






**MONTGOMERY COUNTY PLANNING DEPARTMENT**  
THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION

MCPB

Item No.: 8A

Date: 03-28-2019

**The Potomac Edison Company-Clarksburg Substation: CU-19-07**

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**Completed: 03-15-2019**

**Description**

**Potomac Edison Company-Clarksburg Substation: CU-19-07**

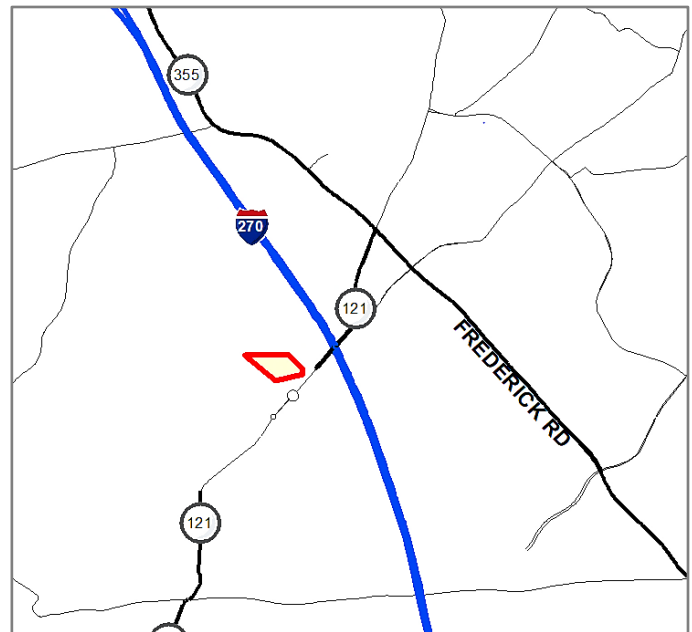
Request for a Conditional Use approval of a Public Utility Structure for the construction of a modular substation on an approximately 0.70-acre easement on a 12.02-acre parcel leased from Montgomery County. Located at 22800 Whelan Lane, approximately 100 feet north of its intersection with Clarksburg Road in Boyds, Maryland; EOF (Employment Office) Zone, Clarksburg West Environmental Overlay Zone.

*10 Mile Creek Area Limited Amendment, July 2014*

**Staff Recommendation:** Approval with conditions

- **Application Filed:** December 12, 2018
- **Planning Board Hearing:** March 28, 2019
- **Hearing Examiner Hearing:** April 12, 2019

**Applicant:** Potomac Edison Company



**Summary**

- With the recommended conditions, the subject use conforms to all applicable requirements and regulations for approval of a public utility Conditional Use (**Section 59.3.6.7.E Public Utility**) of the Montgomery County Zoning Ordinance and the applicable development standards under the EOF Zone (**Section 59.4.6.3.E**)
- The subject use is consistent with the recommendations of the *10 Mile Creek Area Limited Amendment, July 2014*
- Approval of the requested Conditional Use will not inflict discernable adverse impact on the immediate neighborhood.
- There are no notable traffic, circulation, noise or environmental issues associated with the Application provided that the recommended conditions are satisfied.
- The Application complies with the Montgomery County Environmental Guidelines; and a separate Preliminary & Final Forest Conservation Plan and the Special Protection Area Water Quality requirements.

## **SECTION I: STAFF RECOMMENDATION AND CONDITIONS OF APPROVALS**

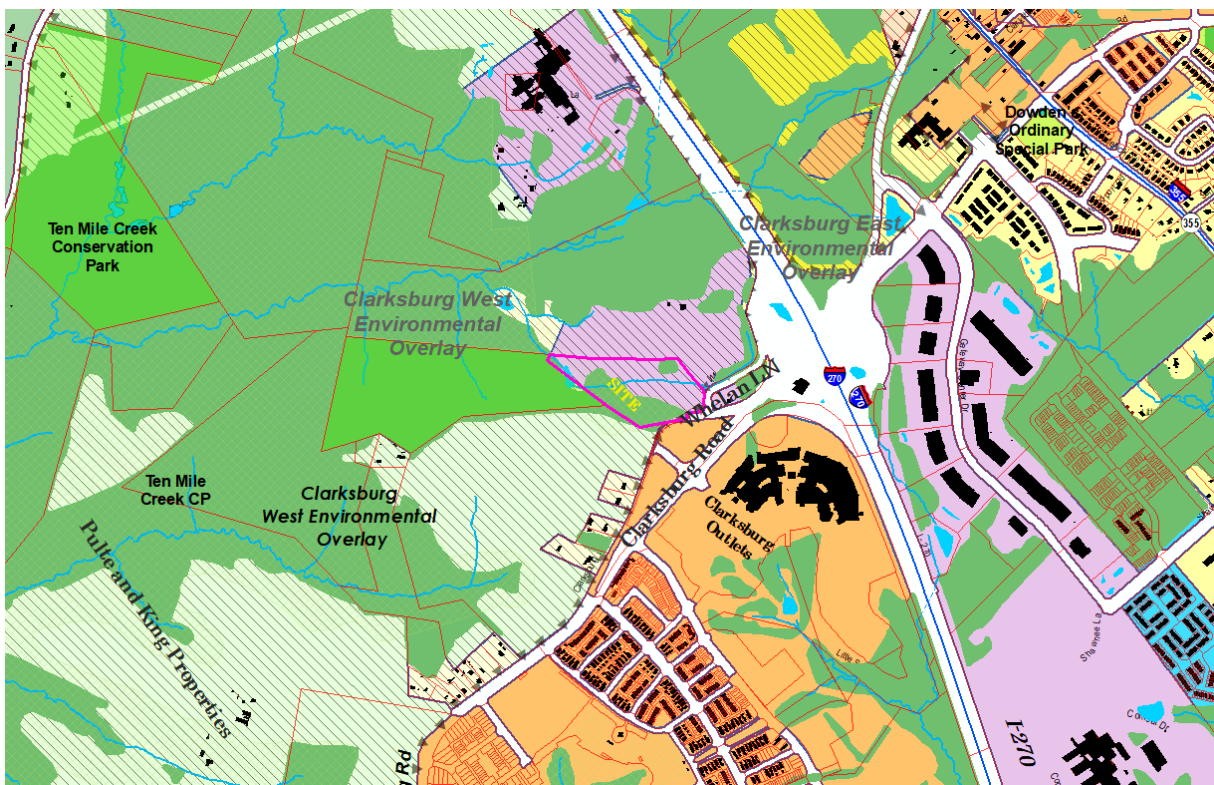
Staff Recommends Approval of CU-19-07 subject to the following conditions:

1. No identification sign, other than safety signs and those required by law, shall be placed on the property.
2. The Applicant must illustrate street right-of-way width on plans for both Whelan Lane and Old Clarksburg Road.
3. The Applicant must construct the access entrance with the maximum 15-foot curb radius as required by the EOF Zone and with 22 feet of width. To accommodate emergency vehicle access, the curbs may be mountable.
4. The sizes of the two parking spaces must meet the minimum dimension standard for parallel parking, and one of the two spaces must be van accessible handicap space.

## SECTION II: PROJECT DESCRIPTION

### A. Site Description

The subject property is located at 22800 Whelan Lane, approximately 100 feet north of its intersection with Clarksburg Road in Boyds, Maryland. The proposed project site consists of an approximately 0.70-acre easement, leased from Montgomery County and located on a 12.02-acre parcel of County-owned land (shown in red below). The property is zoned EOF (Employment Office) and is also within the Clarksburg West Environmental Overlay Zone. The property is within the *10 Mile Creek Area Limited Amendment to the Clarksburg Master Plan and Hyattstown Special Study Area*.



*Figure-1: Vicinity*

Currently, the subject property is unimproved and is generally wooded with existing trees concentrated at the southwest and western edges of the property. There is a small patch of graveled impervious area covering approximately 12,505 square feet at the western edge of the property, with approximately 12,159 square feet of the gravel area located within the proposed easement that will accommodate the proposed use. There is an existing driveway apron along the property's frontage on Whelan Road. The existing driveway will be modified as part of the proposed Conditional Use.

The site is entirely within the 10 Mile Creek Special Protection Area (SPA). Under the SPA law (Section 8 of Montgomery County Executive Regulation 29-95 – *Water Quality Review for Development in Designated Special Protection Areas*), development projects within an SPA are subject to approval of a Water Quality Plan. The Applicant has submitted a detailed stormwater management concept and a Preliminary Water Quality Plan for review and approval by the Planning Board, which is analyzed in a companion staff report.



Figure-2: The Subject Property (outlined in yellow)

### C. Neighborhood Description

For the purposes of this Application, staff defines the area surrounding the neighborhood as follows:

North:	10 Mile Creek Conservation Park and Montgomery County Properties
East:	I-270
West:	10 Mile Creek and the south and southwest boundaries of the 540 acre Pulte and King Properties
South:	West Old Baltimore Road

The neighborhood was defined based on the demand for electricity that the proposed substation proposes to meet. The neighborhood is bisected from north to south by Clarksburg Road (MD 121). The portion of the neighborhood that is east of Clarksburg Road comprises a total of 535 acres of a large multi-phased, mixed-use community (Cabin Branch) zoned CRT-0.5 C-0.25 R-0.25 H-130 T and CRT-0.5C-0.25 R-0.25 H-65. The remaining portion of the neighborhood is located west of Clarksburg Road and encompasses approximately 540 acres that are recommended for residential single-family attached and detached development in the RNC and RE-1 zones.



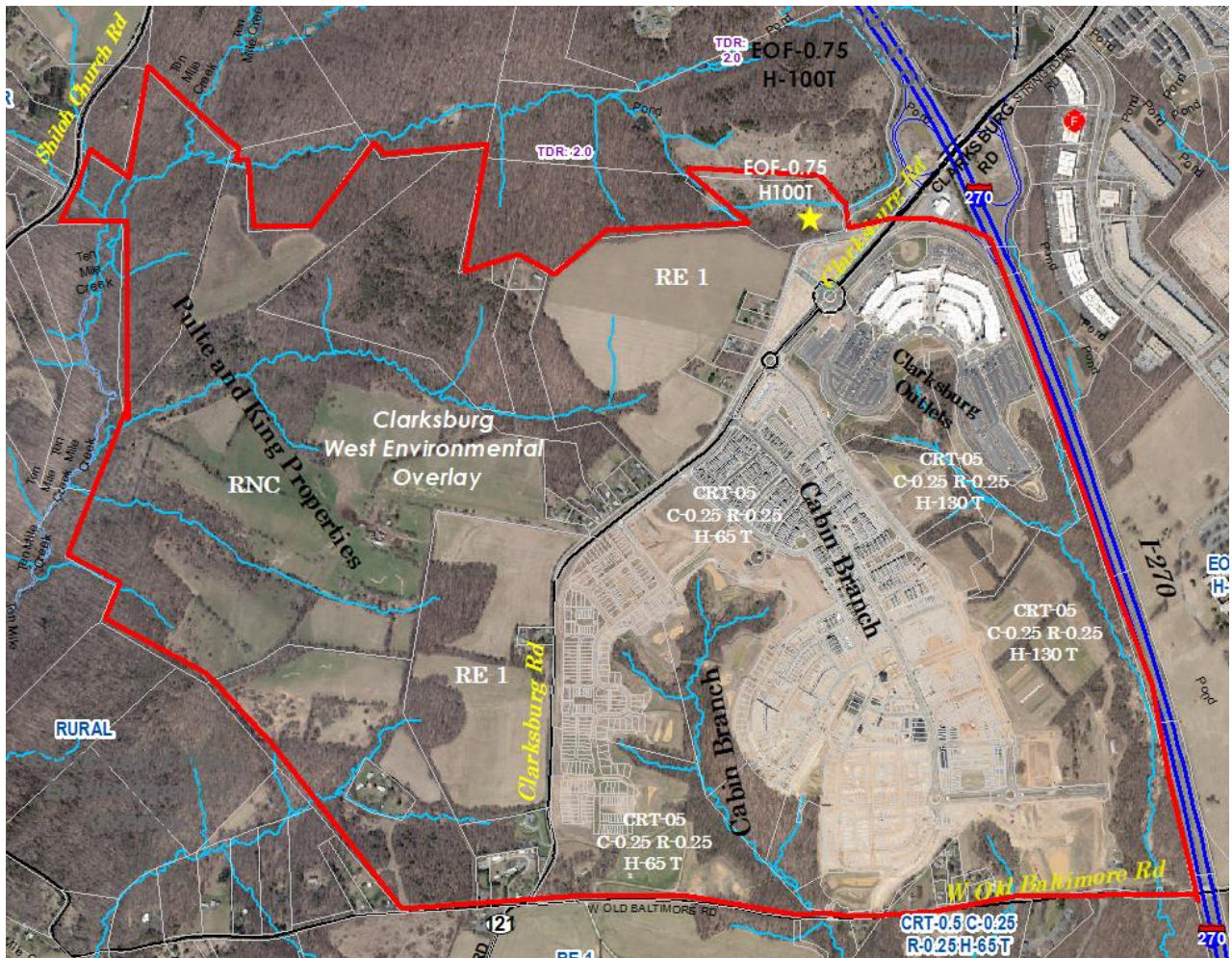


Figure 3: Defined Neighborhood (outlined in red)

The subject property, which is part of a large area of unimproved land owned by Montgomery County, is zoned EOF-75 H 100 T.

