



Formerly known as CSD-1

Engineering Technical Support
10545 Armstrong Avenue, Suite 101
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AutoCAD Standards
April 1, 2008

Sacramento Area Sewer District AutoCAD Standards

April 1, 2008

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Layer Naming Convention

I. INTRODUCTION

The intent of this document is to provide standard AutoCAD guidelines for generating CAD drawings for the Sacramento Area Sewer District (the District) personnel. Consultants or contractors creating CAD drawings for the District shall follow these guidelines. Any drawings created for the District, which do not conform to these guidelines, will not be accepted. Any changes or variations to the guidelines must have prior approval by the District before implementation.

II. GENERAL REQUIREMENTS

SOFTWARE

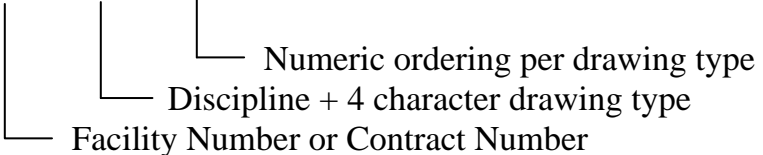
All consultants and contractors creating or editing drawings for the District will use AutoCAD Release 14 or later.

DRAWING NAME & SHEET NUMBERING CONVENTION

All drawings, with the exception of externally referenced drawings, that are created for the District shall follow the naming convention provided in this document. Drawings which are externally referenced into other drawings (such as base maps or topographic maps) need only be descriptively named for ease of identification.

- The standard for a drawing file name will be a 3-part text string. The first part will be a 4-digit facility number¹ or contract number. The second will be a single letter designating the discipline used in the drawing followed by a 4-character abbreviation representing the drawing type. The last portion will be two digits incrementing sequentially for each drawing type used in the set. No other prefixes or suffixes shall be used.

Ex.: S011-EDETL-01



Facility Number or Contract Number

Discipline + 4 character drawing type

Numeric ordering per drawing type

- The drawing file name will be used to reference other sheets in each discipline set.
- If multiple sheets are contained in a single drawing file the name within the “FILE NAME” portion of the each title block must conform to this naming convention.

¹Facility number shall be the first option. Use the contract number if facility number is not available.

List of Abbreviations for Discipline/Group:

- 1 G-General
- 2 A-Architectural
- 3 | C-Civil
- 4 | S-Structural
- 5 | | M-Mechanical
- 6 | | | E-Electrical
- 7 | | | I-Instrumentation/Control Systems
- 8 | | | F-Fire Protection
- 9 L-Landscape |
- 10 T-Traffic Control
- 11 **R-Road/Highway**
- 12 **W-Water**
- 13 **D-Drainage**
- 14 **X-Removal/Demolition**
- 15 **P-Cathodic Protection**

Those disciplines that are listed below other disciplines may be placed on the highest vertically in-line discipline sheet if consolidation is desired.

List of Abbreviations for Drawing Type:

Descriptions for abbreviations

If there are duplicate drawing types on one page, use the abbreviation that appears first on the individual discipline list. The abbreviations that are unique are separated for clarity by discipline.

Common to more than one discipline group:

- INDX** Index - An ordered reference list of the contents of the drawing package. This sheet could also have the location and vicinity maps, and the sheet maps. (Use INDX if combined with General Notes)
- NOTE** Notes – General notes, usually repeated in each section.
- SCHD** Schedules- A drawing sheet showing itemized lists of equipment within the discipline.
- SYMB** Symbols – Standard Abbreviations and Symbols that apply specifically to the discipline. Other sections may contain Standard Abbreviation and Symbol sheets containing information pertinent to the section in which they appear. Electrical drawings use ISA Standard S5.1.

- SITE** Site – Location and Vicinity Maps, Arial Views, Plan drawings showing the site and the site layout. The electrical conduit layout or routing diagrams is shown as an overlay to the “A” or “C” site plan.
- SECT** Section – Drawings that provide a greater level of detail for the components showed in the plan/elevation drawings. For example: a single cabinet showing the front, side and or rear mounted components possibly with dimensions.
- DETL** Detail – Drawings as their name implies, that give specific views, dimensions, and generally provides a greater level of detail for the parts, pieces, or components shown in the Elevation or Section drawings.
- SCHD** Schedules – A drawing sheet showing nameplate information, bill of materials, conduit lists, components or piping materials shown in tabular form.
- PIPE** Pipe- On-site piping and plumbing.

G - General

- CVRS** Cover Sheet- This drawing will hold the title & district information, the contract and consultant information, board of directors and engineer signature information.
- FLOW** Flow- Process, Flow & Hydraulic information for overall project.

A – Architectural

- ELEV** Elevations- Used primarily for Architectural plans showing the facing of the structure.

C – Civil

- SSPP** Sanitary Sewer Systems- Plan & Profile Sheets.
- RELC** Relocations- Detailed design of any utilities to be relocated by the project.
- SWPP** Storm Water Pollution Prevention- Storm Water pollution prevention plans.
- ENVR** Environmental Condition- (May occasionally be used in other disciplines)

S – Structural

- FDTN** Foundation- Foundation and pile pattern plans.
- PLAN** Plan- Structure layout plans.

