

## Reduced Easement Requirements for Electric Underground Facilities

### SUMMARY

This bulletin establishes the criteria to allow a width reduction, of a public utility easement (PUE), for the installation of PG&E electric underground distribution facilities (primary, secondary, streetlight) and services, or joint electric underground and communication (no gas) facilities, when the conduits and cables are installed in a trench under a sidewalk in the public right of way (franchise).

This bulletin is only applicable to brand new single family residential subdivisions. All other residential and nonresidential projects must follow existing PUE requirements.

### AFFECTED DOCUMENT

This bulletin supersedes existing requirements in the following PG&E manuals and documents.

Electric & Gas Service Requirements ([Greenbook](#)) manual, Section 3, Electric Service: Underground (Subsection 3.2.7., Easements for PG&E Facilities)

Electric Design Manual (Chapter 10, Underground)

S5453 Joint Trench, (including any applicable associated documents not listed here).

S5453, Joint Trench – Attachment 1 Detailed Procedures

Service Planning & Design - Five Minute Meeting: Requests for variance of Public Utility Easements less than 10ft, Date: October 2021

[051122 Clearances and Location Requirements for Enclosures, Pads, and Underground Equipment](#)

**Note:** Only the Greenbook manual and Document 051122 are available to the public. The remaining manuals and documents are internal only to PG&E and are not available to the public.

### TARGET AUDIENCE

Internal Electric and Gas Coworkers: service planning, estimating, new business liaisons, inspectors, maintenance and construction, distribution planning, land

External Customers: applicant designers, architects, designers and builders, city and county building departments, individual applicants

### WHAT YOU NEED TO KNOW

- 1 As required in Greenbook Section [3.2.7. Easements for PG&E Facilities](#), new underground distribution facilities must be designed for installation in a PG&E approved PUE that is at least 10 feet wide and outside of public highways, streets, and roads.

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- 2 As an alternative, a minimum 8-foot-wide PUE may be allowed only if all the following requirements have been met.
  - 2.1 The trench location must be in the public right of way (franchise) area, located outside of any highway, street, or road, and typically installed under the sidewalk and next to the PUE on private property.
  - 2.2 All PG&E pad-mounted and subsurface equipment (e.g., transformers, enclosures, etc.), excluding the underground cable, must be installed in the designated PUE.
  - 2.3 PG&E gas facilities (trenched or bored) do not utilize the same reduced 8-foot wide PUE as electric facilities.
  - 2.4 Ensure there is a minimum of 1 foot (12 inches) of clearance from the trench to the closest edge of an enclosure or pad. Including the bottom of a box pad, which is wider than the top.
  - 2.5 Only secondary, service, and 200-amp primary distribution local line cables are installed in a trench, under the sidewalk, in the public right of way, with a reduced 8-foot-wide PUE.
  - 2.6 Trenches that contain 600-amp primary main line are **not** installed in or next to an 8-foot-wide PUE. This is due to the size of main line equipment.
  - 2.7 For pad-mounted equipment that only has doors on the front, the preferred orientation is with the 8-feet of working space facing the road.
  - 2.8 When the preferred orientation of the pad-mounted equipment cannot be achieved, then rotate it 90 degrees, in line with the direction of the PUE, and ensure there is a minimum 8 feet of clear working space in front of the equipment.
  - 2.9 Pad-mounted equipment with doors on the front and back should be rotated 90 degrees, so the front and back of the equipment is in line with the path of the PUE, and the doors do **not** face the road. Ensure a minimum 8 feet of clear working space is in front of both doors.
  - 2.10 When the installation of larger equipment (e.g., transformers, switches/interrupters, enclosures, Junctions) and pads are required, a PUE extension (i.e., bump-out) must be allocated, as needed. A bump-out off the PUE must be attached to, extended outward from the 8-foot PUE, and located on private property away from public right of way.
  - 2.11 If a bump-out (extension), off a PUE, is required, ensure the equipment pad or footprint and the working space clearances are accounted for. See Figure 3 Large Pad-Mounted (PM) Equipment - Top View, and Document [051122, Clearances and Location Requirements for Enclosures, Pads, and Underground Equipment](#).
  - 2.12 Ensure all planted, or to be planted trees have a minimum clearance of 5 feet from all PG&E equipment and from the edge of the trench. Refer to [Greenbook](#) Section [1.10.1. Safe Landscaping Near Underground Facilities](#).