#### D. Zoning and Land Use History

The Subject Property was classified under the RR Zone (Rural Residential) in 1958 and reclassified to the R-200 Zone with the Countywide Comprehensive rezoning in 1973. The area was rezoned to the I-3 Zone by Sectional Map Amendment G-710 in 1994; and with the adoption of the 2014 Zoning Code the property was assigned the EOF-0.75 H 100 T Zone.





The proposed substation will be accessed from Whelan Lane via a single driveway. The existing driveway apron will be modified and upgraded to meet the needs of the proposed use. The driveway apron will be widened to 60 feet, then narrowing to 22 feet wide in the interior of the subject property. The Conditional Use site plan provides ample space for two parking locations, one in the front yard and the second in the side yard, both of which will be accessed directly from the main driveway. The Applicant's statement identifies the types of maintenance vehicles visiting the site to include primarily pick-up trucks, small vans, or SUVs.

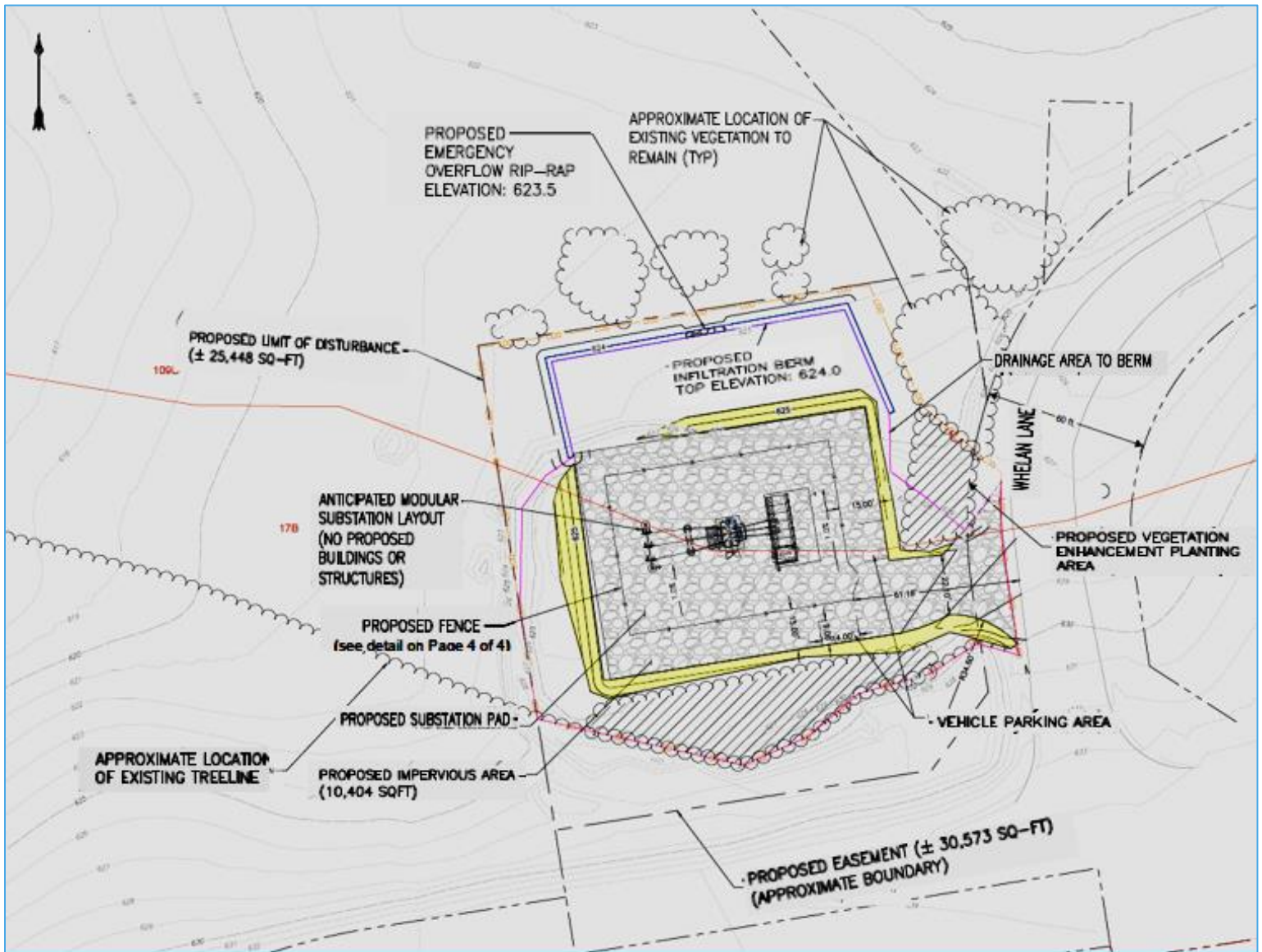
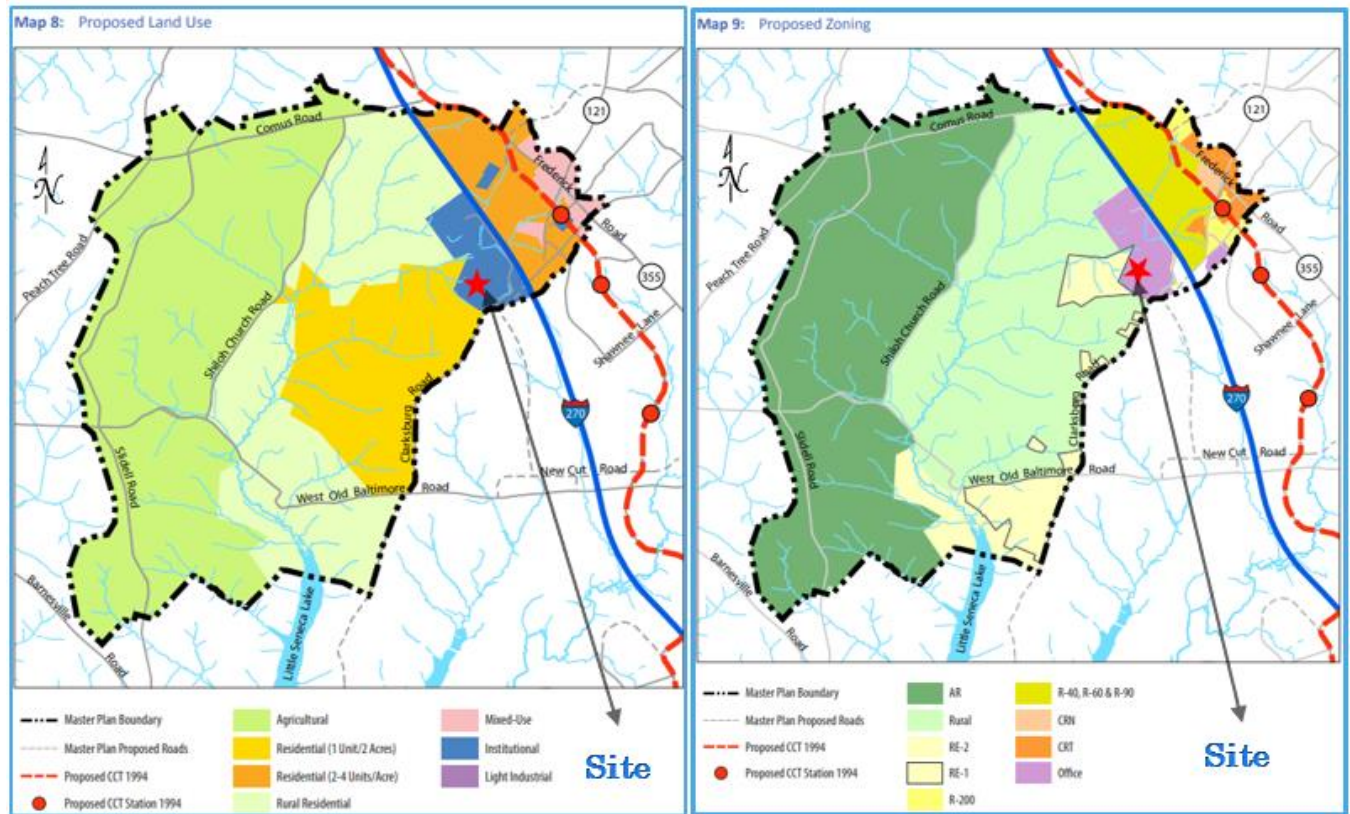


Figure 5: Proposed Conditional Use Site Plan

## SECTION III: ANALYSIS AND FINDINGS

### A. Master Plan



*Figure 6: 2014 10 Mile Creek Area Limited Amendment*

The proposed substation substantially conforms with the applicable sections of the 2014 10 Mile Creek Limited Amendment. The proposed substation supports the Limited Amendment's core vision. It will provide electrical utility services to meet the increased demand that has arisen from the development of a "complete, well-defined corridor town that provides jobs, homes, and commercial activities." (page 5). In addition, constructing the substation offers an opportunity to reduce imperviousness and contribute to the preservation of critical natural resources.

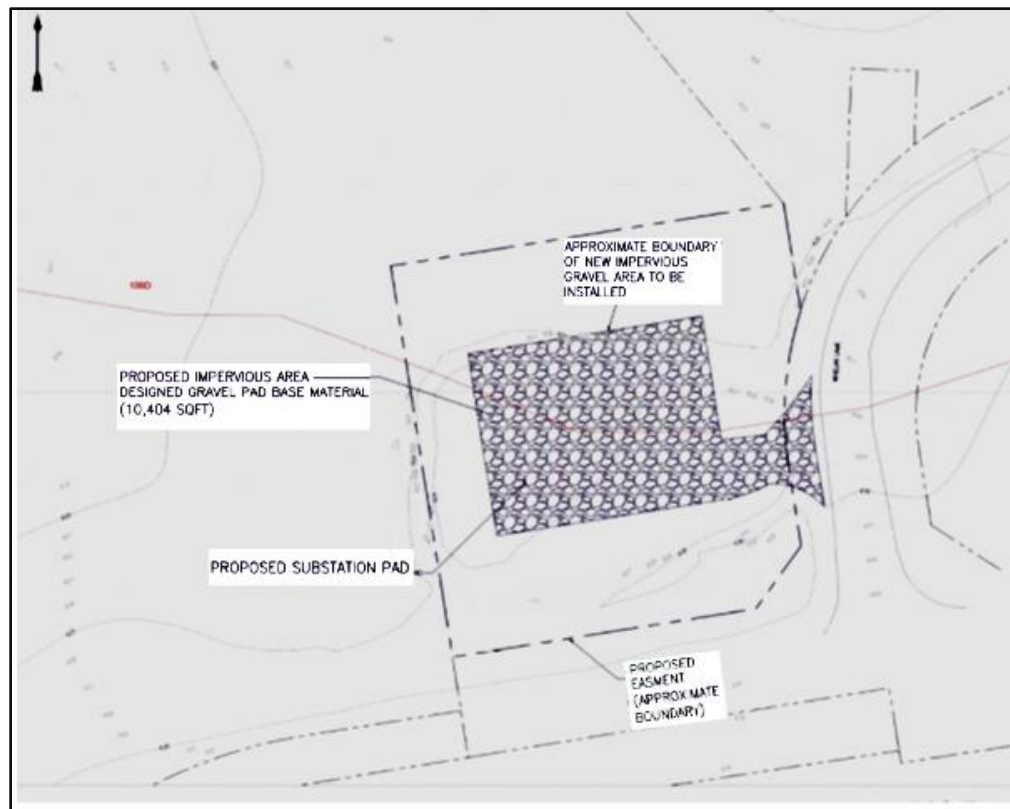
The Limited Amendment's recommendations for properties located west of I-270 include reducing development footprints and impervious cover, reducing impacts to forest and steep slopes, and protecting stream conditions and environmental buffers. It further recommends that imperviousness be limited to six percent with no additional impervious cover on County-owned properties (page 45).

The Master Plan notes that Forest Conservation Plans for properties in the 10 Mile Creek Watershed should protect all forest on County-owned properties. The disturbance associated



with the Application is limited to an area that has already been disturbed and includes impervious cover. The existing impervious surfaces will be removed, and the new impervious surface for the substation will result in a net decrease in impervious surface on the property, which will also be less than six percent. All the existing forest, steep slopes, and other environmental features will be left undisturbed. The unforested stream buffers will be planted to establish forest cover, and the newly planted forest, retained forest, and environmental buffers will be protected in a Category I conservation easement.

## Imperviousness



Existing Impervious Areas					
Number	Description	Area (ft <sup>2</sup> )	Percent of Property	Area to be Removed (ft <sup>2</sup> )	Area to Remain (ft <sup>2</sup> )
1	Abandoned Area	12505	2.4%	12505	0
Proposed Impervious Areas					
Number	Description	Area (ft <sup>2</sup> )	Percent of Property	Area to be Removed (ft <sup>2</sup> )	Area to Remain (ft <sup>2</sup> )
2	Gravel Substation Pad	10405	2.0%	0	10405

*Figure 7: Proposed Impervious Area Plan:*

Impervious surface restrictions for development projects in this portion of the 10 Mile Creek SPA are set forth in the Clarksburg West Overlay Zone. As per Chapter 59, Section 4.9.6.D.2,

County owned land that is not managed as parkland by the M-NCPPC may not add any impervious surface and the maximum total impervious surface area for any development after August 4, 2014 is six percent.

