

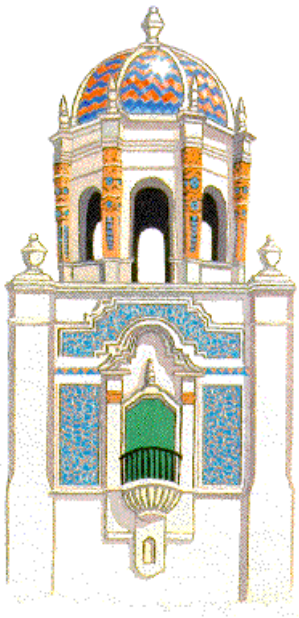
Sarasota County

CADD Production Standards Manual
Civil Engineering
Computer Aided Drafting & Design
February 2003



"Dedicated to Quality Service"

"...committed to provide responsive, courteous, quality service to all public works customers in the most efficient and cost effective manner possible."



Sarasota County Government is...

"Dedicated to Quality Service"

TABLE OF CONTENTS

<u>SECTION</u>	<u>PAGE NO.</u>
CHAPTER 1 - Introduction	1-1
CHAPTER 2 - Project Journal and Project Index.....	2-1
CHAPTER 3 - Project Directory Structure & Format.....	3-1
CHAPTER 4 - Interchangeable Terminology & Colors	4-1
CHAPTER 5 - Highway Lighting	5-1
CHAPTER 6 - Landscape.....	6-1
CHAPTER 7 - Signing & Pavement Marking	7-1
CHAPTER 8 - Signalization	8-1
CHAPTER 9 - Roadway	9-1
CHAPTER 10 - Survey - Topo.....	10-1
CHAPTER 11 – Plats.....	11-1
CHAPTER 12 – Utilities	12-1

APPENDICIES

INDEX

Chapter 1

INTRODUCTION

Chapter 1 - Introduction

Purpose

The electronic files created during the process of developing a Computer Aided Design and Drafting (CADD) project for Sarasota County are to be shared and referenced by many different individuals and must satisfy various needs. The electronic files must be shareable in a format that all parties can utilize. Therefore, CADD processes must be established for disciplines that share in the CADD development workflow. This CADD Production Standards Manual outlines the required standards, conventions and formats necessary to ensure the most usable CADD data set to the foreseeable customers of the CADD data, while providing the producer/developer of the CADD data information necessary to accomplish the task.

Scope

The material presented within this guideline will be monitored as a critical requirement under the CADD Quality Assurance plan. This document is written for CADD users producing plans and maps for Sarasota County.

General

Chapter 334 of the Florida Statutes, known as the Florida Transportation Code, establishes the responsibilities of the State, Counties, and Municipalities for the planning and development of the transportation systems serving the people of Florida, with the objective of assuring development of an integrated, balanced statewide system. The Code's purpose is to protect the safety and general welfare of the people of the State and to preserve and improve all transportation facilities in Florida.

Under Section 334.044(2), the Code sets forth the powers and duties the County has to develop and adopt uniform minimum standards and criteria for the design, construction, maintenance, and operation of public roads.

The guidelines in this Sarasota CADD Production Manual represent minimum requirements that must be met for the development of our projects. While the guidelines contained in this writing provide a basis for uniform CADD practice for Sarasota projects, precise rules that would apply to all possible situations that may arise are impossible to give. Situations will exist where these standards will not apply. If variances from the Sarasota County CADD Production Standards are necessary for a project, they must be approved in writing by the Sarasota County Project Manager and documented in the Project Journal file as defined herein.

Chapter 2

Project Journal and Project Index

Chapter 2 – Project Journal and Project Index

A project journal will be an electronic document produced, updated, and stored in the main project directory. It will aid downstream customers of the CADD data in utilizing the CADD work in their processes. While there is no specific format, the journal will at least contain:

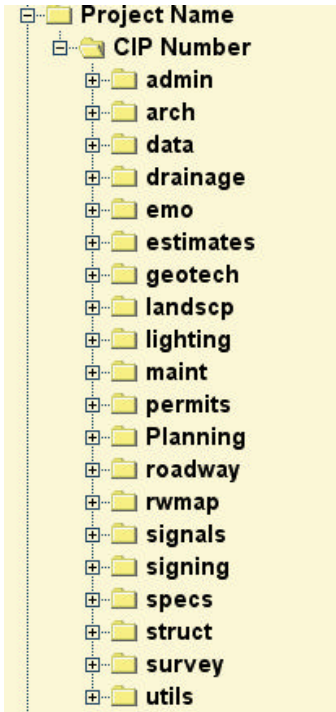
- A listing (Project Index) of the files contained within the project directory, including brief descriptions, and where the files are located
- Documentation about the data including, but not limited to, major processes used, special CADD decisions made, exceptions to standards that were used, problems encountered, and all other pertinent issues that arose during the course of the CADD work
- Design software used, particular software settings
- All information necessary for the regeneration or use of those files by subsequent customers of the CADD data
- Geometry database, controlling alignment elements, alignment and profile names, relevant survey information, cross sections and the methodology used to obtain the final geometric controls.

Chapter 3

Project Directory Structure and File Names

The Standard Project Directory Format:

Every project will utilize the standard directory structure regardless of the project requirements, even if the specific project does not include all of the disciplines listed in the standard structure. Data for each discipline will be maintained in its sub-directory, thus insuring the ability to merge data from different providers or disciplines at time of delivery. If a discipline requires information from another discipline, the needed files should be referenced from the original directory and not copied. For example, the Roadway design file will reference the survey (topo) file and not be copied into the Roadway discipline directory.



CIP Number - first seven digits of the Financial ID number

admin - Administration documents

arch - Architectural

data - Data files specific to the project

drainage - Drainage calculations and files

emo - Environmental management

estimates - Estimates and costs

geotech - Geotech files

landscp - Landscaping

lighting - Highway lighting

maint - Maintenance of Traffic

permits - Permits for environmental requirements

planning - planning files

roadway - Roadway Design

rormap - Right-of-Way Maps

signals – Signals

signing – Signing & pavement marking

specs - Specifications

struct - Structures

survey - Survey archives and files

utils - Utility adjustment files

Standard File Names

The file naming convention shall be used for all design files, standard input files and criteria files. In the event a particular file type that is needed for the project is not addressed in this document, use the file naming convention as a template, or consult the project manager or the county CADD Manager to determine the proper file name and its parameters. Document all files, both standard and project specific in the Project Index file.

File Names

FILE NAMING CONVENTION

File names consist of 8 characters following this example:

AAAABB##.ext

where AAAA = *File description*, BB = *Discipline*, ## = *Sequence number*, ext = *Extension*

Example: The first roadway cross section file created would be named - rdxsrd01.dgn

Note: If necessary the sequence number can exceed two digits.

Description	Highway Lighting Plans	Landscape Plans	Roadway Plans	Signalization Plans	Signing & Marking Plans
Border Sheet Plan	BDPLLT00	BDPLLS00	BDPLRD00	BDPLSG00	BDPLSP00
Cross Section Sheet			RDXSRD00		
Cross Section Pattern			PATTRD00		
Detail Sheet	DETLT00	DETLSS00	DETLRD00	DETLSG00	DETLSP00
Digital Terrain Model & Ground Contour			GDTMRD00		
Drainage Map			DRMPRD00		
Drainage Proposed Structures (Plan)			DRPRRD00		
Drainage Structures Sheet (Sections)			DRSTRD00		
General Notes Sheet	GNNTLT00	GNNTLS00	GNNTRD00	GNNTSG00	GNNTSP00
Intersection/Interchange Details			INTDRD00		
Key Sheet	KEYSLT00	KEYSLS00	KEYSRD00	KEYSSG00	KEYSSP00
Maintenance of Traffic Sheet			MOTSRD00		
MOT Detail Sheet			MOTDRD00		
MOT Layout Sheet			MOTLRD00		
Plan & Profile Sheet			PLPRRD00		
Plan Sheet	PLANLT00	PLANLS00	PLANRD00	PLANS00	PLANS00
Profile Sheet			PROFRD00		
Project Layout Sheet			PLAYRD00		
Proposed Design	DSGNLT00	DSGNLS00	DSGNRD00	DSGN00	DSGN00
Proposed Storm Sewer System Sheet			STMPRD00		
Retention Area Sheet			RETARD00		
Summary of Drainage Structures			SUMDRD00		
Summary of Quantities Sheet		SUMQLS00	SUMQRD00		
Tabulation Quantity Sheet	TABQLT00			TABQSG00	TABQSP00
Topographical Existing	TOPOLT00	TOPOLS00	TOPORD00	TOPOSG00	TOPOSP00
Typical Section Sheet			TYP00		
Utilities Existing			UTEXRD00		
Utilities Proposed			UTPRRD00		
Utility Adjustments Sheet			UTADRD00		
Wetlands and Jurisdictional Lines			WETLRD00		

Line Weight

Line weight is an index in the range 0 to 31 that designates the weight or thickness of the line used to draw or plot a graphic element. Each element has its own line weight. The first position defines weight 0, second weight 1, and third weight 2 and so on up to weight 31. The standard line thickness or width of a plotted graphic element in inches or millimeters for Laser, Electrostatic, or Ink Jet plotter shall be as follows:

Line Weight	Weight (Inches)	Weight (MM)
1	0.005	0.127
2	0.010	0.254
3	0.015	0.381
4	0.020	0.508
5	0.025	0.638
6	0.030	0.762
7	0.035	0.889
8	0.040	1.016
9	0.045	1.143
10	0.050	1.270
11	0.055	1.397
12	0.060	1.524
13	0.065	1.651
14	0.070	1.778
15	0.075	1.905
16	0.080	2.032
17	0.085	2.159
18	0.090	2.286
19	0.095	2.413
20	0.100	2.540
21	0.105	2.667
22	0.110	2.794
23	0.115	2.921
24	0.120	3.048
25	0.125	3.175
26	0.130	3.302
27	0.135	3.429
28	0.140	3.556
29	0.145	3.683
30	0.150	3.810
31	0.155	3.937

Note: Lineweight 0 in AutoCAD is any value less than 0.005 inches.

