Baltimore Gas & Electric
Case No. 2025-0049-S
May 15, 2025

APPLICANT'S EXHIBIT LIST

Exhibit No.	Exhibit Name
1	Photographs (4) of posted public notice signs and Certification Of Sign Posting
2	Introductory PowerPoint presentation
3	Letter of explanation*
4	Supplemental letter of explanation*
5	Administrative site plan*
6	Stormwater management plan*
7	Landscaping plan*
8	Forest delineation/conservation plans*
9	Grading plan*
10	Property deed and subdivision plats*
11	County agency comments on prefile submission*
12	Colored-rendered site plan overview
13	Pollinator meadow plan
14	Tree-planting viewshed timelapse
15	Substation interconnections map
16	Noise Study
17	Noise study conclusion table and noise contours map

*Denotes exhibits that are part of the special exception application package

APP. EXHIBIT# 1
CASE: 2025-0049-S
DATE: 5/15/25

CERTIFICATION OF POSTING OF PUBLIC NOTICE SIGNS

FOR ZONING SPECIAL EXCEPTION APPLICATION

I, Adwoa Ansah-Brew, being over the age of twenty-one (21) and competent to testify to the matters contained in this certification, do solemnly declare and affirm under the penalties of perjury the following:

1. That I posted the two public notice signs that were provided to BGE by the Anne Arundel County Office of Planning and Zoning in Case Number 2025-0049-S.
2. That I posted the two public notice signs on Wednesday, April 30, 2025 in accordance with the directions provided by the Office of Planning and Zoning.
3. That I posted one of the two public notice signs along the edge of Marley Neck Boulevard near the location of an existing access road into BGE's property that is the subject of the special exception request, and that I posted the other sign along the subject property's frontage on Solley Road.
4. Photographs of the public notice signs accompany this Certification.

AAB

Name: Adwoa Ansah-Brew
Title: Outreach Specialist II
Company: Assedo Consulting
Business Address: 6100 Chevy Chase Dr, Laurel, MD 20707

05/12/2025
Date


NOTICE
AN APPLICATION HAS BEEN FILED FOR SPECIAL EXCEPTION TO ALLOW A PUBLIC UTILITY USE IN A W1 DISTRICT AND AN EXTENSION FOR A PHASING PLAN.
LOCATION: 0 SOLLEY ROAD, GLEN BURNIE
CASE NO: 2025-0049-S
BALTIMORE GAS & ELECTRIC COMPANY
PENDING A PUBLIC ZOOM MEETING. FOR INFO CONTACT THE ZONING DIVISION AT 410-222-7437 OR VIEW WEBSITE WWW.AACOUNTY.ORG/ADMIN-HEARINGS


NOTICE
AN APPLICATION HAS BEEN FILED FOR: JUNCTION EXCEPTION
TO BUILD ON A PUBLIC UTILITY LOT IN A R1 DISTRICT AND AN
EXTENSION FOR A PHASING PLAN
LOCATION: 8 SCALLEY ROAD, GLEN BURNIE
CASE NO: 2020-0139-X
BALTIMORE GAS & ELECTRIC COMPANY
PENDING A PUBLIC ZOOM MEETING. FOR INFO CONTACT
THE ZONING DIVISION AT 410-222-7437 OR VIEW WEBSITE
WWW.AACOUNTY.ORG/ADMIN-HEARINGS


NOTICE
AN APPLICATION HAS BEEN FILED FOR SPECIAL EXCEPTION
TO ALLOW A PUBLIC UTILITY USE IN A W1 DISTRICT AND AN
EXTENSION FOR A PHASING PLAN.
LOCATION: 0 SOLLEY ROAD, GLEN BURNIE
CASE NO: 2025-0048-S
BALTIMORE GAS & ELECTRIC COMPANY
PENDING A PUBLIC ZOOM MEETING. FOR INFO CONTACT
THE ZONING DIVISION AT 410-222-7437 OR VIEW WEBSITE
WWW.AACOUNTY.ORG/ADMIN-HEARINGS

APP. EXHIBIT# 2
CASE: 2025-0049-S
DATE: 5/15/25

bge℠
AN EXELON COMPANY

Solley/Marley Neck Substation Project

Zoning Special Exception Hearing

May 15, 2025

Project Team for Special Exception

Sager Williams, Jr., Esq., The Law Office of Sager A. Williams, Jr.

Local Legal Counsel for BGE

- Jerome Wilson, BGE, Principal Project Manager
- Bob Bathurst, P.E., Century Engineering, Vice President
- Shep Tullier, Land Visions, Inc., Planning and Zoning Consultant
- Dr. Pamela Dopart, Ph.D., Exponent, Senior Managing Scientist
- Brian Majerowicz, BGE, Principal Engineer
- David Outen, BGE, Transmission Section Engineer
- Molly Pacifico, McCormick Taylor, Technical Manager – Permitting & Siting
- Andrew Truitt, Black & Veatch, Subject Matter Leader, Acoustic and Noise Control Services
- Dan Yeager, Century Engineering, Senior Wetland Scientist

Project Explanation/Background

- On April 6, 2023, Talen Energy, the owner of the Brandon Shores two-unit coal-fired power plant, which provides 1,238 MW of generation, announced plans to retire the powerplant on June 1, 2025. Subsequently, PJM notified BGE of Talen Energy's intent to deactivate its facility.

- In response, PJM conducted a reliability deactivation analysis, which revealed significant thermal and voltage reliability violations within BGE's service territory, as well as in the service territories of other electric utility providers.

- As a result of the analysis and the urgent need to mitigate for the powerplant closure:

  - PJM directed BGE to develop a proposal to mitigate the identified violations. After evaluating and refining BGE's proposal, PJM mandated that BGE implement a revised mitigation solution, which includes both transmission and substation projects—most notably, the construction of the Solley Road Substation and STATCOM.

  - PJM also entered into a Reliability Must Run ("RMR") agreement that pays Talen Energy to keep the powerplant functional until 5/31/2029 to support system demand and reliability or until the Brandon Shores Retirement Mitigation Project is complete, which is planned to be completed by no later than 12/31/28.

- The Brandon Shores Mitigation Project is currently before the Maryland Public Service Commission for CPCN review and approval. The anticipated CPCN Final Order date is October 2025.

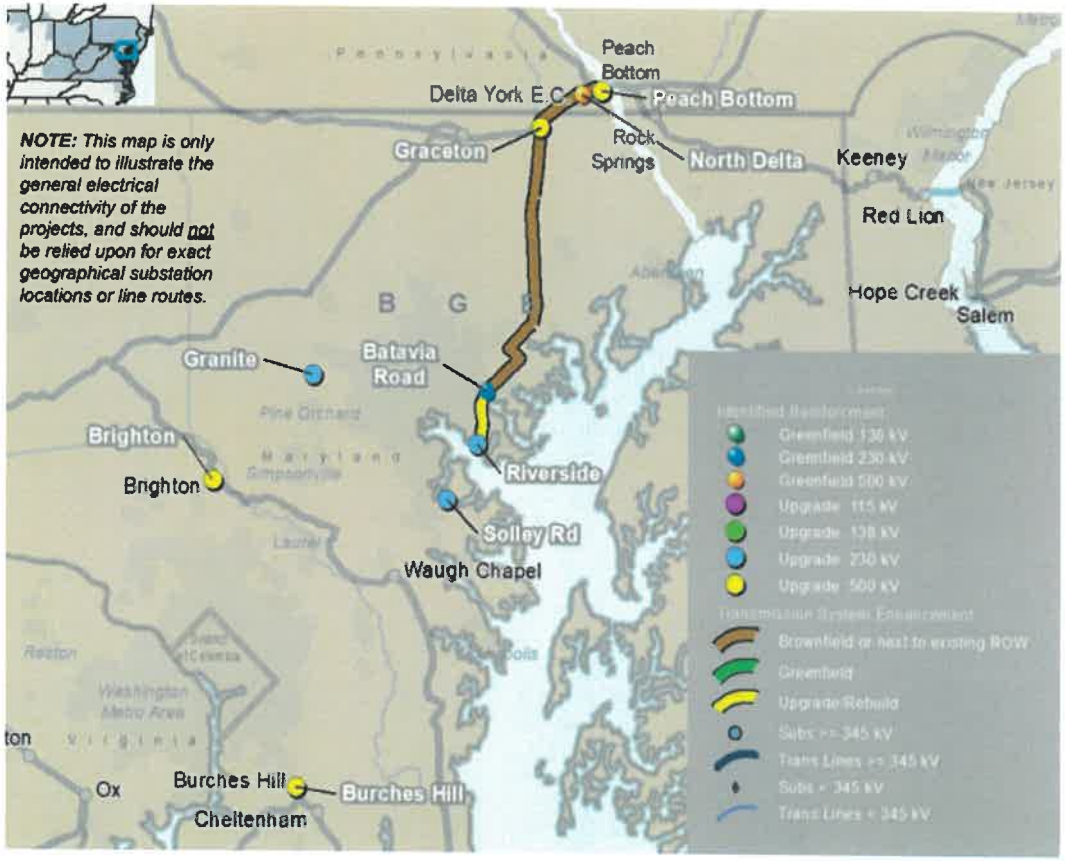
- PJM has required BGE to have all Brandon Shores Transmission and Substation Projects completed and in service by 12/31/28.

Brandon Shores Retirement Mitigation

To maintain the reliability of the electrical grid once the Brandon Shores power plant closes, PJM directed BGE and other utilities to execute a solution that consists of both substation and transmission projects.

BGE Assigned Projects

- ***2 new*** *substations*
- ***3*** *substation* ***expansions/rebuilds***
- ***37 miles of transmission corridor***
  - ***29 miles new*** *transmission line on existing ROW*
  - ***8 miles*** *of transmission line* ***rebuild/upgrades*** *on existing ROW*



BGE's Acquisition of Property

- In 2022, prior to PJM's Brandon Shores Mitigation mandate, as part of its long-range planning, BGE acquired a 125-acre property between Marley Neck Boulevard and Solley Road. This property was identified as having several benefits, including: (1) adequate size needed for air-insulated equipment, (2) appropriate zoning for a substation build, (3) greenfield site with no existing improvements and no costly remediation, (4) proximity to important 230 kV and 115 kV transmission lines, and (5) proximity to Brandon Shores and Wagner generation sources.

- The proposed Solley Road and Marley Neck substations will be sited on said property, which lies between Solley Road to the east and Marley Neck Boulevard to the west, just north of the closed BFI landfill and just south of an existing BGE transmission corridor.

- Previously, BGE acquired linear right-of-way (some land in fee simple and some land via easement) for the transmission corridor, and constructed transmission lines in the corridor between 1955 and 1977. To the north, the existing transmission corridor abuts the residential community of Creekside Village, which began development around 2015.

- BGE's property is zoned W1, Industrial Park. The property is not in the Chesapeake Bay Critical Area.

- Recently assigned substation addresses:
  - Marley Neck Substation - 7519 Marley Neck Blvd., Glen Burnie, MD 21060
  - Solley Road Substation - 7529 Marley Neck Blvd., Glen Burnie, Md 21060

General Project Description

- The Solley Road 230kV substation will include a new 230kV air-insulated substation initially configured with four breaker and a half (BAAH) bays, which will interconnect/network with two existing 230kV Brandon Shores-to-Waugh Chapel circuits. Two 150MVAR capacitor banks will also be installed. (Phase 1)

- The Solley Road 350MVAR STATCOM (Static Synchronous Compensator) is a fast-acting device capable of providing or absorbing reactive current, thereby regulating voltage at the point of connection to the power grid. This voltage regulating function, along with real/reactive power, is being lost with the deactivation of the Brandon Shores powerplant. (Phase 1)

- The Marley Neck 115kV substation will include a new 115kV air-insulated substation initially configured with six breaker and a half (BAAH) bays that will Interconnect/network with two of the four Wagner-to-Pumphrey 115kV circuits. The substation also will provide dedicated dual 115kV supplies to Lipins Corner (where circuits are currently tapped with other transmission circuits). The substation will include two standard 230/115kV transformers that will be connected between 230 kV and 115 kV equipment using appropriate isolation methods. On Feb 26, 2025, PJM mandated that BGE build the Marley Neck 115kV substation to mitigate severe reliability (thermal) issues related to PJM's 2024 Open Window #1 program. (Phase 2)

- The future 35kV and 13kV substations will eventually be sited within the Marley Neck substation's fenced perimeter to support future load growth in the area. (Phase 3).

Anne Arundel County Aerial View

Customer Impact of the RMR

Because the timeline for construction of the required transmission upgrades extends beyond Talen Energy's desired retirement date, PJM has a process by which it negotiates a Reliability Must Run ("RMR") contract with the generation owner, so that the generation owner recovers costs and is able to keep the resource in operation until the needed transmission upgrades are complete.

RMR costs get passed on to utility customers based on PJM's cost allocation methodology. PJM has applied its methodology for the closure of both the Brandon Shores and the HA Wagner Generation Stations.

The exact financial responsibility assigned to Baltimore Gas and Electric is currently unknown. Our best estimate is that the BGE zone will need to pay approximately 74% of the RMR costs. RMR costs amount to about $15 million monthly, which will be incurred from June 2025 through May 31, 2029, subject to early termination or extension. Based on PJM's cost allocation methodology, our current estimate is that a typical BGE residential electric customer will pay about $4.50 per month in RMR charges.

Public Need for Project

PJM's analysis found potential near-term thermal and voltage reliability violations, including a serious risk of voltage collapse, if the Brandon Shores powerplant were to close without significant improvements to transmission infrastructure in central Maryland, including BGE's transmission infrastructure.

A voltage collapse affecting the existing transmission system could cause a loss of power potentially to millions of customers throughout the mid-Atlantic region (BGE's customers and customers of other electric utilities).

- The Brandon Shores project, including the Solley Road substation, addresses both problems and is a vital component of the PJM-mandated transmission infrastructure improvements needed to resolve the reliability and stability concerns resulting from the retirement of the Brandon Shores powerplant.

- The project increases the operability of transmission of electricity in the area, with increased isolation of the connected transmission lines. This will help lessen the potential impact of potential line faults, further protecting downstream customers, particularly loads fed from BGE's Lipins Corner substation.

- The Solley Road location, due to its central location along BGE's 230kV system, is an ideal location to build significant reactive resources, including a STATCOM, to efficiently protect the system.

- Future 13kV and 34kV substations provide additional expandability to serve future load growth in general, including load growth on Marley Neck and nearby areas in Anne Arundel County.

Summary of Project Information

Item	Information
Property Owner Type of Project	Baltimore Gas and Electric Company Public utility infrastructure
Property zoning Critical Area classification	W1, Industrial Not in the Critical Area
Existing use of property Proposed use of property	Electrical transmission lines Additional transmission facilities, including two substations
Property size	125.3 acres
Project size (total limits of disturbance)	64.1 acres
Public water & sewer Public school Impacts Traffic impacts when in operation	None (automated facility operated remotely) None Negligible (occasional inspections and maintenance)
Public road access	Use existing BGE access road from Marley Neck Blvd.

APP. EXHIBIT# 3
CASE: 2025-0049-S
DATE: 5/15/25

The Law Office of Sager A. Williams
2709 Summerview Way #302
Annapolis, MD 21401
410.266.0532 202.768.4592
mdzoninglaw@verizon.net

March 20, 2025

Ms. Sterling P. Seay
Planning Administrator
Zoning Administration Division
Anne Arundel County Office of Planning and Zoning
2664 Riva Road – Third Floor
Annapolis, MD 21401

RE: Special Exception Application Letter of Explanation
BGE – Solley Road Substation and Marley Neck Substation
Tax Map 10, Grid 17, Parcel 397, Lot B

Dear Ms. Seay:

Accompanying this letter is an application for a zoning special exception that I am submitting on behalf of my client, the Baltimore Gas and Electric Company ("BGE"). The special exception application requests authorization to construct and operate a public utility use in the W1 zoning district. Specifically, the application seeks approval of an electrical substation project, including a Static Synchronous Compensator ("STATCOM"), that BGE will construct in three phases on the Marley Neck peninsula. The substation project is part of BGE's response to address significant changes in regional power supply caused by the forthcoming closure of the Brandon Shores and H. A. Wagner powerplants, which are also located on Marley Neck.

The substation project will be sited on a 125.3-acre parcel that lies between Solley Road to the east and Marley Neck Boulevard to the west, just north of the now-closed BFI landfill and just south of an existing BGE transmission corridor. BGE acquired rights-of-way for the transmission corridor, and constructed transmission lines in the corridor, between 1955 and 1977. To the north, the existing transmission corridor abuts the residential community of Creekside Village, which was built beginning in about 2015.

BGE's property does not have an assigned street address, according to SDAT information. But the property is designated as Lot B on a plat entitled "Administrative Plat of South Solley Road Parcel Mount Clare Properties, Inc.," which plat is recorded in the Land Records of Anne Arundel County in plat book 138, beginning at page 18. BGE acquired title to the property on August 19, 2022 by virtue of a deed recorded in the Land Records of Anne Arundel County in Liber 39165, beginning at page 450. The property is zoned W1, Industrial Park. The property is not in the Chesapeake Bay Critical Area.

Project Background

Transmission of electricity in the portion of the United States that includes the State of Maryland is coordinated and directed by a regional transmission organization

("RTO") known as PJM Interconnection, LLC ("PJM"). RTOs and similar entities called Independent System Operators, or ISOs, are regulated by the Federal Energy Regulatory Commission ("FERC"). Among other functions, FERC regulates interstate transmission of electricity and approves open access tariffs for the wholesale electricity market. PJM is a large RTO, with over 1,000 member companies and a transmission service region that includes Maryland, Delaware, the District of Colombia, Pennsylvania, New Jersey, West Virginia, Ohio, and portions of Virginia, North Carolina, Kentucky, Tennessee, Indiana, Illinois, and Michigan. Until the development of the European Integrated Energy Market, PJM was the world's largest competitive wholesale market for electricity.

In April 2023, the owner of the Brandon Shores powerplant, Talen Energy ("Talen"), informed PJM that Talen intended to close the powerplant on June 1, 2025. Because of the significant amount of electricity Brandon Shores generates, PJM subsequently undertook a deactivation reliability analysis. PJM's analysis found potential near-term thermal and voltage reliability violations, including a serious risk of voltage collapse, if Brandon Shores were to close without significant improvements to transmission infrastructure in the region, including BGE's transmission infrastructure. A voltage collapse affecting the existing transmission system could cause a loss of power potentially to millions of customers throughout the mid-Atlantic—BGE's customers and customers of other electric utilities.

As a result of its reliability analysis, PJM took two principal actions. First, PJM directed affected public utilities, including BGE, to construct a wide range of transmission infrastructure improvements, including new transmission lines and substations. The overhead transmission improvements that PJM directed BGE to construct will all occur on existing BGE property and rights-of-way. Second, PJM negotiated a reliability-must-run ("RMR") agreement with Talen. The RMR requires Talen to keep operating Brandon Shores until May 31, 2029 to give time for the necessary transmission infrastructure improvements to be completed. The RMR agreement requires a payment to Talen of between $12 million and $15 million each month, the cost of which utility ratepayers must absorb. BGE's customers will shoulder about 74% of this cost. Any delays to the necessary infrastructure improvements, including the Solley Road substation and STATCOM, will likely extend the RMR charges that customers must pay. On the other hand, if the necessary infrastructure improvements, including the Solley Road substation and STATCOM, are completed before May 31, 2029, the RMR charges can end sooner, thereby potentially saving customers millions of dollars.

As directed by PJM, BGE must construct approximately 37.2 miles of overhead transmission line, as well as construct, expand, or upgrade five electrical substations. Cumulatively, the work that PJM assigned to BGE is expected to cost more than $1 billion

and take until the end of 2028 to complete. Construction of the new Solley Road substation, including the STATCOM, is one of the PJM-mandated projects. The purpose of the STATCOM is to provide reactive power to the 230 kV system via the Solley Road substation. The reactive power that the STATCOM will provide is needed to regulate voltage in the transmission system. The STATCOM will replace voltage regulation that will be lost when Brandon Shores closes.

Although the Marely Neck substation as now designed was not originally included in PJM's directives to BGE, on February 26, 2025, PJM's Board of Managers approved a recommendation that BGE be directed to construct the Marley Neck substation as part of the transmission infrastructure improvements needed to compensate for the closure of the Brandon Shores powerplant. Thus, not only will the PJM-mandated STATCOM occupy a portion of the Marley Neck substation's footprint, but the footprint will also house a 115 kV substation that is needed to address potential thermal overloads in BGE's system, which PJM previously identified.

Because of the PJM Board's recent action, BGE expects that PJM will soon issue what is called a Designation Entity Agreement ("DEA") that directs BGE to build the 115 kV substation. PJM has already included the Marley Neck 115 kV substation in the list of projects set forth in PJM's 2024 "Regional Transmission Expansion Plan, Open Window #1." In addition to the expected DEA mandate, BGE had previously recognized that a future need exists for a 115 kV substation on Marley Neck, which is why BGE purchased the property in 2022. Once PJM required BGE to build the Solley Road substation, BGE conceptualized the design of the Marley Neck substation at the same time to provide a more reliable and efficient transmission path to other parts of BGE's system. Among other advantages, the Marley Neck substation will enhance connectivity and increase protection of neighboring 115 kV circuits that direct-feed customers in the immediate area and beyond.

Because of projected load demand, especially load demand expected to be created by growth on Marley Neck and nearby areas of the County, the Marley Neck substation's footprint will also provide an area for two smaller substations, one a 35 kV substation and the other a 13 kV substation. These two smaller substations are not part of the PJM mandate, but BGE has for some time included the facilities in its long-range plans. BGE anticipates building the two smaller substations in about 10 years, if not sooner.

Project Description

To comply with PJM's directives and enhance its transmission infrastructure, BGE proposes to construct a phased substation project on its Marley Neck property. Both the

Solley Road and Marely Neck substation footprints will be constructed on undeveloped land owned by BGE located immediately adjacent to an intersection of two existing BGE transmission corridors. These existing transmission corridors extend from the City of Baltimore and Baltimore County through northern, western, and central portions of Anne Arundel County. Locating the substation project next to these existing transmission corridors is ideal. If located elsewhere, BGE would need to acquire new rights-of-way and build additional transmission lines to connect the substations to the grid. Doing so would increase the cost of the project and the time it would take to bring the project online.

The project's first phase will include the Solley Road substation, which will tie directly into the adjacent 230 kV transmission lines, and the STATCOM. The second phase of the project will include the Marley Neck 115 kV substation. The Marley Neck substation will add value to the Solley Road facility by, among other benefits, protecting BGE's sub-transmission system in Anne Arundel County and adjacent areas against present and future thermal overload conditions. The project's third phase will be installation of the smaller 35 kV and 13 kV substations within the footprint of the Marley Neck substation.

The proposed Solley Road substation will be positioned in the central portion of BGE's property, just inside the "Y" formed by a south-to-west junction of the existing transmission line corridors. The Solley Road substation will include a fenced footprint of approximately 530 feet by 640 feet, a driveway connecting to an existing private access road located under BGE's overhead transmission lines, and a stormwater management facility. The STATCOM, which can be thought of as a large voltage regulator, will be located to the west of the Solley Road substation's footprint, on land that will mainly be devoted to the Marley Neck 115 kV substation.

The Marley Neck substation will be positioned in the western portion of BGE's property. The proposed substation includes a fenced footprint of approximately 800 feet by 1,080 feet, a driveway connecting to the existing private access road located under BGE's overhead transmission lines, and a stormwater management facility. Drainage from both substations will flow from the two principal onsite stormwater facilities by way of existing open channels through several privately owned parcels before discharging into the tidal waters of Marley Creek, approximately 2,500 feet west of BGE's property.

At present, except for the transmission corridor, BGE's property is mostly wooded. Although the two substation footprints could have been designed with one very large footprint, BGE separated the substation footprints to minimize impacts to forested areas and other onsite environmental resources, including nontidal wetlands, streams, associated buffers, and locally regulated (but not FEMA) floodplains. Because of the two-

footprint design, the STATCOM needed for full operation of the Solley Road substation cannot be sited within the substation's planned perimeter without expansion of the perimeter. But, as noted, such an expansion would involve additional impacts to environmental resources. Therefore, to minimize environmental impacts, the STATCOM—a vital part of the work that PJM has mandated—will be positioned within the southeastern section of the Marley Neck substation's footprint. Similarly, the two main transformers of the Marley Neck substation will be positioned within the footprint of the Solley Road substation. The transformers take up significantly less space than the STATCOM, which is why BGE in effect swapped locations.

Equipment associated with the Solley Road substation will include a remotely managed control building, the STATCOM, and numerous above-ground capacitors, circuit switches, breakers, and conductors. Except for the STATCOM, all the equipment will be sited inside a 12-foot-high safety and security fence surrounding the footprint of the Solley Road substation. Equipment associated with the 115 kV Marley Neck substation will include three remotely managed control buildings and numerous above-ground capacitors, circuit switches, breakers, and conductors—all sited within a separate 12-foot-high safety and security fence. As previously described, the STATCOM will be sited within the footprint of the Marely Neck substation, as will be the two smaller 35 kV and 13 kV substations. Inside the Marley Neck substation's 12-foot-high perimeter fence, the STATCOM will be surrounded by an additional 8-foot-high safety fence.

Vehicular access to both substation facilities will be provided by way of the same private road extending from Marley Neck Boulevard, with separate internal access points from the private road and separate sliding gate entrances. Inside their respective fenced footprints, the substations will be covered with yard stone over top of a safety grounding grid. All components of the substations will be unstaffed and remotely controlled. Once operational, the substations will not generate routine daily traffic.

BGE's property is presently zoned W1, Industrial Park. The property is slated to keep its W1 zoning as part of the County's ongoing regional planning and comprehensive zoning processes. A public utility use is a designated special exception use in the W1 zoning district under section 18-6-103 of the County Code. Once built, the fenced substation footprints will occupy approximately 28 acres of the 125.3-acre property. Construction of the two substation footprints, access roadway connections, and stormwater management facilities will require clearing about 58 acres of forest and grading approximately 46 acres. The larger area of clearing is due to connections between the substations, the STATCOM, and associated existing and new transmission lines and circuits. Disturbance of nontidal wetlands, streams, associated buffers, and locally regulated floodplains (there is no FEMA floodplain on the property) have been minimized

to affect only those areas vitally necessary—consistent with engineering, safety, and reliability requirements—to construct the substations and their related facilities.

Phasing of the Substation Project

PJM has directed BGE to have the Solley Road substation and STATCOM fully operational by the end of 2028. BGE anticipates that the Marley Neck 115 kV substation will need to be fully operational by the end of 2029, especially if PJM broadens its directives to include building the 115 kV substation. Nevertheless, depending on how overall changes to power transmission to central Maryland affect BGE's transmission and distribution grid, issuance of final permit approvals and construction of the Marley Neck 115 kV substation may not occur until after 18 months from approval of a special exception for the overall project. Because BGE may not be able to obtain final approvals for the Marley Neck substation phase of the project before the end of the 18-month lapse period applicable to special exceptions, as part of this special exception application BGE is asking the Administrative Hearing Officer to approve a phasing plan that will avoid the special exception lapsing for the Marley Neck substation phase of the project.

In addition, because the future 35 kV and 13 kV substations are much smaller and will be located within the footprint of the Marely Neck substation, which by the time the smaller substations are built will have long been constructed and fenced, BGE is asking the Administrative Hearing Officer to approve a phase three of the project that will extend up to 10 years. The smaller substations will be in the southwest corner of the Marley Neck substation's footprint. That corner of the footprint is presently, and will remain, well-buffered. Moreover, the closest adjacent land use to the southwest corner of the Marley Neck substation's footprint is, and will remain for the foreseeable future, a dredge spoil property used by Anne Arundel County.

Regarding project phasing, to accommodate the needed STATCOM and to allow the 115 kV Marley Neck substation and the two future smaller substations to be brought into service quickly when needed, BGE has determined that it is necessary to prepare the Marley Neck substation's footprint in the overall project's first phase. Thus, the project's first phase will include completing all clearing, grading, internal roadway construction, yard-stone stabilization, stormwater management facilities, and high-security perimeter fence for the Marly Neck substation as part of construction of the Solley Road substation and STATCOM. Undertaking all the site development work as part of phase one will also reduce potential impacts to neighboring properties by consolidating land development and major construction activities to a singular period. Phases two and three of the project would thus involve only the pouring of equipment pads, the erection of control buildings, and the positioning of equipment behind what will then be an already-installed safety and

security fence to complete the Marley Neck substation and, several years later, the two smaller substations within the footprint of the Marley Neck substation.

To implement such a phased approach, BGE is submitting a plan for phasing with its special exception application as part of its administrative site plan. BGE will thus be asking the Administrative Hearing Officer to approve phased development of the overall project under the provisions of section 18-16-405(b) of the County Code. This Code section provides as follows:

> **Extension for phasing or other good cause.** In deciding an application for a special exception use, the Administrative Hearing Officer may extend the time periods set forth in subsection (a) for the use and any variance granted in connection with it when the application includes a phasing plan or sets forth facts that demonstrate other good cause why the time periods set forth in subsection (a) reasonably cannot be met.

As indicated by BGE's administrative site plan, BGE plans to phase the substation project as follows:

Phase One:

- Site preparation for both substation footprints, including necessary tree-clearing, grubbing, and grading.
- Complete construction of the Solley Road substation.
- Complete construction of the STATCOM on the site of the Marley Neck substation.
- Complete construction of all stormwater management facilities.
- Partial construction of the 115 kV Marley Neck substation, including access roads, gated entrance, surrounding safety and security fencing, and laying of yard stone.
- Time for completion: approximately 24 months from the start of site work.

Phase Two:

- Finish construction of the 115 kV Marely Neck substation, including locating two transformers within the footprint of the Solley Road substation, undertaking any fine grading needed, erecting control buildings, and installing equipment pads and equipment.

- Time for completion: approximately 10 months from start of construction.

Phase Three:

- Installation of the 35 kV and 13 kV substations within the previously prepared and fenced footprint of the Marley Neck substation, including undertaking any fine grading needed, installation of transformers over safety containment structures, and installation of other equipment pads and equipment.

- Time for completion: approximately 18 months from start of construction.

Construction of the Solley Road substation, the STATCOM, and the rest of phase one will begin as soon as the County issues final permits, which BGE hopes will be in early 2026. An approximate date for the start of construction of phase two (the portion of the Marley Neck 115 kV substation not included in phase one) has not yet been established. Depending on several factors, including completion dates for other parts of the PJM-mandated infrastructure improvements, the availability of certain equipment, and the time it takes to obtain final permit approvals, work on phase two could begin shortly after or shortly before work on the Solley Road substation is complete. But there is a chance that phase two work could begin beyond the 18-month period established 18-16-405(a) of the County Code for obtaining permits. For phase three, BGE estimates that installation of the two smaller substations within the footprint of the Marley Neck substation will be necessary in about ten years.

Special Exception Standards for Public Utility Uses

BGE believes that its special exception application meets all specific and general special exception standards in the County Code and anticipates that the Office of Planning and Zoning will agree. Regarding the six specific special exception standards for a public utility use, as set forth in section 18-11-144 of the County Code, BGE respectfully asks the Office of Planning and Zoning and the Administrative Hearing Officer to consider the following.

(1) *The architectural scale, design, and landscaping treatment of the use shall be compatible with other development in the area and shall be fully or partially enclosed as may be necessary to provide compatibility.*

The architectural scale of the proposed substation project involves a lower profile than the scale of existing electrical structures in the adjacent transmission corridor. The lower profile of the substations is generally consistent with the building heights and scale

of development associated with existing and proposed R10-zoned lands to the north and west of BGE's parcel. The scale of the substations will also be far less visible than the now-closed Browing Ferris ("BFI") landfill immediately to the south of BGE's parcel. The landfill's twin mounds loom over much of central Marley Neck.

BGE has designed the substations to be as compact as possible while adhering to required electrical and civil engineering standards, including electrical safety guidelines. Although most of the substations' equipment will not be enclosed within buildings, each substation will be secured by a 12-foot-high safety and security fence. In addition, the substations will be surrounded by forested areas on all four sides. Significantly, BGE will continue to maintain a forested area to the north of the transmission corridor that adjoins an existing forest conservation easement on land owned by the Creekside Village HOA. The two adjoining forested areas will complement one another and will help ensure limited substation visibility from the north (looking to the south). BGE also proposes planting trees to help fill thin spots in the existing woods next to Creekside Village.

BFI owns existing mature forested areas to the south of the proposed substations next to the closed landfill. These forested areas adjoin and complement existing mature forested areas that BGE will retain along the south side of its property. BGE will also retain existing mature forest stands on both the eastern and far western portions of its property. Most of these existing forested areas will be permanently preserved in forest conservation easements and floodplain reservations. Preserved forest on the eastern part of the property will effectively enlarge a significant swath of preserved forest that extends from near Solley Road to the headwaters of Nabbs Creek. Approximately 95 acres of this connected forest was permanently preserved by BGE's then-affiliate, Constellation Power Source Generation, Inc.

Because of (1) the prevalence of existing forested land around the substations' perimeters, (2) the additional trees BGE will plant next to Creekside Village, (3) the distances between the substations and nearby developed areas, and (4) the substations' relatively low profile, the substations either will not be visible or will have significantly attenuated visibility from Solley Road, Marley Neck Boulevard, and nearby homes.

(2) *The use shall be necessary for public convenience at the designated location.*

The proposed substations will provide critical electrical power infrastructure for BGE's service area, including northern and western Anne Arundel County. The location of the substations is ideal for this purpose because of the abutting transmission line corridors. BGE examined several other sites for a possible substation location, but none of the other sites compared favorably to the Solley Road property.

(2) *Utility corridors shall be used to the extent practical.*

The proposed substations will be located immediately adjacent to an existing major transmission line corridor on land already owned by BGE.

(4) *The alignment shall follow the topography to minimize any effects to the terrain.*

The proposed configuration of the substations and associated clearing and grading have been designed to minimize earthmoving and impacts on environmental resources, while still meeting substation engineering and safety design requirements. Steep slope areas on the property will not be disturbed and major topographic changes have been avoided. A sizable portion of the unavoidable impacts on environmental features results from adherence to County stormwater management regulations. BGE has explored, and will continue to explore, obtaining approval of alternate stormwater management designs to minimize effects on the property's existing terrain. As part of its administrative site plan package, BGE is submitting preliminary grading and stormwater management plans with this special exception application.

(5) *There shall be selective vegetative clearance for the right-of-way for soil erosion control.*

The substation project is not a right-of-way project, and therefore this requirement is not applicable.

Regarding the present right-of-way for the existing transmission corridors, rules promulgated by FERC require BGE to protect its transmission lines from damage and keep the transmission corridors accessible for inspection and maintenance. Thus, trees and other significant vegetation in the transmission corridors were cleared many years ago. There will be no additional vegetative clearing within the existing transmission corridors for the substation project.

(6) *Structures, such as antennas and lightning masts, may exceed the maximum height limitations of the zoning district in which the use is located if the excess height is the minimum necessary to accomplish the purpose of the structure and minimum setbacks are increased by one foot for each excess foot in height.*

All substation facilities, including the control buildings, will meet height requirements of the W1 zoning district. As may be necessary, BGE will provide increased setbacks for structures such as communications poles and lightning masts.

General Special Exception Standards

Regarding the general standards applicable to all special exception uses, BGE asks the Office of Planning and Zoning and the Administrative Hearing Officer to consider the following.

(1) *The use will not be detrimental to the public health, safety, or welfare[.]*

The proposed substation project will not be detrimental to the public health, safety, or welfare. Rather, the substations and STATCOM will substantially promote the public welfare by helping to ensure the efficient and reliable delivery of electricity in Anne Arundel County. The need for the substations—an extremely urgent need in the case of the Solley Road substation and STATCOM—results from the imminent closure of the Brandon Shores and Wagner powerplants, and PJM directives related to the powerplant closures to upgrade transmission infrastructure. As determined by PJM, BGE's proposed infrastructure improvements are necessary and in the best interest of the public.

Furthermore, as detailed in the following paragraphs of this letter addressing other special exception Code standards, BGE's ability to meet these standards (which cover a range of more specific public welfare issues) is also proof that the proposed substation project will not be detrimental to the public health, safety, or welfare.

(2) *The location, nature, and height of each building, wall, and fence, the nature and extent of landscaping on the site, and the location, size, nature, and intensity of each phase of the use and its access roads will be compatible with the appropriate and orderly development of the district in which it is located[.]*

The nature and height of the substations' structures, equipment, safety fences, and access roads will be compatible with the orderly development of the district. In addition, it is notable that an adequate and reliable supply of electricity is necessary for the orderly development of the district.

The proposed substation project will be constructed in three phases. The first and largest construction phase will take approximately twenty-four months. The second phase, to complete the 115 kV Marley Neck substation, will take approximately ten months but will be less intense because phase two will not involve clearing or significant grading since the footprint of and access to the Marley Neck substation will be prepared as part of phase one. Similarly, the third phase will be even less intense and involve only installation of smaller transformers and related equipment in the southwest corner of the then already-prepared Marley Neck substation footprint, next to the County's dredge spoil site.

The height of the substations' control buildings and equipment will not exceed heights of typical residential uses and will be lower than the heights of typical industrial uses in W1 zoning districts. Vehicular access to the substation will be via an existing BGE transmission line inspection and maintenance roadway, which will be improved with pavement to reduce dust and function as the principal access to the substations. From a land use perspective, the substations will be comparatively benign uses. The unstaffed, remotely operated substations will place no demands on public facilities and services, including public water, sewer, roads, schools, and libraries.

Regarding landscaping, an electrical substation cannot be landscaped as other land uses might be. For substations, BGE must comply with safety and security standards derived from requirements developed by the North American Electric Reliability Corporation ("NERC") and overseen by FERC. The NERC/FERC requirements include minimum distances between equipment, as well as clearing minimums around a substation's perimeter and associated overhead power lines. The requirements also limit the types and heights of vegetation that can be planted around a substation's broader perimeters.

For example, BGE must maintain a 10-foot ground-to-sky cleared stone or grass-covered area outside of a substation fence to serve as a fire buffer and to facilitate emergency and maintenance access around the substation. The 10-foot cleared area precludes use of tall-growing vegetation that might serve as an access vector for entry by animals (and people) into a substation. Furthermore, all tall-growing vegetation adjacent to the 10-foot cleared area must be maintained so that no overhanging branches encroach into the 10-foot cleared area. Similarly, all tall-growing vegetation must be kept from growing within a "danger tree" area adjacent to a substation and its overhead powerlines. The exact danger tree distance varies depending on the potential heights of trees that might grow tall enough to fall onto electrical equipment or associated powerlines and thereby disrupt power transmission or distribution.

Nevertheless, and arguably better than newly planted landscaping, the proposed substations will be surrounded by forested areas on all four sides. As noted, BGE will maintain an existing forested area adjoining a forest conservation easement platted as part of Creekside Village. The two adjoining forested areas will complement one another and will provide a perpetual forested buffer limiting visibility of the substations from Creekside Village. To the south, BFI owns existing mature forested areas. These forested areas adjoin and complement existing mature forested areas that will be retained on BGE's property. BGE will also retain existing mature forest stands on both the eastern and far western portions of its property. Most of these existing forested areas will be permanently preserved in forest conservation easements.

Because of (1) the prevalence of existing forested areas around the substations' perimeters, (2) the distance to surrounding developed areas, and (3) the substations' relatively low profile, the substations will be only minimally visible, if at all, from adjoining homes and public roads, even after leaves have fallen from deciduous trees.

(3) *Operations related to the use will be no more objectionable with regard to noise, fumes, vibration, or light to nearby properties than operations in other uses allowed under this article[.]*

The substations will not produce fumes. The substations will not be lit unless there is an emergency requiring night-time repairs. Such lighting would be temporary, lasting only until repairs are completed. In addition, any vibration the substations might produce will be imperceptible on adjacent properties.

Regarding noise, for residential areas State standards require that noise received from offsite sources at residential property lines must not exceed 65 dBA during daytime hours and 55 dBA during nighttime hours. For industrial areas, state standards require that noise received from offsite sources must not exceed 75 dBA during both daytime and nighttime hours. Sound levels at receiving property lines produced by the substations' transformers, STATCOM, and other equipment will meet these State standards. Furthermore, after construction, the substations will usually generate no daily traffic, which means vehicle noise associated with the substations will be considerably less than noise produced by traffic associated with other land uses. A noise study that BGE recently commissioned for the substation project found that noise associated with traffic is the greatest contributor to existing background noise in the area.

(4) *The use at the location proposed will not have any adverse effects above and beyond those inherently associated with the use irrespective of its location within the zoning district[.]*

Locating the proposed substations adjacent to existing transmission corridors means the substations will have fewer and less intense inherent adverse effects than if proposed at other locations in the W1 zoning district. The necessary scale of the proposed substations limits where they can be sited because of the amount of land needed and the fact the substations must be connected to transmission lines. If the substations were to be located on a site distant from an existing transmission corridor, presently undeveloped land would have to be cleared for new transmission lines and circuits to connect the substations to the grid, thus causing greater disturbance to a greater number of people. Moreover, as previously noted, the proposed location is large enough and the property's characteristics are such that BGE can preserve existing woodlands for screening and noise

reduction. Furthermore, the property is large enough to protect adjacent land uses from potential vibration and noise.

The proposed location also reduces the substations' visibility, including attenuated visibility from the closest residential land uses. In addition, the substations' equipment will appear similar to (and will not be any taller than) existing electrical infrastructure in the abutting transmission corridors. Thus, the substations will not be interjecting an inherently different use into the vicinity.

It is also important to note that BGE's property is zoned W1, Industrial Park. Development of an industrial park on the property, which is a permitted use, would very likely create the need for more forest clearing and grading than the clearing and grading needed for the substations. Industrial parks typically consist of large warehouse and flex-space buildings, including required parking lots, loading docks, wide roads to serve large trucks, and, at this location, significant industrial entrances on Solley Road and Marley Neck Boulevard. Typical W1 development also would involve impacts to public facilities, including public sewer, water, and roads. In this sense, just as BGE's use of the property for the substations will lessen many of the inherent impacts associated with substations, BGE's use of the property for the substations will lessen many of the inherent impacts associated with developing the property with permitted uses and other special exception uses allowed by W1 zoning.

(5) *The proposed use will not conflict with an existing or programmed public facility, public service, school, or road[.]*

The proposed substations will be located on property already owned by BGE and used to support major transmission lines. The addition of the substations will not conflict with any existing or programmed public facility, service, school, or road. The proposed substations will not use any public facilities except for roads. Regarding roads, the substations will produce no routine traffic. Because the substations will be unstaffed and operated remotely, traffic to the substations will be limited to occasional maintenance and infrequent repair trips.

(6) *The proposed use has the written recommendations and comments of the Health Department and the Office of Planning and Zoning[.]*

As part of the special exception review process, the proposed substation project will have written recommendations and comments from the Health Department and the Office of Planning and Zoning.

(7) *The proposed use is consistent with the County General Development Plan[.]*

The proposed substation use is consistent with Plan2040, which is the County's General Development Plan. BGE's property is on the boundary between an area where Plan2040's Planned Land Use map calls for industrial land use and an area slated for Medium Density Residential land use. The more detailed Region 3 Plan, presently under consideration by the County Council, retains the planned industrial land use for BGE's property. Proposed Region 3 zoning maps retain the property's W1 zoning.

BGE's property is also within the County's priority funding area, in Growth Tier 2A, and in a Neighborhood Preservation Policy Area, which promotes infill development. The Marley Neck neighborhood preservation policy area is rife with recent infill development and new infill proposals, as encouraged by Plan2040. New infill development, as well as existing development in the area, will need reliable electrical infrastructure.

In Policy BE1.3, Plan2040 states:

> The County will provide adequate public schools, roads and other infrastructure facilities in a timely manner and encourage sustainable growth and development practices that enhance the quality of life and general health, safety and welfare of its residents.

Like County infrastructure facilities, electrical power infrastructure is also vital infrastructure that enhances the quality of life and general health, safety and welfare of County residents. In addition, an adequate and reliable supply of electricity is essential for the County to provide its own infrastructure (such as schools, water and sewage treatment plants, pumping stations, and emergency-services communications) to serve the public welfare.

During the review of BGE's special exception prefile submittal, Mr. Patrick Hughes of Planning and Zoning's Long Range Planning Division wrote that BGE's substation proposal "is consistent with the Plan2040 goals, policies and recommendations." BGE welcomes Mr. Hughes' statement, which conveys a significant conclusion by the Office of Planning and Zoning that BGE's proposed public utility use—the substations and STATCOM—is consistent with the County's General Development Plan.

(8) *The applicant has presented sufficient evidence of public need for the use[.]*

The Solley Road substation and STATCOM are critical components of the extensive work that PJM has mandated to compensate for the closure of the Brandon Shores

powerplant. (After its announcement about closing Brandon Shores, Talen announced that it also will be closing the older H. A. Wagner powerplant, which is situated next to Brandon Shores.) The Marley Neck substation, now included as part of PJM's 2024 Regional Transmission Expansion Plan, and likely soon to be mandated, is a necessary adjunct to the Solley Road substation to address potential thermal overloads in BGE's system and to ensure that the region, including Anne Arundel County, is served by an efficient and reliable power supply.

Constructing the substations and upgrading related electrical infrastructure is therefore needed by, and in the best interest of, the public.

(9) *The applicant has presented sufficient evidence that the use will meet and be able to maintain adherence to the criteria for the specific use[.]*

As addressed on the prior pages of this letter, the proposed substations will meet and maintain adherence to the specific criteria for a public utility use, as set forth in section 18-11-144 of the County Code. The proposed substations will also meet and maintain adherence to all zoning bulk standards applicable to the W1 zoning district. The substations' locations, layouts, and other design elements have been planned to avoid the need for any zoning variances.

(10) *The application will conform to the critical area criteria for sites located in the critical area[.]*

The proposed substation project is not in the Chesapeake Bay Critical Area.

(11) *The administrative site plan demonstrates the applicant's ability to comply with the requirements of the Landscape Manual.*

As Planning and Zoning has acknowledged in the past, BGE cannot provide typical landscaping for its electrical substations. The County's Landscape Manual unfortunately does not provide specific standards for electrical substations. Instead, the Development Division planners usually lump substations in with standards for industrial or heavy commercial land uses. None of these land uses, however, are subject to the same engineering and safety standards as an electrical substation.

In some areas of the property, BGE will be able to plant landscaping, and BGE's special exception application includes a landscaping plan as part of the administrative site plan package. A substation, however, is a unique land use. The Landscape Manual's standards were not written with the engineering, safety, and security limitations that

constrain substation design. Nevertheless, the Manual provides for modifications to landscaping standards for safety reasons, as well as for other practical difficulties or unnecessary hardships. For any landscaping deficiencies noted during the project's site development plan process, BGE will apply for such a modification. Over many years, the Office of Planning and Zoning has favorably entertained such reasonable modification requests in conjunction with work at other BGE substations.

Moreover, as noted previously, forested areas abut the proposed substation sites on four sides. These forested areas will buffer and significantly reduce the visibility of the substations from public roads and nearby private properties, thus fulfilling the spirit and intent of the Landscape Manual. On the north side of the property, adjacent to Creekside Village, BGE will plant additional trees to fill gaps in the existing woods. BGE will also plant 1.1 acres of trees in a band along the north side of the transmission corridor, which will make the existing woods on that side slightly deeper and provide additional screening between the substations and Creekside Village.

Finally, although not strictly considered landscaping, BGE proposes to seed cleared areas around the substations' perimeters and stormwater management facilities with plant species that will grow into pollinator meadows. The plant species seeded in cleared upland areas will differ from the plant species seeded in disturbed riparian areas and wetland buffers and floodplain areas to ensure survival of the vegetation and to create meadows that will attract a diverse range of pollinator species. BGE is presently working with staff at the Maryland Department of Environment to identify the best way to create the planned pollinator meadows.

Summary

As part of its response to the unexpected closure of the Brandon Shores and H. A. Wagner powerplants, BGE proposes to construct two, interconnected substations and a STATCOM on 125.3 acres that BGE purchased about three years ago. BGE plans to build the project in three phases. First, BGE will build the Solley Road substation and, on a portion of the Marley Neck substation footprint, the STATCOM. As part of phase one, BGE will prepare the entire Marley Neck substation footprint, including constructing access roads, stormwater management facilities, and security fencing and gating, so that when work on the rest of the 115 kV Marley Neck substation begins, no further land clearing or significant grading will be needed. Second, as phase two, BGE will construct the portion of the 115 kV Marley Neck substation that was not built as part of phase one. Finally, in about ten years, BGE will implement phase three by installing smaller transformers and related equipment for 35 kV and 13 kV substations to meet anticipated load needs on Marley Neck.

PJM, which is the RTO to which BGE belongs, has directed BGE to undertake construction of the Solley Road substation and STATCOM to address potentially severe reliability problems with the existing transmission system that presently brings electric power to central Maryland and beyond. PJM has listed the Marley Neck substation as a facility to be built as part of PJM's 2024 Regional Transmission Expansion Plan and is taking steps to direct BGE to construct the 115 kV Marley Neck substation. But regardless of any PJM action, BGE has already foreseen a public need for the 115 kV Marley Neck substation, as well as the two smaller substations, and is moving forward in three phases with the substations' construction.

The property that BGE purchased in 2022 lies astride two transmission corridors and is an ideal location for the substation project. The property is zoned W1 and is not in the Chesapeake Bay Critical Area. BGE's substation project will be well set back from Solley Road to the east and Marley Neck Boulevard to the west. To the south is forested land owned by BFI and used as a buffer to BFI's closed landfill. To the north is one of the two existing transmission corridors, and beyond the north side of the transmission corridor is the community of Creekside Village. Creekside Village was developed next to then-existing transmission lines about ten years ago and residents have co-existed with them ever since.

As part of its substation project, BGE will be planting trees in thin spots in the existing woods between the transmission lines and Creekside Village. BGE also will be placing these woods in a forest conservation easement that will abut a forest conservation easement created with the development of Creekside Village. Thickening the existing woods and placing the woods in a conservation easement will decrease potential effects of the substation project, including attenuating visibility of the substations from homes in the community.

Compared to permitted and other special exception uses allowed in the W1 zoning district, a substation is a benign land use. An unstaffed substation places no burden on public facilities, including no use of sewer or water and nearly nonexistent traffic generation. Because of the size and other characteristics of BGE's property, the proposed substations will produce fewer potential impacts than other possible substation locations and the potential impacts that remain will be diminished. In essence, BGE's 125.3 acres is the right property at the right location at the right time to provide a site for a critically needed substation project—a project mandated to resolve significant problems created by the closure of the Brandon Shores and H. A. Wagner powerplants, both long-time fixtures on Marley Neck, situated about a mile from BGE's property.

* * * *

The Law Office of Sager A. Williams, Jr.
410-266-0532 – 202-768-4592
mdzoninglaw@verizon.net

In accordance with the County Code's special exception submittal requirements, BGE is providing the required online application information and is uploading this letter and the following materials:

1. An administrative site plan set, including planimetric plans, a phasing plan, stormwater management plans, forest conservation plans, and landscaping plans;
2. A copy of the current deed for the property on which the substations will be located, as recorded in the Anne Arundel County Land Records in Liber 39165, beginning at page 450;
3. A copy of the subdivision plat that originally created Lot B (recorded in plat book 138, pages 16-17) and a copy of the subdivision plat that reduced the size of Lot B to its present 125.3 acres to create Lot C (recorded in plat book 138, pages 18-19);
4. A list of the names and mailing addresses of the owners of adjacent and nearby lots and parcels who are entitled by the County Code to receive notice of the special exception public hearing;
5. A copy of the Zoning Division's pre-file comments and agency memoranda; and
6. Payment for the filing fee for the special exception application and two public notice signs. When supplied by the Office of Planning and Zoning, BGE will post one notice sign along Solley Road and the other notice sign along Marley Neck Boulevard.

If you or your colleagues have questions about any of the information set forth in this letter, or about any of the accompanying application materials, please contact me at your convenience. Also, please contact me if County planners would like additional information about the background, or any other aspect, of BGE's PJM-mandated substation project on Marley Neck.

On behalf of BGE, I thank you for your consideration of BGE's application. If at any time during the Office of Planning and Zoning's review of BGE's special exception application you believe that a virtual or in-person meeting would be useful, please let me know and I will work with you to make the appropriate arrangements.

Sincerely,

Sager A. Williams, Jr.

The Law Office of Sager A. Williams, Jr.
410-266-0532 – 202-768-4592
mdzoninglaw@verizon.net

---

dc: Mr. Jerome Wilson
Mr. Patrick Burke
Ms. Connie Pierce, Esq.
BGE project team members
Mr. Robert G. Bathurst, P.E.
Ms. Bonnie Johansen
Mr. Shep Tullier

APP. EXHIBIT# 4
CASE: 2025-0049-S
DATE: 5/15/25

The Law Office of Sager A. Williams, J
2709 Summerview Way #302
Annapolis, MD 21401
410.266.0532 202.768.4592
mdzoninglaw@verizon.net

March 20, 2025

Ms. Joan A. Jenkins
Planner III
Zoning Administration Division
Anne Arundel County Office of Planning and Zoning
2664 Riva Road – Third Floor
Annapolis, MD 21401

RE: Special Exception Case No. 2025-0049-S
BGE – Solley Road Substation and Marley Neck Substation
Tax Map 10, Grid 17, Parcel 397, Lot B

Dear Ms. Jenkins:

I am writing to you to provide supplemental information regarding BGE's special exception application for a public utility use. Specifically, BGE proposes to construct and operate an electrical substation project on BGE-owned property situated on the Marley Neck between the closed BFI landfill to the south and the community of Creekside Village to the north.

The letter of explanation filed with BGE's special exception application on March 20, 2025 includes certain information about PJM's consideration of the need for the Marely Neck substation phase of BGE's overall substation and STATCOM project. As the March 20th letter of explanation notes, PJM's Board of Managers approved a recommendation that BGE construct the Marley Neck substation to address potential thermal overloads in BGE's system—a problem that both BGE and PJM previously identified. The March 20th letter of explanation goes on to say:

> Because of the PJM Board's recent action, BGE expects that PJM will soon issue what is called a Designation Entity Agreement ("DEA") that directs BGE to build the 115 kV substation. PJM has already included the Marley Neck 115 kV substation in the list of projects set forth in PJM's 2024 "Regional Transmission Expansion Plan, Open Window #1."

PJM has now issued the DEA that BGE was expecting. A copy of PJM's letter to BGE accompanies this letter. Attachment "A" to PJM's letter identifies the Marley Neck substation as a new baseline reliability project required by PJM's Regional Transmission Expansion Plan. As PJM's letter explains, BGE is now the designated entity with construction responsibility for the proposed Marley Neck substation.

BGE believes that the DEA issued by PJM is important evidence that supports BGE's compliance with the special exception standard set forth in § 18-11-144(2) of the County Code that the special exception use "be necessary for public convenience at the

The Law Office of Sager A. Williams, Jr.
410-266-0532 – 202-768-4592
mdzoninglaw@verizon.net

designated location." The DEA issued by PJM is also important evidence that supports BGE's compliance with the special exception standard set forth in § 18-16-304(a)(8) of the County Code requiring the applicant to establish a "public need" for the proposed use.

If you or your colleagues have questions about the DEA that PJM issued to BGE, or otherwise about BGE's special exception application and the Solley Road substation and STATCOM project that is the subject of the application, please contact me at your convenience. Also, please contact me if County planners would like additional information about the background, or any other aspect, of BGE's critically necessary substation project on Marley Neck.

On behalf of BGE, I thank you for adding this letter and the accompanying DEA to BGE's special exception application. If at any time during the Office of Planning and Zoning's review of BGE's special exception application you believe that a virtual or in-person meeting would be useful, please let me know and I will work with you to make the appropriate arrangements.

Sincerely,

Sager A. Williams, Jr.

attachment (1)

dc: Mr. Jerome Wilson
Mr. Patrick Burke
Ms. Connie Pierce, Esq.
BGE project team members
Mr. Robert G. Bathurst, P.E.
Ms. Bonnie Johansen
Mr. Shep Tullier

2750 Monroe Boulevard
Audubon, PA 19403

Thursday, March 13, 2025

Dear Designated Entity:

This letter is notification that Baltimore Gas and Electric Company (BGE) is the Designated Entity with construction responsibility for PJM baseline upgrades that were approved by the PJM board on Wednesday, February 26, 2025

At their meeting on Wednesday, February 26, 2025 the PJM Board of Managers (PJM Board) approved portions of the Regional Transmission Expansion Plan (RTEP) pursuant to Schedule 6 of the PJM Operating Agreement. Schedule 6 – Regional Transmission Expansion Planning Protocol – governs the process for planning the expansion and enhancement of transmission facilities to meet reliability criteria and to enhance market efficiency and to address ARR insufficiency.

Attachment A to this letter identifies BGE as the Designated Entity for each upgrade as provided for in the RTEP[1] as presently approved by the PJM Board. A complete summary of the total RTEP for reliability and market efficiency can be obtained from the PJM web page at the following link: Project Construction

Attachment B lists the projects that have experienced a change in scope.

Attachment C lists the projects that are no longer included in the PJM RTEP as baseline upgrades and are cancelled. The Transmission Owner may still wish to construct some or all of these projects. In that case, the corresponding scope of work should be coordinated with PJM and assigned a supplemental project upgrade identifier.

In accordance with the PJM Operating Agreement, Schedule 6, Section 1.5.8, within 30 days of receiving this notification of its designation, the Designated Entity shall notify the Office of the Interconnection of its acceptance of such designation and submit to the Office of the Interconnection a development schedule, which shall include, but not be limited to, milestones necessary to develop and construct the projects to achieve the required in-service dates, including milestone dates for obtaining all necessary authorizations and approvals, including but not limited to, state approvals. Your response should be sent to PJM attention at the following email address: PJM.CRL@pjm.com. You will then be contacted by staff from PJM's Transmission Coordination & Analysis Department to develop and implement the applicable agreements.

Outage coordination of planned upgrades is a critical part of the near term planning process. PJM requests that the identified Transmission Owners and/or the Designated Entity determine preliminary outage schedules associated with the attached construction work and communicate those schedules to PJM by way of the eDART system as soon as possible. In addition the Transmission Owners are reminded to submit, via eDART, updated technical parameters for the upgrades (ratings, impedance, etc.) per PJM Manual requirements prior to placing the upgrades in service.

To timely meet the needed in-service date of the projects, all necessary state approvals should be obtained at least nine months prior to the required in-service dates specified in Attachment A to this document.

If there are any inaccuracies in the data below, such as the cost estimates or in service dates, or there is a disagreement about the construction designee, please contact Sami Abdulsalam and Jason Connell at the following email addresses: Sami.Abdulsalam@pjm.com, and Jason.Connell@pjm.com

Finally, PJM asks for your assistance in identifying any projects that may require corresponding coordination and/or system enhancements with a neighboring Transmission Owner or other entity. This is to include a review of local remedial action schemes (RASs), including those owned by neighboring Transmission Owner or other entities. Any potential impact and resulting change to an RAS should be coordinated with the RAS owner and PJM. Occasionally, the need for this coordination may be identified after the initial planning identification of the need for the RTEP upgrade.

Thank you for your timely response to this letter. Our Transmission Coordination & Analysis Staff will be contacting you to coordinate the development of the Designated Entity agreement.

[1] This letter is not intended to raise any issues regarding the current or future cost allocation for the subject facilities. Any such issues should be addressed as part of the proceedings related to those issues.

2750 Monroe Boulevard
Audubon, PA 19403

Sincerely,

Jason P Connell

Jason Connell
Vice President, Planning
cc: Paul McGlynn; Sami Abdulsalam; Dave Egan; Augustine Caven; Susan McGill; Asanga Perera

2750 Monroe Boulevard
Audubon, PA 19403

Attachment A: New required RTEP projects:

In 2025 it was determined that these baseline reliability projects are required to be constructed. These baseline reliability projects are required to be constructed by the PJM required in-service date.

PJM Baseline Upgrade ID	Project Description	Cost Estimate ($M)	Construction Designation	Required In-Service Date	Related To Tie Line	Transmission Owner Projected In-Service Date
b3906.1	Construct new Marley Neck 115 kV substation. Marley Neck 115kV portion will accommodate 10 breaker-and-a-half bays, with only 6 bays planned for initial service while accommodating 4 future bays. Two Standard 230/115kV transformers will be connected between the 230 and 115 kV equipment with appropriate isolation methods.	$107.62	BGE	6/1/2029		

2750 Monroe Boulevard
Audubon, PA 19403

Attachment B: RTEP projects with Change in Scope:
In 2025 it was determined that the baseline reliability projects listed below required a change in scope. These baseline reliability projects are required to be constructed by the PJM required in-service date.

None

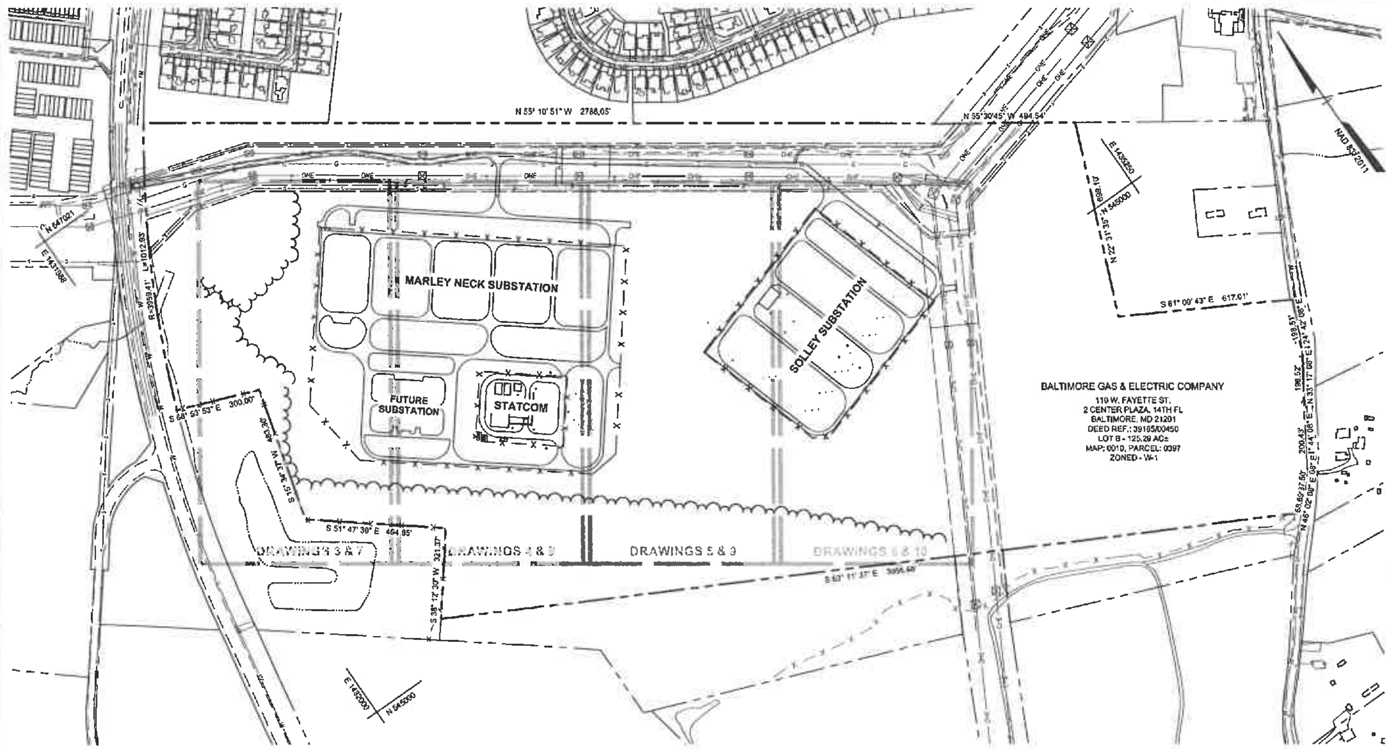
2750 Monroe Boulevard
Audubon, PA 19403

Attachment C: Cancelled RTEP projects:

In 2025 it was determined that the projects listed below are no longer included in the PJM RTEP as baseline upgrades. The Transmission Owner may still wish to construct some or all of these projects. In that case, the corresponding scope of work should be coordinated with PJM and assigned a supplemental project upgrade identifier.

None

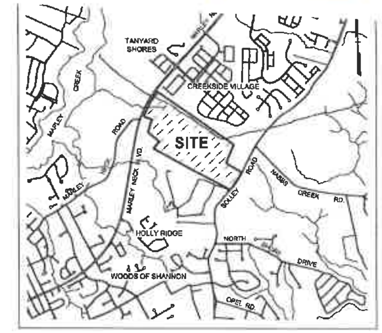
APP. EXHIBIT# 5
CASE: 2025-0049-S
DATE: 5/15/25



PLAN

SCALE: 1"=200'

0 200' 400'



VICINITY MAP

SCALE: 1"=2000'

GENERAL NOTES

PROPERTY ADDRESS : SOLLEY ROAD
GLEN BURNIE, MD 21060

DISTRICT: 03

TAX PARCEL ACCOUNT NUMBER: 3000-9007-5351

TAX MAP: 10, GRID: 17, PARCEL: 397, LOT: B

PLAT BOOK 138, PAGE 18 (MS 01-116: ADMINISTRATIVE SUBDIVISION OF LOT B - SOUTH SOLLEY ROAD PARCEL, MOUNT CLARE PROPERTIES, INC.)

PARCEL AREA: 125.2982 Ac.±

PROPERTY OWNER: BALTIMORE GAS & ELECTRIC CO.
110 W. FAYETTE STREET
2 CENTER PLAZA, 14th FLOOR
BALTIMORE, MARYLAND 21201

DEED REFERENCE: LIBER 39165, FOLIO 450 (8-19-2022)

PREVIOUS OWNER: CSX REALITY DEVELOPMENT, LLC
(LIBER 8293, FOLIO 475 (2-12-1998)

PROPERTY ZONING: W1 (INDUSTRIAL PARK DISTRICT)

SETBACK REQUIREMENTS FOR PRINCIPAL STRUCTURES:
FRONT LOT LINE: 50 FEET
SIDE LOT LINE: 30 FEET
REAR LOT LINE: 30 FEET
ANY OTHER PUBLIC ROAD OR RIGHT-OF-WAY: 50 FEET

MAXIMUM LOT COVERAGE BY STRUCTURES AND PARKING:
75% OF GROSS AREA

MAXIMUM BUILDING HEIGHT: 90 FEET

EXISTING USE: FOREST AND PUBLIC UTILITY

PROPOSED USE: FOREST AND PUBLIC UTILITY

WATERSHED NAME: BALTIMORE HARBOR (MARLEY CREEK)

RECEIVING STREAM USE CLASS DESIGNATION:
I (UNNAMED TRIBUTARIES TO MARLEY CREEK

CHESAPEAKE CRITICAL AREA: N/A OUTSIDE OF CBCA

FEMA FLOODPLAIN PRESENT: NO (REFERENCE FIRM 24003C0062F, DATED FEBRUARY 18, 2015)

LEGEND

EXISTING
- Minor Contour
- Major Contour
- Storm Drain
- Water & Fire Hydrant
- Sanitary Sewer
- Edge of Paving
- Tree Line
- Building
- Tract Boundary
- Road Right-Of-Way
- Easement Line
- Wetlands
- Wetlands Limit
- Flood Plain Limit
- Stream/Waters Edge
- Soils Line
- Overhead Electric
- Guy Wire
- Power/Utility Pole
- Electric Tower
- Fence Line

PROPOSED
- Electrical Equipment Enclosure
- Edge of Paving
- Storm Drain
- Security Fence
- Tree Line
- Phase One Overhead Electric
- Future Phase Two Overhead Electric

PROFESSIONAL CERTIFICATION

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.

LICENSE NO.: 24814 EXPIRATION DATE: 2-28-26

KLEINFELDER
Bright People. Right Solutions.
10710 Gilroy Road
Hunt Valley, Maryland 21031
Phone: 443.589.2400
Project No. 2500796 008A

UPDATE YOUR PRINT TO REFLECT 'AS BUILT' STATE & RETURN A COPY TO THE APPLICABLE DESIGN UNIT

REV	DATE	ACCOUNT NO.	DESCRIPTION	APPROVED
				PREP
				REVD
				APVD

AUTOCAD
ENGINEERING
CIVIL CENTURY ENGINEERING
ELEC.
PROJ. ENG.
PROJ. MGR.
PRIN. ENG.
SUPV. ENG.

