

IN THE MATTER OF: *
POTOMAC ELECTRIC POWER COMPANY *

Before: Martin L. Grossman, Hearing Examiner
Director, Office of Zoning and Administrative Hearings

OZAH Case No. CU 16-04

HEARING EXAMINER'S REPORT AND DECISION

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I. STATEMENT OF THE CASE

On September 10, 2015, the Applicant, Potomac Electric Power Company (PEPCO), filed an application, pursuant to Zoning Ordinance §59.3.6.7.E,¹ seeking a Conditional Use to allow construction and operation of a Public Utility Structure, known as the Darnestown Substation, at 16010 Riffle Ford Road in Gaithersburg, Maryland. The site consists of 2.645 acres, identified as Lot-1, Evangelical Formosan Church of Washington, and located at the northwest corner of the intersection of Darnestown Road and Riffle Ford Road, in the RE-1 Zone. It is subject to the Potomac Subregion Master Plan. The land is owned by the Applicant (Exhibits 14 and 16) under Tax ID No. 06-03484052.

On September 18, 2015, the Office of Zoning and Administrative Hearings (OZAH) issued a notice scheduling a public hearing to be held on January 7, 2016 (Exhibit 24), and on December 4, 2015, OZAH issued a notice of a motion to amend the application (Exhibit 41) with revised plans submitted by the Applicant (Exhibits 39(a) –(h)).

The Technical Staff of the Montgomery County Planning Department (Technical Staff or Staff) issued a report on December 3, 2015, recommending approval of the application, subject to four conditions. Exhibit 42. The Montgomery County Planning Board met on December 17, 2015, and voted unanimously to recommend approval with the conditions recommended by Staff, as indicated in the Chair's letter of December 24, 2015. Exhibit 49. Further revisions to the Applicant's plans were filed on December 28, 2015, to correct lot line dimensions (Exhibits 47 and 48).

In a letter dated January 4, 2016, 13 residents of the Hallman Court development,

¹ All citations in this Decision are to the 2014 Zoning Ordinance for Montgomery County, adopted September 30, 2014 (Ordinance No. 17-52), as amended.

adjacent to the subject site, expressed their opposition to the proposed Conditional Use, citing a variety of concerns and suggesting conditions if the Conditional Use were granted. Exhibit 51.

The public hearing proceeded as scheduled on January 7, 2016. The Applicant called seven witnesses in support of tis application, and introduced a number of exhibits, including a revised Landscape Plan (Exhibit 67), Elevations (Exhibit 64), a Fire Access Plan (Exhibit 68), architectural renderings (Exhibit 65) and Comments from the Fire Marshall (Exhibit 72). Two residents of the neighborhood, Cary Silverman and Pranav Pandya, testified in opposition to the proposal. It was announced at the hearing that the record would be held open until January 22, 2016, for the filing of electronic copies of the new exhibits and for comments on the revised plans from Technical Staff and the community.

While the record was open following the hearing, Technical Staff responded with an email on January 20, 2016, approving the Revised Landscape Plan filed at the hearing (Exhibit 78). On January 22, 2016, Cary Silverman and Pranav Pandya filed additional comments (Exhibit 79), and the record closed, as scheduled, on January 22, 2016.

For the reasons set forth at length in this Report and Decision, the Hearing Examiner approves the conditional use application, subject to the conditions listed in Part IV of this Report.

II. FACTUAL BACKGROUND

A. The Subject Property

The subject site is a 2.645 acre (approximately 115,217 square foot), unimproved property, identified as Lot-1, Evangelical Formosan Church of Washington, and located at the northwest corner of the intersection of Darnestown Road and Riffle Ford Road, in Gaithersburg, Maryland. It is in the RE-1 Zone and is subject to the Potomac Subregion Master Plan. Technical Staff describes the site as follows (Exhibit 42, pp. 3-4):

Currently, the subject property is unimproved and is generally covered with grass and existing trees concentrated at the northeast and southeast corners. There are no streams, wetlands, steep slopes, 100-year floodplains or highly erodible soils on or adjacent to the property. The property's high point is at the corner near the intersection of Riffle Ford and Darnestown Roads and gently slopes to the west at approximately a six percent grade.

There are two existing driveway aprons along the property's frontage on Riffle [Ford] Road that may have been constructed prior to the platting of the property. These driveway aprons are not extended to the interior of the property.

The site is depicted in an aerial photograph supplied by Technical Staff (Exhibit 42, p. 3):

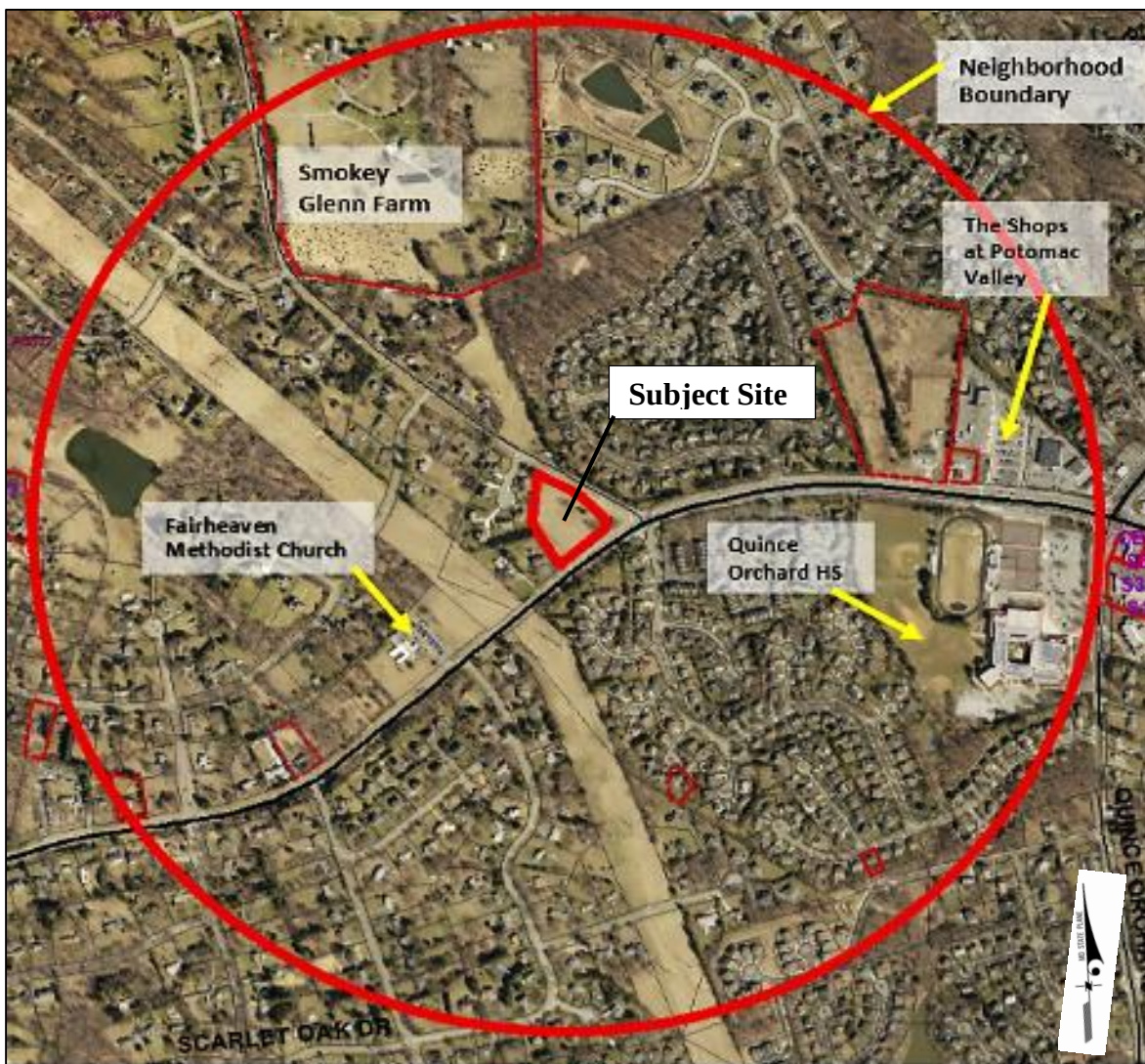


Staff also notes that the property was the subject of a Preliminary Plan of Subdivision No. 120020180 (originally numbered Plan No. 1-02018) that was approved in 2002 for a construction

of a 24,000 square-foot church, with a 300-seat sanctuary and a 75-space surface parking lot, but the church was never constructed.

B. Surrounding Neighborhood

For the purpose of determining the compatibility of the proposed use, it is necessary to delineate and characterize the “surrounding neighborhood” (*i.e.*, the area that will be most directly impacted by the proposed use). Staff proposed defining the neighborhood as all those properties located within a 2,000-foot radius of the subject site, as depicted in the following aerial photograph from the Staff report (Exhibit 42, p. 4):



The Applicant accepted this definition. Tr. 119-120. The Hearing Examiner does as well, although it may well encompass a larger area than will actually suffer any impacts from the proposed facility since it is unlikely to be clearly visible from 2,000 feet, given existing development around the site, and it will have no traffic impacts while it is operational.

Technical Staff notes that uses in the neighborhood include single-family residences, as well as some institutional, commercial and agricultural uses. As detailed by Staff (Exhibit 42, p. 5):

The subject property is surrounded by three RE-1 zoned residential properties to the northwest and west, Riffle Ford Road to the northeast and east and Darnestown Road to the south. An existing, 250-foot wide PEPCO right-of-way passes through the neighborhood 270 feet west of the subject property. Farther south and east beyond Darnestown and Riffle Ford Roads are residential developments in the R-200 Zone. The subject property, along with the adjoining properties, is located within the Ancient Oak North Subdivision, which was initially split between the Potomac Subregion Master Plan area and the Gaithersburg and Vicinity Master Plan area and placed in two different zones (RC and R-200). The 2002 Potomac Subregion Master Plan united the two areas, placing all of the properties within the Potomac Subregion Master Plan Area with the RE-1 Zone.

The Ancient Oak subdivision is a mix of one and two story traditional, colonial, split-level, and rancher style single-family detached homes with facades constructed of mostly brick and siding.

Other uses located closer to the outer perimeter of the subject site were also described by Staff (Exhibit 42, p. 4):

Quince Orchard High School is located approximately one half mile to the east of the property at the intersection of Darnestown Road and Quince Orchard Road. The Shops at Potomac Valley, and Quince Orchard Market Place are also located at this intersection. The shopping areas contain a mix of retail shops, service retail, restaurants, large surface parking lots, filling stations, and drive through banks in the NR Zone. Fairhaven United Methodist Church is less than a quarter of a mile to the west of the property in the RE-1 Zone, and Smokey Glen Farm is approximately three quarters of a mile to the north in the RE-2C Zone.

C. Proposed Use

The Applicant proposes to develop the subject property with an unmanned electrical power distribution substation, pursuant to Zoning Ordinance §59.3.6.7.E, “to serve existing customers, accommodate new customers in the surrounding area, and maintain reliable electrical service as existing substations are predicted to exceed capacity in the near future.” *Applicant’s Statement* in support of its application (Exhibit 2, p. 1).

1. Proposed Structure, Site Plan, Access, Parking, Elevations and Renderings

As described by Technical Staff (Exhibit 42, p. 5),

The proposed structure will have a total gross floor area of 22,000 square feet (SF) of which, approximately 18,300 SF of gross floor area will be of framed open roof area² and the remaining 3,700 SF will be of roofed enclosed gross floor area. The structure will have a height of 48 feet.³ [footnotes added.]

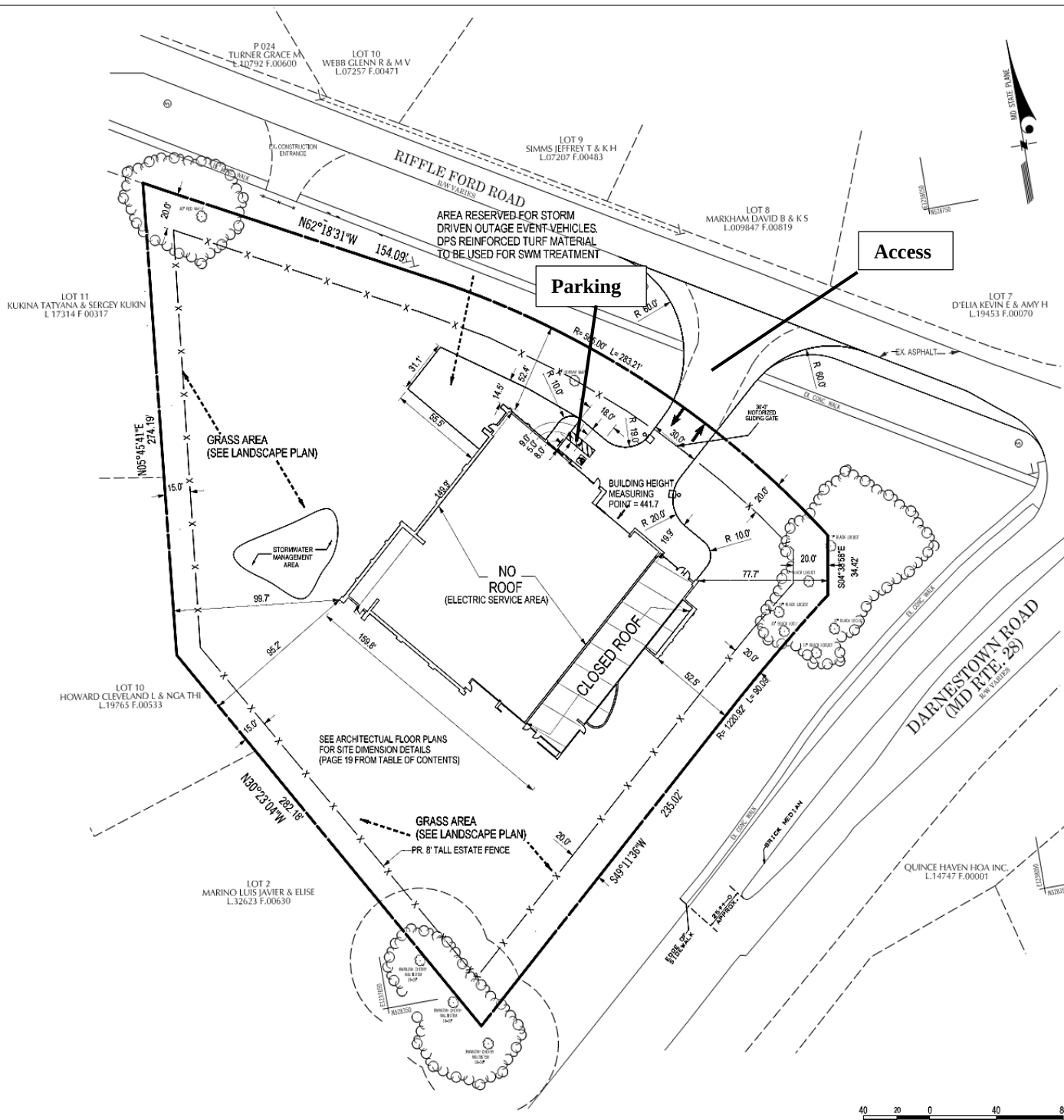
The Applicant’s justification statement indicates that the proposed structure will have three incoming transmission lines feeding three transformers and four transformer bays, three of which will be operational at the end of construction. Space will be provided for a fourth transformer bay and associated equipment to be installed by PEPCO if needed in the future. The structure will also contain a battery room, fire protection room, and a restroom.