Colors

Microstation Color #	Color	AutoCAD Color
0	White	7
1	Blue	5
2	Green	3
3	Red	1
4	Yellow	2
5	Violet	6
6	Orange	20
7	Cyan	4
8	Dark Violet	200
9	Brown	8
10	Tan	10
11	Gray	252
12	Pink	211
13	Dark Green	96
20	Special	254

Drawings:

Please note:

**All drawings must be submitted in NAD 1983 State Plane
Florida West Feet**

HIGHWAY LIGHTING

CADD Standard Symbology

Highway Lighting Plans associated with dgn Dsgnlt00

Description	MS Level	Co	Wt	Lc	AutoCad Layer	Color	Wt	Line Type
EXISTING & PROPOSED CONDUIT								
Conduit Lighting (Bridge Mounted)	31	5	1	0	Bridge_conduit	6	.005	Cont.
Conduit Lighting (Surface Mounted)	31	4	1	0	Surface_conduit	yellow	.005	Cont.
Conduit Lighting (Underground)	31	3	1	0	Conduit_UG	red	.005	Cont.
Conduit Lighting (Underpavement)	31	2	1	0	Conduit_UP	green	.005	Cont.
Conduit Lighting Jacked (Underpavement)	31	1	1	0	Conduit_UPJ	blue	.005	Cont.
PULL & JUNCTION BOX								
Junction Boxes Lighting & Pull Boxes Lighting	32	2	1	0	Pull_Junct Box	green	.005	Cont.
LIGHT POLES								
Existing Light Pole (Remain & Remove)	34	2	1	2	Ex_Lt_Pole	green	.005	Dash
Proposed Light Pole & Dbl. Arm Light Pole	35	2	1	0	Pr_Lt_Pole	green	.005	Cont.
High Mast Poles Lighting	36	2	1	0	HM_Lt_Pole	green	.005	Cont.
High Mast Pole Foundation-Lighting	37	1	1	0	HM_Found	blue	.005	Cont.
High Mast Pole Soil Boring-Lighting	38	5	1	0	HM_Boring	6	.005	Cont.
Pole Locations Lighting	39	4	1	0	Pole_location	yellow	.005	Cont.
SERVICE POINTS								
Service Points Lighting	40	0	2	0	Serv_Points	white	.010	Cont.
LOAD CENTER								
Load Center (Existing & Proposed) Lighting	41	2	1	0	Load_Ctr.	green	.005	Cont.
*TEXT								
					Lt_Limits			
					Cir_text			
					Match_Lines			
					Lt_text			
					Payitems			
					Misc_Lt_text			
					Dimen_text			
					Const_Cloud			
					Const_text			

Highway Lighting Plans associated with dgn Keyslt00

Description	MS Level	Co	Wt	Lc	AutoCad Layer	Color	Wt	Line Type
Arrow Flags (Shape), Equation Lines & Project, Location (Shape)	20	0	0	0	Arrow_Flags	white		Cont.
Length Of Project Text	39	3	1	0	Proj_length	red	.005	Cont.
Railroad Crossing Details	41	3	2	0	RR_Crossing	red	.010	Cont.
Design Standards, Specifications & Reproductions Text Notes	42	4	1	0	Text_notes_1	yellow	.005	Cont.
Text, Index Of Roadway Plan Sheets, Misc. Titles & Group Plan Listing	42	4	1	0	Text_notes_2	yellow	.005	Cont.
Project Numbers & County	47	2	2	0	Proj_numbers	green	.010	Cont.
Plan Set Title	48	2	2	0	Plan_title	green	.010	Cont.
State Road No.	49	2	2	0	SR_number	green	.010	Cont.

Highway Lighting Plans associated with dgn Keyslt00

Description	Lv	Co	Wt	Lc	AutoCad Layer	Color	Wt	Line Type
Text Notes	50	0	0	0	Text_notes	white		Cont.
Text, Misc. Small	52	4	0	0	Misc_text_notes	yellow		Cont.
Construction Cloud	54	7	2	0	Const_cloud	cyan	.010	Cont.
					Text_const_cloud	cyan	.010	Cont.
						yellow	.010	Cont.
Text, Begin/End Project, Location of Project	54	0	1	0	Project_limits	white	.005	Cont.

Highway Lighting Plans associated with dgn Planlt00

Description	Lv	Color	Wt	Lc	AutoCad Layer	Color	Wt	Line Type
Plan Sheet								
					Const_cloud	cyan	.010	Cont.
					General_text	yellow	.010	Cont.

Highway Lighting Plans associated with dgn Tabqlt00

Description	Lv	Co	Wt	Lc	AutoCad Layer	Color	Wt	Line Type
Quantity Box Cell (Form 625-000 *)	0	0	0	0	Tab_Block	white		Cont.
Tab Of Quantities (Form No 625-000-22)	0	0	0	0	Tab_quantities	white		Cont.
Text Notes	50	0	2	0	Text_notes	white	.010	Cont.

LANDSCAPE

CADD Standard Symbology

Landscape Plans associated with dgn Dsgnls00

Description	MS Level	Co	Wt	Lc	AutoCad Layer	Color	Wt	Line Type
Witness/extension lines (L & T)	1	0	1	0	Witness_lines	white	.005	Cont.
Trees location for drip/sprink (L)	35	5	2	0	Tree_location	6	.010	Cont.
					Const_cloud	cyan	.010	Cont.
					Text_const_cloud	yellow	.010	Cont.

Landscape Plans associated with dgn Keysls00

Description	Lv	Co	Wt	Lc	AutoCad Layer	Color	Wt	Line Type
Arrow Flags (Shape), Equation Lines & Project, Location (Shape)	20	0	0	0	Arrow_Flags	white		Cont.
Length Of Project Text	39	3	1	0	Proj_length	red	.005	Cont.
Railroad Crossing Details	41	3	2	0	RR_Crossing	red	.010	Cont.
Design Standards, Specifications & Reproductions Text Notes, Text, Index of Roadway Plan Sheets, Misc. Titles & Group Plan Listing	42	4	1	0	Text_notes	yellow	.005	Cont.
Project Numbers & County	47	2	2	0	Proj_numbers	green	.010	Cont.
Plan Set Title	48	2	2	0	Plan_title	green	.010	Cont.
State Road No.	49	2	2	0	SR_number	green	.010	Cont.
Text Notes	50	0	0	0	Text_notes	white		Cont.
Text, Misc. Small	52	4	0	0	Misc_text_notes	yellow		Cont.

SIGNING & PAVEMENT MARKING

**Signing & Pavement Marking
associated with Dsgnsp00**

Description	MS Level	Co	Wt	Lc	AutoCad Layer	Color	Wt	Line Type
2'/4' Skip White	2	0	2		2-4SKIP_WHITE	white	.010	
2'/4' Skip Yellow	2	4	2		2-4SKIP_YELLOW	yellow	.010	
6'/10' Skip White	3	0	2		6-10SKIP_WHITE	white	.010	
6'/10' Skip Yellow	3	4	2		6-10SKIP_YELLOW	yellow	.010	
10'/30' Skip White	4	0	2		10-30SKIP_WHITE	white	.010	
10'/30' Skip Yellow	4	4	2		10-30SKIP_YELLOW	yellow	.010	
Remove Existing Markings (Paint)	22	2	1	2	REM_MARK	green	.005	Dash
Remove Existing Markings (Thermo)	23	2	1	2	REM_MARK	green	.005	Dash
Pavement Message (Paint)	24	0	0	0	PAVT_MESS	white		Cont.
Pavement Message (Thermo)	24	1	0	0	PAVT_MESS	blue		Cont.
Regulatory Sign Panels	26				REG_SIGN	ByLayer		ByLayer
Warning Sign Panels	27				WARN_SIGN	ByLayer		ByLayer
Construction Sign Panels	28				CONST_SIGN	ByLayer		ByLayer
Civil Defense Sign Panels	29				CIVDEF_SIGN	ByLayer		ByLayer
FTP Sign Panels	30				FTP_SIGN	ByLayer		ByLayer
School Sign Panels	31				SCHOOL_SIGN	ByLayer		ByLayer
Destination Sign Panels	32				DEST_SIGN	ByLayer		ByLayer
General Info Sign Panels	33				INFO_SIGN	ByLayer		ByLayer
Object Markers	34				OBJ_MARK	ByLayer		ByLayer
Route Marker Guidesign Panels	35				RTE_MARK	ByLayer		ByLayer
Reflective Pavement Markers	49				RPM	ByLayer		ByLayer
Text	50				TEXT	ByLayer		ByLayer

**Signing & Pavement Marking
associated with Keyssp00**

Description	MS Level	Co	Wt	Lc	AutoCad Layer	Color	Wt	Line Type
Arrow Flags, Equation Lines & Project location	20	0	0	0	Arrow_Flags	white		Cont.
Length of Project Text	39	3	1	0	Proj_length	red	.005	Cont.
Railroad Crossing Details	41	3	2	0	RR_Crossing	red	.010	Cont.
Design Standards, Specs, Reproduction Texts, Index of Roadway Plan Sheets	3	0	2	0	Text_Notes	white	.010	Cont.
Project Numbers & County	20	0	0	0	Arrow_Flags	white		Cont.
Plan Set Title	48	2	2	0	Plan_Title	Green	.010	Cont.
State Road No.	49	2	2	0	SR_number	Green	.010	Cont.
Text Notes	50	0	0	0	Text_notes	white		Cont.
Text, Misc. Small	52	4	0	0	Misc_text_notes	yellow		Cont.
Construction cloud	54	4	2	0	Const_cloud	yellow	.010	Cont.
Text Construction Cloud	54	4	2	0	Text_const_cloud	yellow	.010	Cont.

Text, Begin / End Project, Location of Project 54 0 1 0 Project_limits

Signing & Pavement Marking associated with Plansp00

Description	MS Level	Co	Wt	Lc	AutoCad Layer	Color	Wt	Line Type
Dimension Lines	48	0	1	0	Dim	white	.005	Cont.
Special Details with text	47	6	1	0	Spdtl	20	.005	Cont.
Text Dimension	48	0	1	0	Text_dim	white	.005	Cont.
Survey Data	49	0	2	0	Surv_data	white	.010	Cont.
Text, Titles, Notes, Dimensions, Begin End Projects	50	4	2	0	Text	yellow	.010	Cont.

