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

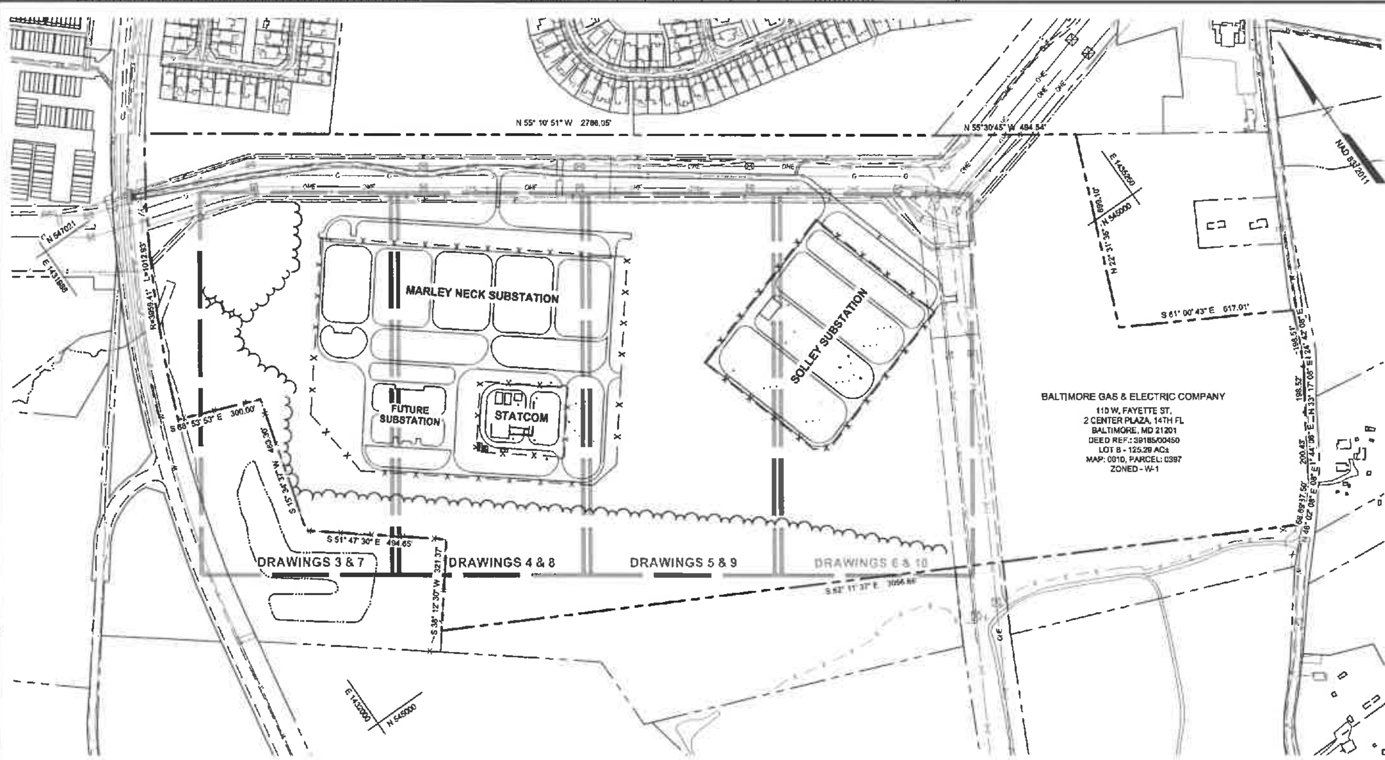
If you or your colleagues have questions about any of the information set forth in this letter, or about any of the accompanying application materials, please contact me at your convenience. Also, please contact me if County planners would like additional information about the background, or any other 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.

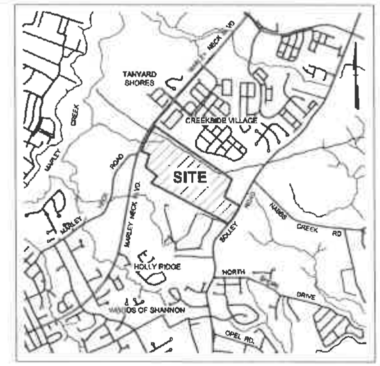
dc: Mr. Jerome Wilson
Mr. Patrick Burke
Ms. Connie Pierce, Esq.
BGE project team members
Mr. Robert G. Bathurst, P.E.
Ms. Bonnie Johansen
Mr. Shep Tullier



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: 3000-9007-6351

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

PLAT BOOK 138, PAGE 18 (MS 91-118: 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 24003C0082F, 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. 2500798 006A

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

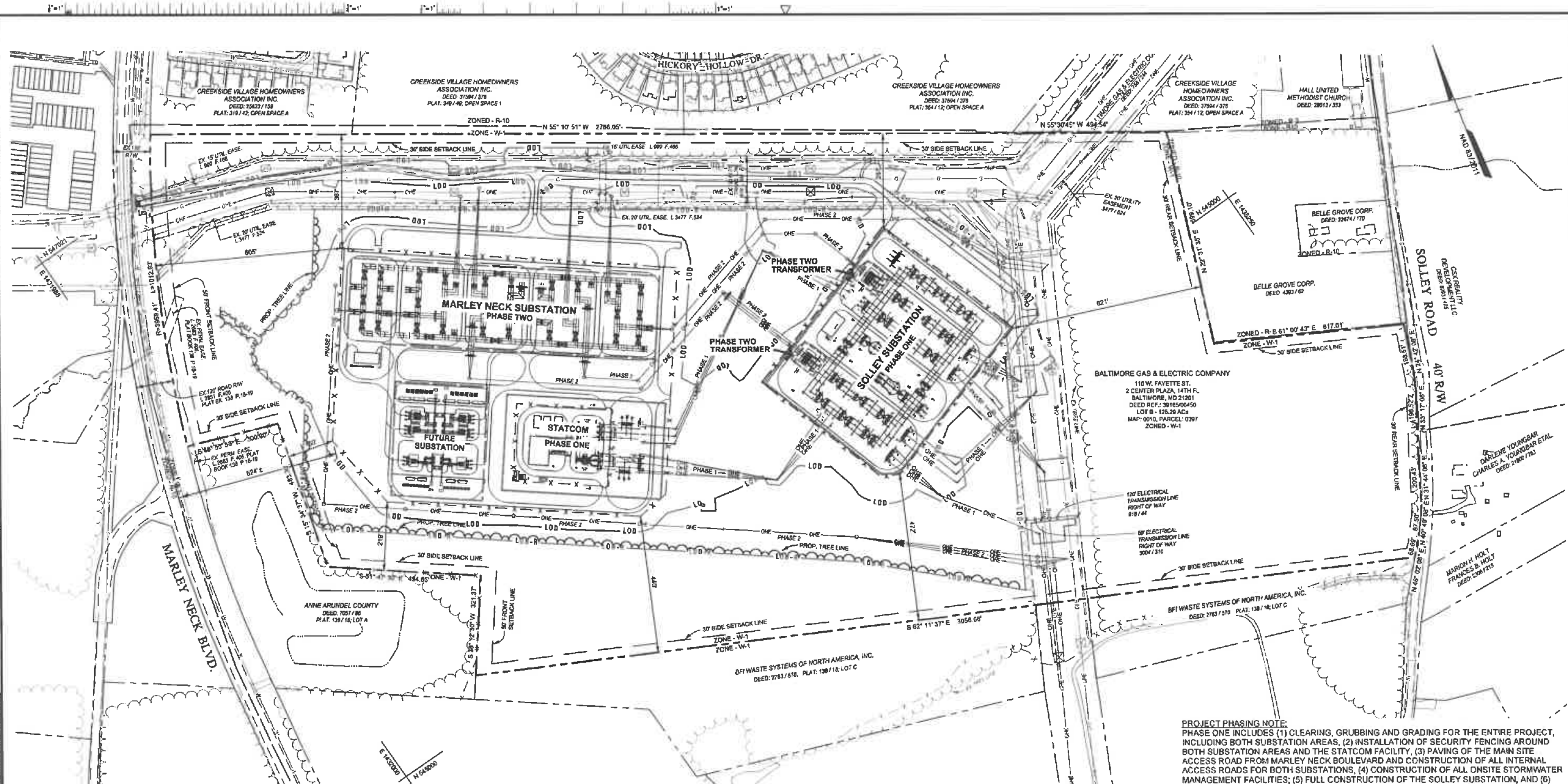
BALTIMORE GAS & ELECTRIC COMPANY
LOT B - SOUTH SOLLEY ROAD
GLEN BURNIE, ANNE ARUNDEL COUNTY, MD 21060
TAX MAP: 10 PARCEL: 397
115kV SUBSTATION

MARLEY NECK - SOLLEY

ELECTRIC SUBSTATION ENGINEERING

bge

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.

PLAN

SCALE: 1"=150'

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

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

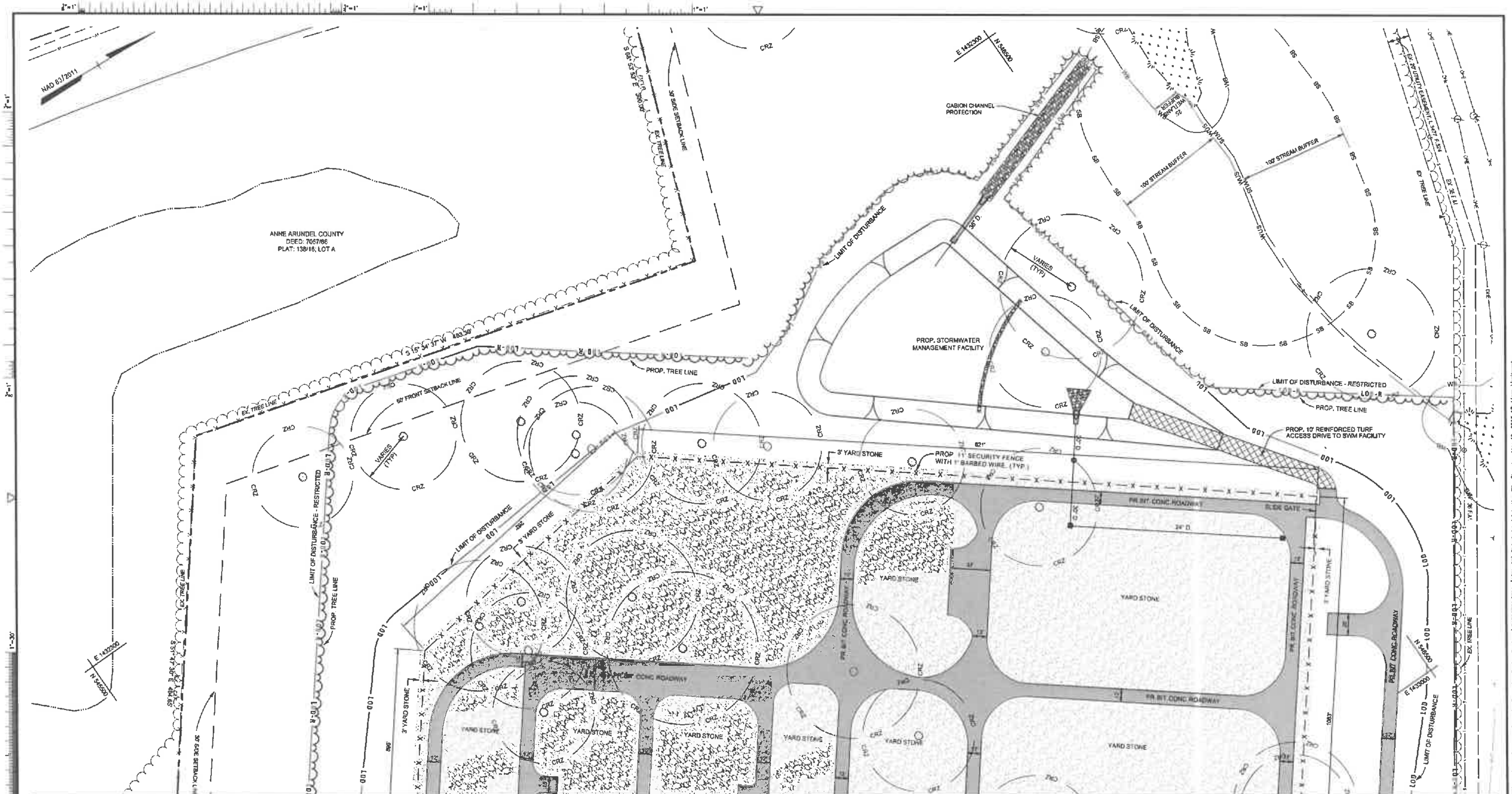
BALTIMORE GAS & ELECTRIC COMPANY
LOT B - SOUTH SOLLEY ROAD
GLEN BURNIE, ANNE ARUNDEL COUNTY, MD 21060
TAX MAP: 10 PARCEL: 397
115kV SUBSTATION

MARLEY NECK - SOLLEY

ELECTRIC SUBSTATION ENGINEERING

bge

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

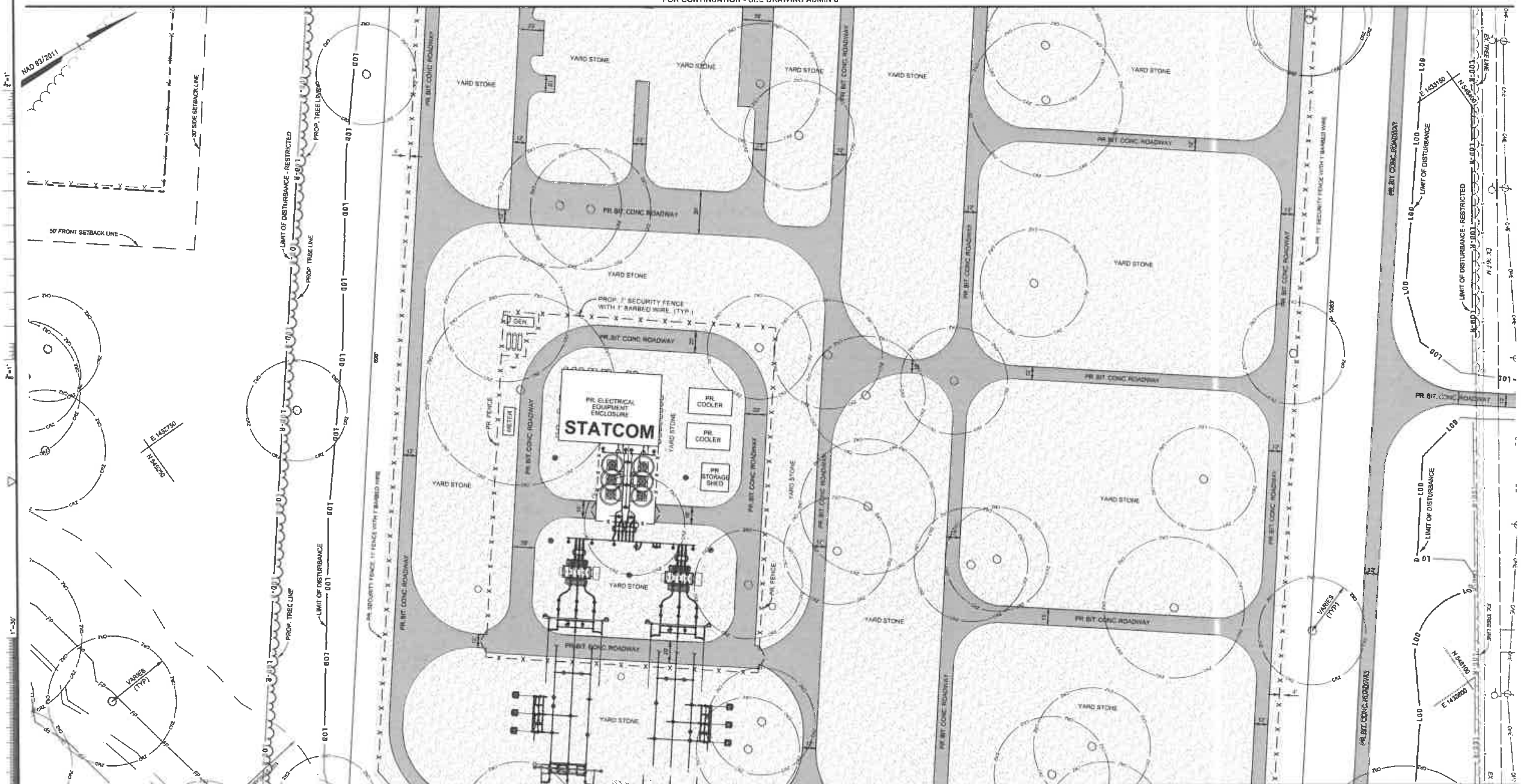
MARLEY NECK SUBSTATION

ELECTRIC SUBSTATION ENGINEERING

bge

SCALE: 1"=40'
DWG NO ADMIN 3 OF 12
REV. B

FOR CONTINUATION - SEE DRAWING ADMIN 3



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 006A

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

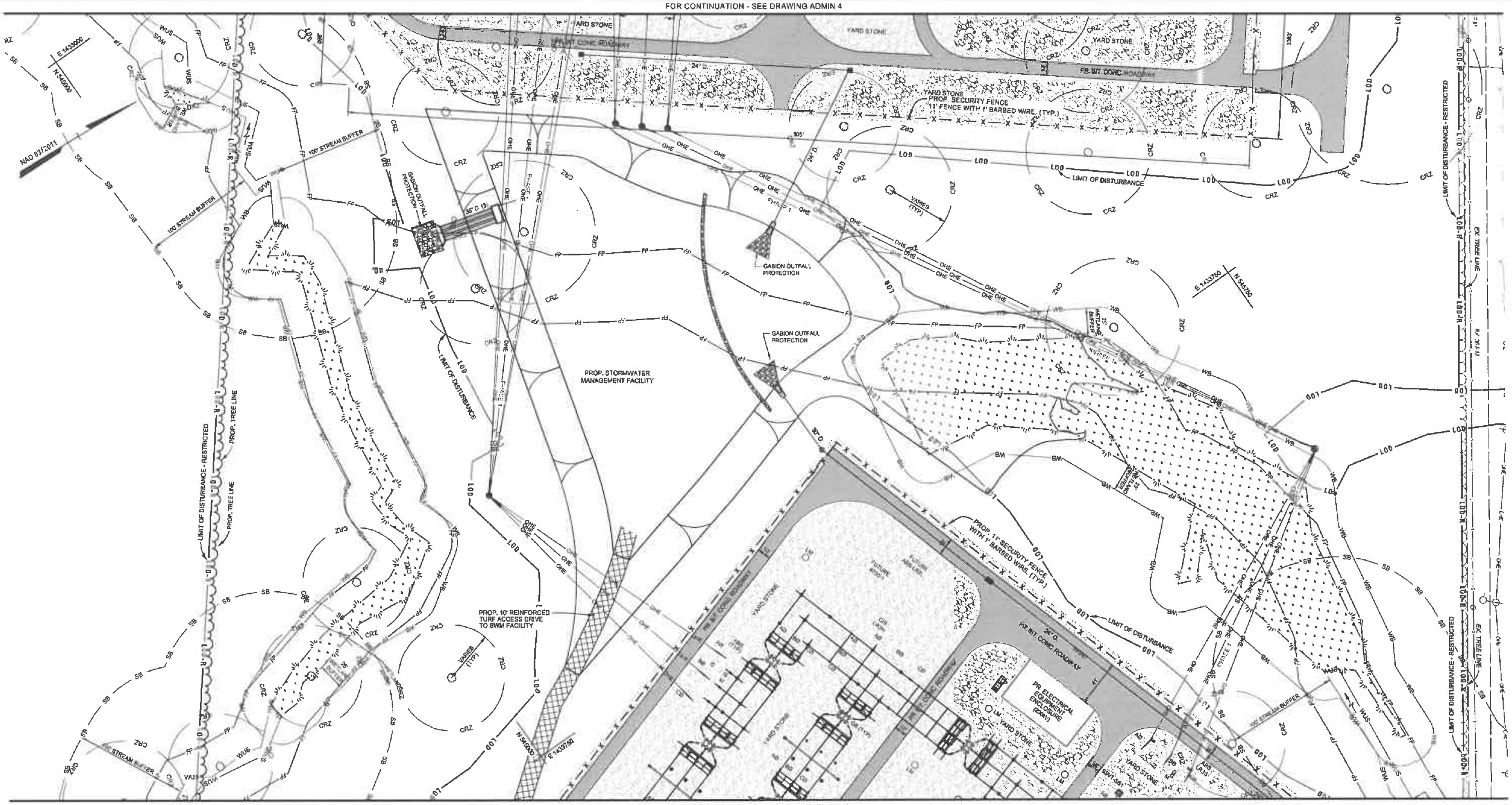
MARLEY NECK SUBSTATION

ELECTRIC SUBSTATION ENGINEERING

bge

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. 2500798.008A

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

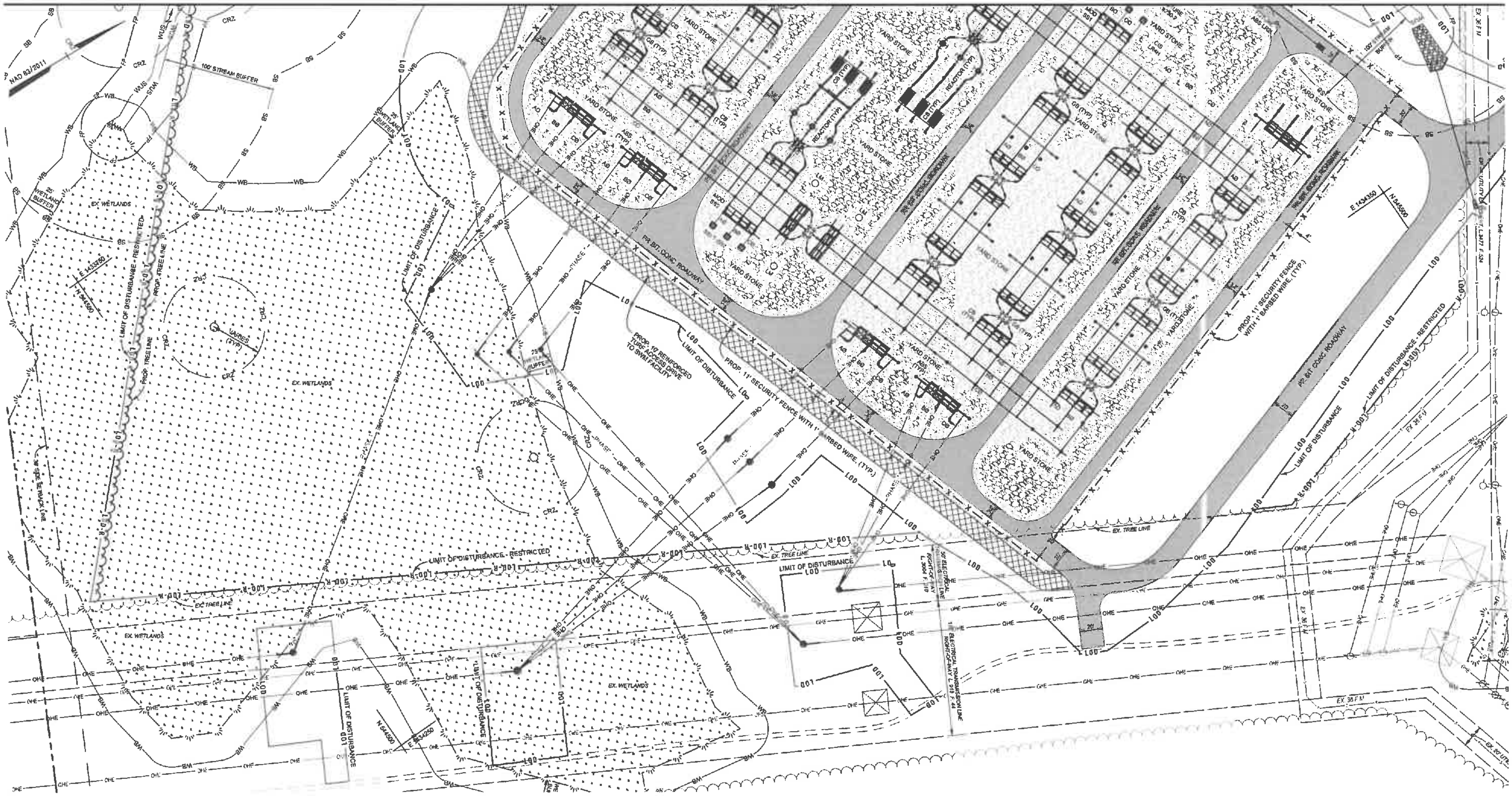
bge AN EXELON COMPANY

SCALE: 1"=40'

DWG NO ADMIN 5 OF 12

REV. B

FOR CONTINUATION - SEE DRAWING ADMIN 5



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.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

ELECTRIC SUBSTATION ENGINEERING

bge

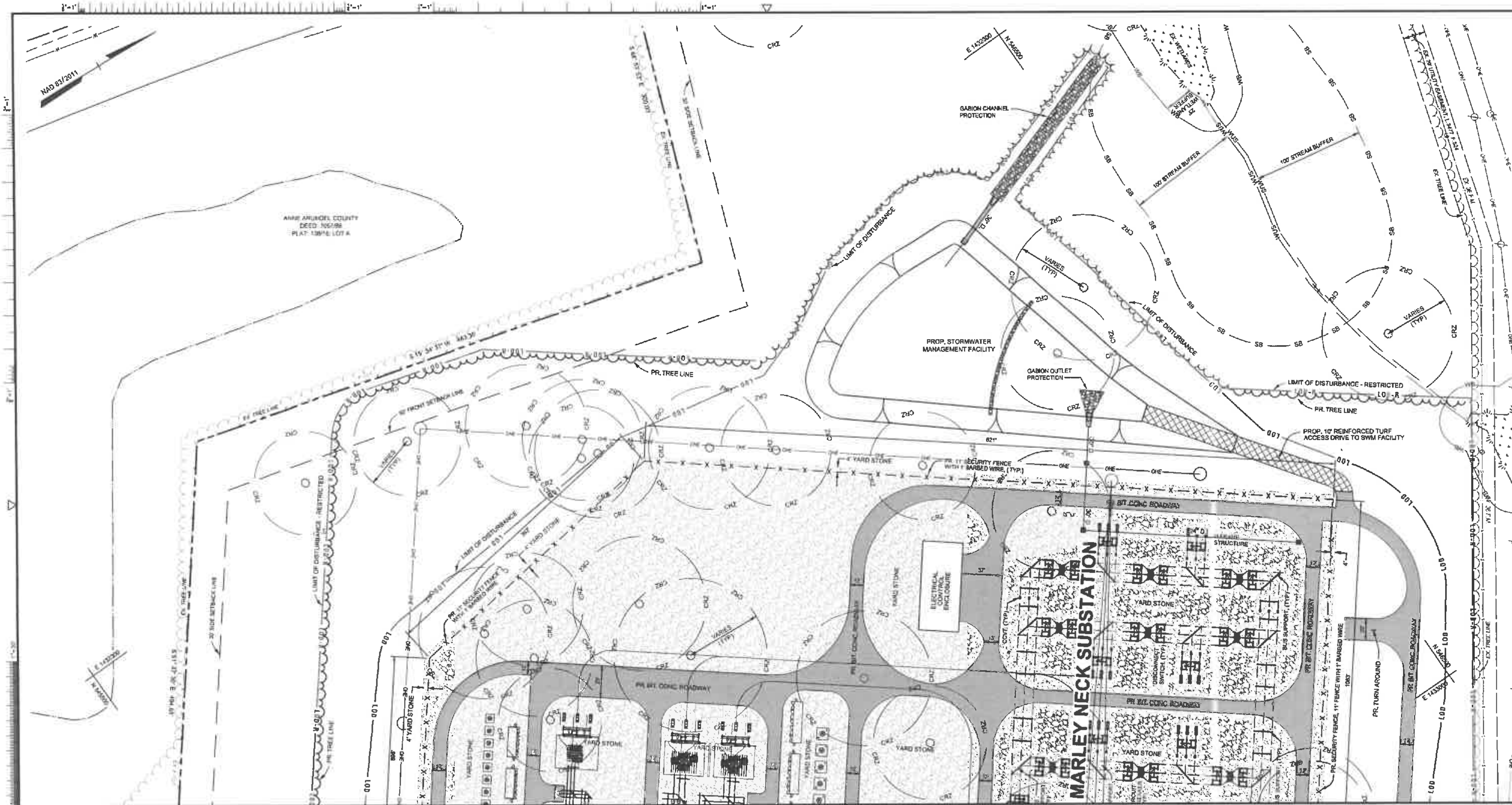
SCALE: 1"=40'
DWG NO ADMIN 6 OF 12
REV. B