There is approximately 12,505 square feet of impervious materials currently located in the southeastern portion of the property, adjacent to Whalen Lane. This area consists of compacted aggregate, including gravel. The Application proposes to remove the existing impervious materials, dispose of them at an approved waste site, and decompact the soils to a minimum depth of 12 inches. The Application proposes approximately 10,405 square feet of impervious surface related to the substation for a net reduction of 2,100 square feet. The proposed impervious surface consists of the substation and associated pad, and a gravel access road. The Application as proposed includes a total of 10,405 square feet of impervious surfaces over a 523,591 square foot net tract area, resulting in two percent imperviousness, as shown on the Impervious Surface Plan. The Application is in conformance with the Clarksburg West Overlay Zone as there will be no additional impervious surfaces on County owned land and the proposed impervious surface on the property is less than six percent.

## B. Development Standards

**Table 1: EOF Zone: Development Standard**

<b>Development Standards EOF Zone</b>		
<b>EOF-Zone</b>	<b>Required (59-4.6.3.E)</b>	<b>Proposed</b>
<b>Open Space</b>	10 percent	
<b>Minimum Lot Area</b>		12.02 ac
<b>Minimum Lot width:</b> <ul style="list-style-type: none"> <li>▪ at street line</li> <li>▪ at building line</li> </ul>	N/A	
<b>Maximum Building Density</b>	0.75 FAR (mapped)	N/A
<b>Minimum Building Setback</b> <b>Principal Building:</b> <ul style="list-style-type: none"> <li>• front</li> <li>• side street</li> <li>• side</li> <li>• rear yard</li> </ul>	0	N/A
<b>Maximum Building Height</b>	100 ft (mapped)	37 ft
<b>Minimum Parking</b>	N/A	2 spaces

## C. Transportation

Site access is adequate; turning movements into the site will not impede vehicle movement through the intersection of Whelan Lane and Clarksburg Road. Very few vehicles that will enter

the site, approximately one or two visits per month. These visits will likely occur during the non-AM or PM peak period. On-site surface parking of two spaces will be provided.

Because of its location in the Clarksburg West Environmental Overlay Zone, the Application is exempt from providing sidewalks along the frontages of the site on Whelan Lane.

With the small number of off-peak visits, intersection congestion levels would not be increased during the weekday morning (6:30 to 9:30 a.m.) and evening (4:00 to 7:00 p.m.) peak periods.

The proposed access point appears to be within the standard minimum 300' spacing distance from an intersection. However, it is unclear if this intersection still exists with the Clarksburg Road realignment. The applicant should provide a statement of justification to explain how the proposed access point will be adequate and safe and revised plans should show right-of-way widths for Whelan Lane and Old Clarksburg Road. The Applicant shall construct the access entrance with the maximum 15 feet curb radius as required by the EOF zone. The width shall remain 22'. To accommodate emergency vehicle access, the curbs may be mountable.

#### **D. Parking**

There is no parking requirement for a Public Utility Structure. The Applicant proposes two parallel parking spaces, with a typical size of 9'x 14'. The sizes of the spaces do not meet the minimum dimensional requirements of the Zoning Code. Staff recommends that the parking spaces meet code requirements. Staff also recommends that one of the spaces be a van accessible space. With the recommended conditions, the parking spaces will sufficiently accommodate the parking needs of the proposed unmanned substation.

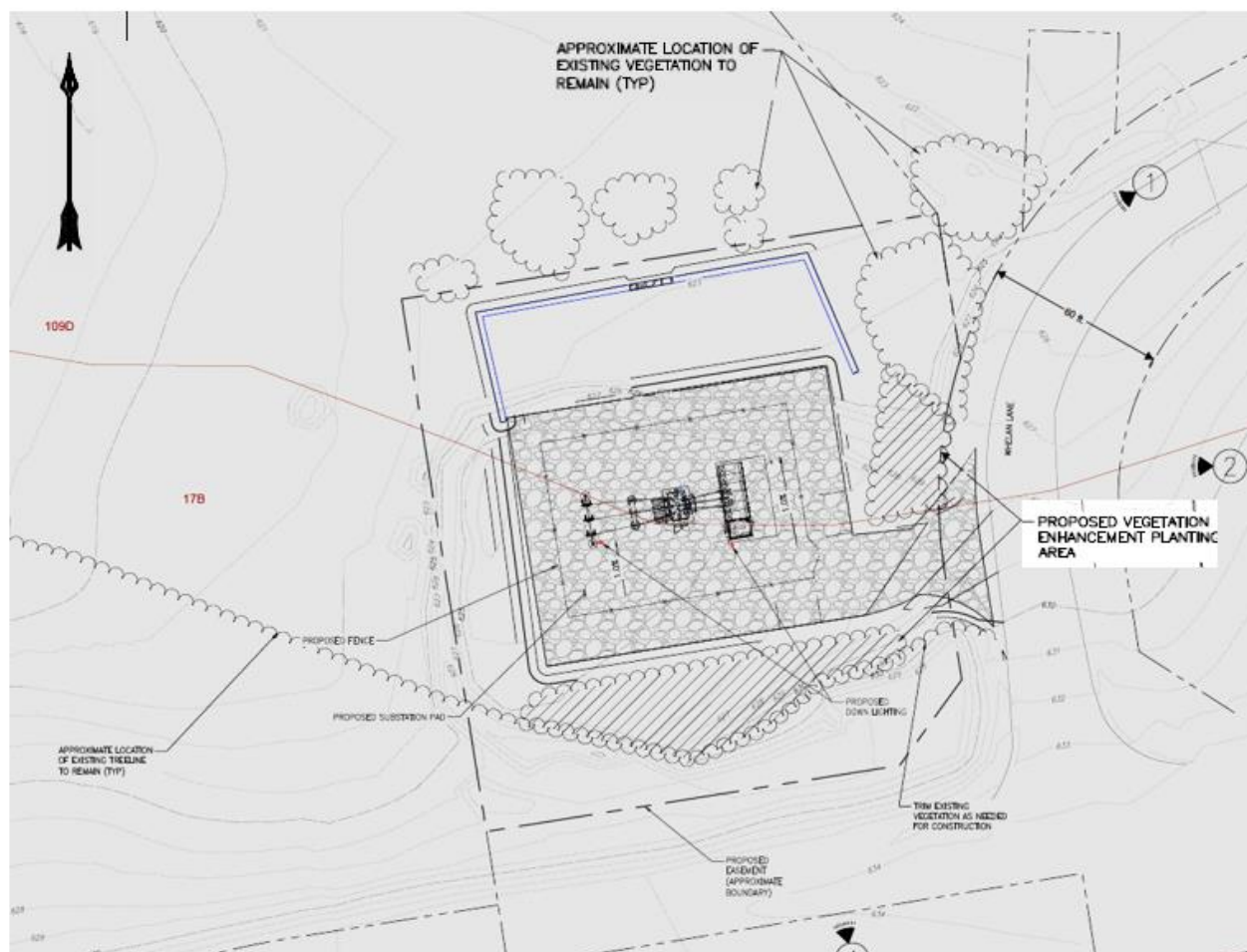
**Table 2: 59-6.2.5.E: Parking Space Minimum Dimensional Requirements:**

	Standard Space		Compact Space	
<b>Parking Angle</b>	<b>Width</b>	<b>Length</b>	<b>Width</b>	<b>Length</b>
Perpendicular	8.5'	18'	7.5'	16.5'
60 to 75 degrees	10'	23'	8.5'	21'
45 to 59 degrees	12'	26.5'	not allowed	not allowed
Parallel	7'	21'	6'	19.5'

#### **E. Landscaping**

**Division 6.5.3.C.7 (page 6-32) requires that landscape screening be provided when a Conditional Use abuts property in a Residential Zone that is vacant or improved with an agricultural or residential use.**





## Planting Schedule

### Vegetation Enhancement Planting Area

Species		Mature Height (feet)	Size	Plant Spacing (feet O.C.)	Quantity
Scientific Name	Common Name				
<i>Alnus rubra</i>	Red Alder	15-30	1" -2" cal./ Min. 6' ht.	7'-10'	10
<i>Acer rubrum</i>	Red Maple	15-40	1" -2" cal./ Min. 6' ht.	7'-10'	10
<i>Ilex opaca</i>	American Holly	15-30	1" -2" cal./ Min. 6' ht.	7'-10'	6
<i>Amelanchier sp.</i>	Service Berry	10-25	1" -2" cal./ Min. 6' ht.	5'-8'	12
<i>Cornus florida</i>	Flowering Dogwood	15-20	1" -2" cal./ Min. 6' ht.	5'-8'	16
<i>Cercis canadensis</i>	Redbud	20-30	1" -2" cal./ Min. 6' ht.	5'-8'	16

**Total = 70**

\*\* Material should be purchased from a native plant nursery. Installation shall be in spring or fall. They should be planted in the ground within 3-5 days of purchase.

*Figure 8: Landscape Plan*

The proposed landscaping with an emphasis on native species is adequate, safe, and efficient. The Landscape Plan achieves the stated objectives in the Zoning Ordinance while providing an attractive appearance throughout the year. Along with existing forest on the property, the landscaped area provides screening and buffering between the project and adjacent roads as well as the nearest residential property, which is 850 feet southwest of the proposed facility. The Application will substantially meet the tree canopy coverage requirement as well.

## **F Lighting**

Pursuant to **Division 59-6.4.4.E**, outdoor lighting for a Conditional Use must be directed, shielded or screened to ensure that the illumination is 0.1 foot-candles or less at any lot line that abuts a lot with a detached house building type, not located in a Commercial/Residential or employment zone.

The proposed lighting will not cause glare on adjoining properties, nor will it exceed the 0.1 foot-candle standard at the side and rear property. The Landscape & Lighting Plan for the substation provides 2 small light fixtures on the site; both are down-lights which will not generate excessive light. Given the number and types of light fixtures, staff does not believe that a photometric plan is needed in this case.

## **G. Signage**

There will be no freestanding sign identifying the proposed use on the property.

## **H. Environment**

### Consistency with Environmental Guidelines

A Natural Resource Inventory/Forest Stand Delineation (NRI/FSD), #420180400, for the 12.02-acre property was approved on December 5, 2017. The NRI/FSD identifies the environmental features and forest resources on the Subject Property. The 12.02-acre Property is located within the 10 Mile Creek watershed, classified by the State of Maryland as Use Class I-P waters. The NRI/FSD identified one tributary stream located in the western end of the property, approximately 3.5 acres of environmental buffer associated with the on-site and off-site streams, and slopes  $\geq 15$  percent on the Subject Property.

There is approximately 4.90 acres of forest, including approximately 2.2 acres of forested environmental buffer on the property. There are no highly erodible soils or mapped 100-year floodplains on the property. In addition to the environmental features, there is an area of gravel/fill located in the eastern portion of the property, adjacent to Whalen Lane. The property is located within the 10 Mile Creek Special Protection Area and the Clarksburg West Environmental Overlay Zone.

This property meets all applicable requirements of Chapter 22A of the County Code. A Preliminary/Final Forest Conservation Plan ("FCP") for the project was submitted with the Conditional Use Application. The FCP is recommended for approval as a separate action by the Planning Board as part of this Conditional Use Application.

(Attachment B)

### ***Chapter 19 and Chapter 59: Special Protection Area Preliminary/Final Water Quality Plan and Stormwater Management***

Under the provision of the Special Protection Area Law, the Montgomery County Department of Permitting Services (MCDPS), the Planning Board, and the Montgomery County Department

of Environmental Protection (MCDEP) have different responsibilities in the review of a Water Quality Plan (Attachment B).

## **H. Community Concerns**

At the time of the Technical Staff report publication, no communication has been received from the community either in support or in opposition of the proposed use.

## **SECTION IV COMPLIANCE WITH THE NECESSARY FINDINGS IN SECTION 59.7.3.1.E AND SPECIFIC CONDITIONAL USE REQUIREMENTS IN SECTION 59-3**

### **Section 59.7.1.E. Necessary Findings**

- 1. Section 59.7.3.1.E.1 states that, to approve a Conditional Use application, the Hearing Examiner must find that the proposed development satisfies the following requirements of Sections 59.7.1.E.a through g.**

- a. Satisfies any applicable previous approval on the subject site or, if not, that the previous approval must be amended;**

There is no previous Conditional Use approval associated with the subject property. A Final Forest Conservation Plan was approved on July 7, 2004 and amended on September 9, 2011. A second Amended Final Forest Conservation Plan has been submitted by the Applicant to show the proposed use on the plan drawings and will be reviewed administratively by Staff.

- b. Satisfies the requirements of the zone under Division 59-3, the use standards (Division 4), and applicable general requirements under Article 59-6.**

With Staff's recommended conditions of approval, the proposal satisfies the specific Conditional Use standards and requirements of Section 59.3.6.7-E Public Utility Structure. As shown on the development standards Table-1 in Section III of this report, the Application meets the requirements of the EOF Zone per Section 59.4.6.3.E. and the applicable parking requirements of Article 6.