SIGNALIZATION

CADD Standard Symbology

Signalization associated with Dsgnsg00

SIGNAL DESIGN - EXISTING/PROPOSED CONDUIT SIGNAL								
Conduit Signal & Cable (Above Ground)	1	4	1	0	CONDUIT	yellow	.005	Cont.
Conduit Signal & Cable (Bridge Mounted)	1	5	1	0	CONDUIT_BRIDGE	6	.005	Cont.
Conduit Signal & Cable (Underground)	1	3	1	0	CONDUIT_UG	red	.005	Cont.
Conduit Signal (Under pavement Jacked)	1	1	1	0	CONDUIT_JACK	blue	.005	Cont.
Conduit Signal (Under pavement)	1	2	1	0	CONDUIT	green	.005	Cont.
CABLE								
SIGNAL CABLE and/or on messenger	2	3	0	0	CABLE	red		Cont.
Existing Interconnect Cable	2	1	0	1	CABLE_INTCONN	blue		Dot
Cable Support Accessories	3	0	2	0	CABLE_MISC	white	.010	Cont.
FIBERGLASS INSULATOR								
FIBERGLASS INSULATOR	2	3	8	0	FIBERGL_INSUL	red		Cont.
POLE & MAST ARM								
Text Pedestrian Numbers, Pole Number Signal, Pole ID; Locations w/Elevations								
SIGNAL MAST ARMS	5	0	1	0	SIGNAL_MAST	white	.005	Cont.
Signal Poles: Concrete, Steel, Wood	20	0	2	0	SIGNAL_POLE	white	.010	Cont.
Down Guys Signal Proposed	4	3	0	0	GUYS_POLE	red		Cont.
GUYS MISC: Power, Telephone, Joint Utility Pole	3	3	0	0	GUYS_MISC	red		Cont.
SIGNAL HEADS								
SIGNAL HEADS: Symbol, Numbers, Plan View	15	1	2	0	SIGNAL_HD	blue	.010	Cont.
SIGNAL HEAD DETAIL W/NUMBERS								
SIGNAL HEAD DETAIL WITH NUMBERS	15	2	0	0	SIGNAL_HDDTL	green		Cont.
SIGNAL HEAD AUXILIARIES	7	0	2	0	SIGNAL_AUX	white	.010	Cont.
SPECIAL SIGNALS DETAILS	19	3	1	0	SIGNAL_SPDTL	red	.005	Cont.
LOOPS								
Existing Loop - All Types	8	2	2	2	LOOP	green	.010	Dash
LOOP LEAD-IN (EXISTING & PROPOSED)	8	3	0	2	LOOP_LEADIN	red		Dash
CONTROLLER SYMBOLS								
Controller Symbols and/or Elevation	10	0	1	0	CTRL_SYMB	white	.005	Cont.
SIGNS								
Exist/Proposed SIGN W/ FLASHER	11	4	2	2	SIGN_FLASH	yellow	.010	Dash
Blank out Sign	20	0	2	0	SIGN_BLANK	white	.010	Cont.
SIGN DETAIL SIGNAL	13	4	2	0	SIGN_DTL	yellow	.010	Cont.

Signalization associated with Dsgnsg00

PEDESTRIAN HEAD SYMBOLS								
Pedestrian Head Symbol, Proposed/Existing	6	1	1	0	PED_HD	blue	.005	Cont.
Pedestrian Head - All Types (Deads, Pedestal)	16	0	2	0	PED_HD_DTL	white	.010	Cont.
PEDESTRIAN DETECTOR	9	0	2	0	PED_DETECT	white	.010	Cont.
SIGNAL TIMING								
SIGNAL TIMING: SIGNAL OPERATING PLAN; BOX; TIMING CHART; TIMING FUNCTION BOX	21	4	2	0	SIGNAL_TIME	yellow	.010	Cont.
SIGNAL CONTROLLER	22	0	2	0	SIGNAL_NTS	white	.010	Cont.
SPAN WIRE								
SPAN WIRE MOUNTED SIGN	22	0	2	0	SIGN_WIRE_MNT	white	.010	Cont.
SPAN WIRE SIGNAL	2	3	2	0	SIGNAL	red	.010	Cont.
PULL & JUNCTION BOXES								
Pull & Junction Boxes	23	3	1	0	PULL_JUNC_BX	red	.005	Cont.
NORTH ARROW								
NORTH ARROW AND SCALE	24	0	2	0	NARRW	white	.010	Cont.
DIMENSIONS								
Dimensions Signals: All Types	25	5	1	0	DIMENSIONS	6	.005	Cont.
S.O.P. Box and Movements (All Phase Operation)	50	0	1	0	BX_MVMT	white	.005	Cont.
Timing Chart; Timing Chart for Pre- emption; w/RR Pre-emption; Function Box	50	0	1	0	TIMING	white	.005	Cont.

Signalization associated with Keysg00

Arrow flags (shape), Equation Lines & Project Location	20	0	0	0	ARROW_FLAGS	white		Cont.
Length of Project Text	39	3	1	0	PROJ_LENGTH	red	.005	Cont.
Railroad Crossing Details	41	3	2	0	RR_CROSSING	red	.010	Cont.
Design Standards, Specs text notes, Index of Plan Sheets	42	4	1	0	TEXT_NOTES	yellow	.005	Cont.
Project Numbers	47	2	2	0	PROJ_NUMBERS	green	.010	Cont.
Plan Set Title	48	2	2	0	PLAN_TITLE	green	.010	Cont.
State Road No.	49	2	2	0	SR_NUMBER	green	.010	Cont.
Text Notes	50	0	0	0	TEXT_NOTES	white		Cont.
Text Misc. Small	52	4	0	0	MISC_TEXT_NOTES	yellow		Cont.
Construction Cloud	54	7	2	0	CONST_CLOUD	cyan	.010	Cont.
Text Construction Cloud	54	4	2	0	TEXT_CONST_CLOUD	yellow	.010	Cont.
Text, Begin & End Const., Location of Project	54	0	1	0	PROJ_LIMITS	white	.005	Cont.

Signalization associated with Plansg00

|--|--|--|--|--|--|--|--|--|

Dimension Lines	48	0	1	0	DIM	white	.005	Cont.
Special Details w/ text	47	6	1	0	SPDTL	20	.005	Cont.
Text Dimension	48	0	1	0	TEXT	white	.005	Cont.
Survey Data	49	0	2	0	SURV_DATA	white	.010	Cont.
Text, Titles, Notes, Dimensions, Begin & End Projects	49	4	2	0	TEXT	yellow	.010	Cont.

ROADWAY

CADD Standard Symbology

Roadway Plans associated with dgn Dsgnrd00

Description	MS Level	Co	Wt	Lc	AutoCad Layer	Color	Wt	Line Type
ATTENUATOR DETAIL SHEET								
Attenuator Module (Sand Filled); Guardrail (All Types) & Impact Attenuator Vehicular	46	0	1	0	ATTEN_GR	white	.005	Cont.
BACK OF SIDEWALK								
Proposed Grade Line Center	41	3	2	0	PGL_CTR	red	.010	Cont.
Proposed Grade Line Left	41	1	2	0	PGL_LT	blue	.010	Cont.
Proposed Grade Line Right	41	4	2	0	PGL_RT	yellow	.010	Cont.
CURVE & COORDINATE DATA								
Summary of Coordinate/Curve Data	41	0	2	0	CC_DATA	white	.010	Cont.
DESIGN (PROPOSED ROADWAY)								
Edge Of Pavement Existing (To Remain)/Proposed/Edge of Concrete Pav/Edge of Asphalt Pavt	2	1	1	3	EOP_EXIST	blue	.005	Dash2
CURB								
Curb & Gutter, Face - All Types	2	4	1	0	CG_FACE	yellow	.005	Cont.
Curb Cut Ramp	3	2	1	0	CURB_CUT	green	.005	Cont.
BUILDINGS								
Buildings - Proposed & To be removed	4	1	2	0	BLDG	blue	.010	Cont.
DRIVEWAY								
Driveway, Lane, Turnout	10	7	2	0	DRWY	cyan	.010	Cont.
Mailbox	11	8	1	0	MAILBX	200	.005	Cont.
HANDRAIL								
Handrail - All Types	11	9	1	3	HANDRAIL	8	.005	Dash2
WETLAND								
Patterning Permit 1 Wetlands, Mitigation Sites, Planting Areas	16	1	1	0	WETLAND_1	blue	.005	Cont.
Patterning Permit 2 Wetlands, Mitigation Sites, Planting Areas	17	2	1	0	WETLAND_2	green	.005	Cont.
Patterning Permit 3 Wetlands, Mitigation Sites, Planting Areas	18	0	4	1	WETLAND_3	white	.020	Dot
Wetland Boundary	58	0	2	0	WETLAND_BNDY	white	.010	Cont.
CONCRETE SEPARATOR								
Concrete Traffic Separator - All Types	2	0	6	1	TRAF SEP	white	.030	Dot
SHOULDER								
Unpaved Shoulder Line	22	0	0	0	SHLDR	white		Cont.
Paved Shoulder Line	42	0	1	1	SHLDR	white	.005	Dot
NORTH ARROW								
North Arrow	25	0	0	2	N_ARRW	white		Dash

Roadway Plans associated with dgn Dsgnrd00

Description	MS Level	Co	Wt	Lc	AutoCad Layer	Color	Wt	Line Type
STATION TICS								
Sta Text & Tics 1:100	29	0	2	0	STA_100	white	.010	Cont.
Sta Text & Tics 1:20	26	0	2	0	STA_20	white	.010	Cont.
Sta Text & Tics 1:200	30	0	2	0	STA_200	white	.010	Cont.
Sta Text & Tics 1:40	27	0	2	0	STA_40	white	.010	Cont.
Sta Text & Tics 1:50	28	0	2	0	STA_50	white	.010	Cont.
BARRIER WALL								
Barrier Wall & Edge of Pavement (All Types)	2	0	1	0	BARR WALL	white	.005	Cont.
Box Culvert Barrier Wall	45	0	1	0	BARR WALL	white	.005	Cont.
Bearing Centerline Text & Curve Data Label (Pc, Pier, Pt)	50	0	2	0	BEARING	white	.010	Cont.
RIGHT OF WAY (ROW)								
Limited Access R/W (Proposed)	38	4	3	0	RW_LA	yellow	.015	Cont.
Limits Of Construction	39	3	0	1	LIM_CONST	red		Dot
Curve & Coordinate Data	50	4	2	0	CC_DATA	yellow	.010	Cont.
SIDEWALK								
Sidewalk Back	2	2	1	0	SWK_BACK	green	.005	Cont.
Sidewalk Front (If different from curb)	2	1	1	0	SWK_FRONT	blue	.005	Cont.
C/L Construction; Summary of Coord. Data Box; Curve Data Box cell	41	0	2	0	CC DATA	white	.010	Cont.
CURVE & COORDINATE DATA BOXES								
*								
**								
FENCES								
Fencing - All Types	43	6	1	0	FENCE	20	.005	Cont.
SLOPE STAKE								
Slope Stakes 1	44	4	3	1	SLOPE_1	yellow	.015	Dot
Slope Stakes 2	44	1	3	1	SLOPE_2	blue	.015	Dot
ATTENUATOR								
Attenuator Module (Sand Filled); Guardrail (All Types) & Impact Attenuator Vehicular	46	0	1	0	ATTEN_GR	white	.005	Cont.
DIMENSIONS								
LANE ARROWS (FLOW DIREC.)	49	0	1	0	ARRW_FLOW	white	.005	Cont.
TEXT								
Text: Dimensions; Curve & Coord. Data;								
Dimension Lines & Text	48	0	1	0	DIM	white	.005	Cont.
ARCHAEOLOGICAL SITES								
Archaeological Sites	44	2	1	0	ARCH_SITE	green	.005	Cont.