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.: 24614 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 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

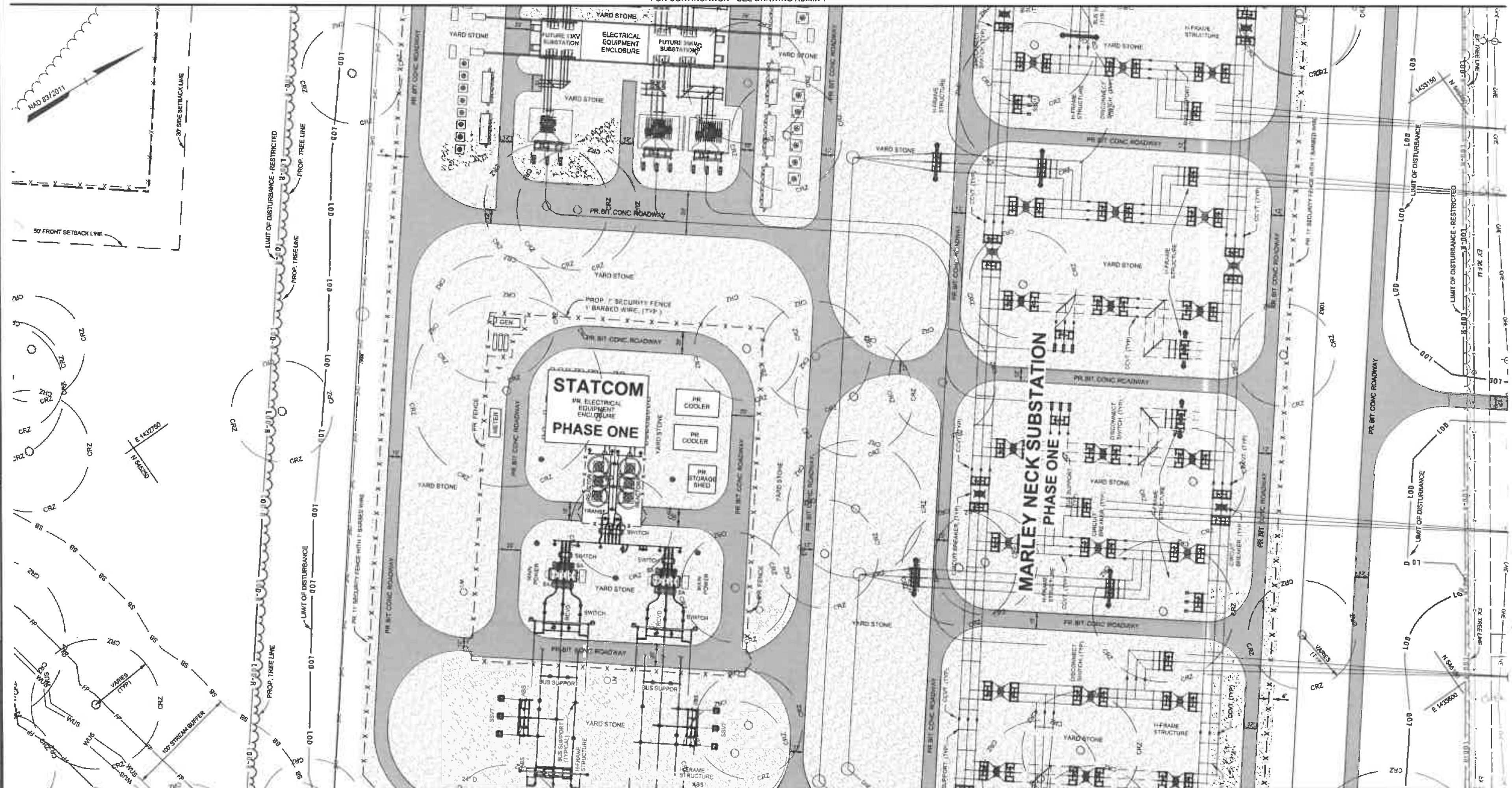
MARLEY NECK - SOLLEY

ELECTRIC SUBSTATION ENGINEERING

bge AN EXELON COMPANY

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. 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 SUBSTATION

ELECTRIC SUBSTATION ENGINEERING

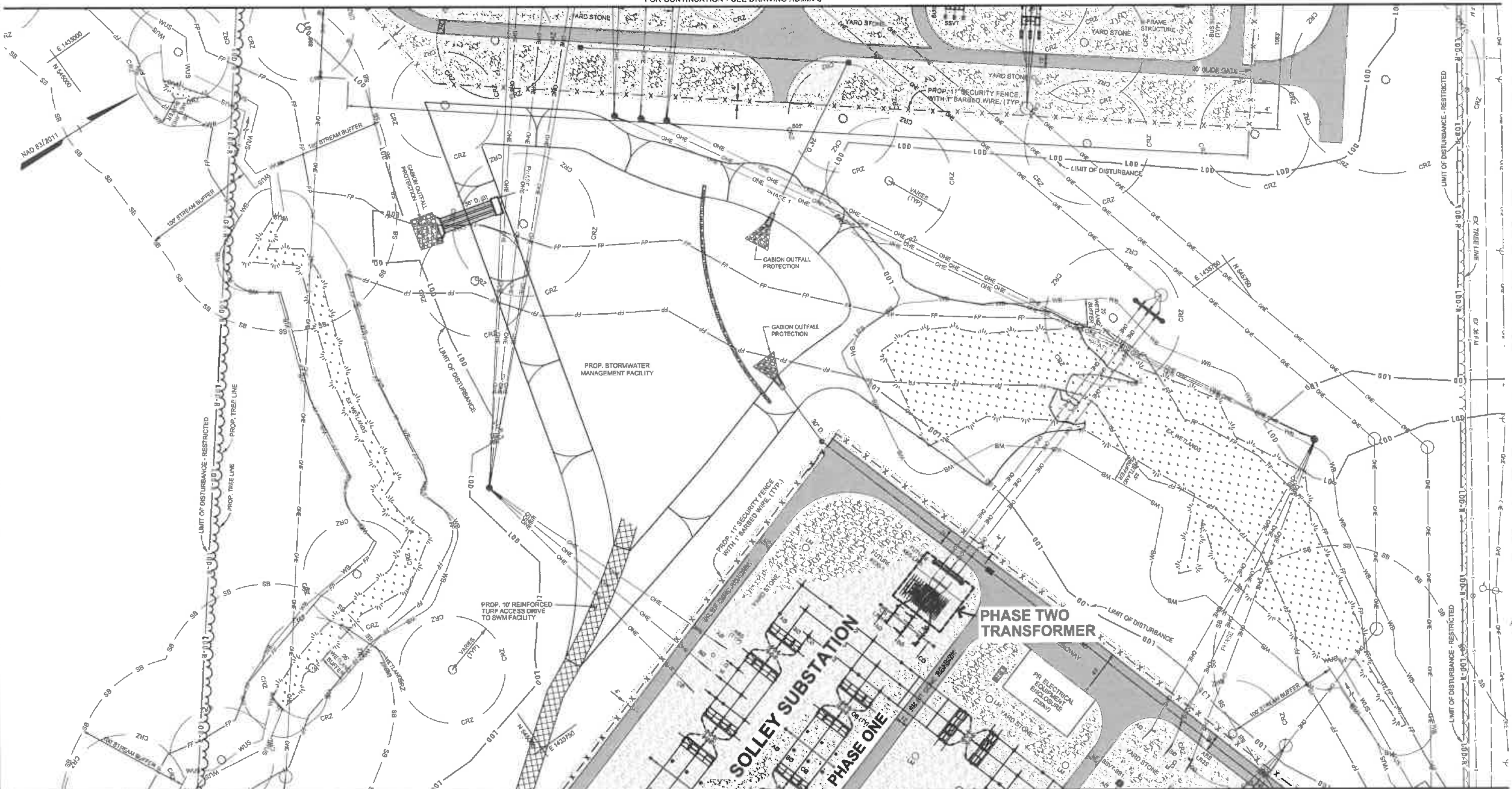
bge

SCALE: 1"=40'

DWG. NO. ADMIN 8 OF 12

REV. B

FOR CONTINUATION - SEE DRAWING ADMIN 8



FOR CONTINUATION - SEE DRAWING ADMIN 10

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. 2500798.008A

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

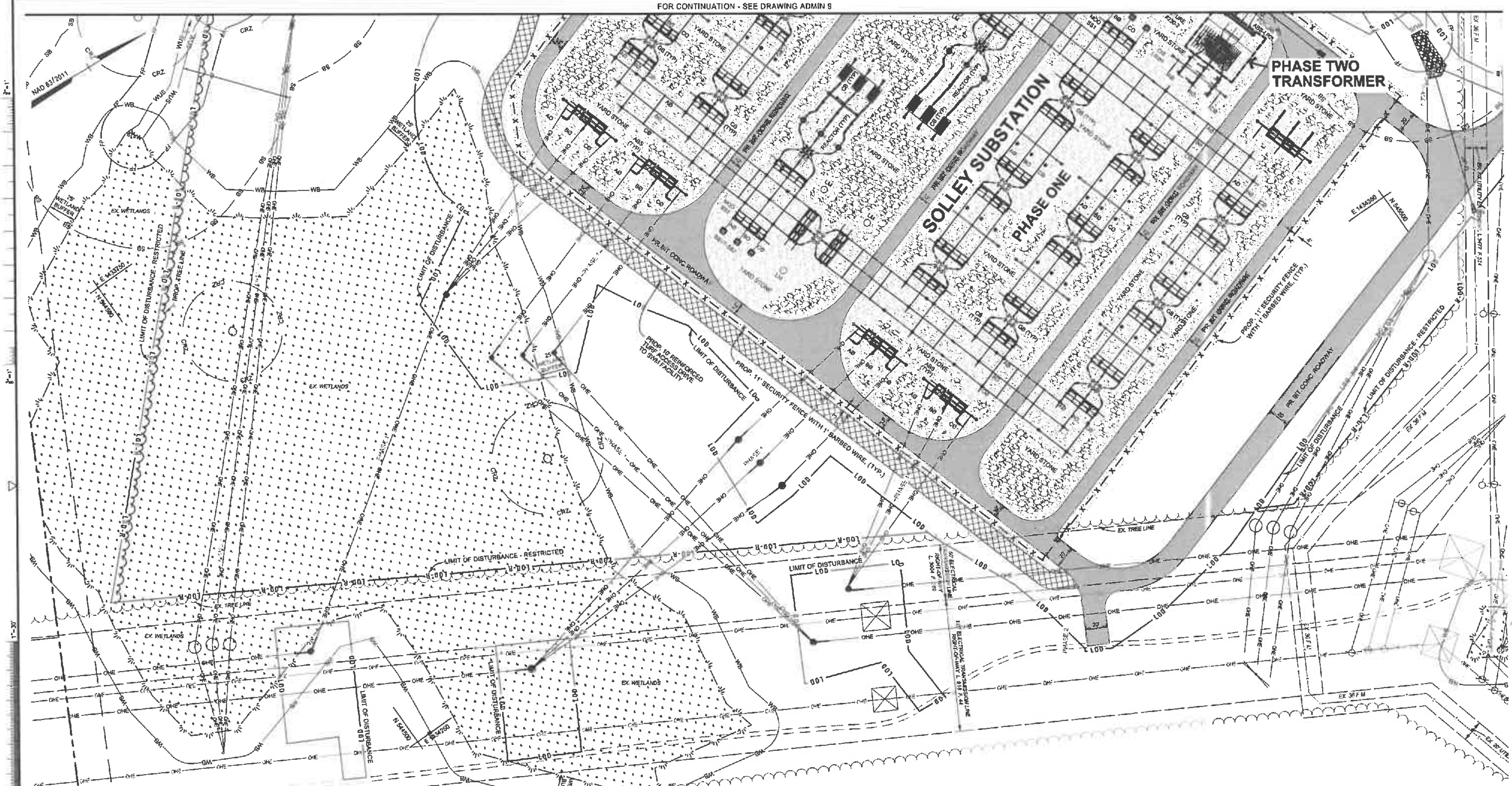
BALTIMORE GAS & ELECTRIC COMPANY
LOT B - SOUTH SOLLEY ROAD
GLEN BURNIE, ANNE ARUNDEL COUNTY, MD 21060
TAX MAP: 10 PARCEL: 397
115kV SUBSTATION

MARLEY NECK/SOLLEY SUBSTATION

ELECTRIC SUBSTATION ENGINEERING

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

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: 443.589.2400
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

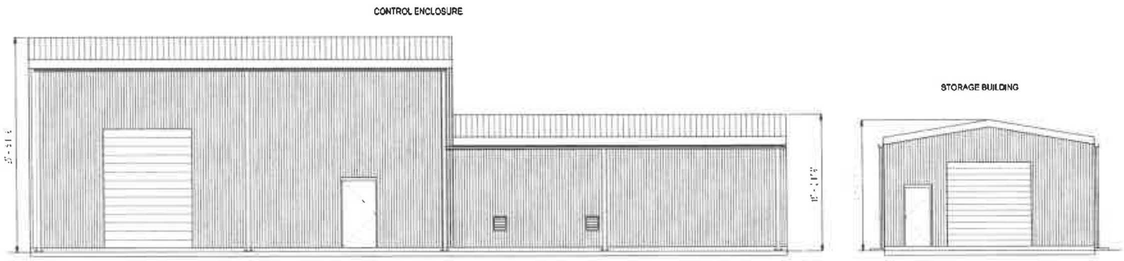
ELECTRIC SUBSTATION ENGINEERING

bge AN EXELON COMPANY

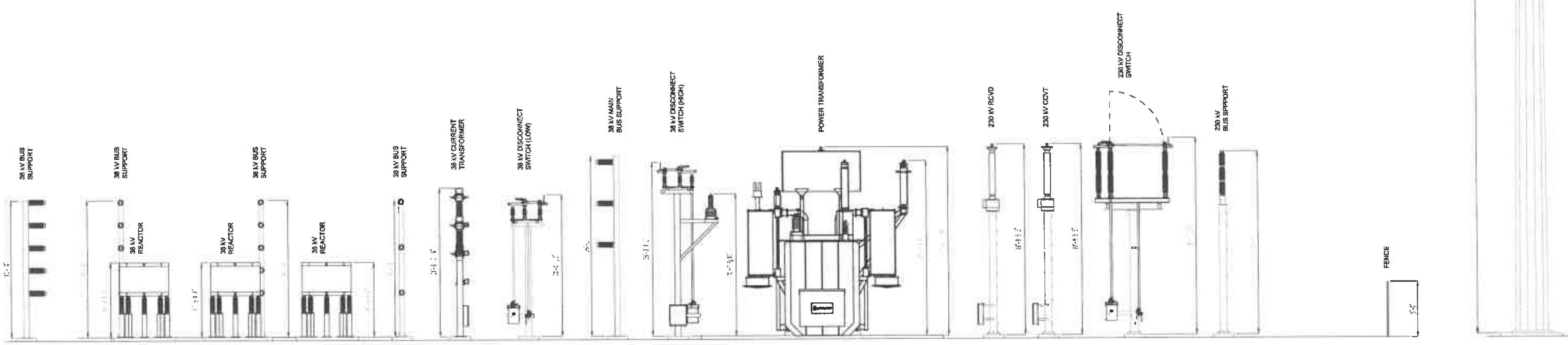
SCALE: 1"=40'

DWG. NO. ADMIN 10 OF 12

REV. B



STATCOM EQUIPMENT ENCLOSURE HEIGHT



STATCOM STRUCTURE HEIGHTS

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 B - 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

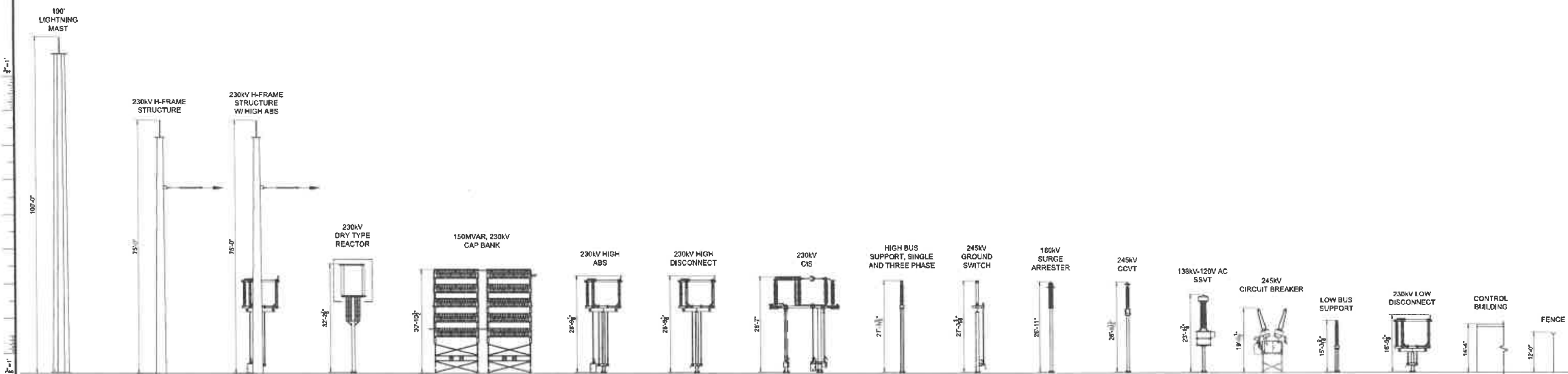
SCALE: AS SHOWN | REV. B
DWG. NO. ADMIN 11 OF 12

PROFESSIONAL CERTIFICATION

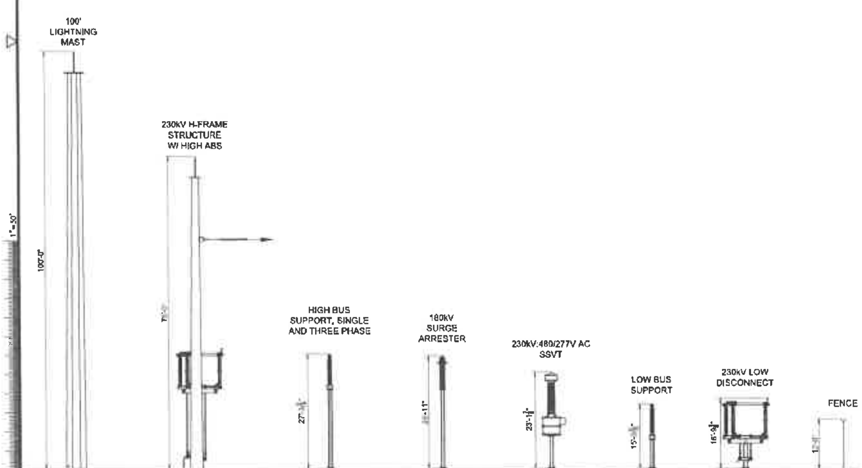
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.

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



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. 2500798.008A

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 —

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

OFFICE OF PLANNING AND ZONING

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.

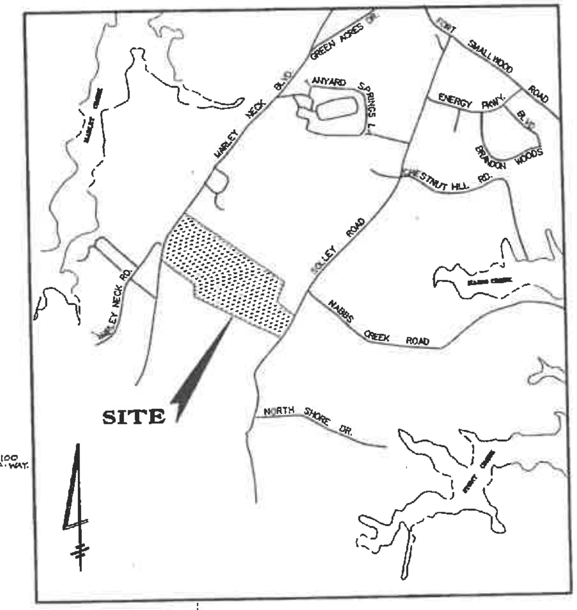
Determination - There are no Engineering objections to approval of the requested Zoning Special Exception provided that item 2 above is addressed prior to Preliminary Plan approval. This request is being deferred to the Zoning Division regarding whether the application meets the Special Exception standards 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

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 COMLPLIED 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'

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 THEBB 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 — 2/8/91 DATE
PRESIDENT
MOUNT CLARE PROPERTIES, INC. (A MD. CORP.)

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

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

WITNESS — 2/8/91 DATE

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 - 153.1357 ACRES
2. EXISTING ZONING	W-1
3. RIGHT-OF-WAY DEDICATION	17,910 SF · 0.4111 ACRES
4. TOTAL LOT AREA	152.7246 ACRES
5. NUMBER OF LOTS PROPOSED	2
6. TYPE OF DEVELOPMENT	INDUSTRIAL

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) 321-5500
SUBDIVISION # MS-91-060 PROJECT #

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 — 9-Oct-90 DATE
REGISTERED PROPERTY LINE SURVEYOR
MARYLAND LICENSE NO. 322

STATE OF MARYLAND — PROPERTY LINE SURVEYOR — No. 322 REGISTERED

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

PLANNING AND ZONING OFFICER — 5/16/91 DATE

COUNTY HEALTH OFFICER-PUBLIC SYSTEMS — 3/1/91 DATE

1991 MAY 22 PM 3:46

 MSA S1235-56-1

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

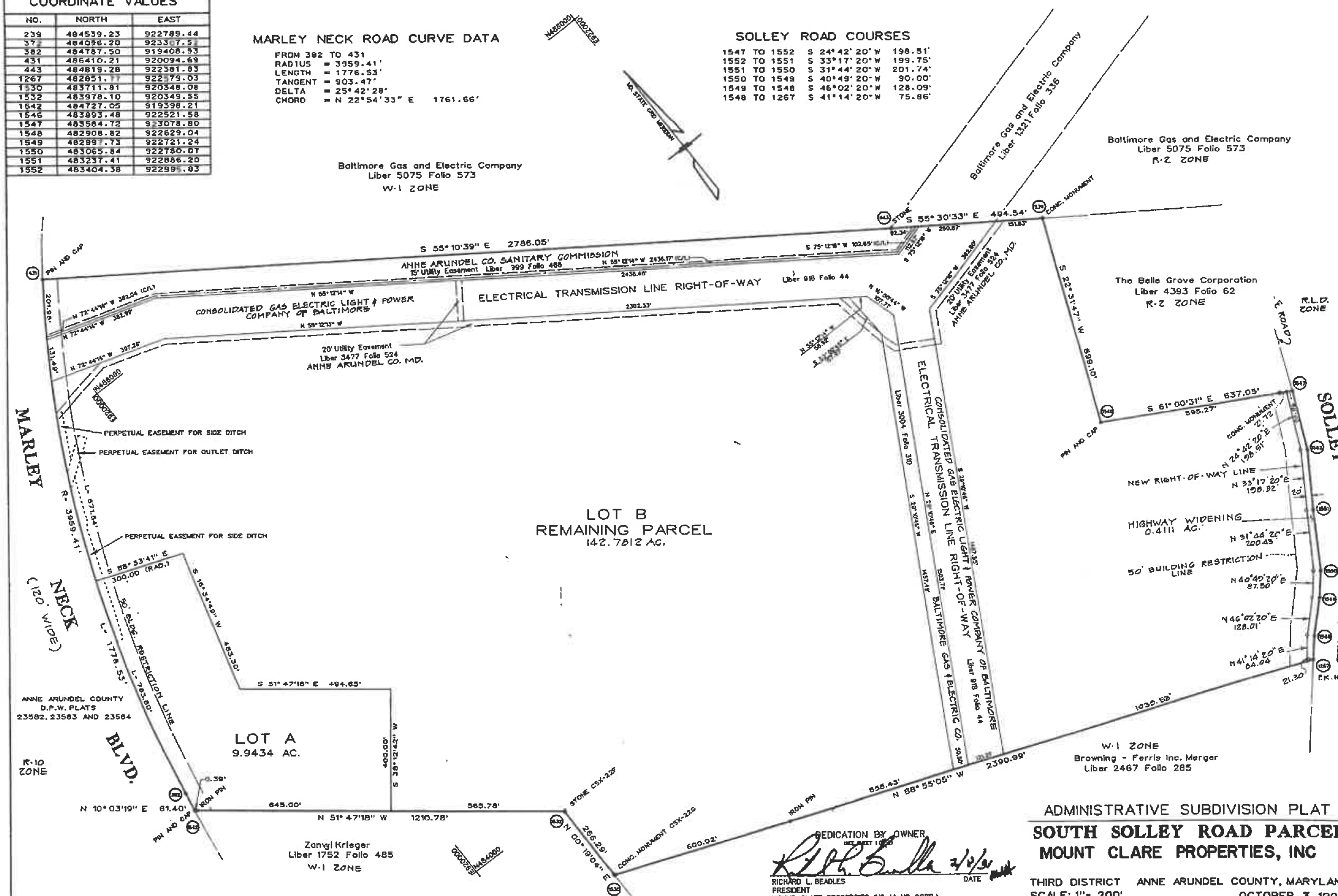
COORDINATE VALUES		
NO.	NORTH	EAST
239	484539.23	922789.44
372	484096.20	923307.52
382	484787.50	919408.93
431	486410.21	920094.69
443	484819.28	922381.83
1267	482851.77	922579.03
1530	483711.81	920348.08
1532	483978.10	920349.55
1542	484727.05	919398.21
1546	483893.48	922521.58
1547	483584.72	923078.80
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'



Baltimore Gas and Electric Company
Liber 5075 Folio 573
W-1 ZONE
Baltimore Gas and Electric Company
Liber 1321 Folio 336
Baltimore Gas and Electric Company
Liber 5075 Folio 573
R-2 ZONE
S 55° 10' 39" E 2786.05'
S 55° 30' 33" E 494.54'
ANNE ARUNDEL CO. SANITARY COMMISSION
15' Utility Easement Liber 399 Folio 488
ELECTRICAL TRANSMISSION LINE RIGHT-OF-WAY
Liber 918 Folio 44
CONSOLIDATED GAS ELECTRIC LIGHT & POWER COMPANY OF BALTIMORE
20' Utility Easement
Liber 3477 Folio 524
ANNE ARUNDEL CO. MD.
The Belle Grove Corporation
Liber 4393 Folio 62
R-2 ZONE
R.L.D. ZONE
S 22° 31' 47" W 899.10'
S 61° 00' 31" E 637.05'
PIN AND CAP
CONC. MONUMENT
NEW RIGHT-OF-WAY LINE
HIGHWAY WIDENING 0.4111 AC.
50' BUILDING RESTRICTION LINE
SOLLEY ROAD (FUTURE 40' R/W)
MARLEY NECK BLVD. (120' WIDE)
PERPETUAL EASEMENT FOR SIDE DITCH
PERPETUAL EASEMENT FOR OUTLET DITCH
PERPETUAL EASEMENT FOR SIDE DITCH
R= 3959.41'
L= 1776.53'
LOT B
REMAINING PARCEL
142.7812 AC.
CONSOLIDATED GAS ELECTRIC LIGHT & POWER COMPANY OF BALTIMORE
ELECTRICAL TRANSMISSION LINE RIGHT-OF-WAY
Liber 918 Folio 44
Liber 3004 Folio 310
BALTIMORE GAS & ELECTRIC CO.
S 88° 53' 41" E 300.00 (RAD.)
50' BLDG. RESTRICTION LINE
S 51° 47' 18" E 494.65'
483.30'
LOT A
9.9434 AC.
S 38° 12' 42" W 400.00'
N 10° 03' 19" E 61.40'
645.00'
N 51° 47' 18" W 1210.78'
565.78'
IRON PIN
N 00° 19' 04" E 266.29'
STONE C5X-22F
CONC. MONUMENT C5X-22G
600.02'
656.43'
N 88° 55' 05" W 2390.99'
1035.52'
BK. NAIL
21.30'
ANNE ARUNDEL COUNTY
D.P.W. PLATS
23582, 23583 AND 23584
R-10 ZONE
Zanyl Krieger
Liber 1752 Folio 485
W-1 ZONE
W-1 ZONE
Browning - Ferris Inc. Merger
Liber 2467 Folio 285
MD. STATE GRID MERIDIAN

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

Drew K White 5/16/91
PLANNING AND ZONING OFFICER DATE

3/1/91
COUNTY HEALTH OFFICER-PUBLIC SYSTEMS DATE

SURVEYOR'S CERTIFICATE
(SEE SHEET 1 OF 2)

GARY J. THURMAN DATE
REGISTERED PROPERTY LINE SURVEYOR
MARYLAND LICENSE NO. 322

STATE OF MARYLAND — REGISTERED PROPERTY LINE SURVEYOR — No. 322

1991 MAY 22 PM 3:46

DEDICATION BY OWNER
(SEE SHEET 1 OF 2)

RICHARD L. BEADLES 2/8/91 DATE
PRESIDENT
MOUNT CLARE PROPERTIES, INC. (A MD. CORP.)

