planrd	FLMap4	Florida Map items - color 11 (Interstate)	11	0	3
	planrd	FLMap5	Florida Map items - style 7, wt. 5 (state line)	3	7 / DGN7	5
	planrd	GradeLine_er	Grade Line Profile (Existing)	2	2 / DGN2	1
	planrd	GradeLine_pr	Grade Line Profile	5	0	2
	planrd	GradeLineCtr_dp	Grade Line Profile Center (shown in plan view)	5	0	0
	planrd	GradeLineCtr_pr	Grade Line Profile Center	5	0	2
	planrd	GradeLineLt_dp	Grade Line Profile Left (shown in plan view)	1	0	0
	planrd	GradeLineLt_er	Grade Line Profile Left (Existing)	1	2 / DGN2	1
	planrd	GradeLineLt_pr	Grade Line Profile Left	1	0	2
	planrd	GradeLineRt_dp	Grade Line Profile Right (shown in plan view)	4	0	0
	planrd	GradeLineRt_er	Grade Line Profile Right (Existing)	4	2 / DGN2	1
	planrd	GradeLineRt_pr	Grade Line Profile Right	4	0	2
	planrd	GradeSecPat	Grade Section Patterns	0	0	0
	planrd	GridMaj_dp	Grid Lines Major in Profile and Cross Section	3	0	1
	planrd	GridMin_dp	Grid Lines Minor in Profile and Cross Section	0	0	0
	planrd	GridMinSub_dp	Grid Lines Minor Sub in Cross Section Sheets	20	0	0
	planrd	ImageAttachment_dp	Image AttachmentstAttachments	0	0	0
	planrd	KeyShtMisc	Key sheet Miscellaneous Items	0	0	2
	planrd	LeaderLine_dp	Leader Line and terminator with Text	0	0	1
	planrd	Logo_dp	Consultant Engineer of Record Logo	0	0	1
	planrd	MatchLineMask_dp	Mask Area for Match Line Overlap Areas (Autodesk)	0	0	0
	planrd	MatchLines_dp	Match Lines with Text, Arrows for Station Notations	1	0	2
	planrd	Miscellaneous0	Undefined proposed item - co blue wt 0	1	0	0
	planrd	Miscellaneous1	Undefined proposed item - co blue wt 1	1	0	1

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
	planrd	Miscellaneous2	Undefined proposed item - co blue wt 2	1	0	2
	planrd	Miscellaneous3	Undefined proposed item - co green wt 0	2	0	0
	planrd	Miscellaneous4	Undefined proposed item - co green wt 1	2	0	1
	planrd	Miscellaneous5	Undefined proposed item - co green wt 2	2	0	2
	planrd	Miscellaneous6	Undefined proposed item - co red wt 0	3	0	0
	planrd	Miscellaneous7	Undefined proposed item - co red wt 1	3	0	1
	planrd	Miscellaneous8	Undefined proposed item - co red wt 2	3	0	2
	planrd	Miscellaneous9	Undefined proposed item - co red wt 3	3	0	3
	planrd	NonPlottingEle_dp	Non plotting items such as construction elements and type 66 elements	4	0	0
	planrd	NorthArw_dp	North Arrows	0	0	2
	planrd	Patternlines_ep	Cross Section Chain	2	1 / DGN1	0
	planrd	PatternLines1_dp	Pattern Lines and Sample Lines (Civil 3D) for Cross Sections	3	0	2
	planrd	PatternLines2_dp	Pattern Lines for XSectionsCross Sections alternate for side streets, critical xsectionsCross Sections or drainage structures	4	0	2
	planrd	PatternLines3_dp	Pattern Lines for XSectionsCross Sections alternate for side streets, critical xsectionsCross Sections or drainage structures	5	0	2
	planrd	PayItem_dp	Pay Item Number Label Elements	4	0	2
X	planrd	PlotBorder_dp	Plot Border	3	0	0
	planrd	PointLocator_ep	Point Locator Symbol	4	0	0
	planrd	ReferencePt_dp	Survey and Construction Reference Point Details and Elements	4	0	2
	planrd	RefPtAngleTie	Annotation:Leader:Survey Reference Point / Detail	0	RW-Dimension-Type1 / 0	1
	planrd	RefPtLine	Miscellaneous:Survey Reference Point Line / Detail	0	0	1
	planrd	Scale_dp	Bar Scale, Scale Label Elements	0	0	2
	planrd	Scratch1_dp	A scratch level for temporary or informational items	4	0	0
	planrd	Scratch2_dp	A scratch level for temporary or informational items	5	0	0
	planrd	ScratchEle_dp	Level for Draft Elements, Temporary Elements, Etc. Do Not Plot	3	0	0
	planrd	ScratchEle2_dp	Level for Draft Elements, Temporary Elements, Etc. Do Not Plot	4	0	0
	planrd	SheetBorder_dp	Sheet Border	1	0	4
	planrd	SheetLines_dp	Sheet Lines	1	0	2
	planrd	SheetLinesMisc1_dp	Sheet Lines	1	0	0
	planrd	SheetLinesMisc2_dp	Sheet Lines	2	0	2
	planrd	SheetLinesMisc3_dp	Sheet Lines	3	0	2
	planrd	SheetLinesMisc4_dp	Sheet Lines	4	0	2
	planrd	StationTicL_dp	Station Tic Marks (Large) and Text	0	0	2
	planrd	StationTicS_dp	Station Tic Marks (Small) and Text	0	0	2
	planrd	SumBoxBorder_dp	Summary Boxes Borders	4	0	3
	planrd	SumBoxLines_dp	Summary Boxes Lines and Miscellaneous Items	4	0	1
	planrd	SumBoxLinesMin_dp	Summary Boxes Lines Minor Line and Miscellaneous Items	4	0	0
	planrd	Tables_dp	Data Tables and All Autodesk Tables	0	0	1
	planrd	TextBLStation	Text - B/L Station and Tics	0	0	2
	planrd	TextConstEle	Text - Construction Element	0	0	1
	planrd	TextCurveData	Text - Curve Data Note	0	0	2
	planrd	TextDetails	Text - Detail Notes	4	0	2
	planrd	TextElevLabel	Elevation Labels	4	0	0
	planrd	TextLabel	Text - Label	0	0	2

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
	planrd	TextLandscape	Text - Landscape Labels	0	0	1
	planrd	TextMajor	Text - Major	0	0	5
	planrd	TextMinor	Text - Minor	0	0	0
	planrd	TextMisc	Text - Miscellaneous	0	0	1
	planrd	TextNotes	Text - Notes	4	0	1
	planrd	TextProfLabel	Text - Profile, Horizontal and Vertical Axis Labels	0	0	2
	planrd	TextProjLabel	Text - Begin and End Project label with leader lines	1	0	2
	planrd	TextPtLabel	Point Labels	4	0	0
	planrd	TextShtNo	Text - Sheet Number	0	0	2
	planrd	TextSurveyLabel	Survey Text Labels	0	0	0
	planrd	TextTables	Text - KeysheetKey sheet Indexes and Table Data	4	0	2
	planrd	TextTitle	Text - Title	0	0	3
	planrd	TextXSElev	Text - Cross Section Elevations	2	0	1
	planrd	Viewport	Viewport (For AutoCAD Use)	3	0	0
	planrd	Wetland	Wetland Boundary	2	RD-Wetland-Proposed	1
	planrd	Xreference01_dp	Reference Files (For AutoCAD Use)	0	0	1
	planrd	Xreference02_dp	Reference Files (For AutoCAD Use)	0	0	1
	planrd	Xreference03_dp	Reference Files (For AutoCAD Use)	0	0	1
	planrd	Xreference04_dp	Reference Files (For AutoCAD Use)	0	0	1
	planrd	XSCell	GEOPAK Cross Section Cell/Block and Profile Cell/Block	8	0	1

PLPRRD - Roadway Plan/Profile Sheet

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
	plprrd	ActivePointCell_dp	Active Point Cell	4	0	10
	plprrd	AdhocPoint_dp	Adhoc Points Placed by SheetInfo	0	4 / 0	0
	plprrd	BaselineSurvey	Baseline Survey	0	0	2
	plprrd	Beacons_ep	Beacons and Path Illumination	0	0	1
X	plprrd	Capacitor	Capacitors (All Types)	3	0	1
	plprrd	CATV_ep	Cable TV Line (Aerial)	6	UT-OverheadCable-Existing	0
X	plprrd	CATVAer	Cable TV Line (Aerial)	6	UT-OverheadCable-Proposed	1
X	plprrd	CATVBur	Cable TV Line (Buried)	6	UT-BuriedCable-Proposed	1
	plprrd	CATVBur_ep	Cable TV Line (Buried)	6	UT-BuriedCable-Existing	1
X	plprrd	CATVCond	Cable TV Conduit System	6	SG-Conduit-Type1	1
	plprrd	CATVCond_ep	Cable TV Conduit System	6	UT-BuriedCable-Existing	1
	plprrd	CATVMisc	Cable TV Service Box	6	0	1
	plprrd	CATVMisc_ep	Cable TV Service Box, Pole	6	1 / DGN1	1
	plprrd	CLConst_dp	Center Line of Construction	0	0	2
	plprrd	ClipBorder_dp	CLIP Border and Civil 3D View Frame	3	0	0
	plprrd	ClipDrawingBound_dp	CLIP Drawing Boundary	3	3 / 0	0
	plprrd	Cloud_dp	Construction Cloud	7	0	2
	plprrd	COGO_dp	COGO Information	3	0	1

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
X	plprrd	Conduit	Conduit for Utilities and Encasements	3	SG-Conduit-Type1	1
	plprrd	Conduit_ep	Utility Conduit & Encasements	3	UT-Casing-Existing	0
X	plprrd	ConduitAG	Conduit – Above Ground	4	SG-ConduitAG-Proposed	1
X	plprrd	ConduitBM	Conduit – Bridge Mount	5	SG-ConduitBM-Proposed	1
X	plprrd	ConduitDB	Conduit – Directional Bore	2	SG-ConduitDB-Proposed	1
X	plprrd	ConduitJB	Conduit – Jack & Bore Under Rail	3	SG-ConduitJB-Proposed	1
X	plprrd	ConduitOT	Conduit – Open Trench	1	SG-ConduitOT-Proposed	1
	plprrd	ConstArea_dp	Construction Area Crosshatch	0	0	1
	plprrd	ConstLimits	Construction Limits	3	RW-LimitsofConst	2
	plprrd	ConstLines	Construction Lines and References	1	0	0
	plprrd	ConstLines_pm	Construction Lines	**4**	0	**0**
X	plprrd	Controller_ep	Controller and Accessories (Existing)	0	2 / DGN2	1
X	plprrd	ControllerB_ep	Controller - Base Mounted (Existing)	0	2 / DGN2	1
X	plprrd	ControllerP_ep	Controller Pole Mount (Existing)	0	2 / DGN2	1
	plprrd	CurveData_dp	Curve & Coordinate Data Elements incl PC, PT, PI symbols	4	0	2
	plprrd	CurveDataLabel_dp	Curve Data Labels PC,PI, PT	0	0	2
	plprrd	DimLines_dp	Dimension Lines, Corresponding Terminators, Equation Lines	0	0	1
	plprrd	DitchProfLt_er	Ditch Profile Left (Existing)	8	3 / DGN3	1
	plprrd	DitchProfLt_pr	Ditch Profile Left	8	0	1
	plprrd	DitchProfMdn_er	Ditch Profile Median (Existing)	10	3	1
	plprrd	DitchProfMdn_pr	Ditch Profile Median	10	0	1
	plprrd	DitchProfRt_er	Ditch Profile Right (Existing)	9	3 / DGN3	1
	plprrd	DitchProfRt_pr	Ditch Profile Right	9	0	1
	plprrd	DrainDivides00	Drainage Divides	10	2 / DGN2	4
	plprrd	DrainDivides00_ep	Drainage Divides (Existing)	9	2 / DGN2	4
	plprrd	DrainDivides01	Drainage Divides	10	2 / DGN2	4
	plprrd	DrainDivides01_ep	Drainage Divides (Existing)	9	2 / DGN2	4
	plprrd	DrainDivides02	Drainage Divides	10	2 / DGN2	4
	plprrd	DrainDivides02_ep	Drainage Divides (Existing)	9	2 / DGN2	4
	plprrd	DrainDivides03	Drainage Divides	10	2 / DGN2	4
	plprrd	DrainDivides03_ep	Drainage Divides (Existing)	9	2 / DGN2	4
	plprrd	DrainDivides04	Drainage Divides	10	2 / DGN2	4
	plprrd	DrainDivides04_ep	Drainage Divides (Existing)	9	2 / DGN2	4
	plprrd	DrainDivides05	Drainage Divides	10	2 / DGN2	4
	plprrd	DrainDivides05_ep	Drainage Divides (Existing)	9	2 / DGN2	4
	plprrd	DrainDivides06	Drainage Divides	10	2 / DGN2	4
	plprrd	DrainDivides06_ep	Drainage Divides (Existing)	9	2 / DGN2	4
	plprrd	DrainDivides07	Drainage Divides	10	2 / DGN2	4
	plprrd	DrainDivides07_ep	Drainage Divides (Existing)	9	2 / DGN2	4
	plprrd	DrainDivides08	Drainage Divides	10	2 / DGN2	4
	plprrd	DrainDivides08_ep	Drainage Divides (Existing)	9	2 / DGN2	4
	plprrd	DrainDivides09	Drainage Divides	10	2 / DGN2	4
	plprrd	DrainDivides09_ep	Drainage Divides (Existing)	9	2 / DGN2	4
	plprrd	DrainMisc	Miscellaneous Drainage Items	10	0	2
X	plprrd	DrainStruct_pr	Drainage Structures (All Types)	10	0	2

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
	plprrd	DummyChains_ep	Dummy Chains	0	0	1
X	plprrd	EaseLicLine	Easement License Agreement Line	5	6 / DGN6	0
X	plprrd	ElecMeter	Meter (Electric)	3	0	1
X	plprrd	ElectPS	Electrical Power Service Miscellaneous	3	0	1
X	plprrd	ElectPSB	Electrical (Buried)	3	UT-BuriedElec-Proposed	2
X	plprrd	ElectPSO	Electrical Outlet	3	0	1
X	plprrd	ElectServWire	Electrical Service Wire	3	0	2
X	plprrd	FireHydrant	Fire Hydrant	1	0	1
	plprrd	FireHydrant_ep	Fire Hydrant	1	1 / DGN1	1
	plprrd	FLMap1	Florida Map items - weight of 1	1	0	1
	plprrd	FLMap2	Florida Map items - weight of 2	3	0	2
	plprrd	FLMap3	Florida Map items - weight of 3	2	0	3
	plprrd	FLMap4	Florida Map items - color 11 (Interstate)	11	0	3
	plprrd	FLMap5	Florida Map items - style 7, wt. 5 (state line)	3	7 / DGN7	5
	plprrd	FloodLight_ep	Flood Light	3	1 / DGN1	1
	plprrd	FlowLine_pr	Flow Line (Roadway Profile View)	0	0	2
X	plprrd	FOCBur	Fiber Optics Cable (Buried)	6	UT-BuriedFiberOptic-Proposed	1
X	plprrd	Gas	Gas Pipe and Fittings	4	UT-Gas-Proposed	1
	plprrd	Gas_ep	Gas Line (all sizesAll Sizes)	4	UT-Gas-Existing	1
X	plprrd	GasMeter	Meter (Gas)	4	0	1
	plprrd	GasMisc	Gas Regulator and Miscellaneous Items	4	0	0
	plprrd	GasReg_ep	Gas Regulator	4	1 / DGN1	1
X	plprrd	Gauges	Gauges	0	0	1
	plprrd	Gauges_ep	Gauges	0	1 / DGN1	1
X	plprrd	Generator	Emergency Generator	0	0	2
	plprrd	GeotechFillPatt1	Geotechnical Fill Pattern - (earth, wood, muck, concrete, rock, riprap) as defined in project	3	0	0
	plprrd	GeotechFillPatt1_px	Geotechnical Fill Pattern - (earth, wood, muck, concrete, rock, riprap) as defined in project	3	0	0
	plprrd	GeotechFillPatt2	Geotechnical Fill Pattern - clay, sand	0	1 / DGN1	0
	plprrd	GeotechFillPatt2_px	Geotechnical Fill Pattern - clay, sand	0	1 / DGN1	0
	plprrd	GeotechFillPatt3	Geotechnical Fill Pattern - shell	3	1 / DGN1	0
	plprrd	GeotechFillPatt3_px	Geotechnical Fill Pattern - shell	3	1 / DGN1	0
	plprrd	GeotechFillPatt4	Geotechnical Fill Pattern - sand	4	0	0
	plprrd	GeotechFillPatt4_px	Geotechnical Fill Pattern - sand	4	0	0
	plprrd	GeotechFillPatt5	Geotechnical Fill Pattern - coquina	1	0	1
	plprrd	GeotechFillPatt5_px	Geotechnical Fill Pattern - coquina	1	0	1
	plprrd	GeotechFillPatt6	Geotechnical Fill Pattern - limestone	2	0	0
	plprrd	GeotechFillPatt6_px	Geotechnical Fill Pattern - limestone	2	0	0
	plprrd	GeotechFillPatt7	Geotechnical Fill Pattern - gravel	6	0	0
	plprrd	GeotechFillPatt7_px	Geotechnical Fill Pattern - gravel	6	0	0
	plprrd	GeotechFillPatt8	Geotechnical Fill Pattern - silt	0	0	1
	plprrd	GeotechFillPatt8_px	Geotechnical Fill Pattern - silt	0	0	1
	plprrd	GeotechMisc	Miscellaneous Geotechnical Elements	0	0	1
	plprrd	GPKDrBack_dp	Back Point on Drainage Cells	2	2 / 0	2

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
	plprrd	GPKDrBottom_dp	Bottom Point on Drainage Cells	3	3 / 0	2
	plprrd	GPKDrCellIns_dp	Cell Insertion Point on Drainage Cells	4	4 / 0	2
	plprrd	GPKDrCentroid_dp	Point on Centroid for Drainage	7	7 / 0	2
	plprrd	GPKDrFront_dp	Front Point on Drainage Cells	1	1 / 0	2
	plprrd	GPKDrPipe_dp	Point on Drainage Pipe	6	6 / 0	2
	plprrd	GPKDrPipeCir_dp	Point on Pipe Circular	6	6 / 0	0
	plprrd	GradeLine_er	Grade Line Profile (Existing)	2	2 / DGN2	1
	plprrd	GradeLine_pr	Grade Line Profile	5	0	2
	plprrd	GradeLineCtr_dp	Grade Line Profile Center (shown in plan view)	5	0	0
	plprrd	GradeLineCtr_pr	Grade Line Profile Center	5	0	2
	plprrd	GradeLineLt_dp	Grade Line Profile Left (shown in plan view)	1	0	0
	plprrd	GradeLineLt_er	Grade Line Profile Left (Existing)	1	2 / DGN2	1
	plprrd	GradeLineLt_pr	Grade Line Profile Left	1	0	2
	plprrd	GradeLineRt_dp	Grade Line Profile Right (shown in plan view)	4	0	0
	plprrd	GradeLineRt_er	Grade Line Profile Right (Existing)	4	2 / DGN2	1
	plprrd	GradeLineRt_pr	Grade Line Profile Right	4	0	2
	plprrd	GradeSecPat	Grade Section Patterns	0	0	0
	plprrd	GridMaj_dp	Grid Lines Major in Profile and Cross Section	3	0	1
	plprrd	GridMin_dp	Grid Lines Minor in Profile and Cross Section	0	0	0
	plprrd	GridMinG_dp	Grid Lines Minor Sub 2 in Cross Section Sheets	20	0	0
	plprrd	GridMinSub_dp	Grid Lines Minor Sub in Cross Section Sheets	20	0	0
	plprrd	Guys_ep	Guy Anchor, Guy pole, Span Guys	3	1 / DGN1	1
X	plprrd	GuyWire	Guy Wire	3	0	0
	plprrd	ImageAttachment _dp	Image AttachmentstAttachments	0	0	0
X	plprrd	InterconCable_ep	Interconnect Cable (Existing)	1	SG-InterconCable-Existing	0
X	plprrd	JunctBox	Junction Boxes, Service Cabinet Elec / Tel	3	0	1
	plprrd	JunctBox_ep	Junction. Box / Service Cabinet (Elec/Tel)	3	1 / DGN1	1
X	plprrd	JunctBoxA	Junction Boxes (Aerial)	3	0	1
X	plprrd	JunctBoxA_ep	Junction Boxes (Aerial) (Existing)	3	1 / DGN1	0
	plprrd	KeyShtMisc	Key sheet Miscellaneous Items	0	0	2
	plprrd	LaneDirArrow	Lane Directional Arrow	0	0	1
	plprrd	LeaderLine_dp	Leader Line and terminator with Text	0	0	1
	plprrd	LiteCond_ep	Street Lighting Conductors	3	SG-ConduitUG-Existing	0
X	plprrd	LoadCenter	Load Center	2	0	1
X	plprrd	LoadCenter_ep	Load Center (Existing)	2	5 / DGN5	0
	plprrd	Logo_dp	Consultant Engineer of Record Logo	0	0	1
X	plprrd	LoopLI_ep	Loop Lead-In (Existing)	3	2 / DGN2	0
X	plprrd	Loops_ep	Loop Assembly (All Types) (Existing)	2	2 / DGN2	2
X	plprrd	Luminaire	Luminaires (Decorative - All Types)	2	0	1
	plprrd	Luminaire_ep	Street Light / Pole	3	1 / DGN1	1
	plprrd	ManholeCover_ep	Manhole Cover (Cable TV)	6	1 / DGN1	1
	plprrd	ManholeCovUnk_ep	Manhole Cover (Unknown)	0	1 / DGN1	1
	plprrd	ManholeCovW_ep	Manhole Cover (Water)	1	1 / DGN1	1
X	plprrd	ManholeElec	Manhole (Electric)	3	0	1
	plprrd	ManholeElec_ep	Manhole (Electric)	3	1 / DGN1	1

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
X	plprrd	ManholeGas	Manhole (Gas)	4	0	1
	plprrd	ManholeGas_ep	Manhole (Gas)	4	1 / DGN1	1
X	plprrd	ManholeSS	Manhole (Sanitary Sewer)	2	0	1
	plprrd	ManholeSS_ep	Manhole (Sanitary Sewer)	2	1 / DGN1	1
X	plprrd	ManholeSW	Manhole (Storm Water)	10	0	1
	plprrd	ManholeSW_ep	Manhole (Storm Water)	10	1 / DGN1	1
X	plprrd	ManholeTel	Manhole (Telephone)	6	0	1
	plprrd	ManholeTel_ep	Manhole (Telephone)	6	1 / DGN1	1
	plprrd	MatchLineMask_dp	Mask Area for Match Line Overlap Areas (Autodesk)	0	0	0
	plprrd	MatchLines_dp	Match Lines with Text, Arrows for Station Notations	1	0	2
	plprrd	MeterElec_ep	Meter (Electric)	3	1 / DGN1	1
	plprrd	MeterElecUG_ep	Meter (Electric) (Underground)	3	1 / DGN1	1
	plprrd	MeterGas_ep	Meter (Gas)	4	1 / DGN1	1
	plprrd	MeterUnk	Meter (Unknown) PROPOSED UNKNOWN ELEMENT	0	0	0
	plprrd	MeterUnk_ep	Meter (Unknown)	0	1 / DGN1	1
	plprrd	MeterWater_ep	Meter (Water)	1	1 / DGN1	1
	plprrd	Miscellaneous0	Undefined proposed item - co blue wt 0	1	0	0
	plprrd	Miscellaneous1	Undefined proposed item - co blue wt 1	1	0	1
	plprrd	Miscellaneous2	Undefined proposed item - co blue wt 2	1	0	2
	plprrd	Miscellaneous3	Undefined proposed item - co green wt 0	2	0	0
	plprrd	Miscellaneous4	Undefined proposed item - co green wt 1	2	0	1
	plprrd	Miscellaneous5	Undefined proposed item - co green wt 2	2	0	2
	plprrd	Miscellaneous6	Undefined proposed item - co red wt 0	3	0	0
	plprrd	Miscellaneous7	Undefined proposed item - co red wt 1	3	0	1
	plprrd	Miscellaneous8	Undefined proposed item - co red wt 2	3	0	2
	plprrd	Miscellaneous9	Undefined proposed item - co red wt 3	3	0	3
	plprrd	NonPlottingEle_dp	Non plotting items such as construction elements and type 66 elements	4	0	0
	plprrd	NorthArw_dp	North Arrows	0	0	2
X	plprrd	Oil	Oil Pipeline, Petroleum	4	UT-Petroleum-Proposed	2
X	plprrd	OverheadSign_ep	Overhead Sign Panels (Existing)	0	3 / DGN3	1
X	plprrd	OverheadStr_ep	Mast Arm, Truss Assemblies, Signal Arms and Supports (Existing)	0	3 / DGN3	1
	plprrd	Patternlines_ep	Cross Section Chain	2	1 / DGN1	0
	plprrd	PayItem_dp	Pay Item Number Label Elements	4	0	2
X	plprrd	Pedestal_ep	Pedestal (Existing)	1	2 / DGN2	1
X	plprrd	PedHead_ep	Pedestrian Head (All Types) (Existing)	0	2 / DGN2	1
	plprrd	PedSignal_ep	Pedestrian Signal Unit, Signage	0	2 / DGN2	0
	plprrd	PipeCulvert_ep	Pipe Culvert	10	3 / DGN3	1
X	plprrd	PipeCulvert_pr	Pipe Culvert in Profile	3	0	2
X	plprrd	PlotBorder_dp	Plot Border	3	0	0
	plprrd	PointLocator_ep	Point Locator Symbol	4	0	0
X	plprrd	PoleConc	Concrete Strain Pole	0	0	2
X	plprrd	PoleConc_ep	Concrete Strain Pole (Existing)	0	2 / DGN2	1
X	plprrd	PoleFound	Pole Foundation	0	0	2
X	plprrd	PoleLight	Light Pole	2	0	1
X	plprrd	PoleLight_ep	Light Pole (Existing)	2	2 / DGN2	1

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
X	plprrd	PoleLightHM	High Mast Light Pole	3	0	1
X	plprrd	PoleLightHM_ep	High Mast Light Pole (Existing)	2	2 / DGN2	1
	plprrd	PoleLightID	Light Pole Location / ID	4	0	1
X	plprrd	PolePower	Power Pole w/ Transformer	3	0	2
	plprrd	PolePower_ep	Power Pole with or without Transformer, shared pole	3	1 / DGN1	1
X	plprrd	PoleShared	Power Pole Electric (Above Ground) Shared w/ Transformer	3	0	2
X	plprrd	PoleSteelStrain	Steel Strain Pole	0	0	2
X	plprrd	PoleSteelStrain_ep	Steel Strain Pole (Existing)	0	2 / DGN2	1
X	plprrd	PoleTel	Telephone Pole	6	0	2
	plprrd	PoleTel_ep	Telephone Pole	6	1 / DGN1	1
X	plprrd	PoleUtil	Utility Pole	0	0	2
X	plprrd	PoleWoodStrain	Wood Strain Pole	0	0	2
X	plprrd	PoleWoodStrain_ep	Wood Strain Pole (Existing)	0	2 / DGN2	1
	plprrd	Power_ep	Existing Overhead Electric Power Conductors (Distribution & Transmission)	3	UT-OverheadElec-Existing	0
	plprrd	PowerBur_ep	Existing Buried Electric Power Conductors (Distribution & Transmission)	3	UT-BuriedElec-Existing	1
	plprrd	PowerBurCond_ep	Secondary Conductor Buried	3	UT-BuriedElec-Existing	0
	plprrd	PowerCapcUG_ep	Capacitors (Underground)	3	1 / DGN1	1
	plprrd	PowerCond_ep	Conductors (primary distribution)	3	UT-OverheadElec-Existing	1
	plprrd	PowerElecOut_ep	Electrical Outlet	3	1 / DGN1	1
	plprrd	PowerMisc	Fuses, Reclosures, Regulator, Sectionalizers	3	0	0
	plprrd	PowerMisc_ep	Capacitors (Above Ground), Switchgear, Transformer, Electrical Service Box	3	1 / DGN1	1
X	plprrd	PropertyLine_ep	Property Lines	3	0	0
X	plprrd	PullBox	Pull Boxes (All Types)	3	0	1
	plprrd	PullBox_ep	Wiring Pull Box	3	1 / DGN1	1
X	plprrd	PumpNonPet	Pump (Non Petroleum)	1	0	0
	plprrd	PumpNonPet_ep	Pump (Non Petroleum)	1	1 / DGN1	1
	plprrd	ReferencePt_dp	Survey and Construction Reference Point Details and Elements	4	0	2
	plprrd	RoadwayMisc	Roadway Miscellaneous Items	4	0	2
X	plprrd	RWLine	Right of Way Lines	4	RW-Proposed	2
X	plprrd	RWLine_ep	Right of Way Lines (Existing)	3	RW-Existing	1
	plprrd	Sanitary_ep	Sanitary Sewer (all sizesAll Sizes)	2	UT-Sanitary-Existing	1
	plprrd	SanitaryDumpSta_ep	Dump Station (SS)	2	2 / DGN2	1
X	plprrd	SanitaryFM	Force Main	2	UT-Sanitary-Proposed	1
	plprrd	SanitaryFM_ep	Force Main (all sizesAll Sizes)	2	UT-Sanitary-Existing	1
	plprrd	SanitaryMisc_ep	Cleanout, Sanitary Effluent (Open channel)	2	1 / DGN1	1
X	plprrd	SanitarySewer	Sanitary Sewer	2	UT-Sanitary-Proposed	1
X	plprrd	SanitarySewerDSta	Sewer Dump Station	2	0	0
X	plprrd	SanitarySewerEff	Sanitary Sewer Effluent NPW	5	UT-NonPotableWater-Proposed	0
	plprrd	SanitarySewerMisc	Sewer Miscellaneous Items	2	0	0
	plprrd	SateDish_ep	SatteliteSatellite Dish Antenna	6	4 / DGN4	1
	plprrd	Scale_dp	Bar Scale, Scale Label Elements	0	0	2
	plprrd	Scratch1_dp	A scratch level for temporary or informational items	4	0	0
	plprrd	Scratch2_dp	A scratch level for temporary or informational items	5	0	0
	plprrd	ScratchEle_dp	Level for Draft Elements, Temporary Elements, Etc. Do Not Plot	3	0	0
	plprrd	ScratchEle2_dp	Level for Draft Elements, Temporary Elements, Etc. Do Not Plot	4	0	0

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
	plprrd	SheetBorder_dp	Sheet Border	1	0	4
	plprrd	SheetLines_dp	Sheet Lines	1	0	2
	plprrd	SheetLinesMisc1_dp	Sheet Lines	1	0	0
	plprrd	SheetLinesMisc2_dp	Sheet Lines	2	0	2
	plprrd	SheetLinesMisc3_dp	Sheet Lines	3	0	2
	plprrd	SheetLinesMisc4_dp	Sheet Lines	4	0	2
	plprrd	SidewalkBack_er	Back of Sidewalk Line Profile (Existing)	2	2 / DGN2	1
	plprrd	SidewalkBack_pr	Back of Sidewalk Line Profile	5	0	2
	plprrd	Signal_ep	Signal Head, Signal on Pedestal	3	1 / DGN1	1
X	plprrd	SignalHead_ep	Signal Head Section Details (Existing)	2	2 / DGN2	0
	plprrd	SignalLoop_ep	Traffic Detector Loops	7	1 / DGN1	2
	plprrd	SignalMisc_ep	Miscellaneous Signal Equipment Existing including control unit	3	2 / DGN2	0
	plprrd	SignalSupport_ep	Signal Supports including Mast Arm	3	2 / DGN2	0
X	plprrd	SignalSym_ep	Signal Head Symbols (Existing)	3	2 / DGN2	0
X	plprrd	SignCantilever_ep	Sign Symbol Cantilever (Existing)	0	2 / DGN2	0
	plprrd	SignMulti_ep	Multi-column Sign (All Signs)	0	3 / DGN3	1
X	plprrd	SignPanel_ep	Sign Panel Elements (Existing)	0	2 / DGN2	1
	plprrd	SignSingle_ep	Sign (Single Support)	3	2 / DGN2	0
X	plprrd	SignSpanwire	Span Wire Signing Assembly	2	0	1
X	plprrd	SignSpanwire_ep	Span Wire Signing Assembly (Existing)	2	2 / DGN2	1
	plprrd	SignSupport_ep	Trusses and Cantilevers for Overhead Signs	0	3 / DGN3	1
X	plprrd	SignTruss_ep	Sign Symbol Truss (Existing)	3	2 / DGN2	1
	plprrd	SpanWire_ep	Signal / Span Wire Pole	3	2 / DGN2	0
	plprrd	Sprinkler_ep	Sprinkler Head	1	1 / DGN1	1
	plprrd	StationTicL_dp	Station Tic Marks (Large) and Text	0	0	2
	plprrd	StationTicS_dp	Station Tic Marks (Small) and Text	0	0	2
X	plprrd	Steam	Steam Pipes	1	UT-Steam-Proposed	1
X	plprrd	StreetLights	Street Lights	2	0	1
	plprrd	SumBoxBorder_dp	Summary Boxes Borders	4	0	3
	plprrd	SumBoxLines_dp	Summary Boxes Lines and Miscellaneous Items	4	0	1
	plprrd	SumBoxLinesMin_dp	Summary Boxes Lines Minor Line and Miscellaneous Items	4	0	0
X	plprrd	Switchgear	Switchgear and Appurtenances	3	0	0
	plprrd	Tables_dp	Data Tables and All Autodesk Tables	0	0	1
	plprrd	Tele_ep	Telephone Line (aerial)	6	UT-OverheadTel-Existing	0
X	plprrd	TeleAer	Telephone Line (Aerial)	6	UT-OverheadTel-Proposed	1
X	plprrd	TeleBur	Telephone (Buried)	6	UT-BuriedTel-Proposed	1
	plprrd	TeleBur_ep	Telephone (all sizesAll Sizes Buried), Duct, Toll	6	UT-BuriedTel-Existing	1
	plprrd	TeleMisc	Telephone Service Box, Booth or Pedestal	6	0	0
	plprrd	TeleMisc_ep	Telephone Service Box, Booth or Pedestal	6	1 / DGN1	1
	plprrd	TextAlert	Text - An Alert Label to Highlight a Problem	3	0	2
	plprrd	TextBLStation	Text - B/L Station and Tics	0	0	2
	plprrd	TextConstEle	Text - Construction Element	0	0	1
	plprrd	TextCurveData	Text - Curve Data Note	0	0	2
	plprrd	TextDetails	Text - Detail Notes	4	0	2
	plprrd	TextElevLabel	Elevation Labels	4	0	0

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
	plprrd	TextGeotech	Text for soil borings and labels	0	0	2
	plprrd	TextLabel	Text - Label	0	0	2
	plprrd	TextLandscape	Text - Landscape Labels	0	0	1
	plprrd	TextMajor	Text - Major	0	0	5
	plprrd	TextMinor	Text - Minor	0	0	0
	plprrd	TextMisc	Text - Miscellaneous	0	0	1
	plprrd	TextNotes	Text - Notes	4	0	1
	plprrd	TextProfLabel	Text - Profile, Horizontal and Vertical Axis Labels	0	0	2
	plprrd	TextProjLabel	Text - Begin and End Project label with leader lines	1	0	2
	plprrd	TextPtLabel	Point Labels	4	0	0
	plprrd	TextShtNo	Text - Sheet Number	0	0	2
	plprrd	TextSurveyLabel	Survey Text Labels	0	0	0
	plprrd	TextTables	Text - KeysheetKey sheet Indexes and Table Data	4	0	2
	plprrd	TextTitle	Text - Title	0	0	3
	plprrd	TextXSElev	Text - Cross Section Elevations	2	0	1
	plprrd	TopoMisc_ep	Miscellaneous Topography	0	3 / DGN3	1
	plprrd	Tower_ep	High Mast Light Poles or Towers, Transmission Tower, Antenna	3	1 / DGN1	1
X	plprrd	TransformerAer	Transformer Unit (Above Ground)	3	0	0
X	plprrd	TransformerBur	Transformer (Underground)	3	0	1
X	plprrd	TransmissionAer	Proposed Overhead Electric Power Conductors (Distribution & Transmission)	3	UT-OverheadElec-Proposed	0
X	plprrd	TransmissionBur	Proposed Buried Electric Power Conductors (Distribution & Transmission)	3	UT-BuriedElec-Proposed	1
X	plprrd	TransmissionT	Transmission Tower Single	3	0	0
	plprrd	Utility_er	Existing Utilities in Profile View	3	2 / DGN2	1
	plprrd	Utility_pr	Proposed Utilities in Profile View	3	0	2
	plprrd	UtilMisc_ep	Miscellaneous Utilities	0	0	0
	plprrd	UtilsMisc	Miscellaneous Utility Items	8	0	1
X	plprrd	Valve	Valve, Valve Box (Unknown) PROPOSED UNKNOW VALVE	0	0	1
	plprrd	Valve_ep	Valve, Valve Box	0	1 / DGN1	1
X	plprrd	ValveCover	Valve Cover (Unknown) PROPOSED UNKNOW VALVE	0	0	1
	plprrd	ValveCover_ep	Valve Cover	0	1 / DGN1	1
X	plprrd	ValveCvrEff	Valve Cover (Effluent)	5	0	1
	plprrd	ValveCvrEff_ep	Valve Cover (Effluent)	5	1 / DGN1	1
X	plprrd	ValveCvrGas	Valve Cover (Gas)	4	0	1
	plprrd	ValveCvrGas_ep	Valve Cover (Gas)	4	1 / DGN1	1
X	plprrd	ValveCvrSewer	Valve Cover (Sewer)	2	0	1
	plprrd	ValveCvrSewer_ep	Valve Cover (Sewer)	2	1 / DGN1	1
X	plprrd	ValveCvrWater	Valve Cover (Water)	1	0	1
	plprrd	ValveCvrWater_ep	Valve Cover (Water)	1	1 / DGN1	1
	plprrd	ValveCvrWaterNP_ep	Valve Cover (Non-potable Water)	5	1 / DGN1	1
X	plprrd	ValveGas	Valve, Valve Box (Gas)	4	0	1
	plprrd	ValveGas_ep	Valve (Gas), Valve Box	4	1 / DGN1	1
X	plprrd	ValveSewer	Valve, Valve Box (Sewer)	2	0	1
	plprrd	ValveSewer_ep	Valve (Sewer), Valve Box	2	1 / DGN1	1
X	plprrd	ValveWater	Valve, Valve Box (Water)	1	0	1
	plprrd	ValveWater_ep	Valve (Water), Valve Box	1	1 / DGN1	1

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
X	plprrd	ValveWaterNP	Water Line Non Potable	5	0	1
	plprrd	ValveWaterNP_ep	Valve (Non-potable Water), Valve Box	8	1 / DGN1	1
	plprrd	Vault_ep	Vaults Above Grade and Below Grade	3	1 / DGN1	0
	plprrd	Vaults	Vaults Above Grade and Below Grade	3	0	0
X	plprrd	VaultsRW	Vaults (Raw Water)	1	0	0
	plprrd	Vent	Vent (Unknown) PROPOSED UNKNOW VENT	0	0	0
	plprrd	Vent_ep	Vent	0	1 / DGN1	1
X	plprrd	VentGas	Vent (Gas)	4	0	0
	plprrd	VentGas_ep	Vent (Gas)	4	1 / DGN1	1
X	plprrd	VentSewer	Vent (Sewer)	2	0	0
	plprrd	VentSewer_ep	Vent (Sewer)	2	1 / DGN1	1
	plprrd	Viewport	Viewport (For AutoCAD Use)	3	0	0
X	plprrd	WallRetain_pr	Retaining Wall Profile	9	0	2
X	plprrd	Water	Water Line	1	UT-Water-Proposed	2
	plprrd	Water_ep	Water Line (all sizesAll Sizes)	1	UT-Water-Existing	1
X	plprrd	WaterFct	Standpipe and Water Faucet	1	0	0
X	plprrd	WaterFilter	Water Filter	5	0	2
X	plprrd	WaterMeter	Water Meter	1	0	2
	plprrd	WaterMisc_ep	Faucet, Standpipe	1	1 / DGN1	1
X	plprrd	WaterNP	Water Line Non Potable	5	UT-NonPotableWater-Proposed	2
X	plprrd	Well	Well	1	1 / DGN1	1
X	plprrd	WellMon	Well MonitoringMonitoring Well	1	0	1
	plprrd	Wells_ep	Wells, Monitoring Well, Taps	1	1 / DGN1	1
	plprrd	Xreference01_dp	Reference Files (For AutoCAD Use)	0	0	1
	plprrd	Xreference02_dp	Reference Files (For AutoCAD Use)	0	0	1
	plprrd	Xreference03_dp	Reference Files (For AutoCAD Use)	0	0	1
	plprrd	Xreference04_dp	Reference Files (For AutoCAD Use)	0	0	1
	plprrd	XSCell	GEOPAK Cross Section Cell/Block and Profile Cell/Block	8	0	1
	plprrd	XSPt_ep	Cross Section Point, Station	2	1 / DGN1	0

QTDSRD - Quantity Computation

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
	qtdsrd	ActivePointCell_dp	Active Point Cell	4	0	10
	qtdsrd	AdhocPoint_dp	Adhoc Points Placed by SheetInfo	0	4 / 0	0
X	qtdsrd	AdvWarnPanel	Advance Warning Arrow Panels	4	0	2
X	qtdsrd	Aggregate	Aggregate	8	0	1
X	qtdsrd	ArtificialCovering	Artificial Coverings	10	0	2
X	qtdsrd	Attenuator	Attenuation Systems	6	MOT-Attenuator	1
X	qtdsrd	AttenuatorTM	Attenuator Truck Mount	6	0	2
X	qtdsrd	Barricade	Barricade	0	0	1
X	qtdsrd	Barricade1	Barricade Symbol Type 1 or 2 at 15' spacing	0	MOT-Barricade-15Gap	1

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
X	qtdsrd	Barricade2	Barricade Symbol Type 1 or 2 at 30' spacing	0	MOT-Barricade-30Gap	1
X	qtdsrd	Barricade3	Barricade Symbol Type 1 or 2 at 50' spacing	0	MOT-Barricade-50Gap	1
X	qtdsrd	Barricade4	Barricade Symbol Type 1 or 2 at 100' spacing	0	MOT-Barricade-100Gap	1
X	qtdsrd	CandG_ex	Curb and Gutter for Cross Sections (All Types) (Existing)	4	2 / DGN2	1
X	qtdsrd	CandG_px	Curb and Gutter for Cross Sections (All Types)	4	0	2
X	qtdsrd	CandGBase_px	Curb and Gutter Base on Cross Sections	3	0	1
	qtdsrd	ChannelDevPed	Longitudinal Channelizing Device for Pedestrians	6	MOT-ChannelDevPed	2
	qtdsrd	CLConst_dp	Center Line of Construction	0	0	2
X	qtdsrd	ClearingGrubbing	Clearing and Grubbing Limits and Quantity Items	4	0	1
	qtdsrd	ClipBorder_dp	CLIP Border and Civil 3D View Frame	3	0	0
	qtdsrd	ClipDrawingBound_dp	CLIP Drawing Boundary	3	3 / 0	0
	qtdsrd	Cloud_dp	Construction Cloud	7	0	2
X	qtdsrd	CmpFlashbrdRiser	Cmp Flashboard Riser	10	0	2
	qtdsrd	COGO_dp	COGO Information	3	0	1
X	qtdsrd	Concrete	Concrete Areas (All Types plus miscellaneous)	0	0	2
X	qtdsrd	ConcSlabs	Concrete Slabs	0	0	2
X	qtdsrd	Cone	Cone and Tubular Marker	6	0	2
	qtdsrd	ConstArea_dp	Construction Area Crosshatch	0	0	1
	qtdsrd	ConstLimits	Construction Limits	3	RW-LimitsofConst	2
	qtdsrd	ConstLines	Construction Lines and References	1	0	0
	qtdsrd	ConstLines_pm	Construction Lines	**4**	0	**0**
X	qtdsrd	CurbBack	Back of Curb	4	0	1
X	qtdsrd	CurbFace	Curb and Gutter (Face)	4	0	1
X	qtdsrd	CurbRamp	Curb Cut Ramp	8	0	1
X	qtdsrd	CurbRampWarning	Detectable Warnings on Curb Ramps	4	0	2
	qtdsrd	CurveData_dp	Curve & Coordinate Data Elements incl PC, PT, PI symbols	4	0	2
	qtdsrd	CurveDataLabel_dp	Curve Data Labels PC,PI, PT	0	0	2
	qtdsrd	DimLines_dp	Dimension Lines, Corresponding Terminators, Equation Lines	0	0	1
X	qtdsrd	DitchPavt	Ditch Pavement Including Quantity Shapes	3	0	1
	qtdsrd	Driveway	Driveway (Drive, Lane, Turnouts)	7	0	2
X	qtdsrd	EaseLicLine	Easement License Agreement Line	5	6 / DGN6	0
X	qtdsrd	FlashingLight	Flashing Lights (All Types)	0	0	1
X	qtdsrd	FlowPaths	Time of Concentration Flow Paths	10	1 / DGN1	1
X	qtdsrd	Gabions	Gabion Baskets or Mats	10	0	2
X	qtdsrd	Gabions_ep	Gabion Baskets or Mats (Existing)	10	1 / DGN1	2
X	qtdsrd	Grass	Grass, Seeding and Mulching Areas	2	1 / DGN1	2
X	qtdsrd	Guardrail	Guardrail	0	0	2
X	qtdsrd	GuardrailBRLt	Guardrail Bridge Left	0	RD-Guardrail-Left	1
X	qtdsrd	GuardrailBRRt	Guardrail Bridge Right	0	RD-Guardrail-Right	1
X	qtdsrd	GuardrailDbl	Guardrail Double Face	0	RD-Guardrail-Double	1
X	qtdsrd	GuardrailEndAch	Guardrail End Anchorage	0	0	1
X	qtdsrd	GuardrailLt	Guardrail Left	0	RD-Guardrail-Left	1
X	qtdsrd	GuardrailModThrieDbl	Guardrail Modified Thrie Beam Double Face	0	RD-Guardrail-Double	1
X	qtdsrd	GuardrailModThrieLt	Guardrail Modified Thrie Beam Left	0	RD-Guardrail-Left	1
X	qtdsrd	GuardrailModThrieRt	Guardrail Modified Thrie Beam Right	0	RD-Guardrail-Right	1

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
X	qtdsrd	GuardrailPanel_px	Guardrail Component Property and Model Break Line for 3D Guardrail Panels	11	0	1
X	qtdsrd	GuardrailPost_px	Guardrail Component Property and Model Break Line for 3D Guardrail Posts	10	0	0
X	qtdsrd	GuardrailPRDbl	Guardrail Double Face w/ Pipe Rail	0	RD-Guardrail-Double	1
X	qtdsrd	GuardrailPRLt	Guardrail Left w/ Pipe Rail	0	RD-Guardrail-Left	1
X	qtdsrd	GuardrailPRRt	Guardrail Right w/ Pipe Rail	0	RD-Guardrail-Right	1
X	qtdsrd	GuardrailRRDbl	Guardrail Double Face w/ Rub Rail	0	RD-Guardrail-Double	1
X	qtdsrd	GuardrailRRLt	Guardrail Left w/ Rub Rail	0	RD-Guardrail-Left	1
X	qtdsrd	GuardrailRRRt	Guardrail Right w/ Rub Rail	0	RD-Guardrail-Right	1
X	qtdsrd	GuardrailRt	Guardrail Right	0	RD-Guardrail-Right	1
X	qtdsrd	GuardrailThrieDbl	Guardrail Thrie Beam Double Face	0	RD-Guardrail-Double	1
X	qtdsrd	GuardrailThrieLt	Guardrail Thrie Beam Left	0	RD-Guardrail-Left	1
X	qtdsrd	GuardrailThriePRLt	Guardrail Thrie Beam Left w/ Pipe Rail	0	RD-Guardrail-Left	1
X	qtdsrd	GuardrailThriePRRt	Guardrail Thrie Beam Right w/ Pipe Rail	0	RD-Guardrail-Right	1
X	qtdsrd	GuardrailThrieRt	Guardrail Thrie Beam Right	0	RD-Guardrail-Right	1
	qtdsrd	ImageAttachment_dp	Image AttachmentstAttachments	0	0	0
X	qtdsrd	InletProt	Rock Bags and Sand Bagging	10	SWP-RockBags	2
	qtdsrd	LeaderLine_dp	Leader Line and terminator with Text	0	0	1
X	qtdsrd	Mailbox	Mailboxes	8	0	1
	qtdsrd	MatchLines_dp	Match Lines with Text, Arrows for Station Notations	1	0	2
	qtdsrd	Miscellaneous0	Undefined proposed item - co blue wt 0	1	0	0
	qtdsrd	Miscellaneous1	Undefined proposed item - co blue wt 1	1	0	1
	qtdsrd	Miscellaneous2	Undefined proposed item - co blue wt 2	1	0	2
	qtdsrd	Miscellaneous3	Undefined proposed item - co green wt 0	2	0	0
	qtdsrd	Miscellaneous4	Undefined proposed item - co green wt 1	2	0	1
	qtdsrd	Miscellaneous5	Undefined proposed item - co green wt 2	2	0	2
	qtdsrd	Miscellaneous6	Undefined proposed item - co red wt 0	3	0	0
	qtdsrd	Miscellaneous7	Undefined proposed item - co red wt 1	3	0	1
	qtdsrd	Miscellaneous8	Undefined proposed item - co red wt 2	3	0	2
	qtdsrd	Miscellaneous9	Undefined proposed item - co red wt 3	3	0	3
X	qtdsrd	MowingAreaLarge	Mowing and Maintenance Areas for Large Machine	2	0	2
X	qtdsrd	MowingAreaSmall	Mowing and Maintenance Areas	68	0	1
X	qtdsrd	Mulch	Mulch Area	10	0	1
	qtdsrd	NonPlottingEle_dp	Non plotting items such as construction elements and type 66 elements	4	0	0
X	qtdsrd	ObjectMarker	Object and Reflective Markers	3	0	1
X	qtdsrd	OverheadSign	Overhead Sign Panels	0	0	2
X	qtdsrd	OverheadSign_ep	Overhead Sign Panels (Existing)	0	3 / DGN3	1
X	qtdsrd	OverheadStr	Mast Arm, Truss Assemblies, Signal Arms and Supports	0	0	2
X	qtdsrd	OverheadStr_ep	Mast Arm, Truss Assemblies, Signal Arms and Supports (Existing)	0	3 / DGN3	1
	qtdsrd	Patternlines_ep	Cross Section Chain	2	1 / DGN1	0
	qtdsrd	Pavers	Pavers - Brick and Block	5	0	1
	qtdsrd	PavtAsph_ep	Asphalt Pavement Edge	0	3 / DGN3	1
X	qtdsrd	PavtAsphalt	Asphalt Pavement Edge Line and Quantity Shapes	0	0	2
X	qtdsrd	PavtBase	Base Material (All Types)	3	0	2
	qtdsrd	PavtConc_ep	Concrete Pavement (Edges)	0	3 / DGN3	1
X	qtdsrd	PavtConcrete	Concrete Pavement Edge Line and Quantity Shapes	10	0	2

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
X	qtdsrd	PavtConcreteSC	Concrete Pavement Edge Line and Quantity Shapes	9	0	1
X	qtdsrd	PavtFrictionCourse	Asphalt Concrete Friction Course	4	0	2
X	qtdsrd	PavtMessage	Pavement Message (All types)(All Types)	0	0	1
X	qtdsrd	PavtMessage_ep	Pavement Message (Existing - All types)(All Types)	0	2 / DGN2	0
	qtdsrd	PavtMisc	Asphalt Miscellaneous Material	1	0	1
X	qtdsrd	PavtStabilization	Stabilization Material Lines and Shapes	9	0	2
	qtdsrd	PavtXover_ep	Crossovers and Detours (Temporary)	0	3 / DGN3	0
	qtdsrd	PayItem_dp	Pay Item Number Label Elements	4	0	2
	qtdsrd	Permit1	Permit 1 Wetlands, Mitigation Sites, Planting Areas	1	0	1
	qtdsrd	Permit2	Permit 2 Wetlands, Mitigation Sites, Planting Areas	2	0	1
	qtdsrd	Permit3	Permit 3 Wetlands, Mitigation Sites, Planting Areas	4	0	1
X	qtdsrd	PMCeramic	Pavement Markers Ceramic	0	0	1
	qtdsrd	PMMisc	Pavement Marking Miscellaneous Items	0	0	2
X	qtdsrd	PMStripe12B	Pavement Marking Traffic Stripe 12in Black	3	0	4
X	qtdsrd	PMStripe12W	Pavement Marking Traffic Stripe 12in White	0	0	4
X	qtdsrd	PMStripe12W(3-9)	Pavement Marking 3/9 Skip Traffic Stripe 12in White	0	0 / PM-Stripe-SKIP 3-9	4
X	qtdsrd	PMStripe12Y	Pavement Marking Traffic Stripe 12in Yellow	4	0	4
X	qtdsrd	PMStripe16B	Pavement Marking Traffic Stripe 16in Black	3	0	5
X	qtdsrd	PMStripe16W	Pavement Marking Traffic Stripe 16in White	0	0	5
X	qtdsrd	PMStripe16Y	Pavement Marking Traffic Stripe 16in Yellow	4	0	5
X	qtdsrd	PMStripe18B	Pavement Marking Traffic Stripe 18in Black	3	0	6
X	qtdsrd	PMStripe18W	Pavement Marking Traffic Stripe 18in White	0	0	6
X	qtdsrd	PMStripe18Y	Pavement Marking Traffic Stripe 18in Yellow	4	0	6
X	qtdsrd	PMStripe24W	Pavement Marking Traffic Stripe 24in White	0	0	7
X	qtdsrd	PMStripe24Y	Pavement Marking Traffic Stripe 24in Yellow	4	0	7
X	qtdsrd	PMStripe6B	Pavement Marking Traffic Stripe 6in Black	3	0	2
X	qtdsrd	PMStripe6B(10-30)	Pavement Marking 10/30 Skip Traffic Stripe 6in Black	3	0 / PM-Stripe-SKIP 10-30	2
X	qtdsrd	PMStripe6Bl	Pavement Marking Traffic Stripe 6in Blue	1	0	2
X	qtdsrd	PMStripe6DY	Pavement Marking Traffic Stripe 6in Double Yellow	4	0	2
X	qtdsrd	PMStripe6W	Pavement Marking Traffic Stripe 6in White	0	0	2
X	qtdsrd	PMStripe6W(10-30)	Pavement Marking 10/30 Skip Traffic Stripe 6in White	0	0 / PM-Stripe-SKIP 10-30	2
X	qtdsrd	PMStripe6W(2-4)	Pavement Marking 2/4 Skip Traffic Stripe 6in White	0	0 / PM-Stripe-SKIP 2-4	2
X	qtdsrd	PMStripe6W(3-9)	Pavement Marking 3/9 Skip Traffic Stripe 6in White	0	0 / PM-Stripe-SKIP 3-9	2
X	qtdsrd	PMStripe6W(6-10)	Pavement Marking 6/10 Skip Traffic Stripe 6in White	0	0 / PM-Stripe-SKIP 6-10	2
X	qtdsrd	PMStripe6Y	Pavement Marking Traffic Stripe 6in Yellow	4	0	2
X	qtdsrd	PMStripe6Y(10-30)	Pavement Marking 10/30 Skip Traffic Stripe 6in Yellow	4	0 / PM-Stripe-SKIP 10-30	2
X	qtdsrd	PMStripe6Y(2-4)	Pavement Marking 2/4 Skip Traffic Stripe 6in Yellow	4	0 / PM-Stripe-SKIP 2-4	2
X	qtdsrd	PMStripe6Y(6-10)	Pavement Marking 6/10 Skip Traffic Stripe 6in Yellow	4	0 /	2