Description	MS Level	Co	Wt	Lc	AutoCad Layer	Color	Wt	Line Type
BRIDGES								
Bridges Approach Slab	56	0	2	0	APP SLAB	white	.010	Cont.
Bridge: Piling, Pier, Column	57	8	2	0	PIER	8	.010	Cont.
Bridges (Structures)	57	0	1	0	STRUCT	white	.005	Cont.
Cogo Information	62	3	0	0	COGO	red		Cont.

Description	Microstation Level	Co	Wt	Lc	AutoCad Layer	Color	Wt	Line Type
Arrow Flags (Shape), Equation Lines & Project Location (Shape) Plan Sheet	20	0	0	0	ARRW_FLAG	white		Cont.
Special Details W / Text	47	6	1	0	SPDTL	20	.005	Cont.
Text; Titles; Notes; Dimensions; Begin End Projects (EXCEPT Special Details)	50	4	2	0	TEXT	yellow	.010	Cont.

Roadway Plans associated with dgn Keysrd00

Description	Microstation Level	Co	Wt	Lc	AutoCad Layer	Color	Wt	Line Type
Arrow Flags (Shape), Equation Lines & Project Location (Shape)	20	0	0	0	ARRW_FLAG	white		Cont.
Railroad Crossing Details	41	3	2	0	RR_XS_DTL	red	.010	Cont.
Text; Titles; Notes; Dimensions; Begin End Projects (EXCEPT Special Details)	50	4	2	0	TEXT	yellow	.010	Cont.
Special Details W / Text	47	6	1	0	SPDTL	20	.005	Cont.

Roadway Plans associated with dgn Motsrd00

Phase I MAINTENANCE OF TRAFFIC Elem	11-15	0	1	0	MOT_PH1	white	.005	Cont.
Phase II MAINTENANCE OF TRAFFIC Elem	21-25	1	1	0	MOT_PH2	blue	.005	Cont.
Phase III MAINTENANCE OF TRAFFIC Elem	31-35	2	1	0	MOT_PH3	green	.005	Cont.
Phase IV MAINTENANCE OF TRAFFIC Elem	41-45	4	1	0	MOT_PH4	yellow	.005	Cont.
Text Notes	50	0	2	0	TEXT	white	.010	Cont.
Barricade (All types)	44	0	1	0	BARRICADE	white	.005	Cont.
Barrier Wall	41	0	1	0	BARR_WALL	white	.005	Cont.
Crossover Temporary	60	0	1	0	CROSSOVER	white	.005	Cont.
Curb Temporary	58	0	1	0	TEMP CURB	white	.005	Cont.
Driveway Temporary	59	0	1	0	TEMP DRWY	white	.005	Cont.
Guardrail Left	43	0	1	0	GR_LT	white	.005	Cont.
Guardrail Right	43	0	1	0	GR_RT	white	.005	Cont.
High Intensity Flashing Lights	47	0	1	0	HI_FLASH_LIT	white	.005	Cont.
Impact Attenuator Vehicle	49	0	1	0	ATTEN_VEH	white	.005	Cont.
Impact Attenuator; Pavement Marking	48	0	1	0	ATTEN	white	.005	Cont.
Lights Barrier Wall Mount	42	0	1	0	BARRWALL_LIT	white	.005	Cont.
Panels Arrow Advance Warning	45	0	1	0	ADVWARN_ARRW	white	.005	Cont.
Pavement Marking	56	0	1	0	PAVT_MARK	white	.005	Cont.
Pavement Marking Reflective	55	0	1	0	PAVT_MARK	white	.005	Cont.
Plan Data	60	0	2	0	DATA	white	.010	Cont.
Signals Traffic Control	46	0	1	0	MOT_SIG	white	.005	Cont.

Roadway Plans associated with dgn Plprrd00 (Plan&Prof. Sht)

Dimension Lines	48	0	1	0	DIM	white	.005	Cont.
Drainage Structures	45	10	2	0	DRAIN_STR	10	.010	Cont.
Profile Center (Existing) W/ Text Elevations And Stations	42	2	1	2	PGL_EX_CTR	green	.005	Dash
Profile Center (Proposed) W/ Text Elevations And Stations	41	3	2	0	PGL_PROP_CTR	red	.010	Cont.
Profile Left (Existing) W/ Text Elevations And Stations	43	1	1	3	PGL_EX_LT	blue	.005	Dash2
Profile Right (Existing) W/ Text Elevations And Stations	44	4	1	4	PGL_EX_RT	yellow	.005	Center
Special Details W/ Text	47	0	6	1	PGL_SP_DTL	white		Dot

Special Ditches	45	10	1	0	PR_SP_DTCH	10	.005	Cont.
Text Dimension	48	0	1	0	TEXT	white	.005	Cont.
Survey Data	49	0	2	0	SURV_DATA	white	.010	Cont.
Text; Titles; Notes; Dimensions; Begin End Projects (EXCEPT Special Details)	50	4	2	0	TEXT	yellow	.010	Cont.

Roadway Plans associated with dgn Plprrd00 (Plan&Prof. Sht)

Dimension Lines	48	0	1	0	DIM	white	.005	Cont.
Drainage Structures	45	10	2	0	DRAIN_STR		.010	Cont.
Profile Center (Existing) W/ Text Elevations And Stations	42	2	1	2	PGL_EX_CTR	green	.005	Dash
Profile Center (Proposed) W/ Text Elevations And Stations	41	3	2	0	PGL_PROP_CTR	red	.010	Cont.
Profile Left (Existing) W/ Text Elevations And Stations	43	1	1	3	PGL_EX_LT	blue	.005	Dash2
Profile Right (Existing) W/ Text Elevations And Stations	44	4	1	4	PGL_EX_RT	yellow	.005	Center
Special Details W/ Text	47	6	1	0	SPDTL	20	.005	Cont.
Special Ditches	45	10	1	0	SP_DTCH		.005	Cont.
Text Dimension	48	0	1	0	TEXT	white	.005	Cont.
Survey Data	49	0	2	0	SURV_DATA	white	.010	Cont.
Text; Titles; Notes; Dimensions; Begin End Projects (EXCEPT Special Details)	50	4	2	0	TEXT	yellow	.010	Cont.

Roadway Plans associated with dgn Rdxsrd00

BASELINE SURVEY								
Baseline Survey	1	0	2	0	BL_SURVEY	white	.010	Cont.
Baseline Station Text & Tics	50	3	2	0	BL_STA	red	.010	Cont.
CENTER LINE OF CONSTRUCTION								
C/L Construction	41	0	2	0	CL_CONST	white	.010	Cont.
CROSS SECTION								
Cross Section Calculation Area For Void Quantity or Resurfacing	61	1	0	0	XS_CALC_VOID	blue		Cont.
Cross Section Elevations (Exist) Text	42	2	2	0	XS_ELV_EX	green	.010	Cont.
Cross Section Sub Design (Prop)	41	4	1	0	XS_SUBDSG_PR	yellow	.005	Cont.
Cross Sections Ground Lines (Exist)	42	2	1	3	XS_GRLN_EX	green	.005	Dash2
Cross Sections Roadway Typical (Prop)	41	1	2	0	XS_RDTYP_PR	blue	.010	Cont.
Cross Sections Subsoil Or Undercut	42	4	2	1	XS_SUBSOIL_UCUT	yellow	.010	Dot
Elevation Text (Existing)	42	2	1	0	ELEV_TXT_EX	green	.005	Cont.
Elevation Text (Proposed)	41	3	1	0	ELEV_TXT_PR	red	.005	Cont.

Roadway Plans associated with dgn Rdxsrd00

--	--	--	--	--	--	--	--	--

TYPICAL

Pavement	41	10	2	0	TYP_PAVT	10	.010	Cont.
Base	43	3	0	3	TYP_BASE	red		Dash2
Stabilization	41	5	2	0	TYP_STABIL	6	.010	Cont.
Subsoil Or Undercut	42	4	2	1	SUBSOIL	yellow	.010	Dot
CURB AND GUTTER	41	0	2	0	CG	white	.010	Cont.
Curbs And Gutters	43	3	0	0	CG_BASE	red		Cont.
Curbs And Gutters (Base)								

SIDEWALK

Sidewalk

GUARDRAIL OR WALL	41	11	2	0	SWK	252	.010	Cont.
Guardrail	2	0	0	3	GUARDRAIL	white		Dash2
Barrier Wall	2	0	0	3	BARRIER_WALL	white		Dash2
Gravity Wall	41	11	2	0	GRAVITY_WALL	252	.010	Cont.

UTILITIES/CABLE (UNDERGROUND)

Cable TV (Line Buried & Conduit System)	15	5	1	4	CABLE_TV	violet	.005	Center
Fiber Optics Power (Size Unknown)	15	6	0	1	CABLE_FOFT	20		Dot

ELECTRIC POWER (UNDERGROUND) CONDUIT SYSTEMS

Conduit & Encasements: Manhole (Electric); Vaults above Grade; Vaults Below Grade; Splice/Pull Box; Pedestals	15	3	0	1	CONDUIT	red		Dot
---	----	---	---	---	---------	-----	--	-----

CONDUCTORS

Conductors: Transmission; Primary/Secondary Distribution; Street Lighting; Fiber Optics; Pipe Line	16	3	1	1	CONDUCTOR	red	.005	Dot
--	----	---	---	---	-----------	-----	------	-----

EQUIPMENT

Switchgear & Appurtenances; Transformers; Capacitors; Test Cells; Meter (Electric)	17	3	1	1	ELEC_MISC	red	.005	Dot
--	----	---	---	---	-----------	-----	------	-----

MISCELLANEOUS

Electric Test & Misc.	18	3	1	0	ELEC_TST_MISC	red	.005	Cont.
-----------------------	----	---	---	---	---------------	-----	------	-------

GAS (UNDERGROUND/MAIN)

GAS - All Sizes	20	4	1	1	GAS_MAIN	yellow	.005	Dot
Gas Service - Pipe & Fitting (All Sizes)	21	4	1	1	GAS_SERV	yellow	.005	Dot
Gas - Meter, Regulator, Valve, Vent, Test & Misc	22	4	1	1	GAS_MISC	yellow	.005	Dot

TELEPHONE (UNDERGROUND)

Buried Telephone - All Sizes	25	6	1	1	BT	20	.005	Dot
Wiring Pull Box Telephone	26	6	0	0	PULL_BOX	20		Cont.
Fiber Optics Telephone (All Sizes)	27	6	1	0	FO	20	.005	Cont.

