



# Riverside Public Utilities Electric Customer CAD File Requirements

To our valued customers,

The purpose of this document is to establish standard requirements for Computer Aided Drafting (CAD) files submitted to Customer Engineering for customer driven projects.

The City of Riverside's Envision Riverside 2025 Strategic Plan, Strategic Priority, High Performing Government, Goal 5.2 states "Utilize technology, data, and process improvement strategies to increase efficiencies, guide decision making, and ensure services are accessible and distributed equitably throughout all geographic areas of the City." A standard for customer CAD files is intended to accomplish the following objectives:

1. To provide the highest quality of public service.
2. To promote efficiency and productivity.
3. To improve quality and accuracy of electric service designs produced.
4. To reduce employee time spent converting customer's CAD files to comply with RPU Electric Engineering's standards.

Establishing a set of requirements for customer provided CAD files is key to achieving high performance. It is the customer's responsibility to comply with these requirements and to ensure the files provided contain the most current and accurate information available. An updated/revised CAD file will be required if substantial changes are made to a project's improvement plans after a CAD file has been submitted to RPU. The customer is responsible for notifying RPU's planner assigned to their project if changes are made to the improvement plans after the design process has been initiated.

The attached requirements specify layer names and colors for each entity/object within the customer provided CAD file. Note, submitted files that do not meet these requirements are subject to rejection.

Unless deemed complex, smaller projects such as individual new single-family residences, additions of new accessory dwelling units (ADUs) to existing residential homes and residential panel upgrades are exempt and will not be required to adhere to these requirements.

Thank you for your support and efforts in assuring the CAD files provided meet these requirements.

## Riverside Public Utilities Electric – Customer CAD File Requirements

For all customer-driven projects, both residential and commercial, deemed complex, customer provided CAD drawing files submitted to Energy Delivery- Customer Engineering Group must be provided in a single file per standards below and in the following format:

- E-mail, or link to a drop box, containing an AutoCAD drawing file of the precise grading/site plan.
- AutoCAD file 2020 version or older
- Entities must adhere to layering standard shown on Table 1-1
- Drawn at 1':1' scale in AutoCAD Engineering Units (decimal)
- No externally referenced drawings or images (XREFs)
- No Proxy Objects
- No "TEXTMASK" objects
- Include (if applicable):
  - Existing and proposed Street Right of Way lines
  - Existing and proposed Property lines, tract boundaries, easements, and city limit lines
  - Existing and proposed curbs, gutters, sidewalks, edge of pavement, berms, driveway aprons, hardscape and access ramps
  - Existing and proposed street centerlines and centerline stationing, including reference stationing at intersections
  - Existing and proposed wet & dry utilities located onsite and offsite; sanitary sewer, water, gas, storm drains, retention basins, underground drainage structures, electric (overhead and underground facilities), cable, telephone, oil, traffic control/signals, private lighting
    - Note: Show utility lines eight inches (8") or larger at full width with size and material labeled, include centerline and sidewalks.
  - Existing and proposed top & toe of slopes, contours and daylight lines
  - Existing and proposed building footprints
  - Existing and proposed freestanding and retaining walls
  - Existing and proposed fences/fence lines
  - Existing and proposed trees/landscape obstructions
  - Building and unit numbers (apartments and commercial projects)
  - Meter/panel locations; show electrical room and switchgear
  - Lot and/or parcel numbers
  - Street names; indicate if private street(s)
  - Street width dimensions
  - North arrow and bar scale
  - Note: Aerial topography drawing files should be sent separately due to large file sizes