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
					PM-Stripe-SKIP 6-10	
X	qtdsrd	PMStripe8B	Pavement Marking Traffic Stripe 8in Black	3	0	3
X	qtdsrd	PMStripe8W	Pavement Marking Traffic Stripe 8in White	0	0	3
X	qtdsrd	PMStripe8W(3-9)	Pavement Marking 3/9 Skip Traffic Stripe 8in White	0	0 / PM-Stripe-SKIP 3-9	2
X	qtdsrd	PMStripe8Y	Pavement Marking Traffic Stripe 8in Yellow	4	0	3
X	qtdsrd	PMStripeVibeWL	Pavement Marking Auditory and Vibratory 6in White (Left)	0	PM-Stripe-VibratoryLeft / PM-Stripe-Vibratory	2
X	qtdsrd	PMStripeVibeWR	Pavement Marking Auditory and Vibratory 6in White (Right)	0	PM-Stripe-VibratoryRight / PM-Stripe-Vibratory	2
X	qtdsrd	PMStripeVibeYL	Pavement Marking Auditory and Vibratory 6in Yellow (Left)	4	PM-Stripe-VibratoryLeft / PM-Stripe-Vibratory	2
X	qtdsrd	PMStripeVibeYR	Pavement Marking Auditory and Vibratory 6in Yellow (Right)	4	PM-Stripe-VibratoryRight / PM-Stripe-Vibratory	2
	qtdsrd	PointLocator_ep	Point Locator Symbol	4	0	0
X	qtdsrd	PondSideSlope	Pond Side Slope	0	0	2
X	qtdsrd	Railing	All Proposed Railings; Piperail, Guiderail, Handrail used for Pedestrian and Bicycles	9	0	2
	qtdsrd	ReferencePt_dp	Survey and Construction Reference Point Details and Elements	4	0	2
X	qtdsrd	ReflPaintWht	Reflective Paint - Island Nose (White)	0	0	3
X	qtdsrd	ReflPaintYel	Reflective Paint - Island Nose (Yellow)	4	0	3
X	qtdsrd	RetentionArea	Retention Area	2	0	2
	qtdsrd	RoadwayMisc	Roadway Miscellaneous Items	4	0	2
X	qtdsrd	RockGravelStone	Rock, Gravel, Stone, Boulders, Etc.	1	0	2
X	qtdsrd	RPM_ep	Reflective Pavement Markers (Existing)	2	2 / DGN2	1
X	qtdsrd	RPM1	Raised Pavement Markers, White	0	0	2
X	qtdsrd	RPM2	Raised Pavement Markers, White - Red	3	0	2
X	qtdsrd	RPM3	Raised Pavement Markers, Yellow	4	0	2
X	qtdsrd	RPM4	Raised Pavement Markers, Yellow - Yellow	9	0	2
X	qtdsrd	RPM5	Raised Pavement Markers, Yellow - Red	6	0	2
X	qtdsrd	RPM6	Raised Pavement Markers, Blue	1	0	2
X	qtdsrd	RumbleStrip1	Rumble Strips Continuous Array	0	PM-RumbleSolid	2
X	qtdsrd	RumbleStrip2	Rumble Strips Skip Array	0	PM-RumbleSkip	2
	qtdsrd	Scratch1_dp	A scratch level for temporary or informational items	4	0	0
	qtdsrd	Scratch2_dp	A scratch level for temporary or informational items	5	0	0
	qtdsrd	ScratchEle_dp	Level for Draft Elements, Temporary Elements, Etc. Do Not Plot	3	0	0
	qtdsrd	ScratchEle2_dp	Level for Draft Elements, Temporary Elements, Etc. Do Not Plot	4	0	0
101	qtdsrd	SedimentBarrier	Synthetic Bales and Staked Silt Fences	10	SWP-HayBales	2
101	qtdsrd	SedimentBarrier	Synthetic Bales and Staked Silt Fences	10	SWP-SiltFence	2
X	qtdsrd	SedimentBasin	Sediment Basin Index 101	10	0	2
X	qtdsrd	SedimentBasin_ep	Sediment Basin Index 101 (Existing)	10	3 / DGN3	1
	qtdsrd	ShldrHatch	Paved Shoulder Hatch Pattern	1	0	1
X	qtdsrd	ShldrPaved	Paved Shoulder Line	1	0	1
X	qtdsrd	ShldrUnpaved	Unpaved Shoulder Line	0	0	0
X	qtdsrd	SidewalkBack	Sidewalk Back	2	0	1
X	qtdsrd	SidewalkConc	Sidewalk Concrete Shape	0	0	2

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
X	qtdsrd	SidewalkFront	Sidewalk Front	1	0	1
X	qtdsrd	SignCantilever	Sign Symbol Cantilever	0	0	1
X	qtdsrd	SignCantilever_ep	Sign Symbol Cantilever (Existing)	0	2 / DGN2	0
	qtdsrd	SignDetail	Sign Details	0	0	2
	qtdsrd	SignLettersAZ	Alphabet Cell Library Letter A-Z Numbers 0-9	0	0	0
	qtdsrd	SignMisc	Miscellaneous Sign Symbols	1	0	2
	qtdsrd	SignMisc_ep	Miscellaneous Sign Symbols (Existing)	1	1 / DGN1	1
X	qtdsrd	SignPanel	Sign Panels - Regulatory	0	0	2
X	qtdsrd	SignPanel_ep	Sign Panel Elements (Existing)	0	2 / DGN2	1
X	qtdsrd	SignPanelBorder	Sign Panel Border on Sign Details	0	0	1
X	qtdsrd	SignSpanwire	Span Wire Signing Assembly	2	0	1
X	qtdsrd	SignSpanwire_ep	Span Wire Signing Assembly (Existing)	2	2 / DGN2	1
X	qtdsrd	SignSpecial	Special Signs / Guide Signs	2	0	2
X	qtdsrd	SignSupport	Ground Mounted Sign Support Symbol (All Types)	1	0	1
	qtdsrd	SignSupport_ep	Trusses and Cantilevers for Overhead Signs	0	3 / DGN3	1
X	qtdsrd	SignSymbol_px	Sign Structure and Foundation on Cross Sections	4	0	2
X	qtdsrd	SignTruss	Sign Symbol Truss	3	0	1
X	qtdsrd	SignTruss_ep	Sign Symbol Truss (Existing)	3	2 / DGN2	1
X	qtdsrd	Sod	Performance Sod	2	0	2
	qtdsrd	StationTicL_dp	Station Tic Marks (Large) and Text	0	0	2
	qtdsrd	StationTicS_dp	Station Tic Marks (Small) and Text	0	0	2
	qtdsrd	SuperPave	Asphaltic Concrete Super Pavement	6	0	2
	qtdsrd	Tables_dp	Data Tables and All Autodesk Tables	0	0	1
X	qtdsrd	TCZSign	Traffic Control Sign Symbol	6	0	2
X	qtdsrd	TCZSign1	Traffic Control Sign Symbol at 200' Spacing	6	MOT-Sign-500Gap	2
X	qtdsrd	TCZSign2	Traffic Control Sign Symbol at 400' Spacing	6	MOT-Sign-400Gap	2
X	qtdsrd	TCZSign3	Traffic Control Sign Symbol at 500' Spacing	6	MOT-Sign-200Gap	2
	qtdsrd	TextAlert	Text - An Alert Label to Highlight a Problem	3	0	2
	qtdsrd	TextBLStation	Text - B/L Station and Tics	0	0	2
	qtdsrd	TextConstEle	Text - Construction Element	0	0	1
	qtdsrd	TextCurveData	Text - Curve Data Note	0	0	2
	qtdsrd	TextDetails	Text - Detail Notes	4	0	2
	qtdsrd	TextElevLabel	Elevation Labels	4	0	0
	qtdsrd	TextLabel	Text - Label	0	0	2
	qtdsrd	TextLandscape	Text - Landscape Labels	0	0	1
	qtdsrd	TextMajor	Text - Major	0	0	5
	qtdsrd	TextMinor	Text - Minor	0	0	0
	qtdsrd	TextMisc	Text - Miscellaneous	0	0	1
	qtdsrd	TextNotes	Text - Notes	4	0	1
	qtdsrd	TextProfLabel	Text - Profile, Horizontal and Vertical Axis Labels	0	0	2
	qtdsrd	TextProjLabel	Text - Begin and End Project label with leader lines	1	0	2
	qtdsrd	TextPtLabel	Point Labels	4	0	0
	qtdsrd	TextShtNo	Text - Sheet Number	0	0	2
	qtdsrd	TextSurveyLabel	Survey Text Labels	0	0	0
	qtdsrd	TextTables	Text - KeysheetKey sheet Indexes and Table Data	4	0	2

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
	qtdsrd	TextTitle	Text - Title	0	0	3
	qtdsrd	TextXSElev	Text - Cross Section Elevations	2	0	1
X	qtdsrd	TrafSeparator	Traffic Separator (All Types)	6	0	1
X	qtdsrd	TurbidityBarrier1	Turbidity Barrier 1 (floating)	10	SWP-TurbidityBarrier-Type1	2
	qtdsrd	TurbidityBarrier1_ep	Turbidity Barrier (Floating) (Existing)	10	1 / DGN1	2
X	qtdsrd	TurbidityBarrier2	Turbidity Barrier 2 (staked)	10	SWP-TurbidityBarrier-Type2	2
	qtdsrd	TurbidityBarrier2_ep	Turbidity Barrier (Staked) (Existing)	10	1 / DGN1	2
X	qtdsrd	Turf	Performance TrufTurf	100	0	2
	qtdsrd	Viewport	Viewport (For AutoCAD Use)	3	0	0
X	qtdsrd	WallBarrier	Barrier Wall All Types	6	0	2
X	qtdsrd	WallGravity	Gravity Wall	11	0	1
	qtdsrd	Wetland	Wetland Boundary	2	RD-Wetland-Proposed	1
	qtdsrd	Widening	Widening Patterns and Miscellaneous Elements	1	0	1
	qtdsrd	Xreference01_dp	Reference Files (For AutoCAD Use)	0	0	1
	qtdsrd	Xreference02_dp	Reference Files (For AutoCAD Use)	0	0	1
	qtdsrd	Xreference03_dp	Reference Files (For AutoCAD Use)	0	0	1
	qtdsrd	Xreference04_dp	Reference Files (For AutoCAD Use)	0	0	1
	qtdsrd	XSCell	GEOPAK Cross Section Cell/Block and Profile Cell/Block	8	0	1
	qtdsrd	XSPt_ep	Cross Section Point, Station	2	1 / DGN1	0

RDXSRD - Roadway Cross Section

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
	rdxsrd	ActivePointCell_dp	Active Point Cell	4	0	10
	rdxsrd	AdhocPoint_dp	Adhoc Points Placed by SheetInfo	0	4 / 0	0
	rdxsrd	BaselineSurvey	Baseline Survey	0	0	2
X	rdxsrd	Berm_px	Berm (Top, Front, or Back) for Cross Sections	10	0	2
X	rdxsrd	Bridge_px	Bridge Component for Cross Sections - Component Property	0	0	2
X	rdxsrd	CableBarrier_px	Cable Barrier for Cross Sections	0	0	2
X	rdxsrd	CandG_ex	Curb and Gutter for Cross Sections (All Types) (Existing)	4	2 / DGN2	1
X	rdxsrd	CandG_px	Curb and Gutter for Cross Sections (All Types)	4	0	2
X	rdxsrd	CandGBase_px	Curb and Gutter Base on Cross Sections	3	0	1
X	rdxsrd	CATVBur_ex	Cable TV and Miscellaneous on Cross Sections (Existing)	6	2 / DGN2	1
X	rdxsrd	CATVBur_px	Cable TV and Miscellaneous on Cross Sections	6	0	1
	rdxsrd	CLConst_dp	Center Line of Construction	0	0	2
	rdxsrd	Cloud_dp	Construction Cloud	7	0	2
	rdxsrd	COGO_dp	COGO Information	3	0	1
X	rdxsrd	Concrete_px	Concrete Boundary Lines on Cross Sections	0	0	2
X	rdxsrd	Conduit_ex	Conduit and Encasements on Cross Sections (Existing)	3	2 / DGN2	1
X	rdxsrd	Conduit_px	Conduit and Encasements on Cross Sections	3	0	1
	rdxsrd	ConstArea_dp	Construction Area Crosshatch	0	0	1

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
	rdxsrd	ConstLimits	Construction Limits	3	RW-LimitsofConst	2
	rdxsrd	ConstLines	Construction Lines and References	1	0	0
	rdxsrd	ConstLines_pm	Construction Lines	**4**	0	**0**
	rdxsrd	CurveData_dp	Curve & Coordinate Data Elements incl PC, PT, PI symbols	4	0	2
	rdxsrd	CurveDataLabel_dp	Curve Data Labels PC,PI, PT	0	0	2
	rdxsrd	DimLines_dp	Dimension Lines, Corresponding Terminators, Equation Lines	0	0	1
X	rdxsrd	Ditch_px	Ditch Top for Cross Sections	7	0	2
X	rdxsrd	DitchBot_px	Ditch Bottom for Cross Sections	10	0	2
X	rdxsrd	DitchPavt_px	Ditch Pavement for Cross Sections	3	0	3
	rdxsrd	DrainAlert_px	Alert Symbology for Structural Elements on Cross Sections	3	0	2
	rdxsrd	DrainMisc_ex	All types of miscellaneous drainage elements (Existing)	10	3 / DGN3	1
X	rdxsrd	DrainStruct_ex	All Drainage Structures for Cross Sections (Existing)	10	3 / DGN3	1
X	rdxsrd	DrainStruct_px	Misc Drainage Structures and Elements for XSectionsCross Sections	10	0	2
X	rdxsrd	Driveway_ex	Driveway Lines on Cross Sections - Existing	7	2 / DGN2	2
X	rdxsrd	Driveway_px	Driveway Lines on Cross Sections	7	0	2
X	rdxsrd	DrivewayBase_px	Proposed Driveway SubgradeSub-grade	3	0	2
	rdxsrd	Earthwork1_px	Earthwork (color 0)	0	0	1
	rdxsrd	Earthwork2_px	Earthwork (color 1)	1	0	1
	rdxsrd	Earthwork3_px	Earthwork (color 2)	2	0	1
	rdxsrd	Earthwork4_px	Earthwork (color 3)	3	0	1
	rdxsrd	Earthwork5_px	Earthwork (color 4)	4	0	1
X	rdxsrd	EaseLicLine	Easement License Agreement Line	5	6 / DGN6	0
X	rdxsrd	EaseLine_ep	Easement Lines (Existing)	1	RW-Easement	1
X	rdxsrd	EasePerpLine_px	Easement Lines Perpetual on Cross Sections	4	RW-PerpetualEasement	12
X	rdxsrd	EaseTempLine_px	Easement Lines Temporary on Cross Sections	6	RW-TemporaryEasement	0
X	rdxsrd	Endwall_px	Endwall for Cross Sections	10	0	2
	rdxsrd	ExcavationLimits_dp	Excavation Limits on Cross Sections	0	0	1
	rdxsrd	Fence_ex	Fence Lines on Cross Sections (Existing)	6	3 / DGN3	1
	rdxsrd	Fence_px	Fence Lines on Cross Sections	6	RD-Fence	2
X	rdxsrd	FES_px	Flared End Sections for Cross Sections	10	0	2
X	rdxsrd	FOCBur_ex	Fiber Optics Cable (Buried) for XSectionsCross Sections (Existing)	6	2 / DGN2	1
X	rdxsrd	FOCBur_px	Fiber Optics Cable (Buried) for XSectionsCross Sections	6	0	1
X	rdxsrd	Gas_ex	Gas Pipe and Fittings, Misc for XsectionsCross Sections (Existing)	4	2 / DGN2	1
X	rdxsrd	Gas_px	Gas Pipe and Fittings, Misc for XsectionsCross Sections	4	0	1
	rdxsrd	GeotechFillPatt1	Geotechnical Fill Pattern - (earth, wood, muck, concrete, rock, riprap) as defined in project	3	0	0
	rdxsrd	GeotechFillPatt1_px	Geotechnical Fill Pattern - (earth, wood, muck, concrete, rock, riprap) as defined in project	3	0	0
	rdxsrd	GeotechFillPatt2	Geotechnical Fill Pattern - clay, sand	0	1 / DGN1	0
	rdxsrd	GeotechFillPatt2_px	Geotechnical Fill Pattern - clay, sand	0	1 / DGN1	0
	rdxsrd	GeotechFillPatt3	Geotechnical Fill Pattern - shell	3	1 / DGN1	0
	rdxsrd	GeotechFillPatt3_px	Geotechnical Fill Pattern - shell	3	1 / DGN1	0
	rdxsrd	GeotechFillPatt4	Geotechnical Fill Pattern - sand	4	0	0
	rdxsrd	GeotechFillPatt4_px	Geotechnical Fill Pattern - sand	4	0	0

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
	rdxsrd	GeotechFillPatt5	Geotechnical Fill Pattern - coquina	1	0	1
	rdxsrd	GeotechFillPatt5_px	Geotechnical Fill Pattern - coquina	1	0	1
	rdxsrd	GeotechFillPatt6	Geotechnical Fill Pattern - limestone	2	0	0
	rdxsrd	GeotechFillPatt6_px	Geotechnical Fill Pattern - limestone	2	0	0
	rdxsrd	GeotechFillPatt7	Geotechnical Fill Pattern - gravel	6	0	0
	rdxsrd	GeotechFillPatt7_px	Geotechnical Fill Pattern - gravel	6	0	0
	rdxsrd	GeotechFillPatt8	Geotechnical Fill Pattern - silt	0	0	1
	rdxsrd	GeotechFillPatt8_px	Geotechnical Fill Pattern - silt	0	0	1
	rdxsrd	GeotechMisc	Miscellaneous Geotechnical Elements	0	0	1
	rdxsrd	GPKDrBack_dp	Back Point on Drainage Cells	2	2 / 0	2
	rdxsrd	GPKDrBottom_dp	Bottom Point on Drainage Cells	3	3 / 0	2
	rdxsrd	GPKDrCellIns_dp	Cell Insertion Point on Drainage Cells	4	4 / 0	2
	rdxsrd	GPKDrCentroid_dp	Point on Centroid for Drainage	7	7 / 0	2
	rdxsrd	GPKDrElv	Location point for drainage cells	5	5 / 0	2
	rdxsrd	GPKDrFront_dp	Front Point on Drainage Cells	1	1 / 0	2
	rdxsrd	GPKDrPipe_dp	Point on Drainage Pipe	6	6 / 0	2
	rdxsrd	GPKDrPipeCir_dp	Point on Pipe Circular	6	6 / 0	0
	rdxsrd	GridMaj_dp	Grid Lines Major in Profile and Cross Section	3	0	1
	rdxsrd	GridMin_dp	Grid Lines Minor in Profile and Cross Section	0	0	0
	rdxsrd	GridMinG_dp	Grid Lines Minor Sub 2 in Cross Section Sheets	20	0	0
	rdxsrd	GridMinSub_dp	Grid Lines Minor Sub in Cross Section Sheets	20	0	0
X	rdxsrd	Guardrail_ex	Guardrail Lines on Cross Sections - Existing	0	2 / DGN2	2
X	rdxsrd	GuardrailPanel_px	Guardrail Component Property and Model Break Line for 3D Guardrail Panels	11	0	1
X	rdxsrd	GuardrailPost_px	Guardrail Component Property and Model Break Line for 3D Guardrail Posts	10	0	0
	rdxsrd	ImageAttachment_dp	Image AttachmentstAttachments	0	0	0
X	rdxsrd	Inlet_px	Inlets on Cross Sections	10	0	2
X	rdxsrd	InletBottom_px	Inlet Bottom on Cross Sections (All Types)	10	0	2
	rdxsrd	KeyShtMisc	Key sheet Miscellaneous Items	0	0	2
X	rdxsrd	LARWLine_ex	Limited Access Right of Way on XSectionsCross Sections (Existing)	4	RW-LimitedAccess-Existing	1
X	rdxsrd	LARWLine_px	Limited Access ROW Lines on Cross Sections	4	RW-LimitedAccess-Proposed	2
X	rdxsrd	LateralLimits_px	Lateral Limits for Cross Sections	6	0	2
	rdxsrd	LeaderLine_dp	Leader Line and terminator with Text	0	0	1
	rdxsrd	Logo_dp	Consultant Engineer of Record Logo	0	0	1
X	rdxsrd	Manhole_px	Manhole on Cross Sections	10	0	2
	rdxsrd	MatchLineMask_dp	Mask Area for Match Line Overlap Areas (Autodesk)	0	0	0
X	rdxsrd	MES_px	Mitered End Section on Cross Sections	10	0	2
	rdxsrd	Miscellaneous0	Undefined proposed item - co blue wt 0	1	0	0
	rdxsrd	Miscellaneous1	Undefined proposed item - co blue wt 1	1	0	1
	rdxsrd	Miscellaneous2	Undefined proposed item - co blue wt 2	1	0	2
	rdxsrd	Miscellaneous3	Undefined proposed item - co green wt 0	2	0	0
	rdxsrd	Miscellaneous4	Undefined proposed item - co green wt 1	2	0	1
	rdxsrd	Miscellaneous5	Undefined proposed item - co green wt 2	2	0	2
	rdxsrd	Miscellaneous6	Undefined proposed item - co red wt 0	3	0	0
	rdxsrd	Miscellaneous7	Undefined proposed item - co red wt 1	3	0	1

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
	rdxsrd	Miscellaneous8	Undefined proposed item - co red wt 2	3	0	2
	rdxsrd	Miscellaneous9	Undefined proposed item - co red wt 3	3	0	3
	rdxsrd	NonPlottingEle_dp	Non plotting items such as construction elements and type 66 elements	4	0	0
	rdxsrd	Patternlines_ep	Cross Section Chain	2	1 / DGN1	0
	rdxsrd	PatternLines1_dp	Pattern Lines and Sample Lines (Civil 3D) for Cross Sections	3	0	2
	rdxsrd	PatternLines2_dp	Pattern Lines for XSectionsCross Sections alternate for side streets, critical xsectionsCross Sections or drainage structures	4	0	2
	rdxsrd	PatternLines3_dp	Pattern Lines for XSectionsCross Sections alternate for side streets, critical xsectionsCross Sections or drainage structures	5	0	2
X	rdxsrd	PavedMedianBase_px	Proposed Paved Median SubgradeSub-grade	3	0	2
	rdxsrd	PavtAsph_ep	Asphalt Pavement Edge	0	3 / DGN3	1
X	rdxsrd	PavtAsphalt_px	Asphalt Pavement for Cross Sections and Components in Models	1	0	2
X	rdxsrd	PavtBase_ex	Base Material for Cross Sections (All Types) (Existing)	3	3 / DGN3	1
X	rdxsrd	PavtBase_px	Base Material for Cross Sections (All Types)	3	0	2
X	rdxsrd	PavtConcrete_px	Concrete Pavement for Cross Sections and Components in Models	0	0	2
X	rdxsrd	PavtMilling_px	Asphalt Milling Lines on Cross Sections	7	0	2
X	rdxsrd	PavtMisc_px	Miscellaneous Pavement on Cross Sections	1	0	2
X	rdxsrd	PavtOverbuild_px	Pavement Overbuild Areas on Cross Sections - Component Property	4	0	2
X	rdxsrd	PavtOverlay_px	Pavement Overlay for Cross Sections - Component Property	1	0	2
X	rdxsrd	PavtOverlay1_px	Pavement Overlay for Cross Sections - Component Property	14	0	2
X	rdxsrd	PavtOverlay2_px	Pavement Overlay for Cross Sections - Component Property	7	0	2
X	rdxsrd	PavtStabilization_px	Stabilization for Cross Sections	5	2 / DGN2	2
	rdxsrd	PayItem_dp	Pay Item Number Label Elements	4	0	2
	rdxsrd	PipeCulvert_ep	Pipe Culvert	10	3 / DGN3	1
X	rdxsrd	PipeCulvert_pr	Pipe Culvert in Profile	3	0	2
X	rdxsrd	PipeCulvert_px	Pipe Culvert for Cross Section View	10	0	2
X	rdxsrd	PlotBorder_dp	Plot Border	3	0	0
	rdxsrd	PointLocator_ep	Point Locator Symbol	4	0	0
X	rdxsrd	Pond_px	Pond Lines on Cross Sections	2	0	2
X	rdxsrd	Power_ex	Power on Cross Sections (Existing)	3	2 / DGN2	1
X	rdxsrd	Power_px	Power on Cross Sections	3	0	1
X	rdxsrd	PropertyLine_ep	Property Lines	3	0	0
X	rdxsrd	PvtAnalysisCrown_px	Pavement Analysis Crowning - Component Property	7	0	1
X	rdxsrd	PvtAnalysisFail_px	Pavement Analysis Failure - Component Property	3	0	1
X	rdxsrd	PvtAnalysisMax_px	Pavement Analysis Acceptable Maximum Range - Component Property	5	0	1
X	rdxsrd	PvtAnalysisMin_px	Pavement Analysis Acceptable Minimum Range - Component Property	4	0	1
X	rdxsrd	PvtAnalysisOptiml_px	Pavement Analysis Optimal - Component Property	2	0	1
X	rdxsrd	Railing_px	Proposed Railing Components and XS Shapes	9	0	2
	rdxsrd	ReferencePt_dp	Survey and Construction Reference Point Details and Elements	4	0	2
	rdxsrd	RegionBdry_dp	Boundary Line for Regions in Corridor Design (Autodesk)	0	0	0
X	rdxsrd	RipRap_px	Rip Rap, Rubble on Cross Sections	4	1 / DGN1	2
X	rdxsrd	RumbleStrip1	Rumble Strips Continuous Array	0	PM-RumbleSolid	2
X	rdxsrd	RumbleStrip2	Rumble Strips Skip Array	0	PM-RumbleSkip	2
X	rdxsrd	RWLine	Right of Way Lines	4	RW-Proposed	2

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
X	rdxsrd	RWLine_ep	Right of Way Lines (Existing)	3	RW-Existing	1
X	rdxsrd	RWLine_ex	ROW Lines on Cross Sections (Existing)	3	RW-Existing	1
X	rdxsrd	RWLine_px	ROW Lines on Cross Sections	4	RW-Proposed	2
X	rdxsrd	SanitaryFM_ex	Force Main Lines on Cross Sections (Existing)	2	2 / DGN2	1
X	rdxsrd	SanitaryFM_px	Force Main Lines on Cross Sections	2	0	1
X	rdxsrd	SanitarySewer_ex	Sanitary Sewer Lines on Cross Sections (Existing)	10	2 / DGN2	0
X	rdxsrd	SanitarySewer_px	Sanitary Sewer Lines on Cross Sections	2	0	1
X	rdxsrd	SanitarySewerEff_px	Sanitary Effluent for Cross Sections	9	0	0
	rdxsrd	Scratch1_dp	A scratch level for temporary or informational items	4	0	0
	rdxsrd	Scratch2_dp	A scratch level for temporary or informational items	5	0	0
	rdxsrd	ScratchEle_dp	Level for Draft Elements, Temporary Elements, Etc. Do Not Plot	3	0	0
	rdxsrd	ScratchEle2_dp	Level for Draft Elements, Temporary Elements, Etc. Do Not Plot	4	0	0
	rdxsrd	SheetBorder_dp	Sheet Border	1	0	4
	rdxsrd	SheetLines_dp	Sheet Lines	1	0	2
	rdxsrd	SheetLinesMisc1_dp	Sheet Lines	1	0	0
	rdxsrd	SheetLinesMisc2_dp	Sheet Lines	2	0	2
	rdxsrd	SheetLinesMisc3_dp	Sheet Lines	3	0	2
	rdxsrd	SheetLinesMisc4_dp	Sheet Lines	4	0	2
X	rdxsrd	ShldrBase_px	Bottom of Proposed Paved Shoulder Base	3	0	2
X	rdxsrd	ShldrBaseTop_px	Top of Proposed Paved Shoulder Base	3	0	2
X	rdxsrd	ShldrMilling_px	Shoulder Milling Component for Cross Sections - Component Property	7	0	2
X	rdxsrd	ShldrOverbuild_px	Shoulder Overbuild - Component Property	4	0	1
X	rdxsrd	ShldrOverlay_px	Shoulder Overlay - Component Property	1	0	1
X	rdxsrd	ShldrPaved_px	Paved Shoulder Lines on Cross Sections	1	0	2
X	rdxsrd	ShldrUnpaved_px	Grass Shoulder Lines on Cross Sections	2	0	2
X	rdxsrd	Sidewalk_ex	Sidewalk Elements in Cross Sections (Existing)	0	2 / DGN2	1
X	rdxsrd	Sidewalk_px	Sidewalk Elements in Cross Sections	0	0	2
	rdxsrd	SidewalkBack_er	Back of Sidewalk Line Profile (Existing)	2	2 / DGN2	1
	rdxsrd	SidewalkBack_pr	Back of Sidewalk Line Profile	5	0	2
X	rdxsrd	SidewalkBase_px	Proposed Sidewalk SubgradeSub-grade	3	0	2
X	rdxsrd	Slopes_px	Slope Lines on Cross Sections	9	0	2
X	rdxsrd	SoilBoxes_px	Soil Boxes and Borings for Cross Sections	4	0	1
	rdxsrd	SpecialDetails_px	Special Details_XS	6	0	1
	rdxsrd	StationTicL_dp	Station Tic Marks (Large) and Text	0	0	2
	rdxsrd	StationTicS_dp	Station Tic Marks (Small) and Text	0	0	2
X	rdxsrd	StreetLights_px	Street Lights for Cross Sections	3	0	1
	rdxsrd	Structure_px	Signal and Sign Structures on Cross Sections	0	0	2
X	rdxsrd	SubDsgn_px	Sub Design for Cross Sections including subbasesub-base	4	0	1
X	rdxsrd	Subsoil_px	Subsoil Or Undercut for Cross Sections	4	0	2
X	rdxsrd	SubsoilFinal_px	Subsoil Final for Multiline	18	0	1
X	rdxsrd	SubsoilProp_px	Subsoil Proposed for Multiline	8	0	1
	rdxsrd	SumBoxBorder_dp	Summary Boxes Borders	4	0	3
	rdxsrd	SumBoxLines_dp	Summary Boxes Lines and Miscellaneous Items	4	0	1
	rdxsrd	SumBoxLinesMin_dp	Summary Boxes Lines Minor Line and Miscellaneous Items	4	0	0

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
	rdxsrd	Tables_dp	Data Tables and All Autodesk Tables	0	0	1
X	rdxsrd	TeleBur_ex	Telephone for Cross Sections (Buried - Miscellaneous - Existing)	6	2 / DGN2	1
X	rdxsrd	TeleBur_px	Telephone for Cross Sections (Buried) (Miscellaneous)	6	0	1
X	rdxsrd	TemplateBottom_px	Bottom of Template for Multiline	6	0	1
X	rdxsrd	TemplateFinal_px	Final Template for Multiline	2	0	1
X	rdxsrd	TemplateTop_px	Top of Template for Multiline	7	0	1
X	rdxsrd	TerrainLine_ex	Existing Ground Line for Multiline	5	0	1
	rdxsrd	TextAlert	Text - An Alert Label to Highlight a Problem	3	0	2
	rdxsrd	TextBLStation	Text - B/L Station and Tics	0	0	2
	rdxsrd	TextConstEle	Text - Construction Element	0	0	1
	rdxsrd	TextCurveData	Text - Curve Data Note	0	0	2
	rdxsrd	TextDetails	Text - Detail Notes	4	0	2
	rdxsrd	TextElevLabel	Elevation Labels	4	0	0
	rdxsrd	TextGeotech	Text for soil borings and labels	0	0	2
	rdxsrd	TextLabel	Text - Label	0	0	2
	rdxsrd	TextLandscape	Text - Landscape Labels	0	0	1
	rdxsrd	TextMajor	Text - Major	0	0	5
	rdxsrd	TextMinor	Text - Minor	0	0	0
	rdxsrd	TextMisc	Text - Miscellaneous	0	0	1
	rdxsrd	TextNotes	Text - Notes	4	0	1
	rdxsrd	TextProfLabel	Text - Profile, Horizontal and Vertical Axis Labels	0	0	2
	rdxsrd	TextProjLabel	Text - Begin and End Project label with leader lines	1	0	2
	rdxsrd	TextPtLabel	Point Labels	4	0	0
	rdxsrd	TextShtNo	Text - Sheet Number	0	0	2
	rdxsrd	TextSurveyLabel	Survey Text Labels	0	0	0
	rdxsrd	TextTables	Text - KeysheetKey sheet Indexes and Table Data	4	0	2
	rdxsrd	TextTitle	Text - Title	0	0	3
	rdxsrd	TextXSBL_dp	Cross Section Baseline Labels	0	0	2
	rdxsrd	TextXSDrain_ex	Existing Drainage Labels	10	0	2
	rdxsrd	TextXSDrain_px	Proposed Drainage Labels	10	0	2
	rdxsrd	TextXSElev	Text - Cross Section Elevations	2	0	1
	rdxsrd	TextXSElev_ex	Existing cross section elevations	2	0	1
	rdxsrd	TextXSElev_px	Proposed cross section elevations	0	0	1
	rdxsrd	TextXSGPKPts_dp	Points Labeled on Cross Sections	4	0	0
	rdxsrd	TextXSNotes_dp	Cross Section Notes	0	0	2
	rdxsrd	TextXSSlope_dp	Cross Section Slope Labels (rise:run format)	0	0	2
	rdxsrd	TextXSSlopePvt_dp	Cross Section Pavement Slope Labels	0	0	2
X	rdxsrd	TrafSeparator_ex	Traffic Separator (All Types) on Cross Sections (Existing)	6	2 / DGN2	1
X	rdxsrd	TrafSeparator_px	Traffic Separator (All Types) on Cross Sections	6	0	2
X	rdxsrd	TrafSeparatorBase_px	Proposed Traffic Separator SubgradeSub-grade	3	0	2
	rdxsrd	TypicalMisc	Typical Miscellaneous Items	0	0	2
	rdxsrd	Utility_er	Existing Utilities in Profile View	3	2 / DGN2	1
	rdxsrd	Utility_pr	Proposed Utilities in Profile View	3	0	2
	rdxsrd	UtilsMisc_ex	Miscellaneous Utility Items on Cross Sections (Existing)	8	2 / DGN2	1

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
	rdxsrd	UtilsMisc_px	Miscellaneous Utility Items on Cross Sections	8	0	1
	rdxsrd	Vehicle	Vehicle for Calculating Turning Radius	7	0	2
	rdxsrd	Viewport	Viewport (For AutoCAD Use)	3	0	0
	rdxsrd	VoidArea_dx	Void Area_XS	1	0	0
X	rdxsrd	WallBarrier_ex	Barrier Wall for Cross Section (Existing)	6	3 / DGN2	1
X	rdxsrd	WallBarrier_px	Barrier Wall for Cross Section	6	0	2
X	rdxsrd	WallFooter_px	Wall Footer (Concrete) - For Component symbology/material on all wall footers/leveling pads	2	0	1
X	rdxsrd	WallGravBase_px	Proposed Gravity Wall Sub-grade	3	0	2
X	rdxsrd	WallGravity_px	Gravity Wall for Cross Sections	11	0	2
X	rdxsrd	WallMedianBase_px	Proposed Median Wall Sub-grade	3	0	2
X	rdxsrd	WallRetain_px	Retaining Walls on Cross Sections	6	0	1
X	rdxsrd	WallShldrBase_px	Proposed Shoulder Wall Sub-grade	3	0	2
X	rdxsrd	Water_ex	Water for Cross Sections (Existing)	1	2 / DGN2	1
X	rdxsrd	Water_px	Water for Cross Sections	1	0	1
X	rdxsrd	WaterNP_px	Raw Water Pipes for Cross Sections	1	0	1
	rdxsrd	Wetland_ex	Wetland Boundary for Cross Sections (Existing)	2	RD-Wetland-Existing	1
	rdxsrd	WetlandEdge_ep	Edge of Mangrove, Wetlands (Marsh or Swamp)	2	RD-Wetland-Existing	0
	rdxsrd	Xreference01_dp	Reference Files (For AutoCAD Use)	0	0	1
	rdxsrd	Xreference02_dp	Reference Files (For AutoCAD Use)	0	0	1
	rdxsrd	Xreference03_dp	Reference Files (For AutoCAD Use)	0	0	1
	rdxsrd	Xreference04_dp	Reference Files (For AutoCAD Use)	0	0	1
X	rdxsrd	XSBaseTop_px	Top of Proposed Base	3	0	2
	rdxsrd	XSCell	GEOPAK Cross Section Cell/Block and Profile Cell/Block	8	0	1
X	rdxsrd	XSExtendGrdLine_ex	Extend Ground Lines for Cross Sections (Existing)	21	2 / DGN2	1
X	rdxsrd	XSGrdLine_ex	Ground Lines for Cross Sections (Existing)	2	2 / DGN2	1
X	rdxsrd	XSGrdLine_px	Roadway Ground Lines on Cross Sections	1	0	2
	rdxsrd	XSMisc_ex	Roadway Miscellaneous Items on Cross Sections (Existing)	4	3 / DGN3	1
	rdxsrd	XSMisc_px	Cross Section Miscellaneous Items	0	0	2
	rdxsrd	XSPt_ep	Cross Section Point, Station	2	1 / DGN1	0
	rdxsrd	XSShapeDep01_dp	Cross Section Shape Dependent	11	0	2
	rdxsrd	XSShapeDep02_dp	Cross Section Shape Dependent	12	0	2
	rdxsrd	XSShapeDep03_dp	Cross Section Shape Dependent	13	0	2
	rdxsrd	XSShapeDep04_dp	Cross Section Shape Dependent	14	0	2
	rdxsrd	XSShapeDep05_dp	Cross Section Shape Dependent	15	0	2
	rdxsrd	XSShapeDep06_dp	Cross Section Shape Dependent	16	0	2
	rdxsrd	XSShapeDep07_dp	Cross Section Shape Dependent	17	0	2
	rdxsrd	XSShapeDep08_dp	Cross Section Shape Dependent	18	0	2
	rdxsrd	XSShapeDep09_dp	Cross Section Shape Dependent	19	0	2
	rdxsrd	XSShapeDep10_dp	Cross Section Shape Dependent	20	0	2
	rdxsrd	XSShapeIndep01_dp	Cross Section Shape Independent	1	0	2
	rdxsrd	XSShapeIndep02_dp	Cross Section Shape Independent	2	0	2
	rdxsrd	XSShapeIndep03_dp	Cross Section Shape Independent	3	0	2
	rdxsrd	XSShapeIndep04_dp	Cross Section Shape Independent	4	0	2

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
	rdxsrd	XSShapeIndep05_dp	Cross Section Shape Independent	5	0	2
	rdxsrd	XSShapeIndep06_dp	Cross Section Shape Independent	6	0	2
	rdxsrd	XSShapeIndep07_dp	Cross Section Shape Independent	7	0	2
	rdxsrd	XSShapeIndep08_dp	Cross Section Shape Independent	8	0	2
	rdxsrd	XSShapeIndep09_dp	Cross Section Shape Independent	9	0	2
	rdxsrd	XSShapeIndep10_dp	Cross Section Shape Independent	10	0	2
X	rdxsrd	XSTypical_px	Roadway Pavement Typical on Cross Sections	1	0	2

RDXSSP - Signing and Pavement Cross Section

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
	rdxssp	ActivePointCell_dp	Active Point Cell	4	0	10
	rdxssp	AdhocPoint_dp	Adhoc Points Placed by SheetInfo	0	4 / 0	0
	rdxssp	BaselineSurvey	Baseline Survey	0	0	2
X	rdxssp	Berm_px	Berm (Top, Front, or Back) for Cross Sections	10	0	2
X	rdxssp	Bridge_px	Bridge Component for Cross Sections - Component Property	0	0	2
X	rdxssp	CandG_ex	Curb and Gutter for Cross Sections (All Types) (Existing)	4	2 / DGN2	1
X	rdxssp	CandG_px	Curb and Gutter for Cross Sections (All Types)	4	0	2
X	rdxssp	CandGBase_px	Curb and Gutter Base on Cross Sections	3	0	1
X	rdxssp	CATVBur_ex	Cable TV and Miscellaneous on Cross Sections (Existing)	6	2 / DGN2	1
X	rdxssp	CATVBur_px	Cable TV and Miscellaneous on Cross Sections	6	0	1
	rdxssp	CLConst_dp	Center Line of Construction	0	0	2
	rdxssp	Cloud_dp	Construction Cloud	7	0	2
	rdxssp	COGO_dp	COGO Information	3	0	1
X	rdxssp	Concrete_px	Concrete Boundary Lines on Cross Sections	0	0	2
X	rdxssp	Conduit_ex	Conduit and Encasements on Cross Sections (Existing)	3	2 / DGN2	1
X	rdxssp	Conduit_px	Conduit and Encasements on Cross Sections	3	0	1
X	rdxssp	ConduitAG	Conduit – Above Ground	4	SG-ConduitAG-Proposed	1
X	rdxssp	ConduitBM	Conduit – Bridge Mount	5	SG-ConduitBM-Proposed	1
X	rdxssp	ConduitDB	Conduit – Directional Bore	2	SG-ConduitDB-Proposed	1
X	rdxssp	ConduitJB	Conduit – Jack & Bore Under Rail	3	SG-ConduitJB-Proposed	1
X	rdxssp	ConduitOT	Conduit – Open Trench	1	SG-ConduitOT-Proposed	1
	rdxssp	ConstArea_dp	Construction Area Crosshatch	0	0	1
	rdxssp	ConstLimits	Construction Limits	3	RW-LimitsofConst	2
	rdxssp	ConstLines	Construction Lines and References	1	0	0
	rdxssp	ConstLines_pm	Construction Lines	**4**	0	**0**
X	rdxssp	CrossWalk1	Emphasis Crosswalk 6ft High	0	PM-Stripe-6’ Crosswalk	4
X	rdxssp	CrossWalk2	Emphasis Crosswalk 10ft High	0	PM-Stripe-10’ Crosswalk	4
	rdxssp	CurveData_dp	Curve & Coordinate Data Elements incl PC, PT, PI symbols	4	0	2
	rdxssp	CurveDataLabel_dp	Curve Data Labels PC,PI, PT	0	0	2
X	rdxssp	Delineator	Delineators (All Types)	4	0	1
	rdxssp	DimLines_dp	Dimension Lines, Corresponding Terminators, Equation Lines	0	0	1

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
X	rdxssp	DirArrowsPavt	Pavement Marking Directional Arrows	0	0	1
X	rdxssp	Ditch_px	Ditch Top for Cross Sections	7	0	2
X	rdxssp	DitchBot_px	Ditch Bottom for Cross Sections	10	0	2
X	rdxssp	DitchPavt_px	Ditch Pavement for Cross Sections	3	0	3
	rdxssp	DrainAlert_px	Alert Symbology for Structural Elements on Cross Sections	3	0	2
	rdxssp	DrainMisc_ex	All types of miscellaneous drainage elements (Existing)	10	3 / DGN3	1
X	rdxssp	DrainStruct_ex	All Drainage Structures for Cross Sections (Existing)	10	3 / DGN3	1
X	rdxssp	DrainStruct_px	Misc Drainage Structures and Elements for XSectionsCross Sections	10	0	2
X	rdxssp	Driveway_ex	Driveway Lines on Cross Sections - Existing	7	2 / DGN2	2
X	rdxssp	Driveway_px	Driveway Lines on Cross Sections	7	0	2
X	rdxssp	DrivewayBase_px	Proposed Driveway SubgradeSub-grade	3	0	2
	rdxssp	Earthwork1_px	Earthwork (color 0)	0	0	1
	rdxssp	Earthwork2_px	Earthwork (color 1)	1	0	1
	rdxssp	Earthwork3_px	Earthwork (color 2)	2	0	1
	rdxssp	Earthwork4_px	Earthwork (color 3)	3	0	1
	rdxssp	Earthwork5_px	Earthwork (color 4)	4	0	1
X	rdxssp	EaseLicLine	Easement License Agreement Line	5	6 / DGN6	0
X	rdxssp	EaseLine_ep	Easement Lines (Existing)	1	RW-Easement	1
X	rdxssp	EasePerpLine_px	Easement Lines Perpetual on Cross Sections	4	RW-PerpetualEasement	1
X	rdxssp	EaseTempLine_px	Easement Lines Temporary on Cross Sections	6	RW-TemporaryEasement	0
X	rdxssp	Endwall_px	Endwall for Cross Sections	10	0	2
	rdxssp	ExcavationLimits_dp	Excavation Limits on Cross Sections	0	0	1
	rdxssp	Fence_ex	Fence Lines on Cross Sections (Existing)	6	3 / DGN3	1
X	rdxssp	Fence_px	Fence Lines on Cross Sections	6	RD-Fence	2
X	rdxssp	FES_px	Flared End Sections for Cross Sections	10	0	2
X	rdxssp	FOCBur_ex	Fiber Optics Cable (Buried) for XSectionsCross Sections (Existing)	6	2 / DGN2	1
X	rdxssp	FOCBur_px	Fiber Optics Cable (Buried) for XSectionsCross Sections	6	0	1
X	rdxssp	Gas_ex	Gas Pipe and Fittings, Misc for XsectionsCross Sections (Existing)	4	2 / DGN2	1
X	rdxssp	Gas_px	Gas Pipe and Fittings, Misc for XsectionsCross Sections	4	0	1
	rdxssp	GeotechFillPatt1	Geotechnical Fill Pattern - (earth, wood, muck, concrete, rock, riprap) as defined in project	3	0	0
	rdxssp	GeotechFillPatt1_px	Geotechnical Fill Pattern - (earth, wood, muck, concrete, rock, riprap) as defined in project	3	0	0
	rdxssp	GeotechFillPatt2	Geotechnical Fill Pattern - clay, sand	0	1 / DGN1	0
	rdxssp	GeotechFillPatt2_px	Geotechnical Fill Pattern - clay, sand	0	1 / DGN1	0
	rdxssp	GeotechFillPatt3	Geotechnical Fill Pattern - shell	3	1 / DGN1	0
	rdxssp	GeotechFillPatt3_px	Geotechnical Fill Pattern - shell	3	1 / DGN1	0
	rdxssp	GeotechFillPatt4	Geotechnical Fill Pattern - sand	4	0	0
	rdxssp	GeotechFillPatt4_px	Geotechnical Fill Pattern - sand	4	0	0
	rdxssp	GeotechFillPatt5	Geotechnical Fill Pattern - coquina	1	0	1
	rdxssp	GeotechFillPatt5_px	Geotechnical Fill Pattern - coquina	1	0	1
	rdxssp	GeotechFillPatt6	Geotechnical Fill Pattern - limestone	2	0	0
	rdxssp	GeotechFillPatt6_px	Geotechnical Fill Pattern - limestone	2	0	0
	rdxssp	GeotechFillPatt7	Geotechnical Fill Pattern - gravel	6	0	0
	rdxssp	GeotechFillPatt7_px	Geotechnical Fill Pattern - gravel	6	0	0

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
	rdxssp	GeotechFillPatt8	Geotechnical Fill Pattern - silt	0	0	1
	rdxssp	GeotechFillPatt8_px	Geotechnical Fill Pattern - silt	0	0	1
	rdxssp	GeotechMisc	Miscellaneous Geotechnical Elements	0	0	1
	rdxssp	GridMaj_dp	Grid Lines Major in Profile and Cross Section	3	0	1
	rdxssp	GridMin_dp	Grid Lines Minor in Profile and Cross Section	0	0	0
	rdxssp	GridMinG_dp	Grid Lines Minor Sub 2 in Cross Section Sheets	20	0	0
	rdxssp	GridMinSub_dp	Grid Lines Minor Sub in Cross Section Sheets	20	0	0
	rdxssp	GSBWFill	GuidSign Black and White Fill Level for GuidSign Cells	0	0	1
	rdxssp	GSColorFill	GuidSign Color Fill Level for GuidSign Cells	2	0	1
	rdxssp	GSDims	GuidSign Dimensions	0	0	1
	rdxssp	GSOutline	GuidSign Outline Level for GuidSign Cells	0	0	2
	rdxssp	GSSign	GuidSign Panel and Tag	7	0	0
X	rdxssp	Guardrail_ex	Guardrail Lines on Cross Sections - Existing	0	2 / DGN2	2
X	rdxssp	GuardrailPanel_px	Guardrail Component Property and Model Break Line for 3D Guardrail Panels	11	0	1
X	rdxssp	GuardrailPost_px	Guardrail Component Property and Model Break Line for 3D Guardrail Posts	10	0	0
	rdxssp	ImageAttachment_dp	Image AttachmentstAttachments	0	0	0
X	rdxssp	Inlet_px	Inlets on Cross Sections	10	0	2
X	rdxssp	InletBottom_px	Inlet Bottom on Cross Sections (All Types)	10	0	2
X	rdxssp	InterconCable	Cable Interconnect	1	SG-InterconCable-Proposed	1
X	rdxssp	InterconCable_ep	Interconnect Cable (Existing)	1	SG-InterconCable-Existing	0
X	rdxssp	JunctBoxA	Junction Boxes (Aerial)	3	0	1
X	rdxssp	JunctBoxA_ep	Junction Boxes (Aerial) (Existing)	3	1 / DGN1	0
	rdxssp	KeyShtMisc	Key sheet Miscellaneous Items	0	0	2
	rdxssp	LaneDirArrow	Lane Directional Arrow	0	0	1
X	rdxssp	LARWLine_ex	Limited Access Right of Way on XSectionsCross Sections (Existing)	4	RW-LimitedAccess-Existing	1
X	rdxssp	LARWLine_px	Limited Access ROW Lines on Cross Sections	4	RW-LimitedAccess-Proposed	2
X	rdxssp	LateralLimits_px	Lateral Limits for Cross Sections	6	0	2
	rdxssp	LeaderLine_dp	Leader Line and terminator with Text	0	0	1
	rdxssp	LightingMisc	Lighting Miscellaneous Items	4	0	2
X	rdxssp	LightingSP	Lighting Service Points	0	0	1
X	rdxssp	LoadCenter	Load Center	2	0	1
X	rdxssp	LoadCenter_ep	Load Center (Existing)	2	5 / DGN5	0
	rdxssp	Logo_dp	Consultant Engineer of Record Logo	0	0	1
X	rdxssp	Luminaire	Luminaires (Decorative - All Types)	2	0	1
X	rdxssp	Manhole_px	Manhole on Cross Sections	10	0	2
X	rdxssp	MES_px	Mitered End Section on Cross Sections	10	0	2
X	rdxssp	MetalButtons	Metal Buttons	0	0	2
	rdxssp	Miscellaneous0	Undefined proposed item - co blue wt 0	1	0	0
	rdxssp	Miscellaneous1	Undefined proposed item - co blue wt 1	1	0	1
	rdxssp	Miscellaneous2	Undefined proposed item - co blue wt 2	1	0	2
	rdxssp	Miscellaneous3	Undefined proposed item - co green wt 0	2	0	0
	rdxssp	Miscellaneous4	Undefined proposed item - co green wt 1	2	0	1
	rdxssp	Miscellaneous5	Undefined proposed item - co green wt 2	2	0	2
	rdxssp	Miscellaneous6	Undefined proposed item - co red wt 0	3	0	0
	rdxssp	Miscellaneous7	Undefined proposed item - co red wt 1	3	0	1