DESIGN GROUP
DESIGNED R.G.B.
DRAWN M.S.S.
CHECKED R.G.B.
APPROVED —
DATE —

KEY SHEET
ADMINISTRATIVE SITE PLAN

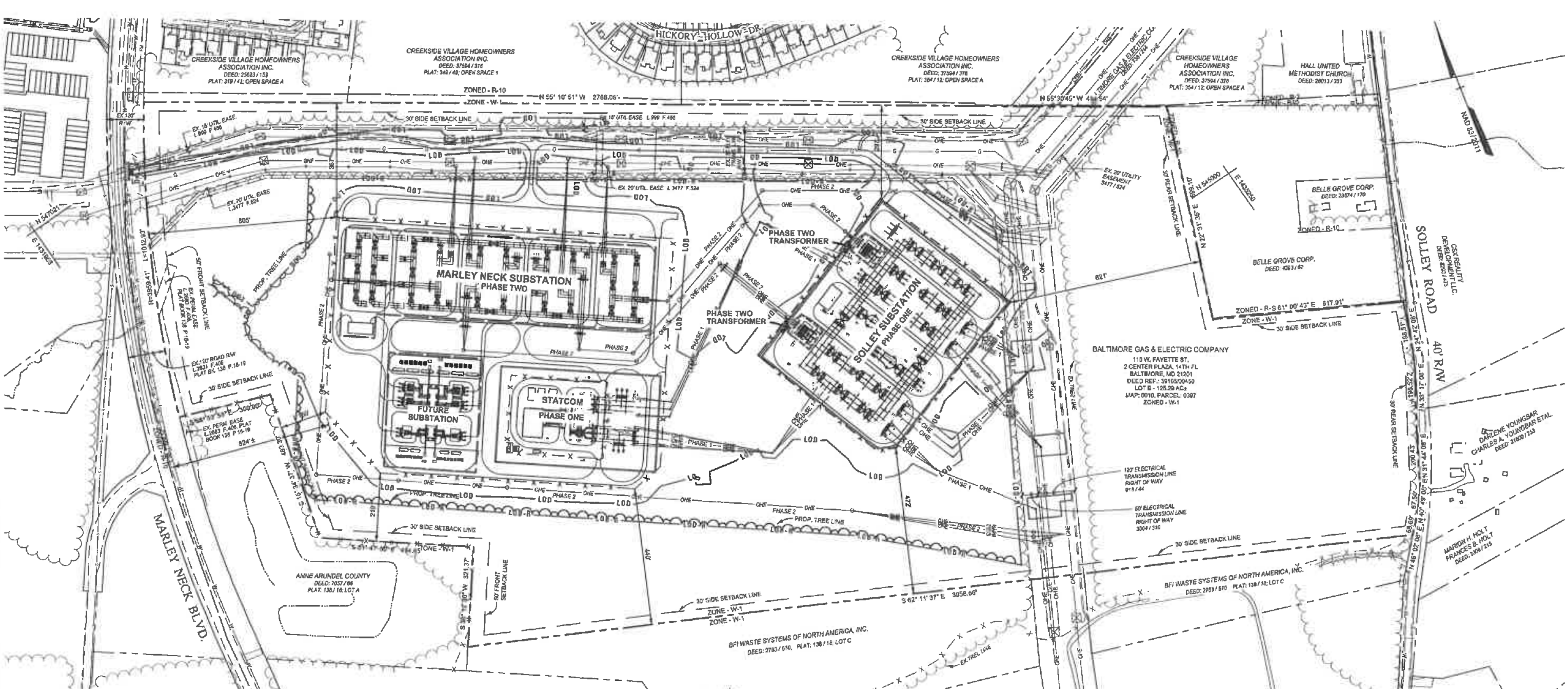
BALTIMORE GAS & ELECTRIC COMPANY
LOT B - SOUTH SOLLEY ROAD
GLEN BURNIE, ANNE ARUNDEL COUNTY, MD 21060
TAX MAP: 10 PARCEL: 397
115kV SUBSTATION

MARLEY NECK - SOLLEY

ELECTRIC SUBSTATION ENGINEERING

bge AN EXELON COMPANY

SCALE: 1"=200'
DWG NO. ADMIN 1 OF 12
REV. B



PROJECT PHASING NOTE:
PHASE ONE INCLUDES (1) CLEARING, GRUBBING AND GRADING FOR THE ENTIRE PROJECT, INCLUDING BOTH SUBSTATION AREAS, (2) INSTALLATION OF SECURITY FENCING AROUND BOTH SUBSTATION AREAS AND THE STATCOM FACILITY, (3) PAVING OF THE MAIN SITE ACCESS ROAD FROM MARLEY NECK BOULEVARD AND CONSTRUCTION OF ALL INTERNAL ACCESS ROADS FOR BOTH SUBSTATIONS, (4) CONSTRUCTION OF ALL ONSITE STORMWATER MANAGEMENT FACILITIES; (5) FULL CONSTRUCTION OF THE SOLLEY SUBSTATION, AND (6) FULL CONSTRUCTION OF THE STATCOM FACILITY. PHASE TWO INCLUDES (1) POURING OF EQUIPMENT PADS/FOUNDATIONS, INSTALLATION OF THE TRANSFORMERS AND OTHER ELECTRICAL EQUIPMENT FOR THE MARLEY NECK SUBSTATION, (2) CONSTRUCTION OF THE CONTROL BUILDING FOR THE MARLEY NECK SUBSTATION, AND (3) ANY FINE GRADING NEEDED FOR THE FOREGOING WORK. PHASE 3 REFERRED TO AS FUTURE PHASE ON THE PLAN VIEW SHOWS A SCHEMATIC REPRESENTATION OF THE FULL BUILDOUT OF THE MARLEY NECK SUBSTATION AT A LATER POINT IN TIME.

LEGEND

EXISTING

- Minor Contour
- Major Contour
- Storm Drain
- Water & Fire Hydrant
- Sanitary Sewer
- Edge of Paving
- Tree Line
- Building
- Tract Boundary
- Road Right-Of-Way
- Easement Line
- Wetlands
- Wetlands Limit
- Flood Plain Limit
- Stream/Waters Edge
- Soils Line
- Overhead Electric
- Guy Wire
- Power/Utility Pole
- Electric Tower
- Fence Line
- Zoning Line (ZONE R / ZONE W-1)

PROPOSED

- Electrical Equipment Enclosure
- Edge of Paving
- Security Fence
- Tree Line
- Phase One Overhead Electric
- Phase Two Overhead Electric

PLAN

SCALE: 1"=150'

0 150' 300'

PROFESSIONAL CERTIFICATION

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.

LICENSE NO.: 24814 EXPIRATION DATE: 2-28-26

KLEINFELDER
Bright People. Right Solutions.
10710 Gilroy Road
Hunt Valley, Maryland 21031
Phone: 443.589.2400
Project No. 2500796.008A

UPDATE YOUR PRINT TO REFLECT 'AS BUILT' STATE & RETURN A COPY TO THE APPLICABLE DESIGN UNIT

REV.	DATE	ACCOUNT NO.	DESCRIPTION	APPROVED
				PREP
				REVD
				APVD

AUTOCAD

ENGINEERING
CIVIL CENTURY ENGINEERING
ELEC.
PROJ. ENG.
PROJ. MGR.
PRIN. ENG.
SUPV. ENG.

DESIGN GROUP
DESIGNED R.G.B.
DRAWN M.S.S.
CHECKED R.G.B.
APPROVED ---
DATE MARCH 14, 2025

OVERALL ADMINISTRATIVE SITE PLAN

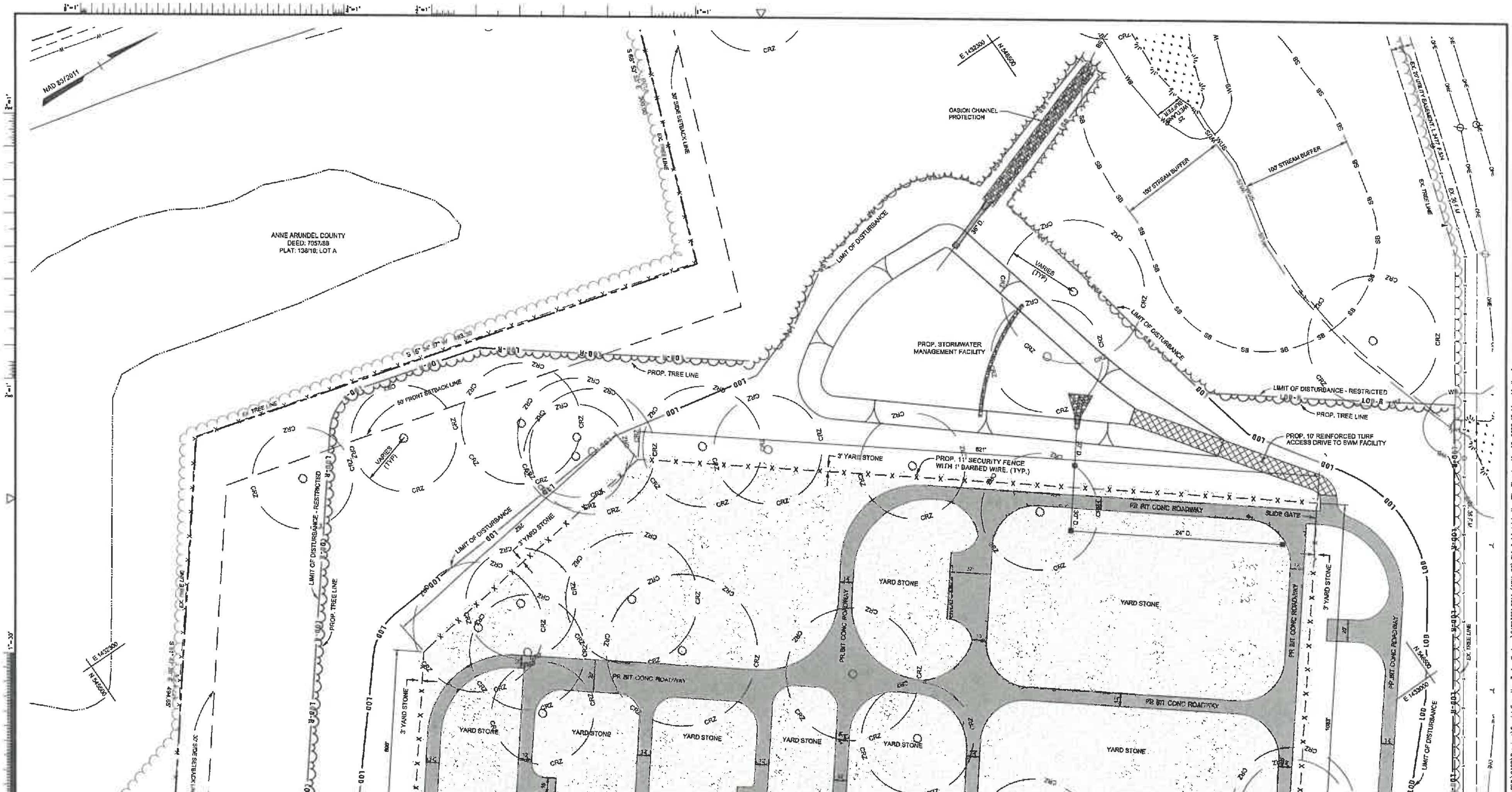
BALTIMORE GAS & ELECTRIC COMPANY
LOT B - SOUTH SOLLEY ROAD
GLEN BURNIE, ANNE ARUNDEL COUNTY, MD 21060
TAX MAP: 10 PARCEL: 397
115kV SUBSTATION

MARLEY NECK - SOLLEY

ELECTRIC SUBSTATION ENGINEERING

bge
AN EXELON COMPANY

SCALE: 1" = 150'
DWG. NO. ADMIN 2 OF 12
REV. B



FOR CONTINUATION - SEE DRAWING ADMIN 4

PLAN

SCALE: 1"=40'

0 40' 80'

PROFESSIONAL CERTIFICATION

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.

LICENSE NO.: 24814 EXPIRATION DATE: 2-28-26

KLEINFELDER
Bright People. Right Solutions.
10710 Gilroy Road
Hunt Valley, Maryland 21031
Phone: 443.589.2400
Project No. 2500796.008A

UPDATE YOUR PRINT TO REFLECT 'AS BUILT' STATE & RETURN A COPY TO THE APPLICABLE DESIGN UNIT

REV	DATE	ACCOUNT NO.	DESCRIPTION	APPROVED
				PREP
				REVD
				APVD

AUTOCAD

ENGINEERING
CIVIL CENTURY ENGINEERING
ELEC.
PROJ. ENG.
PROJ. MGR.
PRIN. ENG.
SUPV. ENG.

DESIGN GROUP
DESIGNED R.G.B.
DRAWN M.S.S.
CHECKED R.G.B.
APPROVED —
DATE —

PHASE ONE
ADMINISTRATIVE SITE PLAN

BALTIMORE GAS & ELECTRIC COMPANY
LOT B - SOUTH SOLLEY ROAD
GLEN BURNIE, ANNE ARUNDEL COUNTY, MD 21060
TAX MAP: 10 PARCEL: 397
115kV SUBSTATION

MARLEY NECK SUBSTATION

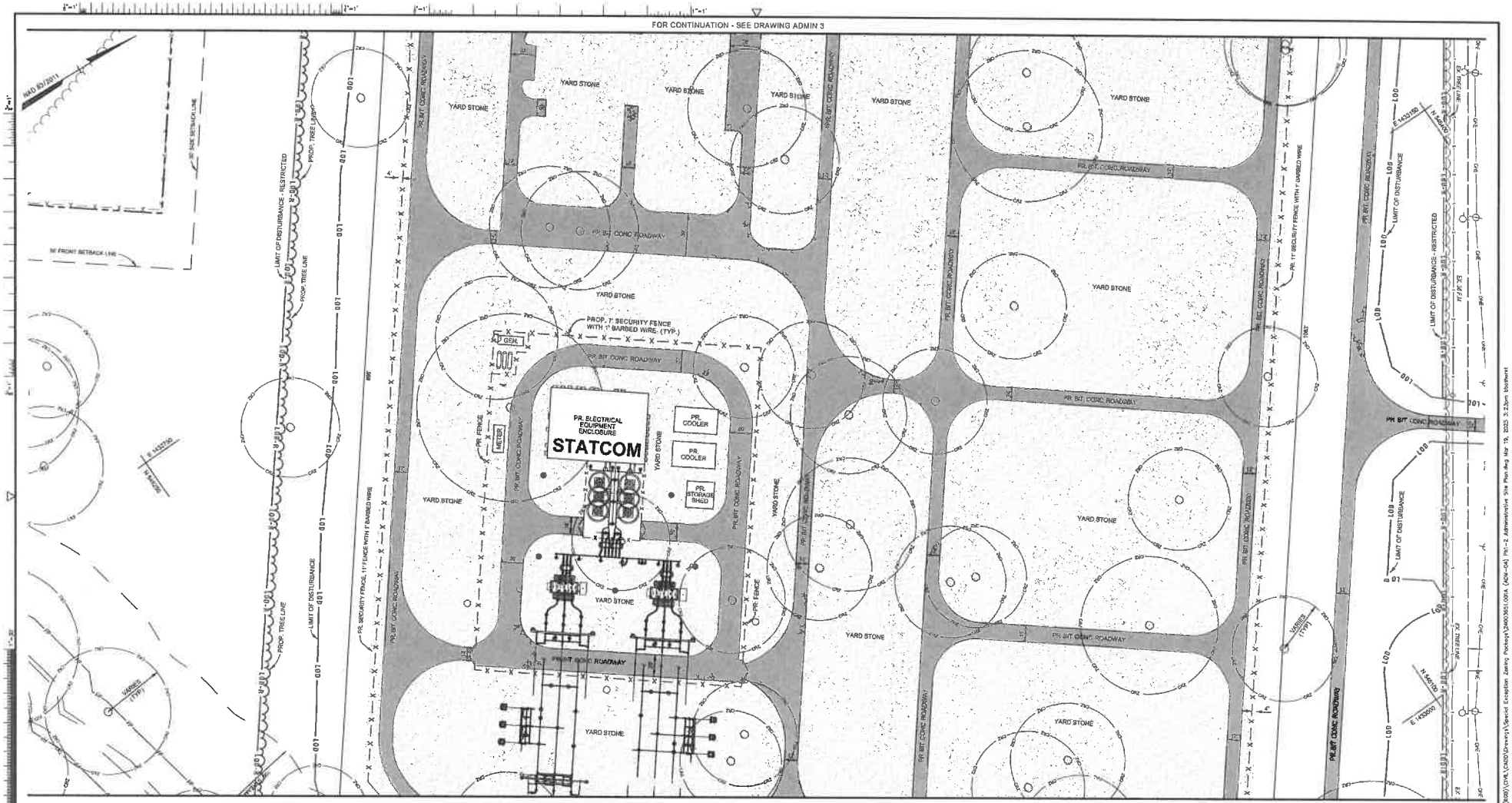
ELECTRIC SUBSTATION ENGINEERING

bge AN EXELON COMPANY

SCALE: 1"=40'

DWG. NO. ADMIN 3 OF 12

REV. B



PLAN

SCALE: 1"=40'

0 40' 80'

UPDATE YOUR PRINT TO REFLECT 'AS BUILT' STATE & RETURN A COPY TO THE APPLICABLE DESIGN UNIT

REV	DATE	ACCOUNT NO.	DESCRIPTION	APPROVED
				PREP
				RVWD
				APVD

PROFESSIONAL CERTIFICATION

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.

LICENSE NO.: 24814 EXPIRATION DATE: 2-26-26

KLEINFELDER
Bright People. Right Solutions.
15710 Gimy Road
Hunt Valley, Maryland 21031
Phone: 443.583.3400
Project No. 2500796.008A

AUTOCAD

ENGINEERING
DWG. CENTURY ENGINEERING
ELEC. _____
PROJ. ENG. _____
PROJ. MGR. _____
PRIN. ENG. _____
SUPV. ENG. _____

DESIGN GROUP
DESIGNED P.G.B.
DRAWN M.S.S.
CHECKED P.G.B.
APPROVED —
DATE —

PHASE ONE ADMINISTRATIVE SITE PLAN

BALTIMORE GAS & ELECTRIC COMPANY
LOT B - SOUTH SOLLEY ROAD
GLEN BURNIE, ANNE ARUNDEL COUNTY, MD 21060
TAX MAP: 10 PARCEL: 397
115kV SUBSTATION

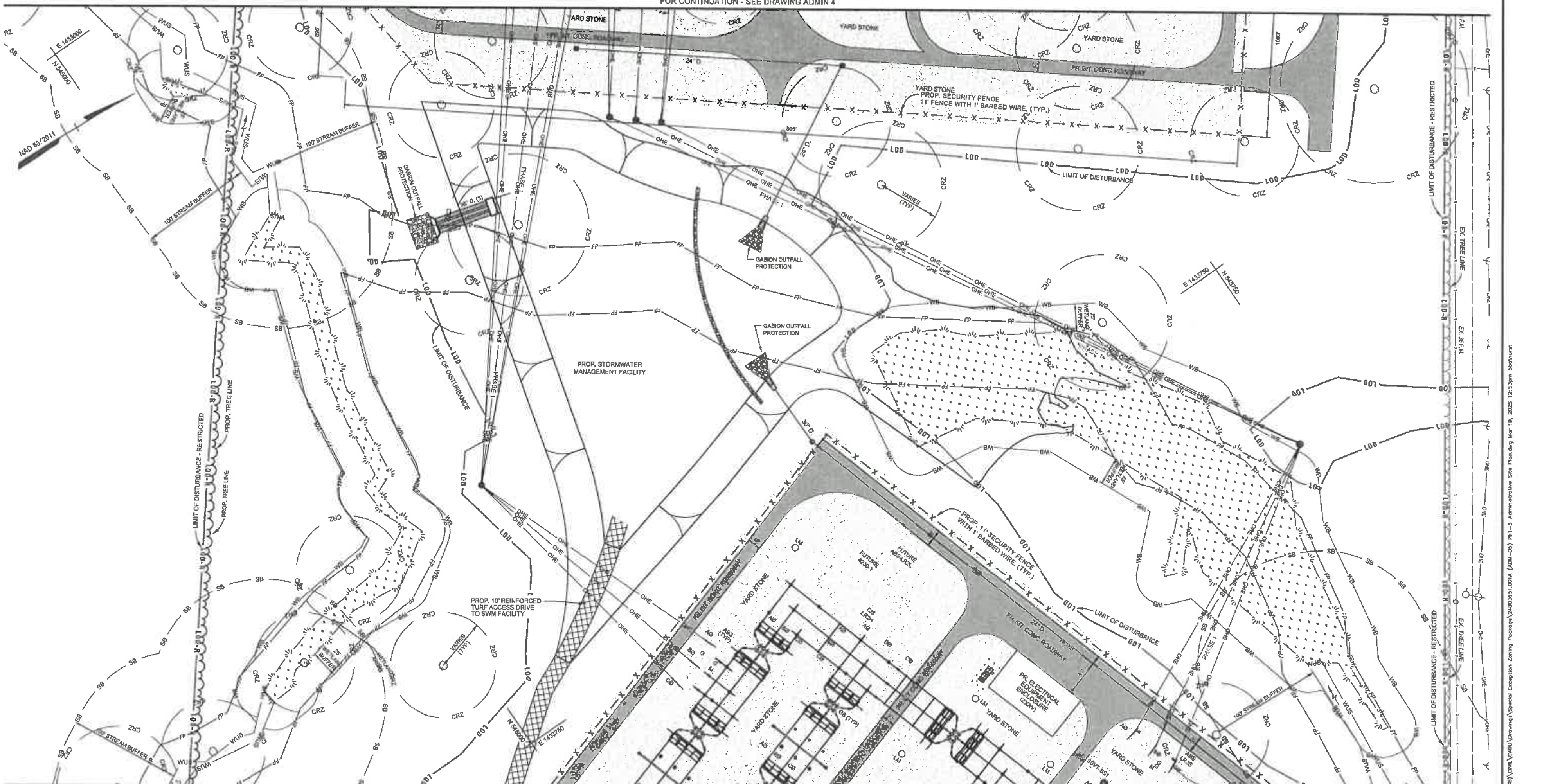
MARLEY NECK SUBSTATION

ELECTRIC SUBSTATION ENGINEERING

bge

SCALE: 1"=40'
DWG NO. ADMIN 4 OF 12
REV. B

FOR CONTINUATION - SEE DRAWING ADMIN 4



FOR CONTINUATION - SEE DRAWING ADMIN 6

PLAN

SCALE: 1"=40'

0 40' 80'

PROFESSIONAL CERTIFICATION

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.

LICENSE NO.: 24814 EXPIRATION DATE: 2-28-26

KLEINFELDER
Bright People. Right Solutions.
10710 Gilroy Road
Hunt Valley, Maryland 21031
Phone: 443.589.2400
Project No. 2500796.008A

UPDATE YOUR PRINT TO REFLECT 'AS BUILT' STATE & RETURN A COPY TO THE APPLICABLE DESIGN UNIT

REV	DATE	ACCOUNT NO.	DESCRIPTION	APPROVED
				PREP
				REVD
				APVD

AUTOCAD

ENGINEERING
CIVIL: CENTURY ENGINEERING
ELEC.
PROJ. ENG.
PROJ. MGR.
PRIN. ENG.
SUPV. ENG.

DESIGN GROUP
DESIGNED: R.G.B.
DRAWN: M.S.S.
CHECKED: R.G.B.
APPROVED: —
DATE: —

PHASE ONE ADMINISTRATIVE SITE PLAN

BALTIMORE GAS & ELECTRIC COMPANY
LOT B - SOUTH SOLLEY ROAD
GLEN BURNIE, ANNE ARUNDEL COUNTY, MD 21060
TAX MAP: 10 PARCEL: 397
115kV SUBSTATION

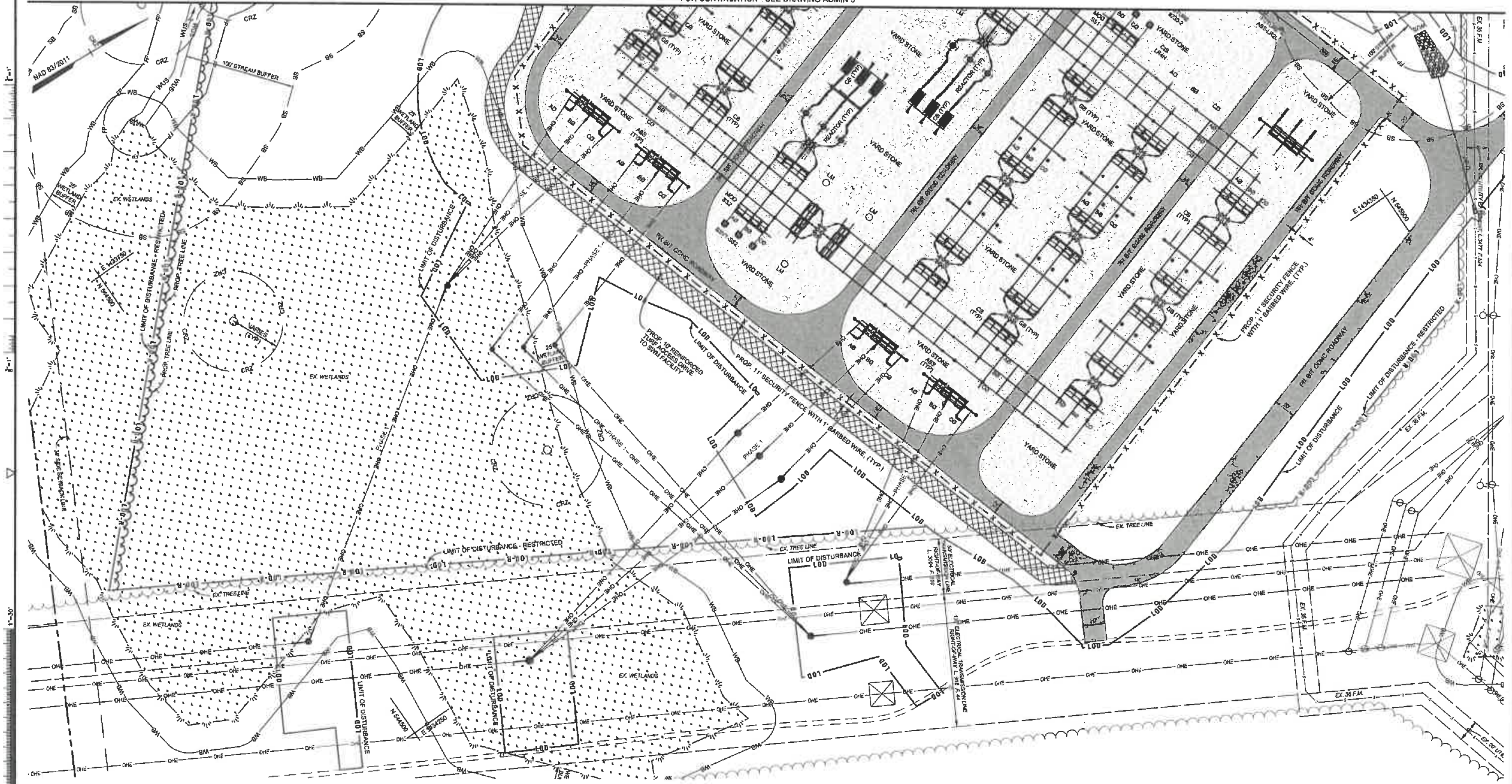
MARLEY NECK/SOLLEY SUBSTATION

ELECTRIC SUBSTATION ENGINEERING

bge

SCALE: 1"=40'
DWG NO. ADMIN 5 OF 12
REV. B

FOR CONTINUATION - SEE DRAWING ADMIN 5



PLAN

SCALE: 1"=40'

0 40' 80'

PROFESSIONAL CERTIFICATION

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.

LICENSE NO.: 24814 EXPIRATION DATE: 2-28-26

KLEINFELDER
Bright People. Right Solutions.
10710 Gilroy Road
Hunt Valley, Maryland 21031
Phone: 443.589.2400
Project No. 2500796.008A

UPDATE YOUR PRINT TO REFLECT 'AS BUILT' STATE & RETURN A COPY TO THE APPLICABLE DESIGN UNIT

REV	DATE	ACCOUNT NO.	DESCRIPTION	APPROVED
				PREP
				REVD
				APVD

AUTOCAD

ENGINEERING
CIVIL CENTURY ENGINEERING
ELEC. ______
PROJ. ENG. ______
PROJ. MGR. ______
PRIN. ENG. ______
SUPV. ENG. ______

DESIGN GROUP
DESIGNED R.G.B.
DRAWN M.S.S.
CHECKED R.G.B.
APPROVED —
DATE —

PHASE ONE ADMINISTRATIVE SITE PLAN

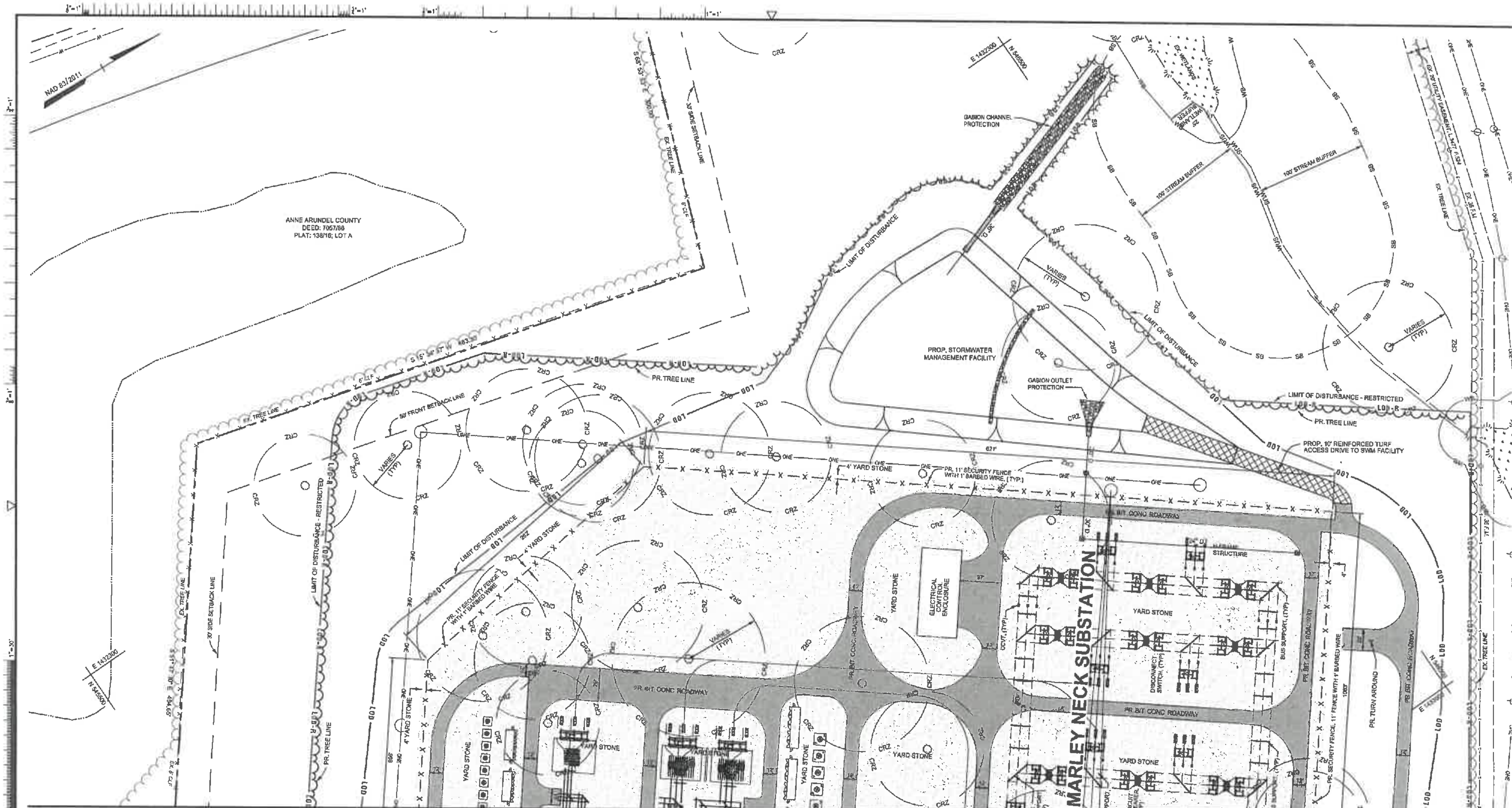
BALTIMORE GAS & ELECTRIC COMPANY
LOT B - SOUTH SOLLEY ROAD
GLEN BURNIE, ANNE ARUNDEL COUNTY, MD 21060
TAX MAP: 10 PARCEL: 387
115kV SUBSTATION

MARLEY NECK - SOLLEY

ELECTRIC SUBSTATION ENGINEERING

bge

SCALE: 1"=40'
DWG. NO. ADMIN 6 OF 12
REV. B



FOR CONTINUATION - SEE DRAWING ADMIN 8

PLAN

SCALE: 1"=40'

0 40' 80'

PROFESSIONAL CERTIFICATION

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.

LICENSE NO.: 24814 EXPIRATION DATE: 2-28-26

KLEINFELDER
Bright People. Right Solutions.
10710 Gilroy Road
Hunt Valley, Maryland 21031
Phone: 443.589.2400
Project No. 2500796.008A

UPDATE YOUR PRINT TO REFLECT 'AS BUILT' STATE & RETURN A COPY TO THE APPLICABLE DESIGN UNIT

REV	DATE	ACCOUNT NO.	DESCRIPTION	APPROVED	
				PREP	
				REVD	
				APVD	

AUTOCAD

ENGINEERING
CIVIL: CENTURY ENGINEERING
ELEC.
PROJ. ENG.
PROJ. MGR.
PRIN. ENG.
SUPV. ENG.

DESIGN GROUP
DESIGNED: R.G.B.
DRAWN: M.S.S.
CHECKED: R.G.B.
APPROVED: —
DATE: —

PHASE TWO
ADMINISTRATIVE SITE PLAN

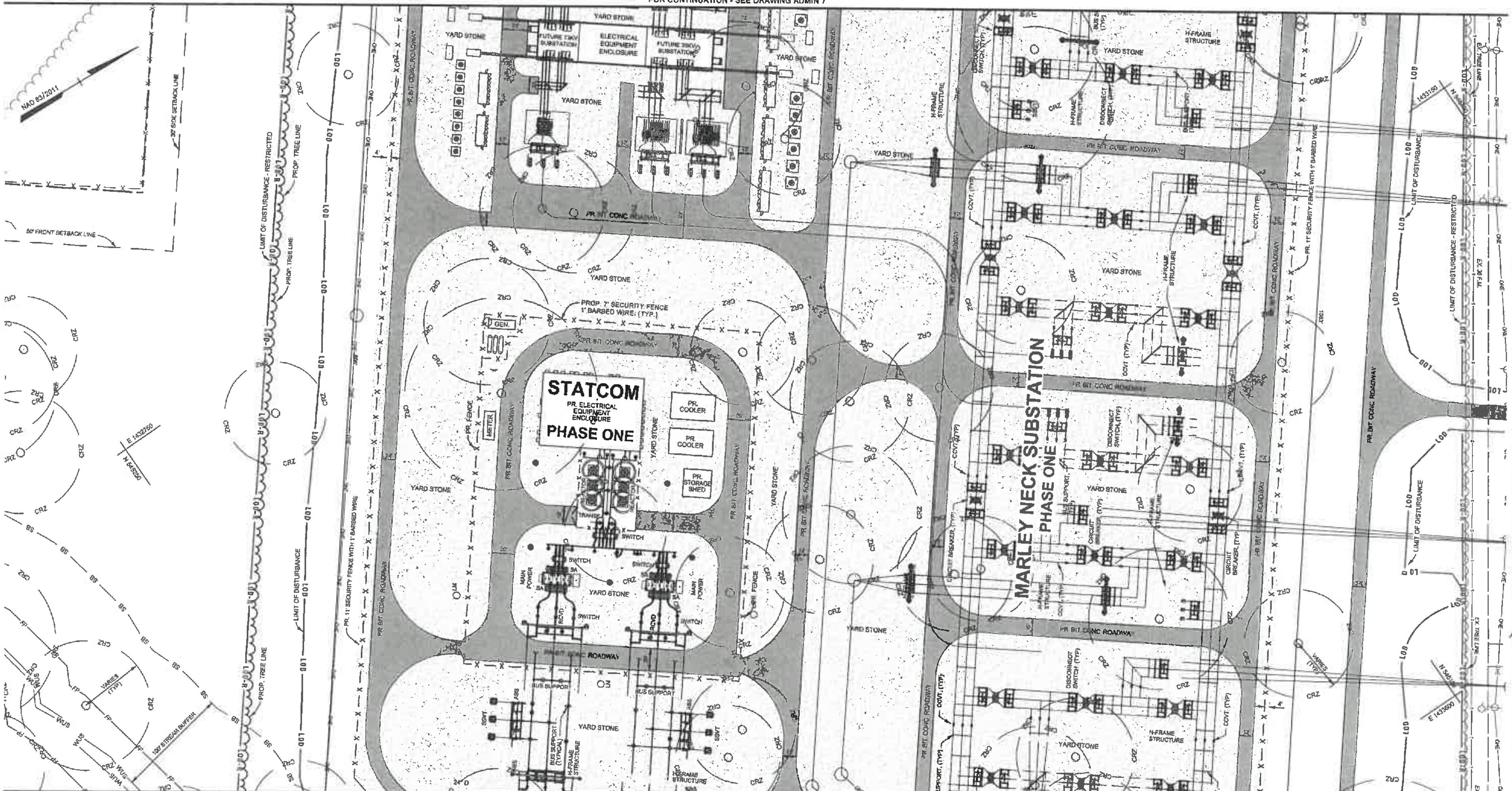
BALTIMORE GAS & ELECTRIC COMPANY
LOT B - SOUTH SOLLEY ROAD
GLEN BURNIE, ANNE ARUNDEL COUNTY, MD 21060
TAX MAP: 10 PARCEL: 397
115KV SUBSTATION

MARLEY NECK - SOLLEY

ELECTRIC SUBSTATION ENGINEERING

bge
SCALE: 1"=40'
DWG. NO. ADMIN 7 OF 12
REV. B

FOR CONTINUATION - SEE DRAWING ADMIN 7



FOR CONTINUATION - SEE DRAWING ADMIN 9

PLAN

SCALE: 1"=40'

0 40' 80'

PROFESSIONAL CERTIFICATION

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.

LICENSE NO.: 24814 EXPIRATION DATE: 2-28-26

KLEINFELDER
Bright People. Right Solutions.
10710 Gilroy Road
Hunt Valley, Maryland 21031
Phone: 443.569.2400
Project No. 2500795 008A

UPDATE YOUR PRINT TO REFLECT 'AS BUILT' STATE
& RETURN A COPY TO THE APPLICABLE DESIGN UNIT

REV	DATE	ACCOUNT NO.	DESCRIPTION	APPROVED
				PREP
				REVD
				APVD

AUTOCAD

ENGINEERING
CIVIL CENTURY ENGINEERING
ELEC.
PROJ. ENG.
PROJ. MGR.
PRIN. ENG.
SUPV. ENG.

DESIGN GROUP
DESIGNED R.G.B.
DRAWN M.S.S.
CHECKED R.G.B.
APPROVED —
DATE —

PHASE TWO
ADMINISTRATIVE SITE PLAN

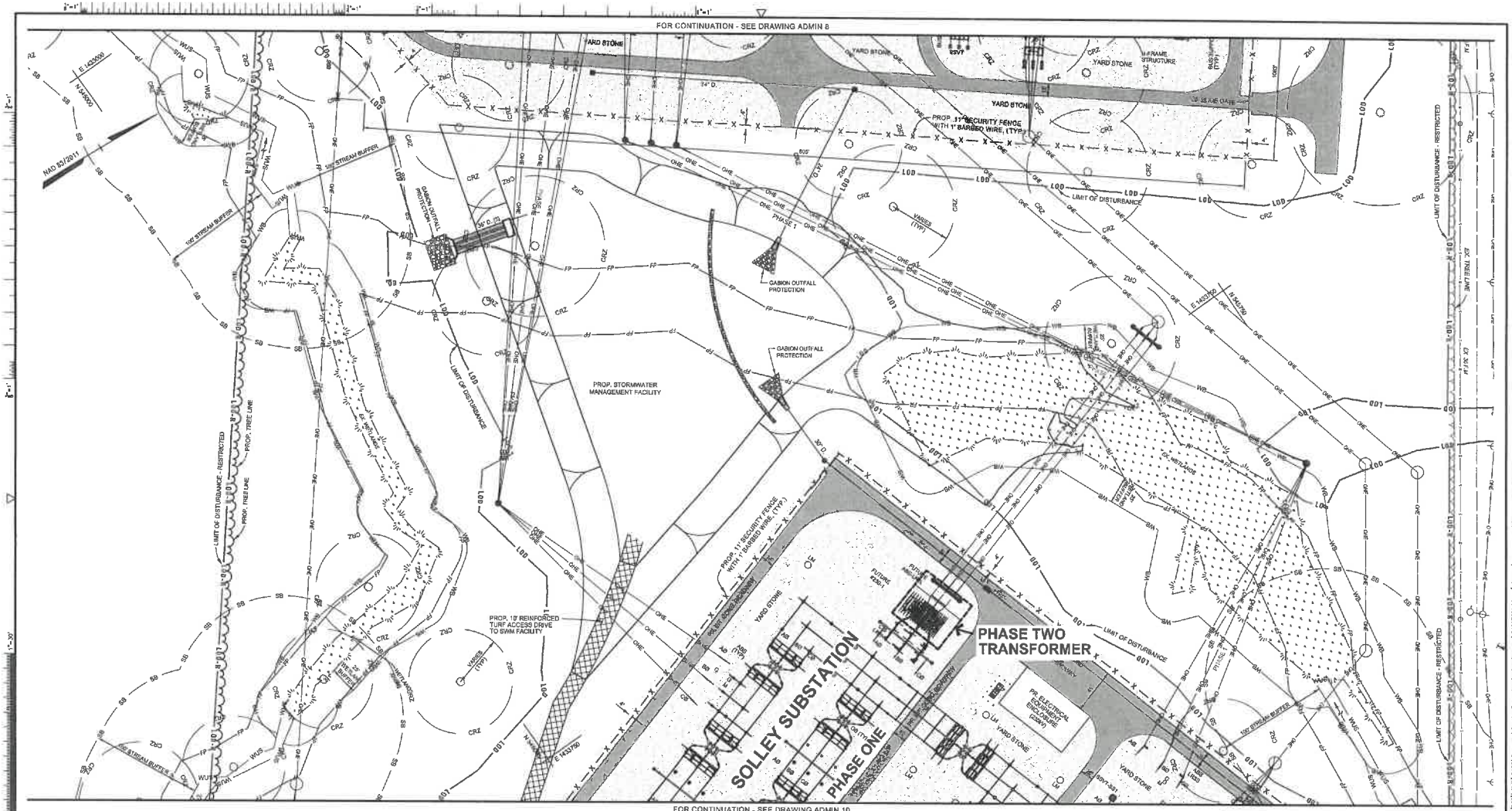
BALTIMORE GAS & ELECTRIC COMPANY
LOT 8 - SOUTH SOLLEY ROAD
GLEN BURNIE, ANNE ARUNDEL COUNTY, MD 21060
TAX MAP: 10 PARCEL: 397
115kV SUBSTATION

MARLEY NECK SUBSTATION

ELECTRIC SUBSTATION ENGINEERING

bge

SCALE: 1"=40'
DWG. NO. ADMIN 8 OF 12
REV. B



PLAN

SCALE: 1"=40'

0 40' 80'

UPDATE YOUR PRINT TO REFLECT 'AS BUILT' STATE & RETURN A COPY TO THE APPLICABLE DESIGN UNIT

REV	DATE	ACCOUNT NO.	DESCRIPTION	APPROVED
				PREP
				REVD
				APVD

AUTOCAD

ENGINEERING
CIVIL: CENTURY ENGINEERING
ELEC: ____
PROJ. ENG.: ____
PROJ. MGR.: ____
PRIN. ENG.: ____
SUPV. ENG.: ____

DESIGN GROUP
DESIGNED: R.G.B.
DRAWN: M.E.S.
CHECKED: R.G.B.
APPROVED: ____
DATE: ____

PHASE TWO
ADMINISTRATIVE SITE PLAN

BALTIMORE GAS & ELECTRIC COMPANY
LOT B - SOUTH SOLLEY ROAD
GLEN BURNIE, ANNE ARUNDEL COUNTY, MD 21060
TAX MAP: 19 PARCEL: 367
115kV SUBSTATION

MARLEY NECK/SOLLEY SUBSTATION
ELECTRIC SUBSTATION ENGINEERING

SCALE: 1"=40'
DWG. NO. ADMIN 9 OF 12
REV. B

PROFESSIONAL CERTIFICATION

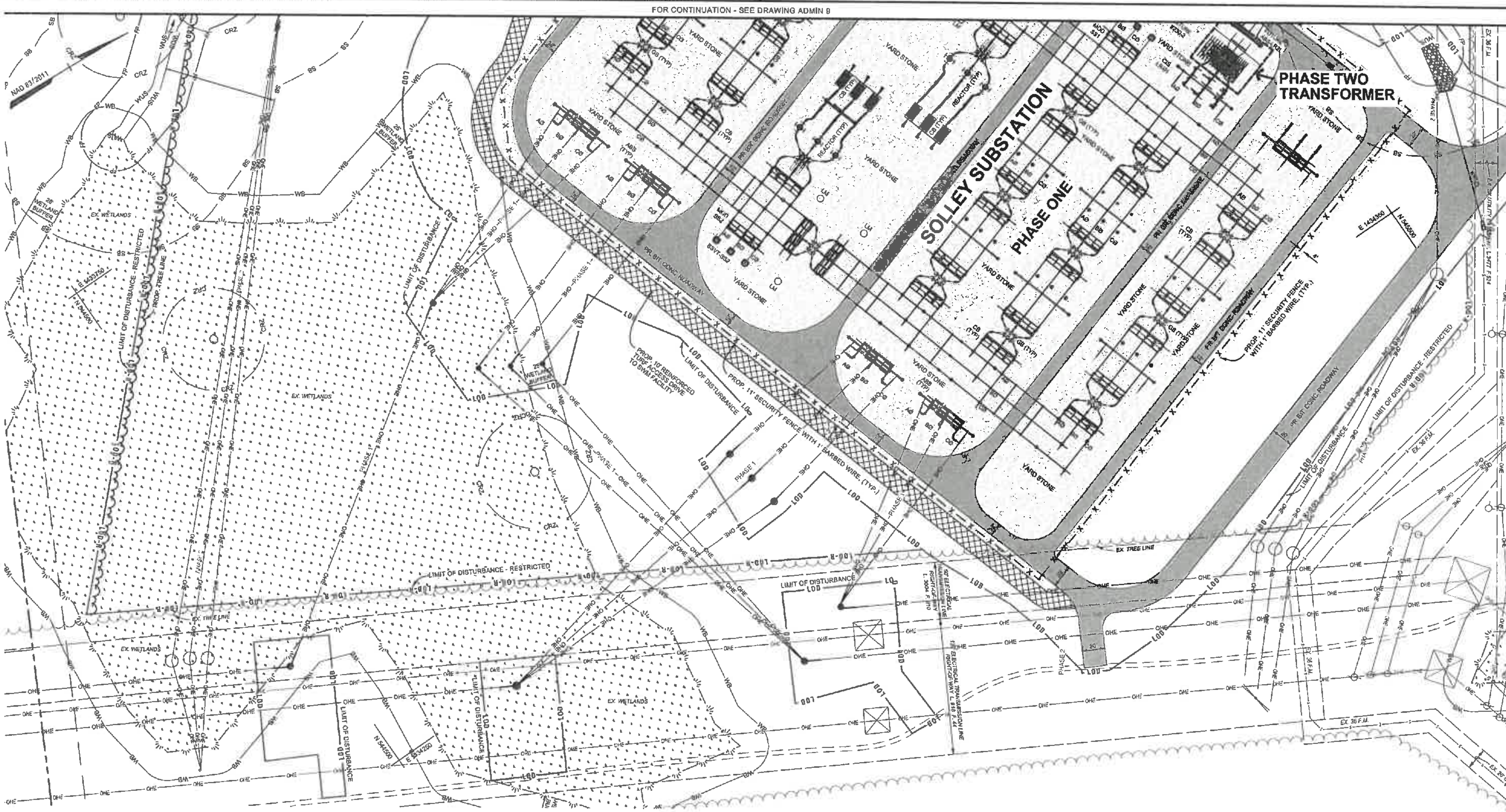
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.

LICENSE NO.: 24814 EXPIRATION DATE: 2-28-26

KLEINFELDER
Bright People. Right Solutions.
10710 Gilroy Road
Hunt Valley, Maryland 21031
Phone: 443.569.2400
Project No. 20200795.008A

bge

T:\2024\Workfiles\24003851.001A_BGE_Solley Road Substation (N98)\Civil\CAD\Drawings\Special Exception Zoning Package\24003851.001A (ADM-09) PhD=3 Administrative Site Plan.dwg Mar 20, 2025 - 12:20pm bbechtel



PLAN

SCALE: 1"=40'

0 40' 80'

PROFESSIONAL CERTIFICATION

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.

LICENSE NO.: 24814 EXPIRATION DATE: 2-28-26

KLEINFELDER
Bright People. Right Solutions.
10710 Gilroy Road
Hunt Valley, Maryland 21031
Phone: 443.589.2400
Project No. 2500796.008A

UPDATE YOUR PRINT TO REFLECT 'AS BUILT' STATE & RETURN A COPY TO THE APPLICABLE DESIGN UNIT

REV.	DATE	ACCOUNT NO.	DESCRIPTION	APPROVED
				PREP
				REVD
				APVD

AUTOCAD

ENGINEERING
CIVIL CENTURY ENGINEERING
ELEC.
PROJ. ENG.
PROJ. MGR.
PRIN. ENG.
SUPV. ENG.

DESIGN GROUP
DESIGNED R.G.B.
DRAWN M.S.S.
CHECKED R.G.B.
APPROVED —
DATE —

PHASE TWO
ADMINISTRATIVE SITE PLAN

BALTIMORE GAS & ELECTRIC COMPANY
LOT B - SOUTH SOLLEY ROAD
GLEN BURNIE, ANNE ARUNDEL COUNTY, MD 21060
TAX MAP: 10 PARCEL: 397
115kV SUBSTATION

MARLEY NECK - SOLLEY

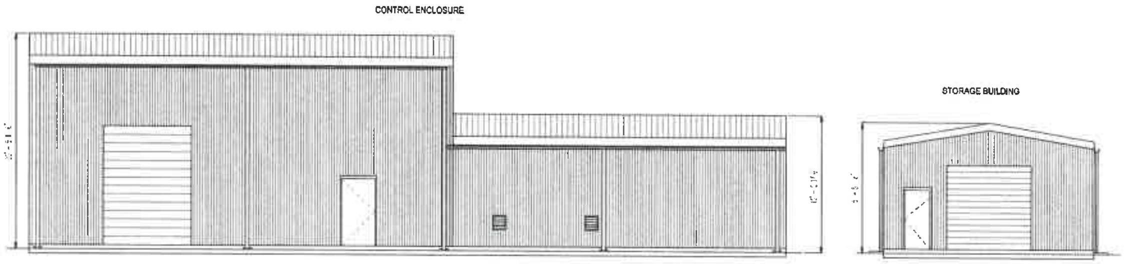
ELECTRIC SUBSTATION ENGINEERING

bge

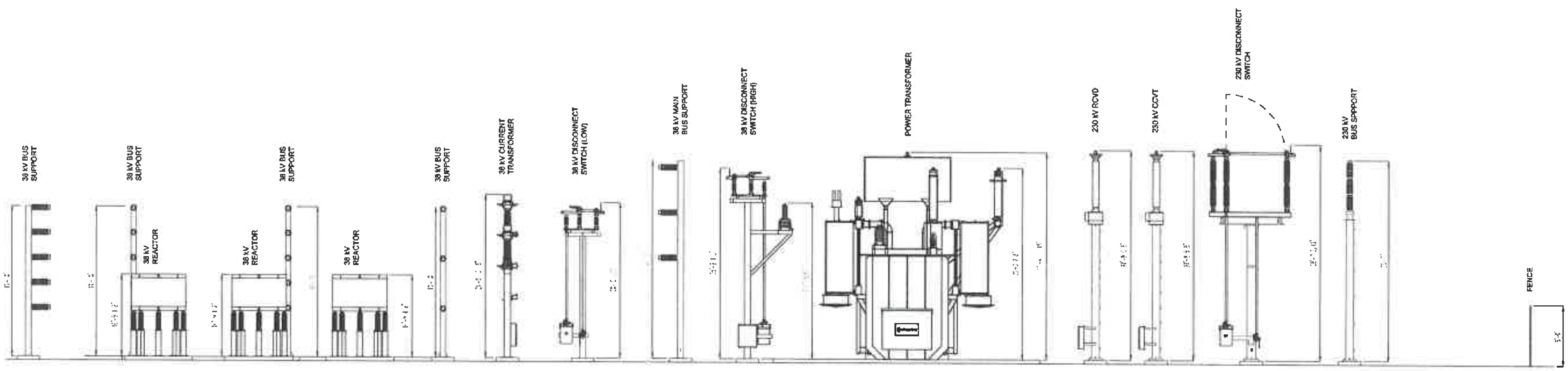
SCALE: 1"=40'

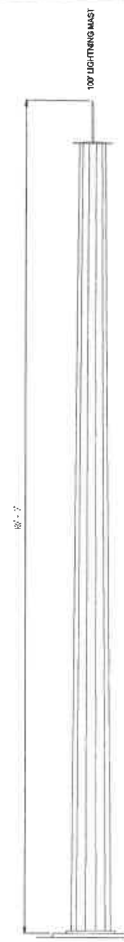
DWG. NO. ADMIN 10 OF 12

REV. B



STATCOM EQUIPMENT ENCLOSURE HEIGHT





STATCOM STRUCTURE HEIGHTS

PROFESSIONAL CERTIFICATION

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.

LICENSE NO.: 24814 EXPIRATION DATE: 2-28-26

KLEINFELDER
Bright People. Right Solutions.
10710 Gilroy Road
Hunt Valley, Maryland 21031
Phone: 443.589.2400
Project No. 2500796.008A

UPDATE YOUR PRINT TO REFLECT 'AS BUILT' STATE & RETURN A COPY TO THE APPLICABLE DESIGN UNIT

REV	DATE	ACCOUNT NO.	DESCRIPTION	APPROVED
				PREP
				REVD
				APVD

AUTOCAD

ENGINEERING
CIVIL: CENTURY ENGINEERING
ELEC.:
PROJ. ENG.:
PROJ. MGR.:
PRIN. ENG.:
SUPV. ENG.:

DESIGN GROUP
DESIGNED: R.G.B.
DRAWN: M.S.S.
CHECKED: R.G.B.
APPROVED: —
DATE: —

STRUCTURE HEIGHTS

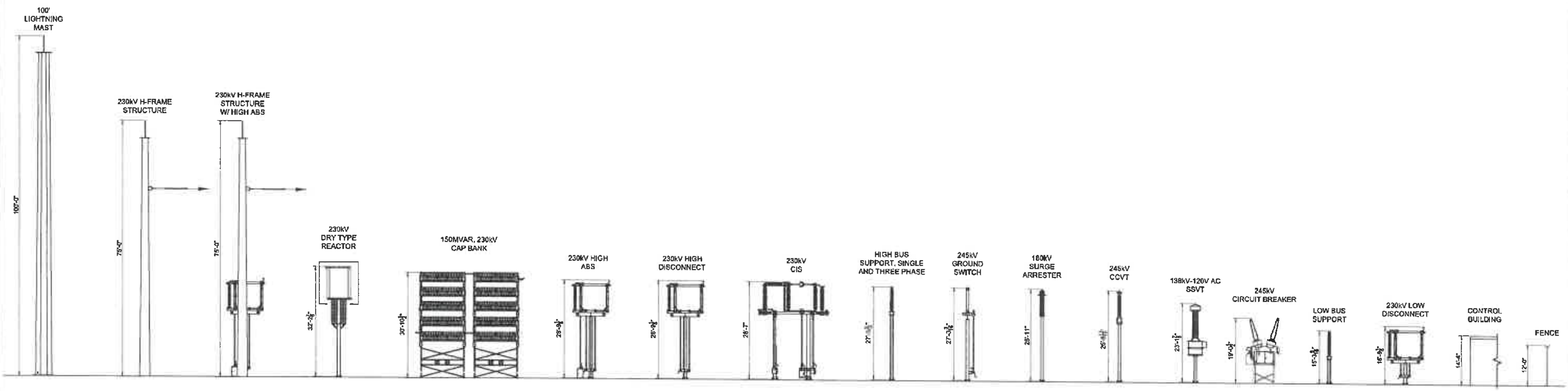
BALTIMORE GAS & ELECTRIC COMPANY
LOT 8 - SOUTH SOLLEY ROAD
GLEN BURNIE, ANNE ARUNDEL COUNTY, MD 21060
TAX MAP: 10 PARCEL: 397
230-115 kV SUBSTATION

SOLLEY ROAD STATCOM

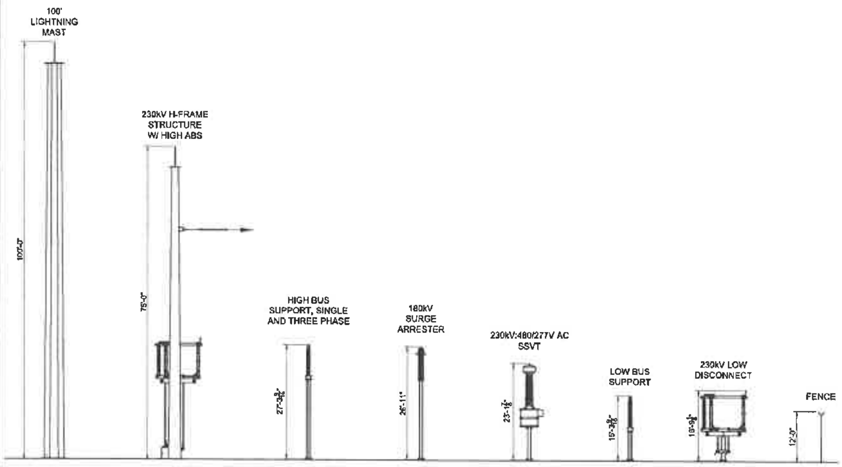
ELECTRIC SUBSTATION ENGINEERING

bge

SCALE: AS SHOWN
DWG. NO. ADMIN 11 OF 12
REV. B



SOLLEY ROAD STRUCTURE HEIGHTS



MARLEY NECK STRUCTURE HEIGHTS

EQUIPMENT LEGEND	
XFMR	TRANSFORMER
TRANS	TRANSFORMER
TRANSF	TRANSFORMER
SSVT	STATION SERVICE VOLTAGE TRANSFORMER
CCVT	COUPLING CAPACITOR VOLTAGE TRANSFORMER
CVT	CAPACITOR VOLTAGE TRANSFORMER
VT	VOLTAGE TRANSFORMER
PT	POTENTIAL TRANSFORMER
CT	CURRENT TRANSFORMER
CB	CIRCUIT BREAKER
GB	GAS CIRCUIT BREAKER
GCB	GAS CIRCUIT BREAKER
OCB	OIL CIRCUIT BREAKER
SA	SURGE ARRESTER
LA	LIGHTNING ARRESTER
DS	DISCONNECT SWITCH
ABS	AIR BREAK SWITCH
MOD	MOTOR OPERATED DISCONNECT
GND SW	GROUND SWITCH
GS	GROUND SWITCH
CIS	CIRCUIT SWITCHER
G	GROUND SWITCH OPERATING MECHANISM
M	MAIN SWITCH OPERATING MECHANISM
CAP BANK	CAPACITOR BANK
LM	LIGHTNING MAST
GEN	GENERATOR

UPDATE YOUR PRINT TO REFLECT 'AS BUILT' STATE & RETURN A COPY TO THE APPLICABLE DESIGN UNIT

PROFESSIONAL CERTIFICATION

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.

LICENSE NO.: 24814 EXPIRATION DATE: 2-28-26

KLEINFELDER
Bright People. Right Solutions.
10710 Gilroy Road
Hunt Valley, Maryland 21031
Phone: 443.589.2400
Project No. 2500795.008A

REV	DATE	ACCOUNT NO.	DESCRIPTION	APPROVED	
				PREP	
				REVD	
				APVD	

AUTOCAD

ENGINEERING
CIVIL CENTURY ENGINEERING
ELEC. ______
PROJ. ENG. ______
PROJ. MGR. ______
PRIN. ENG. ______
SUPV. ENG. ______

DESIGN GROUP
DESIGNED R.G.B.
DRAWN M.B.S.
CHECKED R.G.B.
APPROVED —
DATE —

STRUCTURE HEIGHTS

BALTIMORE GAS & ELECTRIC COMPANY
LOT B - SOUTH SOLLEY ROAD
GLEN BURNIE, ANNE ARUNDEL COUNTY, MD 21060
TAX MAP: 10 PARCEL: 397
230/38 kV STATCOM

MARLEY NECK - SOLLEY

ELECTRIC SUBSTATION ENGINEERING

bge

SCALE: AS SHOWN
DWG. NO. ADMIN 12 OF 12
REV. B

T:\2024\Facilities\24003657.001A BGE Solley Road Substation (RGB)\CIVIL\CADD\Drawings\Special Exception Zoning Package\24003657.001A (Admin-12) Ph2-6 Administrative Site Details.dwg Mar 19, 2025 11:31am bbathurst

APP. EXHIBIT# 6
CASE: 2025-0049-S
DATE: 5/15/25

BGE An Exelon Company

BALTIMORE GAS & ELECTRIC COMPANY
SOLLEY AND MARLEY NECK SUBSTATIONS
GLEN BURNIE ANNE ARUNDEL COUNTY, MARYLAND

STANDARD RESPONSIBILITY NOTES

1. I (WE) CERTIFY THAT:
   A. ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE IN ACCORDANCE WITH THIS SEDIMENT AND EROSION CONTROL PLAN, AND FURTHER, AUTHORIZE THE RIGHT OF ENTRY FOR PERIODIC ON-SITE EVALUATION BY THE ANNE ARUNDEL SOIL CONSERVATION DISTRICT (AASCD) BOARD OF SUPERVISORS OR THEIR AUTHORIZED AGENTS.
   B. ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE FROM THE MARYLAND DEPARTMENT OF THE ENVIRONMENT'S APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT.

      RESPONSIBLE PERSONNEL ON SITE: TBD

   C. IF APPLICABLE, THE APPROPRIATE ENCLOSURE WILL BE CONSTRUCTED AND MAINTAINED ON SEDIMENT BASIN(S) INCLUDED IN THIS PLAN. SUCH STRUCTURE(S) WILL BE IN COMPLIANCE WITH THE ANNE ARUNDEL COUNTY CODE.
2. THE DEVELOPER IS RESPONSIBLE FOR THE ACQUISITION OF ALL EASEMENTS, RIGHT, AND/OR RIGHTS-OF-WAY THAT MAY BE REQUIRED FOR THE SEDIMENT AND EROSION CONTROL PRACTICES, STORM WATER MANAGEMENT PRACTICES AND THE DISCHARGE OF STORM WATER ONTO OR ACROSS ADJACENT OR DOWNSTREAM PROPERTIES INCLUDED IN THE PLAN.
3. FOR INITIAL SOIL DISTURBANCE OR RE-DISTURBANCE, PERMANENT AND/OR TEMPORARY STABILIZATION PER THE AASCD VEGETATIVE ESTABLISHMENT SHALL BE COMPLETED WITHIN THREE CALENDAR DAYS FOR THE SURFACE OF ALL CONTROLS, DIKES, SWALES, DITCHES, PERIMETER SLOPES AND ALL SLOPES GREATER THAN 3 HORIZONTAL TO 1 VERTICAL (3:1); AND SEVEN DAYS FOR ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE.
4. THE GRADING AND SEDIMENT CONTROL APPROVAL ON THIS PLAN EXTENDS ONLY TO THOSE AREAS WITHIN THE LIMITS OF DISTURBANCE.
5. THE APPROVAL OF THIS PLAN FOR SEDIMENT AND EROSION CONTROL DOES NOT RELIEVE THE DEVELOPER/CONSULTANT FROM COMPLYING WITH FEDERAL, STATE OR COUNTY REQUIREMENTS PERTAINING TO ENVIRONMENTAL ISSUES.
6. THE DEVELOPER MUST REQUEST THAT THE SEDIMENT AND EROSION CONTROL INSPECTOR APPROVE WORK COMPLETED IN ACCORDANCE WITH THE APPROVED EROSION AND SEDIMENT CONTROL PLAN, THE GRADING OR BUILDING PERMIT, AND THE ORDINANCE.
7. ALL MATERIAL SHALL BE TAKEN TO A SITE WITH AN APPROVED SEDIMENT AND EROSION CONTROL PLAN.
8. FIRST PHASE INSPECTION AND APPROVAL OF THE SEDIMENT AND EROSION CONTROL INSPECTOR SHALL BE REQUIRED UPON COMPLETION OF THE INSTALLATION OF EROSION AND SEDIMENT CONTROLS PRIOR TO PROCEEDING WITH ANY OTHER EARTH DISTURBANCE OR GRADING. OTHER BUILDING OR GRADING INSPECTION APPROVALS MAY NOT BE AUTHORIZED UNTIL THE INITIAL APPROVAL BY THE SEDIMENT AND EROSION CONTROL INSPECTOR IS GIVEN. INSPECTION AND PERMITS MAY ALSO REQUIRE THAT AN INSPECTION AND CERTIFICATION OF THE INSTALLATION OF SEDIMENT CONTROL ALSO BE PERFORMED BY A DESIGN PROFESSIONAL PRIOR TO CONSTRUCTION COMMENCING.
9. APPROVAL FROM THE INSPECTOR MUST BE REQUESTED ON FINAL STABILIZATION OF ALL SITES PRIOR TO REMOVAL OF SEDIMENT AND EROSION CONTROLS.
10. EXISTING TOPOGRAPHY MUST BE FIELD VERIFIED BY RESPONSIBLE PERSONNEL TO THE SATISFACTION OF THE SEDIMENT CONTROL INSPECTOR PRIOR TO COMMENCING WORK.

SIGNATURE OF DEVELOPER/OWNER ____ DATE ____

NAME (PRINT): ____
TITLE: ____
AFFILIATION: ____
ADDRESS: ____
TELEPHONE NUMBER ____
EMAIL ADDRESS: ____

CONSULTANT'S CERTIFICATION

"THE DEVELOPER'S PLAN TO CONTROL SILT AND EROSION IS ADEQUATE TO CONTAIN THE SILT AND EROSION ON THE PROPERTY COVERED BY THE PLAN. I CERTIFY THAT THIS PLAN OF EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THIS SITE, AND WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE ANNE ARUNDEL SOIL CONSERVATION DISTRICT PLAN SUBMITTAL GUIDELINES AND THE CURRENT MARYLAND STANDARDS AND SPECIFICATIONS FOR SEDIMENT AND EROSION CONTROL. I HAVE REVIEWED THIS EROSION AND SEDIMENT CONTROL PLAN WITH THE OWNER/DEVELOPER."

SIGNATURE ____ MD P.E. LICENSE #: 24814 DATE ____
MD LAND SURVEYOR LICENSE # ____ DATE ____
NAME (PRINT) ROBERT G. BATHURST FIRM NAME: CENTURY ENGINEERING INC.
ADDRESS: 10710 GILROY RD HUNT VALLEY MD 21031

STORMWATER MANAGEMENT RECORD DRAWING CERTIFICATION

THIS CERTIFIES TO THE BEST OF MY PROFESSIONAL BELIEF AND KNOWLEDGE, THE APPROVED S.W.M. SYSTEM(S) AS SHOWN HEREON HAVE BEEN CONSTRUCTED IN SUCH A MANNER THAT WOULD BE CONSISTENT WITH THE APPROVED PLANS. ANY CHANGES/MODIFICATIONS ARE SHOWN IN RED.

PROFESSIONAL'S NAME (PRINTED) SIGNATURE LICENSE NUMBER DATE

OWNER/PERMITTEE ACKNOWLEDGEMENT

"ALL GRADING, DRAINAGE, STRUCTURES, AND EROSION AND SEDIMENT CONTROL PRACTICES INCLUDING FACILITIES AND VEGETATIVE MEASURES HAVE BEEN COMPLETED IN CONFORMANCE WITH APPROVED PLANS."