The proposed substation will be accessed from Riffle Ford Road via a single driveway. The driveway apron closest to the intersection of Riffle Road and Darnestown Roads will be modified and upgraded to meet the needs of the proposed use. The driveway apron will be widened to 150 feet, then narrowing to 30 feet wide in the interior of the subject property. The Conditional Use site plan provides for two parking spaces (one van accessible space) in the front yard which will be accessed directly from the driveway. The Applicant’s statement identifies the types of maintenance vehicles visiting the site to include box trucks, pick-up trucks, passenger vehicles and SUVs.

² The open area will be covered by a bird screen, made of a material similar to an ordinary window screen. Tr. 26-27.

³ The 48 foot height figure is based on the definition of height in Zoning Ordinance §59.4.1.7.C.1.a., as amended effective December 21, 2015. It provides that Building Height in Residential Zones “is measured from the average grade either to the mean height level between the eaves and ridge of a gable, hip, mansard, or gambrel roof or to the highest point of roof surface, regardless of roof type.” Applying the Zoning Ordinance height definition yields a height of 48 feet on the roofed portion (*i.e.*, the front of the building) along Darnestown Road; however, the highest point of the building front is actually 52 feet from ground level. Tr. 195. On the other hand, the area of the building which is not roofed (*i.e.*, the portion of the building closest to the Hallman Court neighborhood) will be only 40 feet tall. Tr. 164-165.

the following page:



GENERAL NOTES

1. Boundary information provided June 2015 by PHI, per Plat #23135.
2. The subject property is located within Tax Map ES342 AND ES562.
3. 100-yr Floodplain from FEMA Flood Map Community-Panel Number 24031C0607D.
4. The project lies within the Potomac Subregion Master Plan (2002).
5. The site is located within the Lower Great Seneca watershed.
6. The project is to be served by public water and sewer systems and is currently in the water and sewer service categories W-1 and S-1, respectively.
7. This site is zoned: RE-1.
8. Building locations will be finalized during the building permit process.

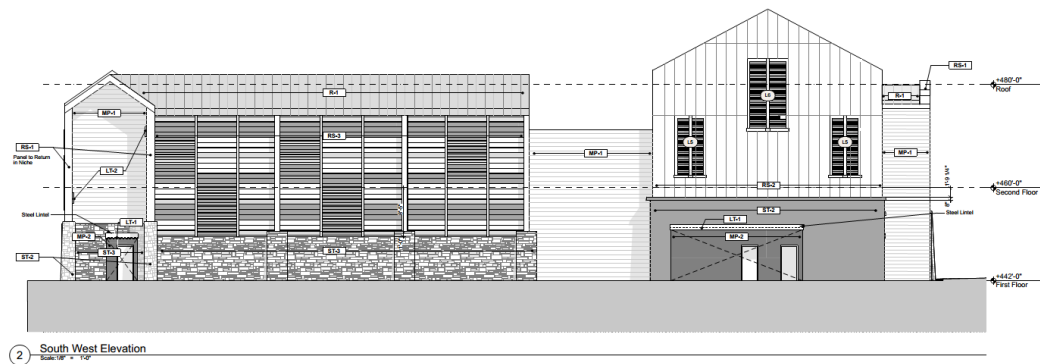
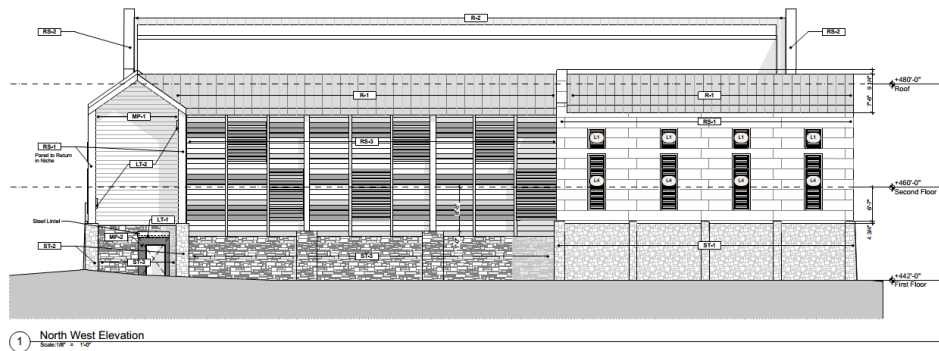
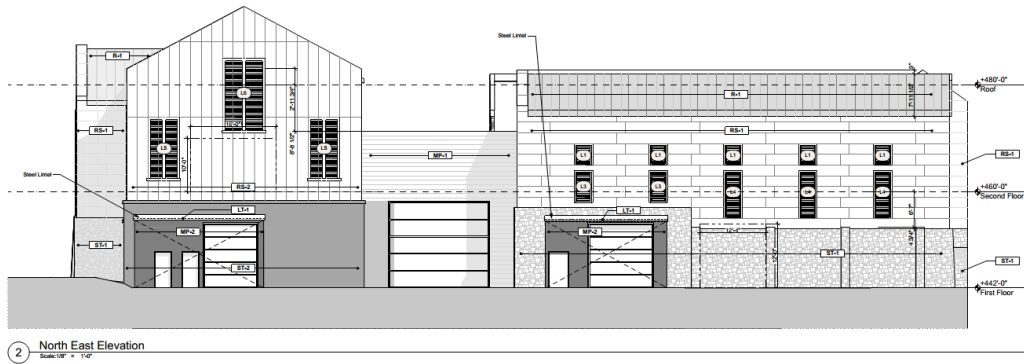
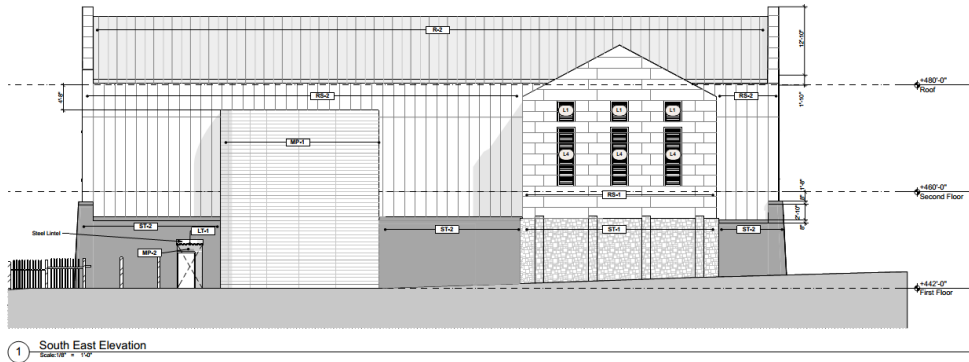
SITE PLAN LEGEND

RE-1 ZONE, STANDARD METHOD DEVELOPMENT STANDARDS (CONDITIONAL USE)		
Development Standard	Permitted/ Required	Proposed
1. Lot and Density		
Lot (min)		
Lot area	40,000 SF	115,217 SF
Lot width at front lot line	25'	437.1'
Coverage (max)		
Lot	15%	3%
2. Placement		
Principal Building Setbacks (min)		
Front setback	50'	52.4'
Side street setback	50'	52.5'
Side setback	17'	99.7'
Rear setback	35'	95.2'
3. Height		
Height (max)		
Principal building	50'	48'
4. Parking		
Number of Parking Spaces (Min)		
Number of Parking Spaces	0	2

NOTE: 1-2 MONTHLY VISITS ANTICIPATED FOR
MAINTENANCE. PROVIDE TWO (2) PARKING SPACES

	EXISTING RIGHT-OF-WAY
	PROPOSED STRUCTURE
	PROPOSED LIGHTS
	PROPOSED 8' TALL ESTATE FENCE

The Applicant also provided elevations (Exhibits 7(a) and (b)) and architectural renderings (Exhibit 42, p. 15 and Exhibits 65(a), (b) and (c)), depicting the proposed site development from different angles:





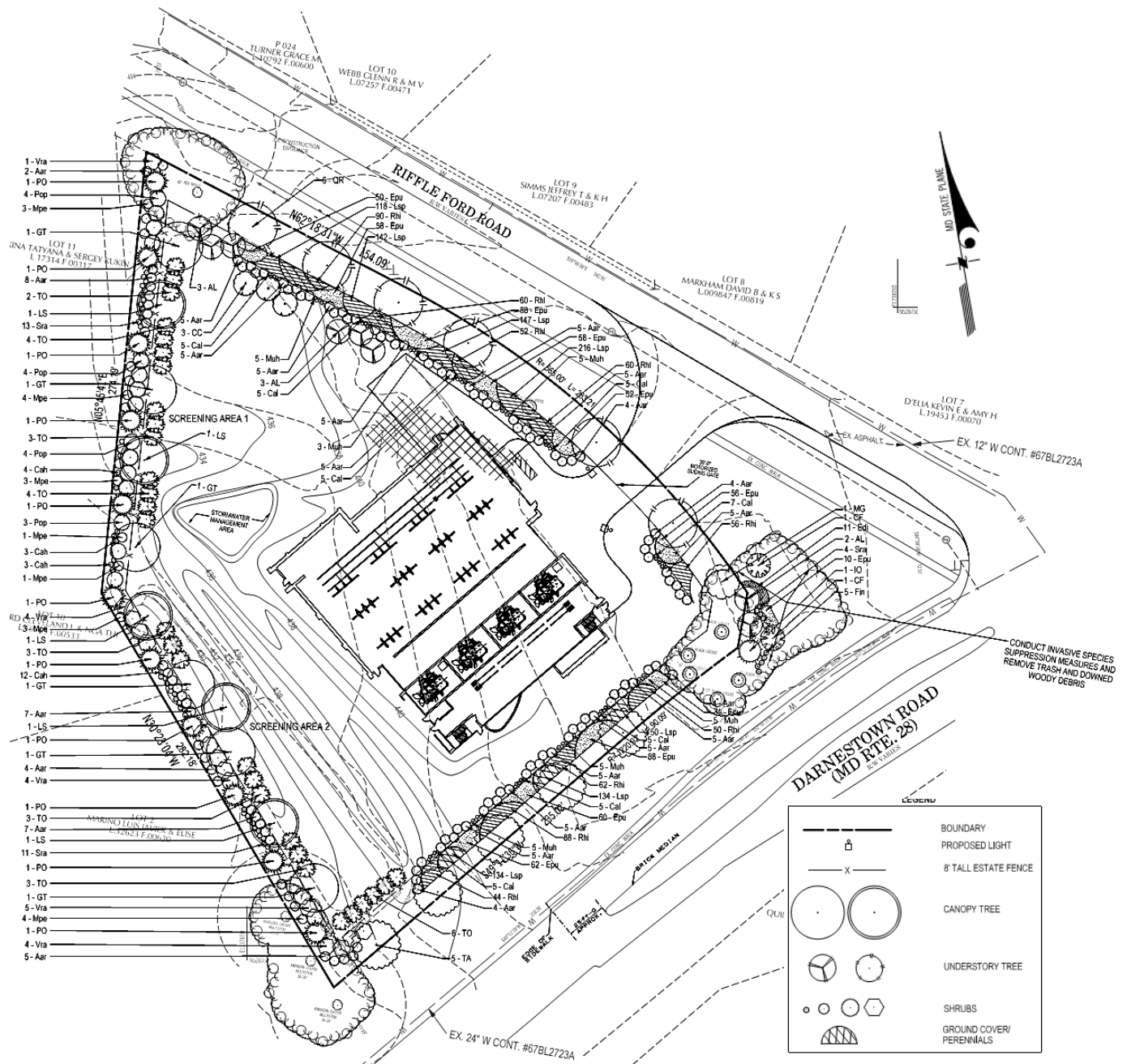
“Bird’s Eye” View of the Facility from Darnestown Road, Looking North (Ex. 42, p. 15)



View from the Corner of Darnestown and Riffle Ford Roads, Looking West (Ex. 65(a))



Shortly before the hearing, Technical Staff indicated to the Applicant in an email exchange that its then existing Landscape Plan (Exhibit 48(c)) needed further revision to include supplemental plantings (Exhibit 50(a)). The Applicant did so, and the final Landscape Plan (Exhibit 76(b)) is reproduced below and on the next page:



PLANTING SCHEDULE					
CANOPY TREE					
KCY	QTY	BOTANICAL NAME	COMMON NAME	SIZE	REMARKS
GT	6	Gleditsia triacanthos 'Inermis'	Thornless Honeylocust	2 1/2"-3" cal.	B&B
LS	5	Liquidambar styraciflua 'Rotundiloba'	Fruitless Sweetgum	2 1/2"-3" cal.	B&B
MG	1	Magnolia grandifolia	Southern Magnolia	2 1/2"-3" cal.	B&B
QR	6	Quercus rubra	Northern Red Oak	2 1/2"-3" cal.	B&B
TA	5	Tilia americana 'Boulevard'	Boulevard Linden	2 1/2"-3" cal.	B&B
EVERGREEN TREE					
IO	1	Ilex opaca	American Holly	6'-7' tall	B&B
PO	11	Picea omorika 'Bruns'	Brun's Serbian Spruce	6'-7' tall	B&B
TO	28	Thuja occidentalis	Arborvitae	6'-7' tall	B&B
UNDERSTORY TREE					
AL	8	Amelanchier laevis	Allegheny Serviceberry	6'-8' tall	B&B; multi-stem
CC	3	Cercis canadensis	Eastern Redbud	6'-8' tall	B&B
CF	2	Cornus florida	Flowering Dogwood	6'-8' tall	B&B; multi-stem
SHRUBS					
Aar	113	Aronia arbutifolia	Red Chokeberry	24"-36"	B&B or Cont.
Cah	22	Clethra alnifolia 'Hummingbird'	Hummingbird Summersweet	18"-24"	Cont.
Fin	5	Forsythia x intermedia	Forsythia	24"-36"	B&B or Cont.
Mpe	19	Myrica pensylvanica	Northern Bayberry	24"-36"	B&B or Cont.
Pop	15	Physocarpus opulifolius	Ninebark	24"-36"	B&B
Sra	28	Sambucus racemosa 'Golden Locks'	Golden Locks Elderberry	18"-24"	Cont.
Vra	18	Viburnum rhytidophyloides 'Allegheny'	Allegheny Viburnum	24"-36"	B&B
GRASSES and PERENNIALS					
Cal	42	Calamagrostis x acutiflora 'Karl Forester'	Foerster's Feather Reed Grass	3 gal.	Cont.
Edi	11	Eurybia divaricata	White Wood Aster	1 gal.	Cont.; 18" O.C.
Epu	616	Echinacea purpurea	Purple Coneflower	1 gal.	Cont.; 18" O.C.
Lsp	1040	Liatris spicata	Blazing Star	1 gal.	Cont.; 12" O.C.
Muh	28	Muhlenbergia capillaris	Pink Muhly Grass	3 gal.	Cont.
Rhi	562	Rudbeckia hirta	Black-eyed Susan	1 gal.	Cont.; 18" O.C.