M-Mechanical

HVAC Heating Ventilation & Air Conditioning- Plans specific to HVAC.

ODOR Odor- Foul air handling equipment plans.

E – Electrical & Instrumentation/Control Systems

- Abbreviation ordering for Electrical / Instrumentation only. These abbreviations shall be used in the order they appear. If the drawing is to be placed on another sheet, it should go onto the drawing that appears above it. The drawing can only go onto another drawing type within each group. Each group is ordered to start with the basic structure. The other drawings in the list provide a greater level of detail. The **BOLD** abbreviations are the minimum required drawings in a set.

INDX

- NOTE
- SYMB

SITE

- PIDD
- BLCK

ELEV

- SECT
- DETL
- SCHD

SGLD

- POWR
- WIRD
- CTRL
- LOOP
- SCHM
- LOGC
- COND

PIDD Piping & Instrumentation Drawing – The primary schematic drawing used for laying out a process control installation showing the process flow from left to right.

BLCK Block – A diagram of a system in which principal parts are represented by suitably annotated geometrical figures to show basic functions of the parts and functional relationships. Usually reserved for complex multistage control circuits such as cascade P&ID control circuits or computer systems.

- ELEV** Elevation – Plan or Elevation drawings showing the overall layout and the location of the major components to the facility. For example: a row of electrical cabinets.
- SGLD** Single Line Diagram – An elementary diagram of the primary power supply from the source to the individual breakers in the MCC. Drawings to include: One-Line Diagrams and Three Phase line diagrams.
- POWR** Power Distribution / Power Panels – Drawings that provide a greater level of detail than that shown for the wiring and components in the Single Line Drawing.
- CTRL** Control Diagrams – Schematic representations of a single control circuit in a control apparatus. Wiring Diagrams that show the actual wiring of a portion of the overall wiring diagram, focusing on a single control function.
- WIRD** Wiring Diagram – A diagram showing the specific physical interconnections between the component parts in an assembly. Includes the interconnection drawings that show the actual wiring between assemblies, chassis, or racks.
- LOOP** Loop Diagrams – Schematic representations of a complete analog current loop circuit. Wiring Diagrams that show the actual wiring of a portion of the overall, focusing on a single analog current loop function from the supply side of the power supply, through the current generator and other elements and continuing to the return side of the power supply. This drawing uses ISA Standard S5.4.
- SCHM** Schematic – A diagram showing the electrical equivalent of a circuit. This drawing may not represent the actual wiring and physical layout of the circuit but it is electrically accurate. This type drawing is usually reserved for electronic circuits rather than an electrical circuit. For example: The schematic drawing of the internal circuit board of a power supply or a battery charger.
- LOGC** Logic Diagram – A Boolean logic diagram showing the designed function of the control circuits. This drawing uses ISA Standard S5.2.
- COND** Connection Diagram – A wiring diagram used during the construction phase of the SCADA project that shows the wiring from the existing station interface terminal strips. These terminal strips provided a convenient, documented, and repetitive location for the contractor to land the wiring to the new RTU panels. These drawings do not appear in new construction.

L-Landscape

- IRRG** Irrigation Plan- Irrigation plans.
- PLNT** Planting Plan- Plans showing planting detailed locations of all vegetative matter to be planted.

T-Traffic Control

CTCP Construction Traffic Control Plan- Drawings that contain traffic control plans specific to the construction.

TSSP Temporary Stripping & Signal Plan- Plans showing temporary construction period stripping or signals plans.

R-Road/Highway

ROAD Road and Highway Plans- Road design symbols, Road sections, Plan and Profiles, Stripping Plans, Miscellaneous Details and Traffic Signal Plans.

W-Water

WTRS Water Supply- Plan and Profile sheets, Cross Sections, Construction Details and Standard Details.

D-Drainage

DRAN Drainage- Plan and Profile sheets, Cross Sections, Construction Details and Standard Details.

X-Removal/Demolition

DEMO Demolition Plans- Plans for the demolitions of any facilities to be removed by the project.

P-Cathodic Protection

(no drawing type abbreviation unique to this discipline)

- Use “CAD Layer Guidelines” by “The American Institute of Architects Press” as a guide/reference. Any additional drawing types need to be approved by the District.

STANDARDIZED SHEET NUMBERING:

- The sheet number shall be the sequential number of the sheets placement within the sheet set.
- The drawing number shall be the letter designating the discipline followed by the page number within the discipline sub set. The total number of sheets within the discipline sub set shall be placed to the right of the drawing number.

Example:

PROJECT TITLE	CONTRACT NO. _____ XXXX	SCALE
SHEET TITLE 1 SHEET TITLE 2 SHEET TITLE 3	FILE NAME _____ XXXX-XXXX-XX	HOR: N/A VER: N/A
	DRAWN _____ NAME	SHEET 10
	DESIGNED _____ NAME	C15 / 30
CHECKED _____ NAME		
	SHEET DATE MAR. 18, 2004	OF 100 SHEETS

Sheet 10 of 100 total sheets & sheet 15 of 30 sheets within the “Civil” sub set

STANDARD COVER SHEETS

The District has developed a prototype cover sheet drawing to be used for all Sacramento Area Sewer District projects. This drawing, as well as those described in the next section, are available for download at the CSD-1 website’s “Document Download Central” page (<http://www.csd-1.com/docs.html>). The cover sheet contains the District logo. In addition an area has been set aside for the names of the Board of Directors, a title area, contract number and an area for the appropriate signatures. These areas are to be updated as needed by the user and kept current for each set of contract documents. There is a consultant logo area in the lower left-hand corner. The logo used shall not exceed 6” wide by 4” high. (See Exhibit 1) The cover sheet is available in either AutoCAD R14 or AutoCAD 2000 (for use with all versions above R14) format.