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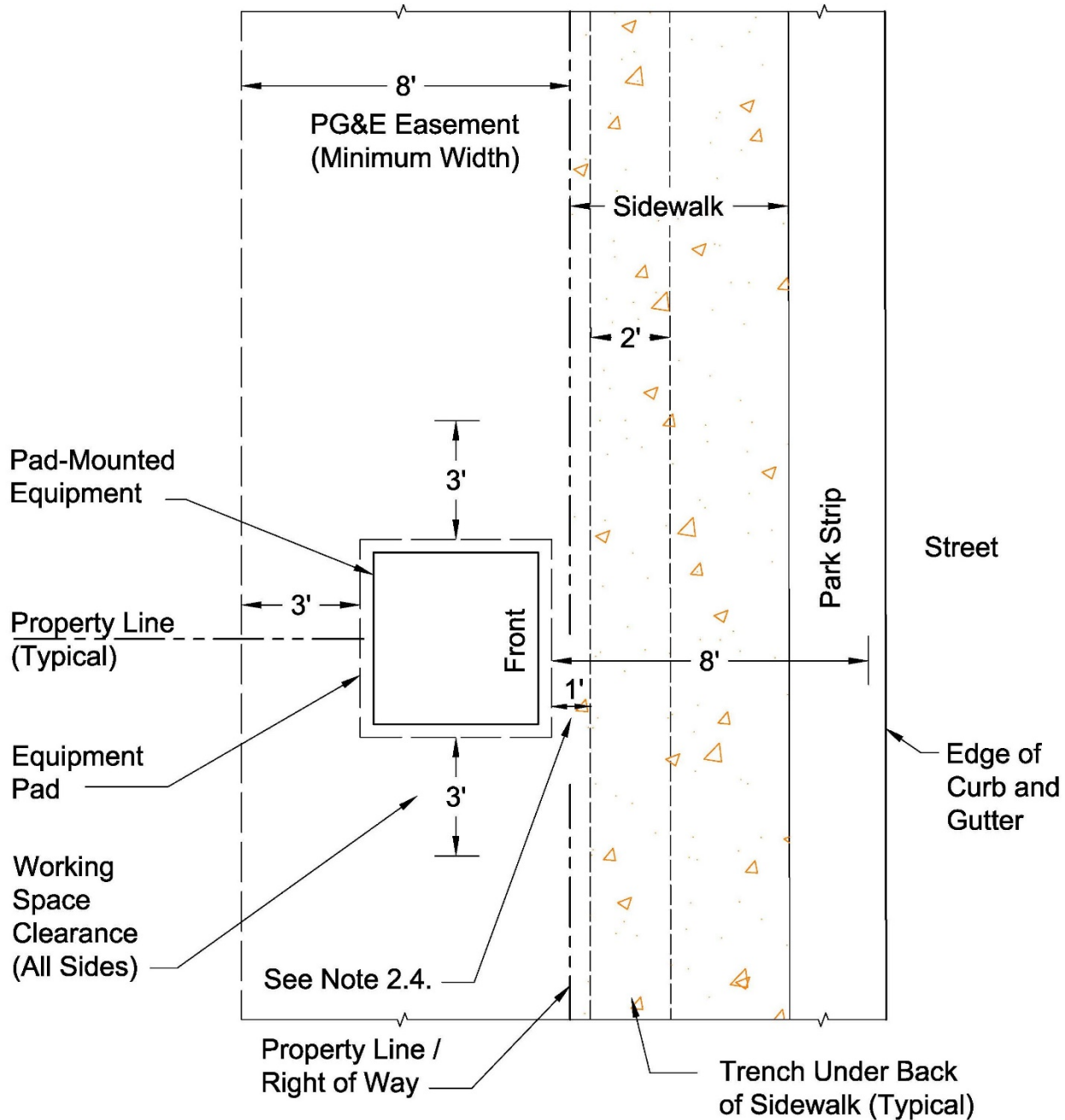