*Note: Plant quantities have been shown for the Contractor's convenience. The Contractor is still responsible for confirming final count.

Screening Requirements (per Section 6.5.3.C.7)		
Zone: RE-1		
Use: Conditional Use in Residential Detached Zones		
Screening Area 1 (Linear Feet)		274
Screening Area 2 (Linear Feet)		282
Screening Area 1 (Option A)	Required	Provided
Depth	8'	30'
Canopy Tree (2 per 100')	5	5
Understory or Evergreen Tree (2 per 100')	5	19
Large Shrub (6 per 100')	16	16
Medium Shrub (8 per 100')	22	22
Small Shrub (8 per 100')	22	23
Wall, Fence or Berm	4'	8'
Screening Area 2 (Option A)	Required	Provided
Depth	8'	30'
Canopy Tree (2 per 100')	6	6
Understory or Evergreen Tree (2 per 100')	6	16
Large Shrub (6 per 100')	17	17
Medium Shrub (8 per 100')	23	29
Small Shrub (8 per 100')	23	25
Wall, Fence or Berm	4'	8'

GENERAL NOTES

- The total gross tract area of the property is 2.65 acres (115,217 square feet)
- Boundary information provided June 2015 by PHI.
- The subject property is located within Tax Map ES342 AND ES562.
- 100-yr Floodplain from FEMA Flood Map Community-Panel Number 24031C0607D.
- The project lies within the Potomac Subregion Master Plan (2002).
- The site is located within the Lower Great Seneca watershed.
- The project is to be served by public water and sewer systems and is currently in the water and sewer service categories W-1 and S-1, respectively.
- This site is zoned: RE-1.

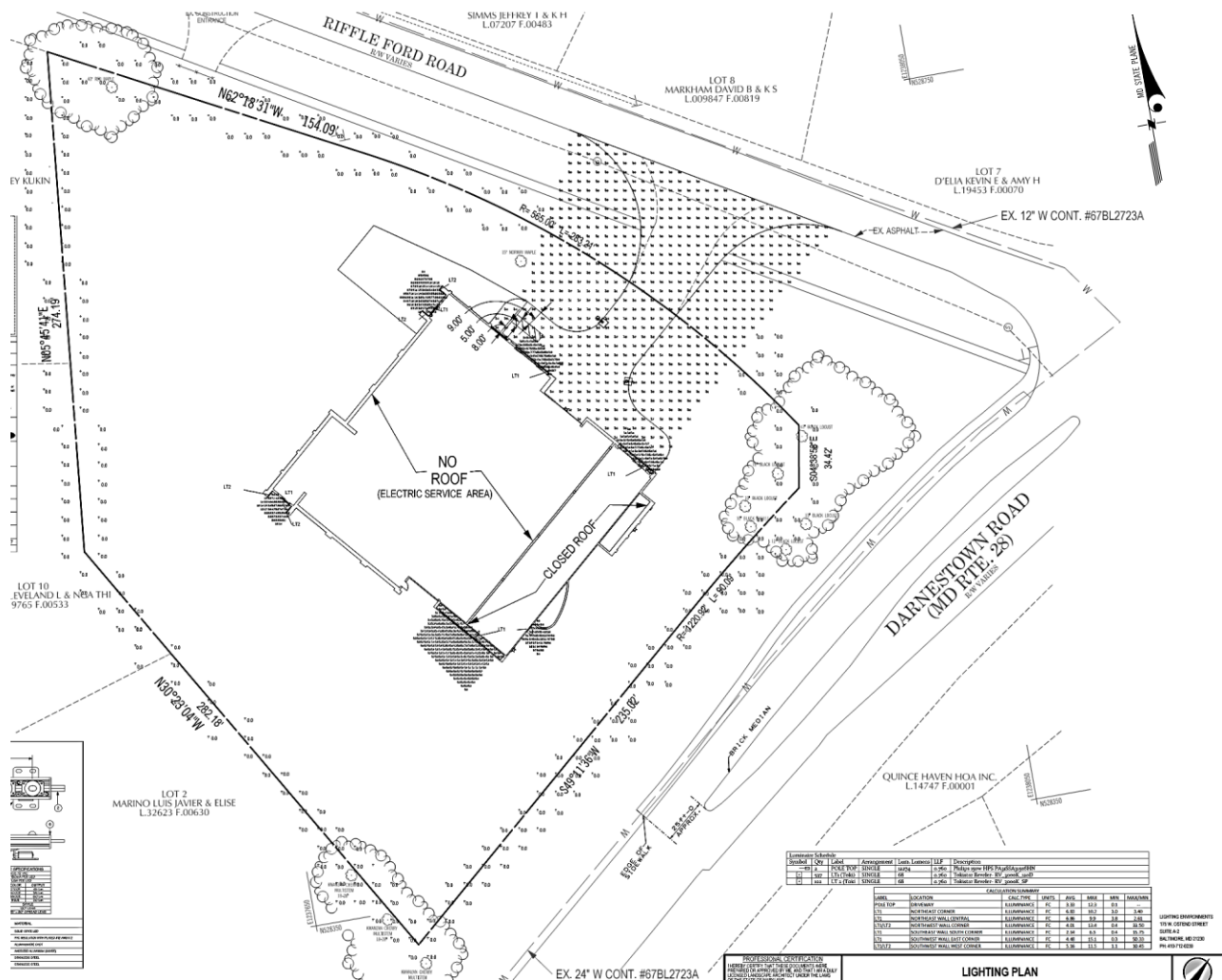
The Applicant also provided a rendered version of the Landscape Plan (Exhibit 66):



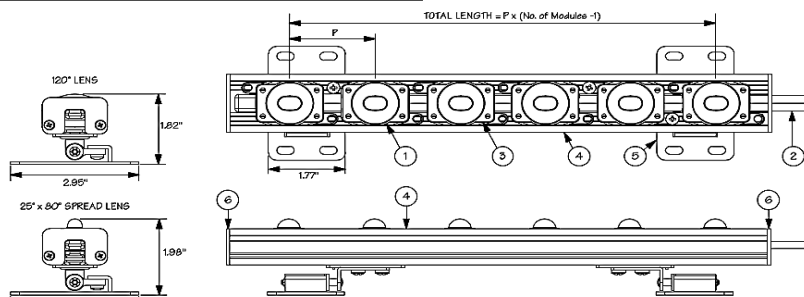
Technical Staff reviewed the final Landscape Plan (Exhibit 76(b)) after the hearing and indicated its approval in an email (Exhibit 78), stating that:

... the revised planting is acceptable and ... provides adequate screening as well as, in the case of the planting at the corner of Riffle and Darnestown Roads, good visual appeal. Staff finds that the revised Landscape Plan conforms to the planting requirements of Section 59.6.4.3 and the screening requirements of Section 59.6.5.3.

The Lighting Plan for the subject site (Exhibit 48(d)) is reproduced below and on the next page:



REVELER RVC SERIES-W/ADJUSTABLE BRACKET



CATALOG#	P (INCH)	LENS	MAX. LENGTH	WEIGHT
RVC-50-(2700K, 3000K, 5600K, BL)-120°	2 ± .08"	120°	8 FT.	28lb/ft.
RVC-50-(2700K, 3000K, 5600K, BL)-SP	2 ± .08"	SPREAD	8 FT.	28lb/ft.
RVC-100-(2700K, 3000K, 5600K, BL)-120°	4 ± .08"	120°	8 FT.	28lb/ft.
RVC-100-(2700K, 3000K, 5600K, BL)-SP	4 ± .08"	SPREAD	8 FT.	28lb/ft.
RVC-150-(2700K, 3000K, 5600K, BL)-120°	6 ± .08"	120°	8 FT.	21lb/ft.
RVC-150-(2700K, 3000K, 5600K, BL)-SP	6 ± .08"	SPREAD	8 FT.	21lb/ft.

REVELER LED SPECIFICATIONS		
VOLTAGE: 12 VAC		
CURRENT: 100mA PER LED		
POWER: 1.5W PER LED		
LED CODE	COLOR	OUTPUT
2700K	45°	45°
3000K	65°	65°
5600K	60°	60°
BL	BLUE	20°
LENS CODE	STYLE	
120°	120° LENS	
SP	25° x 80° SPREAD LENS	

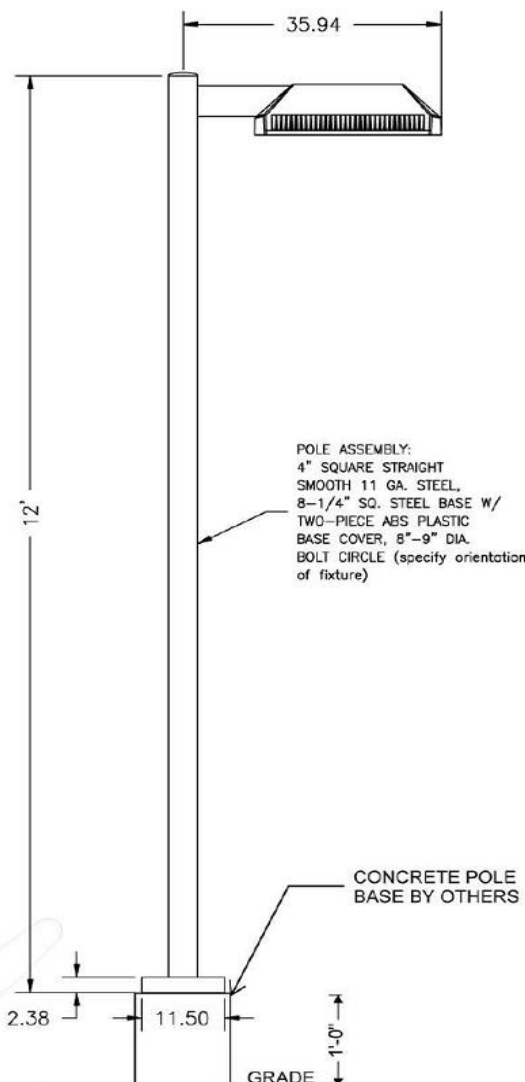


TOKISTAR LIGHTING INC.
1313 E. UNIVERSITY LANE
ANN ARBOR, MI 48106
TEL: 734.772.7023 FAX: 734.772.7014
email: info@tokistar.com Website: tokistar.com

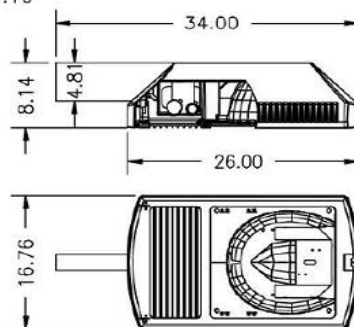
REVELER SERIES SUBMITTAL		NO.	PART	MATERIAL
CATALOG# RVC (50, 100, 150) (LED CODE) (LENS CODE)		1	LED	SOLID STATE LED
DATE: JULY 11, 2012		2	CABLE	PVC INSULATION WITH PLATED #12 AWG X 2
DRAWN BY: F. CORDOVA		3	LED MODULE COVER	ALUMINUM DIE CAST
SCALE: 1/2"		4	CHANNEL	ANODIZED ALUMINUM (SILVER)
BRACKET WEIGHT: 65g/ft.		5	ADJUSTABLE BRACKET	STAINLESS STEEL
		6	CHANNEL END CAP	STAINLESS STEEL

Ordering Guide:
C13451: LUMINAIRE
CP13451: POLE ASSEMBLY

Color:
Black



Luminaire Detail
Scale 1:16



ARM:

- X STRAIGHT ARM
- CURVED ARM
- HORIZONTAL SLIP FITTER
- ADJUSTABLE

MOUNTING:

- 3" O.D. ROUND POLE
- 4" O.D. ROUND POLE
- 5" O.D. ROUND POLE
- X SQUARE POLE
- WALL MOUNT

COLOR:

- X BLACK
- WHITE
- BRONZE
- GRAY

OPTICS:

- TYPE I
- TYPE II
- X TYPE III
- TYPE IV
- FORWARD THROW

WATTAGE:

- X 150W HPS
- 250W HPS
- 400W HPS
- 150W MH
- 250W MH
- 320W MH

VOLTAGE:

- X 120V
- 208V
- 240V
- 277V
- 347V
- 480V

OPTIONS:

- BUTTON EYE
- DOUBLE FUSING
- SINGLE FUSING
- HOUSE SIDE SHIELD
- QUARTZ RESTRIKE
- TWIST-LOCK RECEPTACLE
- X NONE

PRODUCT APPROVALS

HADCO

CMG

CUSTOMER

CONFIDENTIAL:

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HADCO**

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Phone 800-331-4185
Fax 717-359-9289
www.philips.com

JOB NAME:

Darnestown Rd. —
Gaithersburg, MD

DRAWN BY:

H. Kuhn

SCALE:

1:20

DATE:

08/03/15

DRAWING NUMBER:

C13451-DWGO1

REP:

DePorter, Dominick

REV: A

PCN:

15-027

BY:

DATE:

Luminaire Schedule

Symbol	Qty	Label	Arrangement	Lum. Lumens	LLF	Description
—□	2	POLE TOP	SINGLE	12274	0.760	Philips 150w HPS PA31SSA3150SHN
•	537	LT1 (Toki)	SINGLE	68	0.760	Tokistar Reveler- RV_3000K_120D
•	102	LT 2 (Toki)	SINGLE	68	0.760	Tokistar Reveler- RV_3000K_SP

CALCULATION SUMMARY

LABEL	LOCATION	CALC. TYPE	UNITS	AVG	MAX	MIN	MAX/MIN
POLE TOP	DRIVEWAY	ILLUMINANCE	FC	3.33	12.3	0.1	--
LT1	NORTHEAST CORNER	ILLUMINANCE	FC	6.83	10.2	3.0	3.40
LT1	NORTHEAST WALL CENTRAL	ILLUMINANCE	FC	6.86	9.9	3.8	2.61
LT1/LT2	NORTHWEST WALL CORNER	ILLUMINANCE	FC	4.01	13.4	0.4	33.50
LT1	SOUTHEAST WALL SOUTH CORNER	ILLUMINANCE	FC	2.14	6.3	0.4	15.75
LT1	SOUTHWEST WALL EAST CORNER	ILLUMINANCE	FC	4.48	15.1	0.3	50.33
LT1/LT2	SOUTHWEST WALL WEST CORNER	ILLUMINANCE	FC	5.16	11.5	1.1	10.45

The Applicant indicates that “Outdoor lighting has been carefully designed in regards to placement, intensity, and timing to minimize light pollution and to be energy conscious. Cutoff and directional lighting is being proposed to avoid light spillage onto neighboring properties or Darnestown Road.” *Applicant’s Statement in Support of the Application (Exhibit 2, p. 5).*

Technical Staff reviewed the Lighting Plan in its report (Exhibit 42, pp. 10-11) and found it to be in compliance with the Zoning Ordinance:

Pursuant to Division 6.4.4.E [of the Zoning Ordinance], 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 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. A photometric study was submitted with the Application to show that this requirement has been satisfied. . . .

There is no contrary evidence in the record of this case.

