Property Analysis and Siting Survey

In 2020, PSE&G determined that the Montclair Substation was in critical need of a major upgrade due to its age (approximately 100 years old) and the continued operation of some of its original equipment. The existing site is not adequately sized to support the required improvements while meeting modern regulatory, safety, and operational standards, necessitating a full replacement at a new location. As a result, PSE&G began evaluating and identifying suitable properties for a replacement substation in 2020.

When a substation requires an upgrade that cannot be accommodated at the existing location, PSE&G evaluates and identifies properties that meet the fundamental requirements for a new or expanded substation. These requirements include minimum acreage and an appropriate location, and depending on the project's needs, additional site-specific criteria may also be considered.

During the evaluation process, PSE&G reviews a broad set of factors that may influence the feasibility of constructing and operating a substation on a given property. The process begins within a defined search area, typically within 0.5 to 1.0 miles of the existing substation, due to the configuration of the surrounding electrical infrastructure and the need for the new substation to connect to it. All properties within this search radius are evaluated for suitability. While zoning classification is not initially considered, factors such as parcel size, location, and the feasibility of delivering the required electrical circuits are reviewed.

Once properties meet the initial criteria, each is further evaluated for additional constraints, including the presence of wetlands, flood zones, environmental concerns, and off-site limitations. Zoning classification and requirements are considered at this stage, but are not determining factors, as PSE&G constructs new substations in a wide variety of neighborhoods throughout the state. Both listed and off-market properties are evaluated.

After identifying properties that meet these criteria, PSE&G contacts the property owners to determine their interest in selling. The list of properties is then reviewed by various PSE&G divisions. Properties that appear to meet the fundamental requirements and present no major concerns at this stage undergo further investigation. This step typically includes entering into a Right of Entry Agreement with the property owner, allowing PSE&G to conduct initial, non-invasive site assessments to confirm suitability. If the initial assessments are favorable, additional testing—such as soil borings—may be performed. When appropriate, PSE&G may also request permission from the municipality to conduct non-invasive or additional testing within rights-of-way or similar areas.

Once a property is selected and placed under contract, PSE&G proceeds with developing engineering and other technical plans needed to design the new substation. Due to the need to meet modern regulatory, safety, operational, and zoning requirements, as well as incorporate input from various PSE&G divisions, the development of these plans is a multi-step process. This results in a final set of plans that is then presented to the municipality to begin the formal approval process (planning/zoning board reviews, etc.) and to obtain approvals from other outside agencies.

The properties that were identified for the new Montclair Substation, along with the analysis of each, are outlined below:

Property Address: 651 and 665-679 Bloomfield Ave, Montclair, NJ 07042



Distance From Existing Station: 500 Feet
Property Google Maps Link: https://maps.app.goo.gl/xa12mc17hJVFp6Ds8
Property Size: 52,086 SF / 1.19 Acres
Reason Why Location Is Not Viable:

These were the initial properties that PSE&G pursued beginning in 2020 and again in2022. PSE&G had entered into contract with 665-679 Bloomfield Ave and neared finalization with 651 Bloomfield Ave to purchase them. In February 2024 PSE&G was advised that the Montclair Center BID and the previous administration did not favor this location for the future substation as they would like to maintain the downtown business nature of this area of Bloomfield Ave. Without that municipal and stakeholder support, the properties were no longer viable, and PSE&G subsequently terminated the contracts.

Property Address: 33 Cottage Pl, Montclair, NJ 07042 - "*Immaculate Conception High School*"



Property Google Maps Link: https://maps.app.goo.gl/STJz75BXYfoSvRUz5
Distance From Existing Station: 0.7 Miles
Property Size: 42,188 SF / 0.96 Acres (w/ Parking Lot + Building); 26,923 SF / 0.62 Acres (Parking Lot Only)
Reason Why Location Is Not Viable:

This location was previously the site of Immaculate Conception High School. After evaluation by PSE&G, it was determined that the building's historic designation prevents any removal or modification, and the area the building occupies is essential to achieve the minimum footprint required for a modern substation. Without access to that footprint, the remaining parcel is not large enough to accommodate necessary substation equipment, safety clearances, operational access, constructability needs, and land-use requirements.