### **Section 59.3.6.7.E. Public Utility Structure**

#### **1. Defined**

**Public Utility Structure means a utility structure other than transmission lines or pipelines. Public Utility Structure includes structures for the occupancy, use, support, or housing of switching equipment, regulators, stationary transformers, and other such devices for supplying electric service or other public utilities.**

The proposed public utility structure meets the definition of the use as described by this section. The applicant's justification statement states that the proposed utility will bring additional MVA (Mega Volt Amps (Amp/1000,000), increase the capacity



of the existing distribution system, and minimize extended outages in the event of a distribution system failure.

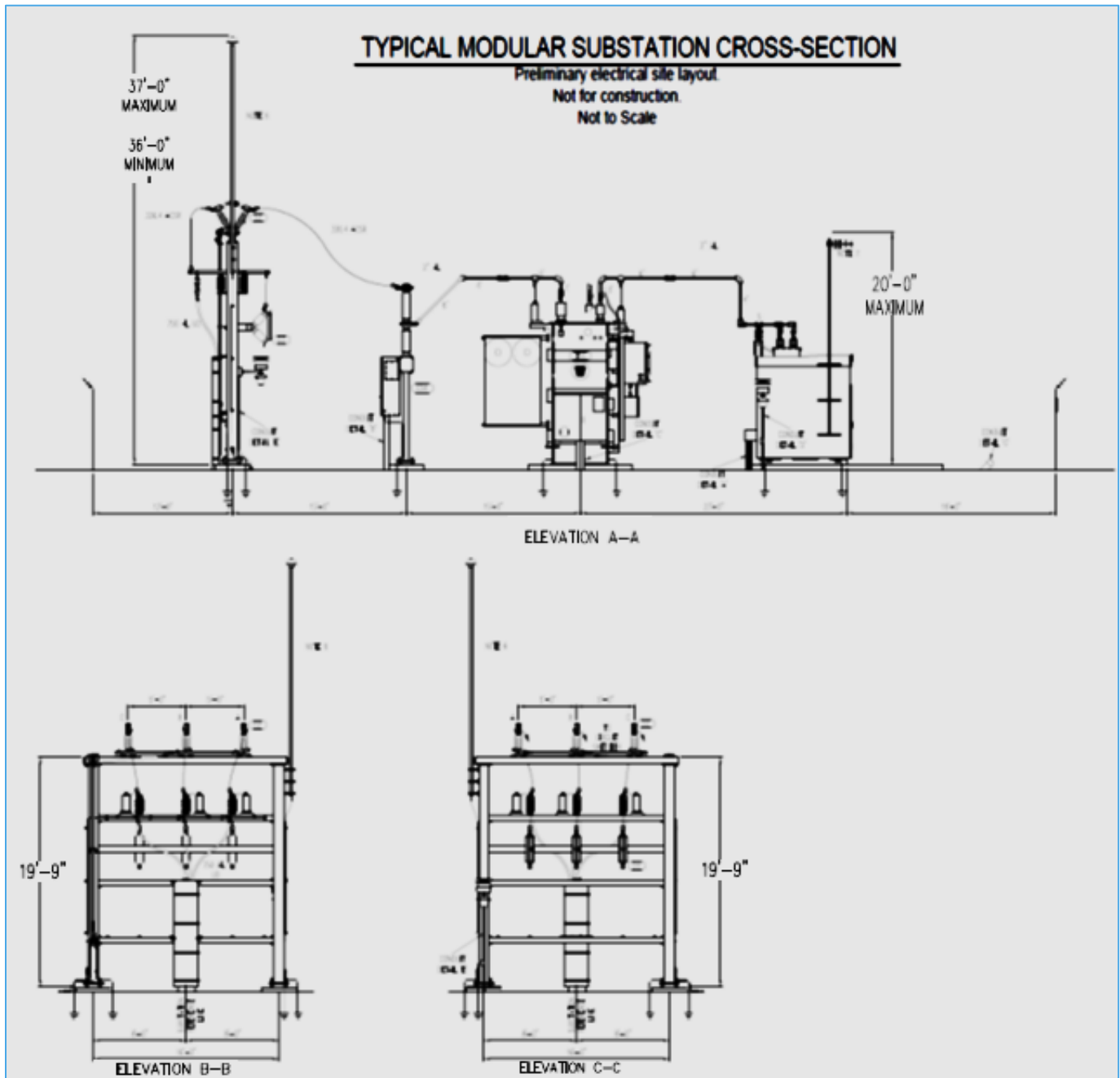


Figure 9: Elevations (Attachment-A)

## 2. Use Standards

- a. Where a Public Utility Structure is allowed as a limited use, and the subject lot abuts or confronts a property zoned Agricultural, Rural Residential, or

**Residential Detached that is vacant or improved with an agricultural or residential use, site plan approval is required under Section.**

The proposed public utility structure is allowed as a Conditional Use in the EOF Zone.

**b. Where a Public Utility Structure is allowed as a Conditional Use, it may be permitted by the Hearing Examiner under Section 7.3.1, Conditional Use, and the following standards:**

**i. The proposed structure at the location selected is necessary for public convenience and service.**

The unmanned substation is needed to accommodate higher service demand in the area brought about by increased residential, office and commercial developments which include 2,386 units residential units and 2.42 million square feet commercial space, including an outlet mall, office buildings gas station, bank, hotel, restaurants, public use, some of which are currently under construction (Preliminary Plan 12003110B and C). The new distribution will help to alleviate predicted overloads.

The proposed substation will have four transformers and transformer bays with all distribution lines leaving the facility placed entirely underground. The substation would provide needed relief to the existing 34.5k V sub-transmission lines owned by Potomac Electric that is near the proposed location for the new substation.

**ii. The proposed structure at the location selected will not endanger the health and safety of workers and residents in the community and will not substantially impair or prove detrimental to neighboring properties.**

The proposed substation is compatible with the surrounding area in its scale, bulk, height, and architectural features. It does not endanger the health and safety of workers and residents in the community and will not substantially impair or prove detrimental to neighboring properties. The substation will be unmanned, is substantially distanced from residential dwellings, and will be obscured from views of nearby uses and roads by existing forests and landscaping

The proposed landscape plan provides for extensive screening, in the form of landscaping that includes a combination of shade and ornamental trees and shrubs, on all sides of the property including its frontages on Whalen Lane. A six-foot-tall chain link fence with a one-foot anti-climbing barbed wire top is also proposed with the landscaping and screening of the property. The

fence, which will surround the electrical equipment powering the modular substation, is screened by existing trees and the proposed landscaping. It will provide an added safety and secure element without affecting the aesthetic appearance of the property.

Access to the site and into the structure will be restricted. Directional lighting and surveillance cameras will be included for added security.

- iii. A Public Utility Structure allowed in any Rural Residential or Residential zone, must, whenever practicable, have the exterior appearance of a residential building and must have suitable landscaping, screen planting and fencing, wherever deemed necessary by the Hearing Examiner.**

This requirement does not apply to the subject property since the proposed substation is in the EOF Zone. However, in response to staff comments and recommendations, the Applicant's landscape plan provides for extensive landscaping and fencing for the purposes of screening and aesthetic appeal.

- iv. The Hearing Examiner may waive the height limits of the applicable zone where, in the opinion of the Hearing Examiner, adjacent residential uses will not be adversely affected by the increased height.**

The proposed use does not exceed the maximum height mapped on the Zoning Map for the EOF Zone on the subject property and does not require a waiver of the height limits of the zone. With the proposed 37 feet of maximum height above the ground level, the structure will be substantially less than the maximum 100-foot height allowed in the EOF Zone at this location.

- v. An applicant for a Public Utility Structure may file a Conditional Use application if the applicant states in writing under oath that a bona fide effort has been made to obtain a contractual interest in the Subject Property for a valid consideration without success, and that there is an intent to continue negotiations to obtain the required interest or in the alternative to file condemnation proceedings should the Conditional Use be approved.**

The Applicant, Potomac Edison, has a contractual interest through the easement granted by the Montgomery County Government and has submitted an Easement Agreement with the county as part of the required documentation for the Application.

- c. Substantially conforms to the recommendations of the applicable Master Plan.**



As noted in Section III of this report, the proposed modular substation substantially conforms to the applicable sections of the *10 Mile Creek Limited Amendment*. The proposed substation is designed to preserve natural resources critical to the County's well-being in addition to furthering the *2014 10 Mile Creek Limited Amendment's* core visions. The proposed utility will provide electric service to meet the increased demand that has arisen from the development of a "complete, well-defined corridor town that provides jobs, homes, and commercial activities." (*10 Mile Creek Limited Amendment*-page 5).

**d. Is harmonious with and will not alter the character of the surrounding neighborhood in a manner inconsistent with the plan.**

With the recommended conditions, the proposed use will be in harmony with the general character of the neighborhood. The Conditional Use Site and Landscape Plans provide for extensive landscaping and adequate setbacks meeting code requirements. There is extensive buffering, in the form of landscaping, fencing, major roads and commercial development, between the nearest residential properties and the proposed use. The Applicant's statement of justification indicates that the proposed utility will be unmanned and, once constructed, will not impact traffic, produce odors or dust, or impact parking. The proposed structure will operate 24 hours a day, seven days a week and there will be no employees present daily. Potomac Edison employees will visit the site to perform periodic maintenance.

Because of the nature of the use, as an unmanned substation with periodic visits by no more than two employees, it is unlikely that the proposed use will generate a level of traffic or noise that will adversely affect the residential neighborhood.

**e. Will not, when evaluated in conjunction with existing and approved Conditional Uses in any neighboring Residential Detached zone, increase the number, intensity or scope of Conditional Uses sufficiently to affect the area adversely or alter the predominately residential nature of the area; a Conditional Use application that conforms with the recommendations of a Master Plan does not alter the nature of the area.**

There are no Conditional Uses within the boundaries of the defined neighborhood. Therefore, the proposed use will not add a level of traffic that would exasperate existing conditions.

**f. Will be served by adequate public services and facilities, including schools, police and fire protection, water, sanitary sewer, public roads, storm drainage and other public facilities. If an approved adequate public facilities test is currently valid and the impact of the Conditional Use is equal or less than what was approved, a new adequate public facilities test is not required. If an adequate public facilities test is required and:**

- i. **If a preliminary subdivision plan is not filed concurrently or required subsequently, the Hearing Examiner must find that the proposed development will be served by adequate public facilities, including schools, police and fire protection, water, sanitary sewer, public roads, or storm drainage; or**

The Application is not subject to approval of a Preliminary Plan of Subdivision. Staff has made the Adequate Public Facilities findings as part of this Application.

**(a) Water and Sewer Service**

There is no water or sewer facility on the property. The property is shown as water category W-6 and sewer category S-6, and therefore will not be served by the Washington Suburban Sanitary Commission (WSSC).

**(b) Transportation**

Local Area Transportation Review (LATR)

A traffic study was not needed for the subject Conditional Use to satisfy Local Area Transportation Review because the proposed unmanned electric distribution substation would not add any peak-hour vehicular trips from this existing land use. The proposed facility will be unmanned and only require routine inspections or service visits once or twice a month. Thus, the intersection congestion levels would not be increased during the weekday morning (6:30 to 9:30 a.m.) and evening (4:00 to 7:00 p.m.) peak periods.

Staff supports the transportation elements of the Application and finds the proposed access to the property to be adequate to serve the traffic generated by the development.

**(c) Other facilities**

Montgomery County Fire Station 35 is located at 22610 Gateway Center Drive approximately 1.0 miles northeast of the property. The closest police station is located at 2000 Aircraft Drive in Germantown, approximately 4.5 miles south of the property.

Because of the nature of the Conditional Use, it will not generate any school aged children and a school facilities review is not necessary.

- ii **If a preliminary plan of subdivision is filed concurrently or required subsequently, the Planning Board must find that the proposed development will be served by adequate public services and facilities, including schools, police and fire protection, water, sanitary sewer, public roads, and storm drainage;**

Not applicable. A Preliminary Plan is not required.

- g. Will not cause undue harm to the neighborhood as a result of a non-inherent adverse effect alone or the combination of an inherent and a non-inherent adverse effect in any of the following categories:**

The inherent, generic physical and operational characteristics associated with Public Utility Structure are (1) buildings and structures, to accommodate the generating and mechanical operations; (2) lighting (3) adequate parking areas to accommodate employee (6) noise associated with transformers, HVAC and other mechanical equipment.

Many of the characteristics of the Conditional Use are inherent. The access point, the internal vehicular circulation system, onsite parking areas, occasional loading and unloading of supplies and equipment needed for maintenance of the facility are operational characteristics typically associated with unmanned public utility structures. The fact that the subject site is encumbered by the requirements of The Clarksburg West Environmental Overlay is a non-inherent impact but one that is not sufficient to warrant a denial.

- i. The use, peaceful enjoyment, economic value or development potential of abutting and confronting properties or the general neighborhood;**

The proposed modular substation is designed to blend with the adjoining forested area and stream valley buffers. Existing forest and ample landscaping screen the proposed use from adjoining roads and nearby residential and non-residential uses. The proposed lighting will not cause glare on adjoining properties. The subject property does not abut any residential property.

- ii. Traffic, noise, odors, dust, illumination or lack of parking; or**

Based on the traffic statement and staff analysis, the vehicular movements on the road will not cause undue harm to the neighborhood. The lighting plan adequately and efficiently provides a safe vehicular and pedestrian environment. The proposed lighting will not cause glare on adjoining properties, nor will it exceed the 0.1 foot-candle standard at the side and rear property lines.

