

Planning Commission Department of Planning, Housing, and Zoning

COUNTY COMMISSIONERS HEARING ROOM 400 HIGH STREET CHESTERTOWN, MARYLAND

AGENDA

Thursday, August 1, 2024 1:30 p.m.

MINUTES

July 11, 2024

APPLICATIONS FOR REVIEW

- 22-17 William and Valerie Ashmore Major Site Plan Extension of Approval PC Decision Map 55, Parcel 128, Lot 1 Fifth Election District Marine (M)
- 23-34 Morgnec Road Solar, LLC Major Site Plan (Concept) PC Review Map 37, Parcel 40 and 174 Fourth Election District Intense Village (IV), Community Residential (CR), Rural Residential (RR), and Resource Conservation District (RCD)
- Delmarva Power and Light Co. of MD Major Site Plan (Preliminary)
 Morgnec Road, Chestertown Fourth Election District Zoned Commercial (C)
- 24-34 Richard and Madeline Zaveta Variance Pier Length
 6278 Burris Road, Rock Hall Seventh Election District Zoned Resource Conservation District (RCD)

GENERAL DISCUSSION

STAFF REPORTS

ADJOURN

Members of the public are welcome to attend meetings in person or via conference call.

Public participation and audio-only call-in number:

- 1. Dial **1-872-239-8359**
- 2. Enter Conference ID: 455 297 729#

PHONE PARTICIPATION - Members of the public are asked to mute their phones/devices, until the Chair opens the floor for comment. Please note that phone participation is dependent on service carriers and internet providers, this option may not be available for all meetings or be available during the entire meeting. In-person attendance is always recommended.

ONLINE VIEWING - Please note that although many meetings are recorded, the availability of video online is dependent on internet availability and functionality. Some members of the public may be able to watch a live video feed and/or view the video after the meeting at the County's YouTube channel at: @kentcountygovernment2757.



Planning Commission Department of Planning, Housing, and Zoning

Meetings are conducted in Open Session unless otherwise indicated. All or part of the Planning Commission meetings can be held in closed session under the authority of the MD Open Meetings Law by vote of the members. Breaks are at the call of the Chairman. Meetings are subject to audio and video recordings.

All applicants will be given the time necessary to assure full public participation and a fair and complete review of all projects. Agenda items are subject to change due to cancellations.



Planning Commission Department of Planning, Housing, and Zoning

MINUTES

July 11, 2024 1:30 p.m.

Video recordings of the Kent County Planning Commission meeting are available online for viewing on the County's YouTube channel at https://www.youtube.com/@kentcountygovernment2757.

The Planning Commission met in regular session on Thursday, July 11, 2024, in the County Commissioners' Hearing Room at 400 High Street, Chestertown, Maryland. Members of the public were invited to attend in person or via conference call.

The following members were in attendance: Chair Joe Hickman, Vice Chair Paul Ruge, Jim Saunders, Ray Strong, Paula Reeder, and William Crowding.

Acting Planning Commission Attorney Thomas Yeager, Esquire, was present. Staff attending included William Mackey, AICP, Director; Carla Gerber, AICP, Deputy Director; Mark Carper, LEED Green Associate, Associate Planner; Rob Tracey, AICP, Associate Planner; Beth Grieb, Office Manager, and serving as Acting Clerk; and Tyler Arnold, GIS Coordinator.

Representatives for the Morgnec Solar project included Genevive H.R. Macfarlane, Esq., Partner with Stevens Palmer, LLC.; Matt McCluskey, Chief Development Officer, Urban Grid; and Nick Leffner, P.E., Kimley Horn and Associates.

Representatives for Camp Fairlee included Gene Aucott of Easterseals Camp Fairlee; Kevin Shearon, P.E., LEED AP, DMS & Associates; and Miles Barnard, ASLA, RLA, South Fork Studio Landscape Architecture.

Members of the public who spoke were Janet Christensen-Lewis, KCPA; Thomas Kocubinski, RA, AIA, Principal Architect, Kocubinski Architects; Fred Kirchner; Tom Warner; Pat Langenfelder; Doug West; Liz Peterson; Jennifer Vaccaro, Shore Rivers; Melinda Bookwalter (reading an email from A. Elizabeth Watson, FAICP); and Sally Shea.

Chair Hickman called the meeting to order at 1:30 p.m.

MINUTES

Vice Chair Ruge moved to approve the minutes from June 6, as presented and corrected. Ms. Reeder seconded the motion. The minutes were approved unanimously.

APPLICATIONS FOR REVIEW

24-25 John Stoltzfus - Zoning Text Amendment

Chair opened the public hearing.

Mr. Tracey provided an overview of the text amendment to add self-storage centers as a permitted use in the Industrial District. Staff recommended changes to the rest of the Land Use Ordinance to use the same terminology throughout.

There were no members of the public who wished to speak. The Chair moved, and the public hearing was closed.

Ms. Reeder moved that the Planning Commission send a favorable recommendation on the zoning text amendment, amended as proposed by the staff, to the County Commissioners for their action. Mr. Strong seconded, and the motion passed unanimously.

Adopted on [Insert date]

23-34 Morgnec Road Solar, LLC - Major Site Plan (Preliminary)

Mr. Carper presented the staff report. The applicant's representatives, Genevieve Macfarlane, Esq.; Matt McCluskey; and Nick Leffner, P.E., presented the project details and addressed questions from the Planning Commission.

Public comments were received from Janet Christensen-Lewis, KCPA; Thomas Kocubinski, RA, AIA; Fred Kirchner; Tom Warner; Pat Langenfelder; Doug West; Liz Peterson; Jennifer Vaccaro, ShoreRivers; Melinda Bookwalter (reading an email from A. Elizabeth Watson, FAICP); and Sally Shea. Digital slides were presented as part of the public comments made by Janet Christensen-Lewis and Thomas Kocubinski, RA, AIA.

Planning Commission discussion included topsoil preservation on the site, early public walking trail, landscaping buffers, lack of species listed, the height of berms, effective screening heights, pollinator plantings and use of sheep, irrigation, planting replacements, and undergrounding connections to the power substation on the other side of Morgnec Road.

The applicant requested to table the application, in order to provide more detailed information at a future meeting.

The Planning Commission tabled the application, per Article VI. Special Provisions, Section 5. Site Plan Review, §5.3 Site Plan Review Procedures, B. Major Site Plan, #11, "... If the Planning Commission determines that more information is required for a decision to be made on the proposal, the Planning Commission may table its consideration of the plan."

24-14 ESSD-M, Inc. - Camp Fairlee - Major Site Plan (Preliminary) - Sensory Cabins

Mr. Carper presented the staff report.

Kevin Shearon, P.E., LEED AP of DMS & Associates, and Gene Aucott of Easterseals represented the applicant.

Planning Commission discussion included the overall plan for the future, and the applicant's representatives explained that the current project is donor-timeline-dependent. Chair noted that the item was for preliminary and final approval.

Mr. Crowding moved to grant preliminary and final site plan approval for Camp Fairlee Manor ESSD-M Incorporated to construct a 2,170 square-foot sensory cabin, a 20-foot-wide access lane, and an 8-foot wide concrete walkway, which are all within the Critical Areas. Approval is subject to the approval of the project by the Maryland Department of Health Center for Recreation and Community Environmental Services, approval of erosion and sediment control and stormwater management plans, and submission and approval of sureties for erosion and sediment control and stormwater management." The motion was seconded by Ms. Reeder, and the motion passed unanimously.

24-32 ESSD-M, Inc. - Camp Fairlee - Major Site Plan (Concept) - Replacing Pool and Bathhouse

Miles Barnard, ASLA, RLA of South Fork Studio and Gene Aucott of Easterseals represented the applicant and presented the concept plan. The project is for in-kind replacement, and the Critical Area buffer is fully established.

The Commission provided favorable feedback and agreed to allow the applicant to return with a combined preliminary and final site plan.

24-33 Fry Family LP - Variance - Setback for Animal Operation

Mr. Tracey presented the staff report and provided the history of a similar variance already granted for this property.

Matt Fry and Ed Fry represented the applicant. CAFO operation requires a greater setback, and applicants plan to submit for a longer-term solution by applying for a lot line adjustment, which requires ESLC/MET approval.

Mr. Crowding moved to send a favorable recommendation to the Kent County Board of Appeals for Fry Family Limited Partnership located at 10120 Augustus Herman Highway for a 585-foot variance from the required 600-foot setback. We find that the variance will not cause a substantial detriment to adjacent or neighboring properties, the variance will not change the character of the neighborhood or district, the variance is consistent with the Comprehensive Plan and the general intent of this ordinance, and that the practical difficulty or other injustice was not caused by the applicant, that it has an unusual size and shape of the property, and it has some extraordinary topographical conditions, noting that the Critical Area would not apply to this site. The motion was seconded by Ms. Reeder and approved unanimously.

GENERAL DISCUSSION

The Planning Commission discussed and made recommendations on two zoning changes, requested by applicants Mr. Kevin Kimble and Mr. Trey Jones, regarding the County's Official Zoning Map.

Mr. Crowding moved to eliminate the split zoning on Map 24, Parcel 2. Vice Chair Ruge seconded. The motion was passed unanimously.

Mr. Crowding moved to send an unfavorable recommendation to the Kent County Commissioners to grant split zoning on the property of Kevin Kimble located at 348 Flatland Road, Chestertown Maryland. Vice Chair Ruge seconded. The motion was passed unanimously.

STAFF REPORTS

Mr. Tracey provided an update on the MALPF program applications. MALPF allowed 16 applications this year with five alternates to be submitted. There were 17 applications received. All 17 were ranked and will be submitted to MALPF for appraisal. The Kent County Commissioners approved the proposed ranking by staff based on an adopted formula.

ADJOURN

Vice Chair Ruge made a motion to adjourn. Mr. Strong seconded. The meeting was adjourned at 5:30 p.m.

_/s/ Francis J. Hickman	
Francis J. Hickman, Chair	William Mackey, AICP, Director

Please note that a portion of this document was created by Claude 3 from Anthropic, utilizing a transcript created by Microsoft Teams. Due to various factors, these minutes were created mostly by a human.

Request for extension of final approval

July 9, 2024

Kent County Department of Planning, Housing and Zoning Kent County Government Center 400 High Street Chestertown, MD 21620

To Whom It May Concern:

Due to the market conditions, we are requesting a 12 month extension to the Grays Inn Destination Residence Club Site Plan that was approved in August of 2023. We are beginning to see market conditions improve and think summer of 2025 will be a more reasonable start date for this project considering builder availability and interest rates.

Thank you once again for your consideration as we navigate this challenging environment.

Sincerely,

Bill and Valerie Ashmore

Grays Inn, LLC

Kent County Department of Planning, Housing and Zoning

Kent County Government Center 400 High Street • Chestertown, MD 21620 410-778-7423 (phone) • 410-810-2932 (fax)

SITE PLAN APPLICATION

File Number:	22-17	Amount Paid:	\$20	0	Date:	7/9/24	
Project Name:	Grays Inn						
District: 5th N	Map: 55 Parcel:	57, lot 1 Lot Size:4	49	Deed Ref:	1079/197	Zoning:	Marine
LOCATION:	Grays Inn Ave, Rock	Hall, MD 21661			······································		
PROPOSED USE	Destination Res	sidence Club					
OWNER OF LAI	ND:						
Name:Will	iam and Valerie Ashmo	re		_ Telephone:_	(859) 322-1093	
Address: 21979 I	Kelleys Park Rd, Rock I	Hall, MD 21661		_ Email:	Bill@graysinr	ncreek.com	
APPLICANT:		•					
Name:Sa	me as owner			_Telephone:_			
Address:				_ Email:			
AGENT/ATTOR	RNEY (if any):						
				Telephone:			
REGISTERED E	NGINEER OR SURV	VEYOR:					
				_ Telephone:_	443-262-9	9130	
Address:I	O Box 80 Centerville,	MD 21617		_ Email:	Kjs@dms	andassociates.	com
person will be con	ntacted by staff and w	son who will be respo ill be the person respo erested parties. EMA	onsible	e for forward	ling the comn	nents or reque	
Water Supply:	☐ Public System 🗓	On lot system				Part non	
Sewerage:	☑ Public System ☐	On lot system				DEPARTN PLANNING, HOUS	ient of Bing & Zo
TELEPHONE SER	CVICED BY: Veriz	con				RECEIVED 7	19/2
ELECTRIC SERV	ICED BY: Delma	rva power					
	Planning Office is no not be held responsib	ot required to make of the for its contents.	out th	is Applicatio	on. If the P	lanning Depa	rtment
Signature of Appl	licant				Date		
9	7)		7/9	/2024		7/9/24	
☐ Concept Plan	Approving Authority	/:			Date		
☐ Preliminary		/:					
☐ Final	Approving Authority	/:			Date		



Department of Planning, Housing, and Zoning

TO: Kent County Planning Commission FROM: Carla Gerber, Deputy Director

MEETING: July 7, 2022

SUBJECT: William and Valerie Ashmore – Major Site Plan – Private Destination/Residence Club

(Final)

Executive Summary

Request by Applicant

Mr. and Mrs. Ashmore are requesting final site plan approval for the construction of a private destination/residence club with three guest suites and one owner's suite.

Public Process

Per Article VI, Section 5 of the Kent County *Land Use Ordinance*, the Planning Commission shall review and approve Major Site Plans.

Summary of Staff Report

Mr. and Mrs. Ashmore are proposing to construct a private destination/residence club on their 0.45-acre parcel located at the southeast corner of the intersection of Skinners Neck Road and Kelleys Park Road near Rock Hall. The residence club will have three guest suites and one owner's suite. The parcel is zoned Marine (M) and the surrounding area is a mix of residential and marine uses.

The application complies with the standards of the Land Use Ordinance.

Recommendation

Staff recommends granting final approval. Staff suggests the following conditions for final approval:

- Submission of all required sureties for stormwater management, sediment and erosion control, and landscaping.
- Recordation of the slip agreement.

PRELIMINARY STAFF REPORT

TO: Kent County Planning Commission

SUBJECT: William and Valerie Ashmore – Major Site Plan – Private Destination/Residence Club (Final)

DATE: June 30, 2022

DESCRIPTION OF PROPOSAL

Mr. and Mrs. Ashmore are proposing to construct a private destination/residence club on their 0.45-acre parcel located at the southeast corner of the intersection of Skinners Neck Road and Kelleys Park Road near Rock Hall. The residence club will have three guest suites and one owner's suite. The parcel is zoned Marine (M) and the surrounding area is a mix of residential and marine uses.

Relevant Issues

- I. Uses
 - A. Comprehensive Plan:
 - "Retain and promote existing businesses and assist in their growth." (page 8)
 - "Promote Kent County as a boating center." (page 16)
 - "Enhance and expand locally based tourism that is rooted in the unique natural, cultural, and historic features and qualities of Kent County." (page 18)
 - B. *Applicable Law*: Article V, Section 13.2, #8.5 of the Kent County Land Use Ordinance permits private destination/residence clubs in the Marine District with the following conditions:
 - a. The aggregate Marine zoned property shall consist of 4 or more acres.
 - b. The facilities for such overnight accommodations shall pay the appropriate county taxes, including taxes payable under Article III or Chapter 152 of the Code of Public Local Laws if Kent County.
 - c. The facilities for overnight accommodations shall use a reservation system.
 - d. Permitted accessory uses may include clubhouse, restaurants, cafés or other dining facilities; bars, pubs or taverns; recreational facilities, such as tennis courts, swimming pools, and spas and other accessory uses that are customarily associated with a lodging facility. The permitted accessory uses shall not include trap, skeet, clay birds, paint ball, or other similar firearm activities. The applicant shall describe all proposed accessory uses in the application for site plan. Recreational facilities shall be at least twenty-five (25) feet from the nearest property line.
 - e. Where they exist, listed historic structures shall be incorporated into the overall project.
 - f. Significant view corridors, both from the site and onto the site, shall be preserved as far as possible.
 - g. The height of all structures shall not exceed thirty-eight (38) feet.
 - h. Parking lots shall be landscaped as required for commercial developments in Article V, Section 11 of this Ordinance.
 - i. The approval of a facility for overnight accommodations shall not impose restrictions that will preclude the use of the marina and property for commercial marine uses permitted in the Marine Zoning District, including boat building, storage, and repair; however, the continuation of these uses shall not be required. The maintenance and continuation of boat slips will be required.
 - j. The County may require connection to a public sewer system, if and when such system is available.
 - k. Campgrounds, mobile homes, recreational vehicle and manufactured home parks shall not be considered private destination or residence clubs.

- C. Staff and TAC Comments: Although the subject parcel is less than 4 acres, the aggregate area of adjacent parcels zoned Marine is approximately 8.3 acres. The parcel is vacant, and no accessory uses are proposed. The applicant is proposing low level landscaping and the proposed structure will resemble a single-family dwelling which will have minimal effect on view corridors. A landscaping plan has been submitted. An agreement for the use of three slips at the adjacent marina, also owned by the applicant, has been approved by the County Attorney. The property has access to public sewer.
- II. Density, Area, Height, Width and Yard Requirements
 - A. Applicable Law: Article V, Section 13.5 of the Kent County Land Use Ordinance requires the minimum yard:

Front 30 ft (there is a front yard of 15 feet on the side street or a corner lot)

Side 8 ft (when adjacent to M)
Rear 10 ft (when adjacent to M)
Waterfront Minimum 100 ft buffer

B. Staff and TAC Comments: The proposed improvements meet the setback requirements. Although this parcel isn't waterfront, the 100-foot buffer extends onto the property. There are no site improvements within the buffer.

III. District Environmental Standards

A. Applicable Law: Article V, Section 13.6 in the Kent County Land Use Ordinance establishes the Marine Environmental Design Standards, which include stormwater and Critical Area standards. The purpose of these standards is to provide for the proper stewardship of the County's natural resources. Specifically, it is the overall goal of the County to maintain the quality of the County's ecosystem in the face of continuing activity, growth and change.

Within the Land Use Ordinance, Article VI, Section 7 addresses Floodplain Management, Section 9 addresses Erosion and Sediment Control, and Section 10 addresses Stormwater Management.

B. Staff and TAC Comments:

Stormwater and sediment and erosion control plans are under review. Sureties are required.

Marine is an Intense Development Area within the Chesapeake Bay Critical Area. Lot coverage limits do not apply; however, all development must reduce pollutant loadings coming off the site by at least 10%. Stormwater management computation worksheets have been submitted showing compliance with the 10% reduction rule.

The applicants are proposing to use fill to raise the base for the foundation approximately 4 feet. The Base Flood Elevation is 6 feet, and the concrete slab for the garage will be 8.25 feet. The first-floor elevation will be 18.25 feet. As required by the floodplain regulations, the engineer for the applicant has stated in the attached letter that flooding risk will not increase to adjacent properties as existing drainage patterns will be maintained and there will be no measurable impact on increased flooding.

IV. Parking and Loading Requirements

- A. Applicable Law: Article VI, Section 1.3 of the Kent County Land Use Ordinance establishes the parking standards. Lodging facilities require 1 space per guest unit, plus 1 per employee.
- B. Staff and TAC Comments: The site plan has four parking spaces on the Skinners Neck Road side of the

property. The applicant has acknowledged that boat trailer parking will be allowed by the users of the public landing on the west side of Skinners Neck Road across from the proposed driveways and a note has been added to the site plan.

V. Landscaping

- A. Applicable Law: Article V, Section 13, #8.5.h of the Land Use Ordinance requires parking lots for private destination/residence clubs to be landscaped as required for commercial developments in Article V, Section 11. Article V, Section 13.7, #4 and 5 establishes the general landscaping and screening requirements in the Marine district.
- B. Staff and TAC Comments: The driveway/parking area is fully landscaped with holly shrubs lining the edges and landscape beds on the sides with single elm trees and perennials and a landscape bed between the garage doors with shrubs and perennials. Kelleys Park Road is screened with a mix of understory trees, evergreens, shrubs and perennials.

VI. Site Plan Review

- A. Comprehensive Plan: "Implement thorough design review for new development and major renovations." (Page 33)
- B. Applicable Law: Article VI, Section 5.3 of the Kent County Land Use Ordinance establishes site plan review procedures. The Planning Commission shall prepare findings of fact concerning the reasonable fulfillment of the objectives listed below.
 - a. Conformance with the Comprehensive Plan and, where applicable, the Village Master Plan.
 - b. Conformance with the provisions of all applicable rules and regulations of county, state, and federal agencies.
 - c. Convenience and safety of both vehicular and pedestrian movement within the site and in relationship to adjoining ways and properties.
 - d. Provisions for the off-street loading and unloading of vehicles incidental to the normal operation of the establishment, adequate lighting, and internal traffic control.
 - e. Reasonable demands placed on public services and infrastructure.
 - f. Adequacy of methods for sewage and refuse disposal, and the protection from pollution of both surface waters and groundwater. This includes minimizing soil erosion both during and after construction.
 - g. Protection of abutting properties and County amenities from any undue disturbance caused by excessive or unreasonable noise, smoke, vapors, fumes, dust, odors, glare, stormwater runoff, etc
 - h. Minimizing the area over which existing vegetation is to be removed. Where tree removal is required, special attention shall be given to planting of replacement trees.
 - i. The applicant's efforts to integrate the proposed development into the existing landscape through design features such as vegetative buffers, roadside plantings, and the retention of open space and agricultural land.
 - j. The applicant's efforts to design the development to complement and enhance the rural and historic nature of the County including incorporating into the project forms and materials that reflect the traditional construction patterns of neighboring communities.
 - k. The building setbacks, area, and location of parking, architectural compatibility, signage, and landscaping of the development, and how these features harmonize with the surrounding townscape and the natural landscape.

C. Staff and TAC Comments:

• The proposal is consistent with strategies and goals of the Comprehensive Plan.

- The property is served by public sewer and private well.
- Public works has approved the project.
- Stormwater management and erosion and sediment control plans have been submitted for review.
- Sufficient parking is provided on the property.
- The landscaping meets the requirements.
- Reasonable demands will be placed on public services and infrastructure.
- Proposed building elevations have been submitted. While the building is large, it contains features and colors compatible with existing waterfront development in the County.
- Exterior lighting will be attached to the building and will be dark sky compatible.
- No signs are proposed at this time.
- The proposed building complies with the setback requirements.
- A citizen participation conference call was held on April 12, 2022.

Staff Recommendation

Staff recommends granting final approval contingent upon:

- Submission of all required sureties for stormwater management, sediment and erosion control, and landscaping.
- Recordation of the slip agreement.

NO TITLE EXAMINATION NO CONSIDERATION

DECLARATION OF BOAT SLIP AGREEMENT

This Declaration of Boat Slip Agreement ("Easement and Agreement") is made this	day of
, 2022, by and between William R. Ashmore and Valerie L. Ashmore (collectively and
hereinafter the "Owners").	·

RECITALS:

WHEREAS, the Owners are the fee simple owners of the property situate, lying and being in the Fifth Election District of Kent County, Maryland, located on Kent County Tax Map 55, Parcel 128 containing 19,166 square feet, more or less, being the same lands described in a deed recorded among the Land Records for Kent County, Maryland in Liber No. 1079, folio 197 (the "Residence Club Property"); and

WHERES, the Owners are the fee simple owners of the property situate, lying and being in the Fifth Election District of Kent County, Maryland, located on Kent County Tax Map 55, Parcel 5, containing 23,827 square feet, more or less, being the same lands described in a deed recorded among the Land Records for Kent County, Maryland in Liber No. 783, folio 310 (the "Marina Property"); and

WHEREAS, the Owners currently operate a commercial marina with approximately thirty one (31) boat slips at the Marina Parcel and the Owners contemplate establishing a Private Destination/Residence Club upon the Residence Club Property as currently defined in the Kent County Zoning Ordinance in section 13.2(8.5); and

WHEREAS, the Owners, in furtherance of the establishment of a Private Destination/Residence Club, seek to hereby provide for the use of three boat slips of the Marina Parcel by guests of the Private Destination/Residence Club operating upon the Residence Club Parcel, upon seventy two (72) hours' prior notice to the owner of the Marina Parcel, and in exchange for certain payment for such use of three boat slips upon the terms and conditions stated herein; and

WHEREAS, these recitals are not merely prefatory but form a substantive part hereof this Agreement.

NOW, THEREFORE, WITNESSETH, that for and in consideration of the sum of Zero Dollars (\$0.00) but other valuable consideration, the receipt and adequacy of which is hereby acknowledged, the Owners do hereby establish, in gross, an agreement upon the following terms and conditions:

1. The Marina Property shall permit the use of three boat slips upon the Marina Property for use by guests of the Residence Club Property only for so long as the Residence Club Property is used as a Residence Club. The use of the three boat slips shall only be for paying guests of the Residence Club Property and are limited to three boat slips. The use does not include or apply to any boat slips rented to long term slip renters. Any use of the boat slip shall be on a first come-first served basis, shall require seventy two (72) hours' prior notice to the Owner of the Marina Property. Any use of a boat slip by a guest of the Residence Club Property shall require payment of the applicable market rate for such transient boat slip rental upon the Marina Property. The use of a boat slip is limited to three boat slips per all the guests of the Residence Club Property at any given time.

- 2. The use of any boat slip upon the Marina Property by the Residence Club Property guests shall be limited to and not exceed the duration of such guest's stay at the Residence Club Property. The guests using the Marina Property boat slips shall have access to the public areas of the Marina Property for use in common with other boat slip renters but such use of said common areas shall not interfere with any other operation of the Marina Property or the other boat slip renters or customers of the Marina Property.
- 3. The use of the boat slips by guests of the Residence Club Property, their licensees, invitees, guests, agents, employees and contractors, shall be at their own risk. The Owners of the Residence Club Property agree to indemnify and hold harmless all other Owners against any and all liability for injury to person or damage to property, when such injury or damage results from, arises out of, or is attributable to the use of the boat slips or Marina Property by the guests of the Residence Club.
- 4. This Agreement shall terminate without demand or notice upon the cessation of the Residence Club Property being used as a Residence Club. This agreement shall be binding on and inure to the benefit of the parties hereto and their respective heirs, successors, and assigns and shall run with the land.

IN WITNESS WHEREOF, the Owners have caused this instrument to be properly executed and sealed as of the day and year first above written.

WITNESS/ATTEST: OWNERS:	
	(SEAL)
William R. Ashmore	
	(SEAL)
Valerie L. Ashmore	, , ,
STATE of MARYLAND, COUNTY of, to w	it:
I HEREBY CERTIFY, that on this day of subscriber, a Notary Public of the State and County aforesaid, pers and Valerie L. Ashmore, husband and wife, known to me (or satisfa whose names are subscribed to the within instrument, that they estated by Agreement for the purposes therein contained, and in my same.	onally appeared William R. Ashmore actorily proven) to be the persons xecuted the foregoing Declaration of
IN WITNESS WHEREOF, I hereunto set my hand and official seal.	
Notary Public	
My Commission expires:	

PROJECT NARRATIVE

GRAYS INN Private Destination / Residence Club Skinners Neck Road Rock Hall, Maryland

In accordance with Article VI, Section 5.4.B of the Kent County Zoning Ordinance, we offer the following:

Name and address of the landowner, the developer and/or representative, if different from the owner

The property is owned by Mr. & Mrs. William Ashmore. They are the property owners and the developers.

Street address, tax map, parcel number, and subdivision if any

The site is located at the southeast corner of the intersection between Skinners Neck Road and Kellys Park Road near Rock Hall, Maryland. The property is identified as Tax Map 55 Parcel 128, Lot 1. A subdivision is not needed as part of this project.

Zoning of the site

The site is zoned Marin (M). The surrounding properties to the north, east, south, and west are also zoned Marine and account for a combined zoning district greater than four acres.

Current and proposed use of the property

The property is currently vacant. A Private Destination / Residence Club with three guest suites and one owner suite is proposed on the property. The club will be developed and operated in accordance with the conditions noted in the Land Use Ordinance, Section 13.2(8.5) which include:

- a. The aggregate Marine zoned property shall consist of 4 or more acres. *The Marine zone in this area consists of approximately 8.3 acres.*
- b. The facilities for such overnight accommodations shall pay the appropriate county taxes, including taxes payable under Article III or Chapter 152 of the Code of Public Local Laws if Kent County.

It is understood that the overnight accommodations associated with this club will pay all applicable taxes.

c. The facilities for overnight accommodations shall use a reservation system.

A reservation system will be used to book overnight accommodations.



d. Permitted accessory uses may include clubhouse, restaurants, cafés or other dining facilities; bars, pubs or taverns; recreational facilities, such as tennis courts, swimming pools, and spas and other accessory uses that are customarily associated with a lodging facility. The permitted accessory uses shall not include trap, skeet, clay birds, paint ball, or other similar firearm activities. The applicant shall describe all proposed accessory uses in the application for site plan. Recreational facilities shall be at least twenty-five (25) feet from the nearest property line.

At this time no accessory uses are proposed. Should an accessory use be added later, the approval of such will be done so following review by the county.

e. Where they exist, listed historic structures shall be incorporated into the overall project.

There are no historical structures on the property.

f. Significant view corridors, both from the site and onto the site, shall be preserved as far as possible.

View corridors have been preserved to the extent possible. Only 1,940-sf of structure is proposed on the 0.45 acre parcel. The landscaping has been designed to be low-level.

g. The height of all *structures* shall not exceed thirty-eight (38) feet.

The height of the proposed structure is less than 38-ft as defined by the

code.

h. Parking lots shall be landscaped as required for commercial developments in Article V, Section 11 of this Ordinance.

Landscape screening has been provided at the edge of the proposed parking area.

i. The approval of a facility for overnight accommodations shall not impose restrictions that will preclude the use of the marina and property for commercial marine uses permitted in the Marine Zoning District, including boat building, storage, and repair; however, the continuation of these uses shall not be required. The maintenance and continuation of boat slips will be required.

The proposed club with overnight accommodations will not impede the rights of others to conduct permitted activities within the Marine Zoning District. An agreement has been drafted designating three boat slips at the nearby marina owned by the Ashmores for use by the paying guests of the Residence Club. The agreement will be recorded prior to final site plan approval.

j. The County may require connection to a public sewer system, if and when such system is available.

As indicated on the site plan, the club will be connected to the existing public sewer system adjacent to the site.

k. Campgrounds, mobile homes, recreational vehicle and manufactured home parks shall not be considered private destination or residence clubs.

The proposed club is not classified as any of the above mentioned uses.

An explanation of viewshed, open space, and conservation analysis undertaken during the design of the site plan

The placement of the proposed building will be near the intersection of Skinners Neck Road and Kelly's Park Road. It is located outside of the Critical Area 100-ft buffer. Only 1,940-sf of structure is proposed on the 0.45 acre parcel.

How the proposed development complies with the Comprehensive Plan and the design and environmental standards of the Ordinance

The development complies with the Comprehensive Plan in that it promotes tourism and lodging in the area.

Proposed type of water and sewer service

The site will be served by public sewer. A private well will be used for potable water as public water is not available in the area.

Number of employees

It is anticipated that one employee will be needed for this club.

The proposed development schedule and phases of development for all proposed construction

This project is intended to be constructed and operational upon receipt of all necessary permits. The construction will not be phased.

Statement of provisions for ultimate ownership and maintenance of all parts of the development including streets, structures, and open space.

The property is intended to remain in the ownership of and maintained by Mr. & Mrs. Ashmore.

Water dependent uses in the Critical Area

n/a

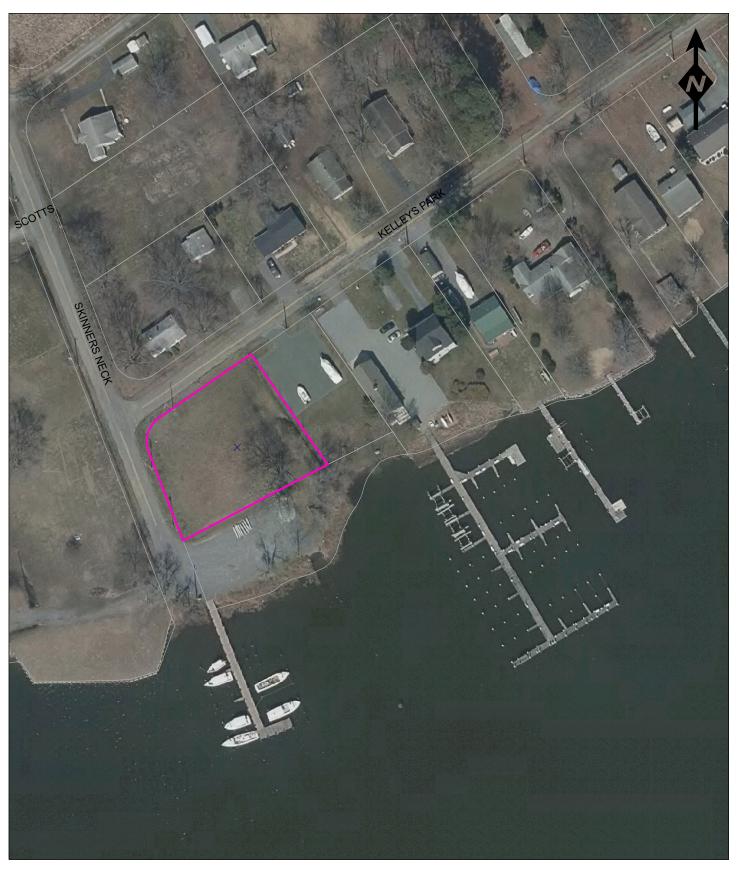
Critical Area density calculations

n/a

Citizen Participation Plan

A conference call is scheduled for Tuesday, April 12, 2022 at 6pm. Notification to property owners in the area was mailed along with a reduced-scale site plan. A report will be provided to the Planning Office following the conference call.

William and Valerie Ashmore Skinners Neck Road/Kelleys Park Road



Source: Kent County Department of Planning, Housing, and Zoning. Aerial taken Spring 2019. Map prepared April 2022.

FINAL SITE PLAN **FOR**

GRAYS INN PRIVATE DESTINATION CLUB

L.O.D. N 55'24'31 E L.O.D. TYPICAL

PROPOSED DECK

ROPOSED 2 STOR'

"PRIVATE

DESTINATION/

RESIDENCE CLUB"

F.F. ELEV. = 18.25

GARAGE SLAB

PROPOSED DECK

PROPOSED STEPS

TEMPORARY TOPSOIL

STOCKPILE AREA

COUNTY COMMISSIONERS OF KENT COUNTY

SKINNERS NECK PUBLIC LANDING

EXISTING PAVED

PARKING AREA

AND LANDING

ELEV. = 8.25

- EXISTING UTILITY POLE WITH

PROPOSED STEPS

PROPOSED STEPS

AND LANDING

AND LANDING

OVERHEAD UTILITY LINE.

40' R//W

BRUSH

OWNER/DEVELOPER:

WILLIAM R. & VALERIE L. ASHMORE 21979 KELLEYS PARK ROAD ROCK HALL, MARYLAND 21661 PHONE No. 1-410-778-3648

ENGINEER

PROPOSED WELL FOR POTABLE WATER

PARKING AREA

SUPPLY. COORDINATE WITH KENT COUNTY

GRAYS INN CREÉK MARINA, LLC

DEPICTS DEED POINT

EXISTING BRUSH

FLOODPLAIN LINE

(UNLESS OTHERWISE NOTED)

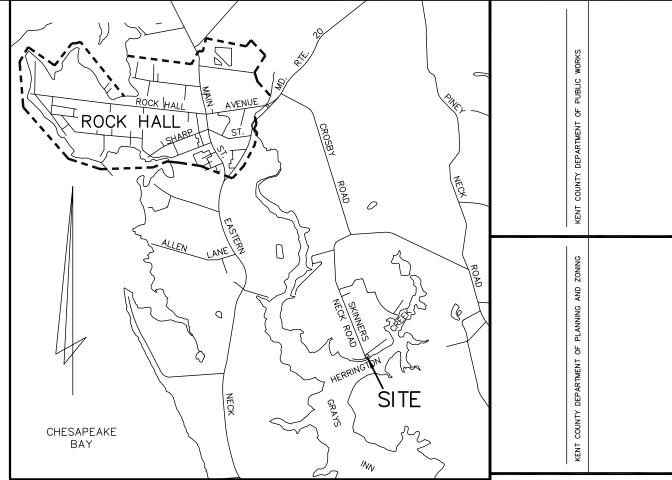
EXISTING UTILITY POLE WITH

OVERHEAD UTILITY LINE

LIMITS OF DISTURBANCE

HEALTH DEPARTMENT FOR EXACT LOCATION

DMS & ASSOCIATES, LLC c/o KEVIN J. SHEARON, P.E. LEED P.O. BOX 80 CENTREVILLE, MARYLAND 21617 PHONE No. 1-443-262-9130



VICINITY MAP

SCALE 1" = 4000'

GENERAL NOTES

1. These drawings show information obtained from the best available records regarding pipes, conduits, telephone lines, and other structures and conditions which exist along the lines of the work both at and below the surface of the ground. The owner and engineer disclaim any responsibilities for the accuracy or completeness of said information being shown only for the convenience of the contractor, who must verify the information to his own satisfaction. If the contractor relies on said information, he does so at his own risk. The giving of the information on the contract drawings will not relieve the contractor of his obligations to support and protect all pipes, conduits, telephone lines, and other structures.

2. The contractor shall notify the following two (2) weeks prior to the start of construction and shall coordinate construction with the utility companies involved:

Delmarva Power & Light Company 1-800-375-7117 1-800-441-8355 Miss Utility 1-443-262-9130 DMS & Associates, LLC Dept. Public Works - Engineering 1-410-778-7407 Dept. of Public Works — Water/Wastewater 1-410-778-3287 Kent Co. Sediment Control Inspector 1-410-778-7457 Maryland Department of the Environment 1-410-631-3510

- 3. All construction shall be marked for traffic and pedestrian
- 4. The Contractor shall provide all equipment, labor, and materials for any miscellaneous or test pit excavations required by the Engineer.
- 5. The owner is responsible for the acquisition of all easements, both permanent and temporary
- 6. The Contractor assumes all responsibility for any deviations from these plans unless said deviation is approved by the Engineer. Contractor shall receive written permission from the Engineer if a deviation of the plans is necessary.
- 7. All disturbed areas shall be smoothly graded to provide positive drainage in the direction of flow arrows herein and stabilized with topsoil, seed, and mulch. If settlement occurs, topsoil, seeding, and mulching shall be repeated until settlement subsides (See Erosion and Sediment Control Specifications).
- 8. All trash, trees, and underbrush are to be cleared and removed off site to an approved dump site by the contractor.
- 9. Any excess excavated material shall be removed off site by the contractor or material shall be placed on site as directed by the Engineer and/or Owner.
- 10. Any existing survey monumentation that is disturbed during construction shall be replaced by a registered surveyor at the contractor's expense.
- 11. The Contractor shall conduct his work in easements so that there will be a minimum of disturbance of the properties crossed. Any disturbed areas shall be restored to its original condition.
- 12. All materials and methods of construction shall conform to the drawings, specifications, local building codes, and the standard specifications and details of Kent County.
- 13. All drainage structures and swales shall remain functional during construction unless otherwise indicated on the plans.
- 14. All water valves, boxes and hydrants shall be set and adjusted to finish grade.
- 15. Wherever sewer or water mains or services run parallel to each other, a minimum horizontal separation of 10' shall
- 16. Minimum cover over the sewer main shall be 42".
- 17. All below grade sewer installation including piping, tanks, electrical wiring shall be inspected by the Department of Public Works Water/Wastewater Division prior to backfilling. Prior notice of 48 hours over two business days shall be provided to schedule any inspections required by the Department of Public Works Water/Wastewater Division
- 18. All concrete used for utility work shall be in accordance with MD SHA Standards and Specifications for Mix No. 2. unless otherwise specified.
- 19. All paving materials and methods shall be in accordance with the latest MD SHA Standards and Specifications and be supplied by a State Certified plant.
- 20. Trenches shall not remain open overnight. If it is necessary for trenches to remain open, steel plates capable of bearing traffic shall be used to completely cover the trench openings.
- 21. Erosion and Sediment Control will be strictly enforced by the Kent County Sediment and Erosion Control Inspector.

SITE STATISTICS

TABLE OF CONTENTS

SHEET C-3 - DRAINAGE AREA MAP, CREDIT MAP

AND DETAILS

SHEET C-4 - SEDIMENT AND EROSION CONTROL

SHEET C-2 - SITE, GRADING, STORMWATER MANAGEMENT

DETAILS AND SPECIFICATIONS

AND SEDIMENT & EROSION CONTROL PLAN

SHEET C-1 - OVERALL SITE PLAN

SHEET L-1 - LANDSCAPE PLAN

CONCRETE PAD

SITE AREA = 0.449 ac. \pm (19,549 sq. ft. \pm) CRITICAL AREA = 0.449 ac. \pm (19,549 sq. ft. \pm) AREA WITHIN 100 Yr. FLOODPLAIN $= 0.39 \text{ ac.} \pm$ LOT COVERAGE (EXISTING) (0.0%) = $0,000 \text{ sq. ft.} \pm (0.000 \text{ ac.} \pm)$ $3,173 \text{ sq. ft.} \pm (0.073 \text{ ac.} \pm)$ LOT COVERAGE (PROPOSED) (16.2%) = DWELLING 1,425 sq. ft. \pm DECKS 516 sq. ft.± DRIVEWAYS 1,225 sq. ft.±

7 sq. ft.±

- 1. PROPERTY LINE INFORMATION SHOWN HEREON IS TAKEN FROM A PLAT ENTITLED "TOPOGRAPHIC SURVEY OF THE LANDS OF WILLIAM R. ASHMORE, et ux" PREPARED BY EXTREME MEASURES, LLC, IN JANUARY, 2022. HORIZONTAL DATUM IS NAD 83/91.
- 2. FOR DEED REFERENCE, SEE LIBER M.L.M. 1079, FOLIO 197.
- 3. CURRENT ZONING CLASSIFICATION (M) MARINE.
- 4. THE PROPERTY IS LOCATED ENTIRELY WITHIN THE CHESAPEAKE BAY CRITICAL AREA DESIGNATION - IDA.
- 5. SITE IS PARTIALLY LOCATED WITHIN 100 YEAR FLOODPLAIN AS SCALED FROM FLOOD INSURANCE RATE MAP COMMUNITY PANEL No. 24029C0380D. (ZONE "AE") (ELEV. = 6')
- 6. SOILS ONSITE CONSIST OF "MpA" MATAPEX FINE SANDY LOAM AS SCALED FROM http://websoilsurvey.nrcs.usda.gov FOR KENT COUNTY, MARYLAND.
- 7. EXISTING IMPROVEMENTS SHOWN SHOWN HEREON ARE THE RESULT OF A FIELD RUN SURVEY BY EXTREME MEASURES, LLC IN JANUARY, 2022. HORIZONTAL DATUM IS NAD 83/91.
- 7. EXISTING TOPOGRAPHY SHOWN HEREON IS THE RESULT OF A FIELD RUN SURVEY BY EXTREME MEASURES, LLC IN JANUARY, 2022. VERITICAL DATUM IS NAVD 88.
- 9. PUBLIC SEWER AND PRIVATE WELL WATER WILL BE UTILIZED FOR SEWAGE DISPOSAL AND POTABLE WATER SUPPLY.
- 10. STORMWATER MANAGEMENT FOR THE SITE HAS BEEN ADDRESSED VIA THE IMPLEMENTATION OF ENVIRONMENTAL SITE DESIGN (ESD) TO THE MAXIMUM EXTENT PRACTICABLE (MEP).
- 11. ALL PROPOSED LIGHTING SHALL BE DARK SKY COMPATIBLE
- 12. NO SIGNAGE IS PROPOSED FOR THIS PROJECT.
- 13. <u>SETBACK AND HEIGHT REQUIREMENTS</u> FRONT YARD SIDE YARD REAR YARD MAXIMUM BUILDING HEIGHT = 38°

REVIEWED FOR THE KENT SOIL AND WATER CONSERVATION DISTRICT AND MEET TECHNICAL REQUIREMENTS APPROVED: KENT SOIL AND WATER CONSERVATION DISTRICT KENT SOIL AND WATER CONSERVATION DISTRICT RESERVES THE RIGHT TO ADD, DELETE, MODIFY OR OTHERWISE ALTER THE EROSION CONTROL PROVISIONS OF THIS PLAN IN THE EVENT ADDITIONAL PROTECTION BECOMES NECESSARY. DEVELOPERS CERTIFICATION I (WE) CERTIFY THAT: A. ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE IN ACCORDANCE WITH THIS SEDIMENT AND EROSION CONTROL PLAN AND/OR STORMWATER MANAGEMENT PLAN, AND FURTHER, AUTHORIZED THE RIGHT OF ENTRY FOR PERIODIC ONSITE EVALUATION BY THE KENT SOIL AND WATER CONSERVATION DISTRICT SEDIMENT CONTROL NSPECTOR OR MARYLAND DEPARTMENT OF THE ENVIRONMEN B. ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATION OF ATTENDANCE AT THE DEPARTMENT OF ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF EROSION AND SEDIMENT BEFORE BEGINNING THE PROJECT. C. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR OR SUBCONTRACTOR TO NOTIFY THE ENGINEER OF ANY DEVIATION FROM THIS PLAN. ANY CHANGE MADE IN THIS PLAN WITHOUT WRITTEN AUTHORIZATION FROM THE ENGINEER WILL PLACE RESPONSIBILITY FOR SAID CHANGE ON THE CONTRACTOR OR SUBCONTRACTOR. SIGNATURE 7 21979 Kelleys Park Rd, Rock Hall, MD 21661 859-322-1093

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STATEMENT OF PURPOSE AND INTENT

THIS SITE IS LOCATED ON THE SOUTH SIDE OF KELLEYS PARK ROAD AND EAST SIDE OF SKINNERS NECK ROAD NEAR THE TOWN OF ROCK HALL. THE PROPERTY IS CURRENTLY VACANT. THE PURPOSE OF THIS SITE PLAN IS TO CONSTRUCT A NEW BUILDING TO BE USED AS A PRIVATE DESTINATION / RESIDENCE CLUB.

BENCHMARK

PROPOSED PAVED -

ZONE "AE"

ELEV. = 6'

THE COUNTY RESERVES THE RIGHT

TO ALLOW DAILY BOAT TRAILER

PARKING ON THE WEST SIDE OF

THE SKINNERS NECK ROAD

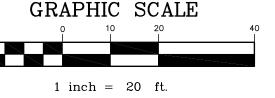
RIGHT-OF-WAY.

FLOODPLAIN LINE -

IRON PIPE FOUND

ELEV. = 5.79_{\circ}

THE INTENT OF THIS SITE PLAN IS TO RECEIVE APPROVAL FROM KENT COUNTY PLANNING AND ZONING FOR THE PROPOSED PLAN.



L.O.D. - DENOTES LIMITS OF DISTURBANCE $AREA = 0.32 \text{ acres} \pm (14,133 \text{ sq. ft.} \pm)$

FOLLOWING INITIAL DISTURBANCE, PERMANENT OR TEMPORARY, STABILIZATION SHALL BE COMPLETED WITHIN 3 CALENDAR DAYS ON ALL PERIMETER CONTROLS AND SLOPES GREATER THAN 3:1 AND 7 DAYS ON ALL OTHER DISTURBED AREAS ON THE SITE.

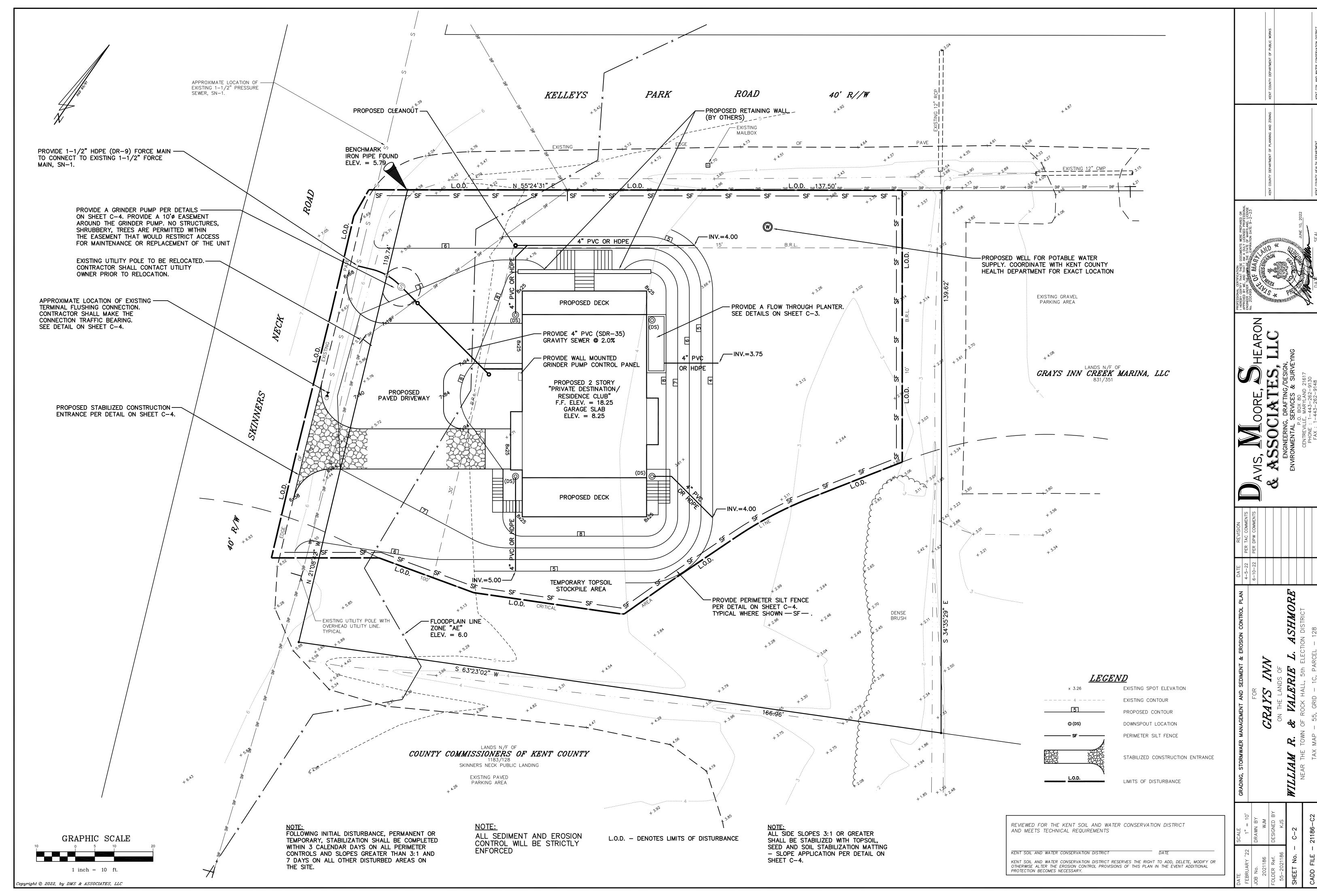
SEDIMENT AND EROSION CONTROL

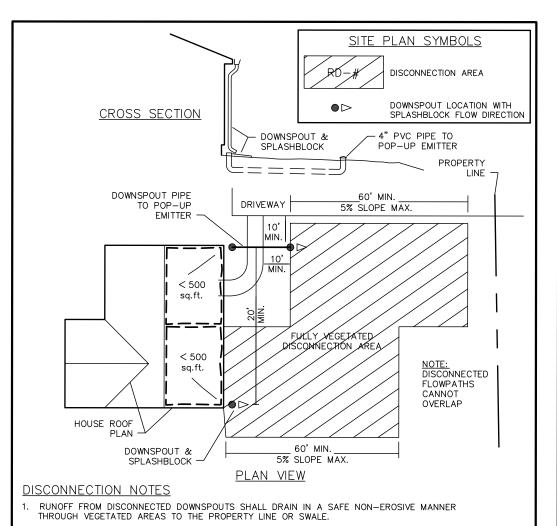
WILL BE STRICTLY ENFORCED



ARON

IM





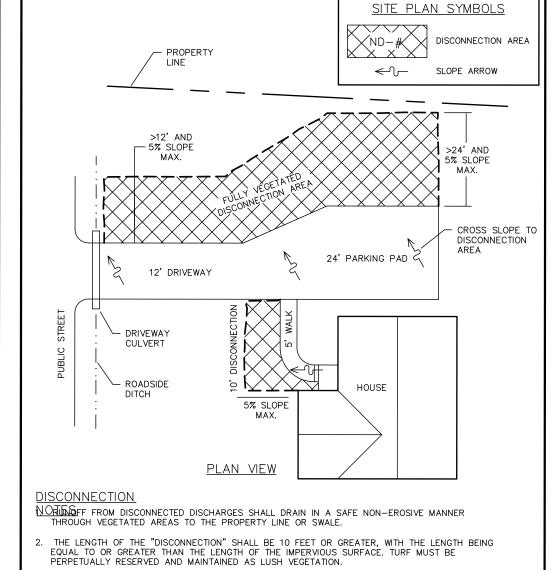
THE LENGTH OF THE "DISCONNECTION" SHALL BE 60 FEET OR GREATER. TURF MUST BE

DISCONNECTED DOWNSPOUTS SHALL BE LOCATED ON GRADUAL SLOPES LESS THAN 5% AND DIRECTED

4. THE CONTRIBUTING AREA OF ROOFTOP TO EACH DISCONNECTED DOWNSPOUT SHALL BE 500 SQ. FT.

PERPETUALLY RESERVED AND MAINTAINED AS LUSH VEGETATION.

AWAY FROM BUILDING TO MAINTAIN SHEET FLOW.

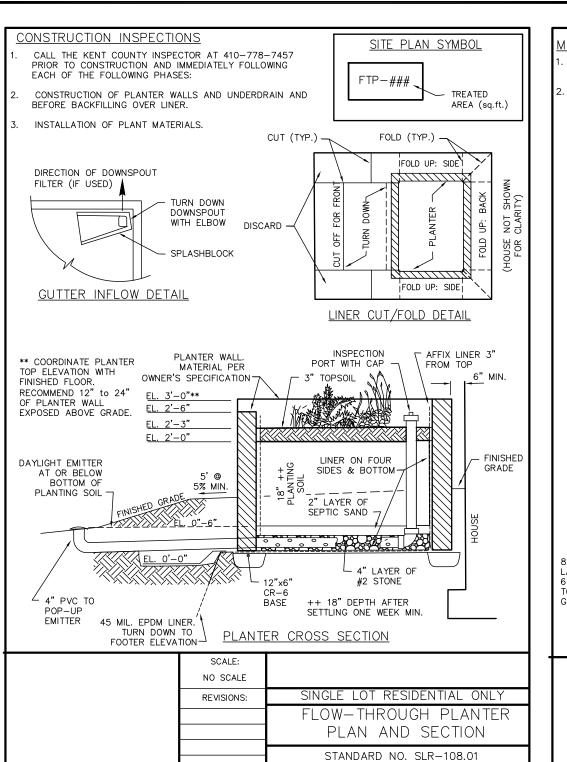


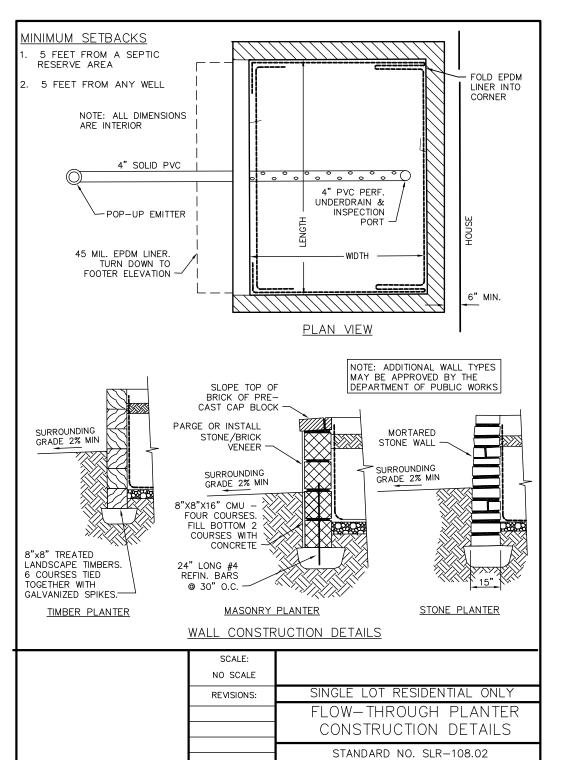
THE MAXIMUM IMPERVIOUS FLOW PATH SHALL BE 75 FEET.

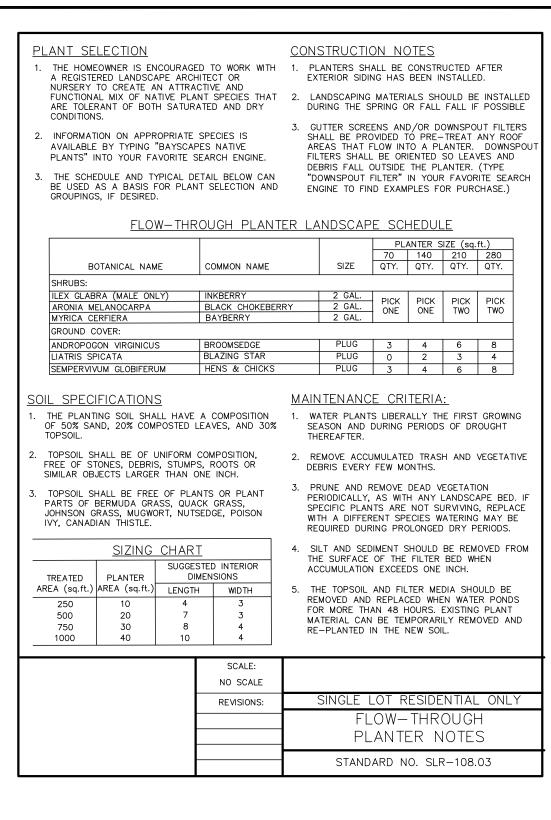
. DISCONNECTION AREAS SHALL BE LOCATED ON GRADUAL SLOPES LESS THAN 5%.

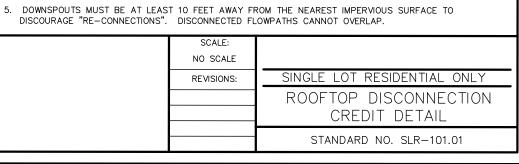
NO SCALE

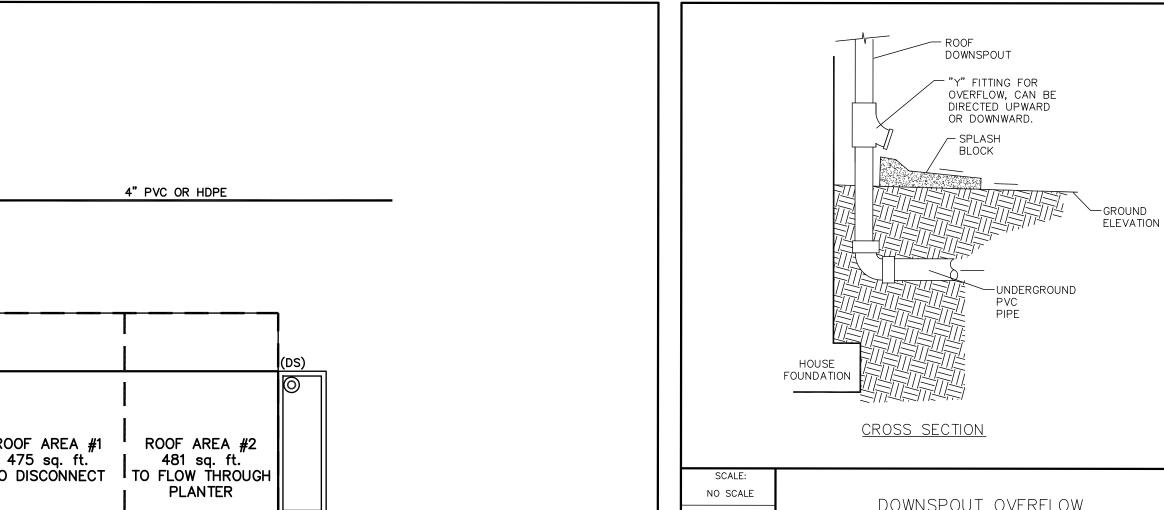
REVISIONS:









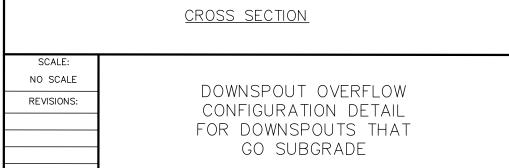


SINGLE LOT RESIDENTIAL ONLY

ION—ROOFTOP DISCONNECTION

CREDIT DETAIL

STANDARD NO. SW-102.01



STORMWATER MANAGEMENT COMPUTATIONS

DRAINAGE AREA = 0.45 acres IMPERVIOUS AREA = 0.07 acres % IMPERVIOUS = 16.2% = 0.20

WITH 'C' SOILS, Pe = 1.0 inch

Disconnection Flow Path Length (ft.)						
Western Shore	15	30	45	60	75	
Eastern Shore	12	24	36	48	60	
P_{E} (in.) =	0.2	0.4	0.6	0.8	1.0	

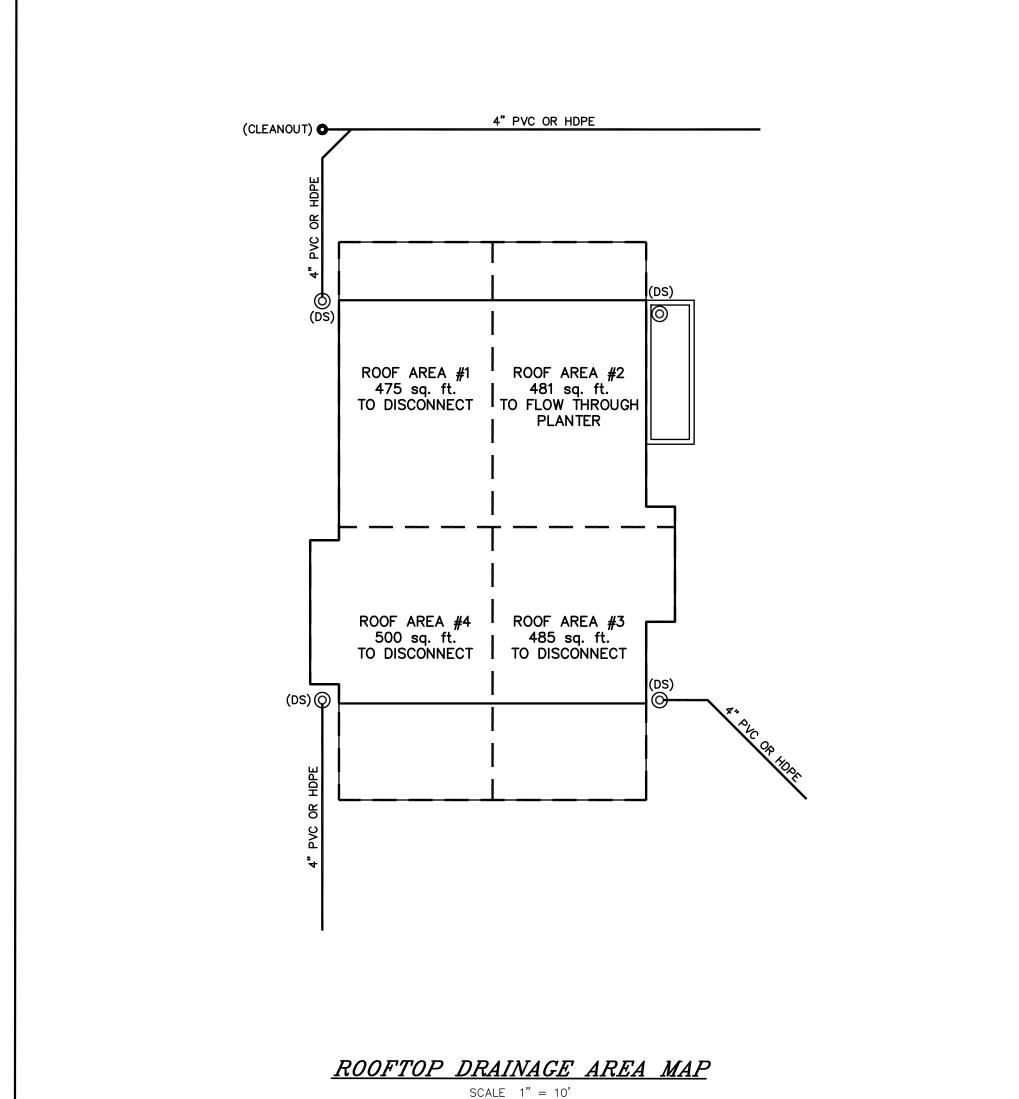
Table 5.7.	ESD Sizing	Factors for	Non-Rooftop	Disconnection

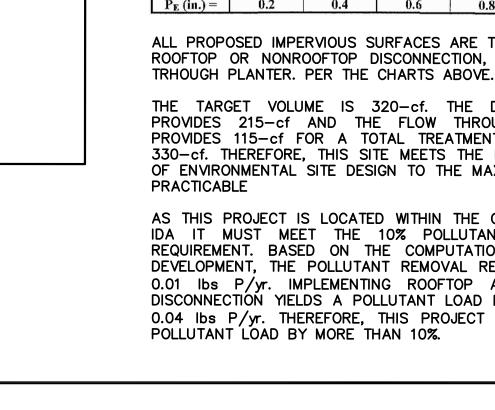
Ra	tio of Disco	nnection Len	gth to Contri	buting Lengt	h
Impervious Ratio	0.2:1	0.4:1	0.6:1	0.8:1	1:1
Pervious Ratio	0.1:1	0.2:1	0.3:1	0.4:1	0.5:1
P _E (in.) =	0.2	0.4	0.6	0.8	1.0

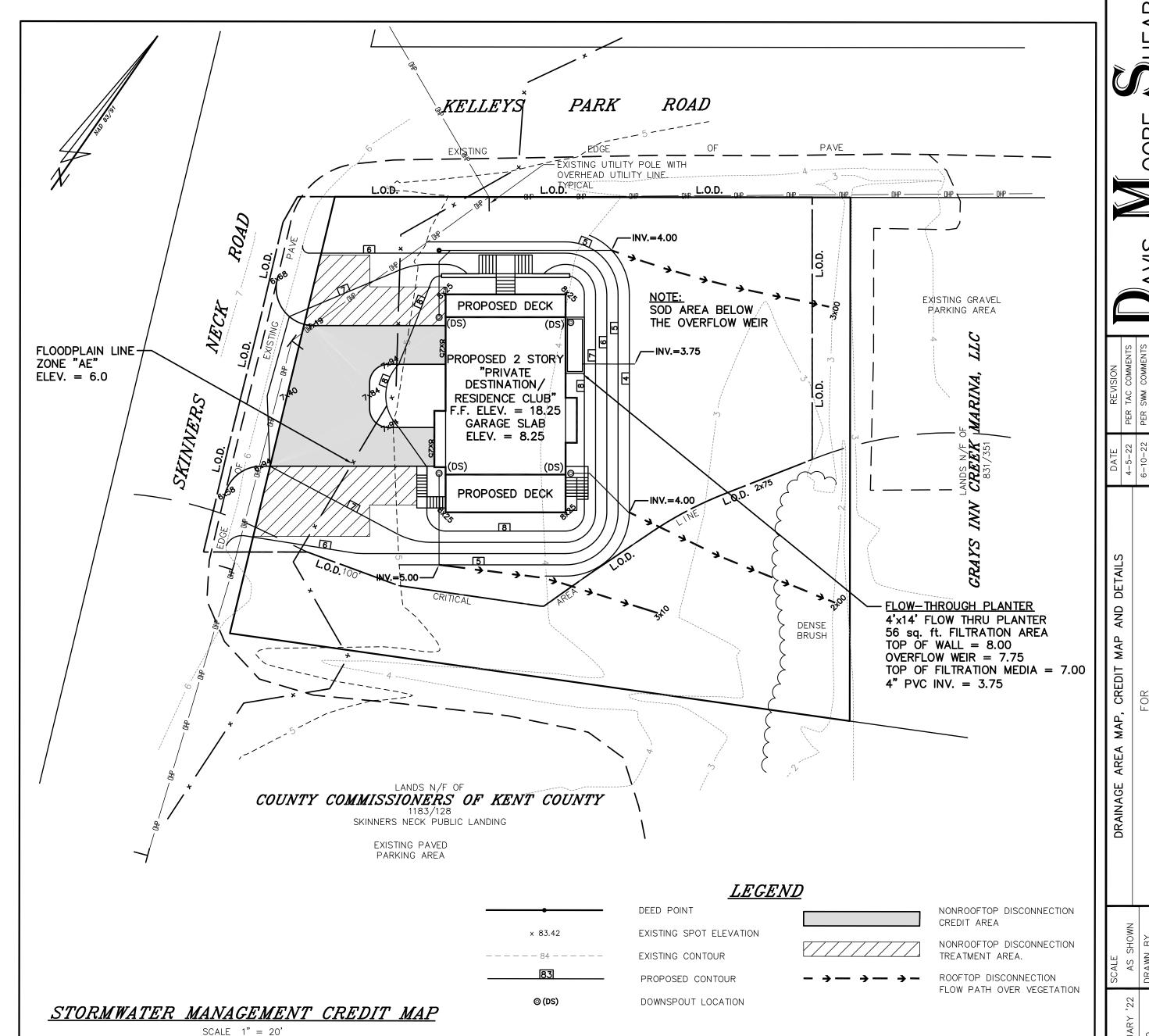
ALL PROPOSED IMPERVIOUS SURFACES ARE TREATED USING ROOFTOP OR NONROOFTOP DISCONNECTION, AND A FLOW

THE TARGET VOLUME IS 320-cf. THE DISCONNECTION PROVIDES 215-cf AND THE FLOW THROUGH PLANTER PROVIDES 115-cf FOR A TOTAL TREATMENT VOLUME OF 330-cf. THEREFORE, THIS SITE MEETS THE REQUIREMENTS OF ENVIRONMENTAL SITE DESIGN TO THE MAXIMUM EXTENT

AS THIS PROJECT IS LOCATED WITHIN THE CRITICAL AREA IDA IT MUST MEET THE 10% POLLUTANT REDUCTION REQUIREMENT. BASED ON THE COMPUTATIONS FOR NEW DEVELOPMENT, THE POLLUTANT REMOVAL REQUIREMENT IS 0.01 lbs P/yr. IMPLEMENTING ROOFTOP AND ROOFTOP DISCONNECTION YIELDS A POLLUTANT LOAD REDUCTION OF 0.04 lbs P/yr. THEREFORE, THIS PROJECT REDUCES THE







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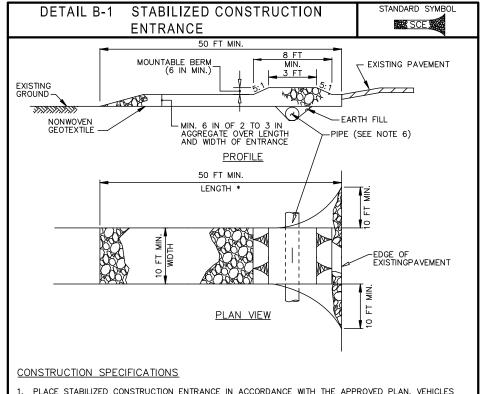
PROTECTION BECOMES NECESSARY.

AND MEETS TECHNICAL REQUIREMENTS

KENT SOIL AND WATER CONSERVATION DISTRICT

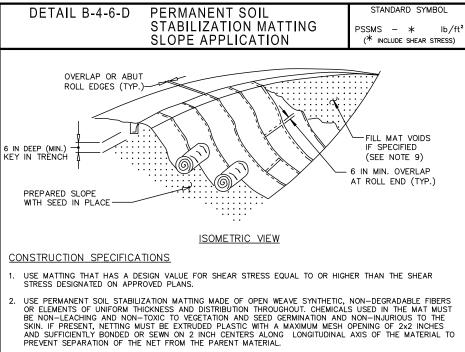
REVIEWED FOR THE KENT SOIL AND WATER CONSERVATION DISTRICT

KENT SOIL AND WATER CONSERVATION DISTRICT RESERVES THE RIGHT TO ADD, DELETE, MODIFY OR OTHERWISE ALTER THE EROSION CONTROL PROVISIONS OF THIS PLAN IN THE EVENT ADDITIONAL



- PLACE STABILIZED CONSTRUCTION ENTRANCE IN ACCORDANCE WITH THE APPROVED PLAN. VEHICLES MUST TRAVEL OVER THE ENTIRE LENGTH OF THE SCE. USE MINIMUM LENGTH OF 50 FEET (*30 FEET FOR SINGLE RESIDENCE LOT). USE MINIMUM WIDTH OF 10 FEET. FLARE SCE 10 FEET MINIMUM AT THE
- PIPE ALL SURFACE WATER FLOWING TO OR DIVERTED TOWARD THE SCE UNDER THE ENTRANCE, MAINTAINING POSITIVE DRAINAGE. PROTECT PIPE INSTALLED THROUGH THE SCE WITH A MOUNTABLE BERM WITH 5:1 SLOPES AND A MINIMUM OF 12 INCHES OF STONE OVER THE PIPE. PROVIDE PIPE AS TO CONVEY, A PIPE IS NOT NECESSARY. A MOUNTABLE BERM IS REQUIRED WHEN SCE IS NOT LOCATED AT A HIGH SPOT.
- PREPARE SUBGRADE AND PLACE NONWOVEN GEOTEXTILE, AS SPECIFIED IN SECTION H-1 MATERIALS. PLACE CRUSHED AGGREGATE (2 TO 3 INCHES IN SIZE) OR EQUIVALENT RECYCLED CONCRETE (WITHOUT REBAR) AT LEAST 6 INCHES DEEP OVER THE LENGTH AND WIDTH OF THE SCE.
- MAINTAIN ENTRANCE IN A CONDITION THAT MINIMIZES TRACKING OF SEDIMENT, ADD STONE OR MAKE OTHER REPAIRS AS CONDITIONS DEMAND TO MAINTAIN CLEAN SURFACE, MOUNTABLE BERM. AND SPECIFIED DIMENSIONS. IMMEDIATELY REMOVE STONE AND/OR SEDIMENT SPILLED, DROPPED, OR TRACKED ONTO ADJACENT ROADWAY BY VACUUMING, SCRAPING, AND/OR SWEEPING. WASHING ROADWAY TO REMOVE MUD TRACKED ONTO PAVEMENT IS NOT ACCEPTABLE UNLESS WASH WATER IS DIRECTED TO AN APPROVED SEDIMENT CONTROL PRACTICE.

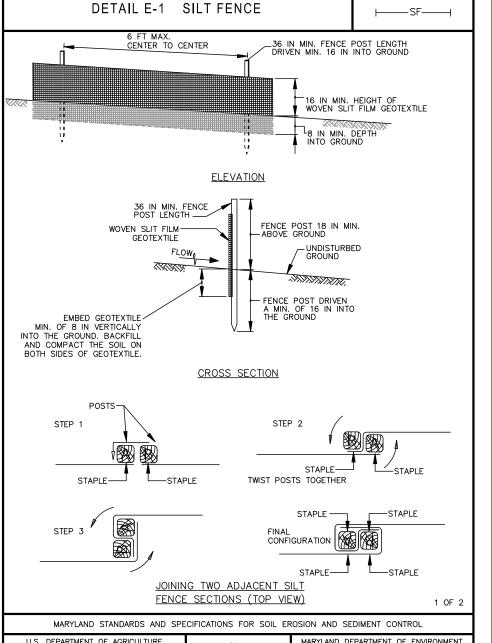
MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL FROSION AND SEDIMENT CONTROL

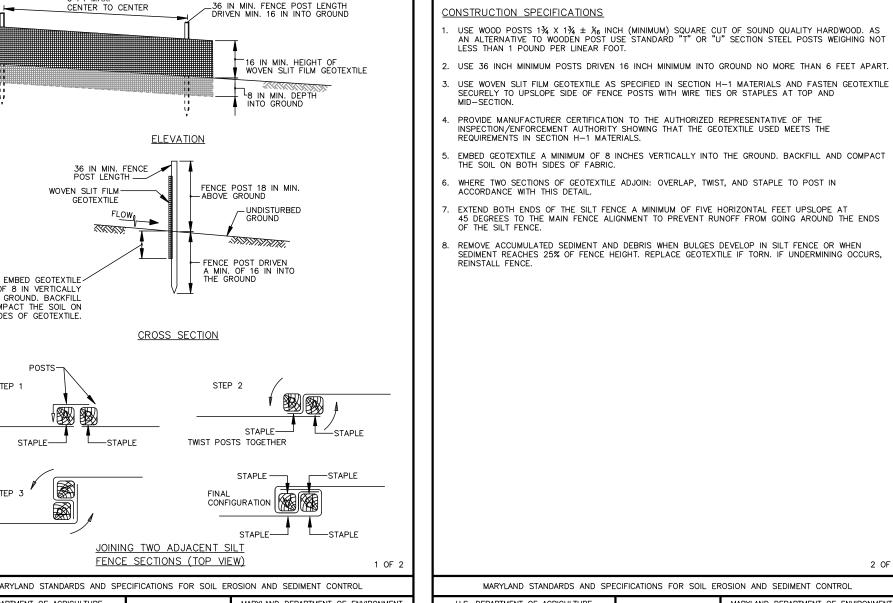


SECURE MATTING USING STEEL STAPLES OR WOOD STAKES. STAPLES MUST BE "U" OR "T" SHAPED STEEL WIRE HAVING A MINIMUM GAUGE OF NO. 11 AND NO. 8 RESPECTIVELY. "U" SHAPED STAPLES MUST AVERAGE 1 TO 1½ INCHES WIDE AND BE A MINIMUM OF 6 INCHES LONG. "T" SHAPED STAPLES MUST HAVE A MINIMUM 8 INCH MAIN LEG, A MINIMUM 4 INCH SECONDARY LEG, AND MINIMUM 4 INCH HEAD. WOOD STAKES MUST BE ROUGH-SAWN HARDWOOD, 12 TO 24 INCHES IN LENGTH, 1x3 INCH IN CROSS SECTION, AND WEDGE SHAPE AT

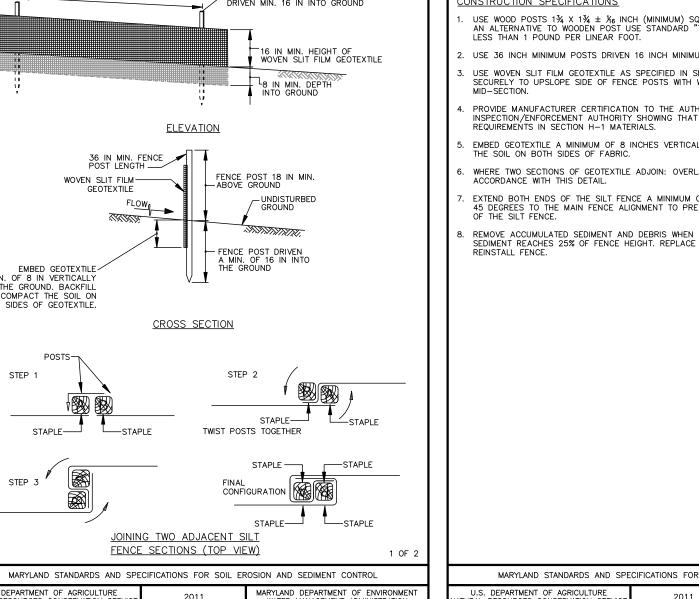
. PERFORM FINAL GRADING, TOPSOIL APPLICATION, SEEDBED PREPARATION, AND PERMANENT SEEDING IN ACCORDANCE WITH SPECIFICATIONS. PLACE MATTING WITHIN 48 HOURS OF COMPLETING SEEDING OPERATIONS, UNLESS END OF WORKDAY STABILIZATION IS SPECIFIED ON THE APPROVED EROSION AND SEDIMENT CONTROL PLAN.

- UNROLL MATTING DOWN SLOPE. LAY MATTING SMOOTHLY AND FIRMLY UPON THE SEEDED SURFACE. AVOID STRETCHING THE MATTING. OVERLAP OR ABUT EDGES OF MATTING ROLLS PER MANUFACTURER RECOMMENDATIONS. OVERLAP ROLL ENDS BY 6 INCHES (MINIMUM), WITH THE UPSTREAM MAT OVERLAPPING ON TOP OF THE DOWNSLOPE MAT.
- KEY IN THE TOP OF SLOPE END OF MAT 6 INCHES (MINIMUM) BY DIGGING A TRENCH, PLACING THE MATTING ROLL END IN THE TRENCH, STAPLING THE MAT IN PLACE, REPLACING THE EXCAVATED MATERIAL, AND TAMPING TO SECURE THE MAT END IN THE KEY. STAPLE/STAKE MAT IN A STAGGERED PATTERN ON 4 FOOT (MAXIMUM) CENTERS THROUGHOUT AND
- 2 FOOT (MAXIMUM) CENTERS ALONG SEAMS, JOINTS, AND ROLL ENDS. IF SPECIFIED BY THE DESIGNER OR MANUFACTURER AND DEPENDING ON THE TYPE OF MAT BEING INSTALLED, ONCE THE MATTING IS KEYED AND STAPLED IN PLACE, FILL THE MAT VOIDS WITH TOP SOIL OR GRANULAR MATERIAL AND LIGHTLY COMPACT OR ROLL TO MAXIMIZE SOIL/MAT CONTACT WITHOUT CRUSHING MAT.
- O. ESTABLISH AND MAINTAIN VEGETATION SO THAT REQUIREMENTS FOR ADEQUATE VEGETATIVE ESTABLISHMENT ARE CONTINUOUSLY MET IN ACCORDANCE WITH SECTION B-4 VEGETATIVE STABILIZATION. MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL FROSION AND SEDIMENT CONTROL





DETAIL E-1 SILT FENCE



1. Notification of Kent County (410-778-7457) at least five (5) days prior to the start of work.

2. Prior to the start of work, the Contractor is to obtain County approval of any proposed plan changes and sequence of construction, specifically relating to installation,

inspection, maintenance and removal of erosion and sediment control measures. 3. Sediment control measures are not to be removed until the

GENERAL NOTES

areas served have established vegetative cover, or with the permission of the Kent County Sediment Control Inspector. 4. When pumping sediment—laden water, the discharge must be directed to an approved sediment trapping measure prior to

release from the site. 5. All temporary stockpiles are to be located within areas protected by sediment control measures, and are to be

temporary stabilized. 6. All sediment control dikes, swales, basins and flow lines to basins will be temporarily seeded immediately upon

installation to reduce the contribution to sediment loading. 7. Disposal of excess earth materials on State or Federal

disposed of at a location approved by the local authority.

property requires MDE Approval, otherwise materials are to be

8. Temporary soil erosion control and sediment control measures are to be provided as per the approved plan prior to grading operations. Location adjustments are to be made in the field as necessary. The minimum area practical shall be disturbed for the minimum possible time.

9. If grading is completed out of a seeding season, graded areas are to be temporarily stabilized by mulch and mulch anchoring. Mulch material shall be unweathered, unchopped small grain straw spread at the rate of 2 to 2-1/2 tons per acre. Mulch anchoring to be accomplished by an approved method, use of a mulch anchoring tool is recommended where possible.

10. Implementation of the sediment control plan shall be in accordance with the "2011 Maryland Standards and Specifications for Soil Erosion and Sediment Control", of the Department

11. The Contractor is responsible for implementation and maintenance of the approved plan, and all other measures necessary to control, filter, or prevent sediment from leaving the site.

12. In case where stormwater management structures are a part of site development, removal of sediment control structures may not be accomplished before the contributing drainage area to the stormwater management structure is dewatered and stabilized.

13. On sites where infiltration techniques are utilized for the control of stormwater, extreme care must be taken to prevent all runoff from entering the structure during construction.

14. Sediment control for utility construction in areas outside of designed controls:

(a) Excavated trench material shall be placed on the high

side of the trench. (b) Immediately following pipe installation the trench shall

be backfilled, compacted and stabilized at the end of each working day. (c) Temporary silt fence or straw bale dikes shall be placed immediately downstream of any disturbed area intended to

remain disturbed longer than one working day. 15. All points on construction ingress and egress shall be

protected to prevent tracking of mud onto public ways.

Total Fill

0.449 Acres Total Area of Site 0.32 Acres Area Disturbed Area to be Roofed or Paved 0.06 Acres 750 cy*

* CUT AND FILL AMOUNTS ARE APPROXIMATE THE CONTRACTOR SHALL DO A SEPARATE TAKE-OFF EROSION & SEDIMENT CONTROL STANDARDS AND SPECIFICATIONS FOR

VEGETATIVE STABILIZATION

1.) Contractor shall install soil erosion and sediment control devices prior to any grading. Following initial disturbance or re—disturbance, permanent or temporary stabilization shall be completed within three (3) calendar days as to the surface of all perimeter controls, dikes, swales, ditches, perimeter slopes greater than three (3) horizontal to one (1) vertical (3:1) and seven days (7) as to all other disturbed or graded areas on the

project site not under active grading. 2.) All temporary erosion and sediment control devices are to be provided as indicated on this plan, with location adjustments to be made in the field as necessary, and to be maintained at the end of each working day until project completion. The minimum area

3.) Clearing and grubbing shall include all trees, brush, debris, root mat and organic materials to be removed.

practical shall be disturbed for the minimal amount of time possible.

4.) Temporary seeding shall be accomplished between February 15th through April 30th, or August 15th through November 30th. During other times, temporary mulching shall be

Temporary seeding shall conform to the following applications: 436 lbs. per acre of 10-20-20, 4,000 lbs. per acre of ground limestone, to be incorporated into the soil by disking or other suitable means. Annual rye grass shall be applied at a rate of 50 lbs. per acre using suitable equipment. Mulching shall be accomplished immediately after

	Seed Mixture (For Hazard Zone 7a) (From Table B-1)					Lima
No.	Species	ecies Appl. Seeding Seeding Rate Dates Depths		Fertilizer Rate (10-20-20)	Lime Rate	
	ANNUAL RYE GRASS	50 lbs.	2/15-4/30 8/15-11/30	1/2"		
	BARLEY OATS WHEAT CEREAL RYE	72 lbs. 120 lbs.	2/15-4/30, 8/15-11/30 2/15-4/30, 8/15-11/30 2/15-4/30, 8/15-11/30 2/15-4/30, 8/15-12/15	1" 1" 1" 1"	436 lb/ac 10 lb/ 1000 sf	2 tons/ac 90 lb/ 1000 sf
	FOXTAIL MILLET PEARL MILLET	30 lbs. 20 lbs.	5/1-8/14 5/1-8/14	1/2" 1/2"		

6.) Mulching shall be unchopped, unrotted, small grain straw applied at a rate of 2—2 1/2 tons per acre. Anchor mulch with a mulch anchoring tool on the contour. Wood cellulose fiber may be used for anchoring straw at a rate of 750 lbs. per acre mixed with water at a maximum of 50 lbs. of wood cellulose fiber per 100 gals of water, or with a synthetic liquid binder according to manufacture recommendations. Wood cellulose fiber used as mulch must be applied at a net dry weight of 1,500 lbs. per acre. Mix wood cellulose fiber with water to attain a mixture with a maximum of 50 lbs. of wood cellulose fiber per 100 gals. of water.

Permanent seeding shall be accomplished between February 15th through April 30th. or August 15th through October 31st. Permanent seeding at other than specified times will be allowed only upon written approval. Permanent seeding shall conform to the following applications: Permanent seeding for sites having disturbed over five (5) acres shall use fertilizer rates recommended by a soil testing agency and the recommendations provided in the Permanent Seeding Summary Table. Permanent seeding for conditions other than listed above shall be performed at the rates and dates as provided in the Permanent Seeding Summary Table below. Fertilizer and lime amendments shall be incorporated into the top 3" — 5" of the soil be disking or other suitable means. Mulching shall be accomplished as discussed in Item #6 of these specifications.