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

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

ADMINISTRATIVE SUBDIVISION PLAT

SOUTH SOLLEY ROAD PARCEL
MOUNT CLARE PROPERTIES, INC

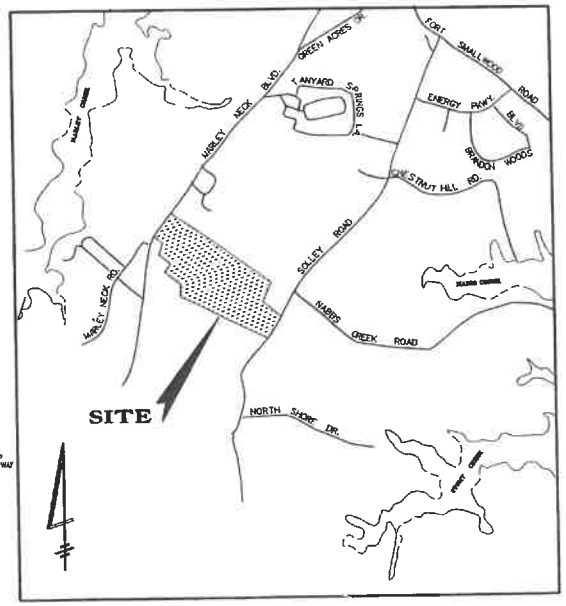
THIRD DISTRICT ANNE ARUNDEL COUNTY, MARYLAND
SCALE: 1" = 200' OCTOBER 3, 1990
TAX MAP 10 GRID 17 PART OF PARCEL 49
SHEET 2 OF 2

KIDDE CONSULTANTS, INC.
ENGINEERS PLANNERS SURVEYORS
1020 CROMWELL BRIDGE ROAD BALTIMORE MARYLAND 21204
(301) 321-5500
SUBDIVISION # MS 91-060 PROJECT #

MSA S SU 1235-76-2
FF AA 10-8
FILE: D:\DGN\PLAT2RP.DGN (MICROSTATION)

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 3-000-19367100
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 G 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 — 4-26-91 DATE
VICE PRESIDENT
MOUNT CLARE PROPERTIES, INC. (A MD. CORP.)

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

WITNESS — 4/26/91 DATE

SITE ANALYSIS

1. TOTAL AREA	6,219,949 SF ± 142.7812 AC. (153.1357 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 — 5/16/91 DATE

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

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

STATE OF MARYLAND — GARY JOSEPH THURMAN — NO. 322 — 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

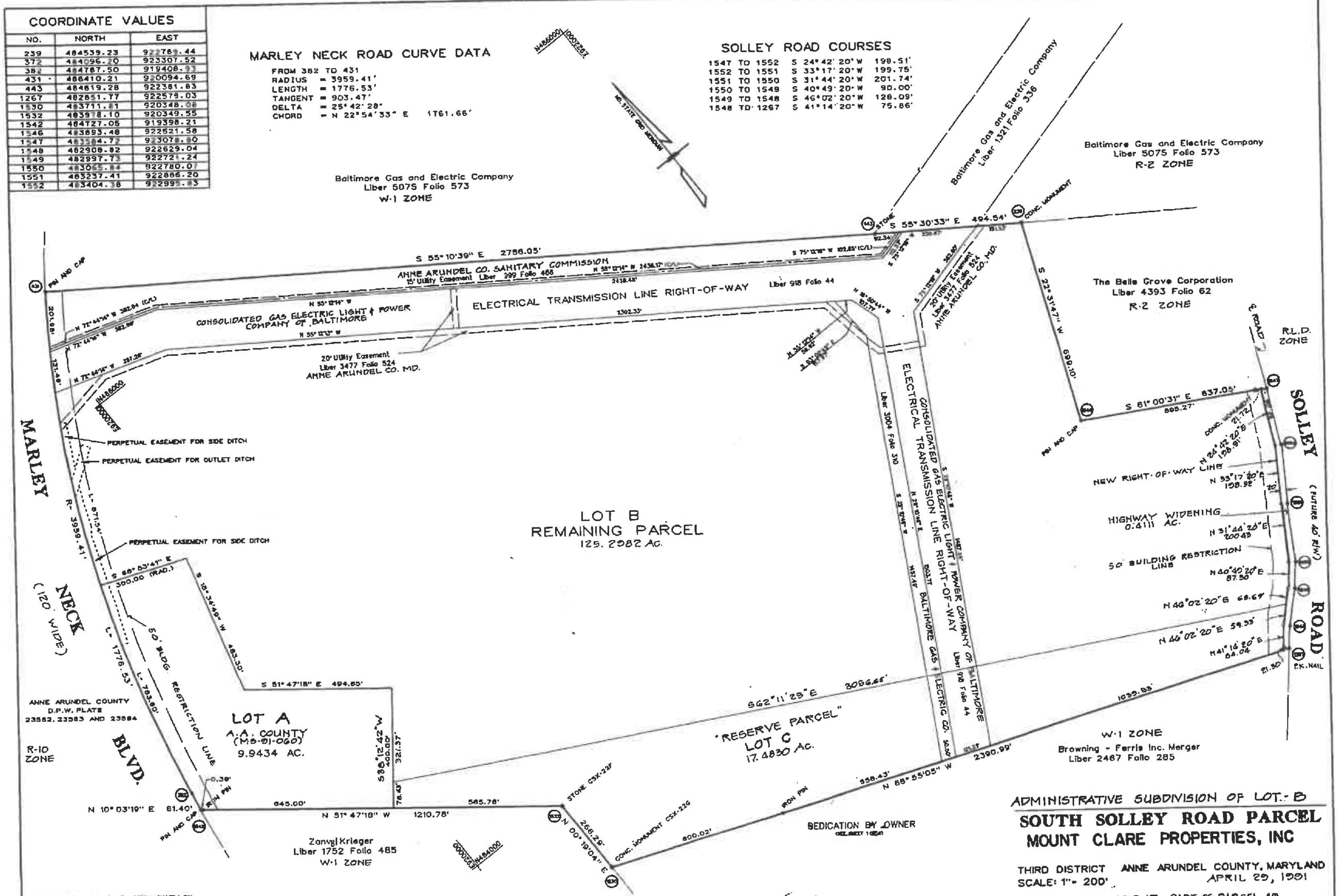
SUBDIVISION # MS-91-118 PROJECT #

MSA S351 1235-76-3

FF AA 10-8 FILE: D:\DGN\CSXRPCOV.DGN (MICROSTATION)

COORDINATE VALUES

NO.	NORTH	EAST
239	484539.23	922769.44
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



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

5/16/91
PLANNING AND ZONING OFFICER — DATE

COUNTY HEALTH OFFICER-PUBLIC SYSTEMS — DATE

SURVEYOR'S CERTIFICATE
(SEE SHEET 1 OF 2)

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

STATE OF MARYLAND — PROPERTY LINE SURVEYOR

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

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

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

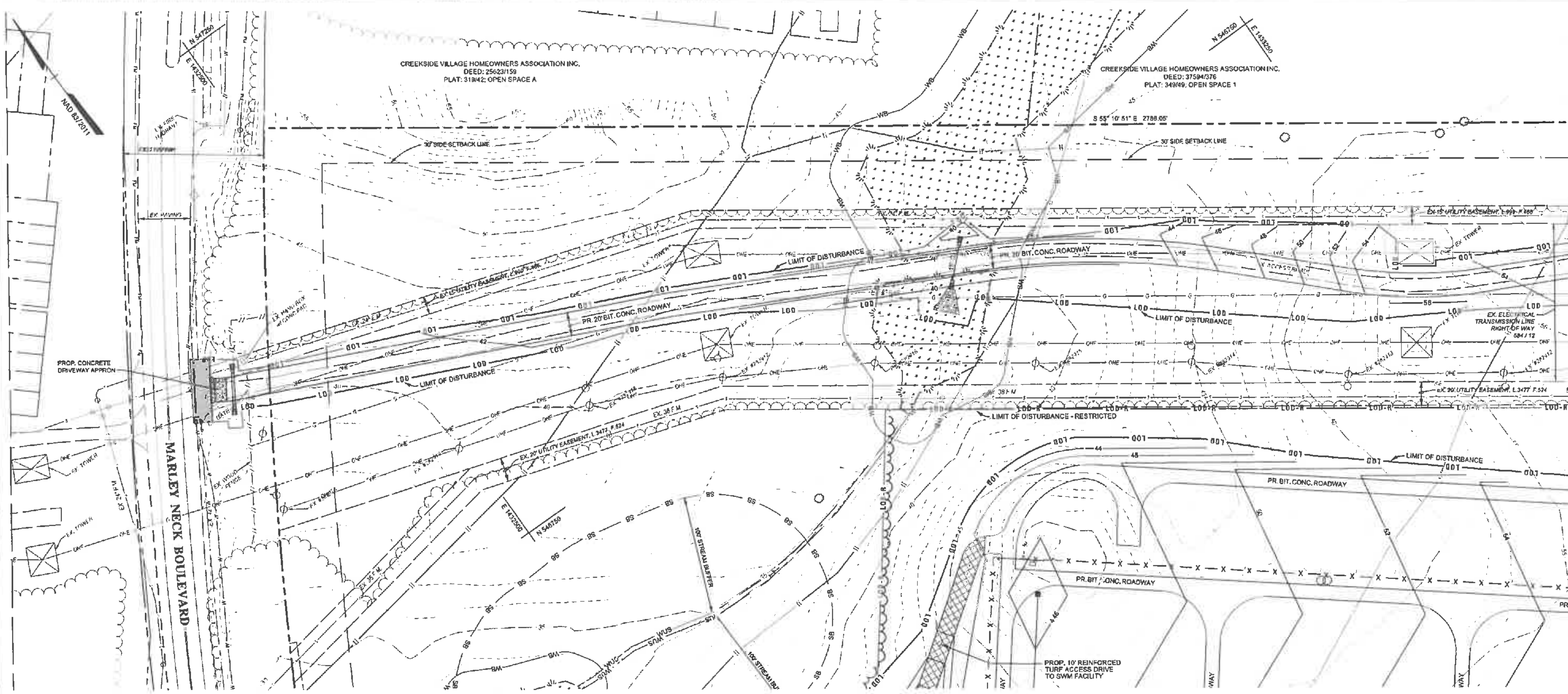
KIDDE CONSULTANTS, INC.
ENGINEERS PLANNERS SURVEYORS
1020 CROMWELL BRIDGE ROAD BALTIMORE MARYLAND 21204
(301) 321-5500

SUBDIVISION # MS 91-118 PROJECT #

BOOK 138 PAGE 19

MSA SSU 1235 -76-4
FF AA 10-8

FILE: D:\DGN\PLAT2RP.DGN (MICROSTATION)



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 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

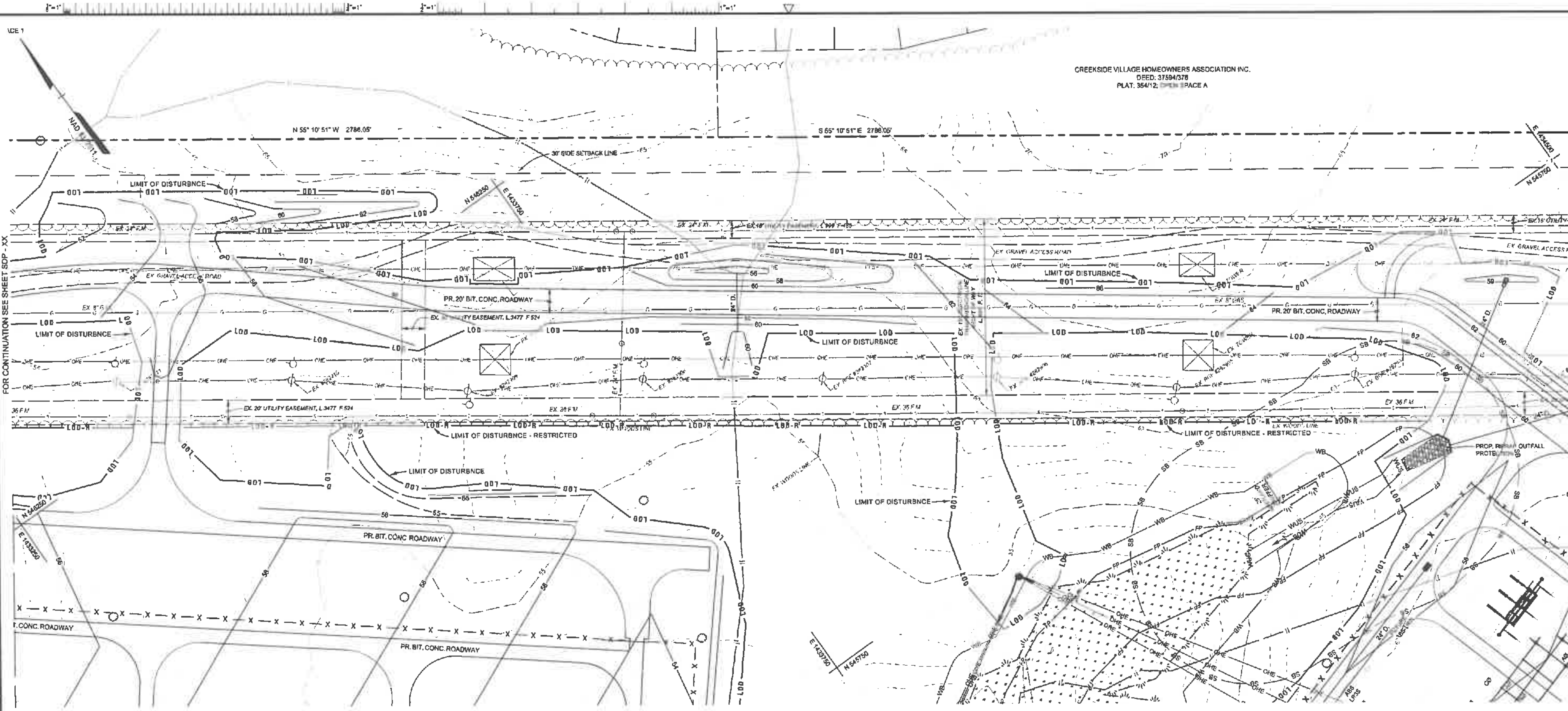
SCALE: 1" = 40' | DWG NO SDP-07 | REV. 8

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



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)

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. 7500196 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.O.B.
DRAWN M.S.S.
CHECKED R.O.B.
APPROVED —
DATE —

SITE DEVELOPMENT PLAN
GRADING

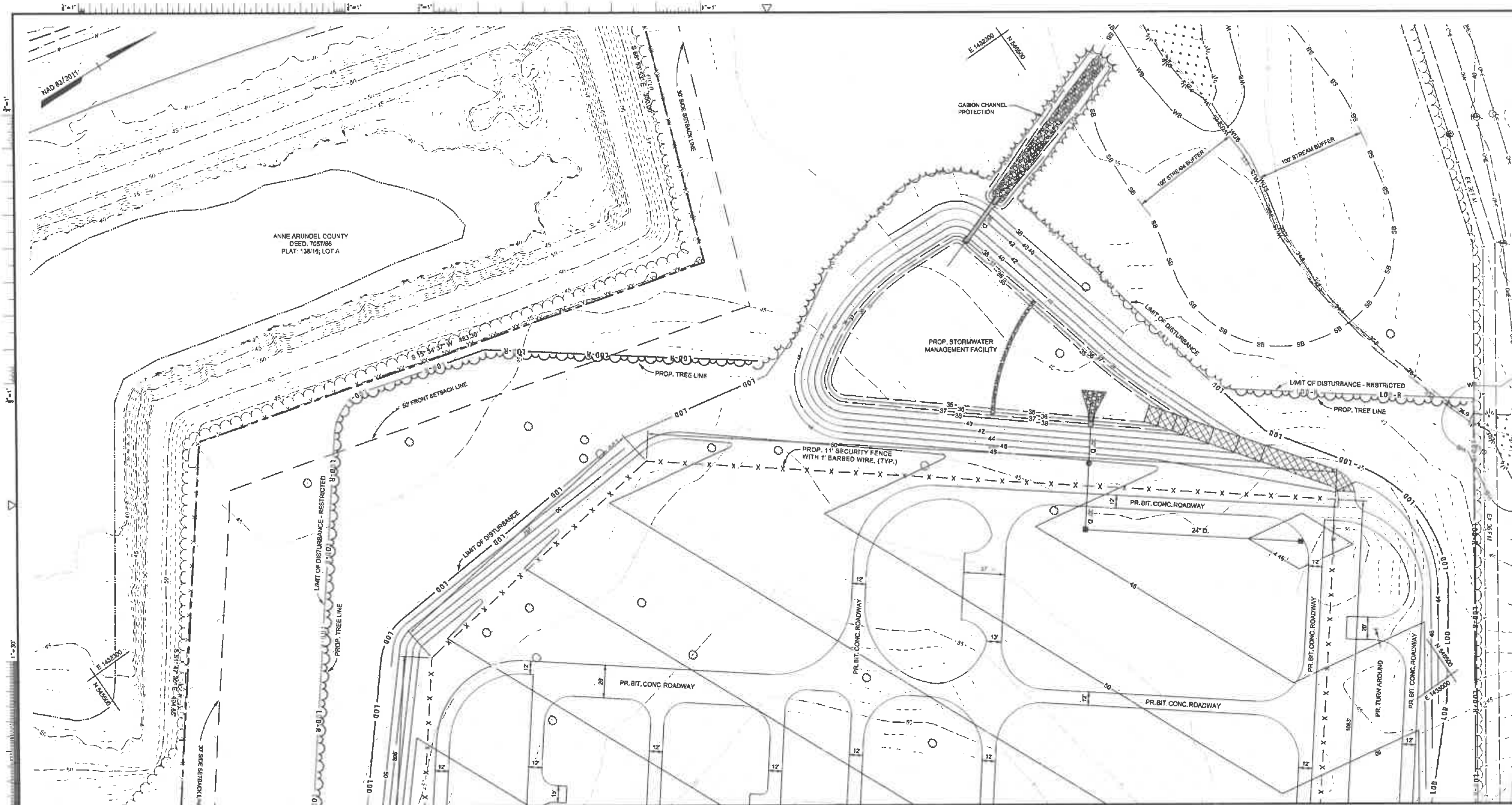
BALTIMORE GAS & ELECTRIC COMPANY
LOT 9 - SOUTH SOLLEY ROAD
GLEN BURNIE, ANNE ARUNDEL COUNTY, MD 21060
TAX MAP: 10 PARCEL: 397
115kV SUBSTATION

MARLEY NECK - SOLLEY

ELECTRIC SUBSTATION ENGINEERING

bge

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



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.
10710 Gilroy Road
Hunt Valley, Maryland 21031
Phone: 443 589 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

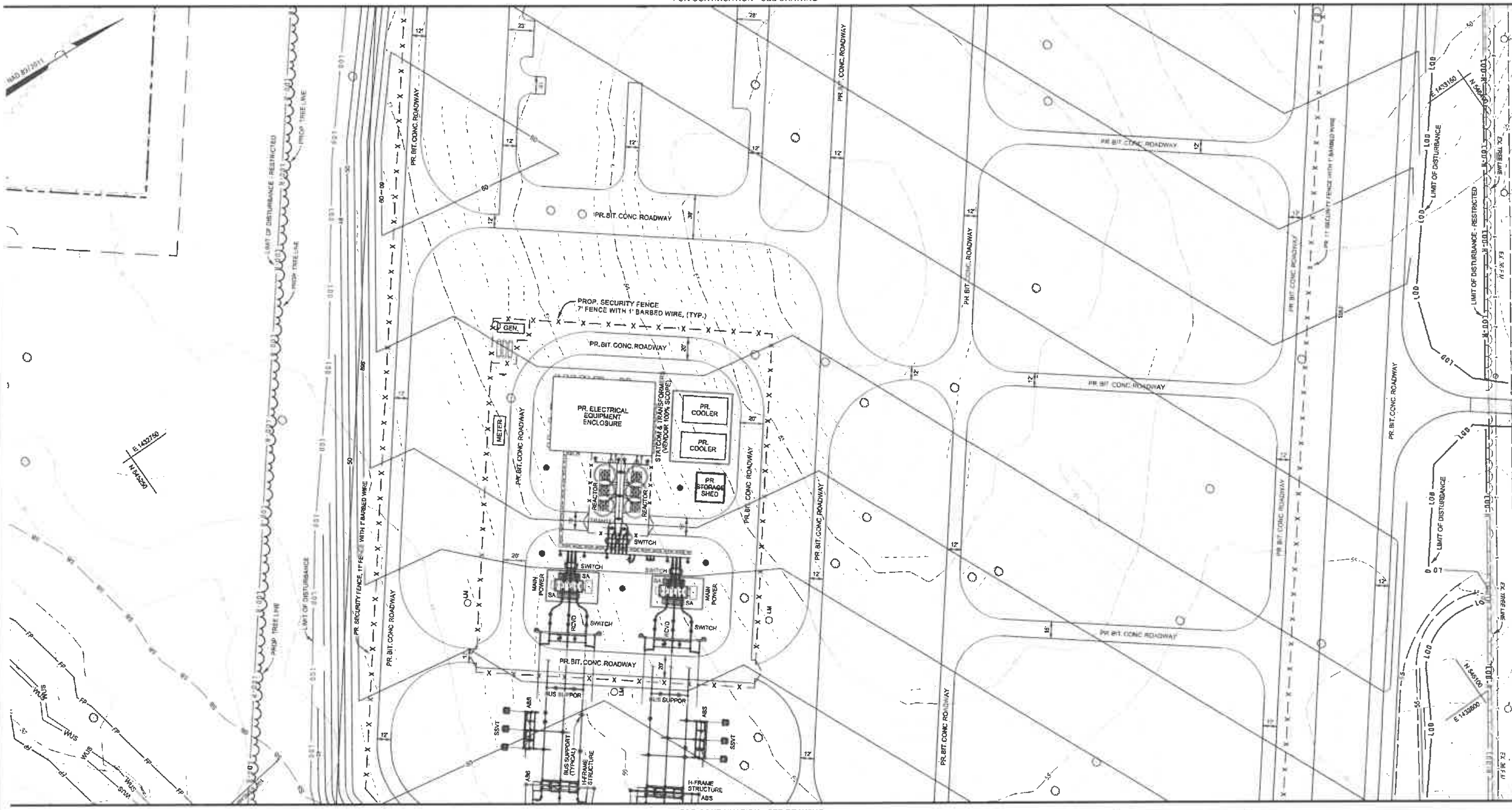
MARLEY NECK SUBSTATION

ELECTRIC SUBSTATION ENGINEERING

bge

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: 443.589.2400
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 B - SOUTH BOLLEY ROAD
GLEN BURNIE, ANNE ARUNDEL COUNTY, MD 21060
TAX MAP: 10 PARCEL: 397
115kV SUBSTATION