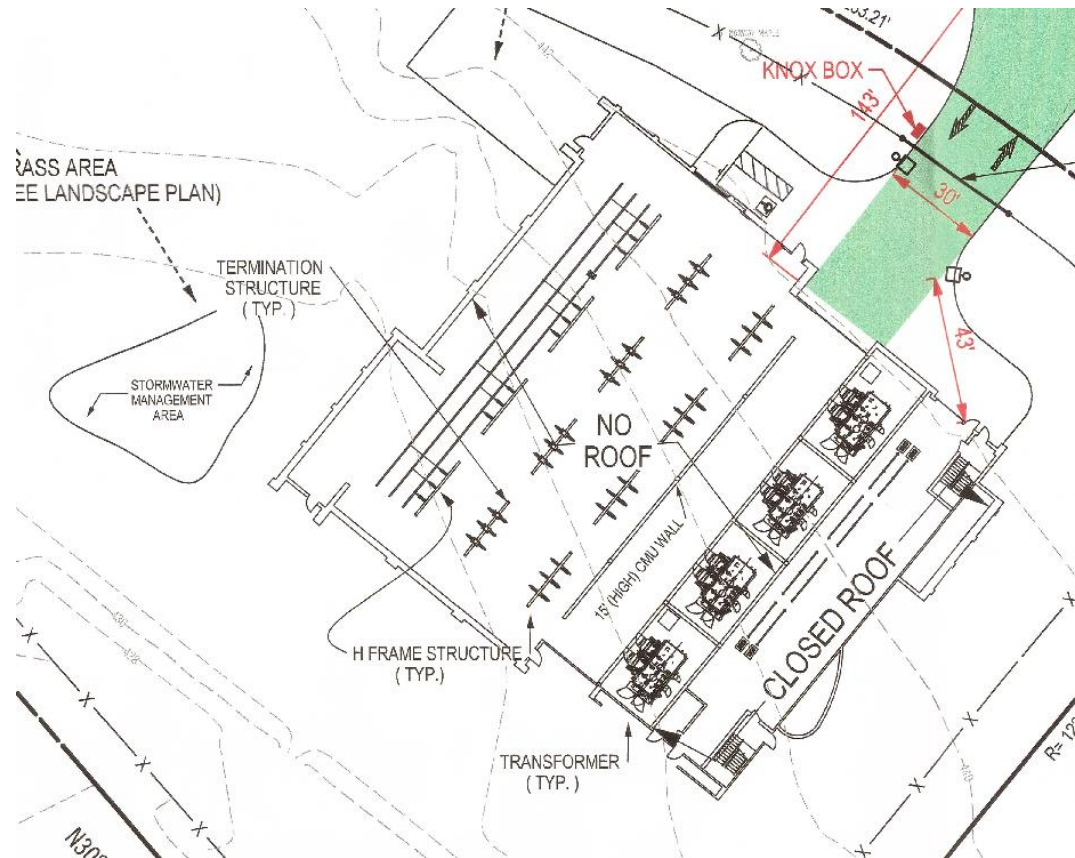
As to signage, the Applicant notes, “There will be no freestanding signs as part of the Project. A stationary identification sign will be attached to the entrance gate.” *Applicant’s Statement in Support of the Application (Exhibit 2, p. 5).*

3. Internal Physical Arrangements for Site Operations

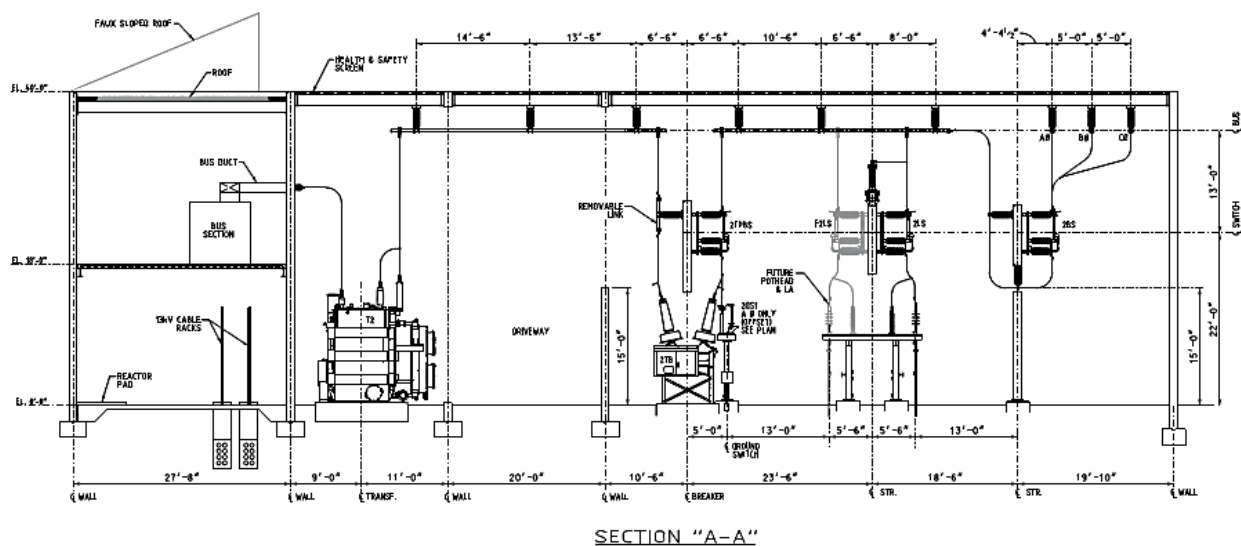
The proposed internal physical characteristics of the facility were summarized in the Applicant’s Statement (Exhibit 2, p. 3):

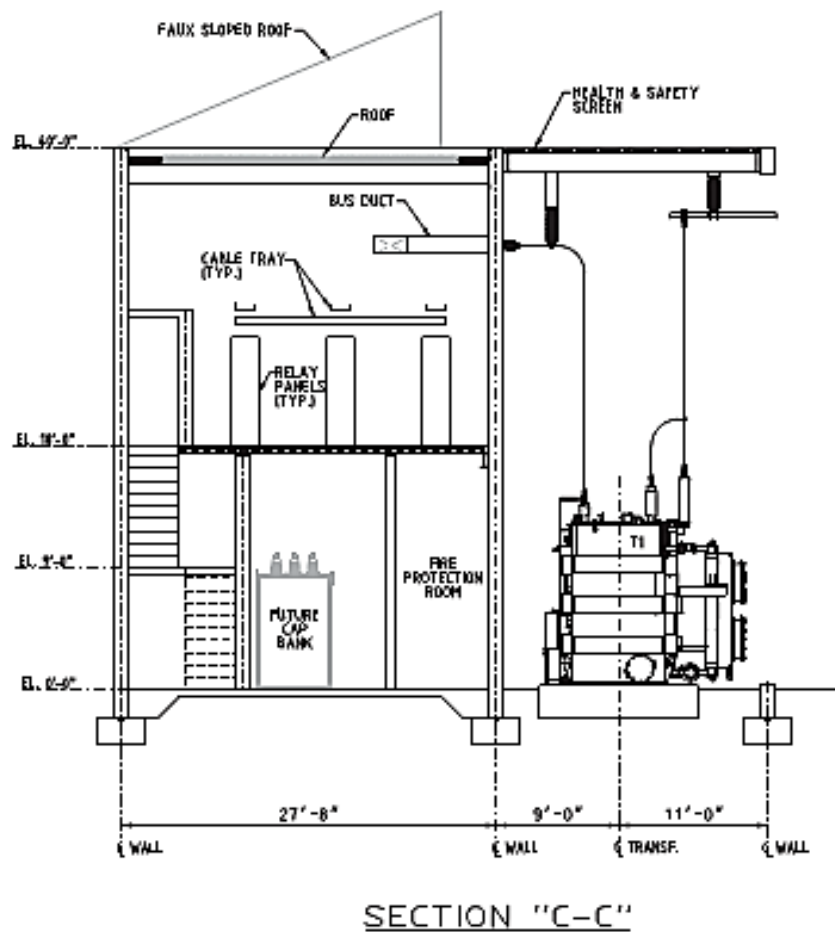
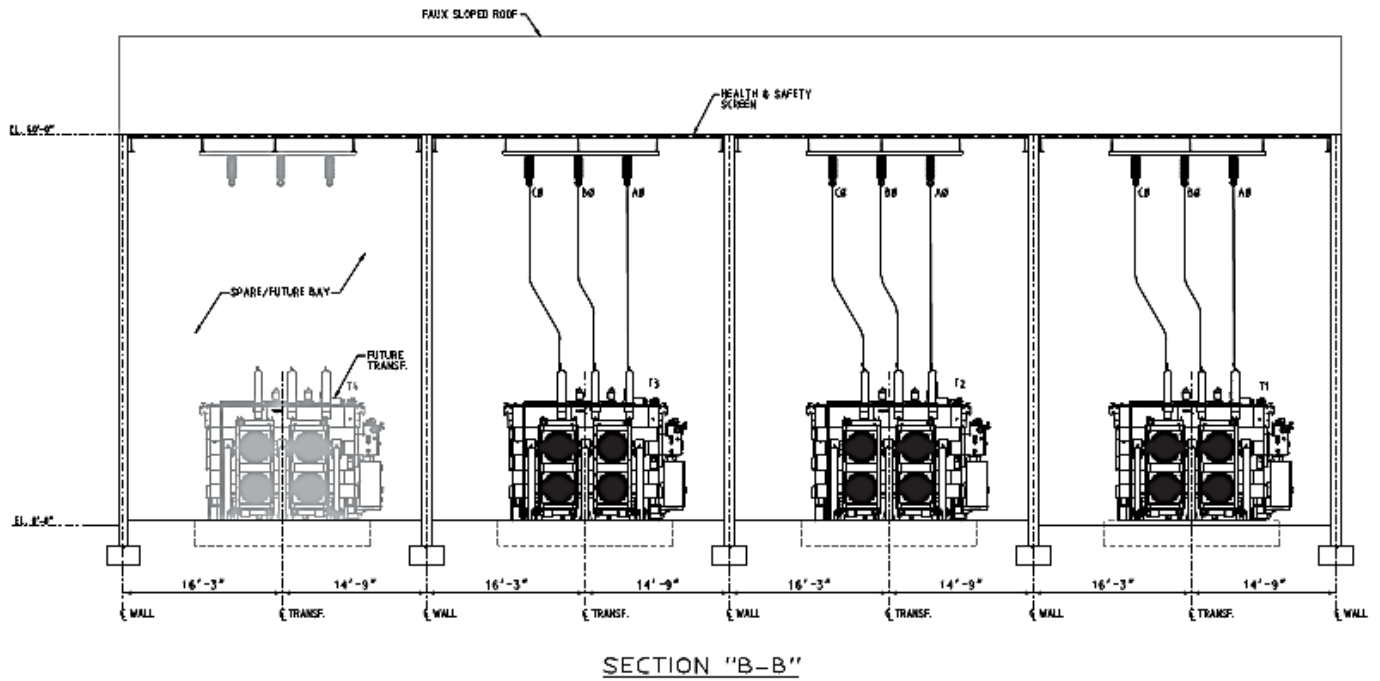
The Project will have three incoming transmission lines feeding three transformers and four transformer bays, three of which will be energized at the end of construction. Space will be provided for a fourth transformer bay and associated equipment to be installed by PEPCO in the future if needed. The Project will also contain a battery room, fire protection room, and a restroom.

A portion of the Fire Access Plan (Exhibit 68), which depicts the general layout of the transformers, is shown below:



Elevations (Exhibit 64) showing the transformers and other equipment are also reproduced below. As explained by PEPCO's lead civil and structural engineer, Ebenezer Botchway (Tr. 94), the 40-foot building height in the area covered by netting (*i.e.*, the area closest to Hallman Court) is dictated by the clearances required for the varying equipment, in accordance with published safety standards, including the electrical code (Exhibits 73(e) and (f)):





4. Operations

As previously mentioned, only three of the four transformers are intended to be used in ordinary operations. Proposed operations were described at the hearing (Tr. 41-42) and summarized in Applicant's Statement in Support of the Application (Exhibit 2, pp. 5-6):

The unmanned substation will be in continuous operation year-round. The Property will be monitored remotely by security cameras and access to the building will be controlled by a key card security system. One to two visits per month by PEPCO employees are anticipated for routine maintenance of electric infrastructure, as well as the Property's green space and landscaping. Maintenance vehicles include box trucks, pick-up trucks and passenger vehicles and SUVs. More frequent maintenance visits by employees may be required in the event of equipment malfunctions of alarms or tripped alarms.

The potential impacts of the operations on the neighborhood, the environment and the transportation system will be discussed in Part II.D., below, and in Part III of this Report and Decision. While it is clear that operations on the site will create almost no additional traffic, the neighbors have expressed a number of concerns, including the imposing visage of a large building, the potential noise from the transformers and the possible health effects of electromagnetic fields. These and other community concerns will be set forth in the next section.

D. Community Response

As mentioned in the first part of this report, 13 residents of the Hallman Court development, located to the northwest of the subject site and adjacent to it, expressed their opposition to the proposed conditional use in a letter dated January 4, 2016 (Exhibit 51), citing a variety of concerns and suggesting conditions if the conditional use were granted. Their concerns, as numbered and paraphrased by the Hearing Examiner are:

1. The proposed substation does not meet the requirements of a Conditional Use under the Zoning Ordinance, Section 59-3-6-7(E), because it will substantially impair and be detrimental to the neighboring properties. Hallman Court is a cul-de-sac composed of seven single-family homes. The proposed PEPCO substation is adjacent to the block and would be operated near the homes.

2. PEPCO is proposing an industrial use-a large power substation that will adversely alter the character of the block and is likely to reduce property values.

3. The scale of the proposed PEPCO substation is out of proportion to the surrounding community. Initially, the community was led to believe that PEPCO planned to build a small substation that would be no larger than a typical home and that it would “blend right in.” The footprint of the proposed substation, however – 22,000 square feet (150 to 160 feet on each side)-is massive. It could fit all seven of the signators’ homes (which are approximately 50’ x 40’) within its walls.

4. PEPCO is also seeking to build a structure that is just two feet short of the maximum permitted building height (50 feet). This structure will tower over the houses, which are less than 40 feet in height. The proposed substation is larger than other substations in the surrounding area, a fact confirmed by PEPCO.

5. The neighborhood appreciates **PEPCO’s designing the substation with architectural features that resemble farmhouse properties** in an attempt to blend into the neighborhood and its history. It **will not, however, look like a real farm.** The proposed structure is significantly larger than any existing farmhouse in the surrounding community.

6. This proposed use is inconsistent with the Darnestown Planning area. It would place a large, industrial building at a prominent location: the entryway to the Darnestown neighborhood. In fact, the site is adjacent to the “Welcome to Darnestown” sign that greets residents and visitors driving along Route 28. The 2002 Potomac Subregion Master Plan (p. 94) recommends preserving, protecting, and enhancing Darnestown’s unique residential and community character, and suggests use of undeveloped sites, such as this, for their potential to contribute to *park land and open space*. The neighborhood supports such uses and would also be comfortable with residential uses as contemplated by the site’s RE-1 zoning.

7. The neighbors are also concerned about potential health risks of placing an electrical substation within feet of homes, adding to the concentration of electrical towers transmission and lines.

8. They are also concerned about Noise generated by the substation. While PEPCO states that the substation will include sound barriers, it is not likely to fully eliminate the noise. A constant hum will be extremely disruptive to the peaceful enjoyment of nearby homes.