NO O

	Seed Mixture (For Hazard Zone 7a) (From Table B-3)					Lime			
No.	Species	Appl. Rate (lbs./ac.)	Seeding Dates	Seeding Depths	N	P205	K20	Rate	
	CREEPING RED FESCUE	60 lbs	2/15-4/30	1/4"					
7	KENTUCKY BLUEGRASS	15 lbs.	8/15-10/31	1/2"					
		400 !!	2/15-4/30	1/4"	45 lb/ac 1 lb/	90 lb/ac 2 lb/	90 lb/ac 2 lb/	2 tons/ac 90 lb/	
8	TALL FESCUE	100 lbs.	8/15-10/31	to 1/2"	1000 sf	1000 sf	1000 sf	1000 sf	
	TALL FESCUE KENTUCKY	60 lbs	2/15-4/30	1/4"					
9	BLUEGRASS	40 lbs.	2/15-4/30 8/15-10/31	to 1/2"					
	PERENNIAL RYEGRASS	20 lbs.	0/10-10/01	1/2"					

8.) Any spoil or borrow will be placed at a site approved by the Soil Conservation District. 9.) All areas remaining or intended to remain disturbed for longer than seven (7) days shall be stabilized in accordance with the USDA, Natural Resources Conservation Service Standards and Specifications for Soil Erosion and Sediment Control in developing areas for critical area stabilization.

10) It will be the responsibility of the Contractor or Subcontractor to notify the Engineer of any deviation from this plan. Any change made in this plan without written authorization from the Engineer will place responsibility of said change on the Contractor or the Subcontractor.

INSPECTION CHECKLIST

THE CONTRACTOR SHALL NOTIFY THE KENT COUNTY SEDIMENT AND EROSION CONTROL INSPECTOR AT (778-7457) AT THE FOLLOWING

1. THE REQUIRED PRECONSTRUCTION MEETING.

2. FOLLOWING INSTALLATION OF SEDIMENT CONTROL MEASURES.

3. PRIOR TO REMOVAL OR MODIFICATION OF ANY SEDIMENT CONTROL STRUCTURE.

4. PRIOR TO REMOVAL OF ALL SEDIMENT AND EROSION CONTROL DEVICES.

5. PRIOR TO FINAL ACCEPTANCE.

MAINTENANCE SCHEDULE

PREVENTATIVE MAINTENANCE SHALL BE ENSURED THROUGH INSPECTION OF ALL INFILTRATION SYSTEMS, RETENTION, OR DETENTION STRUCTURES BY THE lacksquareKENT COUNTY INSPECTOR. THE INSPECTION SHALL OCCUR DURING THE FIRST arphiYEAR OF OPERATION AND AT LEAST ONCE EVERY 2 YEARS THEREAFTER.

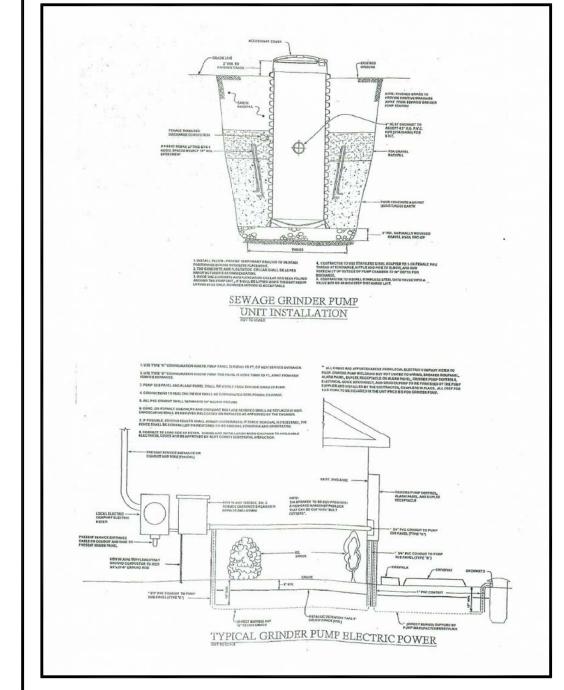
AN ASBUILT SURVEY OF THE STORMWATER MANAGEMENT FACILITY WILL BE PERFORMED AND IF THE AS-BUILT DOES NOT SUBSTANTIALLY REFLECT THE STORMWATER FACILITY DESIGN, THE CONTRACTOR SHALL MAKE ANY CHANGES OR ADDITIONS TO BRING THE FACILITY IN COMPLIANCE WITH THE DESIGN AS DIRECTED BY THE SOIL CONSERVATION TECHNICIAN OF KENT COUNTY.

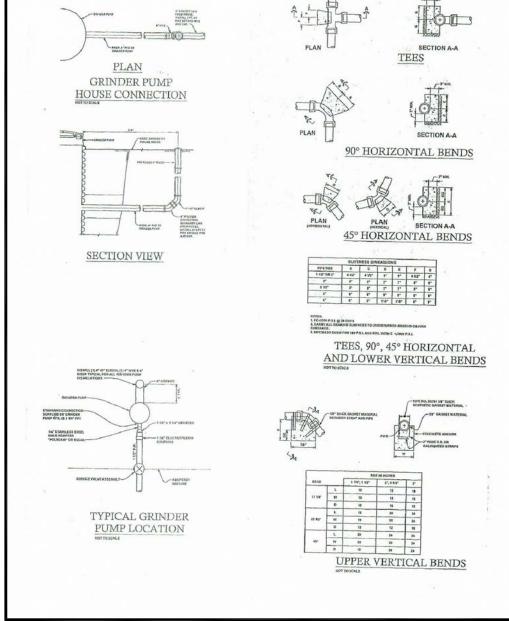
ASBUILT CERTIFICATION

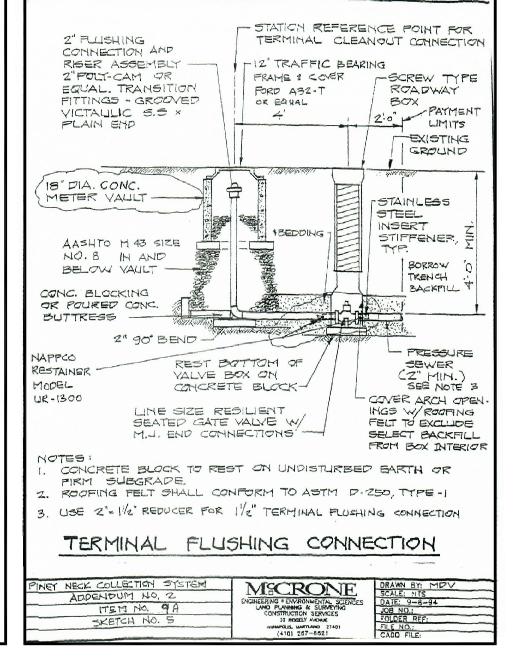
I HEREBY CERTIFY THAT THE FACILITIES SHOWN ON THIS PLAN WERE CONSTRUCTED AS SHOWN ON THE "ASBUILT" PLANS AND MEETS THE APPROVED PLANS AND SPECIFICATIONS.

SIGNATURE P.E. No.

KENT SOIL AND WATER CONSERVATION DISTRICT RESERVES THE RIGHT TO ADD, DELETE, MODIFY OR OTHERWISE ALTER THE EROSION CONTROL PROVISIONS OF THIS PLAN IN THE EVENT ADDITIONAL PROTECTION BECOMES NECESSARY





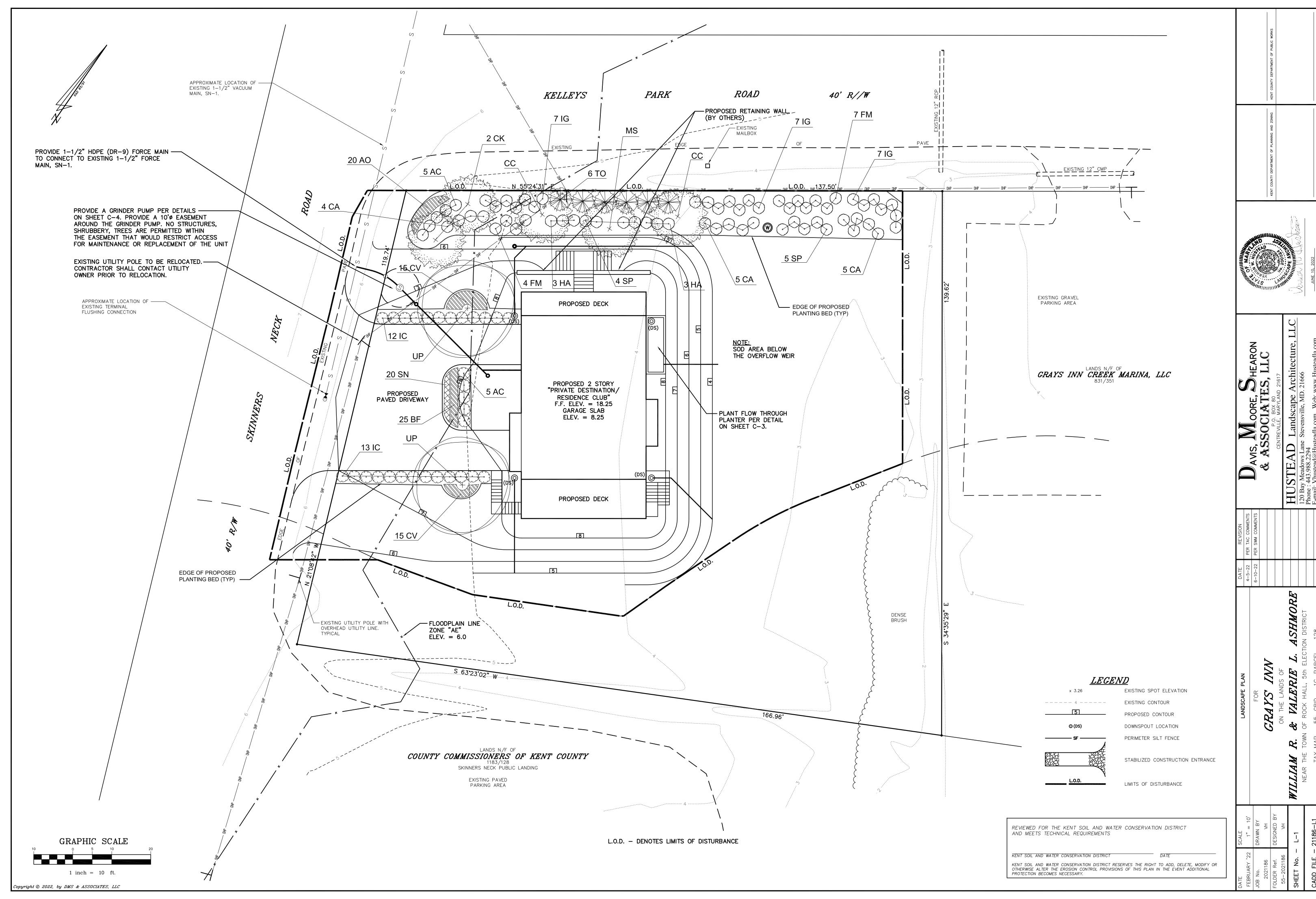


PHASE OF CONSTRUCTION

- 1. CONTACT THE KENT COUNTY SEDIMENT AND EROSION CONTROL INSPECTOR AT 410-778-7457 A MINIMUM OF 2 WEEKS PRIOR TO THE START OF CONSTRUCTION TO SCHEDULE A PRE— CONSTRUCTION MEETING PRIOR TO INITIATION OF ANY GRADING ACTIVITY.
- 2. INSTALL A STABILIZED CONSTRUCTION ENTRANCE AT THE LOCATION SHOWN.
- 3. INSTALL PERIMETER SILT FENCE AT LOCATIONS SHOWN.
- 4. STRIP THE TOPSOIL FROM THE LIMITS OF THE DRIVEWAYS AND DWELLING PAD AND STOCKPILE ONSITE. PLACE CR-6 ON ACCESS TO STABILIZE DURING BUILDING CONSTRUCTION.
- 5. IMPORT FILL AND PREPARE THE DWELLING FOUNDATION AND BEGIN CONSTRUCTION.
- 6. REMOVE EXCESS TOPSOIL AND OTHER MATERIALS OFFSITE TO AN APPROVED LOCATION.
- 7. FINE GRADE SITE AND STABILIZE WITH TOPSOIL, SEED, AND STABILIZATION MATTING FOR ALL SLOPES 3:1 AND STEEPER. MAINTAIN PERIMETER CONTROLS.
- 8. UPON APPROVAL FROM THE KENT COUNTY SEDIMENT CONTROL INSPECTOR, REMOVE ALL TEMPORARY SEDIMENT AND EROSION CONTROL DEVICES AND STABILIZE ALL DISTURBED AREAS PER PERMANENT STABILIZATION SPECIFICATIONS FOUND ON THIS SHEET.

REVIEWED FOR THE KENT SOIL AND WATER CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS KENT SOIL AND WATER CONSERVATION DISTRICT

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LANDSCAPING SPECIFICATIONS

OVERALL COMPLIANCE WITH THE TERMS OF THIS LANDSCAPE PLAN INCLUDING ALL MAINTENANCE AND WARRANTY REQUIREMENTS PRESCRIBED HEREON IS THE RESPONSIBILITY OF THE OWNER/DEVELOPER. MAINTENANCE, WARRANTY AND PLANT MATERIAL SURVIVAL RESPONSIBILITIES OF THE LANDSCAPE CONTRACTOR SHALL BE AS SPECIFICALLY NEGOTIATED BETWEEN OWNER/

DEVELOPER AND CONTRACTOR. ALL WORK SHALL BE ACCOMPLISHED WITH QUALIFIED PERSONNEL, UTILIZING INDUSTRY STANDARD PRACTICES AND TECHNIQUES. THE CONTRACTOR IS RESPONSIBLE FOR THE COMPLETE INSTALLATION OF ALL LANDSCAPING SHOWN OR IMPLIED ON THIS PLAN. PRIOR TO INSTALLATION, THE CONTRACTOR SHALL NOTIFY THE LANDSCAPE ARCHITECT OR PLAN PREPARER IF SITE PLANTING CONDITIONS WARRANT RE-DESIGN CONSIDERATION AND VERIFY THE RECEIPT OF MOST CURRENT APPROVED BUFFER MANAGEMENT PLAN.

(1) PLANTS SHALL BE NURSERY GROWN IN ACCORDANCE WITH GOOD HORTICULTURAL PRACTICES, AND GROWN UNDER CLIMATIC CONDITIONS SIMILAR TO THOSE IN THE LOCALITY OF THE PROJECT. THEY SHALL HAVE BEEN ROOT PRUNED

THEY SHALL BE SOUND, HEALTHY AND VIGOROUS, WELL BRANCHED AND DENSELY FOLIATED WHEN IN LEAF. THEY SHALL BE FREE OF DISEASE, PEST, EGGS OR LARVAE, AND SHALL HAVE A HEALTHY, DEVELOPED ROOT SYSTEM, TREES AND SHRUBS SHALL NOT BE PRUNED BEFORE DELIVERY. ALL PLANTS WITH A DAMAGED OR CROOKED LEADER OR MULTIPLE LEADERS, ABRASIONS ON THE BARK, SUNSCALD, DISFIGURING KNOTS OR FRESH CUTS OVER 1 1/2" WILL BE REJECTED. THE OWNER RESERVES THE RIGHT TO HAVE THE PLANT MATERIAL INSPECTED AND TAGGED AT THE GROWING SITE AND TO REJECT ANY DEFICIENT MATERIAL AT THE JOB SITE. THE LANDSCAPE ARCHITECT OR PLAN PREPARER SHALL REJECT ANY AND ALL PLANT MATERIAL THAT DOES NOT MEET SPECIFICATIONS, IS DISEASED, OR IS OTHERWISE UNHEALTHY.

NO CHANGE IN QUANTITY, SIZE, KIND OR QUALITY OF PLANT SPECIFIED WILL BE PERMITTED WITHOUT THE APPROVAL OF THE LANDSCAPE ARCHITECT/DESIGNER. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE PLANT COUNT AND IN ANY INSTANCE WHERE THERE IS A DISCREPANCY BETWEEN THE PLAN VIEW AND THE LANDSCAPE SCHEDULE, THE PLAN VIEW SHALL PRESIDE.

(2) TOPSOIL SHALL BE FERTILE, FRIABLE AND TYPICAL OF THE LOCALITY. IT SHALL BE FREE OF STONES, LUMPS, PLANTS, ROOTS, STICKS AND SHALL NOT BE DELIVERED IN A FROZEN OR MUDDY CONDITION. COMPACTED SOILS THAT CANNOT BE RESTORED TO A REASONABLE PLANTING SOIL SHALL BE REMOVED AND REPLACED WITH FRIABLE NATIVE SOILS.

(3) PLANTING SOIL (BACKFILL MIX) SHALL BE THREE PARTS NATIVE TOPSOIL AND ONE PART LEAF-GRO.

(4) STAKING MATERIALS: GUY WIRE SHALL BE PLIABLE 12 GAUGE GALVANIZED TWISTED TWO STRAND WIRE. HOSE SHALL BE A SUITABLE LENGTH OF TWO-PLY, REINFORCED BLACK RUBBER HOSE 3/4" INCH IN DIAMETER; STAKES SHALL CONFORM TO THE DETAIL ON THIS SHEET.

(5) MULCH: MULCH SHALL BE ORGANIC DOUBLE SHREDDED HARDWOOD BARK FREE OF HERBICIDES, LARGE CHUNKS AND WEEDS AND SEED AND AGED A MINIMUM OF 6 MONTHS.

"STANDARDIZED PLANT NAMES," LATEST EDITION AMERICAN JOINT COMMITTEE ON HORTICULTURAL NOMENCLATURE. "AMERICAN STANDARD FOR NURSERY STOCK," LATEST EDITION, AMERICAN ASSOCIATION OF NURSERYMEN.

PRE-DELIVERY DIGGING AND HANDLING OF PLANT MATERIALS:

(1) IMMEDIATELY BEFORE DIGGING, SPRAY ALL EVERGREEN OR DECIDUOUS PLANT MATERIAL IN FULL LEAF WITH ANTI-DESICCANT, APPLYING AN ADEQUATE FILM OVER TRUNKS, BRANCHES, TWIGS, AND/ OR FOLIAGE. (2) DIG BALL AND BURLAP (B&B) PLANTS WITH FIRM NATURAL BALLS OF EARTH, OF DIAMETER NOT LESS THAN THAT RECOMMENDED BY AMERICAN STANDARD FOR NURSERY STOCK, AND OF SUFFICIENT DEPTH TO INCLUDE THE FIBROUS AND FEEDING ROOTS. PLANTS MOVED WITH A BALL WILL NOT BE ACCEPTED IF THE BALL IS CRACKED OR BROKEN BEFORE OR DURING PLANTING OPERATIONS.

(3) THE LANDSCAPE CONTRACTOR SHALL PLAN DELIVER AND PLANT INSTALLATION TO MINIMIZE STRESS ON PLANT MATERIAL TO BE STAGED ON OR OFF THE JOB SITE SHALL BE LOCATED TO MAXIMIZE PROTECTION FROM HOT SUN AND DRYING WINDS AND SHALL BE WATERED TO MAINTAIN A STRESS FREE CONDITION. THE LACK OF AVAILABLE WATER SHALL NOT RELIEVE THE CONTRACTOR OF ADEQUATE MAINTENANCE.

PLANTING AREAS THAT HAVE BEEN IN CONSISTENT AGRICULTURAL PRODUCTION SHALL BE PLANTED WITH NO OTHER

REQUIRED SITE PREPARATION. PLANTING AREAS THAT ARE VEGETATED AND STABLE WITH MINIMAL WEEDS SHALL BE MOWED TO 8" OR AS REQUIRED

FOR PLANTING OR SEEDLING INSTALLATION.

E. <u>EXCAVATION OF PLANTING AREAS</u>:
THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL UNDERGROUND UTILITIES PRIOR TO COMMENCING WORK. COORDINATE WITH OTHER CONTRACTORS ON SITE AND MISS UTILITY TO VERIFY UTILITY LOCATIONS. ANY REPAIRS TO EXISTING UNDERGROUND UTILITIES REQUIRED AS A RESULT OF ACTIONS OF THE CONTRACTOR AND/OR HIS ASSIGNS SHALL BE BORNE BY THE CONTRACTOR.

STAKE OUT ON THE GROUND LOCATIONS FOR PLANTS AND OUTLINES OF AREA TO BE PLANTED AND OBTAIN APPROVAL OF THE LANDSCAPE ARCHITECT/DESIGNER BEFORE EXCAVATION IS BEGUN. CONTRACTOR IS TO CAUTIOUSLY TEST PIT AREAS ROUND UTILITIES (ELECTRIC, GAS, CABLE/COMMUNICATIONS LINES, WATER LINES, SEWER, ROOF LEADERS STORM DRAIN PIPE, ETC.) ARE SUSPECTED TO EXIST AND WHERE PROPOSED TO BE PLACED ACCORDING TO PLAN TO AVOID ANY DAMAGE OR DISRUPTIONS TO SERVICES. DO NOT PLACE PLANTS DIRECTLY OVER ANY EXISTING UNDERGROUND UTILITIES. OFFSET A REASONABLE AND PRACTICAL DISTANCE TO AVOID ANY IMMINENT OR FUTURE

DO NOT MIX OR PLACE SOILS AND SOIL AMENDMENTS IN FROZEN. WET OR MUDDY CONDITION. SUSPEND SOIL SPREADING. GRADING AND TILLING OPERATIONS DURING PERIODS OF EXCESS SOIL MOISTURE UNTIL MOISTURE CONTENT REACHES ACCEPTABLE LEVELS TO ATTAIN THE REQUIRED RESULTS. UNIFORMLY MOISTEN EXCESSIVELY DRY SOIL THAT IS NOT

TREE PITS SHALL BE EXCAVATED TO A DEPTH THAT ALLOWS FOR THE PLANTS TO BE SET AT THE SAME RELATIONSHIP TO FINISHED GRADE AS THEY BORE TO THE GROUND FROM WHICH THEY WERE DUG. ADD 1 OZ. OF MYCOAPPLY ENDO GRANULAR PER 2 CU.FT. OF BACKSOIL TO THE SIDES OF THE ROOTBALL. PLANTING PITS SHALL BE DUG A MINIUM OF 6 INCHES BELOW THE ROOT BALL AND 2 FEET PAST THE EDGE OF THE ROOT BALL TO ALLOW ROOM FOR AN EXPANDED AREA OF PLANTING SOIL. USE PLANTING SOIL TO BACKFILL APPROXIMATELY 2/3 FULL, WATER THOROUGHLY BEFORE INSTALLING REMAINDER OF THE PLANTING SOIL TO TOP OF PIT. ELIMINATING ALL AIR POCKETS. SET PLANTS PLUMB AND BRACE RIGIDLY IN POSITION UNTIL THE PLANTING SOIL HAS BEEN STAMPED SOLIDLY AROUND THE BALL AND ROOTS. CUT ROPES OR STRINGS FROM TOP OF BALL AFTER PLANT HAS BEEN SET. LEAVE BURLAP OR CLOTH WRAPPING INTACT AROUND BALLS. TURN UNDER AND BURY PORTIONS OF BURLAP AT TOP OF BALL. FOR CONTAINER GROWN PERENNIALS. CAREFULLY REMOVE FROM CONTAINERS WITHOUT BREAKING APART PLANTS OR ROOT SYSTEMS AND GENTLY LOOSEN SOIL. PLACE IN PIT EXCAVATED TO THE DEPTH THAT ALLOWS FOR THE PLANT TO BE SET AT ITS FORMER GRADE. BACKFILL TO 2/3 FULL AND WATER THOROUGHLY. BACKFILL WITH REMAINING PLANTING SOIL TO TOP OF PIT, ELIMINATING ALL AIR POCKETS. DISPOSE OF REMOVED CONTAINERS OFFSITE AT AN APPROVED LANDFILL.

PROTECT PLANTS AT ALL TIMES FROM SUN OR DRYING WINDS. PLANTS THAT CANNOT BE PLANTED IMMEDIATELY ON DELIVERY SHALL BE KEPT IN THE SHADE, WELL PROTECTED WITH SOIL, WET MOSS OR OTHER ACCEPTABLE MATERIAL AND SHALL BE KEPT WELL WATERED. PLANTS SHALL NOT REMAIN UNPLANTED FOR LONGER THAN THREE DAYS AFTER DELIVERY. PLANTS SHALL NOT BE BOUND WITH WIRE OR ROPE AT ANY TIME SO AS TO DAMAGE THE BARK OR BREAK BRANCHES. PLANTS SHALL BE LIFTED AND HANDLED FROM THE BOTTOM OF THE BALL ONLY.

MULCH ALL PITS AND BEDS WITH A TWO-INCH LAYER OF BARKMULCH IMMEDIATELY AFTER PLANTING, TO WORKED BEDS OF HERBACEOUS PERENNIALS ADD MULCH TO A DEPTH OF 2". PROVIDE AN 3-FOOT DIAMETER MULCH CIRCLE AROUND THE BASE OF ALL LARGE TREES. IN NO INSTANCE IS MULCH TO BE PILED AGAINST THE BASE OF TREE AND SHRUB TRUNKS. MULCH AREAS AROUND BASE OF EACH PLANT AND IN PLANTER AREAS. WATER ALL PLANTS IMMEDIATELY AFTER PLANTING.

CONTRACTOR.

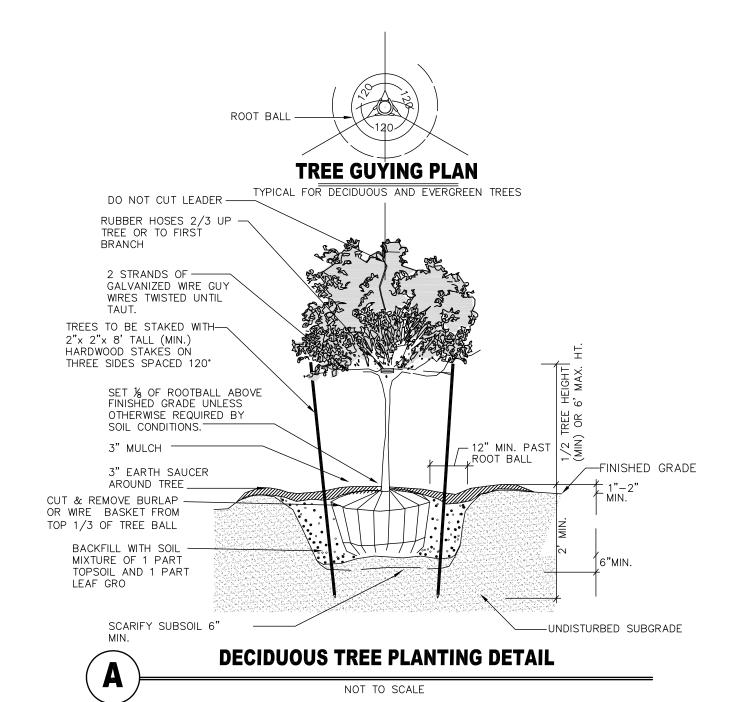
STAKE LARGE TREES IMMEDIATELY AFTER PLANTING. PLANTS SHALL STAND PLUMB AFTER STAKING. STAKES AND GUY WIRES SHALL BE OF THE SIZE AND MATERIAL SPECIFIED ABOVE AND POSITIONED AS SHOWN ON THE ACCOMPANYING PLANTING DETAIL. THEY SHALL BE REMOVED AT THE END OF THE GUARANTEE PERIOD AND DISPOSED OF OFF SITE BY THE

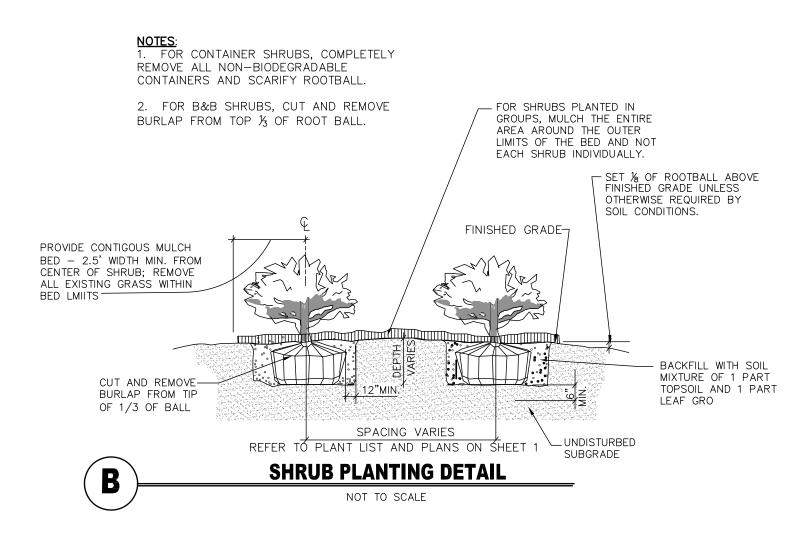
REMOVE ALL DEAD WOOD, SUCKERS, OR BROKEN BRANCHES AND PRESERVE THE NATURAL CHARACTER OF THE PLANT.

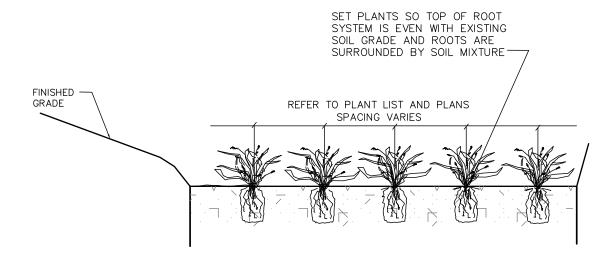
THE OWNER/DEVELOPER THROUGH HIS/HER CONTRACT WITH THE LANDSCAPE CONTRACTOR IS RESPONSIBLE AND SHALL INSURE ADEQUATE MAINTENANCE IS PROVIDED THROUGH THE INSTALLATION AND WARRANTY PERIOD AND FINAL INSPECTION BY THE COUNTY.

TREES AND HERBACEOUS PERENNIALS SHALL BE GUARANTEED FOR TWO (2) FULL YEARS FROM THE DATE THAT THE LANDSCAPE INSTALLATION IS ACCEPTED AS COMPLETE AND HAVE A 100% SURVIVABILITY RATING AT THE END OF THE TWO YEARS. PLANT MATERIAL NOT FOUND TO BE IN A HEALTHY, VIGOROUS CONDITION AT THE BEGINNING OF THE SECOND GROWING SEASON IS TO BE REPLACED. BARE-ROOT SEEDLINGS SHALL BE GUARANTEED FOR A PERIOD OF FIVE (5) YEARS AND HAVE A 50% SURVIVABILITY RATE AT THE END OF 5 YEARS. SEEDLINGS NOT FOUND TO BE IN A HEALTHY VIGOROUS CONDITION AT THE END OF THE FIVE-YEAR PERIOD ARE TO BE REPLACED.

PLANTING DETAILS









LANDSCAPING REQUIREMENTS

LANDSCAPE AREA REQUIREMENTS

SITE IS REQUIRED TO HAVE A MINIMUM OF 10% LANDSCAPED AREA

SITE AREA: 19,549 SQ.FT. REQUIRED LANDSCAPE AREA: 19,549 SQ.FT. x 10% = 1,955 SQ.FT.

PROPOSED LANDSCAPE AREA: 1,966 SQ.FT.

LANDSCAPE PARKING

THERE ARE NO LANDSCAPE REQUIREMENTS FOR PARKING AREAS. HOWEVER, WE HAVE PROVIDED CANOPY TREES AND SHRUBS TO SHADE PARKING SPACES AND SCREEN VEHICLES

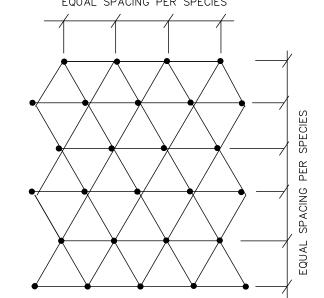
LANDSCAPE BUFFERS & SCREENING

THERE ARE NO BUFFER REQUIREMENTS FOR THIS DEVELOPMENT. HOWEVER WE HAVE PROVIDED PLANTING ALONG THE SIDE BOUNDARY LINE TO SCREEN THE HOUSE FROM VIEW.

LANDSCAPING PLANT SCHEDULE

KEY	QUA	BOTANICAL NAME	COMMON NAME	SIZE	SPACING
	Canopy Tre	?e			
UP	2	Ulmus 'Patriot'	Patriot Elm	2 - 2 ½" Cal. B&B	As Shown
	Understory	Tree			
CC	2	Cercis canadensis	Easter Redbud	1 - 1 ½" Cal. B&B	As Shown
CK	2	Cornus kousa'Milky Way Select	'Milky Way Select Dogwood	1 - 1 ½" Cal. B&B	As Shown
MS	1	Magnolia stellata'Royal Star'	Royal Star Magnolia	1 - 1 ½" Cal. B&B	As Shown
	Evergreen	Conifers		<u>-</u>	
TO	6	Thuja occidentalis'Emerald'	Emerald Arborvitae	3 -4' Ht. B&B	As Shown
	Shrubs				
AC	10	Abelia chinensis'Keiser'	Ruby Anniversary Abelia	36 -42" Cont.	As Shown
CA	14	Callicarpa americana	American Beautyberry	18 - 24" Cont.	As Shown
FM	11	Fothergilla major'Blue Shadow'	Blue Shadow Fothergilla	18 - 24" Cont.	As Shown
HA	6	Hydrangea arborescens'Abetwo	o'Incrediball Smooth Hydrangea	18 - 24" Cont.	As Shown
IC	25	llex crenata'GreenLustre'	Green Luster Holly	36 -42" Cont.	As Shown
IG	21	llex glabra'Densa'	Densa Inkberry	18 - 24" Cont.	As Shown
SP	9	Syringa pubescens'Miss Kim'	Miss Kim Lilac	18 - 24" Cont.	As Shown
	Perennials				
BF	25	Agastache'Blue Fortune'	Blue Fortune Hyssop	1 Gal. Cont.	12" o.c.stag
AO	20	Aster oblong.'October Skies	Aromatic Aster	1 Gal. Cont.	18" o.c. sta
CV	30	Coreopsis verticillata'Zagreb'	Tickseed	1 Gal. Cont.	18" o.c. sta
SN	20	Salvia nem.'East Friesland'	Garden Sage	1 Gal. Cont.	12" o.c.stag

EQUAL SPACING PER SPECIES



D HERBACEOUS VEGETATION PLANTING PATTERN

REVIEWED FOR THE KENT SOIL AND WATER CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS

KENT SOIL AND WATER CONSERVATION DISTRICT KENT SOIL AND WATER CONSERVATION DISTRICT RESERVES THE RIGHT TO ADD, DELETE, MODIFY OR OTHERWISE ALTER THE EROSION CONTROL PROVISIONS OF THIS PLAN IN THE EVENT ADDITIONAL PROTECTION BECOMES NECESSARY

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Department of Planning, Housing, and Zoning

To: Kent County Planning Commission From: Mark Carper, Associate Planner

Meeting: August 1, 2024

Subject: Morgnec Road Solar, LLC

Preliminary Site Plan Review – Utility-Scale Solar Energy System

Supplemental Memorandum

Executive Summary

REQUEST BY THE APPLICANT

Morgnec Road Solar, LLC is requesting preliminary site plan review of a proposed 245-acre utility-scale solar energy system. The site is located at 616 Morgnec Road near Chestertown in the Fourth Election District and is zoned Intense Village (IV), Community Residential (CR), Rural Residential (RR), and Resource Conservation District (RCD). Following the initial preliminary site plan review at the July 11, 2024, Planning Commission meeting, the applicant has provided supplemental material addressing landscaping and visibility of the proposed facilities. These materials include a detailed landscape plan and planting palette, line of site profiles, and visual renderings.

STAFF REVIEW

The submitted landscape plan largely meets or exceeds the minimum requirements as set forth in the Countywide Standards for Utility Scale Solar Energy Systems within the County's Land Use Ordinance. With the exception of 1,265 linear feet along the Morgnec Road frontage, the applicant is requesting a waiver from the minimum 3-foot berm requirement. One of the conditions for a waiver of this requirement is that the required evergreen trees be a minimum of 8 feet in height at the time of installation. On this topic, there is inconsistency with item No. 1 in the Landscaping Notes as presented on each of the associated sheets. The cover sheet (CP-610) states that the proposed evergreen trees are to be at least 8 feet in height at time of planting, as does the cover letter accompanying the recent submission of materials; however, the remainder of the landscaping sheets state that the height of the evergreen trees is to be at least 6 feet rather than 8 feet, even on those sheets depicting areas of the proposed landscaping buffer for which the berm waiver is requested. Landscaping Notes (CP-610) state that all landscape buffers are to be irrigated via water truck based on seasonal rainfall requirements.

The submitted line of site profiles, from points with and without a berm, depict potential visibility of the proposed solar panels at the time of planting at a height of 3.5 feet above the road surface, which is a standard eye height for passenger cars. The average eye height for trucks is 7.75 feet above the road surface. The previously submitted Solar Glare and Glint Analysis Report indicated the truck traffic would not experience glare from the proposed solar panels. It is unclear as to how much of the solar panels would be visible from truck height at the time of planting.

The submitted visual renderings depict four points of view of the project site from Morgnec Road after two years of vegetative growth. Another condition for waiver of the berm requirement is that the landscaping plan is deemed to screen elevations of the site adequately within two years. Staff would like to note that portions of the solar array will remain visible after two years, and the Planning Commission will need to determine if the proposed screening is adequate.



To whom it may concern,

On July 11, 2024, the Morgnec Road Solar, LLC project team presented their Preliminary Plan to the Planning Commission. The project team addressed questions from the Commission and heard many comments from the public during the public hearing. Both the landscaping plan and the discussion of a berm along Morgnec Road were the most common points of concern. The applicant has taken those concerns into consideration and advanced the design of the site accordingly.

We propose the addition of numerous trees, various plants, and new pollinator habitats as detailed in the information submitted herein. These enhancements will substantially improve the aesthetic and visual appeal of the vista, particularly in relation to the industrial facilities across the road. Furthermore, our plan includes natural vegetative buffers that support biodiversity by providing essential food and shelter for various species.

Incorporating native species is crucial to maintaining ecological balance. Our revised plan exceeds the ordinance requirements by utilizing 100% native species, up from the required 90%. This commitment to native species not only supports local ecosystems but also demonstrates our dedication to exceeding environmental standards.

We respectfully submit below our updates to the previously submitted plan to address the concerns we heard in the meeting, we are gratified by the knowledge that 95% of what was submitted met with no concern from Kent County Staff, Planning Commission members or members of the public. We are meeting ordinance and CPCN requirements, and going above those standards in several cases, to ensure we meet with the approval of Kent County. Below is a summary of the updated design elements that are being submitted for your review.

Landscape Planting Plan and Plant Palette

The applicant is submitting completed design of the landscaping buffer along with species selection. This information is included in this package as **Attachment A.**

The applicant has completed a landscape buffering plan comprised of 60' width buffer and meeting the requirements in Section 11 of the county ordinance. Note the following:

- 1. Four typical sections have been included in the design: standard buffer, critical area buffer, buffer with berm, and wet area buffer
- 2. The species lists for the plantings in each typical section of buffer are included
- 3. Tabulation of total trees planned for the site of 627 shade trees, 2,111 evergreen trees, 595 understory trees, and 495 large shrubs

Line-of-Sight Analyses

The applicant has conducted comprehensive line-of-sight profile analyses along Morgnec Road, focusing on the perspective of a standard driver, **at time of planting**. These profiles are included in this package as



Attachment B. The primary concern for many citizens and the Planning Commission has been the viewshed of entry and exit traffic east or westbound from Chestertown. Our updated landscaping plan addresses these concerns by enhancing our commitment to land stewardship and significantly improving the viewshed along Morgnec Road. The results of the analyses yield the following:

- 1. The majority of road frontage (approximately 3,550 linear feet of 5,000 total frontage) was determined to vertically screen the panels with 8-foot-tall plantings on existing grades. The applicant requests a berm waiver for this length of Morgnec Road on the grounds that enhanced buffering per the ordinance on existing grade vertically screens views of panels in these locations.
- 2. A section of road frontage (approximately 1,265 linear feet of 5,000 total frontage) was determined to require a 3-foot-high earthen berm to vertically screen the panels with 6-foot tall plantings. Further engineering review determined that drainage pattern impacts can be reasonably mitigated in this area. The applicant has proposed a 3-foot berm in this section and does not request a waiver for this case.
- 3. A portion of road frontage (approximately 185 linear feet of 5,000 total frontage) in the southwestern area of the site would require a berm exceeding 3-foot-height to vertically screen all panels within the site. This location is limited to approximately 3.7% of road frontage. After further engineering review, the project team believes that a berm in this area would be detrimental to the drainage patterns in this area and increase concentration of runoff into the protected wetlands. A taller berm also presents concerns regarding adequate irrigation and long-term viability of successful vegetation. **Due to these factors, the applicant requests a berm waiver in this area and proposes to instead utilize enhanced buffering as outlined in the ordinance.**

Visual Renderings

The applicant has prepared to-scale renderings of the proposed facility along Morgnec Road generated using industry-standard modeling software included as **Attachment C**. These renderings include the proposed landscaping buffers **at 2-year maturity**. The 3-foot berm section discussed above is also included in the terrain within the renderings.

The applicant heard multiple references to vegetation management practices during the last Planning Commission meeting. Project design is still ongoing as the project progresses through the county review process. The applicant is actively finalizing detailed practices with input from local landscape contractors and vendors, as well as local advocacy groups. While a final plan is still being developed, the applicant understands the county concerns and thus has committed to a number of significant improvements to our landscaping plan designed to promote land stewardship by including agrivoltaics and the use of 100% native pollinator species. These commitments will be compiled and detailed in a robust vegetative management plan for the project, as required by condition under the state license. These commitments are listed below:

- 1. Placing a minimum of 75% of the project area under sheep grazing (agrivoltaics) which will reduce the required mowing at the facility.
- 2. Revising original plan from 90% (ordinance) to 100% (exceeding ordinance) native species for buffer plantings.



- 3. Using a native pollinator meadow mix in buffered areas throughout the project site and a native pollinator array mix under panel areas.
- 4. Providing regular irrigation to plantings for at least two years, or until the buffer is fully established.
- 5. Working with local landscape contractors to source plant material from the region to the extent it is available
- 6. Establishing a protocol for managing invasive species, consistent with county regulations

The applicant requests that the Planning Commission review the supplemental information provided and place Morgnec Road Solar LLC's Preliminary Plan on the August 1, 2024 meeting agenda. The applicant also requests time during the meeting to share a presentation including an overview of the supplemental information, an update on the design process and community engagement, and to address outstanding questions from the Commission regarding the details of the Preliminary Plan.

Thank you for your consideration,

Morgnec Road Solar, LLC

Please find the following enclosed:

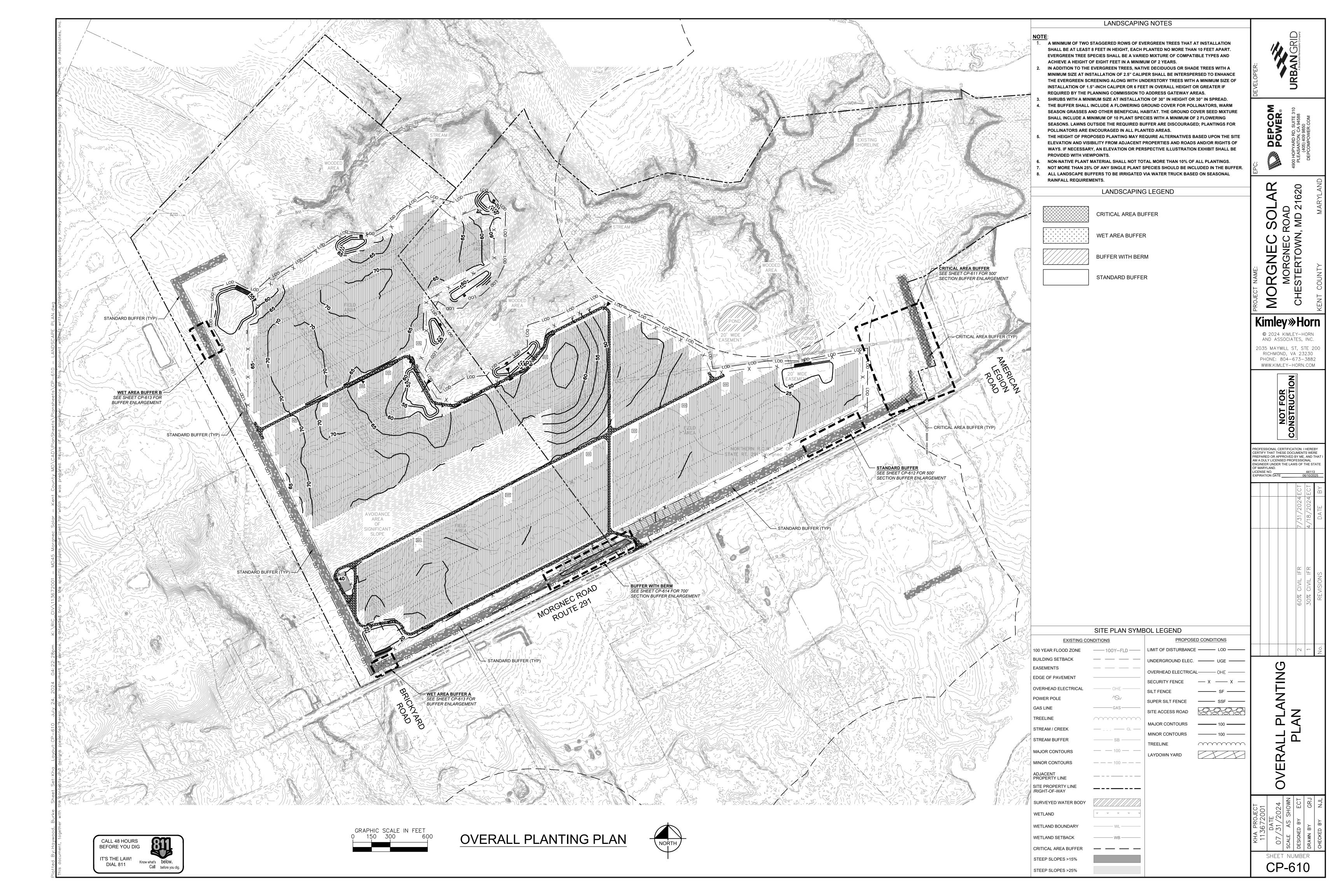
Attachment A – Landscape Planting Plan and Planting Palette

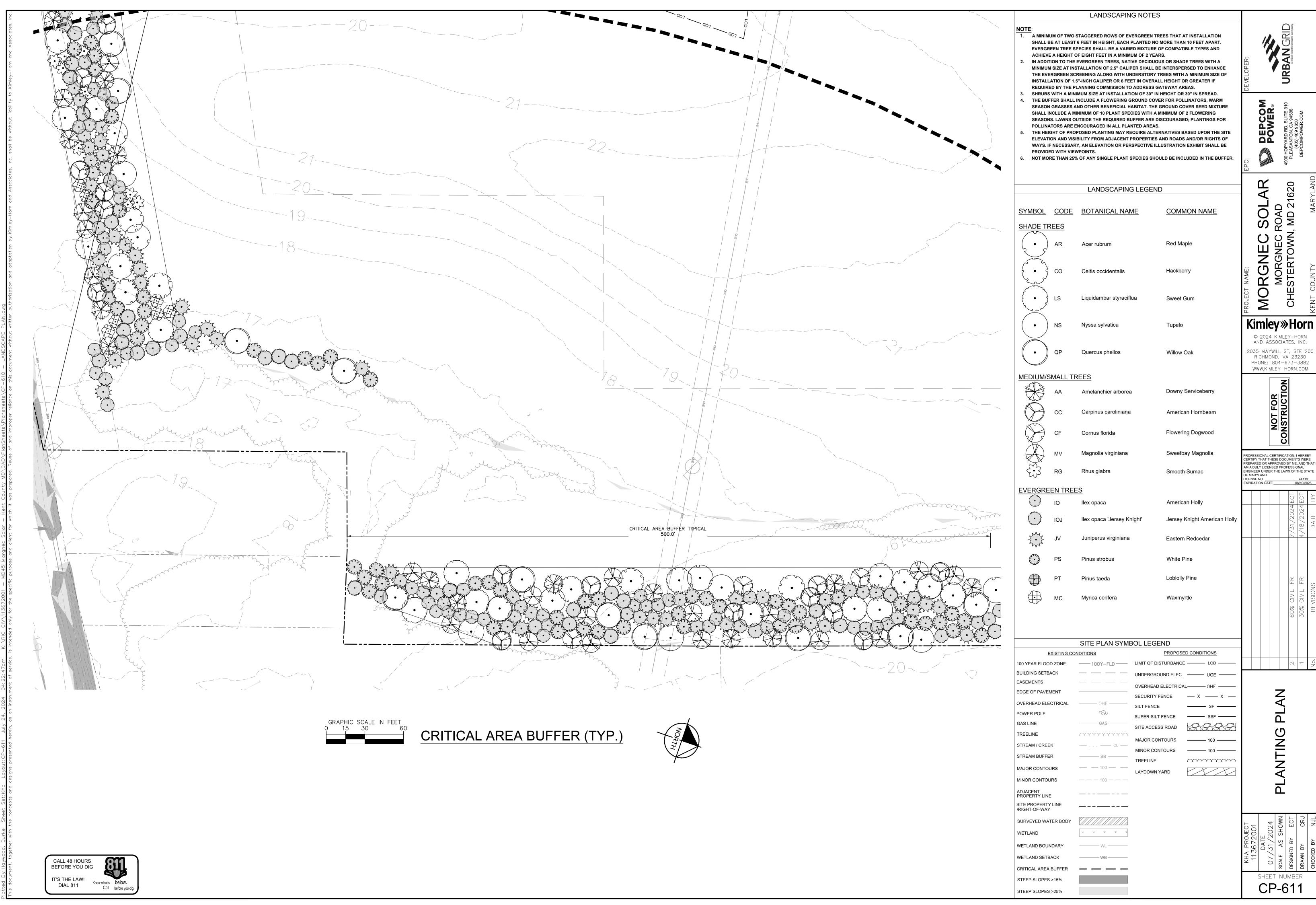
Attachment B – Line of Sight Profiles

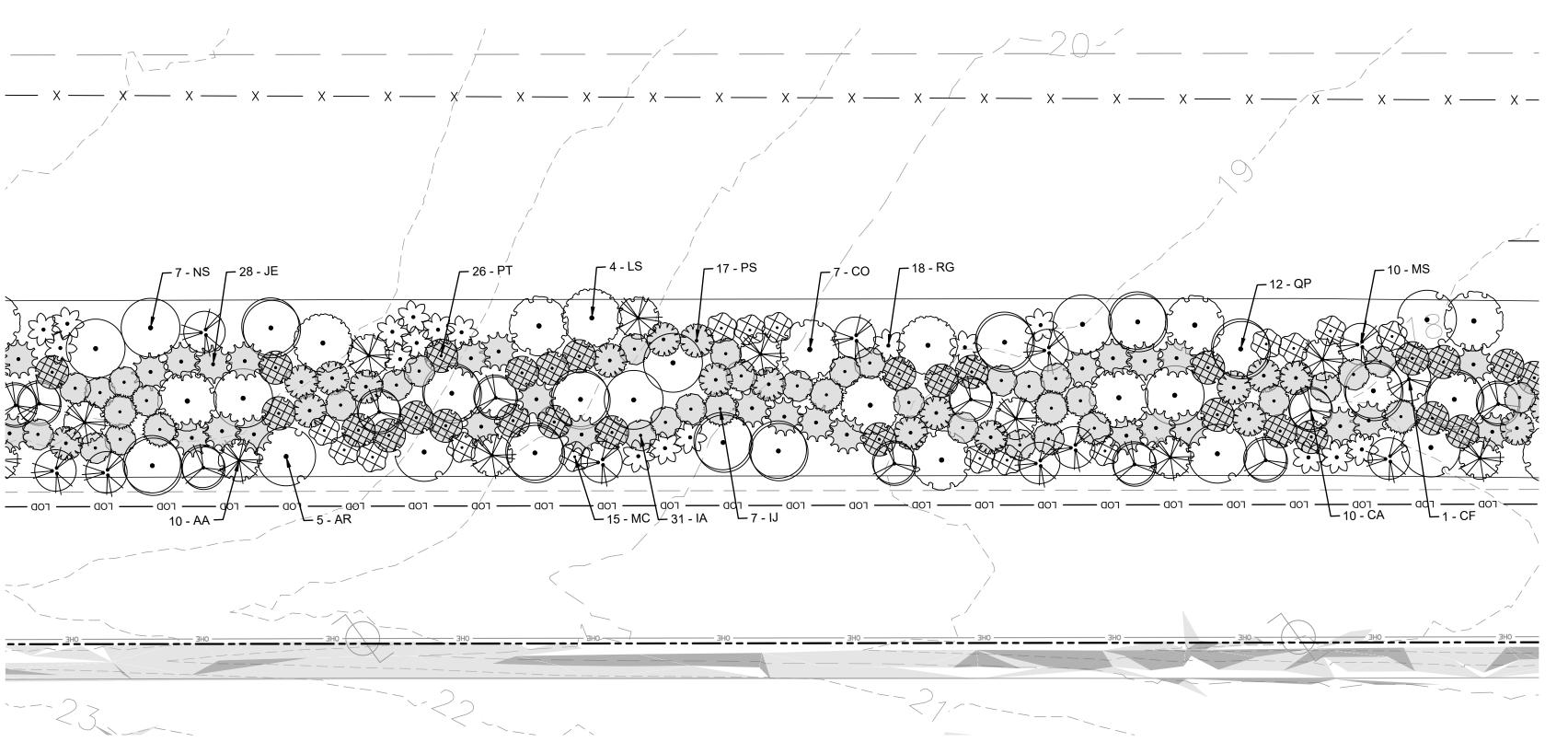
Attachment C – Visual Renderings



Attachment A – Landscape Planting Plan and Planting Palette







STANDARD BUFFER TYPICAL

STANDARD BUFFER 500' TYPICAL SCHEDULE **BOTANICAL NAME** COMMON NAME Red Maple Acer rubrum Celtis occidentalis Hackberry Liquidambar styraciflua Sweet Gum Nyssa sylvatica Willow Oak Quercus phellos MEDIUM/SMALL TREES Amelanchier arborea Downy Serviceberry Carpinus caroliniana American Hornbeam Cornus florida Flowering Dogwood Sweetbay Magnolia Magnolia virginiana Rhus glabra Smooth Sumac **EVERGREEN TREES** llex opaca American Holly Ilex opaca 'Jersey Knight' Jersey Knight American Holly Eastern Redcedar Juniperus virginiana White Pine Pinus strobus Loblolly Pine Pinus taeda Waxmyrtle Myrica cerifera

LANDSCAPING NOTES

A MINIMUM OF TWO STAGGERED ROWS OF EVERGREEN TREES THAT AT INSTALLATION SHALL BE AT LEAST 6 FEET IN HEIGHT, EACH PLANTED NO MORE THAN 10 FEET APART. EVERGREEN TREE SPECIES SHALL BE A VARIED MIXTURE OF COMPATIBLE TYPES AND ACHIEVE A HEIGHT OF EIGHT FEET IN A MINIMUM OF 2 YEARS.

IN ADDITION TO THE EVERGREEN TREES, NATIVE DECIDUOUS OR SHADE TREES WITH A MINIMUM SIZE AT INSTALLATION OF 2.5" CALIPER SHALL BE INTERSPERSED TO ENHANCE THE EVERGREEN SCREENING ALONG WITH UNDERSTORY TREES WITH A MINIMUM SIZE OF INSTALLATION OF 1.5"-INCH CALIPER OR 6 FEET IN OVERALL HEIGHT OR GREATER IF REQUIRED BY THE PLANNING COMMISSION TO ADDRESS GATEWAY AREAS.

SHRUBS WITH A MINIMUM SIZE AT INSTALLATION OF 30" IN HEIGHT OR 30" IN SPREAD. . THE BUFFER SHALL INCLUDE A FLOWERING GROUND COVER FOR POLLINATORS, WARM SEASON GRASSES AND OTHER BENEFICIAL HABITAT. THE GROUND COVER SEED MIXTURE SHALL INCLUDE A MINIMUM OF 10 PLANT SPECIES WITH A MINIMUM OF 2 FLOWERING

POLLINATORS ARE ENCOURAGED IN ALL PLANTED AREAS. THE HEIGHT OF PROPOSED PLANTING MAY REQUIRE ALTERNATIVES BASED UPON THE SITE ELEVATION AND VISIBILITY FROM ADJACENT PROPERTIES AND ROADS AND/OR RIGHTS OF WAYS. IF NECESSARY, AN ELEVATION OR PERSPECTIVE ILLUSTRATION EXHIBIT SHALL BE PROVIDED WITH VIEWPOINTS.

6. NOT MORE THAN 25% OF ANY SINGLE PLANT SPECIES SHOULD BE INCLUDED IN THE BUFFER.

LANDSCAPING LEGEND

COMMON NAME

Red Maple

Hackberry

Sweet Gum

Willow Oak

Downy Serviceberry

American Hornbeam

Flowering Dogwood

Sweetbay Magnolia

Smooth Sumac

American Holly

Eastern Redcedar

White Pine

Loblolly Pine

Waxmyrtle

PROPOSED CONDITIONS

UNDERGROUND ELEC. — UGE —

OVERHEAD ELECTRICAL OHE —

SECURITY FENCE — X — X —

MAJOR CONTOURS — 100 — 100

----- SF -----

——— SSF ———

 $\sim\sim\sim\sim\sim$

Jersey Knight American Holly

BOTANICAL NAME

Acer rubrum

Celtis occidentalis

Nyssa sylvatica

Quercus phellos

Amelanchier arborea

Carpinus caroliniana

Cornus florida

llex opaca

llex opaca 'Jersey Knight'

Juniperus virginiana

Pinus strobus

Pinus taeda

Myrica cerifera

——— SB ———

— — 100 — —

— — — 100 — — —

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V V V

EXISTING CONDITIONS

SITE PLAN SYMBOL LEGEND

—— 100Y—FLD —— LIMIT OF DISTURBANCE —— LOD ———

SILT FENCE

SUPER SILT FENCE

SITE ACCESS ROAD

MINOR CONTOURS

LAYDOWN YARD

TREELINE

Magnolia virginiana

Liquidambar styraciflua

CO

QΡ

EVERGREEN TREES

100 YEAR FLOOD ZONE

BUILDING SETBACK

EDGE OF PAVEMENT

OVERHEAD ELECTRICAL

EASEMENTS

POWER POLE

GAS LINE

TREELINE

STREAM / CREEK

STREAM BUFFER

MAJOR CONTOURS

MINOR CONTOURS

ADJACENT

WETLAND

PROPERTY LINE SITE PROPERTY LINE

/RIGHT-OF-WAY

SURVEYED WATER BODY

WETLAND BOUNDARY

WETLAND SETBACK

CRITICAL AREA BUFFER

STEEP SLOPES >15%

STEEP SLOPES >25%

SEASONS. LAWNS OUTSIDE THE REQUIRED BUFFER ARE DISCOURAGED; PLANTINGS FOR

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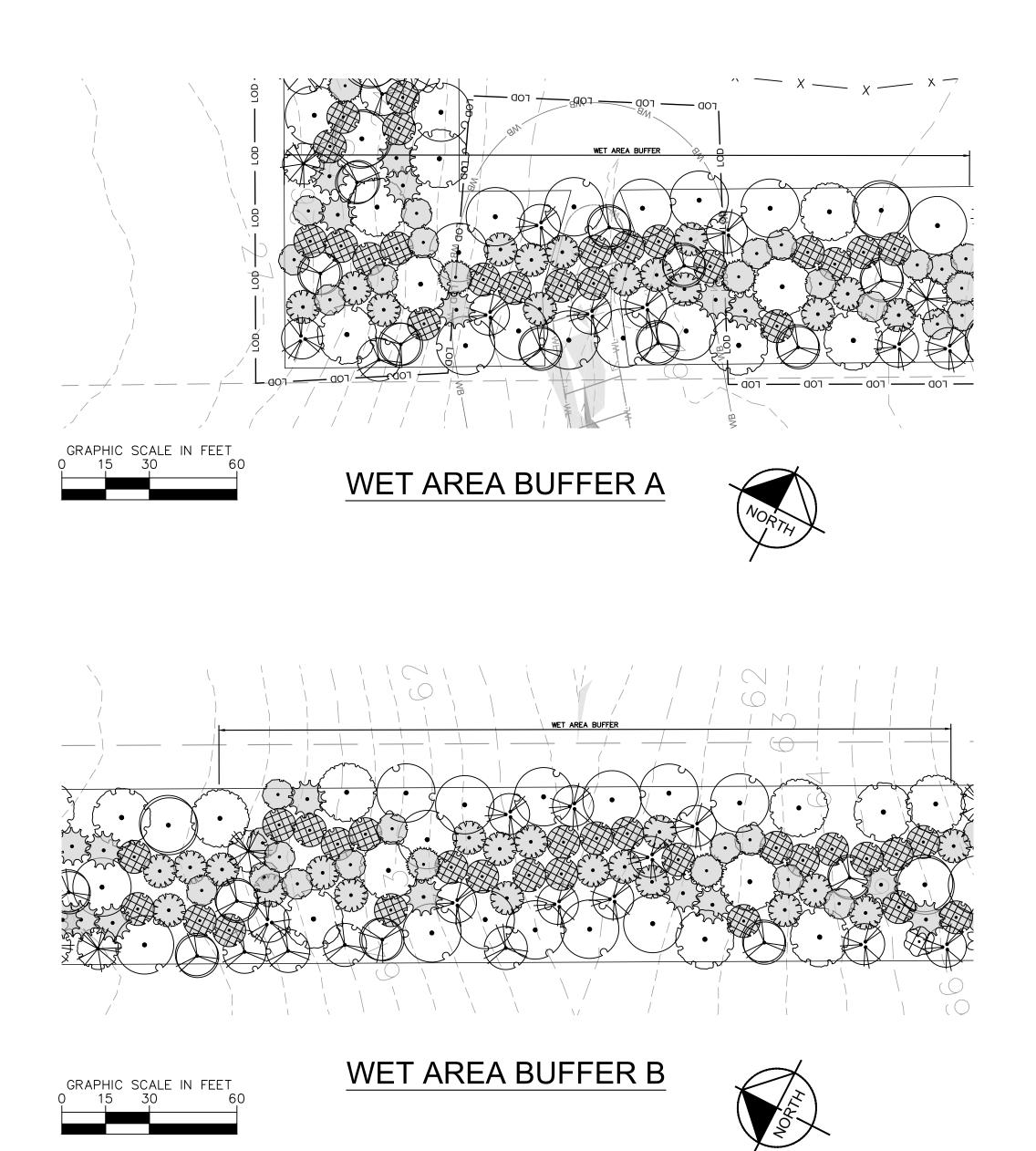
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SHEET NUMBER CP-612

SHADE TREES MEDIUM/SMALL TREES





BEFORE YOU DIG

IT'S THE LAW!

DIAL 811

Know what's below.

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1. A MINIMUM OF TWO STAGGERED ROWS OF EVERGREEN TREES THAT AT INSTALLATION SHALL BE AT LEAST 6 FEET IN HEIGHT, EACH PLANTED NO MORE THAN 10 FEET APART. EVERGREEN TREE SPECIES SHALL BE A VARIED MIXTURE OF COMPATIBLE TYPES AND ACHIEVE A HEIGHT OF EIGHT FEET IN A MINIMUM OF 2 YEARS.

IN ADDITION TO THE EVERGREEN TREES, NATIVE DECIDUOUS OR SHADE TREES WITH A MINIMUM SIZE AT INSTALLATION OF 2.5" CALIPER SHALL BE INTERSPERSED TO ENHANCE THE EVERGREEN SCREENING ALONG WITH UNDERSTORY TREES WITH A MINIMUM SIZE OF INSTALLATION OF 1.5"-INCH CALIPER OR 6 FEET IN OVERALL HEIGHT OR GREATER IF

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SHALL INCLUDE A MINIMUM OF 10 PLANT SPECIES WITH A MINIMUM OF 2 FLOWERING

SEASONS. LAWNS OUTSIDE THE REQUIRED BUFFER ARE DISCOURAGED; PLANTINGS FOR POLLINATORS ARE ENCOURAGED IN ALL PLANTED AREAS. THE HEIGHT OF PROPOSED PLANTING MAY REQUIRE ALTERNATIVES BASED UPON THE SITE ELEVATION AND VISIBILITY FROM ADJACENT PROPERTIES AND ROADS AND/OR RIGHTS OF WAYS. IF NECESSARY, AN ELEVATION OR PERSPECTIVE ILLUSTRATION EXHIBIT SHALL BE

PROVIDED WITH VIEWPOINTS. 6. NOT MORE THAN 25% OF ANY SINGLE PLANT SPECIES SHOULD BE INCLUDED IN THE BUFFER.

LANDSCAPING LEGEND SYMBOL CODE BOTANICAL NAME **COMMON NAME** SHADE TREES Red Maple Acer rubrum Hackberry CO Celtis occidentalis Liquidambar styraciflua Sweet Gum Nyssa sylvatica Tupelo QP Quercus phellos Willow Oak MEDI<u>UM/SMALL TREES</u> Downy Serviceberry Amelanchier arborea Carpinus caroliniana American Hornbeam Flowering Dogwood Cornus florida Magnolia virginiana Sweetbay Magnolia Smooth Sumac **EVERGREEN TREES** American Holly llex opaca llex opaca 'Jersey Knight' Jersey Knight American Holly Juniperus virginiana Eastern Redcedar Pinus strobus White Pine Loblolly Pine Pinus taeda Myrica cerifera Waxmyrtle SITE PLAN SYMBOL LEGEND PROPOSED CONDITIONS **EXISTING CONDITIONS** LIMIT OF DISTURBANCE — LOD — 100 YEAR FLOOD ZONE —— 100Y—FLD —— BUILDING SETBACK UNDERGROUND ELEC. ———— UGE ——— EASEMENTS OVERHEAD ELECTRICAL OHE — EDGE OF PAVEMENT SECURITY FENCE — X — X — OVERHEAD ELECTRICAL POWER POLE ----- SSF -----GAS LINE SITE ACCESS ROAD TREELINE MAJOR CONTOURS STREAM / CREEK STREAM BUFFER TREELINE \bigcirc — — 100 — — MAJOR CONTOURS LAYDOWN YARD MINOR CONTOURS — — — 100 — — — ADJACENT PROPERTY LINE SITE PROPERTY LINE _---/RIGHT-OF-WAY

SURVEYED WATER BODY

WETLAND BOUNDARY

WETLAND SETBACK

CRITICAL AREA BUFFER

STEEP SLOPES >15%

STEEP SLOPES >25%

WETLAND

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DEPCOR POWER®

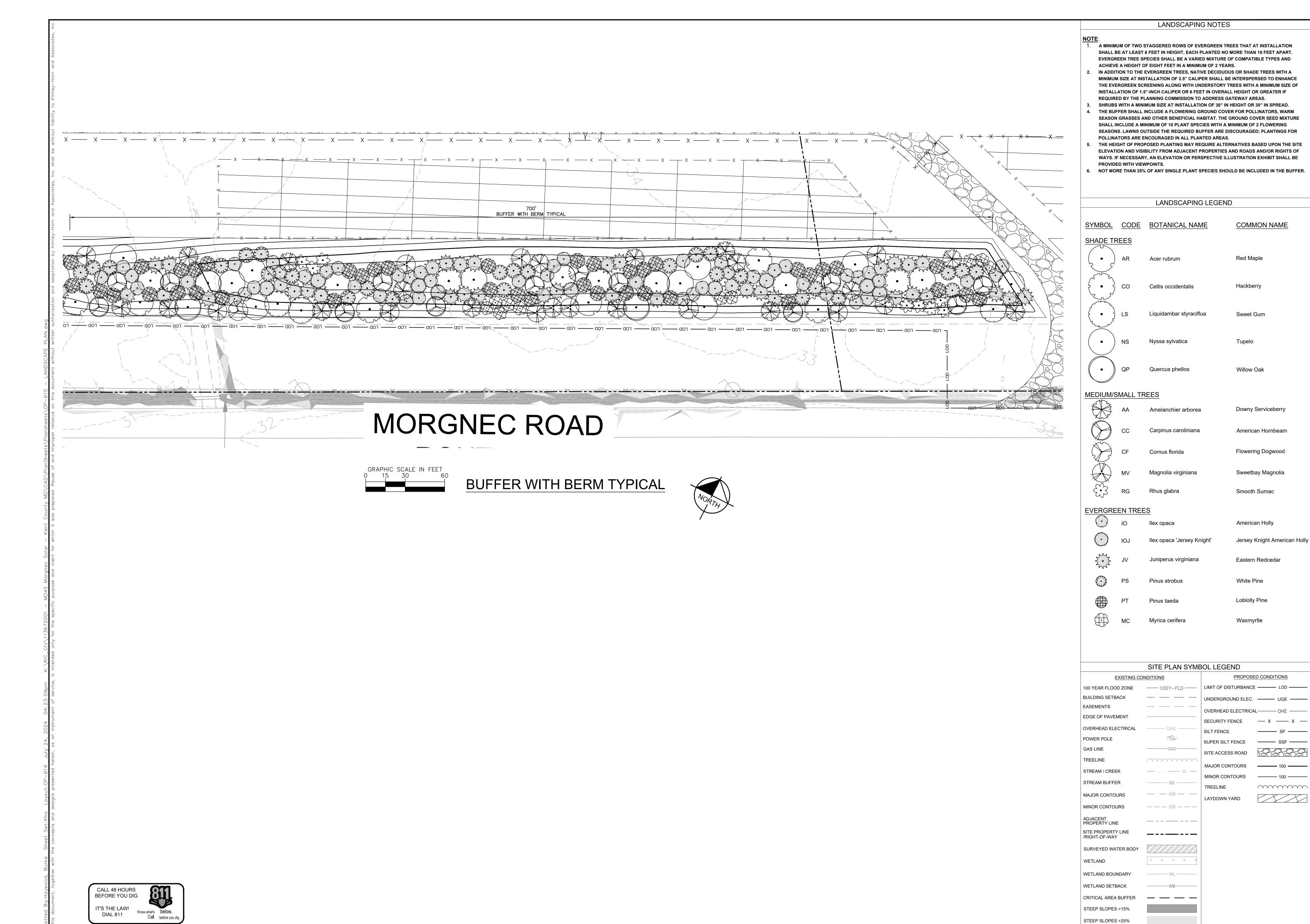
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SHEET NUMBER CP-613



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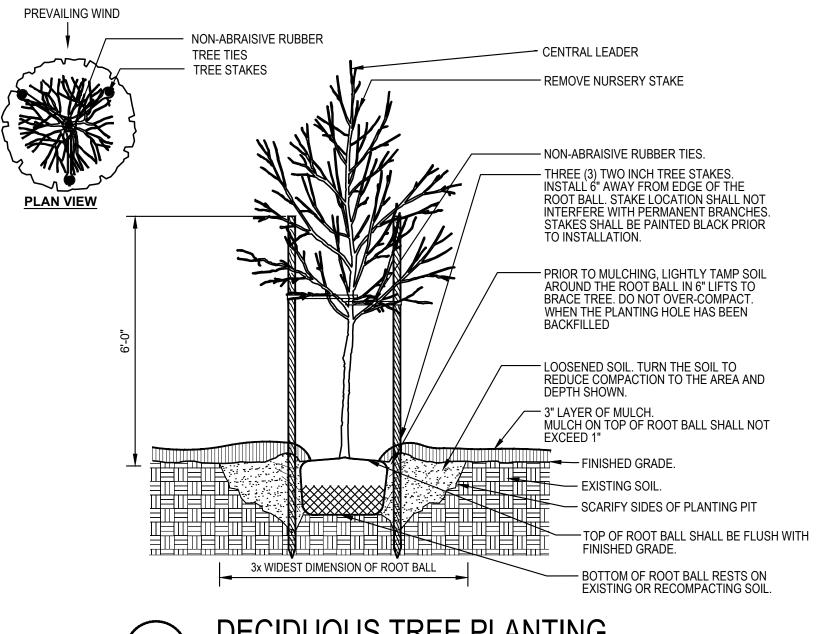
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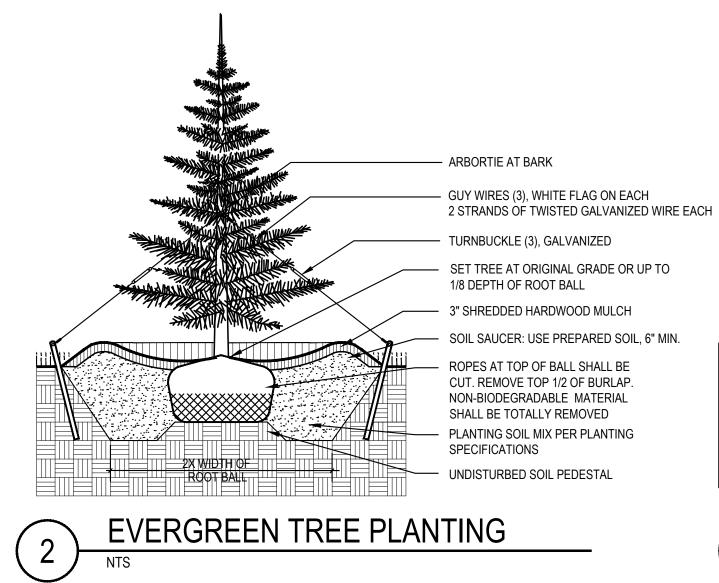
SHEET NUMBER CP-614

						SIZE (NO	SIZE (W/BERM	
QTY	SYMBOL	SCIENTIFIC NAME	COMMON NAME	SPACING	COND.	BERM))	DESCRIPTION
		Shade Trees						
124	СО	Celtis occidentalis	Hackberry	AS SHOWN	B&B	3" CAL.	2" CAL.	Single central leader, full branching
94	AR	Acer rubrum	Red maple	AS SHOWN	B&B	3" CAL.	2" CAL.	Single central leader, full branching
129	NS	Nyssa sylvatica	Black gum	AS SHOWN	B&B	3" CAL.	2" CAL.	Single central leader, full branching
87	LS	Liquidambar styraciflua	Sweet gum	AS SHOWN	B&B	3" CAL.	2" CAL.	Single central leader, full branching
193	QP	Quercus phellos	Willow oak	AS SHOWN	B&B	3" CAL.	2" CAL.	Single central leader, full branching
		Medium/Small Trees						
171	AA	Amelanchier arborea 'Autumn Sunset'	Autumn sunset downy serviceberry	AS SHOWN	#7	2" CAL.	1" CAL.	Multi-stem, full branching,1" Cal each
32	CF	Cornus florida	Flowering dogwood	AS SHOWN	#7	2" CAL.	1" CAL.	Single central leader, full branching
187	CC	Carpinus caroliniana	American hornbeam	AS SHOWN	#7	2" CAL.	1" CAL.	Single central leader, full branching
205	MV	Magnolia virginiana	Sweetbay magnolia	AS SHOWN	#5	2" CAL.	1" CAL.	Single central leader, full branching
		Evergreen Trees						
521	JV	Juniperus virginiana	Red Cedar	10' O.C.	#10	8' HT.	6' HT.	large evergreen tree
611	IO	llex opaca	American holly - female	10' O.C.	#10	8' HT.	6' HT.	large evergreen tree
153	IOJ	llex opaca 'Jersey Knight'	Jersey Knight American holly - male	10' O.C.	#10	8' HT.	6' HT.	Male pollinator
378	PS	Pinus strobus	White pine	10' O.C.	#10	8' HT.	6' HT.	large evergreen tree
448	PT	Pinus taeda	Loblolly pine	10' O.C.	#10	8' HT.	6' HT.	large evergreen tree
		Large Shrubs						
232	MC	Myrica cerifera	Waxmyrtle	8' O.C.	#5	30" HT.	24" HT.	Large evergreen shrub
263	RG	Rhus glabra	Smooth sumac	8' O.C.	#5	30" HT.	24" HT.	Uniform size and shape