STANDARD LOCATION AND SHEET LAYOUT PAGE

The District has developed a prototype for the 2nd page of the set that has areas predetermined for the sheet layout, location of project and index of drawings. This sheet shall be used for those items and can be duplicated if needed. (See Exhibit 2) General notes can be placed on this sheet as well. The prototype-drawing name for AutoCAD R14 is the SASD-bdr-pg2-r14.dwg and for AutoCAD 2000 or later drawings the name is the SASD-bdr-pg2-R2k.dwg.

STANDARD TITLE BLOCKS AND BORDERS

The District has developed a prototype border drawing that is also available for download. (See Exhibit 4) There are many parameters set within the prototype drawing that must be maintained. This is the standard border and title block used by the District and is required on all "D" size drawings. If the border block is exploded or modified in any way, its visual appearance must remain intact. If any portion of the border block is externally referenced into the sheet drawings, it must conform to the Standard regarding external references on page 13 of this booklet.

There is an area on the title block that is set aside for a company logo. The area is fixed and changes to size and location are not allowed. A logo may be designed or an existing logo modified to fit into this area.

There are three areas within the title block that are layer controlled for visibility. All layers are clearly named for easy recognition.

1. The right hand stamp area will toggle between an engineering stamp area and a survey information box.
 - ❖ Layer names:

Stamp-second	-Second engineering stamp
Survey	-Survey information box

2. The grid area will toggle between a 40-scale grid and a 50-scale grid.
 - ❖ Layer names:

Grid-40_primary	-40 scale grid
Grid-40_secondary	-40 scale grid
Grid-50_primary	-50 scale grid
Grid-50_secondary	-50 scale grid

All entries in the border are attributes and can be edited with the AutoCAD command ATE.

DRAWING ATTRIBUTES

Attributes are used to guarantee text style, text height, text placement, and also to generate database files from CAD drawings.

DRAWING TRANSFER

All CAD drawings and/or raster files submitted to the District must be on CD or DVD. All raster files shall be submitted in TIFF format, un-compressed. All Plot Style Tables (stb) and/or Color-Dependent Plot Style Tables (ctb) as well as any District approved non-standard fonts used shall also be submitted.

III. CAD OPERATIONS

GENERAL REQUIREMENTS

The final delivered drawings shall meet the following criteria:

1. The "ACAD" menu saved in the drawing.
2. The current layer set to zero. **(Do not draw on layer 0.)**
3. All drawings, including external references, will be purged of all unused blocks, layers, and line types.
4. Zoomed to the drawing limits as they are set in the prototype.

AutoCAD drawing variables are already set in the prototype drawing file. All drawings shall utilize this prototype. All entity colors and line types shall be set to "bylayer" and not set by each entity.

To use the prototype drawings the operator shall open the appropriate drawing and using the command "saveas" shall save to a drawing name as described in the naming convention portion of this booklet. The model shall then be created in model space. To view the model in paper space, the operator shall scale the viewport in paper space according to the guidelines in Figure 1 (page 12).

PAPER SIZE/BORDER

Use a paper size of 34" x 22". The prototype border drawing is part of these standards and may not be modified without prior approval by the District. All drawings submitted to the District shall use this border drawing. (See Exhibit 3). Filename: the SASD-bdr-r14.dwg (AutoCAD R14 version) and the SASD-bdr-r2k.dwg (AutoCAD 2000 or later version).

PAPER/MODEL SPACE

General:

Use of paper space and model space is required. The prototype drawing file is set up with one viewport set. Tilemode can be turned on and the drawing completed in model space. Scale can be set using Zoom, Xp or within the Properties window. Scaling guidelines are listed in Figure 1 (page 12) for using paper and model space.

Drawing units shall be set to decimal. It is suggested that one AutoCAD unit in model space equal one foot. When in paper space, one AutoCAD unit is equal to one inch.

Schematics and Non-scaled Drawings:

All drawings not drawn to a particular scale will be drawn at 1"=1'. These drawings shall be drawn in model space.

Scaled Drawings using Paper and Model Space:

All drawings using Paper and Model Space shall be drawn full scale in model space. The prototype drawing is set with the border, working area, and viewport in paper space. All dimensions will be placed in model space with the appropriate text height. All general notes, view notes, lists or charts will be placed in paper space. Any notes in model space shall match the text height of notes in paper space where appropriate.

SCALES- STANDARD SCALE FACTORS

General:

Setting the scale of the viewport will set proper scale. A chart of standard scale factors for viewport scale factors is provided in Figure 1 (page 12). These are the only scales allowed for drawings submitted to the District. The scale should be determined before beginning a drawing so text height can be calculated.