Manhole (Telephone)	28	6	0	1	BT_MH	20		Dot
SANITARY SEWER								
Sanitary Sewer - All Sizes	31	2	1	1	SS	green	.005	Dot
Force Main - All Sizes	32	2	1	2	FM	green	.005	Dash
Sewer Misc.: Cleanout, Manhole, Sewage Dump Station, Valve Cover, Vent	33	2	0	1	SS_MISC	green		Dot
WATER								
Water - All Sizes	36	1	1	1	WATER	blue	.005	Dot
Water Misc.: Manhole, Valve Cover	38	1	0	1	WATER_MISC	blue		Dot
SANITARY EFFLUENT								
Sanitary Effluent	41	9	0	1	S_EFFLUENT	8		Dot
Valve Cover (Effluent)	41	9	0	2	S_EFFLUENT_CVR	8		Dash
RAW WATER								
Raw Water Pipes	43	1	0	2	RAW_PIPES	blue		Dash
Raw Water Misc. (Valve Cover; Vaults; Test & Misc)	43	1	0	2	RAW_MISC	blue		Dash
RIGHT OF WAY								
R/W Lines (Existing)	19	7	2	0	RW_EX	cyan	.010	Cont.
Property Lines (Existing) W/ Dimension Lines And Text	50	3	0	0	PL	red		Cont.
Lateral Limits	41	6	2	0	RW	20	.010	Cont.
SOIL BOXES								
Soil Boxes & Borings w/Text	44	4	1	0	SOIL	yellow	.005	Cont.
DRAINAGE								
Drainage Structures: Manhole (Stormwater), Drain Pipe, Stormwater (underground) & Text	45	10	2	0	DR_STR	10	.010	Cont.
Drainage Structures Dimension Lines	49	0	2	0	DR_STR_DIM	white	.010	Cont.
Grassed Areas Text	41	2	2	0	SOD TEXT	green	.010	Cont.
Ditch Bottom	41	9	2	0	DB	8	.010	Cont.
CANTILEVER SIGN STRUCTURE								
Cant. Sign Str & Foundation	46	4	2	0	CANT_SIGN_STR	yellow	.010	Cont.
SPECIAL DETAILS								
Special Details w/Text	47	6	1	0	SPDTL	20	.005	Cont.
EARTHWORK QUANTITY BOX								
Earthwork Quantity Box w/Text	49	4	2	0	EARTHWORK	yellow	.010	Cont.
TEXT								
Text; Titles; Notes; Dimensions; Begin End Projects, Etc. (EXCEPT Special Details)	50	4	2	0	TEXT	yellow	.010	Cont.

SURVEY (TOPO)

Edge Of Pavement								
Pavement Edge: Asphalt, Concrete	2	0	1	3	EOP	white	.005	Dash2
Roads & Trails Unpaved Edge	3	9	1	3	EOP_TRAIL	red	.005	Dash2
CURB & GUTTER								
Face Of Curb & Gutter	2	4	0	3	C&G_FACE	yellow		Dash2
Back Of Curb & Gutter	3	4	0	3	C&G_BACK	red		Dash2
BUILDINGS								
Buildings	4	1	0	0	BLDG	blue		Cont.
Deck / Porch	4	7	0	1	BLDG_DECK	cyan		Dot
WATER FEATURES								
Levee, Dike, Dam	5	9	0	3	WATER_FEATURE1	8		Dash2
Seawall	5	0	3	1	WATER_FEATURE2	white	.015	Dot
Spring (Water Source); Stream; Center of Stream	5	1	0	0	WATER_FEATURE3	blue		Cont.
DITCH								
Man Made Bank; Natural Slope (Top Or Bottom)	6	9	0	3	TOS, TOB	8		Dash2
Ditch (Top, Bottom, Flow)	6	7	0	6	DITCH	cyan		User Def.
Ditch Pavement	6	0	0	1	DITCH	white		Dot
RIP, RAP, RUBBLE (Describe)	8	4	1	3	DITCH	yellow	.005	Dash2
TREES								
Trees; Shrub; Mangrove, Woods, Grove, Orchard, Hedge, Stump & Boundaries	7	2	0	0	TREE	green		Cont.
PAVEMENT CROWN								
Pavement Crown: All Types	8	0	1	4	CROWN	white	.005	Center
Pavement Edge: Asphalt, Concrete	2	0	1	3	EOP	white	.005	Dash2
PHOTO CONTROL								
Photo Control Point Aerial	9	4	0	0	PHOTO_CTRL	yellow		Cont.
DRIVEWAY								
Driveway, Lane, Turnout	10	7	0	3	DRWY	cyan		Dash2
Mailbox	11	8	0	0	MAILBX	200		Cont.
MISCELLANEOUS								
Bench, Bus Stop	11	8	0	3	BENCH	200		Dash2
Playground Equipment	11	9	0	2	PLAYGR	8		Dash
Concrete Slab	16	0	1	1	SLAB	white	.005	Dot
Silo	11	11	0	2	SILO	252		Dash
Misc. Topo	16	0	1	0	MISC_TOPO	white	.005	Cont.

Description	MS Level	Co	Wt	Lc	Autocad Layer	Color	Wt	Line Type
Storage Tank	11	11	0	3	TANK	252		Dash2
Trash Disposal, Dumpster	11	9	0	0	DUMPSTER	8		Cont.
Walls, Handrails	11	9	0	3	HANDRAIL, WALL	8		Dash2
Campstove / Grill	11	9	0	2	GRILL	8		Dash
Filler Cap (Underground Tank)	11	3	0	0	UGTANK	red		Cont.
Flag Pole	11	8	0	0	FLAG_POLE	200		Cont.
Tractor Crossing	4	1	0	1	TRACTR_XS	blue		Dot
Fuel Pump Island	11	7	0	3	FUEL_PUMP	cyan		Dash2
Gate, Gap	11	7	0	3	GATE	cyan		Dash2
Dummy Chain	60	0	1	0	CHAIN	white	.005	Cont.
Glare Screen	11	0	0	3	GLARE_SCREEN	white		Dash2
Incinerator, Boilers, Furnace	11	8	0	1	FURNACE	200		Dot
CONTOURS								
Contours, Index	12	3	1	1	CONTOUR	red	.005	Dot
Contours, Intermediate	13	4	0	1	CONTOUR_MNR	yellow		Dot
SIGNAL								
Multicolumn Sign	15	0	1	3	SIGN_MULTI	white	.005	Dash2
Sign, Single Support	15	3	0	2	SIGN_SINGLE	red		Dash
Truss For Overhead Sign	15	0	1	3	SIGN_TRUSS	white	.005	Dash2
TRAFFIC SEPARATOR								
Traffic Separator	2	6	0	3	TRAF_SEP	20		Dash2
SHOULDER								
Unpaved Shoulder Line	22	0	0	3	SHLDR	white		Dash2
Paved Shoulder Line	42	1	0	3	SHLDR	blue		Dash2
RAILROAD								
RAILROAD: Crossing; Sig/Gate; Switch Control; Warning Pedestal	23	11	0	3	RAILRD_XS	252		Dash2
STATION TICS								
Sta Text & Tics 1:100	29	0	2	0	STA_100	white	.010	Cont.
Sta Text & Tics 1:20	26	0	2	0	STA_20	white	.010	Cont.
Sta Text & Tics 1:200	30	0	2	0	STA_200	white	.010	Cont.
Sta Text & Tics 1:40	27	0	2	0	STA_40	white	.010	Cont.
Sta Text & Tics 1:400	31	0	2	0	STA_400	white	.010	Cont.
Sta Text & Tics 1:50	28	0	2	0	STA_50	white	.010	Cont.
BARRIER WALL								
Barrier Wall: All Types	2	0	0	3	BARRIER_WALL	white		Dash2
MONUMENTATION								
MONUMENTATION (ALL TYPES)	35	4	0	0	MONUMENT	yellow		Cont.
SIDEWALK								
Sidewalk Back	2	2	0	3	SWK_BK	green		Dash2
Sidewalk Front	2	1	0	3	SWK_FR	blue		Dash2
FENCE								
Fences (All Types)	43	6	0	0	FENCE	20		Cont.

ARCHEOLOGICAL SITES

Archaeological Sites	44	2	0	0	ARCHEOLOGICAL	green		Cont.
----------------------	----	---	---	---	---------------	-------	--	-------

--	--	--	--	--	--	--	--	--

ATTENUATOR

Attenuation System	46	0	1	3	ATTEN	white	.005	Dash2
Guardrail Left & Right	46	0	0	0	GR_LT, GR_RT	white		Cont.

PAVEMENT MARKINGS

Lane Lines	49	0	1	0	LL	white	.005	Cont.
Turn Arrow	49	0	1	2	TURN_ARRW	white	.005	Dash

TEXT

Bearing Centerline Text	32	0	2	0	BEARING	white	.010	Cont.
Curve Data Label (Pi, Pc, Pt)	32	1	2	0	CC_DATA	blue	.010	Cont.
Text Notes And Labels	50	0	0	0	TEXT	white		Cont.

BRIDGES

Bridge Approach Slab	57	0	1	3	APP_SLAB	white	.005	Dash2
Bridge Elements	57	0	0	1	STRUCT	white		Dot
Bridge: Hole; Piling; Pier; Column	57	8	0	3	PIER	200		Dash2
Edge or Point of Wetlands	58	2	0	0	WETLAND	green		Cont.