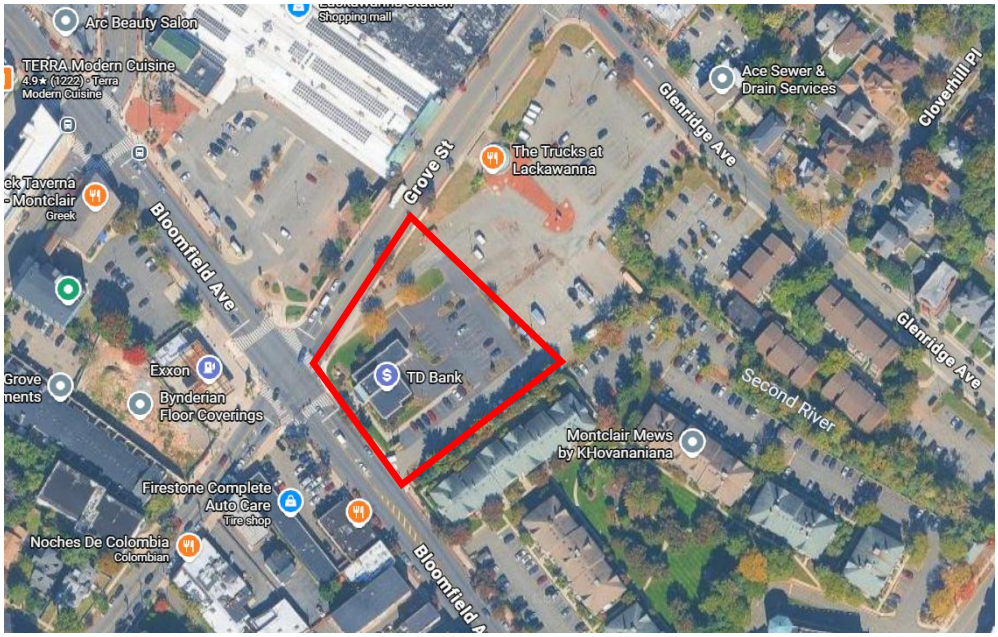
PSE&G's substation design standards require sufficient developable area for transformer containment basins, 26/4kV structures, switchgear, relay and control buildings, underground duct banks, and NEC/NESC-mandated approach-distance envelopes. Since the building cannot be removed and the usable parcel area falls below these minimum requirements, a functional station layout cannot be achieved.

Additional constraints include:

- Insufficient area to maintain NESC Table 234 conductor clearances, equipment approach distances, and transformer oil-containment setbacks.
- Inability to establish appropriate feeder exit routes or meet bend-radius requirements for high-voltage cable systems.
- Limitations preventing installation of a continuous grounding grid that meets IEEE Std. 80 step-and-touch voltage criteria.
- Lack of adequate workspace for equipment staging, replacement operations, and ongoing maintenance access.
- Inability to position perimeter fencing, security infrastructure, and restricted-access zones without violating required safety envelopes and land-use constraints.

Due to these engineering, regulatory, and constructability and space limitations, the parcel cannot support a substation design that meets PSE&G standards, IEEE and NESC requirements, or long-term operational resilience. The site is therefore not viable for substation development.

Property Address: 233 Bloomfield Ave, Montclair, NJ 07042



Property Google Maps Link: https://maps.app.goo.gl/gedaaYYMGzXSwM6R6
Distance From Existing Station: 1.0 Miles
Property Size: 65,933 SF / 1.51 Acres; 36,193 SF / 0.83 Acres [After removal of easement area]
Reason Why Location Is Not Viable:

The property contains several existing utility easements, including a 30-foot drainage easement and 15-foot water and gas easements. These encumbrances significantly reduce the buildable area and restrict the placement of major substation components, required safety clearances, and operational access routes. The alignment of these easements bisects the parcel and prevents the formation of a contiguous buildable area, which is essential for establishing the unified equipment layout, safety clearances, and operational access required for a functional substation design.

The parcel is also bordered by Bloomfield Avenue and Grove Street, both primary transportation corridors underlain with dense, legacy subsurface utility networks. This creates substantial challenges for installing new outside-plant electrical infrastructure. Limited trenching and conduit routing options, combined with the high probability of utility conflicts, relocations, and traffic impacts, further constrain the feasibility of establishing reliable feeder ingress and egress to the site.