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
	rdxssp	Miscellaneous8	Undefined proposed item - co red wt 2	3	0	2
	rdxssp	Miscellaneous9	Undefined proposed item - co red wt 3	3	0	3
	rdxssp	NonPlottingEle_dp	Non plotting items such as construction elements and type 66 elements	4	0	0
	rdxssp	NorthArw_dp	North Arrows	0	0	2
X	rdxssp	ObjectMarker	Object and Reflective Markers	3	0	1
X	rdxssp	OverheadSign	Overhead Sign Panels	0	0	2
X	rdxssp	OverheadSign_ep	Overhead Sign Panels (Existing)	0	3 / DGN3	1
X	rdxssp	OverheadStr	Mast Arm, Truss Assemblies, Signal Arms and Supports	0	0	2
X	rdxssp	OverheadStr_ep	Mast Arm, Truss Assemblies, Signal Arms and Supports (Existing)	0	3 / DGN3	1
	rdxssp	Patternlines_ep	Cross Section Chain	2	1 / DGN1	0
	rdxssp	PatternLines1_dp	Pattern Lines and Sample Lines (Civil 3D) for Cross Sections	3	0	2
	rdxssp	PatternLines2_dp	Pattern Lines for XSectionsCross Sections alternate for side streets, critical xsectionsCross Sections or drainage structures	4	0	2
	rdxssp	PatternLines3_dp	Pattern Lines for XSectionsCross Sections alternate for side streets, critical xsectionsCross Sections or drainage structures	5	0	2
X	rdxssp	PavedMedianBase_px	Proposed Paved Median SubgradeSub-grade	3	0	2
	rdxssp	PavtAsph_ep	Asphalt Pavement Edge	0	3 / DGN3	1
X	rdxssp	PavtAsphalt_px	Asphalt Pavement for Cross Sections and Components in Models	1	0	2
X	rdxssp	PavtBase_ex	Base Material for Cross Sections (All Types) (Existing)	3	3 / DGN3	1
X	rdxssp	PavtBase_px	Base Material for Cross Sections (All Types)	3	0	2
X	rdxssp	PavtConcrete_px	Concrete Pavement for Cross Sections and Components in Models	0	0	2
X	rdxssp	PavtMessage	Pavement Message (All types)(All Types)	0	0	1
X	rdxssp	PavtMessage_ep	Pavement Message (Existing - All types)(All Types)	0	2 / DGN2	0
X	rdxssp	PavtMilling_px	Asphalt Milling Lines on Cross Sections	7	0	2
X	rdxssp	PavtMisc_px	Miscellaneous Pavement on Cross Sections	1	0	2
X	rdxssp	PavtOverbuild_px	Pavement Overbuild Areas on Cross Sections - Component Property	4	0	2
X	rdxssp	PavtOverlay_px	Pavement Overlay for Cross Sections - Component Property	1	0	2
X	rdxssp	PavtOverlay1_px	Pavement Overlay for Cross Sections - Component Property	14	0	2
X	rdxssp	PavtOverlay2_px	Pavement Overlay for Cross Sections - Component Property	7	0	2
X	rdxssp	PavtStabilization_px	Stabilization for Cross Sections	5	2 / DGN2	2
	rdxssp	PayItem_dp	Pay Item Number Label Elements	4	0	2
X	rdxssp	PipeCulvert_ep	Pipe Culvert	10	3 / DGN3	1
X	rdxssp	PipeCulvert_pr	Pipe Culvert in Profile	3	0	2
X	rdxssp	PipeCulvert_px	Pipe Culvert for Cross Section View	10	0	2
X	rdxssp	PlotBorder_dp	Plot Border	3	0	0
X	rdxssp	PMCeramic	Pavement Markers Ceramic	0	0	1
	rdxssp	PMMisc	Pavement Marking Miscellaneous Items	0	0	2
X	rdxssp	PMStripe(10-10-20)	Pavement Marking 10/10/20 Skip Traffic Stripe 6in Contrast	0	PM-Stripe-10'_20'Skip / PM-Stripe-SKIP 10-10-20	2
X	rdxssp	PMStripe12B	Pavement Marking Traffic Stripe 12in Black	3	0	4
X	rdxssp	PMStripe12W	Pavement Marking Traffic Stripe 12in White	0	0	4
X	rdxssp	PMStripe12W(3-9)	Pavement Marking 3/9 Skip Traffic Stripe 12in White	0	0 / PM-Stripe-SKIP 3-9	4
X	rdxssp	PMStripe12Y	Pavement Marking Traffic Stripe 12in Yellow	4	0	4
X	rdxssp	PMStripe16B	Pavement Marking Traffic Stripe 16in Black	3	0	5
X	rdxssp	PMStripe16W	Pavement Marking Traffic Stripe 16in White	0	0	5

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
X	rdxssp	PMStripe16Y	Pavement Marking Traffic Stripe 16in Yellow	4	0	5
X	rdxssp	PMStripe18B	Pavement Marking Traffic Stripe 18in Black	3	0	6
X	rdxssp	PMStripe18W	Pavement Marking Traffic Stripe 18in White	0	0	6
X	rdxssp	PMStripe18Y	Pavement Marking Traffic Stripe 18in Yellow	4	0	6
X	rdxssp	PMStripe24W	Pavement Marking Traffic Stripe 24in White	0	0	7
X	rdxssp	PMStripe24Y	Pavement Marking Traffic Stripe 24in Yellow	4	0	7
X	rdxssp	PMStripe6B	Pavement Marking Traffic Stripe 6in Black	3	0 / PM-Stripe-SKIP 10-30	2
X	rdxssp	PMStripe6B(10-30)	Pavement Marking 10/30 Skip Traffic Stripe 6in Black	3	0	2
X	rdxssp	PMStripe6Bl	Pavement Marking Traffic Stripe 6in Blue	1	0	2
X	rdxssp	PMStripe6DY	Pavement Marking Traffic Stripe 6in Double Yellow	4	0	2
X	rdxssp	PMStripe6W	Pavement Marking Traffic Stripe 6in White	0	0	2
X	rdxssp	PMStripe6W(10-30)	Pavement Marking 10/30 Skip Traffic Stripe 6in White	0	0 / PM-Stripe-SKIP 10-30	2
X	rdxssp	PMStripe6W(2-4)	Pavement Marking 2/4 Skip Traffic Stripe 6in White	0	0 / PM-Stripe-SKIP 2-4	2
X	rdxssp	PMStripe6W(3-9)	Pavement Marking 3/9 Skip Traffic Stripe 6in White	0	0 / PM-Stripe-SKIP 3-9	2
X	rdxssp	PMStripe6W(6-10)	Pavement Marking 6/10 Skip Traffic Stripe 6in White	0	0 / PM-Stripe-SKIP 6-10	2
X	rdxssp	PMStripe6Y	Pavement Marking Traffic Stripe 6in Yellow	4	0	2
X	rdxssp	PMStripe6Y(10-30)	Pavement Marking 10/30 Skip Traffic Stripe 6in Yellow	4	0 / PM-Stripe-SKIP 10-30	2
X	rdxssp	PMStripe6Y(2-4)	Pavement Marking 2/4 Skip Traffic Stripe 6in Yellow	4	0 / PM-Stripe-SKIP 2-4	2
X	rdxssp	PMStripe6Y(6-10)	Pavement Marking 6/10 Skip Traffic Stripe 6in Yellow	4	0 / PM-Stripe-SKIP 6-10	2
X	rdxssp	PMStripe8B	Pavement Marking Traffic Stripe 8in Black	3	0	3
X	rdxssp	PMStripe8W	Pavement Marking Traffic Stripe 8in White	0	0	3
X	rdxssp	PMStripe8W(3-9)	Pavement Marking 3/9 Skip Traffic Stripe 8in White	0	0 / PM-Stripe-SKIP 3-9	2
X	rdxssp	PMStripe8Y	Pavement Marking Traffic Stripe 8in Yellow	4	0	3
X	rdxssp	PMStripe9C(10-30)	Pavement Marking 10/30 Skip Traffic Stripe 9in Contrast	0	0 / PM-Stripe-SKIP 10-30	2
X	rdxssp	PMStripeVibeWL	Pavement Marking Auditory and Vibratory 6in White (Left)	0	PM-Stripe-VibratoryLeft / PM-Stripe-Vibratory	2
X	rdxssp	PMStripeVibeWR	Pavement Marking Auditory and Vibratory 6in White (Right)	0	PM-Stripe-VibratoryRight / PM-Stripe-Vibratory	2
X	rdxssp	PMStripeVibeYL	Pavement Marking Auditory and Vibratory 6in Yellow (Left)	4	PM-Stripe-VibratoryLeft / PM-Stripe-Vibratory	2
X	rdxssp	PMStripeVibeYR	Pavement Marking Auditory and Vibratory 6in Yellow (Right)	4	PM-Stripe-VibratoryRight / PM-Stripe-Vibratory	2
	rdxssp	PointLocator_ep	Point Locator Symbol	4	0	0
X	rdxssp	PoleConc	Concrete Strain Pole	0	0	2
X	rdxssp	PoleConc_ep	Concrete Strain Pole (Existing)	0	2 / DGN2	1
X	rdxssp	PoleFound	Pole Foundation	0	0	2

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
X	rdxssp	PoleLight	Light Pole	2	0	1
X	rdxssp	PoleLight_ep	Light Pole (Existing)	2	2 / DGN2	1
X	rdxssp	PoleLightHM	High Mast Light Pole	3	0	1
X	rdxssp	PoleLightHM_ep	High Mast Light Pole (Existing)	2	2 / DGN2	1
	rdxssp	PoleLightID	Light Pole Location / ID	4	0	1
X	rdxssp	PolePower	Power Pole w/ Transformer	3	0	2
X	rdxssp	PoleShared	Power Pole Electric (Above Ground) Shared w/ Transformer	3	0	2
X	rdxssp	PoleSteelStrain	Steel Strain Pole	0	0	2
X	rdxssp	PoleSteelStrain_ep	Steel Strain Pole (Existing)	0	2 / DGN2	1
X	rdxssp	PoleTel	Telephone Pole	6	0	2
X	rdxssp	PoleUtil	Utility Pole	0	0	2
X	rdxssp	PoleWoodStrain	Wood Strain Pole	0	0	2
X	rdxssp	PoleWoodStrain_ep	Wood Strain Pole (Existing)	0	2 / DGN2	1
X	rdxssp	Pond_px	Pond Lines on Cross Sections	2	0	2
X	rdxssp	Power_ex	Power on Cross Sections (Existing)	3	2 / DGN2	1
X	rdxssp	Power_px	Power on Cross Sections	3	0	1
X	rdxssp	PropertyLine_ep	Property Lines	3	0	0
X	rdxssp	PullBox	Pull Boxes (All Types)	3	0	1
X	rdxssp	PvtAnalysisCrown_px	Pavement Analysis Crowning - Component Property	7	0	1
X	rdxssp	PvtAnalysisFail_px	Pavement Analysis Failure - Component Property	3	0	1
X	rdxssp	PvtAnalysisMax_px	Pavement Analysis Acceptable Maximum Range - Component Property	5	0	1
X	rdxssp	PvtAnalysisMin_px	Pavement Analysis Acceptable Minimum Range - Component Property	4	0	1
X	rdxssp	PvtAnalysisOptiml_px	Pavement Analysis Optimal - Component Property	2	0	1
X	rdxssp	Railing_px	Proposed Railing Components and XS Shapes	9	0	2
	rdxssp	ReferencePt_dp	Survey and Construction Reference Point Details and Elements	4	0	2
X	rdxssp	ReflPaintWht	Reflective Paint - Island Nose (White)	0	0	3
X	rdxssp	ReflPaintYel	Reflective Paint - Island Nose (Yellow)	4	0	3
	rdxssp	RegionBdry_dp	Boundary Line for Regions in Corridor Design (Autodesk)	0	0	0
X	rdxssp	RipRap_px	Rip Rap, Rubble on Cross Sections	4	1 / DGN1	2
X	rdxssp	RPM_ep	Reflective Pavement Markers (Existing)	2	2 / DGN2	1
X	rdxssp	RPM1	Raised Pavement Markers, White	0	0	2
X	rdxssp	RPM2	Raised Pavement Markers, White - Red	3	0	2
X	rdxssp	RPM3	Raised Pavement Markers, Yellow	4	0	2
X	rdxssp	RPM4	Raised Pavement Markers, Yellow - Yellow	9	0	2
X	rdxssp	RPM5	Raised Pavement Markers, Yellow - Red	6	0	2
X	rdxssp	RPM6	Raised Pavement Markers, Blue	1	0	2
X	rdxssp	RumbleStrip1	Rumble Strips Continuous Array	0	PM-RumbleSolid	2
X	rdxssp	RumbleStrip2	Rumble Strips Skip Array	0	PM-RumbleSkip	2
X	rdxssp	RWLine	Right of Way Lines	4	RW-Proposed	2
X	rdxssp	RWLine_ep	Right of Way Lines (Existing)	3	RW-Existing	1
X	rdxssp	RWLine_ex	ROW Lines on Cross Sections (Existing)	3	RW-Existing	1
X	rdxssp	RWLine_px	ROW Lines on Cross Sections	4	RW-Proposed	2
X	rdxssp	SanitaryFM_ex	Force Main Lines on Cross Sections (Existing)	2	2 / DGN2	1
X	rdxssp	SanitaryFM_px	Force Main Lines on Cross Sections	2	0	1
X	rdxssp	SanitarySewer_ex	Sanitary Sewer Lines on Cross Sections (Existing)	10	2 / DGN2	0

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
X	rdxssp	SanitarySewer_px	Sanitary Sewer Lines on Cross Sections	2	0	1
X	rdxssp	SanitarySewerEff_px	Sanitary Effluent for Cross Sections	9	0	0
X	rdxssp	SawCuts	Saw Cuts	3	3 / DGN3	0
	rdxssp	Scale_dp	Bar Scale, Scale Label Elements	0	0	2
	rdxssp	Scratch1_dp	A scratch level for temporary or informational items	4	0	0
	rdxssp	Scratch2_dp	A scratch level for temporary or informational items	5	0	0
	rdxssp	ScratchEle_dp	Level for Draft Elements, Temporary Elements, Etc. Do Not Plot	3	0	0
	rdxssp	ScratchEle2_dp	Level for Draft Elements, Temporary Elements, Etc. Do Not Plot	4	0	0
	rdxssp	SheetBorder_dp	Sheet Border	1	0	4
	rdxssp	SheetLines_dp	Sheet Lines	1	0	2
	rdxssp	SheetLinesMisc1_dp	Sheet Lines	1	0	0
	rdxssp	SheetLinesMisc2_dp	Sheet Lines	2	0	2
	rdxssp	SheetLinesMisc3_dp	Sheet Lines	3	0	2
	rdxssp	SheetLinesMisc4_dp	Sheet Lines	4	0	2
X	rdxssp	ShldrBase_px	Bottom of Proposed Paved Shoulder Base	3	0	2
X	rdxssp	ShldrBaseTop_px	Top of Proposed Paved Shoulder Base	3	0	2
X	rdxssp	ShldrMilling_px	Shoulder Milling Component for Cross Sections - Component Property	7	0	2
X	rdxssp	ShldrOverbuild_px	Shoulder Overbuild - Component Property	4	0	1
X	rdxssp	ShldrOverlay_px	Shoulder Overlay - Component Property	1	0	1
X	rdxssp	ShldrPaved_px	Paved Shoulder Lines on Cross Sections	1	0	2
X	rdxssp	ShldrUnpaved_px	Grass Shoulder Lines on Cross Sections	2	0	2
X	rdxssp	Sidewalk_ex	Sidewalk Elements in Cross Sections (Existing)	0	2 / DGN2	1
X	rdxssp	Sidewalk_px	Sidewalk Elements in Cross Sections	0	0	2
	rdxssp	SidewalkBack_er	Back of Sidewalk Line Profile (Existing)	2	2 / DGN2	1
	rdxssp	SidewalkBack_pr	Back of Sidewalk Line Profile	5	0	2
X	rdxssp	SidewalkBase_px	Proposed Sidewalk SubgradeSub-grade	3	0	2
X	rdxssp	SignCantilever	Sign Symbol Cantilever	0	0	1
X	rdxssp	SignCantilever_ep	Sign Symbol Cantilever (Existing)	0	2 / DGN2	0
	rdxssp	SignDetail	Sign Details	0	0	2
	rdxssp	SignLettersAZ	Alphabet Cell Library Letter A-Z Numbers 0-9	0	0	0
	rdxssp	SignMisc	Miscellaneous Sign Symbols	1	0	2
	rdxssp	SignMisc_ep	Miscellaneous Sign Symbols (Existing)	1	1 / DGN1	1
X	rdxssp	SignPanel	Sign Panels - Regulatory	0	0	2
X	rdxssp	SignPanel_ep	Sign Panel Elements (Existing)	0	2 / DGN2	1
X	rdxssp	SignPanelBorder	Sign Panel Border on Sign Details	0	0	1
X	rdxssp	SignPanelC	Sign Panels - Civil	1	0	2
X	rdxssp	SignPanelDetRed	Sign Panel Details in Red	3	0	2
X	rdxssp	SignPanelG	Sign Panels - Guide	2	0	2
X	rdxssp	SignPanelI	Sign Panels - Special Interest	9	0	2
X	rdxssp	SignPanelT	Sign Panels - Construction	6	0	2
X	rdxssp	SignPanelW	Sign Panels - Warning	4	0	2
X	rdxssp	SignSpanwire	Span Wire Signing Assembly	2	0	1
X	rdxssp	SignSpanwire_ep	Span Wire Signing Assembly (Existing)	2	2 / DGN2	1
X	rdxssp	SignSpecial	Special Signs / Guide Signs	2	0	2
X	rdxssp	SignSupport	Ground Mounted Sign Support Symbol (All Types)	1	0	1

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
X	rdxssp	SignSymbol_px	Sign Structure and Foundation on Cross Sections	4	0	2
X	rdxssp	SignTruss	Sign Symbol Truss	3	0	1
X	rdxssp	SignTruss_ep	Sign Symbol Truss (Existing)	3	2 / DGN2	1
X	rdxssp	Slopes_px	Slope Lines on Cross Sections	9	0	2
X	rdxssp	SoilBoxes_px	Soil Boxes and Borings for Cross Sections	4	0	1
	rdxssp	SpecialDetails_px	Special Details_XS	6	0	1
	rdxssp	StationTicL_dp	Station Tic Marks (Large) and Text	0	0	2
	rdxssp	StationTicS_dp	Station Tic Marks (Small) and Text	0	0	2
X	rdxssp	StreetLights_px	Street Lights for Cross Sections	3	0	1
	rdxssp	Structure_px	Signal and Sign Structures on Cross Sections	0	0	2
X	rdxssp	SubDsgn_px	Sub Design for Cross Sections	4	0	1
X	rdxssp	Subsoil_px	Subsoil Or Undercut for Cross Sections	4	0	2
X	rdxssp	SubsoilFinal_px	Subsoil Final for Multiline	18	0	1
X	rdxssp	SubsoilProp_px	Subsoil Proposed for Multiline	8	0	1
	rdxssp	SumBoxBorder_dp	Summary Boxes Borders	4	0	3
	rdxssp	SumBoxLines_dp	Summary Boxes Lines and Miscellaneous Items	4	0	1
	rdxssp	SumBoxLinesMin_dp	Summary Boxes Lines Minor Line and Miscellaneous Items	4	0	0
	rdxssp	Tables_dp	Data Tables and All Autodesk Tables	0	0	1
X	rdxssp	TeleBur_ex	Telephone for Cross Sections (Buried - Miscellaneous - Existing)	6	2 / DGN2	1
X	rdxssp	TeleBur_px	Telephone for Cross Sections (Buried) (Miscellaneous)	6	0	1
X	rdxssp	TemplateBottom_px	Bottom of Template for Multiline	6	0	1
X	rdxssp	TemplateFinal_px	Final Template for Multiline	2	0	1
X	rdxssp	TemplateTop_px	Top of Template for Multiline	7	0	1
X	rdxssp	TerrainLine_ex	Existing Ground Line for Multiline	5	0	1
	rdxssp	TextBLStation	Text - B/L Station and Tics	0	0	2
	rdxssp	TextConstEle	Text - Construction Element	0	0	1
	rdxssp	TextCurveData	Text - Curve Data Note	0	0	2
	rdxssp	TextDetails	Text - Detail Notes	4	0	2
	rdxssp	TextElevLabel	Elevation Labels	4	0	0
	rdxssp	TextGeotech	Text for soil borings and labels	0	0	2
	rdxssp	TextLabel	Text - Label	0	0	2
	rdxssp	TextLandscape	Text - Landscape Labels	0	0	1
	rdxssp	TextMajor	Text - Major	0	0	5
	rdxssp	TextMinor	Text - Minor	0	0	0
	rdxssp	TextMisc	Text - Miscellaneous	0	0	1
	rdxssp	TextNotes	Text - Notes	4	0	1
	rdxssp	TextProfLabel	Text - Profile, Horizontal and Vertical Axis Labels	0	0	2
	rdxssp	TextProjLabel	Text - Begin and End Project label with leader lines	1	0	2
	rdxssp	TextPtLabel	Point Labels	4	0	0
	rdxssp	TextShtNo	Text - Sheet Number	0	0	2
	rdxssp	TextSurveyLabel	Survey Text Labels	0	0	0
	rdxssp	TextTables	Text - KeysheetKey sheet Indexes and Table Data	4	0	2
	rdxssp	TextTitle	Text - Title	0	0	3
	rdxssp	TextXSBL_dp	Cross Section Baseline Labels	0	0	2
	rdxssp	TextXSDrain_ex	Existing Drainage Labels	10	0	2

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
	rdxssp	TextXSDrain_px	Proposed Drainage Labels	10	0	2
	rdxssp	TextXSElev	Text - Cross Section Elevations	2	0	1
	rdxssp	TextXSElev_ex	Existing cross section elevations	2	0	1
	rdxssp	TextXSElev_px	Proposed cross section elevations	0	0	1
	rdxssp	TextXSGPKPts_dp	Points Labeled on Cross Sections	4	0	0
	rdxssp	TextXSNotes_dp	Cross Section Notes	0	0	2
	rdxssp	TextXSSlope_dp	Cross Section Slope Labels (rise:run format)	0	0	2
	rdxssp	TextXSSlopePvt_dp	Cross Section Pavement Slope Labels	0	0	2
X	rdxssp	TrafSeparator_ex	Traffic Separator (All Types) on Cross Sections (Existing)	6	2 / DGN2	1
X	rdxssp	TrafSeparator_px	Traffic Separator (All Types) on Cross Sections	6	0	2
X	rdxssp	TrafSeparatorBase_px	Proposed Traffic Separator SubgradeSub-grade	3	0	2
	rdxssp	TypicalMisc	Typical Miscellaneous Items	0	0	2
	rdxssp	Utility_er	Existing Utilities in Profile View	3	2 / DGN2	1
	rdxssp	Utility_pr	Proposed Utilities in Profile View	3	0	2
	rdxssp	UtilsMisc_ex	Miscellaneous Utility Items on Cross Sections (Existing)	8	2 / DGN2	1
	rdxssp	UtilsMisc_px	Miscellaneous Utility Items on Cross Sections	8	0	1
	rdxssp	Vehicle	Vehicle for Calculating Turning Radius	7	0	2
	rdxssp	Viewport	Viewport (For AutoCAD Use)	3	0	0
	rdxssp	VoidArea_dx	Void Area_XS	1	0	0
X	rdxssp	WallBarrier_ex	Barrier Wall for Cross Section (Existing)	6	3 / DGN3	1
X	rdxssp	WallBarrier_px	Barrier Wall for Cross Section	6	0	2
X	rdxssp	WallFooter_px	Wall Footer (Concrete) - For Component symbology/material on all wall footers/leveling pads	2	0	1
X	rdxssp	WallGravBase_px	Proposed Gravity Wall Sub-grade	3	0	2
X	rdxssp	WallGravity_px	Gravity Wall for Cross Sections	11	0	2
X	rdxssp	WallMedianBase_px	Proposed Median Wall Sub-grade	3	0	2
X	rdxssp	WallRetain_px	Retaining Walls on Cross Sections	6	0	1
X	rdxssp	WallShldrBase_px	Proposed Shoulder Wall Sub-grade	3	0	2
X	rdxssp	Water_ex	Water for Cross Sections (Existing)	1	2 / DGN2	1
X	rdxssp	Water_px	Water for Cross Sections	1	0	1
X	rdxssp	WaterNP_px	Raw Water Pipes for Cross Sections	1	0	1
	rdxssp	Wetland_ep	Wetland Boundary for Cross Sections (Existing)	2	RD-Wetland-Existing	1
	rdxssp	WetlandEdge_ep	Edge of Mangrove, Wetlands (Marsh or Swamp)	2	RD-Wetland-Existing	0
	rdxssp	Xreference01_dp	Reference Files (For AutoCAD Use)	0	0	1
	rdxssp	Xreference02_dp	Reference Files (For AutoCAD Use)	0	0	1
	rdxssp	Xreference03_dp	Reference Files (For AutoCAD Use)	0	0	1
	rdxssp	Xreference04_dp	Reference Files (For AutoCAD Use)	0	0	1
X	rdxssp	XSBaseTop_px	Top of Proposed Base	3	0	2
	rdxssp	XSCell	GEOPAK Cross Section Cell/Block and Profile Cell/Block	8	0	1
X	rdxssp	XSExtendGrdLine_ex	Extend Ground Lines for Cross Sections (Existing)	21	2 / DGN2	1
X	rdxssp	XSGrdLine_ex	Ground Lines for Cross Sections (Existing)	2	2 / DGN2	1
X	rdxssp	XSGrdLine_px	Roadway Ground Lines on Cross Sections	1	0	2
	rdxssp	XSMisc_ex	Roadway Miscellaneous Items on Cross Sections (Existing)	4	3 / DGN3	1
	rdxssp	XSMisc_px	Cross Section Miscellaneous Items	0	0	2
	rdxssp	XSPt_ep	Cross Section Point, Station	2	1 / DGN1	0

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
	rdxssp	XSShapeDep01_dp	Cross Section Shape Dependent	11	0	2
	rdxssp	XSShapeDep02_dp	Cross Section Shape Dependent	12	0	2
	rdxssp	XSShapeDep03_dp	Cross Section Shape Dependent	13	0	2
	rdxssp	XSShapeDep04_dp	Cross Section Shape Dependent	14	0	2
	rdxssp	XSShapeDep05_dp	Cross Section Shape Dependent	15	0	2
	rdxssp	XSShapeDep06_dp	Cross Section Shape Dependent	16	0	2
	rdxssp	XSShapeDep07_dp	Cross Section Shape Dependent	17	0	2
	rdxssp	XSShapeDep08_dp	Cross Section Shape Dependent	18	0	2
	rdxssp	XSShapeDep09_dp	Cross Section Shape Dependent	19	0	2
	rdxssp	XSShapeDep10_dp	Cross Section Shape Dependent	20	0	2
	rdxssp	XSShapeIndep01_dp	Cross Section Shape Independent	1	0	2
	rdxssp	XSShapeIndep02_dp	Cross Section Shape Independent	2	0	2
	rdxssp	XSShapeIndep03_dp	Cross Section Shape Independent	3	0	2
	rdxssp	XSShapeIndep04_dp	Cross Section Shape Independent	4	0	2
	rdxssp	XSShapeIndep05_dp	Cross Section Shape Independent	5	0	2
	rdxssp	XSShapeIndep06_dp	Cross Section Shape Independent	6	0	2
	rdxssp	XSShapeIndep07_dp	Cross Section Shape Independent	7	0	2
	rdxssp	XSShapeIndep08_dp	Cross Section Shape Independent	8	0	2
	rdxssp	XSShapeIndep09_dp	Cross Section Shape Independent	9	0	2
	rdxssp	XSShapeIndep10_dp	Cross Section Shape Independent	10	0	2
X	rdxssp	XSTypical_px	Roadway Pavement Typical on Cross Sections	1	0	2

RWDTRD - Right of Way Detail for Roadway

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
	rwdtrd	ActivePointCell_dp	Active Point Cell	4	0	10
	rwdtrd	AdhocPoint_dp	Adhoc Points Placed by SheetInfo	0	4 / 0	0
	rwdtrd	BaselineSurvey	Baseline Survey	0	0	2
	rwdtrd	CLConst_dp	Center Line of Construction	0	0	2
	rwdtrd	COGO_dp	COGO Information	3	0	1
	rwdtrd	ConstLines	Construction Lines and References	1	0	0
	rwdtrd	ConstLines_pm	Construction Lines	4	0	0
	rwdtrd	CurveData_dp	Curve & Coordinate Data Elements incl PC, PT, PI symbols	4	0	2
	rwdtrd	CurveDataLabel_dp	Curve Data Labels PC,PI, PT	0	0	2
	rwdtrd	DimLines_dp	Dimension Lines, Corresponding Terminators, Equation Lines	0	0	1
X	rwdtrd	EaseLicLine	Easement License Agreement Line	5	6 / DGN6	0
X	rwdtrd	EaseLine_ep	Easement Lines (Existing)	1	RW-Easement	1
X	rwdtrd	EasePerpLine	Easement Lines Perpetual (Proposed)	4	RW-PerpetualEasement	1
X	rwdtrd	EaseTempLine	Easement Lines Temporary (Proposed)	6	RW-TemporaryEasement	0
X	rwdtrd	EaseTempLine_ep	Easement Lines Temporary (Existing)	6	RW-TemporaryEasement	1
	rwdtrd	GovCityLimitLine_ep	Government:City Limit Line	3	RW-CityLimit-Type 1	0
	rwdtrd	GovCountyLine_ep	Government:County Line	3	RW-CountyLine	3

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
	rwdtrd	GovQuarterLine_ep	Government:Quarter Section Line	3	RW-QuaterSection	1
	rwdtrd	GovSectionLine_ep	Government:Section Line	10	RW-SectionLine	2
	rwdtrd	GovStateLine_ep	Government:State Line	2	RW-StateLine	3
	rwdtrd	GovTwpRgeLine_ep	Township / Range Lines	10	RW-TownshipRange	2
	rwdtrd	ImageAttachment_dp	Image Attachments	0	0	0
X	rwdtrd	LARWLine	Limited Access Right of Way	4	RW-LimitedAccess-Proposed	2
X	rwdtrd	LARWLine_ep	Limited Access Right of Way (Existing)	4	RW-LimitedAccess-Existing	1
	rwdtrd	LeaderLine_dp	Leader Line and terminator with Text	0	0	1
	rwdtrd	Miscellaneous0	Undefined proposed item - co blue wt 0	1	0	0
	rwdtrd	Miscellaneous1	Undefined proposed item - co blue wt 1	1	0	1
	rwdtrd	Miscellaneous2	Undefined proposed item - co blue wt 2	1	0	2
	rwdtrd	Miscellaneous3	Undefined proposed item - co green wt 0	2	0	0
	rwdtrd	Miscellaneous4	Undefined proposed item - co green wt 1	2	0	1
	rwdtrd	Miscellaneous5	Undefined proposed item - co green wt 2	2	0	2
	rwdtrd	Miscellaneous6	Undefined proposed item - co red wt 0	3	0	0
	rwdtrd	Miscellaneous7	Undefined proposed item - co red wt 1	3	0	1
	rwdtrd	Miscellaneous8	Undefined proposed item - co red wt 2	3	0	2
	rwdtrd	Miscellaneous9	Undefined proposed item - co red wt 3	3	0	3
	rwdtrd	NonPlottingEle_dp	Non plotting items such as construction elements and type 66 elements	4	0	0
	rwdtrd	NorthArw_dp	North Arrows	0	0	2
	rwdtrd	PayItem_dp	Pay Item Number Label Elements	4	0	2
	rwdtrd	PointLocator_ep	Point Locator Symbol	4	0	0
X	rwdtrd	PropertyLine_ep	Property Lines	3	0	0
	rwdtrd	ReferencePt_dp	Survey and Construction Reference Point Details and Elements	4	0	2
X	rwdtrd	RefPtAngleTie	Annotation:Angle Tie:Survey Reference Point / Detail	0	RW-Dimension-Type1 / 0	1
X	rwdtrd	RefPtLeader	Annotation:Leader:Survey Reference Point / Detail	0	RW-Leader / 0	1
X	rwdtrd	RefPtLine	Miscellaneous:Survey Reference Point Line / Detail	0	0	1
X	rwdtrd	RefPtStaTie	Annotation:Station Tie:Survey Reference Point / Detail	0	RW-ArrowTie / 0	0
X	rwdtrd	RefPtText	Annotation:Miscellaneous:Text: Survey Data Reference Point	0	0	1
X	rwdtrd	RRBaseline	Baseline:Rail Road Centerline	4	0	2
X	rwdtrd	RWLine	Right of Way Lines	4	RW-Proposed	2
X	rwdtrd	RWLine_ep	Right of Way Lines (Existing)	3	RW-Existing	1
	rwdtrd	Scratch1_dp	A scratch level for temporary or informational items	4	0	0
	rwdtrd	Scratch2_dp	A scratch level for temporary or informational items	5	0	0
	rwdtrd	ScratchEle_dp	Level for Draft Elements, Temporary Elements, Etc. Do Not Plot	3	0	0
	rwdtrd	ScratchEle2_dp	Level for Draft Elements, Temporary Elements, Etc. Do Not Plot	4	0	0
	rwdtrd	StationTicL_dp	Station Tic Marks (Large) and Text	0	0	2
	rwdtrd	StationTicS_dp	Station Tic Marks (Small) and Text	0	0	2
X	rwdtrd	SubDivLine	Existing:Subdivision Line	5	0	0
	rwdtrd	Tables_dp	Data Tables and All Autodesk Tables	0	0	1
	rwdtrd	TextBLStation	Text - B/L Station and Tics	0	0	2
	rwdtrd	TextConstEle	Text - Construction Element	0	0	1
	rwdtrd	TextCurveData	Text - Curve Data Note	0	0	2
	rwdtrd	TextDetails	Text - Detail Notes	4	0	2
	rwdtrd	TextElevLabel	Elevation Labels	4	0	0

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
	rwdtrd	TextLabel	Text - Label	0	0	2
	rwdtrd	TextLandscape	Text - Landscape Labels	0	0	1
	rwdtrd	TextMajor	Text - Major	0	0	5
	rwdtrd	TextMinor	Text - Minor	0	0	0
	rwdtrd	TextMisc	Text - Miscellaneous	0	0	1
	rwdtrd	TextNotes	Text - Notes	4	0	1
	rwdtrd	TextProfLabel	Text - Profile, Horizontal and Vertical Axis Labels	0	0	2
	rwdtrd	TextProjLabel	Text - Begin and End Project label with leader lines	1	0	2
	rwdtrd	TextPtLabel	Point Labels	4	0	0
	rwdtrd	TextShtNo	Text - Sheet Number	0	0	2
	rwdtrd	TextSurveyLabel	Survey Text Labels	0	0	0
	rwdtrd	TextTables	Text - KeysheetKey sheet Indexes and Table Data	4	0	2
	rwdtrd	TextTitle	Text - Title	0	0	3
	rwdtrd	TextXSElev	Text - Cross Section Elevations	2	0	1
	rwdtrd	Viewport	Viewport (For AutoCAD Use)	3	0	0
	rwdtrd	Xreference01_dp	Reference Files (For AutoCAD Use)	0	0	1
	rwdtrd	Xreference02_dp	Reference Files (For AutoCAD Use)	0	0	1
	rwdtrd	Xreference03_dp	Reference Files (For AutoCAD Use)	0	0	1
	rwdtrd	Xreference04_dp	Reference Files (For AutoCAD Use)	0	0	1
	rwdtrd	XSCell	GEOPAK Cross Section Cell/Block and Profile Cell/Block	8	0	1

RWENG10 - Right of Way

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
	rweng10	ActivePointCell_dp	Active Point Cell	4	0	10
	rweng10	AdhocPoint_dp	Adhoc Points Placed by SheetInfo	0	4 / 0	0
101	rweng10	BaselineCurveData	Cell:Baseline Curve Data	0	0	2
X	rweng10	BaselineFlagLT	Annotation:Begin End Baseline Flag Left	0	RW-LeaderLeft / 0	2
X	rweng10	BaselineFlagRT	Annotation:Begin End Baseline Flag Right	0	RW-LeaderRight / 0	2
X	rweng10	BaselineLeaderWt0	Annotation:Leader:Baseline Survey (weight = 0)	0	RW-Leader / 0	0
X	rweng10	BaselineLeaderWt1	Annotation:Leader:Baseline Survey (weight = 1)	0	RW-Leader / 0	1
X	rweng10	BaselineLeaderWt2	Annotation:Leader:Baseline Survey (weight = 2)	0	RW-Leader / 0	2
X	rweng10	BaselineSideStreet	Baseline:Baseline Side Street	0	0	0
X	rweng10	BaselineStaTie	Annotation:Station Tie:Baseline Station Tie	0	RW-ArrowTie / 0	0
	rweng10	BaselineSurvey	Baseline Survey	0	0	2
X	rweng10	BaselineTangentLine	Miscellaneous:Baseline Curve Tangent (PC-PI-PT)	0	2 / DGN2	0
101	rweng10	BaselineTextWt0	Annotation:Text:Baseline Text (weight = 0)	0	0	0
101	rweng10	BaselineTextWt1	Annotation:Text:Baseline Text (weight = 1)	0	0	1
101	rweng10	BaselineTextWt2	Annotation:Text:Baseline Text (weight = 2)	0	0	2
X	rweng10	Building_ep	Buildings	1	0	0
X	rweng10	BuildingLeader	Annotation:Leader:Building	0	RW-Leader / 0 / 0	0
X	rweng10	BuildingStaTie	Annotation:Station Tie:Building	0	RW-ArrowTie	0

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
101	rweng10	BuildingText	Annotation:Text:Buildings	0	0	0
X	rweng10	CLConst_dp	Center Line of Construction	0	0	2
X	rweng10	ClipBorder	Cell:Miscellaneous:R/W Clip Border	4	2 / DGN2	0
X	rweng10	ClipBorderLine	Cell:Miscellaneous:R/W Clip Border	4	0	4
X	rweng10	ClipBorderOutside	Cell:Miscellaneous:R/W Clip Border	3	0	0
X	rweng10	Closing-SameLine	Miscellaneous:Closing Line, Same Point, or Same Line	0	RW-ArrowTie / 0	0
101	rweng10	Closing-SameLineText	Miscellaneous:Text:Closing Line, Same Point, or Same Line	0	0	0
	rweng10	COGO_dp	COGO Information	3	0	1
X	rweng10	ConstLimits	Proposed:Limits of Construction Line	3	RW-LimitsofConst	0
X	rweng10	ConstLimitsLeader	Annotation:Leader:Limits of Construction (Proposed)	3	RW-Leader / 0	0
X	rweng10	ConstLimitsStaTie	Annotation:Station Tie:Limits of Construction (Proposed)	3	RW-ArrowTie / 0	0
101	rweng10	ConstLimitsText	Annotation:Text: Limits of Construction (Proposed)	3	0	0
	rweng10	ConstLines	Construction Lines and References	1	0	0
	rweng10	ConstLines_pm	Construction Lines	4	0	0
101	rweng10	CoordPtText	Annotation:Text:Miscellaneous:Coordinate Geometry Points	4	0	0
101	rweng10	DataBoxWt0	Cell:Miscellaneous:Data Table Wt0 For Text and Linear Elements	0	0	0
101	rweng10	DataBoxWt1	Cell:Miscellaneous:Data Table Wt1 For Text and Linear Elements	0	0	1
101	rweng10	DataBoxWt2	Cell:Miscellaneous:Data Table Wt2 For Text and Linear Elements	0	0	2
101	rweng10	DataBoxWt3	Cell:Miscellaneous:Data Table Wt3 For Text and Linear Elements	0	0	3
101	rweng10	DataBoxWt4	Cell:Miscellaneous:Data Table Wt4 For Text and Linear Elements	0	0	4
X	rweng10	DetailBorder	Miscellaneous: Border for Mapping Detail	0	3 / DGN3	3
X	rweng10	EaseLicLeader	Annotation:Leader:License (Proposed)	0	RW-Leader / 0	1
X	rweng10	EaseLicLine	Easement:License (Proposed)	0	RW-License	1
X	rweng10	EaseLicStaTie	Annotation:Station Tie:License (Proposed)	0	RW-ArrowTie / 0	1
101	rweng10	EaseLicText	Annotation:Text:Easement Lines, License (Proposed)	0	0	1
X	rweng10	EaseLicWidthArrow	Annotation:Arrow:License Width (Proposed)	0	RW-Dimension-Type2 / 0	1
X	rweng10	EaseLine_ep	Easement:Easement Line (Existing)	1	2 / DGN2	0
X	rweng10	EaseLineCenterline_ep	Baseline:Centerline:Easement (Existing)	1	RW-EasementCL-Existing	0
X	rweng10	EaseLineLeader_ep	Annotation:Leader:Easement (Existing)	1	RW-Leader / 0	0
X	rweng10	EaseLineStaTie_ep	Annotation:Station Tie:Easement (Existing)	1	RW-ArrowTie / 0	0
101	rweng10	EaseLineText_ep	Annotation:Text:Easement Lines (Existing)	1	0	0
X	rweng10	EaseLineWidthArrow_ep	Annotation:Arrow:Easement Width (Existing)	1	RW-Dimension-Type2 / 0	0
X	rweng10	EasePerpLeader	Annotation:Leader:Easement Perpetual (Proposed)	4	RW-Leader / 0	1
X	rweng10	EasePerpLine	Easement:Perpetual Easement Line (Proposed)	4	RW-PerpetualEasement	2
X	rweng10	EasePerpStaTie	Annotation:Station Tie:Easement Perpetual (Proposed)	4	RW-ArrowTie / 0	1
101	rweng10	EasePerpText	Annotation:Text:Easement Lines, Perpetual (Proposed)	4	0	1
X	rweng10	EasePerpWidthArrow	Annotation:Arrow:Easement Perpetual Width (Proposed)	4	RW-Dimension-Type2 / 0	1
X	rweng10	EaseTempLeader	Annotation:Leader:Easement Temporary (Proposed)	6	RW-Leader / 0	1
X	rweng10	EaseTempLine	Easement:Temporary Easement Line (Proposed)	6	RW-TemporaryEasement	1
X	rweng10	EaseTempStaTie	Annotation:Station Tie:Easement Temporary (Proposed)	6	RW-ArrowTie / 0	1
101	rweng10	EaseTempText	Annotation:Text:Easement Lines, Temporary (Proposed)	6	0	1
X	rweng10	EaseTempWidthArrow	Annotation:Arrow:Easement Temporary Width (Proposed)	6	RW-Dimension-Type2 / 0	1
X	rweng10	Fence_ep	Fence (All)	6	RD-Fence	0
X	rweng10	FLMap1	Florida Map items - weight of 1	1	0	1

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
X	rweng10	FLMap2	Florida Map items - weight of 2	3	0	2
X	rweng10	FLMap3	Florida Map items - weight of 3	2	0	3
X	rweng10	FLMap4	Florida Map items - color 11 (Interstate)	11	0	3
X	rweng10	FLMap5	Florida Map items - style 7, wt. 5 (state line)	3	7 / DGN7	5
X	rweng10	GenNotesLeader	Annotation:Leader:Miscellaneous:General Notes	0	RW-Leader / 0	2
101	rweng10	GenNotesText	Annotation:Miscellaneous:Text: General Notes	0	0	2
X	rweng10	GovCityLimitHLine_ep	Government:City Limit Line (Hash Only)	3	RW-CityLimit-Type2	0
X	rweng10	GovCityLimitLine_ep	Government:City Limit Line	3	RW-CityLimit-Type1	0
X	rweng10	GovCountyLine_ep	Government:County Line	3	RW-CountyLine	3
X	rweng10	GovGrantLine_ep	Government:Grant Line	3	RW-GrantLine	2
X	rweng10	GovGreenLeaderWt0_ep	Annotation:Leader:Government (color = green)(weight = 0)	2	RW-Leader / 0	0
X	rweng10	GovGreenLeaderWt2_ep	Annotation:Leader:Government (color = green)(weight = 2)	2	RW-Leader / 0	2
X	rweng10	GovGreenStaTie_ep	Annotation:Station Tie:Government (color = green)	2	RW-ArrowTie / 0	0
101	rweng10	GovGreenTextWt0_ep	Annotation:Government Text Green Weight of 0	2	0	0
101	rweng10	GovGreenTextWt2_ep	Annotation:Government Text Green Weight of 2	2	0	2
X	rweng10	GovLotLine_ep	Government:Lot Line	3	0	0
X	rweng10	GovMeanderLine_ep	Government:Meander Line	3	3 / DGN3	1
X	rweng10	GovParkHLine_ep	Government:National or State Park or Forest Line (Hash Only)	2	RW-Nat/StPark/Forest-Type2	0
X	rweng10	GovParkLine_ep	Government:National or State Park or Forest Line	2	RW-Nat/StPark/Forest-Type1	0
X	rweng10	GovQtrQtrLine_ep	Government:Quarter / Quarter Section Line	3	RW-QuarterSection	0
X	rweng10	GovQuarterLine_ep	Government:Quarter Section Line	3	RW-QuarterSection	1
X	rweng10	GovRedLeaderWt0_ep	Annotation:Leader:Government (color = red)(weight = 0)	3	RW-Leader / 0	0
X	rweng10	GovRedLeaderWt2_ep	Annotation:Leader:Government (color = red)(weight = 2)	3	RW-Leader / 0	2
X	rweng10	GovRedStaTie_ep	Annotation:Station Tie:Government (color = red)	3	RW-ArrowTie / 0	0
101	rweng10	GovRedTextWt0_ep	Annotation:Government Text Red Weight of 0	3	0	0
101	rweng10	GovRedTextWt2_ep	Annotation:Government Text Red Weight of 2	3	0	2
X	rweng10	GovSectionLine_ep	Government:Section Line	3	RW-SectionLine	2
X	rweng10	GovStateLine_ep	Government:State Line	2	RW-StateLine	3
X	rweng10	GovTwpRgeLine_ep	Government:Township and Range Government Survey Line	2	RW-TownshipRange	3
	rweng10	ImageAttachment_dp	Image Attachments	0	0	0
X	rweng10	LARWLine	Proposed:Limited Access Right of Way Line	4	RW-LimitedAccess-Proposed	3
X	rweng10	LARWLine_ep	Existing:Limited Access Right of Way Line	7	RW-LimitedAccess-Existing	0
X	rweng10	Logo_dp	Consultant Engineer of Record Logo	0	0	1
X	rweng10	MaintLeader	Annotation:Leader:Maintenance	4	RW-Leader / 0	2
X	rweng10	MaintLine	Proposed:Maintenance Line	4	0	4
X	rweng10	MaintStaTie	Annotation:Station Tie:Maintenance	4	RW-ArrowTie / 0	2
101	rweng10	MaintText	Annotation:Text: Maintenance	4	0	2
X	rweng10	MaintWidthArrow	Annotation:Arrow:Maintenance Width (Proposed)	4	RW-Dimension-Type2 / 0	2
X	rweng10	MapOutline_dp	Outline for key maps	0	0	5
	rweng10	MatchLineMask_dp	Mask Area for Match Line Overlap Areas (Autodesk)	0	0	0
X	rweng10	MHWL_TIITF_Leader	Annotation:Leader:TIITF:Mean High Water Lines or Ordinary High Water Lines	7	RW-Leader / 0	2
X	rweng10	MHWL_TIITF_Line	TIITF:Mean High Water LInesLines or Ordinary High Water Lines	7	0	3

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
X	rweng10	MHWL_TIITF_StaTie	Annotation:Station Tie:TIITF:Safe Upland Elevation Lines or Jurisdictional Lines	7	RW-ArrowTie / 0	2
101	rweng10	MHWL_TIITF_Text	Annotation:Text:TIITF:Mean High Water LInesLines or Ordinary High Water Lines	7	0	2
X	rweng10	MHWL_TIITF_WidthArrow	Annotation:Arrow:TIITF:Mean High Water LInesLines or Ordinary High Water Lines	7	RW-Dimension-Type2 / 0	2
X	rweng10	MonConcOpen	Cell:Monument, Concrete Open	4	0	1
X	rweng10	MonConcSolid	Cell:Monument, Concrete Solid	4	0	1
X	rweng10	MonConRW	Cell:Monument, Concrete RW	4	0	2
X	rweng10	MonLeader	Annotation:Leader:Found / Set Monuments (Not Government Corners)	4	RW-Leader / 0	0
X	rweng10	MonPermRW	Cell:Monument, RW Permanent (RW Survey Map)	4	0	2
X	rweng10	MonRodOpen	Cell:Monument, Rod Open	4	0	1
X	rweng10	MonRodSolid	Cell:Monument, Rod Solid	4	0	1
X	rweng10	MonStaTie	Annotation:Station Tie:Found / Set Monuments (Not Government Corners)	4	RW-ArrowTie / 0	0
101	rweng10	MonText	Annotation:Text:Found / Set Monuments (Not Government Corners)	4	0	0
X	rweng10	Monument_ep	Monuments (all), Stamped Disk or Plate, Photo Control Point, Aerial Targets	4	0	0
X	rweng10	Murphy_TIITF_Leader	Annotation:Leader:TIITF:Murphy Reservations Lines	2	RW-Leader / 0	1
X	rweng10	Murphy_TIITF_Line	TIITF: Upland TIITF:Murphy Reservations Lines	2	RW-TIITFMurphyResLine	1
X	rweng10	Murphy_TIITF_StaTIe	Annotation:Station Tie:TIITF:Murphy Reservations Lines	2	RW-ArrowTie / 0	1
101	rweng10	Murphy_TIITF_Text	Annotation:Text:TIITF:Murphy Reservations Lines	2	0	1
X	rweng10	Murphy_TIITF_WidthArrow	Annotation:Arrow:TIITF:Murphy Reservations Lines	2	RW-Dimension-Type2 / 0	1
	rweng10	NonPlottingEle_dp	Non plotting items such as construction elements and type 66 elements	4	0	0
X	rweng10	NonVehcLeader_ep	Annotation:Leader:Non- Vehicular Access	3	RW-Leader / 0	0
X	rweng10	NonVehcLine_ep	Existing:Non-Vehicular Access Line	3	RW-NonVehicularAccess	0
X	rweng10	NonVehcStaTie_ep	Annotation:Station Tie:Non -Vehicular Access	3	RW-ArrowTie / 0	0
101	rweng10	NonVehcText_ep	Annotation:Text:Non-Vehicular Access (Existing)	3	0	0
	rweng10	NorthArw_dp	North Arrows	0	0	2
101	rweng10	ParcelBubble100	Cell:Miscellaneous:Right of Way Parcel Bubble with Leader	3	0	2
101	rweng10	ParcelBubble700	Cell:Miscellaneous:Temporary Easement Parcel Bubble with Leader	6	0	2
101	rweng10	ParcelBubble800	Cell:Miscellaneous:Perpetual Easement Parcel Bubble with Leader	4	0	2
101	rweng10	ParcelBubble900	Cell:Miscellaneous:License Parcel Bubble with Leader	0	0	2
X	rweng10	Patternlines_ep	Cross Section Chain	2	1 / DGN1	0
	rweng10	PayItem_dp	Pay Item Number Label Elements	4	0	2
X	rweng10	PlotBorder_dp	Plot Border	3	0	0
X	rweng10	PointLocator_ep	Point Locator Symbol	4	0	0
X	rweng10	PropertyLine_ep	Existing:Property Line	7	0	0
X	rweng10	PropertyLineHook_ep	Cell:Miscellaneous:Property Line Hook	4	0	0
X	rweng10	PropertyLineLeader_ep	Annotation:Leader:Property Line (Existing)	7	RW-Leader / 0	0
X	rweng10	PropertyLineStaTie_ep	Annotation:Station Tie:Property Line (Existing)	7	RW-ArrowTie	0
X	rweng10	PropertyLineSymbol_ep	Cell:Miscellaneous:Property Line Symbol	4	0	0
101	rweng10	PropertyLineText_ep	Annotation:Text:Property Line (Existing)	7	0	0
X	rweng10	ReferencePt_dp	Survey and Construction Reference Point Details and Elements	4	0	2
X	rweng10	RefPtAngleTie	Annotation:Angle Tie:Survey Reference Point / Detail	0	RW-Dimension-Type1 / 0	1

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
X	rweng10	RefPtLeader	Annotation:Leader:Survey Reference Point / Detail	0	RW-Leader / 0	1
X	rweng10	RefPtLine	Miscellaneous:Survey Reference Point Line / Detail	0	0	1
X	rweng10	RefPtStaTie	Annotation:Station Tie:Survey Reference Point / Detail	0	RW-ArrowTie / 0	0
X	rweng10	RefPtText	Annotation:Miscellaneous:Text: Survey Data Reference Point	0	0	1
X	rweng10	RFClipPoint	Cell:Miscellaneous:Point (Point Cell for RFCLIP Program)	4	0	10
X	rweng10	RRBaseline	Baseline:Rail Road Centerline	0	RW-RailroadeBL	0
X	rweng10	RRLeaderWt0	Annotation:Leader:Railroad (weight = 0)	0	RW-Leader / 0	0
X	rweng10	RRLeaderWt1	Annotation:Leader:Railroad (weight = 1)	0	RW-Leader / 0	1
X	rweng10	RRLeaderWt2	Annotation:Leader:Railroad (weight = 2)	0	RW-Leader / 0	2
101	rweng10	RRTextWt0	Annotation:Text:Railroad (weight = 0)	0	0	0
101	rweng10	RRTextWt1	Annotation:Text:Railroad (weight = 1)	0	0	1
101	rweng10	RRTextWt2	Annotation:Text:Railroad (weight = 2)	0	0	2
X	rweng10	RWandLA_Leader	Annotation:Leader:R/W & L/A (Proposed)	3	RW-Leader / 0	2
X	rweng10	RWandLA_Leader_ep	Annotation:Leader:R/W & L/A (Existing)	7	RW-Leader / 0	0
X	rweng10	RWandLA_StaTie	Annotation:Station Tie:R/W & L/A Lines (Proposed)	3	RW-ArrowTie / 0	2
X	rweng10	RWandLA_StaTie_ep	Annotation:Station Tie:R/W & L/A Lines (Existing)	7	RW-ArrowTie / 0	0
101	rweng10	RWandLA_Text	Annotation:Text:R/W & L/A Lines Taking Lines (Proposed)	3	0	2
101	rweng10	RWandLA_Text_ep	Annotation:Text:R/W & L/A Lines (Existing)	7	0	0
X	rweng10	RWandLA_WidthArrow	Annotation:Arrow:RW & LA Width (Proposed)	3	RW-Dimension-Type2 / 0	2
X	rweng10	RWandLA_WidthArrow_ep	Annotation:Arrow:RW & LA Width (Existing)	7	RW-Dimension-Type2 / 0	0
X	rweng10	RWLine	Proposed:Right of Way Line	4	RW-Proposed	3
X	rweng10	RWLine_ep	Existing:RW Line	7	RW-Existing	0
X	rweng10	Scale_dp	Bar Scale, Scale Label Elements	0	0	2
X	rweng10	Scratch1_dp	A scratch level for temporary or informational items	4	0	0
X	rweng10	Scratch2_dp	A scratch level for temporary or informational items	5	0	0
X	rweng10	ScratchEle_dp	Level for Draft Elements, Temporary Elements, Etc. Do Not Plot	3	0	0
	rweng10	ScratchEle2_dp	Level for Draft Elements, Temporary Elements, Etc. Do Not Plot	4	0	0
X	rweng10	ScratchElements	Scratch:None Plotting Level for Draft Elements, Temporary Elements, Etc.	3	0	0
X	rweng10	ScratchLevel1	Scratch:Level for Undefined Items - weight of 1	0	0	1
X	rweng10	ScratchLevel2	Scratch:Level for Undefined Items - weight of 2	0	0	2
X	rweng10	ScratchLevel3	Scratch:Level for Undefined Items - weight of 3	0	0	3
101	rweng10	SegCurveData	Cell:Miscellaneous:Segmented Curve Data (Place on Text Symbology of Assoc. Element)	0	0	0
X	rweng10	SheetBorder_dp	Sheet Border	1	0	4
X	rweng10	SheetLines_dp	Sheet Lines	1	0	2
X	rweng10	SheetLinesMisc1_dp	Sheet Lines	1	0	0
X	rweng10	SheetLinesMisc2_dp	Sheet Lines	2	0	2
X	rweng10	SheetLinesMisc3_dp	Sheet Lines	3	0	2
X	rweng10	SheetLinesMisc4_dp	Sheet Lines	4	0	2
	rweng10	SheetLinesSignature_dp	Sheet Lines Signature	1	2 / DGN2	0
X	rweng10	SideStLeaderWt1	Annotation:Leader:Side Street (weight = 1)	0	RW-Leader / 0	1
X	rweng10	SideStLeaderWt2	Annotation:Leader:Side Street (weight = 2)	0	RW-Leader / 0	2
X	rweng10	SideStStaTie	Annotation:Station Tie:Side Street	0	RW-ArrowTie / 0	0