CADD Production Standards Manual

ADJOINER	33	2	0	2	ADJ	green		Dash
BACK OF CURB	3	4	0	3	BC	yellow		Dash2
BASE LINE	1	0	2	0	BL	white	.010	Cont.
POINTS FOR BM	49	0	2	0	BNCH – PT	white	.010	Cont.
BENCHMARKS	35	4	0	0	BNCH	yellow		Cont.
BUILDING	4	1	0	0	BLDG	blue		Cont.
BUILDING TEXT	4	1	0	0	BLDG – TXT	blue		Cont.
BUILDING ELEVATION	4	1	0	0	BLDG – X	blue		Cont.
BOUNDARY	4	3	2	0	BNDY	red	.010	Cont.
BOUNDARY TEXT	4	3	2	0	BNDY – TXT	red	.010	Cont.
BACK OF CURB	3	4	1	0	BOC	yellow	.005	Cont.
BOC ELEVATIONS	3	4	1	0	BOC – X	yellow	.005	Cont.
TITLE SHEET	48	2	2	0	BORD	green	.010	Cont.
SOIL BORING	44	4	1	0	BORE	yellow	.005	Cont.
BACK OF WALK	2	2	1	0	BW	green	.005	Cont.
BAY (Canal)	5	7	0	3	BY	cyan		Dash2
CENTERLINE	41	3	2	0	CL	red	.010	Cont.
CENTERLINE OF DITCH	5	1	0	3	CLD	blue		Dash2
CENTERLINE ELEVATIONS	5	1	0	3	CL – X	blue		Dash2
COLUMN	57	8	2	0	COL	200	.010	Cont.
CONCRETE	5	16	2	0	CONC	User Def.	.010	Cont.
CORNERS	33	3	0	0	CORN	red		Cont.
TEXT	50	1	0	0	CORN – TXT	blue		Cont.
DEED LINES	19	3	0	0	DEED	red		Cont.
DIMENSION	48	0	1	0	DIM	white	.005	Cont.
EDGE OF CONCRETE	2	0	2	0	EC	white	.010	Cont.
EDGE OF PAVEMENT	2	1	1	3	EOP	blue	.005	Dash2
EDGE OF PAVEMENT ELEVATIONS	2	1	1	3	EOP – X	blue	.005	Dash2
EDGE OF WATER	5	7	0	3	EOW	cyan		Dash2
EDGE OF WATER ELEVATIONS	5	7	0	3	EOW - X	cyan		Dash2
EASEMENTS	18	1	1	0	ESMT	blue	.005	Cont.
TEXT	18	1	1	0	ESMT-TXT	blue	.005	Cont.
EDGE OF VEGETATION	7	2	0	0	EV	green		Cont.
EDGE OF WATER	5	7	0	3	EW	cyan		Dash2
FENCE	43	6	1	0	FENC	20	.005	Cont.
FLOW LINE	45	10	0	0	FL	10		Cont.
FORCE MAIN	32	2	1	0	FM	green	.005	Cont.
GAS LINE	22	4	5	1	GL	yellow	.025	Dot
GRASS PARKING	41	2	2	0	GPRK	green	.010	Cont.
GRASS PARKING ELEVATIONS	41	2	2	0	GPRK - X	green	.010	Cont.
GROUND SHOT	42	2	1	3	GS	green	.005	Dash2
HATCHING	53	0	1	3	HTCH	white	.005	Dash2
LOT LINES	47	5	0	0	LOT_LINE	4		Cont.
LOT NUMBER	47	2	0	0	LOT_NUMBER	7		Cont.
MANGROVE	7	2	0	0	MG	green		Cont.

CADD Production Standards Manual

MEAN, HIGH, WATER	12	0	2	0	MHW	white	.010	Cont.
MATCH LINE	43	0	1	0	MTCH	white	.005	Cont.
MITIGATION LINES	23	1	1	0	MITI	blue	.005	Cont.
MITIGATION ELEVATIONS	23	1	1	0	MITI - X	blue	.005	Cont.
NORTH ARROW	25	0	2	0	NARR	white	.010	Cont.
OVERHANDS	2	3	2	0	OH	red	.010	Cont.
OVERHEAD WIRES	2	3	2	0	OHW	red	.010	Cont.
PAVEMENT MARKS	48	0	1	0	PAVM	white	.005	Cont.
RIBBONS	33	0	0	2	RIBB	green		Dash
RIP RAP	8	4	1	3	RIP	yellow	.005	Dash2
ROCK EDGE	13	4	1	3	ROCK	yellow	.005	Dash2
RIGHT-OF-WAY	19	3	0	0	ROW	red		Cont.
RAIL ROAD	21	0	0	0	RR	white		Cont.
SANITARY SEWER	31	2	1	1	SAN	green	.005	Dot
SEAWALL	5	0	3	1	SW	white	.015	Dot
SECTION	13	0	1	User defined	SEC	white	.005	User defined
SIDE WALK EDGE	2	1	1	0	SIDEW	blue	.005	Cont.
WALK ELEVATIONS	2	1	1	0	SIDE-X	blue	.005	Cont.
SIGN	15	3	0	2	SIGN	red		Dash
SIGN ELEVATIONS	15	3	0	2	SIGN-X	red		Dash
STATION	26-31	0	2	0	STA	white	.010	Cont.
SHELL EDGE	11	0	2	0	STAB	white	.010	Cont.
SHELL ELEVATION	11	0	2	0	STAB-X	white	.010	Cont.
STORM SEWER	45	10	1	3	STRM	10	.005	Dash2
SWALE CENTER	42	7	1	0	SWAL	cyan	.005	Cont.
TOP OF BANK	42	2	1	0	TOB	green	.005	Cont.
TOB ELEVATIONS	42	2	1	0	TOB-X	green	.005	Cont.
GROUND ELEVATIONS	42	2	2	0	TOPO -X	green	.010	Cont.
TOE OF SLOPE	6	9	0	3	TOS	8		Dash2
TOE ELEVATIONS	6	9	0	3	TOS-X	8		Dash2
TRACT LINES	22	0	0	0	TRAC	white		Cont.
TRACT TEXT	22	0	0	0	TRAC-TXT	white		Cont.
TRAVERSE LINE	4	3	0	1	TRAV	red		Dot
TREE SYMBOLS	7	2	0	0	TREE	green		Cont.
TREE ELEVATIONS	19	2	0	0	TREE-X	green		Cont.
BOLD TEXT	50	1	3	0	B-TXT	blue	.015	Cont.
FINE TEXT	50	1	0	0	F-TXT	blue		Cont.
LIGHT TEXT	50	1	1	0	L-TXTL	blue	.005	Cont.
MEDIUM TEXT	50	1	2	0	M-TXTM	blue	.010	Cont.
CATV SYMBOLS	15	5	1	4	UCTV	6	.005	Center
CATV ELEVATIONS	15	5	1	4	UCTV-X	6	.005	Center
EFFLUENT SYMBOLS	41	9	0	1	UEFF	8		Dot
EFFLUENT ELEVATIONS	41	9	0	1	UEFF - X	8		Dot
ELECTIC SYMBOLS	6	3	0	0	UELE	red		Cont.
ELECTIC ELEVATIONS	6	3	0	0	UELE-X	red		Cont.
OVERHEAD LINES	7	3	0	0	UELE-X-O	red		Cont.
FIRE LINE SYMBOLS	17	1	1	0	UFIR	blue	.005	Cont.
FIRE LINE ELEVATIONS	17	1	1	0	UFIR - X	blue	.005	Cont.
FORCE MAIN SYMBOLS	32	2	1	2	UFM	green	.005	Dash
FORCE MAIN	42	2	0	0	UFM - X	green		Cont.

CADD Production Standards Manual

ELEVATIONS

GAS SYMBOLS	32	4	1	1	UGAS	yellow	.005	Dot
GAS ELEVATIONS	21	4	1	1	UGAS -X	yellow	.005	Dot
IRRIGATION SYMBOLS	32	5	2	0	UIRR	6	.010	Cont.
IRRIGATION ELEVATIONS	32	5	2	0	UIRR-X	6	.010	Cont.
SANITARY SYMBOLS	31	2	1	1	USAN	green	.005	Dot
SANITARY ELEVATIONS	31	2	1	1	USAN-X	green	.005	Dot
TEXT	31	2	1	1	USAN - TXT	green	.005	Dot
STORM SYMBOLS	45	10	1	3	USTM	10	.005	Dash2
TEXT	45	10	1	3	USTM-TXT	10	.005	Dash2
STORM ELEVATIONS	45	10	1	3	USTM-X	10	.005	Dash2
PHONE SYMBOLS	11	6	0	0	UTEL	20		Cont.
PHONE ELEVATIONS	11	6	0	0	UTEL - X	20		Cont.
UNDER DRAIN SYMBOLS	45	10	1	3	UDD	10	.005	Dash2
UNDER DRAIN ELEVATIONS	45	10	1	3	UDD -X	10	.005	Dash2
UTILITIES	10		1	1	UTIL		.005	Dot
WATER SYMBOLS	36	1	1	1	UWAT	blue	.005	Dot
TEXT	36	1	1	1	UWAT-TXT	blue	.005	Dot
WATER ELEVATIONS	36	1	1	1	UWAT -X	blue	.005	Dot
CORP. WETLAND	58	2	0	0	VACW	green		Cont.
CO. WETLAND	58	2	2	0	VCOW	green	.010	Cont.
WALL LINES	11	9	0	3	WALL	8		Dash2
WALL ELEVATIONS	11	9	0	3	WALL-X	8		Dash2
WATER LINES	10	1	1	1	WL	blue	.005	Dot
WELL SYMBOLS	14	4	2	0	WELL	yellow	.010	Cont.
WELL ELEVATIONS	14	4	2	0	WELL-X	yellow	.010	Cont.
WETLAND	58	2	0	0	WET	green		Cont.
MISC	63	1	1	0	Z-MISC	blue	.005	Cont.
MISC ELEVATIONS	62	1	1	0	Z-MISC-X	blue	.005	Cont.

PLATS

Plats

--	--	--	--	--	--	--	--	--

BLOCK NUMBER	BLOCK_NUMBER	7	Cont.
CANAL	CANAL	140	Cont.
CANAL TEXT	CANAL_TEXT	140	Cont.
CENTERLINE STREET	CL_STREET	2	Center
DRAINAGE EASEMENT	DRAINAGE_EASEMENT	7	Hidden2
GOLFCOURSE	GOLFCOURSE	64	Cont.
GOLFCOURSE TEXT	GOLFCOURSE_TEXT	64	Cont.
LAKE	LAKE	162	Cont.
LAKE TEXT	LAKE_TEXT	162	Cont.
LOT LINE	LOT_LINE	4	Cont.
LOT NUMBER	LOT_NUMBER	4	Cont.
MISCELLANEOUS EASEMENT	MISC_EASEMENT	7	Hidden2
PLAT BOUNDARY	PLAT_BOUNDARY	6	Cont.
PRESERVE	PRESERVE	133	Cont.
PRIVATE STREET	PRIVATE_STREET	7	Hidden2
PRIVATE STREET NAME	PRIVATE_STREET_NAME	7	Cont.
ROAD	ROAD	3	Cont.
ROAD NAME	ROAD_NAME	2	Cont.
STREET	STREET	7	Cont.
STREET NAME	STREET_NAME	7	Cont.
SUBDIVISION NAME	SUB_NAME	7	Cont.
SUBDIVISION ID	SUB_ID	7	Cont.
UTILITY EASEMENT	UTILITY_EASEMENT	7	Hidden2

County Utility Standards:

The following is the County preference regarding layer naming, line types, color, weight and other conventions for utility service plans developed for the Utility Department. These standards are applicable for water, sewer, general and franchise utilities.

