COUNTY OF SAN DIEGO
DEPARTMENT OF PUBLIC WORKS

CIVIL 3D CAD DESIGN STANDARDS

JANUARY
2023

CoSD DPW CAD Design Standards

This document defines the current CAD Standards for DPW design and construction drawing files and plan sheets. Please note that as AutoCAD Civil 3D continues to update so will DPW's CAD Standards. Current versions of the DPW standards are available at: http://www.sandiegocounty.gov/content/sdc/dpw/standards.html. If you have additional questions regarding the CAD Design Standards contact:

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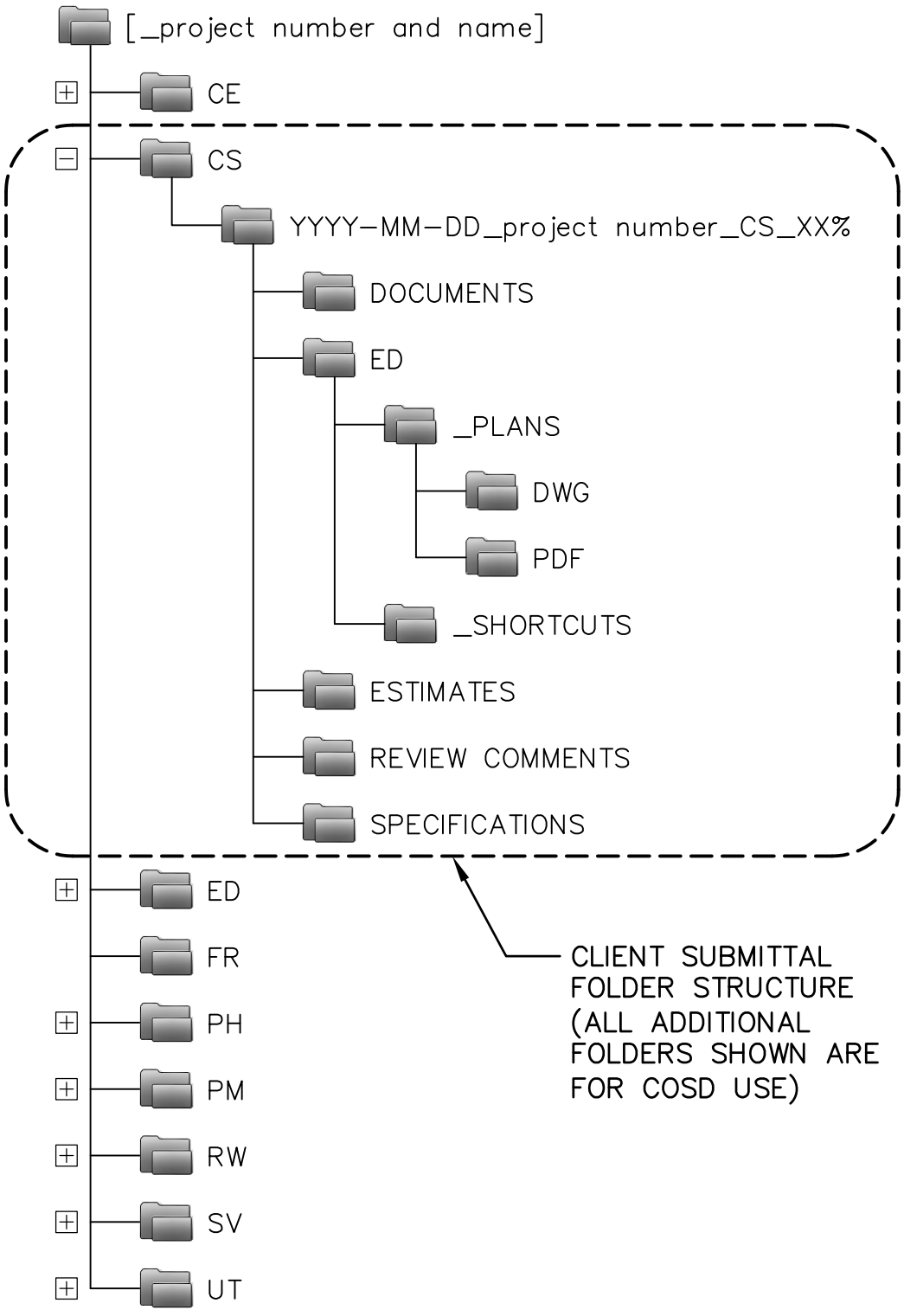
Engineering Design Submittals

All CAD file submittals provided to the County of San Diego for review and approval shall include all current data generated utilizing the County of San Diego's currently adopted version of AutoCAD Civil 3D. The CAD files shall also meet all CoSD DPW CAD Standards and the sheet format shall conform to the CoSD Plan Preparation Guidelines. Full size and half size pdf files are to be to scale and included in each submittal.