Figure 1 Pad-Mounted (PM) Equipment - Top View

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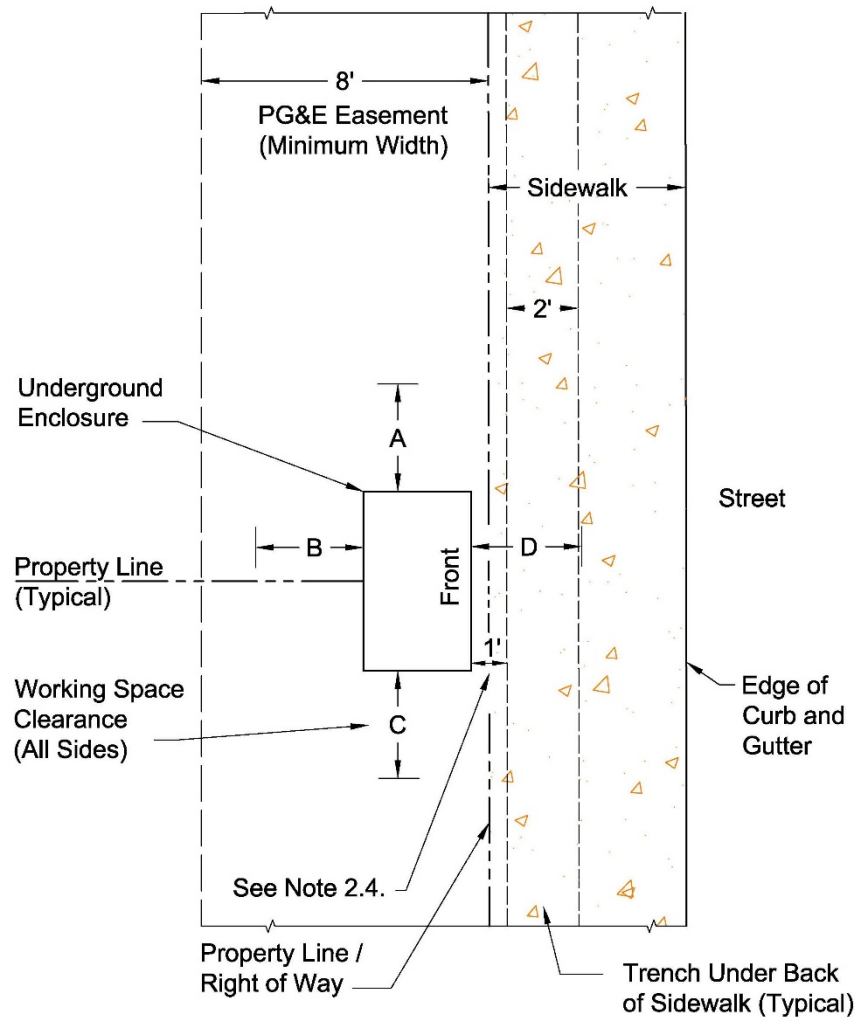


Figure 2 Primary or Secondary Underground Enclosure - Top View

Table 1. Subsurface Enclosure Working Space Clearances<sup>1</sup>

Equipment Type	Minimum Clearance Dimensions (feet)			
	A	B	C	D
3' x 5' Primary or Secondary Enclosure	3	3	3	3
24" x 36" or small Secondary Enclosure	3	1 (preferred)	3	2

1. When larger primary equipment is installed, refer to Document 051122 for the required minimum working space clearances.