County General Standards:

1. LTSCALE for all drawings shall be set to 100.
2. In AutoCad under FORMAT - DIMENSION STYLE - GEOMETRY, set arrowheads size to 12.
3. Lot numbers shall be Romans font with height of 12 and width of 0.85.
4. Street names shall be Romans font with height of 20 and width of 0.85. The height may vary in areas such as mobile home parks and condominiums where space is limited.
5. All text labels for pipes and fittings shall be Romans font with height of 12 and width of 0.85.
6. Leader lines. Leader lines are to be placed on the text layer it corresponds to, and the color set to 252. IE: A leader with the text 12" P.V.C. W.M. would be placed on the Sc12pwmtxt layer and the color changed to 252.
7. Only blocks provided in the GIS Block Directory are to be used in the system maps. The blocks LSNUMBER, SUBNAME, WS-N, and W-S-N can be exploded and edited as needed. All other blocks Are Not to be altered, redefined, or exploded. Blocks may be resized in situations where space is limited.
8. Use OSNAPS when placing and rotating blocks or drawing lines to blocks.
9. Easements unique to utility lines and equipment shall be added to the drawings and labeled.
10. Lot-Name. Label Subdivisions, Commercial properties, Schools, Churches, etc. Use the SUBNAME.dwg block, and explode and edit it as necessary. It may be resized as needed, and placed on the LOT-NAME layer using the color white.
11. Record Number. Record numbers are to be placed below the LOT-NAME that applies to that subdivision, commercial property, etc. Record numbers may also be placed above, below or beside pipe text that it applies to. Record numbers are to be Romans, height 12, width 0.85, color white, and placed on the RECORDNUM layer.
12. Water Mains, Force Mains, Raw Water Mains, Reject Mains, and Reuse Mains are to be joined continuous lines, broken only when size or material changes.
13. Sewer gravity lines are to be broken at manholes and clean-outs.
14. Utility lines shall be placed 8' off the right-of-way. Separation between two adjacent lines shall be 10'. This may vary in situations where space is limited.
15. Please keep presentation in mind. Move or adjust text such as street names, lot numbers, labels, etc. and place graphics in such a manner as to avoid over-lapping of text and graphics.

County Franchise Standards:

Franchise Abbreviation	Franchise Name	Comments
BR	Bee Ridge Utilities	SC water, BR sewer
BP	Beekman Place Utilities	SC water, BP sewer
BC	Beneva Creek Utilities	SC water, BC sewer
CS	City of Sarasota	CS water, CS sewer
CV	City of Venice	CV water, CV sewer
DM	Dolomite Utilities	SC Master Metered water, DM sewer
FC	FGUA (Florida Cities)	SC Master Metered water, FC sewer
KP	Kensington Park Utilities	SC Master Metered water, KP sewer
LF	Lake Forest Utilities	SG Master Metered water, LF sewer
LR	Longwood Run Utilities	SC water, LR sewer
SC	Sarasota County	SC water, SC sewer
SG	Utilities, Inc. (South Gate)	SC Master Metered water, FC sewer
SKUA	Siesta Key Utilities	SC Master Metered water, SKUA sewer
SL	Sylvan Lea, Inc.	SC water, SL sewer
VR	Vroom Utilities	VR water, VR sewer
WB	Woodbridge Estates	SC water, WB sewer

1. Layer names shall begin with the Franchise abbreviation. IE: A 12" P.V.C. water main belonging to the City of Sarasota, shall have a layer name of CS12pwm.
2. All water, sewer, and reuse lines belonging to Sarasota County shall be on a SC layer.

County Water Standards: CADD Standard Symbology

System Maps - Water

Abandoned Water System	35	1	1	1	Scwater-abdn	blue	.005	Dot
Abandoned Water System Text	35	1	1	1	Scwater-abdn	blue	.005	Dot
Asbestos Concrete Water Main - A.C.	36	1	1	1	Sc12awm	blue	.005	Dot
Asbestos Concrete Water Main Text	36	1	1	1	Sc12awmtxt	blue	.005	Dot
Air Release Valve	33	2	0	2	Sc12arv	green		Dash
Air Release Valve Text	33	2	0	2	Sc12arvtxt	green		Dash
Blow-off Assembly	32	2	1	0	Sc12bo	green	.005	Cont.
Blow-off Assembly Text	32	2	1	0	Sc12botxt	green	.005	Cont.
Butterfly Valve	33	2	0	2	Sc12bv	green		Dash
Cast Iron Water Main - C.I.	36	2	1	0	Sc12cwm	green	.005	Cont.
Cast Iron Water Main Text	36	2	1	0	Sc12cwmtxt	green	.005	Cont.
Cross - equal size	33	2	0	2	Sc12cross	green		Dash
Cross - unequal size	33	2	0	2	Sc12x10cross	green		Dash
Directional Bore Water Main- H.D.P.E.	36	2	1	0	Sc12hwm	green	.005	Cont.
Directional Bore Water Main Text	36	2	1	0	Sc12hwmtxt	green	.005	Cont.
Ductile Iron Water Main - D.I.P.	36	2	1	2	Sc12dwm	green	.005	Dash
Ductile Iron Water Main Text	36	2	1	0	Sc12dwmtxt	green	.005	Cont.
Easement - Utility	54	1	0	0	Sceasm	blue		Cont.
Easement Text - Utility	54	1	0	0	Sceasmtxt	blue		Cont.
Fire Hydrant - typical	38	1	0	2	Scfh	blue		Dash
Fire Hydrant - dogleg off main line	38	1	0	2	Scfh	blue		Dash
Fire Hydrant - end of line or 90 at line end	38	1	0	2	Scfh	blue		Dash
Fire Line (see notes)	38	1	0	2	Sc12pwm	blue		Dash
Fire Line Text (see notes)	38	1	0	2	Sc12pwmtxt	blue		Dash
Galvanized Iron Water Main - G.I.	36	2	1	0	Sc12gwm	green	.005	Cont.
Galvanized Iron Water Main Text	36	2	1	0	Sc12gwmtxt	green	.005	Cont.
Gate Valve	33	2	0	2	Sc12gv	green		Dash
Irrigation Meter Assembly	14	1	0	1	Scirrmeter	blue		Dot
Irrigation Meter Assembly Text	14	1	0	1	Scirrmeterxt	blue		Dot
Meter Assembly	38	1	0	1	Scmeter	blue		Dot
Meter Assembly Text	38	1	0	1	Scmetertxt	blue		Dot
Plug or Cap	32	2	1	0	Sc12plug	green	.005	Cont.
Plug Valve	33	2	1	0	Sc12wmpv	green	.005	Cont.
Polyvinyl Chloride Water Main- P.V.C.	36	2	1	0	Sc12pwm	green	.005	Cont.
Polyvinyl Chloride Water Main Text	36	2	1	0	Sc12pwmtxt	green	.005	Cont.
Private Water System	36	2	1	0	12pwm-private	green	.005	Cont.
Private Water System Text	36	2	1	0	12pwmtxt-private	green	.005	Cont.
Raw Water Main - P.V.C. (material varies)	43	1	1	1	Sc12praw	blue	.005	Dot
Raw Water Main Text	43	1	1	1	Sc12prawtxt	blue	.005	Dot

Reducer	33	2	0	2	Sc12x8red	green		Dash
Reject Water Main -P.V.C. (material varies)	35	1	1	1	Sc12preject	blue	.005	Dot
Reject Water Main Text	35	1	1	1	Sc12prejecttxt	blue	.005	Dot
Reject Well	37	1	0	1	Screjectwell	blue		Dot
Reject Well Text	37	1	0	1	Screjectwelltxt	blue		Dot
Tee (run and branch equal)	33	2	0	2	Sc12tee	green		Dash
Tee (run and branch differ)	33	2	0	2	Sc12x12x8tee	green		Dash
Water Service (see notes)	36	2	1	0	Scws	green	.005	Cont.
Water Service Text (see notes)	36	2	1	0	Scwstxt	green	.005	Cont.
Water Treatment Plant	17	2	1	1	Scwtp	green	.005	Dot
Water Treatment Plant Text	17	2	1	1	Scwtptxt	green	.005	Dot
Well (raw, production or potable water)	37	1	0	1	Scwell	blue		Dot
Welltxt	37	1	0	1	Scwelltxt	blue		Dot
Wye (run and branch equal)	33	2	0	2	Sc12wye	green		Dash
Wye (run and branch differ)	33	2	0	2	Sc12x12x8wye	green		Dash

Notes:

1. Abandoned Water Systems. All pipes, fittings, and text are to be put on a single layer. The layer name will have the same letter prefix as the franchise that it belongs to. IE: Scwater-abdn
2. Blow-off Assembly. The blow-off layer name will be based on the actual size of the water main, and not the size of the blow-off assembly. IE: a 2" blow-off assembly on a 6" water main would be on a layer named Sc6bo, and would be labeled on the drawing as B.O..
3. Crosses of unequal size. If more than two pipes leaving a cross are of different sizes, and the cross is not labeled, or reducers not shown on the record drawing, pick the two largest pipe sizes for the crosses run and branch, and place reducers as needed for the smallest pipe. IE: You have a cross with a 12", 8" and 6" water main. The cross would be a 12x8, and you would place a reducer on the 6" water main. Do not label crosses 12x12x8x6.
4. Fire Lines. All pipes and fittings are to be treated as if they were a normal water main, and put on the appropriate layer for its size and material. It should be labeled on the drawing as a fire line.
5. Irrigation Meter. If an irrigation system is tied into potable water, all pipes and fittings leading to the meter assembly are to be treated as if they were a normal water main, and put on the appropriate layer for its size and material. Refer to the Systems Map Reuse section for information concerning irrigation supplied from a reuse main. All lines beyond the meter are to be considered private lines.
6. Private Water Systems. All layer names will have no prefix and the word "private" will be added at the end. IE: a 6" P.V.C. water main layer name would be 6pwm-private. In addition, the block WS-N.dwg or W-S-N.dwg (private water & sewer services) should be added under the lot-name, or somewhere within the property limits, and be placed on the LOT-NAME layer. If there is no sewer, edit the block to reflect that it is private water services.
7. Raw Water Main. All pipes and fittings shall have "raw" in the layer name. IE: Sc12rawtee, Sc12rawgv, and be the color blue.
8. Reject Water Main. All pipes and fittings shall have "reject" in the layer name. IE: Sc12rejecttee, Sc12rejectgv, and be color 44.
9. Water Service. Water services at typical lots should be placed on the right-of-way line inside the lot, and offset 9.4' from the property line to the insertion point of the block. If there is a double service in a single meter box, place a single service box and label it (2) in parentheses on the layer Scwstxt.