Included CAD files will all be parametric/dynamic alignment data, profile data, corridors with all assemblies and subassemblies and the data shortcuts folder structure. Survey data shall include point files, TIN surface .xml files and digital terrain models. All data and files necessary to replicate the original drawing in its entirety and to allow a thorough review of all design elements electronically are to be provided.

Refer to the project's Scope of Services document for additional submittal specific requirements.

Project Directory Structure



Field Survey Files

DPW Field Surveys will provide at least two CAD files in the SV directory of the project.

1) Topographic Survey Plan. This file will be named with a Survey tracking number similar to 2010-0001-EXTO. It is the design team's responsibility to ensure that any copy of the survey master file reflects all the current data provided by Field Surveys. The 1234567-EXPN file can be referenced as an xref into the design files.

2) Legal Road Centerline. This file will be named with a Survey tracking number similar to 2010-0001-EXCL. It is the design team's responsibility to ensure that any copy of the survey master file reflects all the current data provided by Field Surveys. The 1234567-EXCL-SV file can be referenced as an xref into the design if necessary.

File Types and File Naming

Civil design projects consist of multiple drawing files that require file naming management. All working engineering design files including the EXTO, EXCL, EXPN and PRPN master files and all xref files for the project will be in the ED_Plans\Source Drawings folder. All production sheets will be in the ED_Plans\DWG folder.

Most of the drawing files can be classified as one of the three types listed below.

Construction Files Construction files are the files that are plotted as part of the construction plan sheet set. Each construction plan is a compilation of master files, including the title block (TB). The standard construction file naming convention is as follows: The (7) digit project number, a hyphen followed by a single discipline alpha character, the (3) numbers indicating the sheet number, a hyphen and the sheet title. For example, if the project number were 1234567, the first two civil construction sheets would be named as follows:

1234567–C001–Title Sheet	Sheet 1 in the set
1234567–C002–General Notes and References	Sheet 2 in the same project set

Template/Sample files xxxxxxx-C001-Title Sheet.dwg, xxxxxxx-C002-General Notes and References.dwg and xxxxxxx-C-TB.dwg are provided in the deliverables package and form the basic setup for a project sheet set. The 'xxxxxxx' is to be replaced with the project number. Please follow the steps below.

Files will be located in the ED_Plans\DWG directory for the project.
Rename the C–TB sheet to include a one letter designation for the specific discipline. ie: Structural S-TB, Electrical E-TB, Landscaping L-TB, Utilities U-TB.
Rename the other two sheets with the same single letter designation.
ie: Structural = 1234567-S001-(title).dwg, 1234567-S002-(title).dwg
make certain 'xxxxxxx' is replaced with the project number as described above.
Open sheets -x001 and -x002 and re-attach the renamed –TB sheet making certain there is no path used. For additional sheets required, open sheet –x002 and make a saveas copy. This ensures that the correct title block and attribute information is included.

Master Files Master files are the files containing elements or features that are the main components of the design. Examples of master files include the topography (EXTO), road centerline (EXCL), existing planimetric design (EXPN) and proposed planimetric design (PRPN) with the surface and alignments referenced as data shortcuts. Master files are named with the project number (ex 1234567-EXTO, 1234567-EXCL, 1234567-PRPN, etc.). Master files of existing features are prefixed with "EX" (e.g. EXTO, EXCL and EXRW) whereas master files for proposed features are prefixed with "PR" (e.g. PRPN, etc). The following are standard master file names and descriptions. Once a project is started the master files shall not be renamed. In the following example, the project number is 1234567.

1234567-EXRW	Existing Right of Way	1234567-UTIL	Existing Utilities
1234567-EXCL	Existing Survey Centerline	1234567-PROF	Profiles
1234567-EXTO	Existing Topography surface	1234567-SECT	Sections
1234567-EXPN	Existing Planimetric	1234567-CORR	Corridors
1234567-PRPN	Proposed Planimetric	1234567-PIPE	Pipe Networks

Master files represent multiple features that are referenced to an established coordinate system. Do not use any commands that will alter the origin of the design model or the applied coordinate system. Additional master files may be provided by other departments. E.g. DGS – Engineering will provide the EXRW file(s)

The CAD Manager will create the EXTO, EXCL and EXPN master files from the data provided by the survey department and place them in the ED_Plans\Source Drawings folder for the project. The design team will prepare any additional master files from plans provided by other internal departments or outside utility companies. All CAD project files shall be prepared in accordance with the coordinate system provided by (or approved by) the county surveyor. Each utility is to be on a unique layer. If the same utility is supplied by multiple owners, the layer names are to reflect the owners' names.