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
101	rweng10	SideStTextWt1	Annotation:Text:Side Street Curve Data, Curve & Coordinate Box Text	0	0	1
101	rweng10	SideStTextWt2	Annotation:Text:Side Street Data:Stations, Names, Leader Lines & Circles for (PC,PT,PI,POT)	0	0	2
X	rweng10	StationTicL_dp	Station Tic Marks (Large) and Text	0	0	2
X	rweng10	StationTicS_dp	Station Tic Marks (Small) and Text	0	0	2
101	rweng10	SubBlockNumberText	Cell:Miscellaneous:Subdivision:Text:Block Number Enter Data Field	5	0	2
X	rweng10	SubDivDelineator	Annotation:Subdivision Delineator Line for Subdivision Terminator	5	0	1
X	rweng10	SubDivLine	Existing:Subdivision Line	5	0	0
101	rweng10	SubDivLineText	Annotation:Text:Subdivision: Lines & Vacated / Original Lot Lines (Existing)	5	0	0
101	rweng10	SubDivNameText	Annotation:Text:Subdivision: Plat Name (Existing)	5	0	2
X	rweng10	SubDivRW_WidthArrow	Annotation:Arrow:Subdivision	5	RW-Dimension-Type2 / 0	0
X	rweng10	SubDoubleArrow	Annotation:Subdivision: Boundary Arrows Double <<---->>	5	RW-Subdiv-Double	1
101	rweng10	SubLotNumberText	Annotation:Text:Subdivision: Lot Numbers	5	0	1
X	rweng10	SubSingleArrow	Annotation:Subdivision: Boundary Arrows <---->	5	RW-Subdiv-Single	1
X	rweng10	SubSingleLTArrow	Annotation:Subdivision: Boundary Arrows Single Left <----	5	RW-Subdiv-SingleLeft	1
X	rweng10	SubSingleRTArrow	Annotation:Subdivision: Boundary Arrows Single Right ---->	5	RW-Subdiv-SingleRight	1
X	rweng10	SubTwoLTArrow	Annotation:Subdivision: Boundary Arrows Two Left <<---->	5	RW-Subdiv-DoubleLeft	1
X	rweng10	SubTwoLTOnlyArrow	Annotation:Subdivision: Boundary Arrows Two Left Only <<----	5	RW-Subdiv-DoubleLeftOnly	1
X	rweng10	SubTwoRTArrow	Annotation:Subdivision: Boundary Arrows Two Right <---->>	5	RW-Subdiv-DoubleRight	1
X	rweng10	SubTwoRTOnlyArrow	Annotation:Subdivision: Boundary Arrows Two Right Only ---->>	5	RW-Subdiv-DoubleRightOnly	1
X	rweng10	SubVacOrigLotLeader	Annotation:Leader:Subvivision:Lines & Vacated / Original Lot Lines (Existing)	5	RW-Leader / 0	0
X	rweng10	SubVacOrigLotLine	Existing:Subdivision Vacated or Original Lot Line	5	5 / DGN5	0
X	rweng10	SubVacOrigLotStaTie	Annotation:Station Tie:Subdivision Vacated & Original Lot	5	RW-ArrowTie / 0	0
X	rweng10	SUEL_TIITF_Leader	Annotation:Leader:DEP:TIITF:Safe Upland Elevation Lines or Jurisdictional Lines	2	RW-Leader / 0	2
X	rweng10	SUEL_TIITF_Line	DEP:TIITF:Safe Upland Elevation Lines or Jurisdictional Lines established by DEP methodology	2	RW-PerpetualEasement	3
X	rweng10	SUEL_TIITF_StaTie	Annotation:Station Tie:DEP:TIITF:Safe Upland Elevation Lines or Jurisdictional Lines	2	RW-ArrowTie / 0	2
101	rweng10	SUEL_TIITF_Text	Annotation:Text:DEP:TIITF:Safe Upland Elevation Lines or Jurisdictional Lines	2	0	2
X	rweng10	SUEL_TIITF_WidthArrow	Annotation:Arrow:DEP:TIITF:Safe Upland Elevation Lines or Jurisdictional Lines	2	RW-Dimension-Type2 / 0	2
	rweng10	Tables_dp	Data Tables and All Autodesk Tables	0	0	1
101	rweng10	TabOwnshpText	Annotation:Text:Miscellaneous: Table of Ownerships	0	0	1
X	rweng10	TextLabel	Text - Label	0	0	2
X	rweng10	TextMajor	Text - Major	0	0	5
X	rweng10	TextMinor	Text - Minor	0	0	0
X	rweng10	TextMisc	Text - Miscellaneous	0	0	1
X	rweng10	TextNotes	Text - Notes	4	0	1
X	rweng10	TextShtNo	Text - Sheet Number	0	0	2
101	rweng10	TextSurveyLabel	Survey Text Labels	0	0	0
X	rweng10	TextTables	Text - Key sheet Indexes and Table Data	4	0	2
X	rweng10	TextTitle	Text - Title	0	0	3

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
X	rweng10	TopoMisc_ep	Miscellaneous Topography	0	3 / DGN3	1
101	rweng10	TopoText_ep	Annotation:Text:Miscellaneous: All Other Topographic Element Labels (Reference Files)	0	0	0
	rweng10	Viewport	Viewport (For AutoCAD Use)	3	0	0
X	rweng10	WaterEdge	Annotation:Mapping Boundary for Rivers, Streams, or Lakes	7	RW-WaterMapBoundary	0
	rweng10	Xreference01_dp	Reference Files (For AutoCAD Use)	0	0	1
	rweng10	Xreference02_dp	Reference Files (For AutoCAD Use)	0	0	1
	rweng10	Xreference03_dp	Reference Files (For AutoCAD Use)	0	0	1
	rweng10	Xreference04_dp	Reference Files (For AutoCAD Use)	0	0	1

SPST10 - Structures

Critical	Rule File	Level Name	Level Description	ByLevel Color	ByLevel Style	Bylevel Weight	Plot ?
100	spst10	ActivePts-ConstElements	Active Points & Drawing Construction Elements	99	0	0	No
100	spst10	AdhocPoint_dp	Adhoc Points Placed by SheetInfo	0	4 / 0	0	No
100	spst10	AppSlabConc	Concrete	2	0	3	Yes
100	spst10	AppSlabConc_h	Concrete Hidden	2	2 / DGN2	2	Yes
100	spst10	ArchBlocks	Architectural Blocks	0	0	0	Yes
100	spst10	BaseLineSurveyPGL	Baseline Survey orProfile Grade Line	3	6 / DGN6	0	Yes
100	spst10	BeamConc	Beams Concrete	2	0	3	Yes
100	spst10	BeamConc_h	Beams Concrete Hidden	2	2 / DGN2	2	Yes
	spst10	Bearings	Pot, Rocker, Masonry Plates	6	0	1	Yes
100	spst10	Bolts	Misc Bolts for Details	6	0	0	Yes
100	spst10	Bolts_h	Misc Bolts for Details - Hidden	6	1 / DGN1	0	Yes
100	spst10	Border	Border Elements & Text	0	0	1	Yes
100	spst10	Casework	Casework	1	0	1	Yes
100	spst10	Casework_h	Casework Hidden	1	3 / DGN3	0	Yes
100	spst10	Ceiling	Ceiling	0	0	1	Yes
100	spst10	Ceiling_h	Ceiling Hidden	0	3 / DGN3	0	Yes
100	spst10	CL_ConsSurvey	Centerline Construction or Centerline Survey	3	7 / DGN7	0	Yes
100	spst10	CL_Major	Use as needed	3	7 / DGN7	0	Yes
100	spst10	CL_Minor	Use as needed	0	4 / DGN4	0	Yes
100	spst10	ConcArch_walls	Concrete Architectural Walls	1	0	2	Yes
100	spst10	ConcArch_walls_h	Concrete Architectural Walls Hidden	1	3 / DGN3	1	Yes
	spst10	ConstLines	Construction Lines and References	1	0	0	No
	spst10	ConstLines_pm	Construction Lines	4	0	0	No
100	spst10	CounterWeight	CounterWeight	2	0	0	Yes
100	spst10	CounterWeight_h	CounterWeight Hidden	2	2 / DGN2	2	Yes
100	spst10	DDConstruction	Dimension Driven Construction Lines	71	0	0	No
100	spst10	DDDimensions	Dimension Driven Dimensions	71	0	0	No
100	spst10	DeckSteel	Steel Grid Bridge Decking	6	0	1	Yes
100	spst10	Dimension	Dimension Lines	0	0	0	Yes
100	spst10	Doors	Doors	1	0	1	Yes

Critical	Rule File	Level Name	Level Description	ByLevel Color	ByLevel Style	Bylevel Weight	Plot ?
100	spst10	Doors_h	Doors Hidden	1	3 / DGN3	0	Yes
100	spst10	DrainDeck	Scuppers, Deck Inlets	3	0	1	Yes
100	spst10	DrainMisc	Drain Miscellaneous Hardware	3	0	1	Yes
100	spst10	DrainPipe	Drain Pipes PVC, Galvanized	3	0	1	Yes
100	spst10	DrShaftConc	Drilled Shaft Concrete	2	0	3	Yes
100	spst10	DrShaftConc_h	Drilled Shaft Concrete Hidden	2	2 / DGN2	2	Yes
100	spst10	ElectricalConduit	Electrical Conduit	7	0	0	Yes
100	spst10	ExistingMisc	Existing Misc.	3	1 / DGN1	0	Yes
100	spst10	ExistingRebar	Existing Reinforcing	84	1 / DGN1	0	Yes
100	spst10	ExistingUtility	Existing Utilities Electrical; FOC, Telephone, CableTV etc.	86	1 / DGN1	0	Yes
100	spst10	ExistSubStruct	Existing Bridge Substructure, Piers & Bents; Existing Piling	5	1 / DGN1	0	Yes
100	spst10	ExistSuperStruct	Existing Bridge Superstructure: Existing Beams & Diaphragms	5	1 / DGN1	0	Yes
	spst10	Ext_Misc	Exterior Miscellaneous	3	0	0	Yes
	spst10	Ext_Misc_h	Exterior Miscellaneous Hidden	3	3 / DGN3	0	Yes
100	spst10	Ext_Ornimental	Exterior Ornimentation	6	0	0	Yes
100	spst10	Ext_Ornimental_h	Exterior Ornimentation Hidden	6	3 / DGN3	0	Yes
100	spst10	Fascia	Fascia	4	0	1	Yes
100	spst10	Fascia_h	Fascia Hidden	4	3 / DGN3	0	Yes
100	spst10	FencePosts	Bridge Mounted Chain Link Fencing	6	0	1	Yes
100	spst10	Fencing	Bridge Mounted Chain Link Fencing	6	0	1	Yes
100	spst10	Fire_Equipment	Fire Equipment	1	0	1	Yes
100	spst10	Fire_Equipment_h	Fire Equipment Hidden	1	3 / DGN3	0	Yes
100	spst10	Floor	Floor	3	0	2	Yes
100	spst10	Floor_h	Floor Hidden	3	3 / DGN3	1	Yes
100	spst10	Furniture	Furniture	1	0	1	Yes
100	spst10	Furniture_h	Furniture Hidden	1	3 / DGN3	0	Yes
100	spst10	Glazing	Glazing	1	0	1	Yes
100	spst10	Glazing_h	Glazing Hidden	1	3 / DGN3	0	Yes
100	spst10	GroundLines	Proposed; Existing	2	0	1	Yes
	spst10	GSBWFill	GuidSign Black and White Fill Level for GuidSign Cells	0	0	1	Yes
	spst10	GSColorFill	GuidSign Color Fill Level for GuidSign Cells	2	0	1	Yes
	spst10	GSDims	GuidSign Dimensions	0	0	1	Yes
	spst10	GSOutline	GuidSign Ouline Level for GuidSign Cells	0	0	2	Yes
	spst10	GSSign	GuidSign Panel and Tag	7	0	0	Yes
100	spst10	Guardrail	Guardrail and Post, Thrie and W Beam	1	0	1	Yes
100	spst10	Guardrail_h	Guardrail and Post, Thrie and W Beam -Hidden	1	1 / DGN1	1	Yes
100	spst10	Gypsum_board	Gypsum Board	1	0	1	Yes
100	spst10	Gypsum_board_h	Gypsum Board Hidden	1	3 / DGN3	0	Yes
100	spst10	HVAC_Equip	HVAC Equipment	5	0	2	Yes
100	spst10	HVAC_Equip_h	HVAC Equipment Hidden	5	5 / DGN5	1	Yes
100	spst10	HVAC_Misc	HVAC Miscellaneous	3	0	1	Yes
100	spst10	HVAC_Misc_h	HVAC Miscellaneous Hidden	3	5 / DGN5	0	Yes
100	spst10	HVAC_Return	HVAC Return	5	0	2	Yes
100	spst10	HVAC_Return_h	HVAC Return Hidden	5	2 / DGN2	1	Yes
100	spst10	HVAC_Supply	HVAC Supply	5	0	2	Yes
100	spst10	HVAC_Supply_h	HVAC Supply Hidden	5	3 / DGN3	1	Yes

Critical	Rule File	Level Name	Level Description	ByLevel Color	ByLevel Style	Bylevel Weight	Plot ?
100	spst10	Insulation	Insulation	3	0	1	Yes
100	spst10	Insulation_h	Insulation Hidden	3	3 / DGN3	0	Yes
100	spst10	Int_Mis_h	Interior Miscellaneous Hidden	3	3 / DGN3	0	Yes
100	spst10	Int_Misc	Interior Miscellaneous	3	0	1	Yes
100	spst10	Leader	Leader lines, Weld Symbols	0	0	0	Yes
100	spst10	LeafSteel	Leaf Structural Steel	6	0	0	Yes
100	spst10	LeafSteel_h	Leaf Structural Steel Hidden	6	2 / DGN2	2	Yes
100	spst10	Lighting	Lighting Bridge/Sign Mounted	31	0	0	Yes
100	spst10	Lighting_h	Lighting Bridge/Sign Mounted Hidden	31	2 / DGN2	0	Yes
100	spst10	LightingArch	Lighting Architectural	0	0	0	Yes
100	spst10	LightingArch_h	Lighting Architectural	0	0	2	Yes
100	spst10	MachineCompFixed	Machinery Components Fixed	7	0	2	Yes
100	spst10	MachineCompFixed_h	Machinery Components Fixed Hidden	7	2 / DGN2	1	Yes
100	spst10	MachineCompMoving	Machinery Components Moving	3	0	2	Yes
100	spst10	MachineCompMovng_h	Machinery Components Moving Hidden	3	2 / DGN2	1	Yes
100	spst10	MachineWeldments	Machine Weldments	4	0	2	Yes
100	spst10	MachineWeldments_h	Machine Weldments Hidden	4	2 / DGN2	1	Yes
100	spst10	Masonry	Masonry	3	0	1	Yes
100	spst10	Masonry_h	Masonry Hidden	3	3 / DGN3	0	Yes
100	spst10	Metal Framing	Metal Framing	4	0	1	Yes
100	spst10	Metal Framing_h	Metal Framing	4	3 / DGN3	0	Yes
	spst10	Miscellaneous	No definded symbology	3	0	1	Yes
100	spst10	NavLight	Navigational Lights	7	0	0	Yes
100	spst10	NavLight_h	Navigational Lights Hidden	7	2 / DGN2	0	Yes
	spst10	PadMisc	Bearing/Misc Pads	1	0	1	Yes
100	spst10	ParapetConc	Parapet Concrete	2	0	3	Yes
	spst10	Patterning	All; any	3	0	1	Yes
100	spst10	PayItem_dp	Pay Item Number Label Elements	4	0	2	Yes
100	spst10	PedRail	Pedestrian Rail, Bullet,Picket and Guidrail	3	0	1	Yes
100	spst10	PedRailMisc	Handrail Hardware Bullet,Picket and Guidrail	3	0	1	Yes
100	spst10	PileConc	Piles Concrete	2	0	3	Yes
100	spst10	PileConc_h	Piles Concrete Hidden	2	2 / DGN2	2	Yes
100	spst10	PilePlastic	Pile Plastic	1	0	1	Yes
100	spst10	PilePlastic_h	Pile Plastic Hidden	1	2 / DGN2	2	Yes
100	spst10	PileSteel	Piles Steel H-Piles & Pipe	6	0	1	Yes
100	spst10	PileSteel_h	Piles Steel H-Piles & Pipe Hidden	6	2 / DGN2	1	Yes
100	spst10	PileTimber	Pile Timber	142	0	1	Yes
100	spst10	PileTimber_h	Pile Timber Hidden	142	2 / DGN2	1	Yes
100	spst10	PipeHydraulic	Hydraulic Pipe	7	0	1	Yes
100	spst10	PipeHydraulic_h	Hydraulic Pipe Hidden	7	2 / DGN2	0	Yes
100	spst10	PlotBorder_dp	Plot Border	3	0	0	Yes
100	spst10	Plumbing_Fixtures	Plumbing Fixtures	1	0	2	Yes
100	spst10	Plumbing_Fixtures_h	Plumbing Fixtures Hidden	1	5 / DGN5	1	Yes
100	spst10	Plumbing_Supply	Plumbing Supply	1	0	2	Yes
100	spst10	Plumbing_Supply_h	Plumbing Supply Hidden	1	3 / DGN3	1	Yes
100	spst10	Plumbing_Waste	Plumbing Waste	1	0	2	Yes

Critical	Rule File	Level Name	Level Description	ByLevel Color	ByLevel Style	Bylevel Weight	Plot ?
100	spst10	Plumbing_Waste_h	Plumbing Waste Hidden	1	2 / DGN2	1	Yes
100	spst10	PostTension	Post-Tensioning SteelStrands and Bars	6	0	1	Yes
100	spst10	PostTension_h	Post-Tensioning Steel HiddenStrands and Bars	6	2 / DGN2	1	Yes
	spst10	PostTension2	Post-Tensioning SteelStrands and Bars	46	0	1	Yes
	spst10	PostTension2_h	Post-Tensioning SteelStrands and Bars	46	0	1	Yes
	spst10	PostTension3	Post-Tensioning SteelStrands and Bars	46	0	1	Yes
	spst10	PostTension3_h	Post-Tensioning SteelStrands and Bars	46	0	1	Yes
100	spst10	PostTensionDucts	Post Tension Ducts Plastic and Metal	1	0	1	Yes
100	spst10	PostTensionGrout	Post Tension Grout	2	0	1	Yes
100	spst10	PostTensionMisc	Post Tensioning Hardware, Trumpets, Vents and Misc. Items	1	0	1	Yes
100	spst10	PrestressSteel	Prestressing Steel	36	0	1	Yes
100	spst10	PrestressSteel_h	Prestressing Steel Hidden	36	2 / DGN2	1	Yes
100	spst10	RailingArch	Railing Architectural	6	0	2	Yes
100	spst10	RailingArch_h	Railing Architectural Hidden	6	3 / DGN3	1	Yes
100	spst10	RailRoad	Rail road	3	RD-Railroad-Existing	0	Yes
100	spst10	Rebar	Reinforcing Major	4	0	1	Yes
	spst10	Rebar_h	Reinforcing Hidden	4	2	1	Yes
	spst10	Rebar10	Auxillary Rebar	4	0	1	Yes
	spst10	Rebar11	Auxillary Rebar	4	0	1	Yes
	spst10	Rebar2	Auxillary Rebar	4	0	1	Yes
	spst10	Rebar3	Auxillary Rebar	4	0	1	Yes
	spst10	Rebar4	Auxillary Rebar	4	0	1	Yes
	spst10	Rebar5	Auxillary Rebar	4	0	1	Yes
	spst10	Rebar6	Auxillary Rebar	4	0	1	Yes
	spst10	Rebar7	Auxillary Rebar	4	0	1	Yes
	spst10	Rebar8	Auxillary Rebar	4	0	1	Yes
	spst10	Rebar9	Auxillary Rebar	4	0	1	Yes
100	spst10	Roof_Misc	Roof Miscellaneous	3	0	1	Yes
100	spst10	Roof_Misc_h	Roof Miscellaneous Hidden	3	2 / DGN2	0	Yes
100	spst10	Roof_Structure	Roof Structure	4	0	2	Yes
100	spst10	Roof_Structure_h	Roof Structure Hidden	4	3 / DGN3	1	Yes
100	spst10	Roofing	Roofing	4	0	1	Yes
100	spst10	Roofing_h	Roofing Hidden	4	2 / DGN2	0	Yes
100	spst10	RW_Line	Right of Way lines	3	{ Chain Double-Dash }	1	Yes
100	spst10	SchemElectric	Electrical Schematic	7	0	1	Yes
100	spst10	SchemElectricProp	Electrical Schematic Proposed	7	0	1	Yes
100	spst10	SchemHydraulicAux	Hydraulic Schematic Auxillary	4	0	1	Yes
100	spst10	SchemHydraulicMain	Hydraulic Schematic Main	7	0	1	Yes
100	spst10	SchemTextLine	Schematic Text Line	0	0	1	Yes
100	spst10	SchemTextRung	Schematic Text Rung	4	0	1	Yes
100	spst10	SheetPileConc	Wall Sheet Precast	2	0	3	Yes
100	spst10	SheetPileConc_h	Wall Sheet Precast Hidden	2	2 / DGN2	2	Yes
100	spst10	SheetPileSteel	Wall Sheet Pile Steel	6	0	1	Yes
100	spst10	SheetPileSteel_h	Wall Sheet Pile Steel Hidden	6	2 / DGN2	2	Yes
100	spst10	Signage	Bridge Mounted Signs and Cantilever Sign Structures	6	0	1	Yes
100	spst10	Signage_h	Bridge Mounted Signs and Cantilever Sign Structures Hidden	6	2 / DGN2	1	Yes

Critical	Rule File	Level Name	Level Description	ByLevel Color	ByLevel Style	Bylevel Weight	Plot ?
100	spst10	SignageArch	Signage Architectural	0	0	1	Yes
100	spst10	SignageArch_h	Signage Architectural Hidden	0	3 / DGN3	0	Yes
100	spst10	SignMisc	Sign Miscellaneous Plates and Hardware	3	0	1	Yes
100	spst10	SignMisc_h	Sign Miscellaneous Plates and Hardware Hidden	3	2 / DGN2	1	Yes
100	spst10	SlopeProtection	Sand Cement Riprap, Slope Pavement; Rubble Riprap	3	0	3	Yes
100	spst10	SlopeProtection_h	Sand Cement Riprap, Slope Pavement; Rubble Riprap Hidden	3	2 / DGN2	3	Yes
100	spst10	Soffit	Soffit	4	0	1	Yes
100	spst10	Soffit_h	Soffit Hidden	4	3 / DGN3	0	Yes
100	spst10	Stairs	Stairs	6	0	2	Yes
100	spst10	Stairs_h	Stairs Hidden	6	3 / DGN3	1	Yes
100	spst10	SteelArch_Misc	Steel Architectural Miscellaneous	4	0	1	Yes
100	spst10	SteelArch_Misc_h	Steel Architectural Miscellaneous Hidden	4	3 / DGN3	0	Yes
100	spst10	SteelDiapXFram	Steel Diaphragms and Cross Frames	6	0	1	Yes
100	spst10	SteelDiapXFram_h	Steel Diaphragms and Cross Frams Hidden	6	2 / DGN2	0	Yes
100	spst10	SteelGirder	Steel Girder, Stringers, Trusses	6	0	1	Yes
100	spst10	SteelGirder_h	Steel Girder Stringers, Trusses Hidden,	6	2 / DGN2	0	Yes
100	spst10	SteelMisc	Steel Miscellaneous Stiffeners, Plates, Bolts etc.	6	0	1	Yes
100	spst10	SteelMisc_h	Steel Miscellaneous Hidden Stiffeners, Plates, Bolts etc.	6	2 / DGN2	0	Yes
	spst10	StrMisc	Structural Miscellaneous	3	0	1	Yes
	spst10	StrMisc_h	Structural Miscellaneous Hidden	3	2 / DGN2	1	Yes
	spst10	StrMiscConc	Structural Miscellaneous Concrete	2	0	3	Yes
	spst10	StrMiscConc_h	Structural Miscellaneous Concrete Hidden	2	2 / DGN2	2	Yes
100	spst10	Stucco	Stucco	1	0	0	Yes
100	spst10	Stucco_h	Stucco Hidden	1	3 / DGN3	0	Yes
100	spst10	SubStrConc	Substructure Concrete	2	0	3	Yes
100	spst10	SubStrConc_h	Substructure Concrete Hidden	2	2 / DGN2	3	Yes
100	spst10	SubStrConc2	Substructure Concrete Misc	2	0	3	Yes
100	spst10	SubStrConc2_h	Substructure Concrete Misc Hidden	2	2 / DGN2	3	Yes
100	spst10	SupstrConc	Concrete Deck, Segmental Box	2	0	3	Yes
100	spst10	SupstrConc_h	Concrete Deck, Segmental BoxHidden	2	2 / DGN2	2	Yes
100	spst10	SupstrConc2	Concrete Diaphragms, etc	2	0	3	Yes
100	spst10	SupstrConc2_h	Concrete Diaphragms, etc Hidden	2	2 / DGN2	2	Yes
100	spst10	Symbols	All Symbols not covered by Structures Site Menu	0	0	1	Yes
100	spst10	SymbolsElectric	Electrical Symbols	0	0	1	Yes
100	spst10	Tables	Data Tables and All Autodesk Tables	0	0	1	Yes
100	spst10	TextNotes	Text - Notes	0	0	0	Yes
100	spst10	TextRdwyInitials	Text - Roadway Initials	0	0	1	Yes
100	spst10	TextStructShtNo	Sheet Number for Structures border sheet numbers	0	0	0	Yes
100	spst10	TextStructures	Structures Text	0	0	0	Yes
100	spst10	TextStructuresLabel	Used By Sheet Navigator	0	0	0	Yes
100	spst10	TrafBarrierConc	Traffic Barrier Concrete	2	0	3	Yes
100	spst10	UtilityCableTV	UtilityCableTV	6	0	0	Yes
100	spst10	UtilityFiberOptics	UtilityFiberOptics	6	0	0	Yes
100	spst10	UtilityGasMain	UtilityGasMain	0	0	0	Yes
100	spst10	UtilityPower	UtilityPower	2	0	0	Yes
100	spst10	UtilitySewer	UtilitySewer	3	0	0	Yes

Critical	Rule File	Level Name	Level Description	ByLevel Color	ByLevel Style	Bylevel Weight	Plot ?
100	spst10	UtilityTelephone	UtilityTelephone	6	0	0	Yes
100	spst10	UtilityWater	UtilityWater	7	0	0	Yes
	spst10	Viewport	Viewport (for AutoCAD use)	3	0	0	No
100	spst10	Walkways-Ladders	Steel Ladder & Walkway Components; Timber, Steel, Plastic Landings & Catwalks	6	0	1	Yes
100	spst10	WallConc	Wall Coping Concrete	2	0	3	Yes
100	spst10	WallConc_h	Wall Coping Concrete Hidden	2	2 / DGN2	2	Yes
100	spst10	WallHardware	Wall Hardware	3	0	0	Yes
100	spst10	WallMSEPanel	Wall MSE Panels	2	0	3	Yes
100	spst10	WallMSEPanel_h	Wall MSE Panels Hidden	2	2 / DGN2	2	Yes
100	spst10	WallsArch	Interior Walls	6	0	2	Yes
100	spst10	WallsArch_h	Interior Walls Hidden	6	3 / DGN3	1	Yes
100	spst10	WallSoundConc	Precast Soundwall Concrete	2	0	3	Yes
100	spst10	WallSoundConc_h	Precast Soundwall Concrete Hidden	2	2 / DGN2	2	Yes
100	spst10	WallTempCritical	Wall Temporary Critical	3	0	1	Yes
100	spst10	WallTempCritical_h	Wall Temporary Critical Hidden	3	2 / DGN2	1	Yes
100	spst10	WaterLines	Water Line, Symbol	15	0	1	Yes
100	spst10	Whaler	Whalers, Timber,Plastic	142	0	1	Yes
100	spst10	Windows	Windows	3	0	2	Yes
100	spst10	Windows_h	Windows Hidden	3	3 / DGN3	1	Yes
100	spst10	Wood	Wood	142	0	1	Yes
100	spst10	Wood_h	Wood Hidden	142	3 / DGN3	0	Yes

SURVRD - Survey Development Model

Critical	Rule File	Level Name	Level Description	ByLevel Color	ByLevel Style	Bylevel Weight	Point/Line	Feature Code
	survrd	ArchSite_ep	Archeological Site	2	0	1	L	ARST
	survrd	Attenuator_ep	Attenuator Systems	0	0	1	L	ATTN
	survrd	BankMent_ep	Embankment (Manmade, Top or Bottom)	9	3 / DGN3	0	L	BNK
	survrd	BaselineSurvey	Baseline Survey	0	0	2	L	BL
	survrd	Basins_ep	Sediment Basin, Retention Pond	10	3 / DGN3	1	L	BAS
	survrd	Beacons_ep	Beacons and Path Illumination	0	0	1	P	BN
	survrd	BLSurveyCntrl_ep	Baseline Survey Control	0	0	2	L	BLC
	survrd	BLSurveyField_ep	Baseline Field Survey	0	0	2		
	survrd	BLSurveySymbl_ep	Baseline Survey Symbol	0	0	0	P	BL
	survrd	Bollard_ep	Bollards	0	2 / DGN2	1	P	BOL
	survrd	BoxCulvert_ep	Box Culvert	10	3 / DGN3	1	L	BXC
	survrd	Bridge_ep	Bridge Approaches and Slabs	0	3 / DGN3	1	L	APRS
	survrd	BridgeEle_ep	Bridge Elements	0	1 / DGN1	0	L	BRDG
	survrd	Building_ep	Buildings	1	0	0	L	BLDG
	survrd	BusStop_ep	Bench, Bus Stop	8	1 / DGN1	0	P	BNCH
	survrd	CableBarrier_ep	Cable Barrier	0	RD-CableBarrier	1	L	CBR
	survrd	Canal_ep	Canal, Lock	7	3 / DGN3	0	L	CAN

Critical	Rule File	Level Name	Level Description	ByLevel Color	ByLevel Style	Bylevel Weight	Point/Line	Feature Code
	survrd	CattleGuard_ep	Cattle Guard	7	1 / DGN1	0	P	CGD
	survrd	CATV_ep	Cable TV Line (Aerial)	6	UT-OverheadCable-Existing	0		CATV
	survrd	CATVBur_ep	Cable TV Line (Buried)	6	UT-BuriedCable-Existing	1		BCATV
	survrd	CATVBurB_ep	Cable TV Line (Buried) Quality Level B Locate	6	UT-BuriedCable-Existing(B)	1		BCATVB
	survrd	CATVBurC_ep	Cable TV Line (Buried) Quality Level C Locate	6	UT-BuriedCable-Existing(C)	1		BCATVC
	survrd	CATVBurD_ep	Cable TV Line (Buried) Quality Level D Locate	6	UT-BuriedCable-Existing(D)	1		BCATVD
	survrd	CATVCond_ep	Cable TV Conduit System	6	UT-BuriedCable-Existing	1		CATVC
	survrd	CATVCondB_ep	Cable TV Conduit System Quality Level B Locate	6	UT-BuriedCable-Existing(B)	1		CATVCB
	survrd	CATVCondC_ep	Cable TV Conduit System Quality Level C Locate	6	UT-BuriedCable-Existing(C)	1		CATVCC
	survrd	CATVCondD_ep	Cable TV Conduit System Quality Level D Locate	6	UT-BuriedCable-Existing(D)	1		CATVCD
	survrd	CATVMisc_ep	Cable TV Service Box, Pole	6	1 / DGN1	1		CATVS
	survrd	CGBack_ep	Curb and Gutter (Back)	4	3 / DGN3	0	L	CGB
	survrd	CGep_ep	Curb / Curb and Gutter (at EP & FL)	0	3 / DGN3	0	L	CG
	survrd	CGFace_ep	Face of Curb and Gutter	4	3 / DGN3	0	L	CGF
	survrd	ConcSlabs_ep	Concrete Slabs	0	1 / DGN1	1	L	CSL
	survrd	Conduit_ep	Utility Conduit & Encasements	3	UT-Casing-Existing	0		DUCT
	survrd	ConduitB_ep	Utility Conduit & Encasements Quality Level B Locate	3	UT-Casing-Existing(B)	0		DUCTB
	survrd	ConduitC_ep	Utility Conduit & Encasements Quality Level C Locate	3	UT-Casing-Existing(C)	0		DUCTC
	survrd	ConduitD_ep	Utility Conduit & Encasements Quality Level D Locate	3	UT-Casing-Existing(D)	0		DUCTD
	survrd	ConstLines	Construction Lines and References	1	0	0		
	survrd	ConstLines_pm	Construction Lines	4	0	0		
	survrd	Core_ep	Core Sample or Test Hole	9	0	0	P	CSH
	survrd	CrossDrain_ep	Underdrains and Cross drains	10	3 / DGN3	1	L	UD
	survrd	CurbRamp_ep	Curb Cut Ramp	2	3 / DGN3	0	L	CCR
	survrd	CurbRampWarning_ep	Detectable Warnings on Curb Ramps (Existing)	4	3 / DGN3	0	L	CRW
	survrd	CurveDataLabel_dp	Curve Data Labels PC,PI, PT	0	0	2		
	survrd	Deck_ep	Deck / Porch	7	1 / DGN1	0	L	DECK
	survrd	DelineatorPost_ep	Delineator Post, Existing Metal and Flexible	4	1 / DGN1	1	P	DLP
	survrd	Ditch_ep	Ditch (Top, Bottom and Flow Lines)	7	6 / DGN6	0	L	DTCH
	survrd	DitchPavt_ep	Ditch Pavement	0	1 / DGN1	0	L	DTCHP
	survrd	Docks_ep	Docks and Wharfs	0	1 / DGN1	0	L	DOCK
	survrd	Dolphins_ep	Dolphins and Fenders	7	1 / DGN1	0	P	DF
	survrd	DrainMisc_ep	Catch Basins	10	3 / DGN3	1	L	CB
	survrd	DrainMisc_ep	Drainage Pipes and Spouts	10	3 / DGN3	1	L	DRNP
	survrd	DrainMisc_ep	Drainage Junction Box	10	3 / DGN3	1	L	JB
	survrd	DrainMisc_ep	Special Drainage Feature (Describe)	10	3 / DGN3	1	L	SPD
	survrd	DrainMisc_ep	Spillways, Flumes or Scuppers	10	3 / DGN3	1	L	SPL
	survrd	DrainMisc_ep	Yard Drain	10	3 / DGN3	1	L	YD
	survrd	Driveway_ep	Driveway (Drive, Lane, Turnouts)	7	3 / DGN3	0	L	DWY
X	survrd	DTM_ex	Digital Terrain Model for Cross Sections (Existing)	2	1 / DGN1	1		
X	survrd	DTMVertices_ep	Digital Terrain Model, Triangle Vertices (Existing)	0	0	1		
X	survrd	FlowArrow_ep	Digital Terrain Model, Triangle Flow Arrows (Existing)	10	0	1		
	survrd	DummyChains_ep	Dummy Chains	0	0	1	L	DUMB
	survrd	EndTreat_ep	Flared End Section	10	3 / DGN3	1	L	FES
	survrd	EndTreat_ep	Mitered End Section	10	3 / DGN3	1	L	MES

Critical	Rule File	Level Name	Level Description	ByLevel Color	ByLevel Style	Bylevel Weight	Point/Line	Feature Code
	survrd	EndTreat_ep	Straight Endwall	10	3 / DGN3	1	L	SEW
	survrd	EndTreat_ep	Special Endwall	10	3 / DGN3	1	L	SPEW
	survrd	EndTreat_ep	U-Type Endwall	10	3 / DGN3	1	L	UEW
	survrd	EndTreat_ep	Winged End wall	10	3 / DGN3	1	L	WEW
	survrd	Fence_ep	Fence (All)	6	RD-Fence	0	L	FNC
	survrd	FireHydrant_ep	Fire Hydrant	1	1 / DGN1	1		FH
	survrd	FloodLight_ep	Flood Light	3	1 / DGN1	1	P	FLD
	survrd	FOAer_ep	Fiber Optics Cable (Overhead)	6	UT-OverheadFiberOptic-Existing	0		FOC
	survrd	FOBur_ep	Fiber Optics Telephone (Size Unknown)	6	UT-BuriedFiberOptic-Existing	0		FO
	survrd	FOBur_ep	Fiber Optics Cable (Underground)	6	UT-BuriedFiberOptic-Existing	0		FOCU
	survrd	FOBur_ep	Fiber Optics Telephone (Underground)	6	UT-BuriedFiberOptic-Existing	0		FOU
	survrd	FOBurB_ep	Fiber Optics Cable (Underground) Quality Level B Locate	6	UT-BuriedFiberOptic-Existing(B)	0		FOCUB
	survrd	FOBurB_ep	Fiber Optics Cable (Underground) Quality Level B Locate	6	UT-BuriedFiberOptic-Existing(B)	0		FOTVUB
	survrd	FOBurB_ep	Fiber Optics Cable (Underground) Quality Level B Locate	6	UT-BuriedFiberOptic-Existing(B)	0		FOUB
	survrd	FOBurC_ep	Fiber Optics Cable (Underground) Quality Level C Locate	6	UT-BuriedFiberOptic-Existing(C)	0		FOCUC
	survrd	FOBurC_ep	Fiber Optics Cable (Underground) Quality Level C Locate	6	UT-BuriedFiberOptic-Existing(C)	0		FOTVUC
	survrd	FOBurC_ep	Fiber Optics Cable (Underground) Quality Level C Locate	6	UT-BuriedFiberOptic-Existing(C)	0		FOUC
	survrd	FOBurD_ep	Fiber Optics Cable (Underground) Quality Level D Locate	6	UT-BuriedFiberOptic-Existing(D)	0		FOCUD
	survrd	FOBurD_ep	Fiber Optics Cable (Underground) Quality Level D Locate	6	UT-BuriedFiberOptic-Existing(D)	0		FOTVUD
	survrd	FOBurD_ep	Fiber Optics Cable (Underground) Quality Level D Locate	6	UT-BuriedFiberOptic-Existing(D)	0		FOUD
	survrd	FOPower_B_ep	Fiber Optics Power Quality Level B Locate	3	UT-BuriedFiberOptic-Existing(B)	0		FOPUB
	survrd	FOPower_C_ep	Fiber Optics Power Quality Level C Locate	3	UT-BuriedFiberOptic-Existing(C)	0		FOPUC
	survrd	FOPower_D_ep	Fiber Optics Power Quality Level D Locate	3	UT-BuriedFiberOptic-Existing(D)	0		FOPUD
	survrd	FOPower_ep	Fiber Optics Power	3	UT-BuriedFiberOptic-Existing	0	L	FOP
	survrd	FOPower_ep	Fiber Optics Power	3	UT-BuriedFiberOptic-Existing	0	L	FOPU
	survrd	Furnace_ep	Incinerator, Boiler, or Furnace	8	1 / DGN1	0	P	INCN
	survrd	Gas_ep	Gas Line (all sizes)	4	UT-Gas-Existing	1		GAS
	survrd	Gas_ep	Gas Test & Miscellaneous	4	UT-Gas-Existing	1		GTM
	survrd	GasB_ep	Gas Line (all sizes) Quality Level B Locate	4	UT-Gas-Existing(B)	1		GASB
	survrd	GasC_ep	Gas Line (all sizes) Quality Level C Locate	4	UT-Gas-Existing(C)	1		GASC
	survrd	GasD_ep	Gas Line (all sizes) Quality Level D Locate	4	UT-Gas-Existing(D)	1		GASD
	survrd	GasReg_ep	Gas Regulator	4	1 / DGN1	1		RG
	survrd	Gates_ep	Gates	7	3 / DGN3	0	L	GT
	survrd	Gauges_ep	Gauges	0	1 / DGN1	1		GA
	survrd	GlareScrn_ep	Glare Screen & Blinds	0	{ curtain }	0	L	GS
	survrd	GroundShot_ep	Ground Shot for DTM Densification	2	0	0	P	GND
	survrd	GuardrailDbl_ep	Guardrail Double Face	0	RD-Guardrail-Double	0	L	GRDBL
	survrd	GuardrailLt_ep	Guardrail Left	0	RD-Guardrail-Left	0	L	GRL
	survrd	GuardrailRt_ep	Guardrail Right	0	RD-Guardrail-Right	0	L	GRR
	survrd	Guys_ep	Guy Anchor	3	1 / DGN1	1		GYA
	survrd	Guys_ep	Guy Pole (Deadman)	3	1 / DGN1	1		GYP
	survrd	Guys_ep	Span Guys	3	1 / DGN1	1		GYS
	survrd	Hole_ep	Hole	8	1 / DGN1	0	P	HOLE
	survrd	ImageAttachment_dp	Image Attachments	0	0	0		
	survrd	InletBottom_ep	Drainage Structure Bottoms	10	3 / DGN3	1	L	DRNB

Critical	Rule File	Level Name	Level Description	ByLevel Color	ByLevel Style	Bylevel Weight	Point/Line	Feature Code
	survrd	InletCurb_ep	Curb Inlets	10	3 / DGN3	1	L	CINL
	survrd	InletCurb_ep	Median Inlets	10	3 / DGN3	1	L	MEDI
	survrd	InletDBI_ep	Ditch Bottom Inlet	10	3 / DGN3	1	L	DTCHI
	survrd	InletGutter_ep	Gutter Inlets (All Types)	10	3 / DGN3	1	L	GI
	survrd	JunctBox_ep	Junct. Box / Service Cabinet (Elec/Tel)	3	1 / DGN1	1		SRVC
	survrd	LaneLine_ep	Lane Lines	0	RD-LaneLine-Existing	1	L	LL
	survrd	LeaderLine_dp	Leader Line and terminator with Text	0	0	1		
	survrd	LiteCond_ep	Street Lighting Conductors	3	SG-ConduitUG-Existing	0	L	SLC
	survrd	Luminaire_ep	Street Light / Pole	3	1 / DGN1	1	P	LP
	survrd	Mailbox_ep	Mailbox(s)	8	1 / DGN1	0	P	MBX
	survrd	ManholeCover_ep	Manhole Cover (Cable TV)	6	1 / DGN1	1	P	MHCATV
	survrd	ManholeCovUnk_ep	Manhole Cover, Unknown	0	1 / DGN1	1	P	MH
	survrd	ManholeCovW_ep	Manhole Cover (Water)	1	1 / DGN1	1	P	MHW
	survrd	ManholeElec_ep	Manhole (Electric)	3	1 / DGN1	1	P	MHE
	survrd	ManholeGas_ep	Manhole (Gas)	4	1 / DGN1	1	P	MHG
	survrd	ManholeSS_ep	Manhole (Sanitary Sewer)	2	1 / DGN1	1	P	MHS
	survrd	ManholeSW_ep	Manhole (Storm Water)	10	1 / DGN1	0	P	MHD
	survrd	ManholeTel_ep	Manhole (Telephone)	6	1 / DGN1	1	P	MHT
	survrd	MeterElec_ep	Meter (Electric)	3	1 / DGN1	1	P	ME
	survrd	MeterElecUG_ep	Meter (Electric) (Underground)	3	1 / DGN1	1	P	MEU
	survrd	MeterGas_ep	Meter (Gas)	4	1 / DGN1	1	P	MG
	survrd	MeterUnk_ep	Meter (unknown)	0	1 / DGN1	1	P	M
	survrd	MeterWater_ep	Meter (Water)	1	1 / DGN1	1	P	MW
	survrd	MiscEquip_ep	Flag Pole	8	1 / DGN1	0	P	FP
	survrd	MiscEquip_ep	Parking Meter	8	1 / DGN1	0	P	PKGM
	survrd	Monument_ep	Aerial Targets	4	0	0	P	AT
	survrd	Monument_ep	Concrete Monument (Cast)	4	0	0	P	CMON
	survrd	Monument_ep	Drill Hole, Plug (Control Monumentation)	4	0	0	P	DH
	survrd	Monument_ep	Deep Rod Mark	4	0	0	P	DRM
	survrd	Monument_ep	5/8 Rod and Cap	4	0	0	P	IRC
	survrd	Monument_ep	Nail, Spike, Pin (Control Monumentation)	4	0	0	P	NL
	survrd	Monument_ep	Other Marker? (Control Monumentation)	4	0	0	P	OM
	survrd	Monument_ep	Metal Pipe, Rod, Bar (Control)	4	0	0	P	PIP
	survrd	Monument_ep	Concrete Monument (Poured)	4	0	0	P	PMON
	survrd	Monument_ep	Post, Stake, Staub (Control Monumentation)	4	0	0	P	PST
	survrd	Monument_ep	Hub and Tac	4	0	0	P	SAT
	survrd	Monument_ep	Stamped Disk	4	0	0	P	STMD
	survrd	Monument_ep	Stamped Plate	4	0	0	P	STMP
	survrd	Oil_B_ep	Oil Line (all sizes) Quality Level B Locate	4	UT-Petroleum-Existing(B)	1		PETROB
	survrd	Oil_C_ep	Oil Line (all sizes) Quality Level C Locate	4	UT-Petroleum-Existing(C)	1		PETROC
	survrd	Oil_D_ep	Oil Line (all sizes) Quality Level D Locate	4	UT-Petroleum-Existing(D)	1		PETROD
	survrd	Oil_ep	Oil Line (all sizes)	4	UT-Petroleum-Existing	1	L	PETRO
	survrd	ParkEquip_ep	Campstove, Grill, Firepit, BBQ	9	2 / DGN2	0	P	CMPST
	survrd	ParkEquip_ep	Playground Equipment	9	2 / DGN2	0	P	PLEQ
	survrd	Patternlines_ep	Cross Section Chain	2	1 / DGN1	0	L	XSC

Critical	Rule File	Level Name	Level Description	ByLevel Color	ByLevel Style	Bylevel Weight	Point/Line	Feature Code
	survrd	Pavemk_ep	Handicap Pavement Marking	0	2 / DGN2	0	P	HNDC
	survrd	Pavemk_ep	Pavement Markings (Other)	0	2 / DGN2	0	L	PMRK
	survrd	Pavemk_ep	Straight Direction Arrow	0	2 / DGN2	0	P	STAROW
	survrd	Pavemk_ep	Straight and Turn Arrow	0	2 / DGN2	0	P	STATRN
	survrd	Pavemk_ep	Turn Arrow	0	2 / DGN2	0	P	TA
	survrd	PavtAsph_ep	Asphalt Pavement Edge	0	3 / DGN3	1	L	AP
	survrd	PavtConc_ep	Concrete Pavement (Edges)	0	3 / DGN3	1	L	CPVT
	survrd	PavtConcJoints_ep	Concrete Pavement (Joints)	1	5 / DGN5	1	L	CPVJ
	survrd	PavtCrown_ep	Asphalt Pavement (Crown)	0	4 / DGN4	1	L	AC
	survrd	PavtCrown_ep	Concrete Pavement (Crown)	0	4 / DGN4	1	L	CPVC
	survrd	PavtMisc_ep	Pavement Parking Lot/Guardrail/Misc Pavement	7	3 / DGN3	0	L	MP
	survrd	PavtTractorXing_ep	Tractor Crossings	0	3 / DGN3	1	L	TX
	survrd	PavtXover_ep	Crossovers and Detours (Temporary)	0	3 / DGN3	0	L	XO
	survrd	PedSignal_ep	Pedestrian Signal Unit, Signage	0	2 / DGN2	0	P	PS
	survrd	Piling_ep	Piling, Piers, or Column	8	3 / DGN3	0	P	PIL
	survrd	PipeCulvert_ep	Pipe Culvert	10	3 / DGN3	1	L	PCULV
	survrd	PipeEncase_ep	Pipe Encasements	0	UT-Casing-Existing	1	L	PIPEN
	survrd	PipeEncaseB_ep	Pipe Encasements Quality Level B Locate	0	UT-Casing-Existing(B)	1		PIPENB
	survrd	PipeEncaseC_ep	Pipe Encasements Quality Level C Locate	0	UT-Casing-Existing(C)	1		PIPENC
	survrd	PipeEncaseD_ep	Pipe Encasements Quality Level D Locate	0	UT-Casing-Existing(D)	1		PIPEND
	survrd	PointLocator_ep	Point Locator Symbol	4	0	0	P	
	survrd	PolePower_ep	Power Pole	3	1 / DGN1	1	P	PP
	survrd	PolePower_ep	Power Pole with Transformer	3	1 / DGN1	1	P	PPT
	survrd	PolePower_ep	Shared Pole	3	1 / DGN1	1	P	SHP
	survrd	PolePower_ep	Shared Pole with Transformer	3	1 / DGN1	1	P	SHPT
	survrd	PoleTel_ep	Telephone Pole	6	1 / DGN1	1	P	TELP
	survrd	Power_ep	High Voltage Transmission Line	3	UT-OverheadElec-Existing	0	L	HVL
	survrd	Power_ep	Power Lines (Aerial)	3	UT-OverheadElec-Existing	0	L	PWR
	survrd	PowerBur_ep	Buried Power (Unknown Size)	3	UT-BuriedElec-Existing	1	L	BPWR
	survrd	PowerBur_ep	Buried Conductors (Transmission)	3	UT-BuriedElec-Existing	1	L	TRANS
	survrd	PowerBurB_ep	Existing Buried Electric Power Quality Level B Locate	3	UT-BuriedElec-Existing(B)	1		BPWRB
	survrd	PowerBurC_ep	Existing Buried Electric Power Quality Level C Locate	3	UT-BuriedElec-Existing(C)	1		BPWRC
	survrd	PowerBurCond_ep	Secondary Conductor Buried	3	UT-BuriedElec-Existing	0	L	BSEC
	survrd	PowerBurCond_ep	Secondary Conductor Buried	3	UT-BuriedElec-Existing	0	L	SEC
	survrd	PowerBurD_ep	Existing Buried Electric Power Quality Level D Locate	3	UT-BuriedElec-Existing(D)	1		BPWRD
	survrd	PowerCapcUG_ep	Capacitors (UnderGround)	3	1 / DGN1	1	L	CAPB
	survrd	PowerCond_ep	Conductors (primary distribution)	3	UT-OverheadElec-Existing	1	L	PRI
	survrd	PowerElecOut_ep	Electrical Outlet	3	1 / DGN1	1	P	ELEO
	survrd	PowerMisc_ep	Capacitors (Above Ground)	3	1 / DGN1	1	L	CAPA
	survrd	PowerMisc_ep	Electric Service Box (Large)	3	1 / DGN1	1	L	ELECS
	survrd	PowerMisc_ep	Fuses (Existing)	3	1 / DGN1	1	L	FUSE
	survrd	PowerMisc_ep	Switchgear & Appurtenances	3	1 / DGN1	1	L	SW
	survrd	PowerMisc_ep	Transformer	3	1 / DGN1	1	P	TRNF
	survrd	PullBox_ep	Wiring Pull Box	3	1 / DGN1	1	P	WPB