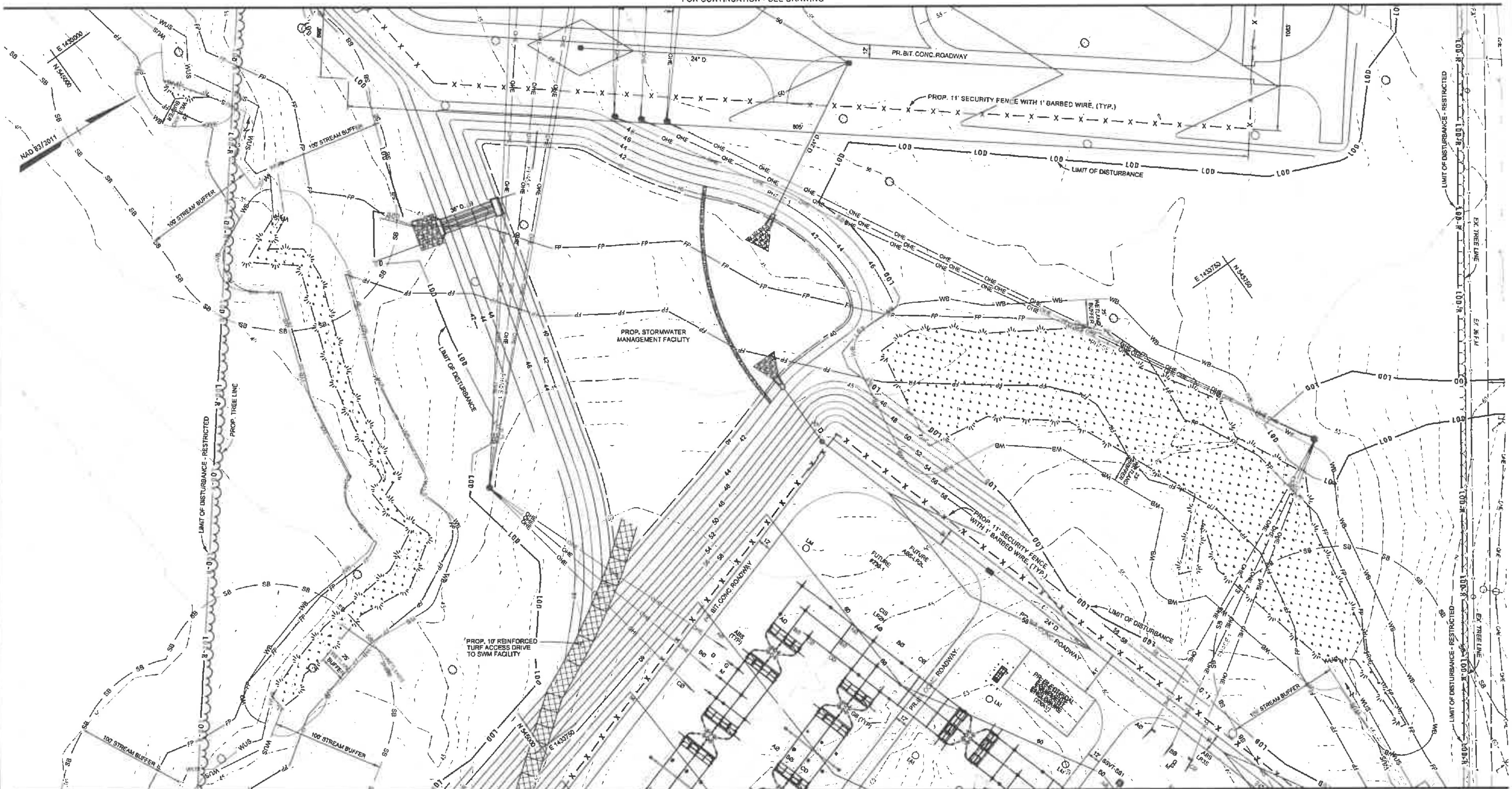
MARLEY NECK SUBSTATION

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: 443.589.2400
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 B - SOUTH SOLLEY ROAD
GLEN BURNIE, ANNE ARUNDEL COUNTY, MD 21060
TAX MAP: 10 PARCEL: 397
115kV SUBSTATION

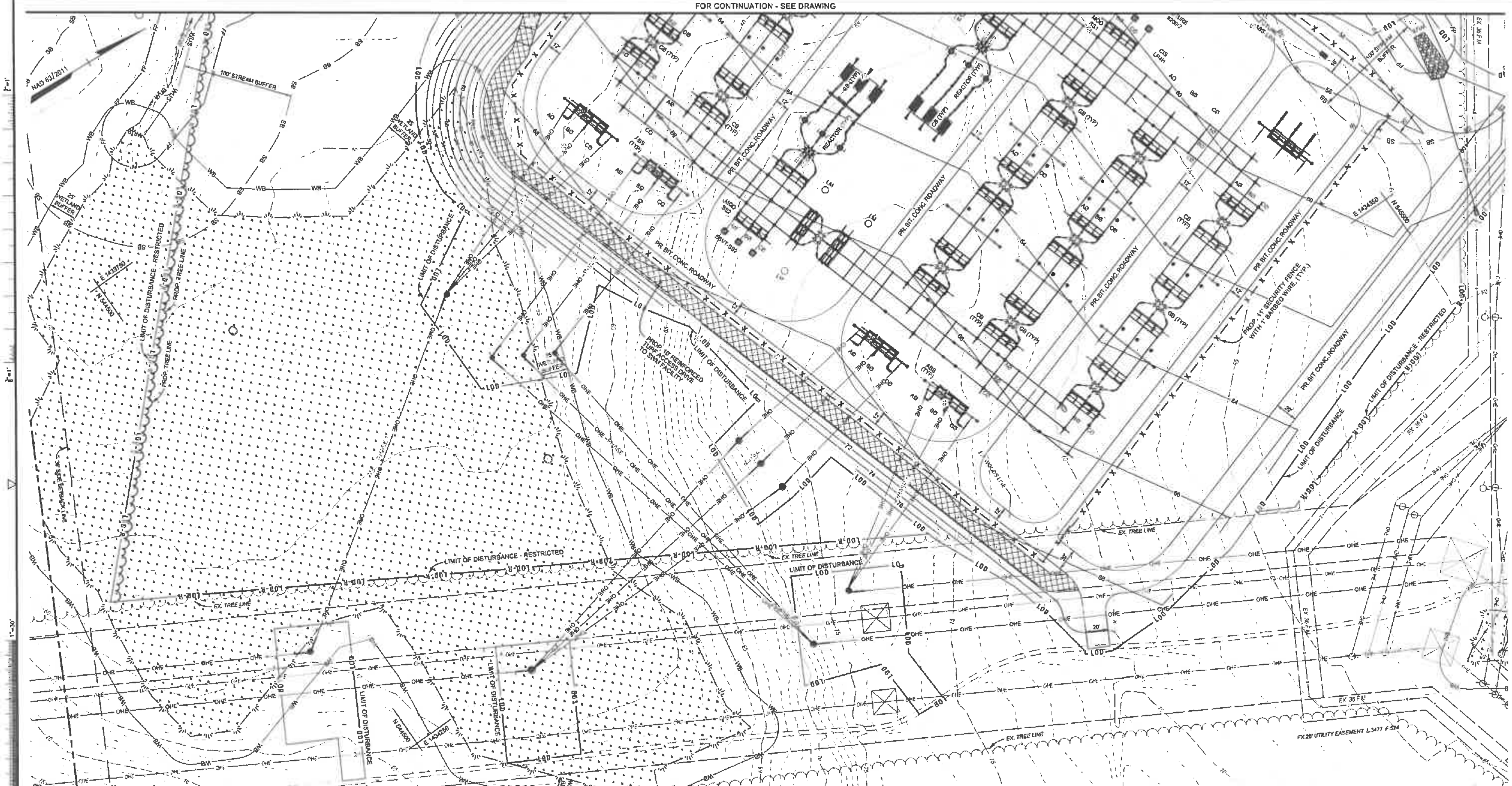
MARLEY NECK/SOLLEY SUBSTATION

ELECTRIC SUBSTATION ENGINEERING

bge

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

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: 443.589.2400
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 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

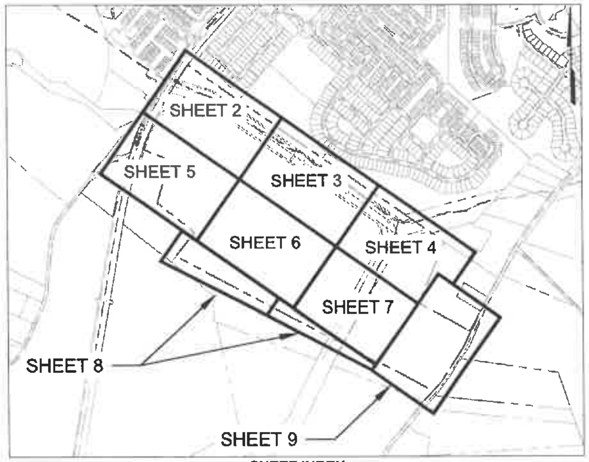
SCALE: 1"=40'
DWG. NO. SDP-XX
REV. B

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

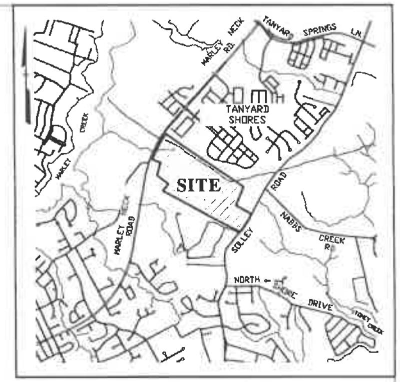
ANNE ARUNDEL COUNTY TAX MAP 10, BLOCK N/A, PARCEL 397
3RD TAX DISTRICT, ANNE ARUNDEL COUNTY, MARYLAND
ZONED: W1 (INDUSTRIAL PARK) ZIP CODE: 21060

SPECIMEN TREE TABLE (30"+ DBH)

Tree Number	Species	Scientific Name	DBH (inches)	Condition
1	White Oak	*Quercus alba*	36.5	Good
2	White Oak	*Quercus 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	*Quercus 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, 115.29 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

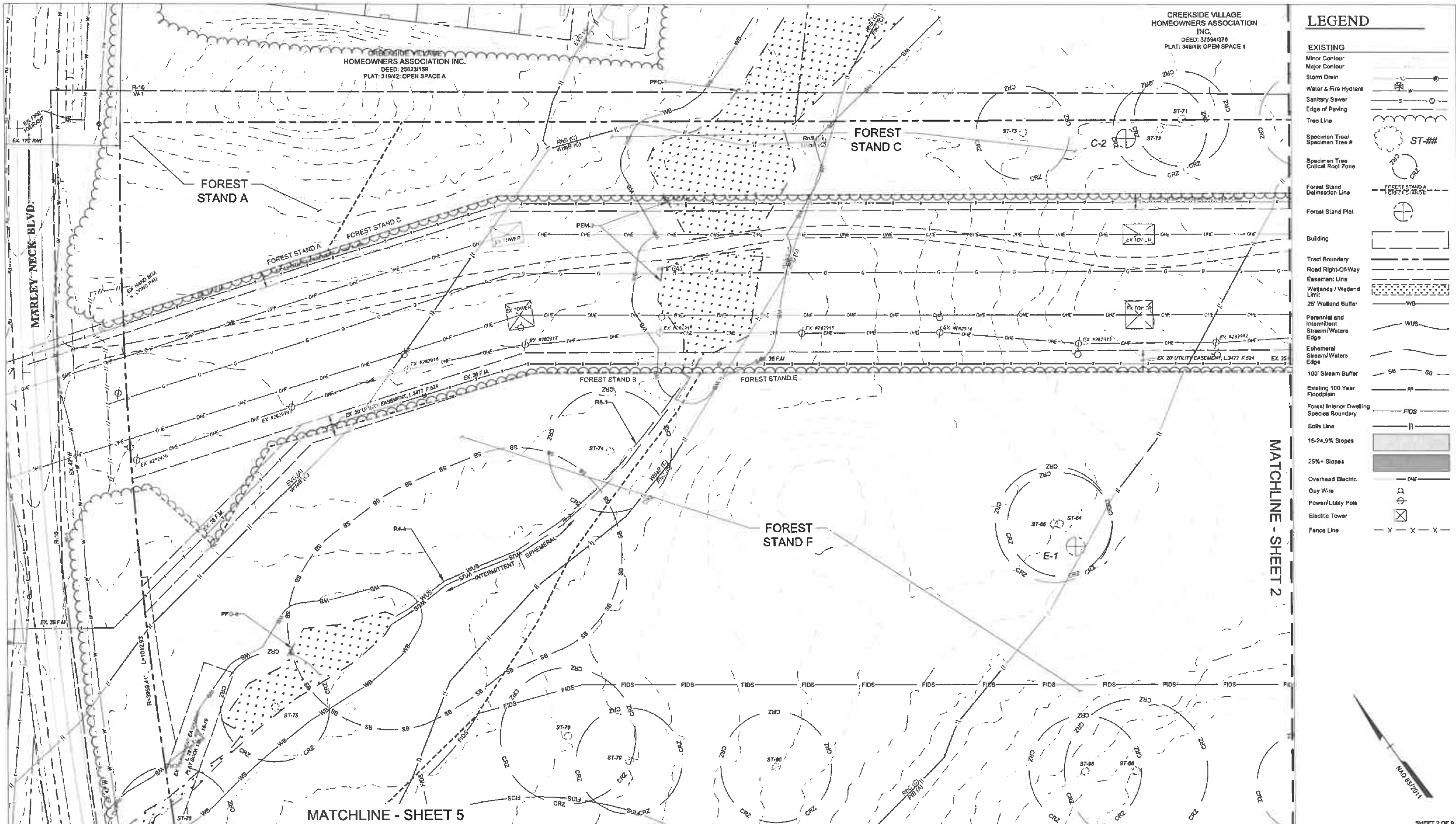
KLEINFELDER
Bright People. Right Solutions.
10710 Gilroy Road
Hunt Valley, Maryland 21031
Phone: 443.589.2400
Project No. 2500798.008A

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 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\24003651.001A BGE Solley Road Substation



SHEET 2 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. 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

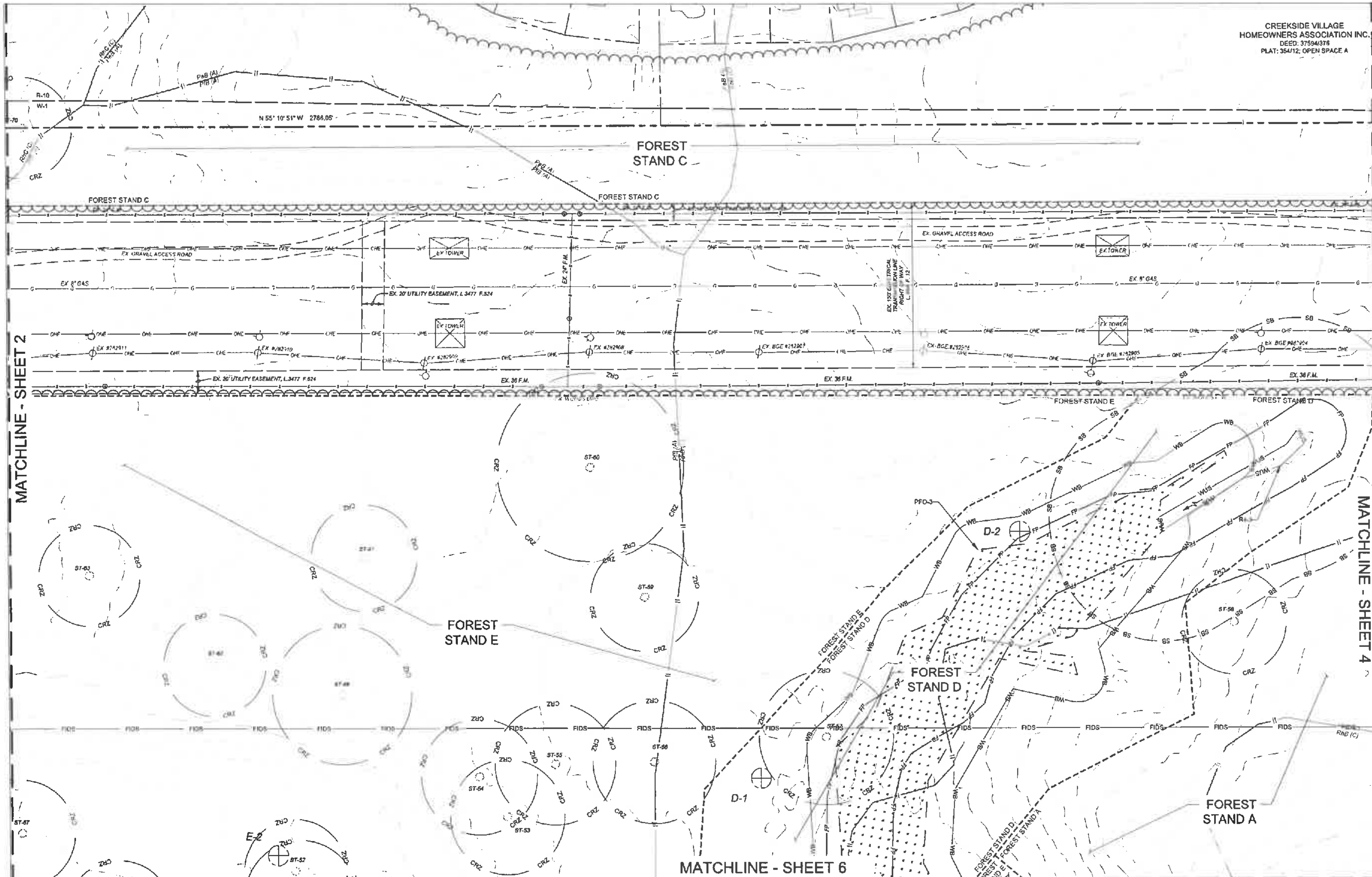
FOREST STAND DELINEATION PLAN

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

SOLLEY ROAD SUBSTATION

ELECTRIC SUBSTATION ENGINEERING

bge
SCALE 1" = 40'
DWG. NO. FSD-02
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 — 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
- Guy Wire
- Power/Utility Pole
- Electric Tower
- Fence Line — X

SHEET 3 OF 9

FOREST STAND E

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

DESIGN GROUP
DESIGNED ____
DRAWN ____
CHECKED ____
APPROVED ____
DATE ____

FOREST STAND DELINEATION PLAN

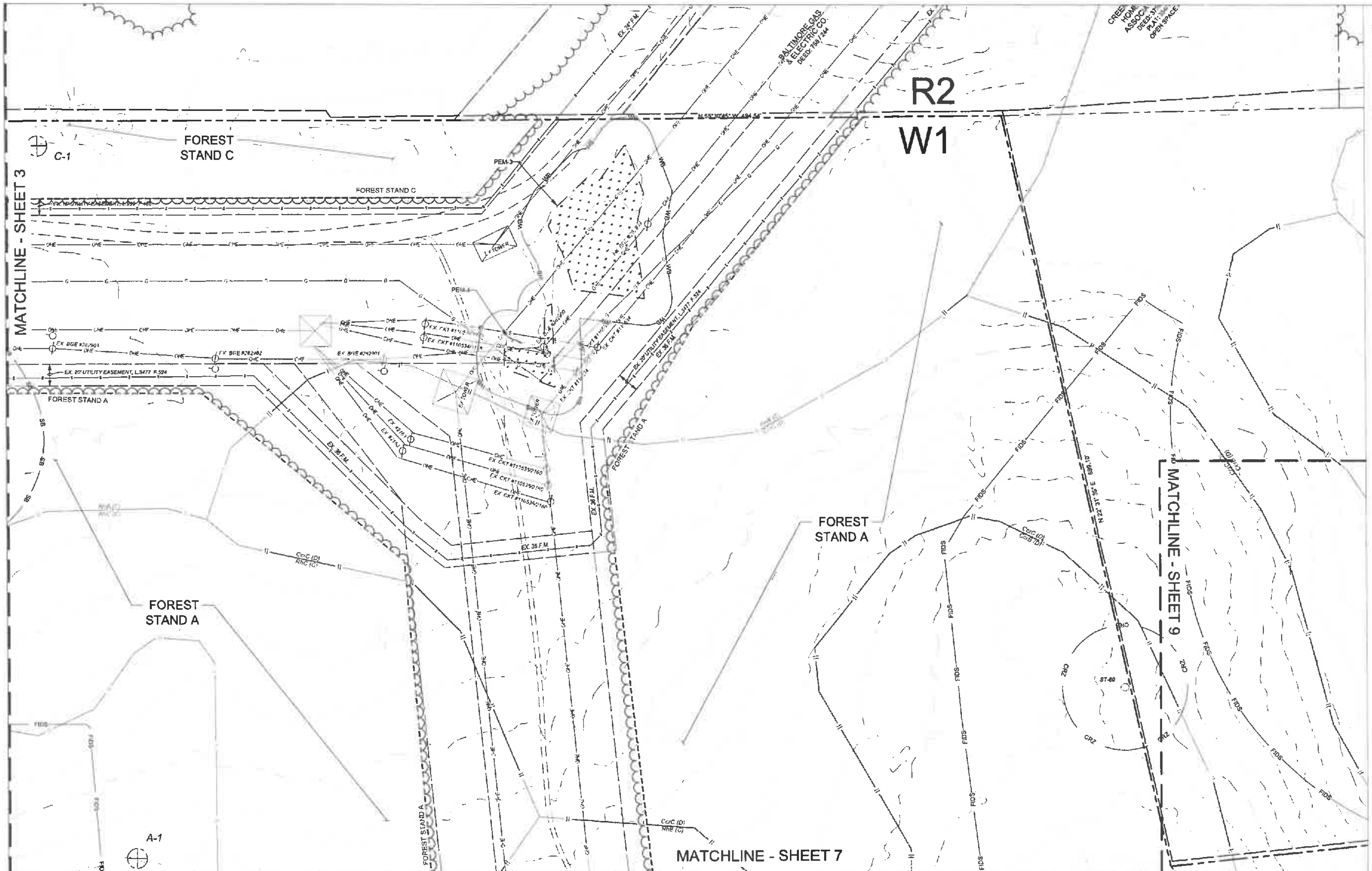
ZONING W1
TAX MAP 10 - PARCEL 397
ANNE ARUNDEL COUNTY, MARYLAND

SOLLEY ROAD SUBSTATION

ELECTRIC SUBSTATION ENGINEERING

bge

SCALE: 1" = 40'
DWG NO. FSD-03
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
- 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 4 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

