

# Charge Ready Program

## Digital CAD File Requirements

Thank you for participating in SCE's Charge Ready Program.

In support of our commitment to continuous improvement, SCE has established a set of requirements for digital file submission of a base map for the project site. 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.

When we receive accurate files containing the most current information available, it helps expedite our review process, and also helps us meet our goal of delivering projects within reasonable timeframes.

We developed this Digital File Requirements document as a tool to assist you. The requirements list identifies the layer names and colors to use for each entity in your file. We require all files related to individual projects to be submitted together as merged files, saved in AutoCad 2009 or an earlier version.

If we receive files that do not meet the listed requirements or that contain cross-reference drawings (XREF's), those files may be rejected.

We appreciate your help in ensuring your digital files meet SCE's digital file requirements.

## Standard Digital File Requirements

**Drawings submitted to TDT/UGDDG must be provided in a single file, and per the standards listed in the AutoCad File Requirements section of this document.**

**The following information, if available, must be displayed on separate layers** (each item's required layer name, as listed in Table 1-1, is shown in brackets).

- Street right-of-way lines [*RW*]
- Property lines, 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 (wet utilities stationing is not required) [*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 (e.g. apartments and commercial – show electrical room when panel is located inside the building, as well as the preferred structure placement) [*BUILD*]
- Meter locations [*BUILD*]
- Driveways [*DWY*]
- Sidewalks [*SW*]
- Walkways [*WALK*]
- Curbs [*CURB*]
- Gutter [*GUTTER*]
- Edge of pavement [*EP*]
- Driveway aprons [*WALK*]
- Walls (decorative walls, retaining walls, etc.) [*WALL*]

- Fences or fence lines [*FENCE*]
- Trash enclosures, where applicable (usually shown in areas, such as apartments, where they would affect structure and/or trench placement [*per customer layer name*])
- Landscape obstructions 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 [*TOPO*]
- Location of any future or proposed utility, building and/or structure locations, labeled accordingly (if available.)

**Location of all other utilities, etc., as applicable, 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*]

**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.

### AutoCAD File Requirements

**AutoCAD file requirements are maintained and updated by the AUD team. To ensure consistency, submitted digital files must meet these requirements and follow the descriptions listed for each layer.**

- No X-Refs or nested X-Refs (External Referenced Drawings)
- Drawings **must** be contained within a single file, with entities separated by layers as listed in Table 1-1
- Drawing scale must be 1'-1' AutoCAD Engineering Unit (decimal), not Architectural scale
- 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. This will ensure 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

Per Table 1-1, SCE's AutoCAD Layering Standard entities must be separated by layers. However, for instances in which a drawing is converted from Microstation to AutoCAD, a layer legend indicating the firm's layer name and description may be provided in lieu of SCE's AutoCAD Layering Standard.

**TABLE 1-1**

<b>Layer Descriptions</b>	<b>Layer Names</b> (UPPERCASE)	<b>Layer Color</b>
Sheet Setup & Title Block Border	BASE	7
Buildings	BUILD	131
Boundaries - City, County, etc.	BOUNDARY	10
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	11
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	157

**TABLE 1-1 (continued)**

<b>Layer Descriptions</b>	<b>Layer Names (UPPERCASE)</b>	<b>Layer Color</b>
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	SEWE	157
Sidewalk & Driveway Aprons	R 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>TEXT RELATED</b>		
TEXT - STREET NAMES	TEXT-STREET	7
TEXT - Lot Numbers	TEXT-LOTS	7
Text - Misc.	TEXT	7
DIMENSIONING - AutoCAD related with	DIMENSION	7