9. The neighbors wonder where PEPCO plans to situate transmission poles along Riffle Ford Road, how many there will be, and their height.

10. The neighbors are concerned that there may be additional rain runoff resulting from this project, which is already a problem.

11. Traffic during construction. The neighbors recognize that the unmanned PEPCO substation is not likely to have any discernable impact on traffic *once built*.

However, during the year-long construction of this project, which may involve installing power lines both above and below ground along Riffle Ford Road, Hallman Court and other neighbors are likely to have significant difficulty commuting to work or making routine errands because there is essentially one way to exit their block and reach Route 28, which leads to the area's shopping, metro, and highways. The alternatives, weaving through the adjacent neighborhood or traveling north on Riffle Ford Road to Germantown Road, add twenty minutes or more to any trip.

12. Placement of such a large power substation within feet of homes is inappropriate and will place a disproportionate and unfair burden on the neighbors, as a PEPCO right-of-way with towers, utility poles and transmission lines already border the homes.

The Hallman Court neighbors also provided a number of suggestions if the conditional use were to be granted, including **reducing the size of the facility:**

1. Improvements to Landscape Plan. As PEPCO's renderings show, even when newly planted trees on its property are mature (a process that will take over a decade), the substation will still be clearly visible from homes and yards on Hallman Court. See Staff Recommendation Packet, p.18, Figure 9, top left, and Attachment 5.

a. Require PEPCO to create a more substantial buffer zone between its proposed substation and Hallman Court properties. This would include setting back the fence fifteen to twenty feet from the Hallman Court property line and planting additional rows of evergreen trees and bushes to create a heavily wooded area. There appears to be sufficient space between the property boundary and substation for such an approach.

b. Enhance existing wooded areas at the corner of Riffle Ford and Darnestown Roads by removing all weedy vegetative overgrowth throughout the area and installing appropriate shrubs and groundcovers. In addition, **PEPCO should, in consultation with Hallman Court residents, take similar action with respect to the corner of Riffle Ford and Hallman Court.**

c. Plant trees on Hallman Court. PEPCO should be required, in consultation and agreement with residents of Hallman Court, to plant, at its expense, twelve trees along Hallman Court. Planting trees along Hallman Court will reduce the visibility of the substation from homes and may help reduce any noise generated by the substation's transformers, HVAC and other mechanical equipment.

2. Address traffic congestion at the site. PEPCO should be required to work with the County to develop a right turn lane at the corner of Riffle Ford Road leading to Darnestown Road (Route 28) to reduce existing and future traffic congestion.

3. Noise control assurances. PEPCO should be required to provide documentary evidence showing cumulative noise levels from the transformers, HVAC equipment, emergency generators, and any other activities are evaluated using the Noise Ordinance's night-time noise standard (55 dBA at the nearest property line) unless such noise-generating operations are explicitly prohibited from operating during nighttime.

4. Shift location of transformers. The transformers should be located closer to Darnestown Road than Hallman Court.

5. Stormwater management. PEPCO should be required to prevent stormwater runoff from flowing to the Hallman Court homes.

The opposition's detailed letter was supplemented with testimony at the OZAH hearing from two residents of the neighborhood, Cary Silverman and Pranav Pandya (Tr. 311-323). The essence of Mr. Silverman's testimony was that "the proposed design is out of proportion to the surrounding neighborhood." Tr. 312. He opined that "placing such a large substation . . . in such close proximity as well to homes is, is inappropriate" (Tr. 315), and he added, "we'd like to see the scope of the proposal reduced to something more consistent with the size of a neighborhood house or something approaching the footprint of the Travilah substation." Tr. 316. Mr. Pandya adopted Mr. Silverman's testimony, stating "it is severely going to impact the residents and the properties, the aesthetical value and the environmental impact and health impact . . ." Tr. 320. He added that "The structure is not suitable for the surrounding community" (Tr. 321) and his property will be "drastically going down in value." Tr. 322. These gentlemen also introduced an October 2006 "Status Report" on the potential health effects of the electromagnetic waves produced by power lines (Exhibit 70).

In a post-hearing written comment, dated January 22, 2016 (Exhibit 79), Messrs. Pandya and Silverman reiterated some of the concerns raised in the opposition's pre-hearing letter and hearing testimony, and noted their continued opposition, emphasizing the compatibility issues previously mentioned, as documented at the hearing. The letter concludes with three proposed

conditions, should the conditional use be granted:

1. We support the revised landscaping plan, which includes an expanded 30-foot landscaping buffer and additional evergreen trees along the Hallman Court side. We request that PEPCO also include invasive species management at Hallman Court and Riffle Ford Road. As indicated at the hearing, this area has similar issues to the corner of Darnestown Road and Riffle Ford Road. We believe this area is PEPCO property. At the hearing, PEPCO indicated that it is amenable to inclusion to this condition (Tr. at 252).
2. We request that the Hearing Examiner require PEPCO to provide Hallman Court residents with 30-days individual notice by mail of a post-construction noise check and the opportunity to observe the test. At the hearing, PEPCO indicated that it is amenable to this condition (Tr. at 61-62). If the noise level is above that permitted at the nearest property line, the Order should require PEPCO to discontinue operation until adequate noise-reducing measures are in place.
3. We request that, as a condition of approval, PEPCO work in good faith with Hallman Court residents to plant up to fifteen trees at its expense on public or private property on Hallman Court. PEPCO indicated a willingness to do so (Tr. at 233). The precise location for planting these trees and selection of tree species would be determined by residents in consultation with PEPCO. These trees would further reduce the visibility of the substation from Hallman Court homes. Any plantings on private property would occur only with the express written authorization of the homeowner. Hallman Court residents would be responsible for the upkeep and maintenance of these trees. PEPCO would be under no obligation to include these trees in its property maintenance plan.

Each of the points raised by the opposition is addressed in the Report and Decision, mostly in Part III in connection with the required findings for approval of a conditional use. It should be said that the opposition has raised some legitimate concerns and has provided some useful suggestions for ameliorating adverse impacts of the project. However, not every legitimate concern justifies denial of a conditional use. Anticipated adverse impacts from a conditional use, even non-inherent adverse impacts, must be evaluated to determine whether the harm to the neighborhood would be “undue,” as that term is used in Zoning Ordinance §59.7.3.1.E.g.

As will be explained in Part III of this Report and Decision, the Hearing Examiner finds,

despite legitimate concerns about compatibility, that the potential adverse impacts in this case would not be “undue,” given the undisputed evidence that this facility is necessary to continue to supply adequate electrical power to the area; that its height will not exceed the Zoning Ordinance limits; that the lowest portion of the building, at 40 feet in height, will be the part adjacent to the Hallman Court community; that its size is dictated by required safety clearances; that it will be located along a major roadway (Darnestown Road - Route 28); that the transformers will be located along Darnestown Road (*i.e.*, away from the Hallman Court community); that the facility will be architecturally disguised to resemble an agricultural structure; that it will be heavily buffered with fencing and plantings; that operations will cause no noise exceeding County standards; that operations will cause virtually no traffic; and that the expert evidence is that operations will cause no harm to the health of the community, from electromagnetic waves or otherwise. Many of the potentially adverse consequences of the use can be ameliorated by conditions, some of which were suggested by the opposition and agreed to by the Applicant.

III. FINDINGS OF FACT AND CONCLUSIONS OF LAW

A conditional use is a zoning device that authorizes certain uses provided that pre-set legislative standards are met. Pre-set legislative standards are both specific and general. General standards are those findings that must be made for all conditional uses. *Zoning Ordinance*, §59.7.3.1.E. Specific standards are those which apply to the particular use requested, in this case, a Public Utility Structure. *Zoning Ordinance* §59.3.6.7.E.

Weighing all the testimony and evidence of record under the “preponderance of the evidence” standard specified in *Zoning Ordinance* §59.7.1.1, the Hearing Examiner concludes that the conditional use proposed in this application, as governed by the conditions imposed in Part IV of this Report and Decision, would satisfy all of the requirements for the use.

A. Necessary Findings (Section 59.7.3.1.E.)

The general findings necessary to approve a conditional use are found in Section 59.7.3.1.E. of the Zoning Ordinance. Standards pertinent to this review, and the Hearing Examiner's conclusions for each finding, are set forth below:⁴

E. Necessary Findings

1. To approve a conditional use application, the Hearing Examiner must find that the proposed development:

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

Conclusion: Technical Staff advises that there are no previous conditional use approvals applicable to the property. However, as noted by Technical Staff, on April 23, 2002, the Planning Board approved Preliminary Plan No. 1-02018 for the church then proposed for site.⁵ A copy of that approval is appended to the Staff Report as Attachment C-4. Upon final approval of the conditional use, the old Preliminary Plan will need to be revised to accommodate the utility structure use that is now proposed. Exhibit 42, p. 12. A condition requiring that the Applicant apply for such a revision is included in Part IV of this Report and Decision.

b. satisfies the requirements of the zone, use standards under Article 59-3, and to the extent the Hearing Examiner finds necessary to ensure compatibility, meets applicable general requirements under Article 59-6;⁶

Conclusion: This subsection requires an analysis of the standards of the RE-1 Zone contained

⁴ Although §59.7.3.1.E. contains six subsections (E.1. through E.6.), only subsections 59.7.3.1.E.1., E.2. and E.3. contain provisions that apply to this application. Section 59.7.3.1.E.1. contains seven subparts, a. through g.

⁵ Under a new numbering system, it is now called Preliminary Plan No. 120020180.

⁶ The underlined language was added by Zoning Text Amendment No. 15-09, adopted by the Council in Ordinance No. 18-08, effective December 21, 2015, to amend the Zoning Ordinance that went into effect on October 30, 2014. The Hearing Examiner advised the parties at the hearing that these proceedings would be governed by those amendments even though the application may have preceded their effective date. Tr. 10.

in Article 59-4; the use standards for a Public Utility Structure contained in Article 59-3; and the applicable development standards contained in Article 59-6, as necessary to ensure compatibility. Each of these Articles is discussed below in separate sections of this Report and Decision (Parts III.B, C, and D, respectively). Based on the analysis contained in those discussions, the Hearing Examiner finds, as did Technical Staff (Exhibit 42, pp. 12-16), that the application satisfies the requirements of Articles 59-3, 59-4 and 59-6.

c. substantially conforms with the recommendations of the applicable master plan;

Conclusion: The subject property lies within the geographic area covered by the 2002 Potomac Subregion Master Plan. The Master Plan does not specifically discuss the subject site (Tr. 240), but it does provide guidance for special exceptions (as “conditional uses” were known when the Master Plan was adopted). Applicant’s land planner, Luis Gonzalez, discusses the Master Plan extensively in his Land Planning Report (Exhibit 39(b), pp. 11-15). With regard to special exceptions, Mr. Gonzalez observes (Exhibit 39(b), pp. 13-15):

The Plan’s “Special Exception Policy” or “Conditional Use” Policy (in current terms), provides specific recommendations regarding incorporating conditional uses into the community. These recommendations include: “[p]rotect[ing]...major transportation corridors and residential communities from incompatible design of [conditional uses].” Plan, pg. 36. The Plan also provides the following guidelines to be followed, in addition to what is stated for conditional uses in the Zoning Ordinance: (a) “Adhere to Zoning Ordinance requirements to examine compatibility with the architecture of the adjoining neighborhood,” (b) “Parking should be located and landscaped to minimize commercial appearance,” and (c) “Efforts should be made to enhance or augment screening and buffering as viewed from abutting residential areas and major roadways.” Plan, pg. 36. . . . [T]he Plan’s recommendations and guidelines were reflected in the building placement, screening, architecture, and environmental site design.

The placement of the Structure provides a significant spatial buffer between it and the abutting residential homes as well as allow enough room for an enhanced landscape buffer along the property line to screen views from abutting homes. The Structure’s placement utilizes the existing topography to minimize unnecessary site grading and facilitate proper placement of stormwater management devices so they

can be integrated into the landscape. Additionally, the Structure's placement and programming minimizes the need for extensive use of pavement by being as close to the road as the zoning development standards allow, resulting in a shorter driveway; and only allocating two parking spaces to be used for the occasional visit by maintenance staff.

Considerable thought and effort was given to the architecture for the Structure, to ensure compatibility with the surrounding community and adjoining neighborhood. As described earlier, the Structure's design is inspired by local barn architecture. The architectural style celebrates the area's agricultural heritage, reflects similar local building typology, and respects the community's character. The Structure's utilization of diverse materials and colors, roof styles, cladding panels, a stone base, louvered openings and a silo inspired metal clad projection provide horizontal and vertical articulation as well as facades that complement the neighborhood character. The Structure's architectural embellishments are designed to mimic the organic growth of a barn expanding over time accentuates the Structure's roof lines, which helps it blend with the multi-tiered roofs of the abutting homes and surrounding neighborhood.

The landscaping for the Project was designed for screening, beautification, and conservation. The landscaping along the Property line abutting the residential lots are tiered to include flowering shrubs in the foreground, mid-size shrubs in the mid-ground, and large shrubs in the background. The mid- and background shrubs are a combination of evergreen and deciduous shrubs. The shrubs are clustered with evergreen trees separating the clusters. Behind the shrubs is an 8 foot tall metal estate style fence, and behind it is an alternating row of shade trees. This buffer is designed to be a visual and physical screen as well as aesthetically pleasing to avoid appearing institutional or static.

The perimeter landscaping has a layered approach that speaks in the vernacular of the community. Shade trees are placed along the edge of the right-of-way to begin to define the space. Behind the trees are a playful mix of native perennials that add a pop of color to an otherwise monochromatic streetscape. The landscaping continues with a row of shrubs and ornamental grasses, separated from the perennials by an 8 foot tall metal estate style fence. An additional tier of flowering trees is included along Riffle Ford Road in response to the landscaping of the homes across the street. The rest of the site remains lawn, with the exception of the rain garden, to continue the narrative of the barn in the landscape. Using a plant and color palette familiar to the community and reminiscent of a pre-developed landscape in Darnestown, the overall landscape design enhances the views along Darnestown and Riffle Ford Roads; screens views to the Structure and parking; increases plant species diversity on the Property, creates wildlife habitat, replaces expanses of lawn with waterwise plants, augments evapotranspiration, and expands tree canopy coverage – all contributing to the health and character of the community and natural environment.

Finally, the Plan forecasts increased traffic congestion due to anticipated future economic and residential growth coupled with few transportation improvements being planned to accommodate for this growth. The Plan further describes its Two-Lane Road Policy which is “intended to preserve the community’s visual aspect and character by discouraging the expansion of existing roadways from two to four lanes[.]” This policy reinforces the Plan’s desire to maintain the rural character of the area. (Plan, pg. 109). The proposed Project consists of an unmanned substation with two parking spaces to accommodate twice monthly visits by maintenance personnel. This use, therefore, will have minimal impact to existing traffic and the adjacent roadways. Additionally, the amount of proposed landscaping and the architectural approach will preserve the community’s visual aspect and character.

As mentioned in Part II.D. of this Report, the opposition contends that a structure of the proposed size would not be compatible with the neighborhood and thus not consistent with the Master Plan’s goals. They note that the Master Plan (p. 94) recommends preserving, protecting, and enhancing Darnestown’s unique residential and community character, and they suggest that undeveloped sites could be used for park land or open space.