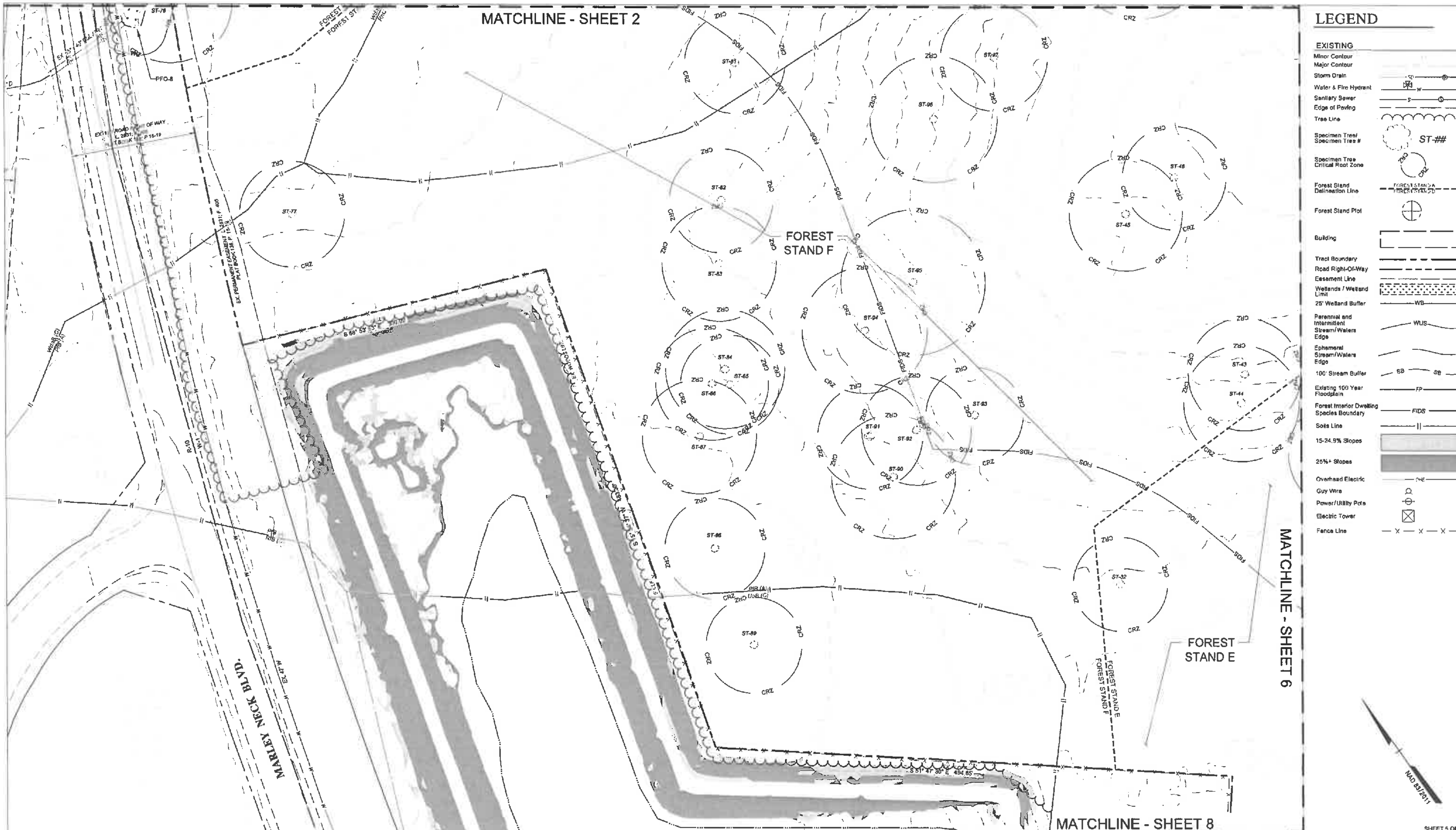
FOREST STAND DELINEATION PLAN

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

SOLLEY ROAD SUBSTATION

ELECTRIC SUBSTATION ENGINEERING

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



SHEET 5 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. 2500796.006A

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

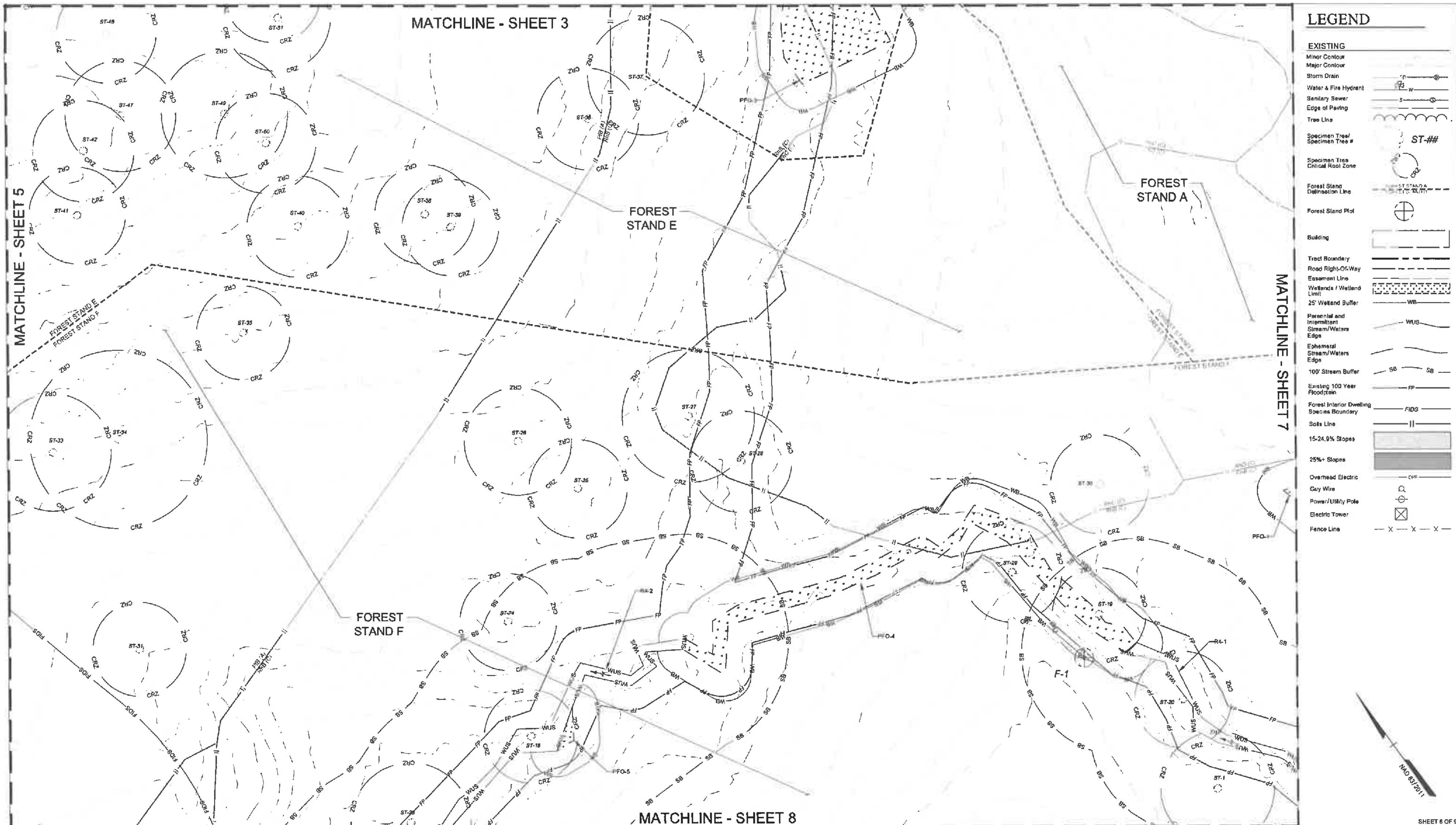
FOREST STAND DELINEATION PLAN

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

SOLLEY ROAD SUBSTATION

ELECTRIC SUBSTATION ENGINEERING

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



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

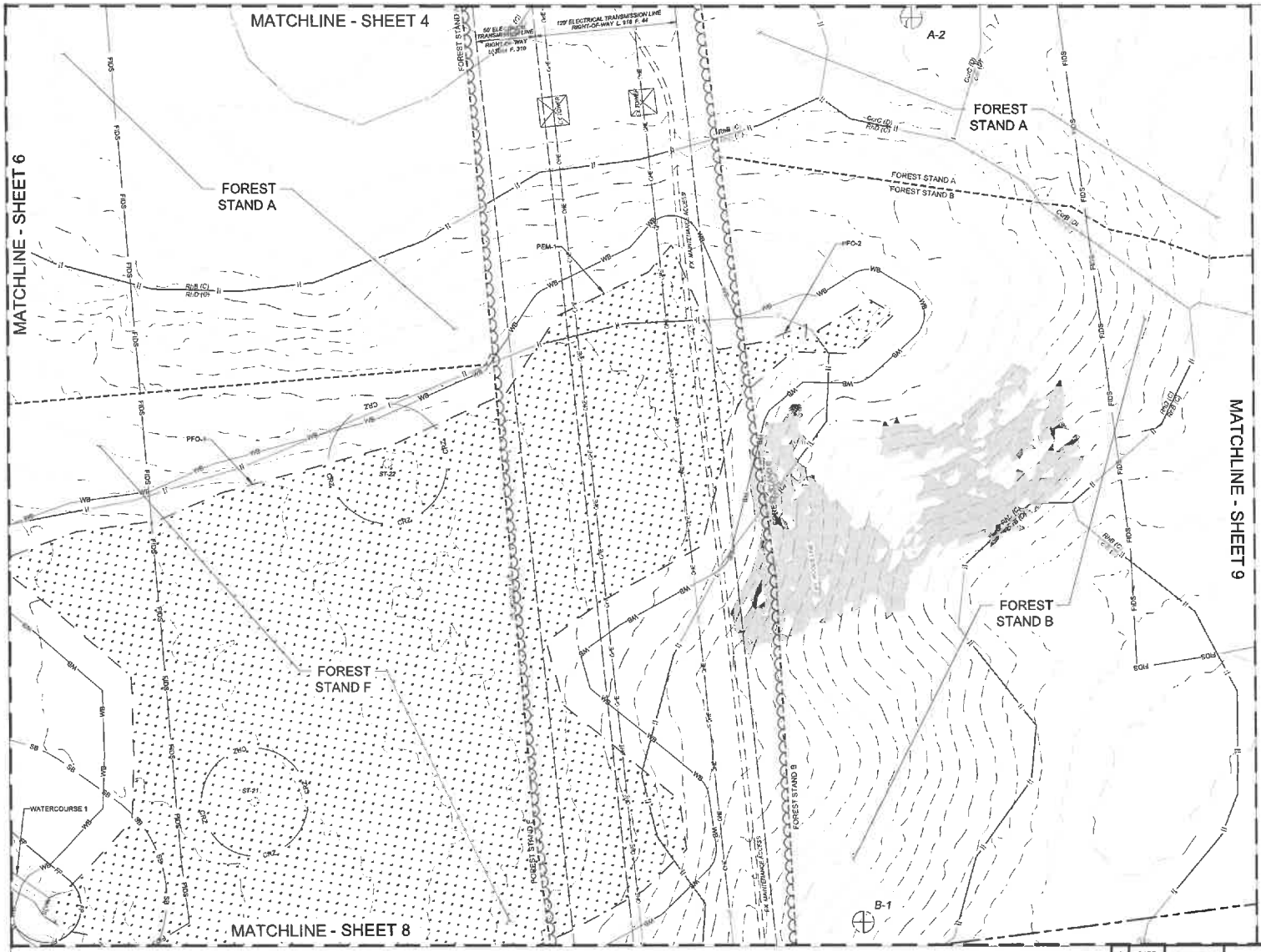
bge
SCALE: 1" = 40'
DWG NO. FSD-06
REV.

MARYLAND DEPARTMENT OF NATURAL RESOURCES, QUALIFIED PROFESSIONAL
KLEINFELDER 443-585-2400
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



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
- Forest Stand Plot
- 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
- Forest Interior Dwelling Species Boundary
- Soils Line
- 15-24.9% Slopes
- 25%+ Slopes
- Overhead Electric
- Guy Wire
- Power/Utility Pole
- Electric Tower
- Fence Line

NAD 83/2011

SHEET 7 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' — REV. — DWG. NO. FSD-07

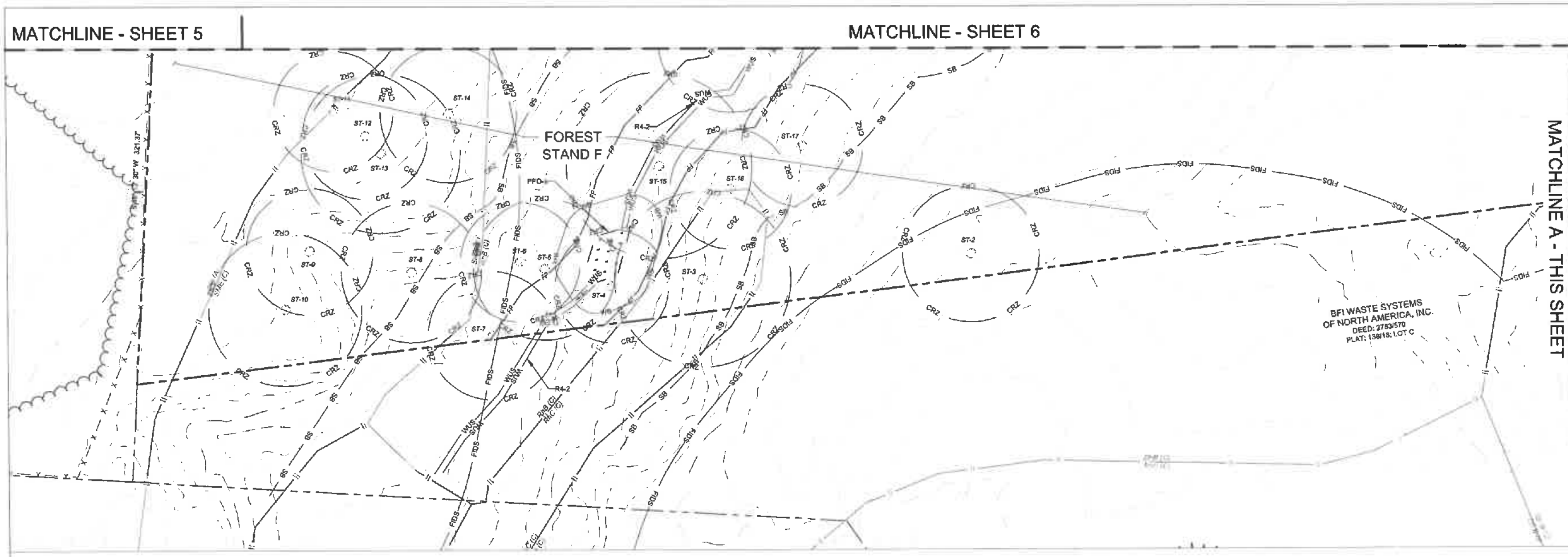
MARYLAND DEPARTMENT OF NATURAL RESOURCES, QUALIFIED PROFESSIONAL
KLEINFELDER
DANIEL YEAGER
443-589-2400

SIGNATURE

3/6/2025
DATE

KLEINFELDER
Bright People. Right Solutions.
10710 Gilroy Road
Hunt Valley, Maryland 21031
Phone: 443.589.2400
Project No. 250079B.008A

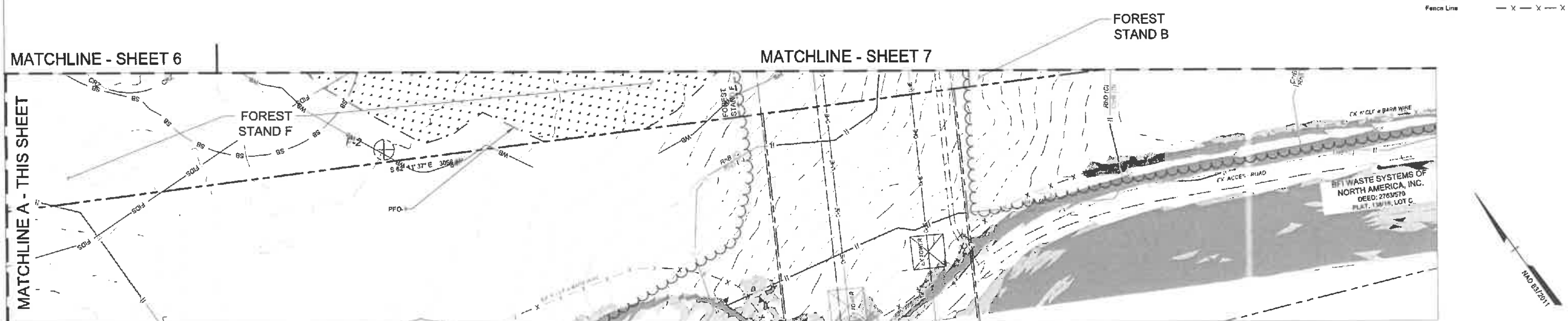
C:\Users\vstrawn\Documents\Local\Temp\AcPublish_12140\Solley Road Substation FSD Plan Sheet.dwg Mar 07, 2025 11:10am vstrawn



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
- Forest Stand Plot
- 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
- Forest Interior Dwelling Species Boundary
- Soils Line
- 15-24.9% Slopes
- 25%+ Slopes
- Overhead Electric
- Guy Wire
- Power/Utility Pole
- Electric Tower
- Fence Line



SHEET 8 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
CIVL
ELEC.
PROJ. ENG.
PROJ. MGR
PRIN. ENG.
SUPV. ENG

DESIGN GROUP
DESIGNED
DRAWN
CHECKED
APPROVED
DATE

FOREST STAND DELINEATION PLAN

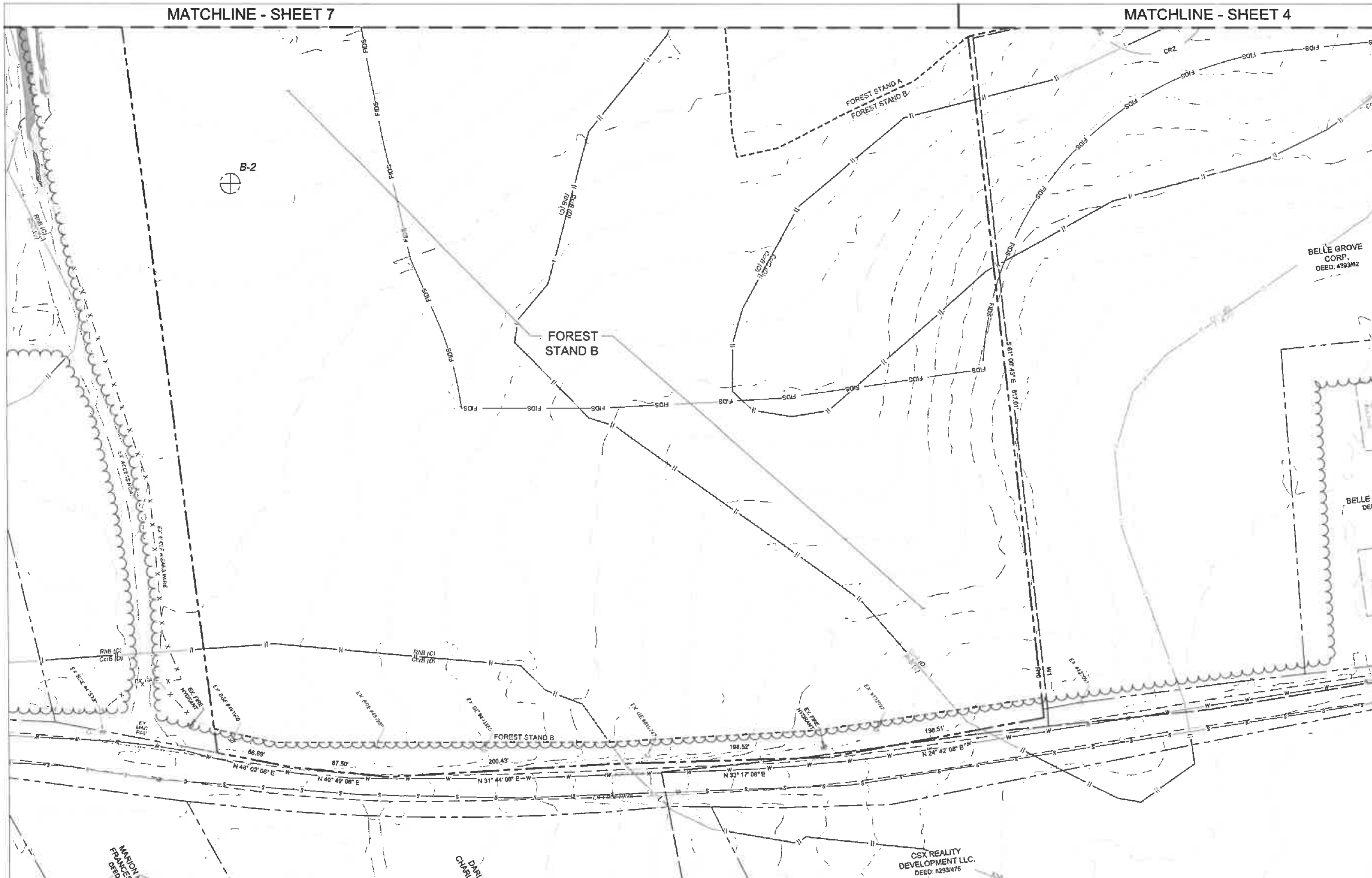
ZONING W1
TAX MAP 10 - PARCEL 397
ANNE ARUNDEL COUNTY, MARYLAND

SOLLEY ROAD SUBSTATION

ELECTRIC SUBSTATION ENGINEERING

bge AN EXELON COMPANY

SCALE: 1" = 40'
DWG NO FSD-08
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 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

SHEET 9 OF 9

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

SIGNATURE 3/5/2025 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

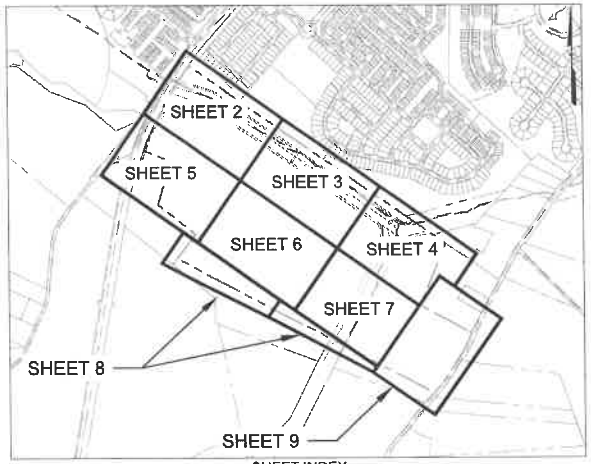
SCALE: 1" = 40'
DWG. NO. FSD-09
REV.

SOLLEY ROAD SUBSTATION
FOREST CONSERVATION PLAN
ANNE ARUNDEL COUNTY, MD

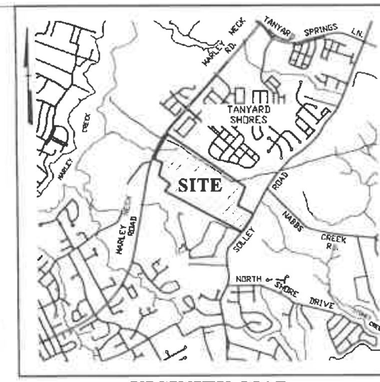
ANNE ARUNDEL COUNTY TAX MAP 10, BLOCK N/A, PARCEL 397
3RD TAX DISTRICT, ANNE ARUNDEL COUNTY, MARYLAND
ZONED: W1 (INDUSTRIAL PARK) ZIP CODE: 21060

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	Good	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'



VICINITY MAP
SCALE: 1"=2000'

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:

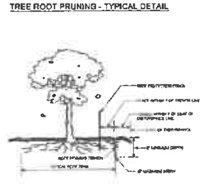
1. ALL EFFORTS TO MINIMIZE THE AREA OF DISTURBANCE WILL BE MADE.
2. 1.2 AC OF TREE PLANTING (REFORESTATION) IS REQUIRED PER THE FOREST CONSERVATION WORKSHEET. OPTIONS TO ADDRESS THIS REQUIREMENT ARE CURRENTLY BEING EXPLORED. WHEN DETERMINED THIS FCP WILL BE UPDATED.
3. SIXTY-NINE SPECIMEN TREES ARE PROPOSED 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.

FCE Summary Table	
FCE 1	18.14 AC
FCE2	5.08 AC
FCE3	24.59 AC

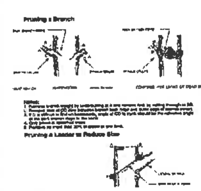
FOREST CONSERVATION WORKSHEET

Variables	Unique Tract 1
Site Information	
A. Growth Management 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. Impervious 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	54.9
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 value table	Priority Funding AreaIndustrialNo
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 = ((0.3333) 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 (0.25). If not, then (P) = (G) X (0.25)	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).	26.2
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) = ((G) - (L)) X 2	0.0
S. Total Reforestation Required = (P) + (R) - (Q)	1.2
T. Afforestation Threshold Area = (H) X (J)	15.6
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 for Tract = (S) + (U)	1.2

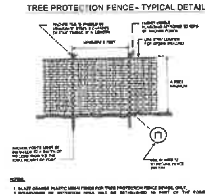
TREE ROOT PRUNING - TYPICAL DETAIL



TREE PRUNING - TYPICAL DETAIL



TREE PROTECTION FENCE - TYPICAL DETAIL



SHEET 1 OF 9

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

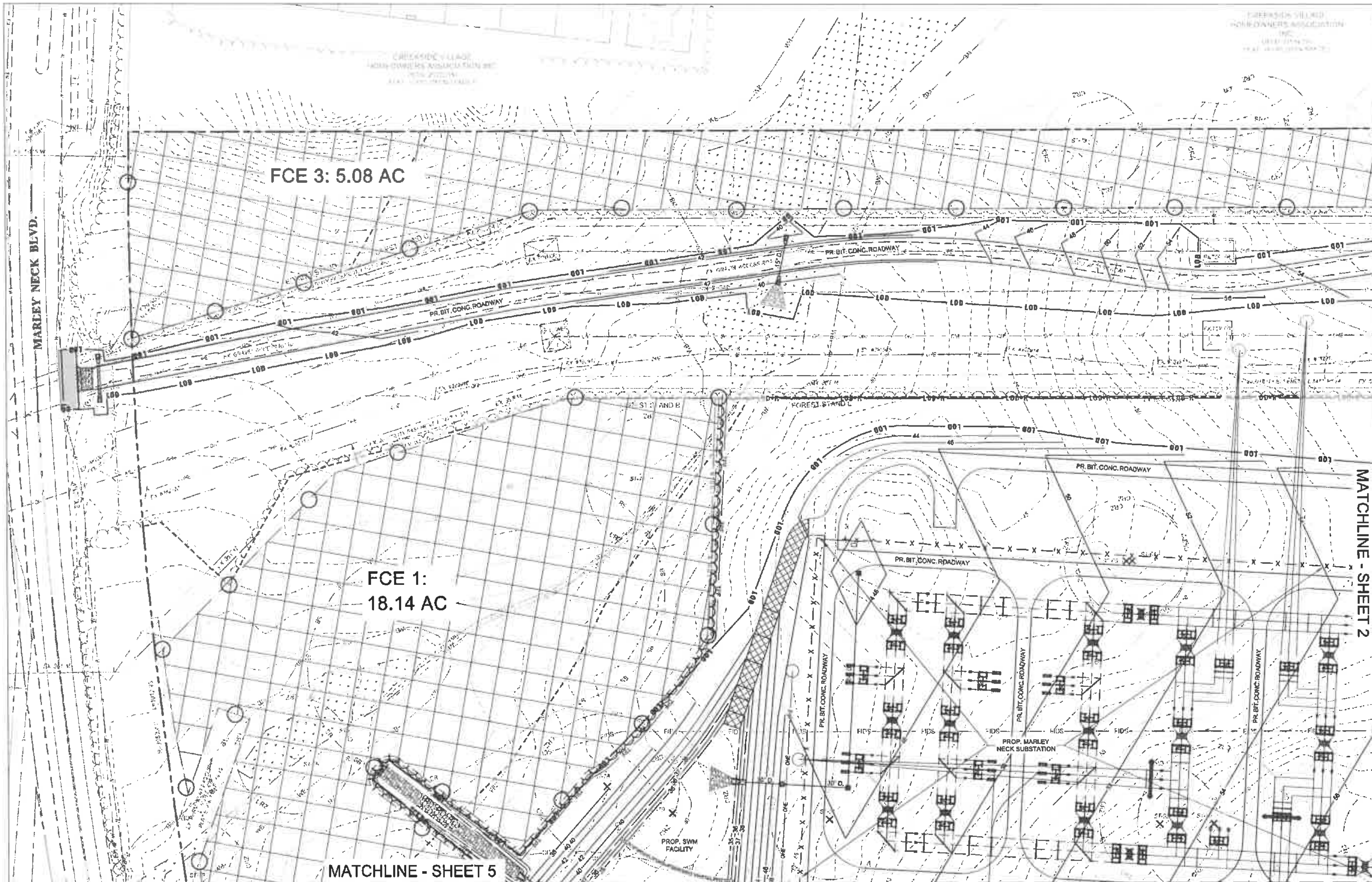
SOLLEY ROAD SUBSTATION

ELECTRIC SUBSTATION ENGINEERING

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

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



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 2 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.
10719 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