Critical	Rule File	Level Name	Level Description	ByLevel Color	ByLevel Style	Bylevel Weight	Point/Line	Feature Code
	survrd	Pump_ep	Pump (Petroleum / Fuel)	7	1 / DGN1	1	P	PMPF
	survrd	PumpIsland_ep	Pump Island	7	3 / DGN3	1	L	PMPIS
	survrd	PumpNonPet_ep	Pump (Non Petroleum)	1	1 / DGN1	1	P	PMP
	survrd	Railing_ep	All Existing Railings; Piperail, Guiderail, Handrail used for Pedestrian and Bicycles	9	3 / DGN3	0	L	HNDRL
	survrd	RailroadMisc_ep	RR Milepost	11	0	0	P	RRMP
	survrd	RailroadMisc_ep	RR Switch	11	0	0	P	RRS
	survrd	RailroadMisc_ep	RR Warning Sign	11	0	0	P	RRWS
	survrd	RailroadMisc_ep	RR Signal with Gate	11	0	0	P	SWG
	survrd	RailroadTracks_ep	Railroad Tracks (Rail, Bed)	4	3 / DGN3	0	L	RR
	survrd	RailroadXing_ep	RR Crossing (Roadway Platforms), RR Signal w/ Gate	11	3 / DGN3	0	L	RRX
	survrd	RefPtLine	Miscellaneous:Survey Reference Point Line / Detail	0	0	1		
	survrd	RefPtText	Annotation:Miscellaneous:Text: Survey Data Reference Point	0	0	1		
	survrd	RipRap_ep	Rip Rap, Rubble	4	3 / DGN3	1	L	RIP
	survrd	RRBaseline	Baseline:Rail Road Centerline	4	0	2	L	RRCL
	survrd	Sanitary_ep	Sanitary Sewer (all sizes)	2	UT-Sanitary-Existing	1	L	SS
	survrd	SanitaryB_ep	Sanitary Sewer (all sizes) Quality Level B Locate	2	UT-Sanitary-Existing(B)	1		SSB
	survrd	SanitaryC_ep	Sanitary Sewer (all sizes) Quality Level C Locate	2	UT-Sanitary-Existing(C)	1		SSC
	survrd	SanitaryD_ep	Sanitary Sewer (all sizes) Quality Level D Locate	2	UT-Sanitary-Existing(D)	1		SSD
	survrd	SanitaryDumpSta_ep	Dump Station (SS)	2	2 / DGN2	1	P	DMPS
	survrd	SanitaryFM_B_ep	Force Main (all sizes) Quality Level B Locate	2	UT-Sanitary-Existing(B)	1		FMB
	survrd	SanitaryFM_C_ep	Force Main (all sizes) Quality Level C Locate	2	UT-Sanitary-Existing(C)	1		FMC
	survrd	SanitaryFM_D_ep	Force Main (all sizes) Quality Level D Locate	2	UT-Sanitary-Existing(D)	1		FMD
	survrd	SanitaryFM_ep	Force Main (all sizes)	2	UT-Sanitary-Existing	1	L	FM
	survrd	SanitaryMisc_ep	Cleanout	2	1 / DGN1	1	P	CLNO
	survrd	SanitaryMisc_ep	Pump Station (Sanitary Sewer)	2	1 / DGN1	1	P	PMPST
	survrd	SanitaryMisc_ep	Sanitary Effluent (Open channel)	2	1 / DGN1	1	L	SE
	survrd	SateDish_ep	Sattelite Dish Antenna	6	4 / DGN4	1	P	SATD
	survrd	Scratch1_dp	A scratch level for temporary or informational items	4	0	0		
	survrd	Scratch2_dp	A scratch level for temporary or informational items	5	0	0		
	survrd	ShldrPaved_ep	Shoulder Edge, Paved	1	3 / DGN3	0	L	SHLDR
	survrd	ShldrUnpaved_ep	Unpaved Shoulders	0	3 / DGN3	0	L	UNPS
	survrd	Shrub_ep	Hedges and Shrubs (Boundary)	2	0	0	L	HED
	survrd	Shrub_ep	Ornamental Plant	2	0	0	P	OP
	survrd	Shrub_ep	Shrub, Bush	2	0	0	P	SHR
	survrd	Shrub_ep	Coniferous Shrub	2	0	0	P	SHRC
	survrd	Shrub_ep	Deciduous Shrub	2	0	0	P	SHRD
	survrd	SidewalkBack_ep	Sidewalk (Backs)	2	3 / DGN3	0	L	SWKB
	survrd	SidewalkFront_ep	Sidewalk (Fronts)	1	3 / DGN3	0	L	SWK
	survrd	Signal_ep	Signal Head	3	1 / DGN1	1	P	SIG
	survrd	Signal_ep	Signal on Pedestal	3	1 / DGN1	1	P	SIGP
	survrd	SignalLoop_ep	Traffic Detector Loops	7	1 / DGN1	2	L	TFD
	survrd	SignalMisc_ep	Signal Controller	3	2 / DGN2	0	P	SIGC
	survrd	SignalSupport_ep	Signal Supports including Mast Arm	3	2 / DGN2	0	P	SMA
	survrd	SignalSupport_ep	Support Mast Arm Extension	3	2 / DGN2	0	L	SMAE

Critical	Rule File	Level Name	Level Description	ByLevel Color	ByLevel Style	Bylevel Weight	Point/Line	Feature Code
	survrd	SignMulti_ep	Multi-column Sign (Large Sign)	0	3 / DGN3	1	L	MS
	survrd	SignSingle_ep	Sign (Single Support)	3	2 / DGN2	0	P	SSS
	survrd	SignSupport_ep	Trusses and Cantilevers for Overhead Signs	0	3 / DGN3	1	L	SGNT
	survrd	Silo_ep	Silo	11	2 / DGN2	0	P	SILO
	survrd	Slopes_ep	Levees, Dikes, or Dams (Top or Bottom)	9	3 / DGN3	0	L	LV
	survrd	Slopes_ep	Natural Slopes (Top or Bottom)	9	3 / DGN3	0	L	SLP
	survrd	SpanWire_ep	Signal / Span Wire Pole	3	2 / DGN2	0	P	SSP
	survrd	SpanWire_ep	Signal / Span Wire Pole	3	2 / DGN2	0	L	SSW
	survrd	Sprinkler_ep	Sprinkler Head	1	1 / DGN1	1	P	SPH
	survrd	Stairs_ep	Stairways, Steps	0	3 / DGN3	1	L	STP
	survrd	StationTicL_dp	Station Tic Marks (Large) and Text	0	0	2		
	survrd	StationTicS_dp	Station Tic Marks (Small) and Text	0	0	2		
	survrd	Steam_ep	Steam	4	UT-Steam-Existing	1	L	STEAM
	survrd	SteamB_ep	Steam Line Quality Level B Locate	4	UT-Steam-Existing(B)	1		STEAMB
	survrd	SteamC_ep	Steam Line Quality Level C Locate	4	UT-Steam-Existing(C)	1		STEAMC
	survrd	SteamD_ep	Steam Line Quality Level D Locate	4	UT-Steam-Existing(D)	1		STEAMD
	survrd	StormSewer_ep	Storm Sewer (all sizes), Drain Pipes and Spouts	10	3 / DGN3	1	L	STS
	survrd	Stream_ep	Stream Edge	1	3 / DGN3	0	L	STRM
	survrd	Stream_ep	Stream Center	1	3 / DGN3	0	L	STRMC
	survrd	StreamMisc_ep	Buoy	7	0	0	P	BUOY
	survrd	StreamMisc_ep	Stream or Tide Gauge	7	0	0	P	TG
	survrd	Stump_ep	Stump	2	0	0	P	STM
	survrd	SU_Misc_ep	Miscellaneous Subsurface Utilities	0	0	0		EOI
	survrd	SU_Misc_ep	Miscellaneous Subsurface Utilities	0	0	0		QDEL
	survrd	SU_QLA_ep	Subsurface Utility Quality Level A Locate Point	0	0	0		QLA
	survrd	SU_QLB_ep	Subsurface Utility Quality Level B Locate Point	0	0	0		QLB
	survrd	SU_QLC_ep	Subsurface Utility Quality Level C Locate Point	0	0	0		QLC
	survrd	SU_QLD_ep	Subsurface Utility Quality Level D Locate Point	0	0	0		QLD
	survrd	SU_TestHole_ep	Subsurface Utility Test Hole (QLA Only)	0	0	0		THA
	survrd	Tables_dp	Data Tables and All Autodesk Tables	0	0	1		
	survrd	TankStor_ep	Storage Tank	11	3 / DGN3	0	P	STTK
	survrd	TankUG_ep	Fill Cap (Underground Tank)	3	1 / DGN1	0	P	FC
	survrd	Tele_ep	Telephone Line (aerial)	6	UT-OverheadTel-Existing	0	L	TEL
	survrd	TeleBur_ep	Buried Telephone (all sizes), Duct, Toll	6	UT-BuriedTel-Existing	1	L	BT
	survrd	TeleBur_ep	Buried Telephone, TOLL	6	UT-BuriedTel-Existing	1	L	BTT
	survrd	TeleBur_ep	Buried Telephone, DUCT	6	UT-BuriedTel-Existing	1		
	survrd	TeleBurB_ep	Telephone (all sizes Buried) Quality Level B Locate	6	UT-BuriedTel-Existing(B)	1		BTB
	survrd	TeleBurB_ep	Telephone (all sizes Buried) Quality Level B Locate	6	UT-BuriedTel-Existing(B)	1		BTDB
	survrd	TeleBurB_ep	Telephone (all sizes Buried) Quality Level B Locate	6	UT-BuriedTel-Existing(B)	1		BTTB
	survrd	TeleBurC_ep	Telephone (all sizes Buried) Quality Level C Locate	6	UT-BuriedTel-Existing(C)	1		BTC
	survrd	TeleBurC_ep	Telephone (all sizes Buried) Quality Level C Locate	6	UT-BuriedTel-Existing(C)	1		BTDC
	survrd	TeleBurC_ep	Telephone (all sizes Buried) Quality Level C Locate	6	UT-BuriedTel-Existing(C)	1		BTTC
	survrd	TeleBurD_ep	Telephone (all sizes Buried) Quality Level D Locate	6	UT-BuriedTel-Existing(D)	1		BTD
	survrd	TeleBurD_ep	Telephone (all sizes Buried) Quality Level D Locate	6	UT-BuriedTel-Existing(D)	1		BTDD
	survrd	TeleBurD_ep	Telephone (all sizes Buried) Quality Level D Locate	6	UT-BuriedTel-Existing(D)	1		BTTD

Critical	Rule File	Level Name	Level Description	ByLevel Color	ByLevel Style	Bylevel Weight	Point/Line	Feature Code
	survrd	TeleMisc_ep	Telephone Booth	6	1 / DGN1	1	P	TB
	survrd	TeleMisc_ep	Telephone Service Box (Large)	6	1 / DGN1	1	L	TELS
	survrd	TeleMisc_ep	Telephone Pedestal / Service	6	1 / DGN1	1	P	TPD
	survrd	TextBLStation	Text - B/L Station and Tics	0	0	2		
	survrd	TextCurveData	Text - Curve Data Note	0	0	2		
	survrd	TextElevLabel	Elevation Labels	4	0	0		
	survrd	TextLabel	Text - Label	0	0	2		
	survrd	TextMisc	Text - Miscellaneous	0	0	1		
	survrd	TextNotes	Text - Notes	4	0	1		
	survrd	TextPtLabel	Point Labels	4	0	0		
	survrd	TextSurveyLabel	Survey Text Labels	0	0	0	P	MISC
	survrd	TextSurveyLabel	Survey Text Labels	0	0	0	P	NOTE
	survrd	TextSurveyLabel	Survey Text Labels	0	0	0		
	survrd	TopoMisc_ep	Miscellaneous Topography	0	3 / DGN3	1	L	MISC
	survrd	Tower_ep	Antenna	3	1 / DGN1	1	P	ANT
	survrd	Tower_ep	Transmission Tower (Single Column)	3	1 / DGN1	1	P	CLMT
	survrd	Tower_ep	High Mast Lighting Poles	3	1 / DGN1	1	P	HML
	survrd	TrafSeparator_ep	Traffic Separator	6	3 / DGN3	0	L	TFSP
	survrd	Trail_ep	Roadway,Trail (Unpaved)	9	3 / DGN3	1	L	RD
	survrd	Trash_ep	Dumpster, Trash Disposal	9	0	0	P	DMP
	survrd	Treadle_ep	Treadle	7	1 / DGN1	5	L	TRD
	survrd	Tree_ep	Tree	2	0	0	P	TREE
	survrd	Tree_ep	Coniferous Tree	2	0	0	P	TREEC
	survrd	Tree_ep	Citrus Tree	2	0	0	P	TREECI
	survrd	Tree_ep	Cypress Tree	2	0	0	P	TREECY
	survrd	Tree_ep	Deciduous Tree	2	0	0	P	TREED
	survrd	Tree_ep	Oak Tree	2	0	0	P	TREEOA
	survrd	Tree_ep	Palm Tree	2	0	0	P	TREEPA
	survrd	Tree_ep	Palm Tree Cluster	2	0	0	P	TREEPC
	survrd	Tree_ep	Pine Tree	2	0	0	P	TREEPI
	survrd	TreeLine_ep	Groves & Orchards (Boundary)	2	RD-TreeLine	0	L	GRV
	survrd	TreeLine_ep	Scattered Trees (Boundary)	2	RD-TreeLine	0	L	SCT
	survrd	TreeLine_ep	Woods Line	2	RD-TreeLine	0	L	WDL
	survrd	Tributary_ep	Spring (Water Source)	1	0	0	P	SPR
	survrd	UnderDrain_ep	Under Drain Box	10	3 / DGN3	0	P	UDBX
	survrd	UtilMisc_ep	Miscellaneous Utilities	0	0	0	L	
	survrd	Valve_ep	Valve Box	0	1 / DGN1	1	P	VB
	survrd	Valve_ep	Valve	0	1 / DGN1	1	P	VLV
	survrd	ValveBFP_ep	Valve (Back Flow Preventer), ValveBox	0	1 / DGN1	1	P	VLVB
	survrd	ValveCover_ep	Valve Cover (Unknown)	0	1 / DGN1	1	P	VC
	survrd	ValveCvrEff_ep	Valve Cover (Effluent)	5	1 / DGN1	1	P	VCEF
	survrd	ValveCvrGas_ep	Valve Cover (Gas)	4	1 / DGN1	1	P	VCG
	survrd	ValveCvrSewer_ep	Valve Cover (Sewer)	2	1 / DGN1	1	P	VCS
	survrd	ValveCvrWater_ep	Valve Cover (Water)	1	1 / DGN1	1	P	VCW
	survrd	ValveCvrWaterNP_ep	Valve Cover (Non-potable Water)	5	1 / DGN1	1	P	VCNPW

Critical	Rule File	Level Name	Level Description	ByLevel Color	ByLevel Style	Bylevel Weight	Point/Line	Feature Code
	survrd	ValveCvrWaterNP_ep	Valve Cover (Raw Water)	5	1 / DGN1	1	P	VCRW
	survrd	ValveGas_ep	Valve Box (Gas)	4	1 / DGN1	1	P	VBG
	survrd	ValveGas_ep	Valve (Gas)	4	1 / DGN1	1	P	VLVG
	survrd	ValveSewer_ep	Valve Box (Sewer)	2	1 / DGN1	1	P	VBS
	survrd	ValveSewer_ep	Valve (Sewer)	2	1 / DGN1	1	P	VLVS
	survrd	ValveWater_ep	Valve Box (Water)	1	1 / DGN1	1	P	VBW
	survrd	ValveWater_ep	Valve (Water)	1	1 / DGN1	1	P	VLVW
	survrd	ValveWaterNP_ep	Valve Box (Non-potable Water)	5	1 / DGN1	1	P	VBNPW
	survrd	ValveWaterNP_ep	Valve (Non-potable Water)	5	1 / DGN1	1	P	VLVNPW
	survrd	Vault_ep	Vaults Above Grade	3	1 / DGN1	0	L	AGV
	survrd	Vault_ep	Vaults Below Grade	3	1 / DGN1	0	L	BGV
	survrd	Vent_ep	Vent	0	1 / DGN1	1	P	VNT
	survrd	VentGas_ep	Vent (Gas)	4	1 / DGN1	1	P	VNTG
	survrd	VentSewer_ep	Vent (Sewer)	2	1 / DGN1	1	P	VNTS
	survrd	Viewport	Viewport (For AutoCAD Use)	3	0	0		
	survrd	Wall_ep	Walls	9	3 / DGN3	1	L	WALL
	survrd	WallBarrier_ep	Any Existing Wall Dividing Traffic	6	3 / DGN3	0	L	BARW
	survrd	WallBarrier_ep	Any Existing Wall Dividing Traffic Temporary	6	3 / DGN3	0	L	TMPW
	survrd	WallRetainEarth_ep	Any Existing Wall Holding Earth	6	3 / DGN3	0	L	RETW
	survrd	WallSea_ep	Sea Walls	0	1 / DGN1	3	L	SEAW
	survrd	Water_ep	Water Line (all sizes)	1	UT-Water-Existing	1	L	WL
	survrd	WaterB_ep	Water Line (all sizes) Quality Level B Locate	1	UT-Water-Existing(B)	1		WLB
	survrd	WaterC_ep	Water Line (all sizes) Quality Level C Locate	1	UT-Water-Existing(C)	1		WLC
	survrd	WaterD_ep	Water Line (all sizes) Quality Level C Locate	1	UT-Water-Existing(D)	1		WLD
	survrd	WaterEdge_ep	Edge of Water	7	3 / DGN3	0	L	WEDG
	survrd	WaterMisc_ep	Faucet	1	1 / DGN1	1	P	FAU
	survrd	WaterMisc_ep	Standpipe	1	1 / DGN1	1	P	SP
	survrd	WaterNP_B_ep	Non-potable Water Line (all sizes) Quality Level B Locate	5	UT-NonPotableWater-Existing(B)	1		NPWLB
	survrd	WaterNP_C_ep	Non-potable Water Line (all sizes) Quality Level C Locate	5	UT-NonPotableWater-Existing(C)	1		NPWLC
	survrd	WaterNP_D_ep	Non-potable Water Line (all sizes) Quality Level D Locate	5	UT-NonPotableWater-Existing(D)	1		NPWLD
	survrd	WaterNP_ep	Non-potable Water Line (all sizes)	5	UT-NonPotableWater-Existing	1	L	NPWL
	survrd	Wells_ep	Well Monitoring, Taps	1	1 / DGN1	1	P	MONW
	survrd	Wells_ep	Well (All Sizes)	1	1 / DGN1	1	P	WELL
	survrd	Wetland_ep	W.M.D. & D.E.P. Wetlands	1	RD-Wetland-Existing	0	L	DEP
	survrd	WetlandEdge_ep	CORPS Wetlands (Marsh or Swamp)	2	RD-Wetland-Existing	0	L	COE
	survrd	WetlandEdge_ep	Edge of Mangrove	2	RD-Wetland-Existing	0	L	EM
	survrd	WetlandEdge_ep	Edge of Wetlands (Marsh or Swamp)	2	RD-Wetland-Existing	0	L	MAR
	survrd	WetlandSym_ep	Marsh Symbol	2	1 / DGN1	0	P	MAR
	survrd	WetlandSym_ep	Wetland Point	2	1 / DGN1	0	P	WLPT
	survrd	WindMill_ep	Wind Mill	1	1 / DGN1	0	P	WIM
	survrd	Xreference01_dp	Reference Files (For AutoCAD Use)	0	0	1		
	survrd	Xreference02_dp	Reference Files (For AutoCAD Use)	0	0	1		
	survrd	Xreference03_dp	Reference Files (For AutoCAD Use)	0	0	1		
	survrd	Xreference04_dp	Reference Files (For AutoCAD Use)	0	0	1		
	survrd	XSPt_ep	Cross Section Point, Station	2	1 / DGN1	0	P	XS

TCDSRD - Traffic Control

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
	tcdsrd	ActivePointCell_dp	Active Point Cell	4	0	10
	tcdsrd	AdhocPoint_dp	Adhoc Points Placed by SheetInfo	0	4 / 0	0
X	tcdsrd	AdvWarnPanel	Advance Warning Arrow Panels	4	0	2
X	tcdsrd	Aggregate	Aggregate	8	0	1
X	tcdsrd	ArtificialCovering	Artificial Coverings	10	0	2
X	tcdsrd	Attenuator	Attenuation Systems	6	MOT-Attenuator	1
X	tcdsrd	AttenuatorTM	Attenuator Truck Mount	6	0	2
X	tcdsrd	Barricade	Barricade	0	0	1
X	tcdsrd	Barricade1	Barricade Symbol Type 1 or 2 at 15' spacing	0	MOT-Barricade-15Gap	1
X	tcdsrd	Barricade2	Barricade Symbol Type 1 or 2 at 30' spacing	0	MOT-Barricade-30Gap	1
X	tcdsrd	Barricade3	Barricade Symbol Type 1 or 2 at 50' spacing	0	MOT-Barricade-50Gap	1
X	tcdsrd	Barricade4	Barricade Symbol Type 1 or 2 at 100' spacing	0	MOT-Barricade-100Gap	1
	tcdsrd	BaselineSurvey	Baseline Survey	0	0	2
X	tcdsrd	Bridge	Bridge	0	0	2
X	tcdsrd	CandG_ex	Curb and Gutter for Cross Sections (All Types) (Existing)	4	2 / DGN2	1
X	tcdsrd	CandG_px	Curb and Gutter for Cross Sections (All Types)	4	0	2
X	tcdsrd	CandGBase_px	Curb and Gutter Base on Cross Sections	3	0	1
	tcdsrd	ChannelDevPed	Longitudinal Channelizing Device for Pedestrians	6	MOT-ChannelDevPed	2
	tcdsrd	CLConst_dp	Center Line of Construction	0	0	2
	tcdsrd	ClipBorder_dp	CLIP Border and Civil 3D View Frame	3	0	0
	tcdsrd	ClipDrawingBound_dp	CLIP Drawing Boundary	3	3 / 0	0
	tcdsrd	Cloud_dp	Construction Cloud	7	0	2
X	tcdsrd	CmpFlashbrdRiser	Cmp Flashboard Riser	10	0	2
	tcdsrd	COGO_dp	COGO Information	3	0	1
X	tcdsrd	Concrete	Concrete Areas (All Types plus miscellaneous)	0	0	2
X	tcdsrd	ConcSlabs	Concrete Slabs	0	0	2
X	tcdsrd	Cone	Cone and Tubular Marker	6	0	2
	tcdsrd	ConstArea_dp	Construction Area Crosshatch	0	0	1
	tcdsrd	ConstLimits	Construction Limits	3	RW-LimitsofConst	2
	tcdsrd	ConstLines	Construction Lines and References	1	0	0
	tcdsrd	ConstLines_pm	Construction Lines	4	0	0
X	tcdsrd	CrossWalk1	Emphasis Crosswalk 6ft High	0	PM-Stripe-6’ Crosswalk	4
X	tcdsrd	CrossWalk2	Emphasis Crosswalk 10ft High	0	PM-Stripe-10’ Crosswalk	4
X	tcdsrd	CurbBack	Back of Curb	4	0	1
X	tcdsrd	CurbFace	Curb and Gutter (Face)	4	0	1
X	tcdsrd	CurbRamp	Curb Cut Ramp	8	0	1
	tcdsrd	CurveData_dp	Curve & Coordinate Data Elements incl PC, PT, PI symbols	4	0	2
	tcdsrd	CurveDataLabel_dp	Curve Data Labels PC,PI, PT	0	0	2
X	tcdsrd	Delineator	Delineators (All Types)	4	0	1
	tcdsrd	DimLines_dp	Dimension Lines, Corresponding Terminators, Equation Lines	0	0	1
X	tcdsrd	DirArrowsPavt	Pavement Marking Directional Arrows	0	0	1
X	tcdsrd	Ditch	Ditch Top	7	6 / DGN6	1

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
X	tcdsrd	DitchBot	Ditch Bottom	10	0	2
X	tcdsrd	DitchPavt	Ditch Pavement Including Quantity Shapes	3	0	1
	tcdsrd	DitchProfLt_er	Ditch Profile Left (Existing)	8	3 / DGN3	1
	tcdsrd	DitchProfLt_pr	Ditch Profile Left	8	0	1
	tcdsrd	DitchProfMdn_er	Ditch Profile Median (Existing)	10	3 / DGN3	1
	tcdsrd	DitchProfMdn_pr	Ditch Profile Median	10	0	1
	tcdsrd	DitchProfRt_er	Ditch Profile Right (Existing)	9	3 / DGN3	1
	tcdsrd	DitchProfRt_pr	Ditch Profile Right	9	0	1
	tcdsrd	DrainDivideArw	Drainage Divide Arrow	0	0	1
	tcdsrd	DrainDivides00	Drainage Divides	10	2 / DGN2	4
	tcdsrd	DrainDivides00_ep	Drainage Divides (Existing)	9	2 / DGN2	4
	tcdsrd	DrainDivides01	Drainage Divides	10	2 / DGN2	4
	tcdsrd	DrainDivides01_ep	Drainage Divides (Existing)	9	2 / DGN2	4
	tcdsrd	DrainDivides02	Drainage Divides	10	2 / DGN2	4
	tcdsrd	DrainDivides02_ep	Drainage Divides (Existing)	9	2 / DGN2	4
	tcdsrd	DrainDivides03	Drainage Divides	10	2 / DGN2	4
	tcdsrd	DrainDivides03_ep	Drainage Divides (Existing)	9	2 / DGN2	4
	tcdsrd	DrainDivides04	Drainage Divides	10	2 / DGN2	4
	tcdsrd	DrainDivides04_ep	Drainage Divides (Existing)	9	2 / DGN2	4
	tcdsrd	DrainDivides05	Drainage Divides	10	2 / DGN2	4
	tcdsrd	DrainDivides05_ep	Drainage Divides (Existing)	9	2 / DGN2	4
	tcdsrd	DrainDivides06	Drainage Divides	10	2 / DGN2	4
	tcdsrd	DrainDivides06_ep	Drainage Divides (Existing)	9	2 / DGN2	4
	tcdsrd	DrainDivides07	Drainage Divides	10	2 / DGN2	4
	tcdsrd	DrainDivides07_ep	Drainage Divides (Existing)	9	2 / DGN2	4
	tcdsrd	DrainDivides08	Drainage Divides	10	2 / DGN2	4
	tcdsrd	DrainDivides08_ep	Drainage Divides (Existing)	9	2 / DGN2	4
	tcdsrd	DrainDivides09	Drainage Divides	10	2 / DGN2	4
	tcdsrd	DrainDivides09_ep	Drainage Divides (Existing)	9	2 / DGN2	4
	tcdsrd	DrainMisc	Miscellaneous Drainage Items	10	0	2
X	tcdsrd	DrainStruct_pr	Drainage Structures (All Types)	10	0	2
X	tcdsrd	DrainStruct_px	Misc Drainage Structures and Elements for XSectionsCross Sections	10	0	2
	tcdsrd	Drum	Drum	6	0	1
X	tcdsrd	EaseLicLine	Easement License Agreement Line	5	6 / DGN6	0
X	tcdsrd	EasePerpLine	Easement Lines Perpetual	4	RW-PerpetualEasement	1
X	tcdsrd	EaseTempLine	Easement Lines Temporary	6	RW-TemporaryEasement	0
X	tcdsrd	Fence	Fence	6	RD-Fence	1
X	tcdsrd	FenceLt	Fence Limited Access Left	6	RD-Fence-Left	1
X	tcdsrd	FenceRt	Fence Limited Access Right	6	RD-Fence-Right	1
X	tcdsrd	Flag	Orange Flag and / or Flagman	6	0	1
X	tcdsrd	FlashingLight	Flashing Lights (All Types)	0	0	1
X	tcdsrd	FlowPaths	Time of Concentration Flow Paths	10	1 / DGN1	1
X	tcdsrd	Gabions	Gabion Baskets or Mats	10	0	2
X	tcdsrd	Gabions_ep	Gabion Baskets or Mats (Existing)	10	1 / DGN1	2

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
X	tcdsrd	GovTwpRgeLine_ep	Township / Range Lines	10	RW-TownshipRange	2
X	tcdsrd	Grass	Grass, Seeding and Mulching Areas	2	1 / DGN1	2
	tcdsrd	GridMaj_dp	Grid Lines Major in Profile and Cross Section	3	0	1
	tcdsrd	GridMin_dp	Grid Lines Minor in Profile and Cross Section	0	0	0
	tcdsrd	GridMinSub_dp	Grid Lines Minor Sub in Cross Section Sheets	20	0	0
X	tcdsrd	Guardrail	Guardrail	0	0	2
X	tcdsrd	GuardrailBRLt	Guardrail Bridge Left	0	RD-Guardrail-Left	1
X	tcdsrd	GuardrailBRRt	Guardrail Bridge Right	0	RD-Guardrail-Right	1
X	tcdsrd	GuardrailDbl	Guardrail Double Face	0	RD-Guardrail-Double	1
X	tcdsrd	GuardrailEndAch	Guardrail End Anchorage	0	0	1
X	tcdsrd	GuardrailLt	Guardrail Left	0	RD-Guardrail-Left	1
X	tcdsrd	GuardrailModThrieDbl	Guardrail Modified Thrie Beam Double Face	0	RD-Guardrail-Double	1
X	tcdsrd	GuardrailModThrieLt	Guardrail Modified Thrie Beam Left	0	RD-Guardrail-Left	1
X	tcdsrd	GuardrailModThrieRt	Guardrail Modified Thrie Beam Right	0	RD-Guardrail-Right	1
X	tcdsrd	GuardrailPanel_px	Guardrail Component Property and Model Break Line for 3D Guardrail Panels	11	0	1
X	tcdsrd	GuardrailPost_px	Guardrail Component Property and Model Break Line for 3D Guardrail Posts	10	0	0
X	tcdsrd	GuardrailPRDbl	Guardrail Double Face w/ Pipe Rail	0	RD-Guardrail-Double	1
X	tcdsrd	GuardrailPRLt	Guardrail Left w/ Pipe Rail	0	RD-Guardrail-Left	1
X	tcdsrd	GuardrailPRRt	Guardrail Right w/ Pipe Rail	0	RD-Guardrail-Right	1
X	tcdsrd	GuardrailRRDbl	Guardrail Double Face w/ Rub Rail	0	RD-Guardrail-Double	1
X	tcdsrd	GuardrailRRLt	Guardrail Left w/ Rub Rail	0	RD-Guardrail-Left	1
X	tcdsrd	GuardrailRRRt	Guardrail Right w/ Rub Rail	0	RD-Guardrail-Right	1
X	tcdsrd	GuardrailRt	Guardrail Right	0	RD-Guardrail-Right	1
X	tcdsrd	GuardrailThrieDbl	Guardrail Thrie Beam Double Face	0	RD-Guardrail-Double	1
X	tcdsrd	GuardrailThrieLt	Guardrail Thrie Beam Left	0	RD-Guardrail-Left	1
X	tcdsrd	GuardrailThriePRLt	Guardrail Thrie Beam Left w/ Pipe Rail	0	RD-Guardrail-Left	1
X	tcdsrd	GuardrailThriePRRt	Guardrail Thrie Beam Right w/ Pipe Rail	0	RD-Guardrail-Right	1
X	tcdsrd	GuardrailThrieRt	Guardrail Thrie Beam Right	0	RD-Guardrail-Right	1
X	tcdsrd	GuyWire	Guy Wire	3	0	0
	tcdsrd	HardscapeDetails	Paving Details, Fence Railing, Stamped Asphalt	4	0	2
	tcdsrd	ImageAttachment_dp	Image AttachmentstAttachments	0	0	0
X	tcdsrd	InletProt	Rock Bags and Sand Bagging	10	SWP-RockBags	2
	tcdsrd	KeyShtMisc	Key sheet Miscellaneous Items	0	0	2
X	tcdsrd	LARWLine	Limited Access Right of Way	4	RW-LimitedAccess-Proposed	2
X	tcdsrd	LARWLine_ep	Limited Access Right of Way (Existing)	4	RW-LimitedAccess-Existing	1
	tcdsrd	LeaderLine_dp	Leader Line and terminator with Text	0	0	1
	tcdsrd	Logo_dp	Consultant Engineer of Record Logo	0	0	1
	tcdsrd	MatchLines_dp	Match Lines with Text, Arrows for Station Notations	1	0	2
	tcdsrd	Miscellaneous0	Undefined proposed item - co blue wt 0	1	0	0
	tcdsrd	Miscellaneous1	Undefined proposed item - co blue wt 1	1	0	1
	tcdsrd	Miscellaneous2	Undefined proposed item - co blue wt 2	1	0	2
	tcdsrd	Miscellaneous3	Undefined proposed item - co green wt 0	2	0	0
	tcdsrd	Miscellaneous4	Undefined proposed item - co green wt 1	2	0	1
	tcdsrd	Miscellaneous5	Undefined proposed item - co green wt 2	2	0	2

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
	tcdsrd	Miscellaneous6	Undefined proposed item - co red wt 0	3	0	0
	tcdsrd	Miscellaneous7	Undefined proposed item - co red wt 1	3	0	1
	tcdsrd	Miscellaneous8	Undefined proposed item - co red wt 2	3	0	2
	tcdsrd	Miscellaneous9	Undefined proposed item - co red wt 3	3	0	3
	tcdsrd	NonPlottingEle_dp	Non plotting items such as construction elements and type 66 elements	4	0	0
	tcdsrd	NorthArw_dp	North Arrows	0	0	2
X	tcdsrd	ObjectMarker	Object and Reflective Markers	3	0	1
X	tcdsrd	OverheadSign	Overhead Sign Panels	0	0	2
X	tcdsrd	OverheadSign_ep	Overhead Sign Panels (Existing)	0	3 / DGN3	1
X	tcdsrd	OverheadStr	Mast Arm, Truss Assemblies, Signal Arms and Supports	0	0	2
X	tcdsrd	OverheadStr_ep	Mast Arm, Truss Assemblies, Signal Arms and Supports (Existing)	0	3 / DGN3	1
X	tcdsrd	PavtBase	Base Material (All Types)	3	0	2
X	tcdsrd	PavtConcreteSC	Concrete Pavement Edge Line and Quantity Shapes	9	0	1
X	tcdsrd	PavtMessage	Pavement Message (All types)(All Types)	0	0	1
X	tcdsrd	PavtMessage_ep	Pavement Message (Existing - All types)(All Types)	0	2 / DGN2	0
	tcdsrd	PavtMisc	Asphalt Miscellaneous Material	1	0	1
X	tcdsrd	PavtStabilization	Stabilization Material Lines and Shapes	9	0	2
	tcdsrd	PavtXover_ep	Crossovers and Detours (Temporary)	0	3 / DGN3	0
	tcdsrd	PayItem_dp	Pay Item Number Label Elements	4	0	2
X	tcdsrd	PedDetector	Pedestrian Detector	0	0	2
X	tcdsrd	Pedestal	Pedestal	1	0	1
X	tcdsrd	Pedestal_ep	Pedestal (Existing)	1	2 / DGN2	1
X	tcdsrd	PedHead	Pedestrian Head (All Types)	1	0	1
X	tcdsrd	PedHead_ep	Pedestrian Head (All Types) (Existing)	0	2 / DGN2	1
X	tcdsrd	PlotBorder_dp	Plot Border	3	0	0
X	tcdsrd	PMCeramic	Pavement Markers Ceramic	0	0	1
	tcdsrd	PMMisc	Pavement Marking Miscellaneous Items	0	0	2
X	tcdsrd	PMStripe(10-10-20)	Pavement Marking 10/10/20 Skip Traffic Stripe 6in Contrast	0	PM-Stripe-10'_20'Skip / PM-Stripe-SKIP 10-10-20	2
X	tcdsrd	PMStripe12B	Pavement Marking Traffic Stripe 12in Black	3	0	4
X	tcdsrd	PMStripe12W	Pavement Marking Traffic Stripe 12in White	0	0	4
X	tcdsrd	PMStripe12W(3-9)	Pavement Marking 3/9 Skip Traffic Stripe 12in White	0	0 / PM-Stripe-SKIP 3-9	4
X	tcdsrd	PMStripe12Y	Pavement Marking Traffic Stripe 12in Yellow	4	0	4
X	tcdsrd	PMStripe16B	Pavement Marking Traffic Stripe 16in Black	3	0	5
X	tcdsrd	PMStripe16W	Pavement Marking Traffic Stripe 16in White	0	0	5
X	tcdsrd	PMStripe16Y	Pavement Marking Traffic Stripe 16in Yellow	4	0	5
X	tcdsrd	PMStripe18B	Pavement Marking Traffic Stripe 18in Black	3	0	6
X	tcdsrd	PMStripe18W	Pavement Marking Traffic Stripe 18in White	0	0	6
X	tcdsrd	PMStripe18Y	Pavement Marking Traffic Stripe 18in Yellow	4	0	6
X	tcdsrd	PMStripe24W	Pavement Marking Traffic Stripe 24in White	0	0	7
X	tcdsrd	PMStripe24Y	Pavement Marking Traffic Stripe 24in Yellow	4	0	7
X	tcdsrd	PMStripe6B	Pavement Marking Traffic Stripe 6in Black	3	0	2
X	tcdsrd	PMStripe6B(10-30)	Pavement Marking 10/30 Skip Traffic Stripe 6in Black	3	0 / PM-Stripe-SKIP 10-30	2
X	tcdsrd	PMStripe6Bl	Pavement Marking Traffic Stripe 6in Blue	1	0	2

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
X	tcdsrd	PMStripe6DY	Pavement Marking Traffic Stripe 6in Double Yellow	4	0	2
X	tcdsrd	PMStripe6W	Pavement Marking Traffic Stripe 6in White	0	0	2
X	tcdsrd	PMStripe6W(10-30)	Pavement Marking 10/30 Skip Traffic Stripe 6in White	0	0 / PM-Stripe-SKIP 10-30	2
X	tcdsrd	PMStripe6W(2-4)	Pavement Marking 2/4 Skip Traffic Stripe 6in White	0	0 / PM-Stripe-SKIP 2-4	2
X	tcdsrd	PMStripe6W(3-9)	Pavement Marking 3/9 Skip Traffic Stripe 6in White	0	0 / PM-Stripe-SKIP 3-9	2
X	tcdsrd	PMStripe6W(6-10)	Pavement Marking 6/10 Skip Traffic Stripe 6in White	0	0 / PM-Stripe-SKIP 6-10	2
X	tcdsrd	PMStripe6Y	Pavement Marking Traffic Stripe 6in Yellow	4	0	2
X	tcdsrd	PMStripe6Y(10-30)	Pavement Marking 10/30 Skip Traffic Stripe 6in Yellow	4	0 / PM-Stripe-SKIP 10-30	2
X	tcdsrd	PMStripe6Y(2-4)	Pavement Marking 2/4 Skip Traffic Stripe 6in Yellow	4	0 / PM-Stripe-SKIP 2-4	2
X	tcdsrd	PMStripe6Y(6-10)	Pavement Marking 6/10 Skip Traffic Stripe 6in Yellow	4	0 / PM-Stripe-SKIP 6-10	2
X	tcdsrd	PMStripe8B	Pavement Marking Traffic Stripe 8in Black	3	0	3
X	tcdsrd	PMStripe8W	Pavement Marking Traffic Stripe 8in White	0	0	3
X	tcdsrd	PMStripe8W(3-9)	Pavement Marking 3/9 Skip Traffic Stripe 8in White	0	0 / PM-Stripe-SKIP 3-9	2
X	tcdsrd	PMStripe8Y	Pavement Marking Traffic Stripe 8in Yellow	4	0	3
X	tcdsrd	PMStripe9C(10-30)	Pavement Marking 10/30 Skip Traffic Stripe 9in Contrast	0	0 / PM-Stripe-SKIP 10-30	2
X	tcdsrd	PMStripeVibeWL	Pavement Marking Auditory and Vibratory 6in White (Left)	0	PM-Stripe-VibratoryLeft / PM-Stripe-Vibratory	2
X	tcdsrd	PMStripeVibeWR	Pavement Marking Auditory and Vibratory 6in White (Right)	0	PM-Stripe-VibratoryRight / PM-Stripe-Vibratory	2
X	tcdsrd	PMStripeVibeYL	Pavement Marking Auditory and Vibratory 6in Yellow (Left)	4	PM-Stripe-VibratoryLeft / PM-Stripe-Vibratory	2
X	tcdsrd	PMStripeVibeYR	Pavement Marking Auditory and Vibratory 6in Yellow (Right)	4	PM-Stripe-VibratoryRight / PM-Stripe-Vibratory	2
	tcdsrd	PointLocator_ep	Point Locator Symbol	4	0	0
X	tcdsrd	PolePower	Power Pole w/ Transformer	3	0	2
X	tcdsrd	PoleShared	Power Pole Electric (Above Ground) Shared w/ Transformer	3	0	2
X	tcdsrd	PoleSteelStrain	Steel Strain Pole	0	0	2
X	tcdsrd	PoleSteelStrain_ep	Steel Strain Pole (Existing)	0	2 / DGN2	1
X	tcdsrd	PoleTel	Telephone Pole	6	0	2
X	tcdsrd	PoleUtil	Utility Pole	0	0	2
X	tcdsrd	PoleWoodStrain	Wood Strain Pole	0	0	2
X	tcdsrd	PoleWoodStrain_ep	Wood Strain Pole (Existing)	0	2 / DGN2	1
X	tcdsrd	PropertyLine_ep	Property Lines	3	0	0
	tcdsrd	RailroadMisc_ep	RR Switch, Warning Sign, Milepost	11	0	0
	tcdsrd	ReferencePt_dp	Survey and Construction Reference Point Details and Elements	4	0	2
X	tcdsrd	RockGravelStone	Rock, Gravel, Stone, Boulders, Etc.	1	0	2
X	tcdsrd	RPM_ep	Reflective Pavement Markers (Existing)	2	2 / DGN2	1

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
X	tcdsrd	RPM1	Raised Pavement Markers, White	0	0	2
X	tcdsrd	RPM2	Raised Pavement Markers, White - Red	3	0	2
X	tcdsrd	RPM3	Raised Pavement Markers, Yellow	4	0	2
X	tcdsrd	RPM4	Raised Pavement Markers, Yellow - Yellow	9	0	2
X	tcdsrd	RPM5	Raised Pavement Markers, Yellow - Red	6	0	2
X	tcdsrd	RPM6	Raised Pavement Markers, Blue	1	0	2
X	tcdsrd	RWLine	Right of Way Lines	4	RW-Proposed	2
X	tcdsrd	RWLine_ep	Right of Way Lines (Existing)	3	RW-Existing	1
	tcdsrd	Scale_dp	Bar Scale, Scale Label Elements	0	0	2
	tcdsrd	Scratch1_dp	A scratch level for temporary or informational items	4	0	0
	tcdsrd	Scratch2_dp	A scratch level for temporary or informational items	5	0	0
	tcdsrd	ScratchEle_dp	Level for Draft Elements, Temporary Elements, Etc. Do Not Plot	3	0	0
	tcdsrd	ScratchEle2_dp	Level for Draft Elements, Temporary Elements, Etc. Do Not Plot	4	0	0
101	tcdsrd	SedimentBarrier	Synthetic Bales and Staked Silt Fences	10	SWP-HayBales	2
101	tcdsrd	SedimentBarrier	Synthetic Bales and Staked Silt Fences	10	SWP-SiltFence	2
	tcdsrd	SheetBorder_dp	Sheet Border	1	0	4
	tcdsrd	SheetLines_dp	Sheet Lines	1	0	2
	tcdsrd	SheetLinesMisc1_dp	Sheet Lines	1	0	0
	tcdsrd	SheetLinesMisc2_dp	Sheet Lines	2	0	2
	tcdsrd	SheetLinesMisc3_dp	Sheet Lines	3	0	2
	tcdsrd	SheetLinesMisc4_dp	Sheet Lines	4	0	2
	tcdsrd	ShldrHatch	Paved Shoulder Hatch Pattern	1	0	1
X	tcdsrd	ShldrPaved	Paved Shoulder Line	1	0	1
	tcdsrd	ShldrPaved_ep	Shoulder Edge, Paved	1	3 / DGN3	0
X	tcdsrd	SidewalkConc	Sidewalk Concrete Shape	0	0	2
X	tcdsrd	SignalCable	Signal Cable	3	SG-Cable /0	1
X	tcdsrd	SignalCableAccs	Signal Cable Accessories	0	0	2
X	tcdsrd	SignalDetail	Signal Details	0	0	1
	tcdsrd	SignalHead	Signal Head Section Details	2	0	1
X	tcdsrd	SignalHead_ep	Signal Head Section Details (Existing)	2	2 / DGN2	0
	tcdsrd	SignalMisc	Signal Miscellaneous Equipment	3	0	1
X	tcdsrd	SignalSOP	S.O.P. Box and Movements	0	0	2
X	tcdsrd	SignalSym	Signal Head Symbols	0	0	1
X	tcdsrd	SignalSym_ep	Signal Head Symbols (Existing)	3	2 / DGN2	0
X	tcdsrd	SignCantilever	Sign Symbol Cantilever	0	0	1
X	tcdsrd	SignCantilever_ep	Sign Symbol Cantilever (Existing)	0	2 / DGN2	0
	tcdsrd	SignDetail	Sign Details	0	0	2
	tcdsrd	SignLettersAZ	Alphabet Cell Library Letter A-Z Numbers 0-9	0	0	0
	tcdsrd	SignMisc	Miscellaneous Sign Symbols	1	0	2
	tcdsrd	SignMisc_ep	Miscellaneous Sign Symbols (Existing)	1	1 / DGN1	1
X	tcdsrd	SignPanel	Sign Panels - Regulatory	0	0	2
X	tcdsrd	SignPanel_ep	Sign Panel Elements (Existing)	0	2 / DGN2	1
X	tcdsrd	SignPanelBorder	Sign Panel Border on Sign Details	0	0	1
X	tcdsrd	SignPanelC	Sign Panels - Civil	1	0	2

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
X	tcdsrd	SignPanelDetRed	Sign Panel Details in Red	3	0	2
X	tcdsrd	SignPanelG	Sign Panels - Guide	2	0	2
X	tcdsrd	SignPanelI	Sign Panels - Special Interest	9	0	2
X	tcdsrd	SignPanelT	Sign Panels - Construction	6	0	2
X	tcdsrd	SignPanelW	Sign Panels - Warning	4	0	2
X	tcdsrd	SignSpanwire	Span Wire Signing Assembly	2	0	1
X	tcdsrd	SignSpanwire_ep	Span Wire Signing Assembly (Existing)	2	2 / DGN2	1
X	tcdsrd	SignSpecial	Special Signs / Guide Signs	2	0	2
X	tcdsrd	SignSupport	Ground Mounted Sign Support Symbol (All Types)	1	0	1
X	tcdsrd	SignSymbol_px	Sign Structure and Foundation on Cross Sections	4	0	2
X	tcdsrd	SignTruss	Sign Symbol Truss	3	0	1
X	tcdsrd	SignTruss_ep	Sign Symbol Truss (Existing)	3	2 / DGN2	1
X	tcdsrd	Sod	Performance Sod	2	0	2
	tcdsrd	SpecialDetails	Special Details	6	0	1
	tcdsrd	StationTicL_dp	Station Tic Marks (Large) and Text	0	0	2
	tcdsrd	StationTicS_dp	Station Tic Marks (Small) and Text	0	0	2
	tcdsrd	Structure	Structures	0	0	2
	tcdsrd	SumBoxBorder_dp	Summary Boxes Borders	4	0	3
	tcdsrd	SumBoxLines_dp	Summary Boxes Lines and Miscellaneous Items	4	0	1
	tcdsrd	SumBoxLinesMin_dp	Summary Boxes Lines Minor Line and Miscellaneous Items	4	0	0
	tcdsrd	Tables_dp	Data Tables and All Autodesk Tables	0	0	1
	tcdsrd	TCZMisc	Traffic Control Miscellaneous Items	3	0	1
X	tcdsrd	TCZSign	Traffic Control Sign Symbol	6	0	2
X	tcdsrd	TCZSign1	Traffic Control Sign Symbol at 200' Spacing	6	MOT-Sign-500Gap	2
X	tcdsrd	TCZSign2	Traffic Control Sign Symbol at 400' Spacing	6	MOT-Sign-400Gap	2
X	tcdsrd	TCZSign3	Traffic Control Sign Symbol at 500' Spacing	6	MOT-Sign-200Gap	2
	tcdsrd	TextBLStation	Text - B/L Station and Tics	0	0	2
	tcdsrd	TextConstEle	Text - Construction Element	0	0	1
	tcdsrd	TextCurveData	Text - Curve Data Note	0	0	2
	tcdsrd	TextDetails	Text - Detail Notes	4	0	2
	tcdsrd	TextElevLabel	Elevation Labels	4	0	0
	tcdsrd	TextLabel	Text - Label	0	0	2
	tcdsrd	TextLandscape	Text - Landscape Labels	0	0	1
	tcdsrd	TextMajor	Text - Major	0	0	5
	tcdsrd	TextMinor	Text - Minor	0	0	0
	tcdsrd	TextMisc	Text - Miscellaneous	0	0	1
	tcdsrd	TextNotes	Text - Notes	4	0	1
	tcdsrd	TextProfLabel	Text - Profile, Horizontal and Vertical Axis Labels	0	0	2
	tcdsrd	TextProjLabel	Text - Begin and End Project label with leader lines	1	0	2
	tcdsrd	TextPtLabel	Point Labels	4	0	0
	tcdsrd	TextShtNo	Text - Sheet Number	0	0	2
	tcdsrd	TextSurveyLabel	Survey Text Labels	0	0	0
	tcdsrd	TextTables	Text - KeysheetKey sheet Indexes and Table Data	4	0	2
	tcdsrd	TextTitle	Text - Title	0	0	3

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
	tcdsrd	TextXSElev	Text - Cross Section Elevations	2	0	1
X	tcdsrd	TrafSeparator	Traffic Separator (All Types)	6	0	1
X	tcdsrd	TrafSeparator_px	Traffic Separator (All Types) on Cross Sections	6	0	2
X	tcdsrd	TurbidityBarrier1	Turbidity Barrier 1 (floating)	10	SWP-TurbidityBarrier-Type1	2
	tcdsrd	TurbidityBarrier1_ep	Turbidity Barrier (Floating) (Existing)	10	1 / DGN1	2
X	tcdsrd	TurbidityBarrier2	Turbidity Barrier 2 (staked)	10	SWP-TurbidityBarrier-Type2	2
	tcdsrd	TurbidityBarrier2_ep	Turbidity Barrier (Staked) (Existing)	10	1 / DGN1	2
X	tcdsrd	Turf	Performance TrufTurf	100	0	2
	tcdsrd	TypicalMisc	Typical Miscellaneous Items	0	0	2
	tcdsrd	Viewport	Viewport (For AutoCAD Use)	3	0	0
X	tcdsrd	WallBarrier	Barrier Wall All Types	6	0	2
X	tcdsrd	WallTempBarrier	Barrier Wall (Temporary)	6	0	2
	tcdsrd	Xreference01_dp	Reference Files (For AutoCAD Use)	0	0	1
	tcdsrd	Xreference02_dp	Reference Files (For AutoCAD Use)	0	0	1
	tcdsrd	Xreference03_dp	Reference Files (For AutoCAD Use)	0	0	1
	tcdsrd	Xreference04_dp	Reference Files (For AutoCAD Use)	0	0	1
	tcdsrd	XSCell	GEOPAK Cross Section Cell/Block and Profile Cell/Block	8	0	1
X	tcdsrd	XSTypical_px	Roadway Pavement Typical on Cross Sections	1	0	2

TOPORD - Existing Topography for Roadway

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style	Bylevel Weight	Point/Line	Feature
	topord	ArchSite_ep	Archeological Site	2	0	1	L	ARST
	topord	Attenuator_ep	Attenuator Systems	0	0	1	L	ATTN
	topord	BankMent_ep	Embankment (Manmade, Top or Bottom)	9	3 / DGN3	0	L	BNK
	topord	BaselineSurvey	Baseline Survey	0	0	2	L	BL
	topord	Beacons_ep	Beacons and Path Illumination	0	0	1	P	BN
	topord	BLSurveyCntrl_ep	Baseline Survey Control	0	0	2	L	BLC
	topord	BLSurveyField_ep	Baseline Field Survey	0	0	2		BL
	topord	BLSurveySymbl_ep	Baseline Survey Symbol	0	0	0	P	BL
	topord	Bollard_ep	Bollards	0	2 / DGN2	1	P	BOL
	topord	Bridge_ep	Bridge Approaches and Slabs	0	3 / DGN3	1	L	APRS
	topord	BridgeEle_ep	Bridge Elements	0	1 / DGN1	0	L	BRDG
	topord	Building_ep	Buildings	1	0	0	L	BLDG
	topord	BusStop_ep	Bench, Bus Stop	8	3 / DGN3	0	P	BNCH
	topord	CableBarrier_ep	Cable Barrier	0	RD-CableBarrier	1	L	CBR
	topord	Canal_ep	Canal, Lock	7	3 / DGN3	0	L	CAN
	topord	CattleGuard_ep	Cattle Guard	7	1 / DGN1	0	P	CGD
	topord	CGBack_ep	Curb and Gutter (Back)	4	3 / DGN3	0	L	CGB
	topord	CGep_ep	Curb / Curb and Gutter (at EP & FL)	0	3 / DGN3	0	L	CG
	topord	CGFace_ep	Face of Curb and Gutter	4	3 / DGN3	0	L	CGF

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style	Bylevel Weight	Point/Line	Feature
	topord	ConcSlabs_ep	Concrete Slabs	0	1 / DGN1	1	L	CSL
	topord	ConstLines	Construction Lines and Preferences	**1**	0	**0**		
	topord	ConstLines_pm	Construction Lines	**4**	0	**0**		
	topord	Core_ep	Core Sample or Test Hole	9	0	0	P	CSH
	topord	CurbRamp_ep	Curb Cut Ramp	2	3 / DGN3	0	L	CCR
	topord	CurbRampWarning_ep	Detectable Warnings on Curb Ramps (Existing)	4	3 / DGN3	0	L	CRW
	topord	CurveDataLabel_dp	Curve Data Labels PC,PI, PT	0	0	2		
	topord	Deck_ep	Deck / Porch	7	1 / DGN1	0	L	DECK
	topord	DelineatorPost_ep	Delineator Post, Existing Metal and Flexible	4	1 / DGN1	1	P	DLP
	topord	Ditch_ep	Ditch (Top, Bottom and Flow Lines)	7	6 / DGN6	0	L	DTCH
	topord	DitchPavt_ep	Ditch Pavement	0	1 / DGN1	0	L	DTCHP
	topord	Docks_ep	Docks and Wharfs	0	1 / DGN1	0	L	DOCK
	topord	Dolphins_ep	Dolphins and Fenders	7	1 / DGN1	0	P	DF
	topord	Driveway_ep	Driveway (Drive, Lane, Turnouts)	7	3 / DGN3	0	L	DWY
	topord	DummyChains_ep	Dummy Chains	0	0	1	L	DUMB
	topord	Fence_ep	Fence (All)	6	RD-Fence	0	L	FNC
	topord	FloodLight_ep	Flood Light	3	1 / DGN1	1	P	FLD
	topord	Furnace_ep	Incinerator, Boiler, or Furnace	8	1 / DGN1	0	P	INCN
	topord	Gates_ep	Gates	7	3 / DGN3	0	L	GT
	topord	GlareScrn_ep	Glare Screen & Blinds	0	{ curtain }	0	L	GS
	topord	GuardrailDbl_ep	Guardrail Double Face	0	RD-Guardrail-Double	0	L	GRDBL
	topord	GuardrailLt_ep	Guardrail Left	0	RD-Guardrail-Left	0	L	GRL
	topord	GuardrailRt_ep	Guardrail Right	0	RD-Guardrail-Right	0	L	GRR
	topord	Hole_ep	Hole	8	1 / DGN1	0	P	HOLE
	topord	ImageAttachment_dp	Image AttachmentstAttachments	0	0	0		
	topord	LaneLine_ep	Lane Lines	0	RD-LaneLine-Existing	1	L	LL
	topord	LeaderLine_dp	Leader Line and terminator with Text	0	0	1		
	topord	Mailbox_ep	Mailbox(s)	8	1 / DGN1	0	P	MBX
	topord	MiscEquip_ep	Flag Pole	8	1 / DGN1	0	P	FP
	topord	MiscEquip_ep	Parking Meter	8	1 / DGN1	0	P	PKGM
	topord	Monument_ep	Aerial Targets	4	0	0	P	AT
	topord	Monument_ep	Concrete Monument (Cast)	4	0	0	P	CMON
	topord	Monument_ep	Drill Hole, Plug (Control Monumentation)	4	0	0	P	DH
	topord	Monument_ep	Deep Rod Mark	4	0	0	P	DRM
	topord	Monument_ep	5/8 Rod and Cap	4	0	0	P	IRC
	topord	Monument_ep	Nail, Spike, Pin (Control Monumentation)	4	0	0	P	NL
	topord	Monument_ep	Other Marker? (Control Monumentation)	4	0	0	P	OM
	topord	Monument_ep	Metal Pipe, Rod, Bar (Control)	4	0	0	P	PIP
	topord	Monument_ep	Concrete Monument (Poured)	4	0	0	P	PMON
	topord	Monument_ep	Post, Stake, Staub (Control Monumentation)	4	0	0	P	PST
	topord	Monument_ep	Hub and Tac	4	0	0	P	SAT
	topord	Monument_ep	Stamped Disk	4	0	0	P	STMD
	topord	Monument_ep	Stamped Plate	4	0	0	P	STMP
	topord	ParkEquip_ep	Campstove, Grill, Firepit, BBQ	9	2 / DGN2	0	P	CMPST
	topord	ParkEquip_ep	Playground Equipment	9	2 / DGN2	0	P	PLEQ