The Applicant has indicated that the proposed use will meet all applicable County noise regulations. To ensure that noise levels related to activities of the substation are kept to a minimum, the Applicant has submitted an evaluation (Attachment C) using the Noise Ordinance's (section 31B-5(a)(1)) maximum night-time noise standard (55 dBA at the nearest property line). The evaluation calculated sound level reduction using a distance of 50 feet, since the transformer will be set back at least 50 feet from all easement boundaries. The



evaluation concluded that the maximum audible sound level at 50 feet from the transformer will be 39 dB. The result indicates that the transformer will be well within the Maximum Allowable Noise Level required by the Montgomery County noise ordinance for non-residential and residential areas.

There is no odor or dust associated with the operation of the project or the equipment within the building. The proposed access to the property is adequate to serve the traffic generated by the development. Adequate parking is provided to serve the proposed use

**iii. The health, safety or welfare of neighboring residents, visitors or employees.**

The proposed substation will not negatively impact the health, safety or welfare of neighboring residents, visitors or employees. The intersection congestion level in the area will not be affected by the establishment of the proposed use at the subject location. The facility will be unmanned and will only require routine inspections or service once or twice a month. The proposed access to the property is adequate to serve the traffic generated by the development.

The use will be adequately screened and buffered from the views of neighboring properties, with minimal lighting and glare, and no significant traffic impact. As noted the property does not abut any residential dwellings. The Conditional Use application will not cause objectionable noise.

With the recommended conditions of approval, the inherent and non-inherent impacts associated with the proposed uses do not rise to a level sufficient to warrant a denial of the Application.

**2. Any structure to be constructed, reconstructed, or altered under a conditional use in a Residential Detached Zone must be compatible with the character of the residential neighborhood.**

Not applicable; the proposed facility is in the Employment Office Zone.

**SECTION V. CONCLUSION**

The proposed Conditional Use satisfies all applicable requirements for approval of a Conditional Use as specified in the 2014 Montgomery County Zoning Ordinance. The proposed use is consistent with the recommendations of the 2014 10 Mile Creek Area Limited Amendment. There is no unacceptable traffic, circulation, noise or environmental impacts associated with the Application provided that the recommended conditions are satisfied.

Based on the foregoing analysis, Staff recommends **Approval** of Conditional Use CU-19-07, subject to the conditions found on Page 2 of this report.

## **ATTACHMENTS**

- A. Plans and drawings
- B. Water Quality Plan and Forest Conservation Plan report
- C. Supplemental information

etesfayestaffreportCU-19-07/03012019

## A. Plans and Drawings

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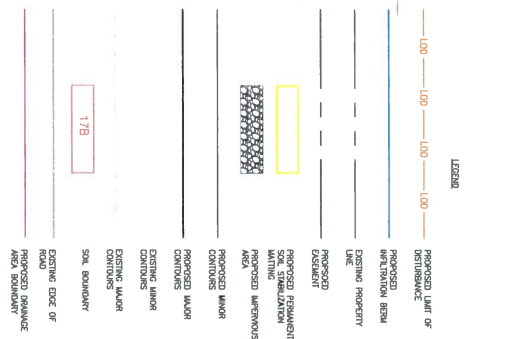
Attachment-A











SCALE: 1" = 20'

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2. BE REMOVED ACCORDING TO APPROVED WATER QUALITY PLAN.

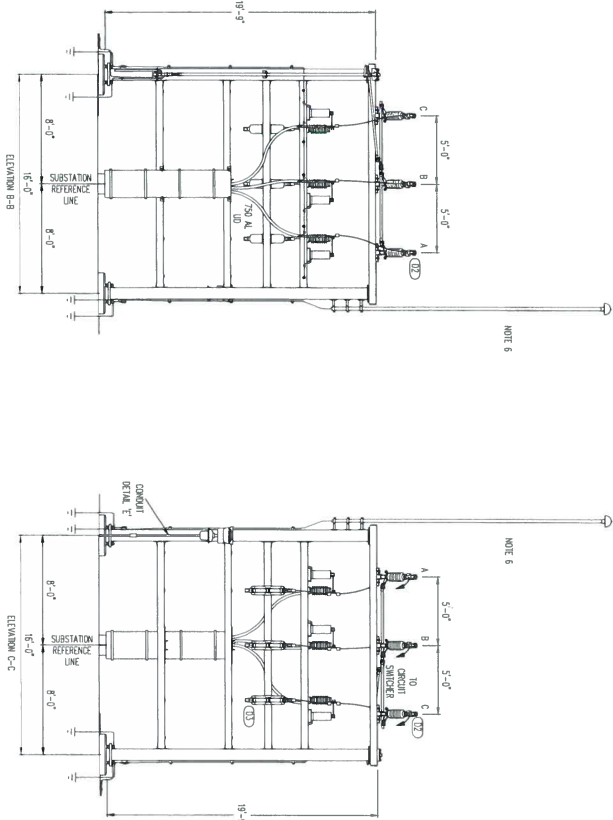
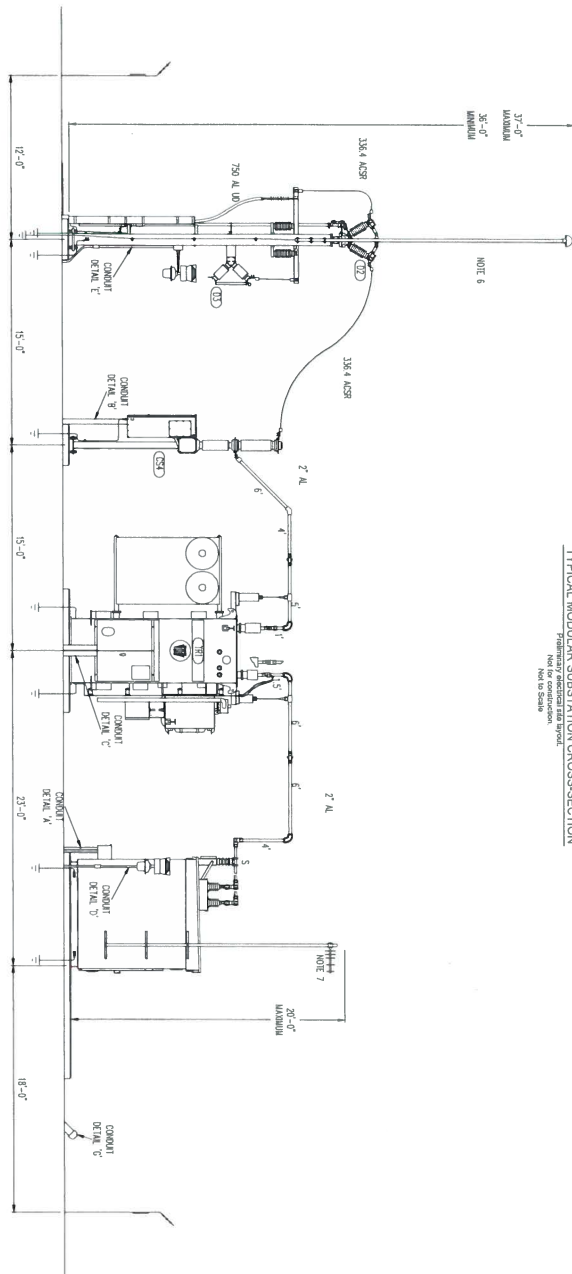
**REFERENCES:**

- **CONTIGURS:** A THOUGHTFUL AND EXISTING CONJUNCTION SURVEY WAS PERFORMED BY OJ CONSULTANTS, INC. IN APRIL 2017. ADDITIONAL CONTIGURS TO DELIBERATE ORANGE JAWA WERE DEVELOPED USING DIGITAL ELEVATION MODEL (DEM) DOWNLOADED FROM US MAP, WATKINS'S WAPPING AND GIS DATA PORTAL FOR NORTHEASTERN CALIFORNIA AND AGRICULTURE TOOLS. 2014
- **SOLS:** SOIL SURVEY GEOGRAPHIC (SSURGO) DATASET, USDA NRCIS, WATKINS, 2007.
- **HORIZONTAL DATUM:** NAD83 WATKINS STATE PLANE COORD. U.S. FOOT.

HORIZONTAL DATUM: NAD83 MARYLAND STATE PLANE ZONE, U.S. FOOT

# TYPICAL MODULAR SUBSTATION CROSS-SECTION

Not for construction  
Primarily for design use only  
Not to be used



DRAWING BY: LUDWIG		CHECKED BY: SHOHIA		APPROVED BY: WERNER	
DATE: AUG. 2018		SCALE: AS SHOWN		DATE: AUG. 2018	
DRAWING NUMBER: C140090-D1-C904C					

PROJECT: CABIN BRANCH SUBSTATION PROJECT 22800 WHELAN LANE BOYDS, MARYLAND 20841		CLIENT: POTOMAC Edison, A FIRSTENERGY COMPANY 800 CABIN HILL DRIVE GREENSBURG PENNSYLVANIA 15601	
ISSUING OFFICE: Pittsburgh   385 E. Waterfront Drive, Homestead, PA 15120			
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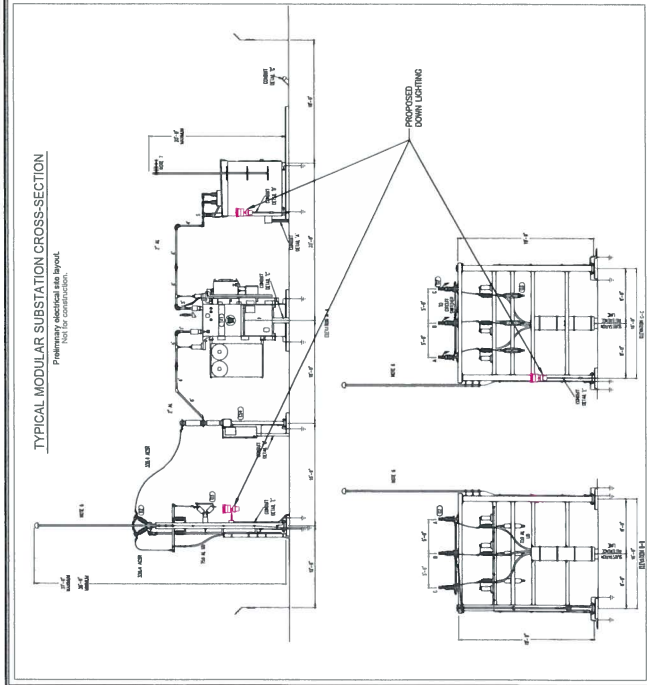
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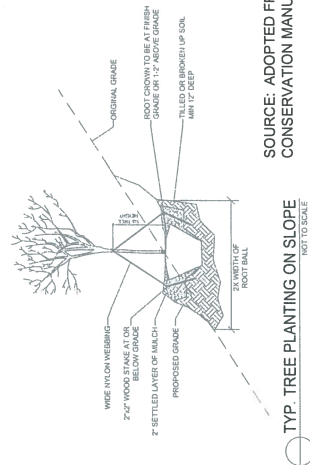








DRAWING TITLE <b>LANDSCAPE SCREENING AND LIGHTING PLAN</b>		PROJECT <b>CABIN BRANCH          SUBSTATION PROJECT          22800 WHELAN LANE          BOYDS, MARYLAND 20841</b>		ISSUING OFFICE: Philadelphia   365 E. Washington Drive, Homestead, PA 15120 PENNSYLVANIA 15601 POTOMAC ECOLOGICAL FIRSTENERGY COMPANY 800 CABIN HILL DRIVE GREENSBURG	
CLIENT <b>POTOMAC ECOLOGICAL FIRSTENERGY COMPANY</b>		NO. _____ DATE: _____ DWN: _____ CHK: _____ APV: _____ REVISION RECORD SHEET NO. 2 OF 3 FILE NAME: C:\140090\01_C803-C804.rvt		REVISION NO. _____ DATE: _____ DWN: _____ CHK: _____ APV: _____ REVISION RECORD SHEET NO. 2 OF 3 FILE NAME: C:\140090\01_C803-C804.rvt	



### Planting Schedule

#### Vegetation Enhancement Planting Area

Scientific Name	Common Name	Mature Height (feet)	Size	Plant Spacing (feet O.C.)	Quantity
<i>Alnus rubra</i>	Red Alder	15-30	1" - 2" cal / Min. 6' ht.	7'-10'	10
<i>Acer rubrum</i>	Red Maple	15-40	1" - 2" cal / Min. 6' ht.	7'-10'	10
<i>Ilex opaca</i>	American Holly	15-30	1" - 2" cal / Min. 6' ht.	7'-10'	6
<i>Amelanchier sp.</i>	Service Berry	10-25	1" - 2" cal / Min. 6' ht.	5'-8'	12
<i>Cornus florida</i>	Flowering Dogwood	15-20	1" - 2" cal / Min. 6' ht.	5'-8'	16
<i>Cercis canadensis</i>	Redbud	20-30	1" - 2" cal / Min. 6' ht.	5'-8'	16
Total =					70

\*\* Material should be purchased from a native plant nursery. Installation shall be in spring or fall. They should be planted in the ground within 3-5 days of purchase.