OWNER/PERMITTEE'S NAME (PRINTED) OWNER/PERMITTEE'S SIGNATURE DATE

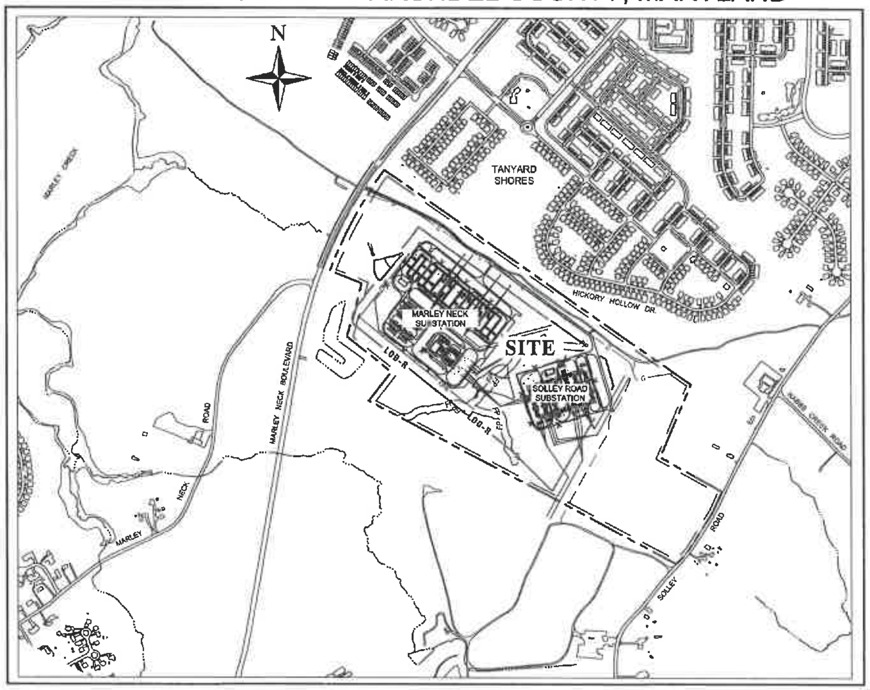
Statement of Accessibility Review

I hereby certify that these plans have been designed in conformance with the 2010 ADA Standards for Accessible Design, County Code, Maryland Accessibility Code and Accessible and Usable Buildings and Facilities-ICC A117.1-2009 standard.

Print Name ____
Signature ____ Date ____

BENCHMARKS

COORDINATES, BEARINGS AND DISTANCES ARE [...] MARYLAND STATE PLANE COORDINATE SYSTEM [...] TIED TO THE FOLLOWING LEICA SMART NET NGS [...] NETWORK STATIONS:
LOYF-0371 N 478639.2591 E 1446171.0640 ELEV. 61.4657 MOAN-0368N 533581.9886 E 1371782.9323 ELEV. 226.5004



LOCATION MAP

SCALE: 1"=500'

DRAWING INDEX

Number	Sheet Title
1	Cover Sheet
2	General Notes
3	Existing Drainage Area Map to POI
4	Existing Drainage Area Map to POI
5	Proposed Drainage Area Map to POI
6	Proposed Drainage Area Map to POI
7	ESD Facilities Drainage Area Map
8	ESD Facility #1 - Non-Rooftop Disconnect
9	ESD Facility #2 - Extended Detention Pond Plan
10	ESD Facility #2 - Extended Detention Pond Details
11	ESD Facility #3 - Infiltration Basin Plan
12	ESD Facility #3 - Infiltration Basin Riser Details
13	ESD Facility #3 - Infiltration Basin Profiles and Details
14	SmartSWM Details

SITE ANALYSIS

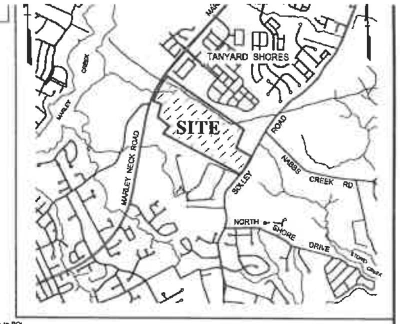
LAND AREA WITHIN THE SOLLEY SUBSTATION FENCE = 339,317 SQ. FT. OR 7.79 ACRES
LAND AREA WITHIN THE MARLEY NECK SUBSTATION FENCE (INCLUDES STATCOM AREA) = 851,872 SQ. FT. OR 19.56 ACRES
APPROXIMATE AREA OF FOREST CLEARING ASSOCIATED WITH SOLLEY SUBSTATION = 1,058,700 SQ. FT. OR 24.3 ACRES
APPROXIMATE AREA FOREST CLEARING ASSOCIATED WITH MARLEY NECK SUBSTATION FENCE (INCLUDES STATCOM AREA) = 1,455,869 SQ. FT. OR 33.4 ACRES
TOTAL AREA OF FOREST CLEARING = 2,514,369 SQ. FT. OR 57.7 ACRES
AREA OF CONVENTIONAL SITE GRADING = 1,995,544 SQ. FT. OR 45.8 ACRES
AREA OF RESTRICTED SITE GRADING [LOD-R] = 796,946 SQ. FT. OR 18.3 ACRES
TOTAL AREA OF DISTURBANCE = 2,793,490 SQ. FT. OR 64.1 ACRES
AREA TO BE VEGETATIVELY STABILIZED = xxxxx SQ. FT. OR xx.x ACRES
CUT
FILL:
TOPSOIL:

CALL "MISS UTILITY" AT 1-800-257-7777 48 Hours Before Start Of Construction

LIMIT OF DISTURBANCE

2,793,490 SQ. FT. OR 64.1 ACRES

SEQUENCE OF CONSTRUCTION; OUTFALL STATEMENT: SEE SHEET 2



VICINITY MAP

SCALE: 1"=2000'

SITE DATA

1. OWNER / DEVELOPER: Baltimore Gas & Electric Company, 110 W Fayette Street, 2 Center Plaza, 14th Floor, Baltimore, MD 21201, Contact: Jerome Wilson Jr, (667) 313-2156
2. SITE ADDRESS: Solley Road, Glen Burnie, Maryland 21060
3. # OF EXISTING PARCELS: 1
4. NET TRACT AREA: 125.30 AC
5. DEED REFERENCE: 39155 / 450
6. TAX ACCOUNT: 90075351
7. TAX MAP/ GRID/ PARCEL: 0010 / 0017 / 397 / B
8. ZONING: W1 - INDUSTRIAL PARK
9. WATER SERVICE AREA: GLEN BURNIE LOW
10. SEWER SERVICE AREA: COX CREEK
11. FEMA FIRM MAP #: 24003C0062F
12. 100 YR FLOODPLAIN: N/A
13. TIDAL/NONTIDAL WETLANDS: NONTIDAL WETLANDS
14. WATERSHED:
    6-DIGIT: 021309 PATAPSCO RIVER
    8-DIGIT: 02130903 BALTIMORE HARBOR
15. THIS SITE IS NOT WITHIN THE CHESAPEAKE BAY CRITICAL AREA.
16. THIS SITE IS NOT WITHIN THE BWI 4-MILE AIRPORT DISTRICT.
17. EXISTING USE: FOREST AND PUBLIC UTILITY
18. PROPOSED USE: FOREST AND PUBLIC UTILITY
19. PARKING SUMMARY
    EXISTING: 0
    PROPOSED: 0

UPDATE YOUR PRINT TO REFLECT 'AS BUILT' STATE & RETURN A COPY TO THE APPLICABLE DESIGN UNIT

PROFESSIONAL CERTIFICATION

I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed Professional Engineer under the laws of the State of Maryland.

License No.: 24814 Expiration Date: 2-28-26

KLEINFELDER
Bright People. Right Solutions.
10710 Gilroy Road
Hunt Valley, Maryland 21031
Phone: 443.589.2400
Project No. 25000796.006A

REV	DATE	ACCOUNT NO.	DESCRIPTION

APPROVED	AUTOCAD
PREP	ENGINEERING
REVD	CIVIL CENTURY ENGINEERING
APVD	ELEC.
	PROJ. ENG.
	PROJ. MGR.
	PRIN. ENG.
	SUPV. ENG.
	DESIGN GROUP
	DESIGNED R.G.B.
	DRAWN M.S.S.
	CHECKED R.G.B.
	APPROVED ---
	DATE ---

COVER SHEET

BALTIMORE GAS & ELECTRIC COMPANY
LOT B - SOUTH SOLLEY ROAD
GLEN BURNIE, ANNE ARUNDEL COUNTY, MD 21060
TAX MAP: 10 PARCEL: 397
115kV SUBSTATION

SOLLEY SUBSTATION

ELECTRIC SUBSTATION ENGINEERING

bge AN EXELON COMPANY

SCALE: ---
DWG. NO. SDP-001
REV. B

T:\2024\facilities\24003851.001a bge solley road substation (rgb)\CIVIL\CADD\Drawings\SWM Concept Plans\24003851.001A (SWM-01) Cover Sheet.dwg Mar 18, 2025 3:31pm dahandahan

LEGEND

EXISTING

Item	Symbol
Tract Boundary	
Property Line	
Easement Line	
Minor Contour	
Major Contour	670
Edge of Paving	
Curb and Gutter	
Storm Drain	EX 15" D, SD
Water & Fire Hydrant	W, EX 12" W
Sanitary Sewer	EX 8" S, S
Underground Electric	UGE
Overhead Electric	OHE
Cable Television	CTV
Gas and Valve	G, EX 4" GAS (HP), G, GV
Power/Utility Pole	BGE #542437
Street Light	
Utility Pole Guy Wire	
Sign	
Electric Structure	
Fence Line	X — X — X
Building	
Soils Line	GhC, MaD
Tree Line	
Deciduous Tree	
Evergreen Tree	
100-Year Floodplain	FP
Natural Surface Trail	

DEMOLITION

Item	Symbol
Line to be Removed	
Pavement to be Removed	
Tree to be Removed	

PROPOSED

Item	Symbol
Limit of Disturbance	LOD
Minor Contour	672
Major Contour	670
Spot Elevation	+143.6
Easement Line	
Sanitary Sewer	PROP. 8" S.
Water and Fire Hydrant	PROP. 8" W.
Storm Drain	PROP. 18" D.
Curb & Gutter	
Asphalt Paving	
Concrete	
Building	
Chain Link Fence	X — X — X
Wall	
Natural Surface Trail	
Tree Line	
Shade Tree	
Flowering Tree	
Evergreen Tree	
Shrubs	
Perennials	
Pollinator Seed Mix	

EROSION & SEDIMENT CONTROL

Item	Symbol
Drainage Area	
Silt Fence	SF
Super Silt Fence	SSF
Super Fence Diversion	SFD
Silt Fence on Paving	SFOP
Super Silt Fence on Paved Area	SSFOP
Same Day Stabilization	SDS
Diversion Fence	DF
High Visibility Fence	HVF
Crossable Swale	
Temporary Swale	
Earth Dike	A-2
Perimeter Dike/Swale	
Curb Inlet Protection	CIP
At Grade Inlet Protection	AGIP
Stone Check Dam	CD
Temporary Gabion Outlet Structure	TGOS
Mountable Berm	
Stabilized Construction Entrance	SCE
Removable Pumping Station	RPS
Gabion Inflow Protection	GM
Rip Rap Inflow Protection	RRP
Rock Outlet Protection	ROP

LEGEND NOTES:

1. ALL ITEMS SHOWN MAY NOT BE PRESENT ON ALL SHEETS.
2. SUPPLEMENTAL SHEET-SPECIFIC LEGENDS WITH ADDITIONAL ITEMS MAY BE PRESENT ON INDIVIDUAL SHEETS.

GENERAL NOTES

1. ALL CONSTRUCTION SHALL COMPLY WITH ANNE ARUNDEL COUNTY STANDARDS.
2. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS REQUIRED BY GOVERNMENT AGENCIES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS FROM ANNE ARUNDEL COUNTY DEPARTMENTS REQUIRED TO PERFORM THE WORK. THE CONTRACTOR SHALL POST ALL BONDS PAY ALL FEES, PROVIDE PROOF OF INSURANCE AND PROVIDE TRAFFIC CONTROL NECESSARY FOR THIS WORK.
3. EXISTING FEATURES AND UTILITIES SHOWN HAVE BEEN BASED UPON SURVEYS AND OTHER SOURCES BELIEVED TO BE RELIABLE. THE CORRECTNESS OR COMPLETENESS OF THE INFORMATION SHOWN IS NOT GUARANTEED. THE CONTRACTOR SHALL VERIFY ALL INFORMATION BEFORE COMMENCING WORK.
4. THE CONTRACTOR SHALL VERIFY HORIZONTAL AND VERTICAL DATUM WITH THE SURVEYOR OF RECORD BEFORE STARTING WORK.
5. CONSTRUCTION SHALL FOLLOW THE SEQUENCE OF CONSTRUCTION ON THE APPROVED EROSION AND SEDIMENT CONTROL DRAWINGS.
6. THE CONTRACTOR SHALL MAINTAIN TRAFFIC AT ALL TIMES, IF APPLICABLE.
7. PROPER CONSTRUCTION PROCEDURES SHALL BE FOLLOWED ON ALL IMPROVEMENTS ON SITE SO AS TO PREVENT THE SILTING OF ANY WATERCOURSE OR WETLANDS IN ACCORDANCE WITH THE REGULATIONS OF MDE & AASCD GUIDELINES FOR SOIL EROSION AND SEDIMENT POLLUTION CONTROL. IN ADDITION, HEREIN, THE CONTRACTOR SHALL STRICTLY ADHERE TO THE "EROSION AND SEDIMENT CONTROL PLAN" CONTAINED. THE CONTRACTOR SHALL BE RESPONSIBLE TO POST ALL BONDS AS REQUIRED BY ANNE ARUNDEL SOIL CONSERVATION DISTRICT WHICH GUARANTEE THE PROPER IMPLEMENTATION OF THE PLAN.
8. THE CONTRACTOR SHALL MAINTAIN, REPAIR, AND/OR REPLACE ANY EXISTING SEDIMENT CONTROL DEVICES ENCOUNTERED AND DISTURBED DURING THE COURSE OF CONSTRUCTION. AT THE END OF EACH DAY, ALL MEASURES AND DEVICES SHALL BE REPAIRED OR REPLACED BEFORE LEAVING THE WORK SITE.
9. ALL FILL MATERIAL UNDER STRUCTURES AND UNDER PAVED AREAS SHALL BE "LOAD BEARING FILL" (COARSE AGGREGATE CRUSHED STONE) AND SHALL BE PLACED IN ACCORDANCE WITH THE REQUIREMENTS OF MD SHA, UNDER THE SUPERVISION OF A QUALIFIED PROFESSIONAL ENGINEER. COMPACTION SHALL BE 95% MIN MODIFIED PROCTOR DENSITY PER ASTM D1557 AT 2 PERCENT OF OPTIMUM MOISTURE CONTENT.
10. ALTERNATIVE METHODS AND PRODUCTS OTHER THAN THOSE SPECIFIED MAY BE USED IF REVIEWED AND APPROVED BY THE OWNER, ENGINEER, AND APPROPRIATE REGULATORY AGENCIES PRIOR TO INSTALLATION.
11. THE CONTRACTOR SHALL RESTORE ANY UTILITY STRUCTURE, PIPE, UTILITY, PAVEMENT, CURBS, SIDEWALKS OR LANDSCAPED AREAS DISTURBED DURING CONSTRUCTION TO THEIR ORIGINAL CONDITION OR BETTER.
12. TOPSOIL SHALL BE STRIPPED AND STOCKPILED FOR USE IN FINAL LANDSCAPING.
13. NUMERICALLY WRITTEN DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALED DIMENSIONS.
14. UNLESS OTHERWISE NOTED, DIMENSIONS FROM CURB ARE MEASURED AT FACE OF CURB.
15. REFER TO THE DETAIL SHEETS FOR PAVEMENT, CURBING, AND SIDEWALK INFORMATION.
16. CONTRACTOR SHALL SAWCUT PAVEMENT WHERE UTILITIES ARE TO BE INSTALLED IN PAVEMENT.
17. ALL PIPES SHALL BE LAID ON STRAIGHT ALIGNMENTS AND EVEN GRADES USING A PIPE LASER OR OTHER APPROVED ACCURATE METHOD.
18. THE CONTRACTOR SHALL COMPACT THE PIPE AND SITE BACKFILL IN 6" LIFTS ACCORDING TO THE PIPE BEDDING DETAIL. TRENCH BOTTOM SHALL BE STABLE IN HIGH GROUND WATER AREAS. A PIPE FOUNDATION SHALL BE USED IN AREAS OF ROCK EXCAVATION.
19. CONTRACTOR IS RESPONSIBLE FOR ALL TRENCHING, BACKFILL AND PADS FOR ELECTRIC UTILITIES. THE CONTRACTOR SHALL CONTACT ANNE ARUNDEL COUNTY PUBLIC WORKS REGARDING CONNECTIONS AND CONSTRUCTION.
20. ELECTRIC, TELEPHONE, GAS, CABLE, AND LIGHTING TO BE DESIGNED BY OTHERS. WHERE THOSE FACILITIES ARE SHOWN, THEY ARE FOR COORDINATION PURPOSES ONLY.
21. CONTRACTOR SHALL VERIFY LOCATIONS AND EXISTENCE OF UTILITY SERVICES AND MAINS PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL CONTACT "MISS UTILITY" 1-800-257-7777 AT LEAST FIVE (5) DAYS PRIOR TO CONSTRUCTION. CONTRACTOR TO TEST PIT WHERE NECESSARY TO VERIFY EXISTING UTILITIES.
22. THE CONTRACTOR SHALL TAKE NECESSARY PRECAUTIONS TO PROTECT THE FACILITIES OF THE COUNTY AND OTHER UTILITIES DURING CONSTRUCTION. EXCAVATION AND CONSTRUCTION SHALL BE PERFORMED WITH EXTREME CARE TO PREVENT DAMAGE TO FACILITIES.
23. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY SHOULD ANY DISCREPANCY REGARDING THE PROPOSED WORK OR UNFORESEEN CONDITIONS ARISE, PRIOR TO PROCEEDING FURTHER WITH THE AFFECTED WORK.
24. ALL DISTURBANCES INCURRED TO ANY ADJOINING PROPERTY DUE TO CONSTRUCTION OR DEMOLITION SHALL BE RESTORED TO THE PREVIOUS CONDITION OR BETTER, TO THE SATISFACTION OF ANNE ARUNDEL COUNTY AND/OR THE INVOLVED LAND OWNERS.
25. ANY DAMAGE DONE DURING CONSTRUCTION TO PARK FACILITIES TO BE REPAIRED OR REPLACED AT THE CONTRACTOR'S EXPENSE.
26. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY WORK NOT SPECIFICALLY MENTIONED ON THE PLANS WHICH NORMALLY WOULD BE REQUIRED TO COMPLETE THE PROJECT.

STORM DRAIN GENERAL NOTES

1. UNLESS OTHERWISE NOTED, ALL STORM DRAIN CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST ANNE ARUNDEL COUNTY DESIGN MANUAL AND STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION.
2. EXISTING FEATURES AND UTILITIES SHOWN HAVE BEEN BASED UPON SURVEYS AND OTHER SOURCES BELIEVED TO BE RELIABLE. THE CORRECTNESS OR COMPLETENESS OF THE INFORMATION SHOWN IS NOT GUARANTEED. THE CONTRACTOR SHALL VERIFY ALL INFORMATION BEFORE COMMENCING WORK.
3. THE CONTRACTOR SHALL NOTIFY MISS UTILITY AT 1-800-257-7777 A MINIMUM OF FIVE (5) WORKING DAYS PRIOR TO CONSTRUCTION.
4. THE CONTRACTOR SHALL MAINTAIN, REPAIR, AND/OR REPLACE ANY EXISTING SEDIMENT CONTROL DEVICES ENCOUNTERED AND DISTURBED DURING THE COURSE OF CONSTRUCTION. AT THE END OF EACH DAY ALL MEASURES AND DEVICES SHALL BE REPAIRED OR REPLACED BEFORE LEAVING THE WORK SITE.
5. CONSTRUCTION SHALL FOLLOW THE SEQUENCE OF CONSTRUCTION ON THE APPROVED EROSION AND SEDIMENT CONTROL DRAWINGS.
6. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS AND INSPECTIONS.
7. THE CONTRACTOR SHALL MAINTAIN TRAFFIC AT ALL TIMES, IF APPLICABLE.
8. NUMERICALLY WRITTEN DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALED DIMENSIONS.
9. UNLESS OTHERWISE NOTED, DIMENSIONS FROM CURB ARE MEASURED AT FACE OF CURB.
10. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION AND DEPTH OF ALL EXISTING UTILITIES, AS NECESSARY, REPORT ANY DISCREPANCIES FROM THE PLANS TO CENTURY ENGINEERING, LLC. THE CONTRACTOR SHALL VERIFY ALL INVERT ELEVATIONS PRIOR TO INSTALLING ANY PIPE.
11. ALL UTILITIES SHALL BE RETAINED UNLESS LABELED OTHERWISE.
12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS AND WORK REQUIRED TO ADJUST EXISTING AND PROPOSED UTILITIES AND APPURTENANCES TO FINISHED GRADES WITHIN THE LIMITS OF WORK.
13. DAMAGE TO EXISTING CONDITIONS AND UTILITIES SHALL BE REPAIRED TO THE OWNER'S SATISFACTION AT THE EXPENSE OF THE CONTRACTOR.
14. EXISTING UTILITIES WHICH ARE NOT TO BE REMOVED OR ABANDONED SHALL REMAIN OPERATIONAL AT ALL TIMES. APPROPRIATE EXISTING UTILITIES SHALL REMAIN IN SERVICE UNTIL REPLACEMENT/RELOCATED UTILITIES ARE OPERATIONAL, UNLESS OTHERWISE NOTED.
15. THE CONTRACTOR SHALL MAINTAIN 2.0 FEET MINIMUM COVER OVER ALL UTILITIES DURING CONSTRUCTION.
16. ELECTRIC, TELEPHONE, GAS, CABLE, AND LIGHTING TO BE DESIGNED BY OTHERS, WHERE THOSE FACILITIES ARE SHOWN, THEY ARE FOR COORDINATION PURPOSES ONLY.
17. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY WORK NOT SPECIFICALLY MENTIONED ON THE PLANS WHICH NORMALLY WOULD BE REQUIRED TO COMPLETE THE PROJECT.
18. THE CONTRACTOR SHALL VERIFY HORIZONTAL AND VERTICAL DATUM WITH THE SURVEYOR OF RECORD BEFORE STARTING WORK.

SEQUENCE OF CONSTRUCTION

1 DAY — 1. Notify the department of inspections and permits (410-222-7780) at least 48 hours before commencing work. Work may not commence until the permittee or the responsible personnel have met on site with the sediment and erosion control inspector to review the approved plans. Contact Miss Utility (1-800-257-7777) and mark all proposed excavation in white at least 5 days prior to beginning any construction or demolition.

PHASE 1

7 DAYS — 2. Prior to beginning any construction or demolition on this site, install tree protective fence as shown*. After tree protective fencing is installed, install construction fence, stabilized construction entrance (SCE), and reinforced reinforced silt fence and super silt fence. Clear the minimum area to install sediment controls and sediment traps as shown.

1 DAY — 3. Once sediment controls and traps have been installed, install dikes and swales which contribute to traps. Contact the inspector for approval of sediment control installation prior to starting work.

NOTE: Inspections and permits may require that an inspection and certification of the installation of sediment control also be performed by a design professional prior to construction commencing.

60 DAYS — 4. With the Sediment Control Inspector's approval, install Sediment Trap#1. With 3-day dry weather forecast, begin clean water diversions-structures and pipes starting with I-2A,M-2C,M-2B and R-2. If water is present in the existing pond, use removable pumping station and filter bag. Install M-2A, I-2, M-2 and E-2 with rip-rap outlet protection. Stabilize areas as installation is completed. Install inlet protection as inlets are installed (needed in phase 2). Once completed, during another 3-day dry weather forecast, install I-1A, E-1A with minor grading and rip-rap. Install inlet protection for I-1A. Repair any sediment controls disturbed by the process as storm drain installation proceeds. During a subsequent 3-day dry weather forecast, install Sediment Traps 1 and 2 with associated earth dike and temporary swale.

5. Once clean water diversions are constructed, contact the inspector for approval prior to beginning work.

PHASE 2

180 DAYS — 6. Begin demolition work as shown on sheet 4. Begin site grading, storm drains (not already constructed as clean water diversions) and utilities. Begin restroom building construction. Install curb and gutter, barrier curb and paving base course. Install inlet protection as inlets are installed.

7. Repair sediment controls at the end of each day as necessary as grading progresses.
8. Stabilize slopes and reposition SSF as construction progresses.
9. Install sub base for road and parking areas.

PHASE 2A

30 DAYS — 10. With the Sediment Control Inspector's permission, once all areas are stabilized, remove sediment traps and install additional SSF to complete paving in area of Trap#2.

11. Complete remaining portion of lower parking lot,I-8,I-7, M-4 and E-11. Install inlet protection as inlets are installed.
12. Final pave parking lots and driveway.
13. Grade in SWM facilities and install underdrains once all areas draining to facilities are stabilized. Delay placement of stone and filter media until 3-day dry weather is forecast. Install SWM landscaping.
14. Repair SSF as necessary at the end of each working day. Stabilize areas below SWM facilities with sod as noted on SWM plans.
15. Install site landscaping.
16. Once all areas are stabilized, and with the permission of the Sediment Control Inspector, remove remaining sediment controls.

*NOTE: ANY DISTURBANCE/DAMAGE TO THE TREE PROTECTION FENCES SHOULD BE REPAIRED IMMEDIATELY

NOTE:

The terms "To Be Removed" and "To Be Relocated", and/or the abbreviation "T.B.R." requires the Project Contractor to remove/relocate said item. "To Be Removed By Others" or "To Be Relocated By Others" indicates said item is to be removed/relocated by an entity other that the Project Contractor.

NOTE:

1. ROADS TO BE SWEPT DAILY
2. STOCKPILES: 15' MAX HEIGHT WITH 2:1 SLOPES

*NOTE: INSTALL RSF OR SSF PRIOR TO ROUGH GRADING/EXCAVATING. SWM FACILITIES MAY BE CLEARED AND EXCAVATED DURING CONSTRUCTION WITH THE INSPECTOR'S APPROVAL. THEY MUST BE PROTECTED WITH RSF IMMEDIATELY UPON GRADING. SWM CANNOT BE COMPLETE (I.E. GRAVEL, STONE, AGGREGATES AND MEDIUM) UNTIL THE UPSTREAM DRAINAGE AREA TO EACH FACILITY IS 95% STABILIZED WITH PERMANENT COVER AND WITH THE INSPECTORS APPROVAL.

UPDATE YOUR PRINT TO REFLECT 'AS BUILT' STATE & RETURN A COPY TO THE APPLICABLE DESIGN UNIT

REV	DATE	ACCOUNT NO.	DESCRIPTION	APPROVED
				PREP
				REVD
				APVD

PROFESSIONAL CERTIFICATION

I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed Professional Engineer under the laws of the State of Maryland.

License No.: 24814 Expiration Date: 2-28-26

KLEINFELDER
Bright People. Right Solutions.
10710 Gilroy Road
Hunt Valley, Maryland 21031
Phone: 443.589.2400
Project No. 25000798.005A

AUTOCAD

ENGINEERING
CIVIL CENTURY ENGINEERING
ELEC.
PROJ. ENG.
PROJ. MGR.
PRIN. ENG.
SUPV. ENG.

DESIGN GROUP
DESIGNED R.G.D.
DRAWN M.S.S.
CHECKED R.G.B.
APPROVED —
DATE —

GENERAL NOTES

BALTIMORE GAS & ELECTRIC COMPANY
LOT B - SOUTH SOLLEY ROAD
GLEN BURNIE, ANNE ARUNDEL COUNTY, MD 21060
TAX MAP: 10 PARCEL: 397
115kV SUBSTATION

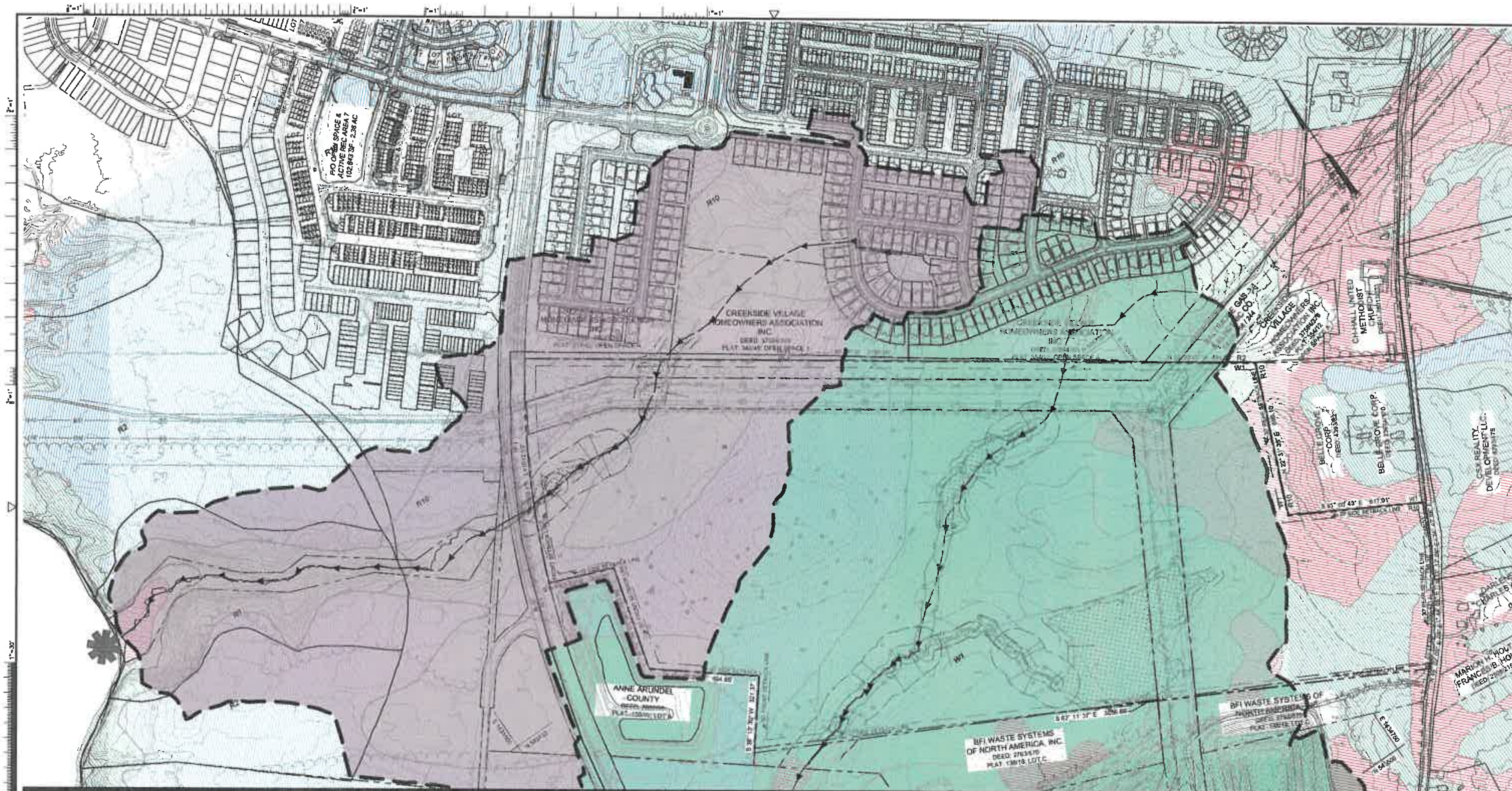
SOLLEY SUBSTATION

ELECTRIC SUBSTATION ENGINEERING

bge AN EXELON COMPANY

SCALE —
DWG. NO. SDP-002
REV. B

T:\2024\facilities\24003651.001a bge solley road substation (rgb)\CIVIL\CADD\Drawings\SWM Concept Plans\24003651.001A (SWM-02) General Notes.dwg Mar 19, 2025 3:32pm



MATCH LINE SEE SHEET SWM-002B

PLAN

SCALE: 1"=200'

0 200' 400'

PROFESSIONAL CERTIFICATION

I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed Professional Engineer under the laws of the State of Maryland.

License No.: 24814 Expiration Date: 2-28-25

KLEINFELDER
Bright People. Right Solutions.
10710 Gilroy Road
Hunt Valley, Maryland 21031
Phone: 443.589.2400
Project No. 25000796 008A

UPDATE YOUR PRINT TO REFLECT 'AS BUILT' STATE & RETURN A COPY TO THE APPLICABLE DESIGN UNIT

REV.	DATE	ACCOUNT NO.	DESCRIPTION	APPROVED	
				PREP	
				REVD	
				APVD	

AUTOCAD

ENGINEERING
CIVIL CENTURY ENGINEERING
ELEC. ____
PROJ. ENG. ____
PROJ. MGR. ____
PRIN. ENG. ____
SUPV. ENG. ____

DESIGN GROUP
DESIGNED R.G.B.
DRAWN M.S.S.
CHECKED R.G.B.
APPROVED --
DATE --

EXISTING DRAINAGE AREA MAP TO POI

BALTIMORE GAS & ELECTRIC COMPANY
LOT B - SOUTH SOLLEY ROAD
GLEN BURNIE, ANNE ARUNDEL COUNTY, MD 21060
TAX MAP: 10 PARCEL: 397
115kV SUBSTATION

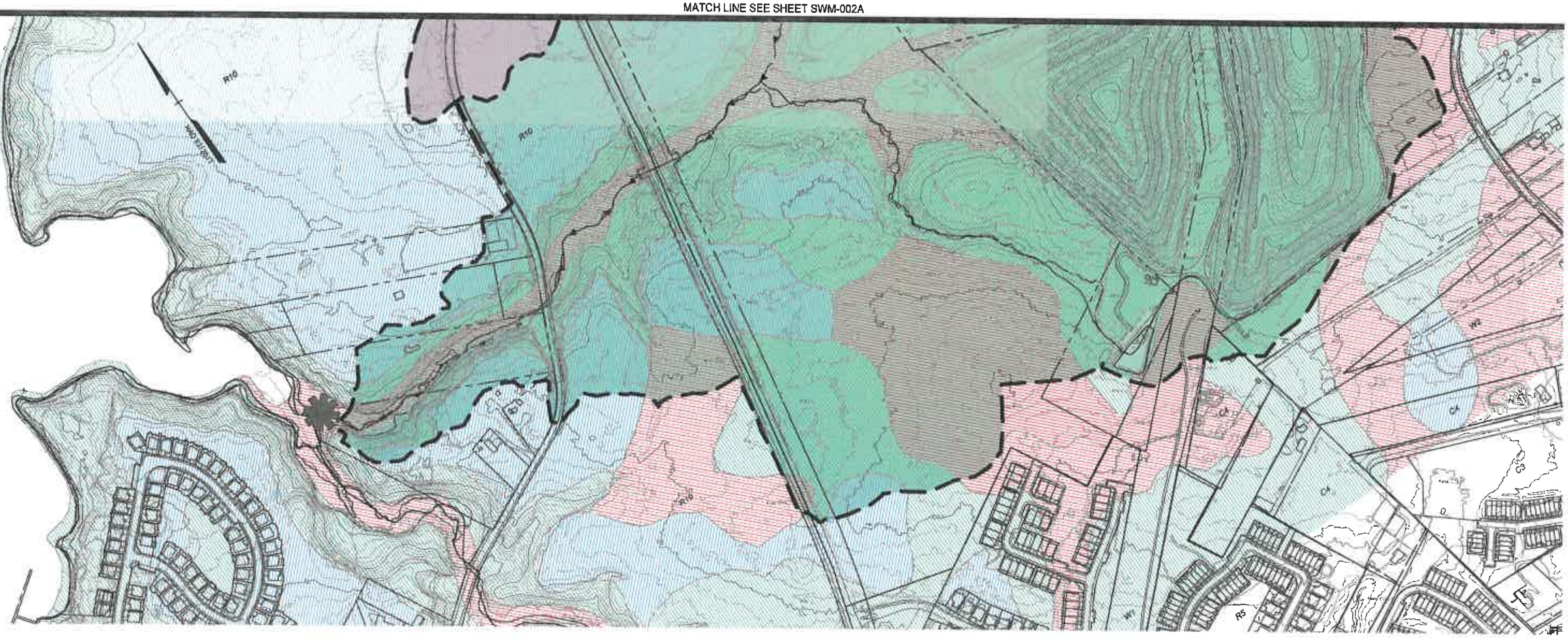
SOLLEY SUBSTATION

ELECTRIC SUBSTATION ENGINEERING

bge

SCALE: 1"=100'
DWG. NO. SDP-003
REV. B

MATCH LINE SEE SHEET SWM-002A



PLAN

SCALE: 1" = 200'

0 200' 400'

PROFESSIONAL CERTIFICATION

I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed Professional Engineer under the laws of the State of Maryland.

License No.: 26614 Expiration Date: 2-28-26

KLEINFELDER
Bright People. Right Solutions.
10710 Gilroy Road
Hunt Valley, Maryland 21031
Phone: 443.589.2400
Project No. 25000796.008A

UPDATE YOUR PRINT TO REFLECT 'AS BUILT' STATE & RETURN A COPY TO THE APPLICABLE DESIGN UNIT

REV	DATE	ACCOUNT NO.	DESCRIPTION	APPROVED
				PREP
				REVD
				APVD

AUTOCAD

ENGINEERING
CIVIL CENTURY ENGINEERING
ELEC. ______
PROJ. ENG. ______
PROJ. MGR. ______
PRIN. ENG. ______
SUPV. ENG. ______

DESIGN GROUP
DESIGNED R.G.B.
DRAWN M.S.S.
CHECKED R.G.B.
APPROVED —
DATE —

EXISTING DRAINAGE AREA MAP TO POI

BALTIMORE GAS & ELECTRIC COMPANY
LOT B - SOUTH SOLLEY ROAD
GLEN BURNIE, ANNE ARUNDEL COUNTY, MD 21060
TAX MAP: 10 PARCEL: 397
115kV SUBSTATION

SOLLEY SUBSTATION

ELECTRIC SUBSTATION ENGINEERING

bge

SCALE: 1"=100'
DWG. NO SDP-004
REV. B

MATCH LINE SEE SHEET SWM-002B

PLAN

SCALE: 1"=200'

0 200' 400'

PROFESSIONAL CERTIFICATION

I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed Professional Engineer under the laws of the State of Maryland.

License No.: 24814 Expiration Date: 2-28-26

KLEINFELDER
Bright People. Right Solutions.
10710 Gilroy Road
Hunt Valley, Maryland 21031
Phone: 443.589.2400
Project No. 25000795.008A

UPDATE YOUR PRINT TO REFLECT 'AS BUILT' STATE & RETURN A COPY TO THE APPLICABLE DESIGN UNIT

REV	DATE	ACCOUNT NO.	DESCRIPTION	APPROVED
				PREP
				REVD
				APVD

AUTOCAD

ENGINEERING
CIVIL CENTURY ENGINEERING
ELEC.
PROJ. ENG.
PROJ. MGR.
PRIN. ENG.
SUPV. ENG.

DESIGN GROUP
DESIGNED R.G.B.
DRAWN M.S.S.
CHECKED R.G.B.
APPROVED —
DATE —

PROPOSED DRAINAGE AREA MAP TO POI

BALTIMORE GAS & ELECTRIC COMPANY
LOT B - SOUTH SOLLEY ROAD
GLEN BURNIE, ANNE ARUNDEL COUNTY, MD 21060
TAX MAP: 10 PARCEL: 397
115kV SUBSTATION

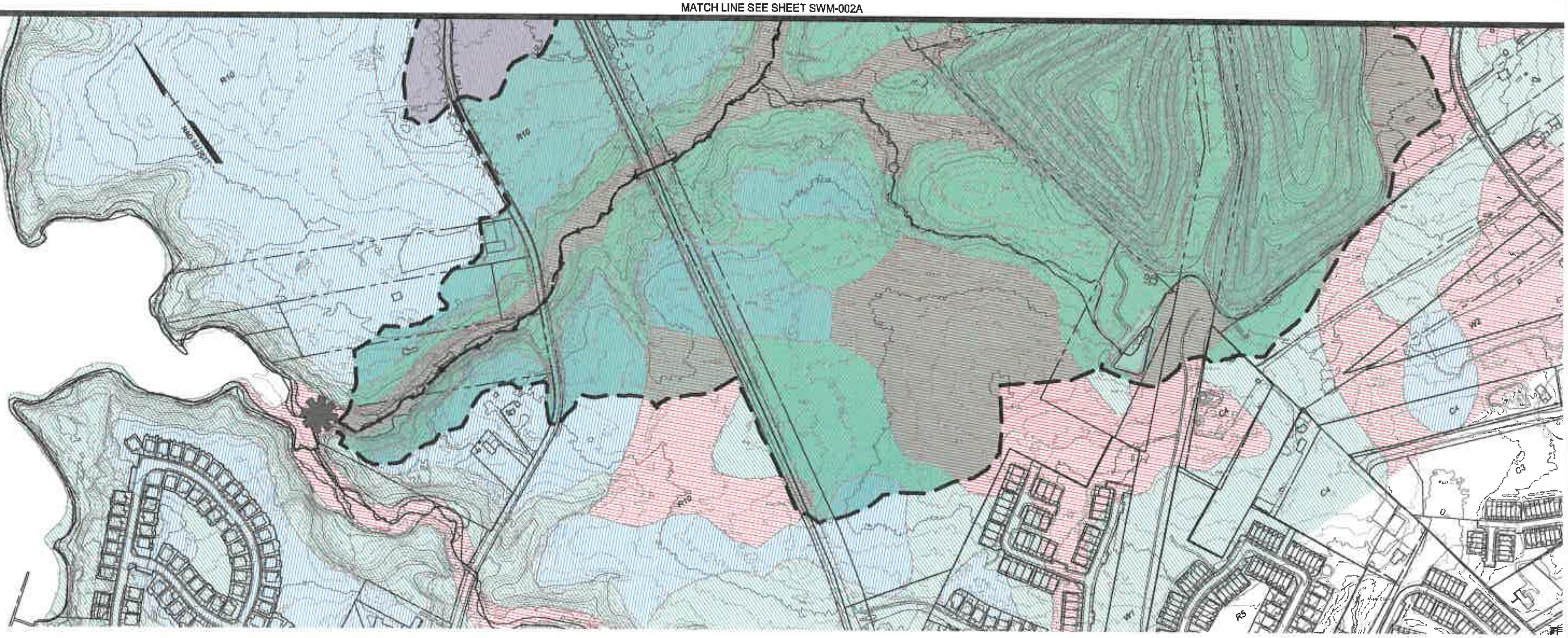
SOLLEY SUBSTATION

ELECTRIC SUBSTATION ENGINEERING

bge

SCALE: 1"=100'
DWG. NO. SDP-005
REV. B

MATCH LINE SEE SHEET SWM-002A



PLAN

SCALE: 1"=200'

0 200' 400'

UPDATE YOUR PRINT TO REFLECT 'AS BUILT' STATE
& RETURN A COPY TO THE APPLICABLE DESIGN UNIT

REV	DATE	ACCOUNT NO.	DESCRIPTION	APPROVED
				PREP
				REVD
				APVD

AUTOCAD

ENGINEERING
CIVIL CENTURY ENGINEERING
ELEC.
PROJ. ENG.
PROJ. MGR.
PRIN. ENG.
SUPV. ENG.

DESIGN GROUP
DESIGNED R.G.B.
DRAWN M.S.S.
CHECKED R.G.B.
APPROVED —
DATE —

PROPOSED DRAINAGE AREA MAP TO POI

BALTIMORE GAS & ELECTRIC COMPANY
LOT B - SOUTH SOLLEY ROAD
GLEN BURNIE, ANNE ARUNDEL COUNTY, MD 21060
TAX MAP: 10 PARCEL: 397
115kV SUBSTATION

SOLLEY SUBSTATION

ELECTRIC SUBSTATION ENGINEERING

bge

SCALE: 1"=100'
DWG NO. SDP-006
REV. B

PROFESSIONAL CERTIFICATION
I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed Professional Engineer under the laws of the State of Maryland.

License No.: 24814 Expiration Date: 2-28-25

KLEINFELDER
Bright People. Right Solutions.
10710 Gilroy Road
Hunt Valley, Maryland 21031
Phone: 443.689.2400
Project No. 25000796.008A

DATA SOURCES:

PLAN

SCALE: 1"=200'

0 200' 400'

LEGEND

EXISTING

- Minor Contour
- Major Contour
- Curb and Gutter
- Storm Drain
- Water & Fire Hydrant
- Sanitary Sewer
- Edge of Paving
- Tree Line
- Building
- Tract Boundary
- Road Right-Of-Way
- Easement Line
- Overhead Electric
- Electric Structure
- Fence Line
- Stream/Waters Edge
- Wetlands
- Wetlands Limit
- Wetlands Buffer
- Stream Buffer
- Flood Plain
- Forest Buffer
- Soils Line

PROPOSED

- Electrical Equipment Enclosure
- Minor Contour
- Major Contour
- Storm Drain
- Edge of Paving
- Tree Line

PROFESSIONAL CERTIFICATION

I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed Professional Engineer under the laws of the State of Maryland.

License No.: 24814 Expiration Date: 2-28-28

KLEINFELDER
Bright People. Right Solutions.
10710 Gilroy Road
Hunt Valley, Maryland 21031
Phone: 443.589.2400

Project No. 25000796.008A

UPDATE YOUR PRINT TO REFLECT 'AS BUILT' STATE
& RETURN A COPY TO THE APPLICABLE DESIGN UNIT

REV	DATE	ACCOUNT NO.	DESCRIPTION	APPROVED
				PREP
				REVD
				APVD

AUTOCAD

ENGINEERING
CIVIL CENTURY ENGINEERING
ELEC.
PROJ. ENG.
PROJ. MGR.
PRIN. ENG.
SUPV. ENG.

DESIGN GROUP
DESIGNED R.G.B.
DRAWN M.S.S.
CHECKED R.G.B.
APPROVED —
DATE —

ESD FACILITIES DRAINAGE AREA MAP

BALTIMORE GAS & ELECTRIC COMPANY
LOT B - SOUTH SOLLEY ROAD
GLEN BURNIE, ANNE ARUNDEL COUNTY, MD 21060
TAX MAP: 10 PARCEL: 397
115kV SUBSTATION

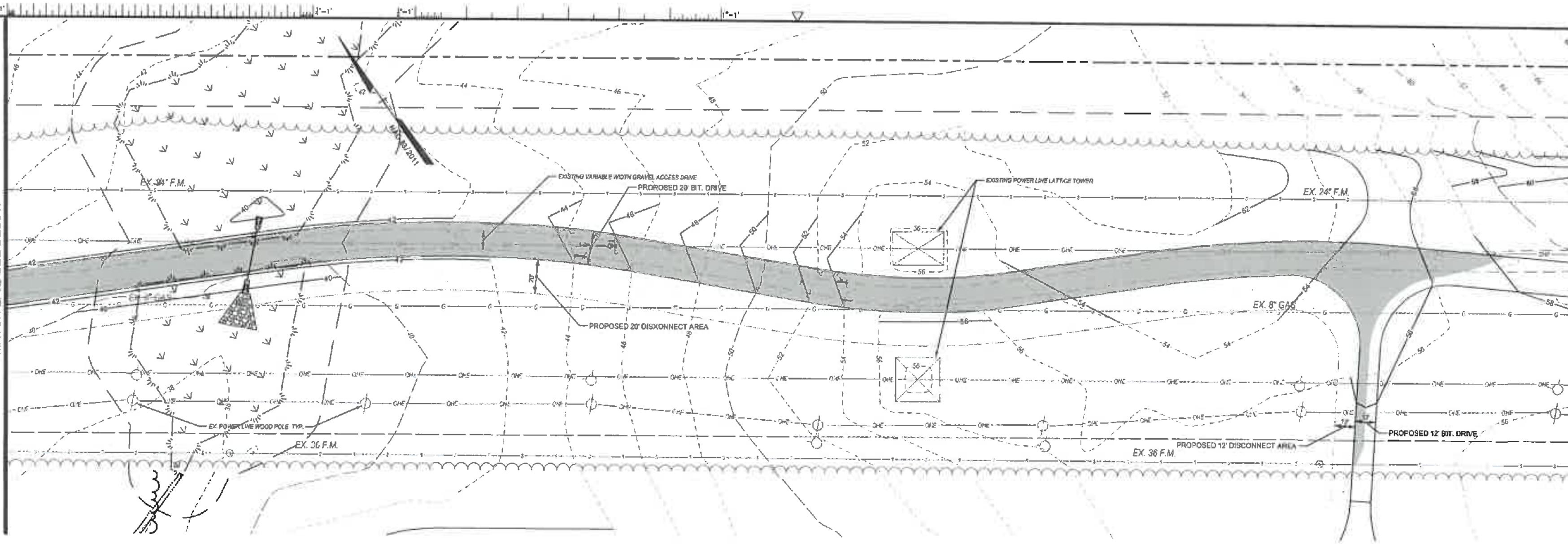
SOLLEY SUBSTATION

ELECTRIC SUBSTATION ENGINEERING

bge AN EXELON COMPANY

SCALE: 1"=100'

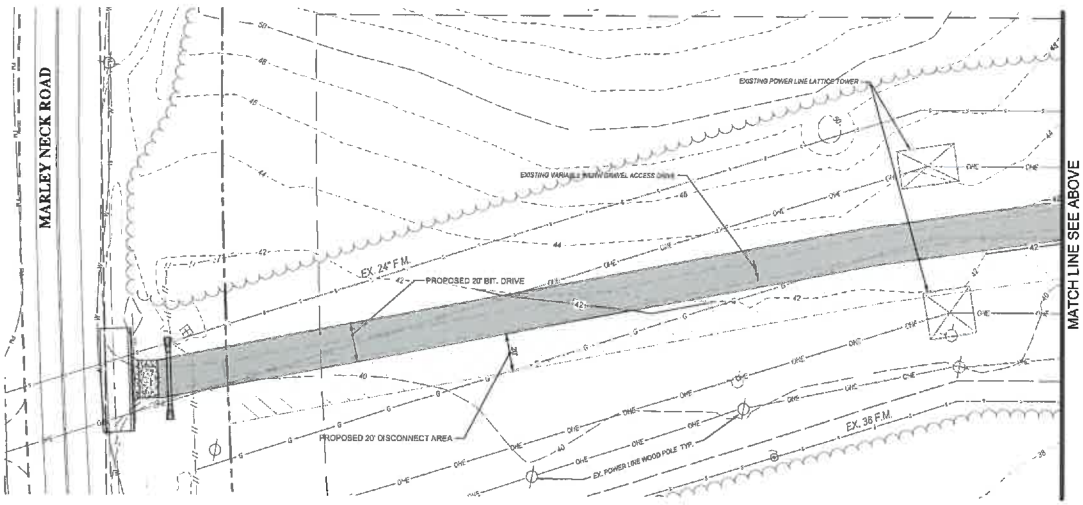
DWG. NO. SDP-007 REV. B



PLAN

SCALE: 1"=30'

0 30' 60'



PLAN

SCALE: 1"=30'

0 30' 60'

PROFESSIONAL CERTIFICATION

I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed Professional Engineer under the laws of the State of Maryland.

License No.: 24814 Expiration Date: 2-28-26

KLEINFELDER
Bright People. Right Solutions.
10710 Gilroy Road
Hunt Valley, Maryland 21031
Phone: 443.589.2400
Project No. 25000796.008A

UPDATE YOUR PRINT TO REFLECT 'AS BUILT' STATE & RETURN A COPY TO THE APPLICABLE DESIGN UNIT

REV	DATE	ACCOUNT NO.	DESCRIPTION	APPROVED
				PREP
				REVD
				APVD

AUTOCAD

ENGINEERING
CIVIL CENTURY ENGINEERING
ELEC.
PROJ. ENG.
PROJ. MGR.
PRIN. ENG.
SUPV. ENG.

DESIGN GROUP
DESIGNED R.G.B.
DRAWN M.S.S.
CHECKED R.G.B.
APPROVED —
DATE —

ESD FACILITY #1 - NON-ROOFTOP DISCONNECT

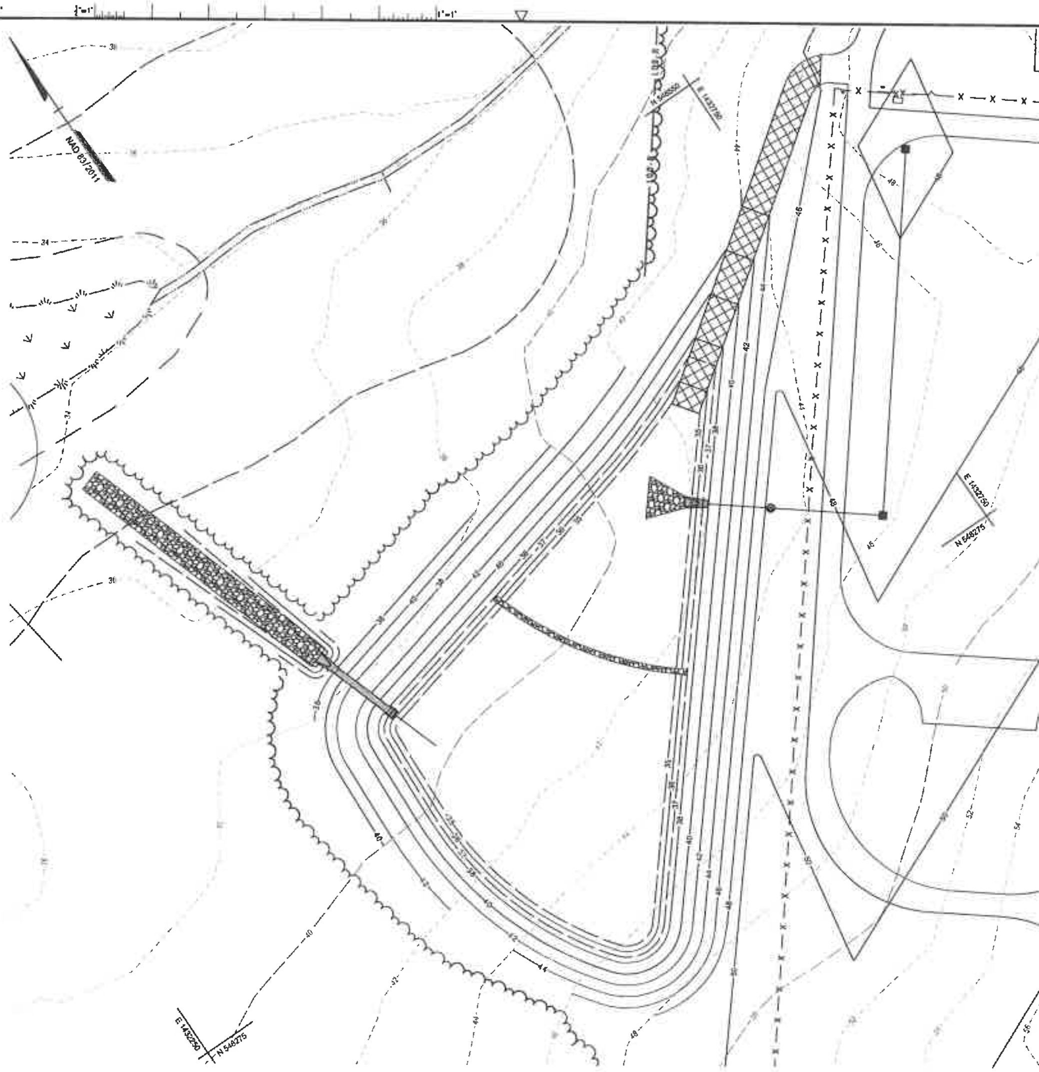
BALTIMORE GAS & ELECTRIC COMPANY
LOT 9 - SOUTH SOLLEY ROAD
GLEN BURNIE, ANNE ARUNDEL COUNTY, MD 21060
TAX MAP: 10 PARCEL: 397
115kV SUBSTATION

SOLLEY SUBSTATION

ELECTRIC SUBSTATION ENGINEERING

bge

SCALE: AS SHOWN
DWG. NO. SDP-008
REV. B



PLAN

SCALE: 1"=30'

0 30' 60'

PROFESSIONAL CERTIFICATION

I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed Professional Engineer under the laws of the State of Maryland.

License No.: 24814 Expiration Date: 2-28-26

KLEINFELDER
Bright People. Right Solutions.
10710 Gilroy Road
Hunt Valley, Maryland 21031
Phone: 443.589.2400
Project No. 25000796.008A

UPDATE YOUR PRINT TO REFLECT 'AS BUILT' STATE & RETURN A COPY TO THE APPLICABLE DESIGN UNIT

REV	DATE	ACCOUNT NO.	DESCRIPTION	APPROVED	
				PREP	
				REVD	
				APVD	

AUTOCAD

ENGINEERING
CIVIL CENTURY ENGINEERING
ELEC.
PROJ. ENG.
PROJ. MGR.
PRIN. ENG.
SUPV. ENG.

DESIGN GROUP
DESIGNED R.G.B.
DRAWN M.S.S.
CHECKED R.G.B.
APPROVED —
DATE —

ESD FACILITY #2 - EXTENDED DETENTION POND PLAN

BALTIMORE GAS & ELECTRIC COMPANY
LOT B - SOUTH SOLLEY ROAD
GLEN BURNIE, ANNE ARUNDEL COUNTY, MD 21060
TAX MAP: 10 PARCEL: 397
115KV SUBSTATION

SOLLEY SUBSTATION

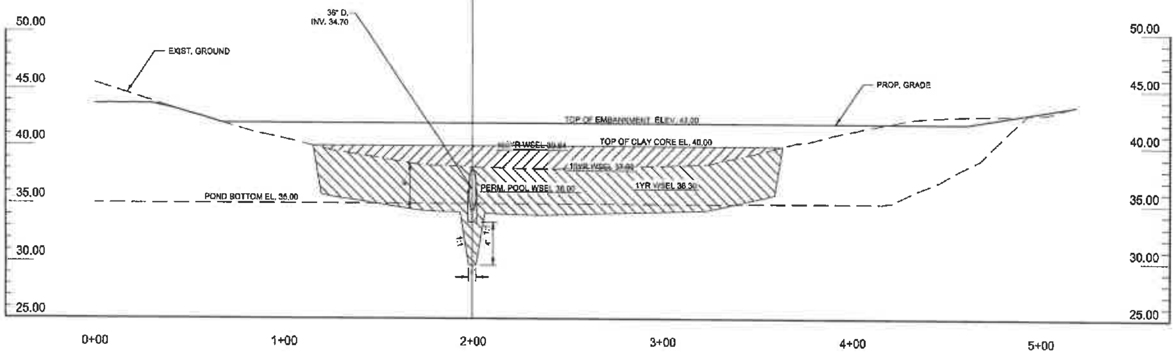
ELECTRIC SUBSTATION ENGINEERING

bge

SCALE: AS SHOWN

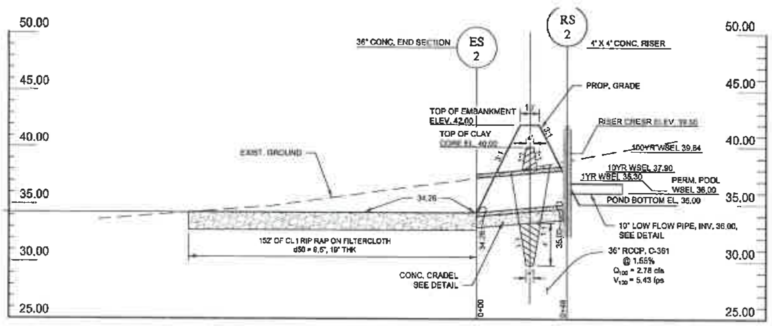
DWG. NO. SDP-009

REV. B



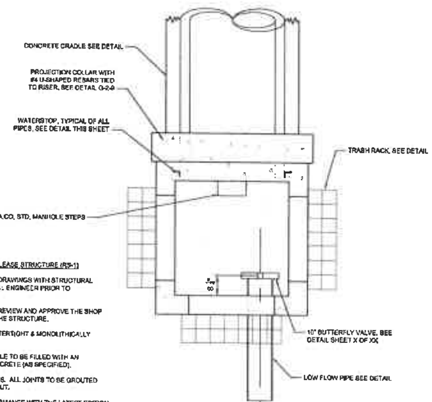
EXTENDED DETENTION POND CENTERLINE OF EMBANKMENT PROFILE

SCALE: 1" = 30' HORZ.
1" = 5' VERT.



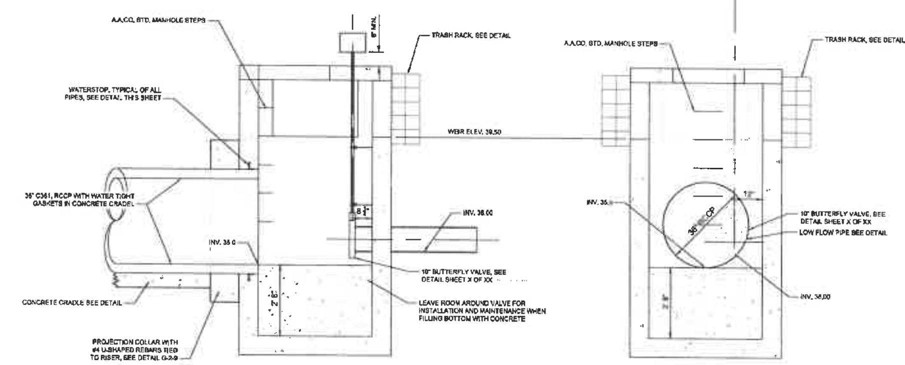
EXTENDED DETENTION POND OUTFALL PROFILE

SCALE: 1" = 30' HORZ.
1" = 5' VERT.



SHOP DRAWING NOTES FOR PRECAST RELEASE STRUCTURE (RS-1)

1. THE PRECASTER IS TO SEND THE SHOP DRAWINGS WITH STRUCTURAL COMPUTATIONS TO THE CERTIFYING CIVIL ENGINEER PRIOR TO CONSTRUCTION.
2. THE CERTIFYING CIVIL ENGINEER MUST REVIEW AND APPROVE THE SHOP DRAWINGS PRIOR TO FABRICATION OF THE STRUCTURE.
3. THE PRECAST STRUCTURE MUST BE WATERTIGHT & MONOLITHICALLY FABRICATED.
4. ANNULAR SPACE BETWEEN PIPE AND HOLE TO BE FILLED WITH AN APPROVED NON-SHRINK GROUT OR CONCRETE (AS SPECIFIED).
5. BUTYL RUBBER TO BE USED IN ALL JOINTS. ALL JOINTS TO BE GROUTED WITH NON-SHRINK GROUT, INSIDE AND OUT.
6. PRECAST FABRICATION TO BE IN CONFORMANCE WITH THE LATEST EDITION AND ADDENDA OF THE MSHA STANDARDS AND SPECIFICATION FOR CONSTRUCTION AND MATERIALS.
7. STRUCTURE TO BE FABRICATED WITHOUT KNOCKOUTS FOR UNDERDRAINS.



RISER RS-2

UPDATE YOUR PRINT TO REFLECT 'AS BUILT' STATE & RETURN A COPY TO THE APPLICABLE DESIGN UNIT

REV	DATE	ACCOUNT NO.	DESCRIPTION	APPROVED	
				PREP	
				REVD	
				APVD	

AUTOCAD

ENGINEERING
CIVIL CENTURY ENGINEERING
ELEC.
PROJ. ENG.
PROJ. MGR.
PRIN. ENG.
SUPV. ENG.

DESIGN GROUP
DESIGNED R.G.B.
DRAWN M.S.S.
CHECKED R.G.B.
APPROVED —
DATE —

ESD FACILITY #2 - EXTENDED DETENTION POND DETAILS

BALTIMORE GAS & ELECTRIC COMPANY
LOT B - SOUTH SOLLEY ROAD
GLEN BURNIE, ANNE ARUNDEL COUNTY, MD 21060
TAX MAP: 10 PARCEL: 397
115kV SUBSTATION

SOLLEY SUBSTATION

ELECTRIC SUBSTATION ENGINEERING

bge

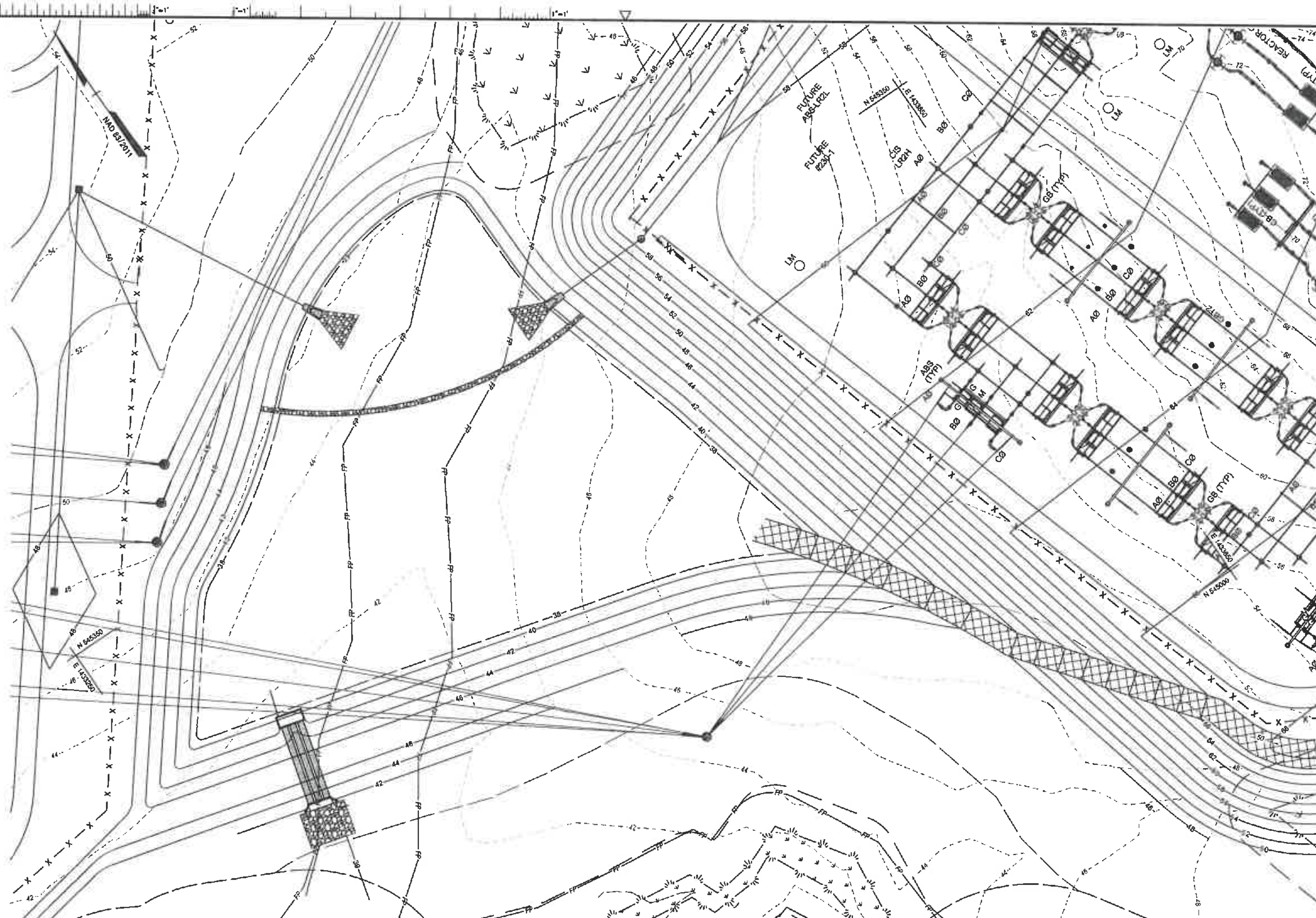
SCALE: —
DWG. NO. SDP-010
REV. B

PROFESSIONAL CERTIFICATION

I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed Professional Engineer under the laws of the State of Maryland.

License No.: 24814 Expiration Date: 2-28-26

KLEINFELDER
Bright People. Right Solutions.
10710 Gilroy Road
Hunt Valley, Maryland 21031
Phone: 443.689.2400
Project No. 25000796.008A



PLAN

SCALE: 1"=30'

0 30' 60'

UPDATE YOUR PRINT TO REFLECT 'AS BUILT' STATE
& RETURN A COPY TO THE APPLICABLE DESIGN UNIT

REV	DATE	ACCOUNT NO.	DESCRIPTION	APPROVED	
				PREP	
				REVD	
				APVD	

AUTOCAD

ENGINEERING
CIVIL CENTURY ENGINEERING
ELEC.
PROJ. ENG.
PROJ. MGR.
PRIN. ENG.
SUPV. ENG.