The property is also located at a considerable distance from the existing substation and the 26 kV and 4 kV circuits currently supplying Montclair's residents and businesses. Developing this site would require approximately one additional mile of both underground (UG) and overhead (OH) feeder construction across multiple circuits to integrate the new station into the distribution network. This added infrastructure would materially increase project cost and introduce substantial construction impacts to neighborhoods in both Ward 3 and Ward 4.

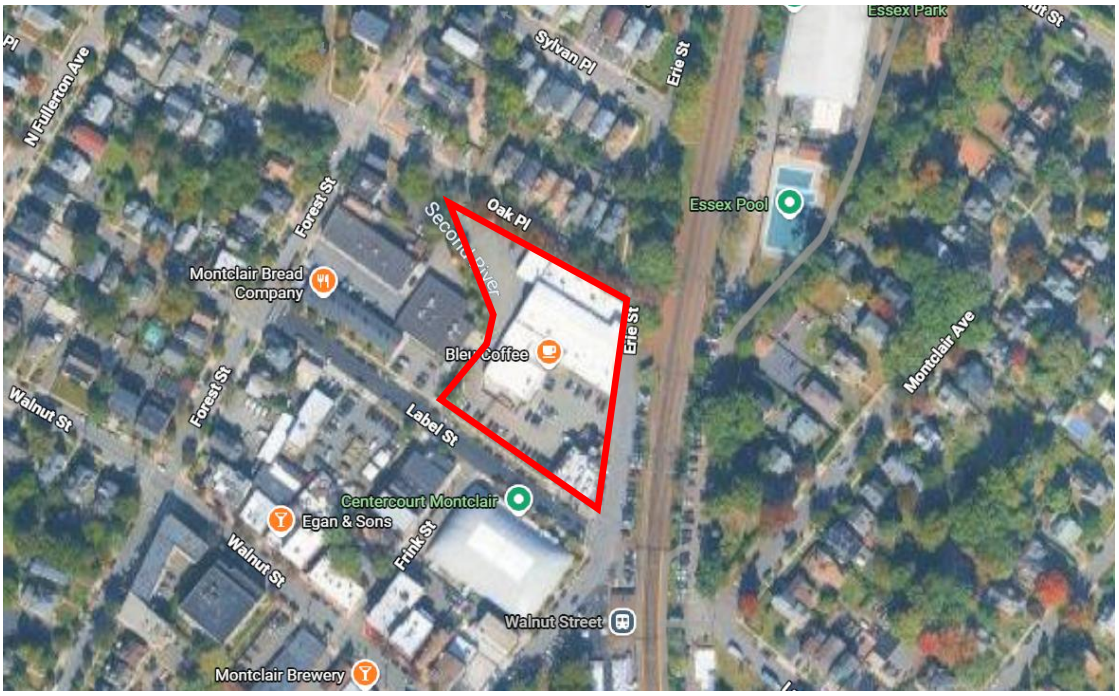
PSE&G's substation design standards require a contiguous area to accommodate transformer containment basins, 26/4 kV structures, switchgear, relay and control buildings, underground duct banks, and NEC/NESC-mandated approach-distance envelopes. After the areas affected by the drainage, water, and gas easements are removed, the remaining footprint falls below the minimum spatial requirements, making a functional station layout unachievable.

Additional constraints include:

- Insufficient area to maintain NESC Table 234 conductor clearances, equipment approach distances, and transformer oil-containment setbacks.
- Inability to establish appropriate feeder exit routes or meet bend-radius requirements for high-voltage cable systems.
- Limitations preventing installation of a continuous grounding grid that meets IEEE Std. 80 step-and-touch voltage criteria.
- Lack of adequate workspace for equipment staging, component replacement operations, and ongoing maintenance access.
- Inability to place perimeter security fencing and restricted-access zones without violating electrical safety envelopes or conflicting with land-use constraints.

Due to these engineering, regulatory, and constructability limitations and location, the parcel cannot support a substation design that meets PSE&G standards, IEEE and NESC requirements, or long-term operational resilience. The site is therefore not viable for substation development.

Property Address: 6 - 10 Erie St, Montclair, NJ 07042



Property Google Maps Link: https://maps.app.goo.gl/8YmmSEjMXTD29ggn8
Distance From Existing Station: 1.0 Miles
Property Size: 62,206 SF / 1.43 Acres
Reason Why Location Is Not Viable:

A 10-foot-deep brook runs along the western boundary of the property and continues beneath Oak Place. This feature presents substantial constructability constraints for installing the required substation circuits, as excavation, underground duct bank installation, and manhole placement would be highly restricted in this area. The limited ability to trench or establish stable subsurface support systems introduces elevated construction risk and reduces the feasibility of routing feeders reliably from the site.

