

# **Southern California Edison CAD File Requirements**

To our valued customers:

SCE employees develop project base maps from digital files supplied by our customers. The process of reviewing and performing clean-up of these files takes time and effort, and directly impacts our ability to turn around a product to our customers in a reasonable time frame.

In support of our commitment to continuous improvement, SCE has established a set of requirements for digital file submission. It is the customer's responsibility to submit files that comply with these requirements and to ensure the files provided contain the most accurate and current information available.

The attached requirements list identifies the layer name and color to use for each entity within the submitted CAD file. SCE requires all related files for a single project be submitted as one comprehensive file.

Submitted files that do not meet the listed requirements or that contain cross-referenced drawings (XREF's) will be rejected.

Thank you for your efforts in ensuring the information provided meets the requirements included.

## STANDARD DIGITAL FILE REQUIREMENTS:

**Drawings submitted must be provided in a single file and per the AutoCAD standards listed in the AutoCAD File Requirements section of this document.**

**The following information is required to be displayed on separate layers:** \*Required layer name for the item per Table 1-1 is enclosed in brackets.

- Street Right Of Way lines *[RW]*, including Public Utility Easement (P.U.E.)
- Property Lot Lines *[PL]*
- Tract Boundaries, Assessment District, Easements, and Boundary lines for the city, county, etc. *[BOUNDARY]*
- Street names – specify “private street, government entities such as” if applicable; specify governing entity when applicable (County Road, State Highway, etc) *[TEXT-STREET]*
- Street width dimensions *[DIMENSIONS]*
- Street Centerline and Centerline Stationing on all streets. Centerline Stationing should not be broken and should show reference stationing at street intersection. *[CL]*
- Lot, Tract or Parcel numbering *[TEXT-LOTS]*
- Existing SCE Underground structures and existing OH poles *[ELECTRIC]*
- Existing SCE Underground conduits *[COND-EX]*
- Existing SCE Overhead Conductors *[OH-EX]*
- Building Outlines on separate layer – file must show exterior walls, doors, and windows only (no interior walls) *[BUILD]*
- Building Numbers where applicable (i.e. Apartments and Commercial) *[BUILD]*  
Note: Also show Electrical Room when panel is located inside the building as well as the preferred structure placement
- Meter Locations *[BUILD]*
- Driveways *[DWY]*
- Sidewalks *[SW]*
- Walkways *[WALK]*
- Curbs *[CURB]*
- Gutter *[GUTTER]*
- Edge of pavement *[EP]*

- Driveway aprons [WALK]
- Walls – i.e. decorative walls, retaining walls, etc. [WALL]
- Fences or fence lines [FENCE]
- Trash enclosures where applicable. Trash enclosures are usually shown in areas such as apartments where they would affect structure and/or trench placement. [Per customer layer name]
- Landscape obstructions that need to be considered for proper electrical planning [LANDSCAPE]
- Vicinity Map [MISC]
- North Arrow and Scale Bar [DECAL]
- Detailed Street Cross Sections (if available) [DECAL]
- Topography (if available) [TOPO]
- Location of any future or proposed utility, building and/or structure locations labeled accordingly (if available.)

**Location of all other utilities, etc. including proposed and existing:**

- Catch basins (separate layer from storm drains) [CB]
- Storm drains (separate layer from catch basins) [SD]
- Cable TV [CATV]
- Fire Hydrants [FH]
- Gas [GAS]
- Manholes [MH]
- Oil [OIL]
- Railroad [RAILROAD]
- Sanitary Sewer [SEWER]
- Telephone [TEL]
- Traffic Control /Traffic Signal [TS]
- Water [WATER]
- Existing utility, service and street poles [per customer name]

**Note:** Wet utilities stationing is not required.

**NOTES:**

1. Show utility lines eight inches (8") or wider to full width with size and material indicated.
2. Storm drain lines should be dashed, all others continuous.
3. Do not show utility lines smaller than 8" in full width, but size and material should be indicated.

**The AutoCAD File Requirements are listed below as well as the Layer Descriptions for each layer. These requirements must be followed to ensure consistency with regard to digital files submitted by customers.**

- No X-Refs or Nested X-Refs (External Referenced Drawings)
- Drawings **must** only be in a single file with entities separated by layers per Table 1:1
- Drawing Scale must be 1:1 AutoCAD Engineering Unit (decimal), not Architectural scale
- No 3<sup>rd</sup> Party Software Entities such as Express Tools “Acad Proxy Entities” (Note: Software provided with AutoCAD but not supported by Autodesk)
- Images such as Bitmap, JPEG, PDF, etc., should be added using “Copy” from Microsoft Photo Editor and then a “PasteClip” into the active model drawing or an active viewport. That will ensure that the graphic is embedded in the drawing and not referenced to as the AutoCAD “Image” command does. Do not add images using the AutoCAD “Image” command.
- No duplicate base objects
- No “TextMask” due to potential plotter incompatibility
- No 3D objects and/or entities with Position Z value (elevation)
- Drawing must be saved as AutoCAD 2018 Drawing (\*.dwg) or earlier version

Entities must be separated by layers per SCE AutoCAD Layering Standard. However, for instances where a drawing is converted from Microstation to AutoCAD, a layer legend which indicates the firm’s layer name and description may be provided in lieu of SCE’s Layering Standard.

**TABLE 1-1**

<b>Layer Descriptions</b>	<b>Layer Names (UPPERCASE)</b>	<b>Layer Color</b>
Sheet setup & Title Block Border	BASE	7
Buildings	BUILD	130
Boundaries - City, County, etc.	BOUNDARY	240
Cable TV	CATV	157
Catch basin	CB	157
Center Line of Streets & Stationing	CL	1
SCE existing conduits	COND-EX	11
Curbs	CURB	10
Driveway (not including aprons)	DWY	221
Edison Decals	DECAL	7
Edison Decals	DECALS	157
Easement	EASEMENT	7
SCE underground structures or OH poles	ELECTRIC	1
Edge of Pavement	EP	10

Fence	FENCE	157
Fire Hydrant	FH	35
Gas Line	GAS	157
Gutter	Gutter	35
Hatching - Buildings, etc.	HATCH	131
Landscape	LANDSCAPE	60
Manhole	MH	157
Match lines	MATCHLINE	252
Oil Line	OIL	157
SCE existing overhead lines	OH-EX	11
Property line, Lot Lines	PL	2
Railroad	RR	7
Right-of-Way Lines	RW	2
Slope	SLOPE	157
Storm drain (Separate CB Lay)	SD	157
Sanitary Sewer	SEWER	157
Sidewalk & Driveway Aprons	SW	35
Telephone	TEL	157
Topography	TOPO	157
Traffic Signals	TS	157
Walkway & Driveway Aprons (SEPARATE)	WALK	35
Walls	WALL	5
Water	WATER	157
Misc. Vicinity Maps, Hatching, etc.	MISC	7
All other existing non-SCE conduits	APPROPRIATE LAYER	11
<b><u>TEXT RELATED</u></b>		
TEXT - STREET NAMES	TEXT-STREET	7
TEXT - Lot Numbers	TEXT-LOTS	7
Text - Misc.	TEXT	7
DIMENSIONING - AutoCAD related with DIM	DIMENSION	7