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LICENSE NO.
EXPIRATION DATE

PLANTING DETAILS

- SET SHRUB AT ORIGINAL GRADE OR

UP TO 1/8 DEPTH OF ROOT BALL

2" SHREDDED HARDWOOD MULCH

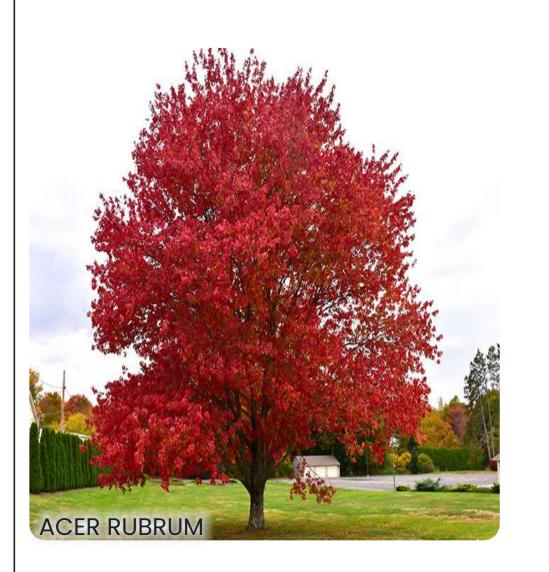
- MAKE (3) - 1" CUTS IN SIDES OF THE

- UNDISTURBED SOIL PEDESTAL

ROOTBALL

SHEET NUMBER CP-620

LARGE SHADE TREES











MEDIUM/SMALL TREES



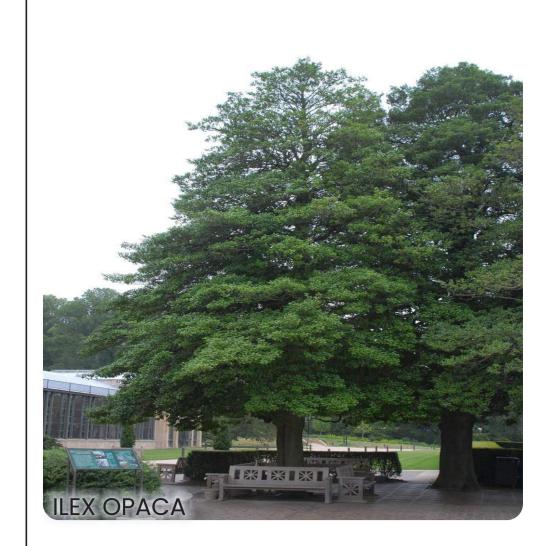


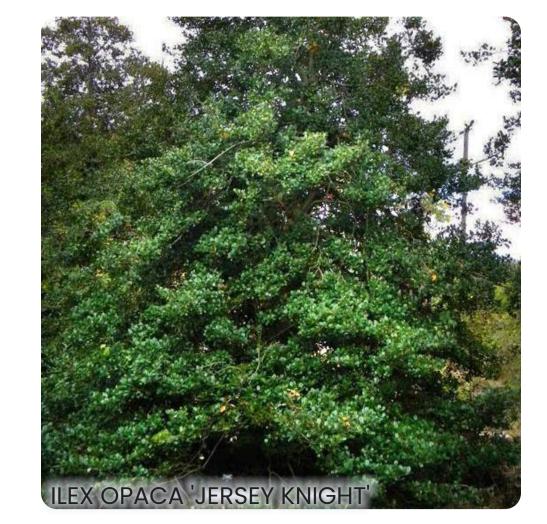






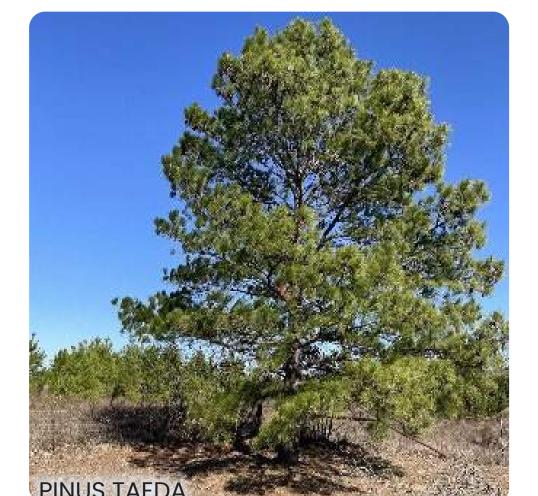
EVERGREEN TREES

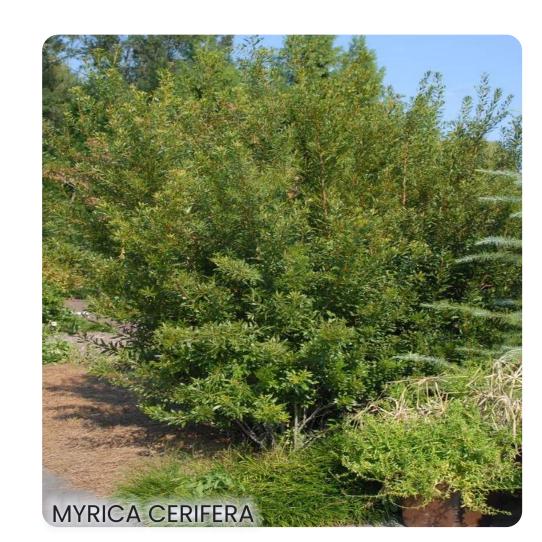












MORGNEC SOLAR-PLANT PALETTE



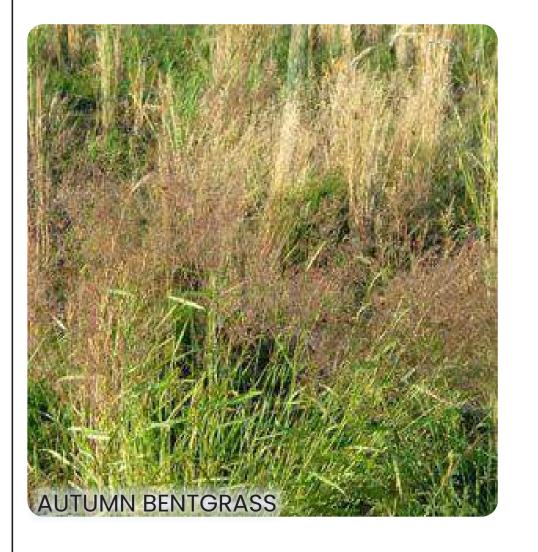


July 24, 2024





MEADOW MIX SPECIES









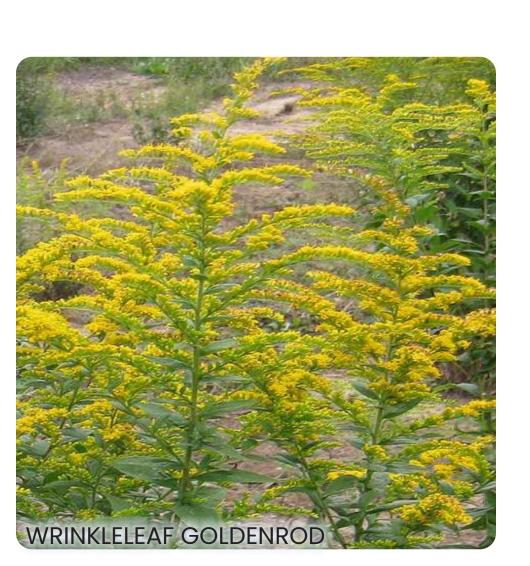












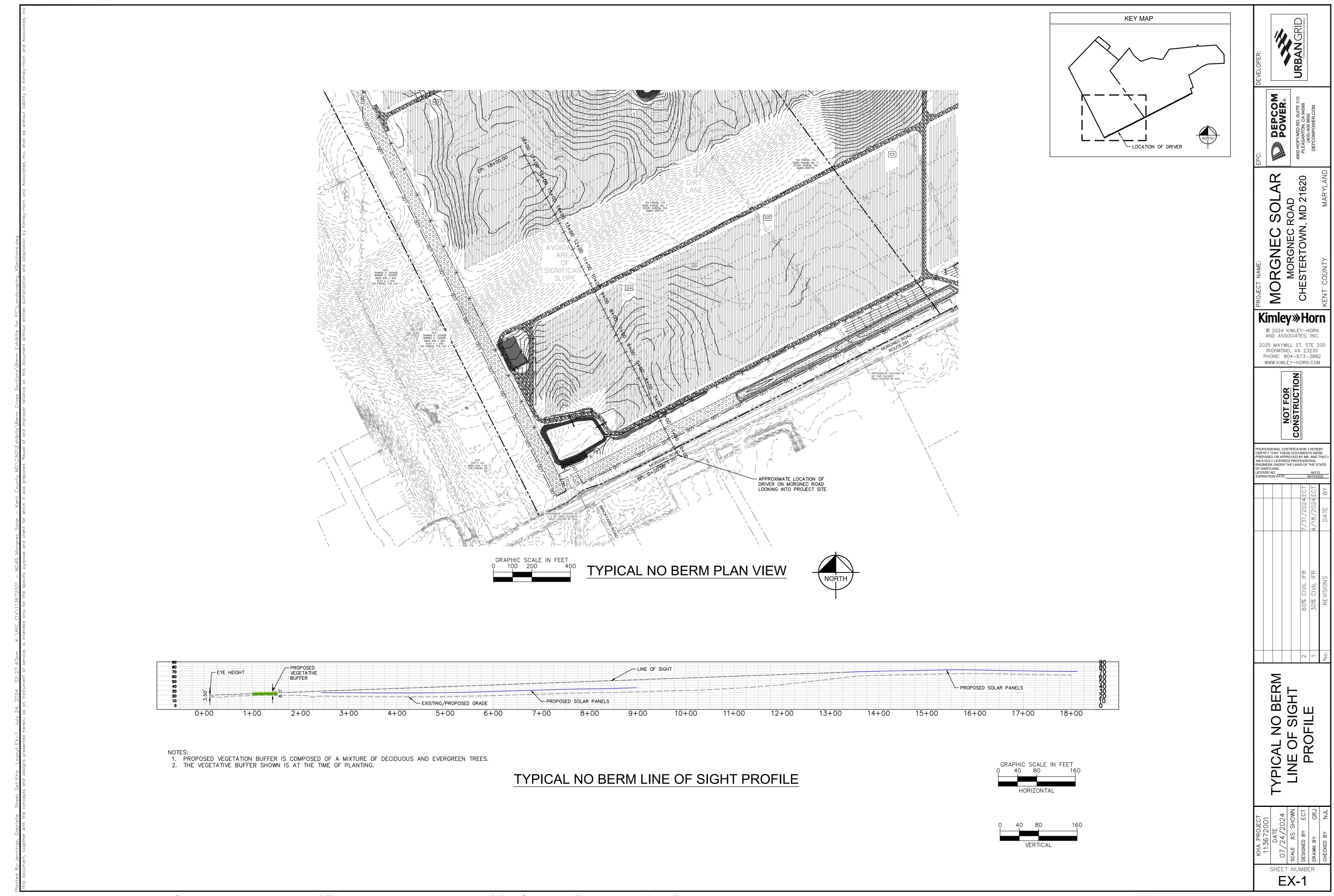


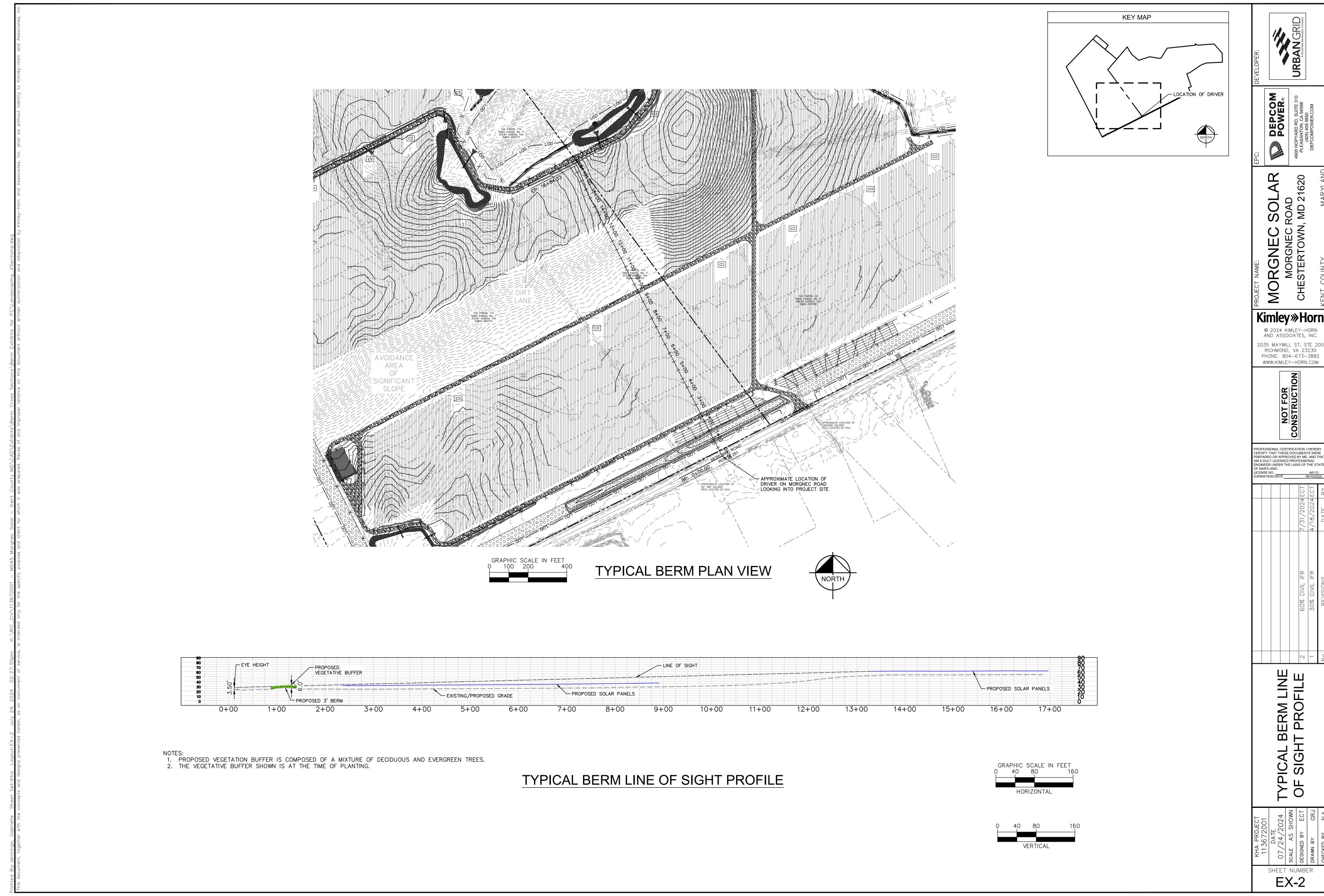






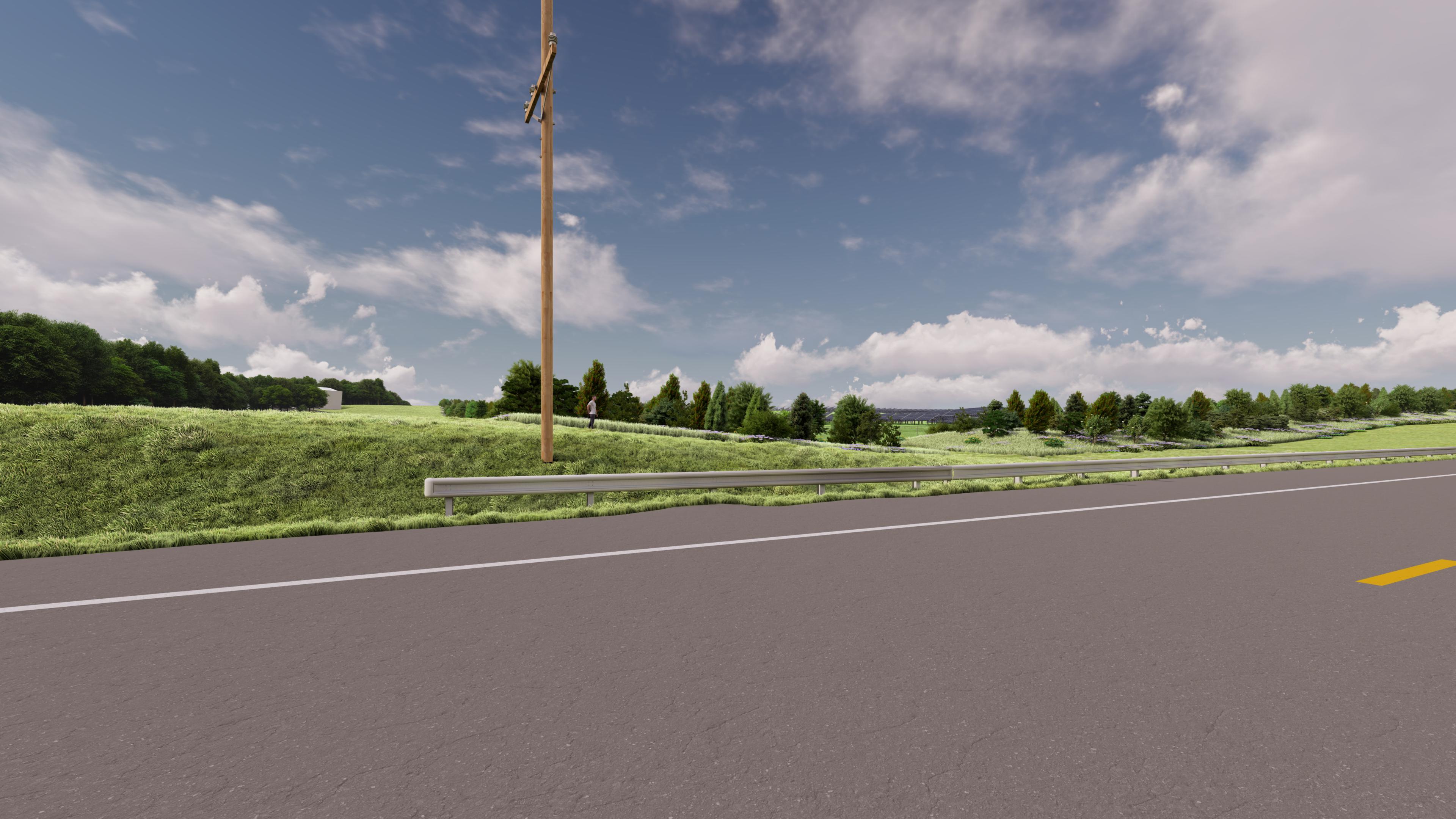
Attachment B – Line of Sight Profiles



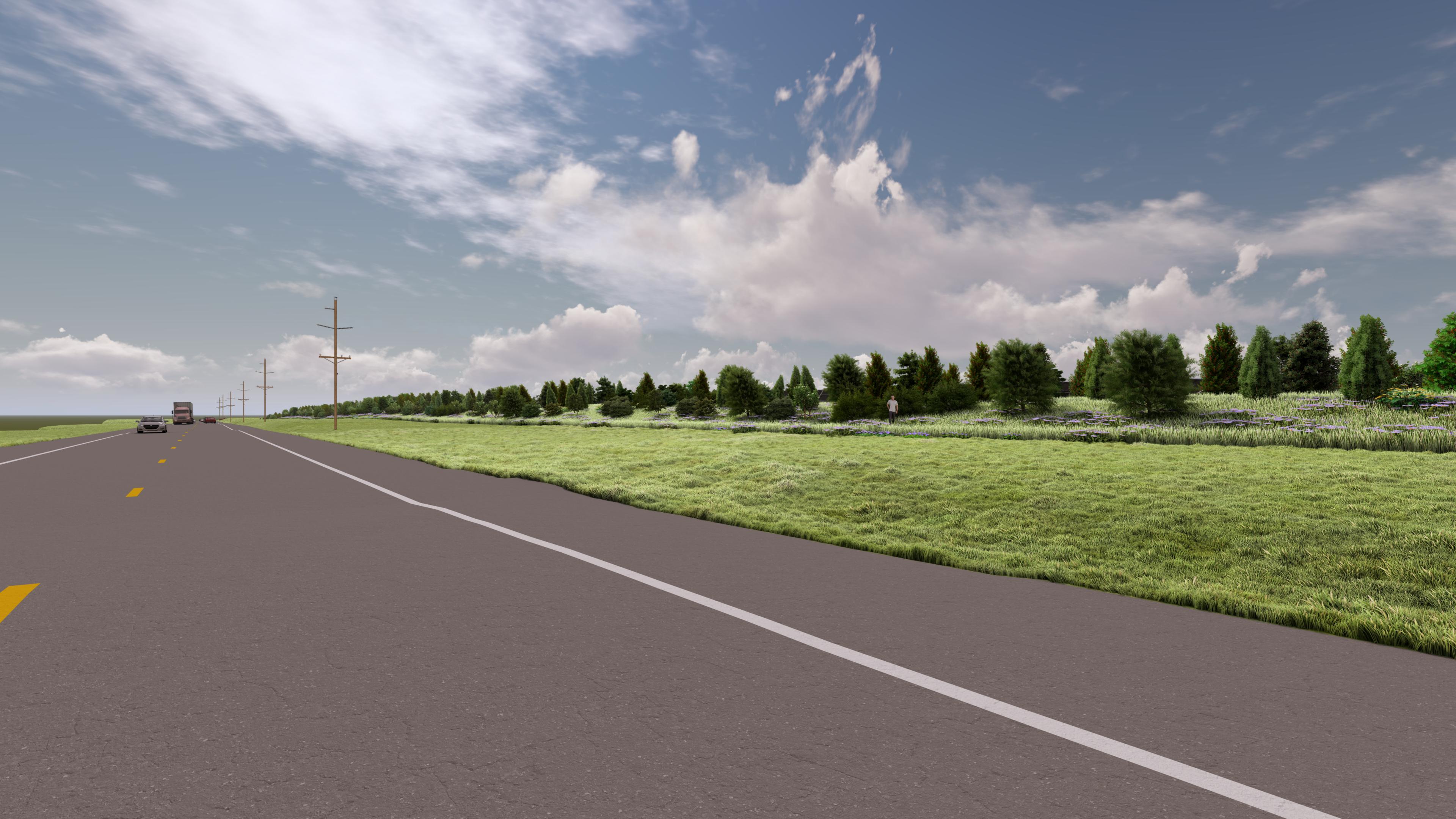


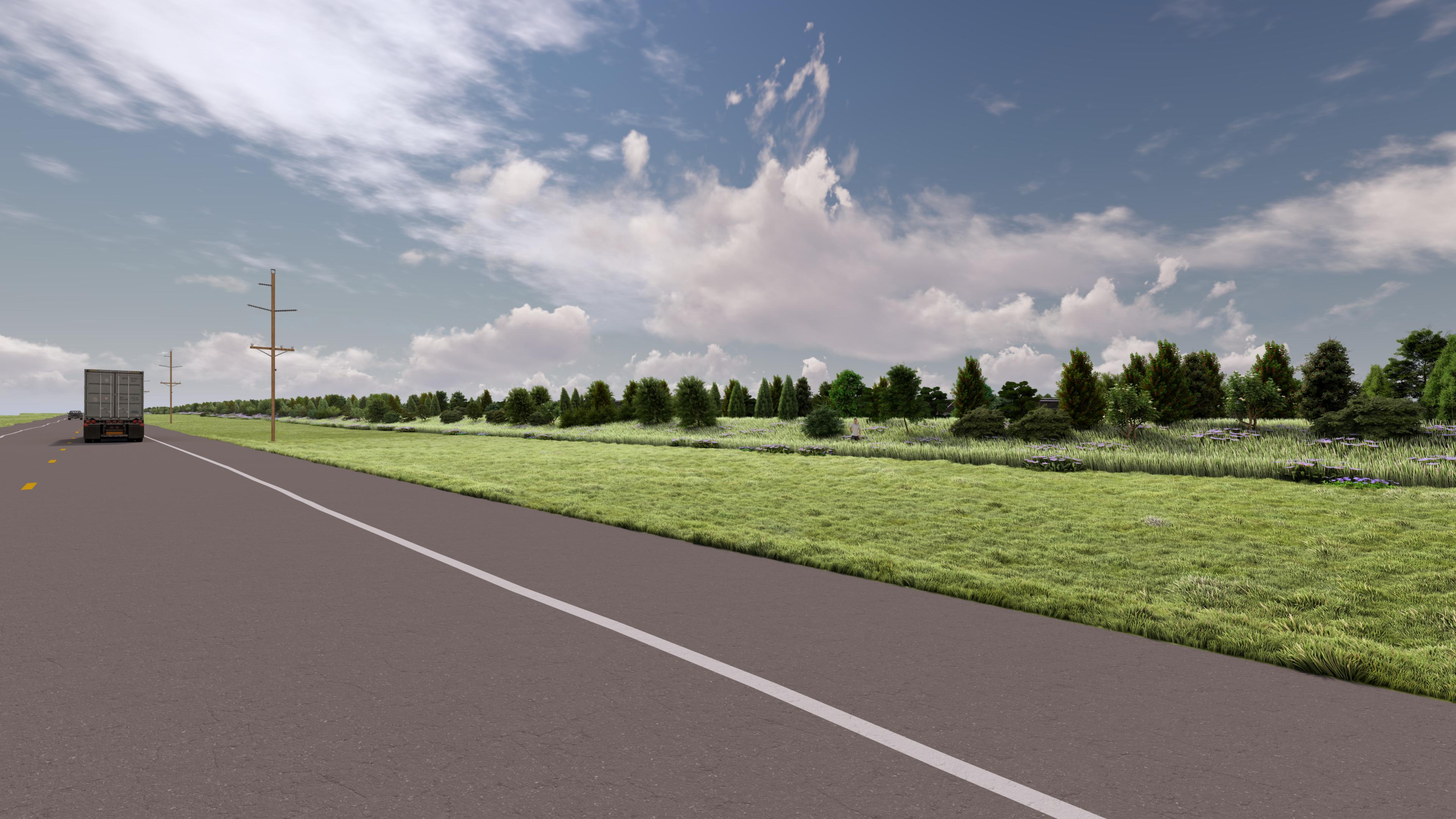


Attachment C – Visual Renderings











Department of Planning, Housing, and Zoning

To: Kent County Planning Commission From: Mark Carper, Associate Planner

Meeting: July 11, 2024

Subject: Morgnec Road Solar, LLC

Preliminary Site Plan Review – Utility-Scale Solar Energy System

Executive Summary

REQUEST BY THE APPLICANT

Morgnec Road Solar, LLC is requesting preliminary site plan review of a proposed 245-acre utility-scale solar energy system. The site is located at 616 Morgnec Road near Chestertown in the Fourth Election District and is zoned Intense Village (IV), Community Residential (CR), Rural Residential (RR), and Resource Conservation District (RCD).

PUBLIC PROCESS

Per Article VI, Section 5.2 of the Kent County *Land Use Ordinance*, the Planning Commission shall review and approve major site plans.

SUMMARY OF THE STAFF REPORT

The project site is currently in agricultural production, and its topography is largely gently rolling hills with a few areas of drainage with steep slopes. The surrounding zoning districts include Intense Village to the west, Agricultural Zoning District to the north, Critical Area Residential to the east, and Commercial and Industrial to the south across Morgnec Road. The solar array is to be installed on a pile-driven post-supported racking system that will allow for the panels to pivot to track the sun. The anticipated electrical output is from 45 to 55 MW. Grid interconnection is to be at the Delmarva Power Chestertown Substation directly across Morgnec Road. A perimeter landscaping buffer has been proposed to screen the fenced facility.

STAFF RECOMMENDATION

Staff recommends that the Planning Commission grant preliminary site plan approval. In order to receive final site plan approval, the applicant must address and/or submit the following:

- MDOT/SHA approval of the proposed facility entrance.
- Installation and maintenance standards, including the handling of solvents, removal of broken and/or waste solar modules, wiring requirements, securement of any required utility right-of-way by legally binding document, and excess noise.
- Clarification of the Forest Conservation Plan.
- Detailed landscaping and irrigation plan adhering to the requirements as specified in Article VI, Section 11 of the Land Use Ordinance, including the unforested segment of land adjacent to Parcel 488. The proposed pollinator meadows shall meet the requirements of the Maryland Pollinator-Friendly Designation Program.
- Evidence that the design of the entranceway will ensure that neighboring properties, public rightsof-ways and roads are not exposed to an unscreened view of the onsite facilities.
- Approval of erosion and sediment control and stormwater management plans.
- Submission and approval of sureties for landscaping maintenance and bond-related requirements for decommissioning as listed in Article VI, Section 11 of the Land Use Ordinance.
- The applicant obtains all state and federal permits.
- Approval of the Deed of Forest Conservation Easement and Agreement.

PRELIMINARY STAFF REPORT

TO: Kent County Planning Commission SUBJECT: #23-34 – Morgnec Road Solar, LLC

Preliminary Site Plan Review – Utility-Scale Solar Energy System

DATE: July 1, 2024

DESCRIPTION OF PROPOSAL

Morgnec Road Solar, LLC is requesting preliminary site plan review of a proposed 245-acre utility-scale solar energy system. The site is located at 616 Morgnec Road near Chestertown in the Fourth Election District and is zoned Intense Village (IV), Community Residential (CR), Rural Residential (RR), and Resource Conservation District (RCD).

The project site is currently in agricultural production, and its topography is largely gently rolling hills with a few areas of drainage with steep slopes. The surrounding zoning districts include Intense Village to the west, Agricultural Zoning District to the north, Critical Area Residential to the east, and Commercial and Industrial to the south across Morgnec Road. The solar array is to be installed on a pile-driven post-supported racking system that will allow for the panels to pivot to track the sun. The anticipated electrical output is from 45 to 55 MW. Grid interconnection is to be at the Chestertown Substation directly across Morgnec Road. A perimeter landscaping buffer has been proposed to screen the fenced facility.

There has been a change in design and engineering responsibilities, and details and formatting of current materials may differ from previous presentations.

RELEVANT ISSUES

I. Site Plan Review

A. Applicable Law: Article VI, Section 5 of the Kent County Land Use Ordinance outlines the procedures and requirements for site plan review. Site Development Plans are required to ensure that new development complies with the Comprehensive Plan, Land Use Ordinance, Village Master Plans and other agency requirements, thereby promoting the health, safety, and general welfare of Kent County residents.

Section 5.3.B.10 establishes that the preliminary review process will assess a project's compliance with the Land Use Ordinance; the Comprehensive Plan; and its feasibility, design, and environmental characteristics based on the site plan. The applicant must demonstrate adequate provisions for water supply and sewage disposal, proposed methods for fire protection, preliminary stormwater management, and forest conservation plans.

Section 5.3.B.16 establishes that the Planning Commission shall prepare findings of fact concerning the reasonable fulfillment of the objectives listed below.

- a. Conformance with the Comprehensive Plan and, where applicable, the Village Master Plan.
- b. Conformance with the provisions of all applicable rules and regulations of county, state, and federal agencies.

- c. Convenience and safety of both vehicular and pedestrian movement within the site and in relationship to adjoining ways and properties.
- d. Provisions for the off-street loading and unloading of vehicles incidental to the normal operation of the establishment, adequate lighting, and internal traffic control.
- e. Reasonable demands placed on public services and infrastructure.
- f. Adequacy of methods for sewage and refuse disposal, and the protection from pollution of both surface waters and groundwater. This includes minimizing soil erosion both during and after construction.
- g. Protection of abutting properties and County amenities from any undue disturbance caused by excessive or unreasonable noise, smoke, vapors, fumes, dust, odors, glare, stormwater runoff, etc.
- h. Minimizing the area over which existing vegetation is to be removed. Where tree removal is required, special attention shall be given to planting of replacement trees.
- i. The applicant's efforts to integrate the proposed development into the existing landscape through design features such as vegetative buffers, roadside plantings, and the retention of open space and agricultural land.
- j. The building setbacks, area, and location of parking, architectural compatibility, signage, and landscaping of the development, and how these features harmonize with the surrounding townscape and the natural landscape.

B. Staff and TAC Comments:

- The project is in conformance with applicable state regulations and has, or will be, submitting materials in conformance with Kent County regulations.
- An existing entrance from MD Route 291 will be utilized. MDOT/SHA has reviewed the application and is working with the County and the design engineering firm.
- Vehicular and pedestrian movement within the proposed facility will be limited to operations and maintenance crews, which will perform all loading and unloading in the course of operations. Site details indicate sufficient room for interior vehicular circulation and emergency services. No lighting is proposed.
- After construction, there will be limited traffic to the property; no sewer or water is to be used; there will be very limited need for emergency services; and, as a condition of Public Service Commission approval, the applicant is responsible for any road damages due to construction. The demands placed on public services and infrastructure are reasonable.
- A preliminary erosion and sediment control plan and a preliminary stormwater management plan have been submitted for review.
- A Solar Glare and Glint Analysis Report has been submitted. Based on the modeling parameters, no glare will affect traffic or specified observation points.
- Two existing hedgerows are to be removed for placement of panels. No trees are to be removed.
- The applicant has submitted a combined Forest Stand Delineation and Forest Conservation Plan for review.
- A 60-foot-wide landscape buffer plan has been proposed.
- All elements of the solar energy collection system will be a minimum 200 feet from any property line. There will be no permanent employees on site, and parking will be limited to the proposed turnaround areas within the facility.
- The applicant held a public information meeting and has submitted notes on the overview of the presentation and a summary of the comments and questions posed. The applicant has also submitted a commitment to collaborate with the Kent County Cultural Alliance and local artists to identify and fund a community improvement project in or near Chestertown.

A. *Applicable Law*: Article VI, Special Provisions, Section 11, details the requirements for setbacks, installation and maintenance standards, landscaping and irrigation requirements, and sureties.

B. Staff and TAC Comments:

- The proposed setback for the area of use is the required 200 feet or greater from any lot line of the project site.
- Compliance with the County requirements for installation and maintenance standards have not been fully addressed. Absent details include the handling of solvents, removal of broken and/or waste solar modules, wiring requirements, and securement of any required utility right-of-way by legally binding document. Installation and maintenance standards that have been addressed include noise, secure enclosure of the facilities, and avoidance of glare.
- In its point-by-point response to CPCN condition 4.i, the applicant states that noise shall be monitored by Morgnec Road Solar and that conditions will be compliant with local, state, and federal laws.
- A perimeter fence around the solar arrays is proposed.
- A Solar Glare and Glint Analysis Report has been submitted. Based on the modeling parameters, no glare will affect traffic or specified observation points at a height of six (6) feet above ground level nor along the road frontage at a height of five (5) feet or nine (9) feet, the respective heights for drivers of sedans and trucks.
- A preliminary erosion and sediment control plan and a preliminary stormwater management plan have been submitted for review.
- The applicant has submitted a combined Forest Stand Delineation and Forest Conservation Plan for review. The area of proposed Forest Conservation Easement needs to be more clearly marked on the Forest Conservation Plan, perhaps through colorization of the cross hatching designating this area.
- Panels will not be placed on wetland areas that are regulated by the MDE or the U.S. Department of the Interior nor on their associated buffer.
- Existing topsoil will not be removed from the site.
- Landscaping
 - A 60-foot-wide perimeter buffer is proposed along the western and southern boundaries
 of the solar arrays along with limited segments along the northwestern and eastern
 boundaries.
 - Existing forest that predominates the northern and eastern portions of the development site may satisfy the buffer standards. The exception to this is the unforested segment of the project site where Parcels 174 and 488 meet. A 60-foot-wide buffer will need to be added along this segment.
 - The submitted landscaping plan (Sheet CP-610) illustrates four planting zones: a hedgerow composed of mixed trees and shrubs to serve as a wind break, a low pollinator meadow around the solar array of grasses no more than 30 inches high to be mowed once annually, a pollinator habitat under the solar array to function as wildlife habitat to be mowed once annually, and a densely vegetated buffer composed of mixed trees and shrubs.
 - Details of proposed species, placements, and tree caliper and heights at time of planting have not been provided. The applicant has indicated that the final buffer detail with spacing and species list is being developed and will be provided with the final plan.
 - It is not clear whether a waiver of the 3-foot berm requirement will be requested.
- An irrigation plan has not been submitted.

- A draft landscape maintenance agreement has been submitted for review. A financial surety to cover replacement of the plantings and irrigation system is required.
- A landscape rendering depicting two years of growth at the proposed Morgnec Road entrance
 has been submitted. The applicant has indicated that the rendering depicts the typical nature
 of the buffer with varied arrangement, size, and species.
- Kent County Land Use Ordinance requires that the entryway be designed to ensure that neighboring properties, public rights-of-ways and roads are not exposed to an unscreened view through the entranceway.
- The applicant has indicated that the solar arrays may be momentarily visible to vehicles as they pass the entryway. The applicant would like to consider the use of varied fencing elements to fully obstruct the view. The Land Use Ordinance states that use of a wire mesh or chain-link gate or fence with vinyl interwoven strips is not acceptable.
- The proposed project has obtained a Certificate of Public Convenience and Necessity from the Public Service Commission. The applicant has provided a point-by-point response to each of the CPCN conditions.
- For final site plan approval, the proposed project must comply with the bond-related requirements, as specified in Article VI, Section 11.K of the Kent County Land Use Ordinance, that pertains to decommissioning and removal or non-vegetative improvements.

STAFF RECOMMENDATION:

Staff recommends that the Planning Commission grant preliminary site plan approval. In order to receive final site plan approval, the applicant must address and/or submit the following:

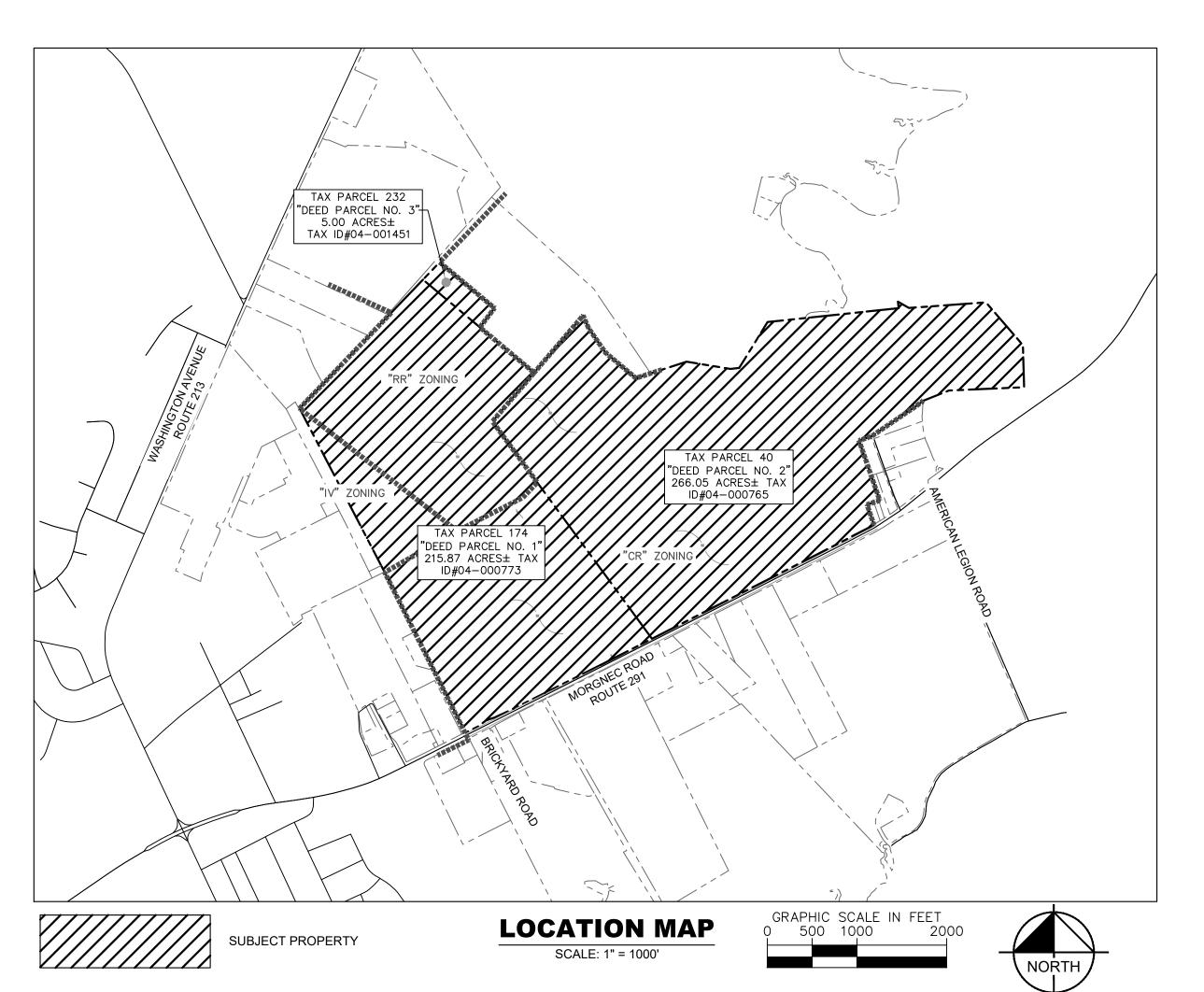
- MDOT/SHA approval of the proposed facility entrance.
- Installation and maintenance standards, including the handling of solvents, removal of broken and/or waste solar modules, wiring requirements, securement of any required utility right-of-way by legally binding document, and excess noise.
- Clarification of the Forest Conservation Plan.
- Detailed landscaping and irrigation plan adhering to the requirements as specified in Article VI, Section 11 of the Land Use Ordinance, including the unforested segment of land adjacent to Parcel 488. The proposed pollinator meadows shall meet the requirements of the Maryland Pollinator-Friendly Designation Program.
- Evidence that the design of the entranceway will ensure that neighboring properties, public rights-of-ways and roads are not exposed to an unscreened view of the onsite facilities.
- Approval of erosion and sediment control and stormwater management plans.
- Submission and approval of sureties for landscaping maintenance and bond-related requirements for decommissioning as listed in Article VI, Section 11 of the Land Use Ordinance.
- The applicant obtains all state and federal permits.
- Approval of the Deed of Forest Conservation Easement and Agreement.

MORGNEC SOLAR PRELIMINARY PLAN

616 MORGNEC ROAD, CHESTERTOWN, MD 21620 KENT COUNTY, MD

TAX PARCELS: 40, 174, 232

Sheet List Table			
Sheet Number Sheet Title			
CP-000	COVER SHEET		
CP-210	OVERALL SITE PLAN		
CP-211	ENLARGED SITE PLAN (1 OF 5)		
CP-212	ENLARGED SITE PLAN (2 OF 5)		
CP-213	ENLARGED SITE PLAN (3 OF 5)		
CP-214	ENLARGED SITE PLAN (4 OF 5)		
CP-215	ENLARGED SITE PLAN (5 OF 5)		
CP-240	SITE DETAILS (1 OF 2)		
CP-241	SITE DETAILS (2 OF 2)		
CP-410	OVERALL STORMWATER MANAGEMENT PLAN		
CP-411	ENLARGED STORMWATER MANAGEMENT PLAN (1 OF 5)		
CP-412	ENLARGED STORMWATER MANAGEMENT PLAN (2 OF 5)		
CP-413	ENLARGED STORMWATER MANAGEMENT PLAN (3 OF 5)		
CP-414	ENLARGED STORMWATER MANAGEMENT PLAN (4 OF 5)		
CP-415	ENLARGED STORMWATER MANAGEMENT PLAN (5 OF 5)		
CP-420	STORMWATER MANAGEMENT NOTES & DETAILS		
CP-421	STORMWATER MANAGEMENT NOTES & DETAILS		
CP-510	OVERALL SOIL EROSION & SEDIMENT CONTROL PLAN		
CP-511	ENLARGED SOIL EROSION & SEDIMENT CONTROL PLAN (1 OF 5)		
CP-512	ENLARGED SOIL EROSION & SEDIMENT CONTROL PLAN (2 OF 5)		
CP-513	ENLARGED SOIL EROSION & SEDIMENT CONTROL PLAN (3 OF 5)		
CP-514	ENLARGED SOIL EROSION & SEDIMENT CONTROL PLAN (4 OF 5)		
CP-515	ENLARGED SOIL EROSION & SEDIMENT CONTROL PLAN (5 OF 5)		
CP-530	SOIL EROSION & SEDIMENT CONTROL DETAILS		
CP-531	SOIL EROSION & SEDIMENT CONTROL DETAILS		
CP-532	SOIL EROSION & SEDIMENT CONTROL DETAILS		
CP-533	SOIL EROSION & SEDIMENT CONTROL DETAILS		
CP-534	SOIL EROSION & SEDIMENT CONTROL DETAILS		
CP-610	OVERALL LANDSCAPE PLAN		



OWNER (TAX PARCEL 40, 174, 232):

FAIR PROMISE FAMILY LIMITED PARTNERSHIP 25260 HOWELL POINT ROAD BETTERTON, MD 21610

DEVELOPER/APPLICANT:

MORGNEC ROAD SOLAR, LLC ATTN: MICHAEL WALTERS 337 LOG CANOE CIRCLE STEVENSVILLE, MD 21666

EPC CONTRACTOR:

4900 HOPYARD ROAD, SUITE 310 PLEASANTON, CA 94588 EMAIL: SANDY.TRUONG@DEPCOMPOWER.COM

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THOSE STATES	28	MOUSTINE HERITAN HINY		
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TOWN ROT		W.		
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CIVIL ENGINEER/ **LANDSCAPE ARCHITECT:**

KIMLEY-HORN AND ASSOCIATES, INC. ATTN: ELLEN TUSING, PE 215 WASHINGTON AVENUE, SUITE 500 TOWSON, MD 21204 TEL: (804) 273-8380 EMAIL: ELLEN.TUSING@KIMLEY-HORN.COM

ENVIRONMENTAL:

ECS MID-ATLANTIC, LLC 114026 THUNDERBOLT PLACE, SUITE 100 CHANTILLY, VA 20151 TEL: (717) 767-4788

SURVEYOR:

DAVIS, BOWEN & FRIEDEL, INC 106 N WASHINGTON ST #103 EASTON, MD 21601

ITEM 12	TABLE
TOTAL ACREAGE	486.92 AC
ACREAGE IN 100-YR FLOODPLAIN	39.23 AC (OF PARCEL AREA)
ACREAGE IN CRITICAL AREA	139.66 AC (OF PARCE AREA)
ACREAGE IN RECREATION AND OPEN SPACE	0 AC
ACREAGE OF IMPERVIOUS SURFACES	6.64 AC (WITHIN DISTURBED AREA)
TOTAL NUMBER OF DWELLING UNITS OR BUILDING TYPES	N/A
TOTAL AREA OF BUILDINGS	N/A
NUMBER AND TYPE OF MULTI-FAMILY UNITS FOR EACH STRUCTURES	N/A
TOTAL NUMBER OF PARKING AND LOADING SPACES	N/A
MAXIMUM NUMBER OF EMPLOYEES	N/A

DESIGN AND DRAWINGS BASED ON MARYLAND COORDINATE SYSTEM (MCS) HORIZONTAL: NAD 83 **VERTICAL: NAVD 88**

Kimley » Horn

TOWSON, MD 21204 PHONE: 443-743-3500 WWW.KIMLEY-HORN.COM

SHEET NUMBER CP-000

PROPERTY INFORMATION:

SITE ADDRESS: 616 MORGNEC ROAD, CHESTERTOWN, MD 21620

TAX PARCEL 174, 40, 232: 486.92 ACRES 00854/00193 DEED REFERENCE:

ZONING CLASSIFICATION: INTENSE VILLAGE (IV), RURAL RESIDENTIAL (RR), COMMUNITY RESIDENTIAL (CR)*

233.36 ACRES

NEAREST PUBLIC ROAD: MORGNEC ROAD AGRICULTURAL EXISTING LAND USE:

UTILITY-SCALE SOLAR ENERGY SYSTEM* PROPOSED LAND USE:

PROPOSED WATER SUPPLY:

PROPOSED SOLAR AREA (LOD):

STORMWATER MANAGEMENT:

PROPOSED SEWER SUPPLY: MDE WATERSHED: CHESTER-SASSAFRAS

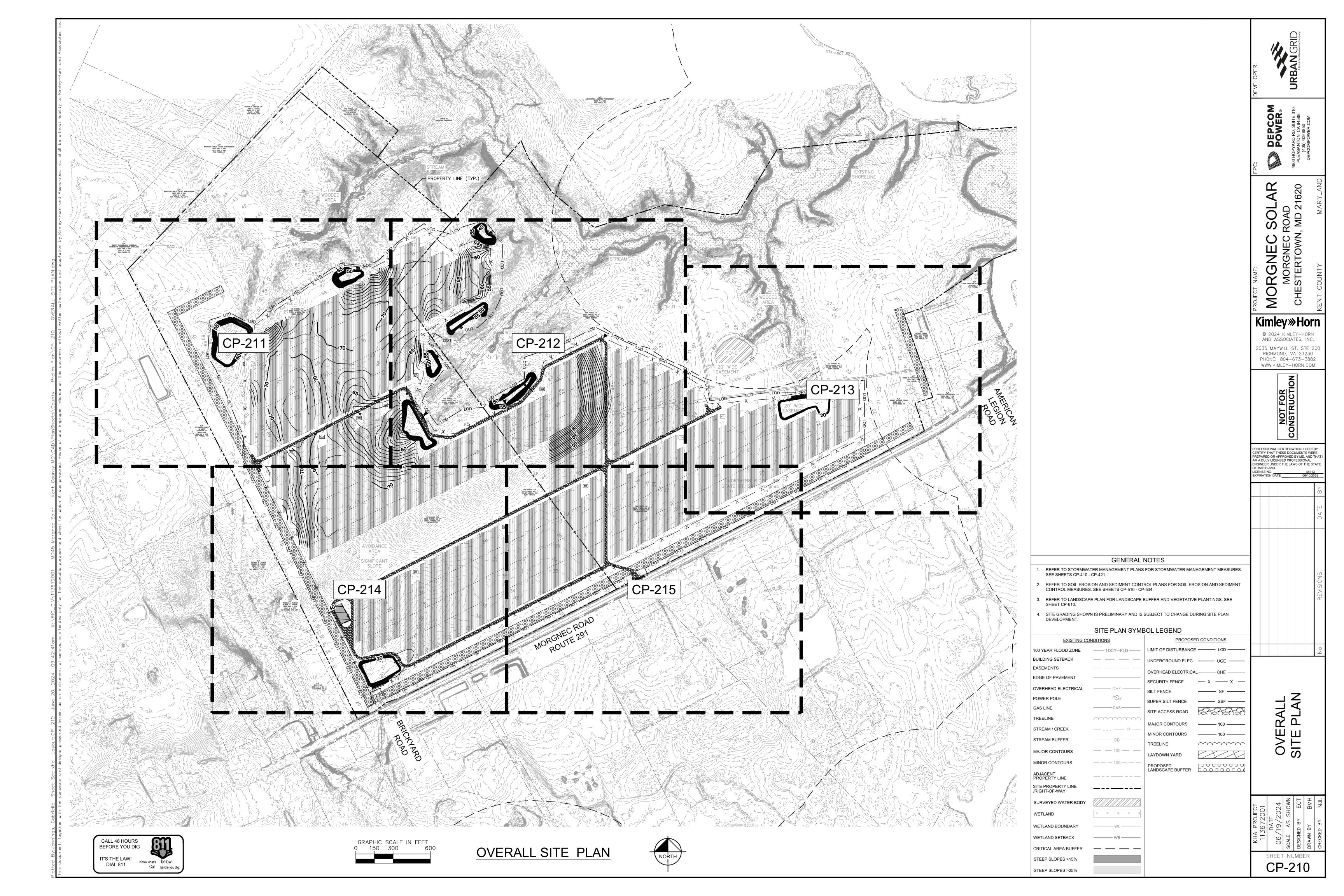
FEMA FLOOD MAP: #24029CO281D

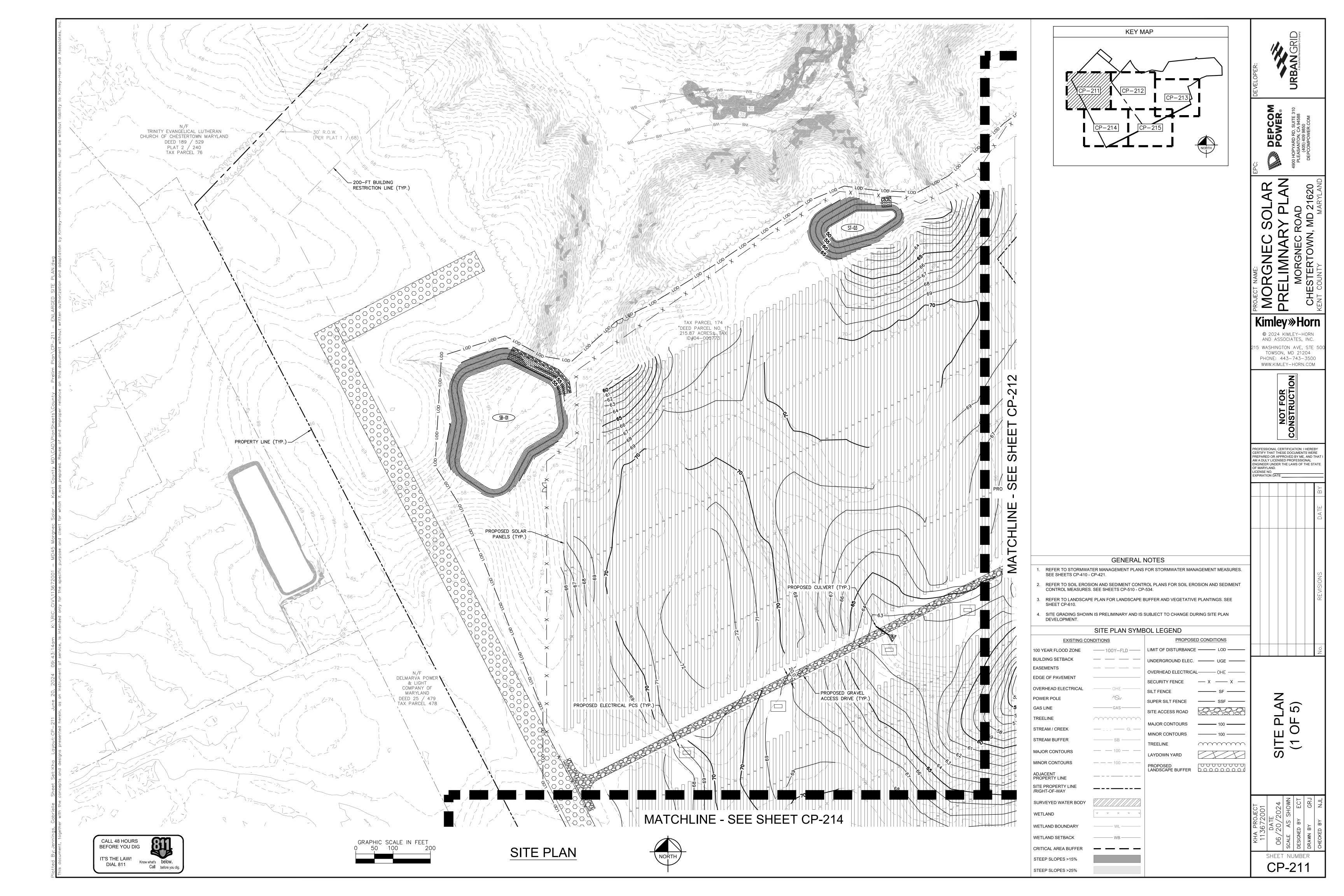
SWM IS PROVIDED ON-SITE IN ACCORDANCE WITH THE KENT COUNTY SWM MANAGEMENT ORDINANCE AND STATE DESIGN MANUAL

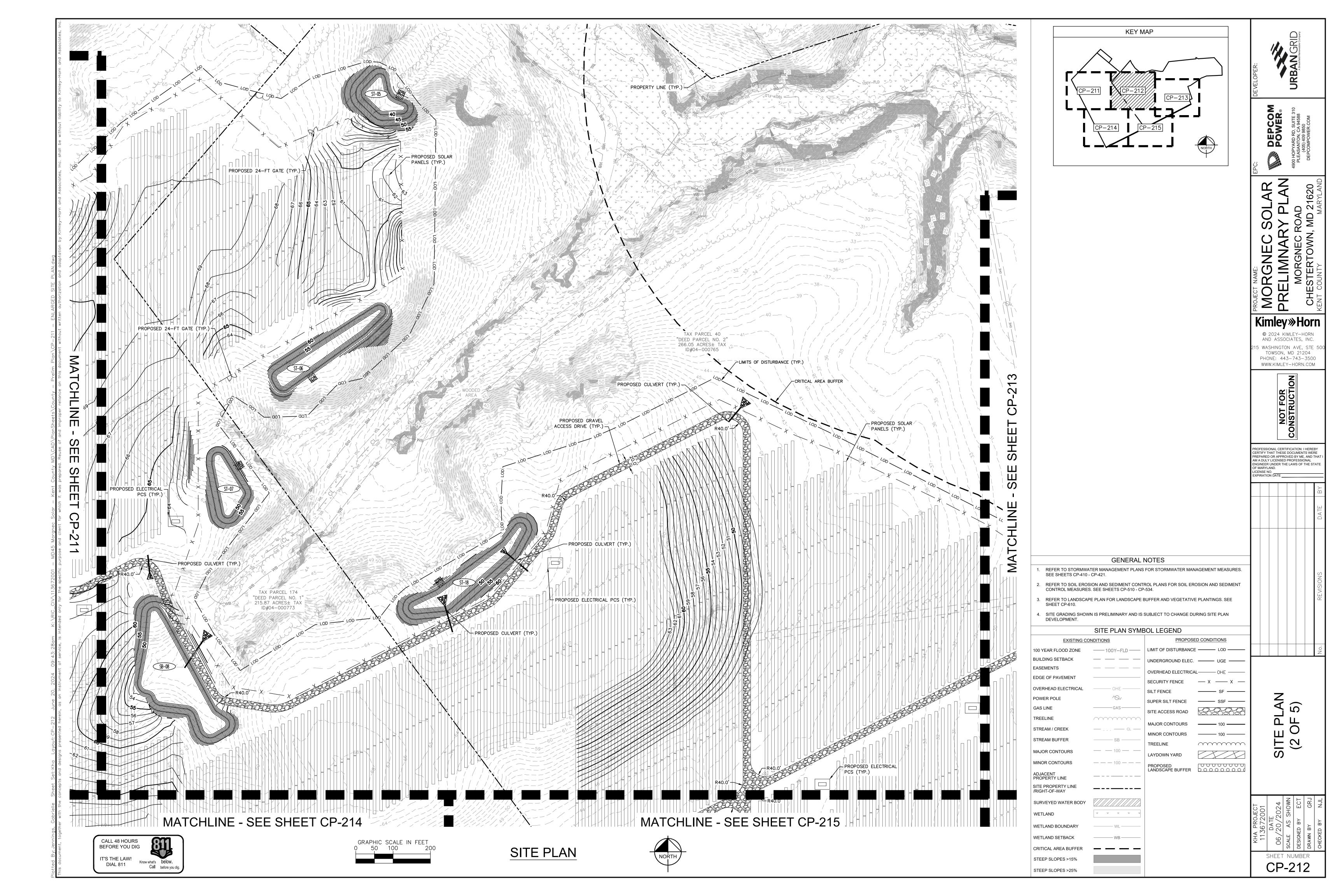
BUILDINGS: PERMANENT: 1 CONTROL ENCLOSURE AT PROJECT COLLECTOR SUBSTATION.

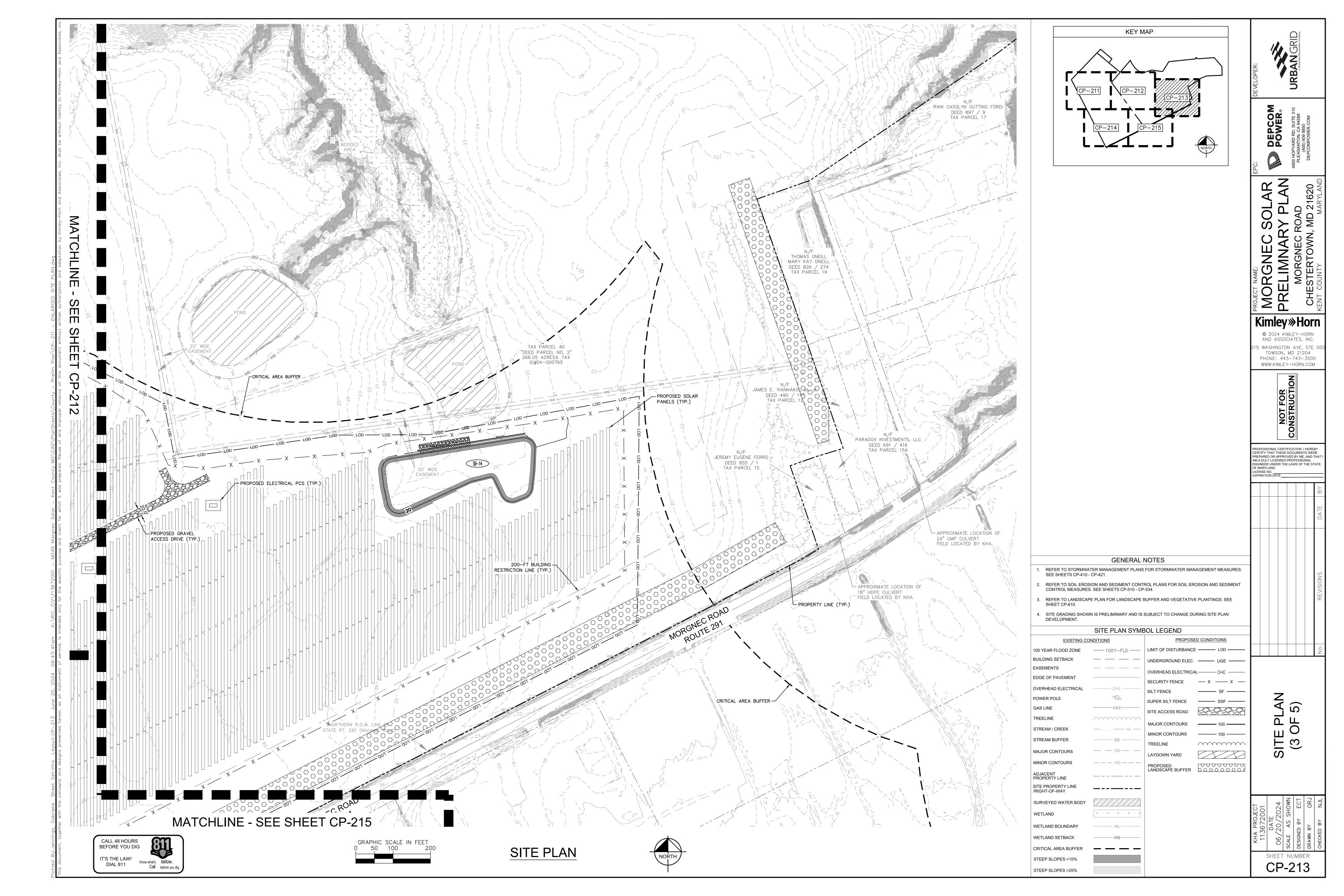
ELECTION DISTRICT:

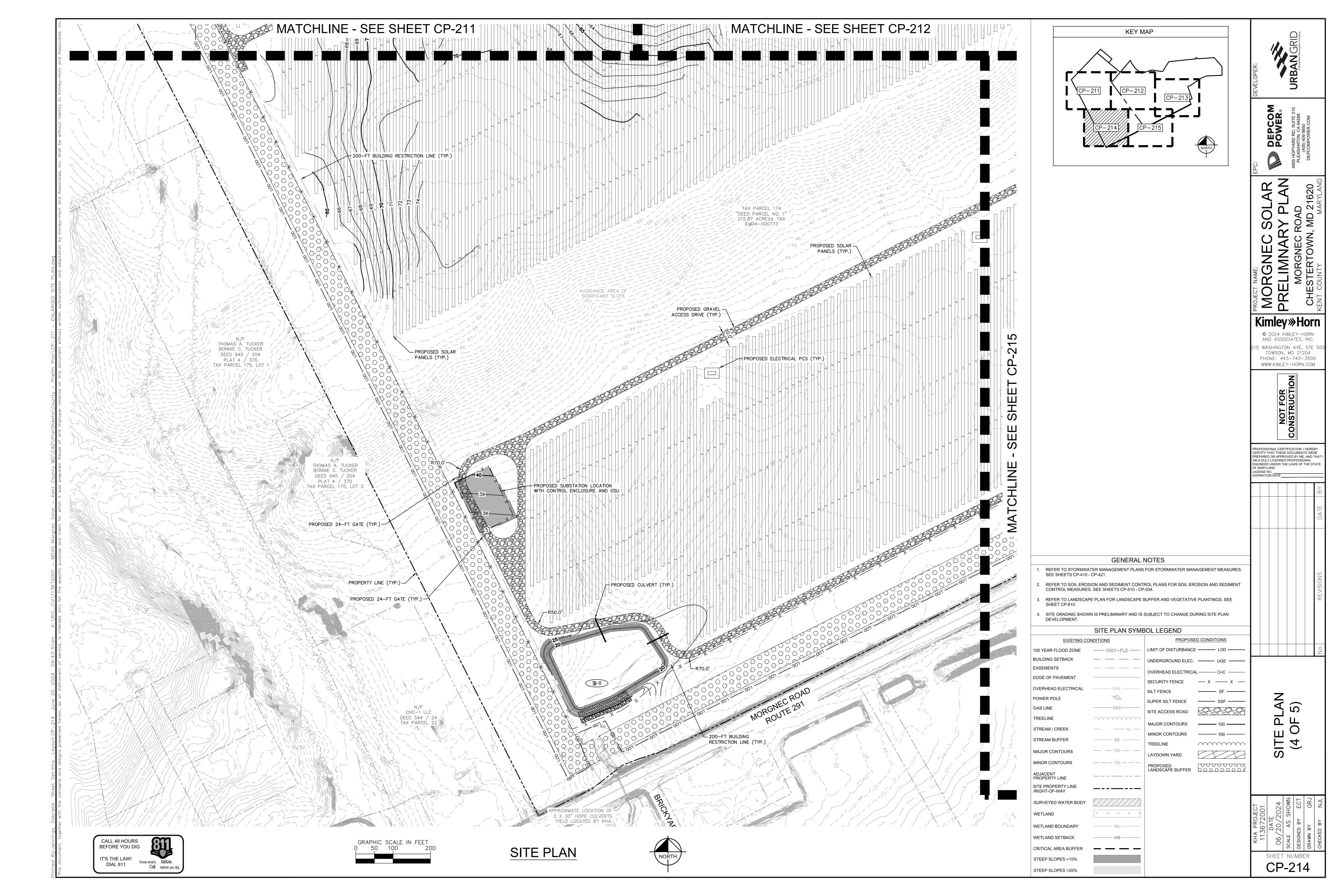
*CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY (CPCN) GRANTED BY MARYLAND PUBLIC SERVICE COMMISSION (PSC) ON APRIL 27, 2022.

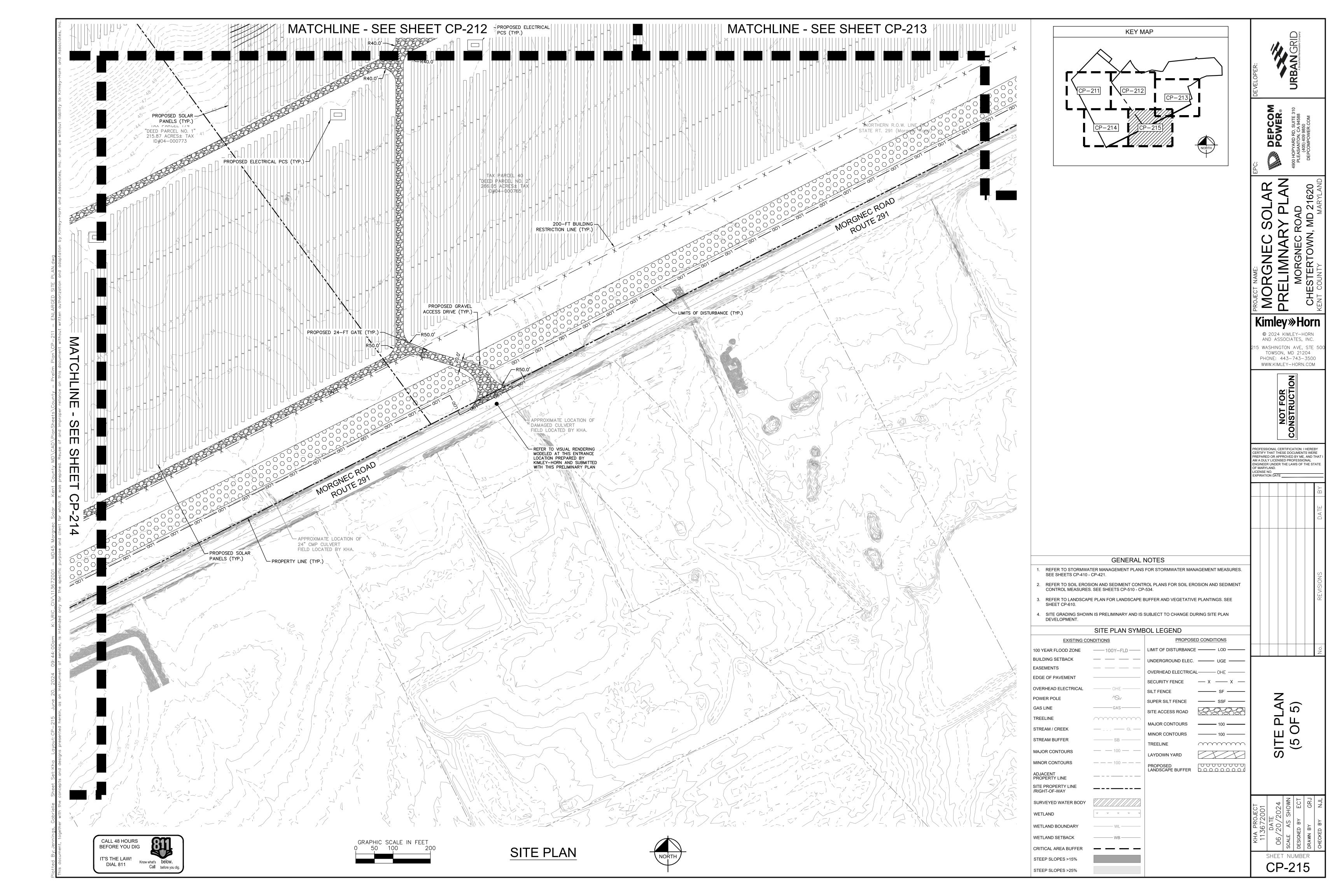


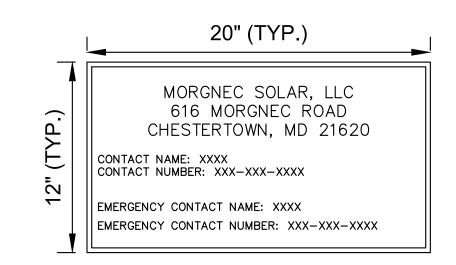










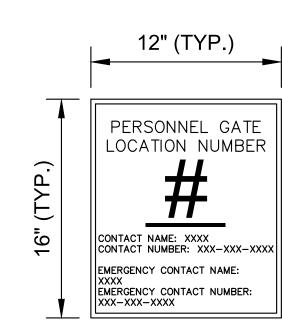


TYPICAL ENTRANCE GATE SIGN DETAIL

NOT TO SCALE

NOTES:

- CODE REQUIRED SIGNAGE WILL BE PROVIDED AROUND THE PERIMETER OF THE PROJECT FENCING, REFER TO ELECTRICAL PLANS FOR PROPOSED SIGNAGE DETAILS.
- 2. TYPICAL ENTRANCE GATE SIGNS WILL BE POSTED AT ENTRANCES FROM
- FINAL CONTACT NAME(S) AND NUMBER(S) TO BE PRINTED PER OWNER SUPPLIED INFORMATION.



TYPICAL PERSONNEL GATE LOCATION

IDENTIFICATION SIGN DETAIL

NOT TO SCALE

1. TYPICAL PERSONNEL GATE LOCATION IDENTIFICATION SIGNS WILL BE

SIGNS FOR EMS LOCATION REFERENCE.

SUPPLIED INFORMATION

POSTED AT ALL PERSONNEL GATES LOCATED ALONG THE PROPOSED SITE

2. CONSECUTIVE NUMBERING (#) SHOULD BE PROVIDED ON PERSONNEL GATE

3. FINAL CONTACT NAME(S) AND NUMBER(S) TO BE PRINTED PER OWNER

INSTALLATION SHALL BE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

GATE LEAF (TYP.)

PROVISIONS FOR

KNOX PAD LOCK

GATE POST (TYP.)

CHAIN LINK (TYP.)

CONCRETE FOOTING

FOR GATE POSTS (TYP.)

- SOLID UNDISTURBED SOIL

KNOX'

IDENTIFICATION SIGN

- 1. FINISH SHALL BE AS SELECTED BY OWNER.
- 1.1. CHAIN LINK FENCING TO BE BLACK VINYL COATED. POSTS, CAPS, BRACING AND HARDWARE TO BE PAINTED BLACK.
- 2. POST TOPS SHALL BE AS SELECTED BY OWNER.
- 3. REFER TO MANUFACTURER'S SPECIFICATIONS FOR ADDITIONAL INFORMATION.
- *CONCRETE FOOTING DESIGN SHALL BE COMPLETED BY LICENSED STRUCTURAL ENGINEER

TYPICAL PERSONNEL GATE DETAIL

NOT TO SCALE

PER PLAN (24'-0") POST TOP — - 월" DIA. TRUSS ROD (TYP.) WIRES GATE POST — PERSONNEL GATE LOCATION PROVISION FOR KNOX PADLOCK ENTRANCE - CHAIN LINK GATE SIGN —ALL JOINTS ARE WELDED TO MAKE A RIGID FRAME - CONCRETE FOOTING FOR GATE POSTS* - SOLID UNDISTURBED SOIL

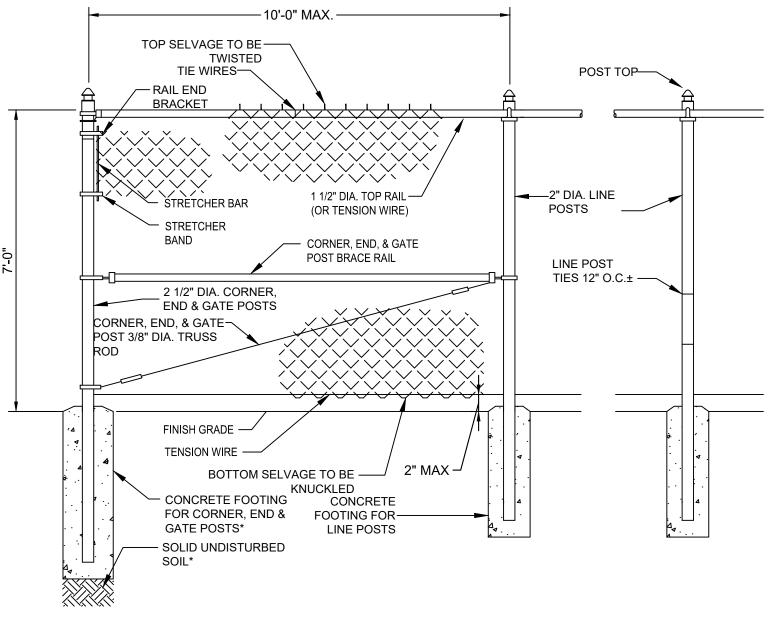
1. INSTALLATION SHALL BE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

- 2. FINISH SHALL BE AS SELECTED BY OWNER.
- 2.1. CHAIN LINK FENCING TO BE BLACK VINYL COATED. 2.2. POSTS, CAPS, BRACING AND HARDWARE TO BE PAINTED BLACK.
- 3. POST TOPS SHALL BE AS SELECTED BY OWNER.
- 4. REFER TO MANUFACTURER'S SPECIFICATIONS FOR ADDITIONAL INFORMATION.

*CONCRETE FOOTING DESIGN SHALL BE COMPLETED BY LICENSED STRUCTURAL ENGINEER

TYPICAL DOUBLE LEAF GATE DETAIL

NOT TO SCALE



INSTALLATION SHALL BE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

- 1. FINISH SHALL BE AS SELECTED BY OWNER.
- 1.1. CHAIN LINK FENCING TO BE BLACK VINYL COATED. POSTS, CAPS, BRACING AND HARDWARE TO BE PAINTED BLACK.
- POST TOPS SHALL BE AS SELECTED BY OWNER
- 3. REFER TO MANUFACTURER'S SPECIFICATIONS FOR ADDITIONAL INFORMATION.

*CONCRETE FOOTING DESIGN SHALL BE COMPLETED BY LICENSED STRUCTURAL ENGINEER

TYPICAL FENCE DETAIL

NOT TO SCALE

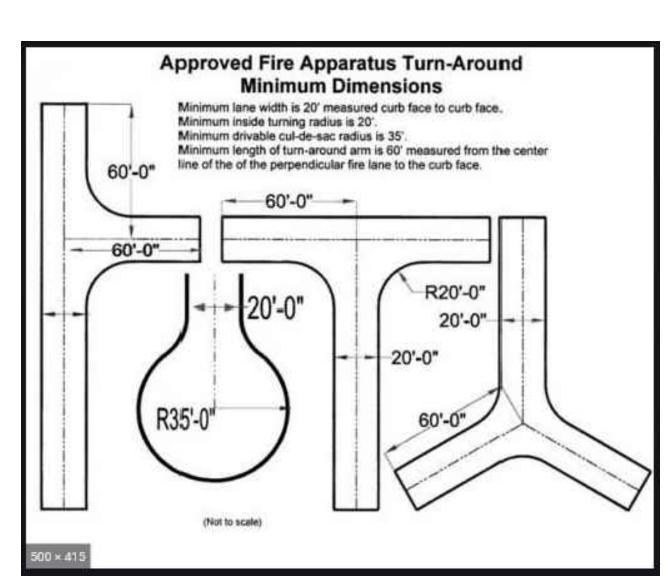
EXISTING GROUND CRUSHER RUN (CR-6) GRAVEL 4-FT CLEAR GRASS AREA BANK RUN GRAVEL (BRG) -PROPOSED GRADE ______ **GEOTEXTILE FABRIC** (IF REQUIRED)

SUBGRADE

- 1. MINIMUM 20' WIDE IMPROVEMENTS
- 2. REMOVE AND STOCKPILE TOPSOIL ON-SITE
- 3. SUBGRADE TO BE PREPARED IN ACCORDANCE WITH GEOTECHNICAL ENGINEER SPECIFICATIONS
- 4. ACCESS DRIVE BASE AND FINAL (WEAR) COURSE TO BE PREPARED IN ACCORDANCE WITH GEOTECHNICAL ENGINEER RECOMMENDATIONS
- 5. ACCESS DRIVE SECTION TO BE DESIGNED BY GEOTECHNICAL ENGINEER TO STRUCTURALLY SUPPORT A FIRE DEPARTMENT APPARATUS UP TO 31,000 LB, TEMPORARY CONSTRUCTION LOADING (PRE-CONTRACTOR REQUIREMENTS), AND PERMANENT OPERATIONS AND MAINTENANCE LOADING (PER OWNER REQUIREMENTS)
- 6. ACCESS DRIVE DESIGN FOR REFERENCE ONLY, REFER TO GEOTECHNICAL AND STRUCTURAL DRAWINGS.
- 7. ACCESS DRIVE TO SUBSTATION TO BE PER SPECIFICATIONS PROVIDED TO DEVELOPER/CONTRACTOR.

TYPICAL ACCESS DRIVE DETAIL

NOT TO SCALE



NFPA FIRE APPARATUS TURN-AROUND TYPICAL DETAIL NOT TO SCALE

EXTERIOR PADLOCK FEATURES AND BENEFITS Knox exterior padlocks utilize the same master key used with the Knox Rapid Access System. The exterior, heavy-duty Knox Padiocks (Models #3781, 3782, 3783) are built with a stainless-steel shackle designed for securing storage areas, temporary construction sites. gated communities, etc. The shrouded all-weather padlock (Model #3784) provides additional security against pry and cut attacks. The lock cylinder is UL 437 listed which demonstrates it has met the rigorous standard. Performance is tested with a battery of endurance FEATURES ✓ All-weather rust-free stainless-steel Grade 6 shackle. ✓ Weather resistant body with durable weather cover includes: cylinder protection, sealed shackle holes, and drainage system ✓ Available in 4", 3" and 2" shackle lengths ✓ Attack resistant ✓ Key retaining (when open) ✓ Precision pin cylinder ✓ High-security shroud version available (for all Knox look cores) ✓ Authorized agency identification labels available: Fire (red); EMS (white) Police (blue); Sheriff (gold); Security (white) ✓ New Shackle lengths support additional applications. ✓ Improved attack resistance provides longer service life. ✓ Key retention prevents dropped/lost keys ✓ Utilizes the Knox master key solution INTERIOR PADLOCK FEATURES AND BENEFITS Knox interior padlocks utilize the same master key used with the Knox Rapid Access System. The Interior Knox Padlock (Models 3771 and 3774) are designed to secure fire sprinkler contr systems, hazardous chemical supplies, restricted utility areas, equipment lockers, and cases. The lock cylinder is UL Listed which demonstrates it has met the rigorous standard. Performance is tested with a battery of endurance and attack tests. FEATURES ✓ Stainless steel shackle; 5/16* diameter available in 2-3/8* and 1-1/8* ✓ Heavy-duty look design and solid brass body resists pull attacks ✓ Precision pin cylinder ✓ Key retaining (when open) ✓ Authorized agency identification labels available: Fire (red); EMS (white) Police (blue); Sheriff (gold); Security (white) ✓ Two shackle lengths support additional applications ✓ Key retention prevents dropped/lost keys Model #3771 → Utilizes Knox master key solution

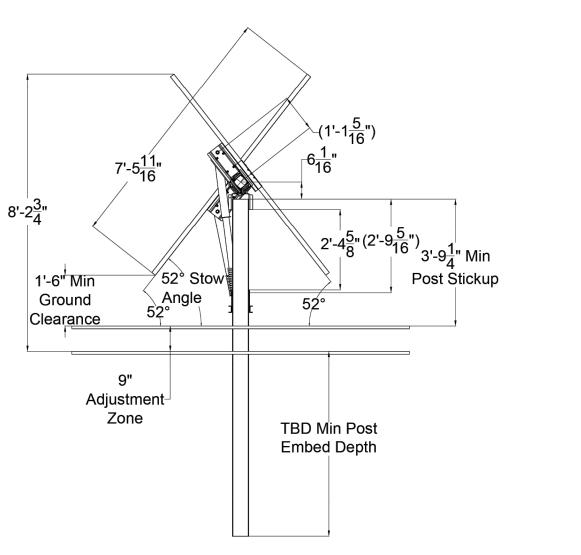
KNOX PADLOCKS"

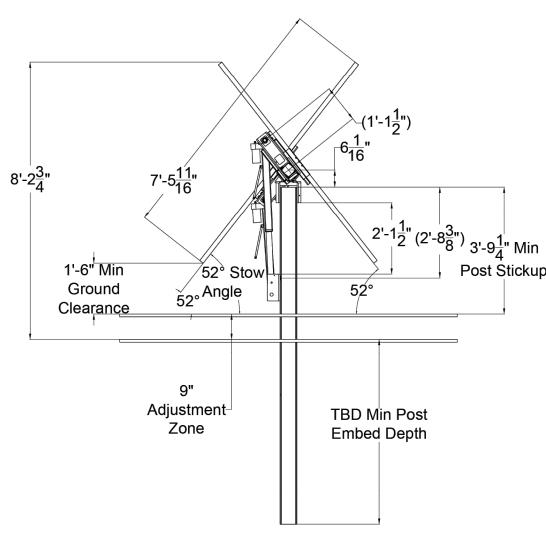
KNOX PAD LOCK DETAIL

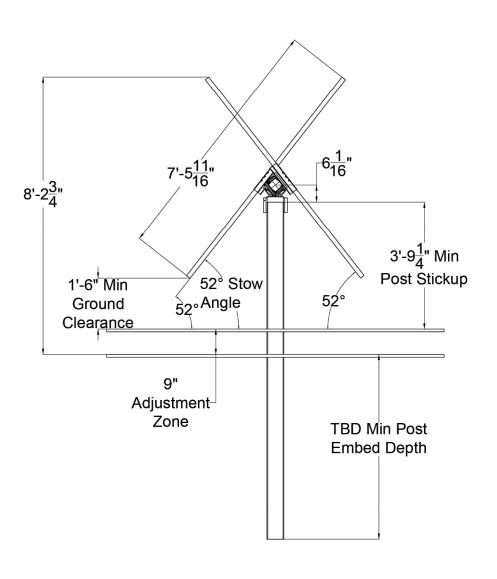
NOT TO SCALE

Kimley Whorr © 2024 KIMLEY-HORN AND ASSOCIATES, INC. 5 WASHINGTON AVE, STE TOWSON, MD 21204 PHONE: 443-743-3500 WWW.KIMLEY-HORN.COM PARED OR APPROVED BY ME. AND THA GINEER UNDER THE LAWS OF THE STAT SHEET NUMBER CP-240

DEPCOI POWER







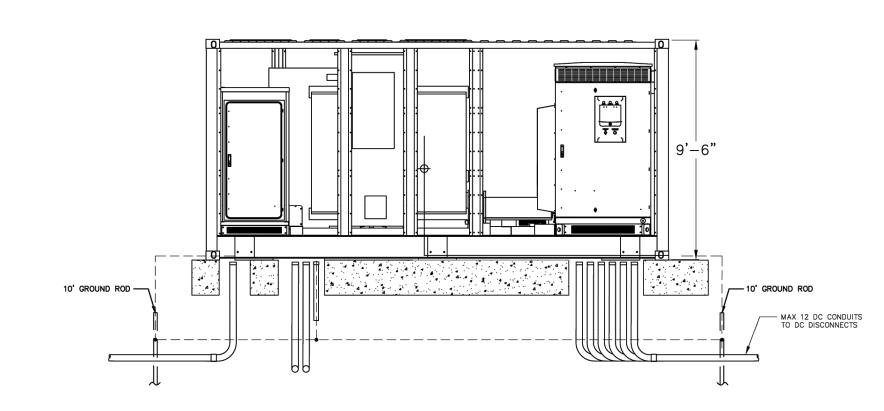
Damper Post

Center Post

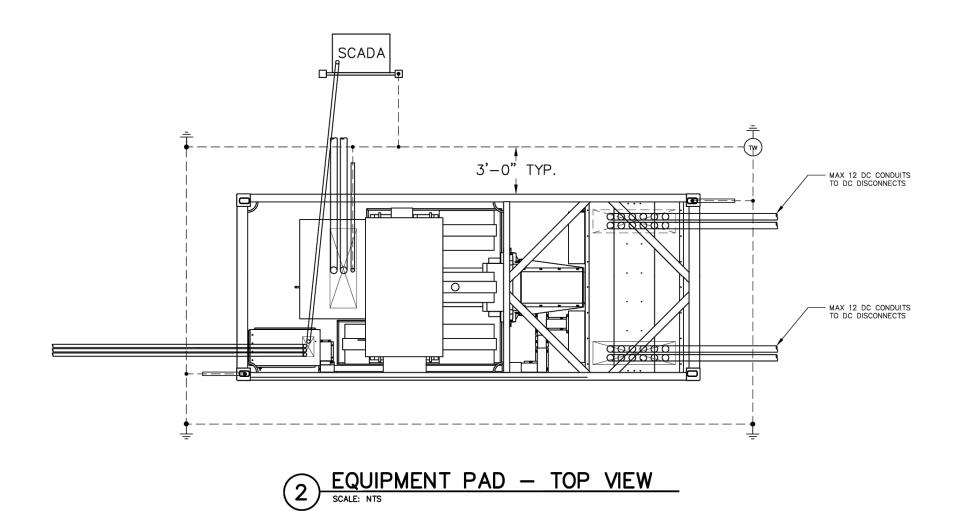
Standard Post

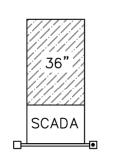
TYPICAL POST SECTION DETAIL

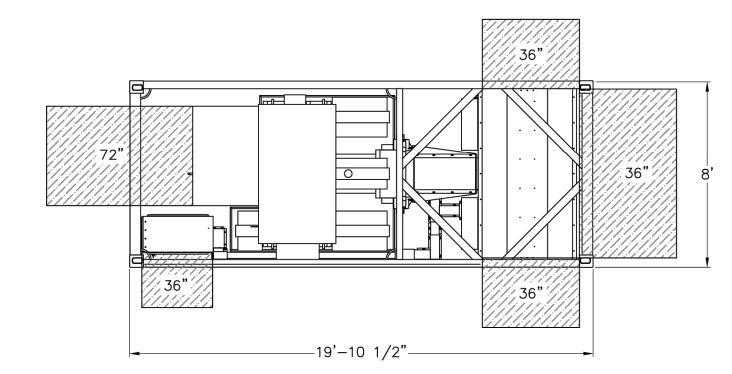
NOT TO SCALE



1 EQUIPMENT PAD - FRONT VIEW SCALE: NTS







3 WORKING CLEARANCE PLAN-TOP VEW
SCALE: NTS

POWER INVERTER PAD TYPICAL DETAIL

NOT TO SCALE

1. INVERTER DETAIL FOR REFERENCE ONLY, REFER TO FINAL STRUCTURAL AND ELECTRICAL PLANS.

SUBJECT TO REVISION, REFER TO FINAL ELECTRICAL PLANS AND BUILDING PERMIT PLANS

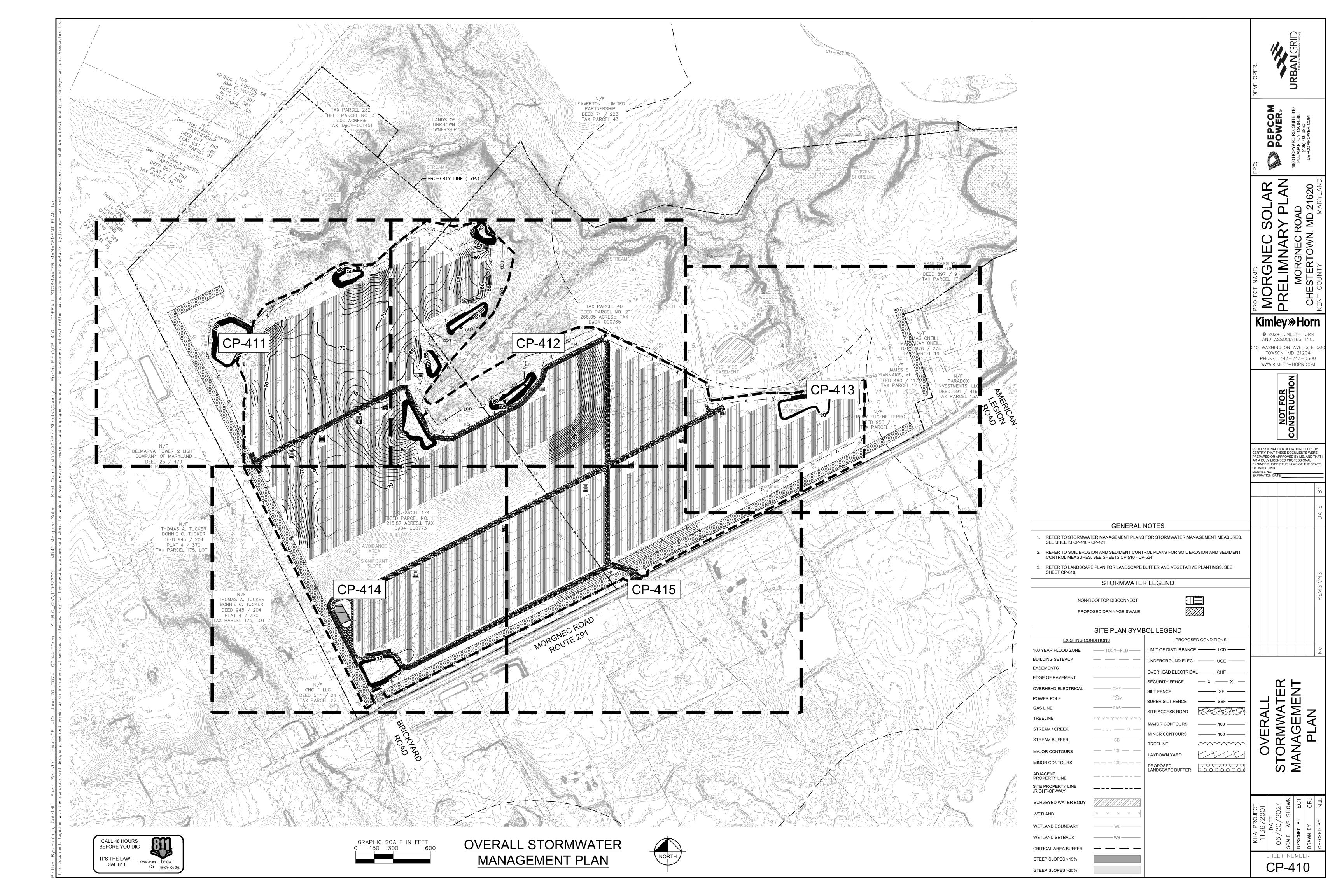
DEPCOM POWER®

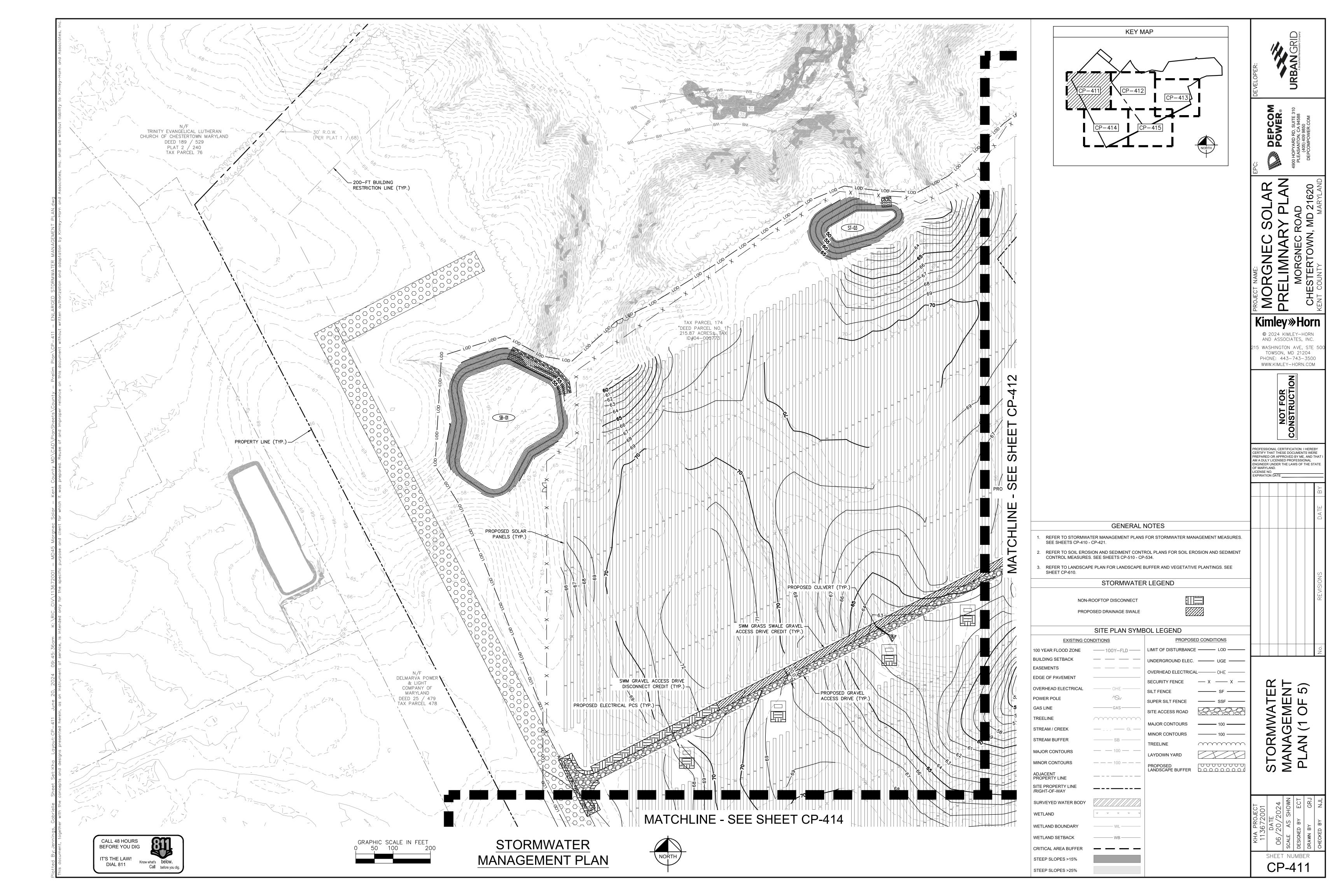
Kimley»Horn © 2024 KIMLEY—HORN AND ASSOCIATES, INC. 15 WASHINGTON AVE, STE 50 TOWSON, MD 21204 PHONE: 443—743—3500 WWW.KIMLEY—HORN.COM

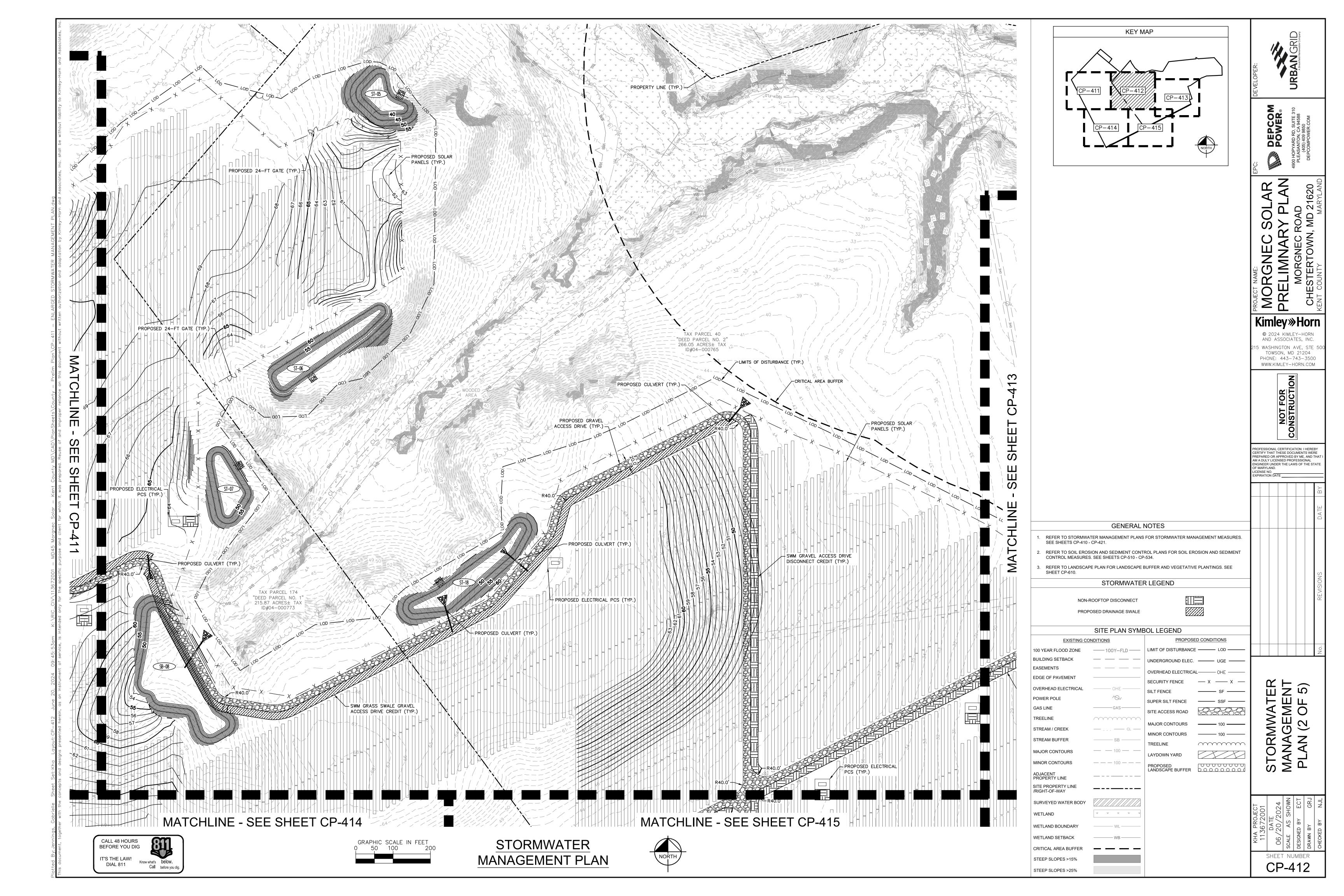
PROFESSIONAL CERTIFICATION: I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE

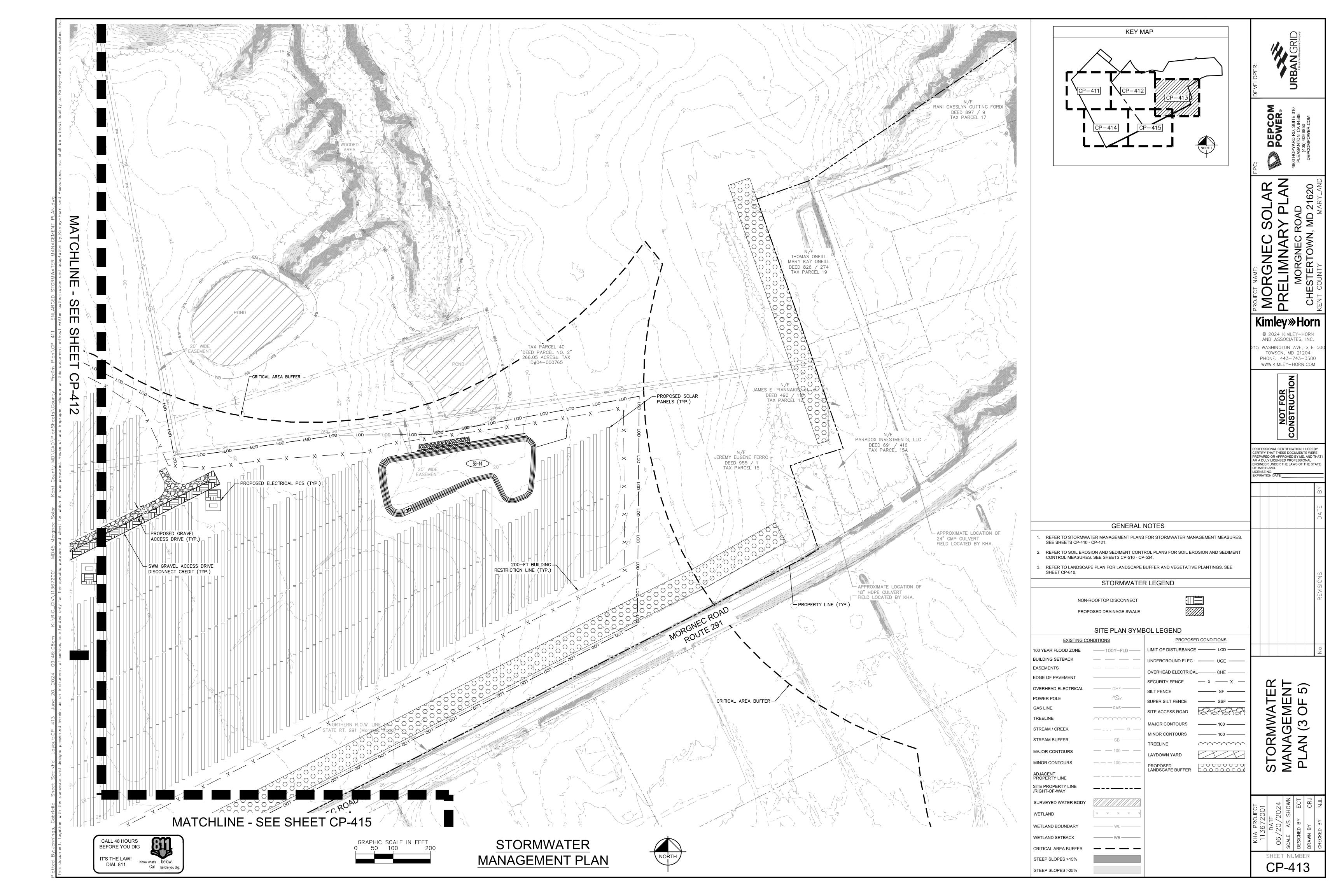
SITE DETAILS

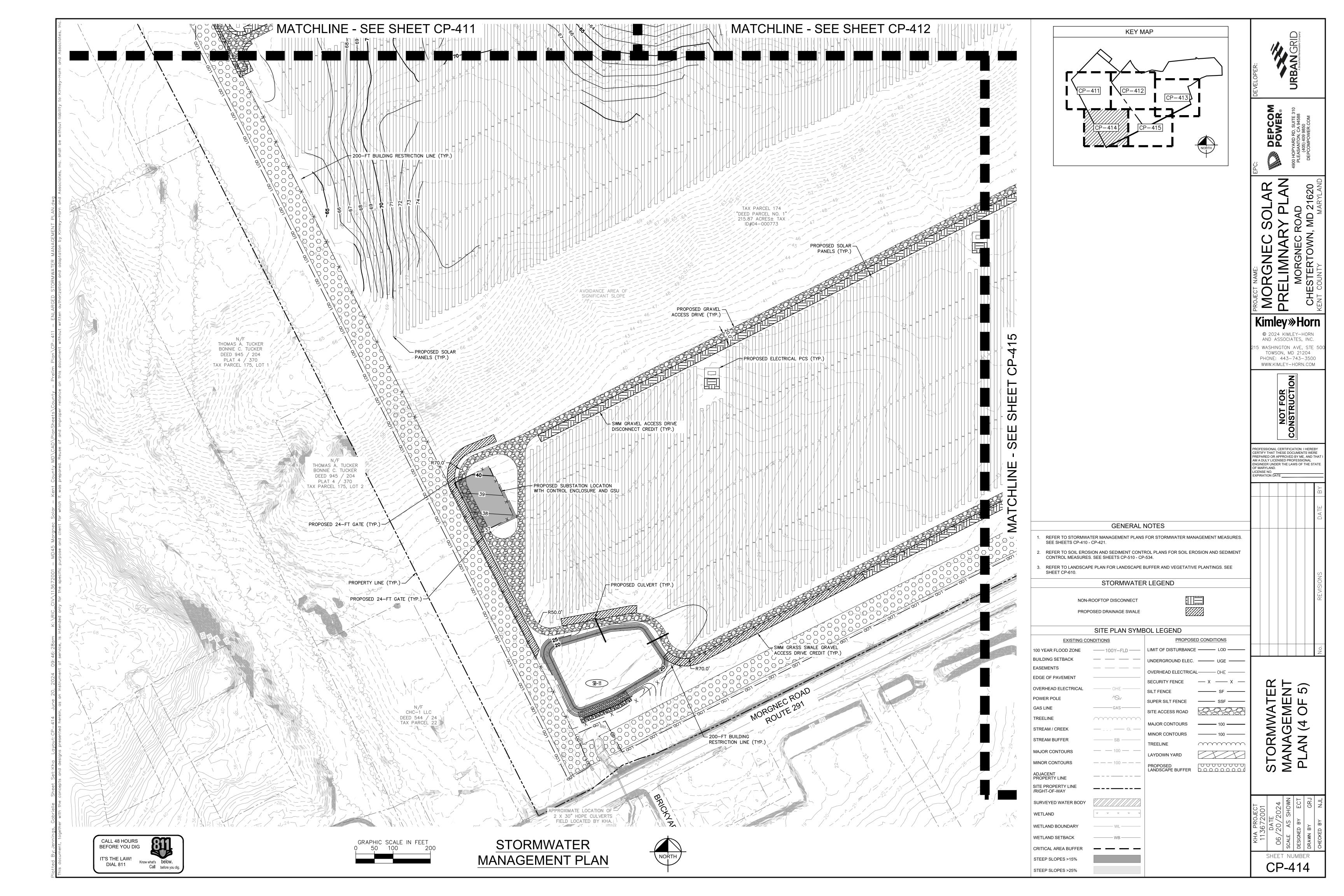
SHEET NUMBER CP-240

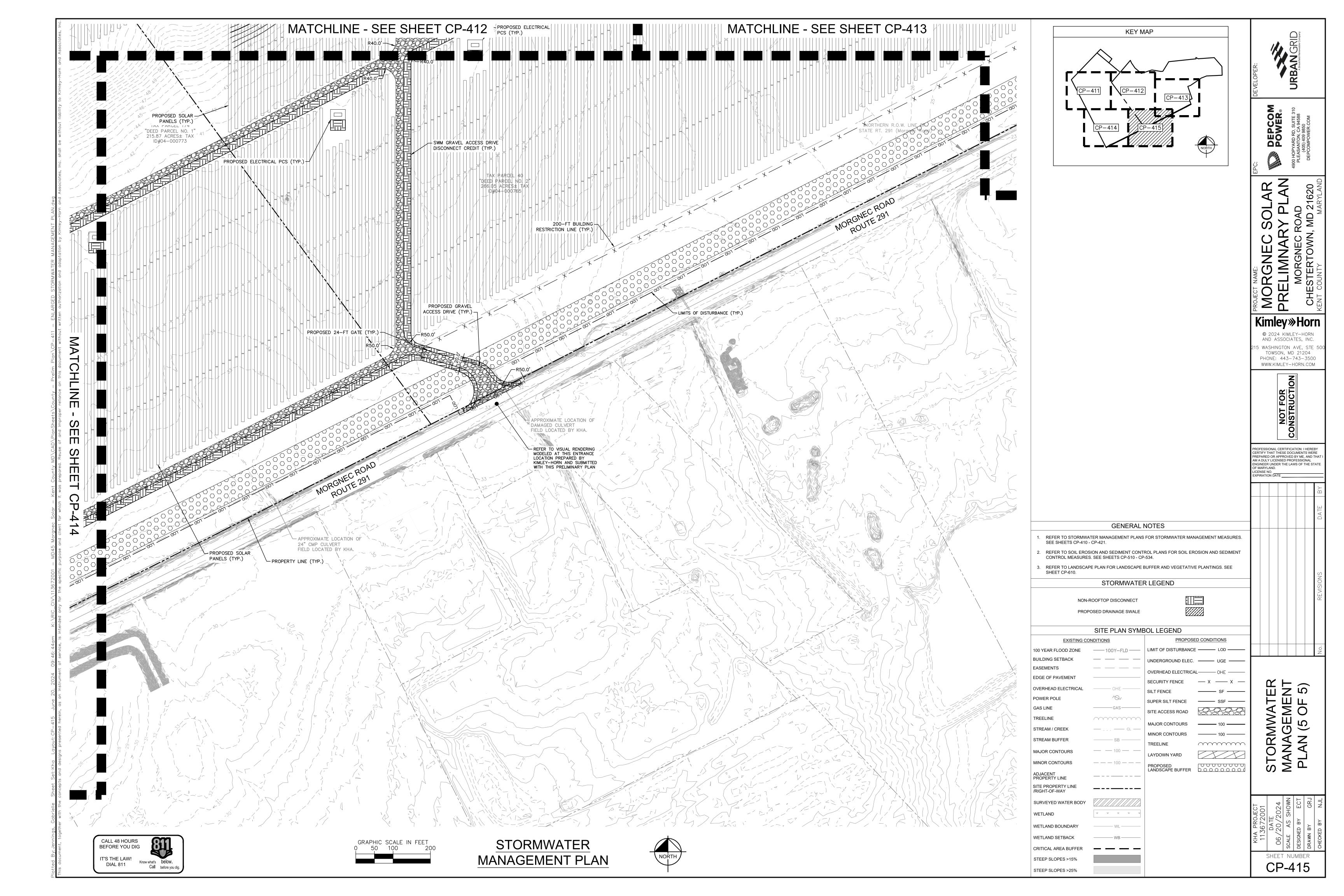


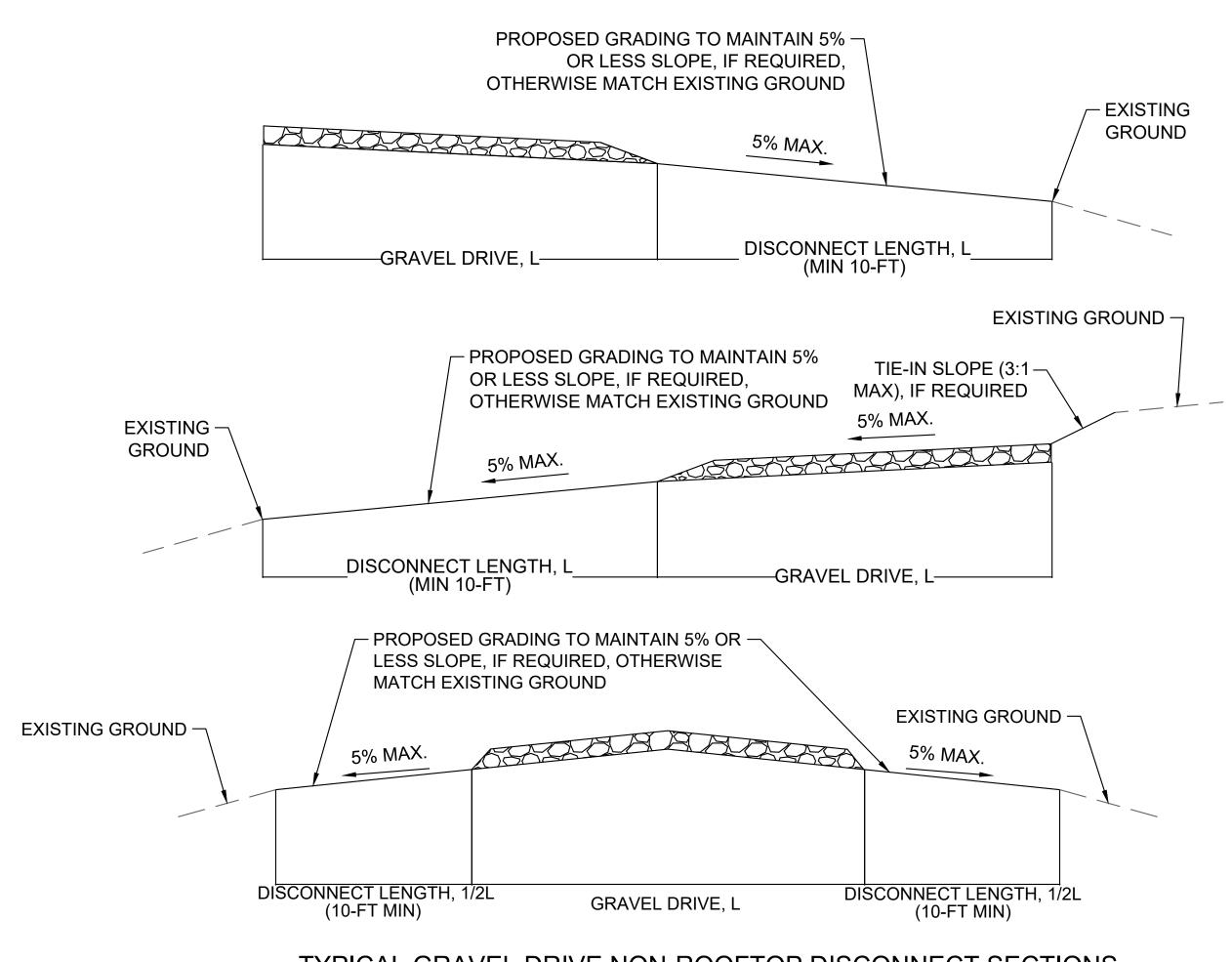




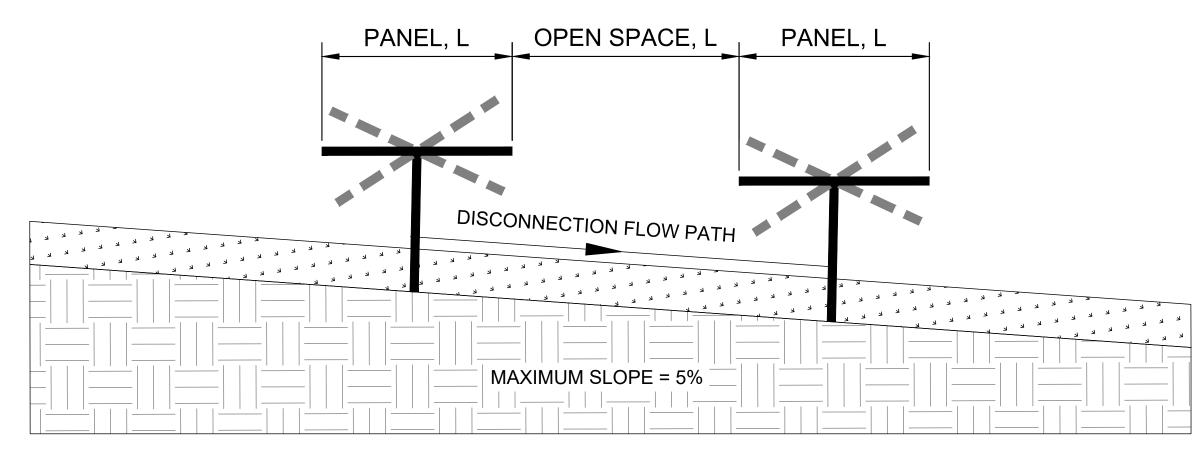








TYPICAL GRAVEL DRIVE NON-ROOFTOP DISCONNECT SECTIONS AND GRADING DETAIL FOR STANDARD AND CROWNED DRIVES SCALE: N.T.S.



TYPICAL PANEL NON-ROOFTOP DISCONNECTION - AVERAGE SLOPE LESS THAN 5% NOT TO SCALE

Kimley » Horn

Per MDE SWM Design Manual			
Site Name:	Morgnec Solar	Date:	06/13/24
Project #:	113672001	By:	GRJ
County:	Kent County	Checked:	ECT
Stormwater Management - Environmental Site Design			

Site Drainage Area Data:

Step 1. Determine Area Requiring	g Treatment	
Project Site Area:	486.92	acres
Project Disturbed Area:	233.36	acres
Existing Impervious Area:	1.49	acres
Existing % Impervious, I:	0%	
Proposed Impervious Area(**):	6.64	acres
Proposed % Impervious, I:	2.8%	
Imp Area to Treat, A _T :	6.64	acres

(**)=Based on gravel drives, equipment pad

Step 2. Determine Required Treatment Volume

A. Determine Target P_E & ESDv Using Table 5.3 (MDE SWM Manual Section 5-page 5.21) New Development

> 2.8% 0.05 + (0.009 * (1)) 0.075617 ESDv = $[(P_E)(R_V)(A)]/12$

(Determine P_E from Table 5.3) 1.470 ac-ft

< 40%,therefore New Developmen

B. Determine SWM Treatment Provided

b. Determin	ne Svvivi Treatilient Provid	eu			
	ESD Practice)	Imp.Area Treated (ac)	Volume Treated (cf)	
	N-2: Non-Rooftop Disc	onnect	3.56	12277	
	M-8: Grass Swale -	Road	3.08	10445	
	M-8: Grass Swale - F	Panels	0.00	0	
	N-2: Solar Array Disc	onnect	0.00	11493	
	N-2: Open Space Disc	onnect	0.00	29840	
		Total	6.64	64055 cf	Provide
			6.64	64055 cf	Require

C. Calculate Recharge (Rev) Requirements

0.204 ac-ft

[(S)(R_v)(A)]/12

Determine SWM Treatment Provided

1.245 ac-ft 54242 cf

D. Calculate Channel Protection (Cpv) Requirements Channel Protection Volume is calculated as the remainder of the required ESDv after Chapter 5 practices have been

implemented to the maximum extent practicable.

Channel Protection Required = Channel Protection Provided =

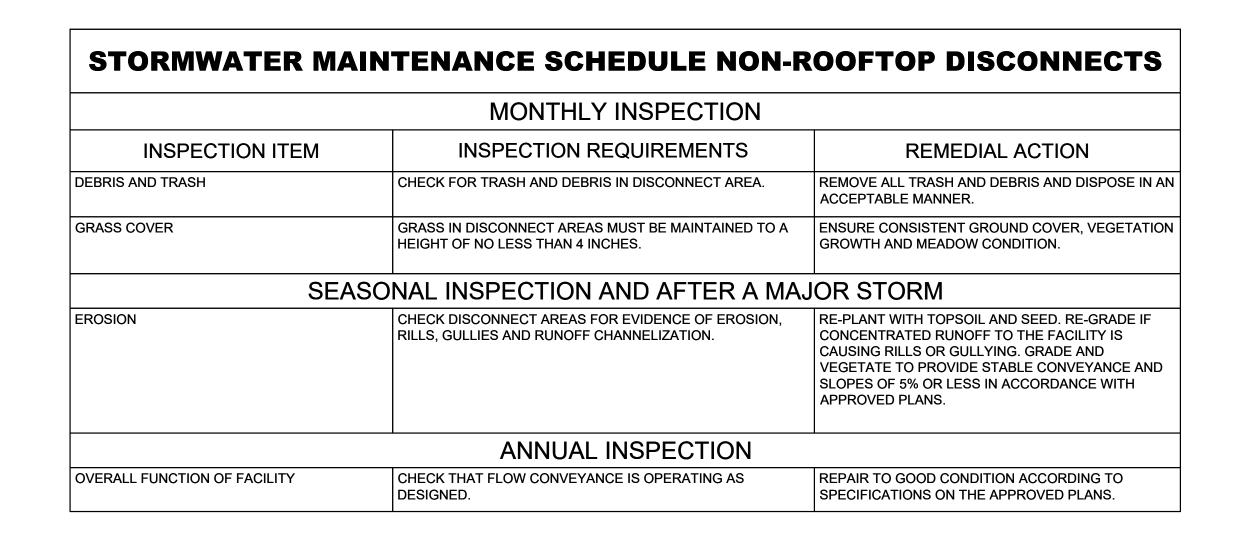
Note: ESD to the MEP has been met with Chapter 5 practices and channel protection volume is not required to

E. Calculate Overbank Flood Protection (Q_{p10}) Requirements

Refer to TR-55 computations

F. Calculate Extreme Flood Protection (Q_{p100}) Requirements

Refer to TR-55 computations





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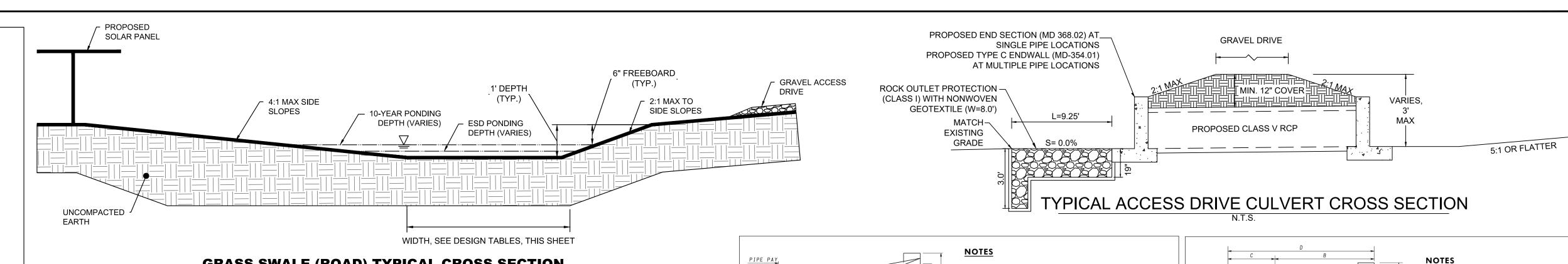
Kimley Morn © 2024 KIMLEY—HORN AND ASSOCIATES, INC.

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RTIFY THAT THESE DOCUMENTS WERE EPARED OR APPROVED BY ME, AND THA M A DULY LICENSED PROFESSIONAL NGINEER UNDER THE LAWS OF THE STATE ENSE NO. _____ PIRATION DATE

VATER EMENT AND

SHEET NUMBER CP-420



GRASS SWALE
SUMMARY
TABLE TO BE
PROVIDED

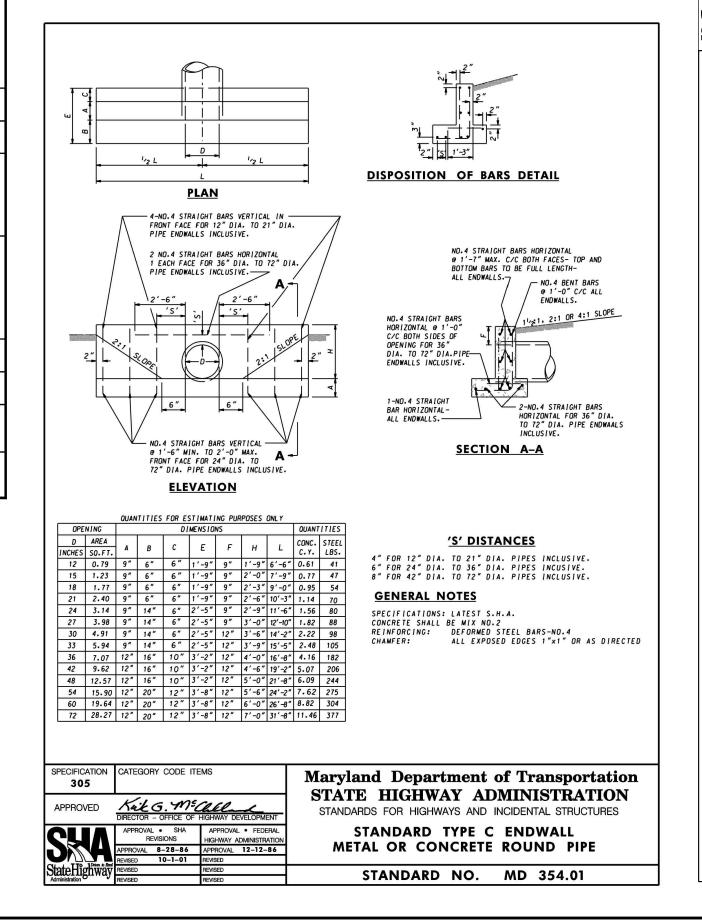
GRASS SWALE (ROAD) TYPICAL CROSS SECTION REFER TO THE

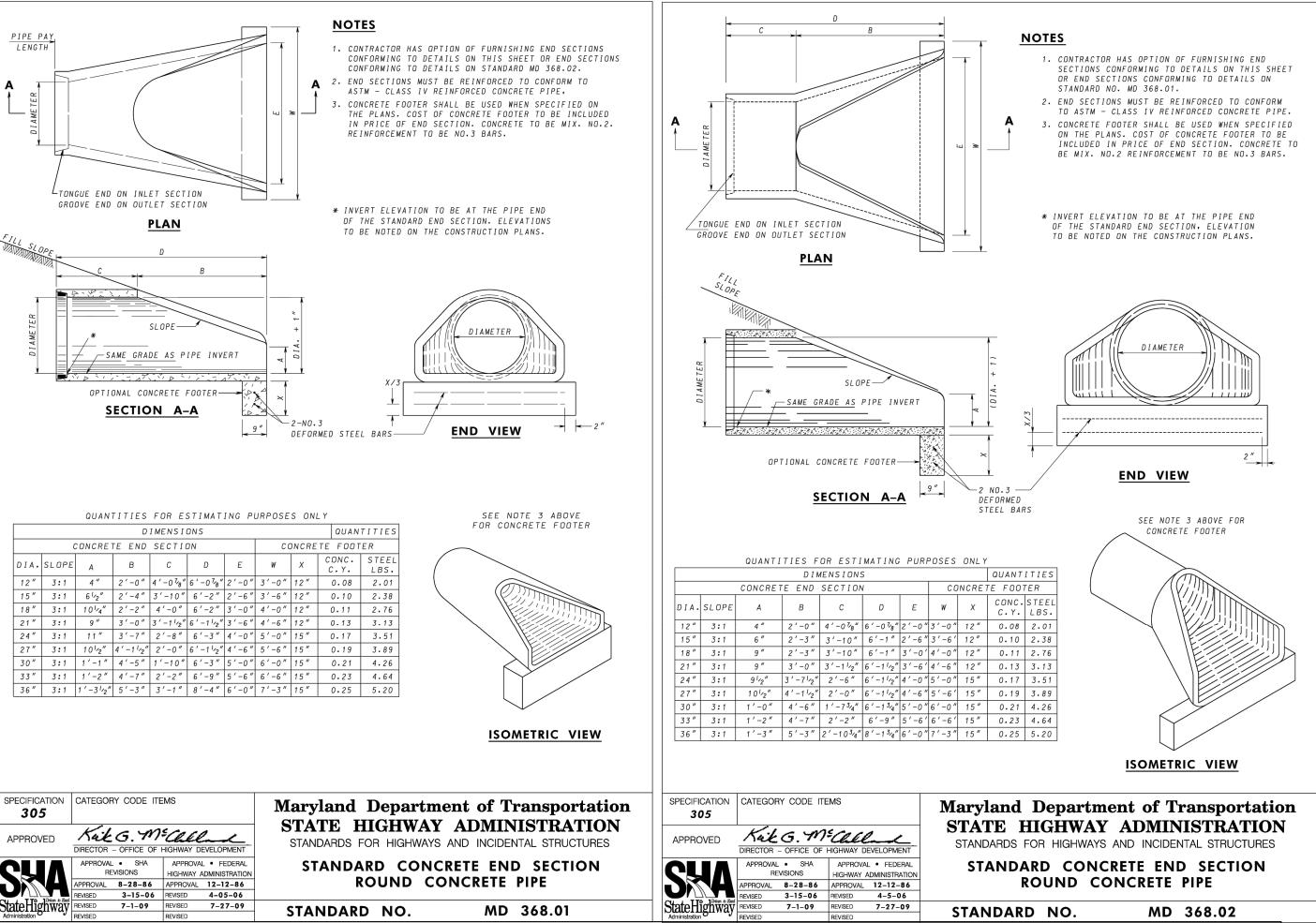
ESD FACILITY DESIGN SUMMARY TABLES, THIS SHEET SCALE = N.T.S.

NOTE:
ENVIRONMENTAL SITE DESIGN (ESD) IS THE MARYLAND DEPARTMENT OF THE ENVIRONMENT ABBREVIATION FOR STORMWATER MANAGEMENT.

STORMWATER MAINTENANCE SCHEDULE GRASS SWALE

	MONTHLY INSPI	ECTION
Inspection Item	Inspection Requirements	Remedial Action
Debris and Trash	Check for trash and debris in channel including inlets, outlets, and area around	Remove all trash and debris and dispose in an acceptable manner.
Grass Cover	facility. Grass in swale must be maintained at a height of 4 to 6 inches.	Unclog all openings. Mow side slopes when grass exceeds 12 inches in height.
	Check for channelizing and bare spots.	Mow channel at least bi-annually. Remove grass clippings. Re-plant with topsoil, seed, and matting.
	SEASONAL INSPECTION AND AI	FTER A MAJOR STORM
Inspection Item	Inspection Requirements	Remedial Action
Sediment Accumulation	Check for accumulated sediment and clogged openings.	When sediment accumulates to 2 inches in depth, remove sediment. Remove sediment from any clogged openings. Dispose of all sediment in an acceptable location.
Erosion	Check inflow, channel, outfall, and side slopes for evidence of erosion, rills, gullies, and runoff channelization.	Re-plant with topsoil, seed, and matting. Re-grade if concentrated runoff to the facility is causing rills or gullying. Grade, vegetate, and/or armor to provide stable conveyance in accordance with approved plans.
	ANNUAL INSPE	CTION
Inspection Item	Inspection Requirements	Remedial Action
Maintenance Access	Check for accessibility to facility.	Prevent excessive vegetative growth, erosion, and obstructions on access way.
Overall Function of Facility	Check that flow conveyance is operating as designed	Repair to good condition according to specifications on the approved plans.





CULVERT SUMMARY
TABLE TO BE
PROVIDED

JRBANGRID A Brookfeld Renewable Company

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PRELIMNARY PLAN
MORGNEC ROAD
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MARYLAND

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ICENSE NO. EXPIRATION DATE

REVISIONS DATE BY

STORMWATER
MANAGEMENT
NOTES AND
DETAILS

DATE

06/20/2024

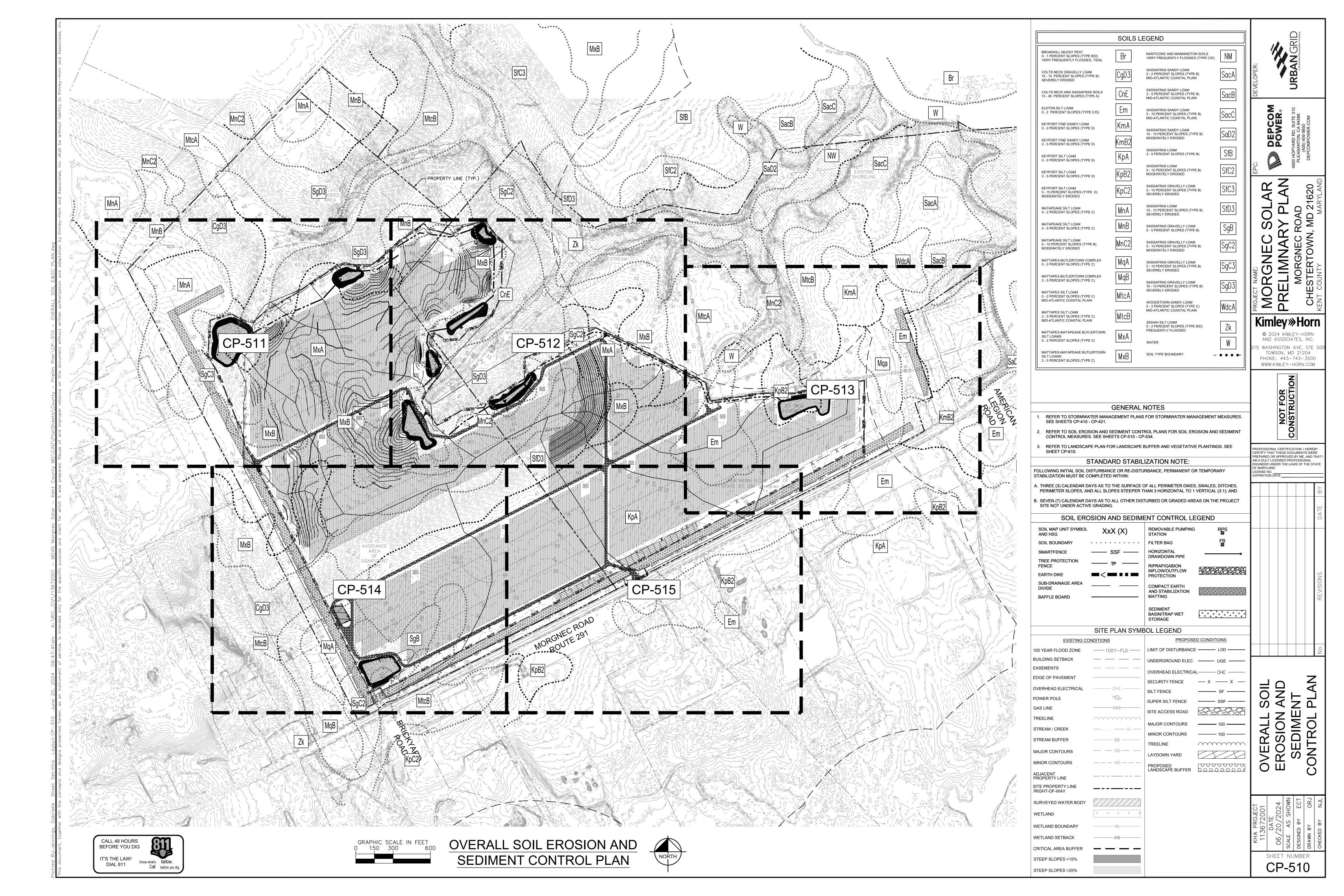
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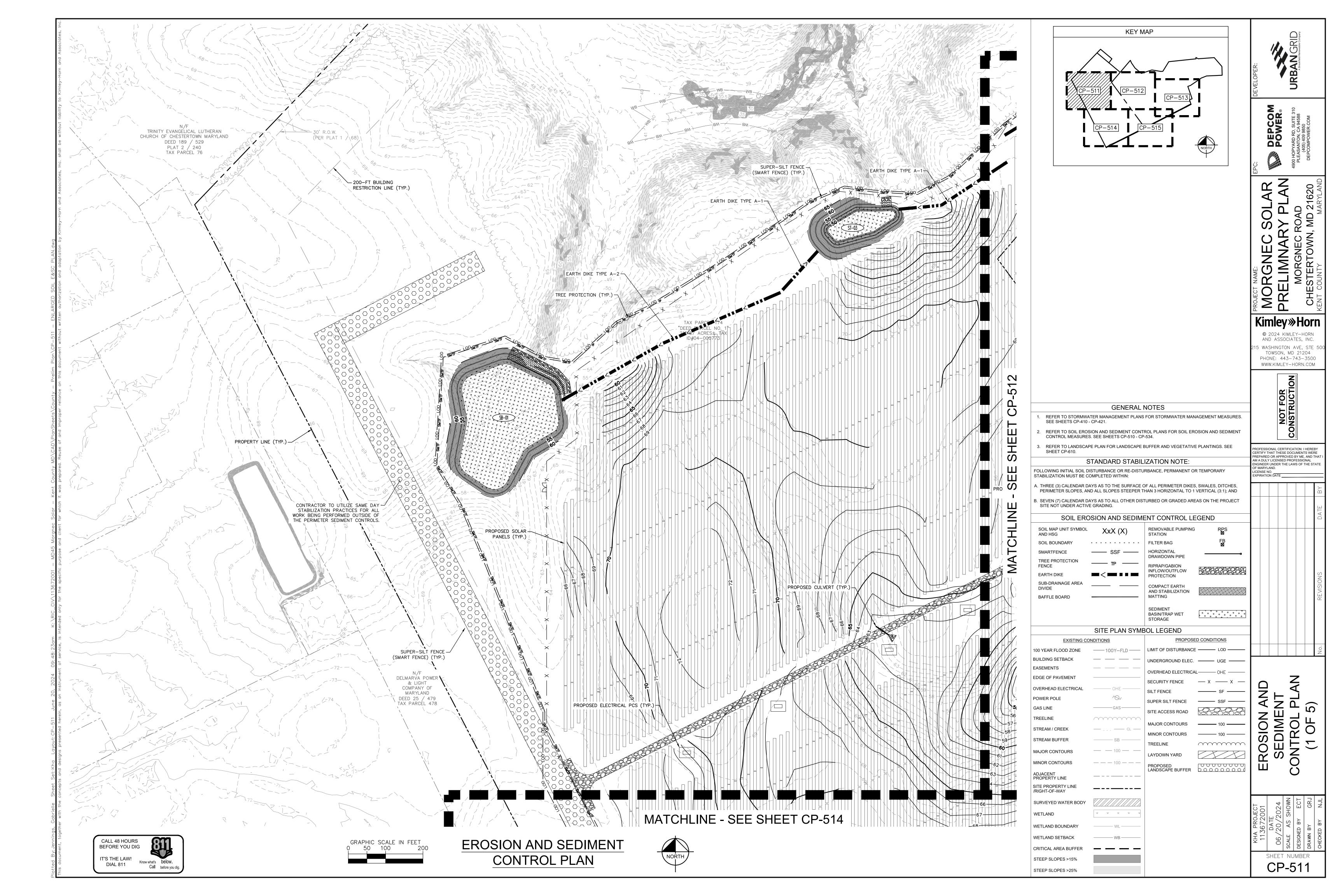
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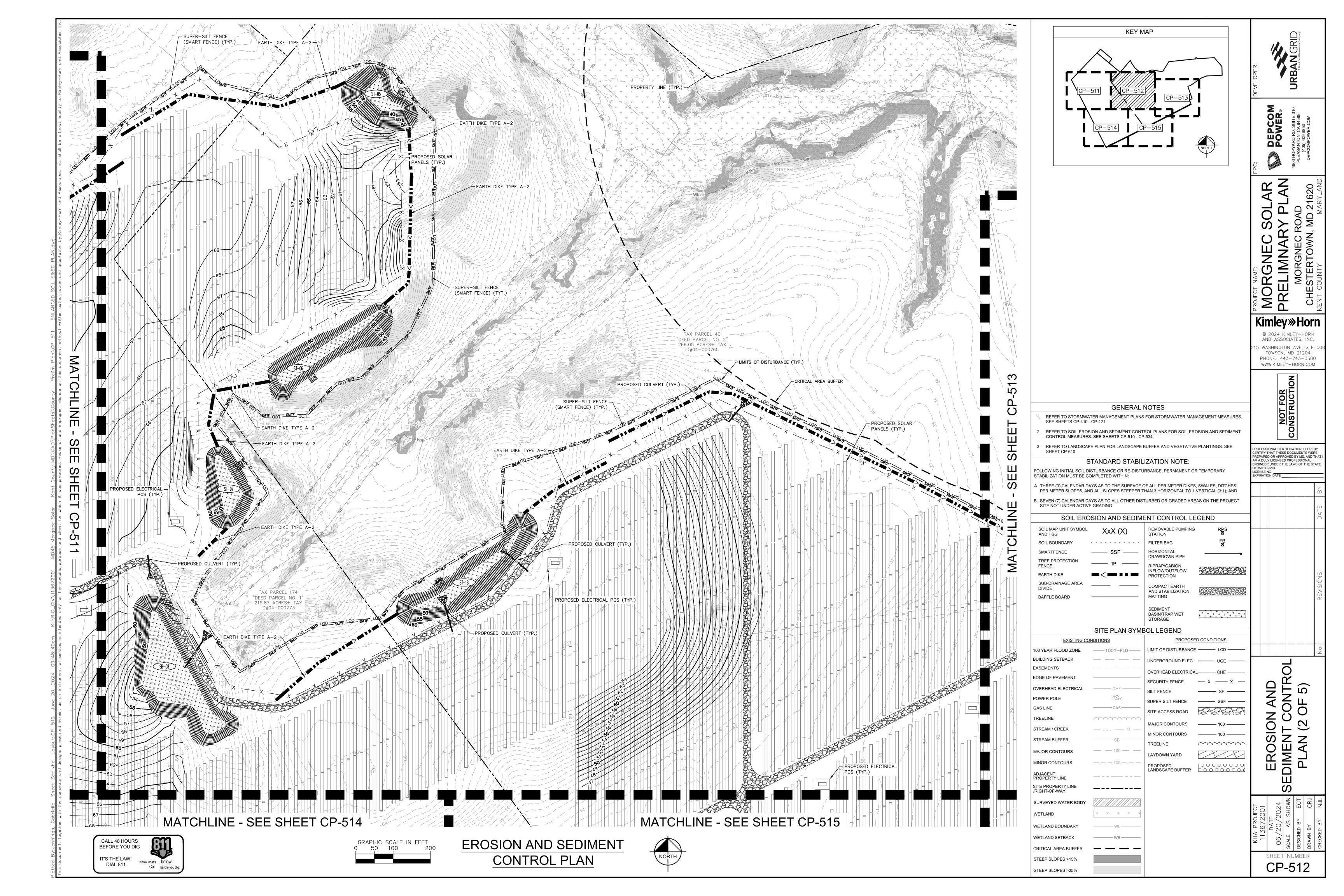
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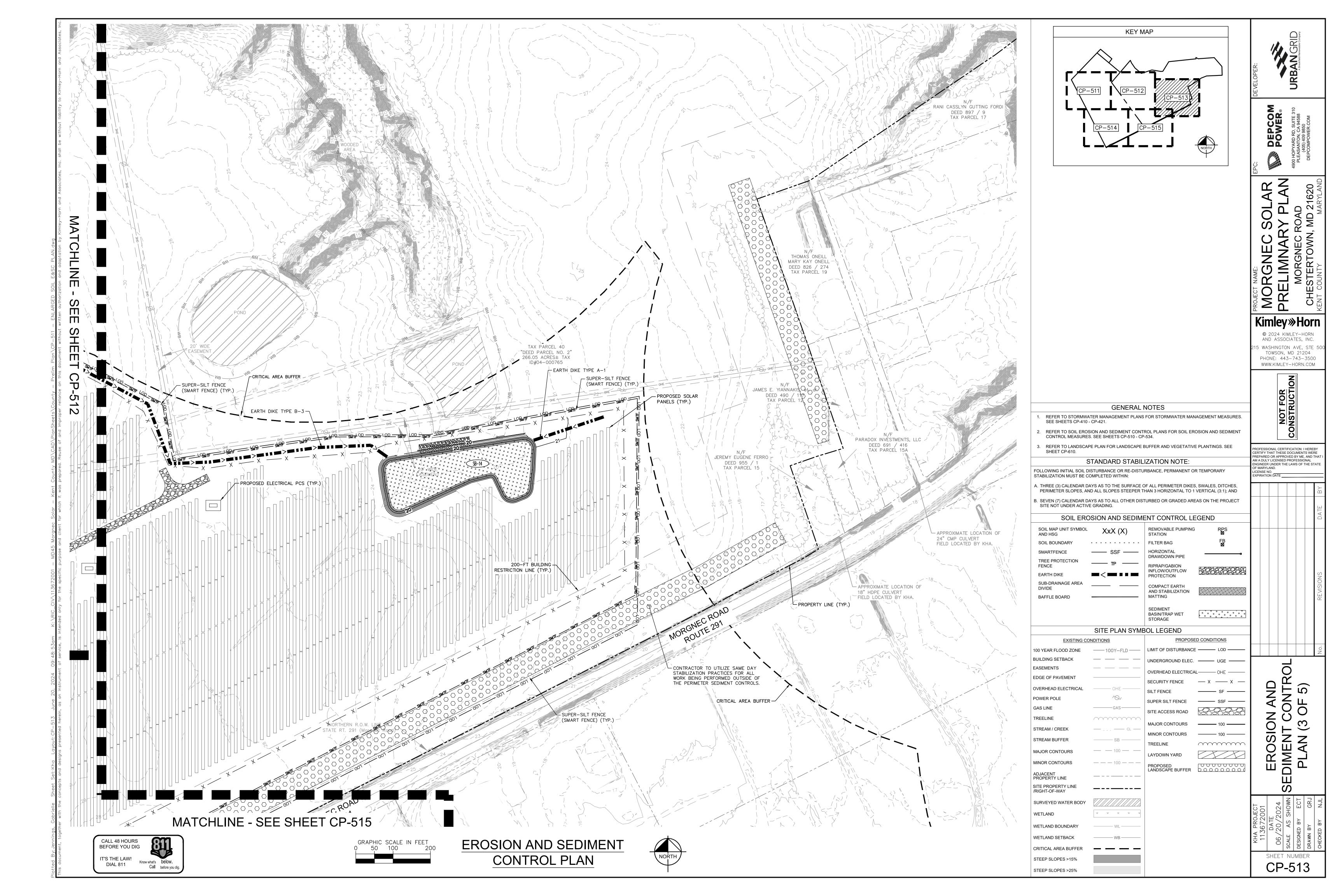
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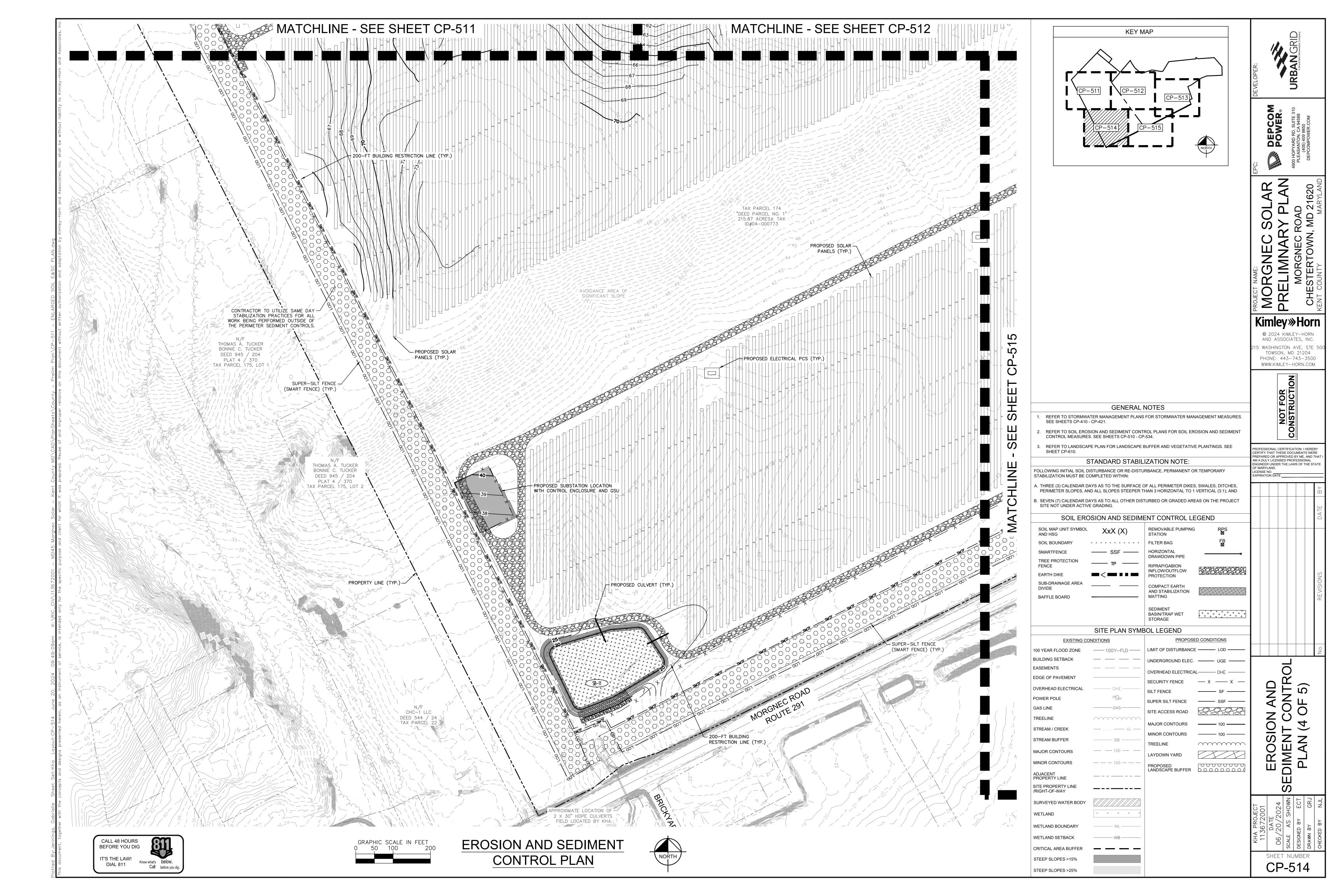
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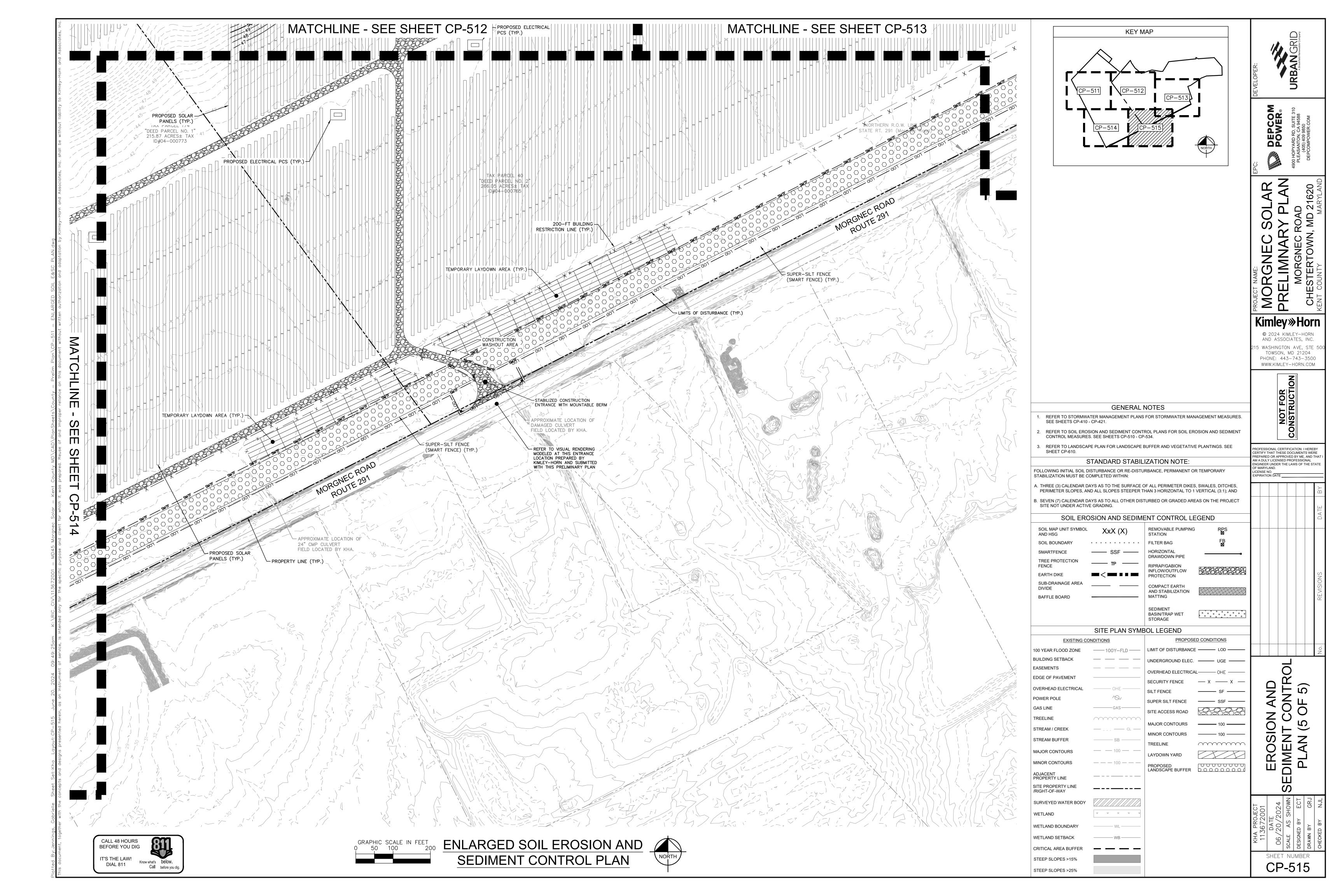










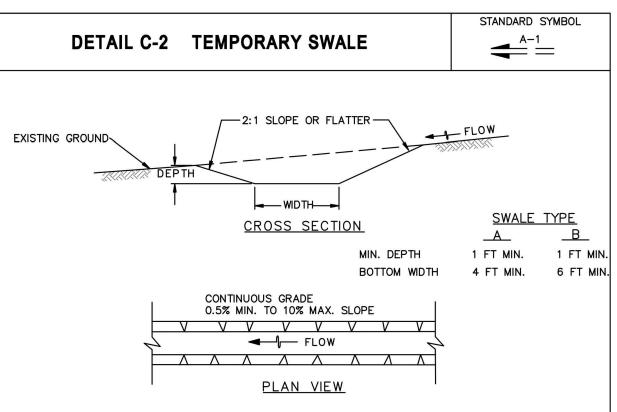


CONSTRUCTION SPECIFICATIONS

- PLACE STABILIZED CONSTRUCTION ENTRANCE IN ACCORDANCE WITH THE APPROVED PLAN. VEHICLES MUST TRAVEL OVER THE ENTIRE LENGTH OF THE SCE. USE MINIMUM LENGTH OF 50 FEET (*30 FEET FOR SINGLE RESIDENCE LOT). USE MINIMUM WIDTH OF 10 FEET. FLARE SCE 10 FEET MINIMUM AT THE EXISTING ROAD TO PROVIDE A TURNING RADIUS.
- . PIPE ALL SURFACE WATER FLOWING TO OR DIVERTED TOWARD THE SCE UNDER THE ENTRANCE MAINTAINING POSITIVE DRAINAGE. PROTECT PIPE INSTALLED THROUGH THE SCE WITH A MOUNTABLE BERM WITH 5:1 SLOPES AND A MINIMUM OF 12 INCHES OF STONE OVER THE PIPE. PROVIDE PIPE AS SPECIFIED ON APPROVED PLAN. WHEN THE SCE IS LOCATED AT A HIGH SPOT AND HAS NO DRAINAGE TO CONVEY, A PIPE IS NOT NECESSARY. A MOUNTABLE BERM IS REQUIRED WHEN SCE IS NOT
- 3. PREPARE SUBGRADE AND PLACE NONWOVEN GEOTEXTILE, AS SPECIFIED IN SECTION H-1 MATERIALS.
- PLACE CRUSHED AGGREGATE (2 TO 3 INCHES IN SIZE) OR EQUIVALENT RECYCLED CONCRETE (WITHOUT REBAR) AT LEAST 6 INCHES DEEP OVER THE LENGTH AND WIDTH OF THE SCE.
- MAINTAIN ENTRANCE IN A CONDITION THAT MINIMIZES TRACKING OF SEDIMENT. ADD STONE OR MAKE OTHER REPAIRS AS CONDITIONS DEMAND TO MAINTAIN CLEAN SURFACE, MOUNTABLE BERM, AND SPECIFIED DIMENSIONS. IMMEDIATELY REMOVE STONE AND/OR SEDIMENT SPILLED, DROPPED, OR TRACKED ONTO ADJACENT ROADWAY BY VACUUMING, SCRAPING, AND/OR SWEEPING. WASHING ROADWAY TO REMOVE MUD TRACKED ONTO PAVEMENT IS NOT ACCEPTABLE UNLESS WASH WATER IS DIRECTED TO AN APPROVED SEDIMENT CONTROL PRACTICE.

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL U.S. DEPARTMENT OF AGRICULTURE MARYLAND DEPARTMENT OF ENVIRONMENT NATURAL RESOURCES CONSERVATION SERVICE WATER MANAGEMENT ADMINISTRATION

B.2



FLOW CHANNEL STABILIZATION

SEED WITH STRAW MULCH AND TACK. (NOT ALLOWED FOR CLEAR WATER DIVERSION.) SEED WITH SOIL STABILIZATION MATTING OR LINE WITH SOD. A-2/B-2

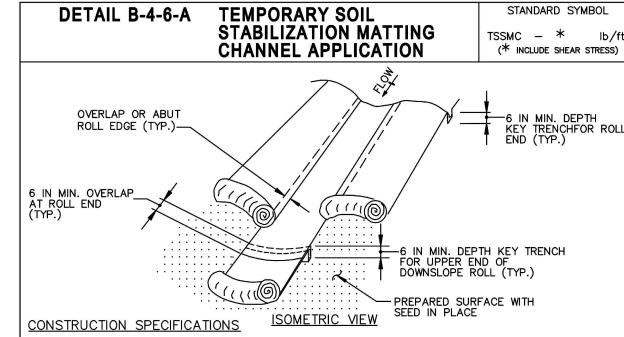
A - 3/B - 34 TO 7 INCH STONE OR EQUIVALENT RECYCLED CONCRETE PRESSED INTO SOIL A MINIMUM OF 7 INCHES AND FLUSH WITH GROUND.

CONSTRUCTION SPECIFICATIONS

- . REMOVE AND DISPOSE OF ALL TREES, BRUSH, STUMPS, OBSTRUCTIONS, AND OTHER OBJECTIONABLE MATERIAL SO AS NOT TO INTERFERE WITH PROPER FUNCTION OF TEMPORARY SWALE.
- 2. EXCAVATE OR SHAPE TEMPORARY SWALE TO LINE, GRADE, AND CROSS SECTION AS SPECIFIED. BANK
- PROJECTIONS OR OTHER IRREGULARITIES ARE NOT ALLOWED. 3. STABILIZE TEMPORARY SWALE WITHIN THREE DAYS OF INSTALLATION. STABILIZE SWALES USED FOR CLEAR WATER DIVERSION WITHIN 24 HOURS OF INSTALLATION.
- CONSTRUCT FLOW CHANNEL ON AN UNINTERRUPTED, CONTINUOUS GRADE, ADJUSTING THE LOCATION
- DUE TO FIELD CONDITIONS AS NECESSARY TO MAINTAIN POSITIVE DRAINAGE.
- 5. PROVIDE OUTLET PROTECTION AS REQUIRED ON APPROVED PLAN.
- . MAINTAIN LINE, GRADE, AND CROSS SECTION. REMOVE ACCUMULATED SEDIMENT AND DEBRIS, AND MAINTAIN POSITIVE DRAINAGE. KEEP TEMPORARY SWALE AND POINT OF DISCHARGE FREE OF EROSION, AND CONTINUOUSLY MEET REQUIREMENTS FOR ADEQUATE VEGETATIVE ESTABLISHMENT IN ACCORDANCE WITH SECTION B-4 VEGETATIVE STABILIZATION.
- UPON REMOVAL OF TEMPORARY SWALE, GRADE AREA FLUSH WITH EXISTING GROUND. WITHIN 24 HOURS OF REMOVAL STABILIZE DISTURBED AREA WITH TOPSOIL, SEED, AND MULCH, OR AS SPECIFIED

MARYLAND STANDARDS AND SPE	CIFICATIONS FOR SOIL EF	ROSION AND SEDIMENT CONTROL
U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE	2011	MARYLAND DEPARTMENT OF ENVIRONMEN WATER MANAGEMENT ADMINISTRATION

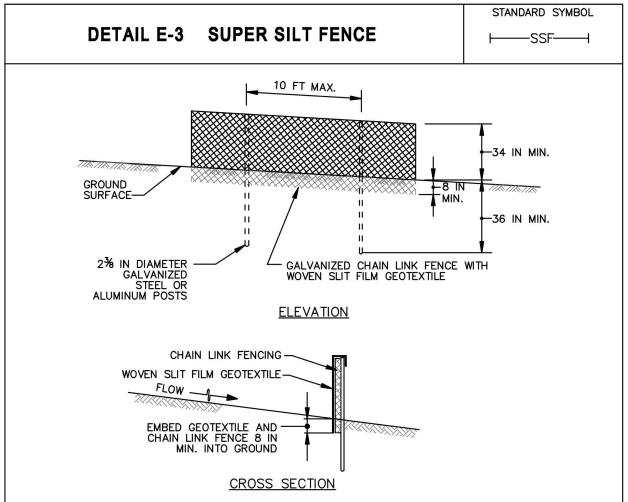
C.11



- USE MATTING THAT HAS A DESIGN VALUE FOR SHEAR STRESS EQUAL TO OR HIGHER THAN THE SHEAR STRESS DESIGNATED ON APPROVED PLANS.
- USE TEMPORARY SOIL STABILIZATION MATTING MADE OF DEGRADABLE (LASTS 6 MONTHS MINIMUM) NATURAL OR MAN-MADE FIBERS (MOSTLY ORGANIC). MAT MUST HAVE UNIFORM THICKNESS AND DISTRIBUTION OF FIBERS THROUGHOUT AND BE SMOLDER RESISTANT. CHEMICALS USED IN THE MAT MUST BE NON-LEACHING AND NON-TOXIC TO VEGETATION AND SEED GERMINATION AND NON-INJURIOUS TO THE SKIN, IF PRESENT, NETTING MUST BE EXTRUDED PLASTIC WITH A MAXIMUM MESH OPENING OF 2x2 INCHES AND SUFFICIENTLY BONDED OR SEWN ON 2 INCH CENTERS ALONG LONGITUDINAL AXIS OF THE MATERIAL TO PREVENT SEPARATION OF THE NET FROM THE PARENT MATERIAL.
- SECURE MATTING USING STEEL STAPLES, WOOD STAKES, OR BIODEGRADABLE EQUIVALENT. STAPLES MUST BE "U" OR "T" SHAPED STEEL WIRE HAVING A MINIMUM GAUGE OF NO. 11 AND NO. 8 RESPECTIVELY. "U" SHAPED STAPLES MUST AVERAGE 1 TO 1/2 INCHES WIDE AND BE A MINIMUM OF 6 INCHES LONG. "T" SHAPED STAPLES MUST HAVE A MINIMUM 8 INCH MAIN LEG, A MINIMUM 1 INCH SECONDARY LEG, AND A MINIMUM 4 INCH HEAD. WOOD STAKES MUST BE ROUGH—SAWN HARDWOOD, 12 TO 24 INCHES IN LENGTH, 1x3 INCH IN CROSS SECTION, AND WEDGE SHAPED AT THE BOTTOM.
- PERFORM FINAL GRADING, TOPSOIL APPLICATION, SEEDBED PREPARATION, AND PERMANENT SEEDING IN ACCORDANCE WITH SPECIFICATIONS. PLACE MATTING WITHIN 48 HOURS OF COMPLETING SEEDING OPERATIONS UNLESS END OF WORKDAY STABILIZATION IS SPECIFIED ON THE APPROVED EROSION AND SEDIMENT CONTROL PLAN.
- UNROLL MATTING IN DIRECTION OF WATER FLOW, CENTERING THE FIRST ROLL ON THE CHANNEL CENTERLINE, WORK FROM CENTER OF CHANNEL OUTWARD WHEN PLACING ROLLS. LAY MAT SMOOTHLY AND FIRMLY ON THE SEEDED SURFACE. AVOID STRETCHING THE MATTING.
- KEY-IN UPSTREAM END OF EACH MAT ROLL BY DIGGING A 6 INCH (MINIMUM) TRENCH AT THE UPSTREAM END OF THE MATTING, PLACING THE ROLL END IN THE TRENCH, STAPLING THE MAT IN PLACE, REPLACING THE EXCAVATED MATERIAL, AND TAMPING TO SECURE THE MAT END.
- OVERLAP OR ABUT THE ROLL EDGES PER MANUFACTURER RECOMMENDATIONS. OVERLAP ROLL ENDS BY
- 6 INCHES (MINIMUM), WITH THE UPSTREAM MAT OVERLAPPING ON TOP OF THE NEXT DOWNSTREAM MAT
- B. STAPLE/STAKE MAT IN A STAGGERED PATTERN ON 4 FOOT (MAXIMUM) CENTERS THROUGHOUT AND 2 FOOT (MAXIMUM) CENTERS ALONG SEAMS, JOINTS, AND ROLL ENDS.
- ESTABLISH AND MAINTAIN VEGETATION SO THAT REQUIREMENTS FOR ADEQUATE VEGETATIVE ESTABLISHMENT ARE CONTINUOUSLY MET IN ACCORDANCE WITH SECTION B-4 VEGETATIVE

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL U.S. DEPARTMENT OF AGRICULTURE





CONSTRUCTION SPECIFICATIONS

STABILIZATION.

- INSTALL 2% INCH DIAMETER GALVANIZED STEEL POSTS OF 0.095 INCH WALL THICKNESS AND SIX FOOT LENGTH SPACED NO FURTHER THAN 10 FEET APART. DRIVE THE POSTS A MINIMUM OF 36 INCHES
- 2. FASTEN 9 GAUGE OR HEAVIER GALVANIZED CHAIN LINK FENCE (2¾ INCH MAXIMUM OPENING) 42 INCHES IN HEIGHT SECURELY TO THE FENCE POSTS WITH WIRE TIES OR HUG RINGS.
- 5. FASTEN WOVEN SLIT FILM GEOTEXTILE AS SPECIFIED IN SECTION H-1 MATERIALS, SECURELY TO THE UPSLOPE SIDE OF CHAIN LINK FENCE WITH TIES SPACED EVERY 24 INCHES AT THE TOP AND MID
- . WHERE ENDS OF THE GEOTEXTILE COME TOGETHER, THE ENDS SHALL BE OVERLAPPED BY 6 INCHES, FOLDED, AND STAPLED TO PREVENT SEDIMENT BY PASS.

SECTION. EMBED GEOTEXTILE AND CHAIN LINK FENCE A MINIMUM OF 8 INCHES INTO THE GROUND.

- 5. EXTEND BOTH ENDS OF THE SUPER SILT FENCE A MINIMUM OF FIVE HORIZONTAL FEET UPSLOPE AT 45 DEGREES TO THE MAIN FENCE ALIGNMENT TO PREVENT RUNOFF FROM GOING AROUND THE ENDS
- PROVIDE MANUFACTURER CERTIFICATION TO THE INSPECTION/ENFORCEMENT AUTHORITY SHOWING THAT
- GEOTEXTILE USED MEETS THE REQUIREMENTS IN SECTION H-1 MATERIALS.
- REMOVE ACCUMULATED SEDIMENT AND DEBRIS WHEN BULGES DEVELOP IN FENCE OR WHEN SEDIMENT REACHES 25% OF FENCE HEIGHT. REPLACE GEOTEXTILE IF TORN. IF UNDERMINING OCCURS, REINSTALL CHAIN LINK FENCING AND GEOTEXTILE.
- MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL U.S. DEPARTMENT OF AGRICULTURE MARYLAND DEPARTMENT OF ENVIRONMENT NATURAL RESOURCES CONSERVATION SERVICE WATER MANAGEMENT ADMINISTRATION

STANDARD SYMBOL DETAIL B-4-6-B **TEMPORARY SOIL** STABILIZATION MATTING TSSMS - * lb/ft2 **SLOPE APPLICATION** (* INCLUDE SHEAR STRESS) OVERLAP OR ABUT ROLL EDGES (TYP.) (SEEDBED) WITH SEED IN PLACE

CONSTRUCTION SPECIFICATIONS

. USE MATTING THAT HAS A DESIGN VALUE FOR SHEAR STRESS EQUAL TO OR HIGHER THAN THE SHEAR STRESS DESIGNATED ON APPROVED PLANS.

ISOMETRIC VIEW

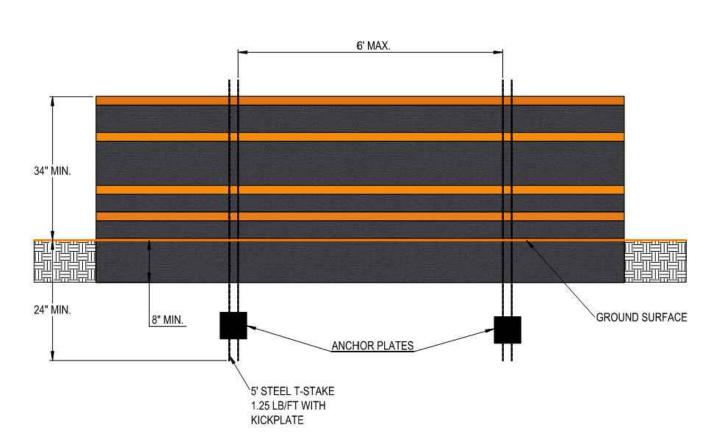
- 2. USE TEMPORARY SOIL STABILIZATION MATTING MADE OF DEGRADABLE (LASTS 6 MONTHS MINIMUM) NATURAL OR MAN-MADE FIBERS (MOSTLY ORGANIC). MAT MUST HAVE UNIFORM THICKNESS AND DISTRIBUTION OF FIBERS THROUGHOUT AND BE SMOLDER RESISTANT. CHEMICALS USED IN THE MAT MUST BE NON-LEACHING AND NON-TOXIC TO VEGETATION AND SEED GERMINATION AND NON-INJURIOUS TO THE SKIN, IF PRESENT, NETTING MUST BE EXTRUDED PLASTIC WITH A MAXIMUM MESH OPENING OF 2x2 INCHES AND SUFFICIENTLY BONDED OR SEWN ON 2 INCH CENTERS ALONG LONGITUDINAL AXIS OF THE MATERIAL TO PREVENT SEPARATION OF THE NET FROM THE PARENT MATERIAL.
- 3. SECURE MATTING USING STEEL STAPLES, WOOD STAKES, OR BIODEGRADABLE EQUIVALENT. STAPLES MUST BE "U" OR "T" SHAPED STEEL WIRE HAVING A MINIMUM GAUGE OF NO. 11 AND NO. 8 RESPECTIVELY. "U" SHAPED STAPLES MUST AVERAGE 1 TO 11/2 INCHES WIDE AND BE A MINIMUM OF 6 INCHES LONG. "T" SHAPED STAPLES MUST HAVE A MINIMUM 8 INCH MAIN LEG, A MINIMUM 1 INCH SECONDARY LEG, AND A MINIMUM 4 INCH HEAD. WOOD STAKES MUST BE ROUGH-SAWN HARDWOOD, 12 TO 24 INCHES IN LENGTH, 1x3 INCH IN CROSS SECTION, AND WEDGE SHAPED AT THE BOTTOM.
- . PERFORM FINAL GRADING, TOPSOIL APPLICATION, SEEDBED PREPARATION, AND PERMANENT SEEDING IN ACCORDANCE WITH SPECIFICATIONS. PLACE MATTING WITHIN 48 HOURS OF COMPLETING SEEDING OPERATIONS UNLESS END OF WORKDAY STABILIZATION IS SPECIFIED ON THE APPROVED EROSION &
- SEDIMENT CONTROL PLAN. 5. UNROLL MATTING DOWNSLOPE. LAY MAT SMOOTHLY AND FIRMLY UPON THE SEEDED SURFACE. AVOID STRETCHING THE MATTING.
- 6. OVERLAP OR ABUT ROLL EDGES PER MANUFACTURER RECOMMENDATIONS. OVERLAP ROLL ENDS BY 6 INCHES (MINIMUM), WITH THE UPSLOPE MAT OVERLAPPING ON TOP OF THE DOWNSLOPE MAT.
- 7. KEY IN THE UPSLOPE END OF MAT 6 INCHES (MINIMUM) BY DIGGING A TRENCH, PLACING THE MATTING ROLL END IN THE TRENCH, STAPLING THE MAT IN PLACE, REPLACING THE EXCAVATED MATERIAL, AND
- TAMPING TO SECURE THE MAT END IN THE KEY. 8. STAPLE/STAKE MAT IN A STAGGERED PATTERN ON 4 FOOT (MAXIMUM) CENTERS THROUGHOUT AND 2 FOOT (MAXIMUM) CENTERS ALONG SEAMS, JOINTS, AND ROLL ENDS.
- 9. ESTABLISH AND MAINTAIN VEGETATION SO THAT REQUIREMENTS FOR ADEQUATE VEGETATIVE

ESTABLISHMENT ARE CONTINUOUSLY MET IN ACCORDANCE WITH SECTION B-4 VEGETATIVE

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

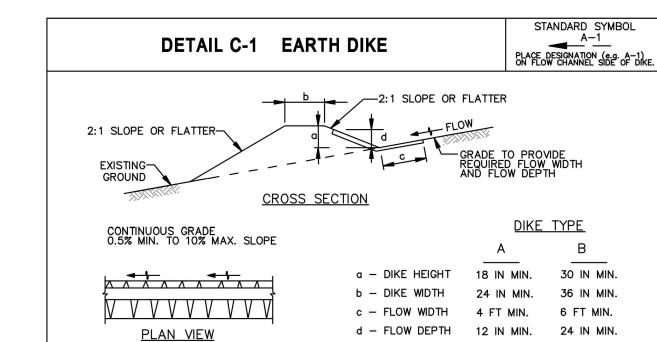
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SMARTfence® 42 Detail



SMARTfence® 42 is NTPEP Compliant GTX-2018-01-187





FLOW CHANNEL STABILIZATION

SEED WITH STRAW MULCH AND TACK. (NOT ALLOWED FOR CLEAR WATER DIVERSION.)

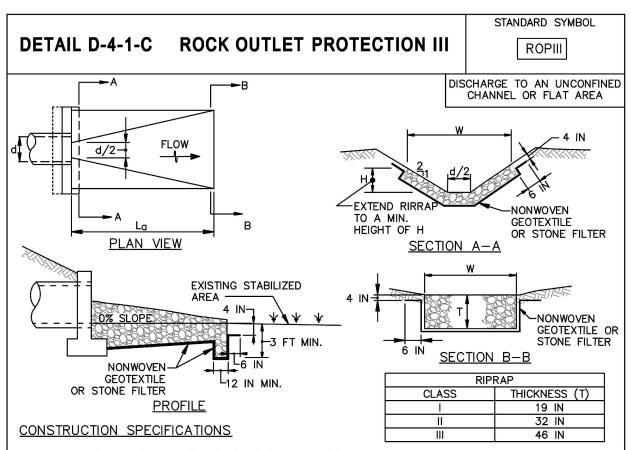
SEED WITH SOIL STABILIZATION MATTING OR LINE WITH SOD.

4 TO 7 INCH STONE OR EQUIVALENT RECYCLED CONCRETE PRESSED INTO SOIL A MINIMUM OF 7 INCHES AND FLUSH WITH GROUND.

CONSTRUCTION SPECIFICATIONS

- REMOVE AND DISPOSE OF ALL TREES, BRUSH, STUMPS, OBSTRUCTIONS, AND OTHER OBJECTIONABLE MATERIAL SO AS NOT TO INTERFERE WITH PROPER FUNCTION OF EARTHDIKE.
- . EXCAVATE OR SHAPE EARTH DIKE TO LINE, GRADE, AND CROSS SECTION AS SPECIFIED. BANK PROJECTIONS OR OTHER IRREGULARITIES ARE NOT ALLOWED.
- . CONSTRUCT FLOW CHANNEL ON AN UNINTERRUPTED, CONTINUOUS GRADE, ADJUSTING THE LOCATION DUE TO FIELD CONDITIONS AS NECESSARY TO MAINTAIN POSITIVE DRAINAGE.
- 5. PROVIDE OUTLET PROTECTION AS REQUIRED ON APPROVED PLAN.
- 6. STABILIZE EARTH DIKE WITHIN THREE DAYS OF INSTALLATION. STABILIZE FLOW CHANNEL FOR CLEAR
- WATER DIVERSION WITHIN 24 HOURS OF INSTALLATION. MAINTAIN LINE, GRADE, AND CROSS SECTION. REMOVE ACCUMULATED SEDIMENT AND DEBRIS, AND MAINTAIN POSÍTIVE DRAINAGE. KEEP EARTH DIKE AND POINT OF DISCHARGE FREE OF EROSIÓN, AND CONTINUOUSLY MEET REQUIREMENTS FOR ADEQUATE VEGETATIVE ESTABLISHMENT IN ACCORDANCE WITH
- UPON REMOVAL OF EARTH DIKE, GRADE AREA FLUSH WITH EXISTING GROUND. WITHIN 24 HOURS OF REMOVAL STABILIZE DISTURBED AREA WITH TOPSOIL, SEED, AND MULCH, OR AS SPECIFIED ON

MARYLAND STANDARDS AND SPE	CIFICATIONS FOR SOIL EF	ROSION AND SEDIMENT CONTROL
U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE	2011	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION
	C.5	



RIPRAP AND STONE MUST CONFORM TO THE SPECIFIED CLASS.

- 2. USE NONWOVEN GEOTEXTILE, AS SPECIFIED IN SECTION H-1 MATERIALS, AND PROTECT FROM PUNCTURING, CUTTING, OR TEARING. REPAIR ANY DAMAGE OTHER THAN AN OCCASIONAL SMALL HOLE BY PLACING AND THE PROTECT OF GEOTEXTILE OVER THE DAMAGED PART OR BY COMPLETELY REPLACING THE GEOTEXTILE. PROTECT OF OFFICE OF THE PROTECT OF THE PROT PIECES OF GEOTEXTILE TOGETHER.
- PREPARE THE SUBGRADE FOR GEOTEXTILE OR STONE FILTER (% TO 11/2 INCH MINIMUM STONE FOR 6 INCH MINIMUM DEPTH) AND RIPRAP TO THE REQUIRED LINES AND GRADES. COMPACT ANY FILL REQUIRED IN THE SUBGRADE TO A DENSITY OF APPROXIMATELY THAT OF THE SURROUNDING UNDISTURBED MATERIAL.
- . EXTEND GEOTEXTILE AT LEAST 6 INCHES BEYOND EDGES OF RIPRAP AND EMBED AT LEAST 4 INCHES AT SIDES OF RIPRAP.
- . CONSTRUCT RIPRAP OUTLET TO FULL COURSE THICKNESS IN ONE OPERATION AND IN SUCH A MANNER AS TO AVOID DISPLACEMENT OF UNDERLYING MATERIALS. PLACE STONE FOR RIPRAP OUTLET IN A MANNER THAT WILL ENSURE THAT IT IS REASONABLY HOMOGENOUS WITH THE SMALLER STONES AND SPALLS FILLING THE VOIDS BETWEEN THE LARGER STONES. PLACE RIPRAP IN A MANNER TO PREVENT DAMAGE TO THE FILTER BLANKET OR GEOTEXTILE. HAND PLACE TO THE EXTENT NECESSARY.
- WHERE NO ENDWALL IS USED, CONSTRUCT THE UPSTREAM END OF THE APRON SO THAT THE WIDTH IS TWO TIMES THE DIAMETER OF THE OUTLET PIPE, AND EXTEND THE STONE UNDER THE OUTLET BY A
- CONSTRUCT APRON WITH 0% SLOPE ALONG ITS LENGTH AND WITHOUT OBSTRUCTIONS. PLACE STONE SO THAT IT BLENDS IN WITH EXISTING GROUND.
- MAINTAIN LINE, GRADE, AND CROSS SECTION. KEEP OUTLET FREE OF EROSION. REMOVE ACCUMULATED SEDIMENT AND DEBRIS. AFTER HIGH FLOWS INSPECT FOR SCOUR AND RIPRAP DISLODGED RIPRAP. MAKE NECESSARY REPAIRS IMMEDIATELY.