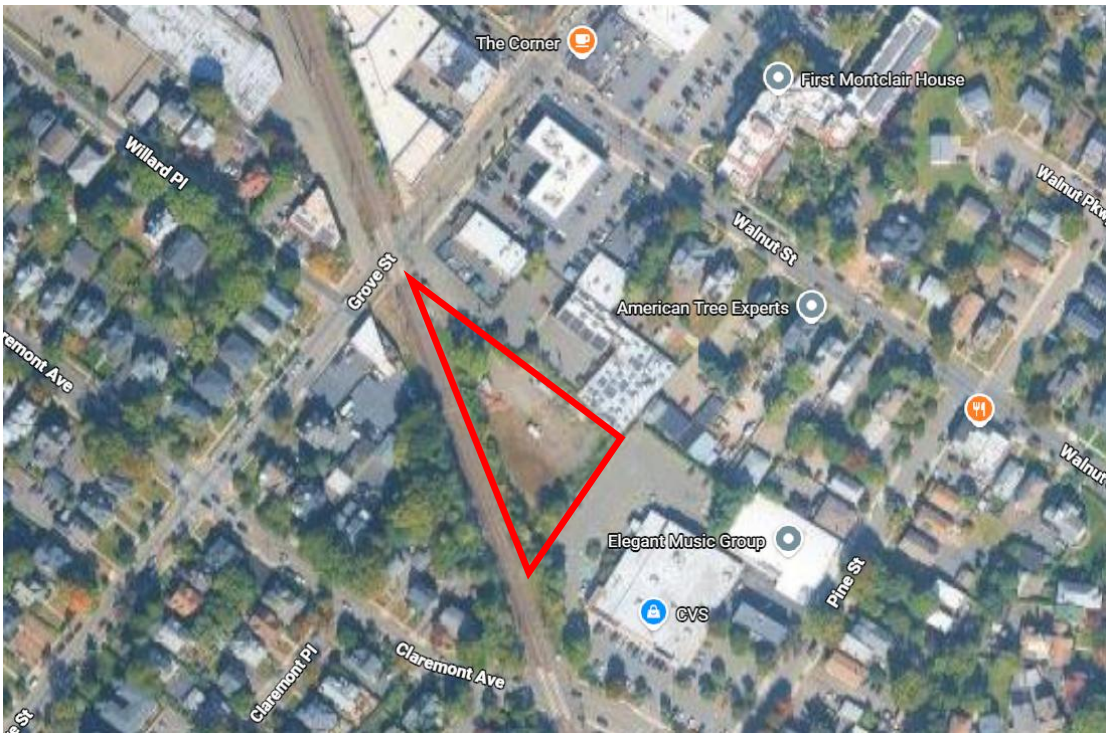
Preliminary due diligence also identified that the property lies within a designated flood hazard area. Because of this, the allowable buildable area is restricted. Once the non-buildable floodplain portions are removed, the remaining parcel area is insufficient to support a functional substation layout that meets PSE&G's design standards, including space for transformer containment basins, 26/4 kV structures, switchgear, relay and control buildings, underground duct banks, and NEC/NESC-mandated approach-distance envelopes.

The eastern boundary of the parcel is constrained by active rail infrastructure. Routing new circuits from the eastern side of the site to supply the western portions of Ward 4 would require complex railroad crossings, specialized construction methods, and extensive coordination with the rail operator. These conditions significantly increase project cost, schedule duration, and construction risk.

In addition, the property is located at a considerable distance from the existing substation and the 26 kV and 4 kV distribution circuits currently serving Montclair's residents and businesses. Developing this location would require constructing approximately one additional mile of both underground (UG) and potentially overhead (OH) feeder infrastructure across multiple circuits to integrate a new station into the existing network. This scale of new construction would materially increase project costs and result in substantial community and traffic impacts within Wards 2, 3, and 4.

Due to these engineering, environmental, and constructability reasons, the site was excluded from further consideration in the substation siting analysis.