All surface and alignment data provided by the survey department is to be data referenced into the PRPN master file and into any construction or production files requiring the information.

Working Files Working files are temporary files and have no specific naming convention. Their purpose is for general design and drafting work that will later be incorporated into construction files. These files are to be located in the ED_Plans\Source Drawings folder for the project.

Changing Design Phases

Prior to advancing the next design phase do the following:

- Create a folder in ED\Archives named for the percent and description [ED_30%-Submittal]
- Create PDF files of all CAD Construction plans and place in the folder created in the step above.
- All cad files in the ED\Plans folder and subfolders are to remain in place and not replicated or archived. They will be used to proceed with the design of the next phase.

Design Element Naming

Alignments: Alignments shall be named based on the centerline and offset. When all improvements are within the limits of an existing road survey alignment the alignments shall be named based on the RS number, for example RS1234-L-EP, RS1234-R-TC.

Note that proposed changes to the centerline will either be a new road survey (example RS2310-1) or simply a construction centerline. Verify with Field Surveys to see if a new road survey is justified If approved utilize the new RS number in alignments (example RS2310-1-R-EP). If the new centerline alignment is a construction centerline then name it as PRCL and offsets as PRCL-R-EP etc. Note that all proposed centerlines must tie into existing road survey alignments with station equations.

Alignment Name	Alignment Description
RS12345	Centerline Alignment for Main Street RS12345
RS12345-L-TC	RS12345 left top of curb
RS12345-R-HP	RS12345 right hinge point
RS12345-L-DWY-44+11	Alignment for RS12345 left side driveway at station 44+11

Alignment abbreviations

BC Back of Curb
BW Back of Walk
FL Flowline
FW Front of Walk
HP Hinge Point
LG Lip of Gutter
SC Saw Cut Line
TC Top of Curb

In addition to alignments, profiles, profile views, section view groups and section line groups will also follow the 'RS' naming convention.

Surfaces: Surface names should provide sufficient information to discern what the surface represents. Avoid abbreviations that others involved in the project may not be able to fully decipher. Include 'top' or 'datum' at the end of the surface name if appropriate.

COGO Point Numbering Standard

Point numbers are to be generated using the following guidelines:

Points 1-999	Boundary and Control Points
Points 1000-9999	Topography Points
Points 10000-14999	Staking and As-Built Points
Points 15000 and up	Design

Standard Text Styles

There are (2) standard text styles, CoSD TITLE and CoSD STANDARD. There are also (3) standard text layers: C-ANNO-01, C-ANNO-02 and C-ANNO-03. The list below is a general overview of the use of the standard fonts and layers.

Text Description	Text Style	Plot Height	Layer
General Notes	CoSD STANDARD	0.100	C-ANNO-01
Stationing	CoSD STANDARD	0.100	C-ANNO-01
Station Elevations	CoSD STANDARD	0.100	C-ANNO-01
Cross Section Offsets	CoSD STANDARD	0.100	C-ANNO-01
Cross Section Elev.	CoSD STANDARD	0.100	C-ANNO-01
Standard Headings	CoSD TITLE	0.150	C-ANNO-02
Standard Labels	CoSD TITLE	0.150	C-ANNO-02
Main titles	CoSD TITLE	0.200	C-ANNO-03
Subtitles	CoSD TITLE	0.200	C-ANNO-03
Street Names	CoSD TITLE	0.200	C-ANNO-03

The CoSD STANDARD style is intended for the majority of the general notation on the sheets. The CoSD TITLE style should be used primarily for main headings and titles. The (3) standard annotation layers have increasingly heavier pen weights as listed below.

C-ANNO-01	0.0070
C-ANNO-02	0.0100
C-ANNO-03	0.1400

Layer Standards

The current layer standards in use by DPW reflect the National CAD Standards layering convention. The majority of the layers used are already present in the template drawing. If additional layers need to be created, follow the format used in the template provided.