Technical Staff agreed with the Applicant’s analysis, but also recommended that “the Applicant enhance the appearance of the property’s northeast corner at the intersection of Riffle Ford and Darnestown Roads by removing all weedy vegetative overgrowth throughout the area and enhancing the area with the installation of appropriate shrubs and groundcovers.” Exhibit 42, pp. 16-17. The Applicant’s amended Landscape Plan (Exhibit 76(b)) does exactly that, as indicated by Staff’s January 20, 2016 (*i.e.*, post-hearing), approval of that plan. Exhibit 78.

The Planning Board agreed with Technical Staff’s conclusions, stating that “the use is compatible with the goals and recommendations of the 2002 Master Plan for *Potomac Subregion* as well as with the Master Plan’s recommendation that are specific for the Darnestown Planning Area.” Exhibit 49.

Compatibility issues will be further discussed below, but given the conclusion of the Planning Board, the agency that developed and adopted the Master Plan in question, that the

proposed use comports with the 2002 Potomac Subregion Master Plan, a conclusion shared by its Technical Staff, and by the Applicant's expert in land use planning, the Hearing Examiner finds that the proposed use is consistent with the subject Master Plan.

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

Conclusion: This Code provision and the following ones get to the heart of the concern raised by the opposition and outlined in Part II. D. of this Report – that the proposed structure may not be compatible with the neighborhood, mostly due to its size in comparison to nearby residences. The Applicant's evidence addresses this concern directly in its land planning report (Exhibit 39(b), pp. 11-13):

. . . The Project incorporates these [Master Plan] recommendations [for preserving the community's character] into its basis of design through the use of building placement, screening and enhancing views, unique architecture, and environmental site design. The Structure is placed as far as possible from the abutting residential lots to provide a significant spatial buffer between it and the abutting residential homes. The massing of the Structure, which screens the substation from vehicular and pedestrian view, is strategically split to mimic the expansion of a barn over time, add visual interest to the roof line, provide horizontal articulation, and to minimize a monolithic architectural expression, consistent with the neighborhood. Barn inspired architecture is deliberately used for the Structure to celebrate Darnestown's agricultural heritage and contribute to the community's eclectic building typology while respecting the existing architectural vernacular.

Aside from architecture and building placement, landscaping is used to preserve, protect, and enhance the community's character. The spatial buffer provided between the Structure and abutting homes is supplemented with a diverse landscaping mix of flowering and evergreen shrubs, evergreen trees, shade trees and estate style fence. This landscaping will help screen views from the abutting lots into the Project area. A conservation landscaping approach using layered, decorative mid-Atlantic inspired plant palette mix of native and acclimated plantings is used along the Property frontage to reflect the aesthetics of the community character and complement views along Darnestown and Riffle Ford Roads. Stormwater management facilities will appear as rain gardens, disturbance to existing trees will be kept at minimum, while the rest of the Property grounds will remain a low maintenance, chemical free bucolic landscape.

Environmental site design is not only used to protect the Property but to enhance it and the community at large. The amount of impervious area has been kept at a minimum by only covering approximately 17% of the Structure with a roof; limiting the amount of parking to two (2) spaces; using reinforced turf instead of pavement for potential staging areas; and shortening the length of the main access drive by placing the Structure as close to the street as the zoning development standards allow. Stormwater management facilities will be used to capture and treat the runoff in accordance with the latest stormwater management regulations but designed to be part of the larger landscape by minimizing site grading and utilizing native plant material, which in turn avoids the appearance of a retrofit. The Project further proposes to improve the quality of the of the environment by increasing the Property's tree canopy coverage with the addition of 28 canopy trees, 11 evergreen trees, and 9 understory trees for a total of 48 additional trees.

Technical Staff found that the proposed use meets the quoted Code standard (Exhibit 42, p. 17):

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 in excess of code requirements, adequate setbacks meeting code requirements, substantial green space that will remain partially in open space and sufficient building setbacks. There is extensive buffering, in the form of landscaping, and fencing, between the nearest residential properties, the two adjacent roads and the proposed use.

Due to the nature of the use, as an unmanned substation with a bi-monthly visit 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.

The Planning Board also concluded that “[t]he Applicant has also met the burden of proof by showing that operating the use at this location will not be a detriment to the neighborhood and will not adversely affect the public interest.” Exhibit 49.

The Hearing Examiner believes that the opposition has raised a legitimate concern about the size of the proposed structure abutting a residential neighborhood, and pressed the Applicant at the hearing to demonstrate that the proposed size and height of the building were necessary to fulfill the community's need for electrical power. Tr. 93-97. The Applicant provided testimony and documentation to establish that the 40-foot building height in the area covered by netting (*i.e.*, the area of the building closest to the Hallman Court neighborhood) is dictated by the

clearances required for the varying equipment, in accordance with published safety standards, including the electrical code (Exhibits 73(e) and (f)). The building height of 48 feet along Darnestown Road is dictated by architectural compatibility considerations.⁷ See the testimony of PEPCO's lead civil and structural engineer, Ebenezer Botchway (Tr. 94-96) and its expert in electrical engineering and substation design and operations, Zinn Morton (Tr. 106-172).

Mr. Morton testified that (Tr. 106):

The purpose and, of the substation is to help enhance the distribution system, provide another point where the electricity from the higher level voltages can be put into the system. The existing infrastructure has some limitations in this area. And by installing the substation at this location, we'll be able to relieve issues that we, that we predict will occur in the coming years.

According to Mr. Botchway, the size of the building is necessitated by the equipment needed to serve the substation. Tr. 35-37. When pressed about whether two smaller substations could be constructed and meet the area's power needs, reducing the size of the one proposed at the subject site, Mr. Morton testified that making that change would impact PEPCO's ability to meet the local power needs, without significantly reducing the size of the necessary facility on the subject site (Tr. 171-172):

MR. WALLACE: You were asked earlier if you could do two smaller stations in the planning area. If you went ahead and did that at this point in time, would it significantly delay your ability to bring in the necessary power service for the, the dates that you've established that existing facilities would be exceeded in terms of their ability to produce and provide power?

MR. MORTON: We, we believe that it would impact that and that we would not be able to meet the requirements that we, we predict we need. In addition, we anticipate that reducing the size of the substation so that there were two of them in

⁷ Some of the extra height for the roof along Darnestown Road is the result of the architect's effort to give the building a more rural appearance. Tr. 190. Given the distance of that roof front from the Hallman Court neighborhood (Tr. 186-188) and the fact that it comports with applicable height limitations in the Zoning Ordinance, the Hearing Examiner finds that the architectural styling enhances rather than reduces compatibility with the neighborhood.

place of one would really not impact at least the length of the facility. It would be similar in length and perhaps a little less wide, but --

MR. WALLACE: And similar in height?

MR. MORTON: And the same as height.

There is no contrary evidence in this record regarding PEPCO's need to locate a substation at the subject site in order to meet the community's need for power now and in the future; nor is there any evidence disputing the Applicant's evidence that the proposed dimensions of the structure, including its height, are necessary to fulfill its public utility requirements. Moreover, as pointed out by Technical Staff, the extensive buffering, in the form of setbacks, fencing, green space and landscaping in excess of statutory requirements, will significantly reduce the visual impact of the proposed building. This buffering can be seen in the Rendered Landscape Plan (Exhibit 66) reproduced on page 16 of this Report and in the architectural renderings (Exhibit 42, p. 15 and Exhibits 65(a), (b) and (c)), reproduced on pages 12 and 13 of this Report.

Based on this record, the Hearing Examiner finds that the proposed building will not alter the character of the surrounding neighborhood in a manner inconsistent with the Master Plan, and that the setbacks, buffering, landscaping and architectural stylings will allow the proposed building to be harmonious with the character of the 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 predominantly residential nature of the area; a conditional use application that substantially conforms with the recommendations of a master plan does not alter the nature of an area;

Conclusion: Technical Staff indicated that there are four other conditional uses in the defined neighborhood (Exhibit 42, p. 19):

CBA-2740 Approved in 1969, automobile filling station (CBA-2740) located at 12301 Darnestown Road about half a mile south of the Subject Property within the NR zone.

- CBA-719A Approved in 2002 for Smokey Glen Farm, a 91.38-acre group picnic, catering and recreational facility about 1.5 miles north of the facility.
- S-2070 Approved in 1993 for a wholesale/retail nursery, greenhouse, & garden center [located at 12311 Darnestown Road, about 1200 feet to the east of the subject site].
- S-1415 Approved in 1987 for a Child Day Care Facility for up to 20 children (may have been modified later). Located 12829 Darnestown Road, located about 0.3 . . . [miles]⁸ west of the property.

Staff concluded, and the Hearing Examiner agrees, that the proposed use “will not increase the number, intensity or scope of Conditional Uses sufficiently to affect the area adversely.” Exhibit 42, p. 19. Moreover, as the language of this Code section notes, “*a conditional use application that substantially conforms with the recommendations of a master plan does not alter the nature of an area.*” As discussed above, the proposed use would substantially conform to the recommendations of the applicable master plan and will not affect the area adversely due to the number of conditional uses in the neighborhood. Therefore, the Hearing Examiner finds that the terms of this Code provision have been satisfied.

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 to 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 services and facilities, including schools, police and fire protection, water, sanitary sewer, public roads, and storm drainage; or

ii. if a preliminary subdivision plan is filed concurrently or required subsequently, the Planning

⁸ The Hearing Examiner corrected Staff’s obvious typographical error referring to the distance as “0.3 feet.”

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; and

Conclusion: The application does require the amendment of the existing Preliminary Plan of subdivision No. 120020180 (originally numbered Plan No. 1-02018) because the original plan called for a church on the site, which is no longer the case. Exhibit 42, pp. 2,3,12 and 19-20.

Thus, under the above statutory language (§f.ii), the Planning Board must find that the proposed development will be served by adequate public services and facilities. Nevertheless, Technical Staff “has made the Adequate Public Facilities findings as part of this Application and believes that the revisions to the previously approved Preliminary Plan will be minimal . . .” Exhibit 42, p. 20.

Staff found (Exhibit 42, p. 20):

(a) Water and Sewer Service

The property which is shown as water category W-1 and sewer category S-1, currently, is not being served by Washington Suburban Sanitary Commission (WSSC); however, both services are located adjacent to the site. As noted, the substation will also contain a battery room, fire protection room, and a restroom and will need to connect to public water and sewer.

(b) Transportation

Local Area Transportation Review (LATR)

A traffic study was not needed for the subject Conditional Use case 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.

Transportation Policy Area Review (TPAR)

The property is located in the North Potomac Policy Area, which is inadequate under both the roadway and transit test. However, since the proposed use will generate three or fewer vehicle trips, the Applicant is exempt making a TPAR payment.

Technical 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

The Rockville Volunteer Fire Station is located at 12100 Darnestown Road, approximately 0.68 miles south of the property. The closest police station, Montgomery County Police Department is located at 45 W Watkins Mill Road in Gaithersburg approximately 4.5 miles north of the property. Due to the nature of the Conditional Use, it does not generate any school aged children and a school facilities review is not necessary.

The Applicant introduced a Fire Access Plan (Exhibit 68) and its approval by the Fire Marshall (Exhibit 72). Moreover a stormwater management concept plan that complies with the latest Environmental Site Design standards has been approved by Montgomery County Department of Permitting Services (Exhibit 42, Attachment C-2). Tr. 257-260. The Applicant's civil engineer, Jeffrey Retterer, testified that the proposed stormwater management facilities will reduce the flow of storm water off the site (Tr. 259-260) and that the proposed substation will be served by adequate public services and facilities (Tr. 262).

There is no contrary evidence in the record. Given this evidence, and Technical Staff's similar conclusion, the Hearing Examiner finds that the proposed use on the subject site will be served by adequate public services and facilities, subject to a final review of this issue by the Planning Board at proceedings to amend the existing Preliminary Plan.

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:

- i. the use, peaceful enjoyment, economic value or development potential of abutting and confronting properties or the general neighborhood;***
- ii. traffic, noise, odors, dust, illumination, or a lack of parking; or***
- iii. the health, safety, or welfare of neighboring residents, visitors, or employees.***

Conclusion: This standard requires consideration of the inherent and non-inherent adverse effects of the proposed use, at the proposed location, on nearby properties and the general neighborhood. *Inherent adverse effects* are “adverse effects created by physical or operational characteristics of a conditional use necessarily associated with a particular use, regardless of its physical size or scale of operations.” Zoning Ordinance, §59.1.4.2. *Non-inherent adverse effects* are “adverse effects created by physical or operational characteristics of a conditional use not necessarily associated with the particular use or created by an unusual characteristic of the site.” *Id.* As specified in §59.7.3.1.E.1.g., quoted above, non-inherent adverse effects in the listed categories, alone or in conjunction with inherent effects in those categories, are a sufficient basis to deny a conditional use. Inherent adverse effects, alone, are not a sufficient basis for denial of a conditional use.

Analysis of inherent and non-inherent adverse effects must establish what physical and operational characteristics are necessarily associated with a public utility structure. Characteristics of the proposed use that are consistent with the characteristics thus identified will be considered inherent adverse effects. Physical and operational characteristics of the proposed use that are not consistent with the characteristics identified **or** adverse effects created by unusual site conditions, will be considered non-inherent adverse effects. The inherent and non-inherent effects then must be analyzed, in the context of the subject property and the general

neighborhood, to determine whether these effects are acceptable or would create adverse impacts sufficient to result in denial.

Technical Staff determined that the following physical and operational characteristics are necessarily associated with (*i.e.*, are inherent in) a public utility structure (Exhibit 42, p. 21):

- (1) buildings, structures, to accommodate the electronic and mechanical . . .
[equipment];
- (2) lighting;
- (3) adequate parking areas [to] accommodate employee [visits; and]
- (6) noise associated with, transformers, HVAC and other mechanical equipment.⁹

The Hearing Examiner agrees that these characteristics are inherent in a public utility structure, but “the devil is in the details” because the size of the proposed building on any given site, in relation to its neighbors, and the level of noise generated may be non-inherent characteristics for any particular project. Those issues will be discussed below in connection with the facts in this case.

As previously noted, Mr. Silverman of the opposition contends that “the proposed design is out of proportion to the surrounding neighborhood.” (Tr. 312), and that “placing such a large substation . . . in such close proximity as well to homes is, is inappropriate” (Tr. 315). Mr. Pandya added that “The structure is not suitable for the surrounding community” (Tr. 321) and his property will be “drastically going down in value.” Tr. 322.

Staff analyzed the potential impacts on the use, peaceful enjoyment and economic value of the neighborhood as follows (Exhibit 42, p. 21):

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

The proposed one-story facility has been designed to blend with the adjoining residential communities and address screening and buffering concerns due to the nature of the use. The proposed building incorporates architectural features and materials that match the character of the surrounding structures and

⁹ The Hearing Examiner has supplied the missing words in Staff’s report which are necessary to the meaning clearly intended. He confirmed that Staff’s jump from the number 3 to the number 6 was a typographical error.

identifies with the area's agricultural nature of recent past with its influence still perceptible in many of the structures in the area. Substantial landscaping that meet and exceed landscaping and screening requirements provides screening of the proposed use from the views of the adjoining neighbors and the two adjacent roads. The proposed lighting will not cause glare on adjoining properties.