Property Address: 103 Grove St, Montclair, NJ 07042



Property Google Maps Link: https://maps.app.goo.gl/erQixZt647vCGt8RA
Distance From Existing Station: 1.1 Miles
Property Size: 32,670 SF / 0.75 Acres
Reason Why Location Is Not Viable:

The property was originally identified with assistance from the Township. Our analysis determined that similar to other evaluated sites the location provides limited feasible pathways for routing the required 26 kV and 4 kV circuits to and from a proposed station.

The western side of the parcel is constrained by active rail infrastructure, meaning all circuits serving the western portions of Montclair (entirely of Ward 3 and a significant portion of Ward 4) would require complex railroad crossings, specialized construction methods, and extensive coordination with the rail operator. Compounding this issue, the property is located at a considerable distance from the existing substation and the 26 kV and 4 kV circuits currently supplying Montclair. Building a station at this location would require additional underground (UG) and overhead (OH) feeder construction across multiple circuits. These factors together introduce significant construction risk, and would result in temporary but substantial impacts to neighborhoods in Wards 3 and 4.

In addition, the parcel does not meet PSE&G's substation design standards, which require sufficient contiguous developable area for transformer containment basins, 26/4 kV structures, switchgear, relay and control buildings, underground duct banks, and NEC/NESC-mandated approach-distance envelopes. The usable area falls below these minimum requirements, making a functional layout unachievable.

Other key constraints include:

- Inability to meet NEC/NESC and IEEE Std. 80 requirements due to insufficient space for clearances, grounding, and appropriate feeder exit routing.
- Lack of adequate contiguous area for construction staging, equipment replacement, and secure perimeter zones, preventing safe and maintainable substation operations.

Due to these engineering, constructability, and system-integration constraints, the property was excluded from further consideration in the substation siting analysis.

Property Address: 101 Greenwood Ave, Montclair, NJ 07042 - "DeCamp"



Property Google Maps Link: https://maps.app.goo.gl/xAAgeKD1TjQB3SU56
Distance From Existing Station: 0.9 Miles
Property Size: 75,794 SF / 1.74 Acres
Reason Why Location Was Initially Not Viable:

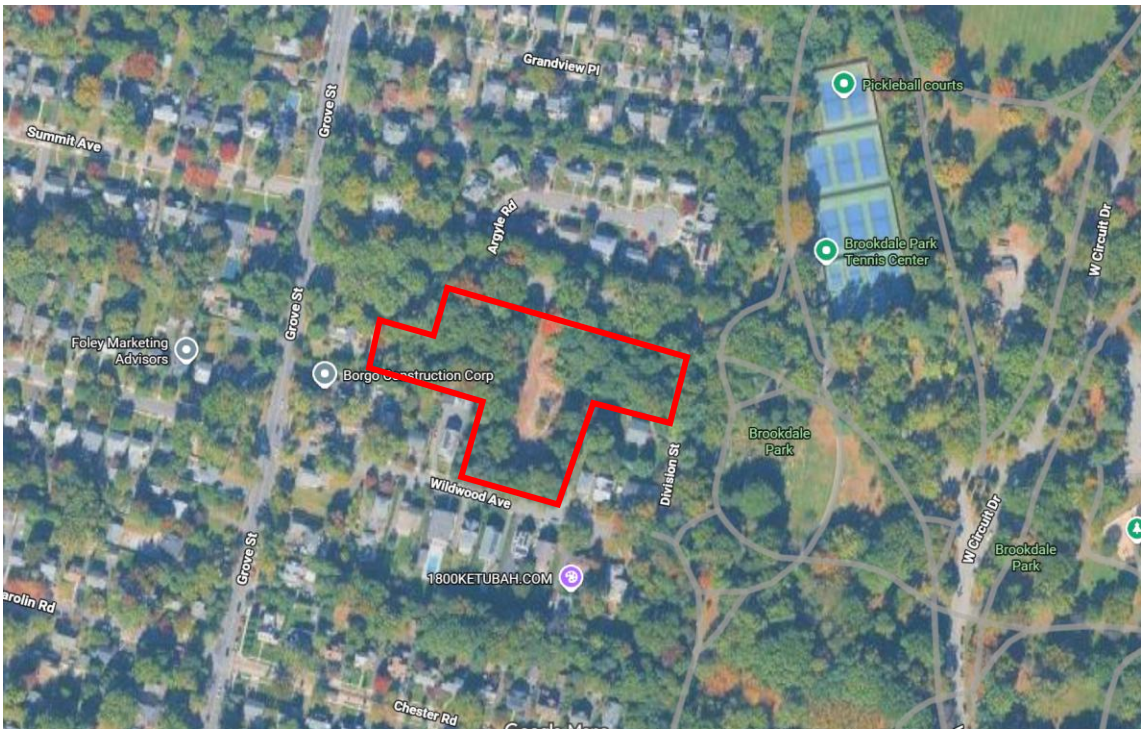
PSE&G initially approached the property owner in 2020 to assess their interest in selling the parcel. At that time, the owner indicated they were not interested, and the property was therefore not advanced for further evaluation