DESIGN GROUP
DESIGNED R.G.B.
DRAWN M.S.S.
CHECKED R.G.B.
APPROVED —
DATE —

ESD FACILITY #3 - INFILTRATION BASIN PLAN

BALTIMORE GAS & ELECTRIC COMPANY
LOT B - SOUTH SOLLEY ROAD
GLEN BURNIE, ANNE ARUNDEL COUNTY, MD 21060
TAX MAP: 10 PARCEL: 397
115KV SUBSTATION

SOLLEY SUBSTATION

ELECTRIC SUBSTATION ENGINEERING

bge AN EXELON COMPANY

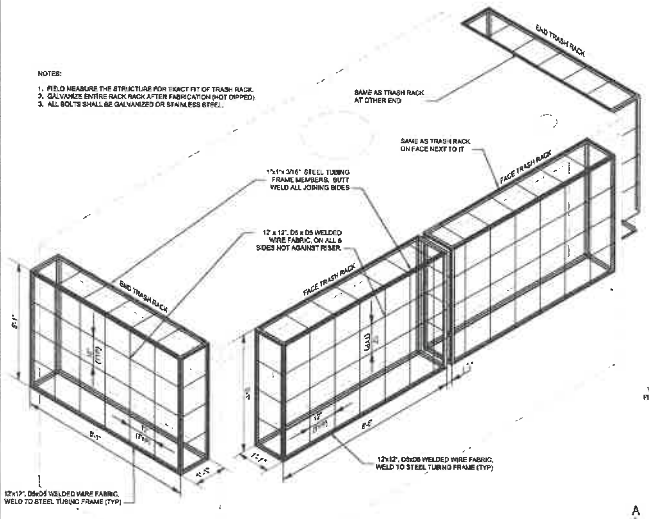
SCALE: AS SHOWN
DWG. NO. SDP-011
REV. B

PROFESSIONAL CERTIFICATION
I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed Professional Engineer under the laws of the State of Maryland.
License No.: 24614 Expiration Date: 2-28-26

KLEINFELDER
Bright People. Right Solutions.
10710 Gilroy Road
Hunt Valley, Maryland 21031
Phone: 443.589.2400
Project No. 25000798.008A

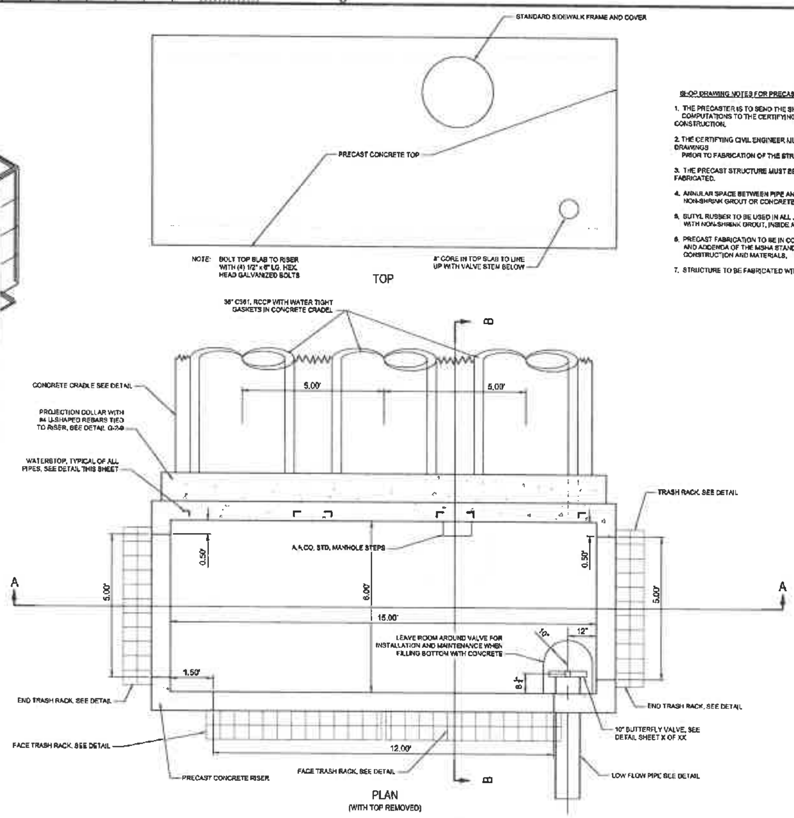
NOTES:

1. FIELD MEASURE THE STRUCTURE FOR EXACT FIT OF TRASH RACK.
2. GALVANIZE ENTIRE RACK RACK AFTER FABRICATION (HOT DIPPED).
3. ALL BOLTS SHALL BE GALVANIZED OR STAINLESS STEEL.



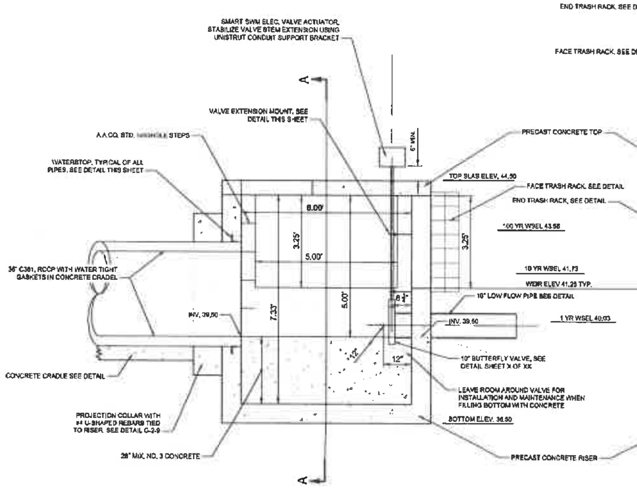
TRASH RACK

SCALE: 1"=2'

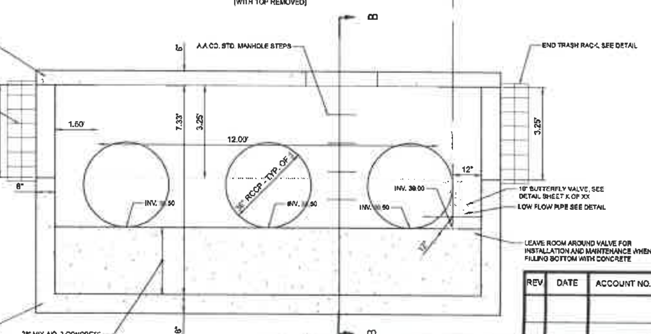


SHOP DRAWING NOTES FOR PRECAST RELEASE STRUCTURE (RS-2)

1. THE PRECASTER IS TO SEND THE SHOP DRAWINGS WITH STRUCTURAL COMPUTATIONS TO THE CERTIFYING CIVIL ENGINEER PRIOR TO CONSTRUCTION.
2. THE CERTIFYING CIVIL ENGINEER MUST REVIEW AND APPROVE THE SHOP DRAWINGS PRIOR TO FABRICATION OF THE STRUCTURE.
3. THE PRECAST STRUCTURE MUST BE WATERTIGHT & MONOLITHICALLY FABRICATED.
4. ANNULAR SPACE BETWEEN PIPE AND HOLE TO BE FILLED WITH AN APPROVED NON-SHRINK GROUT OR CONCRETE (AS SPECIFIED).
5. BUTYL RUBBER TO BE USED IN ALL JOINTS. ALL JOINTS TO BE GROUTED WITH NON-SHRINK GROUT, INSIDE AND OUT.
6. PRECAST FABRICATION TO BE IN CONFORMANCE WITH THE LATEST EDITION AND ADDENDA OF THE MSHA STANDARDS AND SPECIFICATION FOR CONSTRUCTION AND MATERIALS.
7. STRUCTURE TO BE FABRICATED WITHOUT KNOCKOUTS FOR UNDERDRAINS.



SECTION 'B-B'



SECTION 'A-A'

RISER RS-2

SCALE: 1"=5'

PROFESSIONAL CERTIFICATION

I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed Professional Engineer under the laws of the State of Maryland.

License No.: 24814 Expiration Date: 2-28-26

KLEINFELDER
Bright People. Right Solutions.
10710 Gilroy Road
Hunt Valley, Maryland 21031
Phone: 443.589.2400
Project No. 25000796.008A

UPDATE YOUR PRINT TO REFLECT 'AS BUILT' STATE & RETURN A COPY TO THE APPLICABLE DESIGN UNIT

REV	DATE	ACCOUNT NO.	DESCRIPTION	APPROVED	
				PREP	
				REVD	
				APVD	

AUTOCAD

ENGINEERING
CIVIL CENTURY ENGINEERING
ELEC.
PROJ. ENG.
PROJ. MGR.
PRIN. ENG.
SUPV. ENG.

DESIGN GROUP
DESIGNED R.G.B.
DRAWN M.S.S.
CHECKED R.G.B.
APPROVED —
DATE —

ESD FACILITY #3 - INFILTRATION BASIN RISER DETAILS

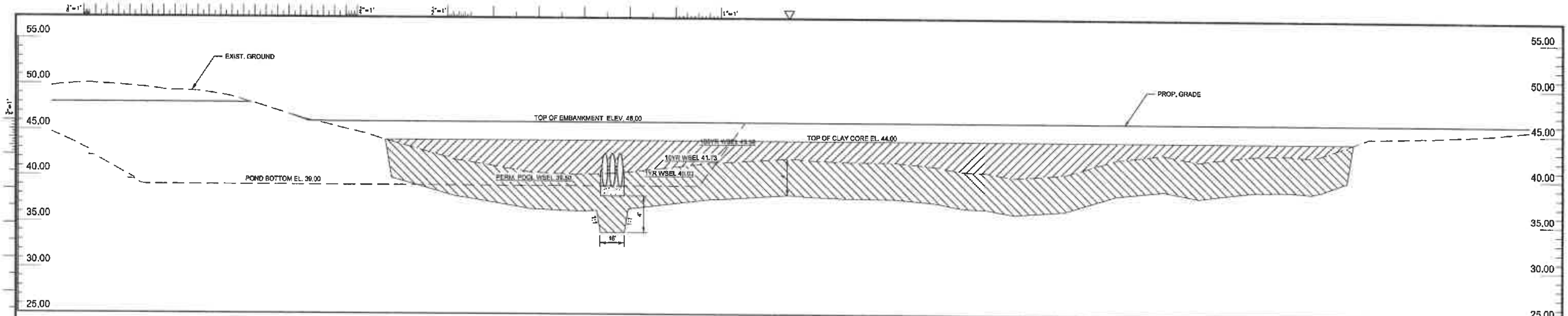
BALTIMORE GAS & ELECTRIC COMPANY
LOT B - SOUTH SOLLEY ROAD
GLEN BURNIE, ANNE ARUNDEL COUNTY, MD 21060
TAX MAP: 10 PARCEL: 397
115kV SUBSTATION

SOLLEY SUBSTATION

ELECTRIC SUBSTATION ENGINEERING

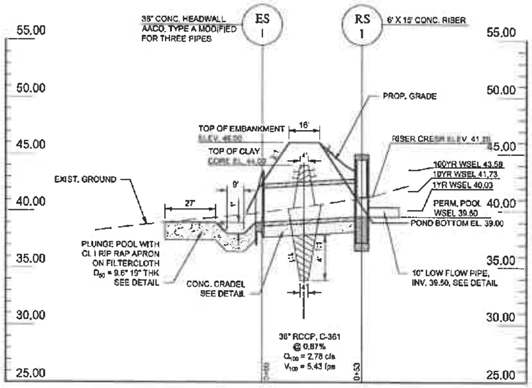
bge AN EXELON COMPANY

SCALE: —
DWG. NO. SDP-012
REV. B



INFILTRATION POND CENTERLINE OF EMBANKMENT PROFILE

SCALE: 1" = 30' HORZ.
1" = 5' VERT.



INFILTRATION POND OUTFALL PROFILE

SCALE: 1" = 30' HORZ.
1" = 5' VERT.

PROFESSIONAL CERTIFICATION

I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed Professional Engineer under the laws of the State of Maryland.

License No.: 24814 Expiration Date: 2-28-26

KLEINFELDER
Bright People. Right Solutions.
10710 Gilroy Road
Hunt Valley, Maryland 21031
Phone: 443.689.2400
Project No. 25000796.008A

UPDATE YOUR PRINT TO REFLECT 'AS BUILT' STATE & RETURN A COPY TO THE APPLICABLE DESIGN UNIT

REV.	DATE	ACCOUNT NO.	DESCRIPTION	APPROVED
				PREP
				REVD
				APVD

AUTOCAD

ENGINEERING
CIVIL CENTURY ENGINEERING
ELEC.
PROJ. ENG.
PROJ. MGR.
PRIN. ENG.
SUPV. ENG.

DESIGN GROUP
DESIGNED R.G.B.
DRAWN M.S.S.
CHECKED R.G.B.
APPROVED —
DATE —

ESD FACILITY #3 - INFILTRATION BASIN PROFILES AND DETAILS

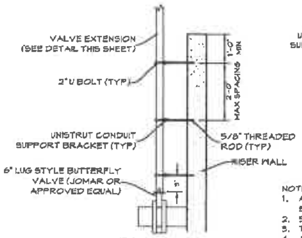
BALTIMORE GAS & ELECTRIC COMPANY
LOT B - SOUTH SOLLEY ROAD
GLEN BURNIE, ANNE ARUNDEL COUNTY, MD 21060
TAX MAP: 10 PARCEL: 397
115kV SUBSTATION

SOLLEY SUBSTATION

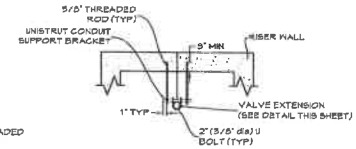
ELECTRIC SUBSTATION ENGINEERING

bge

SCALE: —
DWG. NO. SDP-013
REV. B



FRONT VIEW

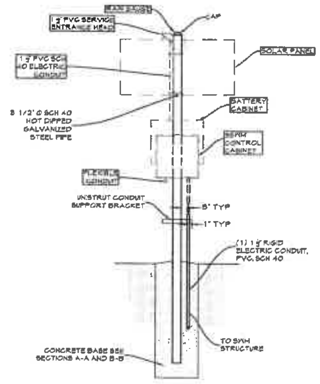


TOP VIEW

NOTES:
1. ALL UNISTRUT SHALL BE 1-5/8" X 1-5/8" WITH 1 1/16" HOLES AND SLOTS (MODEL P1000WT) OR APPROVED EQUAL
2. 5/8 INCH THREADED ROD SHALL BE SET IN WALL A MIN OF 3 INCHES
3. THREADED ROD SHALL BE EPOXYED INTO THE STRUCTURE WALL.
4. ALL THREADED ROD, BOLTS, AND UNISTRUT SHALL BE STAINLESS STEEL

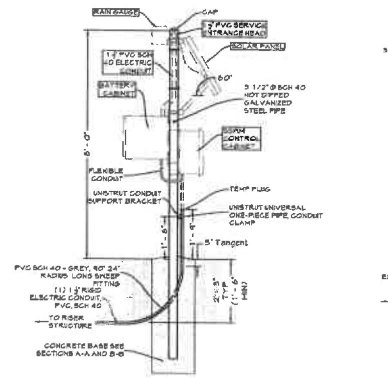
VALVE EXTENSION MOUNTING DETAIL

NOT TO SCALE



FRONT VIEW

TEXT WITH A FRAME AROUND THE PERIMETER ARE SMART SWM COMPONENT CALL OUTS AND WILL INSTALLED BY CENTURY ENGINEERING'S ELECTRICAL CONTRACTOR

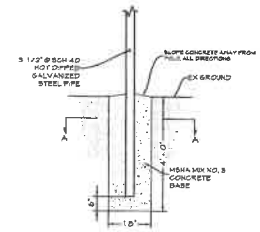


SIDE VIEW

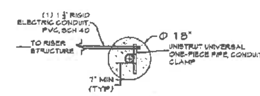
NOTES:
1. INSTALLATION OF THE ELECTRICAL COMPONENTS (E.G. CABLING, CONDUIT) MUST BE PERFORMED BY A LICENSED ELECTRICIAN. IN PARTICULAR, ELECTRICIAN SHALL BE RESPONSIBLE FOR ENSURING THAT THE ELECTRIC FROM THE SOLAR PANEL IS PROPERLY CONNECTED TO THE SMART STORMWATER MANAGEMENT (SSWM) CONTROL CABINET, GROUNDED AND THAT THE CONDUIT AND CABLING IS SIZED AND INSTALLED PER THE NEC.
2. ALL BURIED CONDUIT SHALL BE RIGID ELECTRICAL SCH 40 PVC.
3. ALL BURIED CONDUIT SHALL BE INSTALLED AT A MINIMUM DEPTH OF 18".
4. ALL CABLING SHALL HAVE A MINIMUM TEMPERATURE RATING OF 75 DEGREES C FOR USE IN WET LOCATIONS AND HAVE COPPER CONDUCTORS.
5. ALL UNISTRUT SHALL BE 1-5/8" X 1-5/8" WITH 1 1/16" HOLES AND SLOTS (MODEL P1000WT) OR APPROVED EQUAL AND ZINC COATED.
6. BELL END OF CONDUIT SHALL FACE THE GROUND
7. PULL STRING SHALL BE INSTALLED IN ALL CONDUIT RUNS.
8. POLE TO BE MADE PLUMB UNTIL CONCRETE BASE CURES.

MOUNTING POLE DETAIL

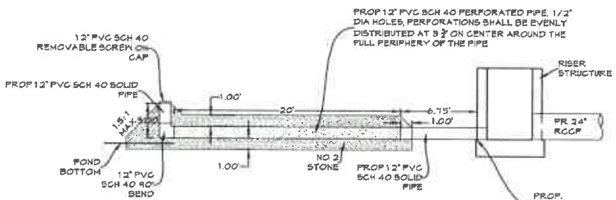
SCALE: 1" = 2'



SECTION B-B

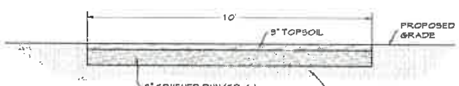


SECTION A-A



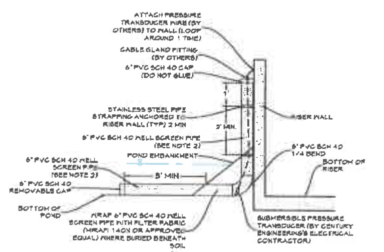
DEWATERING DEVICE DETAIL

NOT TO SCALE



ACCESS ROAD DETAIL

SCALE: 1" = 2'



WATER LEVEL SENSOR STILLING PIPE DETAIL

NOT TO SCALE

NOTES:
1. COMPRESSION FITTING SHALL UV RESISTANT, NYLON 66,94V-2, AND UL APPROVED.
2. WELL SCREEN PIPE 20 LINEAR FEET OF 6 INCH SOLVENT WELDED, BELL AND SPIGOT JOINT, PVC SLOTTED SCREEN PIPE, SDR 21 OR BETTER WITH OPEN AREA OF NO LESS THAN 12.6 SQIN/FT AND MINIMUM SLOT SIZE OF 0.02 INCHES UNLESS APPROVED OTHERWISE. REFERENCE ASTM F480. NOTE THAT THE SPECIFIED LENGTH IS IF FOR THE SLOTTED PORTION OF THE PIPE ONLY.

UPDATE YOUR PRINT TO REFLECT 'AS BUILT' STATE & RETURN A COPY TO THE APPLICABLE DESIGN UNIT

PROFESSIONAL CERTIFICATION

I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed Professional Engineer under the laws of the State of Maryland.

License No.: 24814 Expiration Date: 7-28-26

KLEINFELDER
Bright People. Right Solutions.
10710 Gilroy Road
Hunt Valley, Maryland 21031
Phone: 443.589.2400
Project No. 25000795.008A

REV	DATE	ACCOUNT NO.	DESCRIPTION	APPROVED	
				PREP	
				REVD	
				APVD	

AUTOCAD

ENGINEERING
CIVIL CENTURY ENGINEERING
ELEC.
PROJ. ENG.
PROJ. MGR.
PRIN. ENG.
SUPV. ENG.

DESIGN GROUP
DESIGNED R.G.B.
DRAWN M.S.S.
CHECKED R.G.B.
APPROVED —
DATE —

SMARTSWM DETAILS

BALTIMORE GAS & ELECTRIC COMPANY
LOT B - SOUTH SOLLEY ROAD
GLEN BURNIE, ANNE ARUNDEL COUNTY, MD 21060
TAX MAP: 10 PARCEL: 397
115kV SUBSTATION

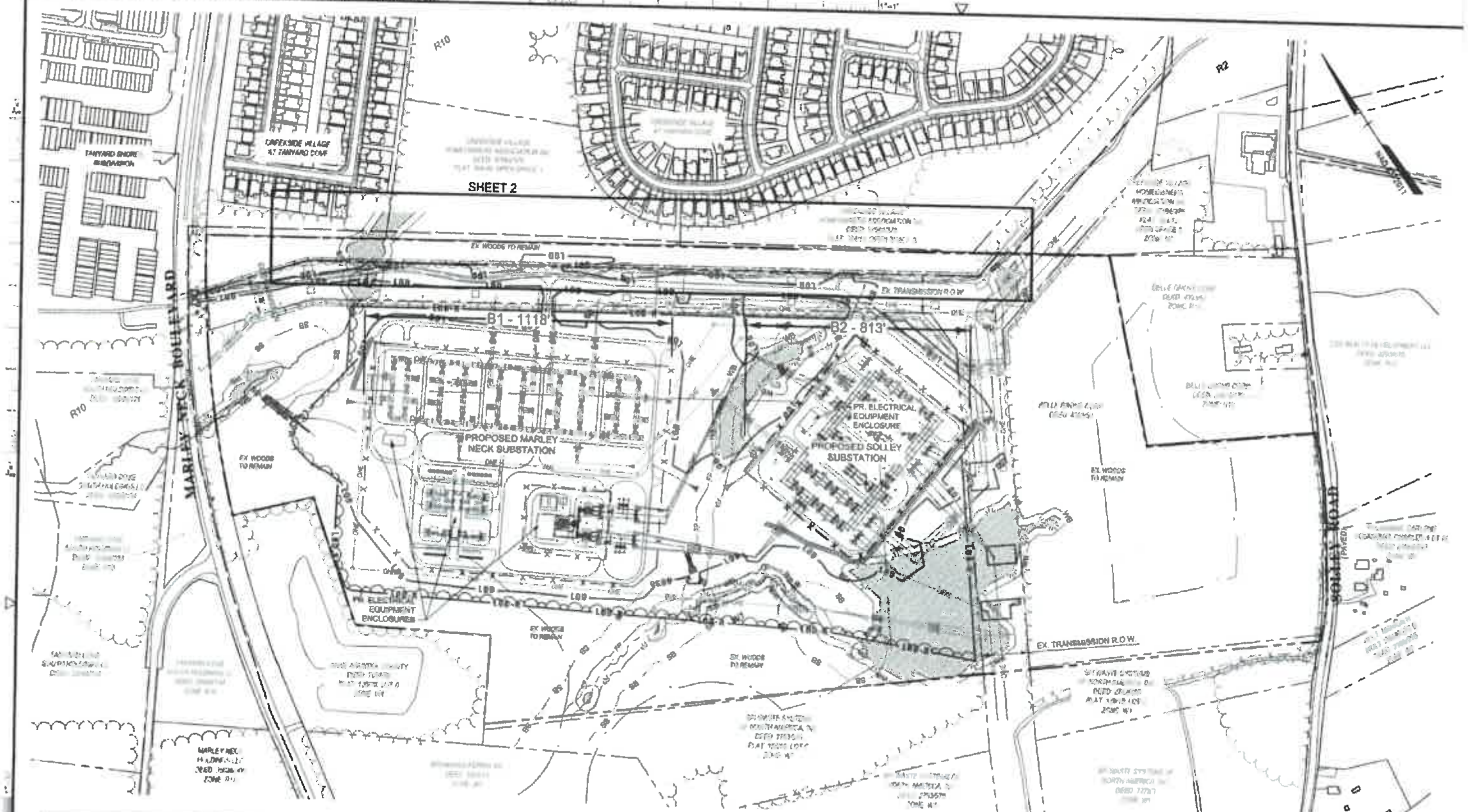
SOLLEY SUBSTATION

ELECTRIC SUBSTATION ENGINEERING

bge AN EXELON COMPANY

SCALE: —
DWG. NO. SDP-014
REV. B

APP. EXHIBIT# 7
CASE: 2025-0049-S
DATE: 5/15/25



PLAN

SCALE: 1"=200'

VICINITY MAP

SCALE: 1"=2,000'

LEGEND

EXISTING

- Minor Contour
- Major Contour
- Storm Drain
- Water & Fire Hydrant
- Sanitary Sewer
- Edge of Paving
- Tree Line
- Building
- Tract Boundary
- Road Right-Of-Way
- Easement Line
- Wetlands
- Wetlands Limit
- Flood Plain
- Stream/Waters Edge
- Overhead Electric
- Power/Utility Pole
- Electric Tower
- Fence Line

PROPOSED

- Electrical Equipment Enclosure
- Minor Contour
- Major Contour
- Edge of Paving
- Fence Line
- Tree Line
- Limit of Disturbance
- Forest Conservation Planting Areas

LANDSCAPE MANUAL PLANTING REQUIREMENTS

KEY	DESCRIPTION	SCREENING CLASS	PLANTING UNIT RATE	LENGTH	CREDIT*	P.U. REQUIRED
B1	Electrical equipment adjacent to existing residential	A	1 PU / 15 LF	1,118 LF	1,118 LF	0
B2	Electrical equipment adjacent to existing residential	A	1 PU / 15 LF	813 LF	813 LF	0
					TOTAL	0

* Credit for existing woods to remain (35 ft width minimum)

PLANTING PROVIDED

TYPE	QTY.	PUs
Major Deciduous Trees	0	0.0
Minor Deciduous Trees	0	0.0
Evergreen Trees	165*	51.7
Shrubs	0	0.0
	TOTAL	51.7

* Forest Conservation Plantings

GENERAL NOTES

1. Existing woods between the transmission Right-of-Way and adjacent residential (Creekside Village) are to remain. Evergreen trees are proposed to supplement the existing woods for the purpose of screening the proposed development.
2. No trees are proposed within existing or proposed utility easements and Rights-of-Way

PROFESSIONAL CERTIFICATION

I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed Landscape Architect under the laws of the State of Maryland.

License No.: 1008 Expiration Date: 5/20/2026

KLEINFELDER
Bright People. Right Solutions.

REV	DATE	ACCOUNT NO.	DESCRIPTION	APPROVED
				PREP
				REVD
				APVD

AUTOCAD

ENGINEERING
CIVIL
ELEC
PROJ. ENG.
PROJ. MGR.
PRIN. ENG.
SUPV. ENG.

DESIGN GROUP
DESIGNED
DRAWN
CHECKED
APPROVED
DATE

Landscape Plan

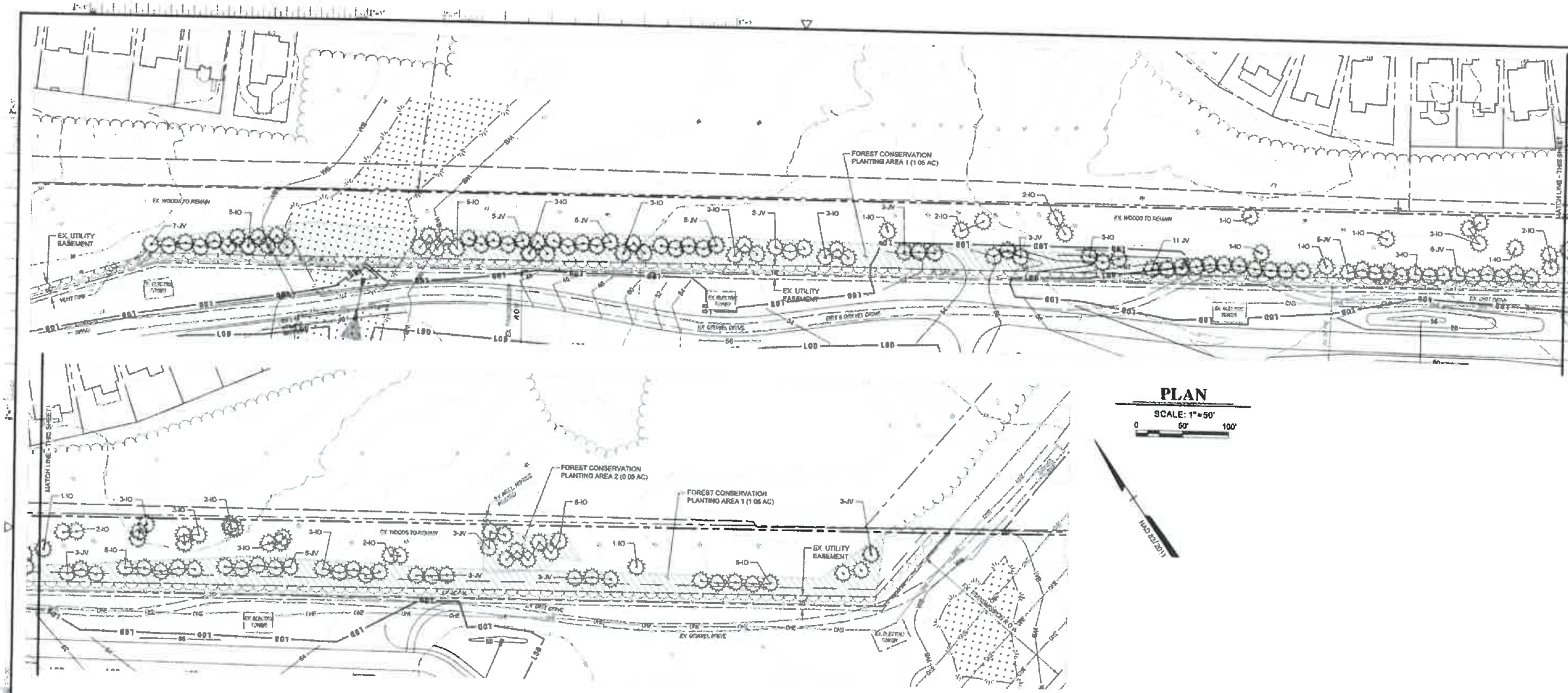
BALTIMORE GAS & ELECTRIC COMPANY
LOT 8 - SOUTH SOLLEY ROAD
GLEN BURNIE, ANNE ARUNDEL COUNTY, MD 21060
TAX MAP: 10 PARCEL: 387
115KV SUBSTATION

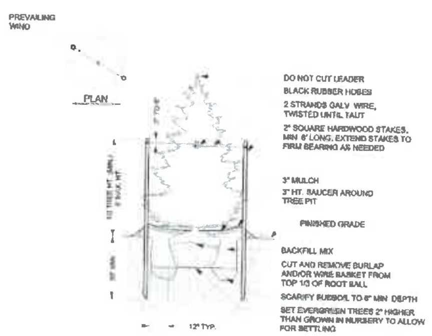
MARLEY NECK - SOLLEY

ELECTRIC SUBSTATION ENGINEERING

bge

SCALE: —
DWG. NO. 1 of 3
REV. B





EVERGREEN TREE PLANTING

NOT TO SCALE

PLANTING NOTES

1. Plant material substitutions will not be accepted without approval of the Landscape Architect.
2. All shrubs and groundcover areas shall be planted in continuous prepared planting beds.
3. All shrub beds shall be mulched with hardwood mulch as detailed and specified except where noted on plans.
4. Maintain positive drainage out of planting beds at a minimum of two percent slope.
5. Plant quantities are provided for the convenience of the contractor. If discrepancies exist between quantities shown on the plan and those shown on the plant list, the quantities on the plan shall take precedence.
6. All areas within contract limits disturbed during or prior to construction not designated to receive plantings and mulch shall be fine graded and seeded in accordance with planting and construction.
7. The contractor shall notify Miss Utility, (800-257-7777) a minimum of three working days prior to planting and construction.
8. All plant material shall be nursery grown, landscape quality, and shall conform to American Standards For Nursery Stock (ANSI Z60.1) published by AmericanHort.
9. All planting procedures shall conform to Landscape Contractors Association Specification Guidelines For Baltimore/Washington Metropolitan Area (latest edition).
10. Contractor shall test pH prior to plant installation.

PLANT LIST - FOREST CONSERVATION

SYM	KEY	QTY	SCIENTIFIC NAME	COMMON NAME	SIZE	COMMENTS
			EVERGREEN TREES			
	IO	82	Ilex opaca	American Holly	3' - 4' HT	#5 Container; 20' O.C.
	JV	73	Juniperus virginiana	Eastern Redcedar	3' - 4' HT	#5 Container; 20' O.C.
	TOTAL	155				

PROFESSIONAL CERTIFICATION

I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed Landscape Architect under the laws of the State of Maryland.

License No.: 1008 Expiration Date: 5/20/2026

KLEINFELDER
Bright People. Right Solutions.
10790 Gilroy Road
Hunt Valley, Maryland 21031
Phone: 443.279.3400
Project No. 20067956.008A

REV	DATE	ACCOUNT NO	DESCRIPTION	APPROVED
				PREP
				REVD
				APVD

AUTOCAD
ENGINEERING
CIVIL KLEINFELDER
ELEC
PROJ. ENG.
PROJ. MGR.
PRIN. ENG.
SUPV. ENG.
DESIGN GROUP
DESIGNED R.G.B.
DRAWN M.S.S.
CHECKED R.G.B.
APPROVED
DATE

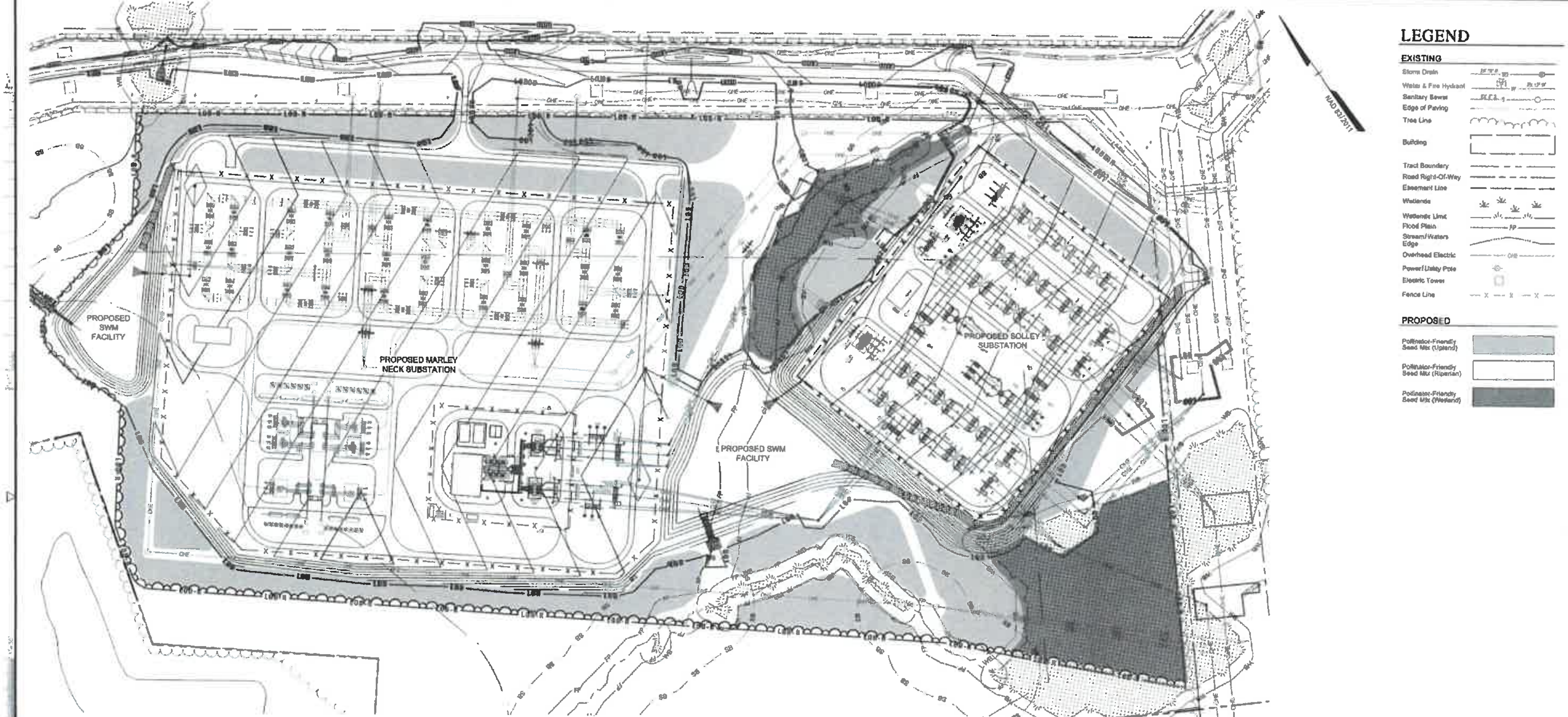
Landscape Plan

BALTIMORE GAS & ELECTRIC COMPANY
LOT 8 - SOUTH SOLLEY ROAD
GLEN BURNIE, ANNE ARUNDEL COUNTY, MD 21060
TAX MAP. 10 PARCEL. 297
115kV SUBSTATION

MARLEY NECK - SOLLEY

ELECTRIC SUBSTATION ENGINEERING

bge
SCALE: —
DWG. NO. 2 of 3
REV B



PLAN

SCALE: 1" = 100'

0 100' 200'

POLLINATOR-FRIENDLY SEED MIX NOTES

1. For the indicated Upland seed mix areas, use Ernst Seeds "Maryland Upland Mix (ERNMX-172)" or approved equal.
2. For the indicated Riparian seed mix areas, use Ernst Seeds "MD Coastal Plain Riparian Mix (ERNMX-732)" or approved equal.
3. For the indicated Wetland seed mix areas, use Ernst Seeds "MD Coastal Plain FACW Mix (ERNMX-733)" or approved equal.
4. Alternative seed mixes shall be approved by the project Landscape Architect. Any alternative seed mixes shall contain native meadow species and shall be composed of an appropriate mix of perennial, biennial, and annual species. The seed mix shall be designed for a seeding rate of 40 to 120 seeds per square foot.
5. No insecticides should be used on the site after planting/sowing and at least one year prior to planting/sowing.
6. Begin weed suppression in spring and summer, prior to sowing the seed mix. Large-scale weed suppression methods may include Repeated Shallow Cultivation, Smother Cropping, Soil Inversion, and/or Organic Herbicide Application. Refer to "Organic Site Preparation for Wildflower Establishment" published by Xerces Society.
7. Sow the meadow seed mix in fall or early winter, after the first hard frost, to improve germination in spring. Sowing methods may include Broadcast Seeding and/or Seed Drilling. Hydroseeding is not recommended unless modified to increase the seeding rate, keep seeds and mulch layers separate, and exclude tackifier and nitrogen fertilizer.
8. Sow the seed mix at a rate of ½ to ¾ lbs per 1,000 square feet or as directed by the seed mix label.
9. Prior to seeding, remove any debris, such as leaf litter, brush, stumps, or wood chips that might inhibit seed-to-soil contact.
10. Mulch the site with a thin layer of weed-free oat or wheat straw mulch after seeding. Do not use rye straw, leaf mulch, wood chips, sawdust, or wood-based mulches.
11. Use erosion control blankets or netting to stabilize seeded areas on steep slopes. Increase the overall seeding rate in these areas to allow for decreased germination. Ensure the netting is well pinned to reduce shading. Choose a netting that is loosely woven.
12. Native meadow seed typically takes three years to establish. For the first two years after seeding, mow the meadow to a height of 6" when vegetation reaches a height of 12"-18." Do not mow during winter.
13. Once the meadow is established, mow only once per year in late winter/early spring while the plants are still dormant. Continue to mow to a height of 4"-12".

GENERAL NOTES

1. Pollinator-friendly seed mix shall be planted within the areas indicated on the plan.
3. The pollinator-friendly seed mix shall not be planted in the clearance zone of electrical equipment pads or storage areas and shall not be planted on dam embankments of stormwater management ponds.
2. A twelve-foot-wide mowed path shall be maintained between all proposed utility poles and paved roads to provide vehicular access for utility maintenance.

SEEDING AREAS	
SEED MIX TYPE	TOTAL AREA
Upland	+/- 486,050 SF (11.16 AC)
Riparian	+/- 34,146 SF (0.78 AC)
Wetland	+/- 178,233 SF (4.09 AC)

PROFESSIONAL CERTIFICATION

I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed Landscape Architect under the laws of the State of Maryland.

License No.: 1008 Expiration Date: 5/20/2026

KLEINFELDER
Bright People. Right Solutions.

Project No. 20223789.004A

REV	DATE	ACCOUNT NO.	DESCRIPTION	APPROVED
				PREP
				REVD
				APVD

AUTOCAD

ENGINEERING: CIVL, ELEC, PROJ. ENG, PROJ. MGR, PRIN. ENG, SUPV. ENG

DESIGN GROUP: DESIGNED R.G.B., DRAWN M.S.S., CHECKED R.G.B., APPROVED, DATE

Pollinator Meadow Plan

BALTIMORE GAS & ELECTRIC COMPANY
LOT 8 - SOUTH SOLLEY ROAD
GLEN BURNIE, ANNE ARUNDEL COUNTY, MD 21060
TAX MAP: 10 PARCEL: 387
115kV SUBSTATION

MARLEY NECK - SOLLEY

ELECTRIC SUBSTATION ENGINEERING

bge

SCALE: —

DWG NO. 3 of 3

REV B

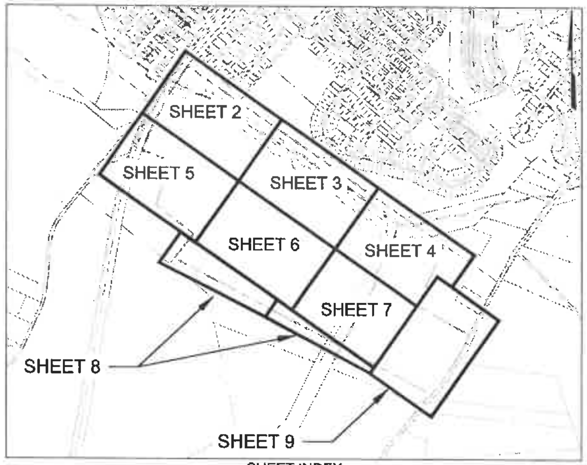
APP. EXHIBIT# 8
CASE: 2025-0049-S
DATE: 5/15/25

SOLLEY ROAD SUBSTATION
FOREST STAND DELINEATION PLAN
ANNE ARUNDEL COUNTY, MD

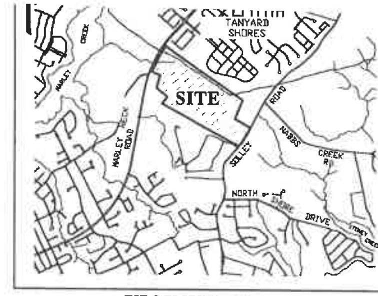
ANNE ARUNDEL COUNTY TAX MAP 10, BLOCK N/A, PARCEL 397
3RD TAX DISTRICT, ANNE ARUNDEL COUNTY, MARYLAND
ZONED: W1 (INDUSTRIAL PARK) ZIP CODE: 21060

SPECIMEN TREE TABLE (30"+ DBH)

Tree Number	Species	Scientific Name	DBH (Inches)	Condition
1	White Oak	*Quecus alba*	36.5	Good
2	White Oak	*Quecus alba*	36	Good
3	Red Maple	*Acer rubrum*	46.5	Good
4	Red Maple	*Acer rubrum*	30	Good
5	Red Maple	*Acer rubrum*	37.5	Good
6	Red Maple	*Acer rubrum*	31.5	Good
7	Red Maple	*Acer rubrum*	34	Good
8	Willow Oak	*Quercus phellos*	37	Good
9	Northern Red Oak	*Quecus rubra*	33.5	Good
10	Willow Oak	*Quercus phellos*	40.5	Good
11	Red Maple	*Acer rubrum*	31.5	Good
12	Red Maple	*Acer rubrum*	33	Good
13	Red Maple	*Acer rubrum*	42	Good
14	Red Maple	*Acer rubrum*	36	Good
15	Red Maple	*Acer rubrum*	49	Good
16	Sweetgum	*Liquidambar styraciflua*	32	Good
17	Red Maple	*Acer rubrum*	32	Good
18	Sweetgum	*Liquidambar styraciflua*	30	Good
19	White Oak	*Quercus alba*	30	Good
20	White Oak	*Quercus alba*	31	Good
21	White Oak	*Quercus alba*	30	Good
22	Northern Red Oak	*Quercus rubra*	33.5	Good
23	Red Maple	*Acer rubrum*	38.5	Good
24	Sweetgum	*Liquidambar styraciflua*	31	Good
25	Unknown Oak	*Quercus sp.*	31.5	Good
26	Willow Oak	*Quercus phellos*	34.5	Good
27	Red Maple	*Acer rubrum*	42.5	Good
28	Sweetgum	*Liquidambar styraciflua*	32.5	Good
29	White Oak	*Quercus alba*	32	Good
30	White Oak	*Quercus alba*	31.5	Good
31	Willow Oak	*Quercus phellos*	30	Good
32	Willow Oak	*Quercus phellos*	30	Good
33	Willow Oak	*Quercus phellos*	37.5	Good
34	Willow Oak	*Quercus phellos*	57	Good
35	Willow Oak	*Quercus phellos*	30	Good
36	Southern Red Oak	*Quercus falcata*	32.5	Good
37	Southern Red Oak	*Quercus falcata*	37	Good
38	Southern Red Oak	*Quercus falcata*	32	Good
39	Willow Oak	*Quercus phellos*	31	Good
40	Unknown Oak	*Quercus sp.*	32.5	Good
41	Southern Red Oak	*Quercus falcata*	31	Good
42	Southern Red Oak	*Quercus falcata*	32.5	Good
43	Willow Oak	*Quercus phellos*	36	Good
44	Willow Oak	*Quercus phellos*	37	Good
45	Willow Oak	*Quercus phellos*	36	Good
46	Willow Oak	*Quercus phellos*	33	Good
47	Southern Red Oak	*Quercus falcata*	35.5	Good
48	Southern Red Oak	*Quercus falcata*	32	Good
49	Southern Red Oak	*Quercus falcata*	40.5	Good
50	Willow Oak	*Quercus phellos*	32	Good
51	Southern Red Oak	*Quercurs falcata*	34	Good
52	Southern Red Oak	*Quercurs falcata*	31	Good
53	Southern Red Oak	*Quercurs falcata*	34.5	Good
54	Willow Oak	*Quercus phellos*	35	Good
55	Southern Red Oak	*Quercus falcata*	36.5	Good
56	Southern Red Oak	*Quercus falcata*	37	Good
57	Red Maple	*Acer rubrum*	40.5	Good
58	Southern Red Oak	*Quercus falcata*	31.5	Good
59	Red Maple	*Acer rubrum*	32.5	Good
60	Red Maple	*Acer rubrum*	56.5	Good
61	Willow Oak	*Quercus phellos*	32	Good
62	Southern Red Oak	*Quercus falcata*	31	Good
63	Southern Red Oak	*Quercus falcata*	30.5	Good
64	Willow Oak	*Quercus phellos*	33.5	Good
65	Willow Oak	*Quercus phellos*	37.5	Good
66	Southern Red Oak	*Quercus falcata*	46	Good
67	Willow Oak	*Quercus phellos*	32	Good
68	Southern Red Oak	*Quercus falcata*	42	Good
69	White Oak	*Quercus alba*	38	Good
70	White Oak	*Quercus alba*	30.5	Good
71	White Oak	*Quercus alba*	30.5	Good
72	White Oak	*Quercus alba*	30	Good
73	White Oak	*Quercus alba*	30	Good
74	Southern Red Oak	*Quercus falcata*	39.5	Good
75	Red Maple	*Acer rubrum*	35	Good
76	Willow Oak	*Quercus phellos*	39.5	Good
77	Southern Red Oak	*Quercus falcata*	33.5	Good
78	Red Maple	*Acer rubrum*	43.5	Good
79	Willow Oak	*Quercus phellos*	34	Good
80	Willow Oak	*Quercus phellos*	30.5	Good
81	Southern Red Oak	*Quercus falcata*	32	Good
82	Southern Red Oak	*Quercus falcata*	33	Good
83	Willow Oak	*Quercus falcata*	36.5	Good
84	Willow Oak	*Quercus phellos*	38	Good
85	Willow Oak	*Quercus phellos*	31.5	Good
86	Willow Oak	*Quercus phellos*	36	Good
87	Southern Red Oak	*Quercus falcata*	36.5	Good
88	Willow Oak	*Quercus phellos*	32	Good
89	Willow Oak	*Quercus phellos*	30.5	Good
90	Willow Oak	*Quercus phellos*	39.5	Good
91	Southern Red Oak	*Quercus falcata*	33.5	Good
92	Willow Oak	*Quercus phellos*	35	Good
93	Southern Red Oak	*Quercus falcata*	31	Good
94	Willow Oak	*Quercus phellos*	40	Good
95	Tulip Poplar	*Liriodendron tulipifera*	46	Good
96	Willow Oak	*Quercus phellos*	40.5	Good
97	Willow Oak	*Quercus phellos*	34	Good
98	Willow Oak	*Quercus phellos*	36	Good



SHEET INDEX
SCALE: 1" = 600'



VICINITY MAP
SCALE: 1"=2000'

BACKGROUND INFORMATION

1. ON-SITE CONTOURS AND EXISTING FEATURES WERE SURVEYED BY CENTURY ENGINEERING, LLC, A KLEINFELDER COMPANY, IN THE WINTER OF 2024. OFF-SITE FEATURES SHOWN ON THIS PLAN WERE DERIVED FROM ANNE ARUNDEL COUNTY GIS DATA.
1. COORDINATES AND ELEVATIONS ARE REFERRED TO THE MARYLAND COORDINATE SYSTEM (NAD83/91 & NAVD88).
2. SOIL BOUNDARY DATA WAS BASED ON NRCS SSURGO SOIL BOUNDARY GIS DATA FOR ANNE ARUNDEL COUNTY, MARYLAND 2024.
3. CLIENT / PROPERTY OWNER INFORMATION:
   BALTIMORE GAS AND ELECTRIC COMPANY
   1699 LEADENHALL STREET
   BALTIMORE, MARYLAND 21230
4. PARCEL INFORMATION: TAX MAP 10, PARCEL 397, 125.29 ACRES

NATURAL RESOURCES INFORMATION

1. A WETLAND DELINEATION AND FOREST STAND DELINEATION WAS PERFORMED BY MCCORMICK TAYLOR IN JANUARY AND FEBRUARY OF 2024.
2. MCCORMICK TAYLOR IDENTIFIED 98 SPECIMEN TREES (≥30" DBH) ON-SITE.
3. NO TREES THAT ARE 75% OF THE STATE CHAMPION ARE LOCATED WITHIN THE STUDY AREA.
4. WATERSHED INFORMATION:
   BALTIMORE HARBOR WATERSHED (CODE 02-13-09-03)
   STREAM USE DESIGNATION - UNT TO MARLEY CREEK CLASSIFIED AS "USE I"
   CLOSURE PERIOD - MARCH 1 THROUGH JUNE 15, INCLUSIVE DURING ANY YEAR
5. THE SITE DRAINS TOWARDS AN UNNAMED TRIBUTARY OF MARLEY CREEK.
6. PER FEMA FIRM PANEL NO. 24003C0062F, NO FEMA REGULATED FLOODPLAINS ARE LOCATED ONSITE.
7. ON FEBRUARY 12, 2024, THE MARYLAND DEPARTMENT OF NATURAL RESOURCES WILDLIFE AND HERITAGE SERVICE DETERMINED THAT THERE ARE NO OFFICIAL RECORDS FOR STATE OR FEDERAL LISTED, CANIDATE, OR RARE PLANT OR ANIMAL SPECIES ON-SITE; HOWEVER, THERE ARE RECORDS FOR SUCH SPECIES DOCUMENTED IN CLOSE PROXIMITY TO THE SITE. THESE SPECIES HAVE THE POTENTIAL TO OCCUR ON THE PROJECT SITE, ESPECIALLY IN AREAS OF SUITABLE HABITAT. THEY ARE:
   - *ARUNDINARIA TECTA* (SWITCH CANE) - RARE
   - *IRIS VERNA* (DWARF IRIS) - ENDANGERED
   - *HUDSONIA ERICOIDES* (GOLDEN HEATHER) - ENDANGERED
8. THE MARYLAND DEPARTMENT OF NATURAL RESOURCES WILDLIFE AND HERITAGE SERVICE ALSO NOTED THAT THEIR REMOTE ANALYSIS SUGGESTS THAT THE FORESTED AREA ON THE PROPERTY CONSISTS OF FOREST INTERIOR DWELLING SPECIES (FIDS) HABITAT.
9. ON FEBRUARY 23, 2024, THE MARYLAND HISTORICAL TRUST DETERMINED THAT THERE ARE NO HISTORIC PROPERTIES ONSITE AND THE UNDERTAKING WILL HAVE NO ADVERSE EFFECT ON HISTORIC PROPERTIES.

WETLANDS/WATERWAYS SUMMARY TABLE

TYPE	NAME	COWARDIN CLASSIFICATION	APPROXIMATE AREA ON-SITE (AC)	APPROXIMATE LENGTH ON-SITE (LF)
STREAM	R4-1	R4	0.05	249
STREAM	R4-2	R4	0.12	678
STREAM	R4-3	R4	0.04	150
STREAM	R4-4	R4	0.01	156
STREAM	R6-1	R6	0.02	238
NONTIDAL WETLAND	PEM-1	PEM	1.45	-
NONTIDAL WETLAND	PEM-2	PEM	0.34	-
NONTIDAL WETLAND	PEM-3	PEM	0.18	-
NONTIDAL WETLAND	PEM-4	PEM	0.04	-
NONTIDAL WETLAND	PFO-1	PFO	3.19	-
NONTIDAL WETLAND	PFO-2	PFO	0.09	-
NONTIDAL WETLAND	PFO-3	PFO	0.96	-
NONTIDAL WETLAND	PFO-4	PFO	0.18	-
NONTIDAL WETLAND	PFO-5	PFO	0.01	-
NONTIDAL WETLAND	PFO-6	PFO	0.02	-
NONTIDAL WETLAND	PFO-7	PFO	0.12	-
NONTIDAL WETLAND	PFO-8	PFO	0.17	-

FOREST STAND SUMMARY TABLE

Stand	Dominant Species	Priority Retention (Y/N)	Area within Study Area (AC)
A	Virginia Pine	Y	19.00
B	Mixed Oak	Y	20.29
C	White Oak - Northern Red Oak	Y	4.27
D	Sweetgum	Y	3.82
E	Southern Red Oak - Virginia Pine	Y	34.46
F	Mixed Oak	Y	26.46

SOIL SURVEY TABLE

Map Unit Name	Symbol	Hydric Component	% Hydric Component	Landform	Kf Value	Hydrologic Group
Evesboro and Galestown soils, 5 to 10 percent slopes	EVC	N/A	N/A	Interfluves	.05	A
Christiana-Sassafras complex, 2 to 5 percent slopes	CcrB	N/A	N/A	Interfluves	.49	D
Christiana-Sassafras complex, 5 to 10 percent slopes	CcrC	N/A	N/A	Interfluves	.49	D
Patapsco-Evesboro-Fort Mott complex, 0 to 5 percent slopes	PeB	N/A	N/A	Interfluves	.02	A
Patapsco-Fort Mott complex, 0 to 5 percent slopes	PfB	N/A	N/A	Interfluves	.02	A
Russett-Christiana-Hambrook complex, 0 to 5 percent slopes	RhB	N/A	N/A	Interfluves	.28	C
Russett-Christiana-Hambrook complex, 5 to 10 percent slopes	RhC	N/A	N/A	Interfluves	.28	C
Russett-Christiana-Hambrook complex, 10 to 15 percent slopes	RhD	N/A	N/A	Interfluves	.28	C
Sassafras and Croom soils, 15 to 25 percent slopes	SME	N/A	N/A	Interfluves	.15	C
Udorthents, loamy, 0 to 5 percent slopes	UoB	N/A	N/A	Interfluves	.37	C
Woodstown sandy loam, 2 to 5 percent slopes, Northern Coastal Plain	WdaB	N/A	N/A	Fluviomarine	.24	C

MARYLAND DEPARTMENT OF NATURAL RESOURCES, QUALIFIED PROFESSIONAL
KLEINFELDER 443-589-2400
DANIEL YEAGER
SIGNATURE 3/6/2025 DATE

KLEINFELDER
Bright People. Right Solutions.
10710 Gilroy Road
Hunt Valley, Maryland 21031
Phone: 443.589.2400
Project No. 2500796.008A

REV	DATE	ACCOUNT NO.	DESCRIPTION	APPROVED	AUTOCAD
				PREP	
				REVD	
				APVD	

ENGINEERING
CIVIL ______
ELEC. ______
PROJ. ENG. ______
PROJ. MGR. ______
PRIN. ENG. ______
SUPV. ENG. ______

DESIGN GROUP
DESIGNED ______
DRAWN ______
CHECKED ______
APPROVED ______
DATE ______

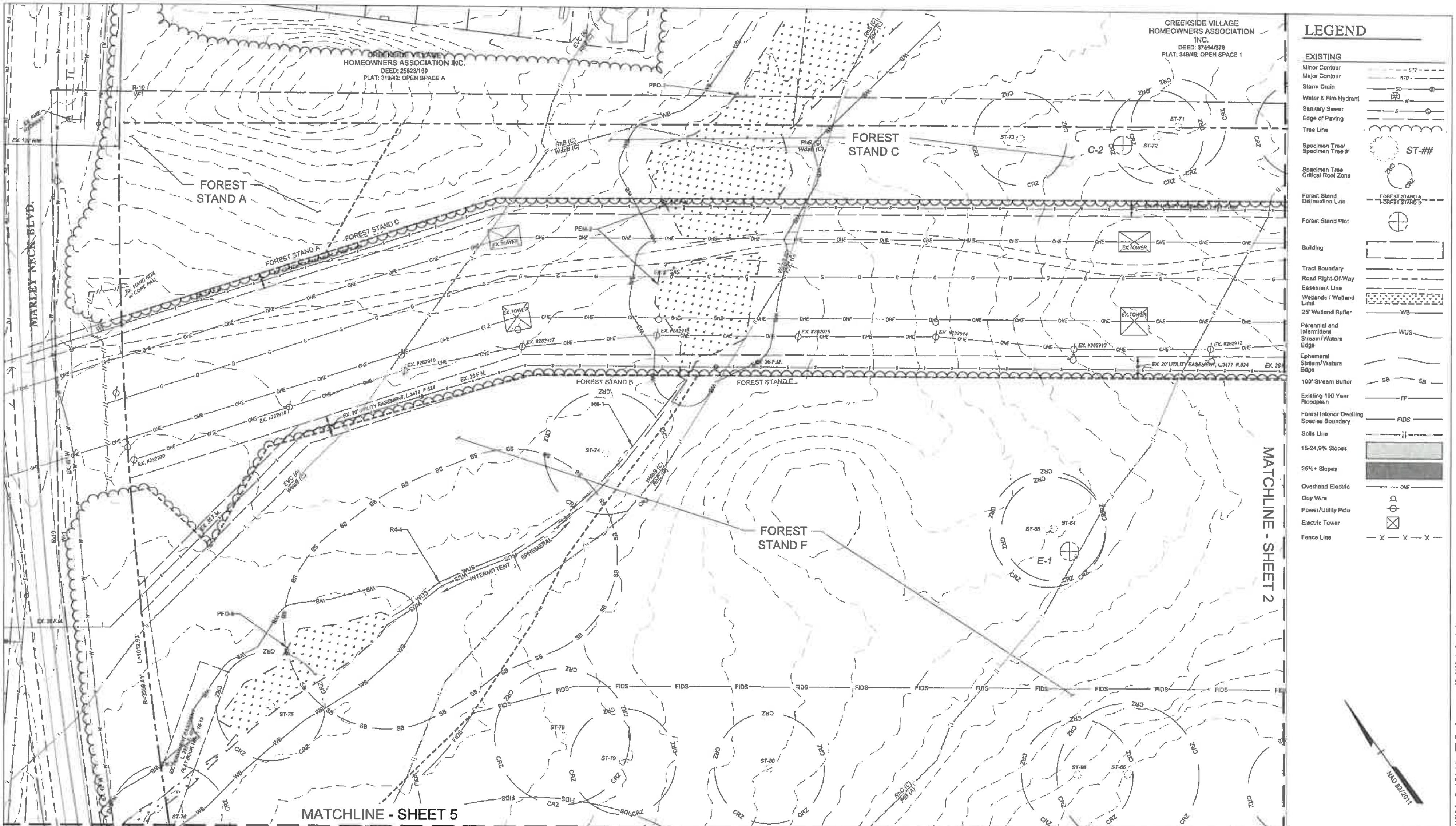
FOREST STAND DELINEATION PLAN

ZONING W1
TAX MAP 10 - PARCEL 397
ANNE ARUNDEL COUNTY, MARYLAND

SOLLEY ROAD SUBSTATION
ELECTRIC SUBSTATION ENGINEERING

bge
SCALE: AS SHOWN
REV.
DWG. NO. FSD-01

T:\2024\Facilities\24003851.001A BGE Solley Road Substation (RGB)\CIVIL\CADD\Natural Resources\Solley Road Substation FSD Cover Sheet.dwg



SHEET 2 OF 9

REV	DATE	ACCOUNT NO.	DESCRIPTION	APPROVED	
				PREP	
				REVD	
				APVD	

MARYLAND DEPARTMENT OF NATURAL RESOURCES, QUALIFIED PROFESSIONAL
KLEINFELDER 443-589-2400
DANIEL YEAGER

SIGNATURE 3/6/2025 DATE

KLEINFELDER
Bright People. Right Solutions.
10710 Gilroy Road
Hunt Valley, Maryland 21031
Phone: 443.589.2400
Project No. 2500796.008A

AUTOCAD
ENGINEERING
CIVIL
ELEC.
PROJ. ENG.
PROJ. MGR.
PRIN. ENG.
SUPV. ENG.

DESIGN GROUP
DESIGNED
DRAWN
CHECKED
APPROVED
DATE

FOREST STAND DELINEATION PLAN

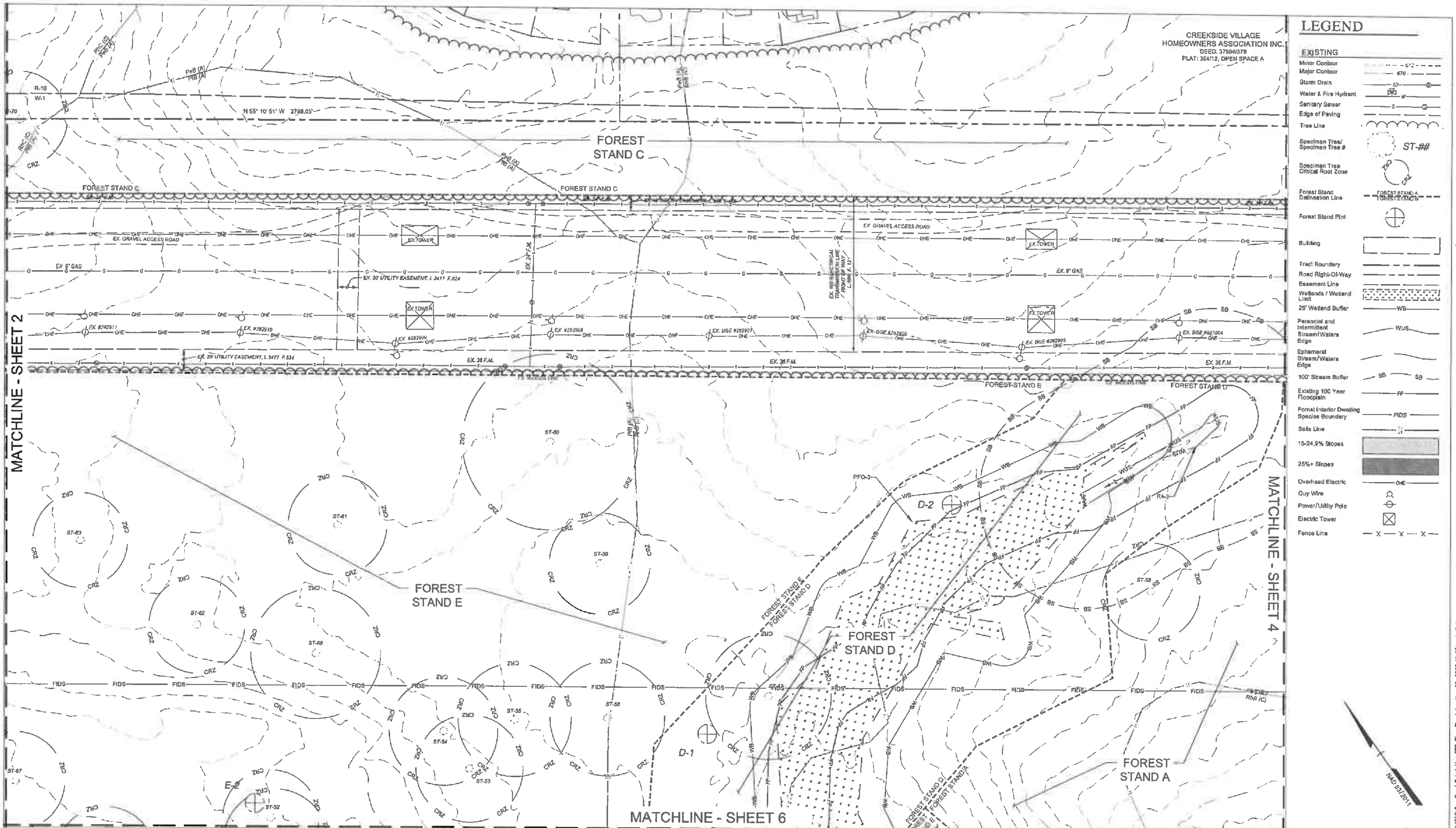
ZONING W1
TAX MAP 10 - PARCEL 397
ANNE ARUNDEL COUNTY, MARYLAND

SOLLEY ROAD SUBSTATION

ELECTRIC SUBSTATION ENGINEERING

bge

SCALE: 1" = 40'
DWG. NO. FSD-02
REV.



FOREST
STAND E

MARYLAND DEPARTMENT OF NATURAL RESOURCES, QUALIFIED PROFESSIONAL
KLEINFELDER 443-589-2400
DANIEL YEAGER

SIGNATURE

3/6/2025
DATE

KLEINFELDER
Bright People. Right Solutions.
10710 Gilroy Road
Hunt Valley, Maryland 21031
Phone: 443.589.2400
Project No. 2500796.008A

REV	DATE	ACCOUNT NO.	DESCRIPTION	APPROVED	
				PREP	
				REVD	
				APVD	

AUTOCAD

ENGINEERING
CIVIL
ELEC.
PROJ. ENG.
PROJ. MGR.
PRIN. ENG.
SUPV. ENG.