MARYLAND STANDARDS AND SPE	CIFICATIONS FOR SOIL EF	ROSION AND SEDIMENT CONTROL
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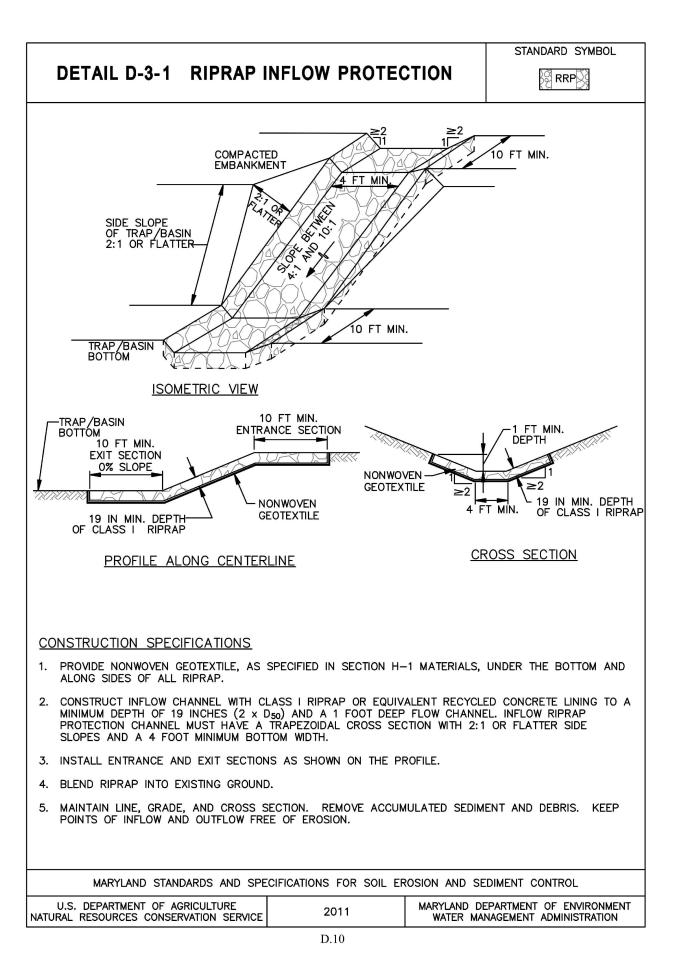
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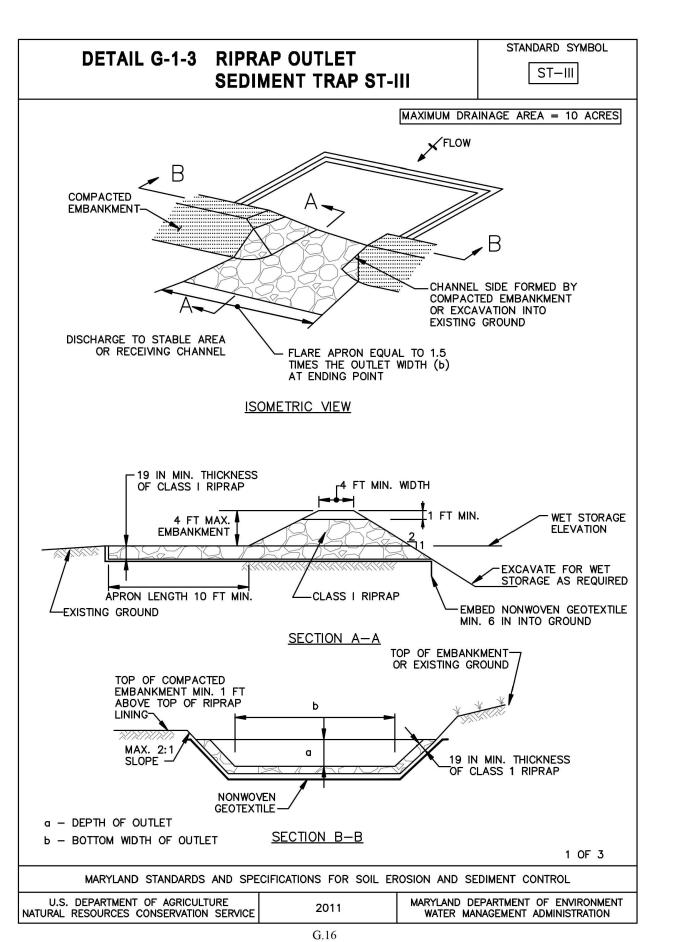
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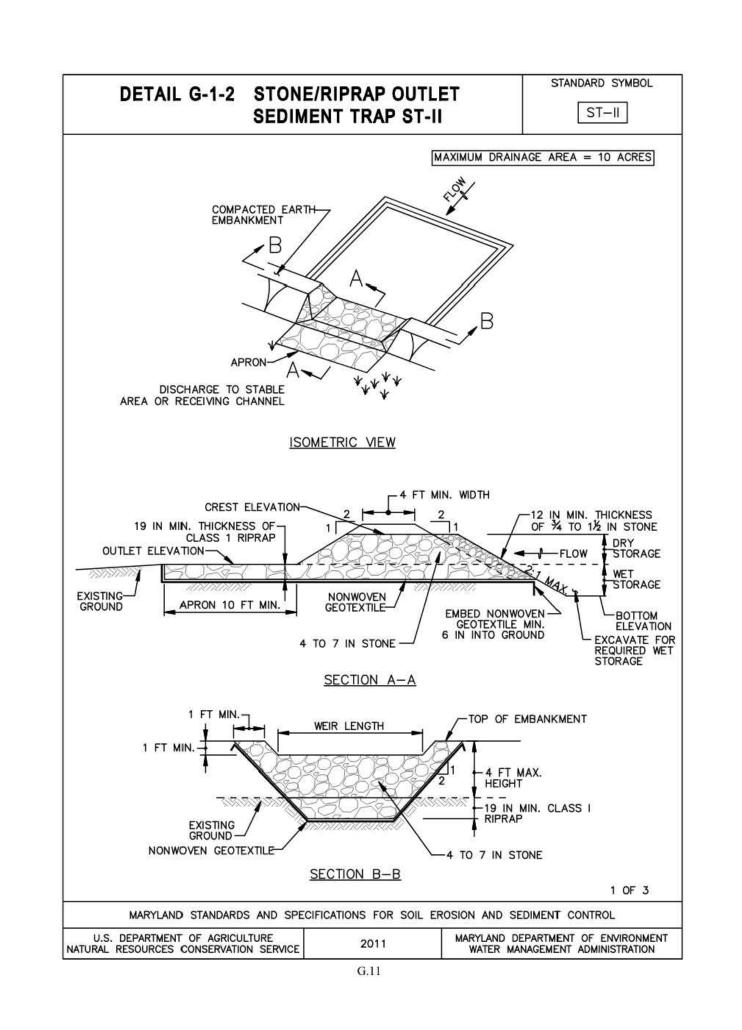
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EPARED OR APPROVED BY ME. AND THA NGINEER UNDER THE LAWS OF THE STATE ENSE NO. _____ PIRATION DATE







<u>co</u>	DNSTRUCTION SPECIFICATIONS
	CONSTRUCT TRAP IN SUCH A MANNER THAT EROSION AND WATER POLLUTION ARE AVOIDED.
2.	CLEAR, GRUB, AND STRIP ANY VEGETATION AND ROOT MAT FROM THE AREA UNDER THE EMBANKME AND TRAP BOTTOM.
3.	USE FILL MATERIAL FREE OF ROOTS, WOODY VEGETATION, OVERSIZED STONES, ROCKS, ORGANIC MATERIAL, OR OTHER OBJECTIONABLE MATERIAL FOR THE EMBANKMENT.
4.	CONSTRUCT TOP OF EMBANKMENT 1 FOOT MINIMUM ABOVE TOP OF RIPRAP OUTLET. COMPACT THE EMBANKMENT BY TRAVERSING WITH EQUIPMENT WHILE IT IS BEING CONSTRUCTED.
5.	MAKE ALL CUT AND FILL SLOPES 2:1 OR FLATTER.
6.	PLACE NONWOVEN GEOTEXTILE, AS SPECIFIED IN SECTION H-1 MATERIALS, OVER THE BOTTOM AND SIDES OF OUTLET AND APRON PRIOR TO PLACEMENT OF RIPRAP. OVERLAP SECTIONS OF GEOTEXTILE AT LEAST 1 FOOT WITH THE SECTION NEARER TO THE TRAP PLACED ON TOP. EMBED GEOTEXTILE AT LEAST 6 INCHES INTO EXISTING GROUND AT ENTRANCE OF OUTLET CHANNEL.
7.	USE CLEAN CLASS 1 RIPRAP PLACED 19 INCHES IN DEPTH FOR THE OUTLET AND APRON. USE OF RECYCLED CONCRETE EQUIVALENT IS ACCEPTABLE.
8.	CONSTRUCT AND MAINTAIN THE OUTLET ACCORDING TO APPROVED PLAN, AND IN SUCH A MANNER THAT EROSION AT OR BELOW THE OUTLET DOES NOT OCCUR.
9.	STABILIZE THE EMBANKMENT AND INTERIOR SLOPES WITH SEED AND MULCH. STABILIZE POINTS OF CONCENTRATED INFLOW AS SHOWN ON APPROVED PLAN.
10.	REMOVE SEDIMENT AND RESTORE TRAP TO ORIGINAL DIMENSIONS WHEN SEDIMENT HAS ACCUMULATE TO CLEANOUT ELEVATION (25% OF WET STORAGE DEPTH). DEPOSIT REMOVED SEDIMENT IN AN APPROVED AREA AND IN SUCH A MANNER THAT IT WILL NOT ERODE. KEEP POINTS OF INFLOW AND OUTFLOW AS WELL AS INTERIOR OF THE TRAP FREE FROM EROSION AND REMOVE ACCUMULATED DEBRIS. MAINTAIN EMBANKMENTS TO CONTINUOUSLY MEET REQUIREMENTS FOR ADEQUATE VEGETATIVE ESTABLISHMENT IN ACCORDANCE WITH SECTION B-4 VEGETATIVE STABILIZATION. REMOVE ANY TREES BRUSH, OR OTHER WOODY VEGETATION GROWING ON EMBANKMENT OR NEAR PRINCIPAL SPILLWAY. MAINTAIN LINE, GRADE, AND CROSS SECTION.
11.	WHEN DEWATERING TRAP, PASS THE REMOVED WATER THROUGH AN APPROVED SEDIMENT CONTROL PRACTICE.
12.	UPON REMOVAL, GRADE AND STABILIZE THE AREA OCCUPIED BY TRAP.
	2 OF MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

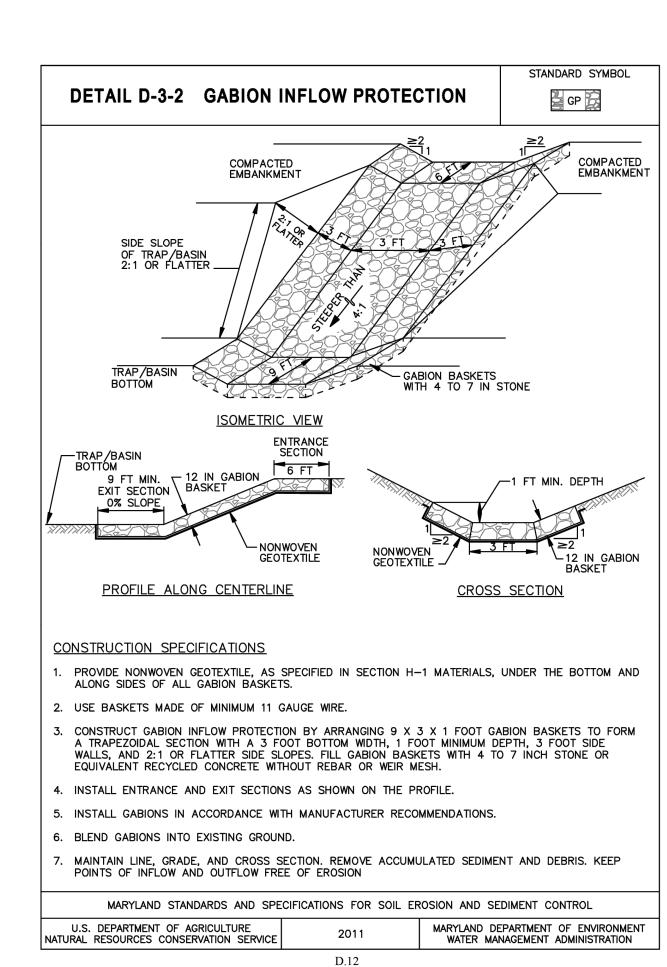
DETAIL G-1-3 RIPRAP OUTLET

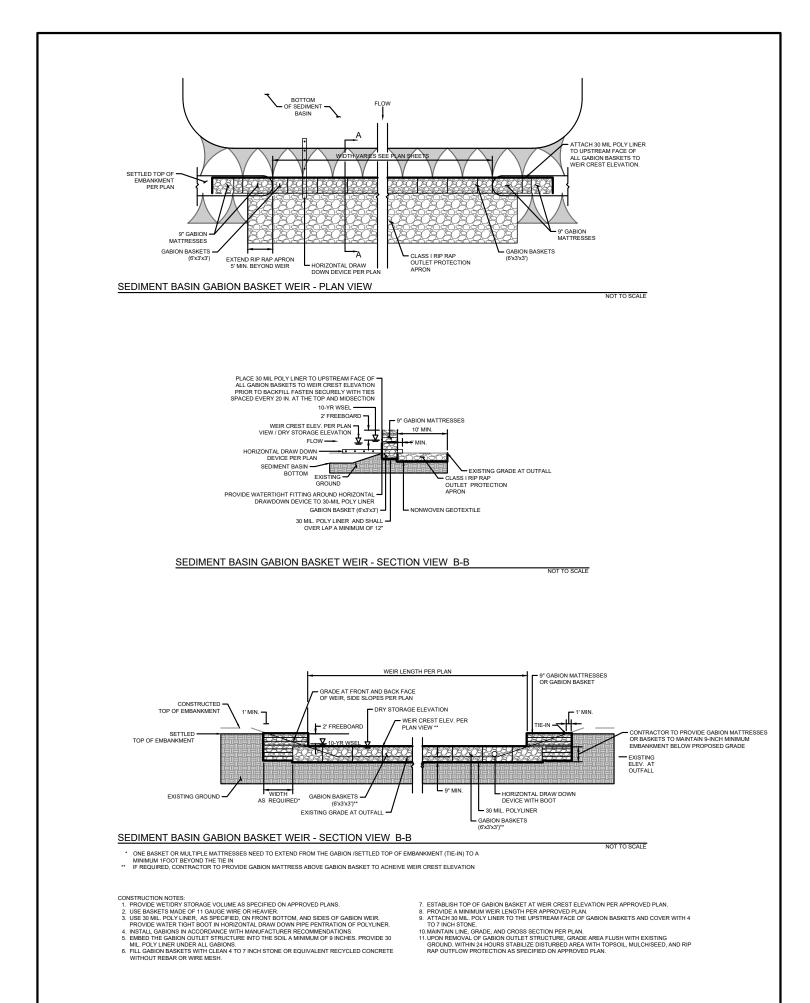
SEDIMENT TRAP ST-III

STANDARD SYMBOL

ST-III

STANDARD SYMBOL DETAIL G-1-2 STONE/RIPRAP OUTLET ST-II SEDIMENT TRAP ST-II CONSTRUCTION SPECIFICATIONS . CONSTRUCT TRAP IN SUCH A MANNER THAT EROSION AND WATER POLLUTION ARE AVOIDED. 2. CLEAR, GRUB, AND STRIP ANY VEGETATION AND ROOT MAT FROM THE AREA UNDER THE EMBANKMENT AND TRAP BOTTOM. 3. USE FILL MATERIAL FREE OF ROOTS, WOODY VEGETATION, OVERSIZED STONES, ROCKS, ORGANIC MATERIAL, OR OTHER OBJECTIONABLE MATERIAL FOR THE EMBANKMENT. I. CONSTRUCT TOP OF EMBANKMENT 1 FOOT MINIMUM ABOVE WEIR CREST, COMPACT THE EMBANKMENT BY TRAVERSING WITH EQUIPMENT WHILE IT IS BEING CONSTRUCTED. 5. MAKE ALL CUT AND FILL SLOPES 2:1 OR FLATTER. 6. PLACE NONWOVEN GEOTEXTILE, AS SPECIFIED IN SECTION H-1 MATERIALS, OVER THE BOTTOM AND SIDES OF OUTLET AND APRON PRIOR TO PLACEMENT OF RIPRAP. OVERLAP SECTIONS OF GEOTEXTILE AT LEAST 1 FOOT WITH THE SECTION NEARER TO THE TRAP PLACED ON TOP. EMBED GEOTEXTILE AT LEAST 6 INCHES INTO EXISTING GROUND AT ENTRANCE OF OUTLET CHANNEL. 7. USE CLEAN 4 TO 7 INCH RIPRAP TO CONSTRUCT THE WEIR. USE CLASS I RIPRAP FOR THE APRON. USE OF RECYCLED CONCRETE EQUIVALENT IS ACCEPTABLE. 8. PLACE 1 FOOT OF CLEAN ¾ TO 1½ INCH STONE OR EQUIVALENT RECYCLED CONCRETE ON THE UPSTREAM FACE OF THE WEIR. 9. CONSTRUCT AND MAINTAIN THE OUTLET ACCORDING TO APPROVED PLAN, AND IN SUCH A MANNER THAT EROSION AT OR BELOW THE OUTLET DOES NOT OCCUR. 10. STABILIZE THE EMBANKMENT AND INTERIOR SLOPES WITH SEED AND MULCH. STABILIZE POINTS OF CONCENTRATED INFLOW AS SHOWN ON APPROVED PLAN. 1. REMOVE SEDIMENT AND RESTORE TRAP TO ORIGINAL DIMENSIONS WHEN SEDIMENT HAS ACCUMULATED TO CLEANOUT ELEVATION (50% OF WET STORAGE DEPTH). DEPOSIT REMOVED SEDIMENT IN AN APPROVED AREA AND IN SUCH A MANNER THAT IT WILL NOT ERODE, KEEP POINTS OF INFLOW AND OUTFLOW AS WELL AS INTERIOR OF THE TRAP FREE FROM EROSION, AND REMOVE ACCUMULATED DEBRIS. MAINTAIN EMBANKMENTS TO CONTINUOUSLY MEET REQUIREMENTS FOR ADEQUATE VEGETATIVE ESTABLISHMENT IN ACCORDANCE WITH SECTION B-4 VEGETATIVE STABILIZATION. REMOVE ANY TREES, BRUSH, OR OTHER WOODY VEGETATION GROWING ON EMBANKMENT OR NEAR PRINCIPAL SPILLWAY. MAINTAIN LINE, GRADE, AND CROSS SECTION. 12. WHEN DEWATERING TRAP, PASS REMOVED WATER THROUGH AN APPROVED SEDIMENT CONTROL 13. UPON REMOVAL, GRADE AND STABILIZE THE AREA OCCUPIED BY TRAP. 2 OF 3 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL U.S. DEPARTMENT OF AGRICULTURE MARYLAND DEPARTMENT OF ENVIRONMENT 2011 NATURAL RESOURCES CONSERVATION SERVICE WATER MANAGEMENT ADMINISTRATION G.12







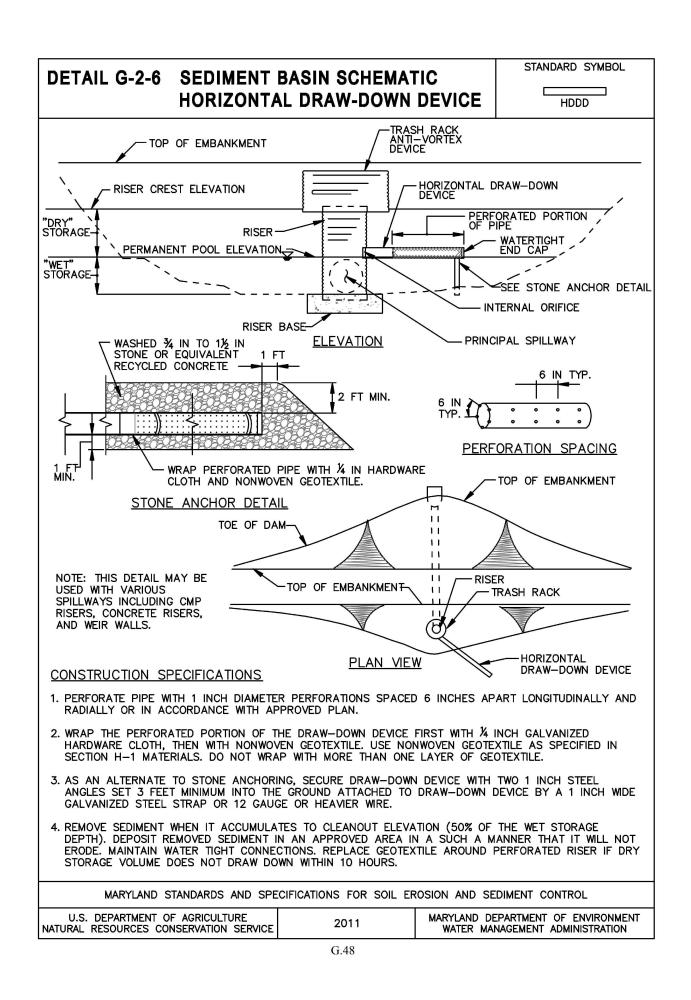
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DETAIL C-8 MOUNTABLE BERM

ISOMETRIC VIEW

-25 FT (A DIKE) / 35 FT (B DIKE)-

IN MIN.

SECTION A-A

. PLACE NONWOVEN GEOTEXTILE, AS SPECIFIED IN SECTION H-1 MATERIALS, OVER THE EARTH MOUND

H. MAINTAIN LINE, GRADE, AND CROSS SECTION. ADD STONE OR MAKE OTHER REPAIRS AS CONDITIONS

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

C.24

. PLACE 2 TO 3 INCH STONE OR EQUIVALENT RECYCLED CONCRETE AT LEAST 6 INCHES DEEP OVER THE

DEMAND TO MAINTAIN SPECIFIED DIMENSIONS. REMOVE ACCUMULATED SEDIMENT AND DEBRIS. MAINTAIN

1. USE MINIMUM WIDTH OF 10 FEET TO ALLOW FOR VEHICULAR PASSAGE.

COMPACTED EARTH

18 IN MIN/A DIKE

30 IN MIN/B DIKE

ROADWAY

CONSTRUCTION SPECIFICATIONS

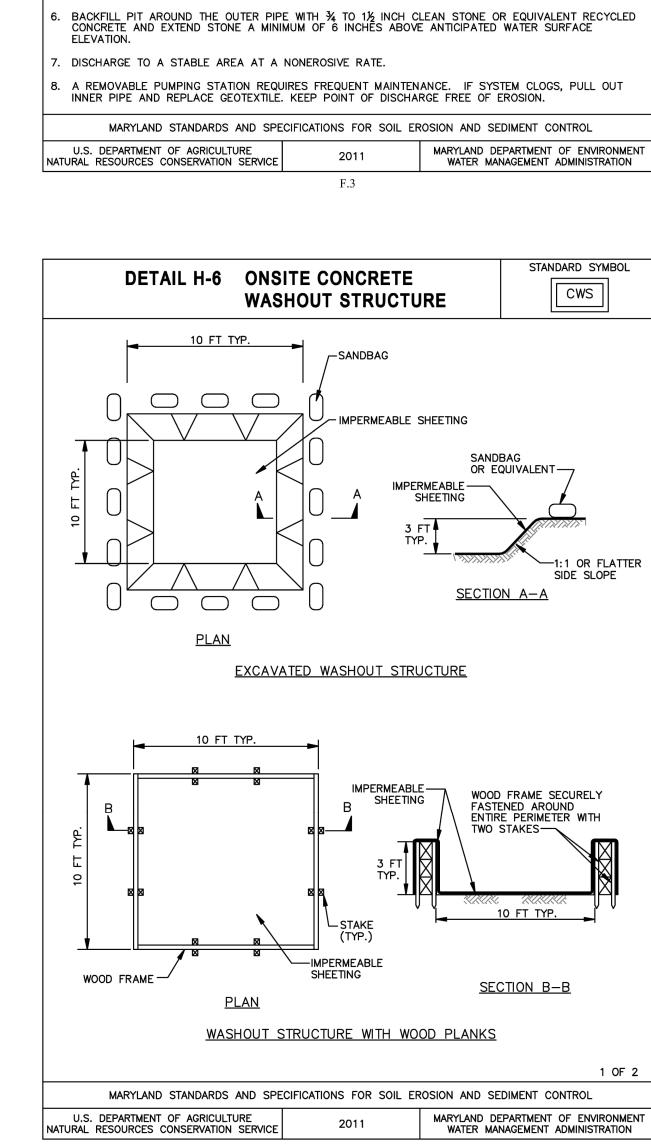
U.S. DEPARTMENT OF AGRICULTURE

EARTH DIKE

TO 3 IN STONE

MARYLAND DEPARTMENT OF ENVIRONMENT

ROADWAY



H.24

DETAIL F-1 REMOVABLE PUMPING STATION

GEOTEXTILE

CLOTH

FINNER PIPE

-ANTICIPATED

CONSTRUCTION SPECIFICATIONS

SURFACE ELEV.,

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Day did

USE CORRUGATED METAL OR PLASTIC PIPE WITH 1 INCH DIAMETER PERFORATIONS 6 INCHES ON CENTER.

. USE A MINIMUM 12 INCH DIAMETER INNER PIPE WITH AN OUTER PIPE A MINIMUM 6 INCHES LARGER IN

EXCAVATE 8 FEET X 8 FEET X 4 FEET DEEP PIT FOR PIPE PLACEMENT. PLACE CLEAN ¾ TO 1½ INCH STONE OR EQUIVALENT RECYCLED CONCRETE, 6 INCHES IN DEPTH PRIOR TO PIPE PLACEMENT.

WRAP EACH PIPE WITH 1/4 INCH GALVANIZED HARDWARE CLOTH. ON INNER PIPE WRAP NONWOVEN GEOTEXTILE, AS SPECIFIED IN SECTION H-1 MATERIALS, OVER THE HARDWARE CLOTH.

SET TOP OF INNER AND OUTER PIPES MINIMUM 12 INCHES ABOVE ANTICIPATED WATER SURFACE

DIAMETER. BOTTOM OF EACH PIPE MUST BE CAPPED WITH WATERTIGHT SEAL.

ELEVATION (OR RISER CREST ELEVATION WHEN DEWATERING A BASIN).

CLEAN STONE

STANDARD SYMBOL

- PERFORATED PIPE

EACH PIPE WITH

WATERTIGHT SEAL ADD WEIGHT AS

NECESSARY TO PREVENT

FLOATATION OF INNER PIPE

WRAPPED WITH 1/4 IN HARDWARE CLOTH

- HOOK AND CHAIN FOR REMOVAL

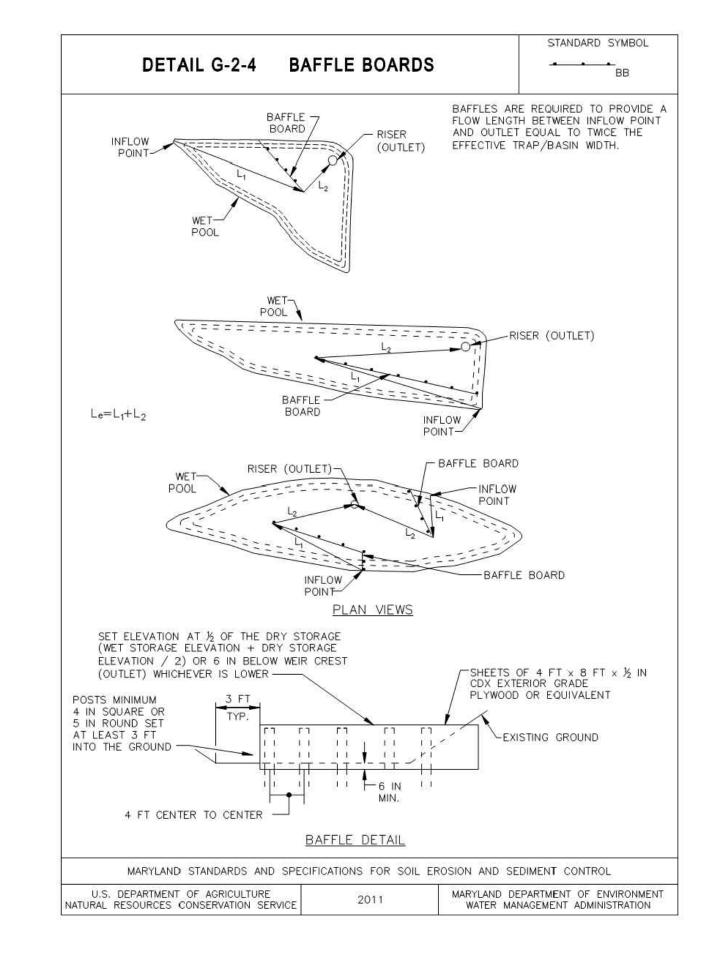
REMOVABLE PERFORATED PIPE

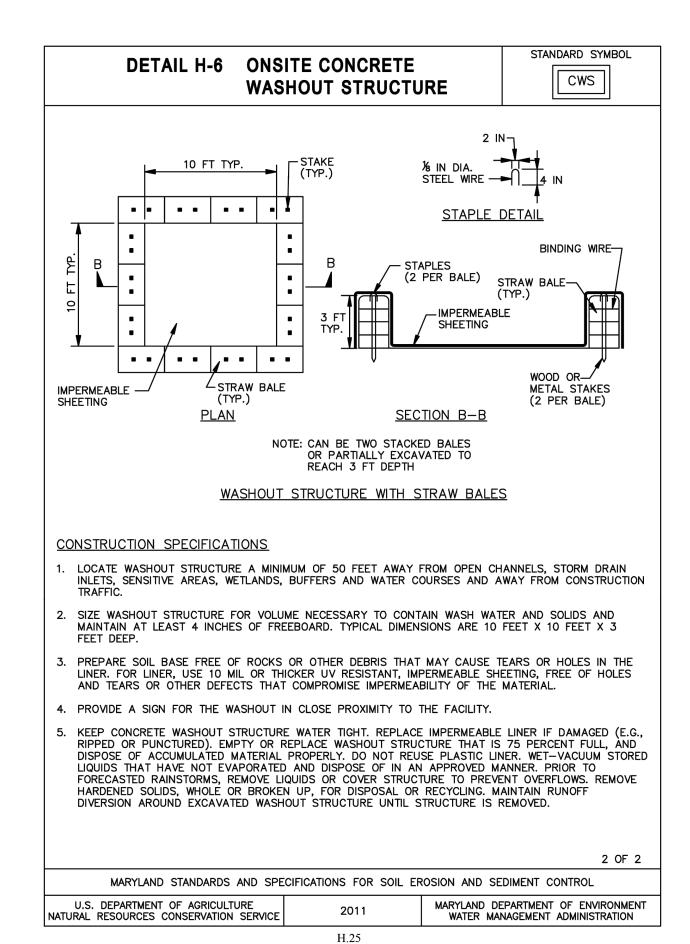
CLOTH, THEN NONWOVEN GEOTEXTILE

WRAPPED FIRST WITH 1/4 IN

GALVANIZED HARDWARE

¾ TO 1½ IN 7





F-4 STANDARDS AND SPECIFICATIONS

FILTER BAC

Definition

A geotextile bag through which sediment-laden water is pumped.

To filter sediment-laden water prior to discharge.

Conditions Where Practice Applies

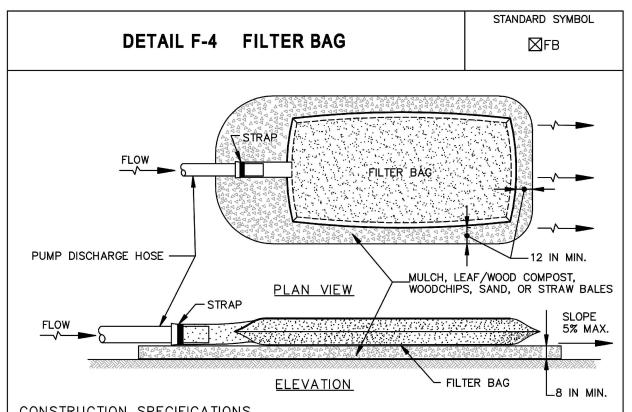
<u>Purpose</u>

When dewatering is needed in association with excavations, trenches, cofferdams, sediment traps or basins. Design Criteria

The filter bag should be placed in a location that allows for ease of disposal of the trapped sediment and has minimal interference with construction activities and pedestrian traffic.

<u>Maintenance</u>

If the filter bag clogs, it needs to be replaced. Rips, tears, and punctures also necessitate replacement of the filter bag. The connection between the pump hose and the filter bag needs to be kept water tight during operation. If the bedding becomes displaced, it must be replaced.



CONSTRUCTION SPECIFICATIONS

- . TIGHTLY SEAL SLEEVE AROUND THE PUMP DISCHARGE HOSE WITH A STRAP OR SIMILAR DEVICE.
- . PLACE FILTER BAG ON SUITABLE BASE (E.G., MULCH, LEAF/WOOD COMPOST, WOODCHIPS, SAND, OR STRAW BALES) LOCATED ON A LEVEL OR 5% MAXIMUM SLOPING SURFACE. DISCHARGE TO A STABILIZED AREA. EXTEND BASE A MINIMUM OF 12 INCHES FROM EDGES OF BAG.
- CONTROL PUMPING RATE TO PREVENT EXCESSIVE PRESSURE WITHIN THE FILTER BAG IN ACCORDANCE WITH THE MANUFACTURER RECOMMENDATIONS. AS THE BAG FILLS WITH SEDIMENT, REDUCE PUMPING
- REMOVE AND PROPERLY DISPOSE OF FILTER BAG UPON COMPLETION OF PUMPING OPERATIONS OR AFTER BAG HAS REACHED CAPACITY, WHICHEVER OCCURS FIRST. SPREAD THE DEWATERED SEDIMENT FROM THE BAG IN AN APPROVED UPLAND AREA AND STABILIZE WITH SEED AND MULCH BY THE END OF THE WORK DAY. RESTORE THE SURFACE AREA BENEATH THE BAG TO ORIGINAL CONDITION UPON REMOVAL OF THE DEVICE.
- USE NONWOVEN GEOTEXTILE WITH DOUBLE STITCHED SEAMS USING HIGH STRENGTH THREAD. SIZE SLEEVE TO ACCOMMODATE A MAXIMUM 4 INCH DIAMETER PUMP DISCHARGE HOSE. THE BAG MUST BE MANUFACTURED FROM A NONWOVEN GEOTEXTILE THAT MEETS OR EXCEEDS MINIMUM AVERAGE ROLL VALUES (MARV) FOR THE FOLLOWING:

RAB TENSILE	250 LB	ASTM D-4632
UNCTURE	150 LB	ASTM D-4833
LOW RATE	70 GAL/MIN/FT ²	ASTM D-4491
ERMITTIVITY (SEC ⁻¹)	1.2 SEC ⁻¹	ASTM D-4491
V RESISTANCE	70% STRENGTH @ 500 HOURS	ASTM D-4355
PPARENT OPENING SIZE (AOS)	0.15-0.18 MM	ASTM D-4751
EAM STRENGTH	90%	ASTM D-4632

REPLACE FILTER BAG IF BAG CLOGS OR HAS RIPS, TEARS, OR PUNCTURES. DURING OPERATION KEEP CONNECTION BETWEEN PUMP HOSE AND FILTER BAG WATER TIGHT. REPLACE BEDDING IF IT BECOMES

MARYLAND STANDARDS AND SPE	CIFICATIONS FOR SOIL E	ROSION AND	SEDIMENT CONTRO	L
U.S. DEPARTMENT OF AGRICULTURE ATURAL RESOURCES CONSERVATION SERVICE	2011		DEPARTMENT OF EI	

H-1 STANDARDS AND SPECIFICATIONS

FOR

MATERIALS

Table H.1: Geotextile Fabrics

		WOVEN SLIT FILM GEOTEXTILE		WOVEN MONOFILAMENT GEOTEXTILE		NONWOVEN GEOTEXTILE		
		MINIMUM AVERAGE ROLL VALUE ¹						
PROPERTY	TEST METHOD	MD	CD	MD	CD	MD	CD	
Grab Tensile Strength	ASTM D-4632	200 lb	200 lb	370 lb	250 lb	200 lb	200 lb	
Grab Tensile Elongation	ASTM D-4632	15%	10%	15%	15%	50%	50%	
Trapezoidal Tear Strength	ASTM D-4533	75 lb	75 lb	100 lb	60 lb	80 lb	80 lb	
Puncture Strength	ASTM D-6241	450 lb		900 lb		450 lb		
Apparent Opening Size ²	ASTM D-4751	U.S. Sieve 30 (0.59 mm)		U.S. Sieve 70 (0.21 mm)		U.S. Sieve 70 (0.21 mm)		
Permittivity	ASTM D-4491	0.05 sec ⁻¹		0.28 sec ⁻¹		1.1 sec ⁻¹		
Ultraviolet Resistance Retained at 500 hours	ASTM D-4355	70% strength		70% strength		70% strength		

- All numeric values except apparent opening size (AOS) represent minimum average roll values (MARV). MARV is calculated as the typical minus two standard deviations. MD is machine direction; CD is cross
- ² Values for AOS represent the average maximum opening.

Geotextiles must be evaluated by the National Transportation Product Evaluation Program (NTPEP) and conform to the values in Table H.1.

The geotextile must be inert to commonly encountered chemicals and hydrocarbons and must be rot and mildew resistant. The geotextile must be manufactured from fibers consisting of long chain synthetic polymers and composed of a minimum of 95 percent by weight of polyolefins or polyesters, and formed into a stable network so the filaments or yarns retain their dimensional stability relative to each other, including selvages.

When more than one section of geotextile is necessary, overlap the sections by at least one foot. The geotextile must be pulled taut over the applied surface. Equipment must not run over exposed fabric. When placing riprap on geotextile, do not exceed a one foot drop height.

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B-4 STANDARDS AND SPECIFICATIONS FOR VEGETATIVE STABILIZATION

USING VEGETATION AS COVER TO PROTECT EXPOSED SOIL FROM EROSION.

TO PROMOTE THE ESTABLISHMENT OF VEGETATION ON EXPOSED SOIL.

AND PERMANENT STABILIZATION.

ON ALL DISTURBED AREAS NOT STABILIZED BY OTHER METHODS. THIS SPECIFICATION IS DIVIDED INTO SECTIONS ON INCREMENTAL STABILIZATION; SOIL PREPARATION, SOIL AMENDMENTS AND TOPSOILING; SEEDING AND MULCHING; TEMPORARY STABILIZATION;

STABILIZATION PRACTICES ARE USED TO PROMOTE THE ESTABLISHMENT OF VEGETATION ON EXPOSED SOIL. WHEN SOIL IS STABILIZED WITH VEGETATION, THE SOIL IS LESS LIKELY TO ERODE AND MORE LIKELY TO ALLOW INFILTRATION OF RAINFALL, THEREBY REDUCING SEDIMENT LOADS AND RUNOFF TO DOWNSTREAM AREAS.

PLANTING VEGETATION IN DISTURBED AREAS WILL HAVE AN EFFECT ON THE WATER BUDGET, ESPECIALLY ON VOLUMES AND RATES OF RUNOFF, INFILTRATION, EVAPORATION, TRANSPIRATION, PERCOLATION, AND GROUNDWATER RECHARGE. OVER TIME, VEGETATION WILL INCREASE ORGANIC MATTER CONTENT AND IMPROVE THE WATER HOLDING CAPACITY OF THE SOIL AND SUBSEQUENT PLANT GROWTH.

VEGETATION WILL HELP REDUCE THE MOVEMENT OF SEDIMENT, NUTRIENTS, AND OTHER CHEMICALS CARRIED BY RUNOFF TO RECEIVING WATERS. PLANTS WILL ALSO HELP PROTECT GROUNDWATER SUPPLIES BY ASSIMILATING THOSE SUBSTANCES PRESENT

SEDIMENT CONTROL PRACTICES MUST REMAIN IN PLACE DURING GRADING, SEEDBED PREPARATION, SEEDING, MULCHING, AND VEGETATIVE ESTABLISHMENT.

ADEQUATE VEGETATIVE ESTABLISHMENT

INSPECT SEEDED AREAS FOR VEGETATIVE ESTABLISHMENT AND MAKE NECESSARY REPAIRS, REPLACEMENTS, AND RESEEDINGS WITHIN THE PLANTING SEASON

- ADEQUATE VEGETATIVE STABILIZATION REQUIRES 95 PERCENT GROUNDCOVER.
- IF AN AREA HAS LESS THAN 40 PERCENT GROUNDCOVER, RESTABILIZE FOLLOWING THE ORIGINAL RECOMMENDATIONS FOR LIME, FERTILIZER SEEDBED PREPARATION AND SEEDING IF AN AREA HAS BETWEEN 40 AND 94 PERCENT GROUNDCOVER, OVER-SEED AND FERTILIZE USING HALF OF THE RATES ORIGINALLY
- MAINTENANCE FERTILIZER RATES FOR PERMANENT SEEDING ARE SHOWN IN TABLE B.6.

B-4-1 STANDARDS AND SPECIFICATIONS FOR INCREMENTAL STABILIZATION

ESTABLISHMENT OF VEGETATIVE COVER ON CUT AND FILL SLOPES.

TO PROVIDE TIMELY VEGETATIVE COVER ON CUT AND FILL SLOPES AS WORK PROGRESSES.

- NY CUT OR FILL SLOPE GREATER THAN 15 FEET IN HEIGHT. THIS PRACTICE ALSO APPLIES TO STOCKPILES.
- EXCAVATE AND STABILIZE CUT SLOPES IN INCREMENTS NOT TO EXCEED 15 FEET IN HEIGHT. PREPARE SEEDBED AND APPLY SEED AND MULCH ON ALL CUT SLOPES AS THE WORK PROGRESSES.

INCREMENTAL STABILIZATION - CUT SLOPES

- CONSTRUCTION SEQUENCE EXAMPLE (REFER TO FIGURE B.1): CONSTRUCT AND STABILIZE ALL TEMPORARY SWALES OR DIKES THAT WILL BE USED TO CONVEY RUNOFF
- AROUND THE EXCAVATION.
 - PERFORM PHASE 1 EXCAVATION, PREPARE SEEDBED, AND STABILIZE. PERFORM PHASE 2 EXCAVATION, PREPARE SEEDBED, AND STABILIZE. OVERSEED PHASE 1 AREAS AS
 - PERFORM FINAL PHASE EXCAVATION, PREPARE SEEDBED, AND STABILIZE. OVERSEED PREVIOUSLY SEEDED
- AREAS AS NECESSARY

NOTE: ONCE EXCAVATION HAS BEGUN THE OPERATION SHOULD BE CONTINUOUS FROM GRUBBING THROUGH THE COMPLETION OF GRADING AND PLACEMENT OF TOPSOIL (IF REQUIRED) AND PERMANENT SEED AND MULCH. ANY INTERRUPTIONS IN THE OPERATION OR COMPLETING THE OPERATION OUT OF THE SEEDING SEASON WILL NECESSITATE THE APPLICATION OF TEMPORARY STABILIZATION.

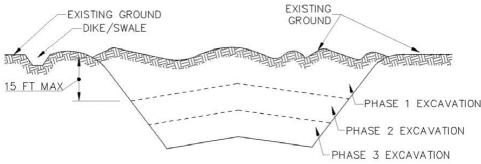


Figure B.1: Incremental Stabilization – Cut

INCREMENTAL STABILIZATION - FILL SLOPES

- CONSTRUCT AND STABILIZE FILL SLOPES IN INCREMENTS NOT TO EXCEED 15 FEET IN HEIGHT. PREPARE SEEDBED AND APPLY SEED AND MULCH ON ALL SLOPES AS THE WORK PROGRESSES. STABILIZE SLOPES IMMEDIATELY WHEN THE VERTICAL HEIGHT OF A LIFT REACHES 15 FEET, OR WHEN THE GRADING
- OPERATION CEASES AS PRESCRIBED IN THE PLANS. AT THE END OF EACH DAY, INSTALL TEMPORARY WATER CONVEYANCE PRACTICE(S), AS NECESSARY, TO INTERCEPT
- SURFACE RUNOFF AND CONVEY IT DOWN THE SLOPE IN A NON-EROSIVE MANNER. CONSTRUCTION SEQUENCE EXAMPLE (REFER TO FIGURE B.2):
- CONSTRUCT AND STABILIZE ALL TEMPORARY SWALES OR DIKES THAT WILL BE USED TO DIVERT RUNOFF AROUND THE FILL. CONSTRUCT SILT FENCE ON LOW SIDE OF FILL UNLESS OTHER METHODS SHOWN ON THE PLANS ADDRESS THIS AREA.
- AT THE END OF EACH DAY, INSTALL TEMPORARY WATER CONVEYANCE PRACTICE(S), AS NECESSARY, TO
- INTERCEPT SURFACE RUNOFF AND CONVEY IT DOWN THE SLOPE IN A NON-EROSIVE MANNER. PLACE PHASE 1 FILL, PREPARE SEEDBED, AND STABILIZE.
- PLACE PHASE 2 FILL, PREPARE SEEDBED, AND STABILIZE.
 - PLACE FINAL PHASE FILL, PREPARE SEEDBED, AND STABILIZE. OVERSEED PREVIOUSLY SEEDED AREAS AS NECESSARY

NOTE: ONCE THE PLACEMENT OF FILL HAS BEGUN THE OPERATION SHOULD BE CONTINUOUS FROM GRUBBING THROUGH THE COMPLETION OF GRADING AND PLACEMENT OF TOPSOIL (IF REQUIRED) AND PERMANENT SEED AND MULCH. ANY INTERRUPTIONS IN THE OPERATION OR COMPLETING THE OPERATION OUT OF THE SEEDING SEASON WILL NECESSITATE THE APPLICATION OF TEMPORARY STABILIZATION.

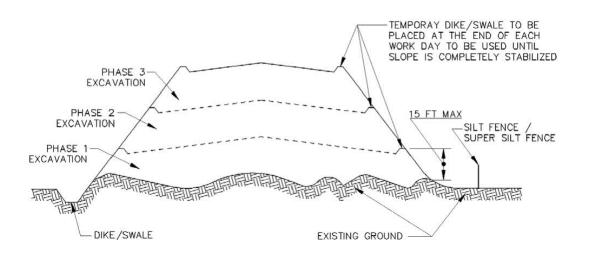


Figure B.2: Incremental Stabilization – Fill

B-4-2 STANDARDS AND SPECIFICATIONS FOR SOIL PREPARATION, TOPSOILING, AND SOIL **AMENDMENTS**

THE PROCESS OF PREPARING THE SOILS TO SUSTAIN ADEQUATE VEGETATIVE STABILIZATION

O PROVIDE A SUITABLE SOIL MEDIUM FOR VEGETATIVE GROWTH CONDITIONS WHERE PRACTICE APPLIES

WHERE VEGETATIVE STABILIZATION IS TO BE ESTABLISHED.

SOIL PREPARATION TEMPORARY STABILIZATION

SEEDBED PREPARATION CONSISTS OF LOOSENING SOIL TO A DEPTH OF 3 TO 5 INCHES BY MEANS OF SUITABLE AGRICULTURAL OR CONSTRUCTION EQUIPMENT, SUCH AS DISC HARROWS OR CHISEL PLOWS OR RIPPERS MOUNTED ON CONSTRUCTION EQUIPMENT. AFTER THE SOIL IS LOOSENED, IT MUST NOT BE ROLLED OR DRAGGED SMOOTH BUT LEFT IN THE ROUGHENED CONDITION. SLOPES 3:1 OR FLATTER ARE TO BE TRACKED WITH RIDGES RUNNING PARALLEL TO THE CONTOUR OF THE SLOPE.

- INCORPORATE LIME AND FERTILIZER INTO THE TOP 3 TO 5 INCHES OF SOIL BY DISKING OR OTHER SUITABLE MEANS.
- a. A SOIL TEST IS REQUIRED FOR ANY EARTH DISTURBANCE OF 5 ACRES OR MORE. THE MINIMUM SOIL CONDITIONS REQUIRED FOR PERMANENT VEGETATIVE ESTABLISHMENT ARE:
 - SOIL PH BETWEEN 6.0 AND 7.0.

APPLY FERTILIZER AND LIME AS PRESCRIBED ON THE PLANS

- SOLUBLE SALTS LESS THAN 500 PARTS PER MILLION (PPM). SOIL CONTAINS LESS THAN 40 PERCENT CLAY BUT ENOUGH FINE GRAINED MATERIAL (GREATER THAN 30 PERCENT SILT PLUS CLAY) TO PROVIDE THE CAPACITY TO HOLD A MODERATE AMOUNT OF MOISTURE. AN EXCEPTION: IF LOVEGRASS WILL BE PLANTED, THEN A SANDY SOIL (LESS THAN 30 PERCENT SILT PLUS CLAY) WOULD BE
- IV. SOIL CONTAINS 1.5 PERCENT MINIMUM ORGANIC MATTER BY WEIGHT
- V. SOIL CONTAINS SUFFICIENT PORE SPACE TO PERMIT ADEQUATE ROOT PENETRATION. APPLICATION OF AMENDMENTS OR TOPSOIL IS REQUIRED IF ON-SITE SOILS DO NOT MEET THE ABOVE CONDITIONS. GRADED AREAS MUST BE MAINTAINED IN A TRUE AND EVEN GRADE AS SPECIFIED ON THE APPROVED PLAN, THEN SCARIFIED OR OTHERWISE LOOSENED TO A DEPTH OF 3 TO 5 INCHES.
- APPLY SOIL AMENDMENTS AS SPECIFIED ON THE APPROVED PLAN OR AS INDICATED BY THE RESULTS OF A SOIL TEST. MIX SOIL AMENDMENTS INTO THE TOP 3 TO 5 INCHES OF SOIL BY DISKING OR OTHER SUITABLE MEANS. RAKE LAWN AREAS TO SMOOTH THE SURFACE, REMOVE LARGE OBJECTS LIKE STONES AND BRANCHES, AND READY THE AREA FOR SEED APPLICATION. LOOSEN SURFACE SOIL BY DRAGGING WITH A HEAVY CHAIN OR OTHER EQUIPMENT TO ROUGHEN THE SURFACE WHERE SITE CONDITIONS WILL NOT PERMIT NORMAL SEEDBED PREPARATION. TRACK SLOPES 3:1 OR FLATTER WITH TRACKED EQUIPMENT LEAVING THE SOIL IN AN IRREGULAR CONDITION WITH RIDGES RUNNING PARALLE TO THE CONTOUR OF THE SLOPE. LEAVE THE TOP 1 TO 3 INCHES OF SOIL LOOSE AND FRIABLE. SEEDBED LOOSENING MAY BE UNNECESSARY ON NEWLY DISTURBED AREAS.
- B. TOPSOILING TOPSOIL IS PLACED OVER PREPARED SUBSOIL PRIOR TO ESTABLISHMENT OF PERMANENT VEGETATION. THE PURPOSE IS TO PROVIDE A SUITABLE SOIL MEDIUM FOR VEGETATIVE GROWTH. SOILS OF CONCERN HAVE LOW MOISTURE CONTENT, LOW
 - NUTRIENT LEVELS, LOW PH, MATERIALS TOXIC TO PLANTS, AND/OR UNACCEPTABLE SOIL GRADATION. TOPSOIL SALVAGED FROM AN EXISTING SITE MAY BE USED PROVIDED IT MEETS THE STANDARDS AS SET FORTH IN THESE SPECIFICATIONS. TYPICALLY, THE DEPTH OF TOPSOIL TO BE SALVAGED FOR A GIVEN SOIL TYPE CAN BE FOUND IN THE REPRESENTATIVE SOIL PROFILE SECTION IN THE SOIL SURVEY PUBLISHED BY USDA-NRCS.
 - TOPSOILING IS LIMITED TO AREAS HAVING 2:1 OR FLATTER SLOPES WHERE: THE TEXTURE OF THE EXPOSED SUBSOIL/PARENT MATERIAL IS NOT ADEQUATE TO PRODUCE VEGETATIVE GROWTH. THE SOIL MATERIAL IS SO SHALLOW THAT THE ROOTING ZONE IS NOT DEEP ENOUGH TO SUPPORT PLANTS OR FURNISH
 - CONTINUING SUPPLIES OF MOISTURE AND PLANT NUTRIENTS. THE ORIGINAL SOIL TO BE VEGETATED CONTAINS MATERIAL TOXIC TO PLANT GROWTH THE SOIL IS SO ACIDIC THAT TREATMENT WITH LIMESTONE IS NOT FEASIBLE.
 - AREAS HAVING SLOPES STEEPER THAN 2:1 REQUIRE SPECIAL CONSIDERATION AND DESIGN. TOPSOIL SPECIFICATIONS: SOIL TO BE USED AS TOPSOIL MUST MEET THE FOLLOWING CRITERIA
 - TOPSOIL MUST BE A LOAM, SANDY LOAM, CLAY LOAM, SILT LOAM, SANDY CLAY LOAM, OR LOAMY SAND. OTHER SOILS MAY BE USED IF RECOMMENDED BY AN AGRONOMIST OR SOIL SCIENTIST AND APPROVED BY THE APPROPRIATE APPROVAL AUTHORITY. TOPSOIL MUST NOT BE A MIXTURE OF CONTRASTING TEXTURED SUBSOILS AND MUST CONTAIN LESS THAN 5 PERCENT BY VOLUME OF CINDERS, STONES, SLAG, COARSE FRAGMENTS, GRAVEL, STICKS, ROOTS, TRASH, OR OTHER MATERIALS LARGER THAN 1S INCHES IN DIAMETER.
 - TOPSOIL MUST BE FREE OF NOXIOUS PLANTS OR PLANT PARTS SUCH AS BERMUDA GRASS, QUACK GRASS, JOHNSON GRASS, NUT SEDGE, POISON IVY, THISTLE, OR OTHERS AS SPECIFIED.
 - TOPSOIL SUBSTITUTES OR AMENDMENTS, AS RECOMMENDED BY A QUALIFIED AGRONOMIST OR SOIL SCIENTIST AND APPROVED BY THE APPROPRIATE APPROVAL AUTHORITY, MAY BE USED IN LIEU OF NATURAL TOPSOIL.
 - EROSION AND SEDIMENT CONTROL PRACTICES MUST BE MAINTAINED WHEN APPLYING TOPSOIL.
 - UNIFORMLY DISTRIBUTE TOPSOIL IN A 5 TO 8 INCH LAYER AND LIGHTLY COMPACT TO A MINIMUM THICKNESS OF 4 INCHES. SPREADING IS TO BE PERFORMED IN SUCH A MANNER THAT SODDING OR SEEDING CAN PROCEED WITH A MINIMUM OF ADDITIONAL SOIL PREPARATION AND TILLAGE. ANY IRREGULARITIES IN THE SURFACE RESULTING FROM TOPSOILING OR OTHER OPERATIONS MUST BE CORRECTED IN ORDER TO PREVENT THE FORMATION OF DEPRESSIONS OR WATER POCKETS
 - TOPSOIL MUST NOT BE PLACED IF THE TOPSOIL OR SUBSOIL IS IN A FROZEN OR MUDDY CONDITION, WHEN THE SUBSOIL IS EXCESSIVELY WET OR IN A CONDITION THAT MAY OTHERWISE BE DETRIMENTAL TO PROPER GRADING AND SEEDBED
- SOIL AMENDMENTS (FERTILIZER AND LIME SPECIFICATIONS) SOIL TESTS MUST BE PERFORMED TO DETERMINE THE EXACT RATIOS AND APPLICATION RATES FOR BOTH LIME AND
- FERTILIZER ON SITES HAVING DISTURBED AREAS OF 5 ACRES OR MORE. SOIL ANALYSIS MAY BE PERFORMED BY A RECOGNIZED PRIVATE OR COMMERCIAL LABORATORY. SOIL SAMPLES TAKEN FOR ENGINEERING PURPOSES MAY ALSO BE USED FOR CHEMICAL ANALYSES
- FERTILIZERS MUST BE UNIFORM IN COMPOSITION, FREE FLOWING AND SUITABLE FOR ACCURATE APPLICATION BY APPROPRIATE EQUIPMENT. MANURE MAY BE SUBSTITUTED FOR FERTILIZER WITH PRIOR APPROVAL FROM THE APPROPRIATE APPROVAL AUTHORITY. FERTILIZERS MUST ALL BE DELIVERED TO THE SITE FULLY LABELED ACCORDING TO THE APPLICABLE LAWS AND MUST BEAR THE NAME. TRADE NAME OR TRADEMARK AND WARRANTY OF THE PRODUCER.
- LIME MATERIALS MUST BE GROUND LIMESTONE (HYDRATED OR BURNT LIME MAY BE SUBSTITUTED EXCEPT WHEN HYDROSEEDING) WHICH CONTAINS AT LEAST 50 PERCENT TOTAL OXIDES (CALCIUM OXIDE PLUS MAGNESIUM OXIDE). LIMESTONE MUST BE GROUND TO SUCH FINENESS THAT AT LEAST 50 PERCENT WILL PASS THROUGH A #100 MESH SIEVE AND 98 TO 100 PERCENT WILL PASS THROUGH A #20 MESH SIEVE. LIME AND FERTILIZER ARE TO BE EVENLY DISTRIBUTED AND INCORPORATED INTO THE TOP 3 TO 5 INCHES OF SOIL BY DISKING
- WHERE THE SUBSOIL IS EITHER HIGHLY ACIDIC OR COMPOSED OF HEAVY CLAYS, SPREAD GROUND LIMESTONE AT THE RATE OF 4 TO 8 TONS/ACRE (200-400 POUNDS PER 1,000 SQUARE FEET) PRIOR TO THE PLACEMENT OF TOPSOIL.

B-4-3 STANDARDS AND SPECIFICATIONS FOR SEEDING AND MULCHING

HE APPLICATION OF SEED AND MULCH TO ESTABLISH VEGETATIVE COVER

PROTECT DISTURBED SOILS FROM EROSION DURING AND AT THE END OF CONSTRUCTION.

TO THE SURFACE OF ALL PERIMETER CONTROLS, SLOPES, AND ANY DISTURBED AREA NOT UNDER ACTIVE GRADING.

SPECIFICATIONS

- ALL SEED MUST MEET THE REQUIREMENTS OF THE MARYLAND STATE SEED LAW. ALL SEED MUST BE SUBJECT TO RE-TESTING BY A RECOGNIZED SEED LABORATORY. ALL SEED USED MUST HAVE BEEN TESTED WITHIN THE 6 MONTHS IMMEDIATELY PRECEDING THE DATE OF SOWING SUCH MATERIAL ON ANY PROJECT. REFER TO TABLE B 4 REGARDING THE QUALITY OF SEED. SEED TAGS MUST BE AVAILABLE UPON REQUEST TO THE INSPECTOR TO VERIFY TYPE OF SEED
- b. MULCH ALONE MAY BE APPLIED BETWEEN THE FALL AND SPRING SEEDING DATES ONLY IF THE GROUND IS FROZEN. THE APPROPRIATE SEEDING MIXTURE MUST BE APPLIED WHEN THE GROUND THAWS
- INOCULANTS: THE INOCULANT FOR TREATING LEGUME SEED IN THE SEED MIXTURES MUST BE A PURE CULTURE OF NITROGEN FIXING BACTERIA PREPARED SPECIFICALLY FOR THE SPECIES. INOCULANTS MUST NOT BE USED LATER THAN THE DATE INDICATED ON THE CONTAINER. ADD FRESH INOCULANTS AS DIRECTED ON THE PACKAGE. USE FOUR TIMES THE RECOMMENDED RATE WHEN HYDROSEEDING. NOTE: IT IS VERY IMPORTANT TO KEEP INOCULANT AS COOL AS POSSIBLE UNTIL USED. TEMPERATURES ABOVE 75 TO 80 DEGREES FAHRENHEIT CAN WEAKEN BACTERIA AND MAKE THE
- INOCULANT LESS EFFECTIVE. SOD OR SEED MUST NOT BE PLACED ON SOIL WHICH HAS BEEN TREATED WITH SOIL STERILANTS OR CHEMICALS USED FOR WEED CONTROL UNTIL SUFFICIENT TIME HAS ELAPSED (14 DAYS MIN.) TO PERMIT DISSIPATION OF PHYTO-TOXIC MATERIALS
- APPLICATION a. DRY SEEDING: THIS INCLUDES USE OF CONVENTIONAL DROP OR BROADCAST SPREADERS INCORPORATE SEED INTO THE SUBSOIL AT THE RATES PRESCRIBED ON TEMPORARY SEEDING TABLE B.1.
 - PERMANENT SEEDING TABLE B.3, OR SITE-SPECIFIC SEEDING SUMMARIES. APPLY SEED IN TWO DIRECTIONS, PERPENDICULAR TO EACH OTHER. APPLY HALF THE SEEDING RATE IN EACH
 - DIRECTION. ROLL THE SEEDED AREA WITH A WEIGHTED ROLLER TO PROVIDE GOOD SEED TO SOIL CONTACT. DRILL OR CULTIPACKER SEEDING: MECHANIZED SEEDERS THAT APPLY AND COVER SEED WITH SOIL.
- CULTIPACKING SEEDERS ARE REQUIRED TO BURY THE SEED IN SUCH A FASHION AS TO PROVIDE AT LEAST 1/4 INCH OF SOIL COVERING. SEEDBED MUST BE FIRM AFTER PLANTING. APPLY SEED IN TWO DIRECTIONS, PERPENDICULAR TO EACH OTHER. APPLY HALF THE SEEDING RATE IN EACH
- DIRECTION c. HYDROSEEDING: APPLY SEED UNIFORMLY WITH HYDROSEEDER (SLURRY INCLUDES SEED AND FERTILIZER) I. IF FERTILIZER IS BEING APPLIED AT THE TIME OF SEEDING, THE APPLICATION RATES SHOULD NOT EXCEED THE
- FOLLOWING: NITROGEN, 100 POUNDS PER ACRE TOTAL OF SOLUBLE NITROGEN; P205 (PHOSPHOROUS), 200 POUNDS PER ACRE; K2O (POTASSIUM), 200 POUNDS PER ACRE. LIME: USE ONLY GROUND AGRICULTURAL LIMESTONE (UP TO 3 TONS PER ACRE MAY BE APPLIED BY HYDROSEEDING). NORMALLY, NOT MORE THAN 2 TONS ARE APPLIED BY HYDROSEEDING AT ANY ONE TIME. DO NOT
- USE BURNT OR HYDRATED LIME WHEN HYDROSEEDING. MIX SEED AND FERTILIZER ON SITE AND SEED IMMEDIATELY AND WITHOUT INTERRUPTION.

B. MULCHING MULCH MATERIALS (IN ORDER OF PREFERENCE)

FIBER PER 100 GALLONS OF WATER.

STRAW CONSISTING OF THOROUGHLY THRESHED WHEAT, RYE, OAT, OR BARLEY AND REASONABLY BRIGHT IN COLOR. STRAW IS TO BE FREE OF NOXIOUS WEED SEEDS AS SPECIFIED IN THE MARYLAND SEED LAW AND NOT MUSTY, MOLDY, CAKED, DECAYED, OR EXCESSIVELY DUSTY. NOTE: USE ONLY STERILE STRAW MULCH IN AREAS WHERE ONE SPECIES OF GRASS IS DESIRED

IV. WHEN HYDROSEEDING DO NOT INCORPORATE SEED INTO THE SOIL.

- WOOD CELLULOSE FIBER MULCH (WCFM) CONSISTING OF SPECIALLY PREPARED WOOD CELLULOSE PROCESSED INTO A UNIFORM FIBROUS PHYSICAL STATE. WCFM IS TO BE DYED GREEN OR CONTAIN A GREEN DYE IN THE PACKAGE THAT WILL PROVIDE AN APPROPRIATE
- COLOR TO FACILITATE VISUAL INSPECTION OF THE UNIFORMLY SPREAD SLURRY. WCFM, INCLUDING DYE, MUST CONTAIN NO GERMINATION OR GROWTH INHIBITING FACTORS. WCFM MATERIALS ARE TO BE MANUFACTURED AND PROCESSED IN SUCH A MANNER THAT THE WOOD CELLULOSE
- FERTILIZER AND OTHER ADDITIVES TO FORM A HOMOGENEOUS SLURRY. THE MULCH MATERIAL MUST FORM A BLOTTER-LIKE GROUND COVER, ON APPLICATION, HAVING MOISTURE ABSORPTION AND PERCOLATION PROPERTIES AND MUST COVER AND HOLD GRASS SEED IN CONTACT WITH THE SOIL WITHOUT INHIBITING THE GROWTH OF THE GRASS SEEDLINGS.

FIBER MULCH WILL REMAIN IN UNIFORM SUSPENSION IN WATER UNDER AGITATION AND WILL BLEND WITH SEED.

- IV. WCFM MATERIAL MUST NOT CONTAIN ELEMENTS OR COMPOUNDS AT CONCENTRATION LEVELS THAT WILL BE
- WCFM MUST CONFORM TO THE FOLLOWING PHYSICAL REQUIREMENTS: FIBER LENGTH OF APPROXIMATELY 10 MILLIMETERS. DIAMETER APPROXIMATELY 1 MILLIMETER, PH RANGE OF 4.0 TO 8.5, ASH CONTENT OF 1.6 PERCENT MAXIMUM AND WATER HOLDING CAPACITY OF 90 PERCENT MINIMUM.

APPLICATION

ANCHORING

- APPLY MULCH TO ALL SEEDED AREAS IMMEDIATELY AFTER SEEDING. WHEN STRAW MULCH IS USED, SPREAD IT OVER ALL SEEDED AREAS AT THE RATE OF 2 TONS PER ACRE TO A UNIFORM LOOSE DEPTH OF 1 TO 2 INCHES. APPLY MULCH TO ACHIEVE A UNIFORM DISTRIBUTION AND DEPTH SO THAT THE SOIL SURFACE IS NOT EXPOSED. WHEN USING A MULCH ANCHORING TOOL, INCREASE THE APPLICATION RATE TO 2.5 TONS
- WOOD CELLULOSE FIBER USED AS MULCH MUST BE APPLIED AT A NET DRY WEIGHT OF 1500 POUNDS PER ACRE. MIX THE WOOD CELLULOSE FIBER WITH WATER TO ATTAIN A MIXTURE WITH A MAXIMUM OF 50 POUNDS OF WOOD CELLULOSE
- a. PERFORM MULCH ANCHORING IMMEDIATELY FOLLOWING APPLICATION OF MULCH TO MINIMIZE LOSS BY WIND OR WATER. THIS MAY BE DONE BY ONE OF THE FOLLOWING METHODS (LISTED BY PREFERENCE), DEPENDING UPON THE SIZE OF THE AREA AND EROSION HAZARD
 - A MULCH ANCHORING TOOL IS A TRACTOR DRAWN IMPLEMENT DESIGNED TO PUNCH AND ANCHOR MULCH INTO THE SOIL SURFACE A MINIMUM OF 2 INCHES. THIS PRACTICE IS MOST EFFECTIVE ON LARGE AREAS, BUT IS LIMITED TO FLATTER SLOPES WHERE EQUIPMENT CAN OPERATE SAFELY. IF USED ON SLOPING LAND,

- THIS PRACTICE SHOULD FOLLOW THE CONTOUR. WOOD CELLULOSE FIBER MAY BE USED FOR ANCHORING STRAW. APPLY THE FIBER BINDER AT A NET DRY WEIGHT OF 750 POUNDS PER ACRE. MIX THE WOOD CELLULOSE FIBER WITH WATER AT A MAXIMUM OF 50 POUNDS OF WOOD
- CELLULOSE FIBER PER 100 GALLONS OF WATER III. SYNTHETIC BINDERS SUCH AS ACRYLIC DLR (AGRO-TACK), DCA-70, PETROSET, TERRA TAX II, TERRA TACK AR OR OTHER APPROVED EQUAL MAY BE USED. FOLLOW APPLICATION RATES AS SPECIFIED BY THE MANUFACTURER. APPLICATION OF LIQUID BINDERS NEEDS TO BE HEAVIER AT THE EDGES WHERE WIND CATCHES MULCH, SUCH AS IN VALLEYS AND ON CRESTS OF BANKS. USE OF ASPHALT BINDERS IS STRICTLY
- PROHIBITED. LIGHTWEIGHT PLASTIC NETTING MAY BE STAPLED OVER THE MULCH ACCORDING TO MANUFACTURER RECOMMENDATIONS. NETTING IS USUALLY AVAILABLE IN ROLLS 4 TO 15 FEET WIDE AND 300 TO 3,000

B-4-4 STANDARDS AND SPECIFICATIONS FOR TEMPORARY STABILIZATION

TO STABILIZE DISTURBED SOILS WITH VEGETATION FOR UP TO 6 MONTHS.

TO USE FAST GROWING VEGETATION THAT PROVIDES COVER ON DISTURBED SOILS.

XPOSED SOILS WHERE GROUND COVER IS NEEDED FOR A PERIOD OF 6 MONTHS OR LESS. FOR LONGER DURATION OF TIME PERMANENT STABILIZATION PRACTICES ARE REQUIRED.

- SELECT ONE OR MORE OF THE SPECIES OR SEED MIXTURES LISTED IN TABLE B.1 FOR THE APPROPRIATE PLANT HARDINESS ZONE (FROM FIGURE B.3), AND ENTER THEM IN THE TEMPORARY SEEDING SUMMARY BELOW ALONG WITH APPLICATION RATES, SEEDING DATES AND SEEDING DEPTHS. IF THIS SUMMARY IS NOT PUT ON THE PLAN AND COMPLETED, THEN TABLE B.1 PLUS FERTILIZER AND
- LIME RATES MUST BE PUT ON THE PLAN. 2. FOR SITES HAVING SOIL TESTS PERFORMED, USE AND SHOW THE RECOMMENDED RATES BY THE TESTING AGENCY. SOIL TESTS
- ARE NOT REQUIRED FOR TEMPORARY SEEDING. WHEN STABILIZATION IS REQUIRED OUTSIDE OF A SEEDING SEASON, APPLY SEED AND MULCH OR STRAW MULCH ALONE AS PRESCRIBED IN SECTION B-4-3.A.1.B AND MAINTAIN UNTIL THE NEXT SEEDING SEASON.

	TEMPORARY SEEDING SUMMARY										
		HARE		FERTILIZER RATE	LIME RATE						
1	NO.	SPECIES	APPLICATION RATE (LB/AC)	SEEDING DATES	SEEDING DEPTHS	(10-20-20)	LIME RATE				
				COOL SEASON G	GRASSES						
	1	ANNUAL RYEGRASS	40	2/15 - 4/30 8/15 - 11/30	0.5"		2 TONS/AC				
	2	BARLEY	96	2/15 - 4/30 8/15 - 11/30	1.0"	436 LB/AC					
	3	OATS	72	2/15 - 4/30 8/15 - 11/30	1.0"	(10 LB/1000 SF)	(90 LB/1000 SF)				
	4	WHEAT	120	2/15 - 4/30 8/15 - 12/15	1.0"						
	WARM SEASON GRASSES										
	7	PEARL MILLET	20	5/1 - 8/14	0.5"						

SEEDING RATES FOR THE WARM-SEASON GRASSES ARE IN POUNDS OF PURE LIVE SEED (PLS), ACTUAL PLANTING RATES SHALL BE ADJUSTED TO REFLECT PERCENT SEED GERMINATION AND PURITY. AS TESTED. ADJUSTMENTS ARE USUALLY NOT NEEDED FOR THE COOL-SEASON GRASSES

SEEDING RATES LISTED ABOVE ARE FOR TEMPORARY SEEDINGS, WHEN PLANTED ALONE. WHEN PLANTED AS A NURSE CROP WITH PERMANENT SEED MIXES, USE 1/3 OF THE SEEDING RATE LISTED ABOVE FOR BARLEY, OATS, AND WHEAT. FOR SMALLER-SEEDED GRASSES (ANNUAL RYEGRASS. PEARL MILLET. FOXTAIL MILLET). DO NOT EXCEED MORE THAN 5% (BY WEIGHT) OF THE OVERALL PERMANENT SEEDING MIX. CEREAL RYE GENERALLY SHOULD NOT BE USED AS A NURSE CROP UNLESS PLANTING WILL OCCUR IN VERY LATE FALL BEYOND THE SEEDING DATES FOR OTHER TEMPORARY SEEDINGS. CEREAL RYE HAS ALLELOPATHIC PROPERTIES THAT INHIBIT THE GERMINATION AND GROWTH OF OTHER PLANTS. IF IT MUST E USED AS A NURSE CROP, SEED AT 1/3 OF THE RATE LISTED ABOVE. OATS ARE THE RECOMMENDED NURSE CROP FOR VARM-SEASON GRASSES. FOR SANDY SOILS, PLANT SEEDS AT TWICE THE DEPTH LISTED ABOVE.

THE PLANTING DATES LISTED ARE AVERAGES FOR EACH ZONE AND MAY REQUIRE ADJUSTMENT TO REFLECT LOCAL CONDITIONS, ESPECIALLY NEAR THE BOUNDARIES OF THE ZONE.

B-4-5 STANDARDS AND SPECIFICATIONS FOR PERMANENT STABILIZATION

TABILIZE DISTURBED SOILS WITH PERMANENT VEGETATION.

USE LONG-LIVED PERENNIAL GRASSES AND LEGUMES TO ESTABLISH PERMANENT GROUND COVER ON DISTURBED SOILS. ONDITIONS WHERE PRACTICE APPLIES

EXPOSED SOILS WHERE GROUND COVER IS NEEDED FOR 6 MONTHS OR MORE

<u>CRITERIA</u> A. SEED MIXTURES

- GENERAL USE a. SELECT ONE OR MORE OF THE SPECIES OR MIXTURES LISTED IN TABLE B.3 FOR THE APPROPRIATE PLANT HARDINESS ZONE (FROM FIGURE B.3) AND BASED ON THE SITE CONDITION OR PURPOSE FOUND ON TABLE B.2. ENTER SELECTED MIXTURE(S), APPLICATION RATES, AND SEEDING DATES IN THE PERMANENT SEEDING SUMMARY. THE SUMMARY IS TO BE PLACED ON THE PLAN.
- b. ADDITIONAL PLANTING SPECIFICATIONS FOR EXCEPTIONAL SITES SUCH AS SHORELINES, STREAM BANKS, OR DUNES OR FOR SPECIAL PURPOSES SUCH AS WILDLIFE OR AESTHETIC TREATMENT MAY BE FOUND IN USDA-NRCS TECHNICAL FIELD OFFICE GUIDE, SECTION 342 - CRITICAL AREA PLANTING. c. FOR SITES HAVING DISTURBED AREA OVER 5 ACRES, USE AND SHOW THE RATES RECOMMENDED BY THE SOIL TESTING AGENCY
- d. FOR AREAS RECEIVING LOW MAINTENANCE, APPLY UREA FORM FERTILIZER (46-0-0) AT 3 S POUNDS PER 1000 SQUARE FEET (150 POUNDS PER ACRE) AT THE TIME OF SEEDING IN ADDITION TO THE SOIL AMENDMENTS SHOWN IN THE PERMANENT SEEDING SUMMARY
- TURFGRASS MIXTURES a. AREAS WHERE TURFGRASS MAY BE DESIRED INCLUDE LAWNS, PARKS, PLAYGROUNDS, AND COMMERCIAL SITES
- WHICH WILL RECEIVE A MEDIUM TO HIGH LEVEL OF MAINTENANCE. SELECT ONE OR MORE OF THE SPECIES OR MIXTURES LISTED BELOW BASED ON THE SITE CONDITIONS OR PURPOSE. ENTER SELECTED MIXTURE(S), APPLICATION RATES, AND SEEDING DATES IN THE PERMANENT SEEDING SUMMARY. THE SUMMARY IS TO BE PLACED ON THE PLAN.
- KENTUCKY BLUEGRASS: FULL SUN MIXTURE: FOR USE IN AREAS THAT RECEIVE INTENSIVE MANAGEMENT. IRRIGATION REQUIRED IN THE AREAS OF CENTRAL MARYLAND AND EASTERN SHORE. RECOMMENDED CERTIFIED KENTUCKY BLUEGRASS CULTIVARS SEEDING RATE: 1.5 TO 2.0 POUNDS PER 1000 SQUARE FEET. CHOOSE A MINIMUM OF THREE KENTUCKY BLUEGRASS CULTIVARS WITH EACH RANGING FROM 10 TO 35 PERCENT OF THE TOTAL MIXTURE BY WEIGHT
- KENTUCKY BLUEGRASS/PERENNIAL RYE: FULL SUN MIXTURE: FOR USE IN FULL SUN AREAS WHERE RAPID ESTABLISHMENT IS NECESSARY AND WHEN TURF WILL RECEIVE MEDIUM TO INTENSIVE MANAGEMENT. CERTIFIED PERENNIAL RYEGRASS CULTIVARS/CERTIFIED KENTUCKY BLUEGRASS SEEDING RATE: 2 POUNDS MIXTURE PER 1000 SQUARE FEET. CHOOSE A MINIMUM OF THREE KENTUCKY BLUEGRASS CULTIVARS WITH EACH RANGING FROM 10 TO 35 PERCENT OF THE TOTAL MIXTURE BY WEIGHT. TALL FESCUE/KENTUCKY BLUEGRASS: FULL SUN MIXTURE: FOR USE IN DROUGHT PRONE AREAS AND/OR FOR
- INCLUDES; CERTIFIED TALL FESCUE CULTIVARS 95 TO 100 PERCENT, CERTIFIED KENTUCKY BLUEGRASS CULTIVARS 0 TO 5 PERCENT. SEEDING RATE: 5 TO 8 POUNDS PER 1000 SQUARE FEET. ONE OR MORE CULTIVARS KENTUCKY BLUEGRASS/FINE FESCUE: SHADE MIXTURE: FOR USE IN AREAS WITH SHADE IN BLUEGRASS LAWNS. FOR ESTABLISHMENT IN HIGH QUALITY. INTENSIVELY MANAGED TURF AREA. MIXTURE INCLUDES: CERTIFIED

KENTUCKY BLUEGRASS CULTIVARS 30 TO 40 PERCENT AND CERTIFIED FINE FESCUE AND 60 TO 70 PERCENT.

AREAS RECEIVING LOW TO MEDIUM MANAGEMENT IN FULL SUN TO MEDIUM SHADE. RECOMMENDED MIXTURE

- SEEDING RATE: 1S TO 3 POUNDS PER 1000 SQUARE FEET. SELECT TURFGRASS VARIETIES FROM THOSE LISTED IN THE MOST CURRENT UNIVERSITY OF MARYLAND PUBLICATION, AGRONOMY MEMO #77, "TURFGRASS CULTIVAR RECOMMENDATIONS FOR MARYLAND" CHOOSE CERTIFIED MATERIAL. CERTIFIED MATERIAL IS THE BEST GUARANTEE OF CULTIVAR PURITY. THE CERTIFICATION PROGRAM OF THE MARYLAND DEPARTMENT OF AGRICULTURE, TURF AND SEED SECTION, PROVIDES A RELIABLE MEANS OF CONSUMER PROTECTION AND ASSURES A PURE GENETIC LINE
- c. IDEAL TIMES OF SEEDING FOR TURF GRASS MIXTURES VESTERN MD: MARCH 15 TO JUNE 1, AUGUST 1 TO OCTOBER 1 (HARDINESS ZONES: 5B, 6A)
- ENTRAL MD: MARCH 1 TO MAY 15, AUGUST 15 TO OCTOBER 15 (HARDINESS ZONE: 6B) JTHERN MD, EASTERN SHORE: MARCH 1 TO MAY 15, AUGUST 15 TO OCTOBER 15 (HARDINESS ZONES: 7A, 7B) TILL AREAS TO RECEIVE SEED BY DISKING OR OTHER APPROVED METHODS TO A DEPTH OF 2 TO 4 INCHES, LEVEL AND RAKE THE AREAS TO PREPARE A PROPER SEEDBED. REMOVE STONES AND DEBRIS OVER 1S INCHES IN DIAMETER. THE
- RESULTING SEEDBED MUST BE IN SUCH CONDITION THAT FUTURE MOWING OF GRASSES WILL POSE NO DIFFICULTY. e. IF SOIL MOISTURE IS DEFICIENT, SUPPLY NEW SEEDINGS WITH ADEQUATE WATER FOR PLANT GROWTH (S TO 1 INCH EVERY 3 TO 4 DAYS DEPENDING ON SOIL TEXTURE) UNTIL THEY ARE FIRMLY ESTABLISHED. THIS IS ESPECIALLY TRUE WHEN SEEDINGS ARE MADE LATE IN THE PLANTING SEASON, IN ABNORMALLY DRY OR HOT SEASONS, OR ON ADVERSE

PERMANENT SEEDING SUMMARY

		ARDINESS ZONE (from Figure B.3): ZONE 7B SEED MIXTURE (from Table B.1) FERTILIZER RATE (10-20-20)						
NO	SPECIES	APPLICATION RATE (LB/AC)	SEEDING DATES	SEEDING DEPTHS	N	P2O5	K2O	LIME RATE
7	CREEPING RED FESCUE KENTUCKY BLUEGRASS	60 15	2/15 - 4/30 8/15 - 10/31 11/1 - 11/30*	1" - 1"		90 LB/AC 90 LB/1 (2 LB/1000 (2 LB/1		
12	CREEPING RED FESCUE HARD FESCUE SHEEP FESCUE	25 25 25 25	2/15 - 4/30 8/15 - 10/31 11/1 - 11/30*	1 " - 1 "	45 POUNDS PER ACRE (1.0 LB/1000 SF)		90 LB/AC (2 LB/1000 SF)	2 TONS/A (90 LB/10 SF)
4	DEERTONGUE CREEPING RED FESCUE VIRGINA WILD RYE	15 20 5	2/15 - 4/30** 5/1 - 5/31***	1" - 1"	LB/1000 SF)			

THE PLANTING DATES LISTED ARE AVERAGES FOR EACH ZONE. THESE DATES MAY REQUIRE ADJUSTMENT TO REFLECT LOCAL CONDITIONS. ESPECIALLY NEAR THE BOUNDARIES OF THE ZONES. WHEN SEEDING TOWARD THE END OF THE LISTED PLANTING ATES. OR WHEN CONDITIONS ARE EXPECTED TO BE LESS THAN OPTIMAL. SELECT AN APPROPRIATE NURSE CROP FROM TABLE B.1 EMPORARY SEEDING FOR SITE STABILIZATION AND PLANT TOGETHER WITH THE PERMANENT SEEDING MIX. WHEN PLANTED DURING THE GROWING SEASON, MOST OF THESE MATERIALS MUST BE PURCHASED AND KEPT IN A DORMANT ONDITION UNTIL PLANTING. BARE-ROOT GRASSES ARE THE EXCEPTION—THEY MAY BE SUPPLIED AS GROWING (NON-DORMANT)

*ADDITIONAL PLANTING DATES FOR THE LOWER COASTAL PLAIN, DEPENDENT ON ANNUAL RAINFALL AND TEMPERATURE TRANDS. RECOMMEND ADDING A NURSE CROP. AS NOTED ABOVE. IF PLANTING DURING THIS PERIOD. **WARM-SEASON GRASSES NEED A SOIL TEMPERATURE OF AT LEAST 50 DEGREES F IN ORDER TO GERMINATE. IF SOIL

TEMPERATURES ARE COLDER THAN 50 DEGREES, OR MOISTURE IS NOT ADEQUATE, THE SEEDS WILL REMAIN DORMANT UNTIL CONDITIONS ARE FAVORABLE. IN GENERAL, PLANTING DURING THE LATTER PORTION OF THIS PERIOD ALLOWS MORE TIME FOR WEED EMERGENCE AND WEED CONTROL PRIOR TO PLANTING. WHEN SELECTING A PLANTING DATE. CONSIDER THE NEED FOR WEED CONTROL VS. THE LIKELIHOOD OF HAVING SUFFICIENT MOISTURE FOR LATER PLANTINGS. ESPECIALLY ON DROUGHTY SITES. ***ADDITIONAL PLANTING DATES DURING WHICH SUPPLEMENTAL WATERING MAY BE NEEDED TO ENSURE PLANT ESTABLISHMENT. ***OTHER MEADOW SEED MIXES MAY BE USED (REFER TO LANDSCAPE PLAN).

SOD: TO PROVIDE QUICK COVER ON DISTURBED AREAS (2:1 GRADE OR FLATTER).

PREVENT WILTING

- a. CLASS OF TURFGRASS SOD MUST BE MARYLAND STATE CERTIFIED. SOD LABELS MUST BE MADE AVAILABLE TO THE JOB FOREMAN AND INSPECTOR.
- SOD MUST BE MACHINE CUT AT A UNIFORM SOIL THICKNESS OF S INCH, PLUS OR MINUS J INCH, AT THE TIME OF CUTTING. MEASUREMENT FOR THICKNESS MUST EXCLUDE TOP GROWTH AND THATCH. BROKEN PADS AND TORN OR UNEVEN ENDS WILL NOT BE ACCEPTABLE
- STANDARD SIZE SECTIONS OF SOD MUST BE STRONG ENOUGH TO SUPPORT THEIR OWN WEIGHT AND RETAIN THEIR SIZE AND SHAPE WHEN SUSPENDED VERTICALLY WITH A FIRM GRASP ON THE UPPER 10 PERCENT OF THE SECTION. SOD MUST NOT BE HARVESTED OR TRANSPLANTED WHEN MOISTURE CONTENT (EXCESSIVELY DRY OR WET) MAY
- ADVERSELY AFFECT ITS SURVIVAL. SOD MUST BE HARVESTED, DELIVERED, AND INSTALLED WITHIN A PERIOD OF 36 HOURS. SOD NOT TRANSPLANTED WITHIN THIS PERIOD MUST BE APPROVED BY AN AGRONOMIST OR SOIL SCIENTIST PRIOR TO ITS INSTALLATION.
 - DURING PERIODS OF EXCESSIVELY HIGH TEMPERATURE OR IN AREAS HAVING DRY SUBSOIL, LIGHTLY IRRIGATE THE SUBSOIL IMMEDIATELY PRIOR TO LAYING THE SOD.
 - LAY THE FIRST ROW OF SOD IN A STRAIGHT LINE WITH SUBSEQUENT ROWS PLACED PARALLEL TO IT AND TIGHTLY WEDGED AGAINST EACH OTHER. STAGGER LATERAL JOINTS TO PROMOTE MORE UNIFORM GROWTH AND STRENGTH. ENSURE THAT SOD IS NOT STRETCHED OR OVERLAPPED AND THAT ALL JOINTS ARE BUTTED TIGHT IN ORDER TO PREVENT VOIDS WHICH WOULD CAUSE AIR DRYING OF THE ROOTS.
 - WHEREVER POSSIBLE, LAY SOD WITH THE LONG EDGES PARALLEL TO THE CONTOUR AND WITH STAGGERING ROLL AND TAMP, PEG OR OTHERWISE SECURE THE SOD TO PREVENT SLIPPAGE ON SLOPES. ENSURE SOLID CONTACT EXISTS BETWEEN SOD ROOTS AND THE UNDERLYING SOIL SURFACE. WATER THE SOD IMMEDIATELY FOLLOWING ROLLING AND TAMPING UNTIL THE UNDERSIDE OF THE NEW SOD PAD AND
- SOIL SURFACE BELOW THE SOD ARE THOROUGHLY WET. COMPLETE THE OPERATIONS OF LAYING, TAMPING AND IRRIGATING FOR ANY PIECE OF SOD WITHIN EIGHT HOURS. 3. SOD MAINTENANCE a. IN THE ABSENCE OF ADEQUATE RAINFALL, WATER DAILY DURING THE FIRST WEEK OR AS OFTEN AND SUFFICIENTLY
 - AFTER THE FIRST WEEK, SOD WATERING IS REQUIRED AS NECESSARY TO MAINTAIN ADEQUATE MOISTURE CONTENT. DO NOT MOW UNTIL THE SOD IS FIRMLY ROOTED. NO MORE THAN 1/3 OF THE GRASS LEAF MUST BE REMOVED BY THE INITIAL CUTTING OR SUBSEQUENT CUTTINGS. MAINTAIN A GRASS HEIGHT OF AT LEAST 3 INCHES UNLESS OTHERWISE

AS NECESSARY TO MAINTAIN MOIST SOIL TO A DEPTH OF 4 INCHES. WATER SOD DURING THE HEAT OF THE DAY TO





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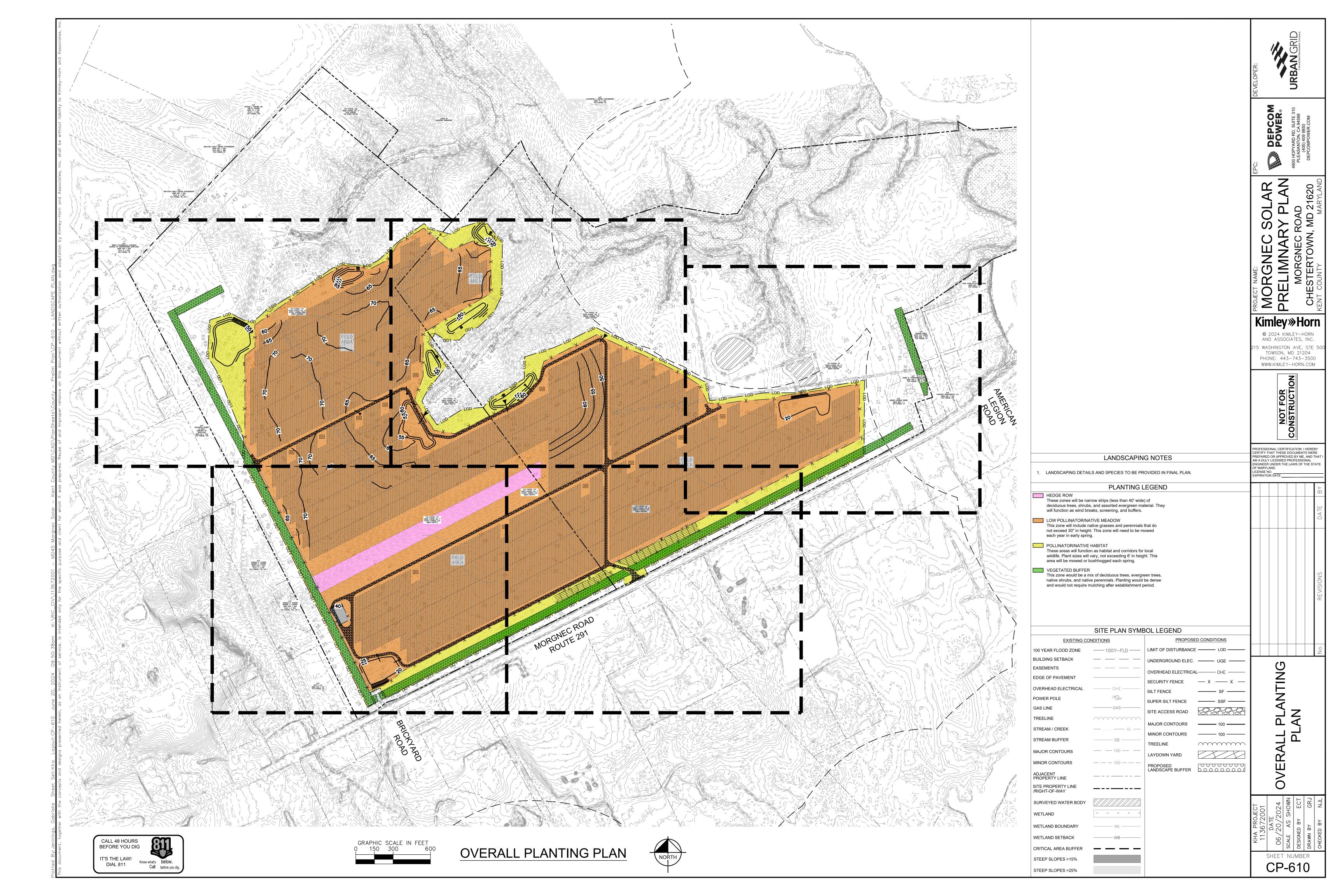
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PARED OR APPROVED BY ME. AND TH INEER UNDER THE LAWS OF THE STAT ENSE NO.