However, during a meeting with the Montclair Facilities and Infrastructure Committee at the end of September, PSE&G was informed that the owner of 101 Greenwood Avenue may now be open to considering a sale. Based on this updated information, PSE&G will re-examine the property and conduct an assessment of its technical feasibility and alignment with substation siting requirements.

Upon initial review, the property is approximately one mile from the existing station and about half a mile farther than the preferred site at 205 Claremont Avenue. As a result, an additional minimum of 0.5 miles of underground construction would be required to extend the existing 26 kV and 4 kV circuits to this location. The active rail line adjacent to the property may also present interconnection challenges.

Nonetheless, as stated previously, PSE&G will take a second, more detailed look at this property to determine its overall viability.

Property Address: Wildwood Ave, Montclair, NJ 07043



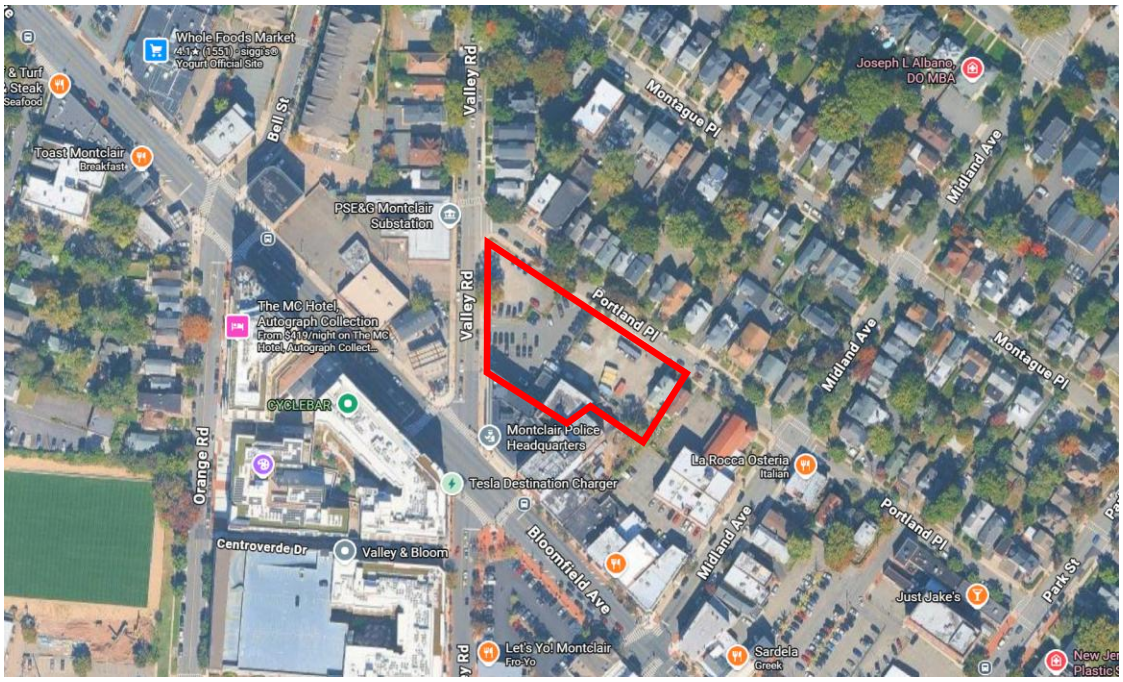
Property Google Maps Link: https://maps.app.goo.gl/xAAgeKD1TjQB3SU56
Distance From Existing Station: 2.3 Miles
Property Size: 113,256 SF / 2.6 Acres
Reason Why Location Is Not Viable:

The property, which was identified during the recent Facilities and Infrastructure Committee meeting and is located more than two miles from the existing substation. While the parcel is adequately sized relative to PSE&G's minimum developable-area requirements, its distance presents a significant technical limitation. Constructing the necessary outside-plant electrical infrastructure would require extending multiple new 26 kV and 4 kV feeders through Wards 3, 2, and portions of Ward 1, resulting in extensive underground and overhead construction across a large portion of Montclair. This level of circuit extension would materially increase construction duration, and community impacts.