**TABLE 1-1: LAYER NAMES & DESCRIPTIONS**

<b>Name</b>	<b>Color</b>	<b>Layer Description</b>
ANO	cyan	ANNOTATION, LEGENDS, NOTES
ANO-LOTS	cyan	LOT NUMBERS
ANO-MISC	cyan	MISC. ANNOTATION
ANO-STREET NAME	blue	STREET NAMES
BLDG	8	EXIST. BUILDINGS & ELECTRICAL ROOMS
BLDG-PROP	blue	PROP. BUILDINGS & ELECTRICAL ROOMS
BLOCK WALL	8	EXIST. FREESTANDING & RETAINING BLOCK WALLS
BLOCK WALL-PROP	white	PROP. FREESTANDING & RETAINING BLOCK WALLS
CF	8	EXIST. CURB FACE
CF-PROP	white	PROP. CURB FACE
CL	8	EXIST. CENTERLINES & STATIONING
CL-PROP	white	PROP. CENTERLINES & STATIONING
COMMS	8	EXIST. COMMUNICATIONS & CABLE TV
COMMS-PROP	8	PROP. COMMUNICATIONS & CABLE TV
DETAILS	green	DETAILS
DIM	white	STREET DIMENSIONS
DUCT	cyan	EXIST. ELECTRICAL DUCT/CONDUIT
DUCT-PROP	red	PROP. ELECTRICAL DUCT/CONDUIT
DWY	8	EXIST. DRIVEWAYS
DWY-PROP	white	PROP. DRIVEWAYS
ELEC	8	EXIST. ELECTRIC PANELS & SWITCHGEAR
ELEC-PROP	8	PROP. ELECTRIC PANELS & SWITCHGEAR
EP	8	EXIST. EDGE OF PAVEMENT
EP-PROP	white	EDGE OF PAVEMENT
ESMT	8	EXIST. EASEMENTS
ESMT-PROP	white	PROP. EASEMENTS
FENCE	8	EXIST. FENCES
FENCE-PROP	white	PROP. FENCES
FIRE_WATER	8	EXIST. FIRE WATER
FIRE_WATER-PROP	8	PROP. FIRE WATER
FL	9	EXIST. FLOW LINE
FL-PROP	9	PROP. FLOW LINE
GAS	8	EXIST. GAS
GAS-PROP	8	PROP. GAS
GUTTER	9	EXIST. GUTTER
GUTTER-PROP	white	PROP. GUTTER
GUY	white	EXIST. GUY WIRES

GUY-PROP	blue	PROP. GUY WIRES
INTF	8	INTERFERENCES
INTF-SD	8	STORM DRAIN INTERFERENCES
INTF-SWR	8	SEWER INTERFERENCES
INTF-W	8	WATER INTERFERENCES
LANDSCAPE-PROP	8	PROP. HARDSCAPE
MATCH	magenta	MATCHLINES
OBJ	8	EXIST. MISC. OBJECTS
OBJ-PROP	white	PROP. MISC. OBJECTS
OH	white	EXIST. OH STRUCTURES
OH-PROP	blue	PROP. OH STRUCTURES
PL	8	EXIST. PROPERTY LINES
PL-PROP	8	PROP. PROPERTY LINES
POLE	yellow	EXIST. UTILITY POLES
POLE-PROP	blue	PROP. UTILITY POLES
PUE	8	EXIST. PUBLIC UTILITY EASEMENTS
PUE-PROP	white	PROP. PUBLIC UTILITY EASEMENTS
RW	yellow	EXIST. RIGHT OF WAY LINES
RW-PROP	yellow	PROP. RIGHT OF WAY LINES
SCHEM	yellow	EXIST. SCHEMATIC SYMBOLS
SCHEM-PROP	magenta	PROP. SCHEMATIC SYMBOLS
SD	8	EXIST. STORM DRAIN
SD-PROP	8	PROP. STORM DRAIN
SLOPE	8	EXIST. SLOPES
SLOPE-PROP	8	PROP. SLOPES
SS	8	EXIST. SANITARY SEWER
SS-PROP	8	PROP. SANITARY SEWER
STLT	yellow	EXIST. STREETLIGHT STRUCTURES
STLT-PROP	blue	PROP. STREETLIGHT STRUCTURES
SW	8	EXIST. SIDEWALKS
SW-PROP	white	PROP. SIDEWALKS
TEL	8	EXIST. TELEPHONE
TEL-PROP	8	PROP. TELEPHONE
TOPO	8	EXIST. TOPOGRAPHY
UGS	green	EXIST. ELECTRICAL UG STRUCTURES
UGS-PROP	blue	PROP. ELECTRICAL UG STRUCTURES
VEG	8	EXIST. VEGETATION & TREES
VEG-PROP	8	PROP. VEGETATION & TREES
WATER	8	EXIST. WATER
WATER-PROP	8	PROP. WATER