0	7	Continuous	z e r o
_CoSD_TB	7	Continuous	Layer reserved for CoSD title block
C-ANNO-01	1	Continuous	Annotation: light pen weight
C-ANNO-02	2	Continuous	Annotation: medium pen weight
C-ANNO-03	3	Continuous	Annotation: heavy pen weight
C-ANNO-MTCH	7	DASHED	Annotation: C-ANNO-MTCH
C-ANNO-MTCH-HATCH	7	Continuous	Annotation: C-ANNO-MTCH-HATCH
C-ANNO-MTCH-TEXT	4	Continuous	Annotation: C-ANNO-MTCH-TEXT
C-ANNO-TABL	1	Continuous	Civil: Table
C-ANNO-TABL-PATT	7	Continuous	Civil: Table Hatch
C-ANNO-TABL-TEXT	4	Continuous	Civil: Table Text
C-ANNO-TABL-TITL	4	Continuous	Civil: Table Title
C-ANNO-TABL-TTBL	5	Continuous	Civil: Table Borders
C-ANNO-VFRM	131	Continuous	Annotaton: C-ANNO-VFRM
C-ANNO-VFRM-TEXT	2	Continuous	Annotation: C-ANNO-VFRM-TEXT
C-ESMT-ROAD	1	Continuous	Easements: roadway
C-POWR-NPLT	7	Continuous	Power: no plot
C-POWR-OVHD	31	CENTER2	Power: overhead lines
C-PROP-BNDY	4	Continuous	Property: boundary
C-PROP-BRNG	3	Continuous	Property: bearing
C-PROP-CURV-LABL	3	Continuous	Property: radii and distance for curve segment lables
C-PROP-LABL	3	Continuous	Property: label
C-PROP-LINE	230	Continuous	Property: parcel lines
C-PROP-LINE-LABL	3	Continuous	Property: bearings and distance for line segment lables
C-PROP-LOTS	6	Continuous	Property: lots
C-PROP-PATT	131	Continuous	Property: parcel hatching
C-PROP-RSRV	94	Continuous	Property: reserved
C-PROP-TEXT	3	Continuous	Property: label
C-ROAD	7	Continuous	Roadways: C-ROAD
C-ROAD-ASSM	40	Continuous	Roadways: assemblies and subassemblies
C-ROAD-ASSM-BLIN	1	Continuous	Roadways: assembly baseline
C-ROAD-ASSM-OFFS	1	Continuous	Roadways: assembly offset
C-ROAD-ASSM-TEXT	7	Continuous	Roadways: assembly text
C-ROAD-BRNG	1	Continuous	Roadways: bearings
C-ROAD-CNTR	4	CENTER2	Roadways: centerline
C-ROAD-CNTR-EXTN	4	CENTER2	Roadways: centerline
C-ROAD-CNTR-EXTN-N	4	CENTER2	Roadways: centerline
C-ROAD-CNTR-N	4	Continuous	Roadways: centerline, NEW
C-ROAD-CORR	5	Continuous	Roadways: corridor
C-ROAD-CORR-BNDY	1	CENTER2	Roadways: corridor boundary
C-ROAD-CORR-PATT	141	Continuous	Roadways: corridor patterns
C-ROAD-CTLN	1	CENTER2	Roadways: centerline
C-ROAD-CURV	4	Continuous	Roadways: curves
C-ROAD-CURV-LABL	3	Continuous	Roadways: curve segment lables for centerline
C-ROAD-FEAT	182	Continuous	Roadways: feature line
C-ROAD-LABL	1	Continuous	Roadways: labels
C-ROAD-LABL-N	3	Continuous	Roadways: labels
C-ROAD-LINE	1	Continuous	Roadways: tangent lines
C-ROAD-LINE-EXTN	252	HIDDEN	Roadways: PVI extention lines
C-ROAD-LINE-LABL	3	Continuous	Roadways: line segment lables for centerline