Total Plant Area = 3,340 square feet

SOURCE: ADOPTED FROM FOREST CONSERVATION MANUAL, 1991



# LANDSCAPE SCREENING AND LIGHTING PLAN

## PHOTO LOG



Photograph 1.  
Facing Southwest from Whelan Lane



Photograph 2.  
Facing West at Gate Location



Photograph 3.  
Facing Northwest from relocated Clarksburg Rd



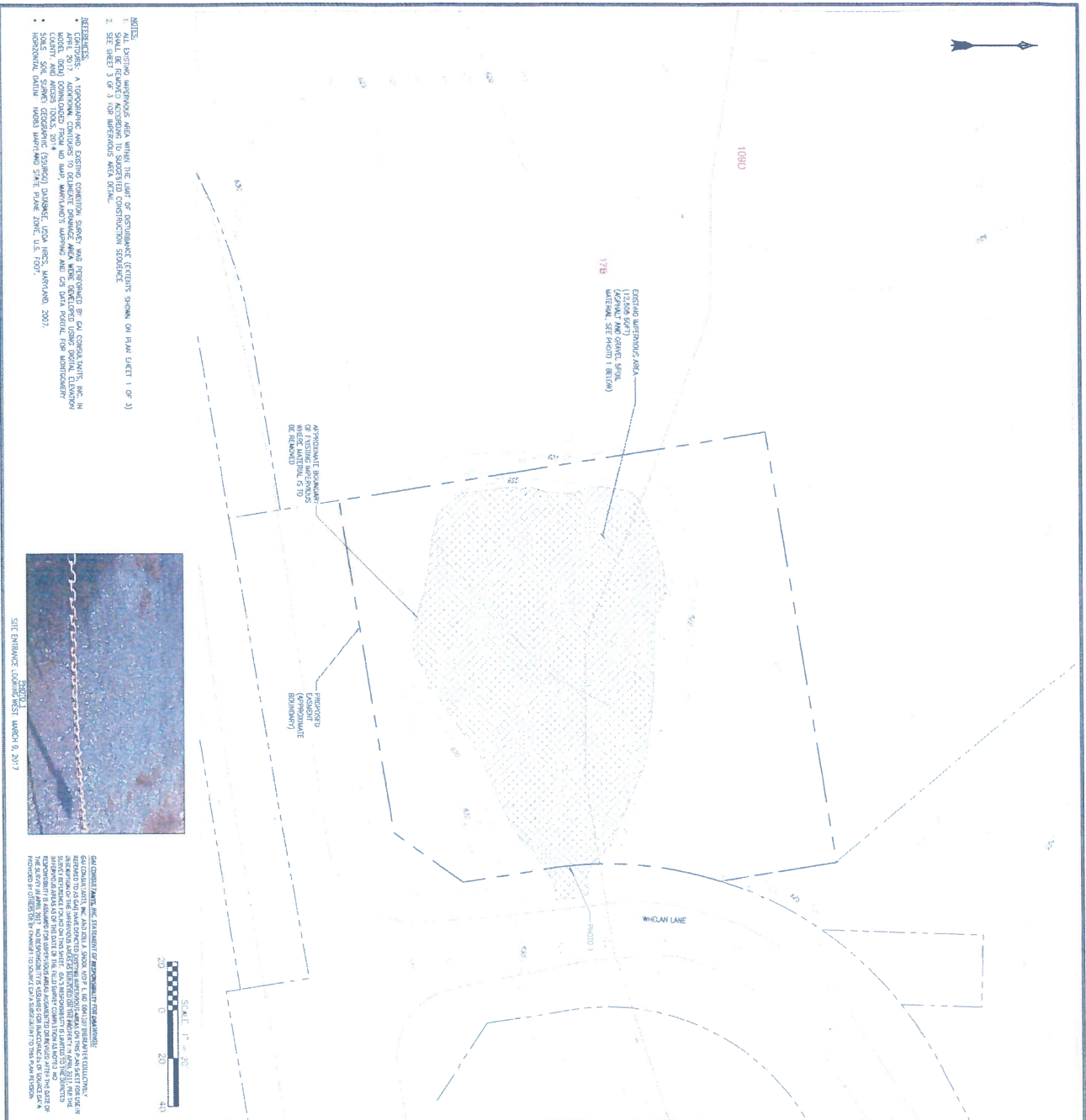
Photograph 4.  
Facing North from Clarksburg Road



Photograph 5.  
Facing North from Field

PHOTOGRAPHS TAKEN SEPTEMBER 19, 2018

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PROJECT		gai consultants			
CABIN BRANCH SUBSTATION PROJECT 22800 WHELAN LANE BOYDS, MARYLAND 20841					
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© 2018 GAI Consultants					






**IMPERVIOUS AREA REMOVAL AND RESTORATION NOTES:**

- NO CLAIMING OF EARTH DISTURBANCE IS TO TAKE PLACE OUTSIDE OF LIMITS OF PROJECT.
- FOR THOSE AREAS WHERE IMPERVIOUS SPACES ARE TO BE REMOVED, REMOVE IMPERVIOUS MATERIAL WITHIN LIMITS OF DISTURBANCE INDICATED ON SHEET. ANY REMOVED MATERIAL WILL BE REMOVED FROM THE PROPERTY. THE MATERIAL WILL NOT BE USED AS A BACKFILL. ANY REUSING MATERIAL WILL BE USED AS A BACKFILL. ANY REUSING MATERIAL WILL BE USED AS A BACKFILL. ANY REUSING MATERIAL WILL BE USED AS A BACKFILL.
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<b>DRAWING TITLE</b> IMPERVIOUS AREA PLAN - EXISTING IMPERVIOUS		<b>CLIENT</b> POTOMAC EDITION A RESTORATION COMPANY 800 CABIN HILL DRIVE GREENSBURG PENNSYLVANIA 15001	
<b>PROJECT</b> CABIN BRANCH SUBSTATION PROJECT 22800 WHEEL LANE BOYDS, MARYLAND 20841		<b>ISSUING OFFICE:</b> Pittsburgh   350 E. Waterfront Drive, Homestead, PA 15120	
<b>DATE:</b> AUG 2018 <b>SCALE:</b> AS SHOWN		<b>DATE:</b> AUG 2018 <b>SCALE:</b> AS SHOWN	
<b>DESIGNED BY:</b> J. A. BROWN <b>CHECKED BY:</b> J. A. BROWN		<b>DESIGNED BY:</b> J. A. BROWN <b>CHECKED BY:</b> J. A. BROWN	
<b>DATE:</b> AUG 2018 <b>SCALE:</b> AS SHOWN		<b>DATE:</b> AUG 2018 <b>SCALE:</b> AS SHOWN	
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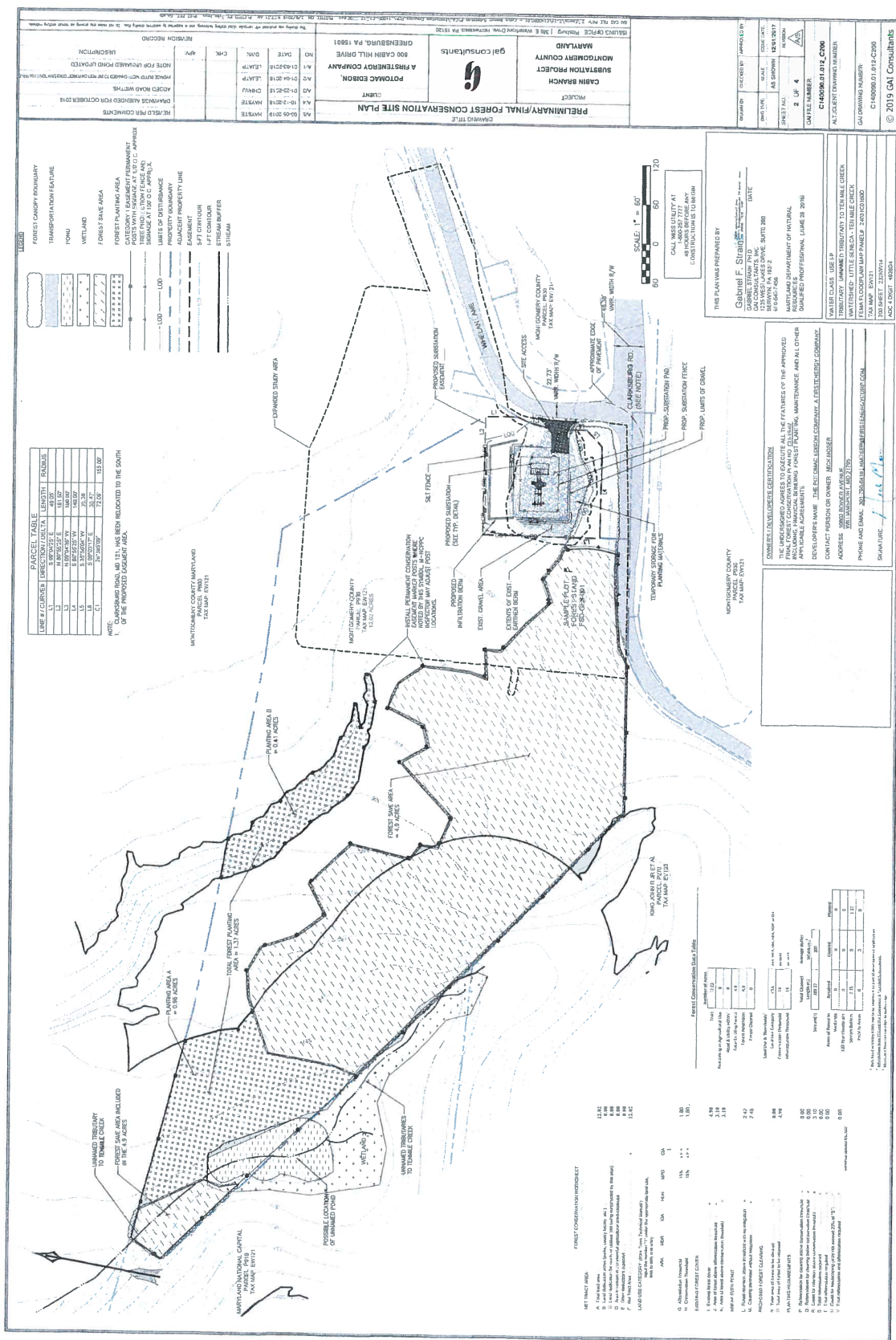
C140090.01-C904				DRAWING TITLE <b>IMPERVIOUS AREA PLAN - PROPOSED IMPERVIOUS</b>															
PROJECT <b>CABIN BRANCH          SUBSTATION PROJECT          26000 WHELAN LANE          BOYDS, MARYLAND 20841</b>		 <b>gai consultants</b>		CLIENT <b>POTOMAC EDITION, A FIRSTENERGY COMPANY          800 CABIN HILL DRIVE          GREENSBURG          PENNSYLVANIA 15801</b>		NO.		DATE		DWN		CHK		APV		DESCRIPTION			
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Existing Impervious Areas				
Number	Description	Area (ft <sup>2</sup> )	Percent of Property	Area to be Removed (ft <sup>2</sup> )
1	Abandoned Area	12505	2.6%	12505
Proposed Impervious Areas				
Number	Description	Area (ft <sup>2</sup> )	Percent of Property	Area to be Removed (ft <sup>2</sup> )
2	Gravel Substation Pad	10405	2.0%	0

- AS DESCRIBED IN SHEETS 1 OF 3 AND 2 OF 3, THE IMPERVIOUS AREA EXISTING ON THE PROJECT PROPERTY IS 12,505 SQUARE FEET AND SHEETS 1 OF 3 AND 2 OF 3, THE IMPERVIOUS AREA TO BE REMOVED IS 12,505 SQUARE FEET.
- THE PROPOSED IMPERVIOUS AREA ON THE PROJECT PROPERTY IS APPROXIMATELY 10,405 SQUARE FEET AND SHEETS 1 OF 3 AND 2 OF 3, THE IMPERVIOUS AREA TO BE REMOVED IS 12,505 SQUARE FEET.
- THE IMPERVIOUS AREA OF THE SITE WILL BE APPROXIMATELY REDUCED FROM 2.6% OF PROPERTY TO 2.0% OF THE PROPERTY AND THIS SATISFIES THE REQUIREMENT OF THE OVERLAY ZONE OF ZONING TEXT AMENDMENT 14-03 AND THE COUNCIL RECOMMENDATION.
- REFERENCE SECTION 43.01.2 OF CHARTER 99, READING COUNTY, OHIO, LAND NOT ADJACENT AND IMPERVIOUS SURFACE AREA OF THE PROJECT PROPERTY IS APPROXIMATELY 10,405 SQUARE FEET AND SHEETS 1 OF 3 AND 2 OF 3, THE IMPERVIOUS AREA TO BE REMOVED IS 12,505 SQUARE FEET.
- THIS SHEET SHOWS A PROPOSED DECREASE IN IMPERVIOUS AREA, THEREFORE, MEETING THE REQUIREMENTS OF THE CLASSIC WEST DRINKING WATER ZONE.