The stormwater management concept plan proposes to meet required stormwater management goals through the use of landscape infiltration and an alternative surface. The Application has received a concept approval from the Department of Permitting Services Water Resource Section (see attached DPS letter of 24, 2015-Attachment C-2).

The issue of compatibility was discussed at some length above in connection with Master Plan conformity, and the Hearing Examiner found that the proposed building will not alter the character of the surrounding neighborhood in a manner inconsistent with the Master Plan, and that the setbacks, buffering, landscaping and architectural stylings will allow the proposed building to be harmonious with the character of the neighborhood. The Hearing Examiner is not insensitive to the opposition's concerns, but they have produced no expert evidence that the proposed structure will actually diminish the economic value of their homes, given the way it will be buffered and given the benefit in terms of reliable electric power that it will bring to the neighborhood and the reduction in stormwater runoff. Moreover, the test in this section of the Code (§59.7.3.1.E.1.g.) is whether the proposed use will “*cause undue harm to the neighborhood . . .*” [Emphasis added.] Given the record in this case establishing that the size of the facility is necessary to accomplish its function, the Hearing Examiner finds that any visual impacts it may have, even though buffered, are not an “undue harm.”

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

The opposition concedes that operation of the proposed use will cause no traffic or parking issues, but they are concerned about traffic and disruption that may be created along Riffle Ford Road during the construction period (Exhibit 51, p. 2). The Applicant's engineering

supervisor, Zinn Morton, responded to that concern at the hearing, indicating that PEPCO could connect to the exiting feeder along Riffle Ford Road and transition to that feeder from Darnestown Road without any impact to Riffle Ford Road itself. Tr. 135. Technical Staff also found that “the vehicular movements on the road will not cause undue harm to the neighborhood.” Exhibit 42, p. 22. The Hearing Examiner so finds. Parking is also not an issue since there will be only two parking spaces needed for the one to two visits per month by PEPCO employees for routine maintenance of electric infrastructure and landscaping.

With regard to lighting, Technical Staff found that (Exhibit 42, p. 22):

The lighting plan adequately and efficiently provides 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. A photometric study indicates that the proposed lighting satisfies requirements.

In the absence of any contrary evidence in this record, the Hearing Examiner finds that proposed illumination of the facility will not cause any harm to the neighborhood. Similarly, there is no evidence that any odor or dust will be created by operations of the facility, and Technical Staff found, “There is no odor or dust associated with the operation of the project or the equipment within the building.” Exhibit 42, p. 23. The Hearing Examiner so finds.

The only remaining issue in this subsection is the question of whether noise generated by the facility (*i.e.*, the hum of the transformers) will exceed County noise regulations or will be offensive to the neighbors.

Technical Staff addressed the noise issue as follows (Exhibit 42, p. 22):

The Applicant has indicated that the Propose Use will meet all applicable County noise regulations. To ensure that noise levels related to activities of the substation are kept to the minimal, Technical Staff recommends cumulative noise levels from the transformers, HVAC equipment, emergency generator(s) and any other activities must be evaluated using the Noise Ordinance’s night-time noise standard (55 dBA at the nearest property line) unless such noise-

generating operation(s) are explicitly prohibited from operating during nighttime (“quiet”) hours (9 PM to 7 AM weekdays, and 9 PM to 9 AM weekends and holidays).

It is undisputed that the transformers will be situated along the Darnestown Road side of the building, away from Hallman Court cul-de-sac. At the hearing, Mr. Botchway testified that the only noise generated by the substation would be from the transformers, and PEPCO has gone to great lengths to mitigate that noise, limiting the level to around 55 decibels, even close to the transformers. PEPCO will also place walls around the transformers to block the sound and will place those walls at distances and with design features which limit resonance, thereby reducing noise. PEPCO will test the sound levels to make sure those levels do not exceed the 55 decibels noise ordinance for the neighborhood. Mr. Botchway opined that the noise levels from this facility would be 30 percent less than the noise level that the Code requires, and the Hallman Court neighbors would not hear any transformer noise, even from their backyards. Tr. 47-49, 92, 100.

The Applicant also called a noise analysis expert, Gabriel Weger, who testified that substations emit a low frequency hum that is not loud (Tr. 298-299). He did a noise analysis of the proposed substation (Exhibit 44(b)), and he concluded that even with four of the transformers operational, “the modeling showed that it was still below 50 DBA at the nearest receiving property lines” and “will not be in violation of any of the County codes with regards to noise.” Tr. 303.

There is no evidence in the record to dispute Applicant’s evidence with regard to noise, and the Hearing Examiner finds that the proposed use will not produce noise that would result in undue harm to the neighborhood. Nevertheless, to alleviate the concerns of the neighbors, the Applicant agreed to a condition which would notify the neighbors and allow them to witness

sound measurements by a contractor once the facility is operational. Tr. 61-62, 331. The Hearing Examiner has imposed such a condition in Part IV of this Report and Decision.

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

The final subsection asks whether the proposed use will cause undue harm to the “health, safety or welfare of neighboring residents, visitors or employees.” Technical Staff replied with the following statement (Exhibit 42, p. 23):

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. Thus, the intersection congestion levels would not be increased during the weekday morning and evening peak periods. 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.

Upon request by Technical Staff the Applicant has provided a summary of information (Attachment C-3) concerning Electronic Magnetic Field (EMF) and the nature of the EMF that is associated with unmanned substations. The information was also shared with the community at the time of the outreach meetings to explain and reassure that there will be no adverse effects of public health, safety or welfare caused by EMF from the substation.

The lighting concept as depicted on the Photometric Study Plan is appropriate for the proposed use at the subject location. 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.

The opposition raised concerns, both in their letter (Exhibit 51) and at the hearing, about the potential health impacts of the Electronic Magnetic Field (EMF) that will be generated by the electrical power equipment to be operated at the facility. They introduced an October 2006 “Status Report” on the potential health effects of the electromagnetic waves produced by power

lines (Exhibit 70). This study concluded that some studies have shown an increased risk of childhood leukemia associated with ELF [Extremely Low Frequency] magnetic fields, but research is ongoing.

In response, the Applicant produced testimony from William H. Bailey, Ph.D., a highly credentialed expert on the health effects of EMF. Tr. 265-294. Dr. Bailey testified that EMF is produced by all electrical equipment and is ubiquitous in our everyday environment. It has been studied for the last 40 years, and no government agency has concluded that electric and magnetic fields at levels we typically encounter in the everyday environment cause any adverse effect on health. He stated that the EMF produced by electric power substations is no different than the EMF generated by other equipment and that substations are specifically designed to function efficiently to contain electric and magnetic fields within the equipment. The fields from these sources in the substation diminish with distance very quickly, and so at the boundaries of the substation property, the EMF values are typically no different than what are found in the surrounding community from other sources that are outside houses, like a distribution line. He opined that the weight of the scientific evidence regarding EMF indicates that exposure to the levels that would be expected to be generated from the subject substation would have no adverse effect on animals or humans. Tr. 271-272.

Dr. Bailey further testified that EMF from substations like the one proposed would not exceed any recommended limits for exposure for the general public, and in fact would be “orders of magnitude below recommended levels of exposure for the general public.” In his opinion, the location of the substation on the subject property would not cause any undue harm to the health, safety and welfare of the surrounding residents, the general community, any employees to the site or visitors to the site due to EMF. Tr. 272-273.

Dr. Bailey explained that the EMF diminishes with the cube of the distance, and once you get 15 feet away from a transformer, the fields are quite low, so “the levels of magnetic fields from the transformers would not impinge to any significant extent at the boundary of the property.” Tr. 274. On cross-examination, he added that the other components of the substation are generally not important contributors at the boundaries of the site. Tr. 275.

Dr. Bailey further testified that the standard for EMF exposure to the general public, below which there would be no adverse effects, is pegged by one international agency at 2,000 milligauss and by another at 9,040 milligauss. He estimated that at the fence line of this proposed use, based on his general experience, these levels would be in the single or double digits, in a range of anywhere from two milligauss to 20 or so milligauss (*i.e.*, far below any harmful level). Tr. 278-279.

Dr. Bailey noted (Tr. 281):

[S]cientists have been looking at this question for the last 40 years. And the weight of the evidence does not suggest that exposures at levels below the standards that I quoted of 2,000 milligauss or 9,040 milligauss have any adverse effect on health. And the World Health Organization has indicated that compliance with these guidelines is protective of public health.

When asked about the 2006 Status Report introduced by the opposition, Dr. Bailey noted that the studies observing an increased risk of childhood leukemia associated with ELF¹⁰ were retrospective studies that established only some statistical correlation, but not a cause-and-effect relationship. He indicated that a more recent report to the World Health Organization was released by the Committee of the European Commission in 2015. It notes that direct examination of animals exposed to different levels of EMF in laboratory tests has shown no

¹⁰ Dr. Bailey stated that the EMF he was referencing was the same as ELF since it was generated by low frequency sources. Tr. 291.

health effects related to EMF dosage despite the statistical associations reported in a number of studies in the early years. Tr. 285-291. Moreover, Dr. Bailey concluded that the people in the neighborhood around this proposed substation would not be exposed to EMF at any greater levels than exist in the general background as a result of this proposed substation. Tr. 292.

The Hearing Examiner finds that the clear weight of the evidence establishes that the proposed use will cause no undue harm to the “health, safety or welfare of neighboring residents, visitors or employees.” Nevertheless, to alleviate the legitimate concerns of the immediate neighbors, a condition will be imposed in Part IV of this Report and Decision to require EMF level testing once the facility is operational, as agreed to by the Applicant. Tr. 330-331.

Based on the entire record, the Hearing Examiner finds that, with the conditions imposed in Part IV of this Report and Decision, the proposed use will not cause undue harm to the neighborhood as a result of non-inherent adverse effects alone or the combination of inherent and non-inherent adverse effects in any of the categories listed in §59.7.3.1.E.1.g.

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.*

Conclusion: For the reasons discussed at length in connection with Sections 59.7.3.1.E.1. c., d. and g, above, the Hearing Examiner finds that the proposed structure will be compatible with the neighborhood.

3. *The fact that a proposed use satisfies all specific requirements to approve a conditional use does not create a presumption that the use is compatible with nearby properties and, in itself, is not sufficient to require conditional use approval.*

Conclusion: The application satisfies all specific requirements for the conditional use, and as discussed above, the proposed use will be compatible with the neighborhood. The Hearing

Examiner concludes that, with the conditions imposed in Part IV of this Report and Decsision, the conditional use should be approved.

B. Development Standards of the Zone (Article 59.4)

In order to approve a conditional use, the Hearing Examiner must find that the application meets the development standards of the zone where the use will be located – in this case, the RE-1 Zone. Development standards for the RE-1 Zone are contained §59.4.4.6.B of the Zoning Ordinance. Staff compared the minimum development standards of the RE-1 Zone to those provided by the application in a Table included in the Staff Report (Exhibit 42, p. 8), and reproduced below.

Development Standards AR Zone		
RE-1-Zone	Required 59-4.4.6.BF	Proposed
Minimum Lot Area	40,000 SF	115,217 SF
Minimum Lot width:		
▪ at street line	25ft	437 ft
▪ at building line	125 ft	375 ft
Maximum Building Coverage	15 percent	3 percent
Minimum Building Setback		
Principal Building:		
• front	50 ft	52 ft
• side street	50 ft	52 ft
• side	17 ft	99 ft
• rear yard	35 ft	95 ft
Maximum Building Height	50 ft	48_ft
Minimum Parking	0	2

Conclusion: As can be seen from the above Table, the proposed use more than meets all the development standards of the RE-1 Zone, as provided in Zoning Ordinance §59.4.4.6.B.

C. Use Standards for a Public Utility Structure (Section 59.3.6.7.E.)

The specific use standards for approval of a Public Utility Structure are set out in Section 59.3.6.7.E. of the Zoning Ordinance:

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.

Conclusion: As stated by Technical Staff (Exhibit 42, p. 12), the proposed public utility structure meets the definition of the use as described by this section. The proposed structure will have three incoming transmission lines feeding three transformers and four transformer bays.

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 7.3.4.

Conclusion: The proposed public utility structure is applied for as a conditional use, not a limited use, so this subsection is not applicable.

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.

Conclusion: The need for the proposed substation is established in the *Applicant's Statement in Support of its Application* (Exhibit 2, p. 3):

PEPCO delivers safe and reliable electric service to approximately 536,000 residential and commercial customers over 556 square miles in Maryland. The Project will meet existing demand and serve new residents as PEPCO's Hunting

Hill and Quince Orchard Substations in the vicinity of the Property are predicted to exceed their electrical capacity by 2017. Other nearby substations are either operating near capacity or constrained by the capability to extend new distribution circuits as necessary to alleviate predicted overloads. Relying on existing substations alone will cause damage to and failure of current equipment, as well as result in service outages for area customers. Approval of the Application will ensure that PEPCO can both maintain dependable service for current customers and satisfy growing demand of future development for years to come. The Property is also close to an existing PEPCO right-of-way.

Applicant's statement is supported by testimony at the hearing from Zinn Morton, Applicant's expert in electrical engineering and substation design and operations (Tr. 106):

The purpose and, of the substation is to help enhance the distribution system, provide another point where the electricity from the higher level voltages can be put into the system. The existing infrastructure has some limitations in this area. And by installing the substation at this location, we'll be able to relieve issues that we, that we predict will occur in the coming years.

Technical Staff noted that “. . . the close proximity to the power line substantially reduces the need to add new poles along the roadway. Moreover, proximity to an existing power lines minimizes disruption to the community during construction of the proposed substation and facilitates faster service restoration time in the event of a storm that damages the lines feeding the station.” Exhibit 42, p. 13.

There is no evidence in the record contradicting PEPCO's claim that the proposed structure is necessary for public convenience and service, and the Hearing Examiner so finds.

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.

Conclusion: For the reasons discussed at length in Part III. A. of this Report and Decision, the Hearing Examiner finds that 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.

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.

Conclusion: As stated by Technical Staff (Exhibit 42, pp. 14-15), the exterior of the proposed structure is designed to appear as a barn style residence recognizing the Darnestown community's agricultural heritage. This architectural effort can be seen in the elevations (Exhibits 7(a) and (b)) reproduced on page 11 of this Report and Decision, and is explained extensively in Applicant's Land Planning Report (Exhibit 39(b)), quoted at length on pages 29-30 of this Report. Technical Staff found that the proposed design of the structure, especially buffered with extensive landscaping, will maintain the residential character of the neighborhood. The Hearing Examiner agrees, and so finds.

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.

Conclusion: This proposed structure does not exceed the height limits of the applicable RE-1 Zone (50 feet), and thus no waiver has been sought, nor is one called for.

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.

Conclusion: This section is not applicable since the Applicant owns the subject property (Exhibits 14 and 16).

In sum, the application satisfies all of the use standards in Code §59.3.6.7.E.

D. General Development Standards (Article 59.6)

Article 59.6 sets the general requirements for site access, parking, screening, landscaping, lighting, and signs. Under the amendments to Section 59.7.3.1.E.1.b. of the new Zoning Ordinance, effective December 21, 2015, the requirements of these sections need be satisfied only “to the extent the Hearing Examiner finds necessary to ensure compatibility.” The applicable requirements, and whether the use meets these requirements, are discussed below.