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style	Bylevel Weight	Point/Line	Feature
	topord	Patternlines_ep	Cross Section Chain	2	1 / DGN1	0	L	XSC
	topord	Pavemk_ep	Handicap Pavement Marking	0	2 / DGN2	0	P	HNDC
	topord	Pavemk_ep	Pavement Markings (Other)	0	2 / DGN2	0	L	PMRK
	topord	Pavemk_ep	Straight Direction Arrow	0	2 / DGN2	0	P	STAROW
	topord	Pavemk_ep	Straight and Turn Arrow	0	2 / DGN2	0	P	STATRN
	topord	Pavemk_ep	Turn Arrow	0	2 / DGN2	0	P	TA
	topord	PavtAsph_ep	Asphalt Pavement Edge	0	3 / DGN3	1	L	AP
	topord	PavtConc_ep	Concrete Pavement (Edges)	0	3 / DGN3	1	L	CPVT
	topord	PavtConcJoints_ep	Concrete Pavement (Joints)	1	5 / DGN5	1	L	CPVJ
	topord	PavtCrown_ep	Asphalt Pavement (Crown)	0	4 / DGN4	1	L	AC
	topord	PavtCrown_ep	Concrete Pavement (Crown)	0	4 / DGN4	1	L	CPVC
	topord	PavtMisc_ep	Pavement Parking Lot/Guardrail/Misc Pavement	7	3 / DGN3	0	L	MP
	topord	PavtTractorXing_ep	Tractor Crossings	0	3 / DGN3	1	L	TX
	topord	PavtXover_ep	Crossovers and Detours (Temporary)	0	3 / DGN3	0	L	XO
	topord	PedSignal_ep	Pedestrian Signal Unit, Signage	0	2 / DGN2	0	P	PS
	topord	Piling_ep	Piling, Piers, or Column	8	3 / DGN3	0	P	PIL
	topord	PumpIsland_ep	Pump Island	7	3 / DGN3	1	L	PMPIS
	topord	Railing_ep	All Existiing Railings; Piperail, Guiderail, Handrail used for Pedestrian and Bicycles	9	3 / DGN3	0	L	HNDRL
	topord	RailroadMisc_ep	RR Milepost	11	0	0	P	RRMP
	topord	RailroadMisc_ep	RR Switch	11	0	0	P	RRS
	topord	RailroadMisc_ep	RR Warning Sign	11	0	0	P	RRWS
	topord	RailroadMisc_ep	RR Signal with Gate	11	0	0	P	SWG
	topord	RailroadTracks_ep	Railroad Tracks (Rail, Bed)	4	3 / DGN3	0	L	RR
	topord	RailroadXing_ep	RR Crossing (Roadway Platforms), RR Signal w/ Gate	11	3 / DGN3	0	L	RRX
	topord	RefPtLine	Miscellaneous:Survey Reference Point Line / Detail	0	0	1	L	REFL
	topord	RefPtText	Annotation:Miscellaneous:Text: Survey Data Reference Point	0	0	1		
	topord	RipRap_ep	Rip Rap, Rubble	4	3 / DGN3	1	L	RIP
	topord	RRBaseline	Baseline: Rail Road Centerline	4	0	2	L	RRCL
	topord	Scratch1_dp	A scratch level for temporary or informational items	4	0	0		
	topord	Scratch2_dp	A scratch level for temporary or informational items	5	0	0		
	topord	ShldrPaved_ep	Shoulder Edge, Paved	1	3 / DGN3	0	L	SHLDR
	topord	ShldrUnpaved_ep	Unpaved Shoulders	0	3 / DGN3	0	L	UNPS
	topord	Shrub_ep	Hedges and Shrubs (Boundary)	2	0	0	L	HED
	topord	Shrub_ep	Ornamental Plant	2	0	0	P	OP
	topord	Shrub_ep	Shrub, Bush	2	0	0	P	SHR
	topord	Shrub_ep	Coniferous Shrub	2	0	0	P	SHRC
	topord	Shrub_ep	Deciduous Shrub	2	0	0	P	SHRD
	topord	SidewalkBack_ep	Sidewalk (Backs)	2	3 / DGN3	0	L	SWKB
	topord	SidewalkFront_ep	Sidewalk (Fronts)	1	3 / DGN3	0	L	SWK
	topord	Signal_ep	Signal Head	3	1 / DGN1	1	P	SIG
	topord	Signal_ep	Signal on Pedestal	3	1 / DGN1	1	P	SIGP
	topord	SignalLoop_ep	Traffic Detector Loops	7	1 / DGN1	2	L	TFD
	topord	SignalMisc_ep	Signal Controller	3	2 / DGN2	0	P	SIGC
	topord	SignalSupport_ep	Signal Supports including Mast Arm	3	2 / DGN2	0	P	SMA

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style	Bylevel Weight	Point/Line	Feature
	topord	SignalSupport_ep	Support Mast Arm Extention	3	2 / DGN2	0	L	SMAE
	topord	SignMulti_ep	Multi-column Sign (Large Sign)	0	3 / DGN3	1	L	MS
	topord	SignSingle_ep	Sign (Single Support)	3	2 / DGN2	0	P	SSS
	topord	SignSupport_ep	Trusses and Cantilevers for Overhead Signs	0	3 / DGN3	1	L	SGNT
	topord	Silo_ep	Silo	11	2 / DGN2	0	P	SILO
	topord	Slopes_ep	Levees, Dikes, or Dams (Top or Bottom)	9	3 / DGN3	0	L	LV
	topord	Slopes_ep	Natural Slopes (Top or Bottom)	9	3 / DGN3	0	L	SLP
	topord	SpanWire_ep	Signal / Span Wire Pole	3	2 / DGN2	0	P	SSP
	topord	SpanWire_ep	Signal / Span Wire Pole	3	2 / DGN2	0	L	SSW
	topord	Stairs_ep	Stairways, Steps	0	3 / DGN3	1	L	STP
	topord	StationTicL_dp	Station Tic Marks (Large) and Text	0	0	2		
	topord	StationTicS_dp	Station Tic Marks (Small) and Text	0	0	2		
	topord	Stream_ep	Stream Edge	1	3 / DGN3	0	L	STRM
	topord	Stream_ep	Stream Center	1	3 / DGN3	0	L	STRMC
	topord	StreamMisc_ep	Buoy	7	0	0	P	BUOY
	topord	StreamMisc_ep	Stream or Tide Gauge	7	0	0	P	TG
	topord	Stump_ep	Stump	2	0	0	P	STM
	topord	Tables_dp	Data Tables and All Autodesk Tables	0	0	1		
	topord	TankStor_ep	Storage Tank	11	3 / DGN3	0	P	STTK
	topord	TankUG_ep	Fill Cap (Underground Tank)	3	1 / DGN1	0	P	FC
	topord	TextBLStation	Text - B/L Station and Tics	0	0	2		
	topord	TextCurveData	Text - Curve Data Note	0	0	2		
	topord	TextElevLabel	Elevation Labels	4	0	0		
	topord	TextLabel	Text - Label	0	0	2		
	topord	TextMisc	Text - Miscellaneous	0	0	1		
	topord	TextNotes	Text - Notes	4	0	1		
	topord	TopoMisc_ep	Miscellaneous Topography	0	3 / DGN3	1	L	MISC
	topord	TrafSeparator_ep	Traffic Separator	6	3 / DGN3	0	L	TFSP
	topord	Trail_ep	Roadway, Trail (Unpaved)	9	3 / DGN3	1	L	RD
	topord	Trash_ep	Dumpster, Trash Disposal	9	0	0	P	DMP
	topord	Treadle_ep	Treadle	7	1 / DGN1	5	L	TRD
	topord	Tree_ep	Tree	2	0	0	P	TREE
	topord	Tree_ep	Coniferous Tree	2	0	0	P	TREEC
	topord	Tree_ep	Citrus Tree	2	0	0	P	TREECI
	topord	Tree_ep	Cypress Tree	2	0	0	P	TREECY
	topord	Tree_ep	Deciduous Tree	2	0	0	P	TREED
	topord	Tree_ep	Oak Tree	2	0	0	P	TREEOA
	topord	Tree_ep	Palm Tree	2	0	0	P	TREEPA
	topord	Tree_ep	Palm Tree Cluster	2	0	0	P	TREEPC
	topord	Tree_ep	Pine Tree	2	0	0	P	TREEPI
	topord	TreeLine_ep	Groves & Orchards (Boundary)	2	RD-TreeLine	0	L	GRV
	topord	TreeLine_ep	Scattered Trees (Boundary)	2	RD-TreeLine	0	L	SCT
	topord	TreeLine_ep	Woods Line	2	RD-TreeLine	0	L	WDL
	topord	Tributary_ep	Spring (Water Source)	1	0	0	P	SPR
	topord	Viewport	Viewport (For AutoCAD Use)	3	0	0		

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style	Bylevel Weight	Point/Line	Feature
	topord	Wall_ep	Walls	9	3 / DGN3	1	L	WALL
	topord	WallBarrier_ep	Any Existing Wall Dividing Traffic	6	3 / DGN3	0	L	BARW
	topord	WallBarrier_ep	Any Existing Temporary Wall Dividing Traffic	6	3 / DGN3	0	L	TMPW
	topord	WallRetainEarth_ep	Any Existing Wall Holding Earth	6	3 / DGN3	0	L	RETW
	topord	WallSea_ep	Sea Walls	0	1 / DGN1	3	L	SEAW
	topord	WaterEdge_ep	Edge of Water	7	3 / DGN3	0	L	WEDG
	topord	Wetland_ep	W.M.D. & D.E.P. Wetlands	1	RD-Wetland-Existing	0	L	DEP
	topord	WetlandEdge_ep	CORPS Wetlands (Marsh or Swamp)	2	RD-Wetland-Existing	0	L	COE
	topord	WetlandEdge_ep	Edge of Mangrove	2	RD-Wetland-Existing	0	L	EM
	topord	WetlandEdge_ep	Edge of Wetlands (Marsh or Swamp)	2	RD-Wetland-Existing	0	L	MAR
	topord	WetlandSym_ep	Marsh Symbol	2	1 / DGN1	0	P	MAR
	topord	WetlandSym_ep	Wetland Point	2	1 / DGN1	0	P	WLPT
	topord	WindMill_ep	Wind Mill	1	1 / DGN1	0	P	WIM
	topord	Xreference01_dp	Reference Files (For AutoCAD Use)	0	0	1		
	topord	Xreference02_dp	Reference Files (For AutoCAD Use)	0	0	1		
	topord	Xreference03_dp	Reference Files (For AutoCAD Use)	0	0	1		
	topord	Xreference04_dp	Reference Files (For AutoCAD Use)	0	0	1		
	topord	XSPt_ep	Cross Section Point, Station	2	1 / DGN1	0	P	XS

TYPDRD - Typical Section Data

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
	typdrd	ActivePointCell_dp	Active Point Cell	4	0	10
	typdrd	AdhocPoint_dp	Adhoc Points Placed by SheetInfo	0	4 / 0	0
X	typdrd	AdvWarnPanel	Advance Warning Arrow Panels	4	0	2
X	typdrd	Attenuator	Attenuation Systems	6	MOT-Attenuator	1
X	typdrd	AttenuatorTM	Attenuator Truck Mount	6	0	2
X	typdrd	Barricade	Barricade	0	0	1
X	typdrd	Barricade1	Barricade Symbol Type 1 or 2 at 15' spacing	0	MOT-Barricade-15Gap	1
X	typdrd	Barricade2	Barricade Symbol Type 1 or 2 at 30' spacing	0	MOT-Barricade-30Gap	1
X	typdrd	Barricade3	Barricade Symbol Type 1 or 2 at 50' spacing	0	MOT-Barricade-50Gap	1
X	typdrd	Barricade4	Barricade Symbol Type 1 or 2 at 100' spacing	0	MOT-Barricade-100Gap	1
	typdrd	BaselineSurvey	Baseline Survey	0	0	2
X	typdrd	Berm_px	Berm (Top, Front, or Back) for Cross Sections	10	0	2
X	typdrd	BoxCulvert	Box Culvert	10	0	2
X	typdrd	Bridge_px	Bridge Component for Cross Sections - Component Property	0	0	2
X	typdrd	CandG_ex	Curb and Gutter for Cross Sections (All Types) (Existing)	4	2 / DGN2	1
X	typdrd	CandG_px	Curb and Gutter for Cross Sections (All Types)	4	0	2
X	typdrd	CandGBase_px	Curb and Gutter Base on Cross Sections	3	0	1
	typdrd	CLConst_dp	Center Line of Construction	0	0	2
	typdrd	Cloud_dp	Construction Cloud	7	0	2
	typdrd	COGO_dp	COGO Information	3	0	1

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
X	typdrd	Concrete	Concrete Areas (All Types plus miscellaneous)	0	0	2
X	typdrd	ConcSlabs	Concrete Slabs	0	0	2
X	typdrd	Conduit_px	Conduit and Encasements on Cross Sections	3	0	1
X	typdrd	Cone	Cone and Tubular Marker	6	0	2
	typdrd	ConstArea_dp	Construction Area Crosshatch	0	0	1
	typdrd	ConstLimits	Construction Limits	3	RW-LimitsofConst	2
	typdrd	ConstLines	Construction Lines and References	1	0	0
	typdrd	ConstLines_pm	Construction Lines	**4**	0	**0**
X	typdrd	CurbBack	Back of Curb	4	0	1
X	typdrd	CurbFace	Curb and Gutter (Face)	4	0	1
X	typdrd	CurbRamp	Curb Cut Ramp	8	0	1
	typdrd	CurveData_dp	Curve & Coordinate Data Elements incl PC, PT, PI symbols	4	0	2
	typdrd	CurveDataLabel_dp	Curve Data Labels PC,PI, PT	0	0	2
	typdrd	DimLines_dp	Dimension Lines, Corresponding Terminators, Equation Lines	0	0	1
X	typdrd	DirArrowsPavt	Pavement Marking Directional Arrows	0	0	1
X	typdrd	Ditch	Ditch Top	7	6 / DGN6	1
X	typdrd	Ditch_px	Ditch Top for Cross Sections	7	0	2
X	typdrd	DitchBot	Ditch Bottom	10	0	2
X	typdrd	DitchBot_px	Ditch Bottom for Cross Sections	10	0	2
X	typdrd	DitchPavt	Ditch Pavement Including Quantity Shapes	3	0	1
X	typdrd	DitchPavt_px	Ditch Pavement for Cross Sections	3	0	3
	typdrd	DitchProfLt_er	Ditch Profile Left (Existing)	8	3 / DGN3	1
	typdrd	DitchProfLt_pr	Ditch Profile Left	8	0	1
	typdrd	DitchProfMdn_er	Ditch Profile Median (Existing)	10	3 / DGN3	1
	typdrd	DitchProfMdn_pr	Ditch Profile Median	10	0	1
	typdrd	DitchProfRt_er	Ditch Profile Right (Existing)	9	3 / DGN3	1
	typdrd	DitchProfRt_pr	Ditch Profile Right	9	0	1
X	typdrd	DrainStruct_pr	Drainage Structures (All Types)	10	0	2
X	typdrd	DrainStruct_px	Misc Drainage Structures and Elements for XSectionsCross Sections	10	0	2
X	typdrd	Driveway_px	Driveway Lines on Cross Sections	7	0	2
X	typdrd	DrivewayBase_px	Proposed Driveway SubgraeeSub-grade	3	0	2
	typdrd	Drum	Drum	6	0	1
	typdrd	Earthwork1_px	Earthwork (color 0)	0	0	1
	typdrd	Earthwork2_px	Earthwork (color 1)	1	0	1
	typdrd	Earthwork3_px	Earthwork (color 2)	2	0	1
	typdrd	Earthwork4_px	Earthwork (color 3)	3	0	1
	typdrd	Earthwork5_px	Earthwork (color 4)	4	0	1
X	typdrd	EaseLicLine	Easement License Agreement Line	5	6 / DGN6	0
X	typdrd	EasePerpLine	Easement Lines Perpetual	4	RW-PerpetualEasement	1
X	typdrd	EasePerpLine_px	Easement Lines Perpetual on Cross Sections	4	RW-PerpetualEasement	1
X	typdrd	EaseTempLine	Easement Lines Temporary	6	RW-TemporaryEasement	0
X	typdrd	EaseTempLine_px	Easement Lines Temporary on Cross Sections	6	RW-TemporaryEasement	0
X	typdrd	Endwall	Endwall (All Types)	10	0	2
X	typdrd	Endwall_px	Endwall for Cross Sections	10	0	2
	typdrd	ExcavationLimits_dp	Excavation Limits on Cross Sections	0	0	1

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
X	typdrd	Fence	Fence	6	RD-Fence	1
	typdrd	Fence_ex	Fence Lines on Cross Sections (Existing)	6	3 / DGN3	1
X	typdrd	Fence_px	Fence Lines on Cross Sections	6	RD-Fence	2
X	typdrd	FenceLt	Fence Limited Access Left	6	RD-Fence-Left	1
X	typdrd	FenceRt	Fence Limited Access Right	6	RD-Fence-Right	1
X	typdrd	FES	Flared End Sections	10	0	2
X	typdrd	FES_px	Flared End Sections for Cross Sections	10	0	2
X	typdrd	FlashingLight	Flashing Lights (All Types)	0	0	1
X	typdrd	FOCBur_px	Fiber Optics Cable (Buried) for XSectionsCross Sections	6	0	1
X	typdrd	Gas_px	Gas Pipe and Fittings, Misc for XsectionsCross Sections	4	0	1
	typdrd	GeotechFillPatt1	Geotechnical Fill Pattern - (earth, wood, muck, concrete, rock, riprap) as defined in project	3	0	0
	typdrd	GeotechFillPatt1_px	Geotechnical Fill Pattern - (earth, wood, muck, concrete, rock, riprap) as defined in project	3	0	0
	typdrd	GeotechFillPatt2	Geotechnical Fill Pattern - clay, sand	0	1 / DGN1	0
	typdrd	GeotechFillPatt2_px	Geotechnical Fill Pattern - clay, sand	0	1 / DGN1	0
	typdrd	GeotechFillPatt3	Geotechnical Fill Pattern - shell	3	1 / DGN1	0
	typdrd	GeotechFillPatt3_px	Geotechnical Fill Pattern - shell	3	1 / DGN1	0
	typdrd	GeotechFillPatt4	Geotechnical Fill Pattern - sand	4	0	0
	typdrd	GeotechFillPatt4_px	Geotechnical Fill Pattern - sand	4	0	0
	typdrd	GeotechFillPatt5	Geotechnical Fill Pattern - coquina	1	0	1
	typdrd	GeotechFillPatt5_px	Geotechnical Fill Pattern - coquina	1	0	1
	typdrd	GeotechFillPatt6	Geotechnical Fill Pattern - limestone	2	0	0
	typdrd	GeotechFillPatt6_px	Geotechnical Fill Pattern - limestone	2	0	0
	typdrd	GeotechFillPatt7	Geotechnical Fill Pattern - gravel	6	0	0
	typdrd	GeotechFillPatt7_px	Geotechnical Fill Pattern - gravel	6	0	0
	typdrd	GeotechFillPatt8	Geotechnical Fill Pattern - silt	0	0	1
	typdrd	GeotechFillPatt8_px	Geotechnical Fill Pattern - silt	0	0	1
	typdrd	GeotechMisc	Miscellaneous Geotechnical Elements	0	0	1
X	typdrd	GovTwpRgeLine_ep	Township / Range Lines	10	RW-TownshipRange	2
	typdrd	GPKDrBack_dp	Back Point on Drainage Cells	2	2 / 0	2
	typdrd	GPKDrBottom_dp	Bottom Point on Drainage Cells	3	3 / 0	2
	typdrd	GPKDrCellIns_dp	Cell Insertion Point on Drainage Cells	4	4 / 0	2
	typdrd	GPKDrCentroid_dp	Point on Centroid for Drainage	7	7 / 0	2
	typdrd	GPKDrFront_dp	Front Point on Drainage Cells	1	1 / 0	2
	typdrd	GPKDrPipe_dp	Point on Drainage Pipe	6	6 / 0	2
	typdrd	GPKDrPipeCir_dp	Point on Pipe Circular	6	6 / 0	0
X	typdrd	Grass	Grass, Seeding and Mulching Areas	2	1 / DGN1	2
	typdrd	GridMaj_dp	Grid Lines Major in Profile and Cross Section	3	0	1
	typdrd	GridMin_dp	Grid Lines Minor in Profile and Cross Section	0	0	0
	typdrd	GridMinSub_dp	Grid Lines Minor Sub in Cross Section Sheets	20	0	0
	typdrd	GroundCover	Groundcover Edge Symbol	2	0	1
	typdrd	GroundCoverHatch	Groundcover Hatch Pattern	2	0	0
X	typdrd	Guardrail	Guardrail	0	0	2
X	typdrd	GuardrailBRLt	Guardrail Bridge Left	0	RD-Guardrail-Left	1

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
X	typdrd	GuardrailBRRt	Guardrail Bridge Right	0	RD-Guardrail-Right	1
X	typdrd	GuardrailDbl	Guardrail Double Face	0	RD-Guardrail-Double	1
X	typdrd	GuardrailEndAch	Guardrail End Anchorage	0	0	1
X	typdrd	GuardrailLt	Guardrail Left	0	RD-Guardrail-Left	1
X	typdrd	GuardrailModThrieDbl	Guardrail Modified Thrie Beam Double Face	0	RD-Guardrail-Double	1
X	typdrd	GuardrailModThrieLt	Guardrail Modified Thrie Beam Left	0	RD-Guardrail-Left	1
X	typdrd	GuardrailModThrieRt	Guardrail Modified Thrie Beam Right	0	RD-Guardrail-Right	1
X	typdrd	GuardrailPanel_px	Guardrail Component Property and Model Break Line for 3D Guardrail Panels	11	0	1
X	typdrd	GuardrailPost_px	Guardrail Component Property and Model Break Line for 3D Guardrail Posts	10	0	0
X	typdrd	GuardrailPRDbl	Guardrail Double Face w/ Pipe Rail	0	RD-Guardrail-Double	1
X	typdrd	GuardrailPRLt	Guardrail Left w/ Pipe Rail	0	RD-Guardrail-Left	1
X	typdrd	GuardrailPRRt	Guardrail Right w/ Pipe Rail	0	RD-Guardrail-Right	1
X	typdrd	GuardrailRRDbl	Guardrail Double Face w/ Rub Rail	0	RD-Guardrail-Double	1
X	typdrd	GuardrailRRLt	Guardrail Left w/ Rub Rail	0	RD-Guardrail-Left	1
X	typdrd	GuardrailRRRt	Guardrail Right w/ Rub Rail	0	RD-Guardrail-Right	1
X	typdrd	GuardrailRt	Guardrail Right	0	RD-Guardrail-Right	1
X	typdrd	GuardrailThrieDbl	Guardrail Thrie Beam Double Face	0	RD-Guardrail-Double	1
X	typdrd	GuardrailThrieLt	Guardrail Thrie Beam Left	0	RD-Guardrail-Left	1
X	typdrd	GuardrailThriePRLt	Guardrail Thrie Beam Left w/ Pipe Rail	0	RD-Guardrail-Left	1
X	typdrd	GuardrailThriePRRt	Guardrail Thrie Beam Right w/ Pipe Rail	0	RD-Guardrail-Right	1
X	typdrd	GuardrailThrieRt	Guardrail Thrie Beam Right	0	RD-Guardrail-Right	1
	typdrd	HardscapeDetails	Paving Details, Fence Railing, Stamped Asphalt	4	0	2
	typdrd	ImageAttachment _dp	Image AttachmentstAttachments	0	0	0
X	typdrd	Inlet_px	Inlets on Cross Sections	10	0	2
X	typdrd	InletBottom_px	Inlet Bottom on Cross Sections (All Types)	10	0	2
X	typdrd	InletBottomJ	Inlet Bottom Type J	10	0	1
X	typdrd	InletBottomP	Inlet Bottom Type P	10	0	1
X	typdrd	InletCurb	Curb Inlet (All Types)	10	0	2
X	typdrd	InletDBI	Ditch Bottom Inlet (All Types)	10	0	2
X	typdrd	InletGutter	Gutter Inlet (All Types)	10	0	2
X	typdrd	InletMedian	Median Barrier Inlet	10	0	2
	typdrd	KeyShtMisc	Key sheet Miscellaneous Items	0	0	2
	typdrd	LaneDirArrow	Lane Directional Arrow	0	0	1
X	typdrd	LARWLine	Limited Access Right of Way	4	RW-LimitedAccess-Proposed	2
X	typdrd	LARWLine_ep	Limited Access Right of Way (Existing)	4	RW-LimitedAccess-Existing	1
X	typdrd	LARWLine_ex	Limited Access Right of Way on XSectionsCross Sections (Existing)	4	RW-LimitedAccess-Existing	1
X	typdrd	LARWLine_px	Limited Access ROW Lines on Cross Sections	4	RW-LimitedAccess-Proposed	2
X	typdrd	LateralLimits_px	Lateral Limits for Cross Sections	6	0	2
	typdrd	LeaderLine_dp	Leader Line and terminator with Text	0	0	1
	typdrd	LightingMisc	Lighting Miscellaneous Items	4	0	2
X	typdrd	LightingSP	Lighting Service Points	0	0	1
	typdrd	Logo_dp	Consultant Engineer of Record Logo	0	0	1
X	typdrd	Luminaire	Luminaires (Decorative - All Types)	2	0	1
X	typdrd	Manhole	Manhole (Drainage and Unknown)	10	0	2
X	typdrd	Manhole_px	Manhole on Cross Sections	10	0	2

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
X	typdrd	MES	Mitered End Section	10	0	2
X	typdrd	MES_px	Mitered End Section on Cross Sections	10	0	2
	typdrd	Miscellaneous0	Undefined proposed item - co blue wt 0	1	0	0
	typdrd	Miscellaneous1	Undefined proposed item - co blue wt 1	1	0	1
	typdrd	Miscellaneous2	Undefined proposed item - co blue wt 2	1	0	2
	typdrd	Miscellaneous3	Undefined proposed item - co green wt 0	2	0	0
	typdrd	Miscellaneous4	Undefined proposed item - co green wt 1	2	0	1
	typdrd	Miscellaneous5	Undefined proposed item - co green wt 2	2	0	2
	typdrd	Miscellaneous6	Undefined proposed item - co red wt 0	3	0	0
	typdrd	Miscellaneous7	Undefined proposed item - co red wt 1	3	0	1
	typdrd	Miscellaneous8	Undefined proposed item - co red wt 2	3	0	2
	typdrd	Miscellaneous9	Undefined proposed item - co red wt 3	3	0	3
	typdrd	NonPlottingEle_dp	Non plotting items such as construction elements and type 66 elements	4	0	0
	typdrd	PatternLines1_dp	Pattern Lines and Sample Lines (Civil 3D) for Cross Sections	3	0	2
	typdrd	PatternLines2_dp	Pattern Lines for XSectionsCross Sections alternate for side streets, critical xsectionsCross Sections or drainage structures	4	0	2
	typdrd	PatternLines3_dp	Pattern Lines for XSectionsCross Sections alternate for side streets, critical xsectionsCross Sections or drainage structures	5	0	2
X	typdrd	PavedMedianBase_px	Proposed Paved Median SubgradeSub-grade	3	0	2
	typdrd	PavtAsph_ep	Asphalt Pavement Edge	0	3 / DGN3	1
X	typdrd	PavtAsphalt	Asphalt Pavement Edge Line and Quantity Shapes	0	0	2
X	typdrd	PavtAsphalt_px	Asphalt Pavement for Cross Sections and Components in Models	1	0	2
X	typdrd	PavtBase	Base Material (All Types)	3	0	2
X	typdrd	PavtBase_ex	Base Material for Cross Sections (All Types) (Existing)	3	3 / DGN3	1
X	typdrd	PavtBase_px	Base Material for Cross Sections (All Types)	3	0	2
X	typdrd	PavtConcrete	Concrete Pavement Edge Line and Quantity Shapes	10	0	2
X	typdrd	PavtConcrete_px	Concrete Pavement for Cross Sections and Components in Models	0	0	2
X	typdrd	PavtConcreteSC	Concrete Pavement Edge Line and Quantity Shapes	9	0	1
	typdrd	PavtCrown	Pavement Crown	16	0	2
X	typdrd	PavtMessage	Pavement Message (All types)(All Types)	0	0	1
X	typdrd	PavtMessage_ep	Pavement Message (Existing - All types)(All Types)	0	2 / DGN2	0
X	typdrd	PavtMilling_px	Asphalt Milling Lines on Cross Sections	7	0	2
X	typdrd	PavtMisc	Asphalt Miscellaneous Material	1	0	1
X	typdrd	PavtMisc_px	Miscellaneous Pavement on Cross Sections	1	0	2
X	typdrd	PavtOverbuild_px	Pavement Overbuild Areas on Cross Sections - Component Property	4	0	2
X	typdrd	PavtOverlay_px	Pavement Overlay for Cross Sections - Component Property	1	0	2
X	typdrd	PavtOverlay1_px	Pavement Overlay for Cross Sections - Component Property	14	0	2
X	typdrd	PavtOverlay2_px	Pavement Overlay for Cross Sections - Component Property	7	0	2
X	typdrd	PavtStabilization	Stabilization Material Lines and Shapes	9	0	2
X	typdrd	PavtStabilization_px	Stabilization for Cross Sections	5	2 / DGN2	2
	typdrd	PayItem_dp	Pay Item Number Label Elements	4	0	2
	typdrd	PipeCulvert_ep	Pipe Culvert	10	3 / DGN3	1
X	typdrd	PipeCulvert_pr	Pipe Culvert in Profile	3	0	2
X	typdrd	PipeCulvert_px	Pipe Culvert for Cross Section View	10	0	2
X	typdrd	PlotBorder_dp	Plot Border	3	0	0

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
	typdrd	PMMisc	Pavement Marking Miscellaneous Items	0	0	2
X	typdrd	PMStripe12B	Pavement Marking Traffic Stripe 12in Black	3	0	4
X	typdrd	PMStripe12W	Pavement Marking Traffic Stripe 12in White	0	0	4
X	typdrd	PMStripe12W(3-9)	Pavement Marking 3/9 Skip Traffic Stripe 12in White	0	0 / PM-Stripe-SKIP 3-9	4
X	typdrd	PMStripe12Y	Pavement Marking Traffic Stripe 12in Yellow	4	0	4
X	typdrd	PMStripe16B	Pavement Marking Traffic Stripe 16in Black	3	0	5
X	typdrd	PMStripe16W	Pavement Marking Traffic Stripe 16in White	0	0	5
X	typdrd	PMStripe16Y	Pavement Marking Traffic Stripe 16in Yellow	4	0	5
X	typdrd	PMStripe18B	Pavement Marking Traffic Stripe 18in Black	3	0	6
X	typdrd	PMStripe18W	Pavement Marking Traffic Stripe 18in White	0	0	6
X	typdrd	PMStripe18Y	Pavement Marking Traffic Stripe 18in Yellow	4	0	6
X	typdrd	PMStripe24W	Pavement Marking Traffic Stripe 24in White	0	0	7
X	typdrd	PMStripe24Y	Pavement Marking Traffic Stripe 24in Yellow	4	0	7
X	typdrd	PMStripe6B	Pavement Marking Traffic Stripe 6in Black	3	0	2
X	typdrd	PMStripe6B(10-30)	Pavement Marking 10/30 Skip Traffic Stripe 6in Black	3	0 / PM-Stripe-SKIP 10-30	2
X	typdrd	PMStripe6Bl	Pavement Marking Traffic Stripe 6in Blue	1	0	2
X	typdrd	PMStripe6DY	Pavement Marking Traffic Stripe 6in Double Yellow	4	0	2
X	typdrd	PMStripe6W	Pavement Marking Traffic Stripe 6in White	0	0	2
X	typdrd	PMStripe6W(10-30)	Pavement Marking 10/30 Skip Traffic Stripe 6in White	0	0 / PM-Stripe-SKIP 10-30	2
X	typdrd	PMStripe6W(2-4)	Pavement Marking 2/4 Skip Traffic Stripe 6in White	0	0 / PM-Stripe-SKIP 2-4	2
X	typdrd	PMStripe6W(3-9)	Pavement Marking 3/9 Skip Traffic Stripe 6in White	0	0 / PM-Stripe-SKIP 3-9	2
X	typdrd	PMStripe6W(6-10)	Pavement Marking 6/10 Skip Traffic Stripe 6in White	0	0 / PM-Stripe-SKIP 6-10	2
X	typdrd	PMStripe6Y	Pavement Marking Traffic Stripe 6in Yellow	4	0	2
X	typdrd	PMStripe6Y(10-30)	Pavement Marking 10/30 Skip Traffic Stripe 6in Yellow	4	0 / PM-Stripe-SKIP 10-30	2
X	typdrd	PMStripe6Y(2-4)	Pavement Marking 2/4 Skip Traffic Stripe 6in Yellow	4	0 / PM-Stripe-SKIP 2-4	2
X	typdrd	PMStripe6Y(6-10)	Pavement Marking 6/10 Skip Traffic Stripe 6in Yellow	4	0 / PM-Stripe-SKIP 6-10	2
X	typdrd	PMStripe8B	Pavement Marking Traffic Stripe 8in Black	3	0	3
X	typdrd	PMStripe8W	Pavement Marking Traffic Stripe 8in White	0	0	3
X	typdrd	PMStripe8W(3-9)	Pavement Marking 3/9 Skip Traffic Stripe 8in White	0	0 / PM-Stripe-SKIP 3-9	2
X	typdrd	PMStripe8Y	Pavement Marking Traffic Stripe 8in Yellow	4	0	3
X	typdrd	PMStripeVibeWL	Pavement Marking Auditory and Vibratory 6in White (Left)	0	PM-Stripe-VibratoryLeft / PM-Stripe-Vibratory	2
X	typdrd	PMStripeVibeWR	Pavement Marking Auditory and Vibratory 6in White (Right)	0	PM-Stripe-VibratoryRight / PM-Stripe-Vibratory	2
X	typdrd	PMStripeVibeYL	Pavement Marking Auditory and Vibratory 6in Yellow (Left)	4	PM-Stripe-VibratoryLeft / PM-Stripe-Vibratory	2

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
X	typdrd	PMStripeVibeYR	Pavement Marking Auditory and Vibratory 6in Yellow (Right)	4	PM-Stripe-VibratoryRight / PM-Stripe-Vibratory	2
	typdrd	PointLocator_ep	Point Locator Symbol	4	0	0
X	typdrd	PoleConc	Concrete Strain Pole	0	0	2
X	typdrd	PoleConc_ep	Concrete Strain Pole (Existing)	0	2 / DGN2	1
X	typdrd	PoleFound	Pole Foundation	0	0	2
X	typdrd	PoleLight	Light Pole	2	0	1
X	typdrd	PoleLight_ep	Light Pole (Existing)	2	2 / DGN2	1
X	typdrd	PoleLightHM	High Mast Light Pole	3	0	1
X	typdrd	PoleLightHM_ep	High Mast Light Pole (Existing)	2	2 / DGN2	1
	typdrd	PoleLightID	Light Pole Location / ID	4	0	1
X	typdrd	PolePower	Power Pole w/ Transformer	3	0	2
X	typdrd	PoleShared	Power Pole Electric (Above Ground) Shared w/ Transformer	3	0	2
X	typdrd	PoleSteelStrain	Steel Strain Pole	0	0	2
X	typdrd	PoleSteelStrain_ep	Steel Strain Pole (Existing)	0	2 / DGN2	1
X	typdrd	PoleTel	Telephone Pole	6	0	2
X	typdrd	PoleUtil	Utility Pole	0	0	2
X	typdrd	PoleWoodStrain	Wood Strain Pole	0	0	2
X	typdrd	PoleWoodStrain_ep	Wood Strain Pole (Existing)	0	2 / DGN2	1
X	typdrd	Pond_px	Pond Lines on Cross Sections	2	0	2
X	typdrd	Power_px	Power on Cross Sections	3	0	1
X	typdrd	PropertyLine_ep	Property Lines	3	0	0
X	typdrd	PvtAnalysisCrown_px	Pavement Analysis Crowning - Component Property	7	0	1
X	typdrd	PvtAnalysisFail_px	Pavement Analysis Failure - Component Property	3	0	1
X	typdrd	PvtAnalysisMax_px	Pavement Analysis Acceptable Maximum Range - Component Property	5	0	1
X	typdrd	PvtAnalysisMin_px	Pavement Analysis Acceptable Minimum Range - Component Property	4	0	1
X	typdrd	PvtAnalysisOptiml_px	Pavement Analysis Optimal - Component Property	2	0	1
X	typdrd	Railing	All Proposed Railings; Piperail, Guiderail, Handrail used for Pedestrian and Bicycles	9	0	2
X	typdrd	Railing_px	Proposed Railing Components and XS Shapes	9	0	2
	typdrd	ReferencePt_dp	Survey and Construction Reference Point Details and Elements	4	0	2
X	typdrd	RipRap_px	Rip Rap, Rubble on Cross Sections	4	1 / DGN1	2
X	typdrd	RWLine	Right of Way Lines	4	RW-Proposed	2
X	typdrd	RWLine_ep	Right of Way Lines (Existing)	3	RW-Existing	1
X	typdrd	RWLine_ex	ROW Lines on Cross Sections (Existing)	3	RW-Existing	1
X	typdrd	RWLine_px	ROW Lines on Cross Sections	4	RW-Proposed	2
X	typdrd	SanitaryFM_px	Force Main Lines on Cross Sections	2	0	1
X	typdrd	SanitarySewer_ex	Sanitary Sewer Lines on Cross Sections (Existing)	10	2 / DGN2	0
X	typdrd	SanitarySewer_px	Sanitary Sewer Lines on Cross Sections	2	0	1
	typdrd	Scratch1_dp	A scratch level for temporary or informational items	4	0	0
	typdrd	Scratch2_dp	A scratch level for temporary or informational items	5	0	0
	typdrd	ScratchEle_dp	Level for Draft Elements, Temporary Elements, Etc. Do Not Plot	3	0	0
	typdrd	ScratchEle2_dp	Level for Draft Elements, Temporary Elements, Etc. Do Not Plot	4	0	0
	typdrd	SheetBorder_dp	Sheet Border	1	0	4
	typdrd	SheetLines_dp	Sheet Lines	1	0	2

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
	typdrd	SheetLinesMisc1_dp	Sheet Lines	1	0	0
	typdrd	SheetLinesMisc2_dp	Sheet Lines	2	0	2
	typdrd	SheetLinesMisc3_dp	Sheet Lines	3	0	2
	typdrd	SheetLinesMisc4_dp	Sheet Lines	4	0	2
X	typdrd	ShldrBase_px	Bottom of Proposed Paved Shoulder Base	3	0	2
X	typdrd	ShldrBaseTop_px	Top of Proposed Paved Shoulder Base	3	0	2
	typdrd	ShldrHatch	Paved Shoulder Hatch Pattern	1	0	1
X	typdrd	ShldrMilling_px	Shoulder Milling Component for Cross Sections - Component Property	7	0	2
X	typdrd	ShldrOverbuild_px	Shoulder Overbuild - Component Property	4	0	1
X	typdrd	ShldrOverlay_px	Shoulder Overlay - Component Property	1	0	1
X	typdrd	ShldrPaved	Paved Shoulder Line	1	0	1
X	typdrd	ShldrPaved_px	Paved Shoulder Lines on Cross Sections	1	0	2
X	typdrd	ShldrUnpaved	Unpaved Shoulder Line	0	0	0
X	typdrd	ShldrUnpaved_px	Grass Shoulder Lines on Cross Sections	2	0	2
X	typdrd	Shrub	Shrubs	2	0	1
X	typdrd	Sidewalk_ex	Sidewalk Elements in Cross Sections (Existing)	0	2 / DGN2	1
X	typdrd	Sidewalk_px	Sidewalk Elements in Cross Sections	0	0	2
X	typdrd	SidewalkBack	Sidewalk Back	2	0	1
X	typdrd	SidewalkBase_px	Proposed Sidewalk SubgradeSub-grade	3	0	2
X	typdrd	SidewalkConc	Sidewalk Concrete Shape	0	0	2
X	typdrd	SidewalkFront	Sidewalk Front	1	0	1
X	typdrd	Slopes	Slopes (Top, Bottom)	9	3 / DGN3	0
X	typdrd	Slopes_px	Slope Lines on Cross Sections	9	0	2
X	typdrd	Sod	Performance Sod	2	0	2
X	typdrd	SoilBoxes_px	Soil Boxes and Borings for Cross Sections	4	0	1
	typdrd	SpecialDetails_px	Special Details_XS	6	0	1
	typdrd	StationTicL_dp	Station Tic Marks (Large) and Text	0	0	2
	typdrd	StationTicS_dp	Station Tic Marks (Small) and Text	0	0	2
X	typdrd	StreetLights	Street Lights	2	0	1
X	typdrd	StreetLights_px	Street Lights for Cross Sections	3	0	1
	typdrd	Structure_px	Signal and Sign Structures on Cross Sections	0	0	2
X	typdrd	SubDsgn_px	Sub Design for Cross Sections including subbase	4	0	1
X	typdrd	Subsoil_px	Subsoil Or Undercut for Cross Sections	4	0	2
X	typdrd	SubsoilFinal_px	Subsoil Final for Multiline	18	0	1
X	typdrd	SubsoilProp_px	Subsoil Proposed for Multiline	8	0	1
	typdrd	SumBoxBorder_dp	Summary Boxes Borders	4	0	3
	typdrd	SumBoxLines_dp	Summary Boxes Lines and Miscellaneous Items	4	0	1
	typdrd	SumBoxLinesMin_dp	Summary Boxes Lines Minor Line and Miscellaneous Items	4	0	0
	typdrd	Tables_dp	Data Tables and All Autodesk Tables	0	0	1
X	typdrd	TemplateBottom_px	Bottom of Template for Multiline	6	0	1
X	typdrd	TemplateFinal_px	Final Template for Multiline	2	0	1
X	typdrd	TemplateTop_px	Top of Template for Multiline	7	0	1
X	typdrd	TerrainLine_ex	Existing Ground Line for Multiline	5	0	1
	typdrd	TextBLStation	Text - B/L Station and Tics	0	0	2
	typdrd	TextConstEle	Text - Construction Element	0	0	1

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
	typdrd	TextCurveData	Text - Curve Data Note	0	0	2
	typdrd	TextDetails	Text - Detail Notes	4	0	2
	typdrd	TextElevLabel	Elevation Labels	4	0	0
	typdrd	TextGeotech	Text for soil borings and labels	0	0	2
	typdrd	TextLabel	Text - Label	0	0	2
	typdrd	TextLandscape	Text - Landscape Labels	0	0	1
	typdrd	TextMajor	Text - Major	0	0	5
	typdrd	TextMinor	Text - Minor	0	0	0
	typdrd	TextMisc	Text - Miscellaneous	0	0	1
	typdrd	TextNotes	Text - Notes	4	0	1
	typdrd	TextProfLabel	Text - Profile, Horizontal and Vertical Axis Labels	0	0	2
	typdrd	TextProjLabel	Text - Begin and End Project label with leader lines	1	0	2
	typdrd	TextPtLabel	Point Labels	4	0	0
	typdrd	TextShtNo	Text - Sheet Number	0	0	2
	typdrd	TextSurveyLabel	Survey Text Labels	0	0	0
	typdrd	TextTables	Text - KeysheetKey sheet Indexes and Table Data	4	0	2
	typdrd	TextTitle	Text - Title	0	0	3
	typdrd	TextXSElev	Text - Cross Section Elevations	2	0	1
X	typdrd	TrafSeparator	Traffic Separator (All Types)	6	0	1
X	typdrd	TrafSeparator_px	Traffic Separator (All Types) on Cross Sections	6	0	2
X	typdrd	TrafSeparatorBase_px	Proposed Traffic Separator SubgradeSub-grade	3	0	2
X	typdrd	Tree	Trees, Tree Line Pattern	2	0	1
X	typdrd	TreeGrate	Tree Grate	5	0	1
X	typdrd	TreeProtection	Tree Protection Symbol	5	0	2
X	typdrd	Turf	Performance TrufTurf	100	0	2
	typdrd	TypicalMisc	Typical Miscellaneous Items	0	0	2
X	typdrd	UnderDrain	Underdrains (All Types)	10	0	2
	typdrd	Utility_er	Existing Utilities in Profile View	3	2 / DGN2	1
	typdrd	Utility_pr	Proposed Utilities in Profile View	3	0	2
	typdrd	UtilsMisc_px	Miscellaneous Utility Items on Cross Sections	8	0	1
	typdrd	Vehicle	Vehicle for Calculating Turning Radius	7	0	2
	typdrd	Viewport	Viewport (For AutoCAD Use)	3	0	0
	typdrd	VoidArea_dx	Void Area_XS	1	0	0
X	typdrd	WallBarrier	Barrier Wall All Types	6	0	2
X	typdrd	WallBarrier_ex	Barrier Wall for Cross Section (Existing)	6	3 / DGN3	1
X	typdrd	WallBarrier_px	Barrier Wall for Cross Section	6	0	2
X	typdrd	WallFooter_px	Wall Footer (Concrete) - For Component symbology/material on all wall footers/leveling pads	2	0	1
X	typdrd	WallGravBase_px	Proposed Gravity Wall Sub-grade	3	0	2
X	typdrd	WallGravity	Gravity Wall	11	0	1
X	typdrd	WallGravity_px	Gravity Wall for Cross Sections	11	0	2
X	typdrd	WallMedianBase_px	Proposed Median Wall Sub-grade	3	0	2
X	typdrd	WallRetain	Retaining Wall System	6	0	1
X	typdrd	WallRetain_pr	Retaining Wall Profile	9	0	2
X	typdrd	WallRetain_px	Retaining Walls on Cross Sections	6	0	1

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
X	typdrd	WallShldrBase_px	Proposed Shoulder Wall Sub-grade	3	0	2
X	typdrd	Water	Water Line	1	UT-Water-Proposed	2
	typdrd	Water_ep	Water Line (all sizesAll Sizes)	1	UT-Water-Existing	1
X	typdrd	Water_ex	Water for Cross Sections (Existing)	1	2 / DGN2	1
X	typdrd	Water_px	Water for Cross Sections	1	0	1
	typdrd	Xreference01_dp	Reference Files (For AutoCAD Use)	0	0	1
	typdrd	Xreference02_dp	Reference Files (For AutoCAD Use)	0	0	1
	typdrd	Xreference03_dp	Reference Files (For AutoCAD Use)	0	0	1
	typdrd	Xreference04_dp	Reference Files (For AutoCAD Use)	0	0	1
X	typdrd	XSBaseTop_px	Top of Proposed Base	3	0	2
	typdrd	XSCell	GEOPAK Cross Section Cell/Block and Profile Cell/Block	8	0	1
X	typdrd	XSExtendGrdLine_ex	Extend Ground Lines for Cross Sections (Existing)	21	2 / DGN2	1
X	typdrd	XSGrdLine_ex	Ground Lines for Cross Sections (Existing)	2	2 / DGN2	1
X	typdrd	XSGrdLine_px	Roadway Ground Lines on Cross Sections	1	0	2
	typdrd	XSMisc_px	Cross Section Miscellaneous Items	0	0	2
	typdrd	XSShapeDep01_dp	Cross Section Shape Dependent	11	0	2
	typdrd	XSShapeDep02_dp	Cross Section Shape Dependent	12	0	2
	typdrd	XSShapeDep03_dp	Cross Section Shape Dependent	13	0	2
	typdrd	XSShapeDep04_dp	Cross Section Shape Dependent	14	0	2
	typdrd	XSShapeDep05_dp	Cross Section Shape Dependent	15	0	2
	typdrd	XSShapeDep06_dp	Cross Section Shape Dependent	16	0	2
	typdrd	XSShapeDep07_dp	Cross Section Shape Dependent	17	0	2
	typdrd	XSShapeDep08_dp	Cross Section Shape Dependent	18	0	2
	typdrd	XSShapeDep09_dp	Cross Section Shape Dependent	19	0	2
	typdrd	XSShapeDep10_dp	Cross Section Shape Dependent	20	0	2
	typdrd	XSShapeIndep01_dp	Cross Section Shape Independent	1	0	2
	typdrd	XSShapeIndep02_dp	Cross Section Shape Independent	2	0	2
	typdrd	XSShapeIndep03_dp	Cross Section Shape Independent	3	0	2
	typdrd	XSShapeIndep04_dp	Cross Section Shape Independent	4	0	2
	typdrd	XSShapeIndep05_dp	Cross Section Shape Independent	5	0	2
	typdrd	XSShapeIndep06_dp	Cross Section Shape Independent	6	0	2
	typdrd	XSShapeIndep07_dp	Cross Section Shape Independent	7	0	2
	typdrd	XSShapeIndep08_dp	Cross Section Shape Independent	8	0	2
	typdrd	XSShapeIndep09_dp	Cross Section Shape Independent	9	0	2
	typdrd	XSShapeIndep10_dp	Cross Section Shape Independent	10	0	2
X	typdrd	XSTypical_px	Roadway Pavement Typical on Cross Sections	1	0	2

TYPSRD - Typical Section Sheets

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
	typsrd	ActivePointCell_dp	Active Point Cell	4	0	10
	typsrd	AdhocPoint_dp	Adhoc Points Placed by SheetInfo	0	4 / 0	0
X	typsrd	AdvWarnPanel	Advance Warning Arrow Panels	4	0	2
X	typsrd	Attenuator	Attenuation Systems	6	MOT-Attenuator	1
X	typsrd	AttenuatorTM	Attenuator Truck Mount	6	0	2
X	typsrd	Barricade	Barricade	0	0	1
X	typsrd	Barricade1	Barricade Symbol Type 1 or 2 at 15' spacing	0	MOT-Barricade-15Gap	1
X	typsrd	Barricade2	Barricade Symbol Type 1 or 2 at 30' spacing	0	MOT-Barricade-30Gap	1
X	typsrd	Barricade3	Barricade Symbol Type 1 or 2 at 50' spacing	0	MOT-Barricade-50Gap	1
X	typsrd	Barricade4	Barricade Symbol Type 1 or 2 at 100' spacing	0	MOT-Barricade-100Gap	1
	typsrd	BaselineSurvey	Baseline Survey	0	0	2
X	typsrd	Berm_px	Berm (Top, Front, or Back) for Cross Sections	10	0	2
X	typsrd	BoxCulvert	Box Culvert	10	0	2
X	typsrd	Bridge_px	Bridge Component for Cross Sections - Component Property	0	0	2
X	typsrd	CandG_ex	Curb and Gutter for Cross Sections (All Types) (Existing)	4	2 / DGN2	1
X	typsrd	CandG_px	Curb and Gutter for Cross Sections (All Types)	4	0	2
X	typsrd	CandGBase_px	Curb and Gutter Base on Cross Sections	3	0	1
	typsrd	CLConst_dp	Center Line of Construction	0	0	2
	typsrd	Cloud_dp	Construction Cloud	7	0	2
	typsrd	COGO_dp	COGO Information	3	0	1
X	typsrd	Concrete	Concrete Areas (All Types plus miscellaneous)	0	0	2
X	typsrd	ConcSlabs	Concrete Slabs	0	0	2
X	typsrd	Conduit_px	Conduit and Encasements on Cross Sections	3	0	1
X	typsrd	Cone	Cone and Tubular Marker	6	0	2
	typsrd	ConstArea_dp	Construction Area Crosshatch	0	0	1
	typsrd	ConstLimits	Construction Limits	3	RW-LimitsofConst	2
	typsrd	ConstLines	Construction Lines and References	1	0	0
	typsrd	ConstLines_pm	Construction Lines	4	0	0
X	typsrd	CurbBack	Back of Curb	4	0	1
X	typsrd	CurbFace	Curb and Gutter (Face)	4	0	1
X	typsrd	CurbRamp	Curb Cut Ramp	8	0	1
	typsrd	CurveData_dp	Curve & Coordinate Data Elements incl PC, PT, PI symbols	4	0	2
	typsrd	CurveDataLabel_dp	Curve Data Labels PC,PI, PT	0	0	2
	typsrd	DimLines_dp	Dimension Lines, Corresponding Terminators, Equation Lines	0	0	1
X	typsrd	DirArrowsPavt	Pavement Marking Directional Arrows	0	0	1
X	typsrd	Ditch	Ditch Top	7	6 / DGN6	1
X	typsrd	Ditch_px	Ditch Top for Cross Sections	7	0	2
X	typsrd	DitchBot	Ditch Bottom	10	0	2
X	typsrd	DitchBot_px	Ditch Bottom for Cross Sections	10	0	2
X	typsrd	DitchPavt	Ditch Pavement Including Quantity Shapes	3	0	1
X	typsrd	DitchPavt_px	Ditch Pavement for Cross Sections	3	0	3
	typsrd	DitchProfLt_er	Ditch Profile Left (Existing)	8	3 / DGN3	1
	typsrd	DitchProfLt_pr	Ditch Profile Left	8	0	1