SHEET NUMBER

ANTI-DEGRADATION SUMMARY: SEQUENCE OF CONSTRUCTION B-4-6 STANDARDS AND SPECIFICATIONS FOR SOIL STABILIZATION MATTING THE ENHANCED MINIMIZATION EFFORTS NOTED BELOW SHALL BE EMPLOYED FOR CONFORMANCE TO MARYLAND MATERIAL USED TO TEMPORARILY OR PERMANENTLY STABILIZE CHANNELS OR STEEP SLOPES UNTIL GROUNDCOVER IS ESTABLISHED. DEPARTMENT OF THE ENVIRONMENT, ANTI-DEGRADATION STRATEGIES, ASSOCIATED WITH IMPACTS AND THE NOTE: TO BE PROVIDED IN FINAL PLAN. PROTECTION TO WETLANDS IDENTIFIED WITHIN THE PROJECT LIMITS. PURPOSE TO PROTECT THE SOILS UNTIL VEGETATION IS ESTABLISHED. EROSION AND SEDIMENT CONTROL PLAN - GENERAL 1. THE CONTRACTOR SHALL LIMIT DISTURBED AREAS TO THOSE IDENTIFIED ON THE APPROVED PLANS. TO THE CONDITIONS WHERE PRACTICE APPLIES ON NEWLY SEEDED SURFACES TO PREVENT THE APPLIED SEED FROM WASHING OUT; IN CHANNELS AND ON STEEP SLOPES WHERE EXTENT PRACTICAL, MAINTAIN EXISTING GROUND DURING THE CONSTRUCTION PROCESS. 2. THE CONTRACTOR SHALL SEQUENCE THE LAND DISTURBING ACTIVITIES TO MINIMIZE EARTH DISTURBANCE. THE FLOW HAS EROSIVE VELOCITIES OR CONVEYS CLEAR WATER: ON TEMPORARY SWALES, EARTH DIKES, AND PERIMETER DIKE 3. WHERE PRACTICAL, WORK DONE ON ANY GIVEN DAY SHALL BE LIMITED SO AS TO DISTURB NO MORE AREA SWALES AS REQUIRED BY THE RESPECTIVE DESIGN STANDARD; AND, ON STREAM BANKS WHERE MOVING WATER IS LIKELY TO WASH THAN CAN BE STABILIZED BY THE END OF THE WORKDAY; AND/OR TEMPORARY AND PERMANENT STABILIZATION MUST COMPLY WITH THE RESPECTIVE 3- AND 7-DAY TIME FRAMES DENOTED ON THE OUT NEW VEGETATIVE PLANTINGS. APPROVED EROSION AND SEDIMENT CONTROL PLAN. 4. TO THE EXTENT PRACTICABLE THE CONTRACTOR SHALL TAKE EFFORTS TO SCHEDULE ACTIVITIES TO TAKE B-4-7 STANDARDS AND SPECIFICATIONS FOR HEAVY USE AREA PROTECTION PLACE DURING TIMES WHEN SEDIMENT CONTROL TRANSPORT IS LIKELY TO BE MINIMIZED, (BY VIRTUE OF A NOAA 1- OR 3-DAY WEATHER FORECAST). 5. CONDUCT INSPECTIONS ON A DAILY BASIS. LOGBOOKS MAY BE REVIEWED. DEPCOI POWER GRADING AND STABILIZATION: THE STABILIZATION OF AREAS FREQUENTLY AND INTENSIVELY USED BY SURFACING WITH SUITABLE MATERIALS (E.G., MULCH AND 6. THE CONTRACTOR SHALL PROVIDE INSPECTIONS OF EROSION CONTROL DEVICES, AT A MINIMUM OF 1) ONCE EVERY 7 CALENDAR DAYS, AND B) WITHIN 24 HOURS OF THE OCCURRENCE OF A STORM EVENT OF 0.25 INCHES OR GREATER. 7. STOCKPILES SHALL BE LOCATED GREATER THAN 100 FEET FROM STREAMS AND THE WETLANDS DENOTED ON THE PLAN. ALSO, SILT FENCE SHALL BE PROVIDED AROUND ALL STOCKPILES AS ILLUSTRATED ON THE TO PROVIDE A STABLE, NON-ERODING SURFACE FOR AREAS FREQUENTLY USED AND TO IMPROVE THE WATER QUALITY FROM THE APPROVED PLANS. WHEN INACTIVE, STOCKPILES SHALL BE STABILIZED IN ACCORDANCE WITH EROSION AND RUNOFF OF THESE AREAS. SEDIMENT CONTROL CRITERIA NOTED ON THE APPROVED PLANS. CONDITIONS WHERE PRACTICE APPLIES FILTERING: 8. THE CONTRACTOR SHALL INSTALL SUPER SILT FENCE AND DIVERSION FENCE IN AND AROUND THE WETLANDS THIS PRACTICE APPLIES TO INTENSIVELY USED AREAS (E.G., EQUIPMENT AND MATERIAL STORAGE, STAGING AREAS, HEAVILY USED AND WETLAND BUFFER AS ILLUSTRATED ON THE APPROVED EROSION AND SEDIMENT CONTROL PLAN. 9. THE TRASH RACK MUST BE INSTALLED IN THE SEDIMENT BASIN AS ILLUSTRATED ON THE APPROVED PLAN. 10. THE CONTRACTOR SHALL UTILIZE THE BAFFLE BOARDS WITHIN THE SEDIMENT TRAPS, AS SPECIFIED ON THE 1. A MINIMUM 4-INCH BASE COURSE OF CRUSHED STONE OR OTHER SUITABLE MATERIALS INCLUDING WOOD CHIPS OVER NONWOVEN GEOTEXTILE SHOULD BE PROVIDED AS SPECIFIED IN SECTION H-1 MATERIALS. ک بے ک 7 2. SELECT THE STABILIZING MATERIAL BASED ON THE INTENDED USE, DESIRED MAINTENANCE FREQUENCY, AND RUNOFF CONTROL. 11. THE CONTRACTOR SHALL ASSURE THAT THE DEWATERING DISCHARGE OF THE SEDIMENT TRAPS AND BASIN SHALL TAKE PLACE BEYOND 100 FEET OF THE WETLAND BUFFER IDENTIFIED ON THE PLAN. NO DISCHARGE 3. THE TRANSPORT OF SEDIMENTS, NUTRIENTS, OILS, CHEMICALS, PARTICULATE MATTER ASSOCIATED WITH VEHICULAR TRAFFIC SHALL OCCUR OR BE DIRECTED INTO THE WETLAND OR THE BUFFER. AND EQUIPMENT, AND MATERIAL STORAGE NEEDS TO BE CONSIDERED IN THE SELECTION OF MATERIAL. ADDITIONAL CONTROL MEASURES MAY BE NECESSARY TO CONTROL SOME OF THESE POTENTIAL POLLUTANTS. PROJECT COMPLETION AND FINAL STABILIZATION: 12. AT THE END OF CONSTRUCTION, THE CONTRACTOR SHALL CAREFULLY REMOVE ALL TEMPORARY EROSION 4. SURFACE EROSION CAN BE A PROBLEM ON LARGE HEAVY USE AREAS. IN THESE SITUATIONS, MEASURES TO REDUCE THE FLOW AND SEDIMENT CONTROL PRACTICES SO AS TO AVOID IMPACTS TO THE WETLANDS AND WETLAND BUFFERS. LENGTH OF RUNOFF OR EROSIVE VELOCITIES NEED TO BE CONSIDERED. DISTURBED AREAS MUST BE IMMEDIATELY STABILIZED. STORMWATER MANAGEMENT PLAN 13. THIS APPROVED PLAN USES ESD PRACTICES TO COMPLY WITH THE STORMWATER MANAGEMENT CRITERIA THE HEAVY USE AREAS MUST BE MAINTAINED IN A CONDITION THAT MINIMIZES EROSION. THIS MAY REQUIRE ADDING SUITABLE OF THE COUNTY AND THE STATE. ALL PRACTICES SHALL BE CONSTRUCTED CONSISTENT WITH THE MATERIAL, AS SPECIFIED ON THE APPROVED PLANS, TO MAINTAIN A CLEAN SURFACE. APPROVED PLANS. THE CONTRACTOR SHALL TAKE PRECAUTIONS TO AVOID CONCENTRATED FLOW FROM AREAS DESIGNATED AS SHEET FLOW. IF CONCENTRATED FLOW IS OBSERVED WITHIN AREAS DESIGNATED AS SHEET FLOW, THE CONTRACTOR SHALL GRADE THOSE AREAS TO SMOOTH OUT SAID OCCURRENCES. **B-4-8 STANDARDS AND SPECIFICATIONS FOR STOCKPILE AREA** MO PRE A MOUND OR PILE OF SOIL PROTECTED BY APPROPRIATELY DESIGNED EROSION AND SEDIMENT CONTROL MEASURES TO PROVIDE A DESIGNATED LOCATION FOR THE TEMPORARY STORAGE OF SOIL THAT CONTROLS THE POTENTIAL FOR EROSION, SEDIMENTATION, AND CHANGES TO DRAINAGE PATTERNS. CONDITIONS WHERE PRACTICE APPLIES STOCKPILE AREAS ARE UTILIZED WHEN IT IS NECESSARY TO SALVAGE AND STORE SOIL FOR LATER USE © 2024 KIMLEY-HORN AND ASSOCIATES, INC. CRITERIA A. THE STOCKPILE LOCATION AND ALL RELATED SEDIMENT CONTROL PRACTICES MUST BE CLEARLY INDICATED ON THE EROSION WASHINGTON AVE, STE 50 TOWSON, MD 21204 PHONE: 443-743-3500 B. THE FOOTPRINT OF THE STOCKPILE MUST BE SIDED TO ACCOMMODATE THE ANTICIPATED VOLUME OF MATERIAL AND BASED ON WWW.KIMLEY-HORN.COM A SIDE SLOPE RATION NO STEEPER THAT 2:1. BENCHING MUST BE PROVIDED IN ACCORDANCE WITH SECTION B-3 LAND GRADING. C. RUNOFF FROM THE STOCKPILE AREA MUST DRAIN TO A SUITABLE SEDIMENT CONTROL PRACTICE. ACCESS THE STOCKPILE AREA FROM THE UPGRADE SIDE. E. CLEAR WATER RUNOFF INTO THE STOCKPILE AREA MUST BE MINIMIZED BY USE OF A DIVERSION DEVICE SUCH AS AN EARTH DIKE, TEMPORARY SWALE OR DIVERSION FENCE. PROVISIONS MUST BE MADE FOR DISCHARGING CONCENTRATED FLOW IN A NON-EROSIVE F. WHERE RUNOFF CONCENTRATES ALONG THE TOE OF THE STOCKPILE FILL, AN APPROPRIATE EROSION/SEDIMENT CONTROL PRACTICE MUST BE USED TO INTERCEPT THE DISCHARGE. G. STOCKPILES MUST BE STABILIZED IN ACCORDANCE WITH THE 3/7 DAY REQUIREMENT AS WELL AS STANDARD B-4-1 INCREMENTAL STABILIZATION AND STANDARD B-4-4 TEMPORARY STABILIZATION H. IF THE STOCKPILE IS LOCATED ON AN IMPERVIOUS SURFACE, A LINER SHOULD BE PROVIDED BELOW THE STOCKPILE TO FACILITATE CLEANUP. STOCKPILES CONTAINING MATERIAL MUST BE COVERED WITH IMPERMEABLE SHEETING. THE STOCKPILE AREA MUST CONTINUOUSLY MEET THE REQUIREMENTS FOR ADEQUATE VEGETATIVE ESTABLISHMENT IN ACCORDANCE WITH SECTION B-4 VEGETATIVE STABILIZATION. SIDE SLOPES MUST BE MAINTAINED AT NO STEEPER THAN A 2:1 RATIO. THE STOCKPILE AREA MUST BE KEPT FREE OF EROSION. IF THE VERTICAL HEIGHT OF A STOCKPILE EXCEEDS 20 FEET FOR 2:1 SLOPES, 30 FEET FOR 3:1 FESSIONAL CERTIFICATION: LHERERY SLOPES, OR 40 FEET FOR 4:1 SLOPES, BENCHING MUST BE PROVIDED IN ACCORDANCE WITH SECTION B-3 LAND GRADING PARED OR APPROVED BY ME AND THA M A DULY LICENSED PROFESSIONAL NGINEER UNDER THE LAWS OF THE STATE H-5 STANDARDS AND SPECIFICATIONS FOR DUST CONTROL **DEFINITION** CONTROLLING THE SUSPENSION OF DUST PARTICLES FROM CONSTRUCTION ACTIVITIES. <u>PURPOSE</u> TO PREVENT BLOWING AND MOVEMENT OF DUST FROM EXPOSED SOIL SURFACES TO REDUCE ON AND OFF-SITE DAMAGE INCLUDING **CONDITIONS WHERE PRACTICE APPLIES** AREAS SUBJECT TO DUST BLOWING AND MOVEMENT WHERE ON AND OFF-SITE DAMAGE IS LIKELY WITHOUT TREATMENT. 1. MULCHES: SEE SECTION B-4-2 SOIL PREPARATION, TOPSOILING, AND SOIL AMENDMENTS, SECTION B-4-3 SEEDING AND MULCHING, AND SECTION B-4-4 TEMPORARY STABILIZATION. MULCH MUST BE ANCHORED TO PREVENT BLOWING. 2. VEGETATIVE COVER: SEE SECTION B-4-4 TEMPORARY STABILIZATION. 3. TILLAGE: TILL TO ROUGHEN SURFACE AND BRING CLODS TO THE SURFACE. BEGIN PLOWING ON WINDWARD SIDE OF SITE. CHISEL-TYPE PLOWS SPACED ABOUT 12 INCHES APART, SPRING-TOOTHED HARROWS, AND SIMILAR PLOWS ARE EXAMPLES OF EQUIPMENT THAT MAY PRODUCE THE DESIRED EFFECT. 4. IRRIGATION: SPRINKLE SITE WITH WATER UNTIL THE SURFACE IS MOIST. REPEAT AS NEEDED. THE SITE MUST NOT BE IRRIGATED TO THE POINT THAT RUNOFF OCCURS. 5. BARRIERS: SOLID BOARD FENCES, SILT FENCES, SNOW FENCES, BURLAP FENCES, STRAW BALES, AND SIMILAR MATERIAL CAN BE USED TO CONTROL AIR CURRENTS AND SOIL BLOWING. 6. CHEMICAL TREATMENT: USE OF CHEMICAL TREATMENT REQUIRES APPROVAL BY THE APPROPRIATE PLAN REVIEW AUTHORITY





MORGNEC SOLAR- PROPOSED BUFFER PLANTING RENDERING (2 YEAR GROWTH)

DEPCOM POWER®

June 20, 2024





LANDSCAPING MAINTENANCE AND INSPECTION AGREEMENT

THIS LANDSCAPING MAINTAINENCE AND INSPECTION AGREEMENT ("Agreement") made this	
day of, 2023 by, a limited liability company ("Responsible Party")	
and, a limited liability company (collectively, "Owner") for the benefit of the COUNTY COMMISSIONERS OF KENT COUNTY, MARYLAND, a body politic and corporate of the State of Maryland ("County").	
RECITALS:	
WHEREAS, the Responsible Party is the owner/operator of the utility-scale solar array ("Project") located upon the parcel of land situated, lying and being in the 4th Election District of Kent County, State of Maryland and designated as Parcel 40 of Kent County Tax Map 37, Parcel 174 of Kent County Tax Map 37, and Parcel 232 of Kent County Tax Map 37 ("Property"); and	
WHEREAS, the Responsible Party received conditional plan approval from the Kent County Department of Planning and Zoning ("Department") on, and final approval on,; and	d
NOW, THEREFORE, the Responsible Party and Owner hereby make the Following declarations and agreements for the benefit of the County:	
1. The Responsible Party shall plant, maintain, manage, and monitor for so long as the Project is in operation, the plantings shown on the Final Landscape Plan prepared by Kimley-Horn and Associates, Inc. dated,, and maintained at the Department.	
2. The Responsible Party's maintenance and monitoring duties and the survival and planting surety release periods under Section 11 G of the Kent County land use ordinance shall commence when the Department verifies that all plantings are installed as required by the Landscape Buffer Plan.	
3. The Responsible Party shall perform all tasks necessary to ensure required survivability of the landscape buffer surrounding the Project and shall be responsible for initiating/enacting protective measures outlined on the Buffer Landscape Plan for the control of invasive species, pests, weeks, predation, and mechanical damage throughout the year period following commencement of the Responsible Party's maintenance and monitoring duties.	3
4. The Responsible Party and Owner grant the County, its agents and representatives, the right to enter onto the Project site to conduct inspections within forty-eight (48) hours of notice given to the Responsible Party. The County may inspect the buffer plantings to the extent it deems necessary during the period of this Agreement to ensure that the installation and maintenance is being performed in accordance with the requirements of this Agreement and the Landscape Buffer Plan .	
 This Agreement shall run with and bind the land should the Property transfer to new landowners while this Agreement remains in force and effect. The Responsible Party, his, her, or its successors and assigns, are solely accountable for the protection and 	

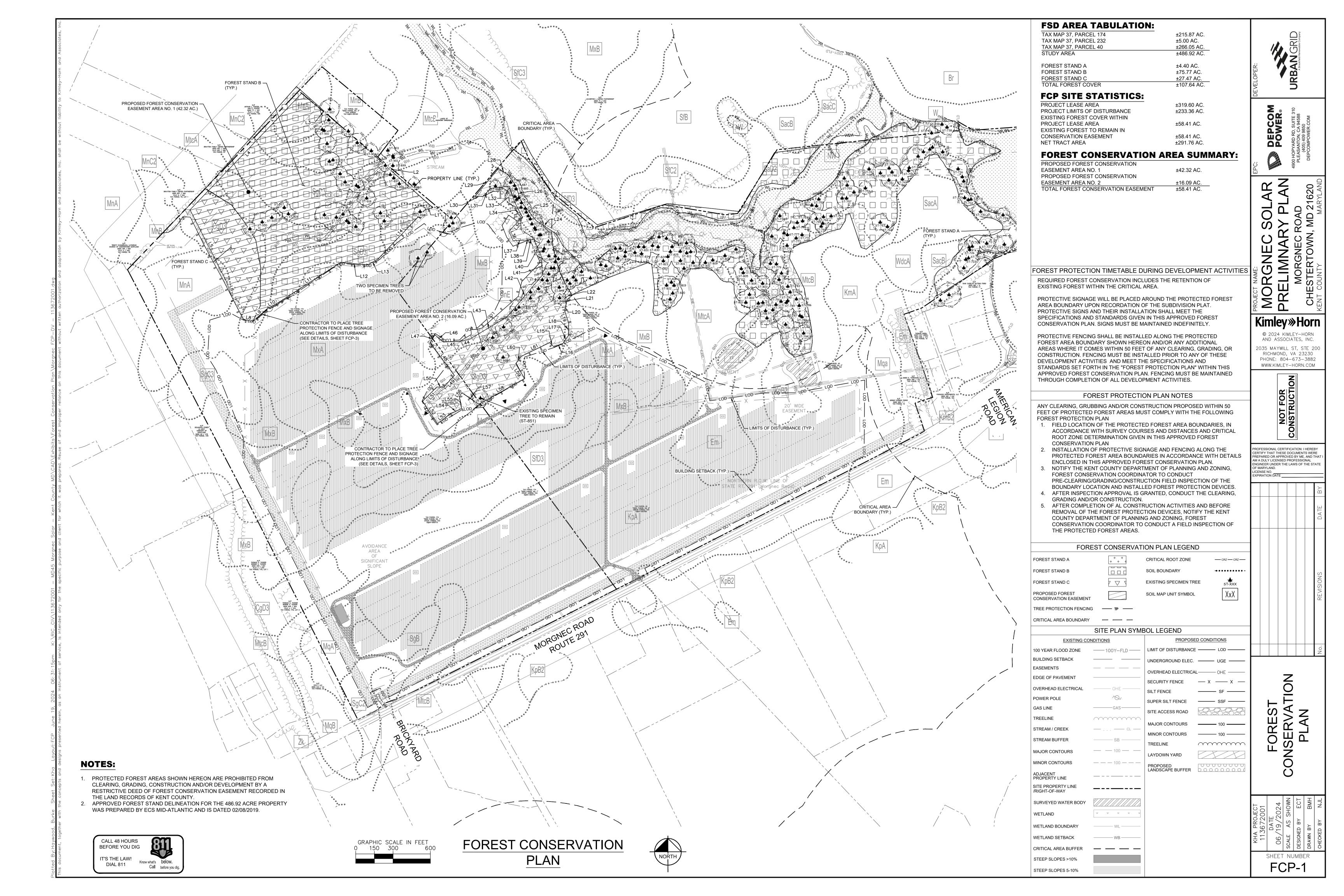
- maintenance of the landscape buffer and are also responsible for notifying subsequent landowners of this Agreement and the requirements of the <u>Landscape Buffer Plan</u>.
- 6. The Responsible Party agrees that the County shall record this Agreement among the Land Records for Kent County and that the Responsible Party shall pay the recording fee prior to receiving plan approval.
- 7. During the term of this Agreement, the Responsible Party shall remove dead and dying plant material and plant replacement plant material as directed by the County. In the event the Responsible Platy fails or refuses to do so, the County may enter the Property to remove dead and dying plant material and install new landscape stock. The cost incurred by the County shall be assessed as a lien against the Property if unpaid by the Responsible Party and may be collected by the County in the same manner as unpaid property taxes are collected.
- 8. Owner joins this Agreement to acknowledge the commitments made by the Responsible Party and hereby grants the County the right to enter the Property, at any time after forty-eight (48) hours of written notice from the County to the Responsible Party and Owner, for purposes of inspection and enforcement of all codes, regulations, laws, and requirements imposed upon or applicable to the Project.

[NOTARY AND SIGNATURE APPEAR ON FOLLOWING PAGES]

As witness the h	nands and seals c	of the parties of	on the dat	e first	above written.	
WITNESS:					, LLC	
			Name:			
			Addres			
STATE OF	_, COUNTY OF		<u></u> ,			_
Notary Public of the Sta	te of	, in th	e County	afores	_, before me, the subscril said, personally appeared lged the foregoing instrur	
· <u></u>	٠.				or the purposes therein c	
WITNESS my ha	nd and Notarial S	Seal.				
My Commission Expires	:		Notary	Public		_

SIGNATURES CONTINUE ON FOLLOWING PAGE

WITNESS:	, LLC		
	Ву:	(SEAL)	
	Name:		
	Title:		
	Address:		
STATE OF, COUNTY OF			
I HEREBY CERTIFY, that on this day of Notary Public of the State of, in t, known to me or satisfactorily proven to me act and who further acknowledged that executed the WITNESS my hand and Notarial Seal.	he County aforesaid, personally who acknowledged the foregoi	appeared ng instrument to b	
	Notary Public		
My Commission Expires:	Notary Fublic		
My Commission Expires: Approved as to legal sufficiency.	TVOTATY T ADMIC		



TREE #	SPECIES NAME	DBH (IN)	MORGNEC SOLAR SPECI CRITICAL ROOT ZONE RADIUS (FT)	CONDITION	COMMENTS
ST-719 ST-720	Southern Red Oak Sweet Gum	34 63	51.0 94.5	Fair Fair	One dead limb Double leader, dead limbs, ivy cover
ST-721	Sweet Gum	32	48.0	Fair	lvy cover
ST-722	Tulip Poplar	55	82.5	Fair	Few dead limbs, lvy cover
ST-723	Tulip Poplar	50.5	75.8	Good	Some ly at base
ST-724 ST-725	Tulip Poplar Tulip Poplar	33 57.5	49.5 86.3	Fair Good	One dead limb Double leader
ST-726	Tulip Poplar	36	54.0	Fair	Dead limbs, ly Cover
ST-727	Tulip Poplar	40.5	60.8	Good	Dead limbs
ST-728	White Oak	47	70.5	Good	Dead limbs, double leader
ST-729	Swamp Chestnut Oak	37	55.5	Fair	lvy cover
ST-730	Southern Red Oak	43	64.5	Good	n/a
ST-731 ST-732	Southern Red Oak Southern Red Oak	32 32	48.0 48.0	Good Fair	n/a lwy cover
ST-732	Southern Red Oak	33	49.5	Good	Dead limbs
ST-734	Southern Red Oak	32	48.0	Good	Dead limbs
ST-735	Southern Red Oak	34	51.0	Good	Dead limbs
ST-736	Southern Red Oak	48	72.0	Good	Dead limbs
ST-737	Southern Red Oak	32	48.0	Good	Dead limbs
ST-738 ST-739	Chestnut Oak Chestnut Oak	41 38	61.5 57.0	Good Good	Dead limbs Dead limbs
ST-740	Chestnut Oak Chestnut Oak	34	51.0	Good	Dead limbs Dead limbs
ST-741	Southern Red Oak	36	54.0	Fair	Large dead limbs
ST-742	Chestnut Oak	34.5	51.8	Fair	Dead limbs, quadruple leaders
ST-743	Chestnut Oak	33	49.5	Fair	Dead limbs, one-sided
ST-744	Tulip Poplar	60	90.0	Fair	Triple leaders, dead limbs, tree stand
ST-745	Southern Red Oak	47	70.5	Fair/Poor	Multiple large dead limbs
ST-746	Chestnut Oak	32	48.0	Good	Small dead limbs
ST-747 ST-748	White Oak American Beech	32 45	48.0 67.5	Good Fair	Dead limbs Large dead limbs
ST-748 ST-749	Chestnut Oak	38	57.0	Good	Double leader, dead limbs
ST-750	American Beech	38	57.0	Fair	Large dead limbs
ST-751	Chestnut Oak	38	57.0	Good	Dead limbs, double leader
ST-752	American Beech	33	49.5	Fair	Multiple large dead limbs
ST-753	American Beech	34	51.0	Fair	Large dead limbs
ST-754	Swamp Chestnut Oak	32 38	48.0 57.0	Fair Fair	Dead limbs
ST-755 ST-756	White Oak American Beech	38	57.0 46.5	Fair Good	Large dead limbs Dead limbs
ST-757	Tulip Poplar	53	79.5	Fair/Poor	Quadruple leaders, damage from fallen tree
ST-758	Chestnut Oak	30	45.0	Good	Slight lean
ST-759	White Oak	32	48.0	Fair	Large dead limbs
ST-760	Chestnut Oak	32	48.0	Fair	Multiple large dead limbs
ST-761	White Oak	37	55.5	Fair	Dead limbs
ST-762 ST-763	Northern Red Oak White Oak	43 42	64.5 63.0	Fair Poor	Dead limbs, water sprouts Split, many large dead limbs
ST-764	Southern Red Oak	33	49.5	Fair	Dead limbs, one-sided
ST-765	American Beech	32	48.0	Fair	Trunk damage, dead limbs
ST-766	American Sycamore	34	51.0	Good	Dead limbs
ST-767	Tulip Poplar	34	51.0	Fair	Dead leader, large dead limbs
ST-768	Northern Red Oak	33	49.5	Poor	Hollow, large dead limbs
ST-769 ST-770	Northem Red Oak American Beech	30 35	45.0 52.5	Fair Fair	Large dead limbs Large dead limbs
ST-770	Southern Red Oak	41	61.5	Fair	Large dead limbs Large dead limbs
ST-772	Southern Red Oak	35	52.5	Fair	Double leader, large dead limbs
ST-773	White Oak	31	46.5	Fair	Large dead limbs
ST-774	Northern Red Oak	32	48.0	Fair	Large dead limbs
ST-775	White Oak	45	67.5	Fair	Large dead limbs
ST-776	Northern Red Oak	36	54.0	Fair	Large dead limbs
ST-777 ST-778	White Oak Chestnut Oak	40 34	60.0 51.0	Fair Fair	Large dead limbs Triple leaders, dead limbs
ST-779	White Oak	42	63.0	Fair	Multiple large dead limbs
ST-780	Northern Red Oak	34	51.0	Fair	Double leaders, dead limbs
ST-781	Northern Red Oak	30	45.0	Fair	Dead limbs
ST-782	American Beech	30	45.0	Poor	Hollow, large dead limbs
ST-783	Chestnut Oak	40	60.0	Fair	Triple leader, dead limbs
ST-784 ST-785	Northern Red Oak Southern Red Oak	37 33	55.5 49.5	Fair Fair	Large dead limbs Leani ng, one-sided, dead limbs
ST-786	Southern Red Oak	38	57.0	Fair	Dead limbs
ST-787	Southern Red Oak	41	61.5	Fair	Large dead limbs
ST-788	Northern Red Oak	35	52.5	Fair	One-sided, dead limbs
ST-789	Tulip Poplar	46	69.0	Fair	Double leaders, dead limbs
ST-790	Tulip Poplar	34	51.0	Fair	Quadruple leaders, vines, dead limbs
ST-791 ST-792	Tulip Poplar Tulip Poplar	35 39	52.5 58.5	Fair Fair	Triple le aders, heavy vines, large dead limbs Large dead limbs, root damage
ST-792 ST-793	Tulip Poplar Tulip Poplar	39	45.0	Fair Fair/Poor	Vines, large dead limbs, root damage Vines, large dead limbs, hollow at base
ST-794	Tulip Poplar	42	63.0	Fair/Poor	Triple leader, heavy vines, dead limbs
ST-796	Northem Red Oak	44	66.0	Fair	Vines, dead limbs, double trunk
ST-797	White Oak	37	55.5	Fair	Large dead limbs
ST-798	White Oak	32	48.0	Poor	Large dead limbs
ST-799 ST-800	White Oak White Oak	41 31	61.5 46.5	Fair Fair	Triple leader, large dead limbs Large dead limbs
ST-800 ST-801	White Oak	60	90.0	Fair Fair	Vines, dead limbs
ST-802	White Oak	30	45.0	Fair	Large dead limbs
ST-803	Northern Red Oak	40	60.0	Fair	Large dead limbs, hole at base
ST-804	Northem Red Oak	42	63.0	Fair	Large dead limbs
ST-805	White Oak	41	61.5	Fair	Large dead limbs
ST-806	White Oak	37	55.5	Fair	Large dead limbs
ST-807 ST-808	Chestnut Oak	49	73.5	Fair	Double leader, dead limbs Dead limbs
ST-808 ST-809	American Beech Southern Red Oak	31 57	46.5 85.3	Good Fair	Triple leader, tree stand
ST-810	Southern Red Oak	30	45.0	Fair	Leaning, one-sided
ST-811	Northern Red Oak	36	54.0	Fair	Large dead limbs
ST-812	American Beech	32	48.0	Fair	Large dead limbs
ST-813	Tulip Poplar	44	66.0	Fair	Large dead limbs, tree stand
ST-814	Tulip Poplar	45	66.9	Poor	Double leader, dead limbs
ST-815	American Beech	30	45.0	Fair	Large dead and broken limbs
ST-816	Tulip Poplar	46	69.0 51.0	Fair Fair	Quadruple leaders, broken leader, trunk damage
ST-817 ST-818	Northern Red Oak Tulip Poplar	34 31	51.0 46.5	Fair Fair	Large dead and broken limbs Trunk hollow, large dead limbs
ST-818 ST-819	Southern Red Oak	37	46.5 55.5	Fair/Poor	Vines, many large dead limbs
ST-820	Tulip Poplar	53	79.5	Fair/Poor	Dead leader, vines
	White Oak	43	64.5	Fair	Large dead limbs
ST-821	Black Walnut	49	73.5	Fair	Large dead limbs
ST-821					
ST-822 ST-823	Northem Red Oak	41	61.5	Fair	Large dead limbs
ST-822		41 33 30	61.5 49.5 45.0	Fair Fair Good	Large dead limbs Many large dead limbs Dead limbs

ST-827	American Beech	33	49.5	Fair/Poor	Broken leaders
ST-828	American Beech	32	48.0	Fair	Trunk damage, dead limbs
ST-829	American Beech	37	55.5	Fair	Large dead and broken limbs
ST-830	American Beech	41	61.5	Fair	Trunk damage, dead limbs
ST-831	American Beech	32	48.0	Fair/Poor	Rotten at base, large dead and broken limbs
ST-832	American Beech	35	52.5	Fair	Large dead and broken limbs
ST-833	American Beech	45	67.5	Fair	Large dead and broken limbs
ST-834	Northern Red Oak	49	73.5	Fair	Large dead limbs
ST-835	American Beech	32	48.0	Fair	Large dead limbs
ST-836	American Beech	32	48.0	Fair	Dead limbs
ST-837	American Beech	43	64.5	Fair	Large dead limbs
ST-838	American Beech	33	49.5	Fair	Large dead limbs
ST-839	American Beech	31	46.5	Fair	Large dead limbs
ST-840	Northern Red Oak	30	45.0	Fair	Large dead and broken limbs
ST-841		32	48.0	Fair	Large dead limbs, crooked
	Tulip Poplar				
ST-842	Tulip Poplar	38	57.0	Fair	Triple leaders, large dead limbs
ST-843	American Beech	35	52.5	Fair	Dead limbs
ST-844	Tulip Poplar	33	49.5	Good	Dead limbs
ST-845	Tulip Poplar	30	45.0	Good	Dead limbs
ST-846	American Beech	32	48.0	Good	Dead limbs
ST-847	Tulip Poplar	38	57.0	Fair	Vines, dead limbs
ST-848	Tulip Poplar	42	63.0	Good	Dead limbs
ST-849	Tulip Poplar	34	51.0	Fair	Vines, dead limbs
ST-850	Black Cherry	31	46.5	Fair/Poor	Heavy vines, many dead limbs
ST-851	Black Cherry	42	63.0	Fair/Poor	Heavy yines, many large dead and broken limbs
ST-852	Black Wal nut	30	45.0	Fair	Heavy vines, dead limbs
ST-853	Black Cherry	45	67.5	Fair/Poor	Trunk hole, many dead limbs, heavy vines
ST-854	Tulip Poplar	32	48.0	Fair/Poor	Trunk and root damage, dead limbs
ST-855	Black Walnut	39	58.5	Fair/Poor	Vines, many large dead limbs
ST-856	Tulip Poplar	47	70.5	Fair	Vines, large dead limbs
ST-857	White Oak	40	60.0	Fair	Vines, large dead limbs
ST-858	Northern Red Oak	42	63.0	Fair	Large dead limbs
ST-859	Southern Red Oak	34	51.0	Fair	Double leader, dead limbs
ST-860	Northern Red Oak	37	55.5	Fair	Large dead limbs
ST-861	Northern Red Oak	32	48.0	Fair	Dead limbs, water sprouts
ST-862	Tulip Poplar	31	46.5	Good	Dead limbs
ST-863	Tulip Poplar	32	48.0	Good	Dead limbs
ST-864	Chestnut Oak	32	48.0	Fair	Dead limbs
ST-865	Red Maple	32	48.0	Fair	Dead limbs, slight lean
ST-866	Tulip Poplar	31	46.5	Poor	Half dead
ST-867	Tulip Poplar	37	55.5	Fair	Dead leader
ST-868	Tulip Poplar	39	58.5	Fair	Vines, dead limbs
ST-869	Tulip Poplar	33	49.5	Fair	Dead limbs
ST-870	Tulip Poplar	50	75.0	Fair	Double leader, large dead limbs
ST-871	Tulip Poplar	43	64.7	Fair	Double leader, large dead limbs
ST-872	Tulip Poplar	31	46.5	Fair	Dead limbs
ST-873	Tulip Poplar	46	69.0	Good	Double leader, dead limbs
ST-874	Tulip Poplar	32	48.0	Fair	Large dead limbs
ST-875	Tulip Poplar	60	90.0	Fair	Double leader, dead limbs
ST-876	Tulip Poplar	36	54.0	Fair	Large dead limbs
ST-877	Tulip Poplar	31	46.5	Fair	Triple leader, large dead limbs
ST-878	Southern Red Oak	33	49.5	Fair	One-sided, dead limbs
ST-879	Tulip Poplar	33	49.5	Good	Dead limbs
ST-880	American Beech	31	46.5	Fair	One-sided, dead limbs
ST-881	Red Maple	34	51.0	Fair	Leaning, dead limbs
ST-882	Tulip Poplar	39	58.5	Fair	Double leader, dead limbs
ST-883	Tulip Poplar	30	45.0	Fair	Dead limbs
ST-884	Tulip Poplar	50	75.0	Fair	Large dead limbs
ST-885	American Beech	32	48.0	Fair	Dead limbs, slight lean
ST-886	Southern Red Oak	32	48.0	Fair	Large dead limbs
ST-887	American Beech	32	48.0	Fair	Large dead limbs
ST-888	Tulip Poplar	30	45.0	Fair	Large dead limbs
ST-889	Northern Red Oak	40	60.0	Fair	Vines, large dead limbs
ST-890	White Oak	31	46.5	Fair	Large dead limbs
ST-890 ST-891	White Oak	32	48.0	Fair	Double leader, dead limbs, chain in tree
ST-892			58.5		
	Northern Red Oak	39		Fair	Large dead limbs
ST-893	Southern Red Oak	47	70.5	Fair	Triple leader, vines, dead limbs
ST-894	White Oak	32	48.0	Fair	Large dead limbs
ST-895	Tulip Poplar	32	48.0	Fair	Double leader, large dead limbs
ST-896	Tulip Poplar	35	52.5	Good	Dead limbs
ST-897	Southern Red Oak	53	79.5	Fair	Double leader, large dead limbs
ST-898 ST-899	Tulip Poplar	32 33	48.0 49.5	Fair Fair	Large dead limbs
ST-899 ST-900	Tulip Poplar	33	49.5 51.0	Fair	Large dead limbs
	Tulip Poplar		51.0 57.0	Fair	Large dead limbs
ST-901 ST-902	Tulip Poplar	38			Large dead limbs
	Tulip Poplar	32	48.0 60.0	Fair Fair	Large dead limbs
ST-903 ST-904	Tulip Poplar	40 34	51.0	Fair	Large dead limbs
	Tulip Poplar Southern Red Oak		73.5		Large dead limbs
ST-905		49		Fair	Many large dead limbs, barbed-wire fence
ST-906	White Oak	30	45.0 76.5	Fair	Large dead limbs
ST-907	Tulip Poplar	51	76.5	Good	Large dead limbs
ST-908	White Oak	41	61.5	Fair Fair/Poor	Large dead limbs
ST-909	Tulip Poplar	36	54.0		Dead leader
ST-910	American Beech	44	66.0	Fair	Dead limbs
ST-911	White Oak	44	66.0	Fair	Large dead limbs
ST-912	Tulip Poplar	51	76.5	Fair	Triple leader, large dead limbs
ST-913	Northern Red Oak	34	51.0	Fair	Large dead limbs
ST-914	Tulip Poplar	36	54.0 72.0	Fair	Double leader, large dead limbs
ST-915	Tulip Poplar	48	72.0	Fair	Double leader, large dead limbs
ST-916	Tulip Poplar	38	57.0	Fair	Double leader, large dead limbs
ST-917	Tulip Poplar	31	46.5	Fair	Double leader, large dead limbs
ST-918	Tulip Poplar	45	67.5	Fair	Triple leader, large dead limbs
ST-919	Tulip Poplar	35	52.5	Fair	Large dead limbs
ST-920	American Beech	32	48.0	Fair	Large dead limbs
ST-921	Tulip Poplar	41	61.5	Fair	Vines, dead limbs
ST-922	Tulip Poplar	44	66.0	Fair	Vines, large dead limbs, double leader
ST-923	Tulip Poplar	33	49.5	Fair	Vines, large dead limbs
ST-924	Tulip Poplar	32	48.0	Fair	Large dead limbs
ST-925	Tulip Poplar	76	114.0	Fair/Poor	Hollow, many large dead limbs
ST-926	Tulip Poplar	50	75.0	Fair	Double leader, large dead limbs
ST-927	Tulip Poplar	32	48.0	Fair	Vines, large dead limbs
ST-928	Southern Red Oak	32	48.0	Fair	Large dead limbs
ST-929	Tulip Poplar	42	63.0	Fair	Vines, large dead limbs
ST-930	Tulip Poplar	50	75.0 51.0	Fair	'Vines, large dead limbs, double leader
ST-931	Tulip Poplar	34	51.0	Fair	Vines, large dead limbs

Vines, large dead limbs

Tulip Poplar

CONSERVATION EASEMENT METES & BOUNDS

	LINE AND	CURV	E TABL	E.
NO.	DELTA OR BRG	RADIUS	LENGTH	REMARKS
C1	Δ=31° 36′ 24″	970.00'	535.09'	
L1	N 75°46'39" E		63.53'	
L2	N 48°21'37" W		942.86	
L3	N 50°01'55" W		455.89'	
L4	S 43°47'12" W		1296.82	
L5	S 26°56'12" E		650.62	
L6	S 18°49'32" E		124.01	
L7	S 27°09'15" E		205.61	
L8	S 78°58'29" E		78.09'	
L9	N 48°51'29" E		157.25	
L10	N 61°49'52" E		97.52	
L11	N 57°13'22" E		595.98	
L12	S 85°04'43" E		218.20'	
L13	N 61°03'42" E		91.71'	
L14	N 43°43'39" E		551.82'	
L15	S 45°00'00" E		48.14'	
L16	N 68°57'45" E		79.02'	
L17	N 34°17'13" E		75.53'	
L18	N 1°41'05" E		96.49	
L19	N 17°58'09" W		110.34	
L20	N 14°28'13" E		49.03'	
L21	N 9°00'40" W		51.41'	
L22	N 52°01'43" E		61.04'	
L24	N 56°46'50" W		148.68'	
L25	N 38°03'42" W		194.85	
L26	N 19°00'22" W		137.77	
L27	N 35°43'39" W		101.62'	
L28	N 55°04'50" W		93.55'	
L29	S 40°17'16" W		295.48'	
L30	N 90°00'00" E		62.41'	
L31	N 45°46'23" E		93.80'	

NO	LINE AND			
NO.	DELTA OR BRG	RADIUS		REMARKS
L32	N 83°41'56" E		148.77	
L33	S 18°12'00" E		129.87	
L34	S 27°07'17" E		140.43	
L35	S 44°01'35" W		155.84	
L36	S 23°01'44" E		83.77	
L37	N 87°34'44" E		104.45	
L38	N 80°33'23" E		32.08'	
L39	S 85°49'21" E		34.13'	
L40	S 23°15'43" E		153.16'	
L41	S 1°50'52" E		143.38	
L42	S 40°10'54" W		437.74	
L43	S 59°08'32" W		344.40'	
L44	S 7518'53" W		88.80'	
L45	S 88°54'07" W		133.02	
L46	N 48 * 59'27" W		86.46	
L47	S 32°28'16" W		73.97'	
L48	S 36°34'23" E		328.49	
L49	S 42°16'25" W		126.51	
L50	N 90°00'00" W		56.73'	
L51	S 45°00'00" W		160.47	
L52	S 33°16'30" E		217.15'	
L53	N 51°37'57" E		127.30'	
L54	N 6513'29" E		102.52	
L55	N 10°00'29" W		97.94'	
L56	N 32°28'16" E		36.99'	
L57	S 55°29'29" E		165.24	
L58	N 60°41'03" E		422.93'	
L59	N 31°01'35" W		139.56	
L60	N 36°23'04" E		73.44	
L61	N 64°17'24" E		255.02	

Map Unit Symbol	Map Unit Name	Hydric Soil (Y/N)	Prime Agricultural Soils (Y/N)	K-Valu	
Ax	Axis mucky silt loam	Υ	N ,	0.32	
Bs	Bibb silt loam	Υ	N	0.49	
Bt	Bibb variant silt loam	Υ	N	0.28	
DA	Butlertown-Mattapex silt loams, 0 to 2	Y		0.40	
BuA	percent slopes	r	ī	0.49	
BuB2	Butlertown-Mattapex silt loams, 2 to 5 percent slopes, moderately eroded	Y	N	0.49	
CgD3	Colts Neck gravelly loam, 10 to 15 percent slopes, severely eroded	N	N	0.20	
	Colts Neck and Sassafras soils, 15 to			+	
CnE	40 percent slopes	Υ	N	0.20	
Em	Elkton silt loam, 0 to 2 percent slopes	Y	N	N/A	
lk	luka silt loam, rarely flooded	N			
IIV	Keyport fine sandy loam, 0 to 2 percent			0.55	
KmA	slopes	Y	Υ	0.32	
	Keyport fine sandy loam, 2 to 5 percent				
K.B2	slopes	Υ	N	0.32	
КрА	Keyport silt loam, 0 to 2 percent slopes	Y	Agricultural Soils (Y/N) N 0.33 N 0.45 N 0.45 N 0.45 N 0.45 N 0.26 N 0.26 N 0.35 Y 0.45 N 0.45	0.49	
KpB2	Keyport silt loam, 2 to 5 percent slopes	Y			
Прыг	Matapeake silt loam, 0 to 2 percent			0.49	
MnA	slopes	N	Υ	0.49	
MnB	Matapeake silt loam, 2 to 5 percent slopes	N	Υ	0.49	
MnC2	Matapeake silt loam, 5 to 10 percent	N	N	0.55	
	slopes, moderately eroded				
MtcA	Mattapex silt loam, 0 to 2 percent	Y	N	0.49	
	slopes, Mid-Atlantic Coastal Plain Mattapex silt loam, 2 to 5 percent				
MtcB		Y	Υ	0.49	
	slopes, Mid-Atlantic Coastal Plain Mattapex-Matapeake-Butlertown silt			+	
MxA	loams, 0 to 2 percent slopes	Y	Υ	0.49	
	Mattapex-Matapeake-Butlertown silt			+	
MxB	loams, 2 to 5 percent slopes	Y	Υ	0.49	
	Sassafras sandy loam, 0 to 2 percent				
SacA	slopes, Mid-Atlantic Coastal Plain	N	Υ	0.20	
	Sassafras sandy loam, 2 to 5 percent				
SacB	slopes, Mid-Atlantic Coastal Plain	N	Υ	0.20	
	Sassafras sandy loam, 5 to 10 percent			+	
SacC	slopes, Mid-Atlantic Coastal Plain	N	N	0.49	
	Sassafras sandy loam, 10 to 15				
SaD2	percent slopes, moderately eroded	N	N	0.49	
	Sassafras loam, 5 to 10 percent				
SfC3	slopes, severely eroded	N	N	0.49	
	Sassafras loam, 10 to 15 percent				
SfD3	slopes, severely eroded	N	N	0.49	
	Sassafras gravelly loam, 0 to 5 percent			+	
SgB	slopes	N	Υ	0.20	
	Sassafras gravelly loam, 5 to 10			+	
SgC2	percent slopes, moderately eroded	N	N	0.20	
	Sassafras gravelly loam, 5 to 10			+	
SgC3	percent slopes, severely eroded	N	N	0.20	
	Sassafras gravelly loam, 10 to 15			 	
SgD3	percent slopes, severely eroded	N	N	0.24	
W	Water	N	N	N/A	
	Woodstown sandy loam, 0 to 2 percent				
WdcA		Y	Υ	0.15	

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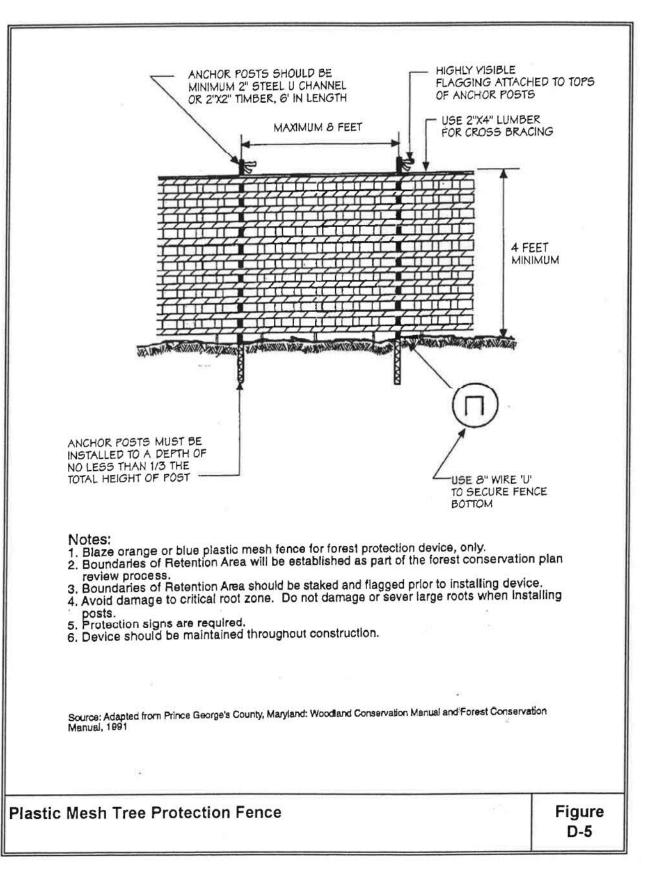
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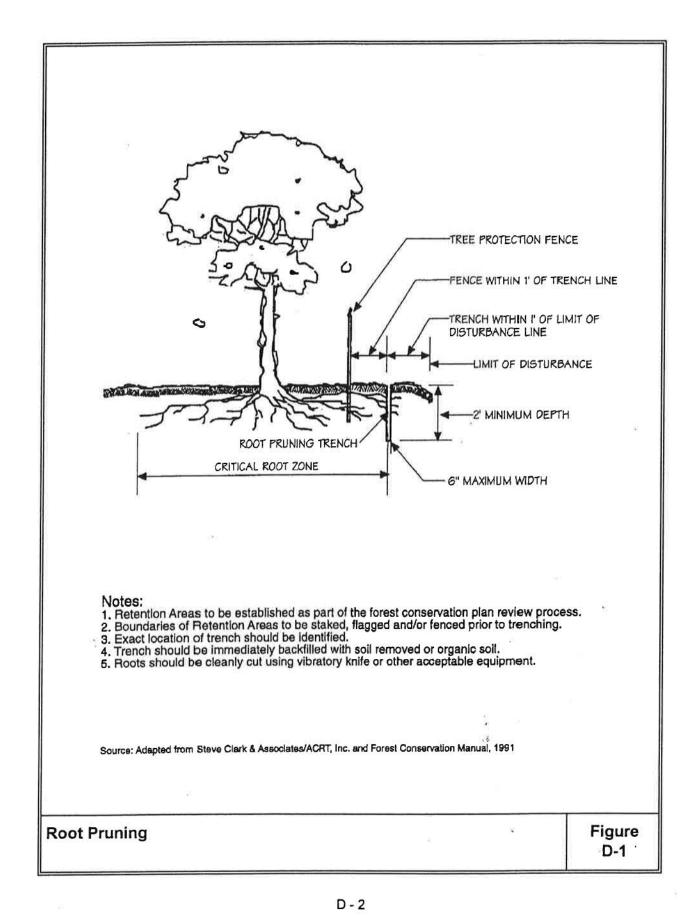
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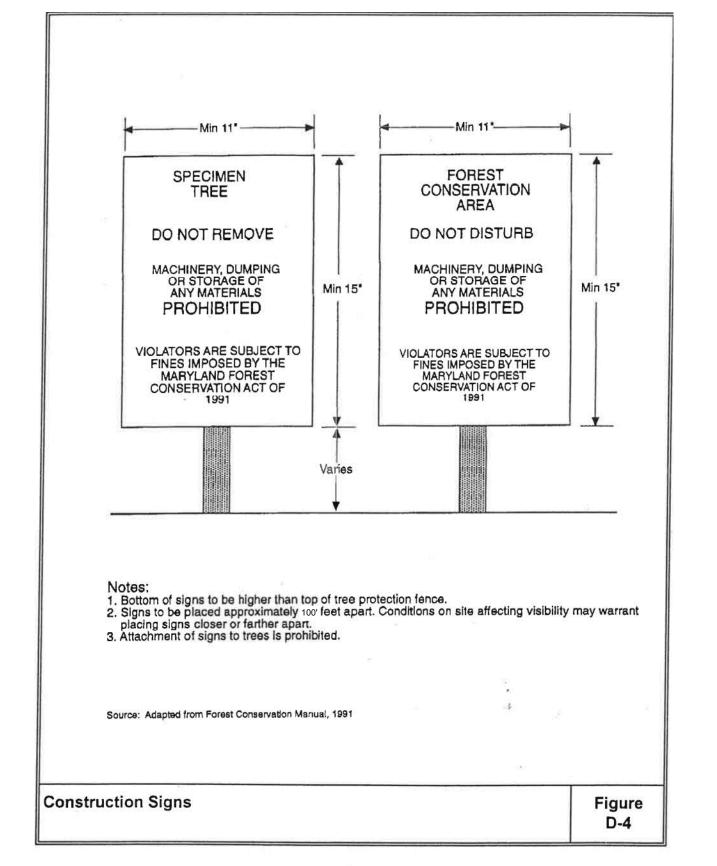
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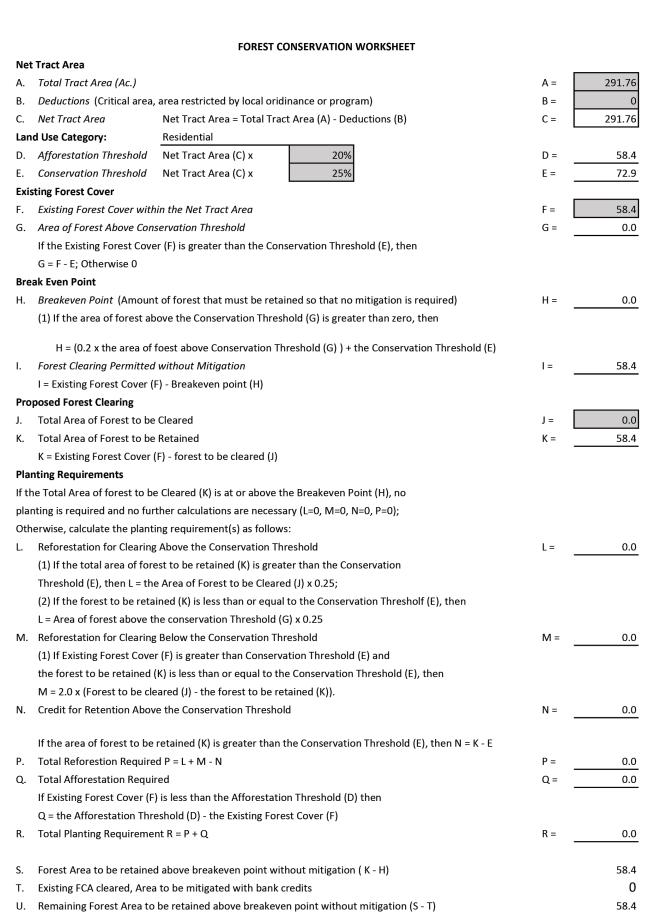
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D - 6



v Mitigation Required

D - 5

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CP DETAILS WORKSHEE

Solar Glare and Glint Analysis Report

for

Morgnec Solar Chestertown, MD

June 2024

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<u>Introduction</u>

The Morgnec Solar Project (Project) is 176 acres in Kent County, Maryland. The site is situated on the north side of Morgnec Rd (MD 291), half a mile east of Washington Ave (MD 213), and a little over 1 mile northeast of Chestertown's downtown. The use of the data is up to the client, including the determination if any glare is allowed for this development and if further steps should mitigation be required for any glare identified. See Figure 1 for vicinity map with receptors and Project location.

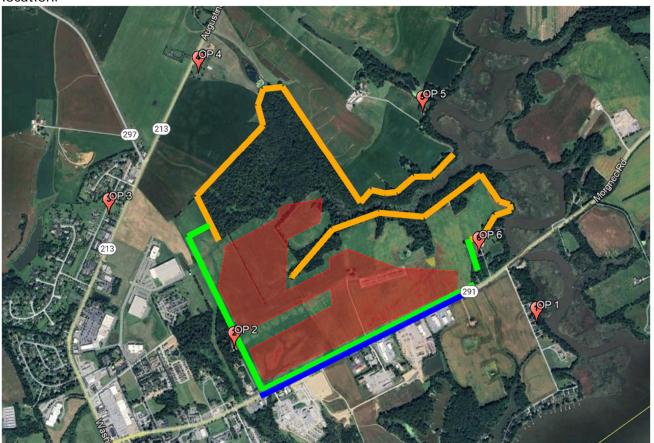


Figure 1: Project Location

Kimley Horn completed a glare analysis using the Solar Glare Hazard Analysis Tool (SGHAT) software, developed by Sandia Laboratories, now hosted by ForgeSolar. The SGHAT software is considered an industry-best practice and conservative model that effectively models the potential for glare at defined receptors from defined solar energy generating facilities.

Receptors & Methodology

Kimley Horn included as part of the analysis the six observation points within one mile of the Project and Morgnec Road along the Project frontage. The analysis is based on Preliminary Design Documents from June 2024. The points used for observation points were modeled without restricting the field of view, to ensure the results were conservative in nature. The receptors for roadways were limited to a 50-degree field of view to the left and right simulating the extent of peripheral vision. Glare that is beyond 50 degrees left or right from a driver's line-of-sight is not

considered a safety hazard for the flight approaches. The PV array was modeled with single axis tracking, smooth glass with anti-reflective coating, and shade-slope backtracking. The panel specifications, roadways, observation points, and obstruction specifications can be found in Appendix A. All receptors analyzed are listed below including route receptors, and observation points, shown in Table 1.

Receptors	Location	Description
6 Observation	Single family homes identified	Analyzed within one mile of Project
Points	all around site	
Morgnec Road	South of Project	Two-way road running north-southwest
		to south-northeast

Table 1: Receptor Descriptions

Kimley Horn utilized the ForgeSolar Glare Gauge software tool to perform the glare analysis. If any receptor showed signs of glare, the tool calculated the retinal irradiance (brightness) and subtended angle (size divided by distance) of the glare source. By considering retinal irradiance and subtended angle, the analysis could predict ocular hazards ranging from low potential for temporary after-image to retinal burn. Based on the predicted retinal irradiance (intensity) and the subtended angle (size/distance) of the glare source to the receptor, the software categories glare into three levels shown by colors. The three glare levels are: "green" grade indicating a low potential for temporary after-image, "yellow" grade indicating the potential for temporary after-image, and "red" grade indicating the potential for retinal damage. For comparison, viewing the unfiltered sun is in the upper region of yellow glare near the red border, while solar panel glare tends to be on the border of green and yellow, approximately three orders of magnitude less than direct viewing of the sun. The three levels of glare were determined in "Ho, 2011". The different levels are displayed in Figure 2, with viewing unfiltered sun shown as a reference point.

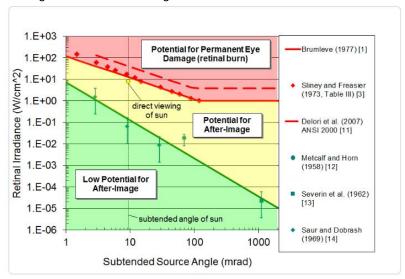


Figure 2: Glare Level Determined from "Ho, 2011"

Green and yellow glare is common from bodies of water, glass facades, and solar panel arrays. Red glare is extremely rare for PV arrays because solar panels do not concentrate glare.

According to the Federal Aviation Administration's (FAA) 2021 Final Policy, in previous years, pilots have reported glare from bodies of water and glass façades, resembling the glare produced by solar panels. The software analyzes pilot's similarly to motorists; therefore, results are similar to those found when analyzing pilots near bodies of water or existing building facades. Mitigating glare remains the focus, but it is not as significant an issue as initially thought in 2013 when the initial policy was formulated. The amount of light reflected by a surface, increases as the sunlight's angle of incidence from the surface increases as illustrated in Figure 3. The red angle of incidence yields 50% light reflected while the blue angle of incidence yields only two percent of light reflected.

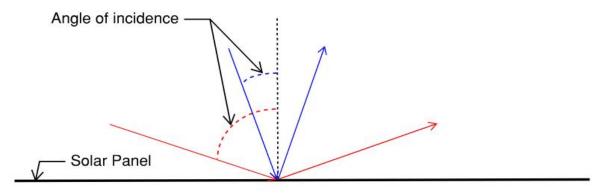


Figure 3: Reflected Light and Angle of Incidence (illustration only) on a panel

Analysis Results

The Project is not anticipated to produce any glare for the six observation points and along the adjacent route section of Morgnec Road. The tables below summarize the results for the observation points and routes. Glare is reflected in hours per year with time of day in standard time assuming clear skies, no existing topography, or manmade objects to block line of sight. Two analyses were ran simulating for trucks, sedans, and multiple proposed vegetative screening heights.

Observation Points

The observation points were modeled at a height of six foot to simulate an individual in a single-story building within one mile of the Project. All six observation points had no observed glare, see Table 2. Two existing vegetative buffers were modeled around the northern and eastern portion of the Project with a ground height of 30 feet, simulating existing trees that would block any glare in the existing condition. Additionally, two planned proposed vegetative frontage buffers were modeled on the western and southern border of the Project, each with a height of 6 and 8 foot.

Receptor	Hazard Level	Hours (per year)
	Green	0
OP 1	Yellow	0
	Red	0
	Green	0
OP 2	Yellow	0
	Red	0

	Green	0
OP 3	Yellow	0
	Red	0
	Green	0
OP 4	Yellow	0
	Red	0
	Green	0
OP 5	Yellow	0
	Red	0
	Green	0
OP 6	Yellow	0
	Red	0

Table 2: Total Yearly Glare Hazard per Observation Point Receptors

Routes

There is no expected glare for route receptors modeled along the Project frontage. The routes were modeled with a driver height of five foot to simulate an individual in a sedan vehicle as well as nine foot to model a truck drive. Morgnec Road observed no glare, see Table 3.

Receptor	Hazard Level	Hours (per year)
Morgnec Road	Green	0
	Yellow	0
	Red	0

Table 3: Total Yearly Glare Hazard per Flight Path Receptors

Conclusion

In summary, there was no glare identified, for all receptors. The model is shown in the most conservative scenario assuming there is no terrain or man-made objects blocking the line of sight from the PV arrays and receptors. The panel specifications should resemble those shown in Appendix A to aim for the same results shown in this report.

CPCN LICENSE CONDITIONS PSC CASE NO. 9499

(Below are the CPCN conditions for Morgnec Road Solar, LLC, and a description of how each condition is being met. The response to each expressed condition is in *Iltalic*. Many Conditions are requirements post site plan approval and both pre and post construction. In those instances the response is "*Agreed*" or "*So Noted*.")

1. Applicability of Conditions - Except as otherwise provided for in the following provisions, the application ("Application") for the Certificate of Public Convenience and Necessity ("CPCN") is considered to be part of this CPCN for the Morgnec Road Solar, LLC ("Morgnec Road Solar") Project ("project"). The Application consists of the original application filed with the Maryland Public Service Commission ("PSC" or "Commission") on November 30, 2018, the amended site plan provided to PPRP on July 24, 2019 (in response to PPRP Data Request 1-7), and direct testimony filed on August 2, 2019. Construction and operation of the project shall be undertaken in accordance with these conditions, which have been prepared by the Power Plant Research Program ("PPRP") in coordination with the reviewing State agencies. If there are any inconsistencies between the conditions specified below and the Application, the conditions in this CPCN shall take precedence. If CPCN conditions incorporate federal or State laws through paraphrased language, where there is any inconsistency between the paraphrased language and the actual State or federal laws being paraphrased, the applicable federal or State laws shall take precedence.

Kevin Clark, Project Developer, Morgnec Road Solar (owned by Urban Grid, 337 Log Canoe Cir. Stevensville, MD 21666 kevin.clark@urbangridco.com) will be the point person for compliance with condition 1 of the CPCN, and the point person for the County concerning implementation of conditions and state and federal laws. The timeline will be through-out the life of the project, and should Mr. Clark no longer be the point person the County will be advised of his replacement.

2. Project Scope – The project shall be constructed as a single-axis tracking photovoltaic (PV) system within the limit of disturbance and approximate dimensions (surface, in total acreage, and height) as described in the Application and as modified by these conditions and the Settlement Agreement submitted herewith. Modifications to the project's specifications that are not covered by this CPCN should be reviewed by PPRP, but must be approved by the PSC.

Kevin Clark, Morgnec Road Solar (owned by Urban Grid, 337 Log Canoe Cir. Stevensville, MD 21666 kevin.clark@urbangridco.com) will be the point person for compliance with condition 2 of the CPCN, as well as the Settlement Agreement, and the point person for the County concerning implementation of conditions and state and federal laws. The timeline will be through-out the life of the project, and should Mr. Clark no longer be the point person, the County will be advised of his replacement.

3. CPCN Expiration –

a. Construction of the project shall commence within three (3) years of receiving the CPCN (established by the date of the Final Order), and the project shall be in operation no later than four (4) years after receipt of the CPCN; otherwise, the CPCN shall expire and no longer constitute authorization to construct and operate the project.

This is a statement of the term of the CPCN which Morgnec Road Solar has accepted. Kevin Clark, Morgnec Road Solar (owned by Urban Grid, 337 Log Canoe Cir. Stevensville, MD 21666 kevin.clark@urbangridco.com) will be the point person for project construction until such time as the general contractor is engage, after which the County will be advised as to all applicable contact information for the general contractor.

b. This CPCN shall expire 30 years from the date of the beginning of commercial operations or 34 years from the date of the CPCN issuance (defined as receipt of a final unappealable Commission Order), whichever is sooner. Morgnec Road Solar may request that the PSC extend the expiration date if Kent County agrees to such an extension.

This is a statement of the term of the CPCN which Morgnec Road Solar has accepted. Kevin Clark, Morgnec Road Solar (owned by Urban Grid, 337 Log Canoe Cir. Stevensville, MD 21666 kevin.clark@urbangridco.com) will be the point person for compliance with condition 3b of the CPCN, and the point person for the County concerning implementation of conditions and compliance with state and federal laws. The timeline will be through-out the life of the project, and should Mr. Clark no longer be the point person, the County will be advised of his replacement.

- 4. Applicable Laws and Regulations Construction and operation of the solar facility shall be undertaken in accordance with this CPCN and shall comply with all applicable local, State, and federal laws and regulations, including but not limited to the following:
- a. Nontidal Wetlands COMAR 26.23.01 applies to activities conducted in nontidal wetlands and wetland buffers. An initial wetland delineation was performed by Environmental Resource, Inc. and verified by Chris Pajak with the Maryland Department of Environment on November 21, 2016. Nontidal wetland ponds shown on the preliminary plan in the vicinity of the proposed arrays were field delineated and surveyed located by Andrews, Miller & Associates in December 2016. MDE issued a letter of concurrence on August 4, 2023 in reference to the Lane Engineering Concept & Site Improvement Plans dated July 21, 2023. Morgnec Road Solar agrees that no development activities will be conducted in nontidal wetlands or wetland buffers. Kevin Clark, Morgnec Road Solar (owned by Urban Grid, 337 Log Canoe Cir. Stevensville, MD 21666 kevin.clark@urbangridco.com) will be the point person for compliance with condition 4a. of the CPCN, and the point person for the County concerning implementation of conditions and compliance with state and federal laws. The timeline will be through-out the life of the project, and should Mr. Clark no longer be the point person, the County will be advised of his replacement.

- b. Waterway Construction COMAR 26.17.04 applies to regulations governing construction activities in nontidal waters and floodplains. No waterways have been identified within the project limits. See discussion of MDE review in the Nontidal Wetlands section above. Morgnec Road Solar agrees that no development activities or construction in any waterways. Kevin Clark, Morgnec Road Solar (owned by Urban Grid, 337 Log Canoe Cir. Stevensville, MD 21666 kevin.clark@urbangridco.com) will be the point person for compliance with condition 4b. of the CPCN, and the point person for the County concerning implementation of conditions and compliance with state and federal laws. The timeline will be through-out the life of the project, and should Mr. Clark no longer be the point person, the County will be advised of his replacement.
- c. Water Quality and Water Pollution Control COMAR 26.08.01 through COMAR 26.08.04 apply to discharges to waters of the State and maintenance of surface water quality.
- d. Erosion, Sediment and Stormwater Control COMAR 26.17.01 and COMAR 26.17.02 applies to the preparation, submittal, review, approval, and enforcement of erosion, sediment and stormwater control plans, including any dewatering plans and associated water recycling plans. Preparation of Erosion, Sediment and Stormwater plans in compliance with the applicable regulations is by Kimley-Horn and Associates, Inc. Maintenance by Morgnec Road Solar. The erosion, sediment, and stormwater control plans will be approved by Kent County. Any dewatering plans or associated water recycling plans will be approved by the State of Maryland, as applicable. Kevin Clark, Morgnec Road Solar (owned by Urban Grid, 337 Log Canoe Cir. Stevensville, MD 21666 kevin.clark@urbangridco.com) will be the point person for compliance with condition 4.d. of the CPCN, and the point person for the County concerning implementation of conditions and compliance with local, state and federal laws related to the same. The timeline will be through-out the life of the project, and should Mr. Clark no longer be the point person the County will be advised of his replacement.
- e. Oil Pollution Control EPA 40 CFR 112 and COMAR 26.10.01.12 apply to the procedures for oil spill control. Kevin Clark, Morgnec Road Solar, (owned by Urban Grid, 337 Log Canoe Cir. Stevensville, MD 21666 kevin.clark@urbangridco.com) has reviewed the above reference regulations. Kevin Clark will be the point person for compliance with condition 4.e. of the CPCN, and the point person for the County concerning implementation of conditions and compliance with local, state and federal laws related to the same. The timeline will be throughout the life of the project, and should Mr. Clark no longer be the point person the County will be advised of his replacement.
- f. Forest Conservation Maryland's Forest Conservation Act (FCA), Md. Code, Sections 5-1601 through 5-1613 of the Natural Resources Article. Preparation of plans by Kimley-Horn and Associates, Inc. propose maintenance of forest protected areas by Morgnec Road Solar. Maintenance by Morgnec Road Solar. Those plans will be approved by Kent County. Kevin Clark, Morgnec Road Solar (owned by Urban Grid, 337 Log Canoe Cir. Stevensville, MD 21666 kevin.clark@urbangridco.com) will be the point person for compliance with condition 4.f. of the CPCN, and the point person for the County concerning implementation of conditions and compliance with local, state and federal laws related to the same. The timeline will be throughout the life of the project, and should Mr. Clark no longer be the point person the County will be advised of his replacement.
- g. Threatened and Endangered Species COMAR 08.03.08 applies to actions affecting

threatened or endangered species on State or private lands. The are no actions being conducted on the Property that have been determined to affect threatened or endangered species as determined by the Maryland Department of Natural Resources. Nonetheless, Kevin Clark, Morgnec Road Solar (owned by Urban Grid, 337 Log Canoe Cir. Stevensville, MD 21666 kevin.clark@urbangridco.com) will be the point person for compliance with condition 4.g. of the CPCN, and the point person for the County concerning implementation of conditions and compliance with local, state and federal laws related to the same. The timeline will be throughout the life of the project, and should Mr. Clark no longer be the point person the County will be advised of his replacement.

h. Critical Area Commission for the Chesapeake and Atlantic Coastal Bays – COMAR 27 applies to development in the Critical Areas.

There will be no limits of disturbance within the Critical Areas. There are limited perimeter landscape buffers proposed within the Critical Area to satisfy County requirements. To the extent coordination with the Critical Area Commission is required, it will be undertaken by Morgnec Road Solar. Kevin Clark, Morgnec Road Solar (owned by Urban Grid, 337 Log Canoe Cir. Stevensville, MD 21666 kevin.clark@urbangridco.com) will be the point person for compliance with condition 4.h. of the CPCN, and the point person for the County concerning implementation of conditions and compliance with local, state and federal laws related to the same. The timeline will be through-out the life of the project, and should Mr. Clark no longer be the point person the County will be advised of his replacement.

i. Noise - Construction and operation of the proposed Project shall comply with the Maryland noise regulations in COMAR 26.02.03.

Agreed. Noise shall be monitored by Morgnec Road Solar. Kevin Clark, Morgnec Road Solar (owned by Urban Grid, 337 Log Canoe Cir. Stevensville, MD 21666 kevin.clark@urbangridco.com) will be the point person for compliance with condition 4.i. of the CPCN, and the point person for the County concerning implementation of conditions and compliance with local, state and federal laws related to the same. The timeline will be throughout the life of the project, and should Mr. Clark no longer be the point person the County will be advised of his replacement.

5. Site Control - In accordance with COMAR 20.79.03.01, prior to construction, Morgnec Road Solar shall provide the PSC and PPRP a copy of the purchase agreement, land lease, or similar agreement with the owners of the properties on which the project site is located. Morgnec Road Solar shall also identify any applicable term of the purchase agreement, land lease, or similar agreement and provide assurances to PPRP and the PSC that such term of the purchase agreement, land lease, or similar agreement meets or exceeds any applicable Power Purchase Agreement ("PPA") term and includes any time necessary for complete decommissioning closure and removal of the project facilities.

All site control documents have been, or will be supplied to PPRP/PSC. Kevin Clark, Morgnec Road Solar (owned by Urban Grid, 337 Log Canoe Cir. Stevensville, MD 21666 kevin.clark@urbangridco.com) will be the point person for compliance with condition 5. of the CPCN, and the point person for the County concerning implementation of conditions and compliance with local, state and federal laws related to the same. The timeline will be throughout the life of the project, and should Mr. Clark no longer be the point person the County will be

advised of his replacement.

6. Project As-Built Details – Within 60 days of commencing operations, Morgnec Road Solar shall provide to the PSC, PPRP, and Kent County, the following as-built details: engineering and construction plans for the project, including the total acreage of the project site; the PV panel and module type, dimensions, and locations; and consistent counts of the number of PV modules, and support posts for the PV modules, as well as a consistent depth of post/pile burial and height of the PV panels above grade. Where the as-built details are identical to those submitted with the CPCN application, Morgnec Road Solar shall provide a statement to this effect and not resubmit the information.

This is a future condition subsequent to construction completions and will be complied with at the applicable time by Morgnec Road Solar. Kevin Clark, Morgnec Road Solar (owned by Urban Grid, 337 Log Canoe Cir. Stevensville, MD 21666 kevin.clark@urbangridco.com) will be the point person for compliance with condition 6. of the CPCN, and the point person for the County concerning implementation of conditions and compliance with local, state and federal laws related to the same. The timeline will be through-out the life of the project, and should Mr. Clark no longer be the point person the County will be advised of his replacement.

- 7. Access Representatives of the PSC, PPRP, and Kent County shall be afforded access to the project site at any reasonable time, with appropriate notification, to conduct inspections and evaluations necessary to confirm compliance with the CPCN requirements. Morgnec Road Solar shall provide assistance as reasonably necessary to conduct inspections and evaluations effectively and safely, which may include, but need not be limited to, the following:
- a. Inspecting construction authorized under this CPCN;
- b. Accessing or copying any records that Morgnec Road Solar is required to keep pursuant to this CPCN or applicable regulations;
- c. Obtaining any photographic documentation and evidence; and
- d. Determining compliance with the conditions and regulations specified in the CPCN.

Agreed. Kevin Clark, Morgnec Road Solar (owned by Urban Grid, 337 Log Canoe Cir. Stevensville, MD 21666 kevin.clark@urbangridco.com) will be the point person for compliance with condition 7a.-d. of the CPCN, and the point person for the PSC, PPRP and County concerning implementation of conditions and compliance with local, state and federal laws related to the same and access to the Property. The timeline will be through-out the life of the project, and should Mr. Clark no longer be the point person the County will be advised of his replacement.

8. Spill Control – Morgnec Road Solar shall follow guidelines established by the U.S. Environmental Protection Agency (EPA) Spill Prevention, Control and Countermeasure and Facility Response Plan programs to prevent and control spills. All adjacent properties, streams and wetlands shall be protected from spills or leaks of transformer fluids or other biologically detrimental substances by appropriate containment structures.

Agreed. Kevin Clark, Morgnec Road Solar (owned by Urban Grid, 337 Log Canoe Cir.

Stevensville, MD 21666 <u>kevin.clark@urbangridco.com</u>) will be the point person for compliance with condition 8. of the CPCN, and the point person for the County concerning implementation of conditions and compliance with local, state and federal laws related to the same. The timeline will be through-out the life of the project, and should Mr. Clark no longer be the point person the County will be advised of his replacement.

9. Sediment Control – Morgnec Road Solar shall implement soil erosion and sediment control best management practices (BMPs) provided in the Maryland Department of the Environment (MDE) document, 2011 Maryland Standards and Specifications for Soil Erosion and Sediment Control, and as otherwise may be approved or required by Kent County. All portions of the project site disturbed during construction shall be stabilized as soon as practicable after the cessation of construction activities within that portion of the site, followed by seed application, in accordance with the above-cited document.

Kimley-Horn and Associates, Inc. on behalf of Morgnec Road Solar has or shall prepare and submit Sediment Control plan to the applicable government agencies as required by State and County regulations. Kevin Clark, Morgnec Road Solar (owned by Urban Grid, 337 Log Canoe Cir. Stevensville, MD 21666 kevin.clark@urbangridco.com) will be the point person for compliance with condition 9. of the CPCN, and the point person for the County concerning implementation of conditions and compliance with local, state and federal laws related to the same. The timeline will be through-out the life of the project, and should Mr. Clark no longer be the point person the County will be advised of his replacement.

10. Forest Conservation – To satisfy Forest Conservation Act Requirements for development, Morgnec Road Solar shall prepare and submit to Maryland DNR and Kent County for review and approval a Forest Stand Delineation (FSD) as described by NRA 5-1604 and a Forest Conservation Plan (FCP) as described by NRA 5-1605. In addition, the FSD and FCP shall be compliant with Kent County Forest Conservation regulations as stated in Kent County Regulations, Part III, Chapter 222.

ECS-Mid Atlantic, LLC on behalf of Morgnec Road Solar has prepared FSD and Kimley-Horn and Associates, Inc. on behalf of Morgnec Road Solar has prepared FCP in accordance with applicable regulations. These are being submitted to the County as part of the Site Plan review process. Kevin Clark, Morgnec Road Solar (owned by Urban Grid, 337 Log Canoe Cir. Stevensville, MD 21666 kevin.clark@urbangridco.com) will be the point person for compliance with condition 10. of the CPCN, and the point person for the County concerning implementation of conditions and compliance with local, state and federal laws related to the same. The timeline will be through-out the life of the project, and should Mr. Clark no longer be the point person the County will be advised of his replacement.

11. Vegetation Management Plan – Morgnec Road Solar shall plant and establish the grounds of the project beneath and between the solar panels with native, warm season grasses and/or low-growing pollinator-friendly plant species. Further, Morgnec Road Solar shall, prior to commencement of project construction, develop and submit to PPRP for review a grounds management plan that incorporates an Integrated Vegetation Management (IVM) approach and specifically includes the following:

- a. Description of grasses and other plant species to be maintained at the site, with preference given to native (or naturalized) species;
- b. Schedule for mowing that avoids or minimizes mowing activities during the nesting season of most ground-nesting birds (i.e., May through August);
- c. Restriction of grass mowing height at all times to not less than 10 inches except in areas where this would present a fire hazard or impede required access to equipment;
- d. Protocol for managing invasive plant species, consistent with county regulations; and
- e. Description of the herbicides and pesticides to be used at the project site, details for avoiding or minimizing their use, and specific conditions under which these substances will be used. Herbicides and pesticides shall be EPA-registered at the time of application and shall only be applied in accordance with label recommendations, applicable law, and landowner requirements.

A vegetation management plan will be provided to PPRP within 30 days prior to the start of construction. Kevin Clark, Morgnec Road Solar (owned by Urban Grid, 337 Log Canoe Cir. Stevensville, MD 21666 kevin.clark@urbangridco.com) will be the point person for compliance with condition 11 of the CPCN, and the point person for the County concerning implementation of conditions and compliance with local, state and federal laws related to the same. The timeline will be through-out the life of the project, and should Mr. Clark no longer be the point person the County will be advised of his replacement.

- 12. Pollinator Habitat Morgnec Road Solar shall use native flowering plants to establish and maintain long-term pollinator habitats where possible throughout the solar facility. Morgnec Road Solar shall develop a Pollinator Habitat Plan that sets forth details of the pollinator habitat and includes the following:
- a. Maps of designated pollinator habitat areas on the project site;
- b. Lists and descriptions of all intended target native plant species for the pollinator areas;
- c. Methods for planting the pollinator areas;
- d. All management methods for the pollinator areas, including elimination of non-native invasive species, mowing, herbicides, and other pertinent criteria; and
- e. Projected success goals for the pollinator habitats, including expected percent survival statistics of all planted species during a period of five years after installation, and contingency planting for areas of nonestablishment.

Morgnec Road Solar shall submit the Pollinator Habitat Plan to PPRP and Kent County for review at least 30 days before completion of project construction and shall indicate if Morgnec Road Solar will participate in Maryland Department of Natural Resources' Pollinator-Friendly Designation Program for Solar Facilities.

A Pollinator Habitat Plan is being prepared by Kimley-Horn and Associates, Inc. and will be submitted to Kent County as part of the site plan review process. The Plan will also be provided

to PPRP for review within 30 days before completion of project construction. Kevin Clark, Morgnec Road Solar (owned by Urban Grid, 337 Log Canoe Cir. Stevensville, MD 21666 kevin.clark@urbangridco.com) will be the point person for compliance with condition 12 of the CPCN, and the point person for the County concerning implementation of conditions and compliance with local, state and federal laws related to the same. The timeline will be throughout the life of the project, and should Mr. Clark no longer be the point person the County will be advised of his replacement.

13. Rare, Threatened, and Endangered Species – Morgnec Road Solar shall notify and consult with the Maryland Department of Natural Resources-Wildlife and Heritage Service to determine appropriate actions if any rare, threatened, or endangered species are encountered during planning, construction, operation, or maintenance of this facility.

Included with the Site Plan submittal is a letter from Maryland Department of Natural Resources-Wildlife and Heritage Service indicating no official State or Federal Records for listed plant or animal species. Morgnec Road Solar shall continue to notify and consult with the Department as required in this condition. Kevin Clark, Morgnec Road Solar (owned by Urban Grid, 337 Log Canoe Cir. Stevensville, MD 21666 kevin.clark@urbangridco.com) will be the point person for compliance with condition 13 of the CPCN, and the point person for the County concerning implementation of conditions and compliance with local, state and federal laws related to the same. The timeline will be through-out the life of the project, and should Mr. Clark no longer be the point person the County will be advised of his replacement.

14. Grading and Stormwater Management – Morgnec Road Solar shall provide PPRP and the PSC Engineering Staff with copies of all plans that Morgnec Road Solar submits to Kent County in connection with the project for grading the site, and all permits received for such grading, within fifteen (15) calendar days of submitting such plans or receiving such permits. Grading and associated stormwater controls shall be designed to minimize hydrological changes to off- site streams and wetlands and to maintain the existing flow regime to these streams and wetlands. In no case shall such plans include removal of topsoil from the site.

Site improvement plans will be provided to the PPRP and PSC Engineering Staff as well as copies of all permits related to grading. All grading and stormwater management plan associated with the Preliminary Site Plan is being provided PPRP and PSC Engineering Staff. Kevin Clark, Morgnec Road Solar (owned by Urban Grid, 337 Log Canoe Cir. Stevensville, MD 21666 kevin.clark@urbangridco.com) will be the point person for compliance with condition 15 of the CPCN, and the point person for the County concerning implementation of conditions and compliance with local, state and federal laws related to the same. The timeline will be throughout the life of the project, and should Mr. Clark no longer be the point person the County will be advised of his replacement.

15. Chesapeake Bay Critical Area - Due to anticipated changes to Kent County's Critical Area Maps for this portion of Kent County, review by the Critical Area Commission for the Chesapeake and Atlantic Coastal Bays is required prior to commencement of any development activity in the Critical Area to determine if the Project is consistent with Natural Resources Article 8-1801 et seq. and COMAR Title 27. Morgnec Road Solar shall submit the Project to the

Critical Area Commission (CAC) for review. If the CAC determines that the Project requires approval, Morgnec Road Solar may not undertake development activity in the Critical Area until the required approval is obtained. A copy of the submittal to the CAC and any CAC approval and conditions shall be provided to PPRP and filed in the PSC docket for the case.

Morgnec Road Solar shall comply with these conditions; however, limits of disturbance are not proposed within the critical area. There are limited perimeter landscape buffers proposed within the Critical Area to satisfy County requirements. To the extent coordination with the Critical Area Commission is required, it will be undertaken by Morgnec Road Solar. All grading, installation of infrastructure and construction of solar panels shall be outside of the Critical Area. Morgnec Road Solar has provided CAC a copy of the Preliminary Site Plan submittal. Kevin Clark, Morgnec Road Solar (owned by Urban Grid, 337 Log Canoe Cir. Stevensville, MD 21666 kevin.clark@urbangridco.com) will be the point person for compliance with condition 15 of the CPCN, and the point person for the County concerning implementation of conditions and compliance with local, state and federal laws related to the same. The timeline will be throughout the life of the project, and should Mr. Clark no longer be the point person the County will be advised of his replacement.

16. Site Plan Review - Morgnec Road Solar shall certify to the PSC and to PPRP that it has designed the facility in substantial conformity to Kent County Site Plan requirements, has obtained Site Plan approval from the Kent County Planning Commission and received all required local permits prior to the commencement of construction. This certification shall demonstrate that Morgnec Road Solar has complied with all requirements of Kent County Land Use Ordinance Article VI, Section 11, as amended on February 16, 2021, including but not limited to setback and screening provisions. Morgnec Road Solar shall comply with all standard development review requirements of Kent County.

Agreed. Morgnec Road Solar shall certify to the PSC and to PPRP that it has designed the facility in substantial conformity to Kent County Site Plan requirements, has obtained Site Plan approval from the Kent County Planning Commission and received all required local permits prior to the commencement of construction. Kevin Clark, Morgnec Road Solar (owned by Urban Grid, 337 Log Canoe Cir. Stevensville, MD 21666 kevin.clark@urbangridco.com) will be the point person for compliance with condition 16 of the CPCN, and the point person for the County concerning implementation of conditions and compliance with local, state and federal laws related to the same. The timeline will be through-out the life of the project, and should Mr. Clark no longer be the point person the County will be advised of his replacement.

17. Coordination with MDOT SHA - Morgnec Road Solar shall coordinate any future maintenance of traffic concerns during construction with the MDOT SHA District 2 Engineer.

Agreed. Kevin Clark, Morgnec Road Solar (owned by Urban Grid, 337 Log Canoe Cir. Stevensville, MD 21666 kevin.clark@urbangridco.com) will be the point person for compliance with condition 17 of the CPCN, and the point person for the County concerning implementation of conditions and compliance with local, state and federal laws related to the same. The timeline will be through-out the life of the project, and should Mr. Clark no longer be the point person the County will be advised of his replacement.

18. Construction Traffic Management Plan - Prior to construction, Morgnec Road Solar shall submit to the PSC and PPRP a copy of a traffic management plan. The plan shall restrict truck deliveries to non-peak hours, limit the number of trucks that can be onsite at any given time, and limit their duration at the project site. The traffic management plan shall designate MD 291 (River Road – Morgnec Road) as the primary truck route for all non-local construction truck traffic accessing the project area from US 301, and include the condition in all contracts with suppliers or contractors. If circumstances or conditions require construction traffic to temporarily access the project site from an alternative route, Morgnec Road Solar shall obtain prior approval from the Kent County Department of Public Works, and/or Maryland Department of Transportation State Highway Administration, as appropriate, and within 30 days, shall file a certification in the record that the alternative route used received prior approval. This compliance filing shall document the approval required above, and describe the reason(s) for and duration of the alternative route.

Agreed. Kimley-Horn and Associates, Inc. is preparing a construction traffic management plan to satisfy this condition in coordination with Morgnec Road Solar and for Kent County and SHA review, as applicable. Kevin Clark, Morgnec Road Solar will be the point person for compliance with condition 18 of the CPCN, and the point person for the County concerning implementation of conditions and compliance with local, state and federal laws related to the same. The timeline will be through-out the life of the project, and should Mr. Clark no longer be the point person the County will be advised of his replacement.

19. Road Permits - Morgnec Road Solar shall comply with all permit requirements and restrictions for use, crossing and occupancy of State highways and obtain appropriate approvals, as necessary.

Agreed. Kevin Clark, Morgnec Road Solar will be the point person for compliance with condition 19 of the CPCN, and the point person for the County concerning implementation of conditions and compliance with local, state and federal laws related to the same. The timeline will be through-out the life of the project, and should Mr. Clark no longer be the point person the County will be advised of his replacement.

20. Road Damage - Prior to construction, Morgnec Road Solar shall document road, shoulder, and right-of-way (ROW) conditions on roads with direct access to the project site, and monitor road conditions weekly during the construction period, or when notified of damage or debris caused by construction vehicles. If it is determined that Morgnec Road Solar has caused damage during its work to any roadway under the authority of MDOT SHA, Morgnec Road Solar shall contact District 2 Maintenance to report such damage. Morgnec Road Solar shall reimburse MDOT SHA for repairs or correct all identified road damage that deviates from its initial reconnaissance within 48 hours of being detected or reported. Repairs performed by Morgnec Road Solar to roads, shoulders, and ROWs shall conform to MDOT SHA specifications.

Agreed. The above required documentation will be provide prior to commencement of construction, then on a weekly basis as required. Kevin Clark, Morgnec Road Solar (owned by Urban Grid, 337 Log Canoe Cir. Stevensville, MD 21666 kevin.clark@urbangridco.com) will be the point person for compliance with condition 20 of the CPCN, and the point person for the County concerning implementation of conditions and compliance with local, state and federal

laws related to the same. The timeline will be through-out the life of the project, and should Mr. Clark no longer be the point person the County will be advised of his replacement.

21. Landscape Buffer – Morgnec Road Solar shall submit to the PSC and PPRP a landscaping plan that has been approved by Kent County prior to construction and complies with Kent County requirements for vegetated buffers set forth in the Land Use Ordinance Article VI, Section 11, as amended on February 16, 2021.

Landscape Buffer plans are included with each phase of the site plan submittal. Once approved by Kent County Morgnec Road Solar shall submit the plans to PSC and PPRP. Kevin Clark, Morgnec Road Solar (owned by Urban Grid, 337 Log Canoe Cir. Stevensville, MD 21666 kevin.clark@urbangridco.com) will be the point person for compliance with condition 20 of the CPCN, and the point person for the County concerning implementation of conditions and compliance with local, state and federal laws related to the same. The timeline will be throughout the life of the project, and should Mr. Clark no longer be the point person the County will be advised of his replacement.

22. Landscape Maintenance - Prior to the commencement of construction, Morgnec Road Solar shall negotiate and execute a landscape maintenance and enforcement agreement with Kent County that ensures the landscape buffer is protected, monitored and maintained over the life of the project. Morgnec Road Solar shall submit to the PSC and to PPRP a copy of an executed Certificate of Maintenance Agreement for the landscape plan.

A Landscape Maintenance Agreement has been drafted as part of the preliminary plan to reviewed by the County. Copies of the executed agreement will be provided to the PSC and PPRP. Kevin Clark, Morgnec Road Solar (owned by Urban Grid, 337 Log Canoe Cir. Stevensville, MD 21666 kevin.clark@urbangridco.com) will be the point person for compliance with condition 20 of the CPCN, and the point person for the County concerning implementation of conditions and compliance with local, state and federal laws related to the same. The timeline will be through-out the life of the project, and should Mr. Clark no longer be the point person the County will be advised of his replacement.

23. Within five years after obtaining a final unappealable CPCN, the Applicant shall coordinate with PPRP and/or a reviewing State Agency, and in consultation with the County and a representative of the local community, develop and implement a plan for one or more public amenities or enhancements, which may be located adjacent to Morgnec Road Solar in the required 200-foot setback as a Gateway into the Town of Chestertown or another location in Kent County. The Applicant shall engage in these required activities in good faith and shall commit to expending \$75,000 to implement the agreed upon plan.

The use of local artwork mounted outside the buffer or on the project fence has been discussed. Morgnec Road Solar will work closely with all stakeholders to develop the gateway plan. Kevin Clark, Morgnec Road Solar (owned by Urban Grid, 337 Log Canoe Cir. Stevensville, MD 21666 kevin.clark@urbangridco.com) will be the point person for compliance with condition 23 of the CPCN, and the point person for the County concerning implementation of conditions and compliance with local, state and federal laws related to the same. The timeline will be through-out the life of the project, and should Mr. Clark no longer be the point person the

County will be advised of his replacement.

24. Visual Impact Complaint Resolution - If Kent County, PPRP or any other party to the case provides information to Morgnec Road Solar indicating that reflective glare or visibility of structures within the perimeter fence is impacting a nearby road(s) or resident(s), Morgnec Road Solar shall coordinate with the PSC, PPRP and Kent County to determine a reasonable solution to mitigate negative impacts.