Scale	Zoom XP Scale Factor	Standard Text	Title & Subtitle Text
1"=50'-0"	.020	5.00	6.00
1"=40'-0"	.025	4.00	4.80
1"=20'-0"	.050	2.00	2.40
1"=10'-0"	.100	1.00	1.20
3/4"=1'-0"	.750	0.13	0.16
1/2"=1'-0"	.500	0.20	0.24
3/8"=1'-0"	.375	0.27	0.32
1/4"=1'-0"	.250	0.40	0.48
1/8"=1'-0"	.125	0.80	0.96
1"=1'-0"	1.00	0.10	0.12
2"=1'-0"	2.00	0.05	0.06

(Figure 1)

- ❖ Figure 1 suggests that one AutoCAD unit is equal to 1' in model space and one AutoCAD unit is equal to 1" in paper space.

On D size (34x22) drawings, standard text must not be smaller than 0.1 inches high when plotted at full size. Titles and subtitles shall be no smaller than 0.12 inches high. The table above list text heights for each scale factor. The scale factor will also be used for LTSCALE and DIMSCALE.

LAYER NAMES

The names used for layers shall be descriptive in nature. Do not use numbers or nondescript lettering. A CAD layer guideline is included in this document as "Attachment A". It outlines the method to be used in creating layer names and lists suggested names for layers. Follow the guideline when creating layer names. Any additional layers created shall be provided in printed form to the division in the same format as "Attachment A". **All drawings supplied to the District shall have all unused layers purged.**

Example: C-SSWR-PIPE-12 (Civil-Sanitary Sewer-Pipe-12")

FONTS

All fonts shall be from the AutoCAD standard fonts supplied with the software. The District must approve any other font before use and a font file shall be provided to the county. This also includes fonts unique to other AutoCAD based programs such as Autodesk Architectural Desktop or Autodesk Land Desktop. If there is doubt about whether a font is AutoCAD standard the file for that font should be submitted with the drawing files.

LINE TYPES

A line type is a specific sequence of alternating line segments and spaces. Line types shall be assigned to layers. Do not assign line types by entity. The length of segments and spaces of a line type varies in size depending on how the AutoCAD system variable "LTSCALE" is set. The LTSCALE should be set according to the insertion scale factor specified in the "Scales-Standard Scale factors" section of the Standards. The ltscale can be set for individual objects as needed. If tilemode is set to zero (paper space enabled), set ltscale and psltscale to 1.

All line types other than the AutoCAD standard line types must be approved by the District and a file must be provided including each line type used. This also includes line types unique to other AutoCAD based programs such as Autodesk Architectural Desktop or Autodesk Land Desktop. If there is doubt about whether a line type is AutoCAD standard the file for that line type should be submitted with the drawing files.

VIEWS & UCS

Each viewport should be given a view name. This will allow a quick return to the exact view set for each viewport. The viewport name should be descriptive.

Three-dimensional drawings are not used. Do not modify UCS settings. All drawings shall remain in plan view using the default AutoCAD World UCS. To modify the orientation of a particular view use the DVIEW command.

Any drawing not in compliance with these standards shall be rejected and returned for correction. Plotted sheets will not be approved until drawing files are correct.

EXTERNAL REFERENCES

All external references (Xref's) and inserted images must be placed in the same directory as the drawing file. All Xref items shall be attached on layer zero.

PLOTTING

The consultant shall provide all stb and/or ctb files used for plotting to the District and if using AutoCAD R14 all .pcp files shall be provided. To ensure the District has the correct final plot layer settings; the consultant shall save these settings at the time of plotting. The layer settings can be saved using the “Layer States” manager.



Formerly Known As County Sanitation District 1 (CSD-1)

**CONTRACT DRAWINGS FOR
PROJECT TITLE**

BOARD OF DIRECTORS

JEANNIE BRUINS	DON NOTTOLI
ROGER DICKINSON	SUSAN PETERS
KERRI HOWELL	SOPHIA SCHERMAN
ROBERTA MacGLASHAN	DAN SKOGLUND
KEVIN McCARTY	JIMMIE R. YEE

DATE OF PROJECT

CONSULTANT LOGO

APPROVAL RECOMMENDED:	xxxxxx, NAME OF CONSULTANT/ENGINEER	RCE xxxxx	DATE
APPROVAL RECOMMENDED:	ROSEMARY CLARK, PRINCIPAL ENGINEER/ARCHITECT	RCE 53170	DATE
APPROVAL RECOMMENDED:	CHRISTOPH DOBSON, COLLECTION SYSTEMS CHIEF	RCE 56516	DATE
APPROVED:	MARY K. SNYDER, DISTRICT ENGINEER	RCE 47869	DATE



ENCROACHMENT APPROVAL:

APPROVED: _____

REZA MOGHESSI
TRANSPORTATION DIVISION CHIEF,
COUNTY OF SACRAMENTO, RCE 52605

CONTRACT NO. XXXX

Standard Cover Sheet

	LOCATION MAP	INDEX OF SHEETS <table border="1" style="margin: auto; border-collapse: collapse;"> <thead> <tr> <th>DRAWING NO.</th> <th>SHEET NO.</th> <th>TITLE</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>G1</td> <td>GENERAL COVER SHEET</td> </tr> <tr> <td>2</td> <td>G2</td> <td></td> </tr> <tr> <td>3</td> <td>C1</td> <td>CIVIL</td> </tr> </tbody> </table>		DRAWING NO.	SHEET NO.	TITLE	1	G1	GENERAL COVER SHEET	2	G2		3	C1	CIVIL	SHEET MAP		CONSULTANT LOGO 	PROJECT NAME SHEET TITLE 1 SHEET TITLE 2 SHEET TITLE 3	CONTRACT NO. _____ PROJECT NAME _____ DESIGNED NAME _____ CHECKED NAME _____ SHEET DATE _____ MAR. 22, 2004
DRAWING NO.	SHEET NO.	TITLE																		
1	G1	GENERAL COVER SHEET																		
2	G2																			
3	C1	CIVIL																		
						SCALE: HOR: N/A VER: N/A SHEET 10 / 3 OF 100 SHEETS														

Standard Location and Sheet Layout Page

Layer Naming Convention

The American Institute of Architects CAD standards are the basis for the naming convention illustrated as follows:

MAJOR GROUP	(Required)
-MINOR GROUP	(Required)
-MODIFIER	(optional)
-USER DEFINED	(optional)

Example:

Major Group...

C CIVIL

Minor Group...

ALGN Alignment (FOUR CHARACTERS)

Modifier Group...

PARC Parcel Line (FOUR CHARACTERS)

User Defined...

Anything that accommodates special requirements (i.e., pipe size, type etc...)

The layer name looks like this...

C-ALGN-PARC

The Major Groups are used to distinguish disciplines. They are especially useful in multi-discipline drawings. Features that are existing are not categorized as a Major group discipline. Layers that are used for existing features may be represented with an "X." In a drawing where there are multi-discipline existing features, an "X" followed by the standard letter may be used. It is not required. The "X" is an optional designation.

Example:

A) Standard...

X-ROAD-BKCB Existing top back of curb

B) More specialized...

XC-ROAD-BKCB Existing top back of curb -CIVIL

XA-BLDG-BARN Existing site building -ARCHITECTURAL

The Major Group and Minor Group are required for layer names.

The Modifier is a 4-character option used to add one more level of detail to the drawing layer name. The User Defined is a 1 to 4-character option that makes the layer name unique to the project. This layer naming system is designed to allow the user to decide the level of detail that will be used. It may be unnecessary, in some instances, to show intricate detail for existing utilities. You can group all utilities that do not need specific names all into:

X-UTIL

This could include all electrical, gas, and telephone etc...

Where more detail is required, use specific modifiers:

X-UTIL-ELEC	Existing electrical
X-UTIL-NGAS	Existing natural gas
X-UTIL-TELE	Existing telephone
...or for example with TEXT	
C-TEXT-SSWR	Sanitary Sewer text
C-TEXT-SSWR-PIPE	Pipe Text
C-TEXT-STRM	Storm Drainage text.

Definitions...**Major Group Layer Name**

C-Civil
 A-Architectural
 M-Mechanical
 S-Structural
 P-Plumbing
 L-Landscape Architecture
 E-Electrical
 F-Fire Protection
 X-Existing
 XC, XA, XM etc...

Specialized Existing

Minor Group Layer Name

Minor Groups are laid out as follows:

Four-letter group name: "Full Name"

Examples of applicable features to be included in-group.

ALGN "Alignment."

This group is alignments and boundaries. An alignment example is a property line. A boundary can be district boundaries, city limits, subdivision boundaries, or watershed limits.

ESMT: "Easement."

All easements.

ROAD "Road."

All improvements and alignments within right of way areas including the right of way line.

SITE: "Site."

All improvements outside of right of way.

BLDG: "Building."

All Structures

LSCP: "Landscape."

Plants, shrubs, sprinkler systems, trees, general landscaping items.

UTIL: "Utilities."

Fire Department and Electric, Gas, Cable, Telephone companies.

WTWY: "Waterways."

Streams, rivers, channels, lakes, wetlands.

SSWR: "Sanitary Sewer."

Manholes, clean-outs, flusher branch, conveyance.

STRM: "Storm Sewer."

Manholes, drop inlets, pumps, stations, conveyance.

WATR: "Water Supply."

Valves, conveyance, blow-offs.

SURV: "Survey"

Bench marks, monuments, bearings, and property lines.

TOPO: "Topography."

Contours, spot elevations, grids, control points.

TEXT: "Text."

All text is located from this group name.

