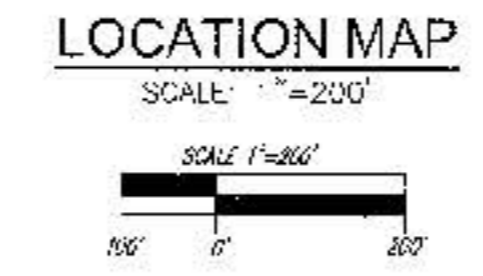
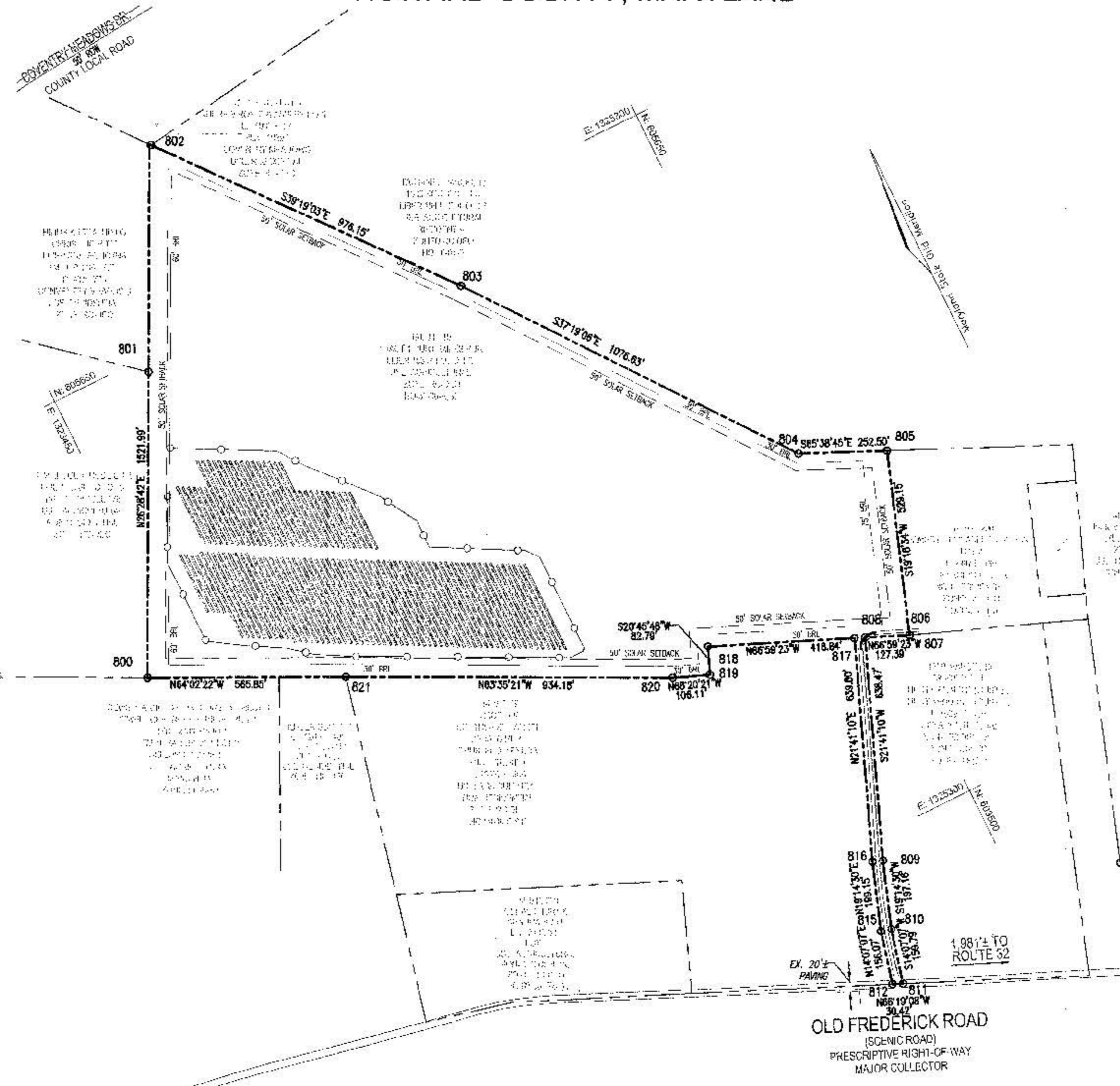