The property is further constrained by its surroundings. Brookdale Park borders the site to the east and north, and Grove Street borders it to the west, significantly restricting feasible routing corridors for both 26 kV and 4 kV feeder circuits. These physical barriers limit the number of viable egress pathways and reduce the feasibility of integrating a new substation into the existing distribution network without major system reconfiguration.

Given these routing constraints, system-integration challenges, and the substantial construction impact associated with extending feeders over long distances, this property was excluded from further consideration in the substation siting analysis.

Property Address: 61-57 Valley Road & 46 Portland Place



Property Google Maps Link: https://maps.app.goo.gl/T1ueRBeJxKkUZXc68
Distance From Existing Station: 0.3 Miles
Property Size: 49,680 SF / 1.14 Acres
Reason Why Location Is a Secondary Option:

The property was originally identified with assistance from the Township under the prior administration after building the station on the property at 665-679 Bloomfield Ave. was no longer viable. During preliminary screening, the parcel appeared viable due to its proximity to the existing substation and the Township's initial willingness to consider negotiating the sale of a portion of the police station property which would be needed to accommodate the proposed Montclair Substation.

However, subsequent due diligence identified significant congestion within the underground utility infrastructure along Valley Road. These conditions create major limitations and difficulties for routing the 26 kV and 4 kV circuits into the proposed substation property.

PSE&G understands that Valley Road serves as one of Montclair's primary arterial corridors and is also where the Montclair Police Headquarters is located, which substantially increases the operational and logistical sensitivity of performing major excavation or utility work in this area.

Siting the station at this location would necessitate extensive utility relocations, deep excavation, and prolonged traffic control along both Valley Road and Portland Place and would most likely impact Bloomfield Avenue as well. This introduces significant cost escalation, and schedule uncertainty. In addition, the magnitude of civil work required along this critical corridor would create additional community impacts, including extended lane closures, restricted access for residents and businesses, and operational challenges for municipal facilities and emergency services. The adjacency to essential services, particularly the police headquarter further complicates construction sequencing, cutover coordination, and traffic management and why this location is not the preferred option but remains a secondary option.

Property Address: 205 Claremont Ave, Montclair, NJ 07042



Property Google Maps Link: https://maps.app.goo.gl/T1ueRBeJxKkUZXc68
Distance From Existing Station: 0.6 Miles
Property Size: 89,601 SF / 1.98 Acres
Reason Why Location is the Preferred Option:

This property emerged as a potential site following several public articles indicating that the Township was evaluating long-term options for replacing or relocating its existing municipal complex due to the age and condition of the current facilities. Based on this context, PSE&G identified the parcel as a candidate location, and it has since become PSE&G's preferred option for the proposed Montclair Substation due to several key engineering and operational advantages.

Preliminary subsurface utility investigations along Claremont Avenue, North Fullerton Avenue, and Park Street show comparatively lower underground utility congestion than other evaluated corridors. This reduced utility congestion provides viable, technically efficient pathways for installing the required 26 kV and 4 kV infrastructure. The site's close proximity to the existing Valley Road Substation also enables us to intercept and tie into existing 26 & 4kV distribution circuits along their current routes.

The property's size, including the bank parcel and the Cornerstone House parcel, offers sufficient contiguous area to accommodate the full substation footprint, including transformer containment basins, 26/4 kV structures, switchgear, the control building, stormwater management systems, and all necessary operational clearances. As the property is in a redevelopment area, it is presumed there would not be zoning constraints encountered with other properties. The available property area also provides flexibility for electric-friendly landscaping, architectural façade treatments, and other aesthetic or mitigation features to be developed in consultation with the Township and the community.

The combination of favorable electrical routing conditions, reduced civil-infrastructure complexity, sufficient land area, minimized community impact, and the redevelopment area, makes this site PSE&G's preferred option for development of the new Montclair Substation.