Standard CAD Layers

District Boundaries, Rights of Way, Property Lines, Flood Plains

C-ALGN-PRLN	Property Line
C-ALGN-PARC	Assessor Tax Parcel
C-ALGN-SUBD	Subdivision Boundary
C-ALGN-FLDP-500Y	500-year Floodplain
C-ALGN-FLDP-100Y	100-year Floodplain
C-ALGN-FLDP-10Y	10-year Floodplain
<i>Text</i>	
C-TEXT-PRLN	Property Line
C-TEXT-PARC	Assessor Tax Parcel
C-TEXT-SUBD	Subdivision Boundary
C-TEXT-FLDP-500Y	
C-TEXT-FLDP-100Y	
C-TEXT-FLDP- 10Y	

Water Resources Specific Districts

C-ALGN-ZN11	Zone 11
C-ALGN-ZN12	Zone 12
C-ALGN-ZN13	Zone 13
C-ALGN-ZN40	Zone 40

Text

C-TEXT-ZN11
C-TEXT-ZN12
C-TEXT-ZN13
C-TEXT-ZN40

Water Quality Specific Districts

C-ALGN-CSD1	County Sanitation District 1
C-ALGN-REGN	Sacramento Regional County Sanitation District

Text

C-TEXT-CSD1
C-TEXT-REGN

Water Districts

C-ALGN-WDIS-ARC	Arcade
C-ALGN-WDIS-ARCO	Arden-Cordova
C-ALGN-WDIS-CARN	Carmichael
C-ALGN-WDIS-CITZ	Citizens
C-ALGN-WDIS-METR	Metro Airport
C-ALGN-WDIS-NATM	Natomas Mutual
C-ALGN-WDIS-RANM	Rancho Murieta
C-ALGN-WDIS-RIOL	Rio Linda
C-ALGN-WDIS-NORT	Northridge
C-ALGN-WDIS-SANJ	San Juan
C-ALGN-WDIS-OMCH	Omuchumne
C-ALGN-WDIS-ORNG	Orangevale
C-ALGN-WDIS-TOKY	Tokay
C-ALGN-WDIS-CHID	Citrus Heights
C-ALGN-WDIS-ELDO	Eldorado
C-ALGN-WDIS-ELKG	Elk Grove
C-ALGN-WDIS-FAIR	Fair Oaks
C-ALGN-WDIS-FOLS	Folsom

C-ALGN-WDIS-GALT	Galt
C-ALGN-WDIS-ROSE	Roseville
C-ALGN-WDIS-SACR	Sacramento
C-ALGN-WDIS-CLAY	Clay
C-ALGN-WDIS-FLOR	Florin
C-ALGN-WDIS-FRUI	Fruitridge
C-ALGN-WDIS-DELP	Del Paso
C-ALGN-WDIS	All Water Districts

Text

C-TEXT-WDIS	All Water District Text
-------------	-------------------------

Cities

C-ALGN-CITY-SACR	Sacramento
C-ALGN-CITY-FOLS	Folsom
C-ALGN-CITY-GALT	Galt
C-ALGN-CITY-ROSE	Roseville
C-ALGN-CITY-ISLE	Isleton
C-ALGN-CITY-WLGR	Walnut Grove
C-ALGN-CITY-HOOD	Hood
C-ALGN-CITY-COUR	Courtland

Text

C-TEXT-CITY	
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Planning Land Uses

C-ALGN-LAND-RECR	Recreation
C-ALGN-LAND-AGUR	Agriculture/Urban
C-ALGN-LAND-NATR	Natural Preserve
C-ALGN-LAND-AGCR	Agriculture/Cropland
C-ALGN-LAND-GA20	General Agriculture 20 acre
C-ALGN-LAND-GA80	General Agriculture 80 acre
C-ALGN-LAND-AGRR	Agriculture/Recreation Reserve
C-ALGN-LAND-AGRS	Agriculture Residential
C-ALGN-LAND-LDRS	Low Density Residential
C-ALGN-LAND-MDRS	Medium Density Residential
C-ALGN-LAND-HDRS	High Density Residential
C-ALGN-LAND-URTR	Urban Transit Oriented
C-ALGN-LAND-NHTR	Neighborhood Transit Oriented
C-ALGN-LAND-CORE	Core Area
C-ALGN-LAND-CMOF	Commercial and Office
C-ALGN-LAND-INND	Intensive Industrial

C-ALGN-LAND-EXND
 C-ALGN-LAND-URDV
 C-ALGN-LAND-RESA
 C-ALGN-LAND-RESC
 C-ALGN-LAND-QUAS

Extensive Industrial
 Urban Development
 Aggregate Resources
 Resource Conservation Area
 Public/Quasi-Public

Text

C-TEXT-LAND

Hatching

C-HTCH-ZN11
 C-HTCH-ZN12
 C-HTCH-ZN13
 C-HTCH-ZN40

Zone 11
 Zone 12
 Zone 13
 Zone 40

Water Quality Specific Districts

C-HTCH-CSD1
 C-HTCH-REGN
 District

County Sanitation District 1
 Sacramento Regional County Sanitation

Water Districts

C-HTCH-WDIS-ARC
 C-HTCH-WDIS-ARCO
 C-HTCH-WDIS-CARN
 C-HTCH-WDIS-CITZ
 C-HTCH-WDIS-METR
 C-HTCH-WDIS-NATM
 C-HTCH-WDIS-RANM
 C-HTCH-WDIS-RIOL
 C-HTCH-WDIS-NORT
 C-HTCH-WDIS-SANJ
 C-HTCH-WDIS-OMCH
 C-HTCH-WDIS-ORNG
 C-HTCH-WDIS-TOKY
 C-HTCH-WDIS-CHID
 C-HTCH-WDIS-ELDO
 C-HTCH-WDIS-ELKG
 C-HTCH-WDIS-FAIR
 C-HTCH-WDIS-FOLS
 C-HTCH-WDIS-GALT
 C-HTCH-WDIS-ROSE