DESIGN GROUP
DESIGNED
DRAWN
CHECKED
APPROVED
DATE

FOREST STAND DELINEATION PLAN

ZONING W1
TAX MAP 10 - PARCEL 397
ANNE ARUNDEL COUNTY, MARYLAND

SOLLEY ROAD SUBSTATION

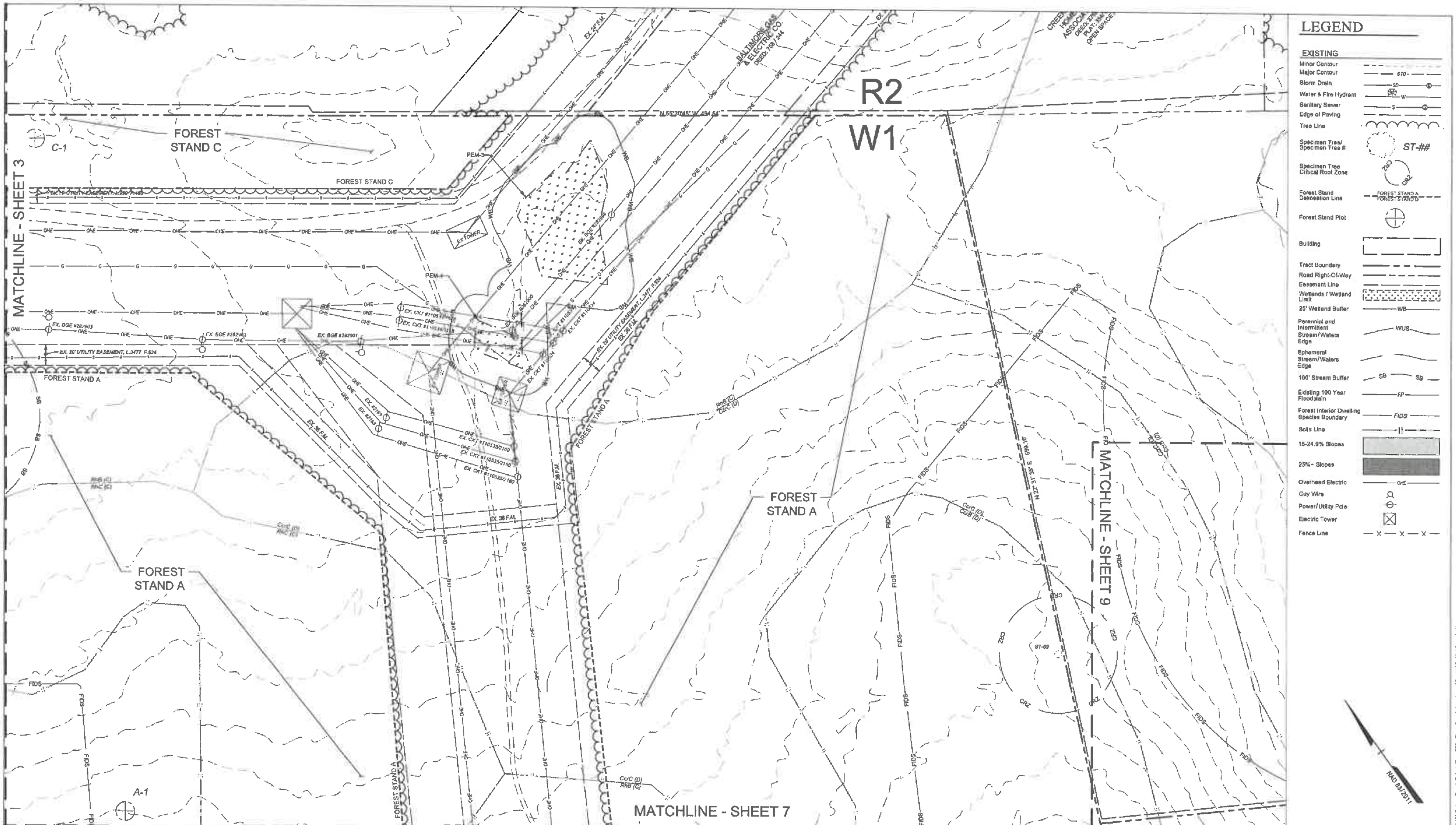
ELECTRIC SUBSTATION ENGINEERING

bge AN EXELON COMPANY

SCALE: 1" = 40'

REV.

DWG. NO. FSD-03



REV	DATE	ACCOUNT NO.	DESCRIPTION	APPROVED
				PREP
				REVD
				APVD

AUTOCAD

ENGINEERING
CIVIL
ELEC.
PROJ. ENG.
PROJ. MGR.
PRIN. ENG.
SUPV. ENG.

DESIGN GROUP
DESIGNED
DRAWN
CHECKED
APPROVED
DATE

FOREST STAND DELINEATION PLAN

ZONING W1
TAX MAP 10 - PARCEL 397
ANNE ARUNDEL COUNTY, MARYLAND

SOLLEY ROAD SUBSTATION

ELECTRIC SUBSTATION ENGINEERING

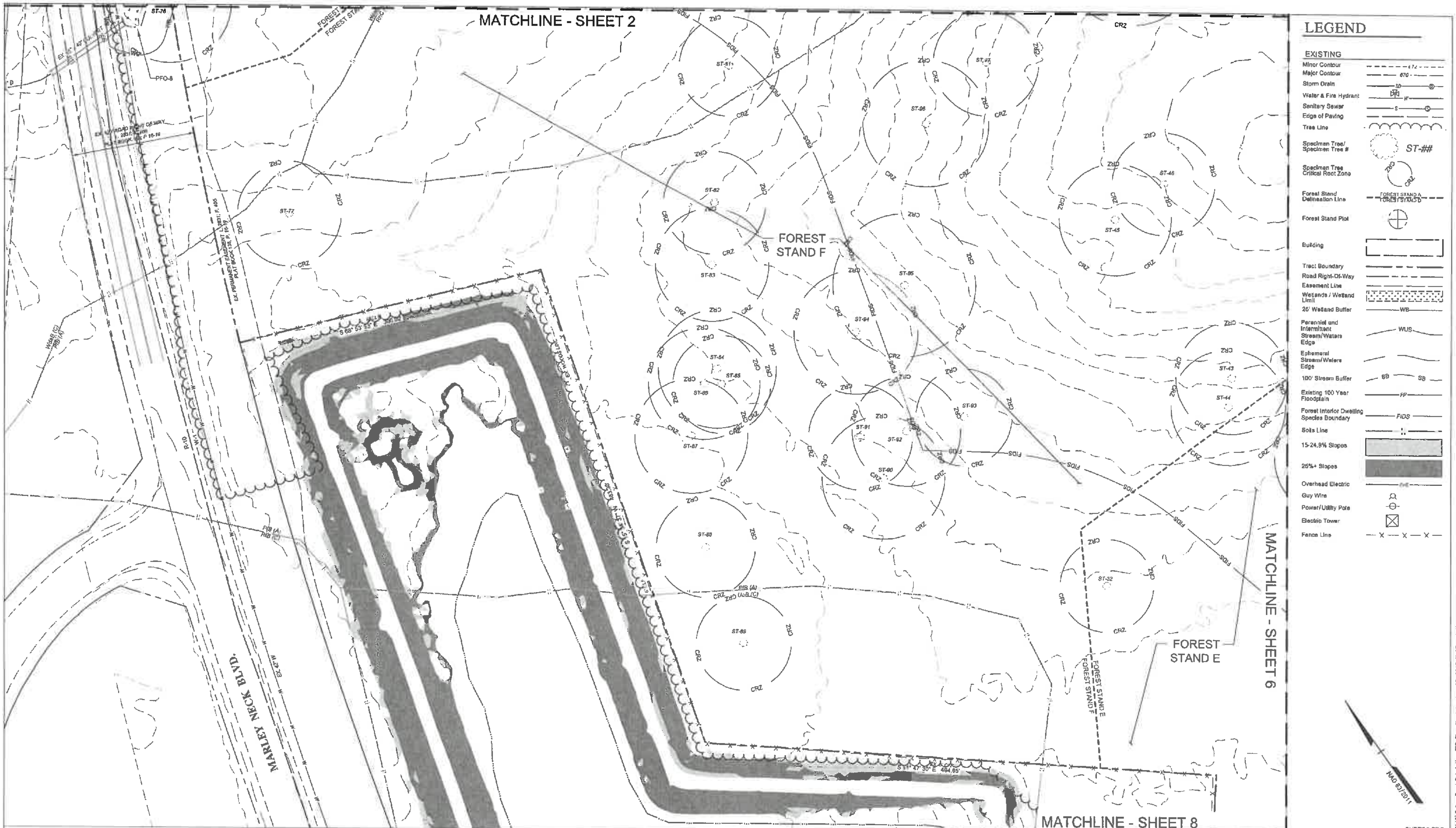
bge
SCALE: 1" = 40
REV
DWG. NO. FSD-04

MARYLAND DEPARTMENT OF NATURAL RESOURCES, QUALIFIED PROFESSIONAL
KLEINFELDER 443-589-2400
DANIEL YEAGER

SIGNATURE

3/6/2025
DATE

KLEINFELDER
Bright People. Right Solutions.
10710 Gilroy Road
Hunt Valley, Maryland 21031
Phone: 443.589.2400
Project No. 2500795.008A



SHEET 5 OF 8

REV	DATE	ACCOUNT NO.	DESCRIPTION	APPROVED	
				PREP	
				REVD	
				APVD	

MARYLAND DEPARTMENT OF NATURAL RESOURCES, QUALIFIED PROFESSIONAL
KLEINFELDER 443-589-2400
DANIEL YEAGER

SIGNATURE 3/6/2025
DATE

KLEINFELDER
Bright People. Right Solutions.
10710 Gilroy Road
Hunt Valley, Maryland 21031
Phone: 443.589.2400
Project No. 2500796.008A

AUTOCAD
ENGINEERING
CIVL
ELEC.
PROJ. ENG.
PROJ. MGR.
PRIN. ENG.
SUPV. ENG.

DESIGN GROUP
DESIGNED
DRAWN
CHECKED
APPROVED
DATE

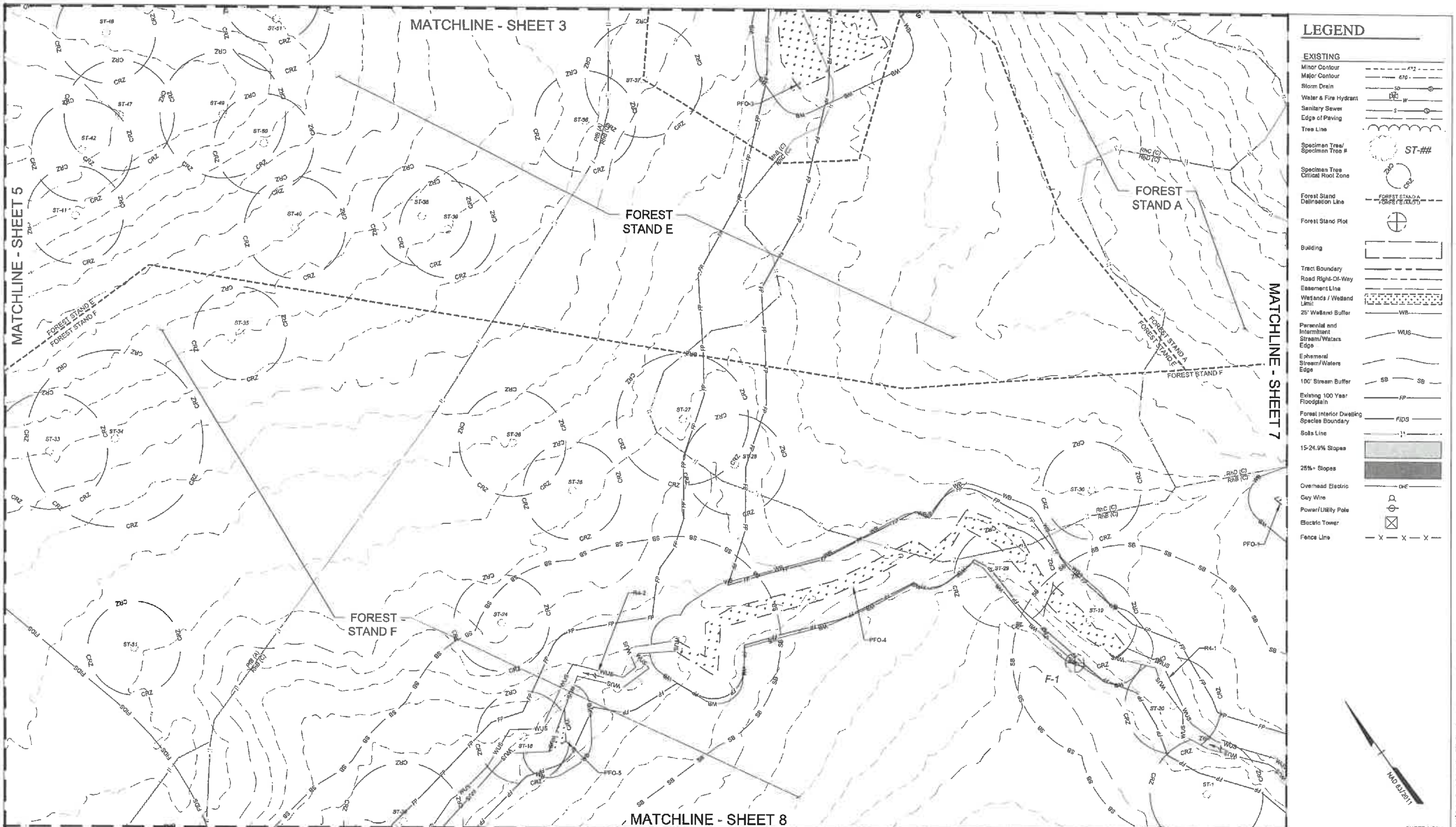
FOREST STAND DELINEATION PLAN

ZONING W1
TAX MAP 10 - PARCEL 397
ANNE ARUNDEL COUNTY, MARYLAND

SOLLEY ROAD SUBSTATION

ELECTRIC SUBSTATION ENGINEERING

bge
SCALE: 1" = 40'
REV.
DWG. NO. FSD-05



SHEET 6 OF 9

REV	DATE	ACCOUNT NO.	DESCRIPTION	APPROVED	
				PREP	
				REVD	
				APVD	

AUTOCAD

ENGINEERING
CIVIL
ELEC.
PROJ. ENG.
PROJ. MGR.
PRIN. ENG.
SUPV. ENG.

DESIGN GROUP
DESIGNED
DRAWN
CHECKED
APPROVED
DATE

FOREST STAND DELINEATION PLAN

ZONING W1
TAX MAP 10 - PARCEL 397
ANNE ARUNDEL COUNTY, MARYLAND

SOLLEY ROAD SUBSTATION

ELECTRIC SUBSTATION ENGINEERING

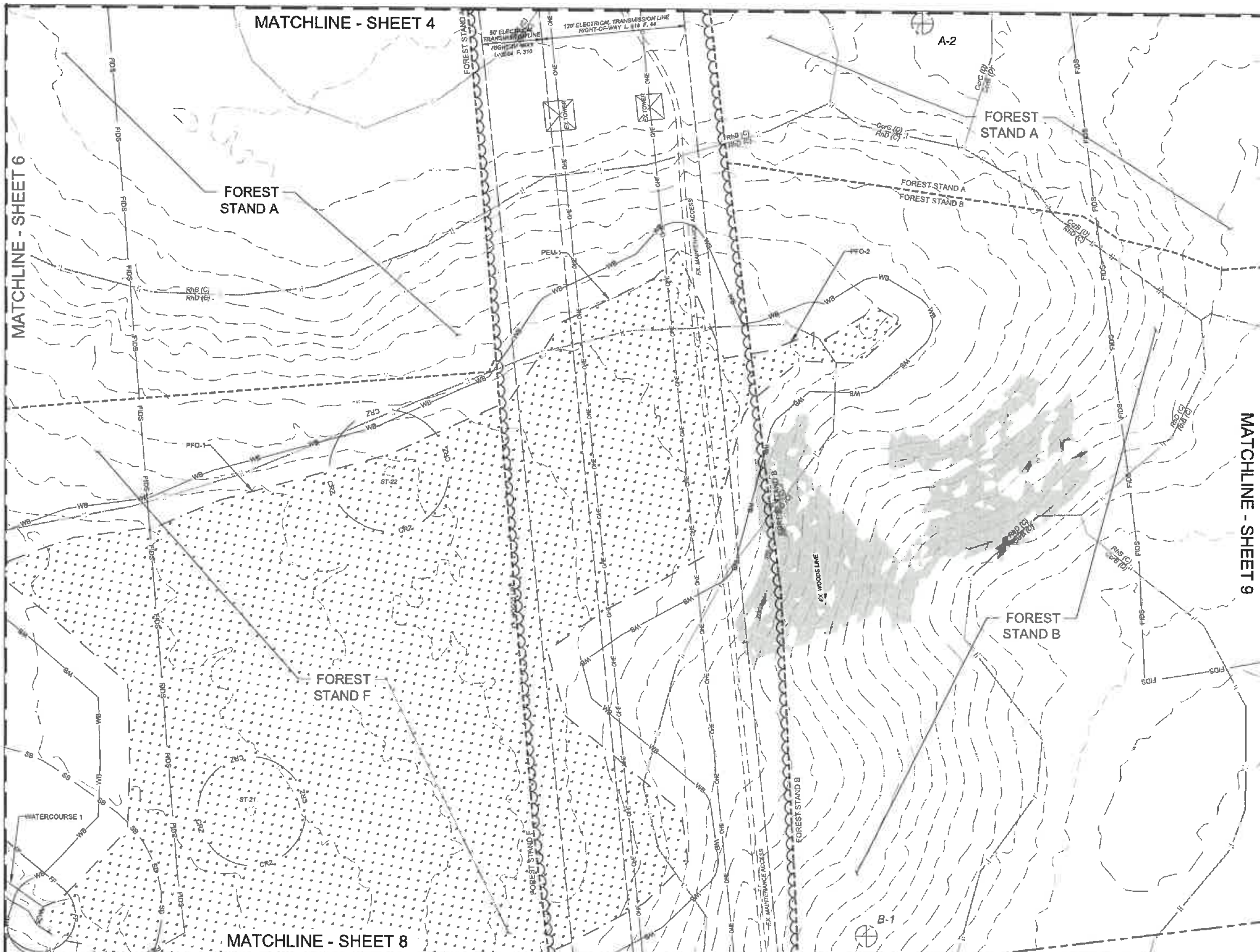
bge

SCALE: 1" = 40'
DWG. NO. FSD-06
REV.

MARYLAND DEPARTMENT OF NATURAL RESOURCES, QUALIFIED PROFESSIONAL
KLEINFELDER 443-589-2400
DANIEL YEAGER

SIGNATURE 3/6/2025
DATE

KLEINFELDER
Bright People. Right Solutions.
10710 Gilroy Road
Hunt Valley, Maryland 21031
Phone: 443.589.2400
Project No. 2500796.00BA



LEGEND

EXISTING

Symbol	Label
Minor Contour	672
Major Contour	670
Storm Drain	SD
Water & Fire Hydrant	W
Sanitary Sewer	S
Edge of Paving	
Tree Line	
Specimen Tree/ Specimen Tree #	ST-##
Specimen Tree Critical Root Zone	CRZ
Forest Stand Delineation Line	FOREST STAND A / FOREST STAND B
Forest Stand Plot	
Building	
Tract Boundary	
Road Right-Of-Way	
Easement Line	
Wetlands / Wetland Limit	
25' Wetland Buffer	WB
Perennial and Intermittent Stream/Waters Edge	WUS
Ephemeral Stream/Waters Edge	
100' Stream Buffer	SB
Existing 100 Year Floodplain	FP
Forest Interior Dwelling Species Boundary	FIDS
Soils Line	
15-24.9% Slopes	
25%+ Slopes	
Overhead Electric	OHE
Guy Wire	
Power/Utility Pole	
Electric Tower	
Fence Line	X

SHEET 7 OF 9

REV	DATE	ACCOUNT NO.	DESCRIPTION	APPROVED	
				PREP	
				REVD	
				APVD	

MARYLAND DEPARTMENT OF NATURAL RESOURCES, QUALIFIED PROFESSIONAL
KLEINFELDER 443-589-2400
DANIEL YEAGER

SIGNATURE 3/6/2025 DATE

KLEINFELDER
Bright People. Right Solutions.
10710 Gilroy Road
Hunt Valley, Maryland 21031
Phone: 443.589.2400
Project No. 2500796.008A

AUTOCAD

ENGINEERING
CIVIL
ELEC.
PROJ. ENG.
PROJ. MGR.
PRIN. ENG.
SUPV. ENG.

DESIGN GROUP
DESIGNED
DRAWN
CHECKED
APPROVED
DATE

FOREST STAND DELINEATION PLAN

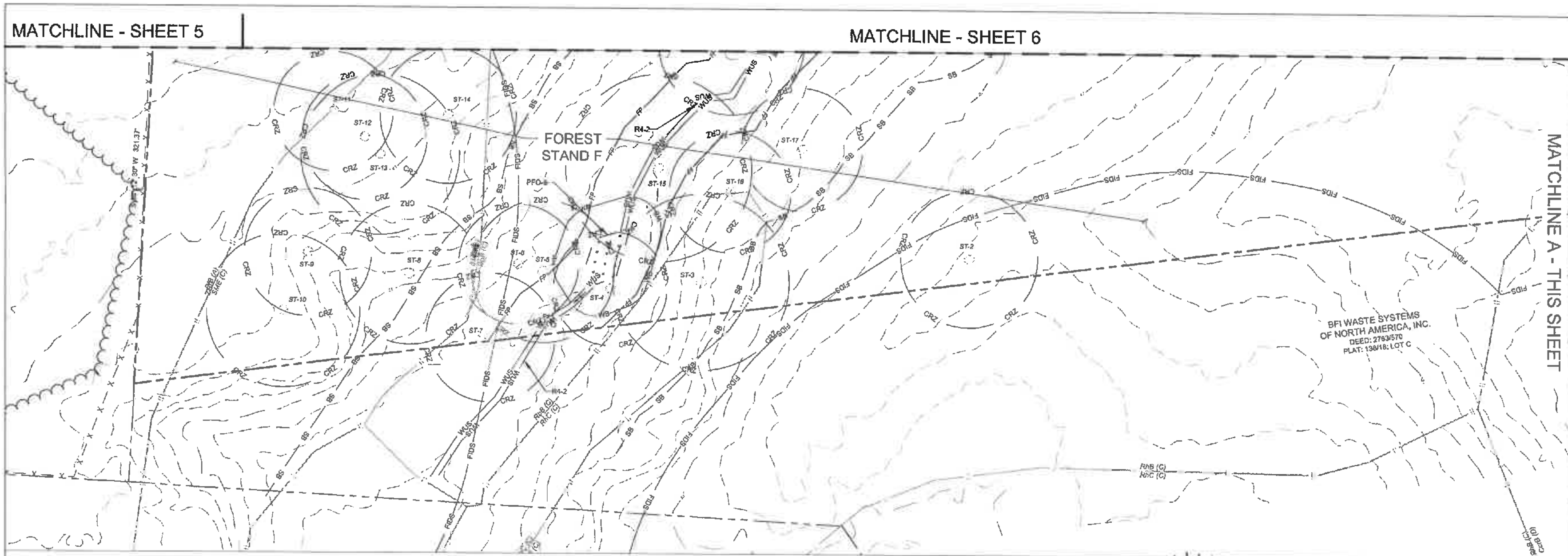
ZONING W1
TAX MAP 10 - PARCEL 397
ANNE ARUNDEL COUNTY, MARYLAND

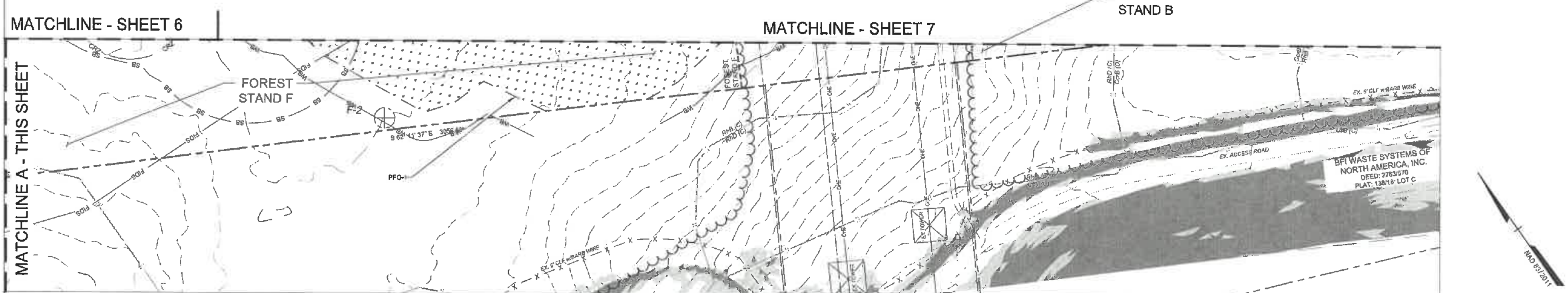
SOLLEY ROAD SUBSTATION

ELECTRIC SUBSTATION ENGINEERING

bge AN EXELON COMPANY

SCALE: 1" = 40'
DWG. NO. FSD-07
REV.





LEGEND

EXISTING

- Minor Contour
- Major Contour
- Storm Drain
- Water & Fire Hydrant
- Sanitary Sewer
- Edge of Paving
- Tree Line
- Specimen Tree/ Specimen Tree # — ST-##
- Specimen Tree Critical Root Zone — CRZ
- Forest Stand Delineation Line — FOREST STAND A / FOREST STAND D
- Forest Stand Plot
- Building
- Tract Boundary
- Road Right-Of-Way
- Easement Line
- Wetlands / Wetland Limit
- 25' Wetland Buffer — WB
- Perennial and Intermittent Stream/Waters Edge — WUS
- Ephemeral Stream/Waters Edge
- 100' Stream Buffer — SB
- Existing 100 Year Floodplain — FP
- Forest Interior Dwelling Species Boundary — FIDS
- Soils Line
- 15-24.9% Slopes
- 25%+ Slopes
- Overhead Electric — OHE
- Guy Wire
- Power/Utility Pole
- Electric Tower
- Fence Line

SHEET 8 OF 9

REV	DATE	ACCOUNT NO.	DESCRIPTION	APPROVED
				PREP
				REVD
				APVD

AUTOCAD

ENGINEERING: CIVIL, ELEC, PROJ. ENG., PROJ. MGR., PRIN. ENG., SUPV. ENG.

DESIGN GROUP: DESIGNED, DRAWN, CHECKED, APPROVED, DATE

FOREST STAND DELINEATION PLAN

ZONING W1
TAX MAP 10 - PARCEL 397
ANNE ARUNDEL COUNTY, MARYLAND

SOLLEY ROAD SUBSTATION

ELECTRIC SUBSTATION ENGINEERING

bge AN EXELON COMPANY

SCALE: 1" = 40'

DWG. NO. FSD-08

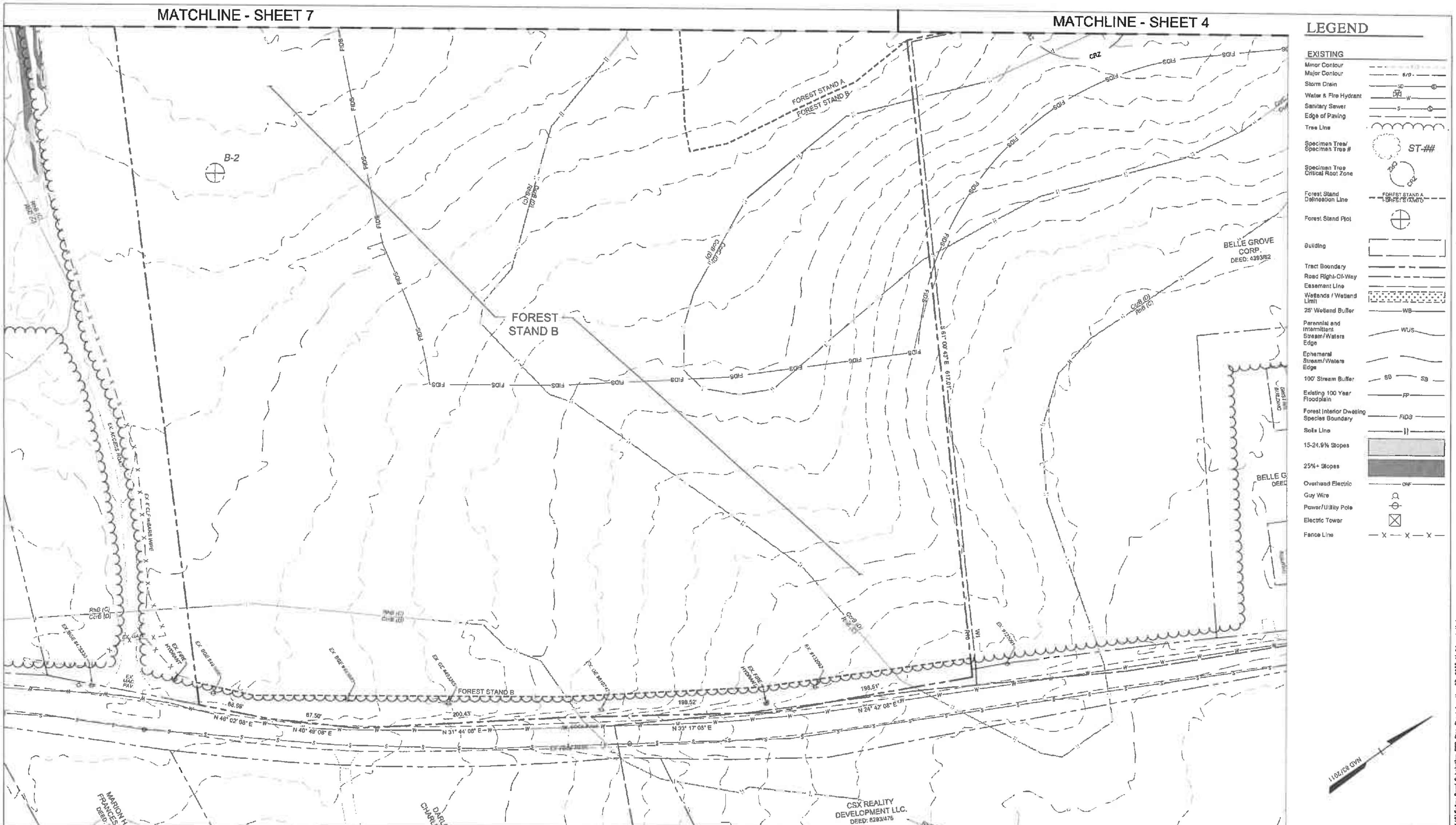
REV.

MARYLAND DEPARTMENT OF NATURAL RESOURCES, QUALIFIED PROFESSIONAL
KLEINFELDER 443-589-2400
DANIEL YEAGER

SIGNATURE: Daniel Yeager

DATE: 3/5/2025

KLEINFELDER
Bright People. Right Solutions.
10710 Gilroy Road
Hunt Valley, Maryland 21031
Phone: 443.589.2400
Project No. 2500798.006A



REV	DATE	ACCOUNT NO.	DESCRIPTION	APPROVED
				PREP
				REVD
				APVD

MARYLAND DEPARTMENT OF NATURAL RESOURCES, QUALIFIED PROFESSIONAL
KLEINFELDER 443-589-2400
DANIEL YEAGER

SIGNATURE 3/6/2025
DATE

KLEINFELDER
Bright People. Right Solutions.
10710 Gilroy Road
Hunt Valley, Maryland 21031
Phone: 443.589.2400
Project No. 2500796.008A

AUTOCAD
ENGINEERING
CIVIL
ELEC.
PROJ. ENG.
PROJ. MGR.
PRIN. ENG.
SUPV. ENG.
DESIGN GROUP
DESIGNED
DRAWN
CHECKED
APPROVED
DATE

FOREST STAND DELINEATION PLAN

ZONING W1
TAX MAP 10 - PARCEL 397
ANNE ARUNDEL COUNTY, MARYLAND

SOLLEY ROAD SUBSTATION
ELECTRIC SUBSTATION ENGINEERING

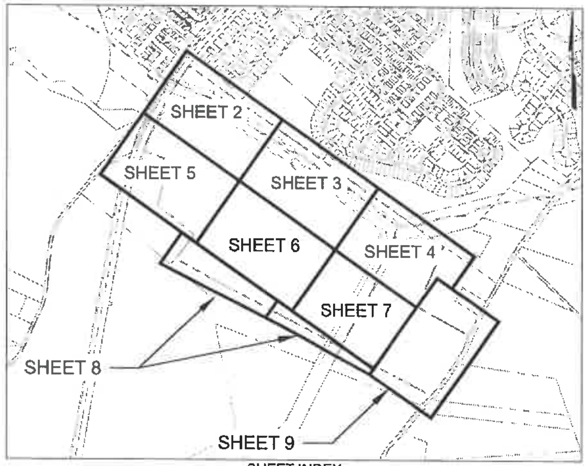
bge
SCALE: 1" = 40' REV.
DWG. NO. FSD-09

SOLLEY ROAD SUBSTATION
FOREST CONSERVATION PLAN
ANNE ARUNDEL COUNTY, MD

ANNE ARUNDEL COUNTY TAX MAP 10, BLOCK N/A, PARCEL 397
3RD TAX DISTRICT, ANNE ARUNDEL COUNTY, MARYLAND
ZONED: W1 (INDUSTRIAL PARK) ZIP CODE: 21060

SPECIMEN TREE IMPACT TABLE

Tree Number	Species	Scientific Name	DBH (inches)	Condition	Impact / Treatment
1	White Oak	*Quecus alba*	36.5	Good	To Remain
2	White Oak	*Quecus alba*	36	Good	To Remain
3	Red Maple	*Acer rubrum*	46.5	Good	To Remain
4	Red Maple	*Acer rubrum*	30	Good	To Remain
5	Red Maple	*Acer rubrum*	37.5	Good	To Remain
6	Red Maple	*Acer rubrum*	31.5	Good	To Remain
7	Red Maple	*Acer rubrum*	34	Good	To Remain
8	Willow Oak	*Quercus phellos*	37	Good	To Remain
9	Northern Red Oak	*Quecus rubra*	33.5	Good	To Remain
10	Willow Oak	*Quercus phellos*	40.5	Good	To Remain
11	Red Maple	*Acer rubrum*	31.5	Good	To Remain
12	Red Maple	*Acer rubrum*	33	Good	To Remain
13	Red Maple	*Acer rubrum*	42	Good	To Remain
14	Red Maple	*Acer rubrum*	36	Good	To Remain
15	Red Maple	*Acer rubrum*	49	Good	To Remain
16	Sweetgum	*Liquidambar styraciflua*	32	Good	To Remain
17	Red Maple	*Acer rubrum*	32	Good	To Remain
18	Sweetgum	*Liquidambar styraciflua*	30	Good	To Remain
19	White Oak	*Quercus alba*	30	Good	Cleared
20	White Oak	*Quercus alba*	31	Good	Cleared
21	White Oak	*Quercus alba*	30	Good	Cleared
22	Northern Red Oak	*Quercus rubra*	33.5	Good	Cleared
23	Red Maple	*Acer rubrum*	38.5	Good	To Remain
24	Sweetgum	*Liquidambar styraciflua*	31	Good	Cleared
25	Unknown Oak	*Quercus sp.*	31.5	Good	Cleared
26	Willow Oak	*Quercus phellos*	34.5	Good	Cleared
27	Red Maple	*Acer rubrum*	42.5	Good	Cleared
28	Sweetgum	*Liquidambar styraciflua*	32.5	Good	Cleared
29	White Oak	*Quercus alba*	32	Good	Cleared
30	White Oak	*Quercus alba*	31.5	Good	Cleared
31	Willow Oak	*Quercus phellos*	30	Good	Cleared
32	Willow Oak	*Quercus phellos*	30	Good	Cleared
33	Willow Oak	*Quercus phellos*	37.5	Good	Cleared
34	Willow Oak	*Quercus phellos*	57	Good	Cleared
35	Willow Oak	*Quercus phellos*	30	Good	Cleared
36	Southern Red Oak	*Quercus falcata*	32.5	Good	Cleared
37	Southern Red Oak	*Quercus falcata*	37	Good	Cleared
38	Southern Red Oak	*Quercus falcata*	32	Good	Cleared
39	Willow Oak	*Quercus phellos*	31	Good	Cleared
40	Unknown Oak	*Quercus sp.*	32.5	Good	Cleared
41	Southern Red Oak	*Quercus falcata*	31	Good	Cleared
42	Southern Red Oak	*Quercus falcata*	32.5	Good	Cleared
43	Willow Oak	*Quercus phellos*	36	[illegible]	Cleared
44	Willow Oak	*Quercus phellos*	37	Good	Cleared
45	Willow Oak	*Quercus phellos*	36	Good	Cleared
46	Willow Oak	*Quercus phellos*	33	Good	Cleared
47	Southern Red Oak	*Quercus falcata*	35.5	Good	Cleared
48	Southern Red Oak	*Quercus falcata*	32	Good	Cleared
49	Southern Red Oak	*Quercus falcata*	40.5	Good	Cleared
50	Willow Oak	*Quercus phellos*	32	Good	Cleared
51	Southern Red Oak	*Quercurs falcata*	34	Good	Cleared
52	Southern Red Oak	*Quercurs falcata*	31	Good	Cleared
53	Southern Red Oak	*Quercurs falcata*	34.5	Good	Cleared
54	Willow Oak	*Quercus phellos*	35	Good	Cleared
55	Southern Red Oak	*Quercus falcata*	36.5	Good	Cleared
56	Southern Red Oak	*Quercus falcata*	37	Good	Cleared
57	Red Maple	*Acer rubrum*	40.5	Good	Cleared
58	Southern Red Oak	*Quercus falcata*	31.5	Good	Cleared
59	Red Maple	*Acer rubrum*	32.5	Good	Cleared
60	Red Maple	*Acer rubrum*	56.5	Good	Cleared
61	Willow Oak	*Quercus phellos*	32	Good	Cleared
62	Southern Red Oak	*Quercus falcata*	31	Good	Cleared
63	Southern Red Oak	*Quercus falcata*	30.5	Good	Cleared
64	Willow Oak	*Quercus phellos*	33.5	Good	Cleared
65	Willow Oak	*Quercus phellos*	37.5	Good	Cleared
66	Southern Red Oak	*Quercus falcata*	46	Good	Cleared
67	Willow Oak	*Quercus phellos*	32	Good	Cleared
68	Southern Red Oak	*Quercus falcata*	42	Good	Cleared
69	White Oak	*Quercus alba*	38	Good	To Remain
70	White Oak	*Quercus alba*	30.5	Good	To Remain
71	White Oak	*Quercus alba*	30.5	Good	To Remain
72	White Oak	*Quercus alba*	30	Good	To Remain
73	White Oak	*Quercus alba*	30	Good	To Remain
74	Southern Red Oak	*Quercus falcata*	39.5	Good	To Remain
75	Red Maple	*Acer rubrum*	35	Good	To Remain
76	Willow Oak	*Quercus phellos*	39.5	Good	To Remain
77	Southern Red Oak	*Quercus falcata*	33.5	Good	To Remain
78	Red Maple	*Acer rubrum*	43.5	Good	Cleared
79	Willow Oak	*Quercus phellos*	34	Good	Cleared
80	Willow Oak	*Quercus phellos*	30.5	Good	Cleared
81	Southern Red Oak	*Quercus falcata*	32	Good	Cleared
82	Southern Red Oak	*Quercus falcata*	33	Good	Cleared
83	Willow Oak	*Quercus falcata*	36.5	Good	Cleared
84	Willow Oak	*Quercus phellos*	38	Good	Cleared
85	Willow Oak	*Quercus phellos*	31.5	Good	Cleared
86	Willow Oak	*Quercus phellos*	36	Good	Cleared
87	Southern Red Oak	*Quercus falcata*	36.5	Good	Cleared
88	Willow Oak	*Quercus phellos*	32	Good	Cleared
89	Willow Oak	*Quercus phellos*	30.5	Good	To Remain
90	Willow Oak	*Quercus phellos*	39.5	Good	Cleared
91	Southern Red Oak	*Quercus falcata*	33.5	Good	Cleared
92	Willow Oak	*Quercus phellos*	35	Good	Cleared
93	Southern Red Oak	*Quercus falcata*	31	Good	Cleared
94	Willow Oak	*Quercus phellos*	40	Good	Cleared
95	Tulip Poplar	*Liriodendron tulipifera*	46	Good	Cleared
96	Willow Oak	*Quercus phellos*	40.5	Good	Cleared
97	Willow Oak	*Quercus phellos*	34	Good	Cleared
98	Willow Oak	*Quercus phellos*	36	Good	Cleared



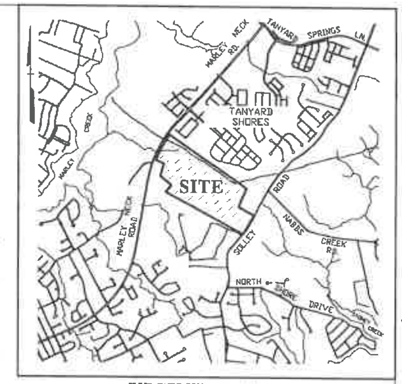
SHEET INDEX
SCALE: 1" = 600'

FOREST PROTECTION NOTES:

1. THE EROSION AND SEDIMENT CONTROL PLAN (E&S) SHALL LOCATE AND DESCRIBE ANY PROTECTION MECHANISMS TO BE INSTALLED TO PROTECT FOREST AREAS DURING AND AFTER CONSTRUCTION.
2. CUTTING OR CLEARING OF FOREST NOT IN CONFORMANCE WITH THIS PLAN OR WITHOUT THE EXPRESSED WRITTEN CONSENT OF THE APPROVING AUTHORITY OR DESIGNEE SHALL BE SUBJECT TO FINES.
3. AN ON-SITE PRE-CONSTRUCTION MEETING IS REQUIRED. PROTECTIVE MECHANISMS SHALL BE FIELD LOCATED AND APPROVED BY THE AUTHORITY OR DESIGNEE PRIOR TO THE START OF CONSTRUCTION. ATTENDEES SHALL INCLUDE THE PERMITTEE, CONSTRUCTION SUPERINTENDENT, MD LICENSED TREE EXPERT/ISA CERTIFIED ARBORIST AND COUNTY/STATE SEDIMENT AND EROSION CONTROL INSPECTOR.
4. ANY CLEARING, GRADING, OR CONSTRUCTION ADJACENT TO FORESTED AREAS WILL REQUIRE PROTECTIVE DEVICES, INCLUDING BUT NOT LIMITED TO ORANGE BLAZE CONSTRUCTION FENCING AND/OR ADAPTED E&S CONTROL DEVICES INDICATED ON THE E&S PLAN. ALL PROTECTIVE DEVICES SHALL REMAIN IN PLACE FOR THE DURATION OF THE CONSTRUCTION. PROTECTIVE DEVICES MAY BE REMOVED FOLLOWING FINAL INSPECTION APPROVAL.
5. NO CLEARING OR GRADING SHALL BEGIN BEFORE STRESS REDUCTION MEASURES HAVE BEEN IMPLEMENTED AND APPROVED BY THE AUTHORITY, DESIGNEE, OR A MD LICENSED TREE EXPERT/ISA CERTIFIED ARBORIST. STRESS REDUCTION MEASURES MAY INCLUDE BUT ARE NOT LIMITED TO:
   i. ROOT PRUNING - PRUNE USING PROPER PRUNING EQUIPMENT TO ENSURE A CLEAN CUT. EXPOSED ROOTS SHOULD BE COVERED IMMEDIATELY WITH TOPSOIL OR OTHER SUITABLE MATERIAL.
   ii. CROWN REDUCTION - REMOVE NO MORE THAN 1/3 OF THE CROWN. USE ACCEPTABLE PRUNING EQUIPMENT AND STANDARDS FOR THE TIME OF YEAR.
   iii. WATERING - DESIGN A WATERING SYSTEM AS DIRECTED BY A TREE CARE PROFESSIONAL.
   iv. FERTILIZING - APPLY A LOW NITROGEN, SLOW RELEASE FERTILIZER IN LATE FALL/EARLY SPRING SEE SEDIMENT AND EROSION CONTROL DETAILS SHEET (ED-2) FOR TREE PROTECTION DETAILS.
6. NO EQUIPMENT, VEHICLES, MACHINERY, DUMPING, STORAGE, OR OTHER CONSTRUCTION ACTIVITIES SHALL BE LOCATED WITHIN FORESTED AREAS, UNLESS WAIVED BY THE APPROVING AUTHORITY, OR AMENDED FOREST CONSERVATION PLAN.

FOREST CONSERVATION NOTES:

1. ALL EFFORTS TO MINIMIZE THE AREA OF DISTURBANCE WILL BE MADE.
2. 1.2 AC OF TREE PLANTING (REFORESTATION) IS REQUIRED PER THE FOREST CONSERVATION WORKSHEET. OPTIONS TO ADDRESS THIS REQUIREMENT ARE CURRENTLY BEING EXPLORED. WHEN DETERMINED THIS FCP WILL BE UPDATED.
3. SIXTY-NINE SPECIMEN TREES ARE PROPOSED TO BE REMOVED. PLEASE REFER TO THE SPECIMEN TREE IMPACT TABLE FOR FURTHER DETAILS. THE CLEARING OF THESE SPECIMEN TREES WILL BE ADDRESSED AS PART OF A MODIFICATION REQUEST THAT WILL BE SUBMITTED AT A FUTURE DATE.



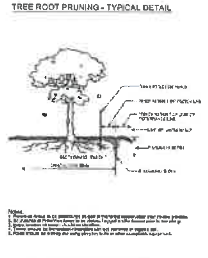
VICINITY MAP
SCALE: 1"=2000'

FCE Summary Table	
FCE 1	18.14 AC
FCE2	5.08 AC
FCE 3	24.59 AC

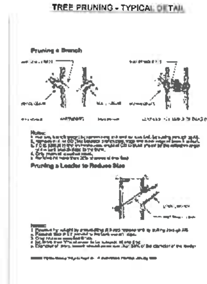
FOREST CONSERVATION WORKSHEET

Variables	Unique Tract 1
Site Information	
A. Growth [illegible] Area	Priority Funding Area
B. Land Use Type	Industrial
C. Total Unique Tract Area	107.4
D. Universal Deductions (Critical Area or 100-Yr Floodplain)	3.7
E. [illegible] Surface Deductions for Targeted Growth and Priority Funding Areas	0.0
F. Existing Forest Cover within Net Unique Tract Area	101.8
G. Proposed Forest Clearing within Net Unique Tract Area	54.2
H. Net Unique Tract Area = (C) - (D) - (E)	103.7
Is Total Net Tract Area less than or equal to 5 Acres?	No
Key for [illegible] table	Priority Funding Area/Industrial
I. Conservation Threshold	20%
J. Afforestation Threshold	15%
Forest Conservation	
K. Conservation Threshold Area = (H) X (I)	20.7
L. Area of Forest Above Conservation Threshold = (F) - (K)	81.1
M. Breakeven Point (Amount of forest that must be retained so that no mitigation is required) If the Area of Forest Above Conservation Threshold (L) is greater than 0, then M = ((0.5555) X (L)) + (K). If the Area of Forest Above Conservation Threshold is equal to 0, then M = (F)	47.8
N. Forest Clearing Permitted without Mitigation = (F) - (M)	54.1
O. Proposed Forest Retention = (F) - (G)	47.0
P. Reforestation for Retention Above the Threshold If Proposed Forest Clearing (G) is > Area of Forest Above Conservation Threshold (L), then (P) = (L) X (0.5). If not, then (P) = (G) X (0.5)	27.4
Q. Credit for Retention Above the Threshold If Proposed Forest Clearing (G) is > Area of Forest Above Conservation Threshold (L), then (Q) = 0. If not, then (Q) = (L) - (G)	28.2
R. Reforestation for Retention Below the Threshold If Proposed Forest Clearing (G) < Area of Forest Above Conservation Threshold (L), then (R) = 0. If not, then (R) = [illegible] X 2	0.0
S. Total Reforestation Required = (P) + (R) - (Q)	1.2
T. Afforestation Threshold Area = (H) X (J)	15.5
U. Total Afforestation Required If Existing Forest Cover (F) < Afforestation Threshold Area (T), then (U) = (T) - (F). If not, then (U) = 0.	0.0
V. Total Mitigation Required By Tract = (S) + (U)	1.2

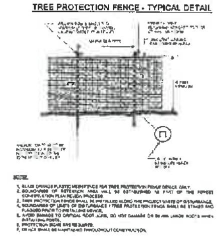
TREE ROOT PRUNING - TYPICAL DETAIL



TREE PRUNING - TYPICAL DETAIL



TREE PROTECTION FENCE - TYPICAL DETAIL



MARYLAND DEPARTMENT OF NATURAL RESOURCES, QUALIFIED PROFESSIONAL
KLEINFELDER 443-689-2400
DANIEL YEAGER

SIGNATURE 3/6/2025 DATE

KLEINFELDER
Bright People. Right Solutions.
10710 Gilroy Road
Hunt Valley, Maryland 21031
Phone: 443.689.2400
Project No. 2500796.006A

SHEET 1 OF 9

REV.	DATE	ACCOUNT NO.	DESCRIPTION	APPROVED
				PREP
				REVD
				APVD

AUTOCAD

ENGINEERING
CIVIL
ELEC.
PROJ. ENG.
PROJ. MGR.
PRIN. ENG.
SUPV. ENG.

DESIGN GROUP
DESIGNED
DRAWN
CHECKED
APPROVED
DATE

FOREST CONSERVATION PLAN

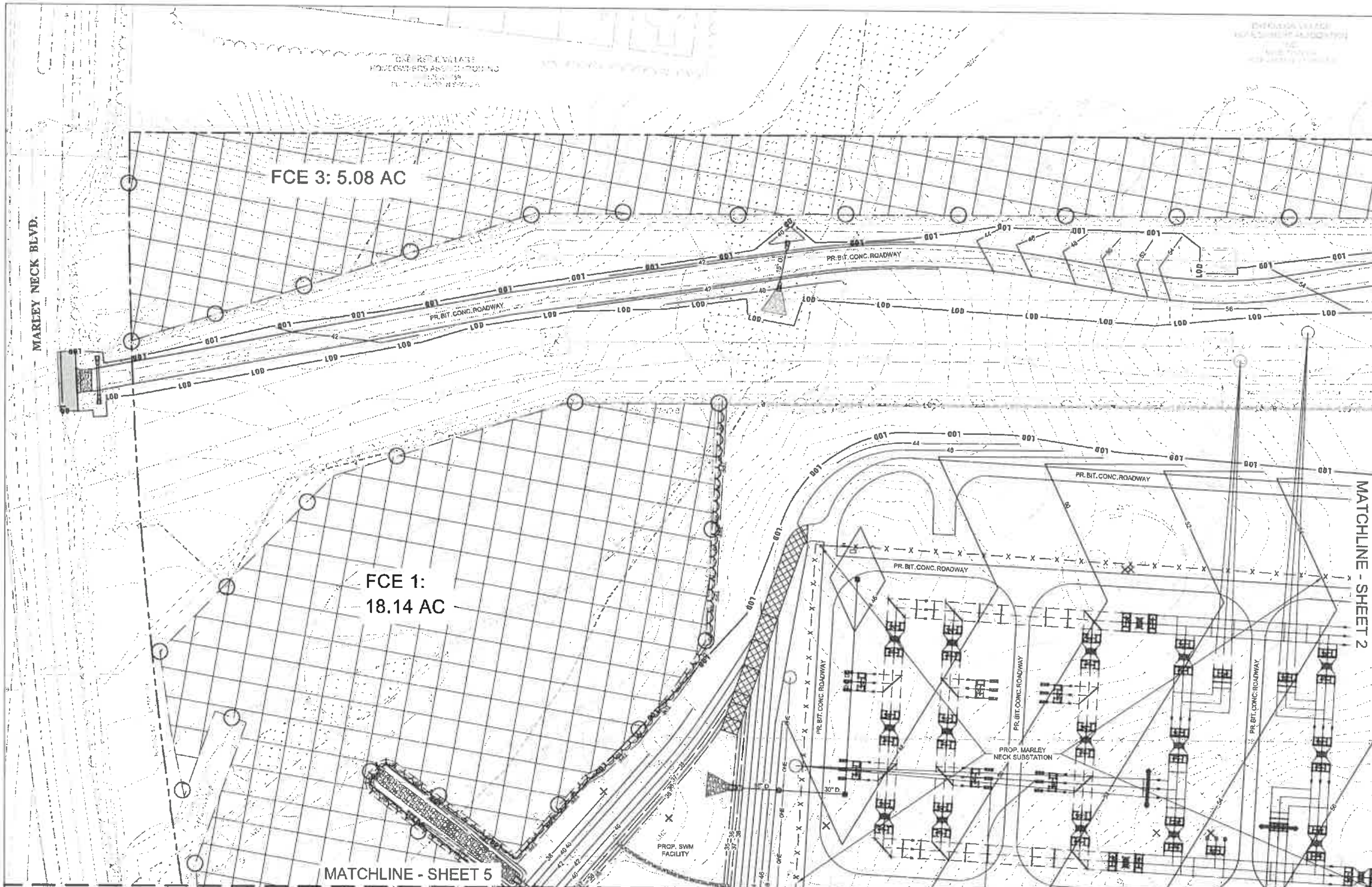
ZONING W1
TAX MAP 10 - PARCEL 397
ANNE ARUNDEL COUNTY, MARYLAND

SOLLEY ROAD SUBSTATION

ELECTRIC SUBSTATION ENGINEERING

bge AN EXELON COMPANY

SCALE: AS SHOWN
DWG. NO. FCP-01
REV.



LEGEND

EXISTING

- Minor Contour
- Major Contour
- Storm Drain
- Water & Fire Hydrant
- Sanitary Sewer
- Edge of Paving
- Tree Line
- Specimen Tree/ Specimen Tree #
- Specimen Tree Critical Root Zone
- Forest Stand Delineation Line
- Building
- Tract Boundary
- Road Right-Of-Way
- Easement Line
- Wetlands / Wetland Limit
- 25' Wetland Buffer
- Perennial and Intermittent Stream/Waters Edge
- Ephemeral Stream/Waters Edge
- 100' Stream Buffer
- Existing 100 Year Floodplain
- Overhead Electric
- Forest Interior Dwelling Species Boundary
- Guy Wire
- Power/Utility Pole
- Electric Tower
- Fence Line

FOREST CONSERVATION

- Limit of Disturbance — LOD
- Proposed Treeline
- Specimen Tree to be Cleared — X
- Tree Protection Fence — TPF
- Tree Root Pruning — RP
- Proposed Forest Conservation Easement
- Proposed Forest Conservation Sign

SHEET 2 OF 9

REV	DATE	ACCOUNT NO.	DESCRIPTION	APPROVED
				PREP
				REVD
				APVD

AUTOCAD

ENGINEERING: CIVIL; ELEC.; PROJ. ENG.; MGR.; PRIN. ENG.; SUPV. ENG.

DESIGN GROUP: DESIGNED; DRAWN; CHECKED; APPROVED; DATE

FOREST CONSERVATION PLAN

ZONING W1
TAX MAP 10 - PARCEL 397
ANNE ARUNDEL COUNTY, MARYLAND

SOLLEY ROAD SUBSTATION

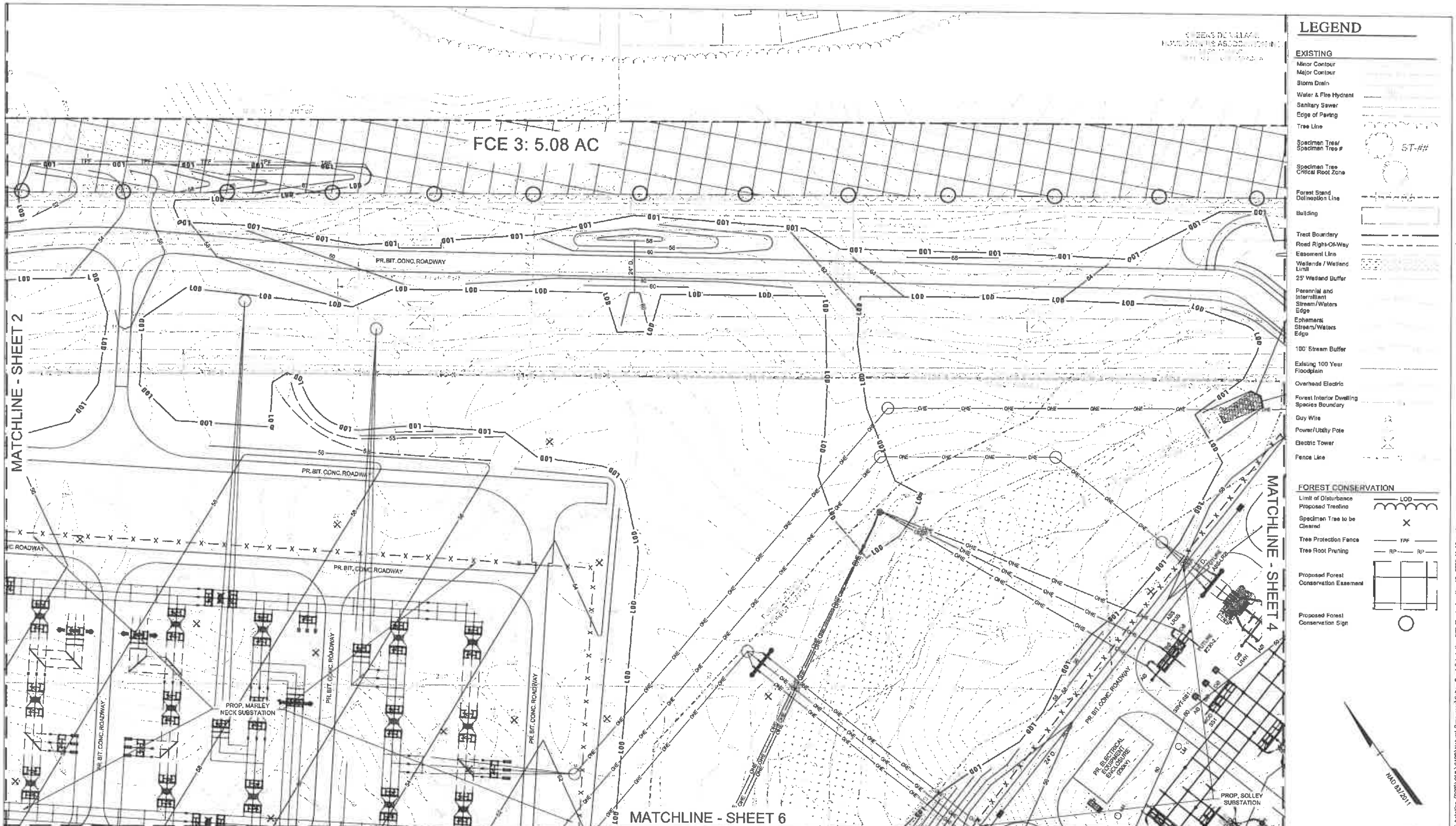
ELECTRIC SUBSTATION ENGINEERING

bge — SCALE: 1" = 40' — DWG. NO. FCP-02 — REV.

MARYLAND DEPARTMENT OF NATURAL RESOURCES, QUALIFIED PROFESSIONAL
KLEINFELDER 443-589-2400
DANIEL YEAGER

SIGNATURE — DATE 3/6/2025

KLEINFELDER
Bright People. Right Solutions.
10710 Gilroy Road
Hunt Valley, Maryland 21031
Phone: 443.589.2400
Project No. 2500796.008A



SHEET 3 OF 8

MARYLAND DEPARTMENT OF NATURAL RESOURCES, QUALIFIED PROFESSIONAL
KLEINFELDER 443-589-2400
DANIEL YEAGER

SIGNATURE 3/6/2025 DATE

KLEINFELDER
Bright People. Right Solutions.
10710 Gilroy Road
Hunt Valley, Maryland 21031
Phone: 443.589.2400
Project No. 2500795.008A

REV.	DATE	ACCOUNT NO.	DESCRIPTION	APPROVED	
				PREP	
				REVD	
				APVD	

AUTOCAD
ENGINEERING
CIVIL
ELEC.
PROJ. ENG.
PROJ. MGR.
PRIN. ENG.
SUPV. ENG.
DESIGN GROUP
DESIGNED
DRAWN
CHECKED
APPROVED
DATE

FOREST CONSERVATION PLAN

ZONING W1
TAX MAP 10 - PARCEL 397
ANNE ARUNDEL COUNTY, MARYLAND

SOLLEY ROAD SUBSTATION
ELECTRIC SUBSTATION ENGINEERING

bge SCALE: 1" = 40' REV.
DWG. NO. FCP-03

MARYLAND DEPARTMENT OF NATURAL RESOURCES, QUALIFIED PROFESSIONAL
KLEINFELDER 443-589-2400
DANIEL YEAGER

SIGNATURE

3/6/2025
DATE

KLEINFELDER
Bright People. Right Solutions.
10710 Gilroy Road
Hunt Valley, Maryland 21031
Phone: 443.589.2400
Project No. 2500796.008A

REV	DATE	ACCOUNT NO.	DESCRIPTION	APPROVED	
				PREP	
				REVD	
				APVD	

AUTOCAD
ENGINEERING
CIVIL
ELEC.
PROJ. ENG.
PROJ. MGR.
PRIN. ENG.
SUPV. ENG.

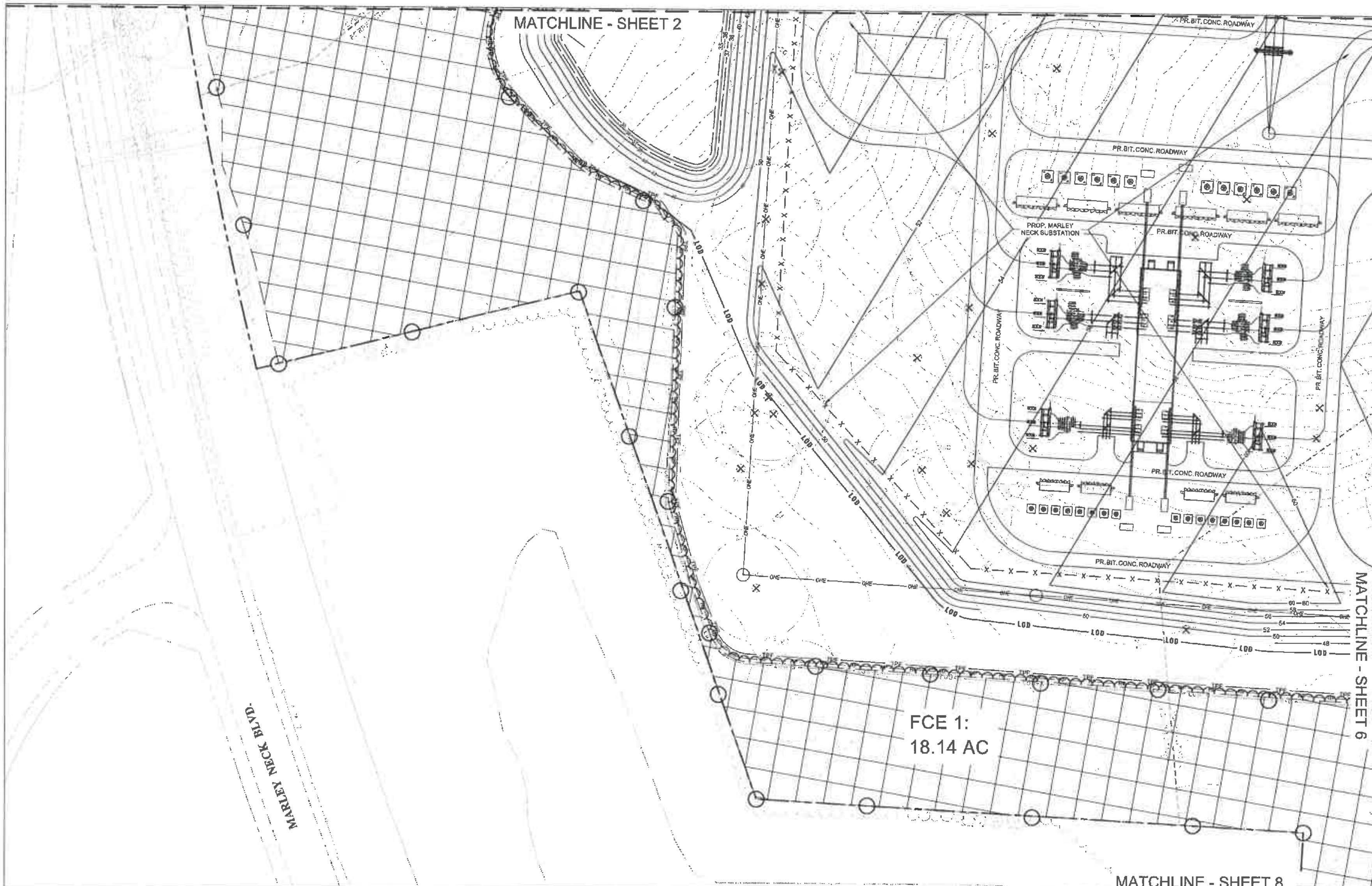
DESIGN GROUP
DESIGNED
DRAWN
CHECKED
APPROVED
DATE

FOREST CONSERVATION PLAN

ZONING W1
TAX MAP 10 - PARCEL 397
ANNE ARUNDEL COUNTY, MARYLAND

SOLLEY ROAD SUBSTATION
ELECTRIC SUBSTATION ENGINEERING

bge
SCALE: 1" = 40'
DWG. NO. FCP-04
REV.