C-ROAD-LINK	150	Continuous	Roadways: corridor and section links
C-ROAD-LINK-TEXT	7	Continuous	Roadways: corridor and section link text
C-ROAD-MARK	212	Continuous	Roadways: corridor and section marks
C-ROAD-N	4	Continuous	Roadways: C-ROAD-N
C-ROAD-NPLT	7	Continuous	Roadways: no plot
C-ROAD-PROF	1	HIDDEN	Roadways: profiles
C-ROAD-PROF-ASMC	3	Continuous	Roadways: profile assymetrical curves
C-ROAD-PROF-BAND	2	Continuous	Roadways: profile bands
C-ROAD-PROF-CIRC	5	Continuous	Roadways: profile circular curve segment
C-ROAD-PROF-CURV	5	Continuous	Roadways: profile vertical curves
C-ROAD-PROF-DIAG	4	Continuous	Roadways: profile band diagrams
C-ROAD-PROF-EGRD	1	HIDDEN2	Roadways: existing grade profile
C-ROAD-PROF-FGRD	1	Continuous	Roadways: finished grade profile
C-ROAD-PROF-GRID	4	Continuous	Roadways: profile grid
C-ROAD-PROF-GRID-GEOM	5	Continuous	Roadways: profile gridline @ geometry points
C-ROAD-PROF-GRID-MAJR	8	Continuous	Roadways: profile gridline @ major stations
C-ROAD-PROF-GRID-MINR	8	Continuous	Roadways: profile gridline @ minor stations
C-ROAD-PROF-LABL	3	Continuous	Roadways: profile label
C-ROAD-PROF-LINE	1	Continuous	Roadways: profile vertical lines
C-ROAD-PROF-LINE-EXTN	1	HIDDEN	Roadways: centerline extension
C-ROAD-PROF-LINE-EXTN-N	4	HIDDEN	Roadways: centerline extension
C-ROAD-PROF-LINE-SGMT	252	HIDDEN	Roadways: centerline segment
C-ROAD-PROF-LTOF	2	Continuous	Roadways: profile left offset sample lines
C-ROAD-PROF-N	4	Continuous	Roadways: profile new
C-ROAD-PROF-NEW	4	Continuous	Roadways: profile new
C-ROAD-PROF-PARB	7	Continuous	Roadways: profile parabolic curves
C-ROAD-PROF-PNTS	252	HIDDEN	Roadways: profile geometry points
C-ROAD-PROF-RTOF	1	Continuous	Roadways: profile right offset sample lines
C-ROAD-PROF-STAN-GEOM	2	Continuous	Roadways: profile geometry point labels
C-ROAD-PROF-STAN-MAJR	2	Continuous	Roadways: profile major station labels
C-ROAD-PROF-STAN-MINR	2	Continuous	Roadways: profile minor station labels
C-ROAD-PROF-TEXT	2	Continuous	Roadways: profile text
C-ROAD-PROF-TEXT-N	3	Continuous	Roadways: profile text
C-ROAD-PROF-TICK	7	Continuous	Roadways: profile tick marks
C-ROAD-PROF-TITL	2	Continuous	Roadways: profile label
C-ROAD-PROF-TTLB	5	Continuous	Roadways: profile label
C-ROAD-PROF-VIEW	7	Continuous	Roadways: C-ROAD-PROF-VIEW
C-ROAD-SAMP	131	HIDDEN	Roadways: sample lines
C-ROAD-SAMP-LABL	3	Continuous	Roadways: sample lines labels
C-ROAD-SAMP-TEXT	2	Continuous	Roadways: sample lines text
C-ROAD-SCTN	7	Continuous	Roadways: grade in sections
C-ROAD-SCTN-DIAG	212	Continuous	Roadways: section diagram
C-ROAD-SCTN-E	1	HIDDEN2	Roadways: grade in sections
C-ROAD-SCTN-GRID	7	Continuous	Roadways: section grid
C-ROAD-SCTN-LABL	3	Continuous	Roadways: section labels
C-ROAD-SCTN-N	4	Continuous	Roadways: section, NEW
C-ROAD-SCTN-SHET	7	Continuous	Roadways: grade in section sheets
C-ROAD-SCTN-TABL	1	Continuous	Roadways: C-ROAD-SCTN-TABL
C-ROAD-SCTN-TEXT	3	Continuous	Roadways: section text
C-ROAD-SCTN-TICK	7	Continuous	Roadways: section tick marks
C-ROAD-SCTN-TITL	3	Continuous	Roadways: section title
C-ROAD-SCTN-TTLB	5	Continuous	Roadways: section border
C-ROAD-SHAP	32	Continuous	Roadways: corridor and section shapes
C-ROAD-SHAP-PATT	7	Continuous	Roadways: corridor and section shapes hatching
C-ROAD-SPIR	3	Continuous	Roadways: spirals
C-ROAD-SPIR-LABL	3	Continuous	Roadways: spiral segment labels for centerline
C-ROAD-STAN	2	Continuous	Roadways: stationing
C-ROAD-STAN-MAJR	2	Continuous	Roadways: major stationing labels
C-ROAD-STAN-MINR	2	Continuous	Roadways: minor stationing labels
C-ROAD-TABL	1	Continuous	Roadways: C-ROAD-TABL