Arcade
 Arden-Cordova
 Carmichael
 Citizens
 Metro Airport
 Natomas Mutual
 Rancho Murieta
 Rio Linda
 Northridge
 San Juan
 Omuchumne
 Orangevale
 Tokay
 Citrus Heights
 Eldorado
 Elk Grove
 Fair Oaks
 Folsom
 Galt
 Roseville

C-HTCH-WDIS-SACR	Sacramento
C-HTCH-WDIS-CLAY	Clay
C-HTCH-WDIS-FLOR	Florin
C-HTCH-WDIS-FRUI	Fruitridge
C-HTCH-WDIS-DELP	Del Paso

Water Districts

C-HTCH-CITY-SACR	Sacramento
C-HTCH-CITY-FOLS	Folsom
C-HTCH-CITY-GALT	Galt
C-HTCH-CITY-ROSE	Roseville
C-HTCH-CITY-ISLE	Isleton
C-HTCH-CITY-WLGR	Walnut Grove
C-HTCH-CITY-HOOD	Hood
C-HTCH-CITY-COUR	Courtland

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C-HTCH--LAND-RESA	Aggregate Resources
C-HTCH--LAND-RESC	Resource Conservation Area
C-HTCH--LAND-QUAS	Public/Quasi-Public

Roadways and Street ImprovementsRoadways

C-ROAD-COLL	Collector
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C-ROAD-ARTL	Arterial
C-ROAD-PRIM	Primary
C-ROAD-SCND	Secondary
C-ROAD-FRWY	Freeway
C-ROAD-RESD	Residential
<u>Centerlines</u>	
C-ROAD-COLL-CTLN	Collector Centerline
C-ROAD-ARTL-CTLN	Arterial Centerline
C-ROAD-PRIM-CTLN	Primary Centerline
C-ROAD-SCND-CTLN	Secondary Centerline
C-ROAD-FRWY-CTLN	Freeway Centerline
C-ROAD-RESD-CTLN	Residential Centerline
<u>Road Improvements</u>	
C-ROAD-CGSW	Curb, Gutter and Sidewalk
C-ROAD-BKCB	Back of Curb
C-ROAD-LPCB	Lip of Curb
C-ROAD-BKSW	Back of Sidewalk
C-ROAD-MEDN	Median Curb
C-ROAD-STRP	Lane Striping
<i>Text</i>	
C-TEXT-COLL	Street Names, etc...
C-TEXT-ARTL	
C-TEXT-PRIM	
C-TEXT-SCND	
C-TEXT-FRWY	
C-TEXT-RESD	
C-TEXT-ROAD	General Street Improvement text
<u>Hatching</u>	
C-HTCH-CGSW	Curb, Gutter and Sidewalk
<u>Site Improvements</u>	
C-SITE-CGSW	Curb, Gutter and Sidewalk
C-SITE-BKCB	Back of Curb
C-SITE-LPCB	Lip of Curb
C-SITE-BKSW	Back of Sidewalk
C-SITE-MEDN	Median Curb
C-SITE-STRP	Lane Striping