		<b>DRAWING TITLE</b> <b>IMPERVIOUS AREA DETAIL</b>		<b>CLIENT</b> POTOMAC Edison, A PRESTERGENCY COMPANY 800 CABIN HILL DRIVE GREENSBURG PENNSYLVANIA 15601		<b>ISSUING OFFICE</b>   Pittsburgh   385 E. Waterfront Drive, Homestead, PA 15120 <small>The drawing was prepared with no public draft printing requirements and is intended for electronic viewing only. Do not reuse this drawing for printed drafting purposes.</small>									
<b>PROJECT</b> CABIN BRANCH SUBSTATION PROJECT 22800 WHELAN LANE BOYDS, MARYLAND 20841				<b>NO.</b> _____ <b>DATE</b> _____ <b>DWN.</b> _____ <b>CHK.</b> _____ <b>APV.</b> _____		<b>REVISION RECORD</b> <table border="1"> <tr> <th>REVISION</th> <th>ALT./CLIENT DRAWING NUMBER</th> <th>SHEET NO.</th> <th>GAI FILE NUMBER</th> </tr> <tr> <td>0</td> <td></td> <td>3 OF 3</td> <td>C140090.01_C908_C909</td> </tr> </table>		REVISION	ALT./CLIENT DRAWING NUMBER	SHEET NO.	GAI FILE NUMBER	0		3 OF 3	C140090.01_C908_C909
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<b>DESIGNED BY:</b> LUCHINI, MICHAEL J. <b>CHECKED BY:</b> SHOHAI, WERENJAY <b>DATE:</b> AUG. 2018 <b>SCALE:</b> AS SHOWN		<b>PROJECT NO.:</b> C140090.01-C908		<b>PROJECT NAME:</b> CABIN BRANCH SUBSTATION PROJECT		<b>PROJECT LOCATION:</b> 22800 WHELAN LANE, BOYDS, MARYLAND 20841									





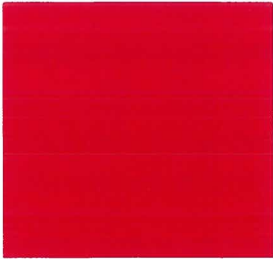




**B. Forest Conservation Plan and Water Quality  
Plan Recommendation**

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**Attachment-B**







CU-19-07, Potomac Edison Company – Clarksburg Substation: Preliminary/Final Forest Conservation Plan and Preliminary/Final Water Quality Plan

*WJK* Mary Jo Kishter, Planner Coordinator, Area 3, [maryjo.kishter@montgomeryplanning.org](mailto:maryjo.kishter@montgomeryplanning.org), 301-495-4701

*FB* Frederick Vernon Boyd, Master Planner Supervisor, Area 3, [fred.boyd@montgomeryplanning.org](mailto:fred.boyd@montgomeryplanning.org), 301-495-4654

*RAW* Richard Weaver, Chief, Area 3, [richard.weaver@montgomeryplanning.org](mailto:richard.weaver@montgomeryplanning.org), 301-495-4544

Completed: 03/15/19

## Description

### B. Potomac Edison Company – Clarksburg Substation:

#### Preliminary/Final Forest Conservation Plan No. CU-19-07

Construction of a modular substation on an approximately 0.70-acre easement on a 12.02-acre parcel leased from Montgomery County. Located at 22800 Whalen Lane, approximately 100 feet north of its intersection with Clarksburg Road in Boyds; Employment Office (EOF) Zone and Clarksburg West Environmental Overlay Zone; *10 Mile Creek Area Limited Amendment Master Plan* (2014)

**Recommendation:** Approval with conditions

### C. Potomac Edison Company – Clarksburg Substation:

#### Preliminary/Final Water Quality Plan No. CU-19-07

Construction of a modular substation on an approximately 0.70-acre easement on a 12.02-acre parcel leased from Montgomery County. Located at 22800 Whalen Lane, approximately 100 feet north of its intersection with Clarksburg Road in Boyds; Employment Office (EOF) Zone and Clarksburg West Environmental Overlay Zone; *10 Mile Creek Area Limited Amendment Master Plan* (2014)

**Recommendation:** Approval with conditions

**Applicant:** Potomac Edison, A First Energy Company

**Application filing date:** December 12, 2018

**Review basis:** Chapter 22A, Chapter 19



## Summary

- The Applicant requests approval of a Forest Conservation Plan and a Water Quality Plan associated with a Conditional Use application to construct a substation on an 0.70-acre leased portion of a 12.02-acre property owned by Montgomery County. The Application will result in a reduction in impervious surfaces that currently exist on the site from 12,505 square feet to 10,405 square feet, or 2.4 percent to 2.0 percent. The Application will not remove any existing forest and requests the ability to create a forest bank for the County's use.
- This memorandum covers Staff review and recommendations for the Forest Conservation Plan and the SPA Water Quality Plan. The Planning Board's actions on the Forest Conservation Plan and Water Quality Plan are regulatory and binding. The review and recommendations for the Conditional Use are covered in a separate memorandum.

## RECOMMENDATIONS AND CONDITIONS

B. Approval of the Preliminary/Final Forest Conservation Plan ("FCP"), subject to the following conditions:

1. Prior to the start of any demolition, clearing, grading, or construction on the Subject Property, the Applicant must record a Category I Conservation Easement over all areas of forest planting and retention, as shown on the approved FCP. The Category I Conservation Easements must be in a form approved by the M-NCPPC Office of the General Counsel and recorded among the Montgomery County Land Records by deed.
2. Prior to the start of any demolition, clearing, grading, or construction on the Subject Property, the Applicant must reforest the 1.37 acres of unforested environmental buffer's as shown on the approved FCP.
3. Prior to the start of any demolition, clearing, grading, or construction on the Subject Property, the Applicant must provide financial surety to the M-NCPPC Planning Department for the on-site forest planting areas.
4. Prior to the start of any demolition, clearing, grading, or construction on the Subject Property, the Applicant must submit for review and approval a five-year Maintenance and Management Agreement for the forest planting areas. The Agreement must be approved by the M-NCPPC Office of the General Counsel.
5. Forest planting must begin within the first planting season after issuance of the first grading permit.
6. The Applicant must install permanent conservation easement signage along the perimeter of the Category I Conservation Easements, or as determined by the M-NCPPC forest conservation inspector. Signs must be installed a maximum of 100 feet apart with additional signs installed where the easement changes direction.
7. The Applicant must comply with all tree protection and tree save measures shown on the approved FCP. Tree save measures not specified on the approved FCP may be required by the M-NCPPC forest conservation inspector.
8. The Limits of Disturbance ("LOD") shown on the Final Sediment and Erosion Control Plan must be consistent with the LOD shown on the approved FCP.

C. Approval of the Preliminary/Final Water Quality Plan, subject to the following conditions:

- a. Impervious surfaces are limited to no more than two percent of the Subject Property within the Clarksburg West Overlay Zone as shown on the Impervious Surface Plan portion of the Preliminary/Final Water Quality Plan.
- b. Prior to the start of any clearing, grading, or demolition on the Subject Property, the owner of the Subject Property must enter into an agreement with the Planning Board to limit impervious surfaces to no more than two percent of the Subject Property within the Clarksburg West Environmental Overlay Zone and demonstrate conformance to the impervious surface limits. The agreement must be in a form approved by the M-NCPPC Office of the General Counsel and recorded by deed in the Montgomery County land records.
- c. Prior to the start of any clearing or grading for the construction of the substation, the Applicant must remove all impervious surfaces and restore these areas to a pervious condition, as shown on the Impervious Surface Plan portion of the Preliminary/Final



Water Quality Plan. An M-NCPPC inspector must be present at a pre-work meeting prior to the removal of the impervious surfaces.

- d. Prior to the start of any clearing, or grading for the construction of the substation, the Applicant must contact an M-NCPPC inspector to conduct a post-work inspection to verify the removal of all impervious surfaces in accordance with the Impervious Surface Plan portion of the Preliminary/Final Water Quality Plan.
- e. The Applicant must conform to the conditions as stated in the Montgomery County Department of Permitting Service's (MCDPS) Preliminary/Final Water Quality Plan approval letter dated November 1, 2017, unless otherwise amended by MCDPS, provided the amendments do not conflict with other conditions of approval.

#### **PROPERTY AND VICINITY DESCRIPTION**

The 12.02-acre property, identified as Parcel 930 on tax Map EW21, is located at 22800 Whalen Lane, approximately 100 feet north of its intersection with Clarksburg Road (Figures 1 and 2) ("Property" or "Subject Property"). The Property is located within the *10 Mile Creek Area Limited Amendment (2014)* Master Plan area and is zoned Employment Office (EOF). The Property is also located within the Ten Mile Creek Special Protection Area and the Clarksburg West Environmental Overlay Zone. The Property is located within the LSTM 202 subwatershed of the Little Seneca Creek - Ten Mile Creek watershed, which is classified by the State of Maryland as Use I/I-P waters. The Clarksburg West Environmental Overlay Zone limits impervious surfaces for any new development on this Property. The Property contains 4.90 acres of existing forest. There is a stream that traverses through the northeastern corner of the Property and its associated environmental buffer as well as environmental buffer associated with another off-site stream comprise approximately 3.52 acres of the Property. There is no mapped 100-year flood plain or highly erodible soils located on or immediately adjacent to the Property. There are several areas of slopes between 15-24% and areas  $\geq 25\%$  on the Property. The Property is currently undeveloped except for a small area of deposited aggregate and gravel (impervious surface) surrounded by a man-made earthen berm located adjacent to Whalen Lane.

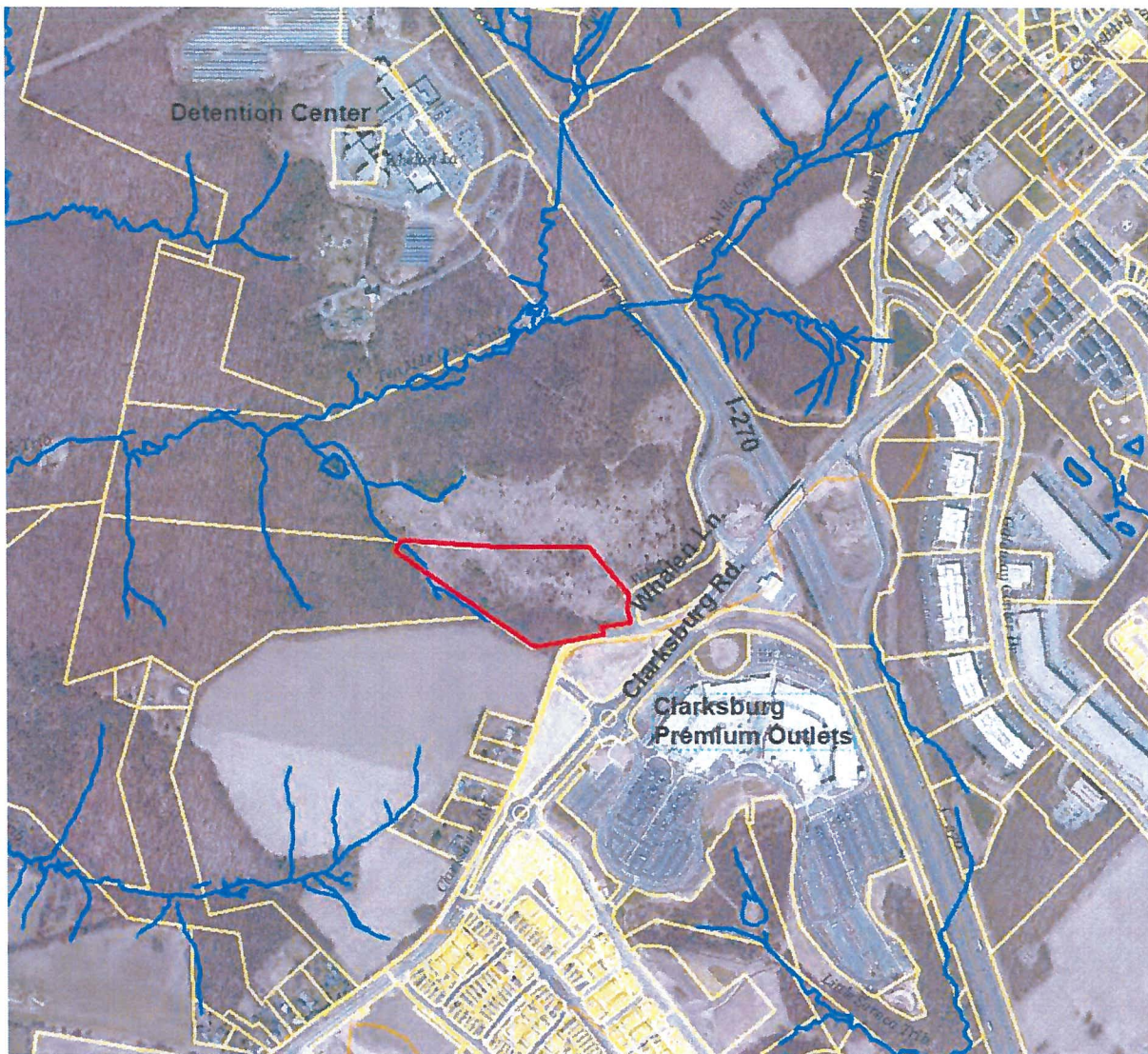


Figure 1. Property Location and Surrounding Area





Figure 2. Property Location – Aerial Photograph

## PROJECT DESCRIPTION

The Potomac Edison Company - Clarksburg substation is planned to be constructed on a 0.70-acre leased portion of the 12.02-acre Property owned by the Montgomery County Department of General Services. Potomac Edison's main power substation located along MD Route 355, north of MD Route 121, was identified as being inadequate to service approved development and future potential development envisioned by the Master Plan in Clarksburg. Potomac Edison determined they would need to install a small, modular substation to supplement the main substation. Potomac Edison reviewed various potential sites before identifying the County owned land, the Subject Property, as the appropriate location for the substation. An Application for approval of a Conditional Use, Preliminary/Final Forest Conservation Plan and Preliminary/Final Water Quality Plan was submitted by the Applicant to demonstrate conformance with the recommendations of the *10 Mile Creek Area Limited Amendment Master Plan*, the 10 Mile Creek Special Protection Area, and the Clarksburg West Environmental Overlay Zone.