C-ROAD-TEXT	2	Continuous	Roadways: text
C-SSWR-CNTR	200	Continuous	Sanitary Sewer: centerline
C-SSWR-PIPE	200	Continuous	Sanitary Sewer: piping
C-SSWR-PIPE-PATT	7	Continuous	Sanitary Sewer: piping, hatching
C-SSWR-PROF	200	Continuous	Sanitary Sewer: profile
C-SSWR-STRC	200	Continuous	Sanitary Sewer: structures
C-SSWR-STRC-PATT	200	Continuous	Sanitary Sewer: structures, hatching
C-SSWR-TEXT	7	Continuous	Sanitary Sewer: text
C-STRM-CNTR	170	CENTER2	Storm Sewer: centerline
C-STRM-PIPE	170	Continuous	Storm Sewer: piping
C-STRM-PIPE-PATT	7	Continuous	Storm Sewer: piping, hatching
C-STRM-PROF	170	Continuous	Storm Sewer: profile
C-STRM-STRC	170	Continuous	Storm Sewer: structures
C-STRM-STRC-PATT	7	Continuous	Storm Sewer: structures, hatching
C-STRM-TABL	1	Continuous	Storm Sewre: C-STRM-TABL
C-STRM-TEXT	7	Continuous	Storm Sewer: text
C-TINN	182	Continuous	Triangulated irregular network
C-TINN-BNDY	110	Continuous	Triangulated irregular network: boundary
C-TINN-VIEW	252	Continuous	Triangulated irregular network: triangle view
C-TINN-VIEW-N	2	Continuous	
C-TOPO	7	Continuous	
C-TOPO-BNDY	2	Continuous	Topography: boundary
C-TOPO-CONT-TEXT	7	Continuous	Topography: contour labels
C-TOPO-CONT-TEXT-N	1	Continuous	Topography: contours labels, NEW
C-TOPO-FEAT	3	Continuous	Topography: C-TOPO-FEAT
C-TOPO-GRAD	3	Continuous	Topography: grading
C-TOPO-GRAD-CUT	1	Continuous	Topography: grading cut material
C-TOPO-GRAD-CUT_	1	Continuous	Topography: grading cut material
C-TOPO-GRAD-FILL	3	Continuous	Topography: grading fill material
C-TOPO-GRID	6	Continuous	Topography: gridded
C-TOPO-LABL	3	Continuous	Topography: label
C-TOPO-MAJR	9	Continuous	Topography: major gridlines
C-TOPO-MAJR-N	5	Continuous	Topography: major contours, NEW
C-TOPO-MAJR-TEXT	1	Continuous	
C-TOPO-MINR	8	Continuous	Topography: minor gridlines
C-TOPO-MINR-N	3	Continuous	Topography: minor contours, NEW
C-TOPO-MINR-TEXT	1	Continuous	
C-TOPO-PNTS	1	Continuous	Topography: points
C-TOPO-SPOT-LABL	3	Continuous	Topography: spot elevation labels
C-TOPO-TEXT	12	Continuous	Topography: text
C-TOPO-USER	40	Continuous	Topography: user contours
C-TOPO-USER-N	4	Continuous	Topography: user contours
C-TOPO-WDRP	141	Continuous	Topography: C-TOPO-WDRP
C-TOPO-WSHD	141	Continuous	Topography: watershed
C-TOPO-WSHD-TEXT	7	Continuous	Topography: watershed text
Defpoints	7	Continuous	
S-BRDG-ABUT	3	Continuous	Structural: bridge abutment
S-BRDG-ASLB	3	Continuous	Structural: bridge approach slab
S-BRDG-CBAR	3	Continuous	Structural: bridge concrete barrier rail
S-BRDG-DECK	3	Continuous	Structural: bridge deck
S-BRDG-FTNG	3	Continuous	Structural: bridge footing
S-BRDG-MBAR	3	Continuous	Structural: bridge metal barrier rail
S-BRDG-PIER	3	Continuous	Structural: bridge pier
S-BRDG-WWAL	3	Continuous	Structural: bridge wingwall
V-BLDG-OTLN	170	Continuous	Survey Buildings: outline
V-CTRL-BMRK	4	Continuous	Survey Control points: benchmark.
V-CTRL-HCPT	4	Continuous	Survey Control points: horizontal.
V-CTRL-LINE-DIRC	6	Continuous	Survey Control points: traverse lines
V-CTRL-LINE-NETW	2	Continuous	Survey Control points: traverse network
V-CTRL-LINE-SHOT	177	Continuous	Survey Control points: traverse sideshot