No visual impacts are anticipated at buffer maturity. However, Morgnec Road Solar will work with all listed entities to insure this is the case. Kevin Clark, Morgnec Road Solar (owned by Urban Grid, 337 Log Canoe Cir. Stevensville, MD 21666 kevin.clark@urbangridco.com) will be the point person for compliance with condition 24 of the CPCN, and the point person for the County concerning implementation of conditions and compliance with local, state and federal laws related to the same. The timeline will be through-out the life of the project, and should Mr. Clark no longer be the point person the County will be advised of his replacement.

25. Exterior Lighting Plan - Morgnec Road Solar shall design a lighting distribution plan for the project to conform to standards in the Kent County Code for zoning districts where utility-scale solar energy systems are a permitted principal use, unless it is inconsistent with any other license condition of this CPCN, or any federal, State, or local laws or regulations.

No lighting is proposed for the project at this time. If lighting is proposed for the project it will be in compliance with the Kent County Code and following review and approval by the applicable regulatory agencies of the County. Kevin Clark, Morgnec Road Solar (owned by Urban Grid, 337 Log Canoe Cir. Stevensville, MD 21666 kevin.clark@urbangridco.com) will be the point person for compliance with condition 25 of the CPCN, and the point person for the County concerning implementation of conditions and compliance with local, state and federal laws related to the same. The timeline will be through-out the life of the project, and should Mr. Clark no longer be the point person the County will be advised of his replacement.

26. Archeological Discoveries - In the event that relics from unforeseen archeological sites are revealed and identified during construction, Morgnec Road Solar, in consultation with and as approved by the MHT, shall develop and implement a plan for avoidance and protection, data recovery, or destruction without recovery of such relics or sites.

Agreed. Kevin Clark, Morgnec Road Solar (owned by Urban Grid, 337 Log Canoe Cir. Stevensville, MD 21666 kevin.clark@urbangridco.com) will be the point person for compliance with condition 26 of the CPCN, and the point person for the County concerning implementation of conditions and compliance with local, state and federal laws related to the same. The timeline will be through-out the life of the project, and should Mr. Clark no longer be the point person the County will be advised of his replacement.

27. Scenic Byways Coordination - Prior to construction, Morgnec Road Solar shall certify to the PSC and to PPRP that it has consulted with the MDOT SHA Scenic Byways Coordinator to ensure the project's site layout, landscaping, and lighting maintains the byway's visual quality.

Agreed. Morgnec Road Solar is providing copies of the Preliminary Site Plan to the MDOT, SHA Scenic Byways Coordinator, and will initiate follow-up consultation prior to submitting a Final Site Plan with the County. Kevin Clark, Morgnec Road Solar (owned by Urban Grid, 337 Log Canoe Cir. Stevensville, MD 21666 kevin.clark@urbangridco.com) will be the point person for compliance with condition 27 of the CPCN, and the point person for the County concerning implementation of conditions and compliance with local, state and federal laws related to the same. The timeline will be through-out the life of the project, and should Mr. Clark no longer be the point person the County will be advised of his replacement.

28. Cycling Safety - Morgnec Road Solar shall instruct its suppliers and contractors to be aware of on-road bicycle route designations near the project and Maryland traffic laws regarding bicycles on the road, and include the condition in all contracts with suppliers or contractors.

Prior to construction Morgnec Road Solar will develop a delivery plan that will include provisions for cyclist safety. Kevin Clark, Morgnec Road Solar (owned by Urban Grid, 337 Log Canoe Cir. Stevensville, MD 21666 kevin.clark@urbangridco.com) will be the point person for compliance with condition 28 of the CPCN, and the point person for the County concerning implementation of conditions and compliance with local, state and federal laws related to the same. The timeline will be through-out the life of the project, and should Mr. Clark no longer be the point person the County will be advised of his replacement.

29. MDOT SHA Bicycle and Pedestrian Coordination - Morgnec Road Solar shall certify to the PSC and to PPRP that it has consulted with the MDOT SHA Bicycle and Pedestrian Coordinator to ensure activity during construction minimizes conflict with bicyclists.

Prior to commencement of construction Morgnec Road Solar shall provide the MDOT, SHA Bicycle and Pedestrian Coordinator copies of the approved Final Site Plan, and will initiate follow-up consultation. Kevin Clark, Morgnec Road Solar (owned by Urban Grid, 337 Log Canoe Cir. Stevensville, MD 21666 kevin.clark@urbangridco.com) will be the point person for compliance with condition 29 of the CPCN, and the point person for the County concerning implementation of conditions and compliance with local, state and federal laws related to the same. The timeline will be through-out the life of the project, and should Mr. Clark no longer be the point person the County will be advised of his replacement.

30. Fire Safety - Morgnec Road Solar shall install and maintain the project to meet the minimum guidelines set forth in the National Fire Protection Association's NFPA 1 Fire Code Handbook and NFPA 70 National Electrical Code.

Applicable building and construction permits/plans will indicate compliance with the minimum guidelines set forth in the National Fire Protection Association's NFPA 1 Fire Code Handbook and NFPA 70 National Electrical Code. Kevin Clark, Morgnec Road Solar (owned by Urban Grid, 337 Log Canoe Cir. Stevensville, MD 21666 kevin.clark@urbangridco.com) will be the point person for compliance with condition 30 of the CPCN, and the point person for the County concerning implementation of conditions and compliance with local, state and federal laws related to the same. The timeline will be through-out the life of the project, and should Mr. Clark no longer be the point person the County will be advised of his replacement.

31. Emergency Preparedness - Morgnec Road Solar shall contact the Kent County Office of Emergency Services, Chestertown Volunteer Fire Company and Kennedyville Volunteer Fire Company to develop appropriate protocols for addressing on-site emergencies.

All first responders shall be briefed on the site prior to construction. Following Final Site Plan approval and before commencement of construction Morgnec Road Solar shall contact the Kent County Office of Emergency Services, Chestertown Volunteer Fire Company and Kennedyville Volunteer Fire Company to develop appropriate protocols for addressing on-site emergencies. Kevin Clark, Morgnec Road Solar (owned by Urban Grid, 337 Log Canoe Cir. Stevensville, MD 21666 kevin.clark@urbangridco.com) will be the point person for compliance with condition 31 of the CPCN, and the point person for the County concerning implementation of conditions and compliance with local, state and federal laws related to the same. The timeline will be through-out the life of the project, and should Mr. Clark no longer be the point person the County will be advised of his replacement.

32. Solar Decommissioning

a. At least 30 days prior to the start of construction, Morgnec Road Solar shall submit a decommissioning plan to the PSC and PPRP for review. The decommissioning plan shall describe the responsible party(ies), timeframes, and estimated costs for decommissioning, dismantling, and legal disposal of all components, including cables, wiring, and foundations below and above ground. The plan shall address site conditions after decommissioning, including stabilization, grading and seeding all disturbed areas and evenly distributing topsoil if stockpiled onsite. The plan shall maximize the extent of component recycling and reuse, where practicable, and ensure all materials are handled in accordance with applicable federal, State, county, and local requirements. Morgnec Road Solar shall not begin construction until Morgnec Road Solar has addressed all written comments from the PSC and PPRP, the PSC has approved the plan, and all specified financial guaranties are in place. The approved plan, and any updated plans, shall be filed in the PSC docket for Case No. 9499.

Agreed. Morgnec Road Solar will also provide the "decommissioning plan" to the County in accordance with this condition 32 a. Kevin Clark, Morgnec Road Solar (owned by Urban Grid, 337 Log Canoe Cir. Stevensville, MD 21666 kevin.clark@urbangridco.com) will be the point person for compliance with condition 32 a. of the CPCN, and the point person for the County concerning implementation of conditions and compliance with local, state and federal laws related to the same. The timeline will be through-out the life of the project, and should Mr. Clark no longer be the point person the County will be advised of his replacement.

b. Morgnec Road Solar shall implement a financial mechanism to ensure that decommissioning costs are not borne by the State and/or the County at the end of the useful life of the project or in the event of abandonment of the project. The project will be considered to be abandoned if there is no electric generation provided to the grid for a period of twelve (12) consecutive months. The financial instrument may be in the form of a surety bond, a letter of credit issued by a financial institution, or other alternative arrangement and must be in place prior to the commencement of construction of the project. The financial mechanism is subject to the evaluation and approval of

the PSC as to the credit-worthiness and financial capabilities of the counter-party(ies).

Agreed. A financial instrument in the form of a surety bond, a letter of credit issued by a financial institution, or other alternative arrangement will be provided to the PSC and the County prior to the commencement of construction of the project. The financial instrument shall be approved by the PSC and in a form reasonably acceptable to the County. Kevin Clark, Morgnec Road Solar (owned by Urban Grid, 337 Log Canoe Cir. Stevensville, MD 21666 kevin.clark@urbangridco.com) will be the point person for compliance with condition 32 b. of the CPCN, and the point person for the County concerning implementation of conditions and compliance with local, state and federal laws related to the same. The timeline will be throughout the life of the project, and should Mr. Clark no longer be the point person the County will be advised of his replacement.

c. Morgnec Road Solar shall develop an estimate of decommissioning costs by a third-party consultant to determine the amount of the decommissioning surety bond letter of credit, or other alternative arrangement. The cost estimate shall address provisions for the safe removal and proper disposal of all components of the project, including any components containing hazardous or toxic materials.

The "estimate of decommissioning costs" shall be prepared prior to compliance with 32. B. above. Kevin Clark, Morgnec Road Solar (owned by Urban Grid, 337 Log Canoe Cir. Stevensville, MD 21666 kevin.clark@urbangridco.com) will be the point person for compliance with condition 32 c. of the CPCN, and the point person for the County concerning implementation of conditions and compliance with local, state and federal laws related to the same. The timeline will be through-out the life of the project, and should Mr. Clark no longer be the point person the County will be advised of his replacement.

d. Over the life of the project, Morgnec Road Solar shall update the decommissioning cost estimate and corresponding approved financial instrument every five (5) years after the issuance of the CPCN to adjust for inflation and any other necessary changes. The salvage value of the panels may only be included in a five (5) year update as an offset to decommissioning costs if Morgnec Road Solar can provide evidence that a recycling market exists for such panels and the value is commercially supported. Morgnec Road Solar shall provide the revised cost estimate to the PSC for approval, file the revised cost estimate in the PSC docket for Case No. 9499, and execute an adjustment to the financial guarantee mechanism.

The "updated decommissioning cost estimate and financial instrument" shall be provided in accordance with 32 d. Kevin Clark, Morgnec Road Solar(owned by Urban Grid, 337 Log Canoe Cir. Stevensville, MD 21666 kevin.clark@urbangridco.com) will be the point person for compliance with condition 32 d. of the CPCN, and the point person for the County concerning implementation of conditions and compliance with local, state and federal laws related to the same. The timeline will be through-out the life of the project, and should Mr. Clark no longer be the point person the County will be advised of his replacement.

e. Morgnec Road Solar shall begin implementation of the approved decommissioning plan within 12 months after the project ceases to generate electricity for sale or upon expiration of the CPCN pursuant to Condition 3(b). Prior to starting implementation of the decommissioning plan, Morgnec Road Solar shall notify the PSC and PPRP of its intent to decommission.

Agreed. Kevin Clark, Morgnec Road Solar will be the point person for compliance with condition 32 e. of the CPCN, and the point person for the County concerning implementation of conditions and compliance with local, state and federal laws related to the same. The timeline will be through-out the life of the project, and should Mr. Clark no longer be the point person the County will be advised of his replacement.

33. Project Transfer - All provisions and requirements of this CPCN shall apply to any and all subsequent owners and/or operators of the project. In the event of any pending change in control or ownership, the current owner/operator shall notify the succeeding owner/operator of the existence of the requirements of this CPCN by letter and shall send a copy of this letter to the PSC and PPRP. Information provided to the PSC and PPRP shall also be filed in the PSC docket for Case No. 9499.

Agreed. Kevin Clark, Morgnec Road Solar (owned by Urban Grid, 337 Log Canoe Cir. Stevensville, MD 21666 kevin.clark@urbangridco.com) will be the point person for compliance with condition 33 of the CPCN, and the point person for the County concerning implementation of conditions and compliance with local, state and federal laws related to the same. The timeline will be through-out the life of the project, and should Mr. Clark no longer be the point person the County will be advised of his replacement.

34. Current Point of Contact – The Applicant or its legal successor shall specify a representative for project matters, including compliance with the CPCN conditions ("Representative"). The Applicant or its legal successor shall file in the PSC docket for Case No. 9499 the representative's contact information, including the representative's name, title, email address, and physical address. Any change in the representative or to the representative's contact information shall be filed in the PSC docket within 30 days.

Agreed. Kevin Clark, Morgnec Road Solar (owned by Urban Grid, 337 Log Canoe Cir. Stevensville, MD 21666 kevin.clark@urbangridco.com) will be the point person for compliance with condition 34 of the CPCN, and the point person for the County concerning implementation of conditions and compliance with local, state and federal laws related to the same. The timeline will be through-out the life of the project, and should Mr. Clark no longer be the point person the County will be advised of his replacement.

35. Compliance – Issues of non-compliance with CPCN conditions raised by Kent County, PPRP, or any other party to the case shall be addressed by the project's Representative. Within 45 days of receiving notice, the project's Representative shall submit, and file in the PSC docket for Case No. 9499, a summary of the non-compliance issue and a statement of how the project has addressed or is addressing the matter.

Kevin Clark, Morgnec Road Solar (owned by Urban Grid, 337 Log Canoe Cir. Stevensville, MD 21666 kevin.clark@urbangridco.com) will be the point person for compliance with condition 35 of the CPCN, and the point person for the County concerning implementation of conditions and compliance with local, state and federal laws related to the same. The timeline will be through-out the life of the project, and should Mr. Clark no longer be the point person the County will be advised of his replacement.

36. Submissions to PPRP - Informational copies of the required communications, reports or studies referenced in the preceding license conditions shall be sent to PPRP by e-mail (and by mail if requested) at:

Director Power Plant Assessment Division Department of Natural Resources Tawes State Office Bldg., B-3 580 Taylor Avenue Annapolis, Maryland 21401

e-mail: pprp.dnr@maryland.gov

This is a statement for which no description of compliance is necessary.

Kent County Commissioners Office 400 High Stree Chestertown, MD 21620



Chestertown Town Hall 118N Cross Street Chestertown, MD 21620

June 18, 2024

Dear Kent County Commissioners and Chestertown Town Council Members,

As the owner and operator of Morgnec Solar, currently in development in Kent County, Maryland, Urban Grid is committed to ensuring our solar facility brings positive benefits to the surrounding community for years to come. Not only does Urban Grid pride itself is producing clean, renewable energy in the United States, we also take our community commitments seriously and work hard to be a good neighbor and corporate citizen in any community where we develop, construct and operate solar energy facilities.

As part of our commitment to the Kent County community, Urban Grid will collaborate with the Kent Cultural Alliance to facilitate a community art-project to benefit local residents and community members. We intend to work with the Kent Cultural Alliance and local artists to identify and fund a community improvement project in or near Chestertown. While details of the proposed community improvement project are still being worked out, we do want to convey or commitment to bringing this project to life as Morgnec Solar becomes operational.

Urban Grid strives to be an excellent community partner and we look forward to collaborating with local residents and organizations in Kent County for many years to come!

Sincerely,

Amanda Marple

Community Engagement Manager

(304) 707-1053

Amanda.marple@ubangridco.com



MEMORANDUM

To: Kent County Planning and Zoning

From: Ellen Tusing, P.E.

Kimley-Horn and Associates, Inc.

Date: 06/20/2024

Subject: Morgnec Solar Preliminary Plan - Planning Commission Submittal

SUMMARY

Kimley-Horn and Associates, Inc. is submitting this preliminary plan package on behalf of Morgnec Road Solar, LLC. The Morgnec Solar major site plan was previously submitted to the Kent County Technical Advisory Committee for Concept TAC review on February 14th, 2024. A detailed response to the comments provided during that TAC meeting is provided in this memorandum for reference.

Morgnec Road Solar, LLC requests to be placed on the agenda for the July 11th Planning Commission meeting. Please find the following items for your review and consideration:

ATTACHMENTS

- 01 Preliminary Plan Set
- 02 Preliminary Forest Conservation Plan
- 03 Glint Glare Report
- 04 Entrance Visual Rendering at 2-YR
- 05 Landscape Maintenance and Inspection Agreement
- 06 Revised CPCN Point by Point

COMMENT RESPONSE

23-34 Morgnec Road Solar, LLC – Major Site Plan (Concept)
616 Morgnec Road, Chestertown – Fourth Election District – Intense Village (IV), Community
Residential (CR), Rural Residential (RR), and Resource Conservation District (RCD)

The applicant is requesting preliminary site plan review of a 245-acre utility-scale solar energy system. The project site is currently in agricultural production. The anticipated energy output is from 45 to 55 MW, and grid interconnection is to be at the Chestertown Substation directly across Morgnec Road.

The Health Department has no objections to this application.



Response: Acknowledged.

 Per SHA, they will continue to work with the county and design engineering firm on the project, SHA Tracking Number: 24apke001xx.

Response: Acknowledged.

• The Finance Office has no objections to this application.

Response: Acknowledged.

• Per the Department of Public Works, stormwater management requires further review. The applicant proposes a total ESDv treatment of 9,460cf where the design requires 54,870cf. This is based on the applicant's contention "that despite the provided ESDv being below the target calculated, the reduction in the runoff curve number for the site due to the change in ground cover from row crops to meadow grasses clearly demonstrates that we will be improving the post-development runoff characteristics of the site, which satisfies the intention and goals of the stormwater management program." This contention is acknowledged and understood; however, Section 5.2 of the Maryland Stormwater Design Manual states "To best maintain predevelopment runoff characteristics, the target for ESD implementation should be "woods in good condition" (as opposed to existing ground cover of row crops). Section 5.2 continues "The Act requires the implementation of ESD to the MEP to mimic natural runoff characteristics..." which further reinforces that the calculations must meet the full target volume. Based on this the stormwater management design must be substantially revised to meet the requirements of the Manual, or variance relief would be required.

Response: Understood. The revised preliminary plan proposes the use of non-rooftop disconnect, grass swales along roadways, solar array disconnect, and open space disconnect methods to achieve the required ESDv (64,055 cf) and treat the required impervious area (6.64 AC) as calculated for the project site area. The recharge requirements have also been satisfied. See Sheet CP-420 for full tabulation of ESDv calculations.

• Please provide an updated narrative that addresses points of compliance with the Comprehensive Plan, the Land Use Ordinance, and the conditions for the CPCN license. Please provide a minimal overview of all items that have been submitted for review. Include details of the Citizen Participation Plan. Where not already addressed in the narrative, please include comments that address each of the standards in an ordered list (a., b., c., etc.) corresponding with and reproducing the standards by which the Planning Commission will evaluate the proposal, as is listed in Article VI, Section 5.3.B (16) of the Kent County Land Use Ordinance. Please include conformance with the Comprehensive Plan, protection of abutting properties and County amenities from any undue disturbance (noise, dust, glare, etc.), and design of the development to complement and enhance the rural and historic nature of the County and to harmonize features of development with the surrounding townscape and the natural landscape.

Response: An updated narrative that addresses the points of compliance with conditions of the CPCN license is provided in this submittal package. A letter regarding the Citizen Participation Plan is also provided in this submittal package. See above for a list of deliverables that have been provided in accordance with the Land Use Ordinance specifications and revised based on the comments herein.

 Please indicate whether the proposed temporary storage area in the northwestern corner of the project site will include a temporary pathway, of what it will be composed, what route it will take



around the drainage slopes, and how the area will be restored afterward. If that temporary storage area is not to be used, please remove it from the site plan.

Response: Acknowledged. Storage area in northwestern corner of the project site has been removed.

- Landscaping:
 - Article VI, Section 11.D.5 requires that the landscaping plan be deemed to screen elevations of the site adequately within 2 years. The submitted landscape renderings depict expected screening capability at time of planting and after 5 years of growth. Please provide expected screening capability after two years of growth. The installation of trees taller than the minimum required may be needed.
 - Response: A landscape rendering has been provided that depicts the typical buffer section along Morgnec Road at the proposed entrance location. The rendering depicts two years of growth.
 - Please vary the arrangement of plants so as to promote the growth of a natural landscape and avoid monotony and uniformity of the buffer.
 - Response: Acknowledged. A final buffer detail with spacing and species list is still being developed and will be provided with final plan. The rendering depicts the typical nature of the buffer with varied arrangement, size, and species.
 - Please indicate on renderings and landscape plans how the requirement that entranceways –
 as established in Article VI, Section 11.H are designed to ensure that neighboring
 properties, public rights-rights-of-way and roads are not exposed to an unscreened view.
 - Response: The rendering provided depicts the condition at two years of growth showing the effective screening of the site along the road frontage. Arrays may be visible at an instant that passersby are driving past the site. The applicant would like to consider use of varied fencing elements or other features to fully obstruct the view.
 - Please indicate on the site plans how the proposed gaps in the buffer for the existing drainage lanes in the northwestern portion of the project site will be screened either through new plantings or existing vegetation, which may need to be bolstered.
 - Response: See Site Plan Sheets CP-210 through CP-215 for locations of proposed buffer plantings. If additional screening is required, the existing vegetation will be supplemented with additional plantings.
 - Please indicate on the site plans how the adjacent property (26712 Morgnec Road) on the southeastern portion of the project site will be adequately screened either through new plantings or existing vegetation, which may need to be bolstered.
 - Response: See Site Plan Sheets CP-210 through CP-215 for locations of proposed buffer plantings. If additional screening is required, the existing vegetation will be supplemented with additional plantings.
 - Please provide a landscape maintenance agreement and landscape irrigation plan.
 Response: See submittal package for draft landscape maintenance and inspection agreement.



- Forest Conservation Plan:
 - A forest conservation easement is required, and it will need to include the area necessary to meet the 20% afforestation requirement.

Response: A draft Forest Conservation Plan has been provided that includes the conservation easement necessary to satisfy the site requirements.

- As Forest Conservation requirements are not applicable to the Critical Area, the easement only needs to be applied to forested areas outside of the Critical Area. The applicant is not restricted from placing more forested area into easement, however.
- Calculations to determine the afforestation and conservation thresholds are to be based on the net tract area outside of the Critical Area. Please recalculate the Forest Conservation Worksheet.

Response: The worksheet has been recalculated based on the site limits of disturbance as the applicant does not have land control over the entire tract area. The applicant will conserve existing forest stand within the lease limits to fully satisfy the requirements. Please reference the worksheet on Sheet FCP-3 of the Forest Conservation Plan for detail.

• Please update the previously submitted forest stand delineation.

Response: The forest stand delineation has been incorporated by reference into the Forest Conservation Plan. Please review the draft plan for further details.

 A glare analysis evaluating the effects of the proposed project on nearby airports was previously submitted. In accordance with Article VI, Section 11.B.9, please provide a glare analysis to determine whether adjacent properties and/or roadways will be affected by glare and/or reflectivity. Please indicate how any potential effects will be mitigated.

Response: A revised glint glare report has been included in this submittal package for review.

Please provide an Ownership and Maintenance plan.

Response: An ownership and maintenance plan is still being developed by the applicant to address all project improvements and will be provided to the County for review prior to site plan approval.

CLOSURE

Please advise how many hard copies of the attachments, if any, are requested. If there are any further comments or questions regarding the updated plans, please feel free to reach out directly at (804)-273-8380 or Ellen.Tusing@kimley-horn.com. We look forward to working with you.

Thank you, Ellen Tusing, P.E.



Department of Planning, Housing, and Zoning

To: Kent County Planning Commission From: Rob Tracey, AICP, Associate Planner

Meeting: August 1, 2024

Subject: Delmarva Power and Light Co. of MD

Preliminary Site Plan Review – Improvements to Existing Site

Executive Summary

REQUEST BY THE APPLICANT

Delmarva Power and Light Company of MD is requesting preliminary site plan approval for improvements to the existing substation in Chestertown. The proposed upgrades include rearranging electrical components/buildings, consolidating four driveways into two, replacing the existing chain link fence with a non-conductive/panel system fence, and modifying the existing landscaping approved in 2021. The proposed site is located at 509 Morgnec Road in Chestertown in the Fourth Election District and is zoned Commercial (C).

PUBLIC PROCESS

Per Article VI, Section 5.2 of the Kent County *Land Use Ordinance*, the Planning Commission shall review and approve major site plans.

SUMMARY OF THE STAFF REPORT

The property is improved by electrical equipment and a small control building. The surrounding area is a mix of industrial uses, such as Choptank Electric Cooperative, Gillespie Pre-Cast, small commercial businesses, agriculture, and residential land on the north side of Maryland Route 291. The property's north, south, east, and west sides are currently screened by existing vegetation and a six- foot chain link fence.

The applicant meets all the requirements for preliminary site plan approval, with the exception of the landscaping standards. The applicant has submitted a letter requesting a reduction/waiver of the landscaping requirement.

STAFF RECOMMENDATION

Staff recommends that the Planning Commission review and discuss the applicants request for a landscaping waiver/reduction to determine if the spirit and intent of the requirement outlined above is accomplished through other means or the nature of the change does not require the landscaping be equivalent to the landscaping approved in 2021.

In order to receive final site plan approval, the applicant must address and/or submit the following outstanding items:

- Stormwater management and sediment control plans must be approved and any required sureties must be submitted.
- The final landscaping plan and any required sureties must be submitted and approved.
- Renderings of the proposed panel fencing and landscaping along Morgnec Road.

PRELIMINARY STAFF REPORT

TO: Kent County Planning Commission
SUBJECT: Delmarva Power and Light Co. of MD

Preliminary Site Plan Review – Improvements to Existing Site

DATE: July 25, 2024

DESCRIPTION OF PROPOSAL

Delmarva Power and Light Company of MD is requesting preliminary site plan approval for improvements to the existing substation in Chestertown. The proposed upgrades include rearranging electrical components/buildings, consolidating four driveways into two, replacing the existing chain link fence with an eight-foot tall non-conductive/panel system fence, and modifying the existing landscaping approved in 2021. The proposed site is located at 509 Morgnec Road in Chestertown in the Fourth Election District and is zoned Commercial (C).

The property is improved by electrical equipment and a small control building. The surrounding area is a mix of industrial uses, such as Choptank Electric Cooperative, Gillespie Pre-Cast, small commercial businesses, agriculture, and residential land on the north side of Maryland Route 291. The property's north, south, east, and west portions are currently screened by existing vegetation and a six- foot chain link fence.

RELEVANT ISSUES

- I. Density, Height, Width, Bulk, and Fence Requirements
 - A. Applicable Law: Article V, Section 11.5 of the Kent County Land Use Ordinance establishes the Density, Height, Width, Bulk, and Fence Requirements.
 - B. Staff and TAC Comments: The front yard setback for the Commercial Zoning District is 100 feet. The proposed alterations to the substation appear to meet the required setbacks. Although fences are not required to meet the yard setbacks, the applicant has proposed moving the fence closer to the road and is installing a panel-based fence. Article V, Section 11.5 of the Kent County Land Use Ordinance states that security fences may be eight feet in height.

II. Commercial Specific Design Standards

- A. Applicable Law: Article V, Section 11B of the Kent County Land Use Ordinance establishes the design standards for the Commercial zoning district. The design standards for this district ensure that the site access is sufficient for vehicle and pedestrian safety while also taking measures to alleviate congestion.
- B. Staff and TAC Comments:
- The proposed improvements are located along Maryland Route 291. Currently, there are four driveways which are proposed to be consolidated into two.
- The access to the project appears to be adequate and the roads appear to have the capacity to handle the traffic generated by the proposed project. Additionally, there are no known endangerments to the safety of the general public from this proposal.

III. Parking and Loading

A. Applicable Law: Article VI, Section 1.3 of the Kent County Land Use Ordinance establishes the parking

standards for industrial uses based on 1 parking space per 2 employees in the principal shift.

B. Staff and TAC Comments: The applicant's narrative states that the site will be un-manned and therefore have no permanent employees. However, the site plan provides a parking area for vehicles when maintenance is required.

IV. Commercial Specific Design Standards: Landscaping

A. Applicable Law: Article V, Section 11.8.B.6.C of the Kent County Land Use Ordinance establishes the landscaping design standards for the Commercial zoning district. The landscaping design standards state that the landscaping will be maintained in good condition with at least the same quality and quantity as initially approved. Article V, Section 11.8.B.6.E of the Kent County Land Use Ordinance authorizes the Planning Commission to reduce or waive the landscaping requirement when it is demonstrated that the spirit and intent of the requirement outlined above is accomplished through other means or the nature of the change does not require additional landscaping.

B. Staff and TAC Comments:

- The proposed preliminary landscaping plan adds eight evergreen trees to the design from the concept plan; however, the overall number of evergreen trees compared to the approved 2021 plan is significantly lower, and the applicant proposes to change the evergreen tree species from Japanese black pine to American holly.
- Based on the proposed landscaping plan, staff notes that there may be space for planting additional evergreen trees along the northwest portion of the property, near the stream along Route 291, to provide additional screening and further harmonization with the proposed panel-based fence.
- Staff believes these proposed modifications to the landscaping plan constitute a change in the quality and quantity of the landscaping plan compared to the plan approved in 2021.
- The applicant has submitted a letter requesting a reduction/waiver of the landscaping requirements.
- Staff recommends that the Planning Commission review and discuss the applicants request for a landscaping waiver/reduction to determine if the spirit and intent of the requirement outlined above is accomplished through other means or the nature of the change does not require the landscaping be equivalent to the landscaping approved in 2021.

V. Site Plan Review

A. Applicable Law: Article VI, Section 5 of the Kent County Land Use Ordinance outlines the procedures and requirements for site plan review. Site Development Plans are required to ensure that new development complies with the Comprehensive Plan, Land Use Ordinance, Village Master Plans and other agency requirements, thereby promoting the health, safety, and general welfare of Kent County residents.

Section 5.3.B.16 establishes that the Planning Commission shall prepare findings of fact concerning the reasonable fulfillment of the objectives listed below.

- a. Conformance with the Comprehensive Plan and, where applicable, the Village Master Plan.
- b. Conformance with the provisions of all applicable rules and regulations of county, state, and federal agencies.
- c. Convenience and safety of both vehicular and pedestrian movement within the site and in relationship to adjoining ways and properties.
- d. Provisions for the off-street loading and unloading of vehicles incidental to the normal operation of the establishment, adequate lighting, and internal traffic control.
- e. Reasonable demands placed on public services and infrastructure.

- f. Adequacy of methods for sewage and refuse disposal, and the protection from pollution of both surface waters and groundwater. This includes minimizing soil erosion both during and after construction.
- g. Protection of abutting properties and County amenities from any undue disturbance caused by excessive or unreasonable noise, smoke, vapors, fumes, dust, odors, glare, stormwater runoff, etc.
- h. Minimizing the area over which existing vegetation is to be removed. Where tree removal is required, special attention shall be given to planting of replacement trees.
- i. The applicant's efforts to integrate the proposed development into the existing landscape through design features such as vegetative buffers, roadside plantings, and the retention of open space and agricultural land.
- j. The building setbacks, area, and location of parking, architectural compatibility, signage, and landscaping of the development, and how these features harmonize with the surrounding townscape and the natural landscape.

B. Staff and TAC Comments:

- The proposal is consistent with many strategies and goals of the Comprehensive Plan.
- The Stormwater management, sediment control, and affiliated sureties must be approved prior to final site plan approval.
- There are no known unreasonable demands on public services or infrastructure.
- The applicant has noted that this area is removed from any interaction with the public; as such, all vehicular and pedestrian movements will be governed by the Company in strict compliance with workplace safety.
- Off-street parking is provided for vehicles when maintenance is required.
- No new signage is proposed at this time.
- The applicant has proposed replacing the existing six-foot chain-link privacy fence with an eight-foot nonconductive panel-based fence. The Planning Commission should discuss and ascertain whether this type of fencing harmonizes with the surrounding townscape and proposed landscape.

STAFF RECOMMENDATION:

Staff recommends that the Planning Commission review and discuss the applicants request for a landscaping waiver/reduction to determine if the spirit and intent of the requirement outlined above is accomplished through other means or the nature of the change does not require the landscaping be equivalent to the landscaping approved in 2021.

In order to receive final site plan approval, the applicant must address and/or submit the following outstanding items:

- Stormwater management and sediment control plans must be approved, and any required sureties must be submitted.
- The final landscaping plan and any required sureties must be submitted and approved.
- Renderings of the proposed panel fencing and landscaping along Morgnec Road.

Kent County Department of Planning, Housing and Zoning

Kent County Government Center 400 High Street • Chestertown, MD 21620 410-778-7423 (phone) • 410-810-2932 (fax)

SITE PLAN APPLICATION

File Number:			A	Amount Pa	id: <u>\$225.</u>	.00	Date:_	February 26, 2	2024
Project Name: <u>N</u>	Iorgnec Su	ıbstation l	mprove	ements					
District: 04 M	ap: <u>37</u>	Parcel:	82	Lot Size:	1.72 ac	Deed Ref:	25/28	Zoning:	C
LOCATION: 509	Morgnec 1	Road, Che	estertov	vn, MD 210	520				
PROPOSED USE:	Expansio	on and im	provem	ent of exis	ting Delm	arva Powe	r & Light Co	o. electric substa	ation
OWNER OF LAN	D.								
		1.1.0					(202) 420 (0774	
Name: Delmarva P						_			
Address: 800 King	Street, PO	Box 231,	Wilmi	ngton, DE	<u>19899-02</u>	31Email: io	da.parrett@e	xeloncorp.com	
APPLICANT:									
Name: Delmarva Po	ower & Lig	ght Comp	any			Telephone	·		
			•			-			
Address.						_ Eman			
AGENT/ATTORI	NEY (if an	y):							
Name: Ryan Showalter & Tony Kupersmith						_ Telephone	:(410) 8	20-0259	
McAllister, DeTar, Showalter & Wa Address: 100 N. West Street, Easton, MD 210				ker		Email: rsl	nowalter@m	dswlaw.com	
								mdswlaw.com	
REGISTERED EN	GINEER	OR SUR	VEYOR	l:					
Name: Scott Parker	, PE, Duff	ield Asso	ciates			_ Telephone	:(302) 23	39-6634	
Address: <u>5400 Lime</u>	estone Roa	d, Wilmi	ngton, I	DE 19808-1	1232	_ Email: <u>d</u>	uffield@duf	fnet.com	
Please provide the person will be contadditional informa	acted by st	aff and w	ill be th	ne person re	esponsible	for forwar	ding the con	nments or reque	
Water Supply:	☐ Publi	ic System □	On lot	svstem					
Sewerage:		ic System 🗆]	N/A				
TELEPHONE SERV				- 9					
ELECTRIC SERVIC				& Light Co					
NOTICE: The Plassists you, it cannot	anning Of	ffice is no	ot requi	ired to ma	ke out th				artment
Signature of Applic	cant						Date		
☐ Concept Plan	Approvi	ng Authorit	y:				Date		
☐ Preliminary									
☐ Final	Approvi	ng Authority	y:				Date_		

Site Plan Amendment Supplemental Narrative

Delmarva Power & Light Company Morgnec Road Substation Improvements

The enclosed application and plans depict improvements to the existing Morgnec Road electric substation approved by major site plan in 2021. These proposed amendments to that recent site plan approval are enhancements focused on the security, safety and capacity of the substation. The improvements consist of slight expansion and upgrade of the fencing to provide greater screening of, and security for, the substation components, landscaping shifts to accommodate the fencing changes and elimination of curb cuts, and additional electrical improvements, which modifications do not represent a change in use or a substantial deviation of the character of the recent major site plan approved. Pursuant to Section 5.5 of the Land Use Ordinance, the Landowner/Applicant respectfully requests the Planning Director to approve the proposed improvements as a site plan amendment following the Technical Advisory Committee's review.

Introduction

The Planning Commission unanimously approved Delmarva Power & Light Company's expansion of the long-standing Morgnec Substation onto an adjacent parcel in 2021. A citizen participation meeting for that application was held on September 17, 2020 and no substantive issues were raised or reported. No public comments were provided during the Planning Commission's preliminary site plan review in November 2020 or the January 2021 final site plan review.

The proposed modifications to the existing site consist primarily of: (i) a shift of the fence closer to Morgnec Road to provide functional circulation around the substation within the fence enclosure, (ii) elimination of two existing driveways to provide only two access points to Morgnec Road to accommodate safe equipment access to/from the substation, (iii) replacement of the existing fence with a nonconductive panel fence that will provide enhanced screening of and security for the substation, (iv) adjustment of the landscaping between the fence and Morgnec Road to continue to provide a vegetative visual buffer, and (v) additional electrical substation components. This application includes the following materials:

- (i) Site Plan Application and \$225 Fee;
- (ii) This Supplemental Narrative;
- (iii) Site plan set;
- (iv) Preliminary Stormwater Management Report; and
- (v) Pamphlet describing the proposed HESTIA Model Vanquish fencing system.

Required Narrative Elements:

1. <u>Landowner</u>: Delmarva Power & Light Company

800 King Street P.O. Box 231

Wilmington, DE 19899-0231

Representatives: Ryan Showalter & Anthony Kupersmith

McAllister, DeTar, Showalter & Walker LLC

100 N. West Street Easton, MD 21601

2. <u>Street address, tax map, and parcel number:</u> 509 Morgnec Road, Chestertown

Map 27, Parcel 82

3. Zoning of site: Commercial (C)

4. Current and proposed use of the property: Electric utility substation

- 5. An explanation of the viewshed, open space, and conservation analysis undertaken during the design of the site plan
- 6. How the proposed development complies with the Comprehensive Plan and the design and environmental standards of this Ordinance: The existing substation is essential for the provision of reliable electric service in this area of Kent County. Periodic capacity and function improvements, coupled with enhancement of the safety and security of the substation are consistent with the Plan's recommendations to maintain and upgrade infrastructure to support existing (and attract new) businesses and maintain the quality of life in the County. The provision of robust electrical service for Chestertown compliments the Plan's objective of accommodating growth in existing towns. The reuse and expansion of an existing facility, rather than construction of a new, independent substation, promotes the efficient use of land, avoids environmental impacts that might result from new construction, and concentrates electrical improvements on a parcel that has been used for this purpose for decades. Reduction of entrances and use of a panel fence system will provide enhanced visual screening of the electrical components of the substation.
- 7. Proposed type of water and sewer service: None
- 8. <u>Number of employees:</u> No, resident employees are associated with this use.
- 9. <u>Proposed development schedule:</u> Construction timing is subject to utility service demands. Additional scheduling information will be provided to the County as it develops.
- 10. <u>Statement of provisions for ultimate ownership and maintenance of all parts of the development including streets, structures, and open space:</u> Delmarva Power & Light Company will retain ownership and maintenance responsibility for the entire parcel.
- 11. Water dependent uses in the Critical Area: Not applicable
- 12. <u>Critical Area density calculations based on the original parcel:</u> Not applicable
- 13. <u>Citizen Participation Plan:</u> In light of the recent major site plan review, which generated no substantive public comments or concerns, no additional citizen participation plan is proposed.



Anthony Kupersmith akupersmith@mdswlaw.com (410) 934-3910 Direct

July 24, 2024

VIA EMAIL to rtracey@kentgov.org

Kent County Planning Commission c/o Robert Tracey, Associate Planner 400 High Street Chestertown, Maryland 21620

Re: Request for Landscaping Waiver or Reduction for Delmarva Power & Light Company

Major Site Plan Application 24-13

Dear Members of the Planning Commission:

On behalf of Delmarva Power & Light Company ("DPL"), this is to request a waiver or reduction of the applicable landscaping requirements for DPL's Major Site Plan Application 24-13 (the "Application"). The Application seeks approval of certain improvements to DPL's substation in Chestertown at 509 Morgnec Road (the "Chestertown Substation" or "Substation"), including (i) a shift of the fence closer to Morgnec Road to provide functional circulation around the Substation within the fence enclosure, (ii) elimination of two existing driveways to provide only two access points to Morgnec Road to accommodate safe equipment access to/from the Substation, (iii) replacement of the existing fence with a nonconductive panel fence that will provide enhanced screening of and security for the Substation, (iv) adjustment of the landscaping between the fence and Morgnec Road to continue to provide a vegetative visual buffer, and (v) additional electrical substation components (the "Project"). As explained further below, the waiver or reduction would allow DPL to complete the Project with a necessary and appropriate adjustment to the existing landscaping while maintaining consistency with the intent and spirit of Kent County's landscaping regulations.

The Chestertown Substation, located east of the Town of Chestertown, provides essential services to the Town and surrounding community, facilitating the safe and reliable transmission of electricity. The existing landscaping, established along Morgnec Road (Maryland Route 291), was approved in 2021 as part of a major site plan and consists of 5 understory trees (2.5" caliper), 47 evergreen trees (5-6' in height), and 62 shrubs (18-24" in height), with a total of 114 plantings, as shown on the "Final Major Site & Construction Plans Landscape Plan", prepared by Duffield Associates, dated July 9, 2020, and attached hereto as Exhibit A.

The Application proposes to relocate security fencing closer to Morgnec Road, which will create space for enhanced internal drive aisles and the substation electrical component

¹ The Kent County Code authorizes a waiver or reduction of the applicable landscaping requirements but does not define these terms. We defer to the Planning Commission as to whether this request should technically be deemed a waiver or a reduction.

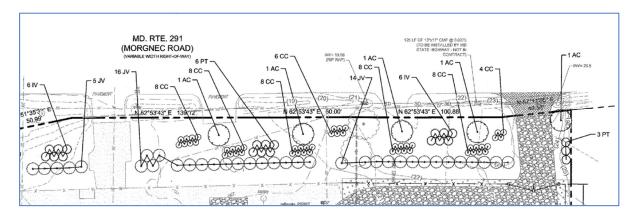


Kent County Planning Commission July 24, 2024

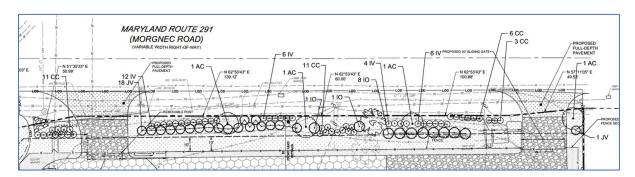
improvements. These changes require modifying and relocating the existing landscaping closer to the road. The proposed landscaping plan consists of 4 understory trees (3" caliper), 29 evergreen trees (8" in height), and 59 shrubs (18-24" in height), with a total of 92 plantings, as shown on the "Preliminary Major Site Plan, Landscape Plan", prepared by Duffield Associates, dated May 3, 2024, last revised July 24, 2024, and attached hereto as Exhibit B.

Below is a comparison of:

(1) The existing approved landscaping:



(2) The proposed modified landscaping:



The Kent County Zoning Ordinance states that landscaping in the Commercial zoning district shall be maintained in a good condition with at least the same quality and quantity as initially approved. See Article V, Section 11.8(B)(6)(c). The Planning Commission, or where applicable the Planning Director, may reduce or waive the landscape requirement when it is demonstrated that the spirit and intent of the requirement are accomplished through other means or the nature of change does not require additional landscaping. Id. at Section 11.8(B)(6)(e).

In this instance, in accordance with § 11.8(B)(6)(e), we are requesting that the Planning Commission grant a waiver or reduction with respect to the quantity and/or quality to allow DPL to relocate and modify the initially approved landscaping for the Substation from 2021 as proposed



Kent County Planning Commission July 24, 2024

in the new landscaping plan.² The new landscaping has been designed to mimic the previous approval to the extent possible while adjusting to a more limited area. The proposed landscaping prioritizes the number of larger trees and evergreens with the tightest spacing recommended by DPL's landscape architect. In addition, the proposed landscaping is substantially similar to the previously approved landscaping in the following respects: the placement of the landscaping is located along Morgnec Road in between the edge of the right-of-way and the Substation's security fencing; the landscaping maintains a setback of approximately 10' from the security fence³; and, the landscaping consists of a mix of shrubs, understory trees, and evergreens to provide texture and variety year-round. Although there would be fewer plantings overall (92 instead of 114), the new proposal includes larger caliper understory trees (3" instead of 2.5"), taller evergreen trees (8' instead of 5-6' in height), and a similar ratio of understory/shrubs/evergreens. The new landscaping also compliments the proposed opaque, non-conductive fence, which will help to promote screening from Morgnec Road. The proposed changes are consistent with the spirit and intent of the existing landscaping while navigating site constraints, including a reduced area for plantings, the presence of underground utility lines, and the need to preserve a 10' setback from the fence for safety reasons. Accordingly, we respectfully request that the Planning Commission grant a waiver or reduction for the proposed landscaping plan.

We look forward to appearing before the Planning Commission at the next meeting in August and will be happy to answer any questions you may have. Thank you for your consideration.

Sincerely,

Anthony P. Kupersmith

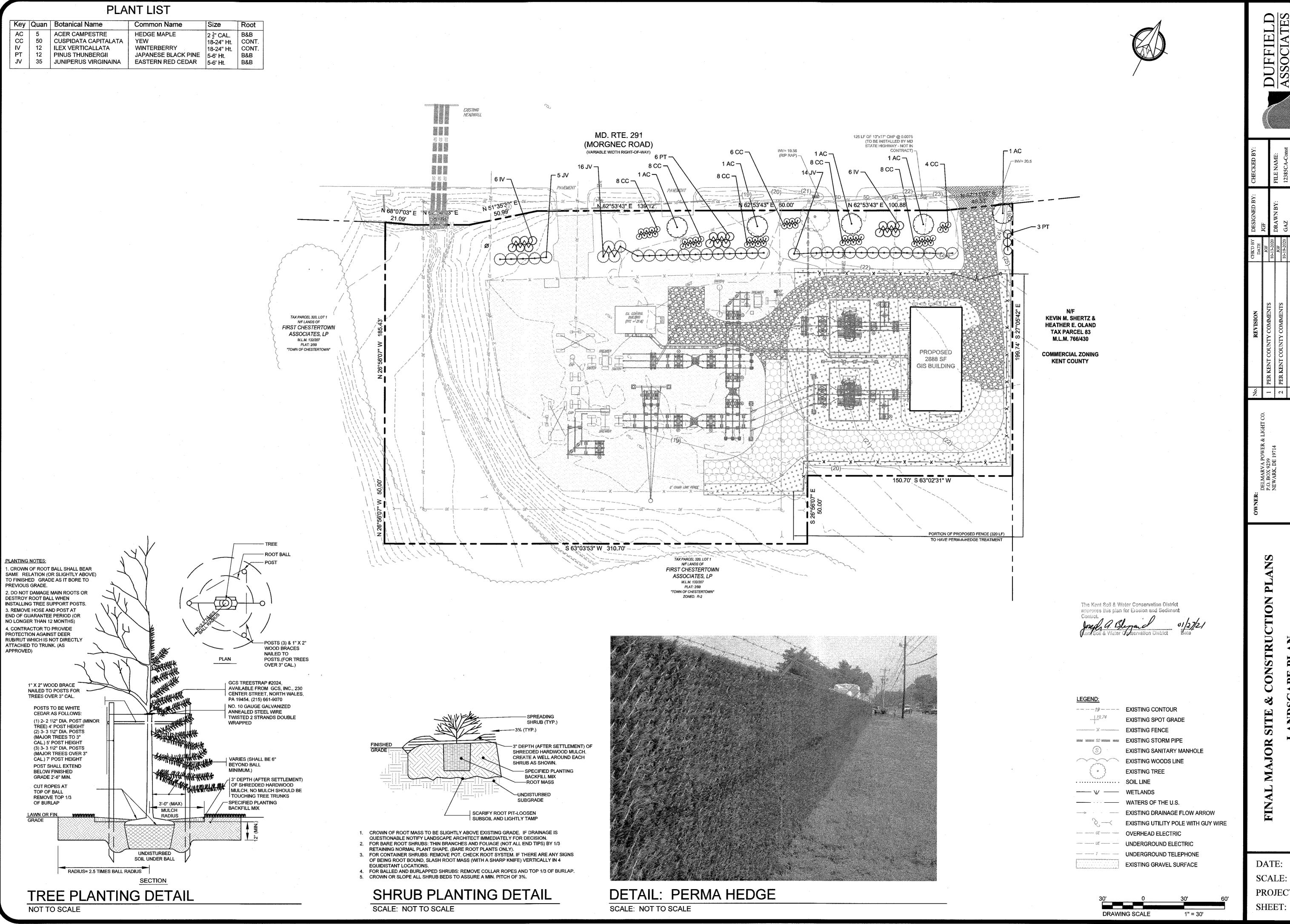
Exhibit A – Existing Landscaping Plan Exhibit B – Proposed Landscaping Plan

cc: Ida Parrett, DPL

Scott Parker, Verdantas

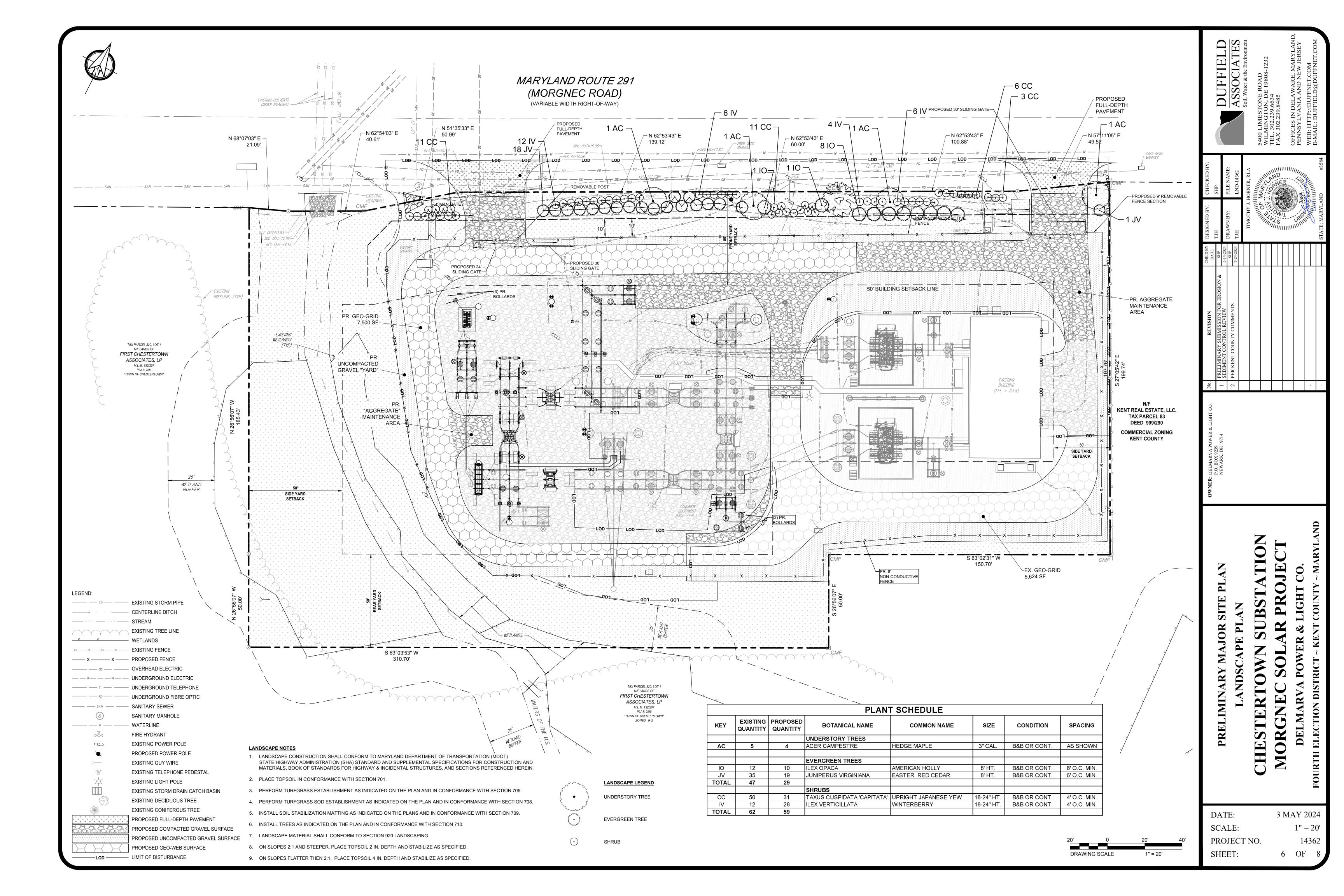
² We believe that $\S 11.8(B)(6)(c)$, requiring that landscaping be maintained as "initially approved", is susceptible to more than one interpretation, including that the requirement technically only applies to requests to modify existing landscaping approvals instead of landscaping proposals made as a part of entirely new site plan applications. However, to the extent the County interprets $\S 11.8(B)(6)(c)$ as requiring DPL to maintain landscaping at levels approved in 2021, we hereby seek a waiver for the new landscaping plan in accordance with $\S 11.8(B)(6)(e)$.

³ The purpose of the 10' setback is to prevent animals or potential trespassers from climbing the landscaping features to gain entry to the secure substation facility.



DEI 9 JULY 2020

1'' = 30'12385.CA PROJECT NO.





July 15, 2024

Duffield Associates, LLC 5400 Limestone Road Wilmington, DE 19808 Phone: 302.239-6634

Fax: 302.239-8485 duffnet.com

Robert W. Tracey, Associate Planner Kent County Department of Planning, Housing & Zoning 400 High Street Chestertown, MD 21620

RE: Duffield Project No. 14362

Technical Advisory Committee Meeting (5/8/2024) Comment Response Letter Chestertown Substation, Morgnec Solar Project

Dear Mr. Tracey:

The members of the Kent County Technical Advisory Committee met on Wednesday, May 8, 2024 and provided site plan comments.

For ease of review, we have listed the comments and provided our responses below.

Major Site Plan (Preliminary)

1. During the April 4th Planning Commission meeting, the members discussed the proposed conceptual landscaping plan for Delmarva Power and Light Company. After some discussion and review of the conceptual landscaping plan, the members acknowledged that the Maryland Route 291 is a gateway into Chestertown and requested the applicant increase the size and number of evergreen and understory trees. The Planning Commission also expressed the desire to have more mature trees planted to provide effective screening of the facility. Please keep in mind that the caliper of a tree is measured at six inches above grade.

Response:. The proposed evergreen tree height has been increased to 8' height and are spaced at 6 feet apart (minimum spacing). (8) evergreen trees have been added to the design. The evergreen tree, evergreen shrub, and understory tree quantities have been maximized to the fullest extent possible as underground / overhead utilities and substation clear zones permit.

2. The preliminary landscaping plan increases the caliper size by a half inch, and height of the understory and evergreen trees; however, no additional evergreen or understory trees are proposed at this time.

Response: 8' height native evergreen trees shall provide an immediate screen to the facility. (8) evergreen trees were added to the design. The dense planting will provide a visually and immediate screen for the facility.

3. On sheet two, existing conditions/demolition plan, the site plan shows a total of seven coniferous trees and two deciduous trees. It appears that the plan proposes the removal of six of the coniferous trees and two deciduous trees are proposed to remain. Please clarify why the removal of the six coniferous trees is needed and please confirm/verify if the two deciduous trees are to remain. It may behoove the applicant to consider merging the existing coniferous and deciduous trees into their proposed landscaping plan prior to Planning Commission.

Robert Tracey, Associate Planner

RE: Project No. 14362

July 15, 2024

Page 2



Response: The existing conditions / demolition plan proposes the removal of (7) coniferous and (1) deciduous tree. (1) coniferous tree is being removed for the installation of the proposed access drive. (6) coniferous trees are being removed to meet the 10' wide vegetation free / clear zone around the facility fence for safety and security purposes. (1) deciduous tree is being removed for the installation of the privacy fence around the facility.

4. Staff recommends that the applicant add additional evergreen and understory trees to meet the request of the Planning Commission and to more closely match the landscaping plan that was approved in 2021 prior to Planning Commission consideration.

Response: (8) evergreen trees have been added to the design. The evergreen tree, evergreen shrub, and understory tree quantities have been maximized to the fullest extent possible as underground / overhead utilities and substation clear zones permit.

5. Please provide a draft landscaping estimate and surety documents.

Response: Attached please find an estimate of probable cost for the tree and shrub installation.

6. Please provide a draft rendering/elevation of the proposed fencing.

Response: Attached please find a 2D rendered site plan with photo of the proposed privacy fence.

We appreciate your review of this project. Please feel free to contact us with any comments or questions.

Sincerely,

DUFFIELD ASSOCIATES, LLC

Scott H. Parker, P.E. Project Manager

SHP/GAZ:aci:cml

14362\Working\CAD\Draft Deliverables\2024-04-17 Prelim Plan\SubmitLtrKent-14362-20240423.docx

Site Plan Amendment Supplemental Narrative

Delmarva Power & Light Company Morgnec Road Substation Improvements

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- (v) Pamphlet describing the proposed HESTIA Model Vanquish fencing system.

Required Narrative Elements:

1. Landowner:

Delmarva Power & Light Company 800 King Street P.O. Box 231

Wilmington, DE 19899-0231

Representatives:

Ryan Showalter & Anthony Kupersmith

McAllister, DeTar, Showalter & Walker LLC

100 N. West Street Easton, MD 21601

2. Street address, tax map, and parcel number:

509 Morgnec Road, Chestertown

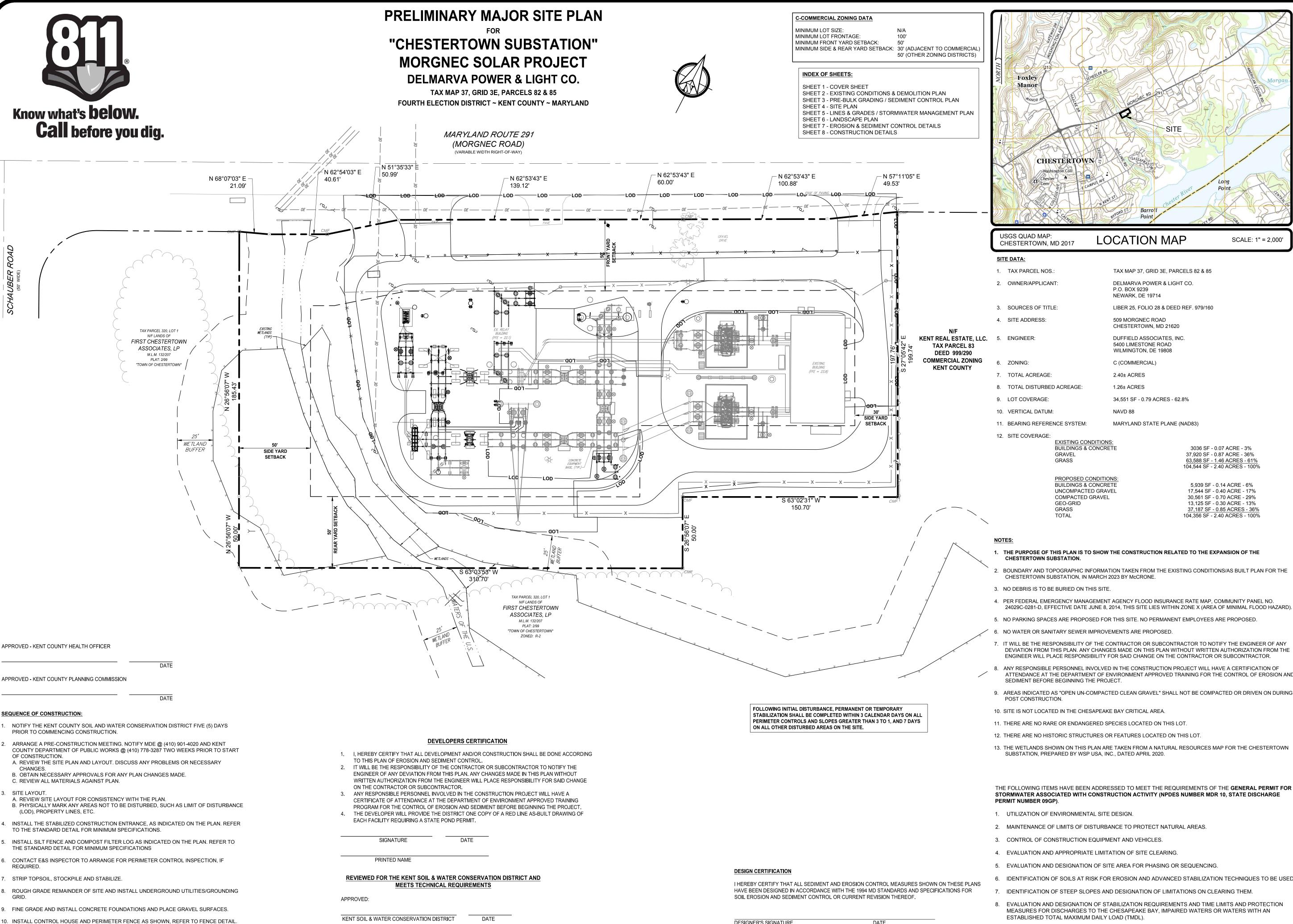
Map 27, Parcel 82

3. Zoning of site:

Commercial (C)

- 4. <u>Current and proposed use of the property:</u> Electric utility substation
- 5. An explanation of the viewshed, open space, and conservation analysis undertaken during the design of the site plan
- 6. How the proposed development complies with the Comprehensive Plan and the design and environmental standards of this Ordinance: The existing substation is essential for the provision of reliable electric service in this area of Kent County. Periodic capacity and function improvements, coupled with enhancement of the safety and security of the substation are consistent with the Plan's recommendations to maintain and upgrade infrastructure to support existing (and attract new) businesses and maintain the quality of life in the County. The provision of robust electrical service for Chestertown compliments the Plan's objective of accommodating growth in existing towns. The reuse and expansion of an existing facility, rather than construction of a new, independent substation, promotes the efficient use of land, avoids environmental impacts that might result from new construction, and concentrates electrical improvements on a parcel that has been used for this purpose for decades. Reduction of entrances and use of a panel fence system will provide enhanced visual screening of the electrical components of the substation.
- 7. Proposed type of water and sewer service: None
- 8. Number of employees: No, resident employees are associated with this use.
- 9. <u>Proposed development schedule:</u> Construction timing is subject to utility service demands. Additional scheduling information will be provided to the County as it develops.
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- 11. Water dependent uses in the Critical Area: Not applicable
- 12. Critical Area density calculations based on the original parcel:

 Not applicable
- 13. <u>Citizen Participation Plan:</u> In light of the recent major site plan review, which generated no substantive public comments or concerns, no additional citizen participation plan is proposed.



NOTE: THE KENT SOIL & WATER CONSERVATION DISTRICT RESERVES THE RIGHT TO

ADD, DELETE, MODIFY, OR OTHERWISE ALTER THE EROSION CONTROL PROVISIONS

OF THIS PLAN IN THE EVENT ADDITIONAL PROTECTION BECOMES NECESSARY.

11. FINE GRADE REMAINDER OF SITE, SEED AND STABILIZE ALL DISTURBED AREAS.

12. REMOVE ALL PAPER AND DEBRIS. TEMPORARY EROSION AND SEDIMENT CONTROL

MEASURES CAN BE REMOVED ONLY AFTER APPROVAL BY THE SITE INSPECTOR.

DESIGNER'S SIGNATURE

KENNETH J. TAYLOR, JR., P.E.

MD REGISTRATION NO. 56369

(P.E.,)R.L.S., OR R.L.A. (CIRCLE ONE)

LOCATION MAP SCALE: 1" = 2,000' TAX MAP 37, GRID 3E, PARCELS 82 & 85 DELMARVA POWER & LIGHT CO. P.O. BOX 9239 NEWARK, DE 19714 LIBER 25, FOLIO 28 & DEED REF. 979/160 509 MORGNEC ROAD CHESTERTOWN, MD 21620 DUFFIELD ASSOCIATES, INC 5400 LIMESTONE ROAD WILMINGTON, DE 19808 C (COMMERCIAL) 2.40± ACRES 1.26± ACRES 34,551 SF - 0.79 ACRES - 62.8% NAVD 88 MARYLAND STATE PLANE (NAD83)

3036 SF - 0.07 ACRE - 3%

37,920 SF - 0.87 ACRE - 36% 63,588 SF - 1.46 ACRES - 61% 104,544 SF - 2.40 ACRES - 100%

5,939 SF - 0.14 ACRE - 6%

17,544 SF - 0.40 ACRE - 17%

30,561 SF - 0.70 ACRE - 29% 13,125 SF - 0.30 ACRE - 13% 37,187 SF - 0.85 ACRES - 36%

104,356 SF - 2.40 ACRES - 100%

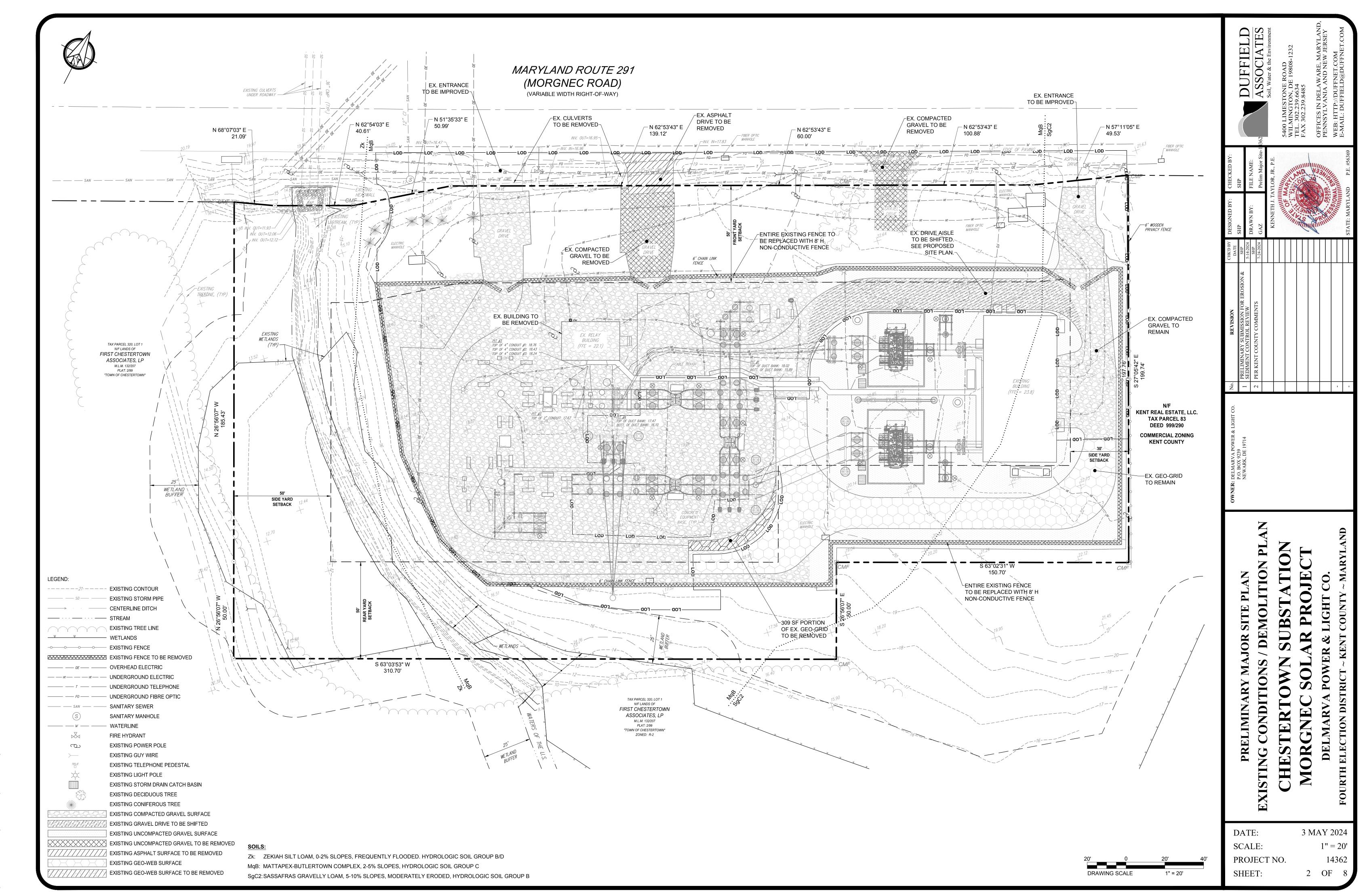
- 1. THE PURPOSE OF THIS PLAN IS TO SHOW THE CONSTRUCTION RELATED TO THE EXPANSION OF THE
- 2. BOUNDARY AND TOPOGRAPHIC INFORMATION TAKEN FROM THE EXISTING CONDITIONS/AS BUILT PLAN FOR THE
- 4. PER FEDERAL EMERGENCY MANAGEMENT AGENCY FLOOD INSURANCE RATE MAP, COMMUNITY PANEL NO.
- 5. NO PARKING SPACES ARE PROPOSED FOR THIS SITE. NO PERMANENT EMPLOYEES ARE PROPOSED.
- 7. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR OR SUBCONTRACTOR TO NOTIFY THE ENGINEER OF ANY DEVIATION FROM THIS PLAN. ANY CHANGES MADE ON THIS PLAN WITHOUT WRITTEN AUTHORIZATION FROM THE ENGINEER WILL PLACE RESPONSIBILITY FOR SAID CHANGE ON THE CONTRACTOR OR SUBCONTRACTOR.
- 8. ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATION OF ATTENDANCE AT THE DEPARTMENT OF ENVIRONMENT APPROVED TRAINING FOR THE CONTROL OF EROSION AND
- 9. AREAS INDICATED AS "OPEN UN-COMPACTED CLEAN GRAVEL" SHALL NOT BE COMPACTED OR DRIVEN ON DURING
- 10. SITE IS NOT LOCATED IN THE CHESAPEAKE BAY CRITICAL AREA.
- 11. THERE ARE NO RARE OR ENDANGERED SPECIES LOCATED ON THIS LOT.
- 12. THERE ARE NO HISTORIC STRUCTURES OR FEATURES LOCATED ON THIS LOT
- 13. THE WETLANDS SHOWN ON THIS PLAN ARE TAKEN FROM A NATURAL RESOURCES MAP FOR THE CHESTERTOWN SUBSTATION, PREPARED BY WSP USA, INC., DATED APRIL 2020.
- THE FOLLOWING ITEMS HAVE BEEN ADDRESSED TO MEET THE REQUIREMENTS OF THE **GENERAL PERMIT FOR** STORMWATER ASSOCIATED WITH CONSTRUCTION ACTIVITY (NPDES NUMBER MDR 10, STATE DISCHARGE
- 2. MAINTENANCE OF LIMITS OF DISTURBANCE TO PROTECT NATURAL AREAS.
- 3. CONTROL OF CONSTRUCTION EQUIPMENT AND VEHICLES.

- 6. IDENTIFICATION OF SOILS AT RISK FOR EROSION AND ADVANCED STABILIZATION TECHNIQUES TO BE USED.
- 7. IDENTIFICATION OF STEEP SLOPES AND DESIGNATION OF LIMITATIONS ON CLEARING THEM.
- 8. EVALUATION AND DESIGNATION OF STABILIZATION REQUIREMENTS AND TIME LIMITS AND PROTECTION MEASURES FOR DISCHARGES TO THE CHESAPEAKE BAY, IMPAIRED WATERS OR WATERS WITH AN ESTABLISHED TOTAL MAXIMUM DAILY LOAD (TMDL).

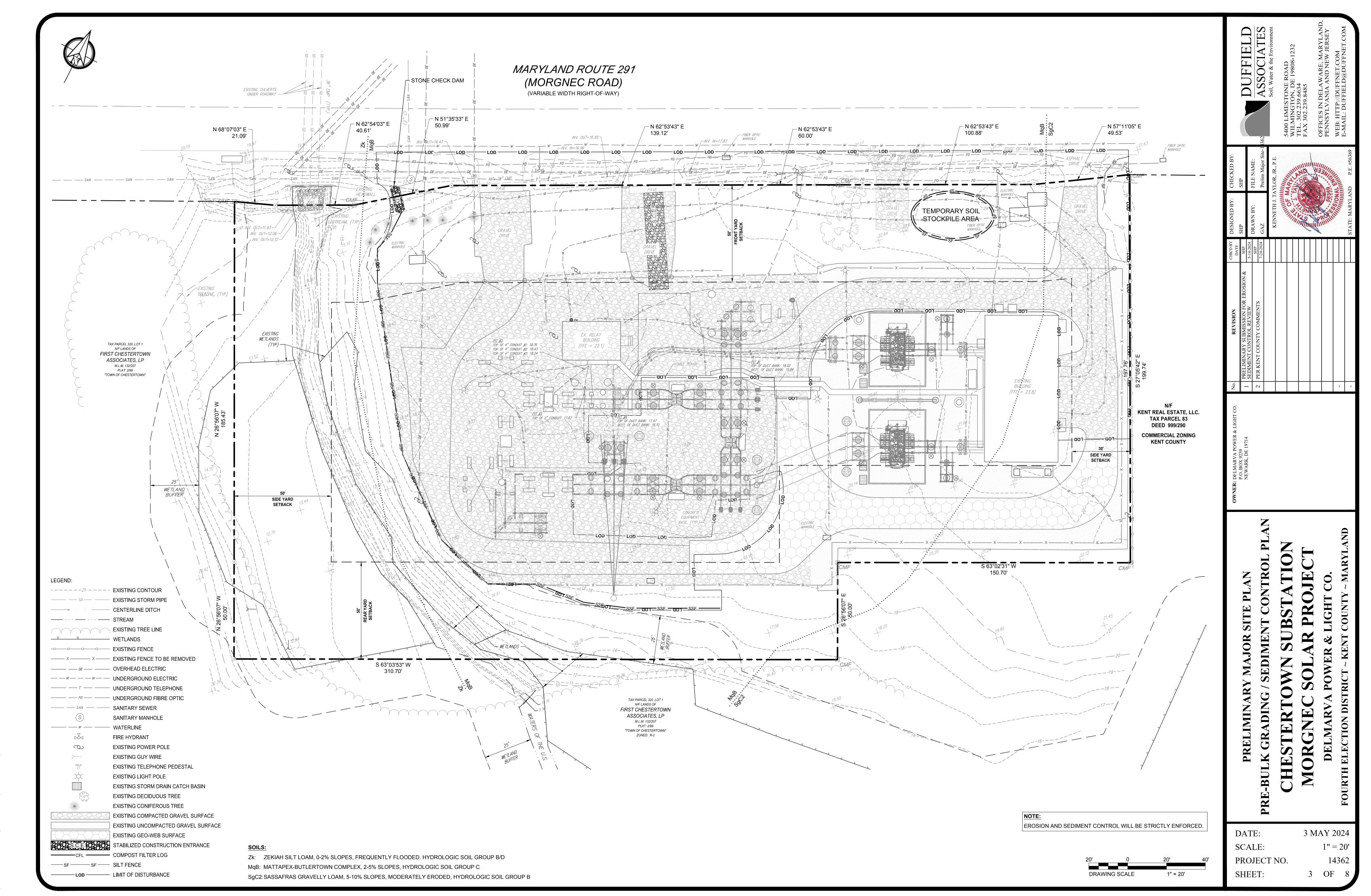


PROJECT NO. SHEET:

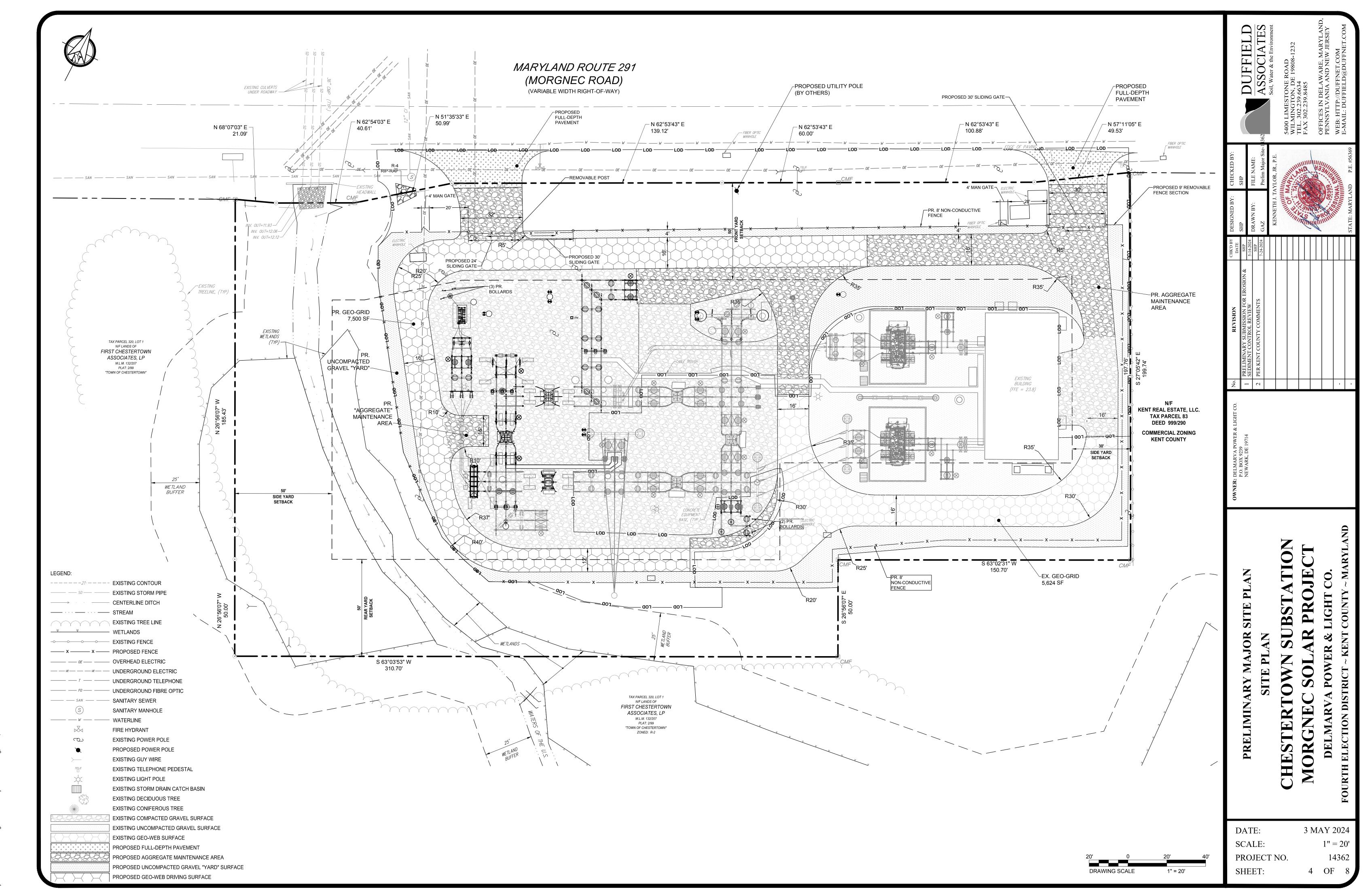
3 MAY 2024



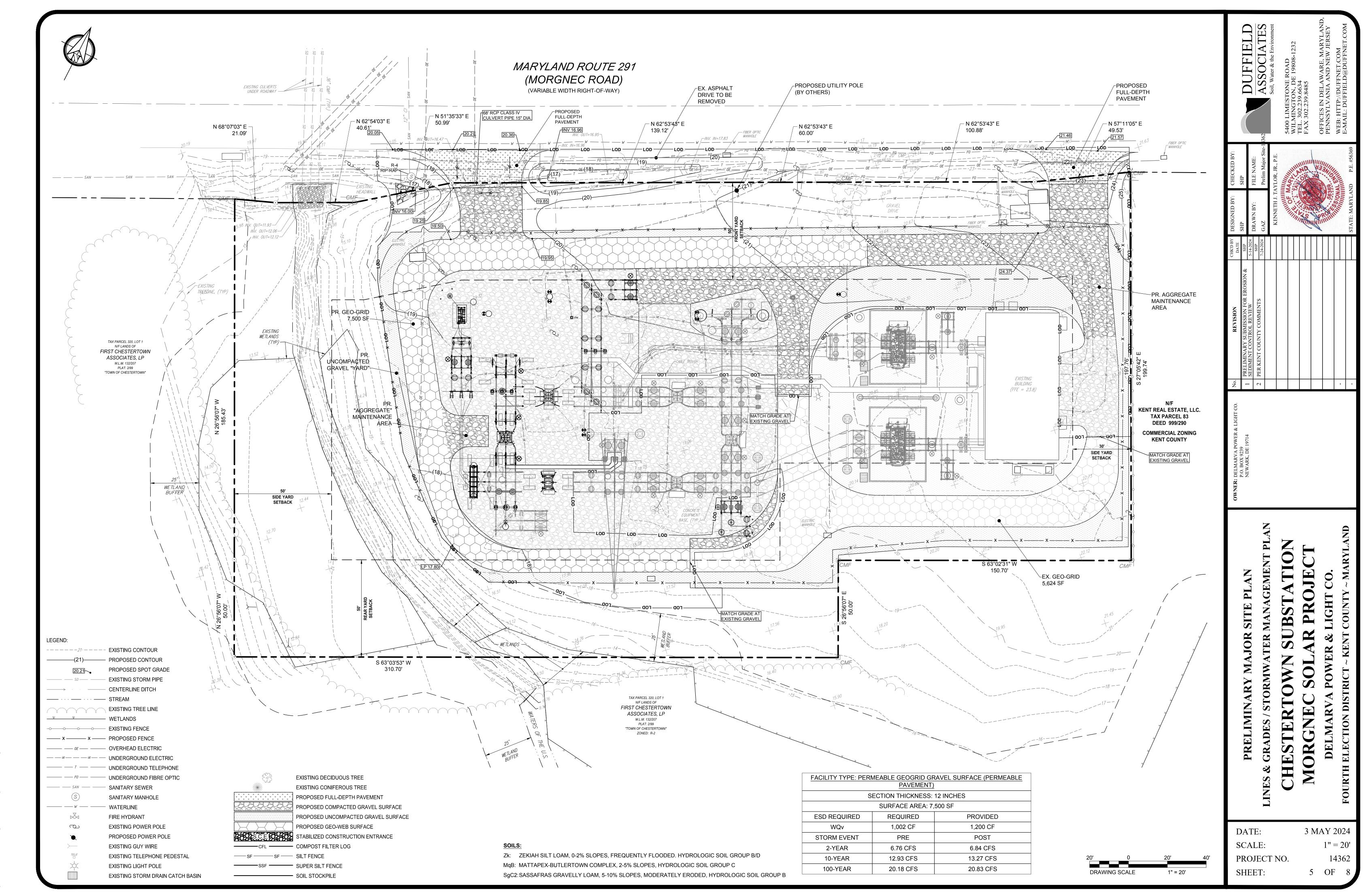
N:\Projects\14000\14362\Working\CAD\Prelim Major Site-14362.dwg, 2-Ex Cond-Demo, 7/24/2024 3:48:07



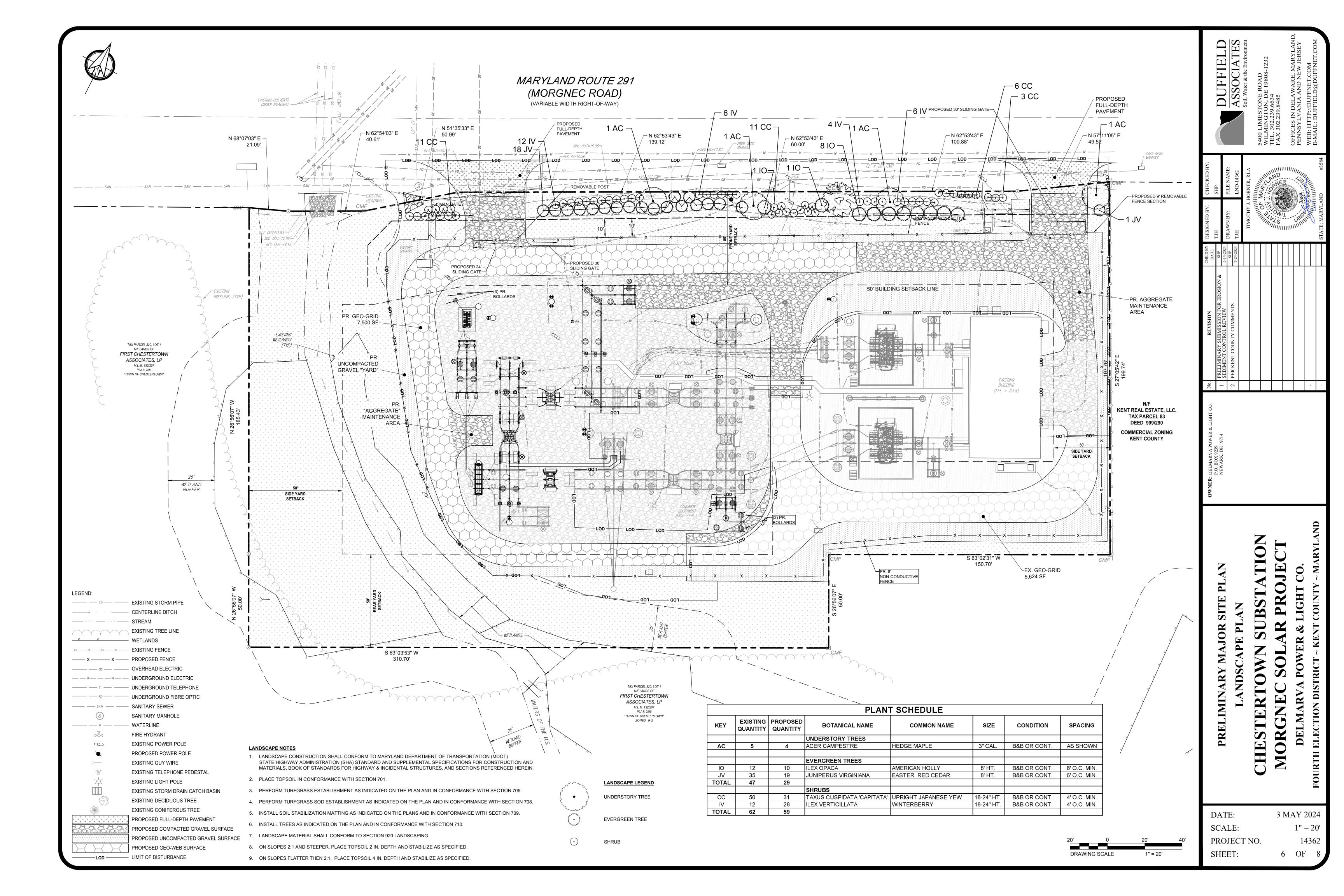
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N:\Projects\14000\14362\Working\CAD\Prelim Major Site-14362.dwg, 5-LG SWM, 7/24/2024 3:48:22 PN



EROSION AND SEDIMENT CONTROL STANDARDS AND SPECIFICATIONS **VEGETATIVE STABILIZATION**

Contractor shall install soil erosion and sediment control devices prior to any grading. Following initial disturbance or re-disturbance, permanent or temporary stabilization shall be completed within three (3) calendar days as to the surface of all perimeter controls, dikes, swales, ditches, perimeter slopes greater than three (3) horizontal to one (1) vertical (3:1) and seven (7) days as to all other disturbed or graded areas on the project site not under active grading. All temporary erosion and sediment control devices are to be provided as indicated on this plan, with location adjustments to be made in the field as necessary, and to be maintained at the end of each working day until project completion. The minimum area practical shall be disturbed for the minimal

Clearing and grubbing shall include all trees, brush, debris, root mat and organic materials to be removed.

Temporary seeding shall be accomplished between February 15th through April 30th, or August 15th through November 30th. During other times, temporary

be accomplished immediately after seeding.

