

SUBJECT: Introduction and Waiver of First Reading of an Ordinance

Amending the Brentwood Municipal Code to allow Pad-Mounted

Transformers within Development Projects.

DEPARTMENT: Engineering

STAFF: Allen Baquilar, Director of Engineering/City Engineer

Vatsal Patel, Engineering Manager

TITLE/RECOMMENDATION

Introduce and waive the first reading of an ordinance to amend Brentwood Municipal Code Section 16.120.120, allowing Permittees to install pad-mounted transformers within development projects while the City monitors the nationwide supply chain issues related to underground transformers.

The proposed ordinance is not an action subject to the California Environmental Quality Act (CEQA), as the action has no potential for resulting in physical change to the environment. (14 Cal. Code. Regs. § 15358.) Further, adoption of the ordinance is exempt under CEQA because it will not cause a change in any of the physical conditions within the area affected by the ordinances. (14 Cal. Code Regs. § 15061(b)(3).)

FISCAL IMPACT

There is no anticipated direct fiscal impact as a result of the adoption of an ordinance amending BMC Section 16.120.120, to allow residential and commercial development projects that include land subdivision to receive building permits.

BACKGROUND

The Subdivision Map Act (Government Code Section 66410, et seq.) is a California state law that authorizes local governments, such as city councils, to regulate and control the design and improvement of subdivisions of land. To carry out this power, each local government, including the City of Brentwood, passes its own subdivision ordinance, which sets out the requirements imposed on developers in exchange for the privilege of subdividing their land.



One of these requirements is found in Brentwood Municipal Code ("BMC") Section 16.120.120(A)(1), which states:

Utility distribution facilities, including, but not limited to, electric, communication, street lighting and advanced technology systems installed in and for the purpose of supplying service to any development, shall be required to be placed underground. "Advanced technology systems" shall be defined as all necessary appurtenances, equipment and facilities required for the provision of Internet, computer, fiber optic, cable television, telephone, and other communication services within the public right-of-way and upon private property. The design, installation, inspection and testing requirements for city acceptance of such system shall meet the minimum requirements as outlined in the city of Brentwood standard plans and specifications as approved by the city engineer. The developer shall also dedicate to the city that portion of the system within the public right-of-way and shall dedicate to the property owner the portion of the system within the private property.

As written, this includes all Pacific Gas & Electric Company ("PG&E") electric transformers, and requires that they be placed underground.

Electric distribution transformers serve an important role in converting or stepping down currents from power lines rated at 300,000 to 750,000 volts to lower voltages for consumer use, typically just 110 to 250 volts, with higher voltages for commercial and industrial use. Without transformers, residents and businesses would not be able to receive electricity.

In order for transformers to be installed beneath the surface, developers are dependent upon the availability of the necessary undergrounding equipment, including subsurface transformers. Recent years have seen a shortage in these materials for a variety of reasons, including factory shutdowns and supply chain delays at the height of the COVID pandemic, increasing construction demand, and shipping disruptions as overseas manufacturers attempt to get their products to US markets. PG&E estimates January 2028 as the earliest availability of subsurface transformers, whereas surface (pad-mounted) transformers are typically now available within 6-9 months after PG&E approval of plans.

On March 26, 2024, the City Council adopted an interim urgency ordinance authorizing the City Engineer to allow pad-mounted transformers for projects subject to BMC Section 16.120.120 ('Undergrounding—Electric, communication, street



lighting and advanced technology systems') with additional screening requirements for residential applications and discussed the adoption of an ordinance to allow for this process.

On May 8, 2024, the City Council adopted an extension of the interim urgency ordinance for a further ten months and fifteen days (expiring March 26, 2025) and directed staff to include restrictions as to the size of pad-mounted transformers within residential developments as part of the ordinance.

The design of electrical distribution systems, which includes electric transformers for residential developments, must comply with general safety, accessibility, and environmental standards as outlined by State regulations such as the California Electrical Code, Fire Code, and Building Code. PG&E is responsible for planning, designing, and engineering its service facilities using company standards for design, materials, and construction. These standards focus on safety, accessibility, voltage limits, and installation requirements rather than specific size restrictions for transformers in residential or commercial settings.

Staff has researched various other City requirements throughout the Bay Area and Southern California and was not able to find an example of another City with a size restriction on transformers.

Staff has verified the pad-mounted residential transformer dimensions found in neighboring cities have dimensions of approximately 34 inches (L) x 37 inches (W) x 25 inches (H), which is consistent with what would be expected for residential development in Brentwood and is rated to provide between 15 kiloVolt-Amps (kVA) to 50 kVA of electricity to homes, which is typical for residential development.

Figure 1: Examples of Pad-Mounted Transformer Installations





PG&E would be subject to requirements set forth by the City and based on City Council's direction, staff is including a restriction on pad-mounted transformers to not exceed a height of 26 inches when placed on or between residential lots.

NEXT STEPS

This action would introduce and waive the first reading of an ordinance to modify BMC 16.120.120 as set forth in the ordinance. The ordinance differs from the urgency ordinance in that it sets forth more explicit instructions for compliance with screening requirements and a height limit on transformers in residential settings.

Staff will continue to monitor the availability of subsurface transformers and its supply chain issues and return to the City Council with an update should supply chain issues resolve prior to March 26, 2025.

CITY COUNCIL STRATEGIC INITIATIVE

Not Applicable.

PREVIOUS ACTION

Previous Action by the City Council is included on Attachment 1.

DATE OF NOTICE

Not Applicable.



ENVIRONMENTAL DETERMINATION

The ordinance is not an action subject to the California Environmental Quality Act (CEQA), as the action has no potential for resulting in physical change to the environment. (14 Cal. Code. Regs. § 15358.) Further, adoption of the ordinance is exempt under CEQA because they will not cause a change in any of the physical conditions within the area affected by the ordinance. (14 Cal. Code Regs. § 15061(b)(3).)

ALTERNATIVE OPTION(S)

Alternative Options to the Staff Recommendation:

1. Do not approve staff's recommendation. The interim urgency ordinance will continue to be in effect until March 26, 2025. Thereafter, or unless otherwise extended, developers will not be able to receive timely full approval of their joint trench plans until underground transformers are available, halting all development until supply issues are resolved, or until separate Planning Commission and City Council consideration is completed (which may not be feasible in all cases).

ATTACHMENT(S)

- 1. Previous Action
- 2. Ordinance Amending BMC Section 16.120.120