V-CTRL-NODE-KNOW	3	Continuous	Survey Control points: known points
V-CTRL-NODE-SHOT	2	Continuous	Survey Control points: sideshots
V-CTRL-NODE-UNKN	1	Continuous	Survey Control points: unknown points
V-CTRL-TRAV	4	Continuous	Survey Control points: traverse
V-CTRL-TRAV-ERRO	3	Continuous	Survey Control points: traverse errors
V-CTRL-VCPT	4	Continuous	Survey Conrtol points: vertical.
V-NODE	1	Continuous	Survey Node
V-NODE-BNDY	1	Continuous	Survey Node: baseline
V-NODE-NGAS	2	Continuous	Survey Node: gas line & appurtenances points.
V-NODE-POLE	1	Continuous	Survey Node: pole points (power, telephone, etc.).
V-NODE-SIGN	1	Continuous	Survey Node: sign.
V-NODE-SSWR	3	Continuous	Survey Node: sanitary sewer and appurtenances points.
V-NODE-STRM	3	Continuous	Survey Node: storm sewer and appurtenances points.
V-NODE-TEXT	2	Continuous	Survey Node: text
V-NODE-TREE	62	Continuous	Survey Node: tree points.
V-NODE-WATR	5	Continuous	Survey Node: water line and appurtenances points.
V-ROAD-CNTR	1	CENTER	Survey Road: centerline
V-ROAD-CURB	50	Continuous	Survey Road: curbs
V-SITE-FNCE	131	FENCELINE2	Survey Site: fences
V-SITE-VEGE	80	Continuous	Survey Site: vegetation, trees, shrubs
V-SURV-FIGR	170	Continuous	Survey: V-SURV-FIGR
V-SURV-LABL	122	Continuous	Survey: text
V-SURV-LINE	130	Continuous	Survey: lines
V-SURV-NTWK	4	Continuous	Survey: V-SURV-NTWK

Printing and Plotting

All prints and plots are to be done to scale, 1:1 for full size and 1:2 for half size. The (2) standard plot styles are “DPW” for full size plots and “DPW Half Size” for half size plots. The following page shows the pen assignments and line weights.

PEN 1
PEN 2
PEN 3
PEN 4
PEN 5
PEN 6
PEN 7
PEN 8
PEN 9
PEN 10

PEN 11
PEN 12
PEN 13
PEN 14
PEN 15
PEN 16
PENS 17-29
PENS 30-31
PEN 32

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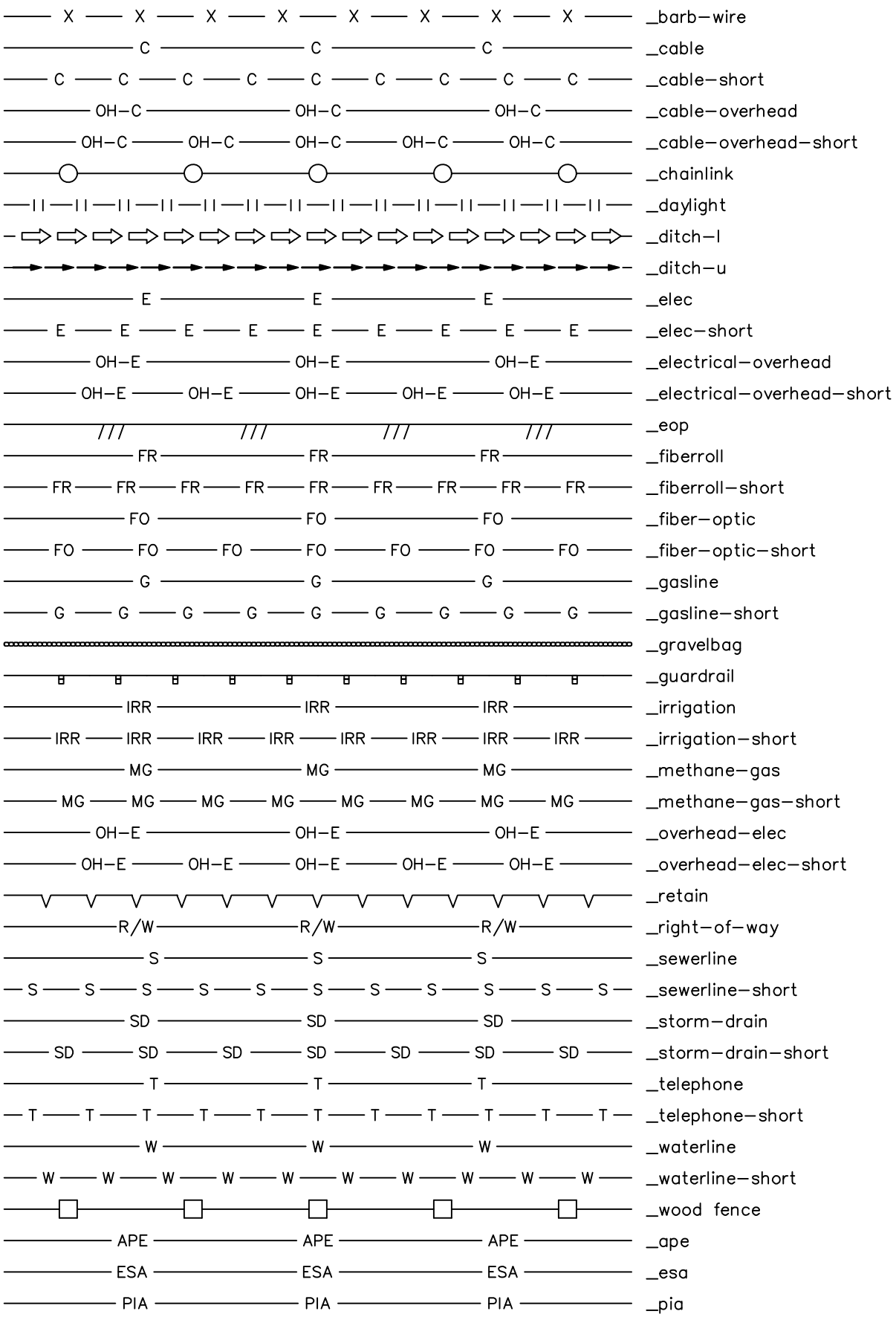
71
72
73
74
75
76