Temporary seeding shall conform to the following applications: 436 lbs. per acre of 10-20-20; 4,000 lbs. per acre of ground limestone, to be incorporated into the soil by disking or other suitable means. Annual ryegrass shall be applied at a rate of 50 lbs. per acre using suitable equipment. Mulching shall

	Seed Mixtur (F	Fertilizer Rate (10-20-20)	Lime Rate			
No.	Species	Appl. Rate (lbs./ac.)	Seeding Dates	Seeding Depths	(10-20-20)	
	ANNUAL RYEGRASS	50#	2/15 - 4/30 B/15 - 11/30	1/2"		
	BARLEY OATS WHEAT CEREAL RYE	96# 72# 120# 112#	2/15 - 4/30 / 8/15 - 11/30 2/15 - 4/30 / 8/15 - 11/30 2/15 - 4/30 / 8/15 - 11/30 2/15 - 4/30 / 8/15 - 12/15	1" 1" 1" 1"	436 lb/ac 10 lb/ 1000 sf	2 tons/ac 90 lb/ 1000 sf
	FOXTAIL MILLET PEARL MILLET	30# 20#	5/1 – 8/14 5/1 – 8/14	И" И"		

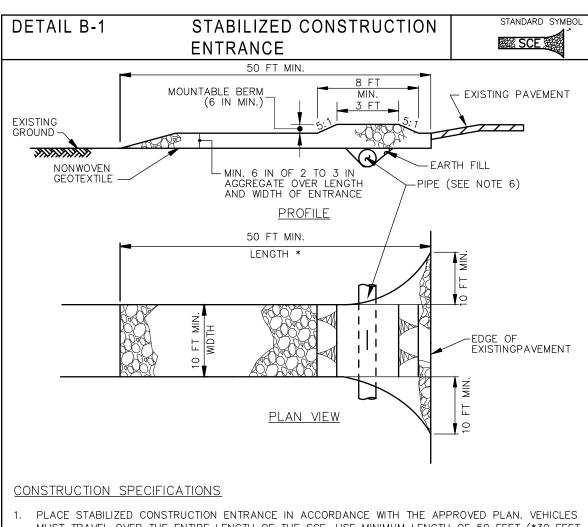
Mulching shall be unchopped, unrotted, small grain straw applied at a rate of 2-2½ tons per acre. Anchor mulch with a mulch anchoring tool on the Contour. Wood cellulose fiber may be used for anchoring straw at a rate of 750 lbs, per acre mixed with water at a maximum of 50 lbs, of wood cellulose fiber per 100 gals. of water, or with a synthetic liquid binder according to manufacturer recommendations. Wood cellulose fiber used as mulch must be applied at a net dry weight of 1,500 lbs. per acre. Mix wood cellulose fiber with water to attain a mixture with a maximum of 50 lbs. of wood cellulose fiber per 100 gals. of water. Permanent seeding shall be accomplished between March 1st through May 15th, or August 15th through October 15th. Permanent seeding at other than specified times will be allowed only upon written approval. Permanent seeding shall conform to the following applications: Permanent seeding for sites having disturbed over five (5) acres shall use fertilizer rates recommended by a soil testing agency and the recommendations provided in the Permanent Seeding Summary Table. Permanent seeding for conditions other than listed above shall be performed at the rates and dates as provided in the Permanent Seeding Summary Table below. Fertilizer and lime amendments shall be incorporated into the top 3"-5" of the soil by disking or other suitable means.

Seed Mixture (For Hardiness Zone 7a) (From Table B.3)					Fertilizer Rate (10-20-20)			Lime
No.	Species	Appl. Rate (lbs./ac.)	Seeding Dates	Seeding Depths	N	P2O5	K2O	Rate
7	CREEPING RED FESCUE KENTUCKY BLUEGRASS	60# 15#	3/1-5/15 8/15-10/15	X"-½"				57
8	TALLFESCUE	100#	3/1-5/15 8/15-10/15	¼"-½"	45 lb/ac 1 lb/ 1000 sf	90 lb/ac 2 lb/ 1000 sf	90 lb/ac 2 lb/ 1000 sf	2 tons/ac 90 lb/ 1000 sf
9	TALL FESCUE KENTUCKY BLUEGRASS PERRENIAL RYEGERASS	60# 40# 20#	3/1-5/15 8/15-10/15	½"-½"	29 24			23 F

Any spoil or borrow will be placed at a site approved by the Soil Conservation District.

Mulching shall be accomplished as discussed in Item #6 of these specifications.

- All areas remaining or intended to remain disturbed for longer than seven (7) days, shall be stabilized in accordance with the USDA, Natural Resources
- conservation Service Standards and Specifications for Soil Erosion and Sediment Control in developing areas for critical area stabilization It will be the responsibility of the Contractor or Subcontractor to notify the Engineer of any deviation from this plan. Any change made in this plan without written authorization from the Engineer will place responsibility of said change on the Contractor or Subcontractor.

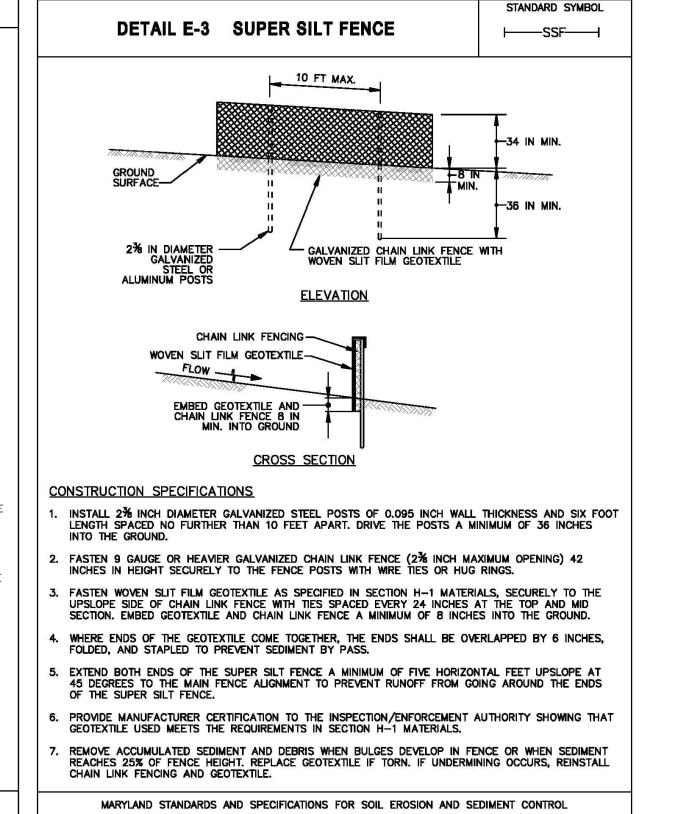


- MUST TRAVEL OVER THE ENTIRE LENGTH OF THE SCE. USE MINIMUM LENGTH OF 50 FEET (*30 FEET FOR SINGLE RESIDENCE LOT). USE MINIMUM WIDTH OF 10 FEET. FLARE SCE 10 FEET MINIMUM AT THE EXISTING ROAD TO PROVIDE A TURNING RADIUS.
- PIPE ALL SURFACE WATER FLOWING TO OR DIVERTED TOWARD THE SCE UNDER THE ENTRANCE, MAINTAINING POSITIVE DRAINAGE. PROTECT PIPE INSTALLED THROUGH THE SCE WITH A MOUNTABLE BERM WITH 5:1 SLOPES AND A MINIMUM OF 12 INCHES OF STONE OVER THE PIPE. PROVIDE PIPE AS SPECIFIED ON APPROVED PLAN. WHEN THE SCE IS LOCATED AT A HIGH SPOT AND HAS NO DRAINAGE TO CONVEY, A PIPE IS NOT NECESSARY. A MOUNTABLE BERM IS REQUIRED WHEN SCE IS NOT LOCATED AT A HIGH SPOT.
- . PREPARE SUBGRADE AND PLACE NONWOVEN GEOTEXTILE, AS SPECIFIED IN SECTION H-1 MATERIALS.
- 4. PLACE CRUSHED AGGREGATE (2 TO 3 INCHES IN SIZE) OR EQUIVALENT RECYCLED CONCRETE (WITHOUT REBAR) AT LEAST 6 INCHES DEEP OVER THE LENGTH AND WIDTH OF THE SCE.
- MAINTAIN ENTRANCE IN A CONDITION THAT MINIMIZES TRACKING OF SEDIMENT. ADD STONE OR MAKE OTHER REPAIRS AS CONDITIONS DEMAND TO MAINTAIN CLEAN SURFACE, MOUNTABLE BERM. AND SPECIFIED DIMENSIONS. IMMEDIATELY REMOVE STONE AND/OR SEDIMENT SPILLED, DROPPED, OR TRACKED ONTO ADJACENT ROADWAY BY VACUUMING, SCRAPING, AND/OR SWEEPING. WASHING ROADWAY TO REMOVE MUD TRACKED ONTO PAVEMENT IS NOT ACCEPTABLE UNLESS WASH WATER IS DIRECTED TO AN APPROVED SEDIMENT CONTROL PRACTICE.

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL: STABILIZED CONSTRUCTION ENTRANCE

STANDARD SYMBOL



MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

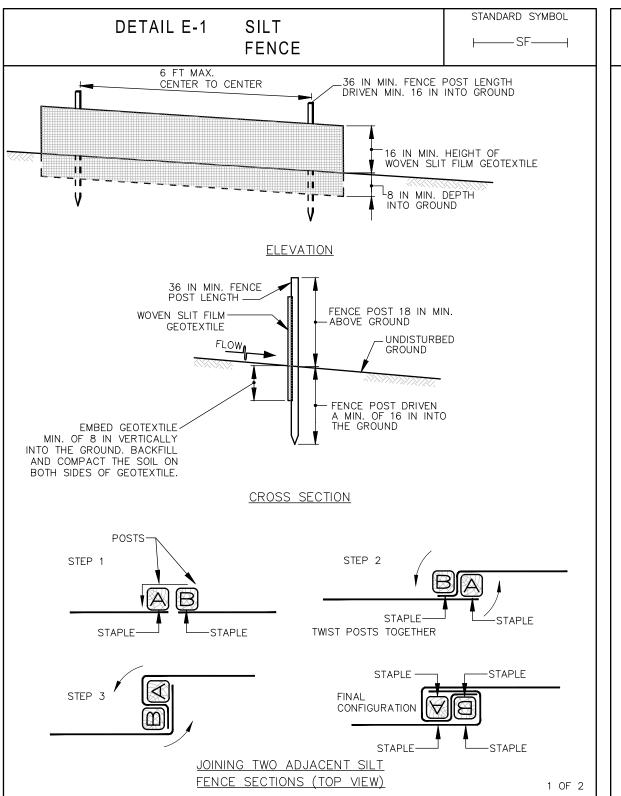
DETAIL: SUPER SILT FENCE

STANDARD SYMBOL

GEOTEXTILE 6 IN

U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE

SCALE: NO SCALE



MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

MARYLAND DEPARTMENT OF ENVIRONMENT

WATER MANAGEMENT ADMINISTRATION

CONSTRUCTION SPECIFICATIONS USE WOOD POSTS $1\frac{3}{4}$ X $1\frac{3}{4}$ \pm $\frac{1}{16}$ Inch (Minimum) square cut of sound quality hardwood. As an alternative to wooden post use standard "t" or "u" section steel posts weighing not LESS THAN 1 POUND PER LINEAR FOOT USE 36 INCH MINIMUM POSTS DRIVEN 16 INCH MINIMUM INTO GROUND NO MORE THAN 6 FEET APART. USE WOVEN SLIT FILM GEOTEXTILE AS SPECIFIED IN SECTION H-1 MATERIALS AND FASTEN GEOTEXTILE SECURELY TO UPSLOPE SIDE OF FENCE POSTS WITH WIRE TIES OR STAPLES AT TOP AND PROVIDE MANUFACTURER CERTIFICATION TO THE AUTHORIZED REPRESENTATIVE OF THE INSPECTION/ENFORCEMENT AUTHORITY SHOWING THAT THE GEOTEXTILE USED MEETS THE REQUIREMENTS IN SECTION H-1 MATERIALS. EMBED GEOTEXTILE A MINIMUM OF 8 INCHES VERTICALLY INTO THE GROUND. BACKFILL AND COMPACT THE SOIL ON BOTH SIDES OF FABRIC. WHERE TWO SECTIONS OF GEOTEXTILE ADJOIN: OVERLAP, TWIST, AND STAPLE TO POST IN ACCORDANCE WITH THIS DETAIL. EXTEND BOTH ENDS OF THE SILT FENCE A MINIMUM OF FIVE HORIZONTAL FEET UPSLOPE AT 45 DEGREES TO THE MAIN FENCE ALIGNMENT TO PREVENT RUNOFF FROM GOING AROUND THE ENDS REMOVE ACCUMULATED SEDIMENT AND DEBRIS WHEN BULGES DEVELOP IN SILT FENCE OR WHEN SEDIMENT REACHES 25% OF FENCE HEIGHT. REPLACE GEOTEXTILE IF TORN. IF UNDERMINING OCCURS,

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

WATER MANAGEMENT ADMINISTRATION

U.S. DEPARTMENT OF AGRICULTURE

TURAL RESOURCES CONSERVATION SERVICE

DETAIL E-1 SILT

FENCE

DETAIL D-2 STONE CHECK DAM -4 TO 7 IN STONE (TYP.) Geotextile 6 in CHANNEL PROFILE NONWOVEN—GEOTEXTILE GEOTEXTILE 6 NONWOVEN GEOTEXTILE CROSS SECTION CONSTRUCTION SPECIFICATIONS PREPARE SWALES IN ACCORDANCE WITH THE CONSTRUCTION SPECIFICATIONS DESCRIBED IN SECTION C-2, STANDARDS AND SPECIFICATIONS FOR TEMPORARY SWALE, OR AS SPECIFIED ON PLAN. PLACE NONWOVEN GEOTEXTILE, AS SPECIFIED IN SECTION H-1 MATERIALS, UNDER THE BOTTOM AND SIDES OF THE DAM PRIOR TO PLACEMENT OF STONE. CONSTRUCT THE CHECK DAM WITH WASHED 4 TO 7 INCH STONE OR EQUIVALENT RECYCLED CONCRETE (WITHOUT REBAR) WITH SIDE SLOPES OF 2:1 OR FLATTER AND A MINIMUM TOP WIDTH OF 12 INCHES. PLACE THE STONE SO THAT IT COMPLETELY COVERS THE WIDTH OF THE CHANNEL AND CHANNEL BANKS. FORM THE WEIR SO THAT TOP OF THE OUTLET CREST IS APPROXIMATELY 6 INCHES LOWER THAN THE OUTER EDGES. LINE THE UPSTREAM FACE OF THE DAM WITH A 1 FOOT THICK LAYER OF WASHED AGGREGATE (3/4 TO 1/2 INCH). SET THE HEIGHT FOR THE WEIR CREST EQUAL TO ONE-HALF THE DEPTH OF THE CHANNEL OR DITCH. TO AVOID SCOUR THE MAXIMUM HEIGHT OF THE WEIR CREST MUST NOT EXCEED 2.0 FEET. REMOVE ACCUMULATED SEDIMENT WHEN IT REACHES ONE—HALF OF THE HEIGHT OF THE WEIR CREST. MAINTAIN LINE, GRADE, AND CROSS SECTION. MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL MARYLAND DEPARTMENT OF ENVIRONMENT U.S. DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL: STONE CHECK DAM

SCALE: NO SCALE

GENERAL SEDIMENT AND EROSION CONTROL NOTES:

- NOTIFICATION OF KENT COUNTY SEDIMENT AND EROSION CONTROL INSPECTOR AT 410-778-7437 AT LEAST FIVE (5) DAYS PRIOR TO THE START OF WORK.
- PRIOR TO THE START OF WORK, THE CONTRACTOR IS TO OBTAIN COUNTY APPROVAL OF ANY PROPOSED CHANGES AND SEQUENCE OF CONSTRUCTION, SPECIFICALLY RELATING TO INSTALLATION, INSPECTION, MAINTENANCE AND REMOVAL OF EROSION AND SEDIMENT CONTROL MEASURES.
- SEDIMENT CONTROL MEASURES ARE NOT TO BE REMOVED UNTIL THE AREAS SERVED HAVE ESTABLISHED VEGETATIVE COVER. OR WITH THE PERMISSION OF THE COUNTY SEDIMENT CONTROL INSPECTOR.
- WHEN PUMPING SEDIMENT-LADEN WATER, THE DISCHARGE MUST BE DIRECTED TO APPROVED SEDIMENT TRAPPING MEASURE PRIOR TO RELEASE FROM THE SITE.
- 5. ALL TEMPORARY STOCKPILES ARE TO BE LOCATED WITHIN AREAS PROTECTED BY SEDIMENT CONTROL MEASURES, AND ARE TO BE TEMPORARILY STABILIZED.
- 6. ALL SEDIMENT CONTROL DIKES, SWALES, BASINS AND FLOW LINES TO BASINS WILL BE TEMPORARILY SEEDED IMMEDIATELY UPON INSTALLATION TO REDUCE THE CONTRIBUTION TO SEDIMENT LOADING.
- DISPOSAL OF EXCESS EARTH MATERIALS ON STATE OR FEDERAL PROPERTY REQUIRES MDE APPROVAL, OTHERWISE MATERIALS ARE TO BE DISPOSED OF AT A LOCATION APPROVED BY THE LOCAL AUTHORITY.
- 8. TEMPORARY SOIL EROSION CONTROL AND SEDIMENT CONTROL MEASURES ARE TO BE PROVIDED AS PER THE APPROVED PLAN PRIOR TO GRADING OPERATION. LOCATION ADJUSTMENTS ARE TO BE MADE IN THE FIELD AS NECESSARY. THE MINIMUM AREA PRACTICAL SHALL BE DISTURBED FOR THE MINIMUM POSSIBLE
- 9. IF GRADING IS COMPLETED OUT OF SEEDING SEASON, GRADED AREAS ARE TO BE TEMPORARILY STABILIZED BY MULCH AND MULCH ANCHORING. MULCH MATERIAL SHALL BE UN-WEATHERED, UN-CHOPPED SMALL GRAIN STRAW SPREAD AT THE RATE OF 1 ½ TO 2 TONS PER ACRE. MULCH ANCHORING TO BE ACCOMPLISHED BY AN APPROVED METHOD, USE OF A MULCH ANCHORING TOOL IS RECOMMENDED WHERE POSSIBLE.
- 10. IMPLEMENTATION OF THE SEDIMENT CONTROL PLAN SHALL BE IN ACCORDANCE WITH THE "2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL", OF THE DEPARTMENT OF THE ENVIRONMENT.
- 11. THE CONTRACTOR IS RESPONSIBLE FOR IMPLEMENTATION AND MAINTENANCE OF THE APPROVED PLAN, AND ALL OTHER MEASURES NECESSARY TO CONTROL, FILTER, OR PREVENT SEDIMENT FROM LEAVING
- 12. IN CASES WHERE STORMWATER MANAGEMENT STRUCTURES ARE A PART OF SITE DEVELOPMENT. REMOVAL OF SEDIMENT CONTROL MAY NOT BE ACCOMPLISHED BEFORE THE CONTRIBUTING AREA TO THE STORMWATER MANAGEMENT STRUCTURE IS STABILIZED.
- 13. ON SITES WHERE INFILTRATION TECHNIQUES ARE UTILIZED FOR THE CONTROL OF STORMWATER, EXTREME CARE MUST BE TAKEN TO PREVENT ALL RUNOFF FROM ENTERING THE STRUCTURE DURING
- CONSTRUCTION.
- 14. SEDIMENT CONTROL FOR UTILITY CONSTRUCTION IN AREAS OUTSIDE OF DESIGNED CONTROLS:
- A. EXCAVATED TRENCH MATERIAL SHALL BE PLACED ON THE HIGH SIDE OF THE TRENCH. B. IMMEDIATELY FOLLOWING PIPE INSTALLATION THE TRENCH SHALL BE BACKFILLED, COMPACTED AND
- STABILIZED AT THE END OF EACH WORKING DAY. C. TEMPORARY SILT FENCE OR STRAW BALE DIKES SHALL BE PLACED IMMEDIATELY DOWNSTREAM OF ANY DISTURBED AREA INTENDED TO REMAIN DISTURBED LONGER THAN ONE WORKING DAY.
- 15. ALL POINTS OF CONSTRUCTION INGRESS AND EGRESS SHALL BE PROTECTED TO PREVENT TRACKING OF MUD ONTO PUBLIC WAYS.

SIT

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3 MAY 2024 AS NOTED

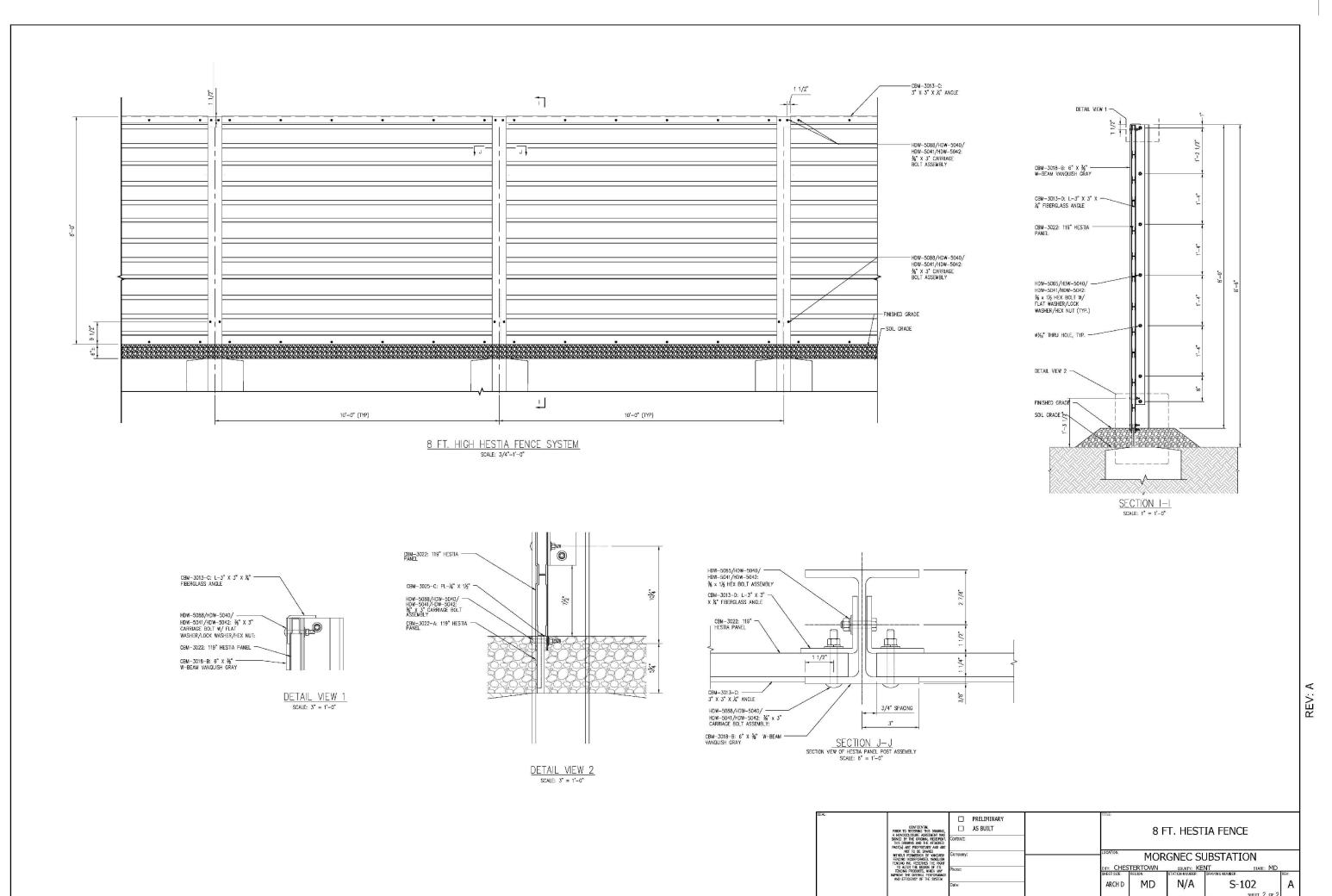
SCALE:

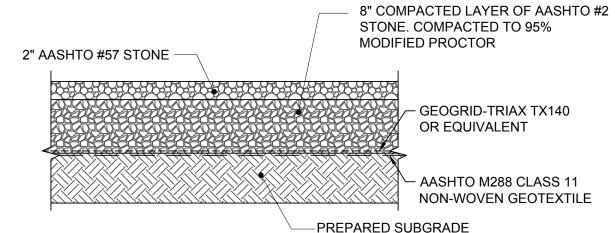
SHEET:

DETAIL: SILT FENCE SCALE: NO SCALE

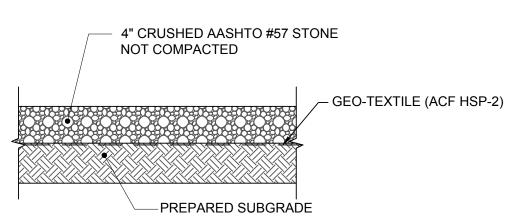
U.S. DEPARTMENT OF AGRICULTURE

NATURAL RESOURCES CONSERVATION SERVICE





SCALE: NO SCALE



DETAIL: UNCOMPACTED GRAVEL "YARD" SURFACE

• FOR THE FIRST 6 MONTHS FOLLOWING CONSTRUCTION, THE GEO-WEB SURFACE SHOULD BE INSPECTED AT LEAST TWICE AFTER STORM EVENTS THAT EXCEED $\frac{1}{2}$ " OF RAINFALL.

• STABILIZE THE CONTRIBUTING AREA TO PREVENT EROSION AS NEEDED. • REMOVE ANY SOIL OR SEDIMENT DEPOSITED ON THE GEO-WEB.

- 4" GEO-WEB LOAD SUPPORT (OR APPROVED EQUIVALENT) - 2" AASHTO #57 STONE - 2" AASHTO #2 STONE - 8" AASHTO #2 STONE

- SUB-GRADE

INSTALLATION PER MANUFACTURERS SPECIFICATIONS. **DETAIL: GEO-GRID DRIVING SURFACE**

- GEO-TEXTILE

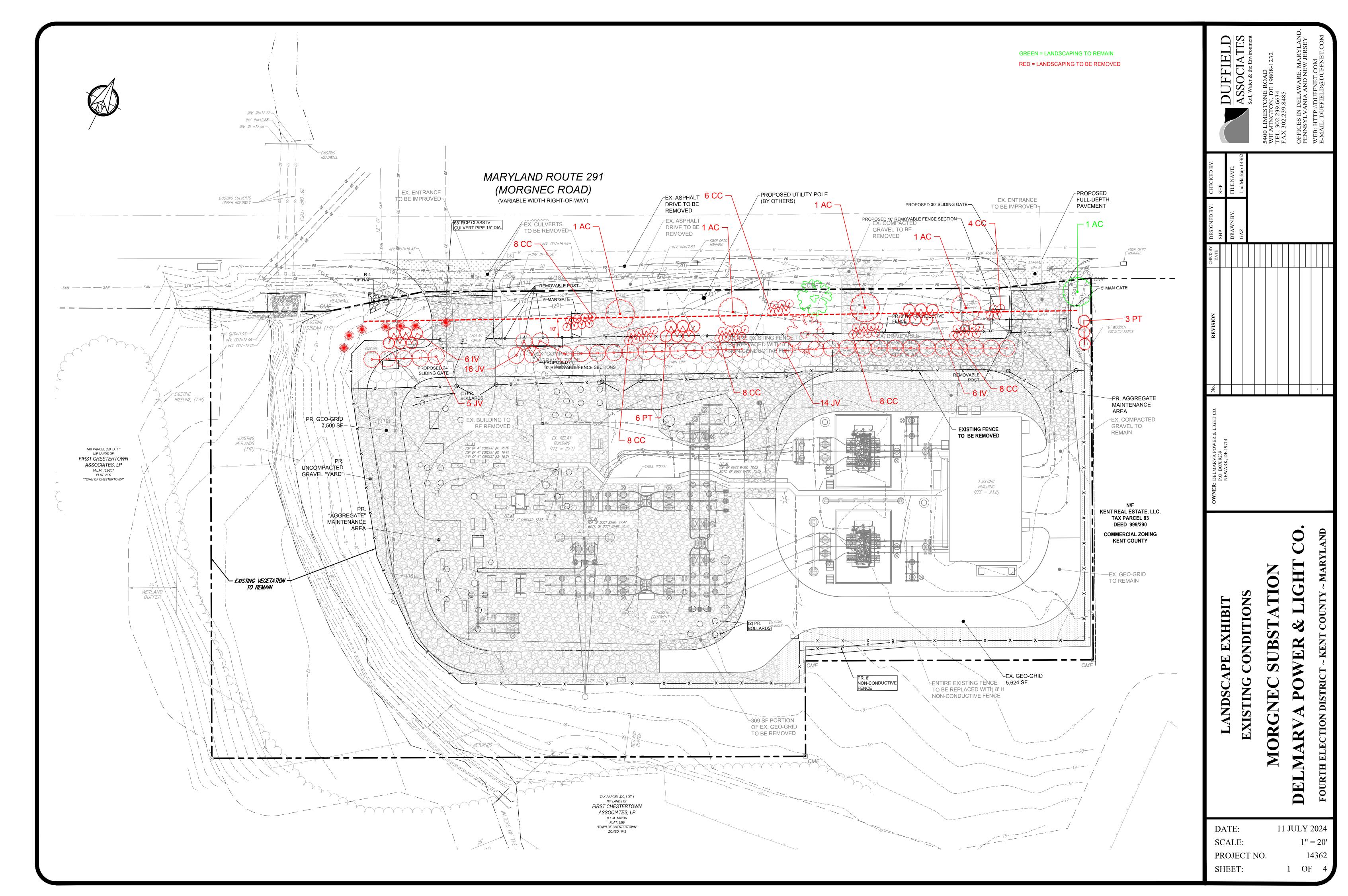
(ACF HSP-2)

SCALE: NONE

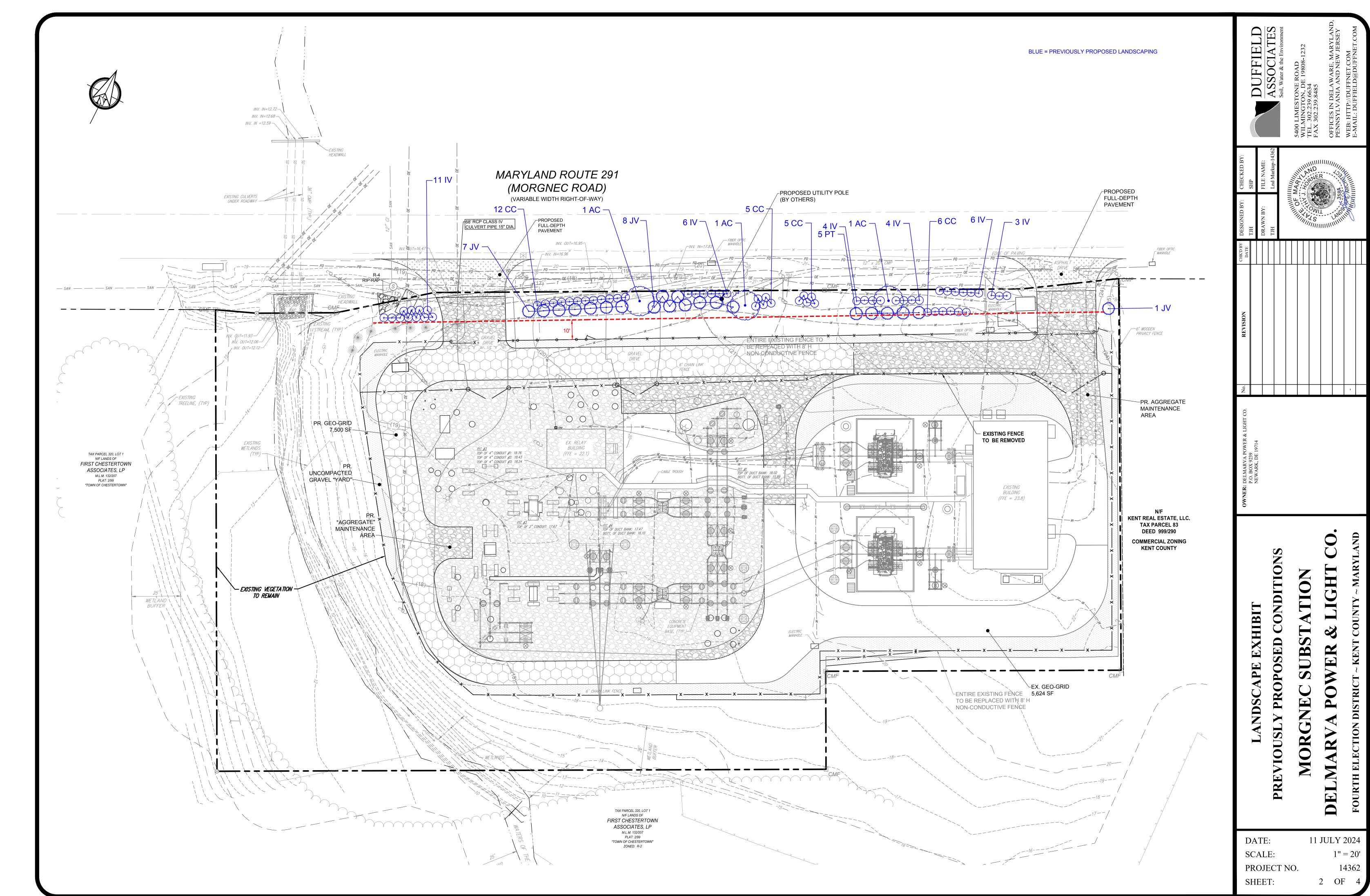
3 MAY 2024 SCALE: AS NOTED PROJECT NO. SHEET:

PRELIMINARY

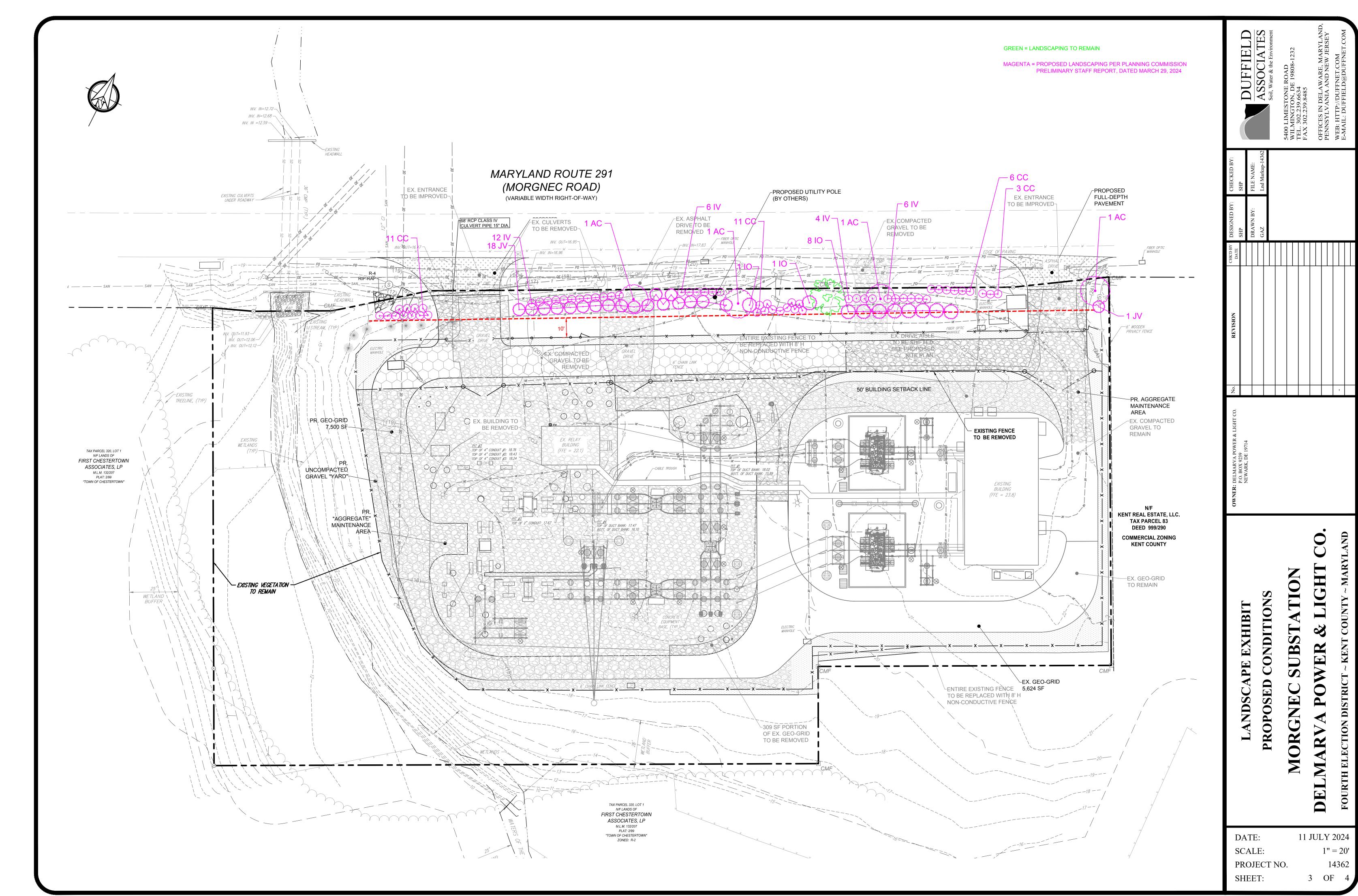
—PREPARED SUBGRADE **DETAIL: AGGREGATE MAINTENANCE AREA** CONDUCT ANY NEEDED REPAIRS OR STABILIZATION. • REPLACE OR REPAIR ANY NECESSARY GEO-WEB AREA THAT IS DEGENERATING. (COMPACTED TO 90% MODIFIED



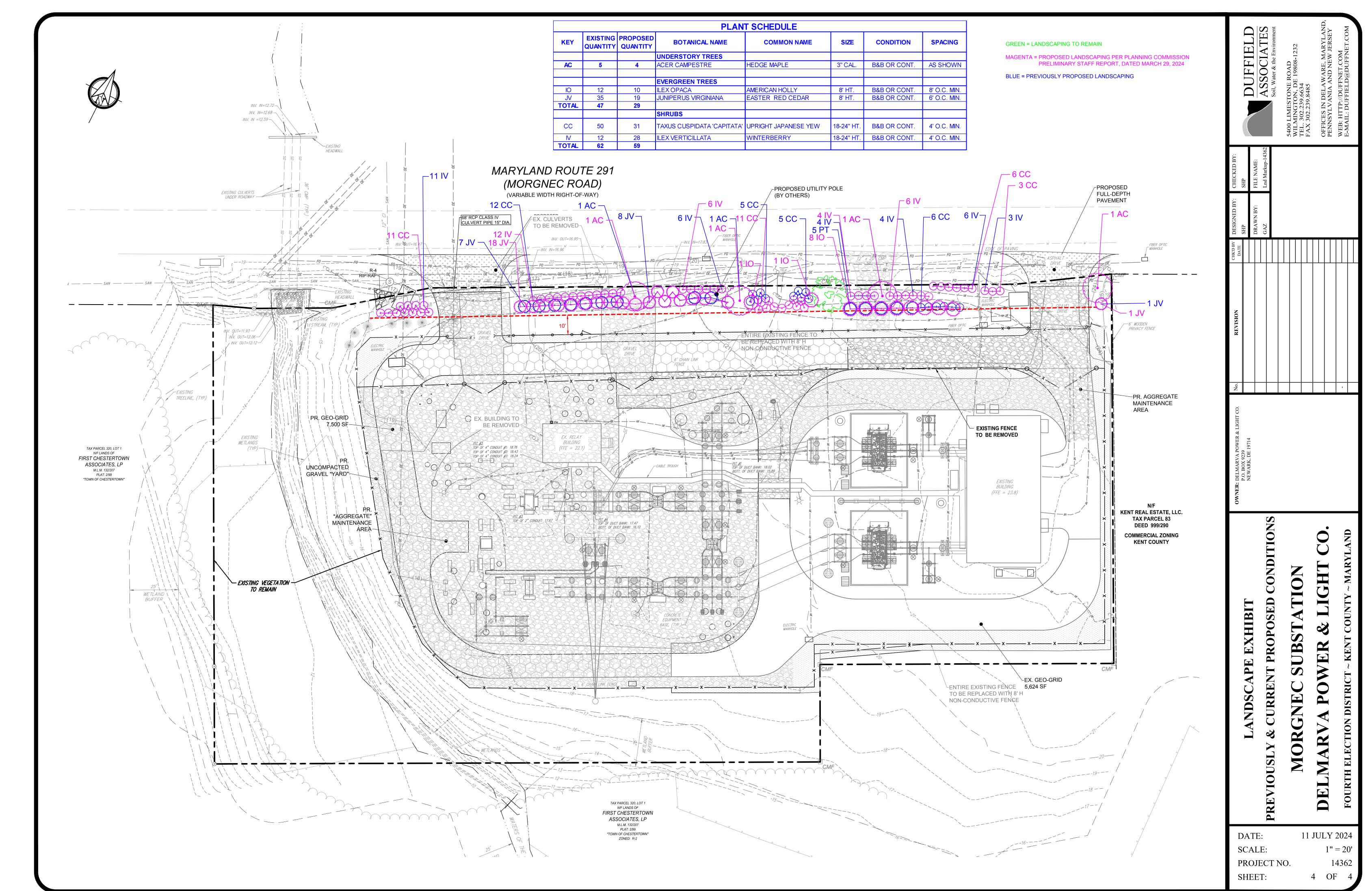
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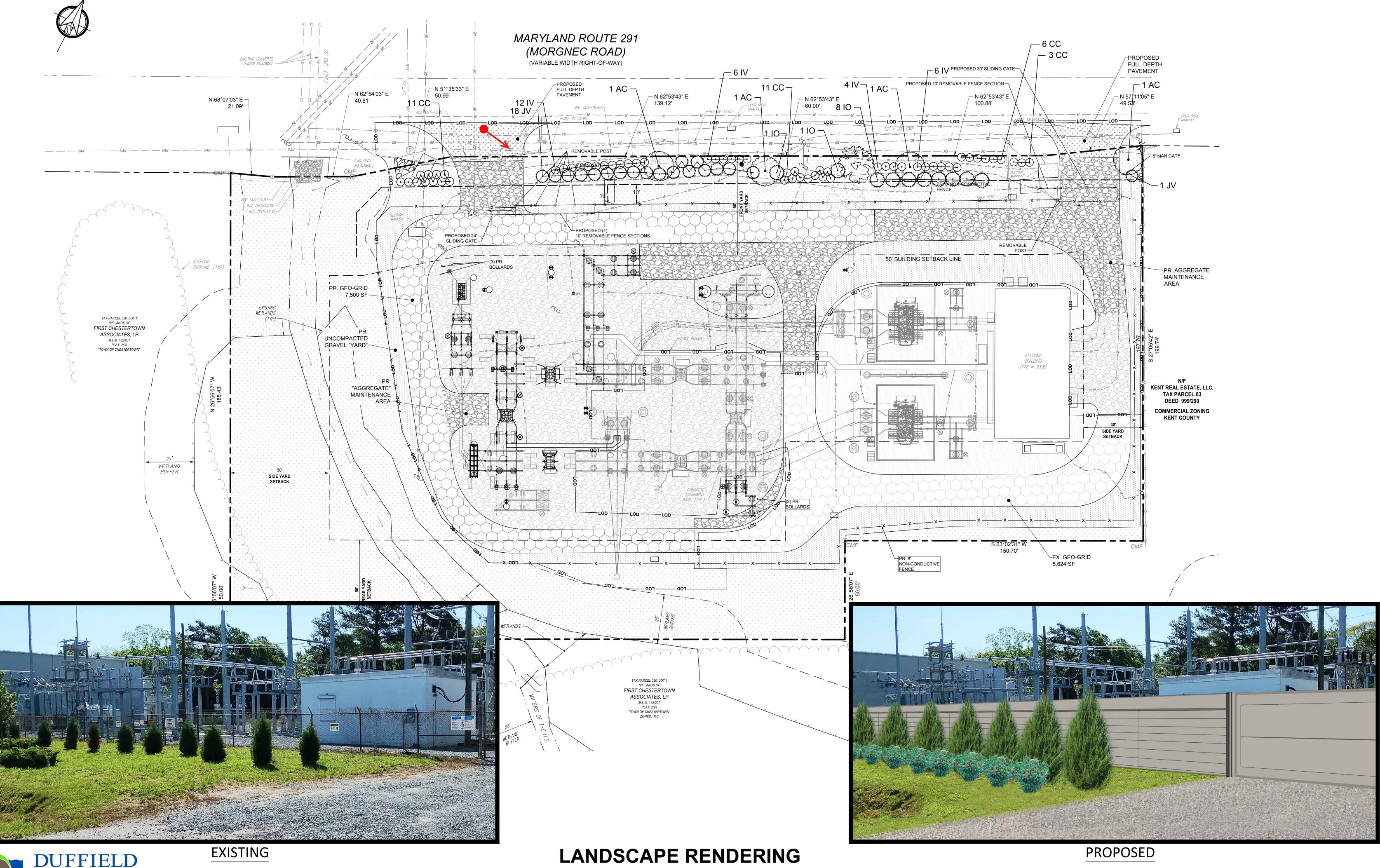
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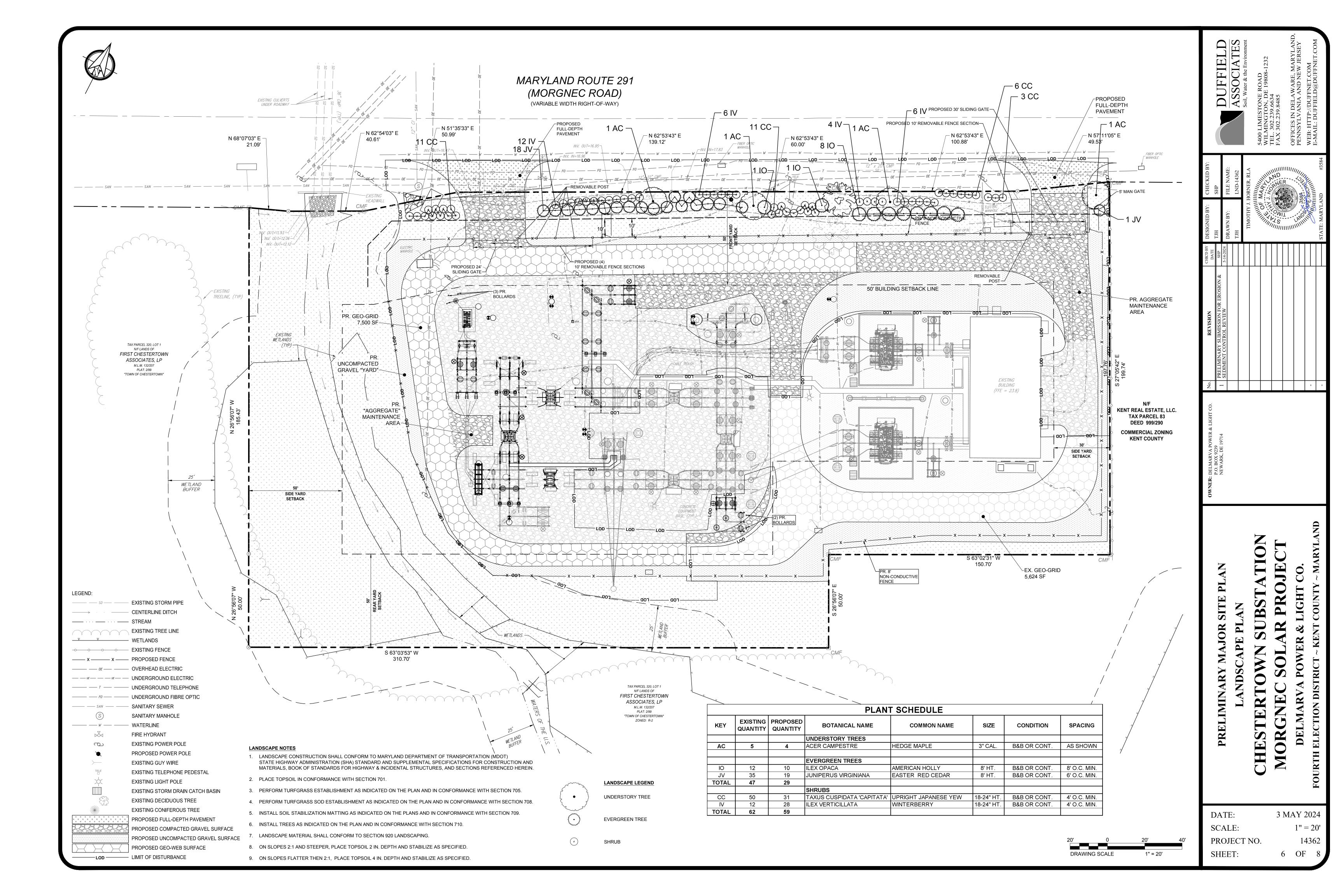


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DUFFIELD
ASSOCIATES
Soil, Water & the Environment

CHESTERTOWN SUBSTATION





Department of Planning, Housing, and Zoning

To: Kent County Planning Commission From: Mark Carper, Associate Planner

Meeting: August 1, 2024

Subject: Richard and Madeline Zaveta

Variance - Pier Length

Executive Summary

Request by Applicant

Richard and Madeline Zaveta, owners, are requesting a 21-foot variance to install a 6-foot-wide pier that is proposed to extend into Tavern Creek 171 feet channelward of the mean high-water line.

Public Process

Per Maryland State Law and Article IX, Section 2.2 of the Kent County *Land Use Ordinance*, the Planning Commission shall review and make a recommendation to the Board of Appeals for variances.

Summary of Staff Report

The 28.06-acre property is located at 6278 Burris Road in the Fifth Election District and is zoned Resource Conservation District (RCD). Piers are not to "exceed 25% of the width of the waterway, the edge of the channel, or 150 feet in length, whichever is less." The Maryland Department of the Environment authorized the proposed pier along with a 15-foot long by 10-foot-wide floating platform, a 58-foot long by 3-foot-wide floating finger pier with a 90-degree bend, and a boat lift with associated piles.

According to the applicant, the practical difficulty is caused by limited water depth and the requirement of a minimum of 2.5 feet for safe operation of the proposed boat lift. The proposed length will extend the pier beyond the range of subaquatic vegetation, greatly reducing impact.

Staff Recommendation

Staff recommends sending a favorable recommendation to the Board of Appeals.

PRELIMINARY STAFF REPORT

TO: Kent County Planning Commission FROM: Mark Carper, Associate Planner SUBJECT: Richard and Madeline Zaveta

#24-34, Variance - Pier Length

DATE: July 16, 2024

Description of Proposal

Richard and Madeline Zaveta, owners, are requesting a 21-foot variance to install a 6-foot-wide pier that is proposed to extend into Tavern Creek 171 feet channelward of the mean high-water line.

The 28.06-acre property is located at 6278 Burris Road in the Fifth Election District and is zoned Resource Conservation District (RCD). Piers are not to "exceed 25% of the width of the waterway, the edge of the channel, or 150 feet in length, whichever is less." The Maryland Department of the Environment authorized the proposed pier along with a 15-foot long by 10-foot-wide floating platform, a 58-foot long by 3-foot-wide floating finger pier with a 90-degree bend, and a boat lift with associated piles.

Relevant Issues

I. Pier Length

- A. Applicable Law: The Kent County Land Use Ordinance, Article V, Section 2.4.B.7 permits as an accessory use, "Private piers, community piers, and private shared piers, not to exceed 25% of the width of the waterway, the edge of the channel, or 150 feet in length, whichever is less and subject to the stipulations of Article VI, Section 3.7 of this ordinance."
- B. Staff and TAC Comments:

The applicants are requesting a 21-foot variance to install a 6-foot-wide pier that is proposed to extend into Tavern Creek 171 feet channelward of the mean high-water line.

II. Variance

A. Applicable Law: Article IX, Section 2.2 of the Kent County Land Use Ordinance authorizes the Board of Appeals to grant variances from the yard (front, side, or rear), height, bulk, parking, loading, shoreline cliff, 15% slope, pier length, impervious surface, stream protection corridor, and buffer requirements so as to relieve practical difficulties or other injustices arising out of the strict application of the provisions of this Ordinance.

Such granting of a variance shall comply, as nearly as possible, in every respect to the spirit, intent, and purpose of this Ordinance; it being the purpose of this provision to authorize the granting of variation only for reasons of demonstrable practical difficulties as distinguished from variations sought for purposes or reasons of convenience, profit, or caprice.

In order to grant a variance, the Board of Appeals must find all of the following:

- a. That the variance will not cause a substantial detriment to adjacent or neighboring property.
- b. That the variance will not change the character of the neighborhood or district.
- c. That the variance is consistent with the Comprehensive Plan and the general intent of this Ordinance.

- d. That the practical difficulty or other injustice was caused by the following:
 - i. Some unusual characteristic of size or shape of the property.
 - ii. Extraordinary topographical or other condition of the property.
 - iii. The use or development of property immediately adjacent to the property, except that this criterion shall not apply in the Critical Area.
- $e. \quad \text{That the practical difficulty or other injustice was not caused by the applicant's own actions.}\\$

...

- g. In considering an application for a variance, the Board shall consider the reasonable use of the entire parcel or lot for which the variance is requested.
- h. In considering an application for a variance, the Board of Appeals shall presume that the specific development activity in the Critical Area that is subject to the application and for which a variance is required does not conform with the general purpose and intent of this Ordinance and the Critical Area Law.
- i. The Board may consider the cause of the variance request and if the variance request is the result of actions by the applicant, including the commencement of development activity before an application for a variance has been filed.

B. Staff and TAC Comments:

- Piers are a common feature for waterfront properties. The proposed pier would not encroach on the channel and is less than 25% of the width of the waterway. The nearest pier to this one is approximately 800 feet to the north on an adjacent property.
- There are no known substantial detriments to adjacent or neighboring properties that would be created by the proposed pier.
- No known change to the character of the neighborhood will be caused by the variance.
- The variance is not inconsistent with the Comprehensive Plan or the Critical Area Program. A strategy of the Comprehensive Plan is to "Encourage the protection of important aquatic resources" (Page 63), such as submerged aquatic vegetation, which serves as important food, nursery, and habitat for fish.
- The proposed length will extend the pier beyond the range of subaquatic vegetation.
- According to the applicant, the practical difficulty is caused by limited water depth and the requirement of a minimum of 2.5 feet for safe operation of the proposed boat lift.
- The proposal has been reviewed by the Kent County Health Department, MDOT SHA, and the Kent County Office of Emergency Services, and none have objections or concerns. The proposed pier has been authorized by the Maryland Department of the Environment.

Staff Recommendation

Staff recommends sending a favorable recommendation to the Board of Appeals for the pier variance.

BOARD OF APPEALS APPLICATION

Kent County Department of Planning, Housing and Zoning

Kent County Government Center 400 High Street • Chestertown, MD 21620 410-778-7423 (phone) • 410-810-2932 (fax)

IN THE MATTER OF THE APPLICATION OF: (Name, Address and Telephone Number of Applicant))	For Office Use Only: Case Number/Date Filed: 27-34/6-4-24 Filed by:
Modeline Zaveta P.O. BOX 244	Applicant:
05/08/ PA 490/183	Notice in Paper:Property Posted:
Email: MZAVETA 9(0) amail.com	
Please provide the email of the one person who will be res person will be contacted by staff and will be the person res	ponsible for responding to comments. Only this sponsible for forwarding the comments or requests for IAIL:
TO THE KENT COUNTY BOARD OF APPEALS: In ac	ccordance with Article Section
of the Kent County Zoning Ordinance, as amended, request	is hereby made for:
Appealing Decision of Kent County Zoning Admin Special Exception Nonconforming Use	istrator Variance
DESCRIPTION OF PROPERTY INVOLVED:	
Located on: (Name of Road, etc.) 6278 F	Burnis Rd, Bock Hall Mc) 2166
In the Election District of Kent County.	
Size of lot or parcel of Land: 28.06 Map: 45 Parcel: 49 Lot #:	13 Deed Ref: 78 465
List buildings already on property:	
If subdivision, indicate lot and block number:	13
If there is a homeowner's association, give name and addres	
LNFHOA	
PRESENT ZONING OF PROPERTY: REST	DENTIAL
DESCRIPTION OF RELIEF REQUESTED: (List here in	detail what you wish to do with property that requires
the Appeal Hearing.) Move toat dock o	
If appealing decision of Zoning Administrator, list date of th	eir decision:
Procent avenage (a) of property	TT 1 1

If Applicant is not owner, please indicate your interest in this property:
OWNER .
Has property involved ever been subject to a previous application?
If so, please give Application Number and Date:
PLEASE FILL IN BELOW, OR ATTACH HERETO, A SKETCH OF THIS PROPERTY.
List all property measurements and dimensions of any buildings already on the property.
Put distances between present buildings or proposed buildings and property lines.
NAMES OF ADJOINING PROPERTY OWNERS:
Owner(s) on the North: Mr. Dwight Gorsoch
443-398-5606
Owner(s) on the North: Mr. Dwight Gorsuch H43-398-5606 Owner(s) on the South:
Owner(s) to the East:
Owner(s) to the West:
Homeowners Association, name and address, if applicable:
BY SIGNING THIS APPLICATION, I GRANT MEMBERS AND ALTERNATE OF THE BOARD OF ZONING APPEALS THE RIGHT TO ENTER ONTO THE PROPERTY FOR THE PURPOSE OF VIEWING THE SITE OF THE APPLICATION OR APPEAL. Signature of Owner/Applicant/Agent or Attorney Date Please file this form at 400 High Street, Chestertown, MD 21620 accompanied by \$350.00 filing fee made payable to the County Commissioners of Kent County. The filing fee for appeals of a Zoning Administrator's decision is

\$250.00. If you have any questions, please contact the Clerk at 410-778-7467.

NOTICE: Neither the Board of Appeals nor the Planning Department is required to make out this Application. If the Planning Department assists you, it cannot be held responsible for its contents.

Applicants arriving more than 10 minutes after the scheduled hearing will not be heard and will be re-scheduled at the applicant's expense.



Wes Moore, Governor Aruna Miller, Lt. Governor

Serena McIlwain, Secretary Suzanne E. Dorsey, Deputy Secretary

March 14, 2024

Richard Zaveta c/o Victoria Payne Waterfront Engineering, Design and Construction, Inc 8348 Governor Ritchie Hwy Pasadena, MD 21122

Via email: Victoria.Payne@waterfrontedc.com

Re:

Agency Interest Number: 96388 Tracking Number: 202460009

Tidal Authorization Number: 24-PR-0009

Dear Richard Zaveta:

Your application to alter tidal wetlands has been evaluated by the Tidal Wetlands Division. Your State wetlands license or permit authorizing work in tidal wetlands is attached. Please take a moment to read and review your authorization to ensure that you understand the limits of the authorized work and all of the general and special conditions.

Your project qualifies for federal approval under the Maryland State Programmatic General Permit (MDSPGP); however your project requires a separate review by the U.S. Army Corps of Engineers and issuance of the required federal permit. The federal permit is not attached. You should not begin any work until you have obtained all necessary State, local, and federal authorizations.

This State authorization is a final agency decision; there is no further opportunity for administrative review. Any person with standing, who is either the applicant or who participated in the public participation process through the submission of written or oral comments, may petition for judicial review in the circuit court in the county where the authorized activity will occur. The petition for judicial review must be filed with the court within 30 days of receipt of this decision. Please contact Matt Godbey at Matt.Godbey@maryland.gov or 410-901-4033 with any questions.

Sincerely,

Jonathan Stewart, Chief Eastern Region

Tidal Wetlands Division



STATE OF MARYLAND DEPARTMENT OF THE ENVIRONMENT WATER AND SCIENCE ADMINISTRATION GENERAL TIDAL WETLANDS LICENSE



Pier, Piling and Boat Lift Construction

LICENSE NUMBER: 24-PR-0009

EFFECTIVE DATE: March 14, 2024 EXPIRATION DATE: March 13, 2027

LICENSEE: Richard Zaveta Jr.

ADDRESS: 4030 Skyron Dr, Ste H

Doylestown, PA 18901-1135

PROJECT LOCATION: 6278 Burris Rd

Rock Hall, MD 21661

Tavern Creek in Kent County

PURSUANT TO THE AUTHORITY OF THE BOARD OF PUBLIC WORKS, TITLE 16 OF THE ENVIRONMENT ARTICLE, ANNOTATED CODE OF MARYLAND, AND CODE OF MARYLAND REGULATIONS 26.24 AND 23.02.04, Richard Zaveta Jr. ("LICENSEE") IS AUTHORIZED BY THE WATER AND SCIENCE ADMINISTRATION ("ADMINISTRATION") TO CONDUCT THE FOLLOWING REGULATED ACTIVITY IN STATE TIDAL WETLANDS, IN ACCORDANCE WITH THE CONDITIONS OF THIS LICENSE AND THE ATTACHED PLANS DATED March 14, 2024, PREPARED BY Waterfront Engineering, Design and Construction, Inc., AND APPROVED BY THE ADMINISTRATION'S TIDAL WETLANDS DIVISION ON March 14, 2024, AND INCORPORATED HEREIN:

- 1. Remove an existing pier and associated structures;
- 2. Construct a 171-foot long by 6-foot wide floating timber pier with a 15-foot long by 10-foot wide floating platform, a 58-foot long by 3-foot wide floating finger pier with a 90 degree bend, a 45-foot long by 3-foot wide floating finger pier with a 90 degree bend, and a boat lift with associated piles, all extending a maximum of 171 feet channelward of the mean high water line.

SPECIAL CONDITIONS

- A. The Licensee shall remove an existing pier and associated structures prior to the commencement of the construction of a new pier.
- B. The existing or authorized pier shall not comprise more than a maximum of 6 slips, lifts, or hoist inclusive of a maximum of six mooring piles with no greater than 4 boat slips, lifts, or hoists.
- C. The total platform area shall not exceed 200 square feet.
- D. The Licensee shall not attach accessory platforms to any existing or proposed boat lifts.

GENERAL CONDITIONS

- A. The Maryland Department of the Environment has determined that the proposed activities comply with, and will be conducted in a manner consistent with the State's Coastal Zone Management Program, as required by Section 307 of the Federal Coastal Zone Management Act of 1972, as amended.
- B. The Licensee shall comply with all Critical Area requirements and obtain all necessary authorizations from local jurisdiction. This License does not constitute authorization for disturbance in the 100-foot Critical Area Buffer. "Disturbance" in the Buffer means clearing, grading, construction activities, or removal of any size of tree or vegetation. Any anticipated Buffer disturbance requires prior written approval, before commencement of land disturbing activity, from local jurisdiction in the form of a Buffer Management Plan.
- C. If the authorized work is not performed by the property owner, all work performed under this Tidal Wetlands License shall be conducted by a marine contractor licensed by the Marine Contractors Licensing Board (MCLB) in accordance with Title 17 of the Environment Article of Annotated Code of Maryland. A list of licensed marine contractors may be obtained by contacting the MCLB at 410-537-3249, by e-mail at MDE.MCLB@maryland.gov or by accessing the Maryland Department of the Environment, Environmental Boards webpage.
- D. The Licensee certifies real property interest in the contiguous upland.
- E. The issuance of this permit is not a validation or authorization by the Department for any of the existing structures depicted on the plan sheets on the subject property that is not part of the authorized work description, nor does it relieve the Licensee of the obligation to resolve any existing noncompliant structures and activities within tidal wetlands.
- F. The Licensee acknowledges that this authorization is based on current water depths that are existing and indicated on the attached plan sheet. This License proposes no dredging and this license provides no justification or assurances for future dredging. All dredging projects will be evaluated on the biological and physical characteristics of the site at the time an application is made.
- G. The Licensee shall obtain an approved sediment and erosion control plan from the local soil conservation district when the area disturbed is greater than 5000 square feet or 100 cubic yards of fill.
- H. The Licensee shall ensure that a copy of this License, including the approved plans, is available at the site until the authorized work is complete.
- I. The Licensee shall make every reasonable effort to design and construct the structure or perform the activity authorized in this License in a manner which minimizes adverse impacts on natural resource values, including water quality, plants, wildlife, plant and wildlife habitat, and on historic property values.
- J. The Secretary of the Environment may suspend or revoke a License if the Secretary finds that the Licensee has not complied with any condition or limitation in the License or has exceeded the scope of the authorized activities.

- K. The Licensee shall indemnify, defend and hold harmless the State of Maryland, its officials, officers, and employees from and against any and all liability, suits, claims and actions of whatever kind, caused by or arising from the work authorized by the License.
- L. The Licensee acknowledges that this License does not transfer any property interest in State tidal wetlands. This License allows the Licensee to use State tidal wetlands only for the structure or activity authorized herein and in no way limits the use of waters of the State by the public.
- M. This License is valid only for use by the Licensee. Permission for transfer of the License shall be obtained from the Water and Science Administration, Tidal Wetland Division. The terms and conditions of this License shall be binding on any assignee or successor in interest of the License.
- N. The Licensee shall allow representatives of the Maryland Department of the Environment to inspect the authorized activities.
- O. The Licensee shall notify the Maryland Department of the Environment, Water and Science Administration, Compliance Program at least 10 days before starting the authorized activities at (410) 901-4020.
- P. The Licensee shall complete construction of the activity authorized under this License by the expiration date, otherwise a new General License shall be obtained.
- Q. Upon completion of the authorized activities, the Licensee shall notify the Maryland Department of the Environment, Water and Science Administration, Compliance Program at (410) 901-4020.

03/18/2024

By authority of the Secretary of the Environment:

Heather L. Nelson, Program Manager

Wetlands and Waterways Protection Program

Tidal Wetland Reviewer: Matt Godbey

Supervisor Concurrence:

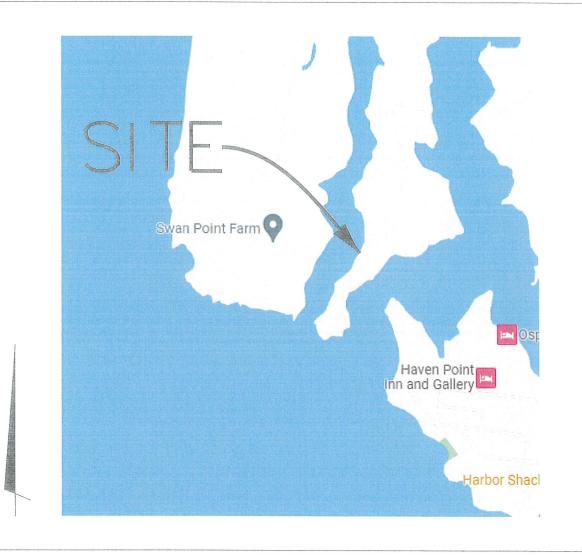
Tracking Number: 202460009 Agency Interest Number: 96388

Enclosure: Plans dated March 14, 2024

cc: WSA Inspection & Compliance Program



VICINITY MAP 1" = 2000"



REVISED 3/14/2024

Tax Account No.: 0502-6636 Tax Map: 0045 Parcel: 0049

Deed Ref: 00078/00465

Lot: 13 Zoning: RCD

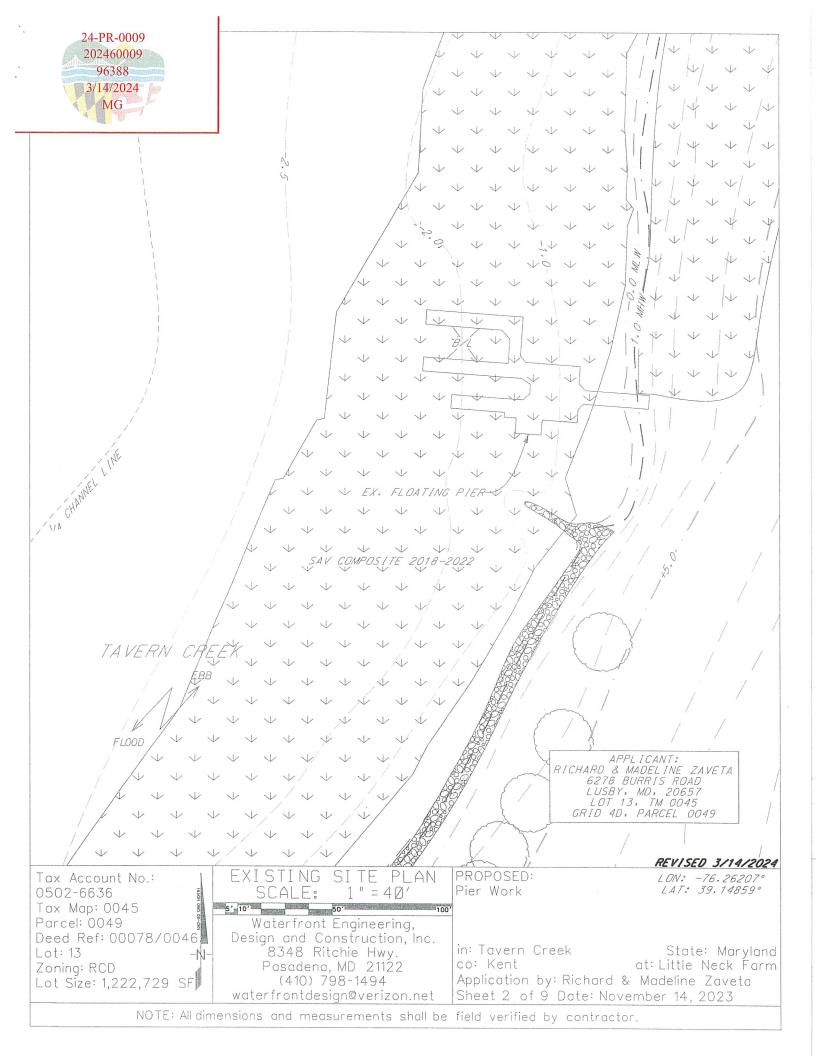
Lot Size: 1,222,729 SF

VICINITY MAP

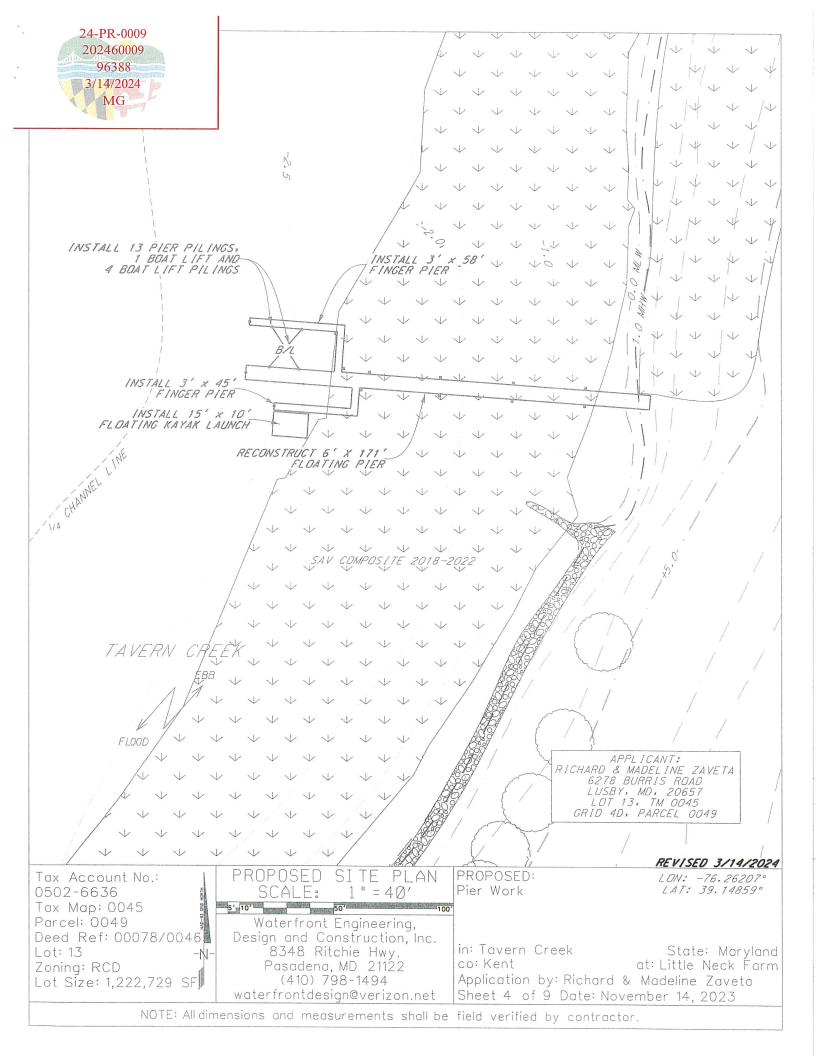
Waterfront Engineering,
Design and Construction, Inc.
8348 Ritchie Hwy.
Pasadena, MD 21122
(410) 798-1494
waterfrontdesign@verizon.net

PROPOSED: Pier Work

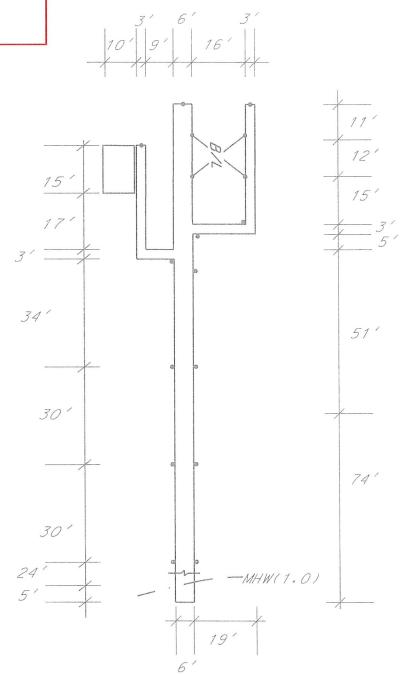
in: Tavern Creek State: Maryland co: Kent at: Little Neck Farm Application by: Richard & Madeline Zaveta Sheet 1 of 9 Date: November 14, 2023











REVISED 3/14/2024

Tax Account No.:
0502-6636
Tax Map: 0045
Parcel: 0049
Deed Ref: 00078/0046
Lot: 13
Zoning: RCD
Lot Size: 1,222,729 SF

PIER DIMENSIONS SCALE: 1"=30'

Waterfront Engineering,
Design and Construction, Inc.
8348 Ritchie Hwy.
Pasadena, MD 21122
(410) 798-1494
waterfrontdesign@verizon.net

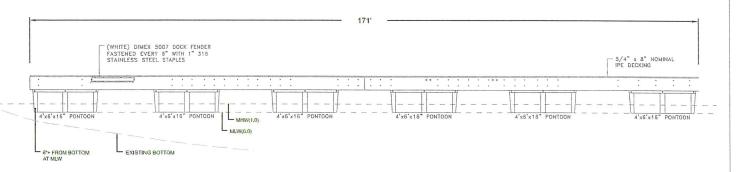
PROPOSED: Pier Work LON: -76.26207° LAT: 39.14859°

in: Tavern Creek co: Kent State: Maryland at: Little Neck Farm

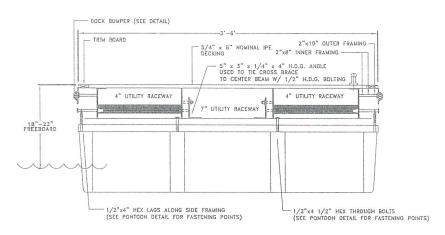
Application by: Richard & Madeline Zaveta Sheet 5 of 9 Date: November 14, 2023

NOTE: All dimensions and measurements shall be field verified by contractor.





SIDE ELEVATION OF PIER



SECTION VIEW OF FLOATING PIER

Tax Account No.: 0502-6636 Tax Map: 0045 Parcel: 0049

Deed Ref: 00078/00465

Lot: 13 Zoning: RCD

_-

Lot Size: 1,222,729 SF

FLOATING PIER DETAIL SHEET

Waterfront Engineering, Design and Construction, Inc. 8348 Ritchie Hwy. Pasadena, MD 21122 (410) 798-1494

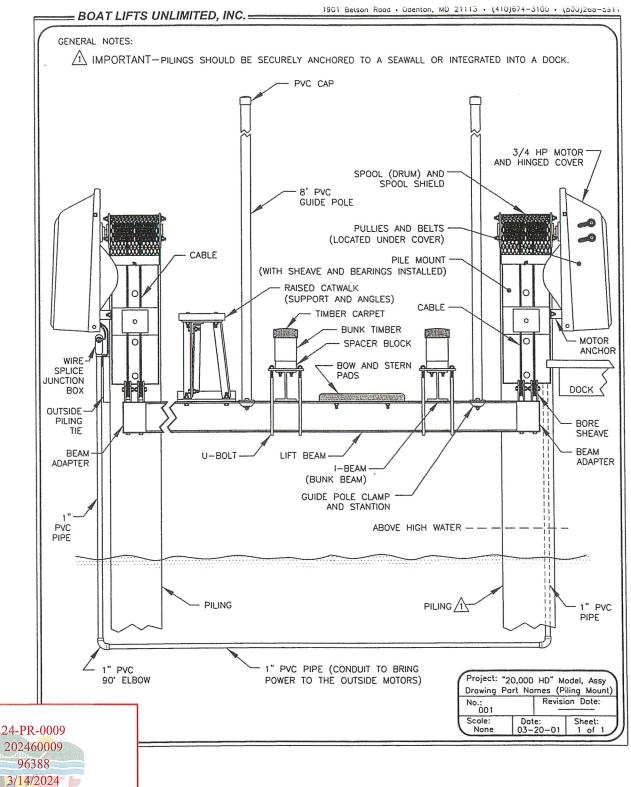
waterfrontdesign@verizon.net

PROPOSED: Pier Work

REVISED 3/14/2024

in: Tavern Creek co: Kent

State: Maryland at: Little Neck Farm Application by: Richard & Madeline Zaveta Sheet 6 of 9 Date: November 14, 2023



BOAT LIFT DETAIL

Tax Account No.: 0502-6636 Tax Map: 0045

MG

Parcel: 0049 Deed Ref: 00078/00465

Lot: 13 Zoning: RCD

Lot Size: 1,222,729 SF

BOAT LIFT DETAIL

Waterfront Engineering, Design and Construction, Inc. 8348 Ritchie Hwy. Pasadena, MD 21122 (410) 798-1494

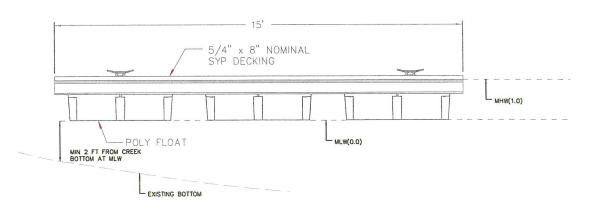
PROPOSED: Pier Work

in: Tavern Creek co: Kent Application by: Richard & Madeline Zaveta waterfrontdesign@verizon.net | Sheet 7 of 9 Date: November 14, 2023

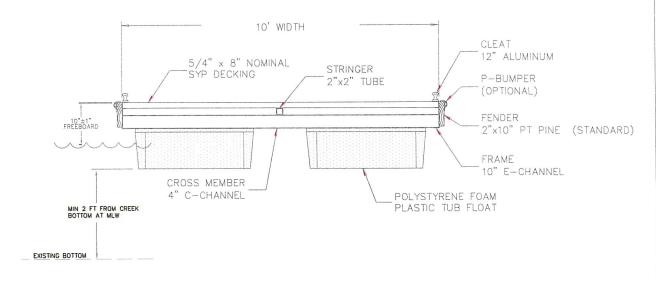
State: Maryland at: Little Neck Farm

REVISED 3/14/2024





SIDE ELEVATION OF KAYAK LAUNCH



SECTION VIEW OF KAYAK LAUNCH

REVISED 3/14/2024

Tax Account No.: 0502-6636 Tax Map: 0045

Parcel: 0049 Deed Ref: 00078/00465

Lot: 13 Zoning: RCD

Lot Size: 1,222,729 SF

KAYAK LAUNCH DETAIL SHEET

Waterfront Engineering, Design and Construction, Inc. 8348 Ritchie Hwy. Pasadena, MD 21122 (410) 798-1494

waterfrontdesign@verizon.net

PROPOSED: Pier Work

in: Tavern Creek co: Kent State: Maryland at: Little Neck Farm Madeline Zaveta

Application by: Richard & Madeline Zaveta Sheet 8 of 9 Date: November 14, 2023

SITE PLAN NOTES AND DISCLAIMERS

- 1. PROPERTY LINES SHOWN HEREON HAVE BEEN TAKEN FROM FIELD EVIDENCE, AND/OR AVAILABLE DEEDS AND PLATS AND SHOULD NOT BE CONSTRUED TO BE REPRESENTATIVE OF THE ACCURACY OF A BOUNDARY SURVEY. THIS IS NOT A BOUNDARY SURVEY! THIS SITE PLAN WAS DEVELOPED WITHOUT THE BENEFIT OF A TITLE SEARCH AND MAY NOT REFLECT ENCUMBRANCES, DEDICATIONS, AND/OR RESTRICTIONS WHICH MAY EXIST AND COULD POTENTIALLY BE REVEALED THROUGH A THOROUGH TITLE EXAMINATION.
- ALL SHORELINE WORK WILL BE CONDUCTED FROM WATER WITH ACCESS FROM BARGE. STOCKPILE AREA WILL BE ON
- 3. CONTRACTOR IS RESPONSIBLE FOR THE LOCATION OF ANY PROPOSED STRUCTURES IN RELATION WITH THE PROPERTY CORNERS. NEIGHBORING STRUCTURES SHOWN ON THIS DRAWING ARE APPROXIMATE IN LOCATION AND SHOULD NOT BE USED TO LOCATE NEW OR REPLACEMENT STRUCTURES. A SURVEY IS REQUIRED TO LOCATE ANY NEW OR REPLACEMENT STRUCTURES. THIS SURVEY MUST BE PERFORMED BY A STATE OF MARYLAND LICENSED SURVEYOR.
- 4. THIS SITE PLAN HAS BEEN PREPARED TO CONSTRUCT A FLOATING PIER. ANY CHANGE TO THESE PLANS WILL REQUIRE A SEPARATE PERMIT FROM KENT CO., FOR WORK ABOVE MHW. IF ANY WORK WILL BE BELOW MHW OR WITHIN TIDAL OR NON-TIDAL WETLANDS THEN ADDITIONAL PERMITS ARE REQUIRED FROM THE MARYLAND DEPARTMENT OF THE ENVIRONMENT AND THE ARMY CORPS OF ENGINEERS. THIS WILL REQUIRE MORE DETAILS AND INFORMATION. THIS DRAWING SHALL NOT BE UTILIZED FOR SUCH LICENSES OR PERMITS THAT ARE NOT SPECIFICALLY OUTLINED ON THIS PLAN.
- 5. CONTACT MS. UTILITY AT LEAST 48 HOURS PRIOR TO START OF ANY ON LAND OR IN WATER WORK. ALL UTILITI MUST BE LOCATED PRIOR TO ANY CONSTRUCTION. THIS PLAN SHALL NOT BE UTILIZED FOR LOCATING ANY UTILITIES ALL UTILITIES EITHER ABOVE OR BELOW GROUND.
- 6. TOPOGRAPHY WAS OBTAINED FROM 2017 DATUM AND FIELD OBSERVATIONS.

24-PR-0009 202460009 96388 3/14/2024 MG

LEGEND			
EXISTING CONTOUR			
	4.0		
EX. MEAN HIGH WATER (MHW)	Processing 1 (management)		
EXISTING TREE LINE			
PROPERTY LINE	Manuscription and Property and		
EXISTING RIP-RAP	5990		
EXISTING/PROPOSED IMPROVEMENTS			
LIMIT OF DISTURBANCE	1 40 mm 40 mm 40 mm		
TURBIDITY CURTAIN	— <i>TBC</i> —		
	bearing formation as a governor stranger development		

Tax	Accou	unt	No.:
050	2-663	6	
Tax	Map:	004	15

Parcel: 0049 Deed Ref: 00078/00465

Lot: 13 Zoning: RCD

Lot Size: 1,222,729 SF

SITE PLAN NOTES AND DATA

Waterfront Engineering, Design and Construction, Inc. 8348 Ritchie Hwy. Pasadena, MD 21122 (410) 798-1494

PROPOSED: Pier Work

REVISED 3/14/2024

in: Tavern Creek co: Kent

State: Maryland at: Little Neck Farm Application by: Richard & Madeline Zaveta waterfrontdesign@verizon.net | Sheet 9 of 9 Date: November 14, 2023

24-PR-0009 License

Final Audit Report

2024-03-18

Created:

2024-03-14

By:

Matt Godbey (matt.godbey@maryland.gov)

Status:

Signed

Transaction ID:

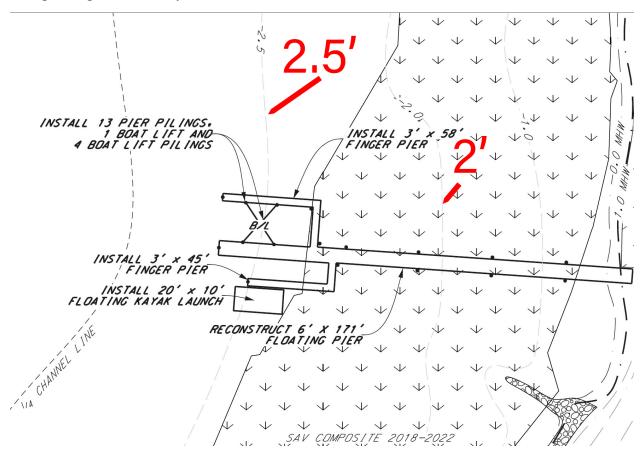
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"24-PR-0009 License" History

- Document created by Matt Godbey (matt.godbey@maryland.gov) 2024-03-14 6:20:43 PM GMT
- Document emailed to twdeastpermit.mde@maryland.gov for signature 2024-03-14 6:27:29 PM GMT
- Email viewed by twdeastpermit.mde@maryland.gov
- Signer twdeastpermit.mde@maryland.gov entered name at signing as Jonathan Stewart 2024-03-15 2:53:09 PM GMT
- Document e-signed by Jonathan Stewart (twdeastpermit.mde@maryland.gov)
 Signature Date: 2024-03-15 2:53:11 PM GMT Time Source: server
- Document emailed to wwppepermits.mde@maryland.gov for signature 2024-03-15 2:53:13 PM GMT
- Email viewed by wwppepermits.mde@maryland.gov 2024-03-18 12:51:05 PM GMT
- Signer wwppepermits.mde@maryland.gov entered name at signing as Heather L. Nelson 2024-03-18 12:51:19 PM GMT
- Document e-signed by Heather L. Nelson (wwppepermits.mde@maryland.gov)
 Signature Date: 2024-03-18 12:51:21 PM GMT Time Source: server
- Agreement completed. 2024-03-18 - 12:51:21 PM GMT

Dear Appeals Board,

I am respectfully requesting a variance for our dock on Tavern Creek at our 28 acre parcel lot 13, Little Neck Farm, Rock Hall Maryland. As of this writing, we have spent the last year and a half procuring permits from the related agencies which was facilitated through Waterfront Engineering, Design and Construction, Inc. As of this writing, we have just learned that the approved plan, while having met all respective agencies, exceeds Kent County's requirement of maximum length which is 150'. Specifically, the dock which is now approved is 171' as prescribed by the Waterfront Engineering company which still falls under the acceptable ratio for transgressing the waterway.



Their recommendation of 171' was exclusively predicated as to provide a minimum of 2'6" of water so that the boat lift will function in a safe manner. As you can see, if one were to back off the 21', we quickly start to approach 2' of depth which is marginally functional.

With the above being said, my specific substantiation of the variance is as follows:

- a. Our property is the peninsula that projects into the bay. As such, I only have one additional neighbor, Dwight Gorsuch at lot 14, who equally has a dock which is 765' away. Hence, predicated on the distance and the fact that he has his own dock immediately behind his residence, there is no detrimental effect. Further, he was notified through the dock application and advised me that he had no issues with the dock.
- b. The variance is for 21'. As such, it will be virtually indistinguishable from an aesthetic standpoint going from 150' to 171', hence no change in character.
- c. The modest relief is exclusively for technical reasons of depth; hence it is in the keeping and spirit of the ordinance.
- d. The practical difficulty is exclusively predicated on the existing ground topography which renders the extreme shallow condition which is further aggressively aggravated by any form of northly wind that dramatically lowers the tide far more so than the posted water depth.
- e. In layman's terms, the health of the waterway can be gauged by the extent of natural aquatic grasses and plant life in the shallows. The shoreline area in this particular tributary provides for strong levels of vegetation. This vegetation promotes fishery and crab propagation and by moving to the 171', disturbing these grasses via outboard motor propulsion is dramatically reduced, hence creating a more environmentally friendly area for fisheries.

In summary, anyone who has experienced a partially grounded boat lift with the boat precariously not fully supported by the lift or partially grounded by mud, will understand the dangers of free spooling cables off pully with thousands of pounds of pressure. It is my intent that my wife will be able to utilize this boat without me being present, hence I would appreciate the boards consideration in lessening the potential precarious situation of a marginally functional lift, hence providing us with variance approval.

In closing, thank you for your time and consideration of our request.

Best regards,

Rich and Madeline Zaveta