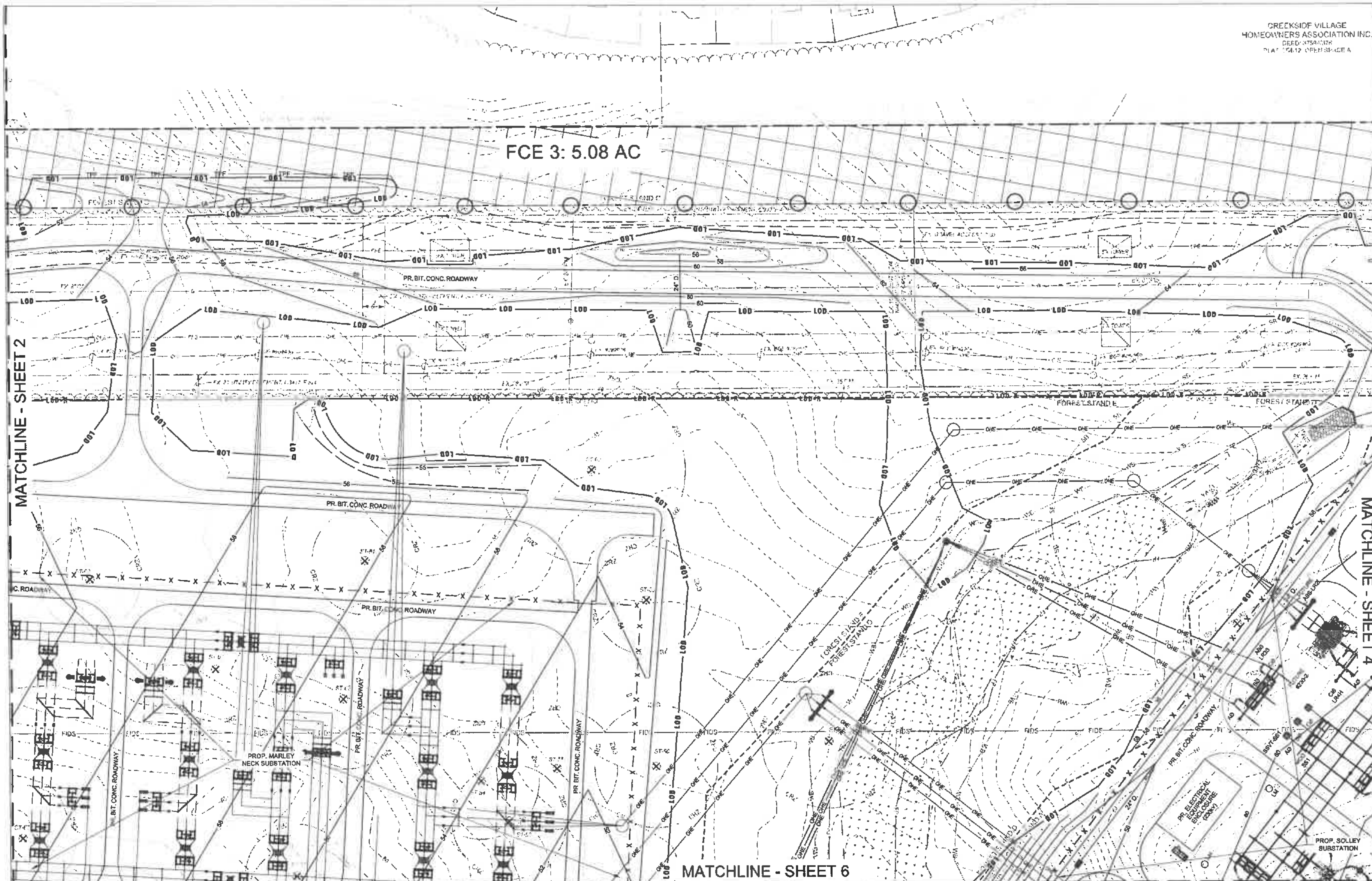
FOREST CONSERVATION PLAN

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

SOLLEY ROAD SUBSTATION

ELECTRIC SUBSTATION ENGINEERING

bge | SCALE: 1" = 40' | DWG NO. FCP-02 | 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 — WUS
- Ephemeral Stream/Waters Edge
- 100' Stream Buffer — SB
- Existing 100 Year Floodplain
- Overhead Electric
- Forest Interior Dwelling Species Boundary — FIDS
- 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 3 OF 9

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

[signature]
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

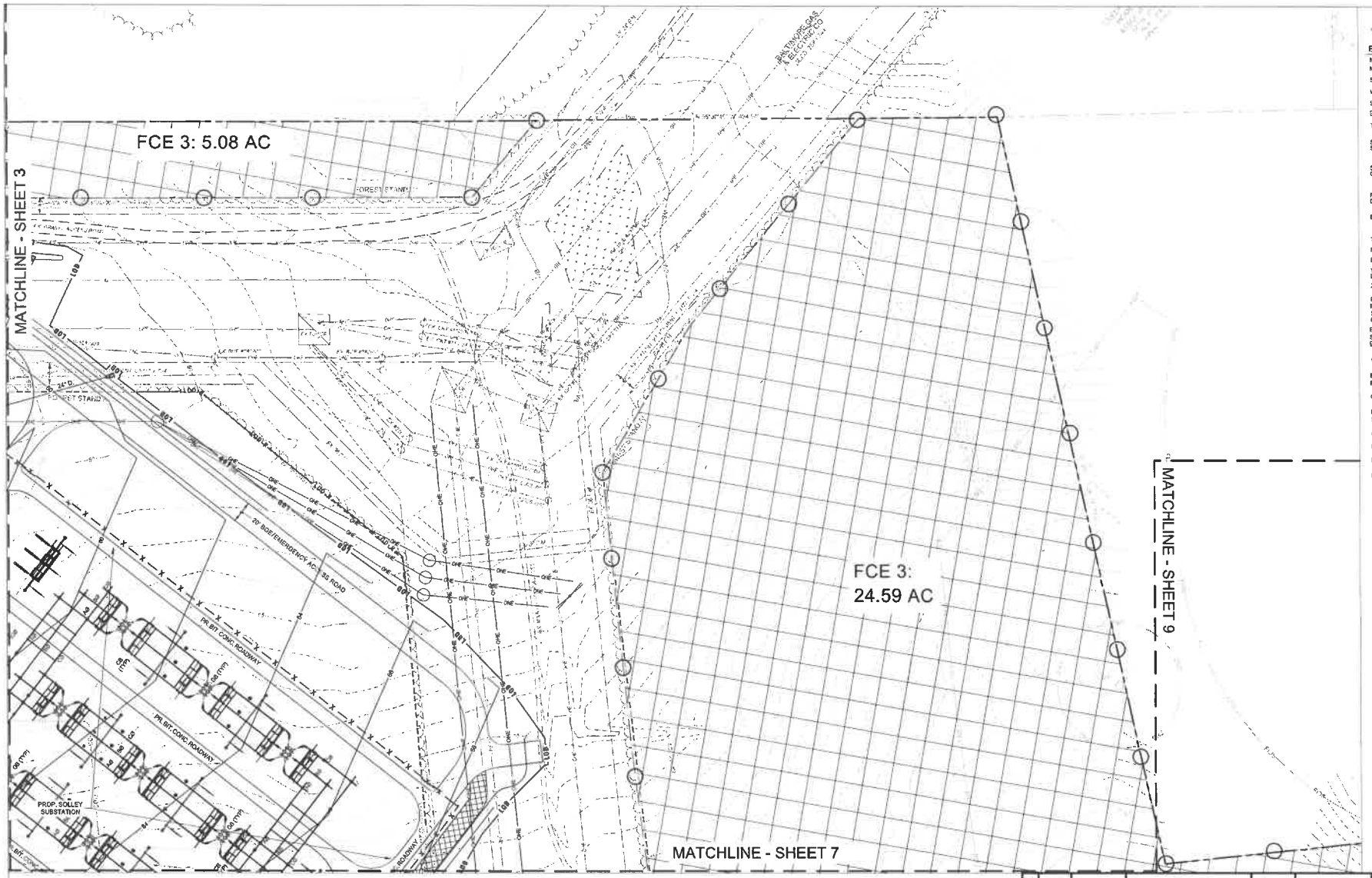
SOLLEY ROAD SUBSTATION

ELECTRIC SUBSTATION ENGINEERING

bge

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

T:\2024\Facilities\24003651.001A BGE Solley Road Substation (RGB)\Civil\CADD\Natural Resources\Solley Road Substation FCP Sheets.dwg Mar 19, 2025 11:43am 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: X
- Tree Protection Fence: TPF
- Tree Root Pruning: RP
- Proposed Forest Conservation Easement
- Proposed Forest Conservation Sign

SHEET 4 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

MARYLAND DEPARTMENT OF NATURAL RESOURCES, QUALIFIED PROFESSIONAL
KLEINFELDER 443-569-2400
DANIEL YEAGER
SIGNATURE
3/6/2025
DATE

KLEINFELDER
Bright People. Right Solutions.
10710 Gilroy Road
Hunt Valley, Maryland 21031
Phone. 443.569.2400

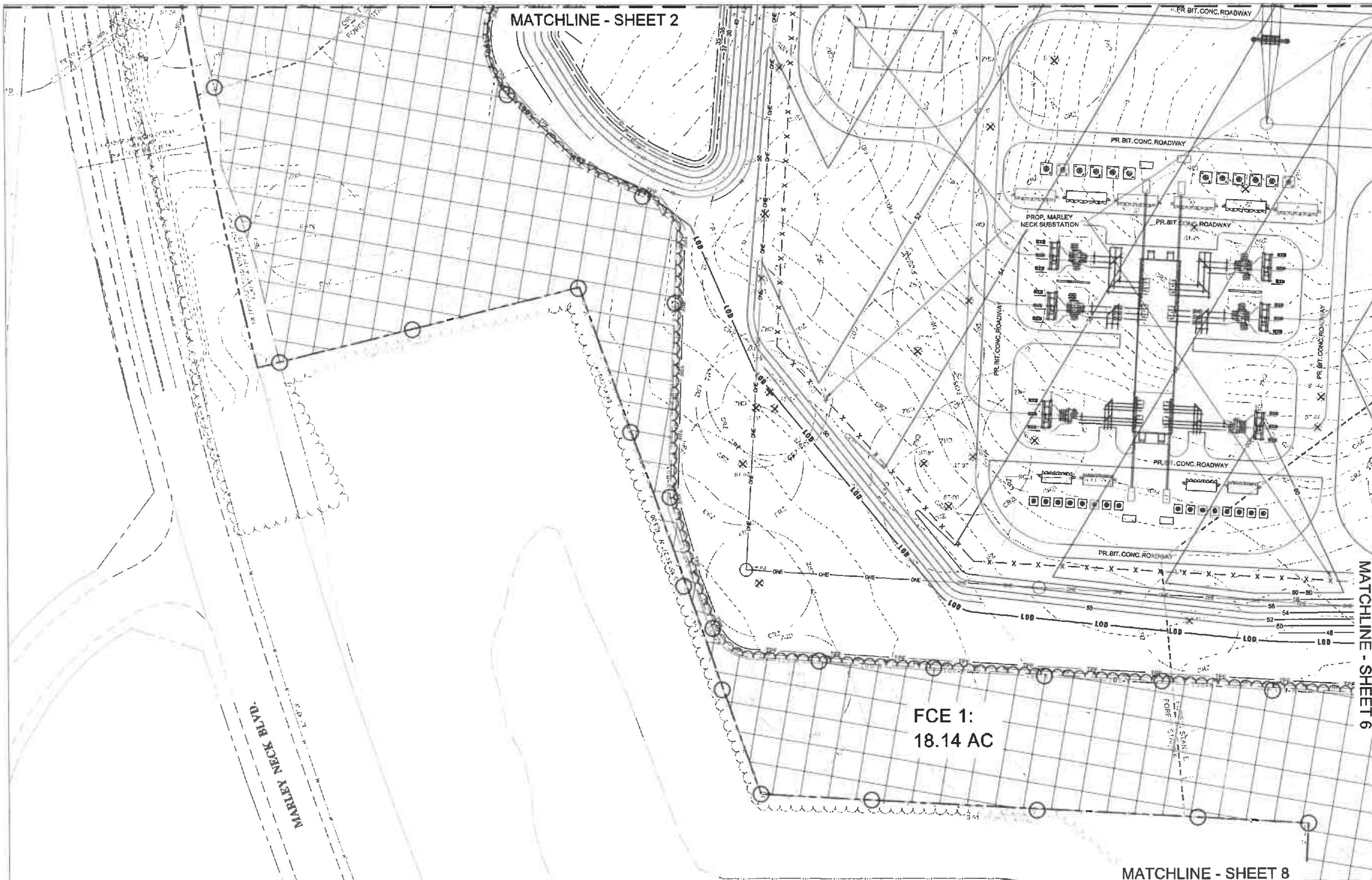
FOREST CONSERVATION PLAN

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

SOLLEY ROAD SUBSTATION
ELECTRIC SUBSTATION ENGINEERING

bge
SCALE: 1" = 47'
DWG NO. FCP-04
REV.

T:\2024\Projects\240035301.001A BGE Solley Road Substation (005B)\Civil\CADD\Natural Resources\Solley Road Substation FCP Sheets.dwg Mar 18, 2025 11:44am 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 — ×
- Tree Protection Fence — TPF
- Tree Root Pruning — RP
- Proposed Forest Conservation Easement
- Proposed Forest Conservation Sign

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

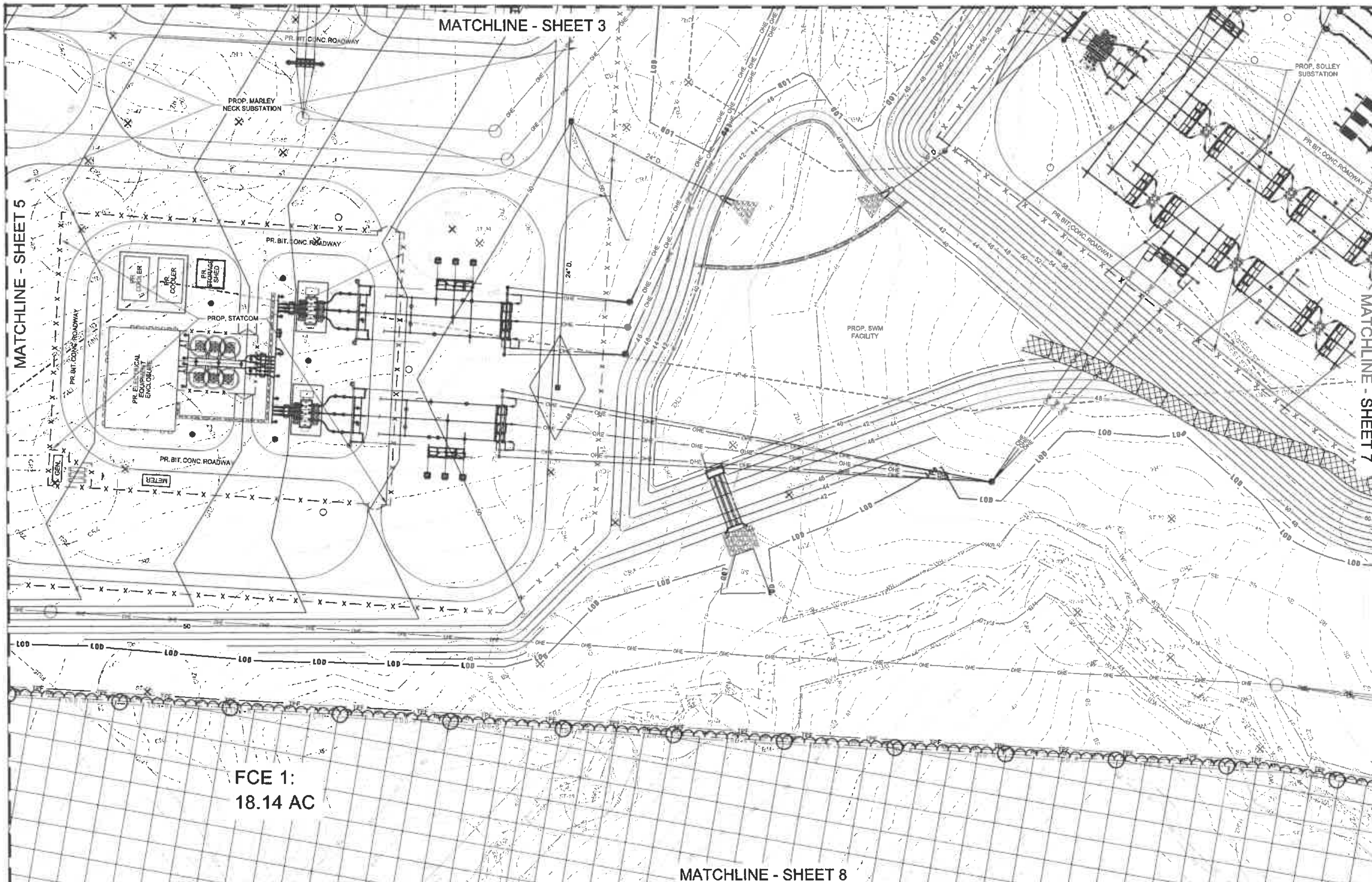
REV	DATE	ACCOUNT NO.	DESCRIPTION	APPROVED
				PREP
				REVD
				APVD

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-05



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 — FIDS
- 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 6 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. 2500796.006A

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-06 | REV.

T:\2024\Facilities\24003851.001A BGE Solley Road Substation (ROB)\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 #
- 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 — FIDS —
- 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

NAD 83/2011

SHEET 7 OF 9

REV	DATE	ACCOUNT NO.	DESCRIPTION	APPROVED
				PREP
				REVD
				APVD

AUTOCAD

ENGINEERING
CIVIL
ELEC
PROJ. ENG
PROJ. MGR.
PROF. ENG.
SURV ENG.

DESIGN GROUP
DESIGNED
DRAWN
CHECKED
APPROVED
DATE

MARYLAND DEPARTMENT OF NATURAL RESOURCES, QUALIFIED PROFESSIONAL
KLEINFELDER 443-569-2400
DANIEL YEAGER
SIGNATURE
3/6/2025
DATE

KLEINFELDER
Bright People. Right Solutions.
10719 Gilroy Road
Hunt Valley, Maryland 21031
Phone 443.569.2400
Project No. 2500796.008A

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-07

REV.

I:\2024\Facilities\24000851.004A BGE Solley Road Substation (PGE)\CIVIL\CAD\Volume Resources\Solley Road Substation FCP Sheets.dwg Mar 19, 2025 11:30am dyeager

SHEET 8 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		AUTOCAD
				PREP		ENGINEERING
				REVD		CIVIL
				APVD		ELEC.
						PROJ. ENG.
						PROJ. MGR.
						PRIN. ENG.
						SUPV. ENG.
						DESIGN GROUP
						DESIGNED
						DRAWN
						CHECKED
						APPROVED
						DATE

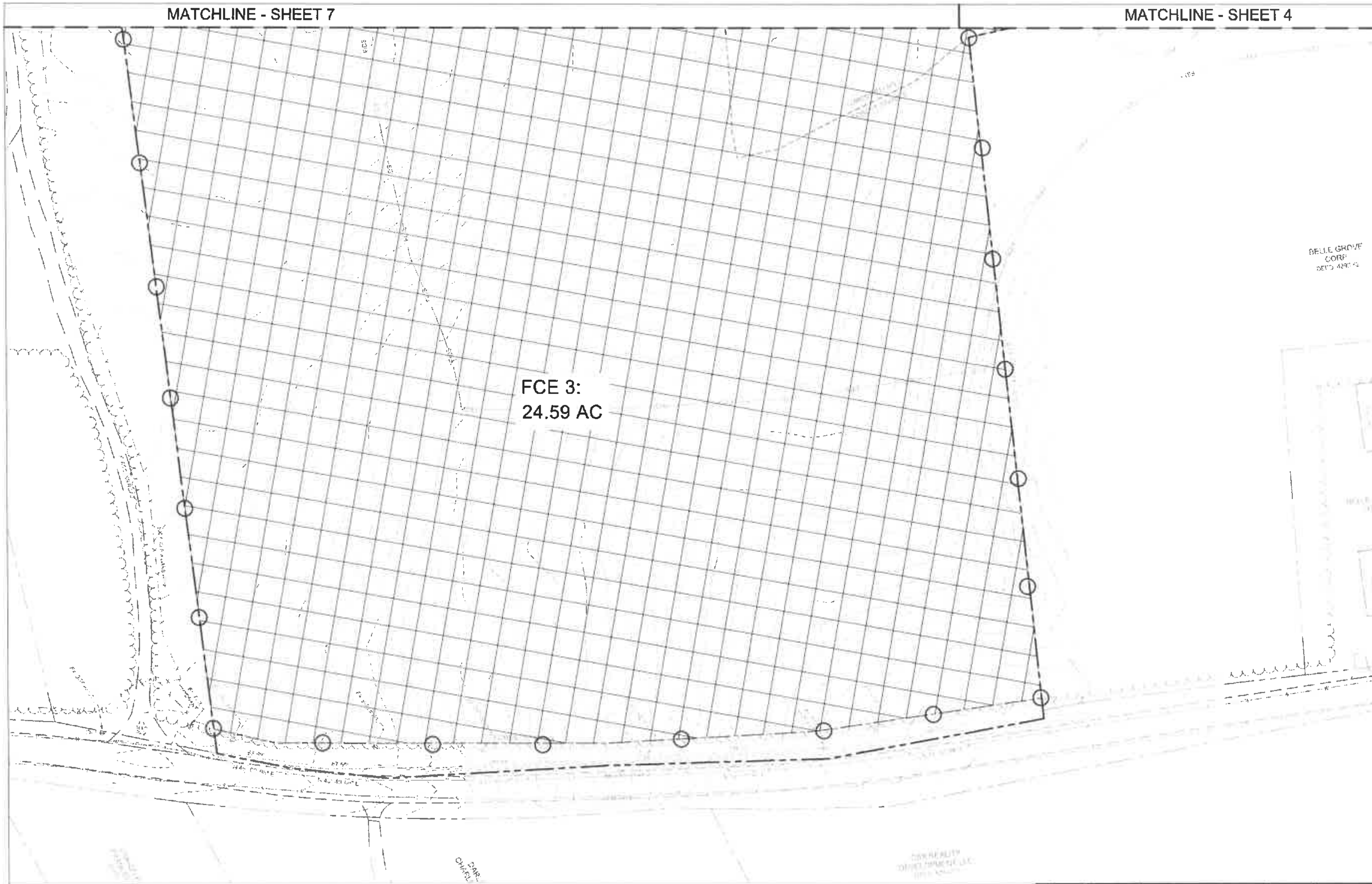
FOREST CONSERVATION PLAN

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

DESIGN GROUP
DESIGNED
DRAWN
CHECKED
APPROVED
DATE

FOREST CONSERVATION PLAN

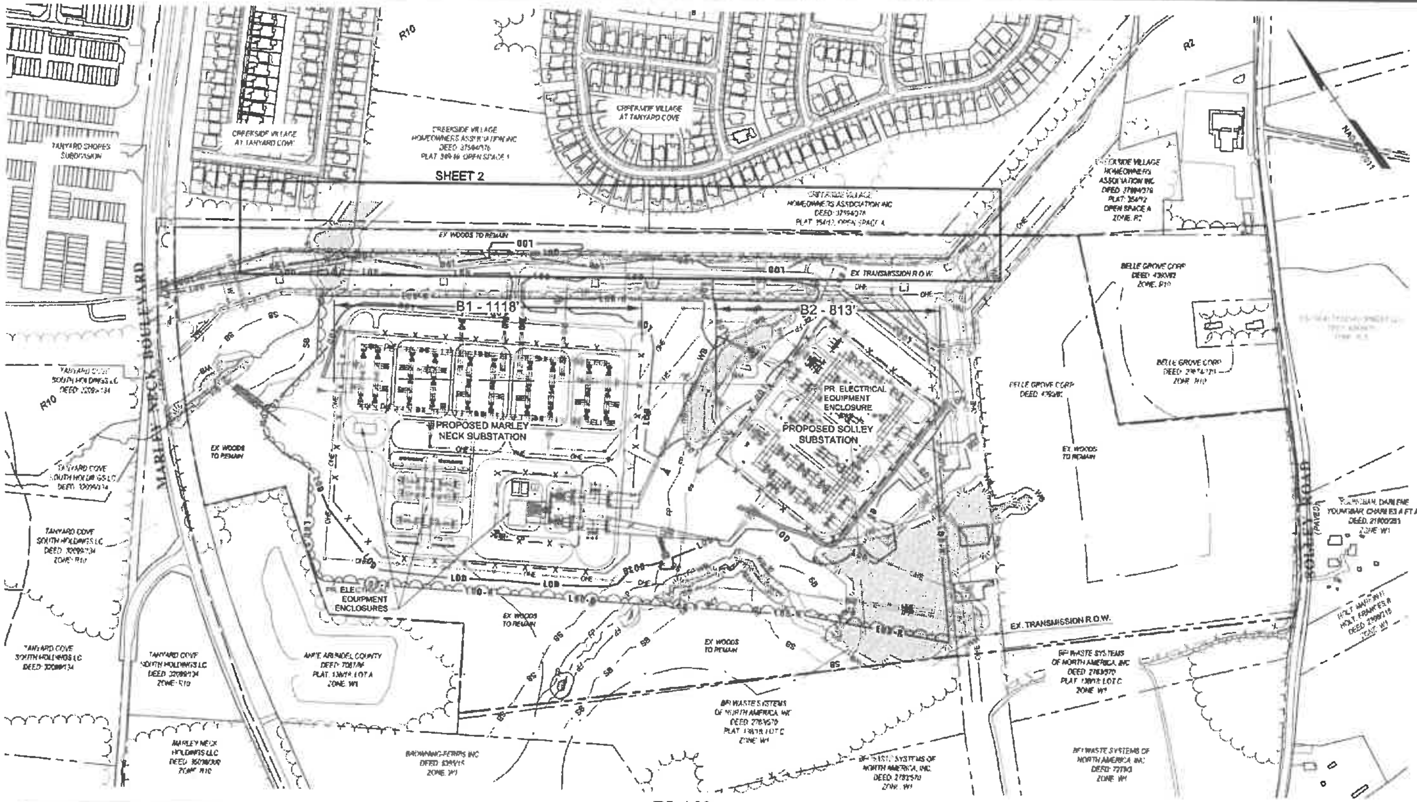
ZONING W1
TAX MAP 10 - PARCEL 397
ANNE ARUNDEL COUNTY, MARYLAND

SOLLEY ROAD SUBSTATION

ELECTRIC SUBSTATION ENGINEERING

bge

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



PLAN

SCALE: 1" = 200'

0 200' 400'

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	155*	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.
10710 Gilroy Road
Hunt Valley, Maryland 21031
Phone: 443 589 2400
Project No. 2600798.006A

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.B.
CHECKED: R.G.B.
APPROVED: ---
DATE: ---

Landscape Plan

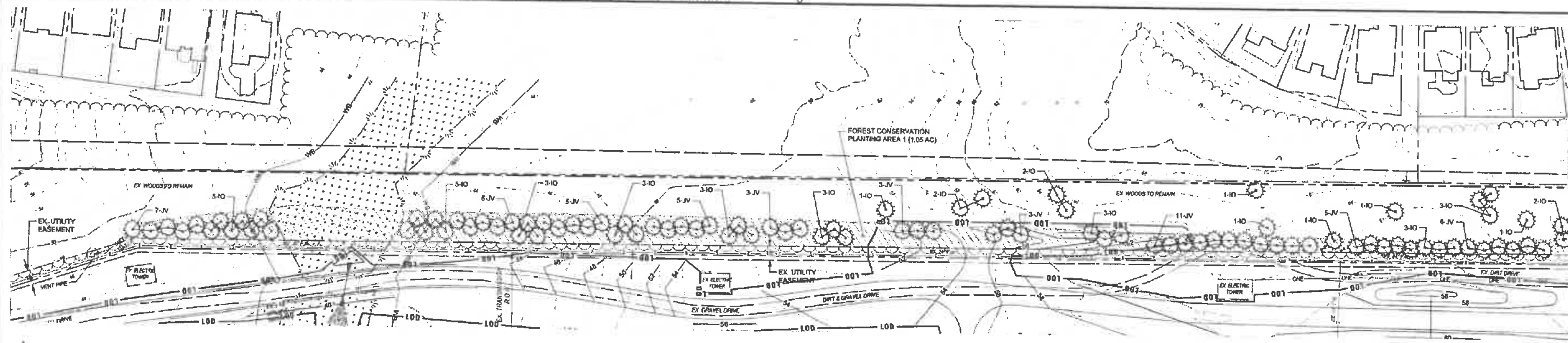
BALTIMORE GAS & ELECTRIC COMPANY
LOT B - SOUTH SOLLEY ROAD
GLEN BURNIE, ANNE ARUNDEL COUNTY, MD 21060
TAX MAP: 10 PARCEL: 397
115kV SUBSTATION

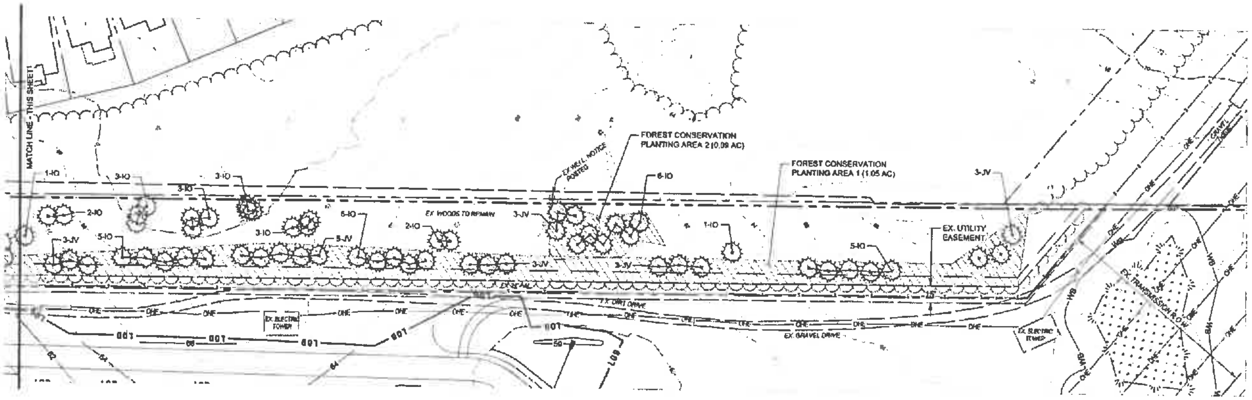
MARLEY NECK - SOLLEY

ELECTRIC SUBSTATION ENGINEERING

bge

SCALE:
DWG. NO. 1 of 3
REV. B



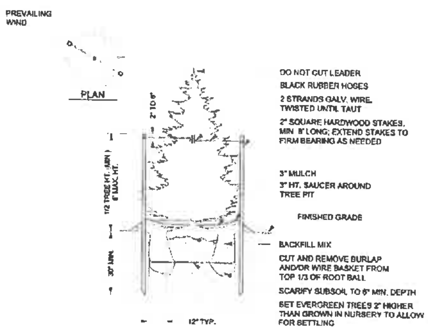


PLAN

SCALE: 1"=50'

0 50' 100'

NAD 83/2011



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 pit prior to plant installation

PLANT LIST - FOREST CONSERVATION

SYM.	KEY	QTY	SCIENTIFIC NAME	COMMON NAME	SIZE	COMMENTS
			EVERGREEN TREES			
(symbol)	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.
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 KLEINFELDER
ELEC.
PROJ. ENG.
PROJ. MGR.
PPM ENG.
SUPV. ENG.

