

# CAD STANDARDS

A7

## CADD STANDARDS

Provide one set of AutoCAD (Version 14 or higher) files for the as-built Civil drawings on a floppy disk. Multiple 1.44 floppies using self-extracting PKZIP file format are acceptable. Provide xref files as required. Softdesk point files are not requested and should not be transmitted. Combination files are acceptable. Provide a list of the file names linking the drawing files to the sheet number. A hard copy description of the drawing configuration including paper space layout, layer assignments, pen assignments and special plotting instructions is requested. A printed description included in the actual drawing file is recommended.

*As-Built drawings shall conform to the following:*

1. Use 3 ½" / 1.44 mb capacity disks or CD ROM IBM compatible.
2. Use AutoCAD version 14 or higher \*.dwg file format.
3. The files saved to disk should be plottable when opened and be the same file used to plot the Mylar as-built.
4. Use compressed file(s) only if the decompression program is included.
5. As-built plans are to conform to the layering standards included on the following page. If additional layering is needed use these general layers as prefixes (Ex. EASE-UTIL, EASE-SS).
6. All entity colors are to be by layer. If different colors are needed for line width and plotting purposes, a suffix of that colors name or number may be added to the appropriate layer name.
7. Where proposed and existing features are shown in the same drawing the prefix "P" shall be used for proposed and prefix "X" for existing in layering names, (ex. P-ROW for proposed right-of-way, X-ROW for existing right-of-way.)
8. Feature annotation shall be attached to each respective layer unless otherwise noted.
9. Use standard fonts, shapes and line types. If nonstandard files are used supply electronic font, shape or line type file on disk. SOFTDESK files are acceptable. Fonts sizes used to label features should be consistent.
10. All manholes, catch basins, fire hydrants, valves, meters, etc. are to be inserted as blocks. All blocks are to be created on layer 0.
11. All drawings are to be seamless, drawn in model space.
12. Drawings are not to be rotated off of world coordinate bases but may be "viewed" in model space to accommodate desired plot rotation.
13. Plan views shall show north predominantly to the top or left of sheet.
14. All drawings are to be plotted by view in paper space at a scale of 1:1. Views are to be named "PLOT" (Ex. PLOT1, PLOT2, etc.)
15. Drawings are to be delivered purged of all unused layers, blocks, line types, and styles.
16. The primary features should appear bolder and stand out against the background features in both the plan and profile views, i.e. sanitary lines and appurtenances on sanitary sheets.
17. Preferred CAD Layering – Sanitary Sewer

SANITARY SEWER CAD LAYERING		
	Existing Sanitary Sewer	Proposed Sanitary Sewer
	(green layer color)	(red layer color)
Sanitary Sewer	E-SS	P-SS
Sanitary Sewer Manhole	E-SSMH	P-SSMH
Sanitary Sewer Text	E-TXT	P-TXT
Lot lines	E-Lot	P-Lot

18. Preferred CAD Layering – Storm Drainage

STORM DRAINAGE CAD LAYERING		
	Existing Storm Drainage	Proposed Storm Drainage
	(blue layer color)	(magenta layer color)

Storm Drainage	E-SD	P-SD
Storm Drainage Manhole	E-SDMH	P-SDMH
Storm Drainage Detention Facilities	E-SDDF	P-SDDF
Storm Drainage Water Quality Facilities	E-SDWQ	E-SDWQ

## 19. Miscellaneous Layering (layer name and description)

TB	Title block, company logo, scale, north arrow	EG	Edge of gravel
TBTXT	Title block text	RR	Railroad tracks, structures, etc.
BORDER	Title block border	PWR	Power lines, power poles, streetlights, etc.
EDGE	Edge of paper	GAS	Gas lines, gas valves, meters, etc.
		TEL	Telephone lines, closures, etc.
SS	Sanitary sewer pipes	TV	Television cable lines, closures, etc.
SSMH	Sanitary sewer manholes	TXT	General text (street names, tax lot numbers, etc.)
SSTXT	Sanitary sewer annotation		
SSLAT	Sanitary sewer service laterals	CONT5	Contour lines are to be on a "CONT" layer with their
		CONT1	interval number as a suffix (Ex. 5' contours would be
SD	Storm drain pipe		on the layer CONT5)
SDMH	Storm system manholes	CONTXT	Contour text labels
SDTXT	Storm system annotation		
SDDF	Storm detention facilities and structures	CL	Centerlines
SDWQ	Storm system water quality facilities	STA	Stationing and stationing text
		GRID	Profile grids
WL	Waterlines and features (valves, meters, vaults, etc.)	GRIDTXT	Profile grid text
		XGRD	Existing ground/grade
ROW	Rights-of-way and easements	PGRD	Proposed ground/grade
LOT	Boundary lines of parcels		
		CONC	Detailed concrete
VEG	Trees, shrubs, vegetation	PIPE	Detailed pipe
BLDG	Buildings and structures	ROCK	Detailed rock
FEN	Fences	EARTH	Detailed earth/ground
WALL	Retaining and other walls	HATCH	Hatch patterns in details
EP	Edge of pavement		