10. Fractional pipe sizes. Most pipes with fractional sizes are service lines and can be placed on the water service layer. However, if a fractional sized pipe is a feeder main, it should be placed on its own layer. IE: a 2-1/2" galvanized iron pipe water main would be on a layer named Sc2halfgwm.
11. All text labels for pipes and fittings shall be Romans font with height of 12 and width of 0.85.
12. Leader lines. Leader lines are to be placed on the text layer it corresponds to, and the color set to 252. IE: A leader with the text 12" P.V.C. W.M. would be placed on the Sc12pwmtxt layer and the color changed to 252.
13. Only blocks provided in the GIS Block Directory are to be used in the system maps. The blocks LSNUMBER, SUBNAME, WS-N, and W-S-N can be exploded and edited as needed. All other blocks Are Not to be altered, redefined, or exploded. Blocks may be resized in situations where space is limited.
14. Lot-Name. Label Subdivisions, Commercial properties, Schools, Churches, etc. Use the SUBNAME.dwg block, and explode and edit it as necessary. It may be resized as needed, and placed on the LOT-NAME layer using the color white.
15. Record Number. Record numbers are to be placed below the LOT-NAME that applies to that subdivision, commercial property, etc. Record numbers may also be placed above, below or beside pipe text that it applies to. Record numbers are to be Romans, height 12, width 0.85, color white, and placed on the RECORDNUM layer.
16. Please keep presentation in mind. Move or adjust text such as street names, lot numbers, labels, etc. and place graphics in such a manner as to avoid over-lapping of text and graphics.

County Sewer Standards: CADD Standard Symbology

System Maps - Wastewater

Description	Microstation Level	Co	Wt	Lc	Autocad Layer	Color	Wt	Line Type
Abandoned Sewer	30	2	2	1	Scsewer-abdn	green	.010	Dot
Abandoned Sewer System Text	30	2	2	1	Scsewer-abdn	green	.010	Dot
Asbestos Concrete Force Main - A.C.	32	2	1	0	Sc6afm	green	.005	Cont.
Asbestos Concrete Force Main Text	32	2	1	0	Sc6afmtxt	green	.005	Cont.
Air Release Valve	33	2	0	2	Sc6fmarv	green		Dash
Air Release Valve Text	33	2	0	2	Sc6fmarvtxt	green		Dash
Blow-off Assembly	32	2	1	0	Sc6fmbo	green	.005	Cont.
Blow-off Assembly Text	32	2	1	0	Sc6fmbotxt	green	.005	Cont.
Butterfly Valve	33	2	0	2	Sc6fmbv	green		Dash
Cap or Plug - Force Main	32	2	1	0	Sc6fmplug	green	.005	Cont.
Cap or Plug - Gravity Line	41	2	1	0	Sc8sanplug	green	.005	Cont.
Cast Iron Force Main - C.I.	32	2	1	0	Sc6cfm	green	.005	Cont.
Cast Iron Force Main Text	32	2	1	0	Sc6cfmtxt	green	.005	Cont.
Cast Iron Gravity Line - C.I.	41	11	1	0	Sc8csan	252	.005	Cont.
Cast Iron Gravity Line Text	41	11	1	0	Sc8csantxt	252	.005	Cont.
Clean-out on Gravity Line	33	2	0	1	Scco	green		Dot
Clean-out on Gravity Line Text	33	2	0	1	Sccotxt	green		Dot
Clean-out on Service Line	33	2	0	1	Scss	green		Dot
Clean-out on Service Line Text	33	2	0	1	Scsstxt	green		Dot
Directional Bore Force Main - H.D.P.E.	32	2	1	0	Sc6hfm	green	.005	Cont.
Directional Bore Force Main Text	32	2	1	0	Sc6hfmtxt	green	.005	Cont.
Ductile Iron Force Main - D.I.P.	32	2	1	0	Sc6dfm	green	.005	Cont.
Ductile Iron Force Main Text	32	2	1	0	Sc6dfmtxt	green	.005	Cont.
Ductile Iron Gravity Line - D.I.P.	41	2	1	0	Sc8dsan	green	.005	Cont.
Ductile Iron Gravity Line Text	41	2	1	0	Sc8dsantxt	green	.005	Cont.
Easement - Utility	54	1	0	0	Sceasm	blue		Cont.
Easement Text - Utility	54	1	0	0	Sceasmtxt	blue		Cont.
Flow Arrow - Gravity Line (see notes)	41	11	1	0	Scfa	252	.005	Cont.
Flow Arrow - Force Main (see notes)	32	2	1	0	Scfmfa	green	.005	Cont.
Flow Meter Assembly	38	1	0	1	Scfmeter	blue		Dot
Flow Meter Assembly Text	38	1	0	1	Scfmetertxt	blue		Dot
Galvanized Iron Force Main - G.I.	32	2	1	0	Sc6gfm	green	.005	Cont.
Galvanized Iron Force Main Text	32	2	1	0	Sc6gfmtxt	green	.005	Cont.
Gate Valve	33	2	0	2	Sc6fmgv	green		Dash
Grinder Pump - Low Pressure System	37	1	1	0	Scgpp	blue	.005	Cont.

Grinder Pump Text	37	1	1	0	Scgptxt	blue	.005	Cont.
Influent Main - P.V.C. (material varies)	32	2	1	0	Scp6fm	green	.005	Cont.
Influent Main Text	32	2	1	0	Scp6fmtxt	green	.005	Cont.
Manhole	33	2	0	1	Scmh	green		Dot
Meter Assembly	38	1	0	1	Scfmmeter	blue		Dot
Meter Assembly Text	38	1	0	1	Scfmmetertxt	blue		Dot
Plug or Cap - Force Main	32	2	1	0	Sc6fmplug	green	.005	Cont.
Plug or Cap - Gravity Line	41	11	1	0	Sc8sanplug	252	.005	Cont.
Plug Valve	33	2	0	2	Sc6fmpv	green		Dash
Polyvinyl Chloride Force Main - P.V.C.	32	2	1	0	Sc6pfm	green	.005	Cont.
Polyvinyl Chloride Force Main Text	32	2	1	0	Sc6pfmtxt	green	.005	Cont.
Polyvinyl Chloride Gravity Line - P.V.C.	41	11	1	0	Sc8psan	252	.005	Cont.
Polyvinyl Chloride Gravity Line Text	41	11	1	0	N/A	252	.005	Cont.
Private Sewer System (see notes)	31	2	1	1	6pfm-private	green	.005	Dot
Private Sewer System Text (see notes)	31	2	1	1	6pfmtxt-private	green	.005	Dot
Reducer	33	2	0	2	Sc6x4fmred	green		Dash
Tee (run and branch equal)	33	2	0	2	Sc6tfmtee	green		Dash
Tee (run and branch differ)	33	2	0	2	Sc6x6x4fmtee	green		Dash
Sewer Service - Double (see notes)	31	2	1	1	Scss	green	.005	Dot
Sewer Service - Single (see notes)	31	2	1	1	Scss	green	.005	Dot
Sewer Service Text (see notes)	31	2	1	1	Scsstxt	green	.005	Dot
Vitrified Clay Gravity Line - V.C.	41	11	1	1	Sc8vsan	252	.005	Dot
Vitrified Clay Gravity Line Text	41	11	1	1	Sc8vsantxt	252	.005	Dot
Wastewater Treatment Plant	17	2	1	1	Scwwtp	green	.005	Dot
Wastewater Treatment Plant Text	17	2	1	1	Scwwtptxt	green	.005	Dot
Wye (run and branch equal)	33	2	0	2	Sc6fmwye	green		Dash
Wye (run and branch differ)	33	2	0	2	Sc6x6x4fmwye	green		Dash

Notes:

17. Abandoned Sewer Systems. All pipes, fittings, and text are to be put on a single layer. The layer name will have the same letter prefix as the franchise that it belongs to. IE: Scsewer-abdn
18. Blow-off Assembly. The blow-off layer name will be based on the actual size of the force main, and not the size of the blow-off assembly. IE: a 2" blow-off assembly on a 6" force main would be on a layer named Sc6fmbo, and would be labeled on the drawing as B.O..
19. Clean-outs. Clean-outs at the end of a gravity system should be put on the clean-out layer. Clean-outs on a service line should be placed on the sewer service layer. Do not show clean-outs for individual lot services.
20. Flow Arrows. Flow arrows are to be placed on all force mains and gravity lines.
21. Grinder Pumps - Low Pressure System. Only show grinder pumps for commercial properties. For individual residences, treat it as a normal Single Sewer Service. The grinder pump shall be put on the grinder pump layer. Pipes, fittings, and text for the force main from

- the grinder pump to the major force main shall be considered private, and placed on the Private layer. See Sewer Service note.
22. Influent mains shall be treated and labeled the same as a force main.
 23. Lift Station Number. Lift stations belonging to Sarasota County are to be numbered by using the LSNUMBER.dwg block. Explode and edit the block using the number for the lift station as provided by Sarasota County SKADA program.
 24. Private Sewer Systems. All layer names will have no prefix and the word "private" will be added at the end. IE: a 6" P.V.C. force main layer name would be 6pfm-private. In addition, the block WS-N.dwg or W-S-N.dwg (private water & sewer services) should be added under the lot-name, or somewhere within the property limits, and be placed on the LOT-NAME layer. If there is no water, edit the block to reflect that it is private sewer services.
 25. Sewer Service - Gravity. Single sewer services at typical lots should be offset 5' from the lot line and extend inside the lot from the right-of-way line. For double sewer services, place the block DBLSS.dwg at the intersection of the lot line and right-of-way line. Service lines should be a continuous line type with a weight of 2. Do not show clean-outs for individual services. See Grinder Pumps note for low pressure services.
 26. Fractional pipe sizes. Most pipes with fractional sizes are service lines and can be placed on the sewer service layer. However, if a fractional sized pipe is a main line, it should be placed on its own layer. IE: a 2-1/2" P.V.C. force main would be on a layer named Sc2halfpfm.
 27. All text labels for pipes and fittings shall be Romans font with height of 12 and width of 0.85.
 28. Leader lines. Leader lines are to be placed on the text layer it corresponds to, and the color set to 252. IE: A leader with the text 6" P.V.C. F.M. would be placed on the Sc6pfmtxt layer and the color changed to 252.
 29. Only blocks provided in the GIS Block Directory are to be used in the system maps. The blocks LSNUMBER, SUBNAME, WS-N, and W-S-N can be exploded and edited as needed. All other blocks Are Not to be altered, redefined, or exploded. Blocks may be resized in situations where space is limited.
 30. Lot-Name. Label Subdivisions, Commercial properties, Schools, Churches, etc. Use the SUBNAME.dwg block, and explode and edit it as necessary. It may be resized as needed, and placed on the LOT-NAME layer using the color white.
 31. Record Number. Record numbers are to be placed below the LOT-NAME that applies to that subdivision, commercial property, etc. Record numbers may also be placed above, below or beside pipe text that it applies to. Record numbers are to be Romans, height 12, width 0.85, color white, and placed on the RECORDNUM layer.
 32. Please keep presentation in mind. Move or adjust text such as street names, lot numbers, labels, etc. and place graphics in such a manner as to avoid over-lapping of text and graphics.