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

Landscape Plan

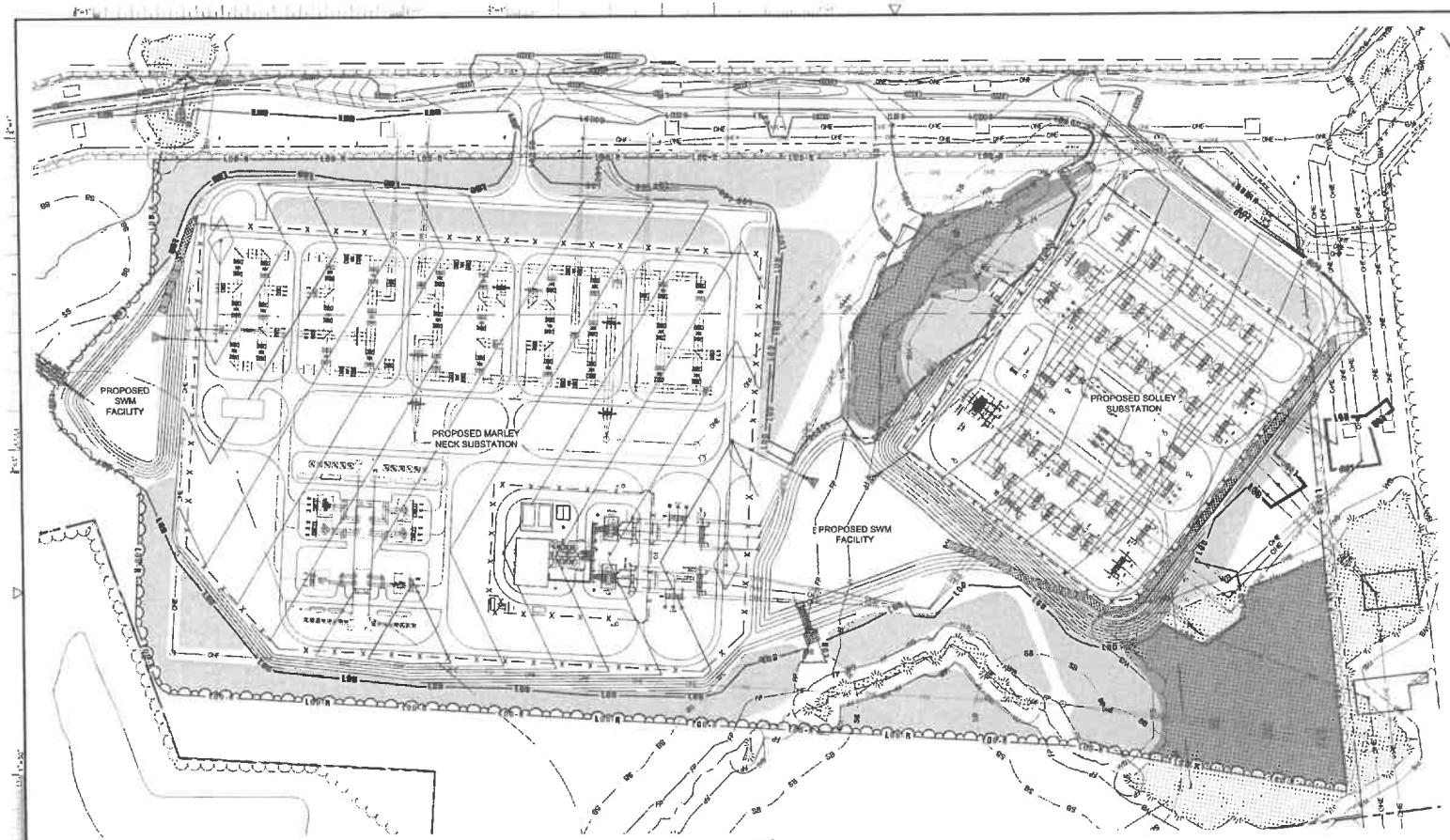
BALTIMORE GAS & ELECTRIC COMPANY
LOT 8 - SOUTH SOLLEY ROAD
GLEN BURNIE, ANNE ARUNDEL COUNTY, MD 21060
TAX MAP: 10 PARCEL: 397
115kV SUBSTATION

MARLEY NECK - SOLLEY

ELECTRIC SUBSTATION ENGINEERING

bge

SCALE: —
DWG. NO. 2 of 3
REV. B



LEGEND

EXISTING

- 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

- Pollinator-Friendly Seed Mix (Upland)
- Pollinator-Friendly Seed Mix (Riparian)
- Pollinator-Friendly Seed Mix (Wetland)

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 wetdeer 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/seeding and at least one year prior to planting/seeding
6. Begin weed suppression in spring and summer, prior to sowing the seed mix. Large-scale weed suppression methods may include Repeated Shallow Cultivation, Boomhoe 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 ¼ to ½ 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, sod mulch, wood chips, sawdust, or wood-based mulches
11. Use erosion control blankets or matting to stabilize seeded areas on steep slopes. Increase the overall seeding rate in these areas to allow for decreased germination. Ensure the matting is well secured to reduce shading. Choose a matting 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 6"-12"

GENERAL NOTES

1. Pollinator friendly seed mix shall be planted within the areas indicated on the plan
2. 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	+/- 486,650 SF (11.16 AC)
Riparian	+/- 34,148 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.
10710 Gilroy Road
Hunt Valley, Maryland 21031
Phone: 443.506.2400
Project No. 2160796.0084

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:

Pollinator Meadow Plan

BALTIMORE GAS & ELECTRIC COMPANY
LOT B - SOUTH SOLLEY ROAD
GLEN BURNIE, ANNE ARUNDEL COUNTY, MD 21060
TAX MAP: 19 PARCEL: 267
115kV SUBSTATION

MARLEY NECK - SOLLEY

ELECTRIC SUBSTATION ENGINEERING

bge

SCALE: --- REV. B

DWG. NO. 3 of 3

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

BGE An Exelon Company

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 [illegible] 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."

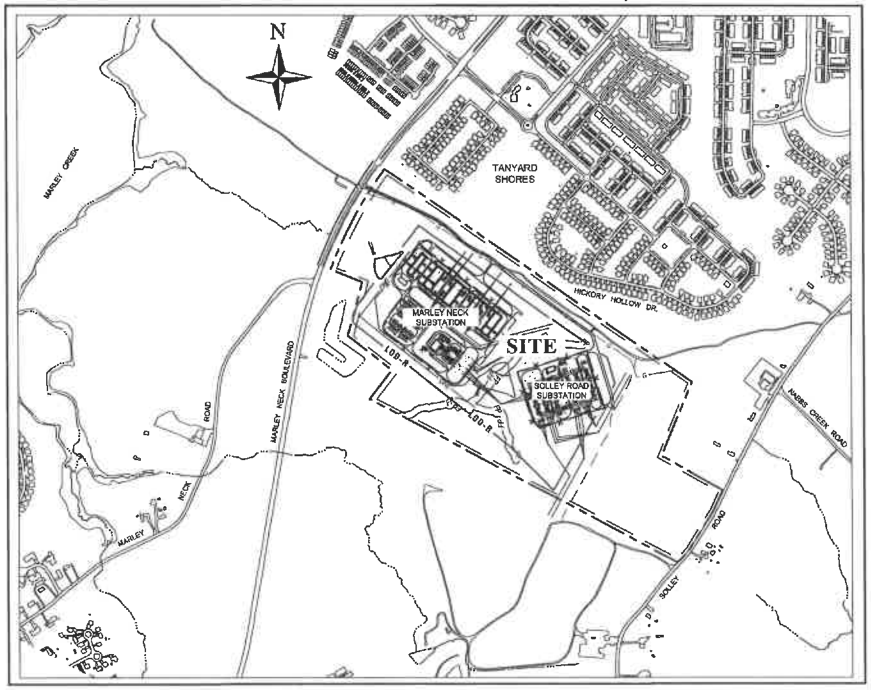
OWNER/PERMITTEE'S NAME (PRINTED) OWNER/PERMITTEE'S SIGNATURE DATE

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______

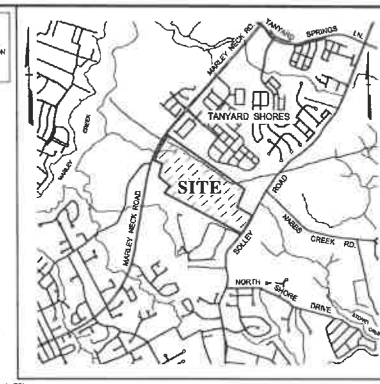


LOCATION MAP

SCALE: 1"=500'

BENCHMARKS

COORDINATES, BEARINGS AND DISTANCES ARE REFERRED TO THE MARYLAND STATE PLANE COORDINATE SYSTEM (NAD 83/2011) VIA GPS AND TIED TO THE FOLLOWING LEICA SMART NET NGS CORS REFERENCE STATION NETWORK STATIONS:
LOYF-0371 N 476639.2501 E 1448171.6640 ELEV. 61.4657 MDAN-0358N 533581.9680 E 1371782.9323 ELEV. 225.5004



VICINITY MAP

SCALE: 1"=2000'

DRAWING INDEX

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) 313-2155
2.	SITE ADDRESS:	Solley Road Glen Burnie, Maryland 21060
3.	# OF EXISTING PARCELS:	1
4.	NET TRACT AREA:	125.30 AC
5.	DEED REFERENCE:	39185 / 450
6.	TAX ACCOUNT:	90075361
7.	TAX MAP/ GRID/ PARCEL:	0010 / 0017 / 397 / B
8.	ZONING PARK	W1 - INDUSTRIAL
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

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) = 851,672 SQ. FT. OR 19.55 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) = 1,455,669 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 = 1,996,544 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 = xxxxxx 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

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. 25000796.008A

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 —

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\24003651.001a bge solley road substation (rgb)\CIVIL\CADD\Drawings\SWM Concept Plans\24003651.001A (SWM-01) Cover Sheet.dwg Mar 19, 2025 3:31pm dafonshan

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	
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	+143.8
Easement Line	
Sanitary Sewer	PROP. 8" S
Water and Fire Hydrant	PROP. 8" W
Storm Drain	PROP. 15" 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 8" 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.

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. 25000798.008A

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 —

GENERAL NOTES

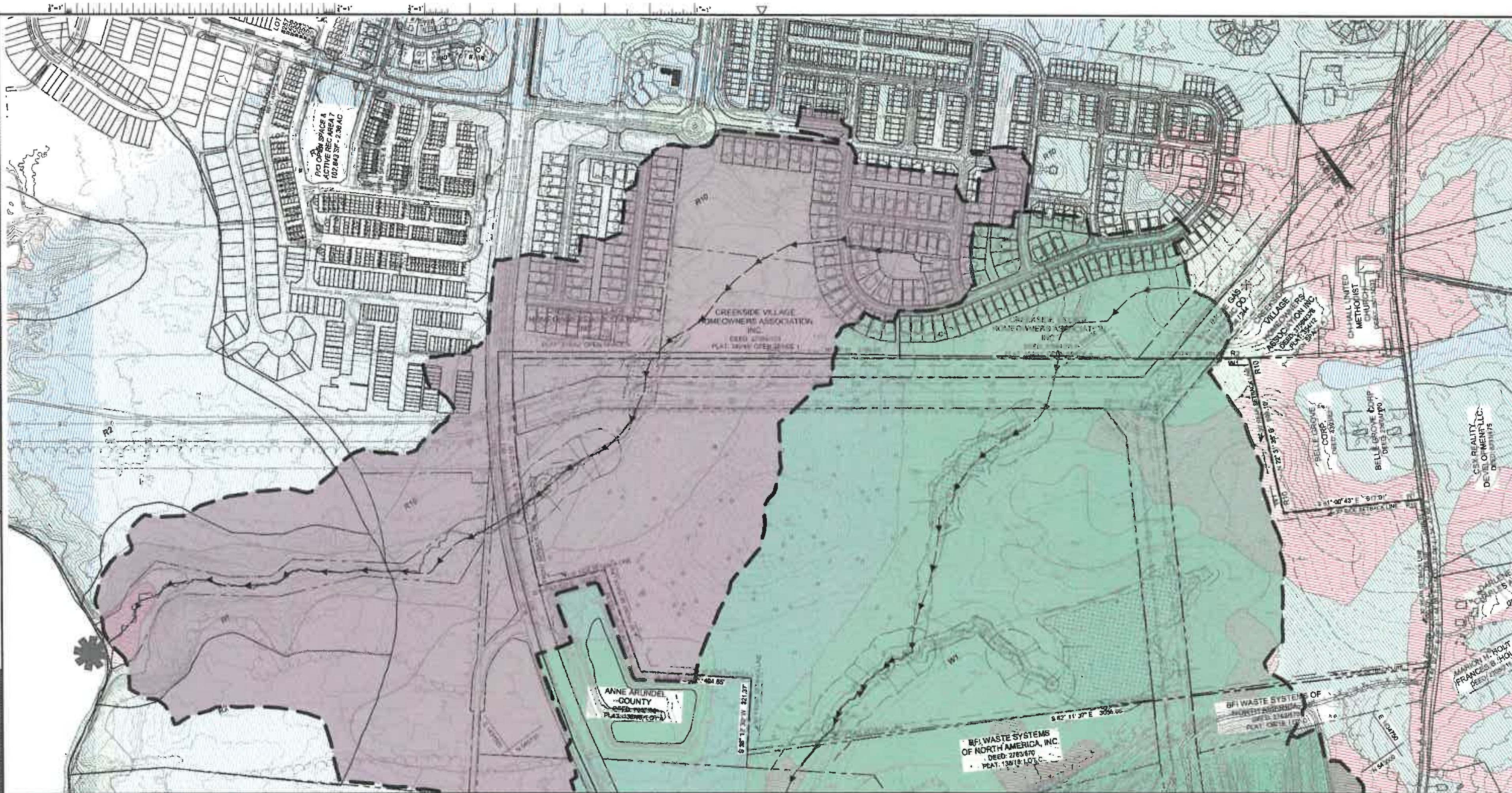
BALTIMORE GAS & ELECTRIC COMPANY
LOT B - SOUTH SOLLEY ROAD
GLEN BURNIE, ANNE ARUNDEL COUNTY, MD 21060
TAX MAP: 10 PARCEL: 397
115KV SUBSTATION

SOLLEY SUBSTATION

ELECTRIC SUBSTATION ENGINEERING

bge AN EXELON COMPANY

SCALE —
DWG. NO. SDP-002
REV. B



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.: 24614 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 AN EXELON COMPANY

SCALE: 1"=100'

DWG. NO. SDP-003

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	

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.
10110 Gilroy Road
Hunt Valley, Maryland 21031
Phone: 443.589.2400

Project No. 25000796.008A

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 AN EXELON COMPANY

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: 2-26-26

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

Project No. 25000798.008A

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

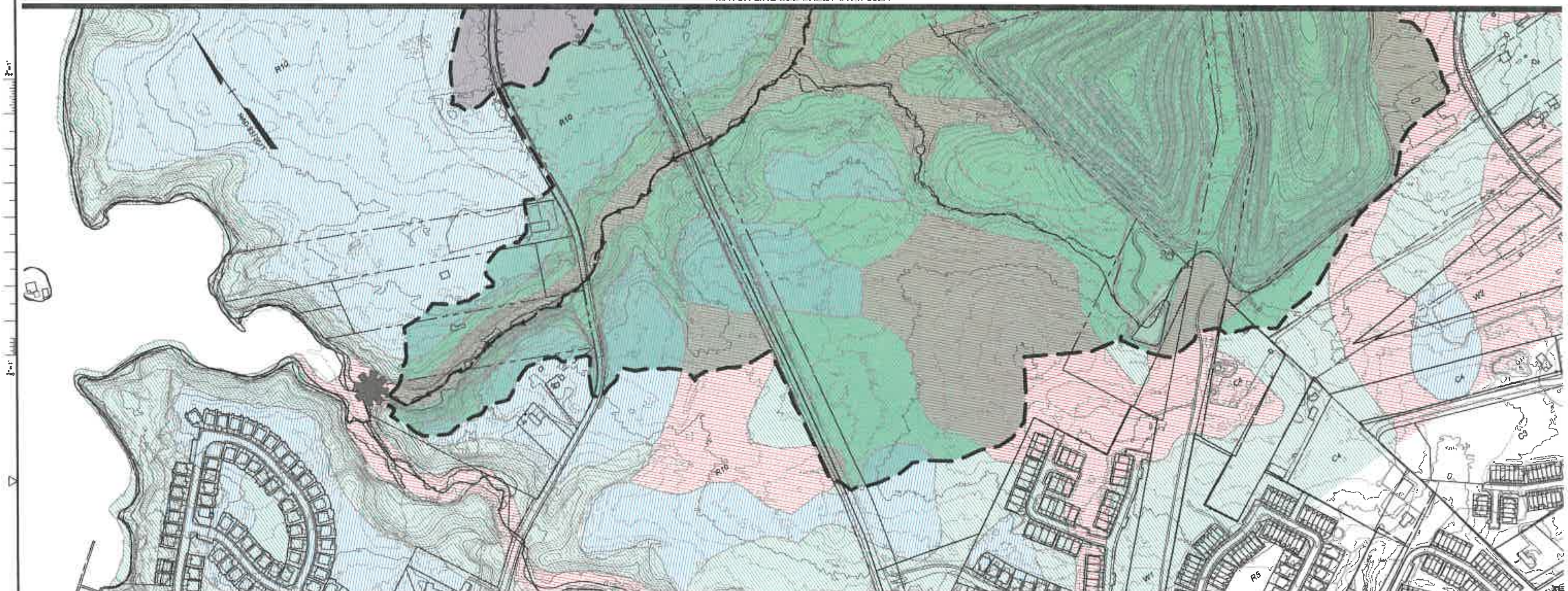
bge

SCALE: 1"=100'

DWG. NO. SDP-005

REV. B

MATCH LINE SEE SHEET SWM-002A



PLAN

SCALE: 1" = 200'

0 200' 400'

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.: 24514 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: —

PROPOSED DRAINAGE AREA MAP TO POI

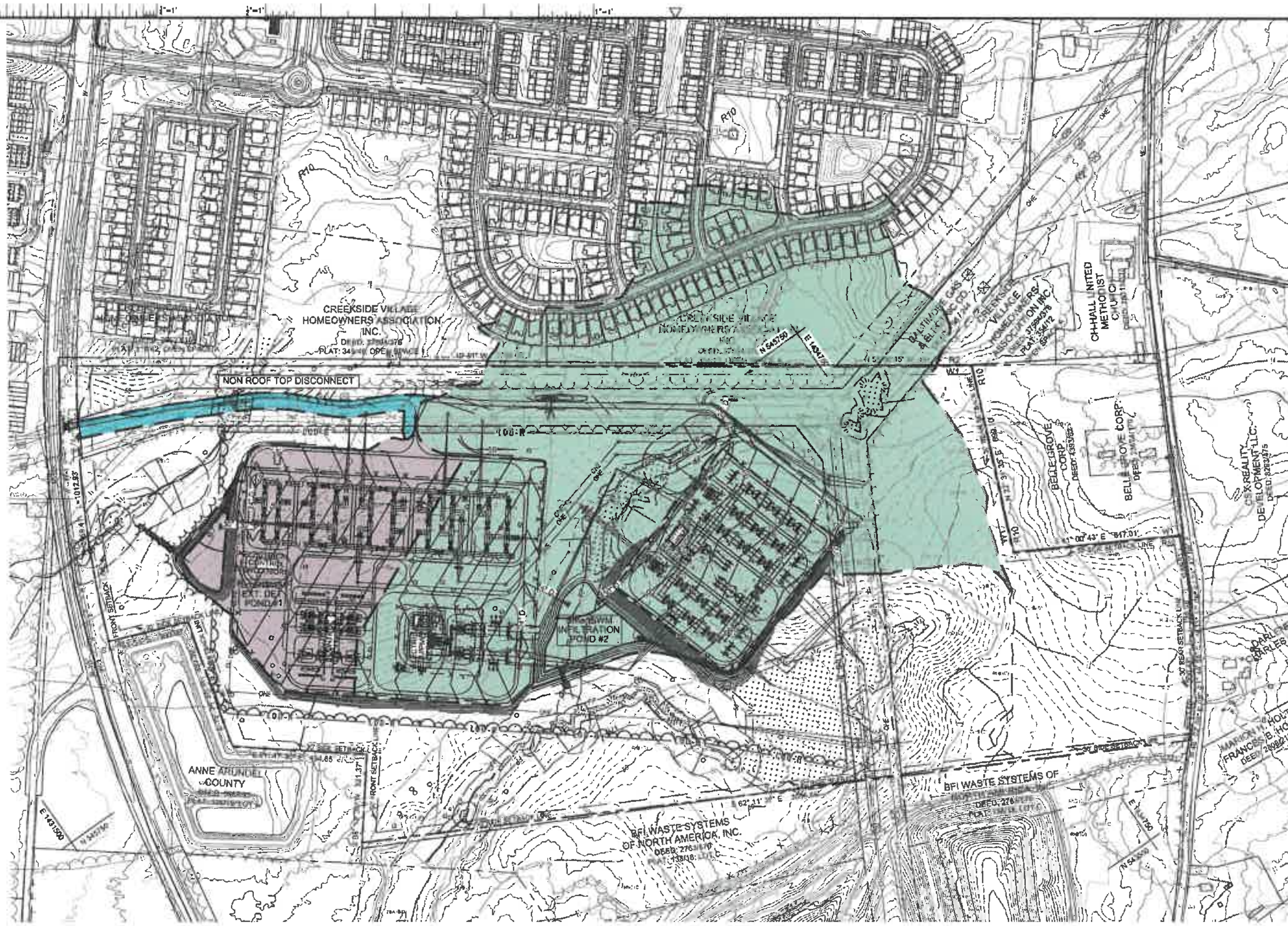
BALTIMORE GAS & ELECTRIC COMPANY
LOT B - SOUTH SOLLEY ROAD
GLEN BURNIE, ANNE ARUNDEL COUNTY, MD 21060
TAX MAP: 10 PARCEL: 397
115kV SUBSTATION

SOLLEY SUBSTATION

ELECTRIC SUBSTATION ENGINEERING

bge

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



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 (GhC / MaD)

PROPOSED

- Electrical Equipment Enclosure
- Minor Contour (658)
- Major Contour (660)
- Storm Drain (PROP. 15" D.)
- 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: 2-26-26

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 FACILITIES DRAINAGE AREA MAP

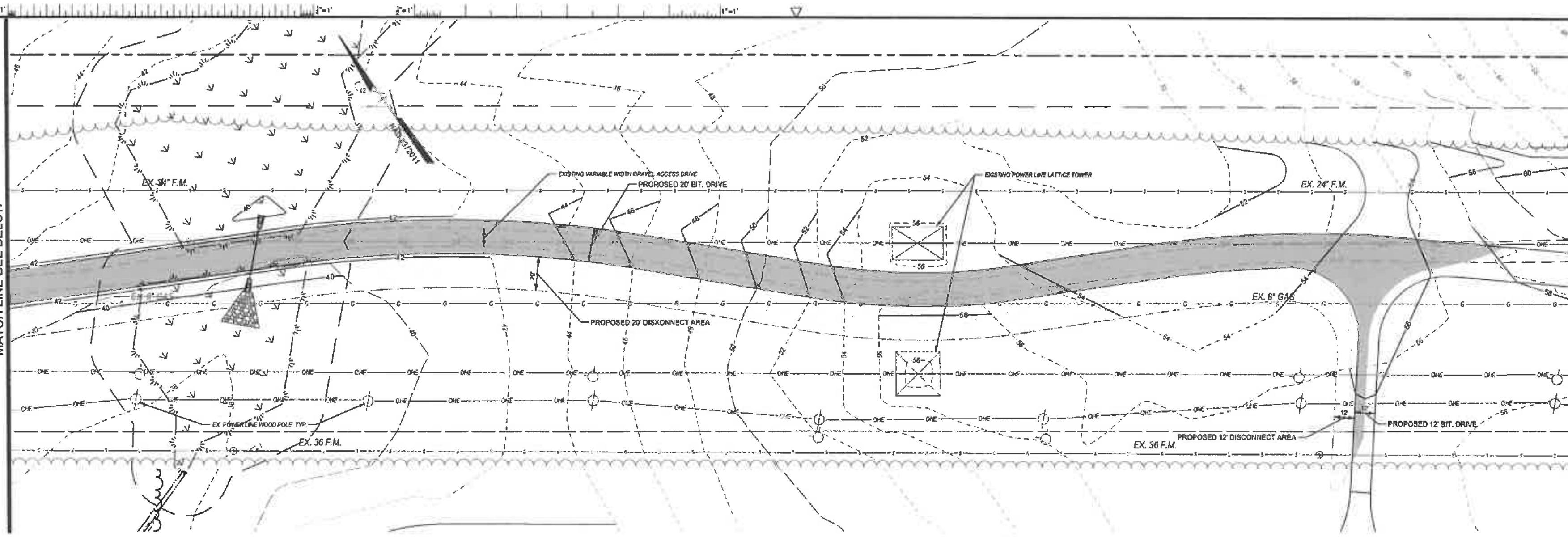
BALTIMORE GAS & ELECTRIC COMPANY
LOT B - SOUTH SOLLEY ROAD
GLEN BURNIE, ANNE ARUNDEL COUNTY, MD 21060
TAX MAP: 10 PARCEL: 397
115kV SUBSTATION