At the time the Zoning Ordinance was amended to include the Clarksburg West Environmental Overlay Zone, the County Council considered the recommendation of the Montgomery County Planning Board and the Planning, Housing, and Economic Development Committee to include text that would allow a public utility facility on County owned land. The Planning Board was aware of the need for a Potomac Edison substation that may need to be located on public land to service approved and potential future development. At the request of Executive staff, the District Council ultimately decided not to include this text, noting that Executive staff indicated that the facility could be accommodated by removing some existing impervious surface, thereby meeting the impervious surface restrictions of the Clarksburg West Environmental Overlay Zone (Attachment A).

The Planning Board's actions on the Preliminary/Final Forest Conservation Plan and the Preliminary/Final Water Quality Plan are regulatory and binding. The Planning Board must act on the FCP and Water Quality Plan before it finalizes its recommendations on the Conditional Use application.

#### **A. FOREST CONSERVATION PLAN ANALYSIS AND FINDINGS**

The Application meets all applicable requirements of Chapter 22A of the Montgomery County Forest Conservation Law.

##### Preliminary/Final Forest Conservation Plan

A Natural Resources Inventory and Forest Stand Delineation (NRI/FSD) #420180400 was approved by Staff on December 5, 2017. The NRI/FSD included detailed, field verified analysis provided for a defined 5.70-acre area around the 0.70-acre leased area where the substation will be located, and a desktop analysis for the remainder of the site, far removed from any potential disturbance. The preferred location of the substation on the Property was determined based on the existing conditions, including the lack of forest, trees, and other environmentally sensitive features, the existing impervious surfaces, and the close proximity to Whalen Lane. A Preliminary/Final Forest Conservation was submitted as part of a Conditional Use application for a modular substation needed to service approved and potential future development in the Clarksburg area (Attachment B).

The net tract area for forest conservation is 12.02 acres. There are approximately 4.90 acres of forest, including approximately 2.2 acres of forested environmental buffer on the Property. The Application proposes to retain all the forest and there is no planting requirement per the Forest Conservation Law. The Applicant proposes to reforest approximately 1.37 acres of currently unforested stream buffer to comply with the *10 Mile Creek Area Limited Amendment Master Plan* (2014) and the *Environmental Guidelines for Environmental Management of Development in Montgomery County* (MNCPPC 2000) ("Environmental Guidelines") recommendations that all unforested stream buffers be reforested as part of development applications. The retained and planted forest will be protected in a Category I conservation easement, and some of this forest may be used to establish a forest bank for the County's use. The proposed Application does not impact or remove any trees greater than or equal to 24 inches in Diameter at Breast Height and does not require a tree variance.

##### Potential Forest Bank

As the Property owner, the Montgomery County Department of General Services requested that the Planning Department consider the potential for the creation of a forest bank for the County's use, on the Property. Chapter V.C.2(a) of the Environmental Guidelines includes a provision for allowing the creation of a forest bank for the portions of the environmental buffer that are reforested per the Special Protection Area forest conservation requirements and not meeting the requirements of the Forest Conservation Law. In addition, the Planning Department's forest bank policy allows areas of forest retention above the minimum required forest retention ("break-even point") per the Forest Conservation Law, to be considered for inclusion in a forest bank. Staff supports the consideration of approximately 1.37 acres of planted environmental buffer and 2.75 acres of retained forest for inclusion in a forest bank to be utilized by the County. A more detailed evaluation of these areas and a determination as to their appropriateness as a forest bank will be conducted by the Planning Department's forest bank program manager under a future, separate process. It will be that process that will determine the exact number of credits available for sale in the forest mitigation bank.



## B. SPA WATER QUALITY PLAN ANALYSIS AND FINDINGS

The Application meets the Water Quality Plan requirements of Chapter 19 of the Montgomery County Code and the requirements of the Clarksburg West Environmental Overlay Zone.

### Review for Conformance to the Special Protection Area Requirements

This project is located within the Ten Mile Creek SPA and on publicly owned property, so it is required to obtain approval of a water quality plan under Chapter 19-62(c) of the Montgomery County Code. This section of the code states:

*“(c) Publicly owned property. Before engaging in any land-disturbing activity on publicly owned property in an area designated as a special protection area, the applying agency or department should prepare a combined preliminary and final water quality plan.”*

As part of the requirements of the Special Protection Area law, a SPA Water Quality Plan should be reviewed in conjunction with a Conditional Use application. Under Section 19-65, the provision of the law, the Montgomery County Department of Permitting Services (MCDPS), the Montgomery County Department of Environmental Protection (MCDEP) and the Planning Board have different responsibilities in the review of a Water Quality Plan. MCDPS and MCDEP have reviewed and conditionally approved the elements of the Water Quality Plan under their purview. The Planning Board’s responsibility is to determine if environmental buffer protection, SPA forest conservation and planting requirements, and limits on impervious surfaces have been satisfied.

### MCDPS and MCDEP Special Protection Area Review Elements

In a letter dated November 1, 2017, MCDPS and MCDEP have conditionally approved the elements of the SPA Preliminary/Final Water Quality Plan under its purview with a synopsis provided below (Attachment C).

#### *Site Performance Goals*

As part of the Preliminary/Final Water Quality Plan, the following performance goals were established for the Property:

1. Minimize storm flow runoff increases
2. Minimize sediment loading

#### *Stormwater Management Concept*

The required stormwater management goals will be met via a reduction in existing impervious area and the use of an infiltration berm.

### *Monitoring*

A stream monitoring fee for the site (leased portion) area and a Best Management Practices monitoring fee for the disturbed area in the SPA is required.

### Planning Board Special Protection Area Review Elements

Staff recommends Planning Board approval of the elements of the SPA Water Quality Plan under its purview.

### *Environmental Buffer Protection*

A Natural Resources Inventory and Forest Stand Delineation (NRI/FSD) #420180400 was approved by Staff on December 5, 2017. The Property is located in the Little Seneca Creek-Ten Mile Creek watershed (Use Class I/I-P waters). There is a stream that traverses through the northeastern corner of the Property and its associated environmental buffer as well as environmental buffer associated with another off-site stream comprise approximately 3.52 acres of the Property. The Application does not propose any disturbance within the environmental buffers and the unforested portions will be reforested and the entire on-site buffer will be protected by a Category I conservation easement as part of this Application.

The Application meets all applicable requirements of the Environmental Guidelines and the *10 Mile Creek Area Limited Amendment Master Plan*.

### *Forest Conservation*

The Applicant submitted an FCP for review with the Conditional Use application. The Application proposes to retain all the existing forest. There is no planting requirement per the Forest Conservation Law; however, the Application proposes to reforest all the unforested environmental buffers on the Property. The result is approximately 4.90 acres of existing forest and 1.37 acres of planted forest on the Property and within the Ten Mile Creek Special Protection Area and Clarksburg West Environmental Overlay Zone will be protected in Category I conservation easement. Per SPA requirements, the forest planting will occur in the first planting season after the first grading permit is issued and the new plantings will be subject to a five-year maintenance and management agreement.

The Application meets all applicable requirements of Chapter 22A of the Montgomery County Forest Conservation Law.

### *Impervious Surfaces*

Impervious surface restrictions for development projects in this portion of the Ten Mile Creek SPA are set forth in the Clarksburg West Overlay Zone. As per Chapter 59, Section 4.9.6, County owned land that is not managed as parkland by the M-NCPPC may not add any impervious surface and the maximum total impervious surface area for any development after August 4, 2014 is six percent. The Application includes the proposed construction of a substation to serve approved and future proposed development. There is approximately 12,505 square feet of impervious surfaces currently located in the southeastern portion of the Property, adjacent to Whalen Lane. This area consists of compacted aggregate, including gravel. The

Application proposes to remove the existing impervious surfaces, dispose of them at an approved waste site, and decompact the soils. The Application proposes approximately 10,405 square feet of impervious surface related to the substation for a net reduction of 2,100 square feet. The proposed impervious surface consists of the substation and associated pad, and a gravel access road. The Application as proposed includes a total of 10,405 square feet of impervious surfaces over a 523,591 square foot net tract area, resulting in two percent imperviousness, as depicted on the Impervious Surface Plan (Attachment D). The Application is in conformance with the Clarksburg West Overlay Zone as there will be no additional impervious surfaces on County owned land and the proposed impervious surface on the Property is less than six percent.

The Application meets all applicable requirements of the Clarksburg West Environmental Overlay Zone, as described in Chapter 59 of the Montgomery County Code.

## **CONCLUSION**

Staff recommends the Planning Board approve the Preliminary/Final Forest Conservation Plan and the Preliminary/Final Water Quality Plan with conditions specified above.

## **ATTACHMENTS**

- A. Ordinance No. 17-46, Zoning Text Amendment No. 14-03
- B. Preliminary/Final FCP
- C. MCDPS Preliminary/Final Water Quality Plan approval letter dated November 1, 2017
- D. Impervious Surface Area Plan

## C. Supplemental Information

**Attachment-C**



Montgomery County  
Office of Zoning and Administrative Hearings  
100 Maryland Avenue  
Room 200  
Rockville, MD 20850

**Re: Demonstrate Cabin Branch SS Compliance with Maximum Allowable Noise Levels**

Per the Montgomery County noise ordinance (Section 31B-5(a)(1)), the maximum allowable noise level for nighttime in a non-residential area is 62 dB and in a residential area is 55 dB (for Receiving Noise Areas).

In accordance with NEMA TR 1-2013, transformers manufactured of this size may not exceed an average audible sound level of 73 dB at the transformer.

The resulting sound level at a location some distance from the source of the sound can be approximated by the equation  $L_2 = L_1 - \left| 20 \left[ \log \left( \frac{r_1}{r_2} \right) \right] \right|$

where:

$r_1$  = initial distance from sound source

$L_1$  = sound level (in dB) at distance  $r_1$

$r_2$  = desired distance from sound source

$L_2$  = sound level (dB) at distance  $r_2$

In this case, sound level reduction can be calculated using a distance of 50 feet, since the transformer will be set back at least 50 feet from all easement boundaries.

Therefore, using the following values:

$r_1$  = 1 ft (standing next to the transformer)

$L_1$  = 73 dB (maximum average audible sound level from the transformer)

$r_2$  = 50 ft (distance 50 ft from the transformer)

$L_2$  = maximum average audible sound level from the transformer

$$L_2 = (73 \text{ dB}) - \left| 20 \left[ \log \left( \frac{1 \text{ ft}}{50 \text{ ft}} \right) \right] \right| = 39 \text{ dB}$$

Therefore, the maximum audible sound level at 50 feet from the transformer will be 39 dB, well within the Maximum Allowable Noise Level required by the Montgomery County noise ordinance for Non-residential and residential areas.

Justin Walter, P.E.  
Engineer  
Project and Portfolio Management  
Potomac Edison

## Transportation Comments for the Development Review Committee

Original comments prepared 2/15/19

<i>DRC Meeting Date</i>		Policy Area: Master Plan:	Clarksburg Clarksburg 10 Mile Creek	Item No.:
<i>Plan Number</i>	CU-19-07	Trans. Reviewer:	C. Van Alstyne - Ext. 4629	
<i>Plan Name</i>	Potomac Electric	Lead Reviewer:	Elsabett Tesfaye	
<i>Address</i>				
<i>Applicant/Developer</i>	Potomac Edison			
<i>Civil Engineer</i>				
<i>Attorney</i>				
<i>Proposed Land Use(s)</i>		Zoning	EOF	
<i>Size/No. of Units</i>	Electric Utility			
<i>Existing Land Use(s)</i>				

### LATR Review

<i>AM Peak Person Trips: 0</i>	<i>PM Peak Person Trips: 0</i>
<i>Transportation Statement Only (Less than 50 peak person trips)</i>	Yes
<i>Transportation Study Needed</i>	No

### Roadways

Roadway Name(s)	Whelan Lane	Old Clarksburg Rd
Roadway Designation	Industrial	Industrial
Required ROW	60 feet	60
ROW shown on plan	?	?
Additional ROW required?	?	?
Sidewalks/ ADA Ramps	N/A	
Bikeways	None	
Bicycle Facilities	• None	
Parking		

#### Comments 2/15/19:

- Show street ROW width on plans for Whelan Lane and Old Clarksburg Road
- Proposed access point appears to be within the standard minimum 300' spacing distance from an intersection. However, it is unclear if this intersection still exists with the Clarksburg Road realignment. Please confirm, and if it still exists, provide a statement of justification to explain how the proposed access point will be adequate and safe.
- The access point apron's turning radii are too large; in the EOF zone they can be a maximum of 15'

#### Conditions:

- The Applicant must illustrate street ROW width on plans for both Whelan Lane and Old Clarksburg Road
- The Applicant shall construct the access entrance with the maximum 15' curb radius as required by the EOF zone. The width shall remain 22'. To accommodate emergency vehicle access, the curbs may be mountable.