Text

C-TEXT-SITE

General Site Text

Hatching

C-HTCH-CGSW

Curb, Gutter and Sidewalk

Buildings and Structures

C-BLDG-HOU

House

C-BLDG-BARN

Barn

C-BLDG-SHED

Shed

C-BLDG-DECK

Deck

C-BLDG-PTIO

Patio

C-BLDG-WALL

Wall

C-BLDG-WALL-ROCK

Rock Wall

C-BLDG-WALL-BRIK

Brick Wall

C-BLDG-WALL-RETN

Retaining Wall

C-BLDG-FENC

Fence

C-BLDG-FENC-CLNK

Chain Link Fence

C-BLDG-FENC-WOOD

Wood Fence

Text

C-TEXT-HOUS

C-TEXT-BARN

C-TEXT-SHED

C-TEXT-DECK

C-TEXT-PTIO

C-TEXT-WALL

C-TEXT-WALL-ROCK

C-TEXT-WALL-BRIK

C-TEXT-WALL-RETN

C-TEXT-FENC

C-TEXT-FENC-CLNK

C-TEXT-FENC-WOOD

C-TEXT-BLDG

General Building Text

Landscaping

C-LSCP-TREE

Trees

C-LSCP-TREE-OAKS

Oak Trees

C-LSCP-TREE-REM

Trees to be Removed

C-LSCP-BUSH

Bush

C-LSCP-SHRB

Shrubs

Text

C-TEXT-TREE

C-TEXT-TREE-OAKS

C-TEXT-TREE-REM

C-TEXT-BUSH

C-TEXT-SHRB

C-TEXT-LSCP

General Landscaping Text

Waterways

Creeks

C-WTWY-CREK

Creek

C-WTWY-CREK-CTLN

Creek Centerline

C-WTWY-CREK-FWLN

Creek Flow Line

C-WTWY-CREK-TOP

Creek Top of Bank

C-WTWY-CREK-TOE

Creek Toe of Bank

Text

C-TEXT-CREK

Rivers

C-WTWY-RIVR

River

C-WTWY-RIVR-CTLN

River Centerline

C-WTWY-RIVR-FWLN

River Flow Line

C-WTWY-RIVR-TOP

River Top of Bank

C-WTWY-RIVR-TOE

River Toe of Bank

Text

C-TEXT-RIVR

Ditches

C-WTWY-DTCH

Ditch

C-WTWY-DTCH-CTLN

Ditch Centerline

C-WTWY-DTCH-FWLN

Ditch Flow Line

C-WTWY-DTCH-TOP

Ditch Top of Bank

C-WTWY-DTCH-TOE

Ditch Toe of Bank

Text

C-TEXT-DTCH

Swales

C-WTWY-SWAL	Swale
C-WTWY-SWAL-CTLN	Swale Centerline
C-WTWY-SWAL-FWLN	Swale Flow Line
C-WTWY-SWAL-TOP	Swale Top of Bank
C-WTWY-SWAL-TOE	Swale Toe of Bank

Text

C-TEXT-SWAL	
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Channels

C-WTWY-CHAN	Channel
C-WTWY-CHAN-CTLN	Channel Centerline
C-WTWY-CHAN-FWLN	Channel Flow Line
C-WTWY-CHAN-TOP	Channel Top of Bank
C-WTWY-CHAN-TOE	Channel Toe of Bank

Text

C-TEXT-CHAN	
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Misc.

C-WTWY-LAKE	Lake
C-WTWY-POND	Pond
C-WTWY-WTLN	Wetland

Text

C-TEXT-WTWY	General Waterway Text
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Storm DrainsStructures

C-STRM-MANH-48	48" Manhole
C-STRM-MANH-54	54" Manhole
C-STRM-DRIN-TYPA	Drop Inlet- (Standard type)
C-STRM-DRIN-TYPB	Drop Inlet- (Standard type)
C-STRM-DRIN-TYPC	Drop Inlet- (Standard type)
C-STRM-DRIN-TYPD	Drop Inlet- (Standard type)
C-STRM-DRIN-TYPE	Drop Inlet- (Standard type)
C-STRM-DRIN-TYPF	Drop Inlet- (Standard type)

C-STRM-TRSH	Trash Rack
C-STRM-HWAL	Headwall
C-STRM-PIPE-(x)	Pipe (Size)
C-STRM-CULV-(x)	Culvert (Size)
C-STRM-CULV BOX	Box Culvert

Text

C-TEXT-MANH	
C-TEXT-DRIN	
C-TEXT-HWAL	
C-TEXT-PIPE	
C-TEXT-CULV	
C-TEXT-CULV-BOX	
C-TEXT-STRM	General Storm Drain Text

Borders

C-BRDR	Any Border
C-BRDR-VIEW-(#)	View Port (#)
C-BRDR-GRID-MAJ	Major Profile Grid
C-BRDR-GRID-MIN	Minor Profile Grid

Text

C-TEXT-TITL	Main Sheet Title
C-TEXT-TITL-SUB (#)	Secondary Text
C-TEXT-ATTR-SUB (#)	Attributed Text

Topography

C-TOPO-CNDX	Contour-Index
C-TOPO-COMT	Contour-Interim
C-TOPO-DNDX	Depression-Index
C-TOPO-DINT	Depression-Interim
C-TOPO-SPOT	Spot Elevations
C-TOPO-CTRL	Survey Control
C-TOPO-CORD	Coordinate Grid

Text

C-TEXT-CNDX
C-TEXT-COMT
C-TEXT-DNDX
C-TEXT-DINT
C-TEXT-SPOT

C-TEXT-CTRL
C-TEXT-CORD

Utilities

C-UTIL-NGAS	Natural Gas (PG&E)
C-UTIL-ELEC	Electric (SMUD)
C-UTIL-CABL	Cable Vision
C-UTIL-TELE	Telephone
C-UTIL-COMM	Communications

Easements

C-ESMT-NGAS	Natural Gas (PG&E)
C-ESMT-ELEC	Electric (SMUD)
C-ESMT-CABL	Cable Vision
C-ESMT-TELE	Telephone
C-ESMT-COMM	Communications
C-ESMT-UTIL	Public Utility
C-ESMT-ROAD	Roadway, IOD, access
C-ESMT-SSWR	Sanitary Sewer
C-ESMT-STRM	Storm Drain

Structures and Details

These layers are specifically for drawings where the detail or structure is the primary focus of the drawing.

The naming convention is the same except the object name moves from the modifier group to the minor group. For instance:

For a Drop Inlet Detail -

The Drop Inlet Layer is:

C-STRM-DRIN

The Detail Drawing for the Drop Inlet is:

C-DRIN

The abbreviated list is as follows:

C-DRIN

C-MANH

C-PUMP

C-PUMP-CONC

C-PUMP-PIPE

C-TEXT-PUMP

As more details are amassed, this portion of the layer names will grow!

Miscellaneous

C-LGND	Lines, etc. in a Legend
C-LGND-SYMB	All symbols
C-TEXT-LGND-SUB (#)	All text
C-SEAL	County Seal
C-SIGB	Lines, etc. in a Signature Block
C-TEXT-SIGB (#)	All Text
C-NRTH	North Arrow