SOLLEY SUBSTATION

ELECTRIC SUBSTATION ENGINEERING

bge

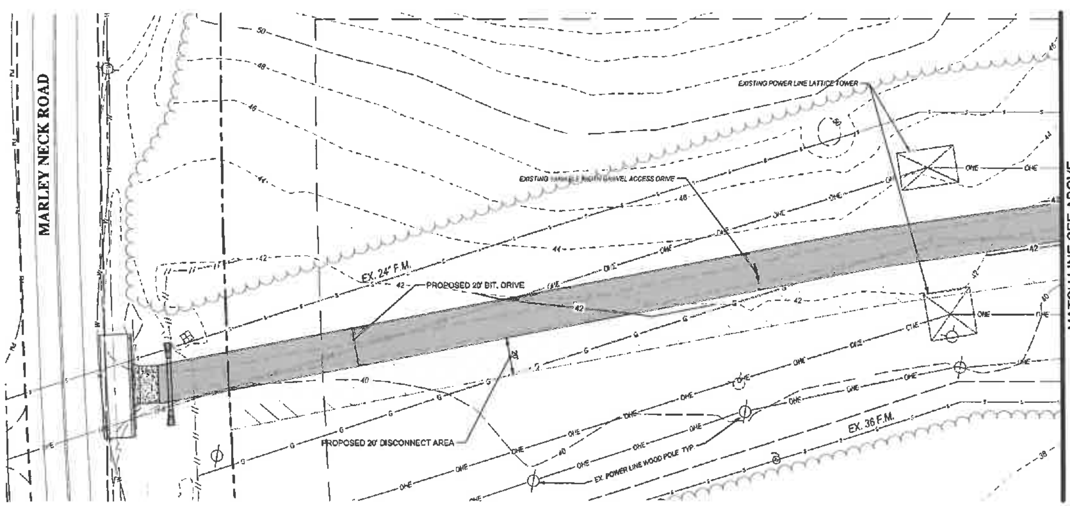
SCALE: 1"=100'
DWG. NO. SDP-007
REV. B



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

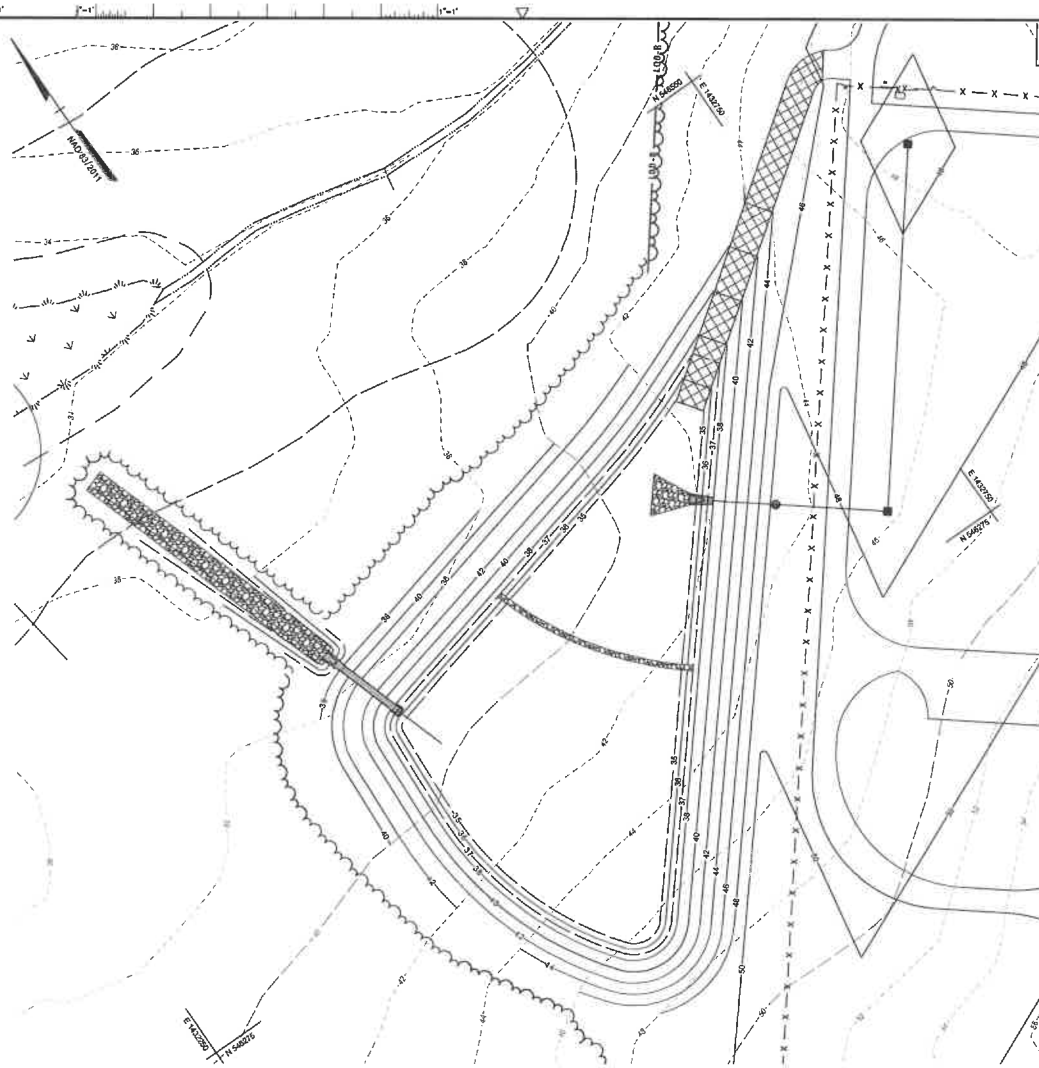
BALTIMORE GAS & ELECTRIC COMPANY
LOT B - SOUTH SOLLEY ROAD
GLEN BURNIE, ANNE ARUNDEL COUNTY, MD 21060
TAX MAP: 10 PARCEL: 397
115kV SUBSTATION

SOLLEY SUBSTATION

ELECTRIC SUBSTATION ENGINEERING

bge

SCALE: AS SHOWN
DWG. NO. SDP-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.: 24614 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 #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

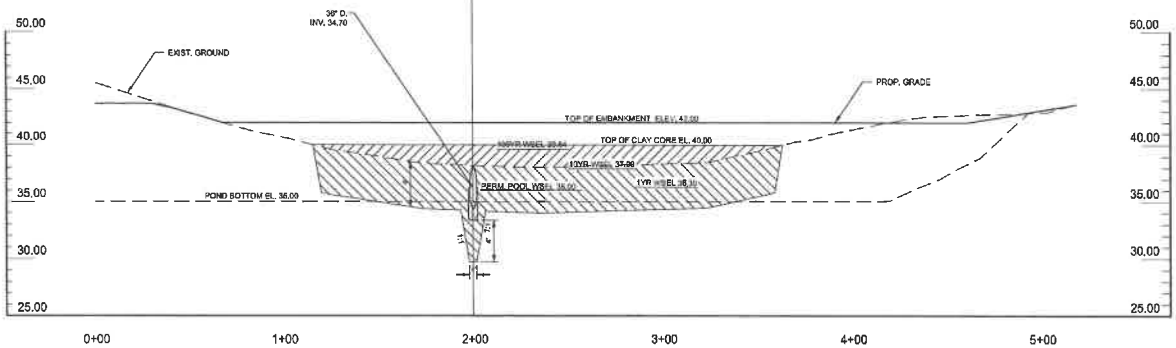
ELECTRIC SUBSTATION ENGINEERING

bge

SCALE: AS SHOWN

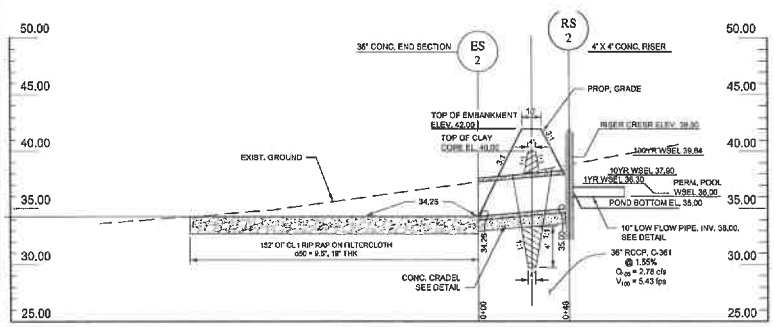
DWG. NO. SDP-009

REV. B



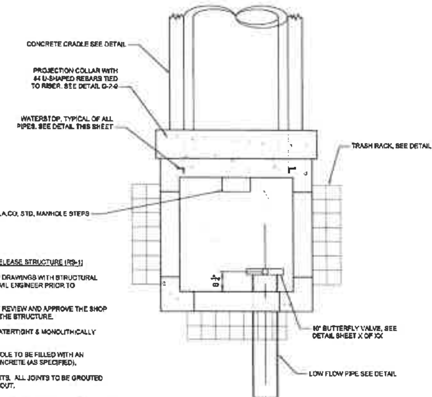
EXTENDED DETENTION POND
CENTERLINE OF EMBANKMENT PROFILE

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



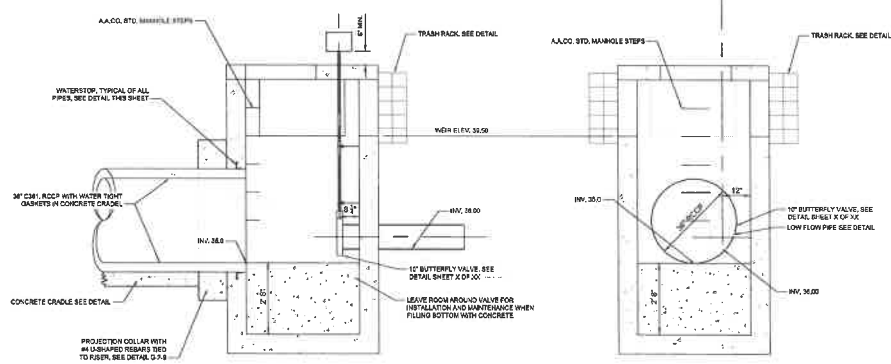
EXTENDED DETENTION POND
OUTFALL PROFILE

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

SCALE: 1"=2'

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 —

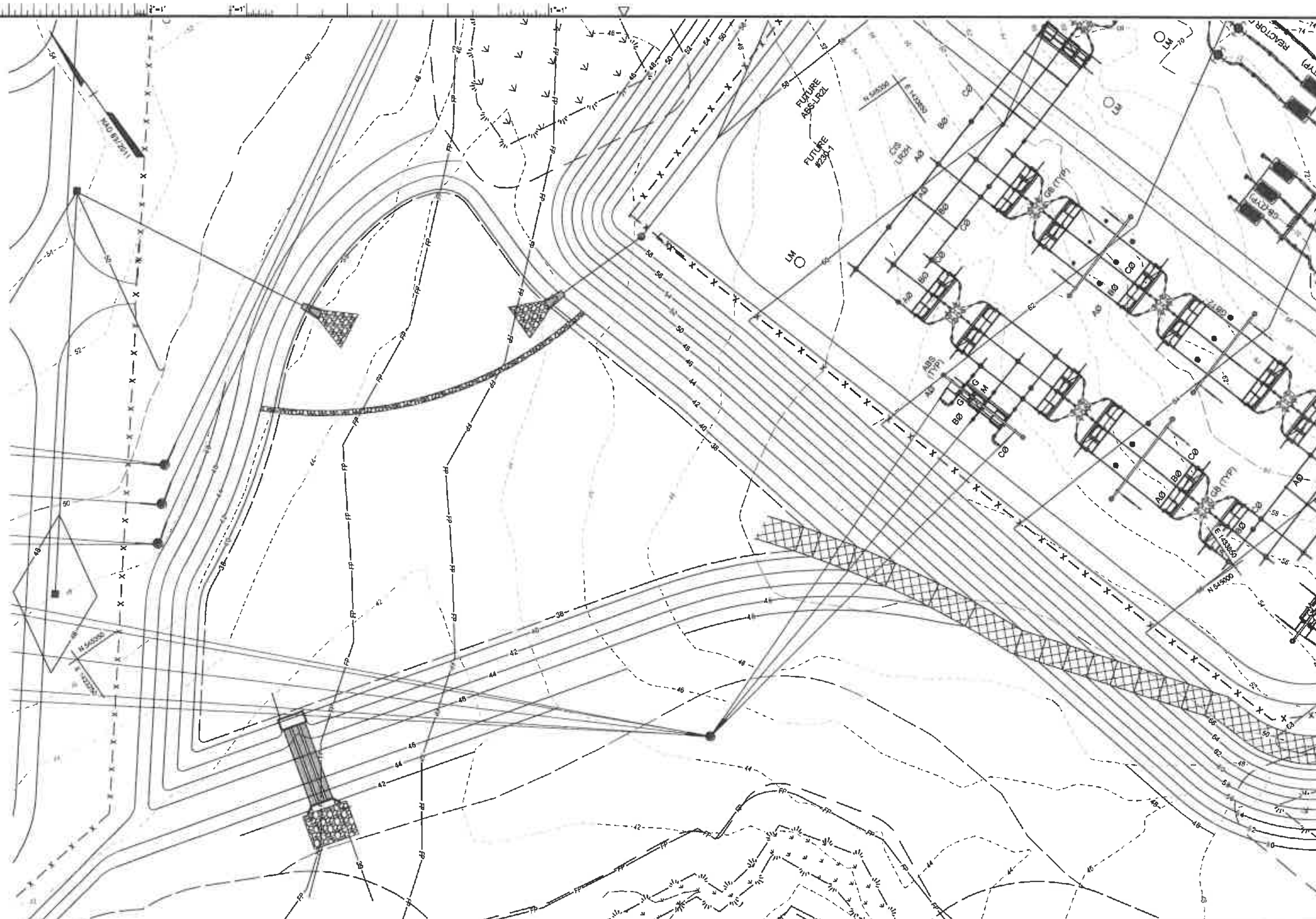
ESD FACILITY #2 - EXTENDED DETENTION POND DETAILS

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



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

SCALE: AS SHOWN

DWG. NO. SDP-011

REV. B

PROFESSIONAL CERTIFICATION

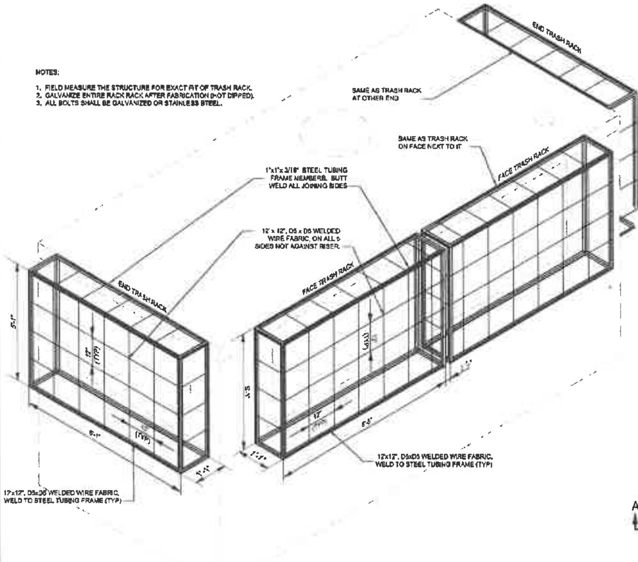
I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed Professional Engineer under the laws of the State of Maryland.

License No.: 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

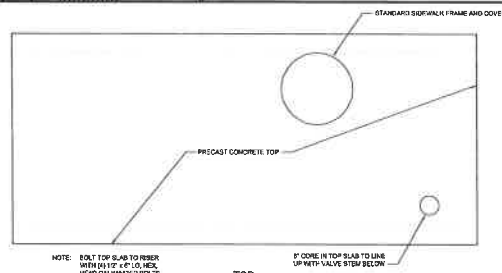
NOTES:

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

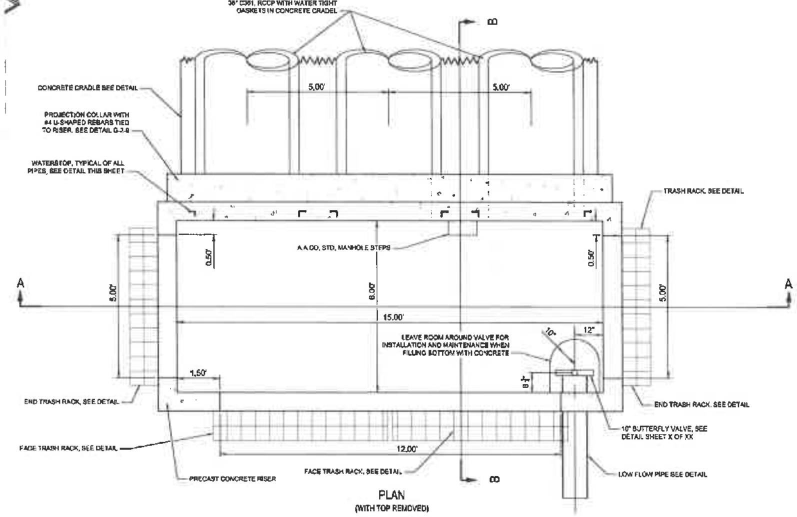
SCALE: 1"=2'



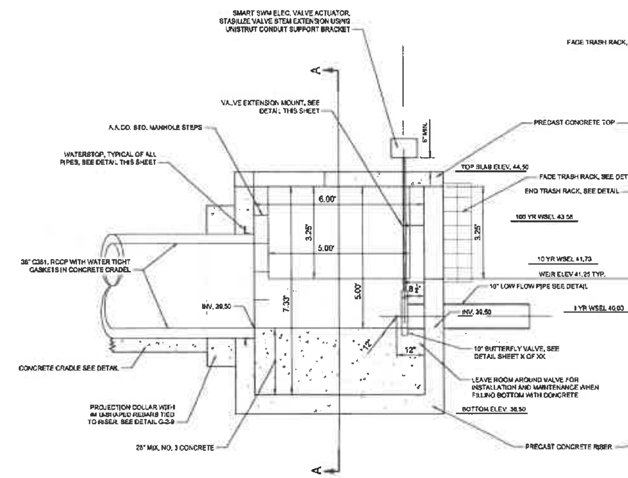
TOP

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

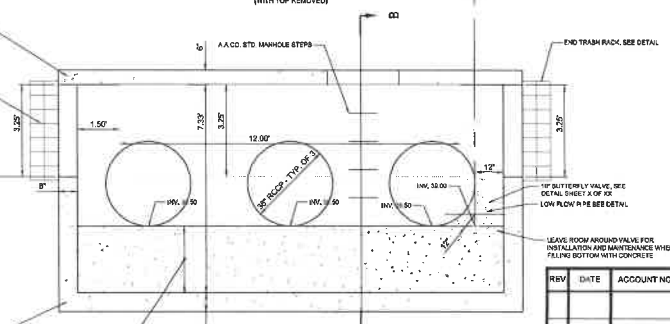
1. THE PRECASTER IS TO SEND THE SHOP DRAWINGS WITH STRUCTURAL COMPUTATIONS TO THE CERTIFYING CIVIL ENGINEER PRIOR TO CONSTRUCTION.
2. THE CERTIFYING CIVIL ENGINEER MUST REVIEW AND APPROVE THE SHOP DRAWINGS PRIOR TO FABRICATION OF THE STRUCTURE.
3. THE PRECAST STRUCTURE MUST BE WATERTIGHT & MONOLITHICALLY 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.



PLAN
(WITH TOP REMOVED)



SECTION 'B-B'



SECTION 'A-A'

RISER RS-2

SCALE: 1"=2'

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: 443.689.2400
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 —

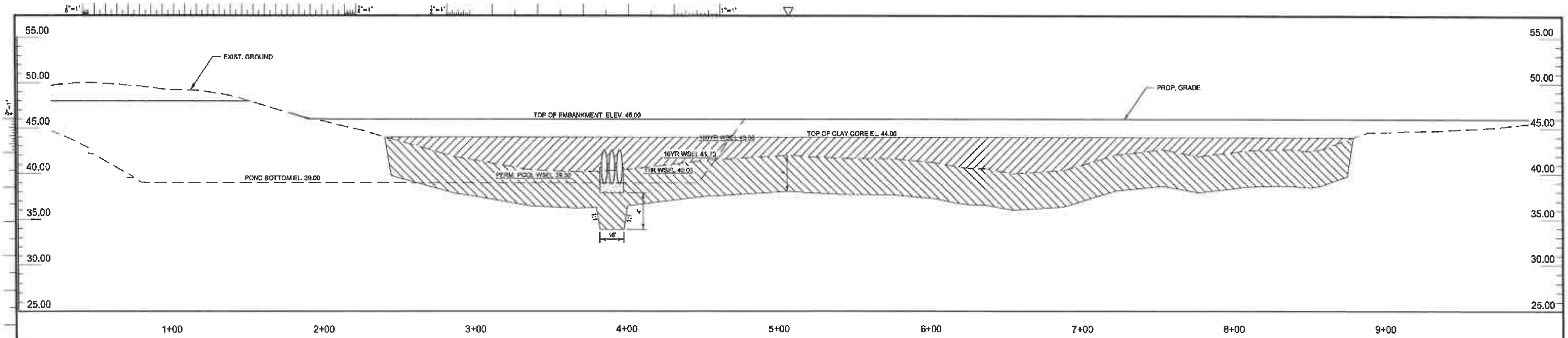
ESD FACILITY #3 - INFILTRATION BASIN RISER DETAILS

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

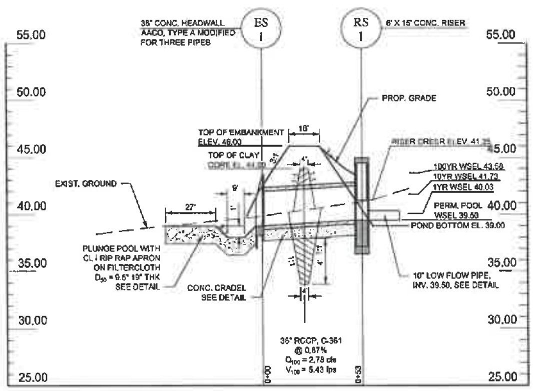
ELECTRIC SUBSTATION ENGINEERING

bge
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.

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

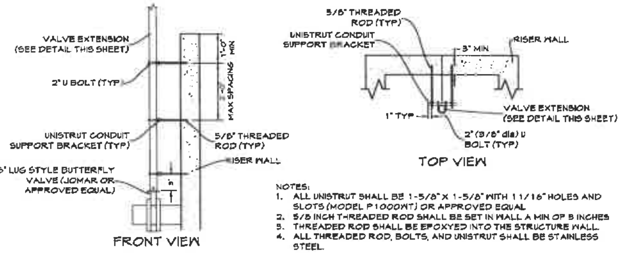
SOLLEY SUBSTATION

ELECTRIC SUBSTATION ENGINEERING

bge
SCALE: —
DWG. NO. SDP-013
REV. B

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: 3-28-26

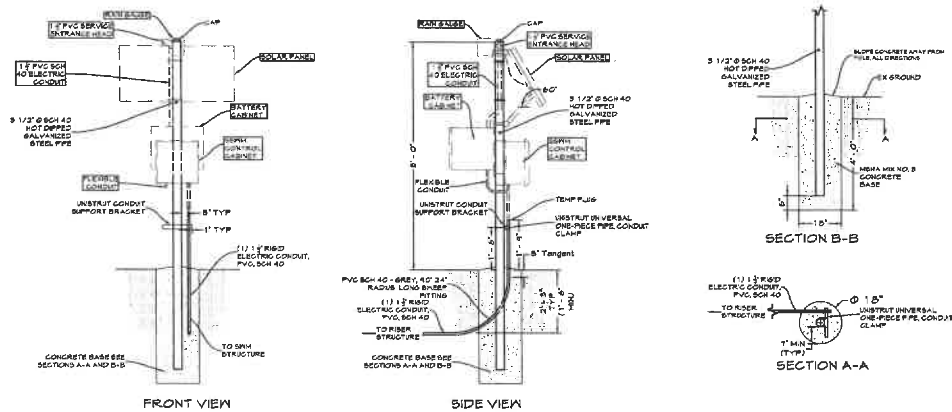
KLEINFELDER
Bright People. Right Solutions.
10710 Gilroy Road
Hunt Valley, Maryland 21031
Phone: 443.680.2400
Project No. 25000796.008A



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 5 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

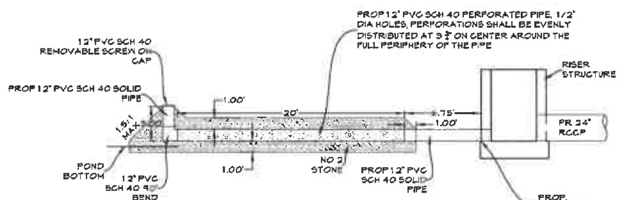


TEXT WITH A FRAME AROUND THE PERIMETER ARE SMART SWM COMPONENT CALL OUTS AND WILL INSTALLED BY CENTURY ENGINEERING'S ELECTRICAL CONTRACTOR

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.

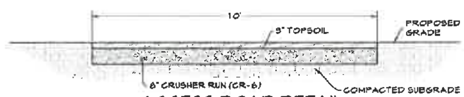
MOUNTING POLE DETAIL

SCALE: 1" = 2'



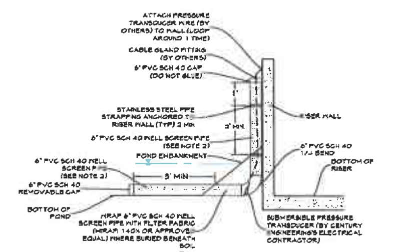
DEWATERING DEVICE DETAIL

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 66.14V-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: 2-28-26

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

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