1. Site Access Standards

Section 6.1.2. Applicability

Division 6.1 applies to development in the Residential Multi-Unit, Commercial/Residential, Employment, Industrial, and Floating zones if:

- A. an apartment, multi use, or general building type is proposed; and*
- B. a site plan or conditional use approval is required.*

Conclusion: Zoning Ordinance Division 59.6.1. governs Site Access; however, by its own terms, as stated in §59.6.1.2., Division 59.6.1 does not apply to development in single-family residential zones, such as the RE-1 Zone involved in this case.

2. Parking Spaces Required, Parking Setbacks and Parking Lot Screening

The standards for the number of parking spaces required, parking setbacks and parking lot screening are governed by Division 6.2 of the Zoning Ordinance. Technical Staff indicates that “There is no parking requirement for an Electric Power Substation. The Applicant proposes two parking spaces, one of which is a van accessible handicap space. The parking spaces will sufficiently accommodate the parking needs of the proposed unmanned substation.” The Hearing Examiner agrees that the proposed parking will be sufficient. Technical Staff did not discuss setbacks and screening of parking spaces, but given the fact that these two parking spaces will be used only during monthly visits for maintenance, the Hearing Examiner finds that an evaluation of those issues in conjunction with parking is not necessary to ensure compatibility.

3. Site Landscaping, Screening and Lighting

Standards for site landscaping and lighting are set forth in Division 6.4 of the Zoning Ordinance, and the standards for screening are set forth in Division 6.5. The stated intent of Division 6.4 is “to preserve property values, preserve and strengthen the character of communities, and improve water and air quality.” §59.6.4.1. The stated intent of Division 6.5 is “to ensure appropriate screening between different building types and uses.” §59.6.5.1.

a. Site Screening and Landscaping

The provisions of Division 6.4 are mostly general and definitional; however, the provisions of Division 6.5 are very specific. Zoning Ordinance §59.6.5.2.B. provides:

In the Agricultural, Rural Residential, and Residential Detached zones, a conditional use in any building type must provide screening under Section 6.5.3 if the subject lot abuts property in an Agricultural, Rural Residential, or Residential Detached zone that is vacant or improved with an agricultural or residential use.

1. The conditional use standards under Article 59-3 may exempt the development from this requirement.
2. The Hearing Examiner may increase the amount of screening required for conditional use approval under Section 7.3.1. [Emphasis added.]

Turning to the requirements of Section 6.5.3., referenced in the above-quoted section, the subject site is covered by Subsection 6.5.3.C.7., which provides:

7. General Building with a Non-Industrial Use; Conditional Use in the Agricultural, Rural Residential, or Residential Detached Zones; and Conditional Use in a Detached House or Duplex in Any Other Zone

This section also gives alternatives for compliance, including the numbers, sizes and depths of trees and shrubs to be planted and fencing to be supplied, along with diagrams showing the placement of the landscaping:

	Option A	Option B
Dimensions (min)		
Depth	8'	12'
Planting and Screening Requirements		
Trees (minimum per 100')		
Canopy	2	2
Understory or Evergreen	2	4
Shrubs (minimum per 100')		
Large	6	8
Medium	8	12
Small	8	--
Wall, Fence or Berm (min)	4' fence or wall	--

The proposed landscaping for the subject site is shown on pages 14 -16 of this Report and Decision. Technical Staff initially addressed the sufficiency of the proposed landscaping in its report (Exhibit 42, pp. 9-10):

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. It provides screening and buffering between the project and adjacent roads and property. The property is adequately screened and buffered through the use of perimeter landscaping along Riffle Ford and Darnestown Roads with periodic viewsheds onto the property along these roadways for security purposes. The landscaping also is used to screen the 8-foot high security fence surrounding the site. The project site is also screened and buffered along the western property boundary from the adjacent residential community as required in Division 6.5 of the Montgomery County Zoning Ordinance. The Applicant will substantially meet the tree canopy coverage requirement as well.

Technical Staff also proposed a condition to require the Applicant to file a revised landscape plan “to reflect enhancement of the wooded area at the corner of Riffle Ford and Darnestown Roads by removing all weedy vegetative overgrowth throughout the area and installing appropriate shrubs and groundcovers.” Exhibit 42, p. 2. The Applicant did so, and the final Landscape Plan (Exhibit 76(b)) was reviewed again by Technical Staff, which approved it in an email to the Hearing Examiner (Exhibit 78), stating:

. . . the revised planting is acceptable and . . . provides adequate screening as well as, in the case of the planting at the corner of Riffle and Darnestown Roads, good visual appeal. Staff finds that the revised Landscape Plan conforms to the planting requirements of Section 59.6.4.3 and the screening requirements of Section 59.6.5.3.

In its final comments regarding this application (Exhibit 79), the opposition witnesses (Messrs. Pandya and Silverman) indicated that they “support the revised landscaping plan, which includes an expanded 30-foot landscaping buffer and additional evergreen trees along the Hallman Court side.” However, they also requested that PEPCO include invasive species management at Hallman Court and Riffle Ford Road since this area has similar issues to the

corner of Darnestown Road and Riffle Ford Road. At the hearing, the Applicant indicated that it is amenable to doing such a cleanup at Hallman Court and Riffle Ford Road, to the extent that area is on their property. Tr. at 252. In addition, the opposition witnesses requested the following condition, paraphrased by the Hearing Examiner, if the application is granted (Exhibit 79):

PEPCO must work in good faith with Hallman Court residents to plant up to fifteen trees at its expense on public or private property on Hallman Court. The precise location for planting these trees and selection of tree species would be determined by residents in consultation with PEPCO. Any plantings on private property would occur only with the express written authorization of the homeowner. Hallman Court residents would be responsible for the upkeep and maintenance of these trees. PEPCO would be under no obligation to include these trees in its property maintenance plan.

At the hearing, the Applicant indicated a willingness to make some commitment along those lines, with limits on the duration of maintenance by PEPCO (Tr. 233):

It's PEPCO's position that if an individual property owner, if, if they want to discuss with PEPCO, PEPCO planting of a tree or two that makes sense, I mean, and once the typical maintenance. Usually there's a two year maintenance that's provided for the, for the provider of the tree. That's, PEPCO would not assume any responsibility after that for the maintenance of that tree. I think PEPCO is willing to engage in that conversation with the, a property owner who wanted to do it and would be willing to let the planting happen.

Given the Applicant's general consent, the Hearing Examiner has included conditions in Part IV of this Report and Decision which incorporate the essence of both opposition requests. Based on this record, the Hearing Examiner finds that the proposed landscaping meets the planting requirements of Section 59.6.4.3 and the screening requirements of Section 59.6.5.3. of the Zoning Ordinance.

b. Lighting

Newly proposed lighting from a conditional use in a residential area is regulated by Section 59.6.4.4. E. of the Zoning Ordinance, which provides:

E. Conditional Uses

Outdoor lighting for a conditional use must be directed, shielded, or screened to ensure that the illumination is 0.1 footcandles 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.

Conclusion: The lighting plan proposed for the subject site (Exhibit 48(d)) is reproduced and discussed on pages 17-19 of this Report and Decision. As indicated there, and on page 42 of this Report, Technical Staff found that the proposed lighting would be compliant with the Zoning Ordinance restrictions. Lighting for a conditional use is also regulated by Zoning Ordinance §59.7.3.1.E.1.d., which requires a finding that the proposed use will be harmonious with the surrounding neighborhood, and by §59.7.3.1.E.1.g.ii., which requires a finding that the proposed use will not cause undue harm to the neighborhood due to “illumination,” among other factors. Those findings were made in Part III.A. of this Report and Decision, and reflect Technical Staff’s determination that “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.” Exhibit 42, pp. 10-11. Based on this record, the Hearing Examiner finds that the proposed lighting will comply with Section 59.6.4.4. E. of the Zoning Ordinance.

4. Signage

The use of signage is governed by Division 6.7 of the Zoning Ordinance. Section 6.7.2 provides:

Section 6.7.2. Applicability

A. A property owner must obtain a permit under Division 6.7 before a sign is constructed, erected, moved, enlarged, illuminated, or substantially altered, except for signs covered by Section 6.7.3, Exempt Signs, Section 6.7.11, Limited Duration signs, and Section 6.7.12, Temporary Signs.

Conclusion: The Applicant specifies in its Statement in Support of the Application ((Exhibit 2, p. 5) that:

There will be no freestanding signs as part of the Project. A stationary identification sign will be attached to the entrance gate.

Technical Staff stated that there would be no freestanding sign (Exhibit 42, p. 11), but did not mention “the stationary identification sign” the Applicant indicates will be attached to the entrance gate. Staff therefore proposed a condition specifying, “No identification sign shall be placed on the property.” Exhibit 42, p. 2.

Some signs are expressly exempted from the sign limitations of the Zoning Ordinance, under Section 59.6.7.3. Specifically, §6.7.3.C.2. exempts (from some of the regulations, including size limits) signs “*erected by, or on the order of, a . . . utility official and used by a . . . utility company in the performance of its official duties such as controlling traffic, identifying streets, warning of danger or providing information.*”

Ordinarily, a sign placed in a residential zone must be limited to 2 square feet, pursuant to Section 59.6.7.8.A. of the Zoning Ordinance. The Applicant in this case did not mention the intended size of its entrance gate sign, nor can the Hearing Examiner determine from this record whether the proposed sign will fall into the exempted category. To clarify this point, a condition is imposed in Part IV of this Report and Decision which will require the Applicant to obtain a permit from the Department of Permitting Services (DPS), if required to do so by DPS, for any proposed entrance gate sign, and to file a copy of the permit with OZAH. Free standing signs will be prohibited, in that the Applicant does not propose any.

IV. CONCLUSION AND DECISION

As set forth above, the application meets all the standards for approval in Articles 59-3, 59-4, 59-6 and 59-7 of the Zoning Ordinance.

Based on the foregoing findings and conclusions and a thorough review of the entire record, Application CU 16-04 filed by the Potomac Electric Power Company (PEPCO) for a

Conditional Use under Zoning Ordinance §59.3.6.7.E, to allow construction and operation of a Public Utility Structure, known as the Darnestown Substation, at 16010 Riffle Ford Road in

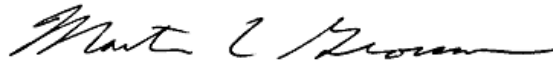
Gaithersburg, Maryland, is hereby **GRANTED**, subject to the following conditions:

1. The Applicant shall be bound by the testimony of its witnesses and the representations of its counsel identified in this Report and Decision.
2. The Applicant must file for an amendment to Preliminary Plan No. 1-02018 (now known as Preliminary Plan No. 120020180) upon the issuance of the Hearing Examiner's decision on the Conditional Use application. If any amendment to the existing Preliminary Plan conflicts with the Hearing Examiner's decision or conditions, the Applicant must seek modification of the Conditional Use.
3. The proposed structure on the subject site, and all the landscaping and other features on the subject site must conform to the final plans and conditions approved by the Hearing Examiner.
4. The hours of operation are 24 hours a day, seven days a week.
5. The Applicant must engage an independent contractor to evaluate noise from the proposed substation within 60 days after it becomes fully operational (*i.e.*, with 3 transformers running) to determine compliance with County noise regulations. The Applicant must provide Pranav Pandya, Cary Silverman and any abutting Hallman Court residents with 30-days individual notice by mail of the time, date and location of the noise testing and allow them the opportunity to observe the test. The test results must be provided in a report to the Hearing Examiner and the Hallman Court residents who attend the test within 30 days after it is completed. If any tested noise level is above that permitted by County regulations, at the property line, the Applicant's report must provide the Hearing Examiner, the Montgomery County Department of Environmental Protection and the parties with a written plan to reduce the noise to legally required levels within 30 days. If all four transformers are activated at a later time, the noise measurements, notifications and reporting required by this condition must be repeated.
6. The Applicant must engage an independent contractor to evaluate electromagnetic field (EMF) levels from the proposed substation within 60 days after it becomes fully operational (*i.e.*, with 3 transformers running) to determine whether the EMF levels at the property line meet the safety standards recommended by the World Health Organization (WHO). The Applicant must provide Pranav Pandya, Cary Silverman and any abutting Hallman Court residents with 30-days individual notice by mail of the time, date and location of the EMF testing and allow them the opportunity to observe the test. The test results must be provided in a report to the Hearing Examiner and the Hallman Court residents who attend the test within 30 days after it is completed. If any tested EMF level is above that recommended as safe by WHO standards, at the property line, the Applicant's report must provide the Hearing Examiner, the Montgomery County

Department of Environmental Protection and the parties with a written plan to reduce the EMF levels to safe levels within 30 days. If all four transformers are activated at a later time, the EMF measurements, notifications and reporting required by this condition must be repeated.

7. The Applicant must obtain a permit from the Department of Permitting Services (DPS) for any proposed entrance gate sign, if required to do so by DPS upon permit application, and to file a copy of any such sign permit with OZAH. Free standing signs are prohibited, in that the Applicant does not propose any.
8. The Applicant must maintain the grounds, including plantings and fencing in good condition, free from debris and undue vegetative growth.
9. The Applicant must provide cleanup and invasive species management on the Applicant's property at both Hallman Court and Riffle Ford Road and at Darnestown Road and Riffle Ford Road.
10. To the extent it is requested, in a signed writing by a property owner in the Hallman Court development, the Applicant must plant up to two trees on each such property, at the Applicant's expense, at the locations and of the tree species agreed to by both the property owner and the Applicant. Any plantings on private property would occur only with the express written authorization of the homeowner. If requested by the property owner, the Applicant would maintain any such trees for two years after the date of planting. Hallman Court residents would be responsible for the upkeep and maintenance of the trees on their land thereafter.
11. The Applicant must obtain and satisfy the requirements of all licenses and permits, including but not limited to building permits and use and occupancy permits, necessary to occupy the conditional use premises and operate the conditional use as granted herein. The Applicant shall at all times ensure that the conditional use and premises comply with all applicable codes (including but not limited to building, life safety and handicapped accessibility requirements), regulations, directives and other governmental requirements.

Issued this 19th day of February, 2016.



Martin L. Grossman
Hearing Examiner

NOTICE OF RIGHT TO REQUEST ORAL ARGUMENT

Any party of record or aggrieved party may file a written request to present oral argument before the Board of Appeals, in writing, within 10 days after the Office of Zoning and Administrative Hearings issues the Hearing Examiner's report and decision. Any party of record or aggrieved party may, no later than 5 days after a request for oral argument is filed, file a written opposition or request to participate in oral argument.

Contact information for the Board of Appeals is listed below, and additional procedures are specified in Zoning Ordinance §59.7.3.1.F.1.c.

Montgomery County Board of Appeals
100 Maryland Avenue, Room 217
Rockville, MD 20850
(240) 777-6600

Notice of this Report and Decision, including the above Notice Regarding Oral Argument, were mailed, this 19th Day of February, 2016 to:

Scott C. Wallace, Esquire, Attorney for PEPCO
Michael Maxwell, of PEPCO
Cary Silverman
Pranav Pandya
Barbara Jay, Executive Director, Montgomery County Board of Appeals
Elsabett Tesfaye, Planning Department