LEGEND

EXISTING

- Minor Contour
- Major Contour
- Storm Drain
- Water & Fire Hydrant
- Sanitary Sewer
- Edge of Paving
- Tree Line
- Specimen Tree/ Specimen Tree # — ST-##
- Specimen Tree Critical Root Zone
- Forest Stand Delineation Line
- Building
- Tract Boundary
- Road Right-Of-Way
- Easement Line
- Wetlands / Wetland Limit
- 25' Wetland Buffer
- Perennial and Intermittent Stream/Waters Edge
- Ephemeral Stream/Waters Edge
- 100' Stream Buffer
- Existing 100 Year Floodplain
- Overhead Electric
- Forest Interior Dwelling Species Boundary
- Guy Wire
- Power/Utility Pole
- Electric Tower
- Fence Line

FOREST CONSERVATION

- Limit of Disturbance — LOD
- Proposed Treeline
- Specimen Tree to be Cleared — ×
- Tree Protection Fence — TPF
- Tree Root Pruning — RP
- Proposed Forest Conservation Easement
- Proposed Forest Conservation Sign

SHEET 5 OF 8

MARYLAND DEPARTMENT OF NATURAL RESOURCES, QUALIFIED PROFESSIONAL
KLEINFELDER 443-589-2400
DANIEL YEAGER

SIGNATURE: [signature] DATE: 3/6/2025

KLEINFELDER
Bright People. Right Solutions.
10710 Gilroy Road
Hunt Valley, Maryland 21031
Phone: 443.589.2400
Project No. 2500796.006A

REV	DATE	ACCOUNT NO.	DESCRIPTION	APPROVED
				PREP
				REVD
				APVD

AUTOCAD

ENGINEERING
CIVL ______
ELEC. ______
PROJ. ENG. ______
PROJ. MGR. ______
PRIN. ENG. ______
SUPV. ENG. ______

DESIGN GROUP
DESIGNED ______
DRAWN ______
CHECKED ______
APPROVED ______
DATE ______

FOREST CONSERVATION PLAN

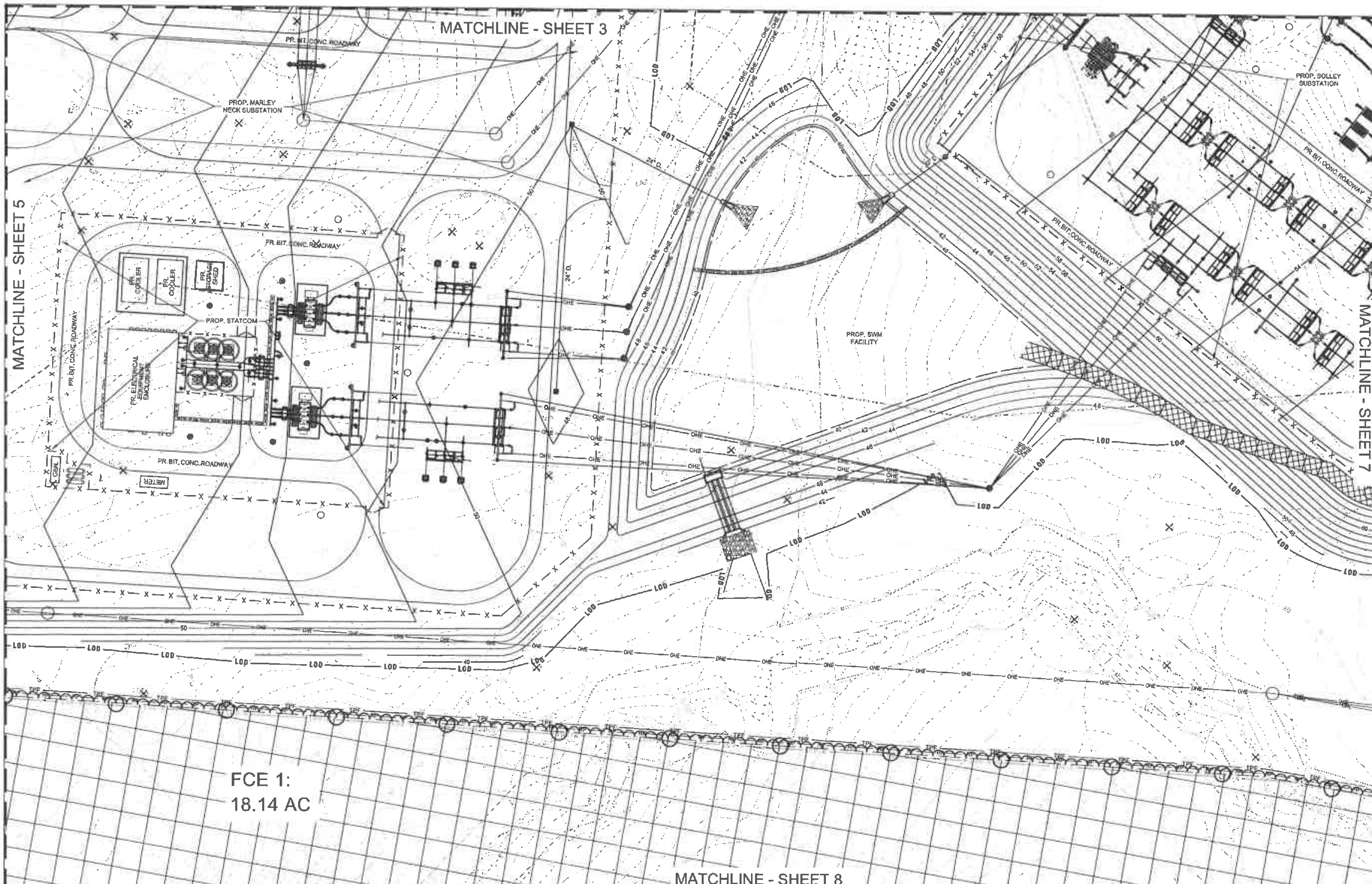
ZONING W1
TAX MAP 10 - PARCEL 397
ANNE ARUNDEL COUNTY, MARYLAND

SOLLEY ROAD SUBSTATION

ELECTRIC SUBSTATION ENGINEERING

bge
SCALE: 1" = 40'
REV.
DWG. NO. FCP-05

T:\2024\Facilities\24003651.001A BGE Solley Road Substation (RGB)\CIVIL\CADD\Natural Resources\Solley Road Substation FCP Sheets.dwg Mar 19, 2025 11:46am dyeager



LEGEND

EXISTING

- Minor Contour
- Major Contour
- Storm Drain
- Water & Fire Hydrant
- Sanitary Sewer
- Edge of Paving
- Tree Line
- Specimen Tree/ Specimen Tree #
- Specimen Tree Critical Root Zone
- Forest Stand Delineation Line
- Building
- Tract Boundary
- Road Right-Of-Way
- Easement Line
- Wetlands / Wetland Limit
- 25' Wetland Buffer
- Perennial and Intermittent Stream/Waters Edge
- Ephemeral Stream/Waters Edge
- 100' Stream Buffer
- Existing 100 Year Floodplain
- Overhead Electric
- Forest Interior Dwelling Species Boundary
- Guy Wire
- Power/Utility Pole
- Electric Tower
- Fence Line

FOREST CONSERVATION

- Limit of Disturbance — LOD
- Proposed Treeline
- Specimen Tree to be Cleared — X
- Tree Protection Fence — TPF
- Tree Root Pruning — RP — RP
- Proposed Forest Conservation Easement
- Proposed Forest Conservation Sign

SHEET 6 OF 9

MARYLAND DEPARTMENT OF NATURAL RESOURCES, QUALIFIED PROFESSIONAL
KLEINFELDER 443-589-2400
DANIEL YEAGER

SIGNATURE

3/6/2025
DATE

KLEINFELDER
Bright People. Right Solutions.
10710 Gilroy Road
Hunt Valley, Maryland 21031
Phone: 443.589.2400
Project No. 2500798.008A

REV	DATE	ACCOUNT NO.	DESCRIPTION	APPROVED
				PREP
				REVD
				APVD

AUTOCAD

ENGINEERING
CIVIL ______
ELEC. ______
PROJ. ENG. ______
PROJ. MGR. ______
PRIN. ENG. ______
SUPV. ENG. ______

DESIGN GROUP
DESIGNED ______
DRAWN ______
CHECKED ______
APPROVED ______
DATE ______

FOREST CONSERVATION PLAN

ZONING W1
TAX MAP 10 - PARCEL 397
ANNE ARUNDEL COUNTY, MARYLAND

SOLLEY ROAD SUBSTATION

ELECTRIC SUBSTATION ENGINEERING

bge

SCALE: 1" = 40'

REV.

DWG. NO. FCP-06

T:\2024\FocilSes\24003651.001A BGE Solley Road Substation (RGB)\CIVIL\CADD\Natural Resources\Solley Road Substation FCP Sheets.dwg Mar 20, 2025 8:57am dyeager

LEGEND

EXISTING

- Minor Contour
- Major Contour
- Storm Drain
- Water & Fire Hydrant
- Sanitary Sewer
- Edge of Paving
- Tree Line
- Specimen Tree/ Specimen Tree # — ST-##
- Specimen Tree Critical Root Zone
- Forest Stand Delineation Line
- Building
- Tract Boundary
- Road Right-Of-Way
- Easement Line
- Wetlands / Wetland Limit
- 25' Wetland Buffer
- Perennial and Intermittent Stream/Waters Edge
- Ephemeral Stream/Waters Edge
- 100' Stream Buffer
- Existing 100 Year Floodplain
- Overhead Electric
- Forest Interior Dwelling Species Boundary
- Guy Wire
- Power/Utility Pole
- Electric Tower
- Fence Line

FOREST CONSERVATION

- Limit of Disturbance — LOD
- Proposed Treeline
- Specimen Tree to be Cleared — ×
- Tree Protection Fence — TPF
- Tree Root Pruning — RP
- Proposed Forest Conservation Easement
- Proposed Forest Conservation Sign

SHEET 7 OF 9

MARYLAND DEPARTMENT OF NATURAL RESOURCES, QUALIFIED PROFESSIONAL
KLEINFELDER 443-589-2400
DANIEL YEAGER

SIGNATURE 3/6/2025 DATE

KLEINFELDER
Bright People. Right Solutions.
10710 Gilroy Road
Hunt Valley, Maryland 21031
Phone: 443.589.2400
Project No. 2500726.008A

REV.	DATE	ACCOUNT NO.	DESCRIPTION	APPROVED
				PREP
				REVD
				APVD

AUTOCAD
ENGINEERING
CIVIL
ELEC
PROJ. ENG.
PROJ. MGR.
PRIN. ENG.
SUPV. ENG.

DESIGN GROUP
DESIGNED
DRAWN
CHECKED
APPROVED
DATE

FOREST CONSERVATION PLAN

ZONING W1
TAX MAP 10 - PARCEL 387
ANNE ARUNDEL COUNTY, MARYLAND

SOLLEY ROAD SUBSTATION

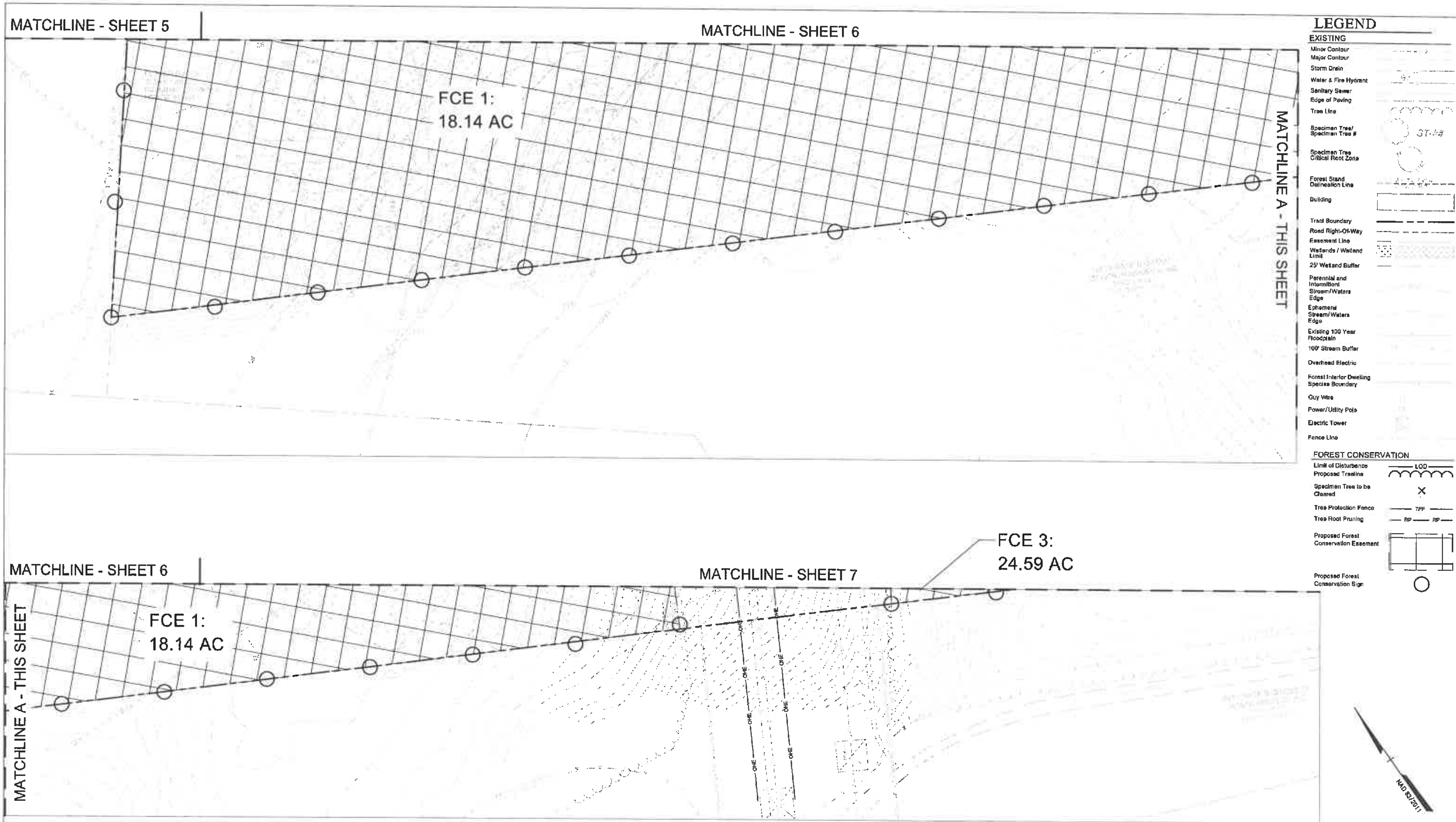
ELECTRIC SUBSTATION ENGINEERING

bge

SCALE: 1" = 40'

DWG. NO. FCP-07

REV.



SHEET 8 OF 9

REV	DATE	ACCOUNT NO.	DESCRIPTION	APPROVED	
				PREP	
				REVD	
				APVD	

MARYLAND DEPARTMENT OF NATURAL RESOURCES, QUALIFIED PROFESSIONAL
KLEINFELDER 443-589-2400
DANIEL YEAGER

SIGNATURE

3/6/2025
DATE

KLEINFELDER
Bright People. Right Solutions.
10710 Gilroy Road
Hunt Valley, Maryland 21031
Phone: 443.589.2400
Project No. 2500796.008A

AUTOCAD

ENGINEERING
CIVL.
ELEC.
PROJ. ENG.
PROJ. MGR.
PRIN. ENG.
SUPV. ENG.

DESIGN GROUP
DESIGNED
DRAWN
CHECKED
APPROVED
DATE

FOREST CONSERVATION PLAN

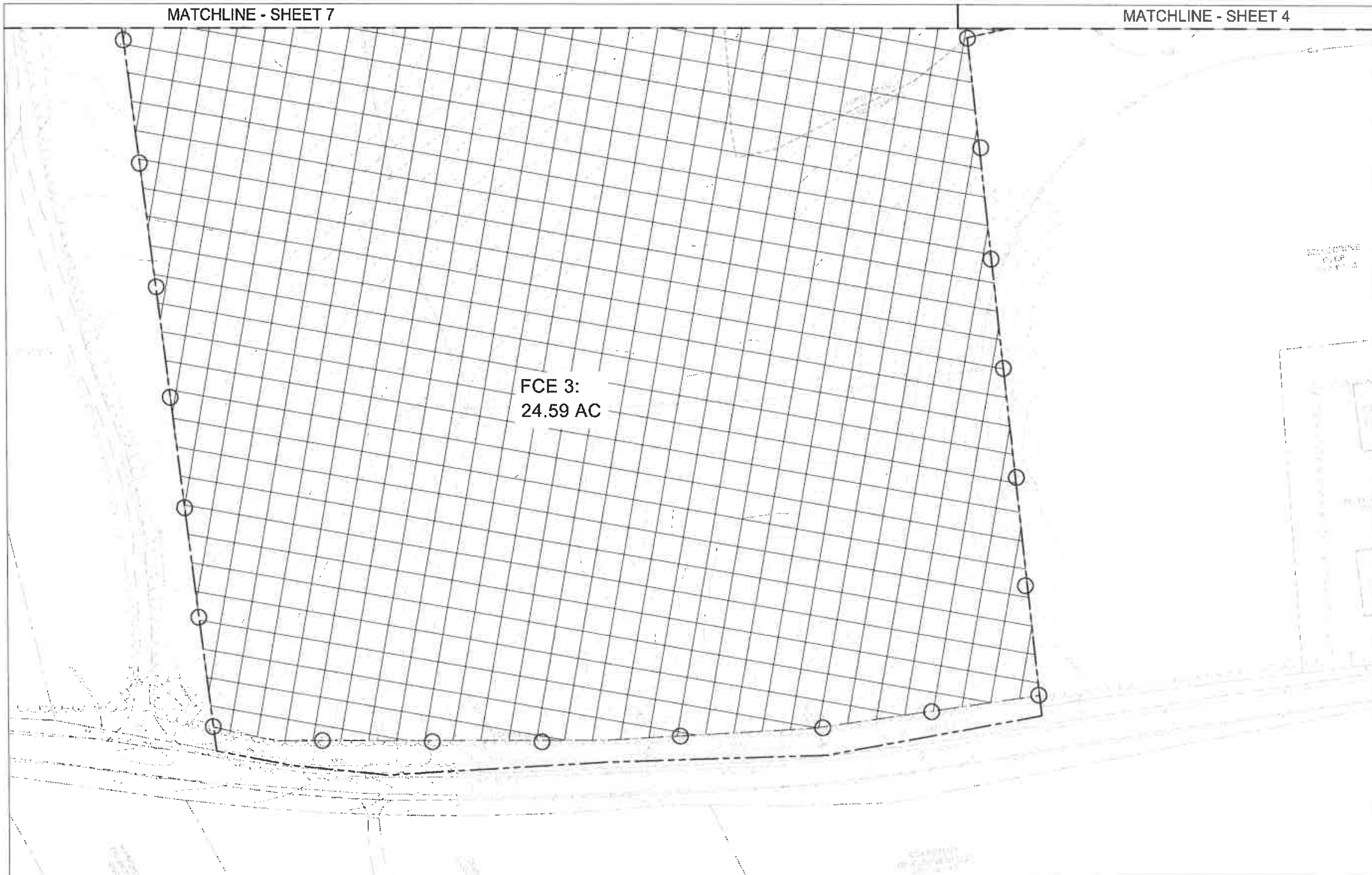
ZONING W1
TAX MAP 10 - PARCEL 397
ANNE ARUNDEL COUNTY, MARYLAND

SOLLEY ROAD SUBSTATION

ELECTRIC SUBSTATION ENGINEERING

bge

SCALE: 1" = 40'
DWG. NO. FCP-08
REV.



LEGEND

EXISTING

- Minor Contour
- Major Contour
- Storm Drain
- Water & Fire Hydrant
- Sanitary Sewer
- Edge of Paving
- Tree Line
- Specimen Tree/ Specimen Tree #
- Specimen Tree Critical Root Zone
- Forest Stand Delineation Line
- Building
- Tract Boundary
- Road Right-Of-Way
- Easement Line
- Wetlands / Wetland Limit
- 25' Wetland Buffer
- Perennial and Intermittent Stream/Waters Edge
- Ephemeral Stream/Waters Edge
- 100' Stream Buffer
- Existing 100 Year Floodplain
- Overhead Electric
- Forest Interior Dwelling Species Boundary
- Guy Wire
- Power/Utility Pole
- Electric Tower
- Fence Line

FOREST CONSERVATION

- Limit of Disturbance (LOD)
- Proposed Treeline
- Specimen Tree to be Cleared
- Tree Protection Fence (TPF)
- Tree Root Pruning (RP)
- Proposed Forest Conservation Easement
- Proposed Forest Conservation Sign

SHEET 9 OF 9

MARYLAND DEPARTMENT OF NATURAL RESOURCES, QUALIFIED PROFESSIONAL
KLEINFELDER 443-589-2400
DANIEL YEAGER

SIGNATURE: [signature] DATE: 3/6/2025

KLEINFELDER
Bright People. Right Solutions.
10710 Gilroy Road
Hunt Valley, Maryland 21031
Phone: 443.589.2400
Project No. 2500796.008A

REV	DATE	ACCOUNT NO.	DESCRIPTION	APPROVED
				PREP
				REVD
				APVD

AUTOCAD

ENGINEERING: CIVIL, ELEC., PROJ. ENG., PROJ. MGR., PRIN. ENG., SUPV. ENG.

DESIGN GROUP: DESIGNED, DRAWN, CHECKED, APPROVED, DATE

FOREST CONSERVATION PLAN

ZONING W1
TAX MAP 10 - PARCEL 397
ANNE ARUNDEL COUNTY, MARYLAND

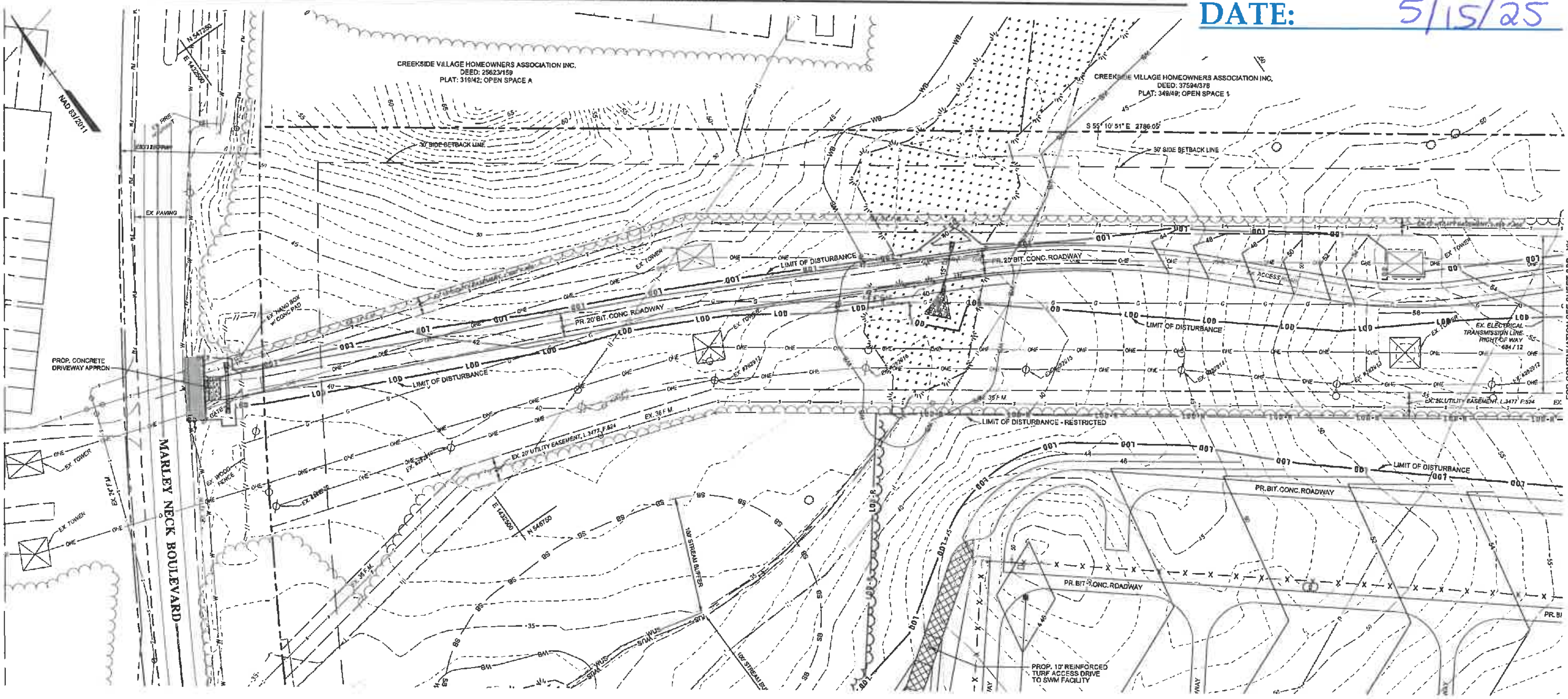
SOLLEY ROAD SUBSTATION

ELECTRIC SUBSTATION ENGINEERING

bge

SCALE: 1" = 40'
DWG. NO. FCP-09
REV.

APP. EXHIBIT# 9
CASE: 2025-0049-S
DATE: 5/15/25



PLAN

SCALE: 1" = 40'

0 40' 80'

DATA SOURCES:

TOPOGRAPHIC INFORMATION SHOWN ON THIS PLAN IS FROM A FIELD-RUN SURVEY PERFORMED BY CENTURY ENGINEERING, A KLEINFELDER COMPANY, PERFORMED ON JUNE 30, 2024, SUPPLEMENTED WITH INFORMATION FROM PUBLIC DRAWINGS AND THE ANNE ARUNDEL COUNTY GIS RESOURCE ON THE WEB.

MARYLAND COORDINATE SYSTEM, NAD83 (2011)

STATE OF MARYLAND PROFESSIONAL ENGINEER

PROFESSIONAL CERTIFICATION

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.

LICENSE NO.: 24814 EXPIRATION DATE: 2-28-26

KLEINFELDER
Bright People. Right Solutions.
10710 Gilroy Road
Hunt Valley, Maryland 21031
Phone: 443 589.2400
Project No. 2500795.008A

90% SUBMITTAL
Date: June 9, 2025

UPDATE YOUR PRINT TO REFLECT 'AS BUILT' STATE & RETURN A COPY TO THE APPLICABLE DESIGN UNIT

REV	DATE	ACCOUNT NO.	DESCRIPTION	APPROVED
				PREP
				REVD
				APVD

AUTOCAD

ENGINEERING
CIVIL KLEINFELDER
ELEC.
PROJ. ENG.
PROJ. MGR.
PRIN. ENG.
SUPV. ENG.

DESIGN GROUP
DESIGNED R.G.B.
DRAWN M.S.S.
CHECKED R.G.B.
APPROVED —
DATE —

SITE DEVELOPMENT PLAN GRADING

BALTIMORE GAS & ELECTRIC COMPANY
LOT 8 - SOUTH SOLLEY ROAD
GLEN BURNIE, ANNE ARUNDEL COUNTY, MD 21060
TAX MAP: 10 PARCEL: 397
115kV SUBSTATION

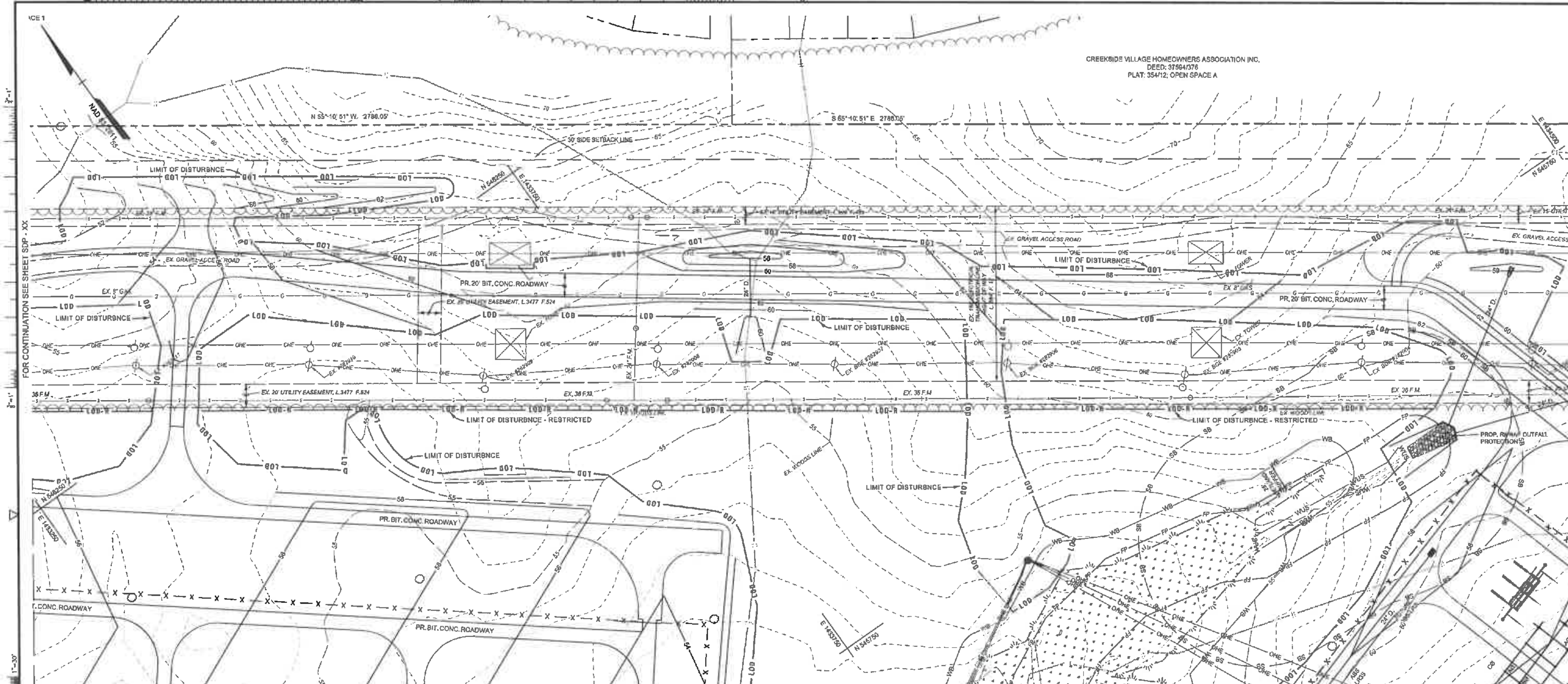
MARLEY NECK - SOLLEY

ELECTRIC SUBSTATION ENGINEERING

bge

SCALE: 1" = 40'
DWG. NO. SDP-07
REV. B

T:\2024\Facilities\24003651.001A BGE Solley Road Substation (RGB)\CIVIL\CADD\Drawings\24003651.001A (SDP-XX) Grading Plan 01 (Access Road).dwg Mar 19, 2025 11:37am



PLAN

SCALE: 1"=40'

0 40' 80'

DATA SOURCES:

TOPOGRAPHIC INFORMATION SHOWN ON THIS PLAN IS FROM A FIELD-RUN SURVEY PERFORMED BY CENTURY ENGINEERING, A KLEINFELDER COMPANY, PERFORMED ON JUNE 30, 2024, SUPPLEMENTED WITH INFORMATION FROM PUBLIC DRAWINGS AND THE ANNE ARUNDEL COUNTY GIS RESOURCE ON THE WEB.

MARYLAND COORDINATE SYSTEM, NAD83 (2011)

90% SUBMITTAL
Date: June 9, 2025

UPDATE YOUR PRINT TO REFLECT 'AS BUILT' STATE & RETURN A COPY TO THE APPLICABLE DESIGN UNIT

REV	DATE	ACCOUNT NO.	DESCRIPTION	APPROVED
				PREP
				REVD
				APVD

AUTOCAD

ENGINEERING
CIVIL KLEINFELDER
ELEC.
PROJ. ENG.
PROJ. MGR.
PRIN. ENG.
SUPV. ENG.

DESIGN GROUP
DESIGNED R.G.B.
DRAWN M.S.S.
CHECKED R.G.B.
APPROVED —
DATE —

SITE DEVELOPMENT PLAN GRADING

BALTIMORE GAS & ELECTRIC COMPANY
LOT B - SOUTH SOLLEY ROAD
GLEN BURNIE, ANNE ARUNDEL COUNTY, MD 21060
TAX MAP: 10 PARCEL: 397
115KV SUBSTATION

MARLEY NECK - SOLLEY

ELECTRIC SUBSTATION ENGINEERING

bge

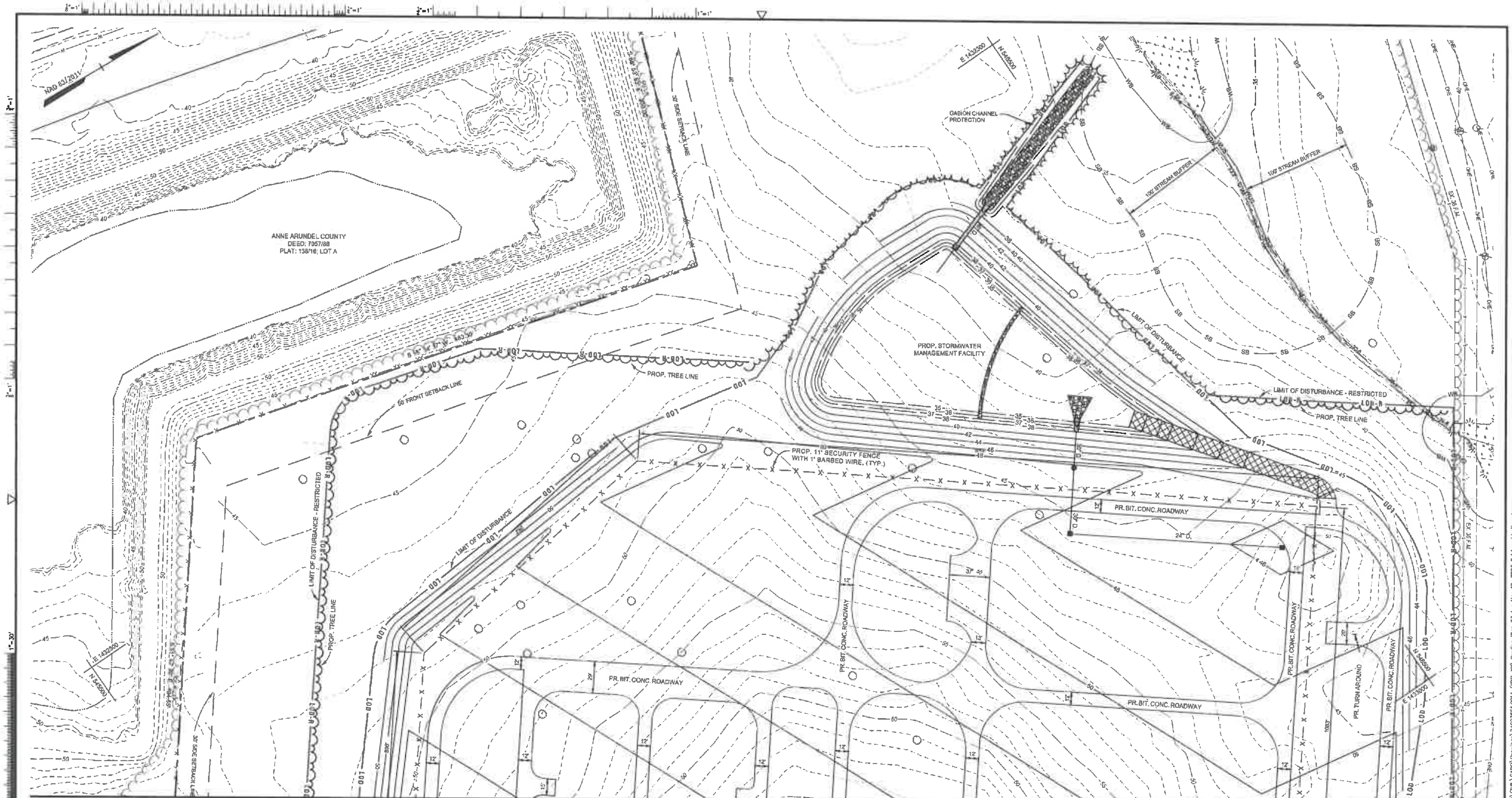
SCALE: 1" = 40'
DWG. NO. SDP-XX
REV. B

PROFESSIONAL CERTIFICATION

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.

LICENSE NO.: 24814 EXPIRATION DATE: 2-28-26

KLEINFELDER
Bright People. Right Solutions.
10710 Gilroy Road
Hunt Valley, Maryland 21031
Phone: 443.589.2400
Project No. 2500795.008A



FOR CONTINUATION - SEE DRAWING 4

PLAN

SCALE: 1"=40'

0 40' 80'

PROFESSIONAL CERTIFICATION

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.

LICENSE NO.: 24814 EXPIRATION DATE: 2-28-26

KLEINFELDER
Bright People. Right Solutions.
10719 Gilroy Road
Hunt Valley, Maryland 21031
Phone: 443.589.2400
Project No. 2500798.008A

90% SUBMITTAL
Date: June 9, 2025

UPDATE YOUR PRINT TO REFLECT 'AS BUILT' STATE & RETURN A COPY TO THE APPLICABLE DESIGN UNIT

REV	DATE	ACCOUNT NO.	DESCRIPTION	APPROVED
				PREP
				REVD
				APVD

AUTOCAD

ENGINEERING
CIVIL KLEINFELDER
ELEC.
PROJ. ENG.
PROJ. MGR.
PRIN. ENG.
SUPV. ENG.

DESIGN GROUP
DESIGNED R.G.B.
DRAWN M.S.S.
CHECKED R.G.B.
APPROVED —
DATE —

SITE DEVELOPMENT PLAN GRADING

BALTIMORE GAS & ELECTRIC COMPANY
LOT B - SOUTH SOLLEY ROAD
GLEN BURNIE, ANNE ARUNDEL COUNTY, MD 21060
TAX MAP: 10 PARCEL: 397
115kV SUBSTATION

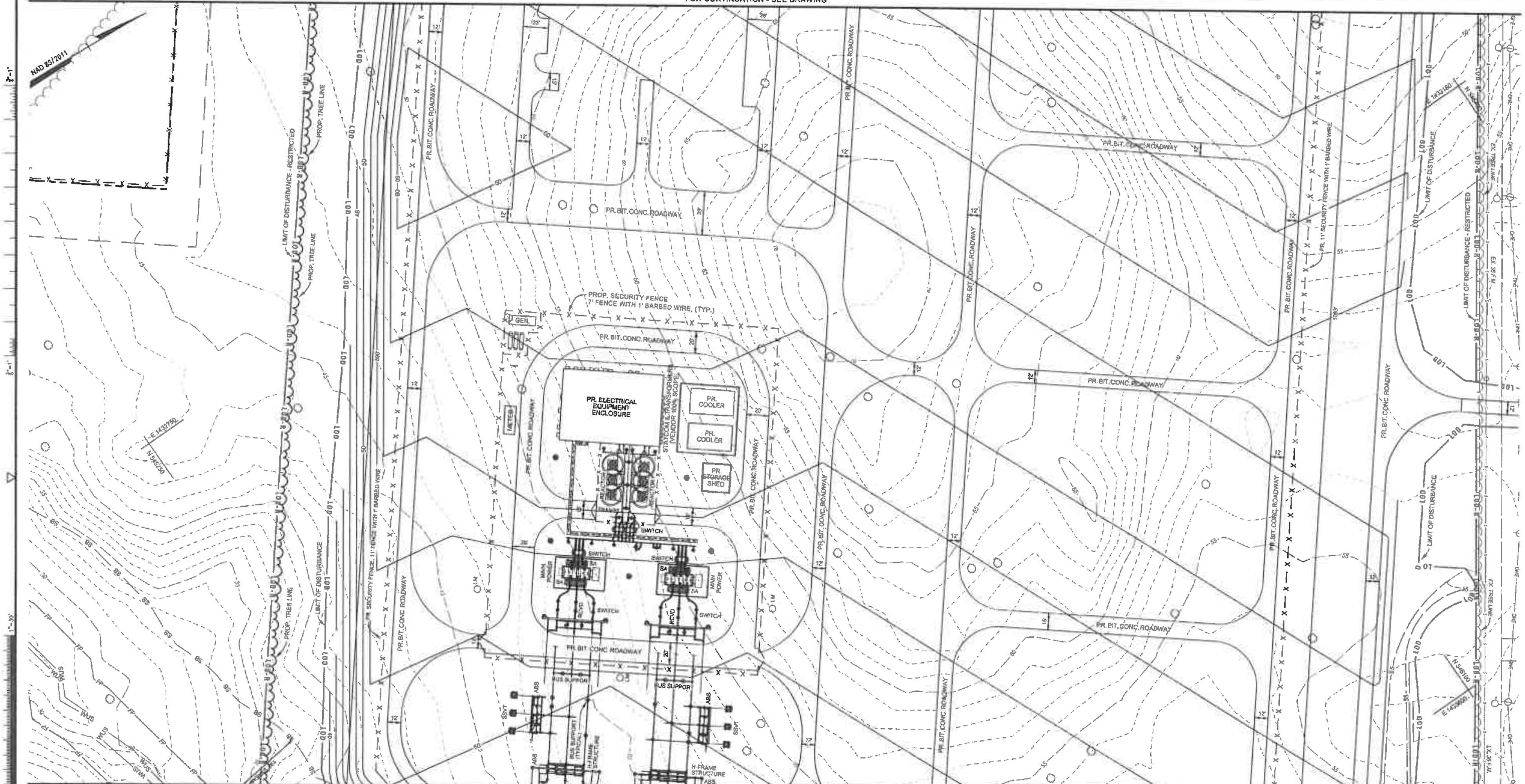
MARLEY NECK SUBSTATION

ELECTRIC SUBSTATION ENGINEERING

bge

SCALE: 1"=40'
DWG. NO. SDP-XX
REV. B

FOR CONTINUATION - SEE DRAWING



FOR CONTINUATION - SEE DRAWING

PLAN

SCALE: 1"=40'

0 40' 80'

PROFESSIONAL CERTIFICATION

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.

LICENSE NO.: 24814 EXPIRATION DATE: 2-28-26

KLEINFELDER
Bright People. Right Solutions.
10710 Gilroy Road
Hunt Valley, Maryland 21031
Phone: 443.580.2400
Project No. 2500796.008A

90% SUBMITTAL
Date: June 9, 2025

UPDATE YOUR PRINT TO REFLECT 'AS BUILT' STATE & RETURN A COPY TO THE APPLICABLE DESIGN UNIT

REV	DATE	ACCOUNT NO.	DESCRIPTION	APPROVED
				PREP
				REVD
				APVD

AUTOCAD

ENGINEERING
CIVIL KLEINFELDER
ELEC.
PROJ. ENG.
PROJ. MGR.
PRIN. ENG.
SUPV. ENG.

DESIGN GROUP
DESIGNED R.G.B.
DRAWN M.S.S.
CHECKED R.G.B.
APPROVED —
DATE —

SITE DEVELOPMENT PLAN
GRADING

BALTIMORE GAS & ELECTRIC COMPANY
LOT B - SOUTH SOLLEY ROAD
GLEN BURNIE, ANNE ARUNDEL COUNTY, MD 21060
TAX MAP: 10 PARCEL: 397
115kV SUBSTATION

MARLEY NECK SUBSTATION

ELECTRIC SUBSTATION ENGINEERING

bge AN EXELON COMPANY

SCALE: 1"=40'
DWG. NO. SDP-XX
REV. B

FOR CONTINUATION - SEE DRAWING

FOR CONTINUATION - SEE DRAWING

PLAN

SCALE: 1"=40'

0 40' 80'

PROFESSIONAL CERTIFICATION

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.

LICENSE NO.: 24814 EXPIRATION DATE: 2-28-26

KLEINFELDER
Bright People. Right Solutions.
10710 Gilroy Road
Hunt Valley, Maryland 21031
Phone: 443.685.2400
Project No. 2500796.008A

90% SUBMITTAL
Date: June 9, 2025

UPDATE YOUR PRINT TO REFLECT 'AS BUILT' STATE & RETURN A COPY TO THE APPLICABLE DESIGN UNIT

REV.	DATE	ACCOUNT NO.	DESCRIPTION	APPROVED
				PREP
				REVD
				APVD

AUTOCAD

ENGINEERING
CIVIL KLEINFELDER
ELEC.
PROJ. ENG.
PROJ. MGR.
PRIN. ENG.
SUPV. ENG.

DESIGN GROUP
DESIGNED R.G.B.
DRAWN M.S.S.
CHECKED R.G.B.
APPROVED —
DATE —

SITE DEVELOPMENT PLAN
GRADING

BALTIMORE GAS & ELECTRIC COMPANY
LOT B - SOUTH SOLLEY ROAD
GLEN BURNIE, ANNE ARUNDEL COUNTY, MD 21060
TAX MAP: 10 PARCEL: 397
115kV SUBSTATION

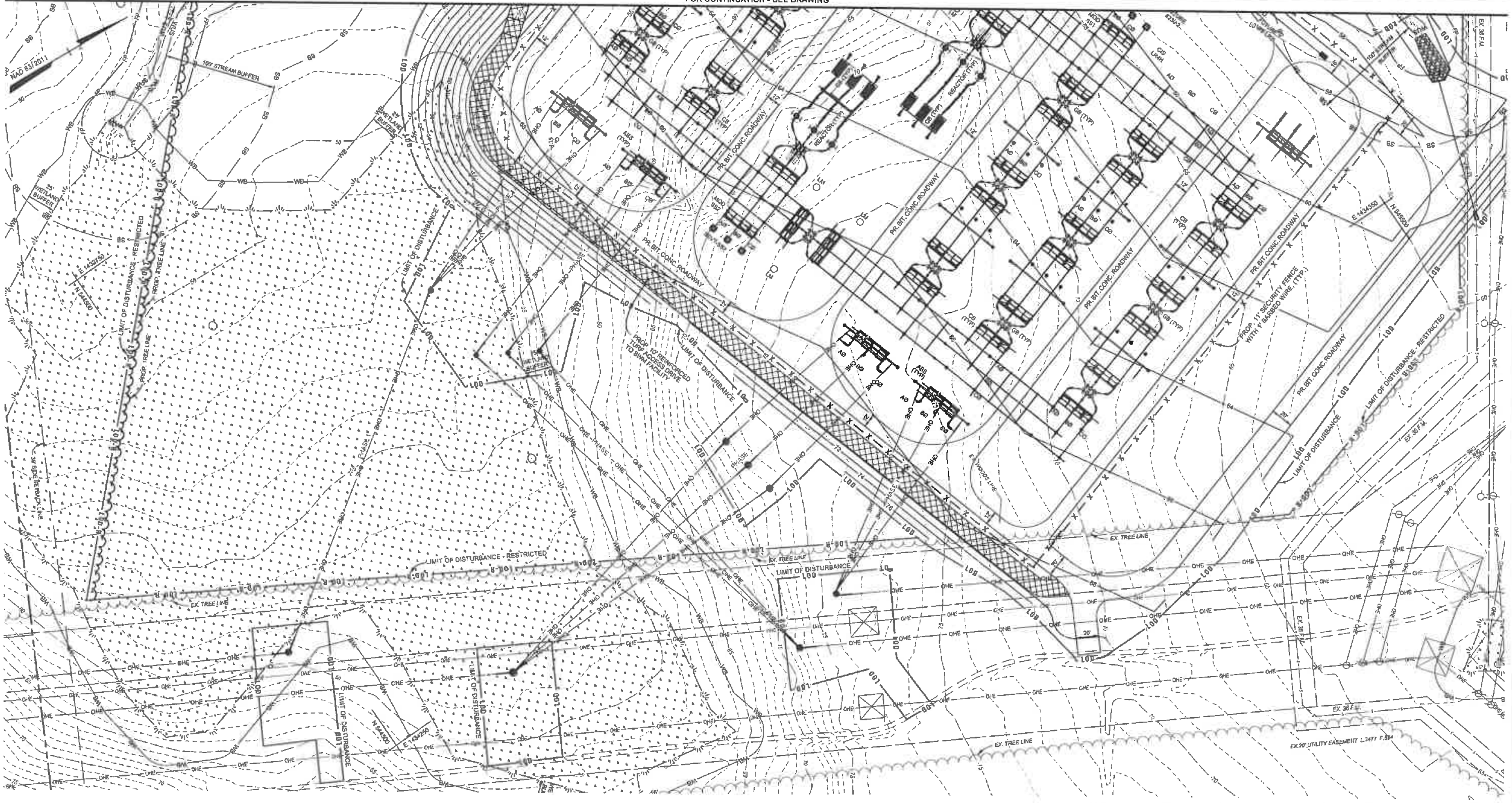
MARLEY NECK/SOLLEY SUBSTATION

ELECTRIC SUBSTATION ENGINEERING

bge
AN EXELON COMPANY

SCALE: 1"=40'
DWG. NO. SDP-XX
REV. B

FOR CONTINUATION - SEE DRAWING



PLAN

SCALE: 1"=40'

0 40' 80'

90% SUBMITTAL Date: June 9, 2025	UPDATE YOUR PRINT TO REFLECT 'AS BUILT' STATE & RETURN A COPY TO THE APPLICABLE DESIGN UNIT

REV	DATE	ACCOUNT NO.	DESCRIPTION	APPROVED
				PREP
				REVD
				APVD

AUTOCAD

ENGINEERING
CIVIL KLEINFELDER
ELEC.
PROJ. ENG.
PROJ. MGR.
PRIN. ENG.
SUPV. ENG.

DESIGN GROUP
DESIGNED R.G.B.
DRAWN M.S.S.
CHECKED R.G.B.
APPROVED —
DATE —

SITE DEVELOPMENT PLAN GRADING

BALTIMORE GAS & ELECTRIC COMPANY
LOT B - SOUTH SOLLEY ROAD
GLEN BURNIE, ANNE ARUNDEL COUNTY, MD 21060
TAX MAP: 10 PARCEL: 397
115kV SUBSTATION

MARLEY NECK - SOLLEY

ELECTRIC SUBSTATION ENGINEERING

bge AN EXELON COMPANY

SCALE: 1"=40'
DWG. NO. SDP-XX
REV. B

PROFESSIONAL CERTIFICATION

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.

LICENSE NO.: 24814 EXPIRATION DATE: 2-28-26

KLEINFELDER
Bright People. Right Solutions.
10710 Gilroy Road
Hunt Valley, Maryland 21031
Phone: 443.583.2400
Project No. 2500796 008A

APP. EXHIBIT# 10
CASE: 2025-0049-S
DATE: 5/15/25

09/29/22 12:17 PM C 0001 R 0003
Val #: 0003-268289 $105,700.00
Deed - Recordation Tax - Mail
Instrument Type: Deed

Tax Map 10, Grid 17, Parcel 397

Recording Only $40.00
Name: CSX REALTY DEVELOPMENT LLC
Ref:
LR - Deed (with Taxes)
Surcharge 40.00
LR - Deed State Transfer Tax 75,500.00
LR - NR Tax - 1kd 0.00
SubTotal: 75,560.00
Total: 75,560.00
09/30/2022 01:13 CC02-SDR
#16661532 CC0501 - Anne Arundel County/CC@5.01.10 - Register 10

After Recording Return To:
Timothy F. Schneid
BGE Real Estate
1068 N. Front Street, Room 520
Baltimore, MD 21202

SPECIAL WARRANTY DEED

THIS DEED, made this 19th day of August, 2022, between CSX REALTY DEVELOPMENT, LLC, a Georgia limited liability company, whose mailing address is 500 Water Street, Jacksonville, Florida 32202, hereinafter called "Grantor", and BALTIMORE GAS AND ELECTRIC COMPANY, a Maryland corporation, whose mailing address is110 West Fayette Street, 2 Center Plaza, 14th Floor, Baltimore, Maryland 21201, hereinafter called "Grantee", WITNESSETH:

(Wherever used herein, the terms "Grantor" and "Grantee" may be construed in the singular or plural as the context may require or admit, and for purposes of exceptions, reservations and/or covenants, shall include the heirs, legal representatives and assigns of individuals or the successors and assigns of corporations.)

THAT Grantor, for and in consideration of the sum of FIFTEEN MILLION ONE HUNDRED THOUSAND DOLLARS AND NO/100 DOLLARS ($15,100,000), to it in hand paid by Grantee, the receipt of which is hereby acknowledged, has granted, bargained and sold, and by these presents does GRANT, BARGAIN, SELL and CONVEY unto Grantee, its successors and assigns, that certain tract or parcel of land situate, lying and being at Marley Neck, County of Anne Arundel, State of Maryland, hereinafter designated "the Premises," more particularly described in **Exhibit A**, attached hereto and incorporated herein, and containing 125.2982 acres, more or less.

BEING the same property which by Confirmatory Deed dated February 12, 1998, and recorded among the Land Records of Anne Arundel County in Liber 8293, folio 475 was granted and conveyed by CSX Realty Development, LLC to Grantor.

TOGETHER WITH all buildings, structures and improvements thereon, and all and singular the rights, alleys, ways, waters, privileges, hereditaments and appurtenances to said Premises belonging or in any way incident or appertaining.

TO HAVE AND TO HOLD the Premises unto Grantee, Grantee's heirs and assigns or successors and assigns, forever.

ACCT: 3000900753S1
ALL REQUIRED LIENS ARE PAID AS OF 9/29/22 A.A. COUNTY
BY:

09/29/22 12:17 PM C 0001 R 0003
Val #: 0003-268290 $151,000.00
County Transfer Tax

Grantor hereby WARRANTS that: (a) SUBJECT TO reservations, easements, covenants, restrictions and limitations of record or platted, all existing public utilities and roadways, and all existing encroachments, ways, and servitudes, howsoever created, determinable by a proper survey or by an inspection thereof, Grantor will forever defend the Premises unto Grantee against claims of or by Grantor and all other persons lawfully claiming or to claim the same or any part thereof by, through or under Grantor; (b) Grantor will execute such other and further assurances of the same as may be required.

Grantor, by its undersigned officer, hereby certifies that the full value of all land or property conveyed hereby, or the actual consideration for the release of all property rights quitclaimed hereby, is Fifteen Million One Hundred Thousand Dollars and No/100 Dollars ($15,100,000), including any property exchanged and any financing.

REMAINDER OF PAGE INTENTIONALLY LEFT BLANK
SIGNATURE PAGE TO FOLLOW

IN WITNESS WHEREOF, CSX REALTY DEVELOPMENT, LLC., pursuant to due corporate authority, has caused its name to be signed hereto by its officers hereunto duly authorized and its corporate seal, duly attested, to be hereunto affixed.

Signed, sealed and delivered
in the presence of:

CSX REALTY DEVELOPMENT, LLC.:

By: _____
Name: Christina W. Bottomley
Title: General Manager

Attest _____ (SEAL)
Name: Michael S. Burns
Title: Corporate Secretary

STATE OF FLORIDA)
) SS.
COUNTY OF DUVAL)

I, Sarah A. Watson, a Notary Public of the State of Florida and the County of Duval, do certify that, on the date below, before me in said County came Christina W. Bottomley (X) to me known, and/or ( ) proven by satisfactory current evidence to be the person whose name is subscribed to the above instrument, who, being by me by means of (X) physical presence or ( ) online notarization first duly sworn, did make oath, acknowledge and say that: she is General Manager of CSX Realty Development, LLC., the limited liability company described in and which executed said instrument; she is fully informed of the contents of the instrument; she knows the seal of said corporation; the seal affixed to said instrument is such seal; it was so affixed by authority of the Board of Directors of said limited liability company; she signed her name thereto for said limited liability company pursuant to Board authority; and instrument is the free act and deed of said limited liability company; and the conveyance herein is not part of a transaction, sale, lease, exchange or other transfer or conveyance of all or substantially all of the property and/or assets of the Grantor.

IN WITNESS WHEREOF, I hereunto set my hand and official seal, this 11th day of AUGUST, 2022.

My commission expires on:
02/02/2024

_____ (SEAL)
Notary Public
Print Name: Sarah A. Watson

SARAH A WATSON
Notary Public - State of Florida
Commission # GG 945131
My Comm. Expires Feb 2, 2024
Bonded through National Notary Assn.

STATE OF FLORIDA)
) SS.
COUNTY OF DUVAL)

I, Sarah A. Watson, a Notary Public of the State of Florida and the County of Duval, do certify that, on the date below, before me in said County came Michael S. Burns to me known to be the person whose name is subscribed to the above instrument, who, being by me by means of physical presence first duly sworn, did make oath, acknowledge and say that: he is Corporate Secretary of CSX Realty Development, LLC, the company described in and which executed said instrument; she is fully informed of the contents of the instrument; he knows the seal of said corporation; the seal affixed to said instrument is such seal; it was so affixed by authority of the Board of Directors of said corporation; he signed his name thereto for said corporation pursuant to Board authority; and instrument is the free act and deed of said corporation; and the conveyance herein is not part of a transaction, sale, lease, exchange or other transfer or conveyance of all or substantially all of the property and/or assets of the Grantor.

IN WITNESS WHEREOF, I hereunto set my hand and official seal, this 12th day of August, 2022

My commission expires on: 02/02/2024

_____(SEAL)
Notary Public
Print Name: Sarah A. Watson

SARAH A WATSON
Notary Public - State of Florida
Commission # GG 945131
My Comm. Expires Feb 2, 2024
Bonded through National Notary Assn.

I HEREBY CERTIFY that this Deed was prepared by Baltimore Gas and Electric Company, one of the Parties to this instrument.

Name: J. GARY BOWERS

Date: 8/18/22

Title: MANAGER, REAL ESTATE

MARYLAND FORM WH-AR

Certification of Exemption from Withholding Upon Disposition of Maryland Real Estate Affidavit of Residence or Principal Residence

2022

Based on the certification below, Transferor claims exemption from the tax withholding requirements of §10-912 of the Tax-General Article, Annotated Code of Maryland. Section 10-912 provides that certain tax payments must be withheld and paid when a deed or other instrument that effects a change in ownership of real property is presented for recordation. The requirements of §10-912 do not apply when a transferor provides a certification of Maryland residence or certification that the transferred property is the transferor's principal residence.

1. Transferor Information

Name of Transferor CSX REALTY DEVELOPMENT, LLC

2. Description of Property (Street address. If no address is available, include county, district, subdistrict and lot numbers).

0 SOLLEY RD, ANNE ARUNDEL CO, MD, LT B

3. Reasons for Exemption

Resident Status

☐ As of the date this form is signed, I, Transferor, am a resident of the State of Maryland.

☑ Transferor is a resident entity as defined in Code of Maryland Regulations (COMAR)03.04.12.02B(11), I am an agent of Transferor, and I have authority to sign this document on Transferor's behalf.

Principal Residence

☐ Although I am no longer a resident of the State of Maryland, the Property is my principal residence as defined in IRC 121 (principal residence for 2 (two) of the last 5 (five) years) and is currently recorded as such with the State Department of Assessments and Taxation.

Under penalty of perjury, I certify that I have examined this declaration and that, to the best of my knowledge, it is true, correct, and complete.

3a. Individual Transferors

Witness

Name **Date

Signature

3b. Entity Transferors

Jessica A Braig

Witness/Attest

CSX REALTY DEVELOPMENT, LLC

Name of Entity

By

SARAH A. WATSON 08/19/22

Name **Date

REAL ESTATE CLOSING SPECIALIST

Title

** Form must be dated to be valid.

Note: Form is only valid if it was executed on the date the Property was transferred and is properly recorded with the Clerk of the Court.

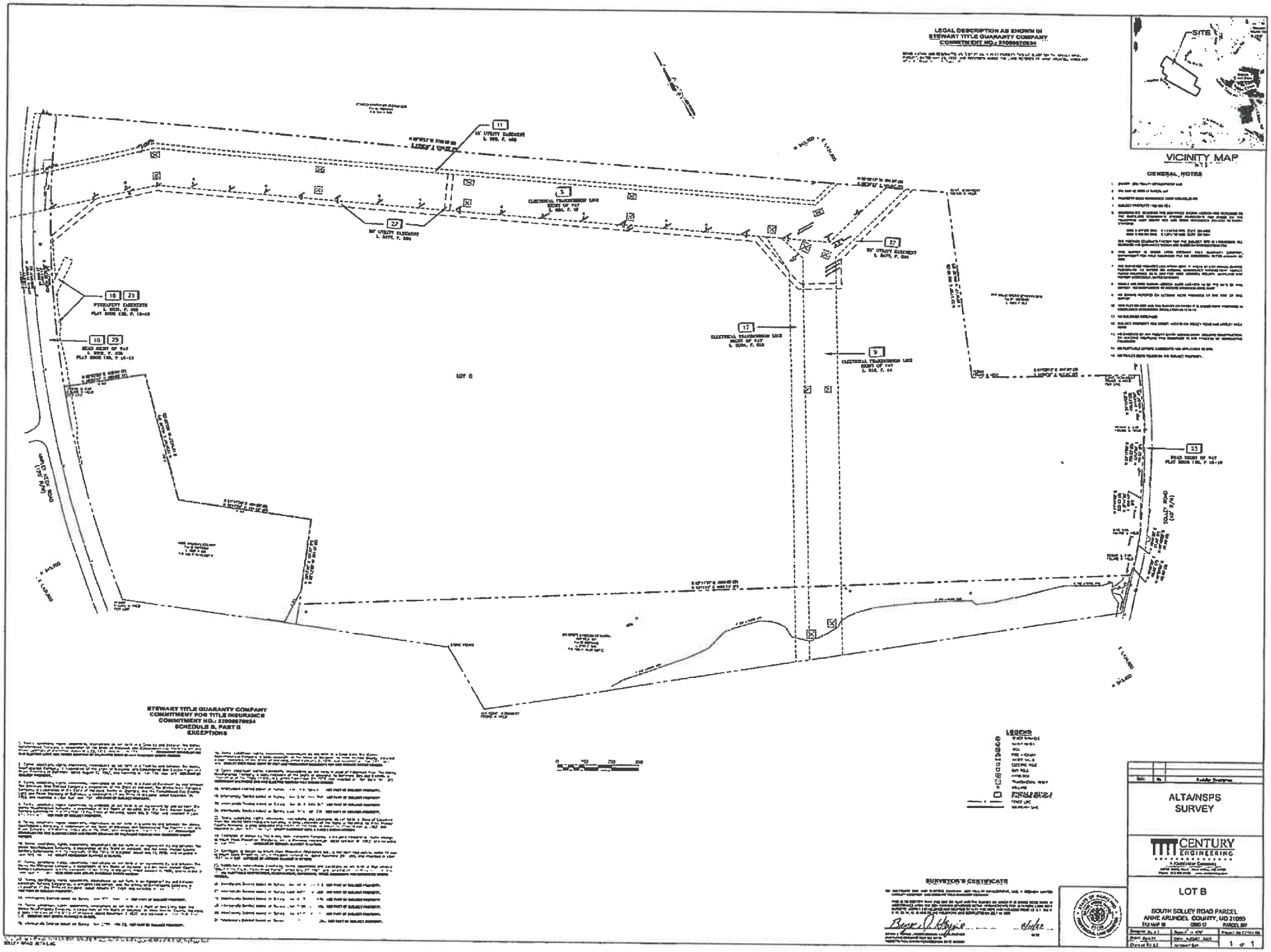
To the Clerk of the Court: Only an un-altered Form WH-AR should be considered a valid certification for purposes of Section 10-912.

EXHIBIT A

Description of property at: Marley Neck, County of Anne Arundel, State of Maryland
To: Baltimore Gas and Electric Company
CSXRD Deed File No.: 2022-6544

LEGAL DESCRIPTION:

BEING KNOWN AND DESIGNATED AS "LOT B" ON A PLAT ENTITLED "MOUNT CLARE SOUTH, SOLLEY ROAD PARCEL", DATED MAY 22, 1992, AND RECORDED AMONG THE LAND RECORDS OF ANNE ARUNDEL, MARYLAND AT PLAT BOOK NO. 138, FOLIO 16.



State of Maryland Land Instrument Intake Sheet

☐ Baltimore City ☑ County: Anne Arundel

Information provided is for the use of the Clerk's Office, State Department of Assessments and Taxation, and County Finance Office Only.

(Type or Print in Black Ink Only–All Copies Must Be Legible)

Space Reserved for Circuit Court Clerk Recording Validation

1 Type(s) of Instruments (☑ Check Box if addendum Intake Form is Attached.)

X Deed / Deed of Trust	☐ Mortgage / Lease	☐ Other	☐ Other

2 Conveyance Type Check Box

☐ Improved Sale Arms-Length [1]	☑ Unimproved Sale Arms-Length [2]	☐ Multiple Accounts Arms-Length [3]	☐ Not an Arms-Length Sale [9]

3 Tax Exemptions (if applicable) Cite or Explain Authority

Recordation	
State Transfer	
County Transfer	

4 Consideration and Tax Calculations

Consideration Amount	
Purchase Price/Consideration	$ 15,100,000.00
Any New Mortgage	$ 0.00
Balance of Existing Mortgage	$ 0.00
Other:	$ 0.00
Other:	$ 0.00
Full Cash Value:	$ 15,100,000.00

Finance Office Use Only Transfer and Recordation Tax Consideration	
Transfer Tax Consideration	$
X ( )% =	$
Less Exemption Amount –	$
Total Transfer Tax =	$
Recordation Tax Consideration	$
X ( ) per $500 =	$
TOTAL DUE	$

5 Fees

Amount of Fees	Doc. 1	Doc. 2
Recording Charge	$ 20.00	$
Surcharge	$ 40.00	$
State Recordation Tax	$105,700.00	$
State Transfer Tax	$ 75,500.00	$
County Transfer Tax	$ 151,000.00	$
Other	$	$
Other	$	$

Agent:

Tax Bill:

C.B. Credit:

Ag. Tax/Other:

6 Description of Property SDAT requires submission of all applicable information. A maximum of 40 characters will be indexed in accordance with the priority cited in Real Property Article Section 3-104(g)(3)(i).

District	Property Tax ID No. (1)	Grantor Liber/Folio	Map	Parcel No.	Var. LOG
	10-17-397		10	397	☐ (5)

Subdivision Name	Lot (3a)	Block (3b)	Sect/AR (3c)	Plat Ref.	SqFt/Acreage (4)

Location/Address of Property Being Conveyed (2)

Lot B, Solley Road

Other Property Identifiers (if applicable)	Water Meter Account No.

Residential ☐ or Non-Residential ☑ | Fee Simple ☑ or Ground Rent ☐ Amount:

Partial Conveyance? ☐ Yes ☑ No | Description/Amt. of SqFt/Acreage Transferred:

If Partial Conveyance, List Improvements Conveyed:

7 Transferred From

Doc. 1 – Grantor(s) Name(s)	Doc. 2 – Grantor(s) Name(s)
CSX REALTY DEVELOPMENT, LLC	
Doc. 1 – Owner(s) of Record, if Different from Grantor(s)	Doc. 2 – Owner(s) of Record, if Different from Grantor(s)

8 Transferred To

Doc. 1 – Grantee(s) Name(s)	Doc. 2 – Grantee(s) Name(s)
BALTIMORE GAS AND ELECTRIC COMPANY	

New Owner's (Grantee) Mailing Address

110 WEST FAYETTE STREET, 2 CENTER PLAZA, 14TH FLOOR, BALTIMORE, MD 21201

9 Other Names to Be Indexed

Doc. 1 – Additional Names to be Indexed (Optional)	Doc. 2 – Additional Names to be Indexed (Optional)

10 Contact/Mail Information

Instrument Submitted By or Contact Person

Name: TANYA CHIARI, PARALEGAL

Firm STEWART TITLE GUARANTY COMPANY

Address: ONE WASHINGTON MALL, SUITE 1400, BOSTON, MA 02108

Phone: (617) 933-2426

☑ Return to Contact Person

☐ Hold for Pickup

☐ Return Address Provided

11 Assessment Information

IMPORTANT: *BOTH* THE ORIGINAL DEED *AND* A PHOTOCOPY MUST ACCOMPANY EACH TRANSFER

☐ Yes ☑ No Will the property being conveyed be the grantee's principal residence?

☐ Yes ☑ No Does transfer include personal property? If yes, identify:

☑ Yes ☐ No Was property surveyed? If yes, attach copy of survey (if recorded, no copy required).

Space Reserved for County Validation

Assessment Use Only – Do Not Write Below This Line

Terminal Verification | Agricultural Verification | Whole | Part | Tran. Process Verification

Transfer Number | Date Received: | Deed Reference: | Assigned Property No.:

Year	20	20	Geo.	Map	Sub	Block
Land			Zoning	Grid	Plat	Lot
Buildings			Use	Parcel	Section	Occ. Cd.
Total			Town Cd.	Ex. St.	Ex. Cd.	

REMARKS:

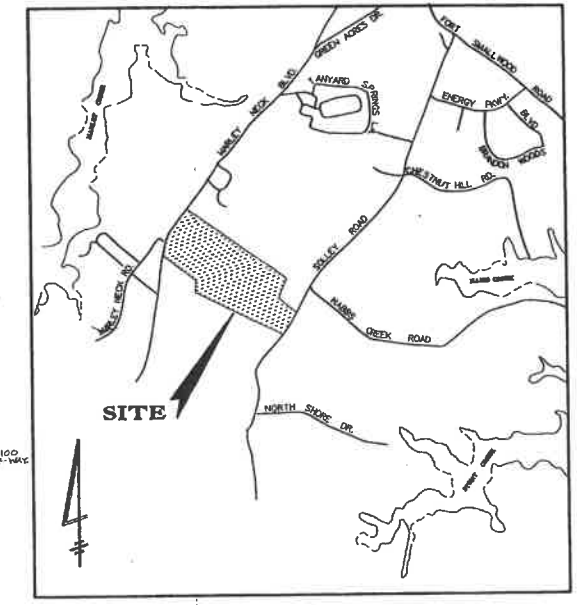
Distribution: White – Clerk's Office; Pink – Office of Finance; Canary – SDAT; Goldenrod – Preparer

AOC-CC-300 (5/2007)

7189

GENERAL NOTES

1. THIS SITE IS SUBJECT TO SITE PLAN APPROVAL BY THE ANNE ARUNDEL COUNTY OFFICE OF PLANNING AND ZONING PRIOR TO BUILDING PERMIT APPROVAL FOR LOTS A AND B.
2. THE REQUIREMENTS OF THE ANNOTATED CODE OF MARYLAND, REAL PROPERTY ARTICLE 3, SECTION 3-108, 1988 EDITION AS FAR AS THEY RELATE TO THE MAKING OF THIS PLAT AND THE SETTING OF MARKERS HAVE BEEN COMPLIED WITH. (SEE SHEET 2 OF 2)
3. EXISTING ZONING OF PROPERTY IS W-1
   SETBACK REQUIREMENTS
   FRONT YARD - 50 FEET
   REAR AND SIDE YARD - PRINCIPAL STRUCTURES - 30 FEET
   ACCESSORY STRUCTURES - 25 FEET
   - STRUCTURES SHALL BE SET BACK AT LEAST 200 FEET FROM ANY FREEWAY, 100 FEET FROM LIMITED ACCESS HIGHWAY AND 50 FEET FROM ANY OTHER PUBLIC RIGHT-OF-WAY.
4. THERE IS NO REFERENCE TO ANY CONDITIONS, COVENANTS AND RESTRICTIONS PERTAINING TO THE USE OF THE SUBDIVISION.
5. ALL CURRENT TAXES 1989-1990 HAVE BEEN PAID UNDER TAX ACCOUNT NUMBER 3-000-19367100
6. COORDINATES SHOWN ON SHEET 2 OF 2 ARE IN COMPLIANCE WITH THE ANNE ARUNDEL COUNTY GRID SYSTEM AND APPLICABLE STATE LAW.



LOCATION MAP
SCALE: 1" = 2000'

THE PURPOSE OF THIS PLAT IS TO CONVEY LOT A AS SHOWN ON SHEET 2 OF 2 TO ANNE ARUNDEL COUNTY.