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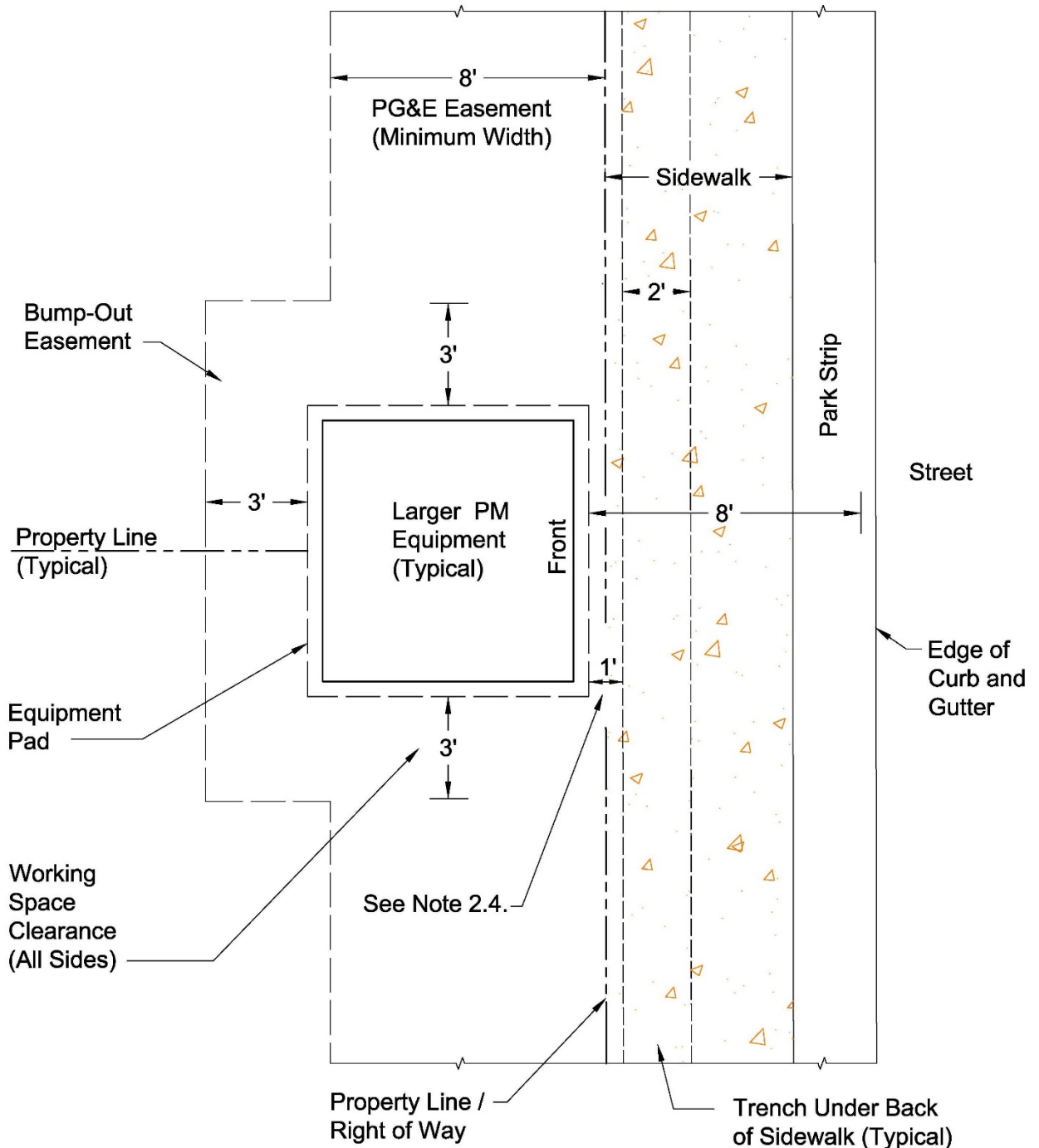


Figure 3 Large Pad-Mounted (PM) Equipment - Top View

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### 3 Additional Document References

- 3.1 [028028 Secondary Enclosures for Electric Underground](#)
- 3.2 [062000 Primary Electric Underground Enclosures](#)

### 4 Definitions

**Bump-Out:** An extension off a public utility easement, with a set width, to cover a wider section of a property to be used for the installation of utility equipment.

**Park Strip:** The narrow strip of land between the sidewalk and the street that creates an attached or detached sidewalk from the curb. Also known as, parkway or sidewalk strip.

**PG&E Equipment:** Includes but not limited to cables, transformers, switches, interrupters, enclosures, and Junctions.

**Public Utility Easement:** An easement that allows utility companies to access and use a portion of a property for public utility purposes.

**Subdivision:** As defined by PG&E; the division of land into four (4) or more smaller parcels for residential use.

**Underground Distribution Facilities:** PG&E electric primary and secondary; cables and equipment (e.g., transformers, switches, enclosures) installed below grade, at grade, or pad-mounted.

### DOCUMENT APPROVER

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### INCLUSION PLAN

The updated requirements in this bulletin will be incorporated into the next edition of the Greenbook or into a numbered engineering document