80
81
82
83
84
85
86

40%
50%
60%
70%
80%

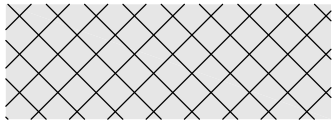
DPW Custom Linetypes



DPW Hatch Styles

PCC (IN PLAN VIEW)

PATTERN = AR-SAND
LAYER = C-PATT-CONC-PC
COLOR = 2

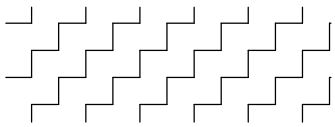


PLANE AND OVERLAY AC

PATTERN = SOLID AND NET
LAYER = C-PATT-PLNE-OLAY
COLOR: SOLID = 31, NET = 1

AC (IN PLAN AND SECTION)

PATTERN = SOLID
LAYER = C-PATT-CONC-AC
COLOR: 31

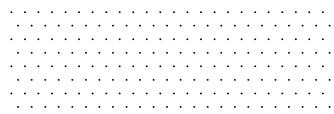


PAVEMENT REMOVAL

PATTERN = ZIGZAG
LAYER = C-PATT-PAVE-DEMO
COLOR = 1

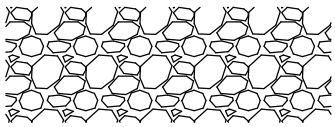
PCC (IN SECTION VIEW)

PATTERN = AR-CONC
LAYER = C-PATT-CONC-SC
COLOR = 1



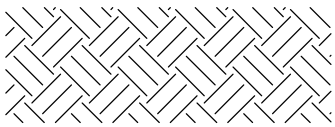
DG PATHWAY / TRAIL

PATTERN = DOTS
LAYER = C-PATT-PATH
COLOR = 2



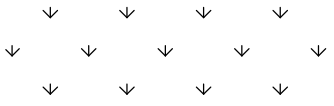
AGGREGATE BASE

PATTERN = GRAVEL
LAYER = C-PATT-BASE-AG
COLOR = 1



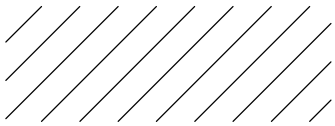
EXISTING GROUND

PATTERN = EARTH
LAYER = C-PATT-SOIL
COLOR = 1



HYDROSEED / EROSION CONTROL

PATTERN = GRASS
LAYER = C-PATT-HYDR
COLOR = 1



DEMOLITION / CONSTRUCTION ZONE

PATTERN = ANSI31
LAYER = C-PATT-CONS-DEMO
COLOR = 1