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
	typsrd	DitchProfMdn_er	Ditch Profile Median (Existing)	10	3 / DGN3	1
	typsrd	DitchProfMdn_pr	Ditch Profile Median	10	0	1
	typsrd	DitchProfRt_er	Ditch Profile Right (Existing)	9	3 / DGN3	1
	typsrd	DitchProfRt_pr	Ditch Profile Right	9	0	1
X	typsrd	DrainStruct_pr	Drainage Structures (All Types)	10	0	2
X	typsrd	DrainStruct_px	Drainage Structures for Cross Sections	10	0	2
X	typsrd	Driveway_px	Driveway Lines on Cross Sections	7	0	2
X	typsrd	DrivewayBase_px	Proposed Driveway SubgradeSub-grade	3	0	2
	typsrd	Drum	Drum	6	0	1
	typsrd	Earthwork1_px	Earthwork (color 0)	0	0	1
	typsrd	Earthwork2_px	Earthwork (color 1)	1	0	1
	typsrd	Earthwork3_px	Earthwork (color 2)	2	0	1
	typsrd	Earthwork4_px	Earthwork (color 3)	3	0	1
	typsrd	Earthwork5_px	Earthwork (color 4)	4	0	1
X	typsrd	EaseLicLine	Easement License Agreement Line	5	6 / DGN6	0
X	typsrd	EasePerpLine	Easement Lines Perpetual	4	RW-PerpetualEasement	1
X	typsrd	EasePerpLine_px	Easement Lines Perpetual on Cross Sections	4	RW-PerpetualEasement	1
X	typsrd	EaseTempLine	Easement Lines Temporary	6	RW-TemporaryEasement	0
X	typsrd	EaseTempLine_px	Easement Lines Temporary on Cross Sections	6	RW-TemporaryEasement	0
X	typsrd	Endwall	Endwall (All Types)	10	0	2
X	typsrd	Endwall_px	Endwall for Cross Sections	10	0	2
	typsrd	ExcavationLimits_dp	Excavation Limits on Cross Sections	0	0	1
X	typsrd	Fence	Fence	6	RD-Fence	1
	typsrd	Fence_ex	Fence Lines on Cross Sections (Existing)	6	3 / DGN3	1
X	typsrd	Fence_px	Fence Lines on Cross Sections	6	RD-Fence	2
X	typsrd	FenceLt	Fence Limited Access Left	6	RD-Fence-Left	1
X	typsrd	FenceRt	Fence Limited Access Right	6	RD-Fence-Right	1
X	typsrd	FES	Flared End Sections	10	0	2
X	typsrd	FES_px	Flared End Sections for Cross Sections	10	0	2
X	typsrd	FlashingLight	Flashing Lights (All Types)	0	0	1
X	typsrd	FOCBur_px	Fiber Optics Cable (Buried) for XSectionsCross Sections	6	0	1
X	typsrd	Gas_px	Gas Pipe and Fittings, Misc for XsectionsCross Sections	4	0	1
	typsrd	GeotechFillPatt1	Geotechnical Fill Pattern - (earth, wood, muck, concrete, rock, riprap) as defined in project	3	0	0
	typsrd	GeotechFillPatt1_px	Geotechnical Fill Pattern - (earth, wood, muck, concrete, rock, riprap) as defined in project	3	0	0
	typsrd	GeotechFillPatt2	Geotechnical Fill Pattern - clay, sand	0	1 / DGN1	0
	typsrd	GeotechFillPatt2_px	Geotechnical Fill Pattern - clay, sand	0	1 / DGN1	0
	typsrd	GeotechFillPatt3	Geotechnical Fill Pattern - shell	3	1 / DGN1	0
	typsrd	GeotechFillPatt3_px	Geotechnical Fill Pattern - shell	3	1 / DGN1	0
	typsrd	GeotechFillPatt4	Geotechnical Fill Pattern - sand	4	0	0
	typsrd	GeotechFillPatt4_px	Geotechnical Fill Pattern - sand	4	0	0
	typsrd	GeotechFillPatt5	Geotechnical Fill Pattern - coquina	1	0	1
	typsrd	GeotechFillPatt5_px	Geotechnical Fill Pattern - coquina	1	0	1
	typsrd	GeotechFillPatt6	Geotechnical Fill Pattern - limestone	2	0	0

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
	typsrd	GeotechFillPatt6_px	Geotechnical Fill Pattern - limestone	2	0	0
	typsrd	GeotechFillPatt7	Geotechnical Fill Pattern - gravel	6	0	0
	typsrd	GeotechFillPatt7_px	Geotechnical Fill Pattern - gravel	6	0	0
	typsrd	GeotechFillPatt8	Geotechnical Fill Pattern - silt	0	0	1
	typsrd	GeotechFillPatt8_px	Geotechnical Fill Pattern - silt	0	0	1
	typsrd	GeotechMisc	Miscellaneous Geotechnical Elements	0	0	1
X	typsrd	GovTwpRgeLine_ep	Township / Range Lines	10	RW-TownshipRange	2
	typsrd	GPKDrBack_dp	Back Point on Drainage Cells	2	2 / 0	2
	typsrd	GPKDrBottom_dp	Bottom Point on Drainage Cells	3	3 / 0	2
	typsrd	GPKDrCellIns_dp	Cell Insertion Point on Drainage Cells	4	4 / 0	2
	typsrd	GPKDrCentroid_dp	Point on Centroid for Drainage	7	7 / 0	2
	typsrd	GPKDrFront_dp	Front Point on Drainage Cells	1	1 / 0	2
	typsrd	GPKDrPipe_dp	Point on Drainage Pipe	6	6 / 0	2
	typsrd	GPKDrPipeCir_dp	Point on Pipe Circular	6	6 / 0	0
X	typsrd	Grass	Grass, Seeding and Mulching Areas	2	1 / DGN1	2
	typsrd	GridMaj_dp	Grid Lines Major in Profile and Cross Section	3	0	1
	typsrd	GridMin_dp	Grid Lines Minor in Profile and Cross Section	0	0	0
	typsrd	GridMinSub_dp	Grid Lines Minor Sub in Cross Section Sheets	20	0	0
	typsrd	GroundCover	Groundcover Edge Symbol	2	0	1
	typsrd	GroundCoverHatch	Groundcover Hatch Pattern	2	0	0
X	typsrd	Guardrail	Guardrail	0	0	2
X	typsrd	GuardrailBRLt	Guardrail Bridge Left	0	RD-Guardrail-Left	1
X	typsrd	GuardrailBRRt	Guardrail Bridge Right	0	RD-Guardrail-Right	1
X	typsrd	GuardrailDbl	Guardrail Double Face	0	RD-Guardrail-Double	1
X	typsrd	GuardrailEndAch	Guardrail End Anchorage	0	0	1
X	typsrd	GuardrailLt	Guardrail Left	0	RD-Guardrail-Left	1
X	typsrd	GuardrailModThrieDbl	Guardrail Modified Thrie Beam Double Face	0	RD-Guardrail-Double	1
X	typsrd	GuardrailModThrieLt	Guardrail Modified Thrie Beam Left	0	RD-Guardrail-Left	1
X	typsrd	GuardrailModThrieRt	Guardrail Modified Thrie Beam Right	0	RD-Guardrail-Right	1
X	typsrd	GuardrailPanel_px	Guardrail Component Property and Model Break Line for 3D Guardrail Panels	11	0	1
X	typsrd	GuardrailPost_px	Guardrail Component Property and Model Break Line for 3D Guardrail Posts	10	0	0
X	typsrd	GuardrailPRDbl	Guardrail Double Face w/ Pipe Rail	0	RD-Guardrail-Double	1
X	typsrd	GuardrailPRLt	Guardrail Left w/ Pipe Rail	0	RD-Guardrail-Left	1
X	typsrd	GuardrailPRRt	Guardrail Right w/ Pipe Rail	0	RD-Guardrail-Right	1
X	typsrd	GuardrailRRDbl	Guardrail Double Face w/ Rub Rail	0	RD-Guardrail-Double	1
X	typsrd	GuardrailRRLt	Guardrail Left w/ Rub Rail	0	RD-Guardrail-Left	1
X	typsrd	GuardrailRRRt	Guardrail Right w/ Rub Rail	0	RD-Guardrail-Right	1
X	typsrd	GuardrailRt	Guardrail Right	0	RD-Guardrail-Right	1
X	typsrd	GuardrailThrieDbl	Guardrail Thrie Beam Double Face	0	RD-Guardrail-Double	1
X	typsrd	GuardrailThrieLt	Guardrail Thrie Beam Left	0	RD-Guardrail-Left	1
X	typsrd	GuardrailThriePRLt	Guardrail Thrie Beam Left w/ Pipe Rail	0	RD-Guardrail-Left	1
X	typsrd	GuardrailThriePRRt	Guardrail Thrie Beam Right w/ Pipe Rail	0	RD-Guardrail-Right	1
X	typsrd	GuardrailThrieRt	Guardrail Thrie Beam Right	0	RD-Guardrail-Right	1
	typsrd	HardscapeDetails	Paving Details, Fence Railing, Stamped Asphalt	4	0	2
	typsrd	ImageAttachment_dp	Image AttachmentstAttachments	0	0	0

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
X	typsrd	Inlet_px	Inlets on Cross Sections	10	0	2
X	typsrd	InletBottom_px	Inlet Bottom on Cross Sections (All Types)	10	0	2
X	typsrd	InletBottomJ	Inlet Bottom Type J	10	0	1
X	typsrd	InletBottomP	Inlet Bottom Type P	10	0	1
X	typsrd	InletCurb	Curb Inlet (All Types)	10	0	2
X	typsrd	InletDBI	Ditch Bottom Inlet (All Types)	10	0	2
X	typsrd	InletGutter	Gutter Inlet (All Types)	10	0	2
X	typsrd	InletMedian	Median Barrier Inlet	10	0	2
	typsrd	KeyShtMisc	Key sheet Miscellaneous Items	0	0	2
	typsrd	LaneDirArrow	Lane Directional Arrow	0	0	1
X	typsrd	LARWLine	Limited Access Right of Way	4	RW-LimitedAccess-Proposed	2
X	typsrd	LARWLine_ep	Limited Access Right of Way (Existing)	4	RW-LimitedAccess-Existing	1
X	typsrd	LARWLine_ex	Limited Access Right of Way on XSectionsCross Sections (Existing)	4	RW-LimitedAccess-Existing	1
X	typsrd	LARWLine_px	Limited Access ROW Lines on Cross Sections	4	RW-LimitedAccess-Proposed	2
X	typsrd	LateralLimits_px	Lateral Limits for Cross Sections	6	0	2
	typsrd	LeaderLine_dp	Leader Line and terminator with Text	0	0	1
	typsrd	LightingMisc	Lighting Miscellaneous Items	4	0	2
X	typsrd	LightingSP	Lighting Service Points	0	0	1
	typsrd	Logo_dp	Consultant Engineer of Record Logo	0	0	1
X	typsrd	Luminaire	Luminaires (Decorative - All Types)	2	0	1
X	typsrd	Manhole	Manhole (Drainage and Unknown)	10	0	2
X	typsrd	Manhole_px	Manhole on Cross Sections	10	0	2
X	typsrd	MES	Mitered End Section	10	0	2
X	typsrd	MES_px	Mitered End Section on Cross Sections	10	0	2
	typsrd	Miscellaneous0	Undefined proposed item - co blue wt 0	1	0	0
	typsrd	Miscellaneous1	Undefined proposed item - co blue wt 1	1	0	1
	typsrd	Miscellaneous2	Undefined proposed item - co blue wt 2	1	0	2
	typsrd	Miscellaneous3	Undefined proposed item - co green wt 0	2	0	0
	typsrd	Miscellaneous4	Undefined proposed item - co green wt 1	2	0	1
	typsrd	Miscellaneous5	Undefined proposed item - co green wt 2	2	0	2
	typsrd	Miscellaneous6	Undefined proposed item - co red wt 0	3	0	0
	typsrd	Miscellaneous7	Undefined proposed item - co red wt 1	3	0	1
	typsrd	Miscellaneous8	Undefined proposed item - co red wt 2	3	0	2
	typsrd	Miscellaneous9	Undefined proposed item - co red wt 3	3	0	3
	typsrd	NonPlottingEle_dp	Non plotting items such as construction elements and type 66 elements	4	0	0
	typsrd	PatternLines1_dp	Pattern Lines and Sample Lines (Civil 3D) for Cross Sections	3	0	2
	typsrd	PatternLines2_dp	Pattern Lines for XSectionsCross Sections alternate for side streets, critical xsectionsCross Sections or drainage structures	4	0	2
	typsrd	PatternLines3_dp	Pattern Lines for XSectionsCross Sections alternate for side streets, critical xsectionsCross Sections or drainage structures	5	0	2
X	typsrd	PavedMedianBase_px	Proposed Paved Median SubgradeSub-grade	3	0	2
	typsrd	PavtAsph_ep	Asphalt Pavement Edge	0	3 / DGN3	1
X	typsrd	PavtAsphalt	Asphalt Pavement Edge Line and Quantity Shapes	0	0	2
X	typsrd	PavtAsphalt_px	Asphalt Pavement for Cross Sections and Components in Models	1	0	2
X	typsrd	PavtBase	Base Material (All Types)	3	0	2

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
X	typsrd	PavtBase_ex	Base Material for Cross Sections (All Types) (Existing)	3	3 / DGN3	1
X	typsrd	PavtBase_px	Base Material for Cross Sections (All Types)	3	0	2
X	typsrd	PavtConcrete	Concrete Pavement Edge Line and Quantity Shapes	10	0	2
X	typsrd	PavtConcrete_px	Concrete Pavement for Cross Sections and Components in Models	0	0	2
X	typsrd	PavtConcreteSC	Concrete Pavement Edge Line and Quantity Shapes	9	0	1
	typsrd	PavtCrown	Pavement Crown	16	0	2
X	typsrd	PavtMessage	Pavement Message (All types)(All Types)	0	0	1
X	typsrd	PavtMessage_ep	Pavement Message (Existing - All types)(All Types)	0	2 / DGN2	0
X	typsrd	PavtMilling_px	Asphalt Milling Lines on Cross Sections	7	0	2
	typsrd	PavtMisc	Asphalt Miscellaneous Material	1	0	1
X	typsrd	PavtMisc_px	Miscellaneous Pavement on Cross Sections	1	0	2
X	typsrd	PavtOverbuild_px	Pavement Overbuild Areas on Cross Sections - Component Property	4	0	2
X	typsrd	PavtOverlay_px	Pavement Overlay for Cross Sections - Component Property	1	0	2
X	typsrd	PavtOverlay1_px	Pavement Overlay for Cross Sections - Component Property	14	0	2
X	typsrd	PavtOverlay2_px	Pavement Overlay for Cross Sections - Component Property	7	0	2
X	typsrd	PavtStabilization	Stabilization Material Lines and Shapes	9	0	2
X	typsrd	PavtStabilization_px	Stabilization for Cross Sections	5	2 / DGN2	2
	typsrd	PayItem_dp	Pay Item Number Label Elements	4	0	2
	typsrd	PipeCulvert_ep	Pipe Culvert	10	3 / DGN3	1
X	typsrd	PipeCulvert_pr	Pipe Culvert in Profile	3	0	2
X	typsrd	PipeCulvert_px	Pipe Culvert for Cross Section View	10	0	2
X	typsrd	PlotBorder_dp	Plot Border	3	0	0
	typsrd	PMMisc	Pavement Marking Miscellaneous Items	0	0	2
X	typsrd	PMStripe12B	Pavement Marking Traffic Stripe 12in Black	3	0	4
X	typsrd	PMStripe12W	Pavement Marking Traffic Stripe 12in White	0	0	4
X	typsrd	PMStripe12W(3-9)	Pavement Marking 3/9 Skip Traffic Stripe 12in White	0	0 / PM-Stripe-SKIP 3-9	4
X	typsrd	PMStripe12Y	Pavement Marking Traffic Stripe 12in Yellow	4	0	4
X	typsrd	PMStripe16B	Pavement Marking Traffic Stripe 16in Black	3	0	5
X	typsrd	PMStripe16W	Pavement Marking Traffic Stripe 16in White	0	0	5
X	typsrd	PMStripe16Y	Pavement Marking Traffic Stripe 16in Yellow	4	0	5
X	typsrd	PMStripe18B	Pavement Marking Traffic Stripe 18in Black	3	0	6
X	typsrd	PMStripe18W	Pavement Marking Traffic Stripe 18in White	0	0	6
X	typsrd	PMStripe18Y	Pavement Marking Traffic Stripe 18in Yellow	4	0	6
X	typsrd	PMStripe24W	Pavement Marking Traffic Stripe 24in White	0	0	7
X	typsrd	PMStripe24Y	Pavement Marking Traffic Stripe 24in Yellow	4	0	7
X	typsrd	PMStripe6B	Pavement Marking Traffic Stripe 6in Black	3	0	2
X	typsrd	PMStripe6B(10-30)	Pavement Marking 10/30 Skip Traffic Stripe 6in Black	3	0 / PM-Stripe-SKIP 10-30	2
X	typsrd	PMStripe6Bl	Pavement Marking Traffic Stripe 6in Blue	1	0	2
X	typsrd	PMStripe6DY	Pavement Marking Traffic Stripe 6in Double Yellow	4	0	2
X	typsrd	PMStripe6W	Pavement Marking Traffic Stripe 6in White	0	0	2
X	typsrd	PMStripe6W(10-30)	Pavement Marking 10/30 Skip Traffic Stripe 6in White	0	0 / PM-Stripe-SKIP 10-30	2
X	typsrd	PMStripe6W(2-4)	Pavement Marking 2/4 Skip Traffic Stripe 6in White	0	0 / PM-Stripe-SKIP 2-4	2

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
X	typsrd	PMStripe6W(3-9)	Pavement Marking 3/9 Skip Traffic Stripe 6in White	0	0 / PM-Stripe-SKIP 3-9	2
X	typsrd	PMStripe6W(6-10)	Pavement Marking 6/10 Skip Traffic Stripe 6in White	0	0 / PM-Stripe-SKIP 6-10	2
X	typsrd	PMStripe6Y	Pavement Marking Traffic Stripe 6in Yellow	4	0	2
X	typsrd	PMStripe6Y(10-30)	Pavement Marking 10/30 Skip Traffic Stripe 6in Yellow	4	0 / PM-Stripe-SKIP 10-30	2
X	typsrd	PMStripe6Y(2-4)	Pavement Marking 2/4 Skip Traffic Stripe 6in Yellow	4	0 / PM-Stripe-SKIP 2-4	2
X	typsrd	PMStripe6Y(6-10)	Pavement Marking 6/10 Skip Traffic Stripe 6in Yellow	4	0 / PM-Stripe-SKIP 6-10	2
X	typsrd	PMStripe8B	Pavement Marking Traffic Stripe 8in Black	3	0	3
X	typsrd	PMStripe8W	Pavement Marking Traffic Stripe 8in White	0	0	3
X	typsrd	PMStripe8W(3-9)	Pavement Marking 3/9 Skip Traffic Stripe 8in White	0	0 / PM-Stripe-SKIP 3-9	2
X	typsrd	PMStripe8Y	Pavement Marking Traffic Stripe 8in Yellow	4	0	3
X	typsrd	PMStripeVibeWL	Pavement Marking Auditory and Vibratory 6in White (Left)	0	PM-Stripe-VibratoryLeft / PM-Stripe-Vibratory	2
X	typsrd	PMStripeVibeWR	Pavement Marking Auditory and Vibratory 6in White (Right)	0	PM-Stripe-VibratoryRight / PM-Stripe-Vibratory	2
X	typsrd	PMStripeVibeYL	Pavement Marking Auditory and Vibratory 6in Yellow (Left)	4	PM-Stripe-VibratoryLeft / PM-Stripe-Vibratory	2
X	typsrd	PMStripeVibeYR	Pavement Marking Auditory and Vibratory 6in Yellow (Right)	4	PM-Stripe-VibratoryRight / PM-Stripe-Vibratory	2
	typsrd	PointLocator_ep	Point Locator Symbol	4	0	0
X	typsrd	PoleConc	Concrete Strain Pole	0	0	2
X	typsrd	PoleConc_ep	Concrete Strain Pole (Existing)	0	2 / DGN2	1
X	typsrd	PoleFound	Pole Foundation	0	0	2
X	typsrd	PoleLight	Light Pole	2	0	1
X	typsrd	PoleLight_ep	Light Pole (Existing)	2	2 / DGN2	1
X	typsrd	PoleLightHM	High Mast Light Pole	3	0	1
X	typsrd	PoleLightHM_ep	High Mast Light Pole (Existing)	2	2 / DGN2	1
	typsrd	PoleLightID	Light Pole Location / ID	4	0	1
X	typsrd	PolePower	Power Pole w/ Transformer	3	0	2
X	typsrd	PoleShared	Power Pole Electric (Above Ground) Shared w/ Transformer	3	0	2
X	typsrd	PoleSteelStrain	Steel Strain Pole	0	0	2
X	typsrd	PoleSteelStrain_ep	Steel Strain Pole (Existing)	0	2 / DGN2	1
X	typsrd	PoleTel	Telephone Pole	6	0	2
X	typsrd	PoleUtil	Utility Pole	0	0	2
X	typsrd	PoleWoodStrain	Wood Strain Pole	0	0	2
X	typsrd	PoleWoodStrain_ep	Wood Strain Pole (Existing)	0	2 / DGN2	1
X	typsrd	Pond_px	Pond Lines on Cross Sections	2	0	2
X	typsrd	Power_px	Power on Cross Sections	3	0	1
X	typsrd	PropertyLine_ep	Property Lines	3	0	0
X	typsrd	PvtAnalysisCrown_px	Pavement Analysis Crowning - Component Property	7	0	1
X	typsrd	PvtAnalysisFail_px	Pavement Analysis Failure - Component Property	3	0	1

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
X	typsrd	PvtAnalysisMax_px	Pavement Analysis Acceptable Maximum Range - Component Property	5	0	1
X	typsrd	PvtAnalysisMin_px	Pavement Analysis Acceptable Minimum Range - Component Property	4	0	1
X	typsrd	PvtAnalysisOptiml_px	Pavement Analysis Optimal - Component Property	2	0	1
X	typsrd	Railing	All Proposed Railings; Piperail, Guiderail, Handrail used for Pedestrian and Bicycles	9	0	2
X	typsrd	Railing_px	Proposed Railing Components and XS Shapes	9	0	2
	typsrd	ReferencePt_dp	Survey and Construction Reference Point Details and Elements	4	0	2
X	typsrd	RipRap_px	Rip Rap, Rubble on Cross Sections	4	1 / DGN1	2
X	typsrd	RWLine	Right of Way Lines	4	RW-Proposed	2
X	typsrd	RWLine_ep	Right of Way Lines (Existing)	3	RW-Existing	1
X	typsrd	RWLine_ex	ROW Lines on Cross Sections (Existing)	3	RW-Existing	1
X	typsrd	RWLine_px	ROW Lines on Cross Sections	4	RW-Proposed	2
X	typsrd	SanitaryFM_px	Force Main Lines on Cross Sections	2	0	1
X	typsrd	SanitarySewer_ex	Sanitary Sewer Lines on Cross Sections (Existing)	10	2 / DGN2	0
X	typsrd	SanitarySewer_px	Sanitary Sewer Lines on Cross Sections	2	0	1
	typsrd	Scratch1_dp	A scratch level for temporary or informational items	4	0	0
	typsrd	Scratch2_dp	A scratch level for temporary or informational items	5	0	0
	typsrd	ScratchEle_dp	Level for Draft Elements, Temporary Elements, Etc. Do Not Plot	3	0	0
	typsrd	SheetBorder_dp	Sheet Border	1	0	4
	typsrd	SheetLines_dp	Sheet Lines	1	0	2
	typsrd	SheetLinesMisc1_dp	Sheet Lines	1	0	0
	typsrd	SheetLinesMisc2_dp	Sheet Lines	2	0	2
	typsrd	SheetLinesMisc3_dp	Sheet Lines	3	0	2
	typsrd	SheetLinesMisc4_dp	Sheet Lines	4	0	2
X	typsrd	ShldrBase_px	Bottom of Proposed Paved Shoulder Base	3	0	2
X	typsrd	ShldrBaseTop_px	Top of Proposed Paved Shoulder Base	3	0	2
	typsrd	ShldrHatch	Paved Shoulder Hatch Pattern	1	0	1
X	typsrd	ShldrMilling_px	Shoulder Milling Component for Cross Sections - Component Property	7	0	2
X	typsrd	ShldrOverbuild_px	Shoulder Overbuild - Component Property	4	0	1
X	typsrd	ShldrOverlay_px	Shoulder Overlay - Component Property	1	0	1
X	typsrd	ShldrPaved	Paved Shoulder Line	1	0	1
X	typsrd	ShldrPaved_px	Paved Shoulder Lines on Cross Sections	1	0	2
X	typsrd	ShldrUnpaved	Unpaved Shoulder Line	0	0	0
X	typsrd	ShldrUnpaved_px	Grass Shoulder Lines on Cross Sections	2	0	2
X	typsrd	Shrub	Shrubs	2	0	1
X	typsrd	Sidewalk_ex	Sidewalk Elements in Cross Sections (Existing)	0	2 / DGN2	1
X	typsrd	Sidewalk_px	Sidewalk Elements in Cross Sections	0	0	2
X	typsrd	SidewalkBack	Sidewalk Back	2	0	1
X	typsrd	SidewalkBase_px	Proposed Sidewalk SubgradeSub-grade	3	0	2
X	typsrd	SidewalkConc	Sidewalk Concrete Shape	0	0	2
X	typsrd	SidewalkFront	Sidewalk Front	1	0	1
X	typsrd	Slopes	Slopes (Top, Bottom)	9	3 / DGN3	0
X	typsrd	Slopes_px	Slope Lines on Cross Sections	9	0	2
X	typsrd	Sod	Performance Sod	2	0	2
X	typsrd	SoilBoxes_px	Soil Boxes and Borings for Cross Sections	4	0	1

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
	typsrd	SpecialDetails_px	Special Details_XS	6	0	1
	typsrd	StationTicL_dp	Station Tic Marks (Large) and Text	0	0	2
	typsrd	StationTicS_dp	Station Tic Marks (Small) and Text	0	0	2
X	typsrd	StreetLights	Street Lights	2	0	1
X	typsrd	StreetLights_px	Street Lights for Cross Sections	3	0	1
	typsrd	Structure_px	Signal and Sign Structures on Cross Sections	0	0	2
X	typsrd	SubDsgn_px	Sub Design for Cross Sections including subbasesub-base	4	0	1
X	typsrd	Subsoil_px	Subsoil Or Undercut for Cross Sections	4	0	2
X	typsrd	SubsoilFinal_px	Subsoil Final for Multiline	18	0	1
X	typsrd	SubsoilProp_px	Subsoil Proposed for Multiline	8	0	1
	typsrd	SumBoxBorder_dp	Summary Boxes Borders	4	0	3
	typsrd	SumBoxLines_dp	Summary Boxes Lines and Miscellaneous Items	4	0	1
	typsrd	SumBoxLinesMin_dp	Summary Boxes Lines Minor Line and Miscellaneous Items	4	0	0
	typsrd	Tables_dp	Data Tables and All Autodesk Tables	0	0	1
X	typsrd	TemplateBottom_px	Bottom of Template for Multiline	6	0	1
X	typsrd	TemplateFinal_px	Final Template for Multiline	2	0	1
X	typsrd	TemplateTop_px	Top of Template for Multiline	7	0	1
X	typsrd	TerrainLine_ex	Existing Ground Line for Multiline	5	0	1
	typsrd	TextBLStation	Text - B/L Station and Tics	0	0	2
	typsrd	TextConstEle	Text - Construction Element	0	0	1
	typsrd	TextCurveData	Text - Curve Data Note	0	0	2
	typsrd	TextDetails	Text - Detail Notes	4	0	2
	typsrd	TextElevLabel	Elevation Labels	4	0	0
	typsrd	TextGeotech	Text for soil borings and labels	0	0	2
	typsrd	TextLabel	Text - Label	0	0	2
	typsrd	TextLandscape	Text - Landscape Labels	0	0	1
	typsrd	TextMajor	Text - Major	0	0	5
	typsrd	TextMinor	Text - Minor	0	0	0
	typsrd	TextMisc	Text - Miscellaneous	0	0	1
	typsrd	TextNotes	Text - Notes	4	0	1
	typsrd	TextProfLabel	Text - Profile, Horizontal and Vertical Axis Labels	0	0	2
	typsrd	TextProjLabel	Text - Begin and End Project label with leader lines	1	0	2
	typsrd	TextPtLabel	Point Labels	4	0	0
	typsrd	TextShtNo	Text - Sheet Number	0	0	2
	typsrd	TextSurveyLabel	Survey Text Labels	0	0	0
	typsrd	TextTables	Text - KeysheetKey sheet Indexes and Table Data	4	0	2
	typsrd	TextTitle	Text - Title	0	0	3
	typsrd	TextXSElev	Text - Cross Section Elevations	2	0	1
X	typsrd	TrafSeparator	Traffic Separator (All Types)	6	0	1
X	typsrd	TrafSeparator_px	Traffic Separator (All Types) on Cross Sections	6	0	2
X	typsrd	TrafSeparatorBase_px	Proposed Traffic Separator SubgradeSub-grade	3	0	2
X	typsrd	Tree	Trees, Tree Line Pattern	2	0	1
X	typsrd	TreeGrate	Tree Grate	5	0	1
X	typsrd	TreeProtection	Tree Protection Symbol	5	0	2
X	typsrd	Turf	Performance TrufTurf	100	0	2

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
	typsrd	TypicalMisc	Typical Miscellaneous Items	0	0	2
X	typsrd	UnderDrain	Underdrains (All Types)	10	0	2
	typsrd	Utility_er	Existing Utilities in Profile View	3	2 / DGN2	1
	typsrd	Utility_pr	Proposed Utilities in Profile View	3	0	2
	typsrd	UtilsMisc_px	Miscellaneous Utility Items on Cross Sections	8	0	1
	typsrd	Vehicle	Vehicle for Calculating Turning Radius	7	0	2
	typsrd	Viewport	Viewport (For AutoCAD Use)	3	0	0
	typsrd	VoidArea_dx	Void Area_XS	1	0	0
X	typsrd	WallBarrier	Barrier Wall All Types	6	0	2
X	typsrd	WallBarrier_ex	Barrier Wall for Cross Section (Existing)	6	3 / DGN3	1
X	typsrd	WallBarrier_px	Barrier Wall for Cross Section	6	0	2
X	typsrd	WallFooter_px	Wall Footer (Concrete) - For Component symbology/material on all wall footers/leveling pads	2	0	1
X	typsrd	WallGravBase_px	Proposed Gravity Wall Sub-grade	3	0	2
X	typsrd	WallGravity	Gravity Wall	11	0	1
X	typsrd	WallGravity_px	Gravity Wall for Cross Sections	11	0	2
X	typsrd	WallMedianBase_px	Proposed Median Wall Sub-grade	3	0	2
X	typsrd	WallRetain	Retaining Wall System	6	0	1
X	typsrd	WallRetain_pr	Retaining Wall Profile	9	0	2
X	typsrd	WallRetain_px	Retaining Walls on Cross Sections	6	0	1
X	typsrd	WallShldrBase_px	Proposed Shoulder Wall Sub-grade	3	0	2
X	typsrd	Water	Water Line	1	UT-Water-Proposed	2
	typsrd	Water_ep	Water Line (all sizesAll Sizes)	1	UT-Water-Existing	1
X	typsrd	Water_ex	Water for Cross Sections (Existing)	1	2 / DGN2	1
X	typsrd	Water_px	Water for Cross Sections	1	0	1
	typsrd	Xreference01_dp	Reference Files (For AutoCAD Use)	0	0	1
	typsrd	Xreference02_dp	Reference Files (For AutoCAD Use)	0	0	1
	typsrd	Xreference03_dp	Reference Files (For AutoCAD Use)	0	0	1
	typsrd	Xreference04_dp	Reference Files (For AutoCAD Use)	0	0	1
X	typsrd	XSBaseTop_px	Top of Proposed Base	3	0	2
	typsrd	XSCell	GEOPAK Cross Section Cell/Block and Profile Cell/Block	8	0	1
X	typsrd	XSExtendGrdLine_ex	Extend Ground Lines for Cross Sections (Existing)	21	2 / DGN2	1
X	typsrd	XSGrdLine_ex	Ground Lines for Cross Sections (Existing)	2	2 / DGN2	1
X	typsrd	XSGrdLine_px	Roadway Ground Lines on Cross Sections	1	0	2
	typsrd	XSMisc_px	Cross Section Miscellaneous Items	0	0	2
	typsrd	XSShapeDep01_dp	Cross Section Shape Dependent	11	0	2
	typsrd	XSShapeDep02_dp	Cross Section Shape Dependent	12	0	2
	typsrd	XSShapeDep03_dp	Cross Section Shape Dependent	13	0	2
	typsrd	XSShapeDep04_dp	Cross Section Shape Dependent	14	0	2
	typsrd	XSShapeDep05_dp	Cross Section Shape Dependent	15	0	2
	typsrd	XSShapeDep06_dp	Cross Section Shape Dependent	16	0	2
	typsrd	XSShapeDep07_dp	Cross Section Shape Dependent	17	0	2
	typsrd	XSShapeDep08_dp	Cross Section Shape Dependent	18	0	2
	typsrd	XSShapeDep09_dp	Cross Section Shape Dependent	19	0	2
	typsrd	XSShapeDep10_dp	Cross Section Shape Dependent	20	0	2

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
	typsrd	XSShapeIndep01_dp	Cross Section Shape Independent	1	0	2
	typsrd	XSShapeIndep02_dp	Cross Section Shape Independent	2	0	2
	typsrd	XSShapeIndep03_dp	Cross Section Shape Independent	3	0	2
	typsrd	XSShapeIndep04_dp	Cross Section Shape Independent	4	0	2
	typsrd	XSShapeIndep05_dp	Cross Section Shape Independent	5	0	2
	typsrd	XSShapeIndep06_dp	Cross Section Shape Independent	6	0	2
	typsrd	XSShapeIndep07_dp	Cross Section Shape Independent	7	0	2
	typsrd	XSShapeIndep08_dp	Cross Section Shape Independent	8	0	2
	typsrd	XSShapeIndep09_dp	Cross Section Shape Independent	9	0	2
	typsrd	XSShapeIndep10_dp	Cross Section Shape Independent	10	0	2
X	typsrd	XSTypical_px	Roadway Pavement Typical on Cross Sections	1	0	2

UTADRD - Utilities Adjustment

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style	Bylevel Weight	Point/Line	Feature
	utadrd	ActivePointCell_dp	Active Point Cell	4	0	10		
	utadrd	AdhocPoint_dp	Adhoc Points Placed by SheetInfo	0	4 / 0	0		
	utadrd	Beacons_ep	Beacons and Path Illumination	0	0	1	P	BN
X	utadrd	Capacitor	Capacitors (All Types)	3	0	1		
	utadrd	CATV_ep	Cable TV Line (Aerial)	6	UT-OverheadCable-Existing	0	L	CATV
X	utadrd	CATVAer	Cable TV Line (Aerial)	6	UT-OverheadCable-Proposed	1		
X	utadrd	CATVBur	Cable TV Line (Buried)	6	UT-BuriedCable-Proposed	1		
	utadrd	CATVBur_ep	Cable TV Line (Buried)	6	UT-BuriedCable-Existing	1	L	BCATV
X	utadrd	CATVBur_px	Cable TV and Miscellaneous on Cross Sections	6	0	1		
X	utadrd	CATVCond	Cable TV Conduit System	6	SG-Conduit-Type1	1		
	utadrd	CATVCond_ep	Cable TV Conduit System	6	UT-BuriedCable-Existing	1	L	CATVC
	utadrd	CATVMisc	Cable TV Service Box	6	0	1		
	utadrd	CATVMisc_ep	Cable TV Service Box, Pole	6	1 / DGN1	1	P	CATVS
	utadrd	COGO_dp	COGO Information	3	0	1		
X	utadrd	Conduit	Conduit for Utilities and Encasements	3	SG-Conduit-Type1	1		
	utadrd	Conduit_ep	Utility Conduit & Encasements	3	UT-Casing-Existing	0	L	DUCT
X	utadrd	ConduitAG	Conduit – Above Ground	4	SG-ConduitAG-Proposed	1		
X	utadrd	ConduitBM	Conduit – Bridge Mount	5	SG-ConduitBM-Proposed	1		
X	utadrd	ConduitDB	Conduit – Directional Bore	2	SG-ConduitDB-Proposed	1		
X	utadrd	ConduitJB	Conduit – Jack & Bore Under Rail	3	SG-ConduitJB-Proposed	1		
X	utadrd	ConduitOT	Conduit – Open Trench	1	SG-ConduitOT-Proposed	1		
	utadrd	ConstLines	Construction Lines and Preferences	**1**	0	**0**		
	utadrd	ConstLines_pm	Construction Lines	**4**	0	**0**		
X	utadrd	Controller_ep	Controller and Accessories (Existing)	0	2 / DGN2	1		
X	utadrd	ControllerB_ep	Controller - Base Mounted (Existing)	0	2 / DGN2	1		
X	utadrd	ControllerP_ep	Controller Pole Mount (Existing)	0	2 / DGN2	1		

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style	Bylevel Weight	Point/Line	Feature
	utadrd	Core_ep	Core Sample or Test Hole	9	0	0	P	CSH
	utadrd	DimLines_dp	Dimension Lines, Corresponding Terminators, Equation Lines	0	0	1		
	utadrd	DummyChains_ep	Dummy Chains	0	0	1	L	DUMB
X	utadrd	EaseLicLine	Easement License Agreement Line	5	6 / DGN6	0		
X	utadrd	ElecMeter	Meter (Electric)	3	0	1		
X	utadrd	ElectPS	Electrical Power Service Miscellaneous	3	0	1		
X	utadrd	ElectPSB	Electrical (Buried)	3	UT-BuriedElec-Proposed	2		
X	utadrd	ElectPSO	Electrical Outlet	3	0	1		
X	utadrd	ElectServWire	Electrical Service Wire	3	0	2		
X	utadrd	FireHydrant	Fire Hydrant	1	0	1		
	utadrd	FireHydrant_ep	Fire Hydrant	1	1 / DGN1	1	P	FH
	utadrd	FloodLight_ep	Flood Light	3	1 / DGN1	1	P	FLD
	utadrd	FOBur_ep	Fiber Optics Cable (Underground)	6	UT-BuriedFiberOptic-Existing	0	L	FOCU
X	utadrd	FOCAer	Fiber Optics Cable (Aerial)	6	UT-OverheadFiberOptic-Propopsed	1		
X	utadrd	FOCBur	Fiber Optics Cable (Buried)	6	UT-BuriedFiberOptic-Proposed	1		
X	utadrd	Gas	Gas Pipe and Fittings	4	UT-Gas-Proposed	1		
	utadrd	Gas_ep	Gas Line (all sizesAll Sizes)	4	UT-Gas-Existing	1	L	GAS
X	utadrd	GasMeter	Meter (Gas)	4	0	1		
	utadrd	GasMisc	Gas Regulator and Miscellaneous Items	4	0	0		
	utadrd	GasReg_ep	Gas Regulator	4	1 / DGN1	1	P	RG
X	utadrd	Gauges	Gauges	0	0	1		
	utadrd	Gauges_ep	Gauges	0	1 / DGN1	1	P	GA
X	utadrd	Generator	Emergency Generator	0	0	2		
	utadrd	GridMaj_dp	Grid Lines Major in Profile and Cross Section	3	0	1		
	utadrd	GridMin_dp	Grid Lines Minor in Profile and Cross Section	0	0	0		
	utadrd	GridMinSub_dp	Grid Lines Minor Sub in Cross Section Sheets	20	0	0		
	utadrd	Guys_ep	Guy Anchor, Guy pole, Span Guys	3	1 / DGN1	1		
X	utadrd	GuyWire	Guy Wire	3	0	0		
	utadrd	ImageAttachment_dp	Image AttachmentstAttachments	0	0	0		
X	utadrd	InterconCable_ep	Interconnect Cable (Existing)	1	SG-InterconCable-Existing	0		
X	utadrd	JunctBox	Junction Boxes, Service Cabinet (Elec/Tel)	3	0	1		
	utadrd	JunctBox_ep	Junct.ion Box / Service Cabinet (Elec/Tel)	3	1 / DGN1	1	P	SRVC
X	utadrd	JunctBoxA	Junction Boxes (Aerial)	3	0	1		
X	utadrd	JunctBoxA_ep	Junction Boxes (Aerial) (Existing)	3	1 / DGN1	0		
	utadrd	LeaderLine_dp	Leader Line and terminator with Text	0	0	1		
	utadrd	LiteCond_ep	Street Lighting Conductors	3	SG-ConduitUG-Existing	0	L	SLC
X	utadrd	LoadCenter	Load Center	2	0	1		
X	utadrd	LoadCenter_ep	Load Center (Existing)	2	5 / DGN5	0		
	utadrd	Logo_dp	Consultant Engineer of Record Logo	0	0	1		
X	utadrd	LoopLI_ep	Loop Lead-In (Existing)	3	2 / DGN2	0		
X	utadrd	Loops_ep	Loop Assembly (All Types) (Existing)	2	2 / DGN2	2		
X	utadrd	Luminaire	Luminaires (Decorative - All Types)	2	0	1		

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style	Bylevel Weight	Point/Line	Feature
	utadrd	Luminaire_ep	Street Light / Pole	3	1 / DGN1	1	P	LP
	utadrd	ManholeCover_ep	Manhole Cover (Cable TV)	6	1 / DGN1	1	P	MHCATV
	utadrd	ManholeCovUnk_ep	Manhole Cover (Unknown)	0	1 / DGN1	1	P	MH
	utadrd	ManholeCovW_ep	Manhole Cover (Water)	1	1 / DGN1	1	P	MHW
X	utadrd	ManholeCvrUnk	Manhole Cover (Unknown)	0	0	0		
X	utadrd	ManholeElec	Manhole (Electric)	3	0	1		
	utadrd	ManholeElec_ep	Manhole (Electric)	3	1 / DGN1	1	P	MHE
X	utadrd	ManholeGas	Manhole (Gas)	4	0	1		
	utadrd	ManholeGas_ep	Manhole (Gas)	4	1 / DGN1	1	P	MHG
X	utadrd	ManholeSS	Manhole (Sanitary Sewer)	2	0	1		
	utadrd	ManholeSS_ep	Manhole (Sanitary Sewer)	2	1 / DGN1	1	P	MHS
X	utadrd	ManholeSW	Manhole (Storm Water)	10	0	1		
	utadrd	ManholeSW_ep	Manhole (Storm Water)	10	1 / DGN1	1	P	MHD
X	utadrd	ManholeTel	Manhole (Telephone)	6	0	1		
	utadrd	ManholeTel_ep	Manhole (Telephone)	6	1 / DGN1	1	P	MHT
	utadrd	MatchLines_dp	Match Lines with Text, Arrows for Station Notations	1	0	2		
	utadrd	MeterElec_ep	Meter (Electric)	3	1 / DGN1	1	P	ME
	utadrd	MeterElecUG_ep	Meter (Electric) (Underground)	3	1 / DGN1	1	P	MEU
	utadrd	MeterGas_ep	Meter (Gas)	4	1 / DGN1	1	P	MG
	utadrd	MeterUnk	Meter (Unknown) PROPOSED UNKNOWN ELEMENT	0	0	0		
	utadrd	MeterUnk_ep	Meter (Unknown)	0	1 / DGN1	1	P	M
	utadrd	MeterWater_ep	Meter (Water)	1	1 / DGN1	1	P	MW
	utadrd	Miscellaneous0	Undefined proposed item - co blue wt 0	1	0	0		
	utadrd	Miscellaneous1	Undefined proposed item - co blue wt 1	1	0	1		
	utadrd	Miscellaneous2	Undefined proposed item - co blue wt 2	1	0	2		
	utadrd	Miscellaneous3	Undefined proposed item - co green wt 0	2	0	0		
	utadrd	Miscellaneous4	Undefined proposed item - co green wt 1	2	0	1		
	utadrd	Miscellaneous5	Undefined proposed item - co green wt 2	2	0	2		
	utadrd	Miscellaneous6	Undefined proposed item - co red wt 0	3	0	0		
	utadrd	Miscellaneous7	Undefined proposed item - co red wt 1	3	0	1		
	utadrd	Miscellaneous8	Undefined proposed item - co red wt 2	3	0	2		
	utadrd	Miscellaneous9	Undefined proposed item - co red wt 3	3	0	3		
	utadrd	NonPlottingEle_dp	Non plotting items such as construction elements and type 66 elements	4	0	0		
	utadrd	NorthArw_dp	North Arrows	0	0	2		
X	utadrd	Oil	Oil Pipeline, Petroleum	4	UT-Petroleum-Proposed	2		
X	utadrd	OverheadSign_ep	Overhead Sign Panels (Existing)	0	3 / DGN3	1		
X	utadrd	OverheadStr_ep	Mast Arm, Truss Assemblies, Signal Arms and Supports (Existing)	0	3 / DGN3	1		
	utadrd	Patternlines_ep	Cross Section Chain	2	1 / DGN1	0	L	XSC
	utadrd	PayItem_dp	Pay Item Number Label Elements	4	0	2		
X	utadrd	Pedestal_ep	Pedestal (Existing)	1	2 / DGN2	1		
X	utadrd	PedHead_ep	Pedestrian Head (All Types) (Existing)	0	2 / DGN2	1		
	utadrd	PedSignal_ep	Pedestrian Signal Unit, Signage	0	2 / DGN2	0	P	PS
X	utadrd	PlotBorder_dp	Plot Border	3	0	0		

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style	Bylevel Weight	Point/Line	Feature
	utadrd	PointLocator_ep	Point Locator Symbol	4	0	0	P	
X	utadrd	PoleConc	Concrete Strain Pole	0	0	2		
X	utadrd	PoleConc_ep	Concrete Strain Pole (Existing)	0	2 / DGN2	1		
X	utadrd	PoleFound	Pole Foundation	0	0	2		
X	utadrd	PoleLight	Light Pole	2	0	1		
X	utadrd	PoleLight_ep	Light Pole (Existing)	2	2 / DGN2	1		
X	utadrd	PoleLightHM	High Mast Light Pole	3	0	1		
X	utadrd	PoleLightHM_ep	High Mast Light Pole (Existing)	2	2 / DGN2	1		
	utadrd	PoleLightID	Light Pole Location / ID	4	0	1		
X	utadrd	PolePower	Power Pole w/ Transformer	3	0	2		
	utadrd	PolePower_ep	Power Pole with or without Transformer, shared pole	3	1 / DGN1	1		
X	utadrd	PoleShared	Power Pole Electric (Above Ground) Shared w/ Transformer	3	0	2		
X	utadrd	PoleSteelStrain	Steel Strain Pole	0	0	2		
X	utadrd	PoleSteelStrain_ep	Steel Strain Pole (Existing)	0	2 / DGN2	1		
X	utadrd	PoleTel	Telephone Pole	6	0	2		
	utadrd	PoleTel_ep	Telephone Pole	6	1 / DGN1	1	P	TELP
X	utadrd	PoleUtil	Utility Pole	0	0	2		
X	utadrd	PoleWoodStrain	Wood Strain Pole	0	0	2		
X	utadrd	PoleWoodStrain_ep	Wood Strain Pole (Existing)	0	2 / DGN2	1		
	utadrd	Power_ep	Existing Overhead Electric Power Conductors (Distribution & Transmission)	3	UT-OverheadElec-Existing	0		
	utadrd	PowerBur_ep	Existing Buried Electric Power Conductors (Distribution & Transmission)	3	UT-BuriedElec-Existing	1		
	utadrd	PowerBurCond_ep	Secondary Conductor Buried	3	UT-BuriedElec-Existing	0		
	utadrd	PowerCapcUG_ep	Capacitors (Underground)	3	1 / DGN1	1	L	CAPB
	utadrd	PowerCond_ep	Conductors (primary distribution)	3	UT-OverheadElec-Existing	1	L	PRI
	utadrd	PowerElecOut_ep	Electrical Outlet	3	1 / DGN1	1	P	ELEO
	utadrd	PowerMisc	Fuses, Reclosures, Regulator, Sectionalizers	3	0	0		
	utadrd	PowerMisc_ep	Capacitors (Above Ground), Switchgear, Transformer, Electrical Service Box	3	1 / DGN1	1		
X	utadrd	PullBox	Pull Boxes (All Types)	3	0	1		
	utadrd	PullBox_ep	Wiring Pull Box	3	1 / DGN1	1	P	WPB
X	utadrd	PumpNonPet	Pump (Non Petroleum)	1	0	0		
	utadrd	PumpNonPet_ep	Pump (Non Petroleum)	1	1 / DGN1	1	P	PMP
	utadrd	ReferencePt_dp	Survey and Construction Reference Point Details and Elements	4	0	2		
	utadrd	Sanitary_ep	Sanitary Sewer (all sizesAll Sizes)	2	UT-Sanitary-Existing	1	L	SS
X	utadrd	SanitaryFM	Force Main	2	UT-Sanitary-Proposed	1		
	utadrd	SanitaryFM_ep	Force Main (all sizesAll Sizes)	2	UT-Sanitary-Existing	1	L	FM
	utadrd	SanitaryMisc_ep	Cleanout, Sanitary Effluent (Open channel)	2	1 / DGN1	1		
X	utadrd	SanitarySewer	Sanitary Sewer	2	UT-Sanitary-Proposed	1		
X	utadrd	SanitarySewerEff	Sanitary Sewer Effluent NPW	5	UT-NonPotableWater-Proposed	0		
X	utadrd	SanitarySewerEff_px	Sanitary Effluent for Cross Sections	9	0	0		
	utadrd	SanitarySewerMisc	Sewer Miscellaneous Items	2	0	0		

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style	Bylevel Weight	Point/Line	Feature
	utadrd	SateDish_ep	SatteliteSatellite Dish Antenna	6	4 / DGN4	1	P	SATD
	utadrd	Scale_dp	Bar Scale, Scale Label Elements	0	0	2		
	utadrd	Scratch1_dp	A scratch level for temporary or informational items	4	0	0		
	utadrd	Scratch2_dp	A scratch level for temporary or informational items	5	0	0		
	utadrd	ScratchEle_dp	Level for Draft Elements, Temporary Elements, Etc. Do Not Plot	3	0	0		
	utadrd	ScratchEle2_dp	Level for Draft Elements, Temporary Elements, Etc. Do Not Plot	4	0	0		
	utadrd	SheetBorder_dp	Sheet Border	1	0	4		
	utadrd	SheetLines_dp	Sheet Lines	1	0	2		
	utadrd	SheetLinesMisc1_dp	Sheet Lines	1	0	0		
	utadrd	SheetLinesMisc2_dp	Sheet Lines	2	0	2		
	utadrd	SheetLinesMisc3_dp	Sheet Lines	3	0	2		
	utadrd	SheetLinesMisc4_dp	Sheet Lines	4	0	2		
	utadrd	Signal_ep	Signal Head, Signal on Pedestal	3	1 / DGN1	1		
X	utadrd	SignalHead_ep	Signal Head Section Details (Existing)	2	2 / DGN2	0		
	utadrd	SignalLoop_ep	Traffic Detector Loops	7	1 / DGN1	2	L	TFD
	utadrd	SignalMisc_ep	Miscellaneous Signal Equipment Existing including control unit	3	2 / DGN2	0	P	SIGC
	utadrd	SignalSupport_ep	Signal Supports including Mast Arm	3	2 / DGN2	0	P	SMA
X	utadrd	SignalSym_ep	Signal Head Symbols (Existing)	3	2 / DGN2	0		
X	utadrd	SignCantilever_ep	Sign Symbol Cantilever (Existing)	0	2 / DGN2	0		
	utadrd	SignMulti_ep	Multi-column Sign (All Signs)	0	3 / DGN3	1		
X	utadrd	SignPanel_ep	Sign Panel Elements (Existing)	0	2 / DGN2	1		
	utadrd	SignSingle_ep	Sign (Single Support)	3	2 / DGN2	0	P	SSS
X	utadrd	SignSpanwire	Span Wire Signing Assembly	2	0	1		
X	utadrd	SignSpanwire_ep	Span Wire Signing Assembly (Existing)	2	2 / DGN2	1		
	utadrd	SignSupport_ep	Trusses and Cantilevers for Overhead Signs	0	3 / DGN3	1	L	SGNT
X	utadrd	SignTruss_ep	Sign Symbol Truss (Existing)	3	2 / DGN2	1		
	utadrd	SpanWire_ep	Signal / Span Wire Pole	3	2 / DGN2	0		
X	utadrd	Sprinkler	Sprinkler Head	1	0	0		
	utadrd	Sprinkler_ep	Sprinkler Head	1	1 / DGN1	1	P	SPH
X	utadrd	Steam	Steam Pipes	1	UT-Steam-Proposed	1		
X	utadrd	StreetLights	Street Lights	2	0	1		
	utadrd	SumBoxBorder_dp	Summary Boxes Borders	4	0	3		
	utadrd	SumBoxLines_dp	Summary Boxes Lines and Miscellaneous Items	4	0	1		
	utadrd	SumBoxLinesMin_dp	Summary Boxes Lines Minor Line and Miscellaneous Items	4	0	0		
X	utadrd	Switchgear	Switchgear and Appurtenances	3	0	0		
	utadrd	Tables_dp	Data Tables and All Autodesk Tables	0	0	1		
	utadrd	Tele_ep	Telephone Line (aerial)	6	UT-OverheadTel-Existing	0	L	TEL
X	utadrd	TeleAer	Telephone Line (Aerial)	6	UT-OverheadTel-Proposed	1		
X	utadrd	TeleBur	Telephone (Buried)	6	UT-BuriedTel-Proposed	1		
	utadrd	TeleBur_ep	Telephone (all sizesAll Sizes Buried), Duct, Toll	6	UT-BuriedTel-Existing	1		
X	utadrd	TeleBur_px	Telephone for Cross Sections (Buried) (Miscellaneous)	6	0	1		
	utadrd	TeleMisc	Telephone Service Box, Booth or Pedestal	6	0	0		
	utadrd	TeleMisc_ep	Telephone Service Box, Booth or Pedestal	6	1 / DGN1	1		
	utadrd	TextBLStation	Text - B/L Station and Tics	0	0	2		