SITE ANALYSIS

1.	TOTAL AREA	6,670,591 SF ± 153.1337 ACRES
2.	EXISTING ZONING	W-1
3.	RIGHT-OF-WAY DEDICATION	17,919 SF ± 0.4111 ACRES
4.	TOTAL LOT AREA	152.7246 ACRES
5.	NUMBER OF LOTS PROPOSED	2
6.	TYPE OF DEVELOPMENT	INDUSTRIAL

DEDICATION BY OWNER

WE, MOUNT CLARE PROPERTIES, INC. (A MD. CORP.) OWNERS OF THE PROPERTY SHOWN AND DESCRIBED HEREON, HEREBY ADOPT THIS PLAN OF SUBDIVISION AND ESTABLISH THE MINIMUM BUILDING RESTRICTION LINES. THERE ARE NO SUITS, ACTIONS AT LAW, LEASES, LIENS, MORTGAGES, TRUSTS, EASEMENTS OR RIGHTS-OF-WAY AFFECTING THE PROPERTY INCLUDED IN THIS PLAN OF SUBDIVISION, EXCEPT AS SHOWN ON THESE PLATS, AND ALL PARTIES IN INTEREST THERETO HAVE HEREUNTO AFFIXED THEIR SIGNATURES INDICATING THEIR ASSENT AND WILLINGNESS TO JOIN THIS PLAN OF SUBDIVISION.

RICHARD L. BEADLES — DATE 2/12/91
PRESIDENT
MOUNT CLARE PROPERTIES, INC. (A MD. CORP.)

DAVID L. LANCASTER — DATE 2-8-91
VICE PRESIDENT
MOUNT CLARE PROPERTIES, INC. (A MD. CORP.)

MARK S. HOFFMANN — DATE 2/8/91
ASSISTANT SECRETARY
MOUNT CLARE PROPERTIES, INC. (A MD. CORP.)

WITNESS — DATE 2/8/91

APPROVED BY VIRTUE OF OFFICIAL ACTION TAKEN BY ANNE ARUNDEL COUNTY OFFICE OF PLANNING AND ZONING.

PLANNING AND ZONING OFFICER — DATE 5/16/91

COUNTY HEALTH OFFICER-PUBLIC SYSTEMS — DATE 5/16/91

1991 MAY 22 PM 3:46

SURVEYOR'S CERTIFICATE

I HEREBY CERTIFY THAT THE PLAN SHOWN ON SHEET 2 OF 2 IS CORRECT, THAT IT IS A SUBDIVISION OF A PORTION OF THE LANDS CONVEYED BY REAL ESTATE AND IMPROVEMENT COMPANY OF BALTIMORE CITY TO THE MARLEY NECK-PATAPSCO COMPANY BY DEED DATED JANUARY 1, 1932 AND RECORDED AMONG THE LAND RECORDS OF ANNE ARUNDEL COUNTY IN LIBER F.S.R. 96 FOLIO 213.

GARY J. THURMAN — DATE 2-06-91
REGISTERED PROPERTY LINE SURVEYOR
MARYLAND LICENSE NO. 322

STATE OF MARYLAND — GARY JAMES THURMAN — 322 — REGISTERED PROPERTY LINE SURVEYOR

ADMINISTRATIVE SUBDIVISION OF

SOUTH SOLLEY ROAD PARCEL
MOUNT CLARE PROPERTIES, INC.

THIRD DISTRICT ANNE ARUNDEL COUNTY, MARYLAND
SCALE: AS SHOWN — OCTOBER 3, 1990
TAX MAP 10 GRID 17 PART OF PARCEL 49
SHEET 1 OF 2

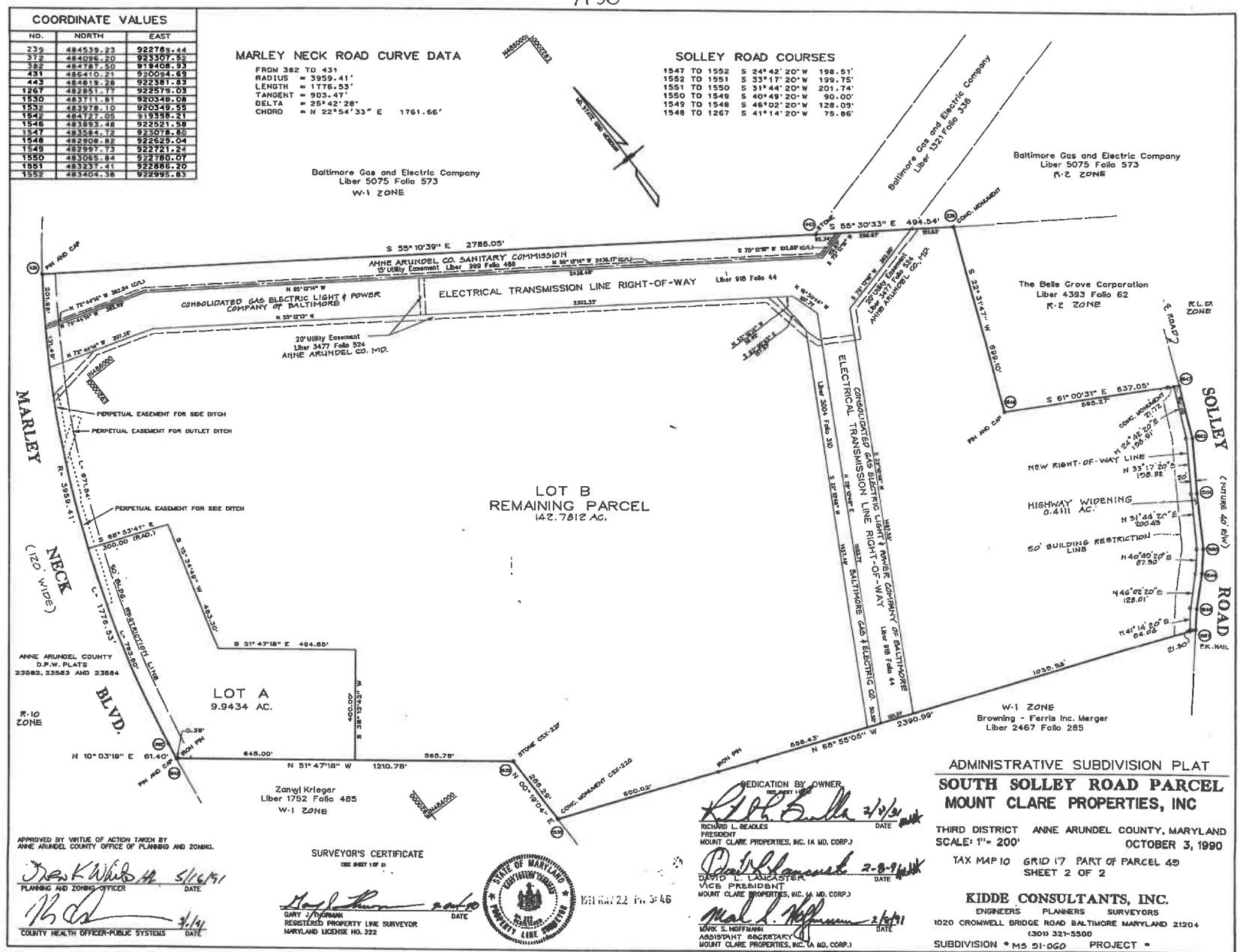
KIDDE CONSULTANTS, INC.
ENGINEERS PLANNERS SURVEYORS
1020 CROMWELL BRIDGE ROAD BALTIMORE MARYLAND 21204
(301) 321-5300

SUBDIVISION # MS-91-060 PROJECT #

BOOK 138 PAGE 16 MSA SS1235-76-1

FILE: DI\DGN\CSXRPCOV.DGN (MICROSTATION)

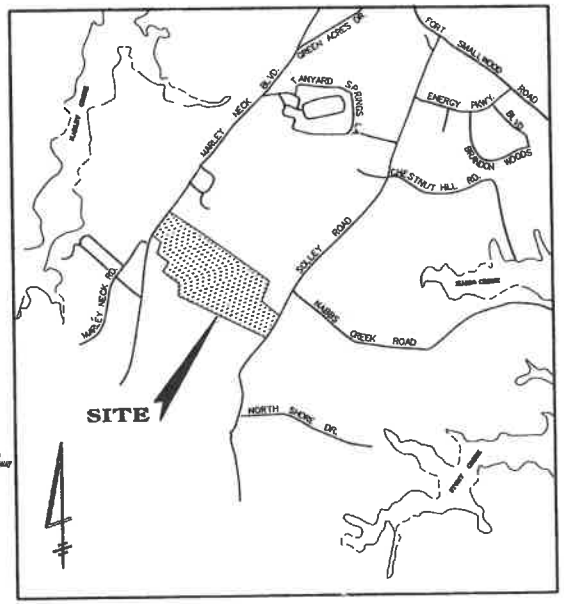
7190



BOOK 138 PAGE 17

GENERAL NOTES

1. THIS SITE IS SUBJECT TO SITE PLAN APPROVAL BY THE ANNE ARUNDEL COUNTY OFFICE OF PLANNING AND ZONING PRIOR TO BUILDING PERMIT APPROVAL FOR LOTS A, B AND C.
2. THE REQUIREMENTS OF THE ANNOTATED CODE OF MARYLAND, REAL PROPERTY ARTICLE 3, SECTION 3-108, 1988 EDITION AS FAR AS THEY RELATE TO THE MAKING OF THIS PLAT AND THE SETTING OF MARKERS HAVE BEEN COMPLIED WITH. (SEE SHEET 2 OF 2)
3. EXISTING ZONING OF PROPERTY IS W-1
   SETBACK REQUIREMENTS
   FRONT YARD - 50 FEET
   REAR AND SIDE YARD - PRINCIPAL STRUCTURES - 30 FEET
   ACCESSORY STRUCTURES - 25 FEET
   STRUCTURES SHALL BE SET BACK AT LEAST 200 FEET FROM ANY FREEWAY, 100 FEET FROM LIMITED ACCESS HIGHWAY AND 50 FEET FROM ANY OTHER PUBLIC RIGHT OF WAY
4. THERE IS NO REFERENCE TO ANY CONDITIONS, COVENANTS AND RESTRICTIONS PERTAINING TO THE USE OF THE SUBDIVISION.
5. ALL CURRENT TAXES 1989-1990 HAVE BEEN PAID UNDER TAX ACCOUNT NUMBER 3-000-18367100
6. COORDINATES SHOWN ON SHEET 2 OF 2 ARE IN COMPLIANCE WITH THE ANNE ARUNDEL COUNTY GRID SYSTEN AND APPLICABLE STATE LAW.



LOCATION MAP
SCALE: 1" = 2000'

THE PURPOSE OF THIS PLAT IS TO CONVEY LOT C AS SHOWN ON SHEET 2 OF 2 TO BROWNING-FERRIS INC. TO ELIMINATE ENCROACHMENTS ALONG SOUTHERLY PROPERTY LINES.

DEDICATION BY OWNER

WE, MOUNT CLARE PROPERTIES, INC. (A MD. CORP.) OWNERS OF THE PROPERTY SHOWN AND DESCRIBED HEREON, HEREBY ADOPT THIS PLAN OF SUBDIVISION AND ESTABLISH THE MINIMUM BUILDING RESTRICTION LINES. THERE ARE NO SUITS, ACTIONS AT LAW, LEASES, LIENS, MORTGAGES, TRUSTS, EASEMENTS OR RIGHTS-OF-WAY AFFECTING THE PROPERTY INCLUDED IN THIS PLAN OF SUBDIVISION, EXCEPT AS SHOWN ON THESE PLATS, AND ALL PARTIES IN INTEREST THERETO HAVE HEREUNTO AFFIXED THEIR SIGNATURES INDICATING THEIR ASSENT AND WILLINGNESS TO JOIN THIS PLAN OF SUBDIVISION.

DAVID L. LANCASTER — DATE 4-26-91
VICE PRESIDENT
MOUNT CLARE PROPERTIES, INC. (A MD. CORP.)

MARK S. HOFFMANN — DATE 4/26/91
ASSISTANT SECRETARY
MOUNT CLARE PROPERTIES, INC. (A MD. CORP.)

WITNESS — DATE 4/26/91

SITE ANALYSIS

1.	TOTAL AREA	6,219,540 SF ± 142.7812 AC. (163.1357 AC. BEFORE MS-91-060)
2.	EXISTING ZONING	W-1
3.	RIGHT-OF-WAY DEDICATION	0
4.	TOTAL LOT AREA	142.7812 AC.
5.	NUMBER OF LOTS PROPOSED	2
6.	TYPE OF DEVELOPMENT	INDUSTRIAL

APPROVED BY VIRTUE OF OFFICIAL ACTION TAKEN BY ANNE ARUNDEL COUNTY OFFICE OF PLANNING AND ZONING.

PLANNING AND ZONING OFFICER — DATE 5/16/91

COUNTY HEALTH OFFICER-PUBLIC SYSTEMS — DATE 5/6/91

1991 ... 13 AM 8:46

SURVEYOR'S CERTIFICATE

I HEREBY CERTIFY THAT THE PLAN SHOWN ON SHEET 2 OF 2 IS CORRECT. THAT IT IS A SUBDIVISION OF A PORTION OF THE LANDS CONVEYED BY REAL ESTATE AND IMPROVEMENT COMPANY OF BALTIMORE CITY TO THE MARLEY NECK-PATAPSCO COMPANY BY DEED DATED JANUARY 1, 1932 AND RECORDED AMONG THE LAND RECORDS OF ANNE ARUNDEL COUNTY IN LIBER F.S.R. 98 FOLIO 213.

GARY J. THURMAN — DATE 15 APR 91
REGISTERED PROPERTY LINE SURVEYOR
MARYLAND LICENSE NO. 322

STATE OF MARYLAND — GARY JOSEPH THURMAN — 322 — REGISTERED PROPERTY LINE SURVEYOR

ADMINISTRATIVE SUBDIVISION OF LOT-B

SOUTH SOLLEY ROAD PARCEL
MOUNT CLARE PROPERTIES, INC.

THIRD DISTRICT ANNE ARUNDEL COUNTY, MARYLAND
SCALE: AS SHOWN — APRIL 29, 1991
TAX MAP 10 GRID 17 PART OF PARCEL 49
SHEET 1 OF 2

KIDDE CONSULTANTS, INC.
ENGINEERS PLANNERS SURVEYORS
1020 CROMWELL BRIDGE ROAD .BALTIMORE MARYLAND 21204
(301) 321-5500

SUBDIVISION # MS-91-118 PROJECT #

MSA S.M. 1935-96-3
FF AA 10-8
FILE: D:\DGN\CSXRPCOV.DGN (MICROSTATION)

COORDINATE VALUES

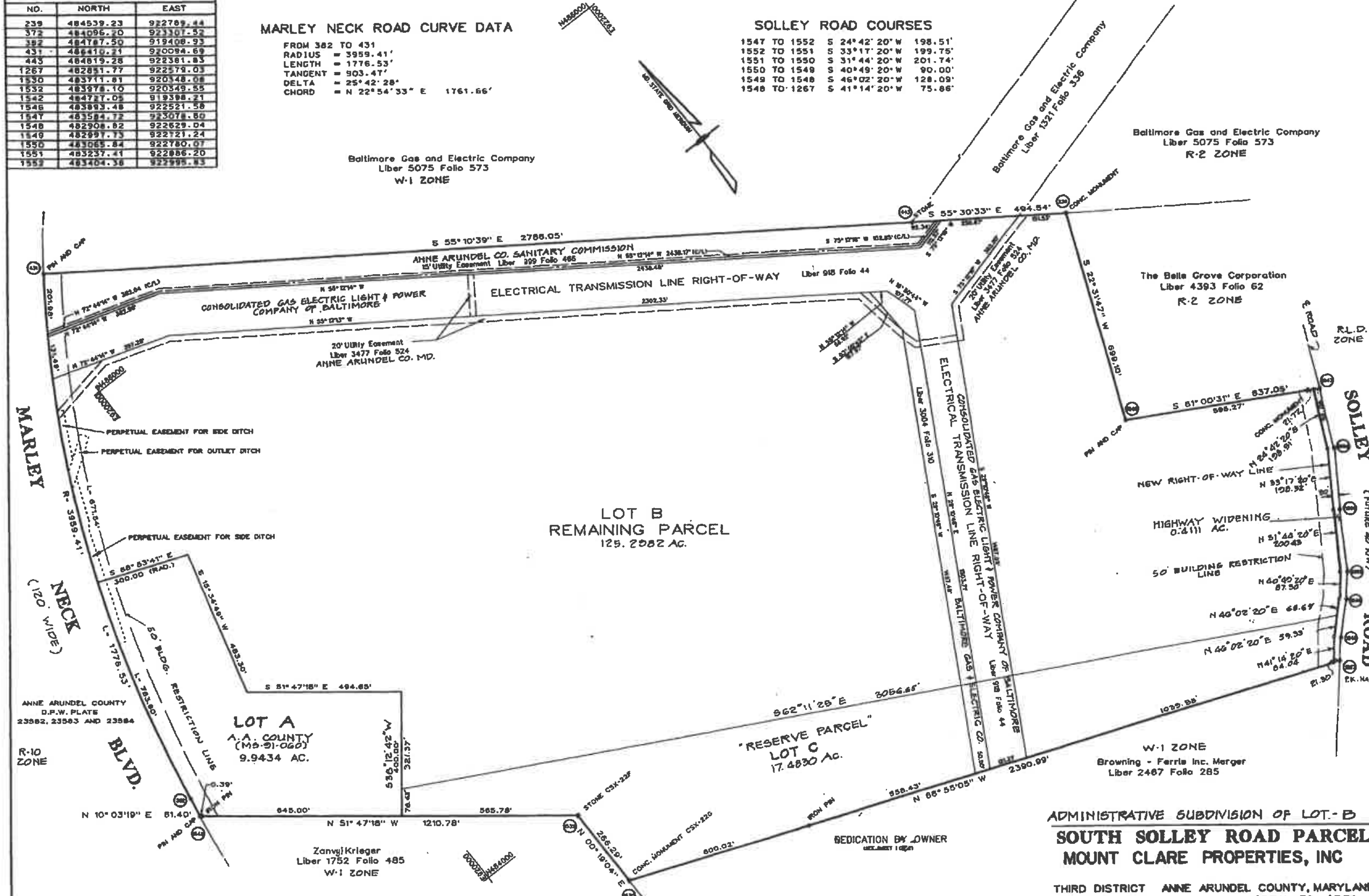
NO.	NORTH	EAST
239	484539.23	922789.44
372	484096.20	923307.52
382	484787.50	919408.93
431	486410.21	920094.69
443	484819.28	922381.83
1267	482851.77	922579.03
1530	483711.81	920348.08
1532	483978.10	920349.55
1542	484727.05	919398.21
1546	483893.48	922521.58
1547	483584.72	923078.80
1548	482908.82	922629.04
1549	482997.73	922721.24
1550	483065.84	922780.07
1551	483237.41	922886.20
1552	483404.38	922995.83

MARLEY NECK ROAD CURVE DATA

FROM 382 TO 431
RADIUS = 3959.41'
LENGTH = 1776.53'
TANGENT = 903.47'
DELTA = 25°42'28"
CHORD = N 22°54'33" E 1761.66'

SOLLEY ROAD COURSES

1547 TO 1552 S 24°42'20" W 198.51'
1552 TO 1551 S 33°17'20" W 199.75'
1551 TO 1550 S 31°44'20" W 201.74'
1550 TO 1549 S 40°49'20" W 90.00'
1549 TO 1548 S 46°02'20" W 128.09'
1548 TO 1267 S 41°14'20" W 75.86'



APPROVED BY VIRTUE OF ACTION TAKEN BY ANNE ARUNDEL COUNTY OFFICE OF PLANNING AND ZONING.

[signature] 5/16/91
PLANNING AND ZONING OFFICER DATE

[signature] 5/16/91
COUNTY HEALTH OFFICER-PUBLIC SYSTEMS DATE

SURVEYOR'S CERTIFICATE
(SEE SHEET 1 OF 2)

[signature] 26-April-91
GARY J. THURMAN DATE
REGISTERED PROPERTY LINE SURVEYOR
MARYLAND LICENSE NO. 322

STATE OF MARYLAND PROPERTY LINE SURVEYOR No. 322

DEDICATION BY OWNER
(SEE SHEET 1 OF 2)

[signature] 4-26-91
DAVID L. LANCASTER DATE
VICE PRESIDENT
MOUNT CLARE PROPERTIES, INC. (A MD. CORP.)

[signature] 4/26/91
MARK S. HOFFMANN DATE
ASSISTANT SECRETARY
MOUNT CLARE PROPERTIES, INC. (A MD. CORP.)

1991 MAY 22 PM 3:47

ADMINISTRATIVE SUBDIVISION OF LOT - B

SOUTH SOLLEY ROAD PARCEL
MOUNT CLARE PROPERTIES, INC

THIRD DISTRICT ANNE ARUNDEL COUNTY, MARYLAND
SCALE: 1"= 200' APRIL 29, 1991
TAX MAP 10 GRID 17 PART OF PARCEL 49
SHEET 2 OF 2

KIDDE CONSULTANTS, INC.
ENGINEERS PLANNERS SURVEYORS
1020 CROMWELL BRIDGE ROAD BALTIMORE MARYLAND 21204
(301) 321-5500
SUBDIVISION # MS 91-118 PROJECT #

MSA S1235-76-4
FF AA10-8
FILE: D:\DGN\PLAT2RP.DGN (MICROSTATION)

APP. EXHIBIT# 11
CASE: 2025-0049-S
DATE: 5/15/25

OFFICE OF PLANNING AND ZOI

CONFIRMATION OF PRE-FILE

PRE-FILE #: 2025-0001-P
DATE: 01/28/2025
OPZ STAFF: Jennifer Lechner
Patrick Hughes
Adam Knubel
I&P STAFF: Bradley Bodman

APPLICANT/REPRESENTATIVE: Baltimore Gas & Electric Company / Law Office of Sager A. Williams, Jr.

EMAIL: mdzoninglaw@verizon.net

SITE LOCATION: Solley Road (Lot B), Glen Burnie **LOT SIZE:** 125.2982 acres

ZONING: W1 **CA DESIGNATION:** n/a **BMA:** n/a **BUFFER:** n/a **APPLICATION TYPE:** Special Exception

---

The applicant is requesting a Special Exception to allow Public Utility Uses in the W1 District, and an extension for a phasing plan.
Per their application: "BGE will be seeking special exception approval for a major electrical substation project on the Marley Neck. As part of its special exception request, BGE will ask the Hearing Officer to approve a phasing plan for the project, allowing full buildout over the next seven years."

COMMENTS

Zoning Administration Section:
The applicant is reminded that, in order for the Administrative Hearing Officer to grant approval of the special exception, the proposal must address and meet all of the applicable standards provided under Sections 18-11-144 and 18-16-304. The Letter of Explanation appears to address each of those standards and to provide adequate justification.

OPZ Long Range Planning:
Plan2040 does not have recommendations that are specific to this site. No application for Planned Land Use change was filed during the Plan2040 process, and the proposal is consistent with the Plan2040 goals, policies and recommendations. No application for rezoning was filed during the 2011 Comprehensive Rezoning process or during the Region 3 Comprehensive Rezoning process, which is currently underway. Adoption of the Region 3 Plan and Comprehensive Zoning map is anticipated for summer 2025.
The 2022 Water and Sewer Master Plan places the site in the Planned Water Service Category (Glen Burnie Low Water Pressure Zone) and the Planned Sewer Service Category (Cox Creek Sewer Service Area). The proposal is consistent with the Water and Sewer Master Plan.

OPZ Development Division, Residential Team:
Defers to the Zoning Division on whether the applicant meets the Special Exception standards. Should the Special Exception be approved, the following comments are offered:

1. Per Article 17, Title 4, a Preliminary Plan (PP) and Site Development Plan (SDP) application must be submitted and approved.
2. As per Section 17-6-301, the subject parcel is greater than 40,000 square feet therefore Forest Conservation regulations will be applicable.
3. As per Section 17-6-302, a forest stand delineation plan prepared by a licensed forester, licensed landscape architect, or other qualified professional who meets the requirements of COMAR, Title 08.
4. All environmentally sensitive areas on the subject parcel need to be clearly shown on the Preliminary Plan,

SDP, and submitted Plans. The impact on these areas and features shall be removed or minimized and mitigated. Any disturbance to the area noted in Article 17 Title 6 will require modification requests.

5. The proposed development will be subject to the grading and building permit review and approval.
6. Landscaping Buffer Yards for the front, side, and rear yards will be required per the Anne Arundel County Landscape Manual.
7. The proposed BGE electrical substation will need to comply with the W1 bulk regulations in Article 17-6-301 of the County Code.

I&P Engineering:

There are no Engineering objections to approval of the requested Zoning Special Exception provided that item 2 in the Engineering Division memo (attached) is addressed prior to Preliminary Plan approval. This request is being deferred to the Zoning Division regarding whether the application meets the Special Exception standards of 18-16-304 requirements for the proposed development for the property under the relevant Code provisions.

INFORMATION FOR THE APPLICANT

Section 18-16-301 (c) Burden of Proof. The applicant has the burden of proof, including the burden of going forward with the production of evidence and the burden of persuasion, on all questions of fact. The burden of persuasion is by a preponderance of the evidence.

A special exception may only be granted if the Administrative Hearing Officer makes affirmative findings that the applicant has addressed all the requirements outlined in Articles 18-11-114 and 18-16-304. Comments made on this form are intended to provide guidance and are not intended to represent support or approval of the special exception request.

A preliminary plan checklist is required for development impacting environmentally sensitive areas and for all new single-family dwellings. A stormwater management plan that satisfies the requirements of the County Procedures Manual is required for development impacting environmentally sensitive areas OR disturbing 5,000 square feet or more. State mandates require a developer of land provide SWM to control new development runoff from the start of the development process.

ANNE ARUNDEL COUNTY
MARYLAND
Office of Planning and Zoning

Jenny Dempsey
Planning and Zoning Officer

MEMORANDUM

TO: Zoning Division

FROM: Patrick Hughes, Long Range Planning

THROUGH: Cindy Carrier, Planning Administrator, Long Range Planning

SUBJECT: Long Range Planning Comments

DATE: 1/17/25

Name of Project: **BGE Solley Road Substation**
Case#: 2025-0001-P
Location: **Between Marley Neck Boulevard and Solley Road, south of Creekside Village**
Tax Map 10, Parcel 397, Lot B
Region Planning Area: **Region 3**
Community: **Glen Burnie**

Summary:
The applicant is seeking a special exception to construct electrical substations as a public utility use in a W1 zone on Marley Neck.

The 125-acre parcel is predominantly wooded and undeveloped, except for transmission line corridors crossing the property. Plan2040 places the site in the Neighborhood Preservation Development Policy Area and the Industrial Planned Land Use category. The current zoning for the site is W1. The site is within the Priority Funding Area. Surrounding Planned Land Uses are Medium Density Residential to the north and west, Commercial and Public Use to the west, and Industrial to the south and east.

Findings:
Plan2040 does not have recommendations that are specific to this site. No application for Planned Land Use change was filed during the Plan2040 process, and the proposal is consistent with the Plan2040 goals, policies and recommendations. No application for rezoning was filed during the 2011 Comprehensive Rezoning process or during the Region 3 Comprehensive Rezoning process, which is currently underway. Adoption of the Region 3 Plan and Comprehensive Zoning map is anticipated for summer 2025.

The 2022 Water and Sewer Master Plan places the site in the Planned Water Service Category (Glen Burnie Low Water Pressure Zone) and the Planned Sewer Service Category (Cox Creek Sewer Service Area). The proposal is consistent with the Water and Sewer Master Plan.

ANNE ARUNDEL COUNTY
MARYLAND
Office of Planning and Zoning

Jenny B. Dempsey
Planning and Zoning Officer

MEMORANDUM

TO: Sterling Seay, Planning Administrator, Zoning Division, OPZ

FROM: Adam Knubel, Development Division, Residential Team, OPZ

SUBJECT: Baltimore Gas and Electric Company, 2025-0001-P

Solley Road, Glen Burnie, MD 21060 (3000-9007-5351)

DATE: January 17, 2025

In response to your request for comments regarding a Special Exception to allow for an electrical substation (Public Utility Uses) in a W-1 District, we defer to the Zoning Division on whether the applicant meets the Special Exception standards. Should the Special Exception be approved, the following comments are offered:

1. Per Article 17, Title 4, a Preliminary Plan (PP) and Site Development Plan (SDP) application must be submitted and approved.
2. As per Section 17-6-301, the subject parcel is greater than 40,000 square feet therefore Forest Conservation regulations will be applicable.
3. As per Section 17-6-302, a forest stand delineation plan prepared by a licensed forester, licensed landscape architect, or other qualified professional who meets the requirements of COMAR, Title 08.
4. All environmentally sensitive areas on the subject parcel need to be clearly shown on the Preliminary Plan, SDP, and submitted Plans. The impact on these areas and features shall be remove or minimized and mitigated. Any disturbance to the area noted in Article 17 Title 6 will require modification requests to be made.
5. The proposed development will be subject to the grading and building permit review and approval processes.
6. Landscaping Buffer Yards for the front, side, and rear yards will be required per the Anne Arundel County Landscape Manual.
7. The proposed BGE electrical substation will need to comply with the W1 bulk regulations in Article 17-6-301 of the County Code.

Mark R. Wedemeyer, Director

Memorandum

TO: Sterling Seay, OPZ - Zoning Division

FROM: Bradley E. Bodman, PE, Engineering Division, Department of Inspections and Permits BEB

SUBJECT: Baltimore Gas and Electric Company (BGE)
Solly Road and Marley Neck Substations
Solley Road Lot B, Glen Burnie MD 21060
Special Exception Case Number: 2025-0001-P
Tax Account Number: 3000-9007-5351
Zoning Special Exception (Pre-file) Review

DATE: January 13, 2025

Request - Allow development of a public utility use (electrical substation) in a W1 – Industrial Park District by Special Exception (County Code Section: 18-6-103).

Review - Approval is sought for a Special Exception permitting two electrical substations within a BGE-owned property that currently contains a Transmission Line Corridor that is split into a "Y" arrangement. The Solley Road Substation is proposed to be constructed in the central portion of the property, within a fenced area (12' Security fence), approximately 530' x 640', accessed via private access road within the existing east-to-west-running Transmission Corridor and a stormwater management facility outside of the fenced area. The area within the fence will be covered with gravel and safety grounding grid, with the exception of asphalt roads and equipment pads. The Marley Neck Substation is proposed to be constructed in the western portion of the property, within a fenced area (12' Security fence), approximately 800' x 1,080', accessed via private access road within the existing east-to-west-running Transmission Corridor and a stormwater management facility outside of the fenced area, to the west of the substation. The area within the fence will be covered with gravel and safety grounding grid, with the exception of asphalt drives and equipment pads.

The site will be constructed within W1-zoned land. The substations will occupy approximately 28 acres of the 125-acre property. Construction of the substations access roadway connections and stormwater management facilities will require grading of 46 acres and clearing of 58 acres. The Solley Road Substation equipment will include 2 transformers, a remotely managed control building, capacitors, circuit switches, breakers and conductors. Equipment within the Marley Neck substation will include 8 transformers, 3 remotely managed control buildings a voltage regulating device (STATCOM) and numerous above-ground capacitors. The STATCOM facility will be located in the southeastern corner of the Marley Neck substation area.

The full project is proposed to be completed in two phases. Phase 1 will consist of complete construction of the Solley Road substation and the STATCOM facility which will be operational by the end of 2026. It is also proposed

that, along with construction of the Solley Road substation and STATCOM facility, the remainder of the Marley Neck substation area (clearing, grading, internal roadways, yard stone, perimeter fence and stormwater management) will also be constructed. Phase 2 will consist of installation of the proposed electrical equipment within the fenced area of the Marley Neck substation and is anticipated to be operational within 5-7 years.

No water or sewer connections are proposed as the site will be un-manned and remotely controlled.

This office has received the subject application and performed a review for engineering (roads, storm drainage, stormwater management and utilities) issues and has the following comments:

1. The proposed project does not include or require water or sewer service. The number of EDU's is proposed to be less than five (0), therefore a SWAMP analysis of public water and/or sewer services is not required. Adequacy of facilities for utilities has been adequately addressed for this development.
2. Review of how the site will comply with storm drain outfall adequacy and stormwater management requirements including environmental site design (ESD) to the Maximum Extent Practicable (MEP) and how stormwater runoff from and through the property will be conveyed and where it discharges – will be addressed with the Preliminary Plan (Concept) review stage.
3. As indicated on FEMA FIRM #24003C0062F, Effective February 18, 2015, the proposed Limits of Disturbance (LOD) appears to be entirely within Flood Zone X. However, based on the 10-yr, 24-hr runoff (Q10) computations for the watercourses within the property, the property may contain 100-year floodplain(s) by Anne Arundel County definition, whereby if the Q10 at any point within the property exceeds 100 cfs, a floodplain will exist.
4. The Applicant asks that the Administrative Hearing Officer to approve the proposed phasing of the project.

Determination - There are no Engineering objections to approval of the requested Zoning Special Exception provided that item 2 above is addressed prior to Preliminary Plan approval. This request is being deferred to the Zoning Division regarding whether the application meets the Special Exception standards of 18-16-304 requirements for the proposed development for the property under the relevant Code provisions.

J:\Shared\subdiv\Brad Bodman\Variances & Special Exceptions\BGE Solley Road Substation\BGE Solley Road Substation - SE 2025-0001-P- EngUtil 01.13.25.docx

APP. EXHIBIT# 12
CASE: 2025-0049-S
DATE: 5/15/25

N

VICINITY MAP
SCALE: 1"=2000'

PLAN
SCALE: 1"=100'
0 100' 200'

LEGEND

EXISTING

- Minor Contour
- Major Contour
- Storm Drain
- Water & Fire Hydrant
- Sanitary Sewer
- Edge of Paving
- Tree Line
- Building
- Tract Boundary
- Road Right-Of-Way
- Easement Line
- Wetlands
- Wetlands Limit
- Stream / Waters Edge
- Flood Plain Limit
- Overhead Electric
- Guy Wire
- Power/Utility Pole
- Electric Tower
- Fence Line
- Flow Line

PROPOSED

- Electrical Equipment Enclosure
- Edge of Paving
- Security Fence

SITE DATA

OWNER/ADDRESS: BALTIMORE GAS AND ELECTRIC COMPANY
110 W FAYETTE ST.,
2 CENTER PLAZA 14TH FLOOR
BALTIMORE, MD 21201

CONTACT: GREG KAPPLER - BGE
6200 NORTH CHARLES STREET
BALTIMORE, MD 20210
PHONE: 410-470-8448

TAX MAP: 0010

PARCEL: 0307

ACREAGE: 125.7982 Ac.±

PLAT REF: 0138/0018

TAX ACCOUNT NUMBER: 0300090076361

EXISTING ZONING: W1 (INDUSTRIAL PARK DISTRICT)

SETBACKS: W1 ZONE
FRONT: 50 FEET
SIDE: 30 FEET
REAR: 30 FEET

LIMIT OF DISTURBANCE: 1,976503 SF/45.4 Ac.+/-

AREA OF YARD STONE: 949,508 SF/ 21.8 Ac. +/-

KLEINFELDER
Bright People. Right Solutions.
14710 Gilroy Road
Hunt Valley, Maryland 21031
Phone: 443 586 3400
Project No. 20500794.004A

REV	DATE	ACCOUNT NO.	DESCRIPTION

UPDATE YOUR PRINT TO REFLECT 'AS BUILT' STATE
& RETURN A COPY TO THE APPLICABLE DESIGN UNIT

APPROVED
PREP
REVD
APVD

AUTOCAD
ENGINEERING
CIVIL CENTURY ENGINEERING
ELEC.
PROJ. ENG.
PROJ. MGR.
PRIM. ENG.
SUPV. ENG.

DESIGN GROUP
DESIGNED RGB
DRAWN MSB
CHECKED RGB
APPROVED
DATE

LOT B - SOUTH SOLLEY ROAD PARCEL

DEVELOPMENT PLAN

ZONING W1
TAX MAP 10 - PARCEL 307
ANNE ARUNDEL COUNTY, MARYLAND

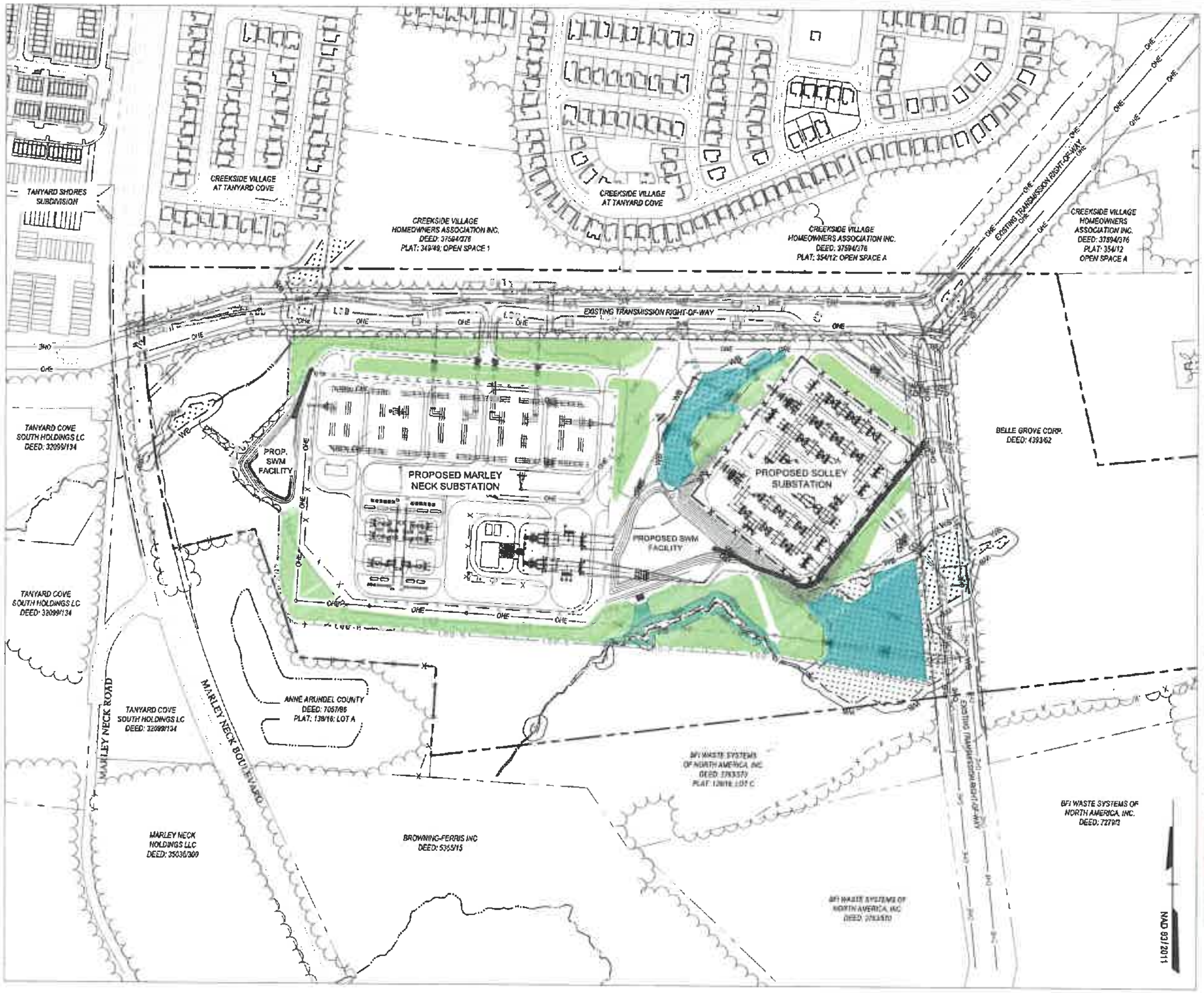
SOLLEY SUBSTATION

ELECTRIC SUBSTATION ENGINEERING

bge

SCALE: 1"=100'
DWG. NO. DP-01
REV.

APP. EXHIBIT# 13
CASE: 2025-0049-S
DATE: 5/15/25



LEGEND

Site Boundary	
Property Lines	
Stream/Waters Edge	
Existing Tree Line	
Proposed Tree Line	
Existing Wetlands	
25' Wetland Buffer	WB
Fence	X
Overhead Electric	OHE
Limit of Disturbance	LOD
Proposed Upland Meadow Mix	
Proposed Riparian Meadow Mix	
Proposed Wetland Meadow Mix	

PLAN

SCALE: 1"=200'

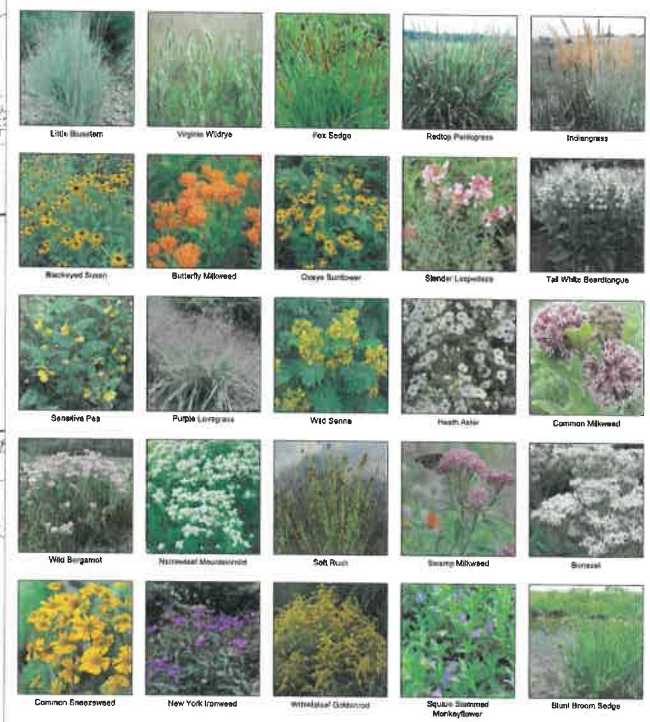
0 200' 400'

Upland Meadow Mix:
(Ernst Seeds "Maryland Upland Mix")

- Little Bluestem (*Schizachyrium scoparium*)
- Virginia Wildrye (*Elymus virginicus*)
- Blackeyed Susan (*Rudbeckia hirta*)
- Butterfly Milkweed (*Asclepias tuberosa*)
- Oxeye Sunflower (*Heliopsis helianthoides*)
- Slender Lespedeza (*Lespedeza virginica*)
- Tall White Beardtongue (*Penstemon digitalis*)
- Sensitive Pea (*Chamaecrista nictitans*)
- Purple Lovegrass (*Eragrostis spectabilis*)
- Wild Senna (*Senna hebecarpa*)
- Heath Aster (*Aster pilosus*)
- Common Milkweed (*Asclepias syriaca*)
- Wild Bergamot (*Monarda fistulosa*)
- Narrowleaf Mountainmint (*Pycnanthemum tenuifolium*)
- White Goldenrod (*Solidago bicolor*)
- Grey Goldenrod (*Solidago nemoralis*)
- Hairy Beardtongue (*Penstemon hirsutus*)
- Hoary Mountainmint (*Pycnanthemum incanum*)
- Early Goldenrod (*Solidago juncea*)

- Fox Sedge (*Carex vulpinoidea*)
- Virginia Wildrye (*Elymus virginicus*)
- Redtop Panicgrass (*Panicum rigidulum*)
- Lurid Sedge (*Carex lurida*)
- Blunt Broom Sedge (*Carex scoparia*)
- Soft Rush (*Juncus effusus*)
- Swamp Milkweed (*Asclepias incarnata*)
- Boneset (*Eupatorium perfoliatum*)
- Common Sneezeweed (*Helenium autumnale*)
- Path Rush (*Juncus tenuis*)
- New York Ironweed (*Vernonia noveboracensis*)
- Wrinkleleaf Goldenrod (*Solidago rugosa*)
- Square Stemmed Monkeyflower (*Mimulus ringens*)
- Woolgrass (*Scirpus cyperinus*)

- Indiangrass (*Sorghastrum nutans*)
- Virginia Wildrye (*Elymus virginicus*)
- Switchgrass (*Panicum virgatum*)
- Redtop Panicgrass (*Panicum rigidulum*)
- Blackeyed Susan (*Rudbeckia hirta*)
- Oxeye Sunflower (*Heliopsis helianthoides*)
- Swamp Milkweed (*Asclepias incarnata*)
- New York Ironweed (*Vernonia noveboracensis*)
- Boneset (*Eupatorium perfoliatum*)
- Narrowleaf Sunflower (*Helianthus angustifolius*)
- Wrinkleleaf Goldenrod (*Solidago rugosa*)



REV	DATE	ACCOUNT NO.	DESCRIPTION	APPROVED
				PREP
				REVD
				APVD

AUTOCAD

ENGINEERING
CIVIL: CENTURY ENGINEERING
ELEC.
PROJ. ENG.
PROJ. MGR.
PRIN. ENG.
SUPV. ENG.

DESIGN GROUP
DESIGNED: R.G.B.
DRAWN: M.S.S.
CHECKED: R.G.B.
APPROVED: —
DATE: —

KLEINFELDER
Bright People. Right Solutions.
10710 Gilroy Road
Hunt Valley, Maryland 21031
Phone: 443.589.2400
Project No. 2500796.008A

Pollinator Meadow Plan

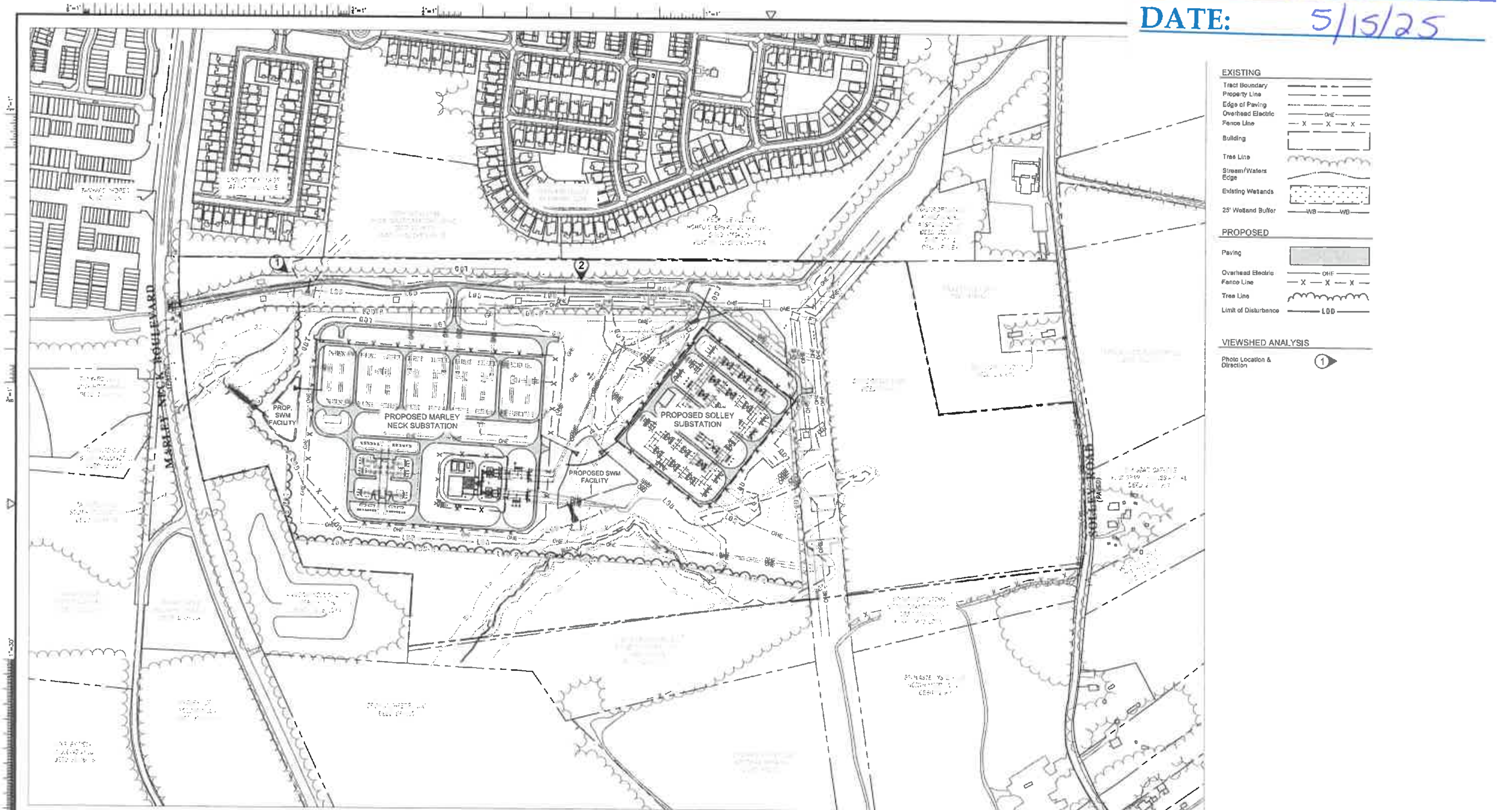
BALTIMORE GAS & ELECTRIC COMPANY
LOT B - SOUTH SOLLEY ROAD
GLEN BURNIE, ANNE ARUNDEL COUNTY, MD 21060
TAX MAP: 10 PARCEL: 397
115kV SUBSTATION

SOLLEY SUBSTATION

ELECTRIC SUBSTATION ENGINEERING

bge AN EXELON COMPANY
SCALE: —
DWG. NO.
REV B

APP. EXHIBIT# 14
CASE: 2025-0049-S
DATE: 5/15/25



PLAN

SCALE: 1"=200'

0 200' 400'

REV.	DATE	ACCOUNT NO.	DESCRIPTION	APPROVED	
				PREP	
				REVD	
				APVD	

KLEINFELDER
Bright People. Right Solutions.
10710 Gilroy Road
Hunt Valley, Maryland 21031
Phone: 443.589.2400
Project No. 2500796.008A

AUTOCAD

ENGINEERING
CIVIL KLEINFELDER
ELEC.
PROJ. ENG.
PROJ. MGR.
PRIN. ENG.
SUPV. ENG.

DESIGN GROUP
DESIGNED R.G.B.
DRAWN M.S.S.
CHECKED R.G.B.
APPROVED —
DATE —

Viewshed Analysis Photo Location Plan

BALTIMORE GAS & ELECTRIC COMPANY
LOT 8 - SOUTH SOLLEY ROAD
GLEN BURNIE, ANNE ARUNDEL COUNTY, MD 21060
TAX MAP: 10 PARCEL: 397
115kV SUBSTATION

MARLEY NECK - SOLLEY

ELECTRIC SUBSTATION ENGINEERING

bge

SCALE: 1" = 200'
DWG. NO. 1 of 2
REV.

Viewshed 1-A
Existing Conditions

Viewshed 1-B
Substation and evergreen trees at installation
(American Holly & Eastern Redcedar)

Viewshed 1-C
Evergreen trees after 5 years
(American Holly & Eastern Redcedar)

Viewshed 1-D
Evergreen trees after 10 years
(American Holly & Eastern Redcedar)

Viewshed 2-A
Existing Conditions

Viewshed 2-B
Substation and evergreen trees at installation
(American Holly & Eastern Redcedar)

Viewshed 2-C
Evergreen trees after 5 years
(American Holly & Eastern Redcedar)

Viewshed 2-D
Evergreen trees after 10 years
(American Holly & Eastern Redcedar)

REV	DATE	ACCOUNT NO.	DESCRIPTION	APPROVED
				PREP
				REVD
				APVD

KLEINFELDER
Bright People. Right Solutions.
10710 Gilroy Road
Hunt Valley, Maryland 21031
Phone: 443.569.2400
Project No. 2500796.008A

AUTOCAD
ENGINEERING
CIVIL KLEINFELDER
ELEC.
PROJ. ENG.
PROJ. MGR.
PRIN. ENG.
SUPV. ENG.

DESIGN GROUP
DESIGNED R.G.B.
DRAWN M.S.S.
CHECKED R.G.B.
APPROVED —
DATE —

Viewshed Analysis Renderings

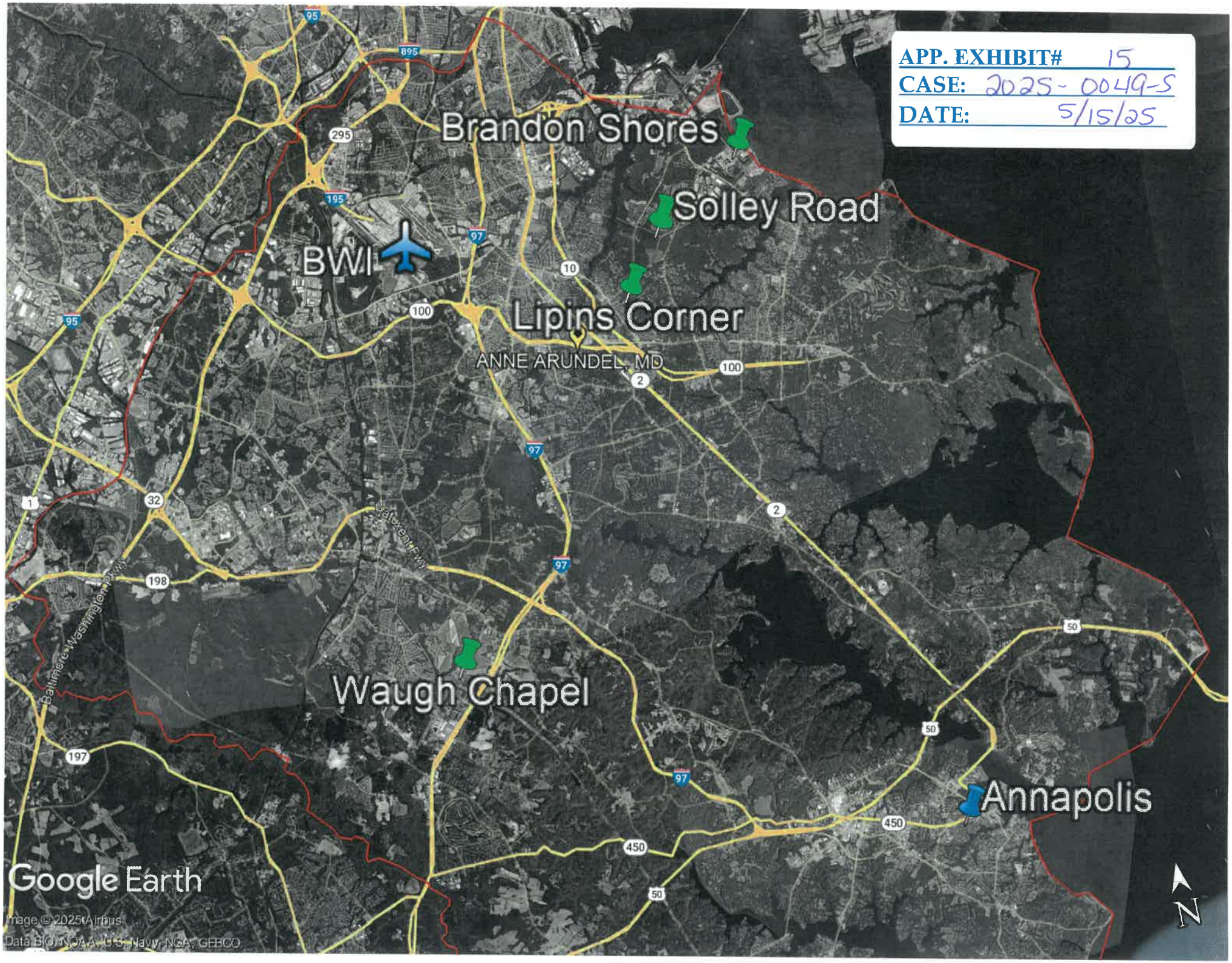
BALTIMORE GAS & ELECTRIC COMPANY
LOT B - SOUTH SOLLEY ROAD
GLEN BURNIE, ANNE ARUNDEL COUNTY, MD 21060
TAX MAP: 10 PARCEL: 397
115KV SUBSTATION

MARLEY NECK - SOLLEY

ELECTRIC SUBSTATION ENGINEERING

bge

SCALE: N.T.S. | REV.
DWG. NO. 2 of 2


APP. EXHIBIT# 15
CASE: 2025-0049-S
DATE: 5/15/25
Brandon Shores
Solley Road
BWI
Lipins Corner
ANNE ARUNDEL, MD
Waugh Chapel
Annapolis
Google Earth
Image © 2025 Airbus
Data SIO, NOAA, U.S. Navy, NGA, GEBCO
N

APP. EXHIBIT# 16
CASE: 2025-0049-S
DATE: 5/15/25

REV1

SOLLEY RD SUBSTATION NOISE REPORT

Glen Burnie, MD

B&V PROJECT NO. 420161

PREPARED FOR

Baltimore Gas and Electric

14 MARCH 2025

BLACK & VEATCH

Table of Contents

LIST OF TABLES

LIST OF FIGURES

Executive Summary

Baltimore Gas and Electric (BGE) is developing a substation (Project) near Solley Rd in Glen Burnie, Maryland. Based on substation design information and drawings, this phase of the project will include a substation and STATCOM unit. The substation noise sources include a control enclosure and six (6) current-limiting reactors. We have assumed four (4) AHUs on the substation control building as a conservative estimate. The STATCOM unit noise sources include two (2) 350 MVA transformers, six (6) shunt reactors, six (6) outdoor coolers, and control buildings with wall-mounted HVAC AHUs. We have assumed twenty (20) HVAC AHUs on the STATCOM control buildings as a conservative estimate. The future Project phases and their potential operational impacts at the Solley Rd Substation is not considered in this study. Additionally, equipment not associated with normal operations, such as the emergency diesel generator, is not considered in this noise study.

To characterize the existing acoustical environment around the Project site, an ambient sound and vibration level survey was conducted from January 10 to January 11, 2025. The survey included three acoustical measurement locations and two vibrational measurement locations representative of the nearest noise-sensitive receptors. Measured ambient sound pressure levels ranged from 51 dBA to 60 dBA during the daytime and 52 dBA to 55 dBA during nighttime. Ambient vibrations ranged from 23 VdB to 63 VdB during the survey.

Noise regulations and standards were reviewed and applicable regulations were identified in the Code of Maryland Regulations (COMAR), Title 26.02.03. The code limits noise based on levels received at properties based on land usage. Residential receptors are limited to 65 dBA during daytime (7:00 a.m. to 10:00 p.m.) and 55 dBA during nighttime (10:00 p.m. to 7:00 a.m.).

An acoustical model was developed in accordance with ISO 9613 to predict the operational noise due to emissions from the initial phase of the Solley Rd Substation. Sound levels along the project boundary are expected to range from 33 dBA to 43 dBA at the nearest receptors. Recorded ambient levels in the area ranged from 51 dBA to 60 dBA for daytime and 50 dBA to 55 dBA at nighttime. At each nearby receptor the predicted Project noise levels are below the limits defined by the State of Maryland. Additionally, the ambient levels are not predicted to have any noticeable increase (< 1 dB) at either of the nearby receptors. As the standard equipment has been modeled to show all noise limits are met, no noise mitigation is required for Project compliance.

1.0 Introduction

Baltimore Gas and Electric (BGE) is developing a substation (Project) near Solley Rd in Glen Burnie, Maryland. Based on substation design information and drawings, this phase of the project will include a control enclosure with a wall-mounted HVAC AHU and six (6) current-limiting reactors at the substation with a STATCOM unit comprising two (2) 350 MVA transformers, six (6) shunt reactors, six (6) outdoor coolers, and control buildings with twenty (20) HVAC AHUs. The future Project phases and their potential operational impacts at the Solley Rd Substation is not considered in this study.

In support of the Project, a noise analysis has been conducted to address the following questions:

- What noise regulations are applicable to the Project?
- What are the expected environmental noise emissions associated with the Project?

2.0 Regulatory Review

Regulations, standards, and guidelines related to the environmental noise emissions were investigated and reviewed to determine applicability to the Project. The following section summarizes the noise regulations established by the Code of Maryland Regulations.

2.1 State of Maryland Noise Regulations

Code of Maryland Regulations (COMAR) Title 26.02.03 outlines a policy to limit the generation of sound and vibration to the environment that would disturb the health, general welfare, and property of the people of Maryland.

Sound pressure levels are limited by what is received at a property based on its land usage. The relevant limitations are for Residential receptors and are 65 dBA during daytime (7:00 a.m. to 10:00 p.m.) and 55 dBA during nighttime (10:00 p.m. to 7:00 a.m.).

Vibration limits are subjective, as Section 26.02.03(4) reads:

"A person may not cause or permit, beyond the property line of a source, vibration of such direct intensity to cause another person to be aware of the vibration by such direct means as sensation of touch or visual observation of moving objects."

There is a subdivision with multiple residential properties to the north of the site and a single residence to the southeast. These are the nearest noise sensitive receptors to the project and will be most likely to be affected by noise and vibration generated by the substation. The site and nearby properties are shown in Figure 1.

Figure 1 Aerial View of the Project with Nearby Residential Locations

3.0 Ambient Sound Level Survey Results

An ambient sound level survey was conducted in order to characterize the existing acoustical and vibrational environment in the area surrounding the Project and to quantify the sound emissions of the transmission lines. The survey was conducted January 10, 2025, to January 11, 2025 and is included in Appendix A. The Survey Locations are given in Figure 2 and the measured levels at each location are given in Table 1. Based on the measurements conducted near the residences north of the project site, levels range from 51 dBA to 60 dBA during the daytime and from 50 dBA to 55 dBA during the nighttime. Most of the existing ambient levels are below the limits but are at the nighttime limit near Survey Location 1.

Table 1 24-Hour Day and Night Measured Average Sound Pressure Levels (L_{eq} dBA)

Daytime & Nighttime Hours	Survey Location 1	Survey Location 2	Survey Location 3
Day (7 a.m. – 10 p.m.)	60 dBA	51 dBA	52 dBA
Night (10 p.m. – 7 a.m.)	55 dBA	52 dBA	50 dBA

The ranges of measurements taken at the two vibration survey locations are given in Table 2, separated into daytime and nighttime measurement periods. The measured vibrational velocity levels at both locations did not exceed 65 VdB, which is accepted as the threshold for human perception by the Federal Transit Administration Noise and Vibration Impact Assessment Manual. Measures to reduce transmission of vibration from Project equipment should be included in the specifications during the procurement process.

Table 2 24-Hour Day and Night Measured Ranges of Vibration Velocity (VdB)

Daytime & Nighttime Hours	Survey Location 4	Survey Location 5
Day (7 a.m. – 10 p.m.)	29 to 63 VdB	26 to 51 VdB
Night (10 p.m. – 7 a.m.)	22 to 59 VdB	24 to 50 VdB

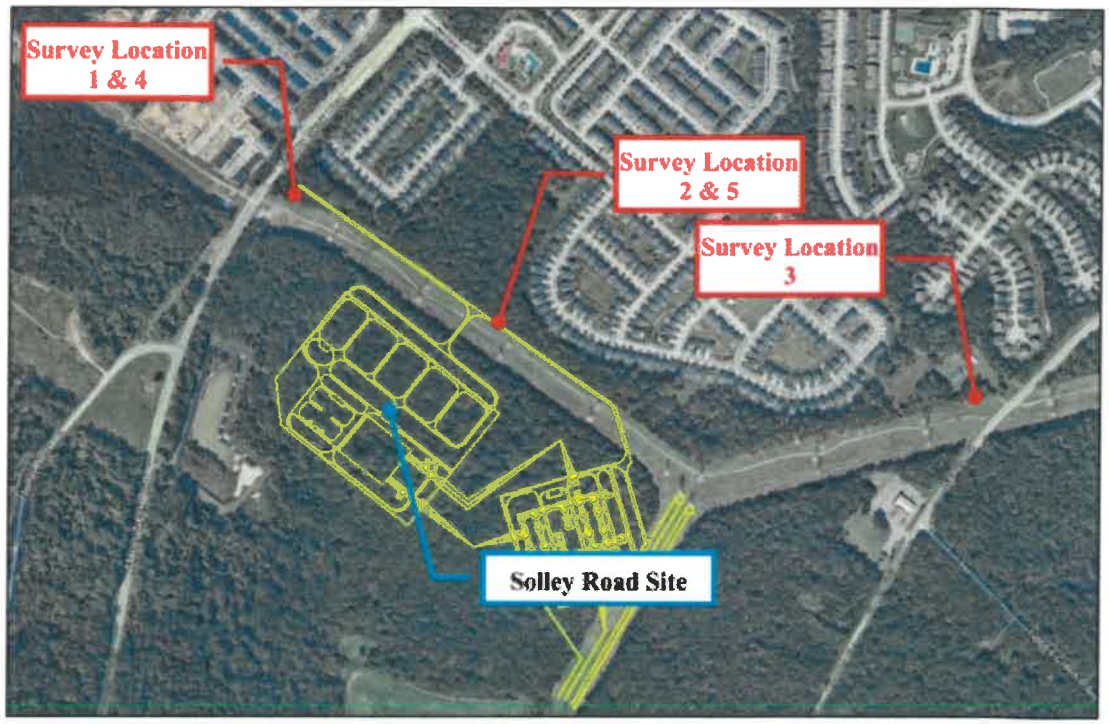


Figure 2 Aerial View of the Proposed Substation Location with Ambient Survey Locations

4.0 Environmental Noise Emissions

The environmental sound levels associated with the Substation were calculated using noise prediction software (Cadna/A Version 2021 MR2), which is based on methodologies specified in ISO 9613. The acoustical model simulated the outdoor propagation of sound from each sound source and accounted for sound wave divergence, topography, atmospheric and ground sound absorption, and sound shielding due to interceding barriers, and buildings. A database was developed which specified the location, and octave-band sound levels of each noise source. A receptor grid was specified which covered the entire area of interest. The model calculated the sound pressure levels within the receptor grid based on the octave-band sound level contributions of each sound source. Finally, a sound level contour plot was produced based on the overall sound levels within the receptor grid, including at specific receptor locations.

4.1 Project Sound Sources

The future project site will include a substation and a STATCOM unit. The substation noise sources include a control enclosure and six (6) current-limiting reactors. We have assumed four (4) HVAC AHUs on the substation control building as a conservative estimate. The STATCOM unit includes two (2) 350 MVA transformers, six (6) shunt reactors, six (6) outdoor coolers, and control buildings. We have assumed twenty (20) HVAC AHUs on the STATCOM control buildings as a conservative estimate. Vendor noise data was not available at the time of this report so values were estimated or assumed based on IEEE standards for electrical equipment and Black & Veatch project experience. These assumed sound power values need to be confirmed during the equipment procurement process. Sound power levels used for the model are given in Table 3. The Substation equipment layout is shown in Figure 3, and the STATCOM Unit is shown in Figure 4.

Table 3 Assumed Substation Equipment Sound Levels

Equipment	Qty.	Equipment sound power level	Total sound power level
350 MVA Transformers	2	101 dBA / unit	104 dBA
Outdoor Cooler	6	92 dBA / unit	100 dBA
Shunt Reactors	6	92 dBA / reactor	100 dBA
Current-Limiting Reactors	6	82 dBA / reactor	90 dBA
Wall-mounted Air Handling Units for Control Buildings/Enclosures	24	79 dBA / AHU	93 dBA

4.2 Project Vibration Sources

There are no significant sources of vibration to be installed at the Project site. Sources that have potential for generating vibrational energy at levels which may disturb the community would involve mechanical process that transfer large amounts of energy to the ground, or extremely high levels of low-frequency airborne noise. This would include large impact hammers or heavy groundwork equipment, typically involved with large construction activities. The substation and STATCOM equipment are mostly static, with the exception of some cooling devices, and would not be typically included in any vibrational study.