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style	Bylevel Weight	Point/Line	Feature
	utadrd	TextConstEle	Text - Construction Element	0	0	1		
	utadrd	TextCurveData	Text - Curve Data Note	0	0	2		
	utadrd	TextDetails	Text - Detail Notes	4	0	2		
	utadrd	TextElevLabel	Elevation Labels	4	0	0		
	utadrd	TextLabel	Text - Label	0	0	2		
	utadrd	TextLandscape	Text - Landscape Labels	0	0	1		
	utadrd	TextMajor	Text - Major	0	0	5		
	utadrd	TextMinor	Text - Minor	0	0	0		
	utadrd	TextMisc	Text - Miscellaneous	0	0	1		
	utadrd	TextNotes	Text - Notes	4	0	1		
	utadrd	TextProfLabel	Text - Profile, Horizontal and Vertical Axis Labels	0	0	2		
	utadrd	TextProjLabel	Text - Begin and End Project label with leader lines	1	0	2		
	utadrd	TextPtLabel	Point Labels	4	0	0		
	utadrd	TextShtNo	Text - Sheet Number	0	0	2		
	utadrd	TextSurveyLabel	Survey Text Labels	0	0	0		
	utadrd	TextTables	Text - KeysheetKey sheet Indexes and Table Data	4	0	2		
	utadrd	TextTitle	Text - Title	0	0	3		
	utadrd	TextXSElev	Text - Cross Section Elevations	2	0	1		
	utadrd	TopoMisc_ep	Miscellaneous Topography	0	3 / DGN3	1	L	MISC
X	utadrd	Tower	High Mast Light Poles or Towers, Transmission Tower, Antenna	3	0	0		
	utadrd	Tower_ep	High Mast Light Poles or Towers, Transmission Tower, Antenna	3	1 / DGN1	1		
X	utadrd	TransformerAer	Transformer Unit (Above Ground)	3	0	0		
X	utadrd	TransformerBur	Transformer (Underground)	3	0	1		
X	utadrd	TransmissionAer	Proposed Overhead Electric Power Conductors (Distribution & Transmission)	3	UT-OverheadElec-Proposed	0		
X	utadrd	TransmissionBur	Proposed Buried Electric Power Conductors (Distribution & Transmission)	3	UT-BuriedElec-Proposed	1		
X	utadrd	TransmissionT	Transmission Tower Single	3	0	0		
	utadrd	UtilMisc_ep	Miscellaneous Utilities	0	0	0		
	utadrd	UtilsMisc	Miscellaneous Utility Items	8	0	1		
X	utadrd	UtilsProposed	Proposed Facilities/Utilities as shown in Utility Adjustments	9	0	2		
X	utadrd	Valve	Valve, Valve Box (Unknown) PROPOSED UNKNOW VALVE	0	0	1		
	utadrd	Valve_ep	Valve, Valve Box	0	1 / DGN1	1		
X	utadrd	ValveCover	Valve Cover (Unknown) PROPOSED UNKNOW VALVE	0	0	1		
	utadrd	ValveCover_ep	Valve Cover	0	1 / DGN1	1	P	VC
X	utadrd	ValveCvrEff	Valve Cover (Effluent)	5	0	1		
	utadrd	ValveCvrEff_ep	Valve Cover (Effluent)	5	1 / DGN1	1	P	VCEF
X	utadrd	ValveCvrGas	Valve Cover (Gas)	4	0	1		
	utadrd	ValveCvrGas_ep	Valve Cover (Gas)	4	1 / DGN1	1	P	VCG
X	utadrd	ValveCvrSewer	Valve Cover (Sewer)	2	0	1		
	utadrd	ValveCvrSewer_ep	Valve Cover (Sewer)	2	1 / DGN1	1	P	VCS
X	utadrd	ValveCvrWater	Valve Cover (Water)	1	0	1		
	utadrd	ValveCvrWater_ep	Valve Cover (Water)	1	1 / DGN1	1	P	VCW
X	utadrd	ValveCvrWaterNP	Water Line Non Potable	5	0	1		

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style	Bylevel Weight	Point/Line	Feature
	utadrd	ValveCvrWaterNP_ep	Valve Cover (Non-potable Water)	5	1 / DGN1	1		
X	utadrd	ValveGas	Valve, Valve Box (Gas)	4	0	1		
	utadrd	ValveGas_ep	Valve (Gas), Valve Box	4	1 / DGN1	1		
X	utadrd	ValveSewer	Valve, Valve Box (Sewer)	2	0	1		
	utadrd	ValveSewer_ep	Valve (Sewer), Valve Box	2	1 / DGN1	1		
X	utadrd	ValveWater	Valve, Valve Box (Water)	1	0	1		
	utadrd	ValveWater_ep	Valve (Water), Valve Box	1	1 / DGN1	1		
	utadrd	ValveWaterNP_ep	Valve (Non-potable Water), Valve Box	8	1 / DGN1	1		
	utadrd	Vault_ep	Vaults Above Grade and Below Grade	3	1 / DGN1	0		
X	utadrd	Vaults	Vaults Above Grade and Below Grade	3	0	0		
X	utadrd	VaultsRW	Vaults (Raw Water)	1	0	0		
	utadrd	Vent	Vent (Unknown) PROPOSED UNKNOW VENT	0	0	0		
	utadrd	Vent_ep	Vent	0	1 / DGN1	1	P	VNT
X	utadrd	VentGas	Vent (Gas)	4	0	0		
	utadrd	VentGas_ep	Vent (Gas)	4	1 / DGN1	1	P	VNTG
X	utadrd	VentSewer	Vent (Sewer)	2	0	0		
	utadrd	VentSewer_ep	Vent (Sewer)	2	1 / DGN1	1	P	VNTS
	utadrd	Viewport	Viewport (For AutoCAD Use)	3	0	0		
X	utadrd	Water	Water Line	1	UT-Water-Proposed	2		
	utadrd	Water_ep	Water Line (all sizesAll Sizes)	1	UT-Water-Existing	1	L	WL
X	utadrd	WaterFct	Standpipe and Water Faucet	1	0	0		
X	utadrd	WaterFilter	Water Filter	5	0	2		
X	utadrd	WaterMeter	Water Meter	1	0	2		
	utadrd	WaterMisc_ep	Faucet, Standpipe	1	1 / DGN1	1		
X	utadrd	WaterNP_px	Raw Water Pipes for Cross Sections	1	0	1		
X	utadrd	Well	Well	1	1 / DGN1	1		
X	utadrd	WellMon	Well MonitoringMonitoring Well	1	0	1		
	utadrd	Wells_ep	Wells, Monitoring Well, Taps	1	1 / DGN1	1		
	utadrd	Xreference01_dp	Reference Files (For AutoCAD Use)	0	0	1		
	utadrd	Xreference02_dp	Reference Files (For AutoCAD Use)	0	0	1		
	utadrd	Xreference03_dp	Reference Files (For AutoCAD Use)	0	0	1		
	utadrd	Xreference04_dp	Reference Files (For AutoCAD Use)	0	0	1		
	utadrd	XSCell	GEOPAK Cross Section Cell/Block and Profile Cell/Block	8	0	1		

UTEXRD - Utilities Existing

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	ByLevel Weight	Point/Line	Feature
	utexrd	Beacons_ep	Beacons and Path Illumination	0	0	1		BN
	utexrd	CATV_ep	Cable TV Line (Aerial)	6	UT-OverheadCable-Existing	0		CATV
	utexrd	CATVBur_ep	Cable TV Line (Buried)	6	UT-BuriedCable-Existing	1		BCATV
	utexrd	CATVBurB_ep	Cable TV Line (Buried) Quality Level B Locate	6	UT-BuriedCable-Existing(B)	1		BCATVB
	utexrd	CATVBurC_ep	Cable TV Line (Buried) Quality Level C Locate	6	UT-BuriedCable-Existing(C)	1		BCATVC
	utexrd	CATVBurD_ep	Cable TV Line (Buried) Quality Level D Locate	6	UT-BuriedCable-Existing(D)	1		BCATVD
	utexrd	CATVCond_ep	Cable TV Conduit System	6	UT-BuriedCable-Existing	1		CATVC
	utexrd	CATVCondB_ep	Cable TV Conduit System Quality Level B Locate	6	UT-BuriedCable-Existing(B)	1		CATVCB
	utexrd	CATVCondC_ep	Cable TV Conduit System Quality Level C Locate	6	UT-BuriedCable-Existing(C)	1		CATVCC
	utexrd	CATVCondD_ep	Cable TV Conduit System Quality Level D Locate	6	UT-BuriedCable-Existing(D)	1		CATVCD
	utexrd	CATVMisc_ep	Cable TV Service Box, Pole	6	1 / DGN1	1		CATVS
	utexrd	Conduit_ep	Utility Conduit & Encasements	3	UT-Casing-Existing	0		DUCT
	utexrd	ConduitB_ep	Utility Conduit & Encasements Quality Level B Locate	3	UT-Casing-Existing(B)	0		DUCTB
	utexrd	ConduitC_ep	Utility Conduit & Encasements Quality Level C Locate	3	UT-Casing-Existing(C)	0		DUCTC
	utexrd	ConduitD_ep	Utility Conduit & Encasements Quality Level D Locate	3	UT-Casing-Existing(D)	0		DUCTD
	utexrd	ConstLines	Construction Lines and References	1	0	0		
	utexrd	ConstLines_pm	Construction Lines	4	0	0		
	utexrd	FireHydrant_ep	Fire Hydrant	1	1 / DGN1	1		FH
	utexrd	FloodLight_ep	Flood Light	3	1 / DGN1	1		FLD
	utexrd	FOAer_ep	Fiber Optics Cable (Overhead)	6	UT-OverheadFiberOptic-Existing	0		FOC
	utexrd	FOBur_ep	Fiber Optics Telephone (Size Unknown)	6	UT-BuriedFiberOptic-Existing	0		FO
	utexrd	FOBur_ep	Fiber Optics Cable (Underground)	6	UT-BuriedFiberOptic-Existing	0		FOCU
	utexrd	FOBur_ep	Fiber Optics Telephone (Underground)	6	UT-BuriedFiberOptic-Existing	0		FOU
	utexrd	FOBurB_ep	Fiber Optics Cable (Underground) Quality Level B Locate	6	UT-BuriedFiberOptic-Existing(B)	0		FOCUB
	utexrd	FOBurB_ep	Fiber Optics Cable (Underground) Quality Level B Locate	6	UT-BuriedFiberOptic-Existing(B)	0		FOTVUB
	utexrd	FOBurB_ep	Fiber Optics Cable (Underground) Quality Level B Locate	6	UT-BuriedFiberOptic-Existing(B)	0		FOUB
	utexrd	FOBurC_ep	Fiber Optics Cable (Underground) Quality Level C Locate	6	UT-BuriedFiberOptic-Existing(C)	0		FOCUC
	utexrd	FOBurC_ep	Fiber Optics Cable (Underground) Quality Level C Locate	6	UT-BuriedFiberOptic-Existing(C)	0		FOTVUC
	utexrd	FOBurC_ep	Fiber Optics Cable (Underground) Quality Level C Locate	6	UT-BuriedFiberOptic-Existing(C)	0		FOUC
	utexrd	FOBurD_ep	Fiber Optics Cable (Underground) Quality Level D Locate	6	UT-BuriedFiberOptic-Existing(D)	0		FOCUD
	utexrd	FOBurD_ep	Fiber Optics Cable (Underground) Quality Level D Locate	6	UT-BuriedFiberOptic-Existing(D)	0		FOTVUD
	utexrd	FOBurD_ep	Fiber Optics Cable (Underground) Quality Level D Locate	6	UT-BuriedFiberOptic-Existing(D)	0		FOUD
	utexrd	FOPower_B_ep	Fiber Optics Power Quality Level B Locate	3	UT-BuriedFiberOptic-Existing(B)	0		FOPUB
	utexrd	FOPower_C_ep	Fiber Optics Power Quality Level C Locate	3	UT-BuriedFiberOptic-Existing(C)	0		FOPUC
	utexrd	FOPower_D_ep	Fiber Optics Power Quality Level D Locate	3	UT-BuriedFiberOptic-Existing(D)	0		FOPUD
	utexrd	FOPower_ep	Fiber Optics Power	3	UT-BuriedFiberOptic-Existing	0	L	FOP
	utexrd	FOPower_ep	Fiber Optics Power	3	UT-BuriedFiberOptic-Existing	0	L	FOPU
	utexrd	Gas_ep	Gas Line (All Sizes)	4	UT-Gas-Existing	1		GAS
	utexrd	Gas_ep	Gas Test & Miscellaneous	4	UT-Gas-Existing	1		GTM
	utexrd	GasB_ep	Gas Line (All Sizes) Quality Level B Locate	4	UT-Gas-Existing(B)	1		GASB
	utexrd	GasC_ep	Gas Line (All Sizes) Quality Level C Locate	4	UT-Gas-Existing(C)	1		GASC

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	ByLevel Weight	Point/Line	Feature
	utexrd	GasD_ep	Gas Line (All Sizes) Quality Level D Locate	4	UT-Gas-Existing(D)	1		GASD
	utexrd	GasReg_ep	Gas Regulator	4	1 / DGN1	1		RG
	utexrd	Gauges_ep	Gauges	0	1 / DGN1	1		GA
	utexrd	Guys_ep	Guy Anchor	3	1 / DGN1	1		GYA
	utexrd	Guys_ep	Guy Pole (Deadman)	3	1 / DGN1	1		GYP
	utexrd	Guys_ep	Span Guys	3	1 / DGN1	1		GYS
	utexrd	ImageAttachment_dp	Image Attachments	0	0	0		
	utexrd	JunctBox_ep	Junction Box / Service Cabinet (Elec/Tel)	3	1 / DGN1	1		SRVC
	utexrd	LeaderLine_dp	Leader Line and terminator with Text	0	0	1		
	utexrd	LiteCond_ep	Street Lighting Conductors	3	SG-ConduitUG-Existing	0	L	SLC
	utexrd	Luminaire_ep	Street Light / Pole	3	1 / DGN1	1	P	LP
	utexrd	ManholeCover_ep	Manhole Cover (Cable TV)	6	1 / DGN1	1	P	MHCATV
	utexrd	ManholeCovUnk_ep	Manhole Cover (Unknown)	0	1 / DGN1	1	P	MH
	utexrd	ManholeCovW_ep	Manhole Cover (Water)	1	1 / DGN1	1	P	MHW
	utexrd	ManholeElec_ep	Manhole (Electric)	3	1 / DGN1	1	P	MHE
	utexrd	ManholeGas_ep	Manhole (Gas)	4	1 / DGN1	1	P	MHG
	utexrd	ManholeSS_ep	Manhole (Sanitary Sewer)	2	1 / DGN1	1	P	MHS
	utexrd	ManholeSW_ep	Manhole (Storm Water)	10	1 / DGN1	1	P	MHD
	utexrd	ManholeTel_ep	Manhole (Telephone)	6	1 / DGN1	1	P	MHT
	utexrd	MeterElec_ep	Meter (Electric)	3	1 / DGN1	1	P	ME
	utexrd	MeterElecUG_ep	Meter (Electric) (Underground)	3	1 / DGN1	1	P	MEU
	utexrd	MeterGas_ep	Meter (Gas)	4	1 / DGN1	1	P	MG
	utexrd	MeterUnk_ep	Meter (Unknown)	0	1 / DGN1	1	P	M
	utexrd	MeterWater_ep	Meter (Water)	1	1 / DGN1	1	P	MW
	utexrd	Oil_B_ep	Oil Line (All Sizes) Quality Level B Locate	4	UT-Petroleum-Existing(B)	1		PETROB
	utexrd	Oil_C_ep	Oil Line (All Sizes) Quality Level C Locate	4	UT-Petroleum-Existing(C)	1		PETROC
	utexrd	Oil_D_ep	Oil Line (All Sizes) Quality Level D Locate	4	UT-Petroleum-Existing(D)	1		PETROD
	utexrd	Oil_ep	Oil Line (All Sizes)	4	UT-Petroleum-Existing	1	L	PETRO
	utexrd	PipeEncase_ep	Pipe Encasements	0	UT-Casing-Existing	1	L	PIPEN
	utexrd	PipeEncaseB_ep	Pipe Encasements Quality Level B Locate	0	UT-Casing-Existing(B)	1		PIPENB
	utexrd	PipeEncaseC_ep	Pipe Encasements Quality Level C Locate	0	UT-Casing-Existing(C)	1		PIPENC
	utexrd	PipeEncaseD_ep	Pipe Encasements Quality Level D Locate	0	UT-Casing-Existing(D)	1		PIPEND
	utexrd	PolePower_ep	Power Pole	3	1 / DGN1	1	P	PP
	utexrd	PolePower_ep	Power Pole with Transformer	3	1 / DGN1	1	P	PPT
	utexrd	PolePower_ep	Shared Pole	3	1 / DGN1	1	P	SHP
	utexrd	PolePower_ep	Shared Pole with Transformer	3	1 / DGN1	1	P	SHPT
	utexrd	PoleTel_ep	Telephone Pole	6	1 / DGN1	1	P	TELP
	utexrd	Power_ep	High Voltage Transmission Line	3	UT-OverheadElec-Existing	0	L	HVL
	utexrd	Power_ep	Power Lines (Aerial)	3	UT-OverheadElec-Existing	0	L	PWR
	utexrd	PowerBur_ep	Buried Power (Unknown Size)	3	UT-BuriedElec-Existing	1	L	BPWR
	utexrd	PowerBur_ep	Buried Conductors (Transmission)	3	UT-BuriedElec-Existing	1	L	TRANS
	utexrd	PowerBurB_ep	Existing Buried Electric Power Quality Level B Locate	3	UT-BuriedElec-Existing(B)	1		BPWRB
	utexrd	PowerBurC_ep	Existing Buried Electric Power Quality Level C Locate	3	UT-BuriedElec-Existing(C)	1		BPWRC
	utexrd	PowerBurCond_ep	Secondary Conductor Buried	3	UT-BuriedElec-Existing	0	L	BSEC

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	ByLevel Weight	Point/Line	Feature
	utexrd	PowerBurCond_ep	Secondary Conductor Buried	3	UT-BuriedElec-Existing	0	L	SEC
	utexrd	PowerBurD_ep	Existing Buried Electric Power Quality Level D Locate	3	UT-BuriedElec-Existing(D)	1		BPWRD
	utexrd	PowerCapcUG_ep	Capacitors (Underground)	3	1 / DGN1	1	L	CAPB
	utexrd	PowerCond_ep	Conductors (primary distribution)	3	UT-OverheadElec-Existing	1	L	PRI
	utexrd	PowerElecOut_ep	Electrical Outlet	3	1 / DGN1	1	P	ELEO
	utexrd	PowerMisc_ep	Capacitors (Above Ground)	3	1 / DGN1	1	L	CAPA
	utexrd	PowerMisc_ep	Electric Service Box (Large)	3	1 / DGN1	1	L	ELECS
	utexrd	PowerMisc_ep	Fuses (Existing)	3	1 / DGN1	1	L	FUSE
	utexrd	PowerMisc_ep	Switchgear & Appurtenances	3	1 / DGN1	1	L	SW
	utexrd	PowerMisc_ep	Transformer	3	1 / DGN1	1	P	TRNF
	utexrd	PullBox_ep	Wiring Pull Box	3	1 / DGN1	1	P	WPB
	utexrd	Pump_ep	Pump (Petroleum / Fuel)	7	1 / DGN1	1	P	PMPF
	utexrd	PumpNonPet_ep	Pump (Non Petroleum)	1	1 / DGN1	1	P	PMP
	utexrd	Sanitary_ep	Sanitary Sewer (All Sizes)	2	UT-Sanitary-Existing	1	L	SS
	utexrd	SanitaryB_ep	Sanitary Sewer (All Sizes) Quality Level B Locate	2	UT-Sanitary-Existing(B)	1		SSB
	utexrd	SanitaryC_ep	Sanitary Sewer (All Sizes) Quality Level C Locate	2	UT-Sanitary-Existing(C)	1		SSC
	utexrd	SanitaryD_ep	Sanitary Sewer (All Sizes) Quality Level D Locate	2	UT-Sanitary-Existing(D)	1		SSD
	utexrd	SanitaryDumpSta_ep	Dump Station (SS)	2	2 / DGN2	1	P	DMPS
	utexrd	SanitaryFM_B_ep	Force Main (All Sizes) Quality Level B Locate	2	UT-Sanitary-Existing(B)	1		FMB
	utexrd	SanitaryFM_C_ep	Force Main (All Sizes) Quality Level C Locate	2	UT-Sanitary-Existing(C)	1		FMC
	utexrd	SanitaryFM_D_ep	Force Main (All Sizes) Quality Level D Locate	2	UT-Sanitary-Existing(D)	1		FMD
	utexrd	SanitaryFM_ep	Force Main (All Sizes)	2	UT-Sanitary-Existing	1	L	FM
	utexrd	SanitaryMisc_ep	Cleanout	2	1 / DGN1	1	P	CLNO
	utexrd	SanitaryMisc_ep	Pump Station (Sanitary Sewer)	2	1 / DGN1	1	P	PMPST
	utexrd	SanitaryMisc_ep	Sanitary Effluent (Open channel)	2	1 / DGN1	1	L	SE
	utexrd	SateDish_ep	Satellite Dish Antenna	6	4 / DGN4	1	P	SATD
	utexrd	Sprinkler_ep	Sprinkler Head	1	1 / DGN1	1	P	SPH
	utexrd	Steam_ep	Steam	4	UT-Steam-Existing	1	L	STEAM
	utexrd	SteamB_ep	Steam Line Quality Level B Locate	1	UT-Steam-Existing(B)	1		STEAMB
	utexrd	SteamC_ep	Steam Line Quality Level C Locate	1	UT-Steam-Existing(C)	1		STEAMC
	utexrd	SteamD_ep	Steam Line Quality Level D Locate	1	UT-Steam-Existing(D)	1		STEAMD
	utexrd	SU_Misc_ep	Miscellaneous Subsurface Utilities	0	0	0		EOI
	utexrd	SU_Misc_ep	Miscellaneous Subsurface Utilities	0	0	0		QDEL
	utexrd	SU_QLA_ep	Subsurface Utility Quality Level A Locate Point	0	0	0		QLA
	utexrd	SU_QLB_ep	Subsurface Utility Quality Level B Locate Point	0	0	0		QLB
	utexrd	SU_QLC_ep	Subsurface Utility Quality Level C Locate Point	0	0	0		QLC
	utexrd	SU_QLD_ep	Subsurface Utility Quality Level D Locate Point	0	0	0		QLD
	utexrd	SU_TestHole_ep	Subsurface Utility Test Hole (QLA Only)	0	0	0		THA
	utexrd	Tables_dp	Data Tables and All Autodesk Tables	0	0	1		
	utexrd	Tele_ep	Telephone Line (aerial)	6	UT-OverheadTel-Existing	0	L	TEL
	utexrd	TeleBur_ep	Buried Telephone (All Sizes), Duct, Toll	6	UT-BuriedTel-Existing	1	L	BT
	utexrd	TeleBur_ep	Buried Telephone, DUCT	6	UT-BuriedTel-Existing	1		
	utexrd	TeleBur_ep	Buried Telephone, TOLL	6	UT-BuriedTel-Existing	1	L	BTT
	utexrd	TeleBurB_ep	Telephone (All Sizes Buried) Quality Level B Locate	6	UT-BuriedTel-Existing(B)	1		BTB

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	ByLevel Weight	Point/Line	Feature
	utexrd	TeleBurB_ep	Telephone (All Sizes Buried) Quality Level B Locate	6	UT-BuriedTel-Existing(B)	1		BTDB
	utexrd	TeleBurB_ep	Telephone (All Sizes Buried) Quality Level B Locate	6	UT-BuriedTel-Existing(B)	1		BTTB
	utexrd	TeleBurC_ep	Telephone (All Sizes Buried) Quality Level C Locate	6	UT-BuriedTel-Existing(C)	1		BTC
	utexrd	TeleBurC_ep	Telephone (All Sizes Buried) Quality Level C Locate	6	UT-BuriedTel-Existing(C)	1		BTDC
	utexrd	TeleBurC_ep	Telephone (All Sizes Buried) Quality Level C Locate	6	UT-BuriedTel-Existing(C)	1		BTTC
	utexrd	TeleBurD_ep	Telephone (All Sizes Buried) Quality Level D Locate	6	UT-BuriedTel-Existing(D)	1		BTD
	utexrd	TeleBurD_ep	Telephone (All Sizes Buried) Quality Level D Locate	6	UT-BuriedTel-Existing(D)	1		BTDD
	utexrd	TeleBurD_ep	Telephone (All Sizes Buried) Quality Level D Locate	6	UT-BuriedTel-Existing(D)	1		BTTD
	utexrd	TeleMisc_ep	Telephone Booth	6	1 / DGN1	1	P	TB
	utexrd	TeleMisc_ep	Telephone Service Box (Large)	6	1 / DGN1	1	L	TELS
	utexrd	TeleMisc_ep	Telephone Pedestal / Service	6	1 / DGN1	1	P	TPD
	utexrd	TextMisc	Text - Miscellaneous	0	0	1		
	utexrd	TextNotes	Text - Notes	4	0	1		
	utexrd	Tower_ep	Antenna	3	1 / DGN1	1	P	ANT
	utexrd	Tower_ep	Transmission Tower (Single Column)	3	1 / DGN1	1	P	CLMT
	utexrd	Tower_ep	High Mast Lighting Poles	3	1 / DGN1	1	P	HML
	utexrd	UtilMisc_ep	Miscellaneous Utilities	0	0	0	L	
	utexrd	Valve_ep	Valve Box	0	1 / DGN1	1	P	VB
	utexrd	Valve_ep	Valve	0	1 / DGN1	1	P	VLV
X	utexrd	ValveBFP_ep	Valve (Back Flow Preventer), Valve Box	0	1 / DGN1	1	P	VLVB
	utexrd	ValveCover_ep	Valve Cover (Unknown)	0	1 / DGN1	1	P	VC
	utexrd	ValveCvrEff_ep	Valve Cover (Effluent)	5	1 / DGN1	1	P	VCEF
	utexrd	ValveCvrGas_ep	Valve Cover (Gas)	4	1 / DGN1	1	P	VCG
	utexrd	ValveCvrSewer_ep	Valve Cover (Sewer)	2	1 / DGN1	1	P	VCS
	utexrd	ValveCvrWater_ep	Valve Cover (Water)	1	1 / DGN1	1	P	VCW
	utexrd	ValveCvrWaterNP_ep	Valve Cover (Non-potable Water)	5	1 / DGN1	1	P	VCNPW
	utexrd	ValveCvrWaterNP_ep	Valve Cover (Raw Water)	5	1 / DGN1	1	P	VCRW
	utexrd	ValveGas_ep	Valve Box (Gas)	4	1 / DGN1	1	P	VBG
	utexrd	ValveGas_ep	Valve (Gas)	4	1 / DGN1	1	P	VLVG
	utexrd	ValveSewer_ep	Valve Box (Sewer)	2	1 / DGN1	1	P	VBS
	utexrd	ValveSewer_ep	Valve (Sewer)	2	1 / DGN1	1	P	VLVS
	utexrd	ValveWater_ep	Valve Box (Water)	1	1 / DGN1	1	P	VBW
	utexrd	ValveWater_ep	Valve (Water)	1	1 / DGN1	1	P	VLVW
	utexrd	ValveWaterNP_ep	Valve Box (Non-potable Water)	5	1 / DGN1	1	P	VBNPW
	utexrd	ValveWaterNP_ep	Valve (Non-potable Water)	5	1 / DGN1	1	P	VLVNPW
	utexrd	Vault_ep	Vaults Above Grade	3	1 / DGN1	0	L	AGV
	utexrd	Vault_ep	Vaults Below Grade	3	1 / DGN1	0	L	BGV
	utexrd	Vent_ep	Vent	0	1 / DGN1	1	P	VNT
	utexrd	VentGas_ep	Vent (Gas)	4	1 / DGN1	1	P	VNTG
	utexrd	VentSewer_ep	Vent (Sewer)	2	1 / DGN1	1	P	VNTS
	utexrd	Viewport	Viewport (For AutoCAD Use)	3	0	0		
	utexrd	Water_ep	Water Line (All Sizes)	1	UT-Water-Existing	1	L	WL
	utexrd	WaterB_ep	Water Line (All Sizes) Quality Level B Locate	1	UT-Water-Existing(B)	1		WLB
	utexrd	WaterC_ep	Water Line (All Sizes) Quality Level C Locate	1	UT-Water-Existing(C)	1		WLC

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	ByLevel Weight	Point/Line	Feature
	utexrd	WaterD_ep	Water Line (All Sizes) Quality Level C Locate	1	UT-Water-Existing(D)	1		WLD
	utexrd	WaterMisc_ep	Faucet	1	1 / DGN1	1	P	FAU
	utexrd	WaterMisc_ep	Standpipe	1	1 / DGN1	1	P	SP
	utexrd	WaterNP_B_ep	Non-potable Water Line (All Sizes) Quality Level B Locate	5	UT-NonPotableWater-Existing(B)	1		NPWLB
	utexrd	WaterNP_C_ep	Non-potable Water Line (All Sizes) Quality Level C Locate	5	UT-NonPotableWater-Existing(C)	1		NPWLC
	utexrd	WaterNP_D_ep	Non-potable Water Line (All Sizes) Quality Level D Locate	5	UT-NonPotableWater-Existing(D)	1		NPWLD
	utexrd	WaterNP_ep	Non-potable Water Line (All Sizes)	5	UT-NonPotableWater-Existing	1	L	NPWL
	utexrd	Wells_ep	Monitoring Well, Taps	1	1 / DGN1	1	P	MONW
	utexrd	Wells_ep	Well (All Sizes)	1	1 / DGN1	1	P	WELL
	utexrd	Xreference01_dp	Reference Files (For AutoCAD Use)	0	0	1		
	utexrd	Xreference02_dp	Reference Files (For AutoCAD Use)	0	0	1		
	utexrd	Xreference03_dp	Reference Files (For AutoCAD Use)	0	0	1		
	utexrd	Xreference04_dp	Reference Files (For AutoCAD Use)	0	0	1		

UTPRRD - Utilities Proposed

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
	utprrd	ActivePointCell_dp	Active Point Cell	4	0	10
	utprrd	AdhocPoint_dp	Adhoc Points Placed by SheetInfo	0	4 / 0	0
	utprrd	Beacons_ep	Beacons and Path Illumination	0	0	1
X	utprrd	Capacitor	Capacitors (All Types)	3	0	1
	utprrd	Casing	Casing	0	UT-Casing-Proposed	0
	utprrd	CATV_ep	Cable TV Line (Aerial)	6	UT-OverheadCable-Existing	0
X	utprrd	CATVAer	Cable TV Line (Aerial)	6	UT-OverheadCable-Proposed	1
X	utprrd	CATVBur	Cable TV Line (Buried)	6	UT-BuriedCable-Proposed	1
	utprrd	CATVBur_ep	Cable TV Line (Buried)	6	UT-BuriedCable-Existing	1
X	utprrd	CATVBur_px	Cable TV and Miscellaneous on Cross Sections	6	0	1
X	utprrd	CATVCond	Cable TV Conduit System	6	SG-Conduit-Type1	1
	utprrd	CATVCond_ep	Cable TV Conduit System	6	UT-BuriedCable-Existing	1
	utprrd	CATVMisc	Cable TV Service Box	6	0	1
	utprrd	CATVMisc_ep	Cable TV Service Box, Pole	6	1 / DGN1	1
	utprrd	COGO_dp	COGO Information	3	0	1
X	utprrd	Conduit	Conduit for Utilities and Encasements	3	SG-Conduit-Type1	1
	utprrd	Conduit_ep	Utility Conduit & Encasements	3	UT-Casing-Existing	0
X	utprrd	ConduitAG	Conduit – Above Ground	4	SG-ConduitAG-Proposed	1
X	utprrd	ConduitBM	Conduit – Bridge Mount	5	SG-ConduitBM-Proposed	1
X	utprrd	ConduitDB	Conduit – Directional Bore	2	SG-ConduitDB-Proposed	1
X	utprrd	ConduitJB	Conduit – Jack & Bore Under Rail	3	SG-ConduitJB-Proposed	1
X	utprrd	ConduitOT	Conduit – Open Trench	1	SG-ConduitOT-Proposed	1
	utprrd	ConstLines	Construction Lines and Preferences	1	0	0
	utprrd	ConstLines_pm	Construction Lines	4	0	0

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
X	utprrd	Controller_ep	Controller and Accessories (Existing)	0	2 / DGN2	1
X	utprrd	ControllerB_ep	Controller - Base Mounted (Existing)	0	2 / DGN2	1
X	utprrd	ControllerP_ep	Controller Pole Mount (Existing)	0	2 / DGN2	1
	utprrd	DimLines_dp	Dimension Lines, Corresponding Terminators, Equation Lines	0	0	1
	utprrd	Duct	Duct Pipe (Buried)	7	UT-Duct-Proposed	0
	utprrd	DummyChains_ep	Dummy Chains	0	0	1
X	utprrd	EaseLicLine	Easement License Agreement Line	5	6 / DGN6	0
X	utprrd	ElecMeter	Meter (Electric)	3	0	1
X	utprrd	ElectPS	Electrical Power Service Miscellaneous	3	0	1
X	utprrd	ElectPSB	Electrical (Buried)	3	UT-BuriedElec-Proposed	2
X	utprrd	ElectPSO	Electrical Outlet	3	0	1
X	utprrd	ElectServWire	Electrical Service Wire	3	0	2
X	utprrd	FireHydrant	Fire Hydrant	1	0	1
	utprrd	FireHydrant_ep	Fire Hydrant	1	1 / DGN1	1
	utprrd	FloodLight_ep	Flood Light	3	1 / DGN1	1
	utprrd	FOBur_ep	Fiber Optics Cable (Underground)	6	UT-BuriedFiberOptic-Existing	0
X	utprrd	FOCAer	Fiber Optics Cable (Aerial)	6	UT-OverheadFiberOptic-Propopsed	1
X	utprrd	FOCBur	Fiber Optics Cable (Buried)	6	UT-BuriedFiberOptic-Proposed	1
X	utadrd	Gas	Gas Pipe and Fittings	4	UT-Gas-Proposed	1
X	utprrd	GasMeter	Meter (Gas)	4	0	1
X	utprrd	Gauges	Gauges	0	0	1
	utprrd	Gauges_ep	Gauges	0	1 / DGN1	1
X	utprrd	Generator	Emergency Generator	0	0	2
	utprrd	Guys_ep	Guy Anchor, Guy pole, Span Guys	3	1 / DGN1	1
X	utprrd	GuyWire	Guy Wire	3	0	0
	utprrd	ImageAttachment_dp	Image AttachmentstAttachments	0	0	0
X	utprrd	InterconCable_ep	Interconnect Cable (Existing)	1	SG-InterconCable-Existing	0
X	utprrd	JunctBox	Junction Boxes, Service Cabinet (Elec/Tel)	3	0	1
	utprrd	JunctBox_ep	Junct.ion Box / Service Cabinet (Elec/Tel)	3	1 / DGN1	1
X	utprrd	JunctBoxA	Junction Boxes (Aerial)	3	0	1
X	utprrd	JunctBoxA_ep	Junction Boxes (Aerial) (Existing)	3	1 / DGN1	0
	utprrd	LeaderLine_dp	Leader Line and terminator with Text	0	0	1
	utprrd	LiteCond_ep	Street Lighting Conductors Existing	3	SG-ConduitUG-Existing	0
X	utprrd	LoadCenter	Load Center	2	0	1
X	utprrd	LoadCenter_ep	Load Center (Existing)	2	5 / DGN5	0
X	utprrd	LoopLI_ep	Loop Lead-In (Existing)	3	2 / DGN2	0
X	utprrd	Loops_ep	Loop Assembly (All Types) (Existing)	2	2 / DGN2	2
X	utprrd	Luminaire	Luminaires (Decorative - All Types)	2	0	1
	utprrd	Luminaire_ep	Street Light / Pole	3	1 / DGN1	1
	utprrd	ManholeCover_ep	Manhole Cover (Cable TV)	6	1 / DGN1	1
	utprrd	ManholeCovUnk_ep	Manhole Cover (Unknown)	0	1 / DGN1	1
	utprrd	ManholeCovW_ep	Manhole Cover (Water)	1	1 / DGN1	1
X	utprrd	ManholeCvrUnk	Manhole Cover (Unknown)	0	0	0

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
X	utprrd	ManholeElec	Manhole (Electric)	3	0	1
	utprrd	ManholeElec_ep	Manhole (Electric)	3	1 / DGN1	1
X	utprrd	ManholeGas	Manhole (Gas)	4	0	1
	utprrd	ManholeGas_ep	Manhole (Gas)	4	1 / DGN1	1
X	utprrd	ManholeSS	Manhole (Sanitary Sewer)	2	0	1
	utprrd	ManholeSS_ep	Manhole (Sanitary Sewer)	2	1 / DGN1	1
X	utprrd	ManholeSW	Manhole (Storm Water)	10	0	1
	utprrd	ManholeSW_ep	Manhole (Storm Water)	10	1 / DGN1	1
X	utprrd	ManholeTel	Manhole (Telephone)	6	0	1
	utprrd	ManholeTel_ep	Manhole (Telephone)	6	1 / DGN1	1
	utprrd	MeterElec_ep	Meter (Electric)	3	1 / DGN1	1
	utprrd	MeterElecUG_ep	Meter (Electric) (Underground)	3	1 / DGN1	1
	utprrd	MeterGas_ep	Meter (Gas)	4	1 / DGN1	1
	utprrd	MeterUnk	Meter (Unknown) PROPOSED UNKNOWN ELEMENT	0	0	0
	utprrd	MeterUnk_ep	Meter (Unknown)	0	1 / DGN1	1
	utprrd	MeterWater_ep	Meter (Water)	1	1 / DGN1	1
	utprrd	Miscellaneous0	Undefined proposed item - co blue wt 0	1	0	0
	utprrd	Miscellaneous1	Undefined proposed item - co blue wt 1	1	0	1
	utprrd	Miscellaneous2	Undefined proposed item - co blue wt 2	1	0	2
	utprrd	Miscellaneous3	Undefined proposed item - co green wt 0	2	0	0
	utprrd	Miscellaneous4	Undefined proposed item - co green wt 1	2	0	1
	utprrd	Miscellaneous5	Undefined proposed item - co green wt 2	2	0	2
	utprrd	Miscellaneous6	Undefined proposed item - co red wt 0	3	0	0
	utprrd	Miscellaneous7	Undefined proposed item - co red wt 1	3	0	1
	utprrd	Miscellaneous8	Undefined proposed item - co red wt 2	3	0	2
	utprrd	Miscellaneous9	Undefined proposed item - co red wt 3	3	0	3
	utprrd	NonPlottingEle_dp	Non plotting items such as construction elements and type 66 elements	4	0	0
X	utprrd	Oil	Oil Pipeline, Petroleum	4	UT-Petroleum-Proposed	2
X	utprrd	OverheadSign_ep	Overhead Sign Panels (Existing)	0	3 / DGN3	1
X	utprrd	OverheadStr_ep	Mast Arm, Truss Assemblies, Signal Arms and Supports (Existing)	0	3 / DGN3	1
	utprrd	Patternlines_ep	Cross Section Chain	2	1 / DGN1	0
	utprrd	PayItem_dp	Pay Item Number Label Elements	4	0	2
X	utprrd	Pedestal_ep	Pedestal (Existing)	1	2 / DGN2	1
X	utprrd	PedHead_ep	Pedestrian Head (All Types) (Existing)	0	2 / DGN2	1
	utprrd	PedSignal_ep	Pedestrian Signal Unit, Signage	0	2 / DGN2	0
	utprrd	PointLocator_ep	Point Locator Symbol	4	0	0
X	utprrd	PoleConc	Concrete Strain Pole	0	0	2
X	utprrd	PoleConc_ep	Concrete Strain Pole (Existing)	0	2 / DGN2	1
X	utprrd	PoleFound	Pole Foundation	0	0	2
X	utprrd	PoleLight	Light Pole	2	0	1
X	utprrd	PoleLight_ep	Light Pole (Existing)	2	2 / DGN2	1
X	utprrd	PoleLightHM	High Mast Light Pole	3	0	1
X	utprrd	PoleLightHM_ep	High Mast Light Pole (Existing)	2	2 / DGN2	1
	utprrd	PoleLightID	Light Pole Location / ID	4	0	1

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
X	utprrd	PolePower	Power Pole w/ Transformer	3	0	2
	utprrd	PolePower_ep	Power Pole with or without Transformer, shared pole	3	1 / DGN1	1
X	utprrd	PoleShared	Power Pole Electric (Above Ground) Shared w/ Transformer	3	0	2
X	utprrd	PoleSteelStrain	Steel Strain Pole	0	0	2
X	utprrd	PoleSteelStrain_ep	Steel Strain Pole (Existing)	0	2 / DGN2	1
X	utprrd	PoleTel	Telephone Pole	6	0	2
	utprrd	PoleTel_ep	Telephone Pole	6	1 / DGN1	1
X	utprrd	PoleUtil	Utility Pole	0	0	2
X	utprrd	PoleWoodStrain	Wood Strain Pole	0	0	2
X	utprrd	PoleWoodStrain_ep	Wood Strain Pole (Existing)	0	2 / DGN2	1
	utprrd	Power_ep	Existing Overhead Electric Power Conductors (Distribution & Transmission)	3	UT-OverheadElec-Existing	0
	utprrd	PowerBur_ep	Existing Buried Electric Power Conductors (Distribution & Transmission)	3	UT-BuriedElec-Existing	1
	utprrd	PowerBurCond_ep	Secondary Conductor Buried	3	UT-BuriedElec-Existing	0
	utprrd	PowerCapcUG_ep	Capacitors (Underground)	3	1 / DGN1	1
	utprrd	PowerCond_ep	Conductors (primary distribution)	3	UT-OverheadElec-Existing	1
	utprrd	PowerElecOut_ep	Electrical Outlet	3	1 / DGN1	1
	utprrd	PowerMisc	Fuses, Reclosures, Regulator, Sectionalizers	3	0	0
	utprrd	PowerMisc_ep	Capacitors (Above Ground), Switchgear, Transformer, Electrical Service Box	3	1 / DGN1	1
X	utprrd	PullBox	Pull Boxes (All Types)	3	0	1
	utprrd	PullBox_ep	Wiring Pull Box	3	1 / DGN1	1
	utprrd	PumpNonPet_ep	Pump (Non Petroleum)	1	1 / DGN1	1
	utprrd	ReferencePt_dp	Survey and Construction Reference Point Details and Elements	4	0	2
	utprrd	Sanitary_ep	Sanitary Sewer (all sizesAll Sizes)	2	UT-Sanitary-Existing	1
	utprrd	SanitaryDumpSta_ep	Dump Station (SS)	2	2 / DGN2	1
X	utprrd	SanitaryFM	Force Main	2	UT-Sanitary-Proposed	1
	utprrd	SanitaryFM_ep	Force Main (all sizesAll Sizes)	2	UT-Sanitary-Existing	1
	utprrd	SanitaryMisc_ep	Cleanout, Sanitary Effluent (Open channel)	2	1 / DGN1	1
X	utprrd	SanitarySewer	Sanitary Sewer	2	UT-Sanitary-Proposed	1
X	utprrd	SanitarySewerDSta	Sewer Dump Station	2	0	0
X	utprrd	SanitarySewerEff	Sanitary Sewer Effluent NPW	5	UT-NonPotableWater-Proposed	0
X	utprrd	SanitarySewerEff_px	Sanitary Effluent for Cross Sections	9	0	0
	utprrd	SanitarySewerMisc	Sewer Miscellaneous Items	2	0	0
	utprrd	SateDish_ep	SatteliteSatellite Dish Antenna	6	4 / DGN4	1
	utprrd	Scratch1_dp	A scratch level for temporary or informational items	4	0	0
	utprrd	Scratch2_dp	A scratch level for temporary or informational items	5	0	0
	utprrd	ScratchEle_dp	Level for Draft Elements, Temporary Elements, Etc. Do Not Plot	3	0	0
	utprrd	ScratchEle2_dp	Level for Draft Elements, Temporary Elements, Etc. Do Not Plot	4	0	0
	utprrd	Signal_ep	Signal Head, Signal on Pedestal	3	1 / DGN1	1
X	utprrd	SignalHead_ep	Signal Head Section Details (Existing)	2	2 / DGN2	0
	utprrd	SignalLoop_ep	Traffic Detector Loops	7	1 / DGN1	2
	utprrd	SignalMisc_ep	Miscellaneous Signal Equipment Existing including control unit	3	2 / DGN2	0
	utprrd	SignalSupport_ep	Signal Supports including Mast Arm	3	2 / DGN2	0
X	utprrd	SignalSym_ep	Signal Head Symbols (Existing)	3	2 / DGN2	0
X	utprrd	SignCantilever_ep	Sign Symbol Cantilever (Existing)	0	2 / DGN2	0

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
	utprrd	SignMulti_ep	Multi-column Sign (All Signs)	0	3 / DGN3	1
X	utprrd	SignPanel_ep	Sign Panel Elements (Existing)	0	2 / DGN2	1
	utprrd	SignSingle_ep	Sign (Single Support)	3	2 / DGN2	0
X	utprrd	SignSpanwire	Span Wire Signing Assembly	2	0	1
X	utprrd	SignSpanwire_ep	Span Wire Signing Assembly (Existing)	2	2 / DGN2	1
	utprrd	SignSupport_ep	Trusses and Cantilevers for Overhead Signs	0	3 / DGN3	1
X	utprrd	SignTruss_ep	Sign Symbol Truss (Existing)	3	2 / DGN2	1
	utprrd	SpanWire_ep	Signal / Span Wire Pole	3	2 / DGN2	0
X	utprrd	Sprinkler	Sprinkler Head	1	0	0
	utprrd	Sprinkler_ep	Sprinkler Head	1	1 / DGN1	1
X	utprrd	Steam	Steam Pipes	1	UT-Steam-Proposed	1
X	utprrd	StreetLights	Street Lights	2	0	1
X	utprrd	Switchgear	Switchgear and Appurtenances	3	0	0
	utprrd	Tables_dp	Data Tables and All Autodesk Tables	0	0	1
	utprrd	Tele_ep	Telephone Line (aerial)	6	UT-OverheadTel-Existing	0
X	utprrd	TeleAer	Telephone Line (Aerial)	6	UT-OverheadTel-Proposed	1
X	utprrd	TeleBur	Telephone (Buried)	6	UT-BuriedTel-Proposed	1
	utprrd	TeleBur_ep	Telephone (all sizesAll Sizes Buried), Duct, Toll	6	UT-BuriedTel-Existing	1
X	utprrd	TeleBur_px	Telephone for Cross Sections (Buried) (Miscellaneous)	6	0	1
	utprrd	TeleMisc	Telephone Service Box, Booth or Pedestal	6	0	0
	utprrd	TeleMisc_ep	Telephone Service Box, Booth or Pedestal	6	1 / DGN1	1
	utprrd	TextBLStation	Text - B/L Station and Tics	0	0	2
	utprrd	TextConstEle	Text - Construction Element	0	0	1
	utprrd	TextCurveData	Text - Curve Data Note	0	0	2
	utprrd	TextDetails	Text - Detail Notes	4	0	2
	utprrd	TextElevLabel	Text - Elevation Labels	4	0	0
	utprrd	TextLabel	Text - Label	0	0	2
	utprrd	TextLandscape	Text - Landscape Labels	0	0	1
	utprrd	TextMajor	Text - Major	0	0	5
	utprrd	TextMinor	Text - Minor	0	0	0
	utprrd	TextMisc	Text - Miscellaneous	0	0	1
	utprrd	TextNotes	Text - Notes	4	0	1
	utprrd	TextProfLabel	Text - Profile, Horizontal and Vertical Axis Labels	0	0	2
	utprrd	TextProjLabel	Text - Begin and End Project label with leader lines	1	0	2
	utprrd	TextPtLabel	Text - Point Labels	4	0	0
	utprrd	TextShtNo	Text - Sheet Number	0	0	2
	utprrd	TextSurveyLabel	Text - Survey Text Labels	0	0	0
	utprrd	TextTables	Text - KeysheetKey sheet Indexes and Table Data	4	0	2
	utprrd	TextTitle	Text - Title	0	0	3
	utprrd	TextXSElev	Text - Cross Section Elevations	2	0	1
	utprrd	TopoMisc_ep	Miscellaneous Topography	0	3 / DGN3	1
X	utprrd	Tower	High Mast Light Poles or Towers, Transmission Tower, Antenna	3	0	0
	utprrd	Tower_ep	High Mast Light Poles or Towers, Transmission Tower, Antenna	3	1 / DGN1	1
X	utprrd	TransformerAer	Transformer Unit (Above Ground)	3	0	0

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
X	utprrd	TransformerBur	Transformer (Underground)	3	0	1
X	utprrd	TransmissionAer	Proposed Overhead Electric Power Conductors (Distribution & Transmission)	3	UT-OverheadElec-Proposed	0
X	utprrd	TransmissionBur	Proposed Buried Electric Power Conductors (Distribution & Transmission)	3	UT-BuriedElec-Proposed	1
X	utprrd	TransmissionT	Transmission Tower Single	3	0	0
	utprrd	UtilMisc_ep	Miscellaneous Utilities	0	0	0
	utprrd	UtilsMisc	Miscellaneous Utility Items	8	0	1
X	utprrd	UtilsProposed	Proposed Facilities/Utilities as shown in Utility Adjustments	9	0	2
X	utprrd	Valve	Valve, Valve Box (Unknown) PROPOSED UNKNOW VALVE	0	0	1
	utprrd	Valve_ep	Valve, Valve Box	0	1 / DGN1	1
X	utprrd	ValveCover	Valve Cover (Unknown) PROPOSED UNKNOW VALVE	0	0	1
	utprrd	ValveCover_ep	Valve Cover	0	1 / DGN1	1
X	utprrd	ValveCvrEff	Valve Cover (Effluent)	5	0	1
	utprrd	ValveCvrEff_ep	Valve Cover (Effluent)	5	1 / DGN1	1
X	utprrd	ValveCvrGas	Valve Cover (Gas)	4	0	1
	utprrd	ValveCvrGas_ep	Valve Cover (Gas)	4	1 / DGN1	1
X	utprrd	ValveCvrSewer	Valve Cover (Sewer)	2	0	1
	utprrd	ValveCvrSewer_ep	Valve Cover (Sewer)	2	1 / DGN1	1
X	utprrd	ValveCvrWater	Valve Cover (Water)	1	0	1
	utprrd	ValveCvrWater_ep	Valve Cover (Water)	1	1 / DGN1	1
X	utprrd	ValveCvrWaterNP	Water Line Non Potable	5	0	1
	utprrd	ValveCvrWaterNP_ep	Valve Cover (Non-potable Water)	5	1 / DGN1	1
X	utprrd	ValveGas	Valve, Valve Box (Gas)	4	0	1
	utprrd	ValveGas_ep	Valve (Gas), Valve Box	4	1 / DGN1	1
X	utprrd	ValveSewer	Valve, Valve Box (Sewer)	2	0	1
	utprrd	ValveSewer_ep	Valve (Sewer), Valve Box	2	1 / DGN1	1
X	utprrd	ValveWater	Valve, Valve Box (Water)	1	0	1
	utprrd	ValveWater_ep	Valve (Water), Valve Box	1	1 / DGN1	1
	utprrd	ValveWaterNP_ep	Valve (Non-potable Water), Valve Box	8	1 / DGN1	1
	utprrd	Vault_ep	Vaults Above Grade and Below Grade	3	1 / DGN1	0
X	utprrd	Vaults	Vaults Above Grade and Below Grade	3	0	0
X	utprrd	VaultsRW	Vaults (Raw Water)	1	0	0
	utprrd	Vent	Vent (Unknown) PROPOSED UNKNOW VENT	0	0	0
	utprrd	Vent_ep	Vent	0	1 / DGN1	1
X	utprrd	VentGas	Vent (Gas)	4	0	0
	utprrd	VentGas_ep	Vent (Gas)	4	1 / DGN1	1
X	utprrd	VentSewer	Vent (Sewer)	2	0	0
	utprrd	VentSewer_ep	Vent (Sewer)	2	1 / DGN1	1
	utprrd	Viewport	Viewport (For AutoCAD Use)	3	0	0
X	utprrd	Water	Water Line	1	UT-Water-Proposed	2
	utprrd	Water_ep	Water Line (all sizesAll Sizes)	1	UT-Water-Existing	1
X	utprrd	WaterFct	Standpipe and Water Faucet	1	0	0
X	utprrd	WaterFilter	Water Filter	5	0	2
X	utprrd	WaterMeter	Water Meter	1	0	2
	utprrd	WaterMisc_ep	Faucet, Standpipe	1	1 / DGN1	1

Critical	Rule	Level Name	Level Description	ByLevel Color	ByLevel Style / LineType	Bylevel Weight
X	utprrd	WaterNP	Water Line Non Potable	5	UT-NonPotableWater-Proposed	2
X	utprrd	WaterNP_px	Raw Water Pipes for Cross Sections	1	0	1
X	utprrd	Well	Well	1	1 / DGN1	1
X	utprrd	WellMon	Well MonitoringMonitoring Well	1	0	1
	utprrd	Wells_ep	Wells, Monitoring Well, Taps	1	1 / DGN1	1
	utprrd	Xreference01_dp	Reference Files (For AutoCAD Use)	0	0	1
	utprrd	Xreference02_dp	Reference Files (For AutoCAD Use)	0	0	1
	utprrd	Xreference03_dp	Reference Files (For AutoCAD Use)	0	0	1
	utprrd	Xreference04_dp	Reference Files (For AutoCAD Use)	0	0	1
	utprrd	XSCell	GEOPAK Cross Section Cell/Block and Profile Cell/Block	8	0	1