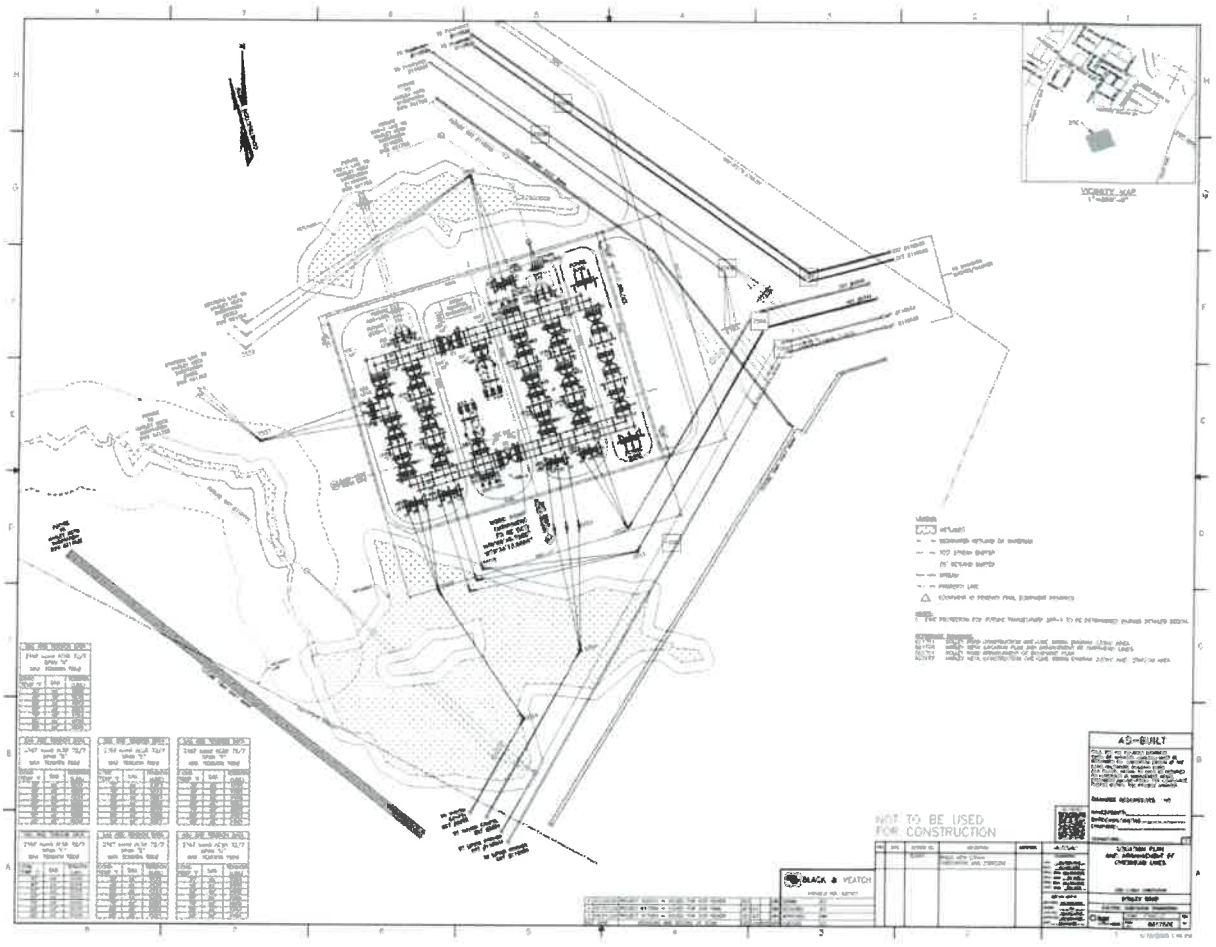


Figure 3 **Location Plan Drawing of Solley Rd Substation (Drawing #621752E [01/10/2025])**

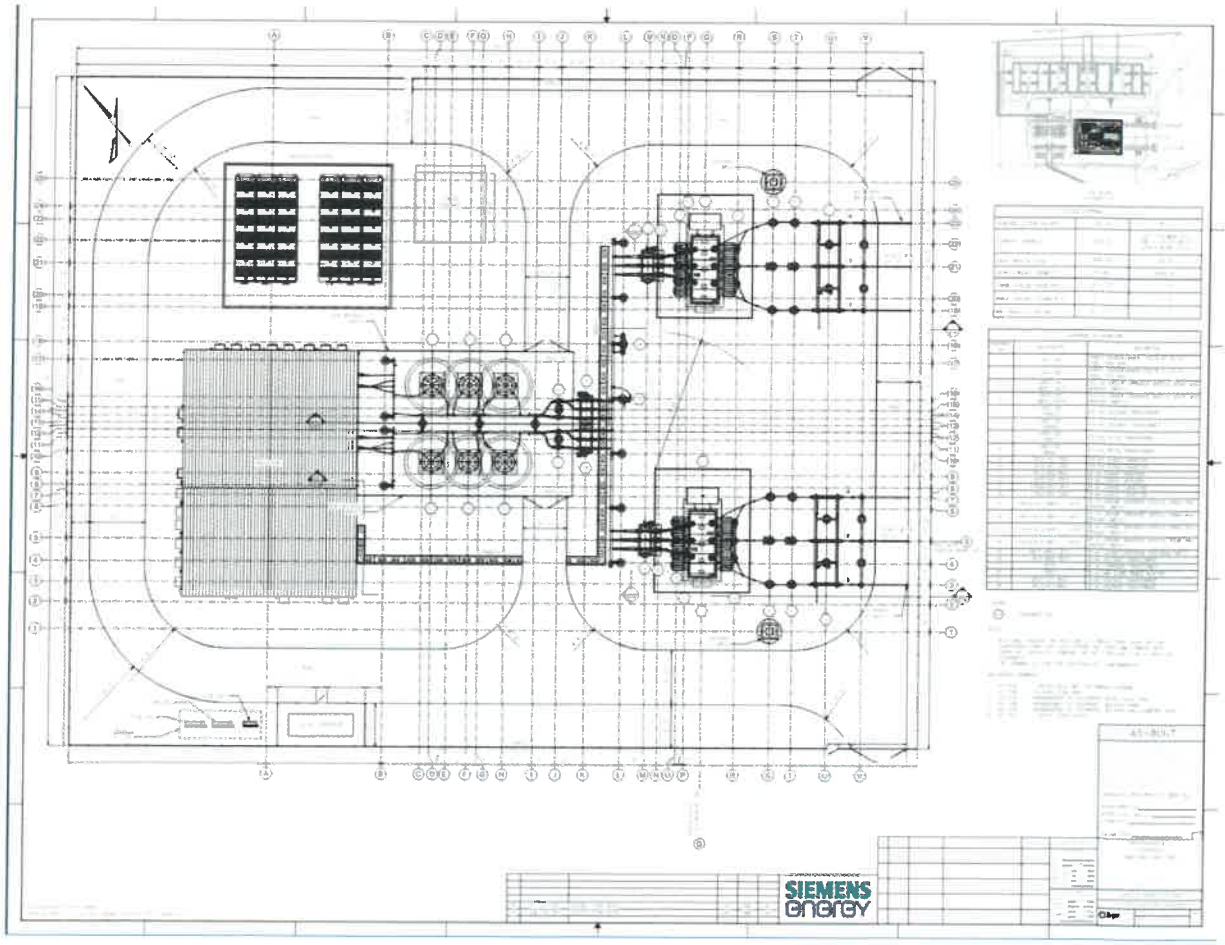


Figure 4 **Equipment Arrangement Plan Drawing of Solley Rd STATCOM Unit (Drawing #621756E [01/10/2025])**

4.3 Modeling Results

The calculated A-weighted sound pressure levels for the project are shown in Table 4 and Figure 5. Lines of equal sound level at 5-dBA intervals are shown. The calculated sound levels at the receptors are 38 dBA at Location 1, 43 dBA at Location 2, and 33 dBA at Location 3, based on the assumed equipment sound levels from Table 3. Noise levels due to the substation operation are expected to be significantly below the most stringent limit of 55 dBA at all receiver locations.

Table 4 Estimated Received Noise Levels at Nearby Residences (L_{eq} dBA)

	Location 1	Location 2	Location 3
Project Contribution	40 dBA	43 dBA	33 dBA
Existing Ambient (Nighttime)	55 dBA	52 dBA	50 dBA
Combined Level (Ambient + Project)	55 dBA	<53 dBA	50 dBA
Level Increase	0 dB	<1 dB	0 dB

4.4 Discussion and Conclusions

The Project noise levels are expected to be within the limits defined by the State of Maryland. Based on the ambient survey results, the Project noise levels are expected to have a negligible impact on existing noise levels.

There are no significant sources of vibrational energy on the Project. Ambient survey results show that there are very low existing vibrational levels in the area, below detectable levels, so there is not any anticipated risk of existing vibrations being misattributed to Project activity.

All presented modeling has assumed standard equipment options without any noise-reducing features. No additional noise mitigation is required or recommended for the Project.

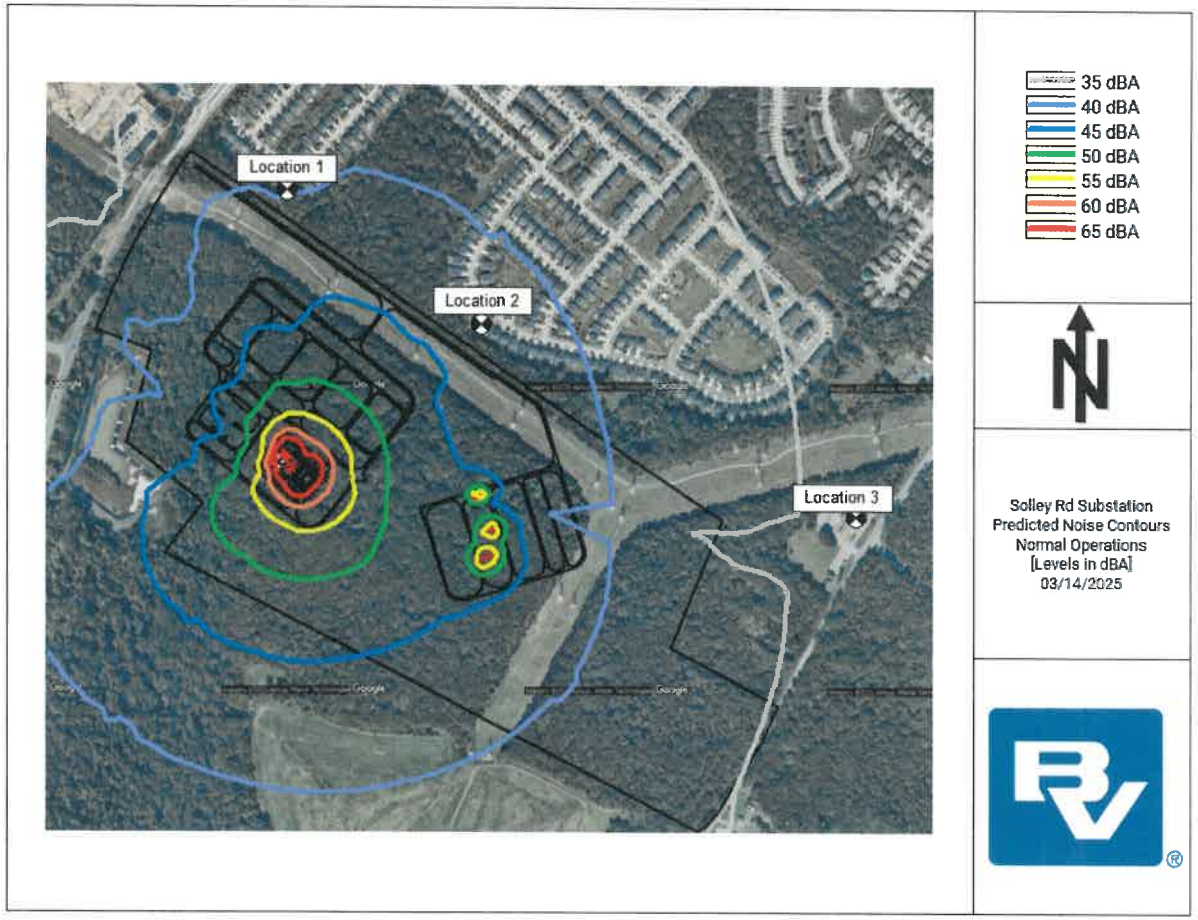


Figure 5 Noise Contours

Appendix A. Site Ambient Survey Report

Solley Road
Ambient Sound and Vibration Survey Report

January 23, 2025

Prepared for:

Black & Veatch
11401 Lamar Avenue
Overland Park, Kansas 66211

Prepared by:

Behrens and Associates, Inc.
2320 Alaska Avenue
El Segundo California, 90245

Shaun Norris
Senior Acoustical Engineer

Jason Peetz
Engineering Manager

1. Introduction

The purpose of this study is to document the measured 24-hour ambient sound and vibration velocity levels adjacent to the proposed Solley Road substation site located (39.164648°, -76.574145°) approximately 617 feet east of the intersection of Marley Neck Road and Marley Neck Boulevard in Pasadena, Maryland. The Solley Road site and the surrounding environment can be seen in Figure 1-1.

- A brief introduction of the fundamentals of noise.
- A discussion of the ambient sound and vibration monitoring methodology and instrumentation details.
- Ambient sound and vibration survey results.

Figure 1-1 Solley Road Site and Surroundings

2. Fundamentals

2.1 Environmental Noise

Sound is most commonly experienced by people as pressure waves passing through air. These rapid fluctuations in air pressure are processed by the human auditory system to produce the sensation of sound. The rate at which sound pressure changes occur is called the frequency. Frequency is usually measured as the number of oscillations per second or Hertz (Hz). Frequencies that can be heard by a healthy human ear range from approximately 20 Hz to 20,000 Hz. Toward the lower end of this range are low-pitched sounds, including those that might be described as a "rumble" or "boom". At the higher end of the range are high-pitched sounds that might be described as a "screech" or "hiss".

Environmental noise generally derives, in part, from a combination of distant noise sources. Such sources may include common experiences such as distant traffic, wind in trees, and distant industrial or farming activities. These distant sources create a low-level "background noise" in which no particular individual source is identifiable. Background noise is often relatively constant from moment to moment but varies slowly from hour to hour as natural forces change or as human activity follows its daily cycle.

Superimposed on this low-level, slowly varying background noise is a succession of identifiable noisy events of relatively brief duration. These events may include the passing of single-vehicles, aircraft flyovers, screeching of brakes, and other short-term events. The presence of these short-term events causes the noise level to fluctuate. Typical indoor and outdoor A-weighted sound levels are shown in Figure 2-1.

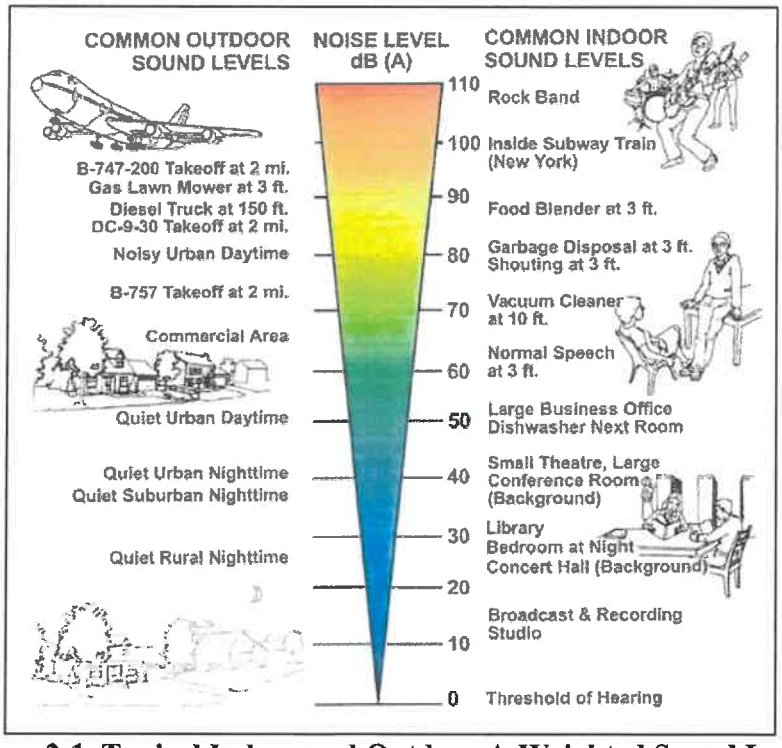


Figure 2-1 Typical Indoor and Outdoor A-Weighted Sound Levels

2.2 Ground-Bourne Vibration Fundamentals

Vibration is acoustic energy transmitted as waves through solid medium, such as soil or concrete. Like noise, the rate at which pressure changes occur is called the frequency of the vibration, measured in Hz. Vibration may be the form of a single pulse of acoustical energy, a series of pulses, or a continuous oscillating motion.

Ground-borne vibration is the ground motion about some equilibrium position that can be described in terms of displacement, velocity, and acceleration. It can be generated by transportation systems, construction activities, and other large mechanical systems. Vibration motion moves in longitudinal (X), transverse (Y) and vertical (Z) axes. The way that vibration is transmitted through the ground depends on the soil type, the presence of rock formations or man-made features and the topography between the vibration source and the receptor location. As a general rule, vibration waves tend to dissipate and reduce in magnitude with the distance from the source. Also, the high frequency vibrations are generally attenuated rapidly as they travel through the ground, so that the vibration received at locations distant from the source tends to be dominated by low-frequency vibration. The frequencies of ground-borne vibration most perceptible to humans range from less than 1 Hz to 100 Hz.

When ground-borne vibration arrives at a building, there is usually an initial ground-to-foundation coupling loss. However, once the vibration energy is in the building structure, it can be amplified by the resonance of the walls and floors. Occupants can perceive vibration as a motion of the building elements (particularly floors) and also rattling of lightweight components, such as windows, shutters or items on shelves. At very high levels, low frequency vibration can cause damage to buildings.

Vibration velocity levels can be expressed in terms of decibels (VdB). Vibration velocity decibel levels are typically used when discussing RMS or average vibration velocity levels. 65 VdB is the approximate threshold for human perception of vibration.

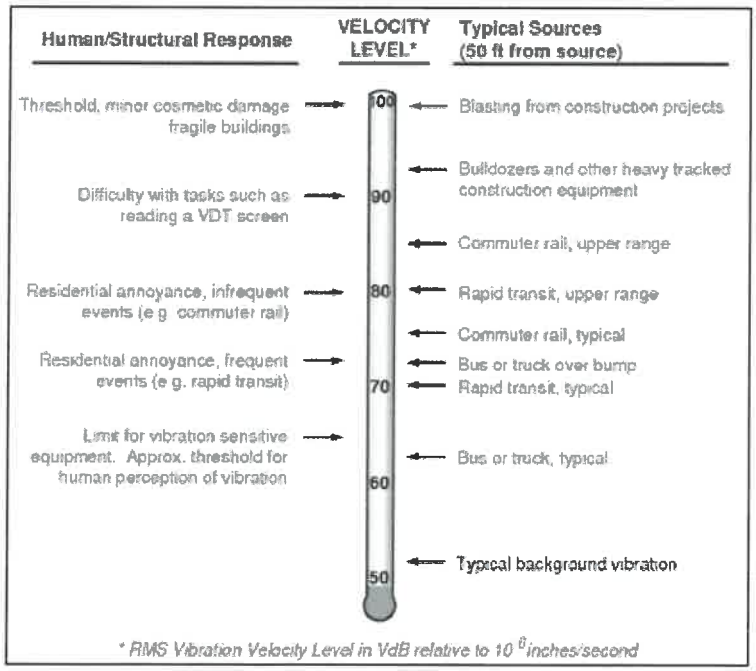


Figure 2-2 Federal Transit Administration – Typical Levels of Ground-Borne Vibration

3. Ambient Sound & Vibration Survey

3.1 Ambient Survey Procedure

Three Class 1 SVANTEK SVAN 971 sound level meters and two Sigicom C22 vibration meters were utilized to conduct an ambient sound and vibration level survey adjacent to the Solley Road site. The sound level meters used to conduct the sound level survey conform to Class 1 as per ANSI/ASA S1.4/IEC 61672 (2024). The sound and vibration instrumentation details are presented in Table 3-1. The sound level meters were placed approximately 5 feet above ground level, 10 feet away from any reflective surfaces, and were calibrated prior to deployment and upon retrieval. The vibration meters are factory calibrated and were placed directly on the surface of the ground.

The sound and vibration level monitoring period began on Friday, January 10, 2025, with the sound level meters programmed to continuously monitor and record A-weighted sound levels. The vibration meters were programmed to continuously monitor and record the vibration velocity decibel levels (VdB). VdB levels were recorded in the vertical, longitudinal, and transverse directions. The monitoring period ended on Saturday, January 11, 2025, to capture a full 24-hour monitoring period. Photos of the deployed meters can be seen in Appendix C.

Table 3-1 Instrumentation Details

Location	Instrument	GPS Coordinates	Manufacturer/Model	Serial Number
Location 1	Sound Level Meter	39.167852°, -76.576116°	SVANTEK SVAN 971	72547
Location 2	Sound Level Meter	39.165985°, -76.572148°	SVANTEK SVAN 971	60715
Location 3	Sound Level Meter	39.164709°, -76.562916°	SVANTEK SVAN 971	72578
Location 4	Vibration Meter	39.167852°, -76.576116°	Sigicom INFRA C22	108497
Location 5	Vibration Meter	39.165985°, -76.572148°	Sigicom INFRA C22	106727

Figure 3-1 Ambient Survey Measurement Locations

3.2 Ambient Survey Results

The measured A-weighted average Leq sound levels for the monitoring period are shown in Table 3-2 and Table 3-3. The measured 15-minute average (Leq) A-weighted sound levels for the duration of survey can be seen in Figure 3-2 through Figure 3-4. The tabulated measured 15-minute average A-weighted sound levels for the duration of survey can be seen in Appendix A.

The A-weighted filter is applied to instrument-measured sound levels in effort to account for the relative loudness perceived by the human ear. As the human ear is less sensitive to low frequencies, the A-weighted filter correspondingly discounts low frequency sound observed during measurements and is widely utilized for environmental noise measurements.

The measure sound level data was processed and used to calculate an average over the 24-hour monitoring period. The attached charts show the unfiltered measurement data. Weather data was collected at Location 3 using a Davis Technologies Vantage Vue Weather Station. Peak wind gust speed data was used and correlated with the ambient sound level measurement data when filtering wind speeds above 11 miles per hour. Wind gust speed and ambient sound level data were filtered on a 15-minute basis.

Table 3-2 24-hour Daytime and Nighttime Average Sound Levels (L_{eq} dBA)

	Daytime & Nighttime Hours	Location 1	Location 2	Location 3
Survey Average	Day (7am – 10pm)	59.5	51.2	51.7
	Night (10pm – 7am)	54.6	52.3	49.7

L90 is a statistical measurement (Ln) representing the sound level that was exceeded 90% of the time over a given time interval (15 minutes). L90 sound levels are commonly used to represent the background sound level of a noise environment by excluding the effects of shorter duration noise level spikes that might occur (planes, trains, traffic, etc.). Table 3-3 shows the arithmetic average L90 day and night sound levels for the measurement period.

Table 3-3 24-hour Daytime and Nighttime Average Sound Levels (L_{90} dBA)

	Daytime & Nighttime Hours	Location 1	Location 2	Location 3
Survey Average	Day (7am – 10pm)	49.7	50.1	39.8
	Night (10pm – 7am)	37.3	50.1	34.5

Based on audio recording created during the sound level survey, road traffic was a dominant noise source at Locations 1 and 3 during all hours of the day. Location 2 was located near a buzzing overhead powerline resulting in a continuous sound level around 50 dBA.

The measured vibration velocity decibel level range for the monitoring period are shown in Table 3-4. The measured 1-minute average vibration velocity decibel levels (VdB) for the duration of the survey are shown graphically in Figure 3-5 and Figure 3-6. Per The Federal Transit Administration (FTA) Noise and Vibration Impact Assessment Manual, the background vibration velocity level in a residential area is usually 50 VdB or lower, well below the threshold of perceptions for humans which is around 65 VdB. Therefore, the measured vibration velocity decibel levels adjacent to the Solley Road site are below the threshold of perception for humans and typical of residential areas.

Table 3-4 Range of Vibration Velocity Decibel Levels (VdB)

Location	Daytime & Nighttime Hours	Vertical	Longitudinal	Transverse
Location 4	Day (7am – 10pm)	29.0 - 54.7	31.0 - 59.9	31.2 - 62.8
	Night (10pm – 7am)	22.4 - 48.6	22.8 - 57.4	23.6 - 59.2
Location 5	Day (7am – 10pm)	25.6 - 40.6	27.8 - 43.6	29.3 - 51.2
	Night (10pm – 7am)	23.5 - 39.2	24.6 - 43.3	25.9 - 49.9

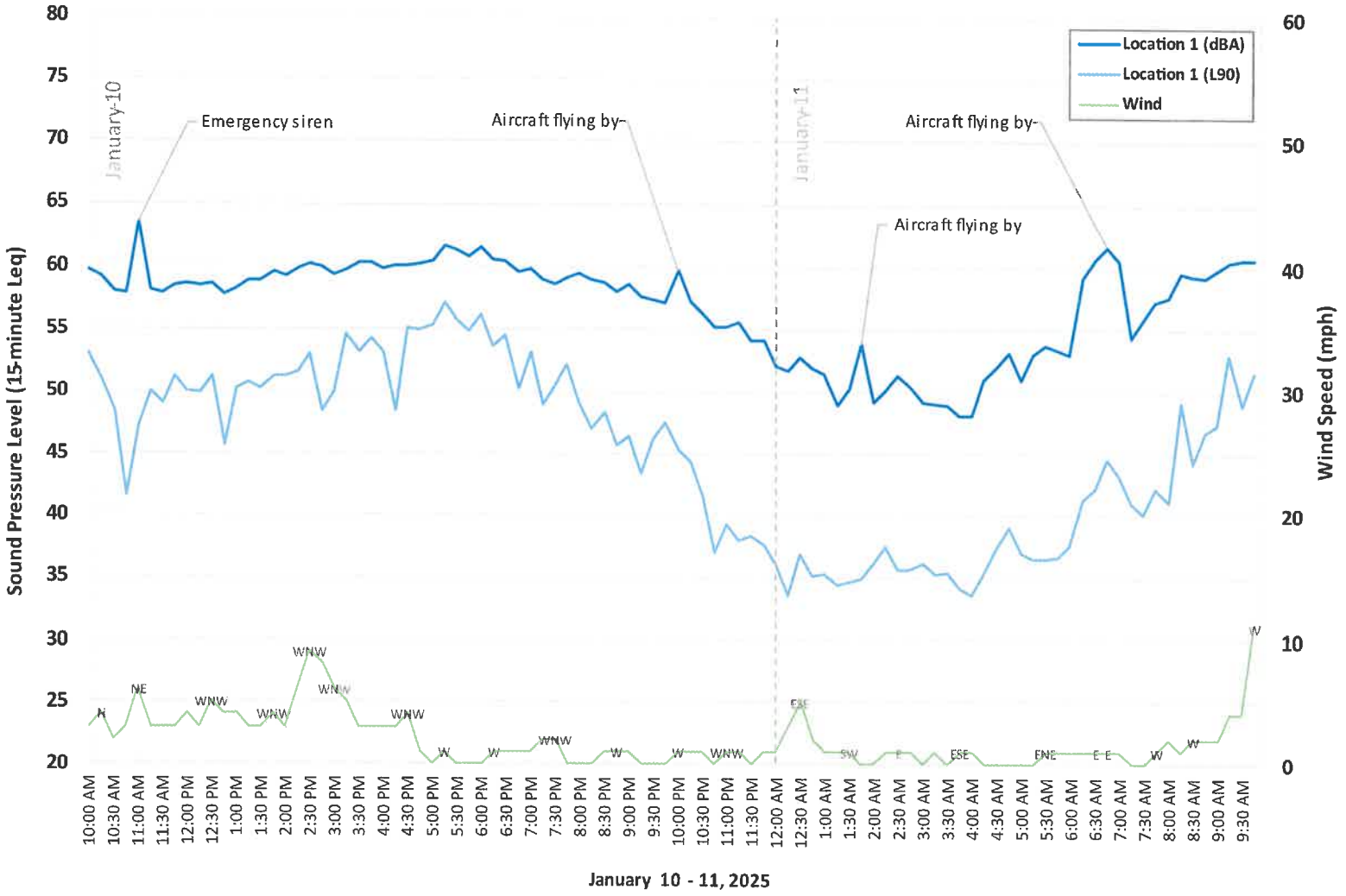


Figure 3-2 Location 1 - Measured 15-Minute Sound Levels

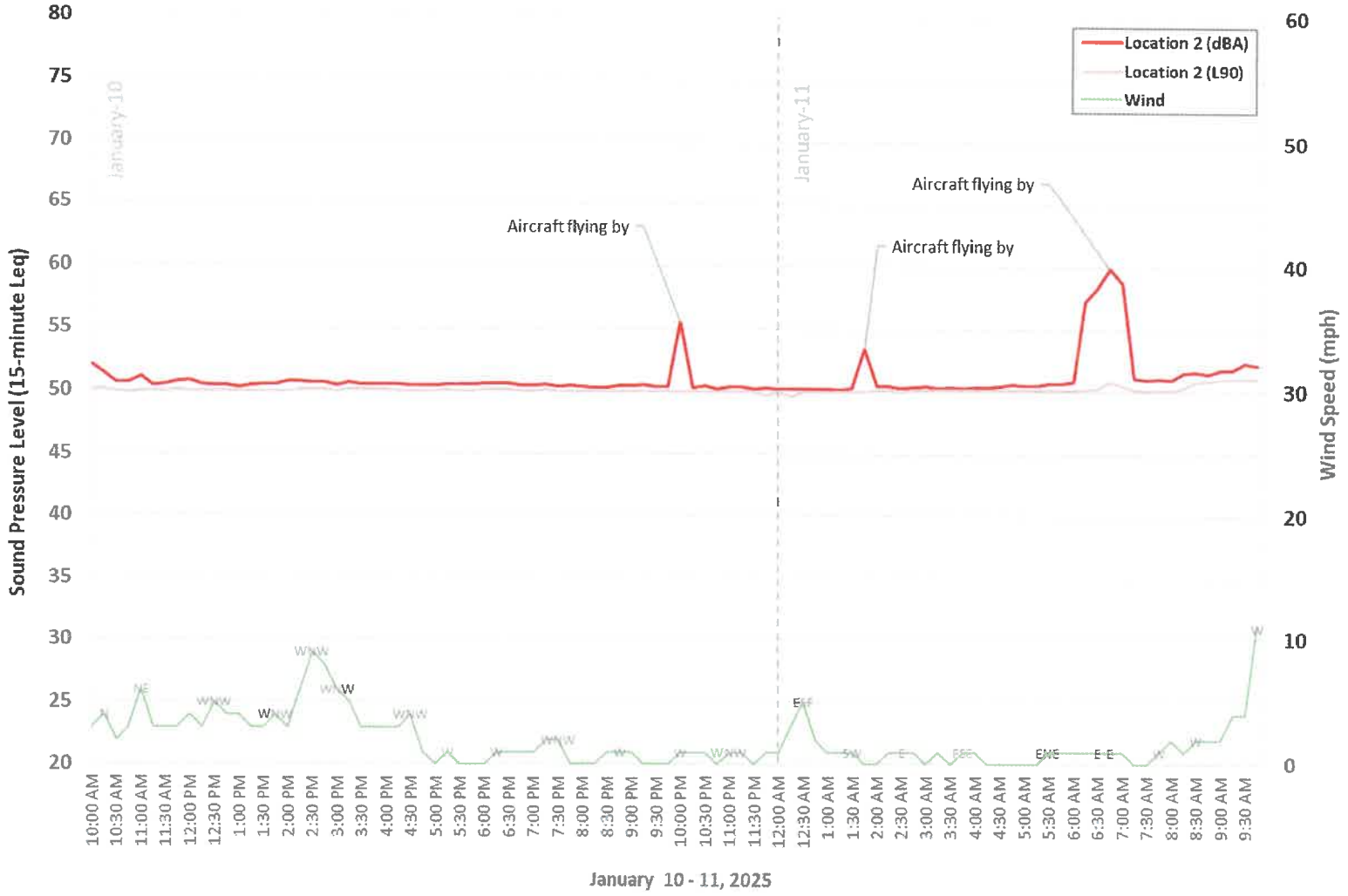


Figure 3-3 Location 2 - Measured 15-Minute Sound Levels

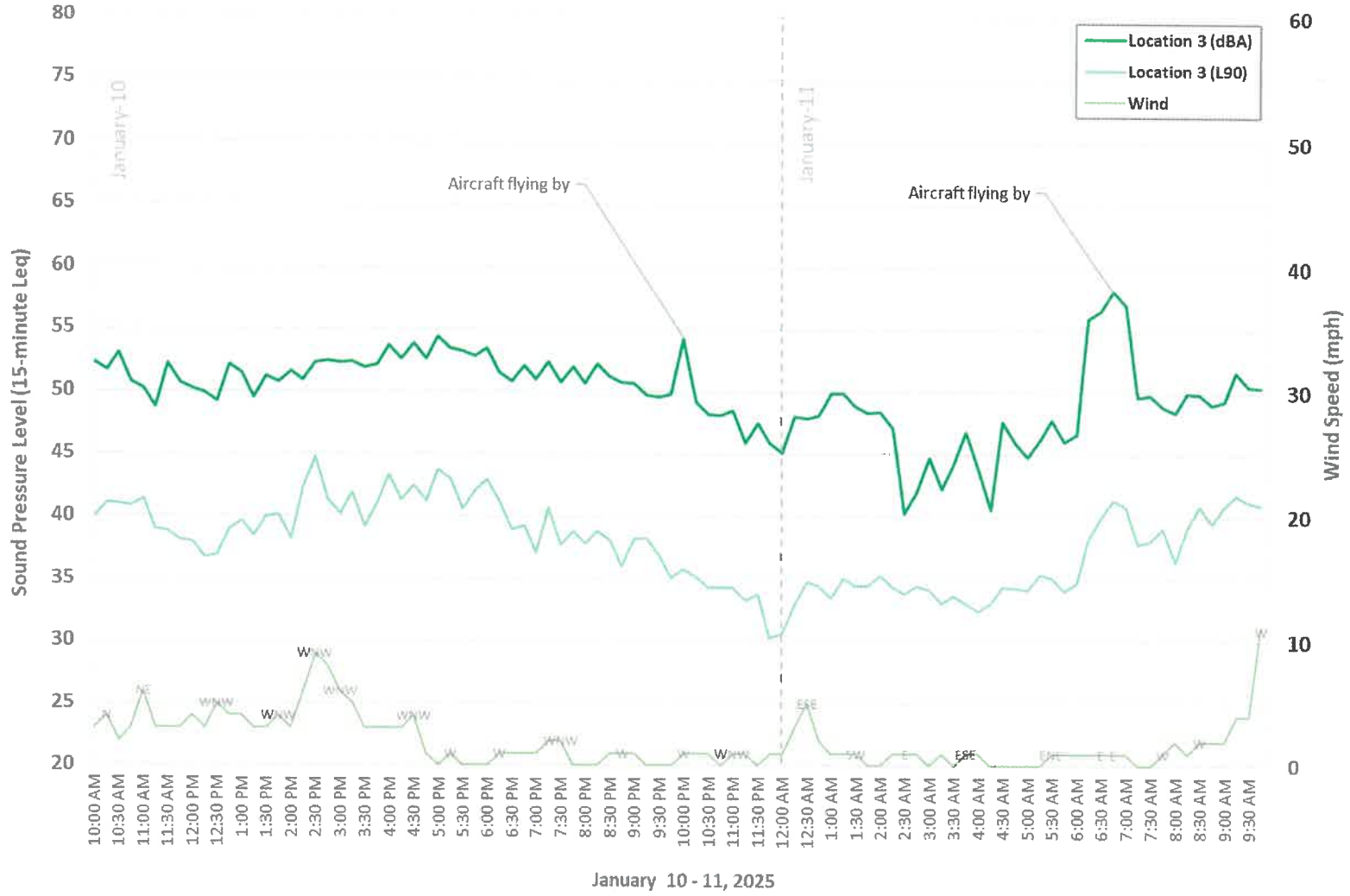


Figure 3-4 Location 3 - Measured 15-Minute Sound Levels

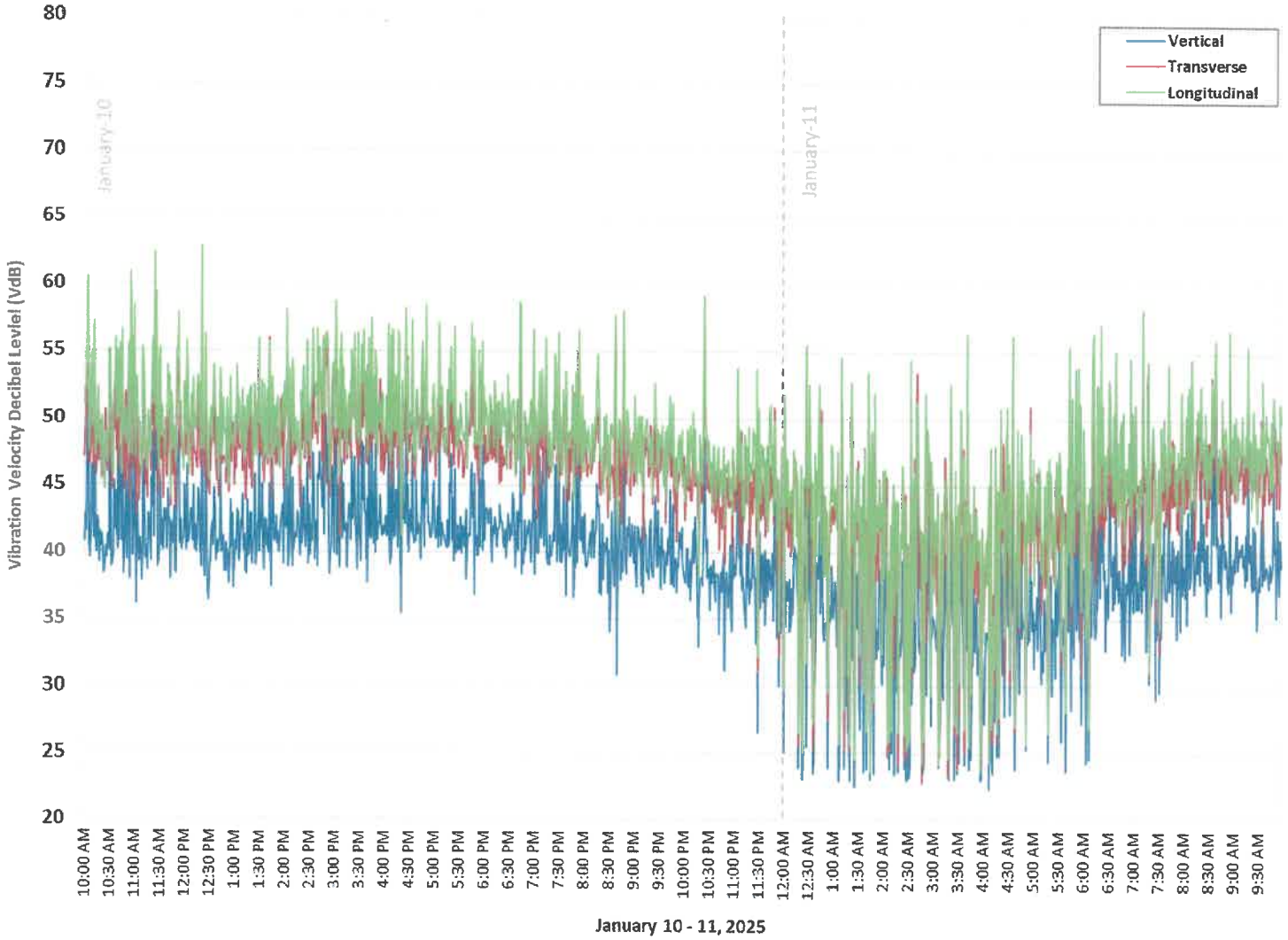


Figure 3-5 Location 4 - Measured 1-Minute Vibration Velocity Decibel Levels (VdB)

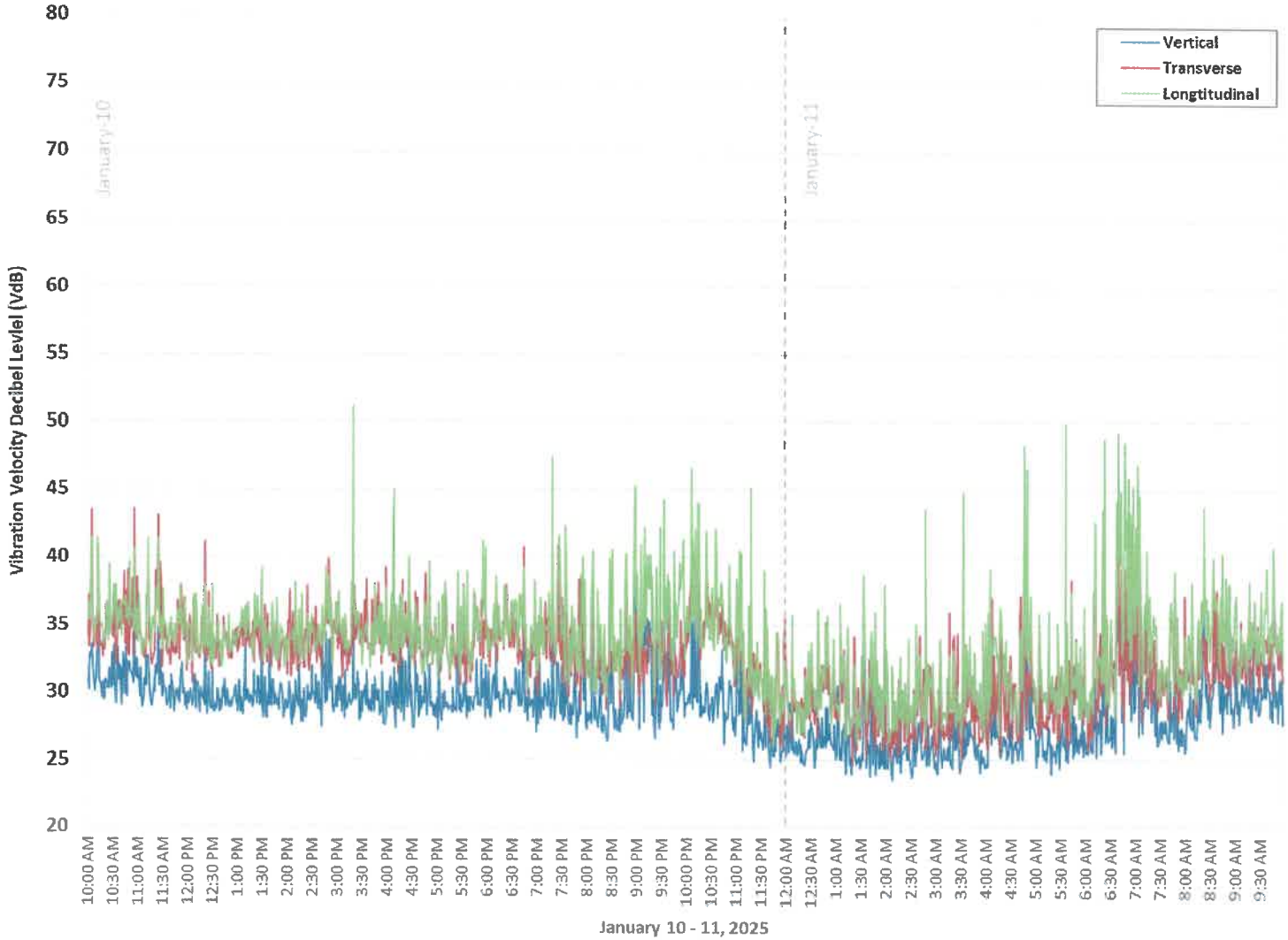


Figure 3-6 Location 5 - Measured 1-Minute Vibration Velocity Decibel Levels (VdB)

4. Conclusion

An ambient sound and vibration level survey was conducted at the Solley Road located (39.164648°, -76.574145°) approximately 617 feet east of the intersection of Marley Neck Road and Marley Neck Boulevard in Pasadena, Maryland. The measurement results are shown in Table 4-1, Table 4-2, and Table 4-3.

Table 4-1 24-hour Daytime and Nighttime Average Sound Levels (L_{eq} dBA)

	Daytime & Nighttime Hours	Location 1	Location 2	Location 3
Survey Average	Day (7am – 10pm)	59.5	51.2	51.7
	Night (10pm – 7am)	54.6	52.3	49.7

Table 4-2 24-hour Daytime and Nighttime Average Sound Levels (L_{90} dBA)

	Daytime & Nighttime Hours	Location 1	Location 2	Location 3
Survey Average	Day (7am – 10pm)	49.7	50.1	39.8
	Night (10pm – 7am)	37.3	50.1	34.5

Table 4-3 Range of Vibration Velocity Decibel Levels (VdB)

Location	Daytime & Nighttime Hours	Vertical	Longitudinal	Transverse
Location 4	Day (7am – 10pm)	29.0 - 54.7	31.0 - 59.9	31.2 - 62.8
	Night (10pm – 7am)	22.4 - 48.6	22.8 - 57.4	23.6 - 59.2
Location 5	Day (7am – 10pm)	25.6 - 40.6	27.8 - 43.6	29.3 - 51.2
	Night (10pm – 7am)	23.5 - 39.2	24.6 - 43.3	25.9 - 49.9

Appendix A - Solley Road Ambient Data

Table C-4 Recorded 15-minute Average Ambient Sound Levels January 10-11, 2025 (dBA)

Time	LOC 1 (Leq)	LOC 1 (L90)	LOC 2 (Leq)	LOC 2 (L90)	LOC 3 (Leq)	LOC 3 (L90)
10:00 AM	59.7	53.0	52.1	50.1	52.3	40.0
10:15 AM	59.2	51.1	51.4	50.2	51.7	41.1
10:30 AM	58.0	48.4	50.7	50.0	53.1	41.0
10:45 AM	57.9	41.6	50.7	49.8	50.8	40.8
11:00 AM	63.6	47.2	51.1	50.0	50.2	41.4
11:15 AM	58.2	50.0	50.5	50.0	48.8	39.0
11:30 AM	57.9	49.0	50.5	50.0	52.2	38.8
11:45 AM	58.5	51.2	50.8	50.1	50.7	38.1
12:00 PM	58.7	50.0	50.9	50.0	50.2	38.0
12:15 PM	58.5	49.9	50.6	50.0	49.9	36.7
12:30 PM	58.6	51.2	50.5	50.0	49.2	36.9
12:45 PM	57.7	45.7	50.5	50.0	52.2	39.0
1:00 PM	58.2	50.2	50.3	50.0	51.5	39.7
1:15 PM	58.9	50.8	50.4	50.0	49.6	38.4
1:30 PM	58.8	50.3	50.5	50.0	51.2	40.0
1:45 PM	59.5	51.2	50.5	50.0	50.8	40.1
2:00 PM	59.3	51.2	50.8	50.0	51.6	38.2
2:15 PM	59.8	51.6	50.8	50.1	50.9	42.2
2:30 PM	60.1	53.0	50.7	50.1	52.3	44.7
2:45 PM	59.9	48.5	50.7	50.1	52.5	41.3
3:00 PM	59.4	50.0	50.4	50.0	52.3	40.2
3:15 PM	59.7	54.6	50.6	50.1	52.4	41.9
3:30 PM	60.3	53.2	50.5	50.1	51.9	39.2
3:45 PM	60.3	54.2	50.5	50.1	52.1	41.1
4:00 PM	59.9	53.2	50.5	50.1	53.7	43.3
4:15 PM	60.0	48.5	50.5	50.0	52.6	41.3
4:30 PM	60.0	55.1	50.4	50.0	53.8	42.5
4:45 PM	60.1	55.0	50.4	50.0	52.6	41.2
5:00 PM	60.5	55.3	50.4	50.0	54.4	43.7
5:15 PM	61.7	57.1	50.5	50.1	53.5	43.0
5:30 PM	61.3	55.7	50.5	50.0	53.2	40.6
5:45 PM	60.9	54.9	50.5	50.0	52.9	42.1
6:00 PM	61.5	56.2	50.6	50.1	53.4	42.9
6:15 PM	60.6	53.7	50.6	50.1	51.5	41.2
6:30 PM	60.4	54.5	50.6	50.1	50.8	39.0
6:45 PM	59.5	50.3	50.5	50.0	52.1	39.3
7:00 PM	59.8	53.2	50.5	50.0	51.0	37.1
7:15 PM	59.0	48.9	50.5	50.1	52.4	40.7
7:30 PM	58.7	50.5	50.4	50.0	50.8	37.7
7:45 PM	59.1	52.2	50.5	50.0	52.0	38.8
8:00 PM	59.5	49.1	50.3	50.0	50.7	37.8
8:15 PM	59.0	47.0	50.3	50.0	52.3	38.8
8:30 PM	58.7	48.3	50.3	50.0	51.2	38.1
8:45 PM	58.1	45.6	50.5	50.0	50.8	36.0
9:00 PM	58.6	46.4	50.5	50.0	50.7	38.2
9:15 PM	57.7	43.3	50.5	50.0	49.8	38.3
9:30 PM	57.4	46.1	50.3	50.0	49.6	36.9
9:45 PM	57.2	47.5	50.4	50.0	49.8	35.1
10:00 PM	59.7	45.3	55.5	50.0	54.3	35.8
10:15 PM	57.3	44.3	50.3	50.0	49.2	35.2
10:30 PM	56.3	41.6	50.5	50.0	48.2	34.3
10:45 PM	55.2	37.0	50.2	50.0	48.1	34.3
11:00 PM	55.3	39.2	50.4	50.0	48.5	34.3
11:15 PM	55.6	37.9	50.4	50.0	45.9	33.3
11:30 PM	54.1	38.3	50.2	50.0	47.5	33.8
11:45 PM	54.2	37.6	50.3	49.7	45.9	30.3
12:00 AM	52.1	36.0	50.2	50.0	45.1	30.6
12:15 AM	51.8	33.5	50.2	49.6	48.0	32.9
12:30 AM	52.8	36.8	50.2	50.0	47.9	34.8
12:45 AM	51.9	35.1	50.2	50.0	48.1	34.5

Table C-5 Recorded 15-minute Average Ambient Sound Levels January 10-11, 2025 (dBA) (Continued)

Time	LOC 1 (Leq)	LOC 1 (L90)	LOC 2 (Leq)	LOC 2 (L90)	LOC 3 (Leq)	LOC 3 (L90)
1:00 AM	51.5	35.3	50.2	50.0	49.9	33.5
1:15 AM	49.0	34.4	50.2	50.0	49.9	35.1
1:30 AM	50.3	34.6	50.3	50.0	48.9	34.5
1:45 AM	53.9	34.9	53.4	50.0	48.3	34.5
2:00 AM	49.2	36.1	50.4	50.1	48.4	35.3
2:15 AM	50.1	37.4	50.5	50.1	47.1	34.4
2:30 AM	51.3	35.6	50.3	50.0	40.3	33.9
2:45 AM	50.5	35.6	50.3	50.1	42.0	34.5
3:00 AM	49.1	36.1	50.4	50.1	44.7	34.2
3:15 AM	49.1	35.2	50.3	50.1	42.2	33.1
3:30 AM	49.0	35.4	50.4	50.1	44.1	33.7
3:45 AM	48.1	34.2	50.3	50.1	46.8	33.1
4:00 AM	48.1	33.6	50.3	50.1	43.8	32.5
4:15 AM	51.0	35.3	50.4	50.1	40.6	33.1
4:30 AM	52.0	37.2	50.4	50.1	47.6	34.4
4:45 AM	53.1	39.0	50.6	50.1	46.0	34.3
5:00 AM	51.0	36.9	50.5	50.1	44.8	34.2
5:15 AM	53.1	36.4	50.5	50.1	46.2	35.4
5:30 AM	53.7	36.5	50.7	50.1	47.8	35.2
5:45 AM	53.4	36.6	50.7	50.1	46.0	34.1
6:00 AM	53.1	37.5	50.8	50.1	46.6	34.7
6:15 AM	59.2	41.3	57.3	50.2	55.9	38.3
6:30 AM	60.6	42.2	58.3	50.3	56.5	40.0
6:45 AM	61.6	44.6	59.9	50.8	58.2	41.4
7:00 AM	60.5	43.1	58.8	50.5	57.0	40.8
7:15 AM	54.4	40.9	51.1	50.2	49.7	37.9
7:30 AM	55.8	40.1	51.0	50.1	49.8	38.1
7:45 AM	57.2	42.2	51.1	50.1	48.9	39.1
8:00 AM	57.7	41.0	51.0	50.1	48.4	36.4
8:15 AM	59.6	49.2	51.5	50.4	50.0	39.1
8:30 AM	59.3	44.2	51.6	50.8	49.9	40.9
8:45 AM	59.2	46.8	51.5	50.9	49.1	39.5
9:00 AM	59.8	47.4	51.8	51.0	49.4	40.9
9:15 AM	60.4	53.1	51.8	51.1	51.7	41.8
9:30 AM	60.7	48.9	52.3	51.1	50.5	41.2
9:45 AM	60.6	51.6	52.2	51.1	50.4	41.0

Appendix B - Weather Data

Table B-1 Weather History for January 10, 2025

Date	Time	Wind Speed	Wind Dir	Wind Run	Hi Speed	Hi Dir	Wind Chill	Heat Index	THW Index	Bar	Rain	Rain Rate
1/10/2025	10:00 AM	0	NW	0	3	WNW	30.4	29.5	29.5	30.096	0	0
1/10/2025	10:15 AM	0	N	0	4	N	29.6	28.7	28.7	30.088	0	0
1/10/2025	10:30 AM	0	N	0	2	W	30.2	29.3	29.3	30.084	0	0
1/10/2025	10:45 AM	0	W	0	3	N	31.3	30.4	30.4	30.095	0	0
1/10/2025	11:00 AM	1	WNW	0.25	6	NE	31.7	30.7	30.7	30.092	0	0
1/10/2025	11:15 AM	0	ENE	0	3	NNE	32.8	31.8	31.8	30.094	0	0
1/10/2025	11:30 AM	1	W	0.25	3	WSW	32.3	31.3	31.3	30.043	0	0
1/10/2025	11:45 AM	0	W	0	3	WNW	33.9	32.9	32.9	30.061	0	0
1/10/2025	12:00 PM	0	W	0	4	N	34.1	33.1	33.1	30.039	0	0
1/10/2025	12:15 PM	1	WNW	0.25	3	NNE	34.2	33.2	33.2	30.012	0	0
1/10/2025	12:30 PM	0	N	0	5	WNW	34.3	33.3	33.3	30.014	0	0
1/10/2025	12:45 PM	0	WNW	0	4	NNW	35.2	34.2	34.2	30.043	0	0
1/10/2025	1:00 PM	1	WNW	0.25	4	W	34.7	33.7	33.7	29.984	0	0
1/10/2025	1:15 PM	1	W	0.25	3	NNW	35.3	34.2	34.2	29.996	0	0
1/10/2025	1:30 PM	1	WNW	0.25	3	WNW	34.6	33.6	33.6	29.979	0	0
1/10/2025	1:45 PM	1	WNW	0.25	4	WNW	33.8	32.8	32.8	29.993	0	0
1/10/2025	2:00 PM	0	WNW	0	3	NW	34.3	33.3	33.3	29.981	0	0
1/10/2025	2:15 PM	2	WNW	0.5	6	WSW	32.6	32.5	31.6	29.977	0	0
1/10/2025	2:30 PM	3	WNW	0.75	9	WNW	30.7	32.3	29.8	29.973	0	0
1/10/2025	2:45 PM	1	WNW	0.25	8	W	33.7	32.7	32.7	29.971	0	0
1/10/2025	3:00 PM	2	WNW	0.5	6	WNW	32.6	32.5	31.6	29.946	0	0
1/10/2025	3:15 PM	1	WNW	0.25	5	WNW	35	33.9	33.9	29.937	0	0
1/10/2025	3:30 PM	1	WNW	0.25	3	WNW	34.9	33.9	33.9	29.926	0	0
1/10/2025	3:45 PM	1	WNW	0.25	3	WNW	33.6	32.6	32.6	29.927	0	0
1/10/2025	4:00 PM	1	WNW	0.25	3	NW	32.7	31.7	31.7	29.925	0	0
1/10/2025	4:15 PM	0	WNW	0	3	WNW	32.6	31.7	31.7	29.937	0	0
1/10/2025	4:30 PM	0	WNW	0	4	WNW	32.4	31.5	31.5	29.915	0	0
1/10/2025	4:45 PM	0	W	0	1	WNW	32	31.1	31.1	29.893	0	0
1/10/2025	5:00 PM	0	---	0	0	---	31.5	30.6	30.6	29.885	0	0
1/10/2025	5:15 PM	0	W	0	1	W	31	30.3	30.3	29.911	0	0
1/10/2025	5:30 PM	0	---	0	0	---	30.7	30	30	29.906	0	0
1/10/2025	5:45 PM	0	---	0	0	---	30.7	30	30	29.895	0	0
1/10/2025	6:00 PM	0	---	0	0	---	30.5	29.9	29.9	29.893	0	0
1/10/2025	6:15 PM	0	W	0	1	W	30.4	29.7	29.7	29.901	0	0
1/10/2025	6:30 PM	0	W	0	1	W	30.6	29.9	29.9	29.9	0	0
1/10/2025	6:45 PM	0	W	0	1	W	30.7	29.9	29.9	29.89	0	0
1/10/2025	7:00 PM	0	W	0	1	W	30.5	29.7	29.7	29.883	0	0
1/10/2025	7:15 PM	0	W	0	2	W	30.7	29.9	29.9	29.888	0	0
1/10/2025	7:30 PM	0	W	0	2	WNW	30.6	29.8	29.8	29.87	0	0
1/10/2025	7:45 PM	0	---	0	0	---	30.1	29.4	29.4	29.867	0	0
1/10/2025	8:00 PM	0	---	0	0	---	29.6	28.9	28.9	29.862	0	0
1/10/2025	8:15 PM	0	---	0	0	---	29.4	28.8	28.8	29.837	0	0
1/10/2025	8:30 PM	0	W	0	1	W	29.4	28.8	28.8	29.835	0	0
1/10/2025	8:45 PM	0	W	0	1	W	29.3	28.7	28.7	29.817	0	0
1/10/2025	9:00 PM	0	W	0	1	W	29.1	28.5	28.5	29.81	0	0
1/10/2025	9:15 PM	0	---	0	0	---	29	28.5	28.5	29.803	0	0
1/10/2025	9:30 PM	0	---	0	0	---	29	28.6	28.6	29.789	0	0
1/10/2025	9:45 PM	0	---	0	0	---	28.8	28.2	28.2	29.782	0	0
1/10/2025	10:00 PM	0	W	0	1	W	28.9	28.3	28.3	29.779	0	0
1/10/2025	10:15 PM	0	WNW	0	1	W	29	28.4	28.4	29.798	0	0
1/10/2025	10:30 PM	0	WNW	0	1	WNW	29.1	28.5	28.5	29.791	0	0
1/10/2025	10:45 PM	0	---	0	0	---	28.7	28.1	28.1	29.785	0	0
1/10/2025	11:00 PM	0	WNW	0	1	WNW	28.7	28.1	28.1	29.776	0	0
1/10/2025	11:15 PM	0	WNW	0	1	WNW	28.9	28.3	28.3	29.779	0	0
1/10/2025	11:30 PM	0	---	0	0	---	28.7	28.2	28.2	29.761	0	0
1/10/2025	11:45 PM	0	WNW	0	1	WNW	28.6	28	28	29.743	0	0

Table B-2 Weather History for January 11, 2025

Date	Time	Wind Speed	Wind Dir	Wind Run	Hi Speed	Hi Dir	Wind Chill	Heat Index	THW Index	Bar	Rain	Rain Rate
1/11/2025	12:00 AM	0	SW	0	1	WSW	28.7	28.2	28.2	29.749	0	0
1/11/2025	12:15 AM	1	WNW	0.25	3	N	28.2	27.8	27.8	29.738	0	0
1/11/2025	12:30 AM	1	SW	0.25	5	ESE	27.1	26.8	26.8	29.73	0	0
1/11/2025	12:45 AM	0	WNW	0	2	WNW	26.7	26.5	26.5	29.719	0	0
1/11/2025	1:00 AM	0	SW	0	1	SW	26.5	26.3	26.3	29.708	0	0
1/11/2025	1:15 AM	0	SW	0	1	SW	26.4	26.2	26.2	29.696	0	0
1/11/2025	1:30 AM	0	SW	0	1	SW	26.4	26.3	26.3	29.676	0	0
1/11/2025	1:45 AM	0	---	0	0	---	26.4	26.3	26.3	29.672	0	0
1/11/2025	2:00 AM	0	---	0	0	---	26.4	26.3	26.3	29.656	0	0
1/11/2025	2:15 AM	0	E	0	1	E	26.4	26.3	26.3	29.637	0	0
1/11/2025	2:30 AM	0	E	0	1	E	26.3	26.2	26.2	29.638	0	0
1/11/2025	2:45 AM	0	E	0	1	E	26.3	26.2	26.2	29.631	0	0
1/11/2025	3:00 AM	0	---	0	0	---	26.4	26.3	26.3	29.622	0	0
1/11/2025	3:15 AM	0	ESE	0	1	ESE	26.4	26.3	26.3	29.619	0	0
1/11/2025	3:30 AM	0	---	0	0	---	26.4	26.3	26.3	29.6	0	0
1/11/2025	3:45 AM	0	ESE	0	1	ESE	26.3	26.2	26.2	29.593	0	0
1/11/2025	4:00 AM	0	ESE	0	1	ESE	26.3	26.2	26.2	29.598	0	0
1/11/2025	4:15 AM	0	---	0	0	---	26.4	26.3	26.3	29.572	0	0
1/11/2025	4:30 AM	0	---	0	0	---	26.3	26.2	26.2	29.571	0	0
1/11/2025	4:45 AM	0	---	0	0	---	26.3	26.2	26.2	29.556	0	0
1/11/2025	5:00 AM	0	---	0	0	---	26.3	26.2	26.2	29.55	0	0
1/11/2025	5:15 AM	0	---	0	0	---	26.4	26.3	26.3	29.546	0	0
1/11/2025	5:30 AM	0	ENE	0	1	ENE	26.5	26.4	26.4	29.553	0	0
1/11/2025	5:45 AM	0	E	0	1	E	26.4	26.3	26.3	29.551	0	0
1/11/2025	6:00 AM	0	E	0	1	E	26.5	26.4	26.4	29.554	0	0
1/11/2025	6:15 AM	0	E	0	1	E	26.6	26.5	26.5	29.544	0	0
1/11/2025	6:30 AM	0	E	0	1	E	26.5	26.4	26.4	29.539	0	0
1/11/2025	6:45 AM	0	E	0	1	E	26.5	26.4	26.4	29.547	0	0
1/11/2025	7:00 AM	0	E	0	1	E	26.3	26.2	26.2	29.542	0	0
1/11/2025	7:15 AM	0	---	0	0	---	26.1	26	26	29.544	0	0
1/11/2025	7:30 AM	0	---	0	0	---	26.3	26.2	26.2	29.546	0	0
1/11/2025	7:45 AM	0	NNE	0	1	W	26.6	26.5	26.5	29.546	0	0
1/11/2025	8:00 AM	0	WNW	0	2	WNW	27.1	27	27	29.546	0	0
1/11/2025	8:15 AM	0	WNW	0	1	WSW	27.8	27.6	27.6	29.549	0	0
1/11/2025	8:30 AM	0	W	0	2	W	28.3	28.1	28.1	29.552	0	0
1/11/2025	8:45 AM	0	N	0	2	N	28.3	28.1	28.1	29.56	0	0
1/11/2025	9:00 AM	0	NE	0	2	W	28.6	28.3	28.3	29.561	0	0
1/11/2025	9:15 AM	0	WNW	0	4	NW	30	29.7	29.7	29.562	0	0
1/11/2025	9:30 AM	0	N	0	4	N	29.8	29.4	29.4	29.571	0	0
1/11/2025	9:45 AM	1	ENE	0.25	11	W	29.6	29.2	29.2	29.573	0	0

Appendix C - Solley Road Sound & Vibrational Meter Photos

Figure D-1 Location 1 Ambient Survey Sound Level Meter

Figure D-2 Location 1 Ambient Survey Sound Level Meter

Figure D-3 Location 1 Ambient Survey Sound Level Meter

Figure D-4 Location 1 Ambient Survey Sound Level Meter

Figure D-5 Location 2 Ambient Survey Sound Level Meter

Figure D-6 Location 2 Ambient Survey Sound Level Meter

Figure D-7 Location 2 Ambient Survey Sound Level Meter

Figure D-8 Location 2 Ambient Survey Sound Level Meter

Figure D-9 Location 3 Ambient Survey Sound Level Meter & Weather Station

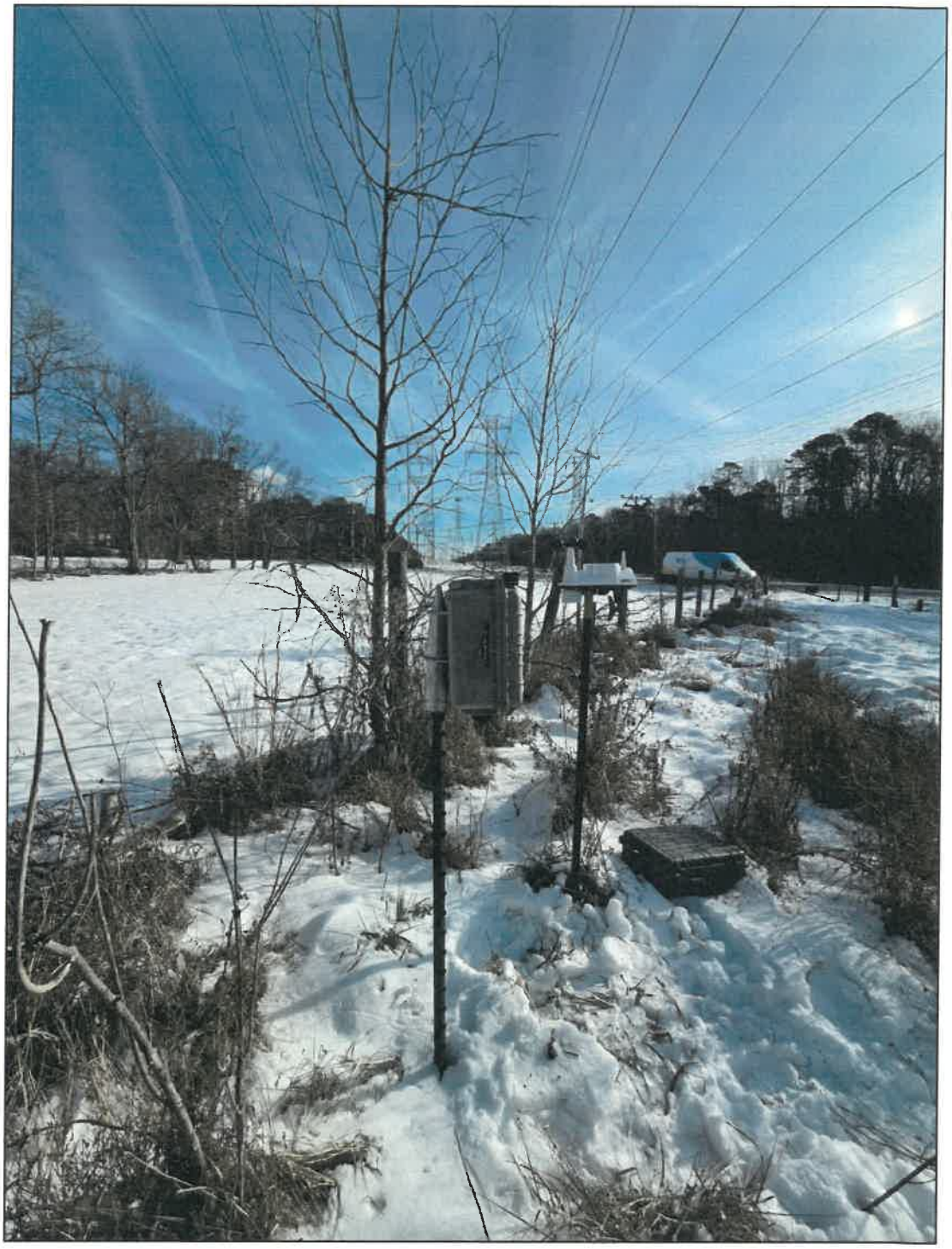


Figure D-10 Location 3 Ambient Survey Sound Level Meter & Weather Station

Figure D-11 Location 3 Ambient Survey Sound Level Meter & Weather Station

Figure D-12 Location 3 Ambient Survey Sound Level Meter & Weather Station

Figure D-13 Ambient Survey Vibration Meter Deployment - Typical

APP. EXHIBIT# 17
CASE: 2025-0049-S
DATE: 5/15/25

4.3 Modeling Results

The calculated A-weighted sound pressure levels for the project are shown in Table 4 and Figure 5. Lines of equal sound level at 5-dBA intervals are shown. The calculated sound levels at the receptors are 38 dBA at Location 1, 43 dBA at Location 2, and 33 dBA at Location 3, based on the assumed equipment sound levels from Table 3. Noise levels due to the substation operation are expected to be significantly below the most stringent limit of 55 dBA at all receiver locations.

Table 4 Estimated Received Noise Levels at Nearby Residences (L_{eq} dBA)

	Location 1	Location 2	Location 3
Project Contribution	40 dBA	43 dBA	33 dBA
Existing Ambient (Nighttime)	55 dBA	52 dBA	50 dBA
Combined Level (Ambient + Project)	55 dBA	<53 dBA	50 dBA
Level Increase	0 dB	<1 dB	0 dB