GENERAL NOTES

- 1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY STANDARDS AND SPECIFICATIONS. ALL WORK AND MATERIALS SHALL COMPLY WITH U.S.A.A. STANDARDS.
2. THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK.
3. THE CONTRACTOR IS TO NOTIFY THE DEPARTMENT OF PUBLIC WORKS AT LEAST FIVE DAYS BEFORE STARTING ANY...

SITE DEVELOPMENT PLAN
VICEROY SOLAR
12750 OLD FREDERICK ROAD
HOWARD COUNTY, MARYLAND

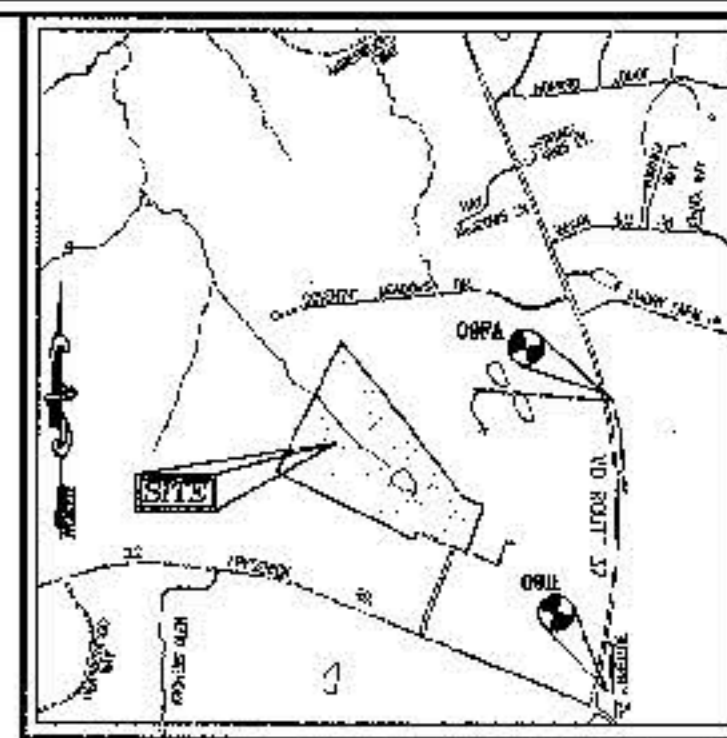


BENCHMARKS

HOWARD COUNTY BENCHMARK 0918
N 602,989.297 E 1,326,821.484 DIST. 652.439
HOWARD COUNTY BENCHMARK 0919
N 505,227.562 E 1,326,994.588 DIST. 624.257

LEGENDS:

- PARCEL BOUNDARY
--- 50' SOLAR SETBACK
--- BUILDING RESTRICTION L.L.C.



SHEET INDEX table with columns: DESCRIPTION, SHEET NO. Includes entries for COVER SHEET, LAYOUT PLAN, SITE DETAILS, etc.

OWNER: VICEROY SOLAR, LLC
DEVELOPER: VICEROY SOLAR, LLC
2003 WESTERN AVENUE, SUITE 225, SEATTLE, WA 98121

Table with columns: NO., REVISION, DATE. Contains one revision entry.

SITE DEVELOPMENT PLAN
COVER SHEET
VICEROY SOLAR
12750 OLD FREDERICK ROAD, SYKESVILLE MD 21784

VOGEL ENGINEERING
TIMMONS GROUP
3300 NORTH RIDGE ROAD, SUITE 110, BELLEVILLE, MD 21043

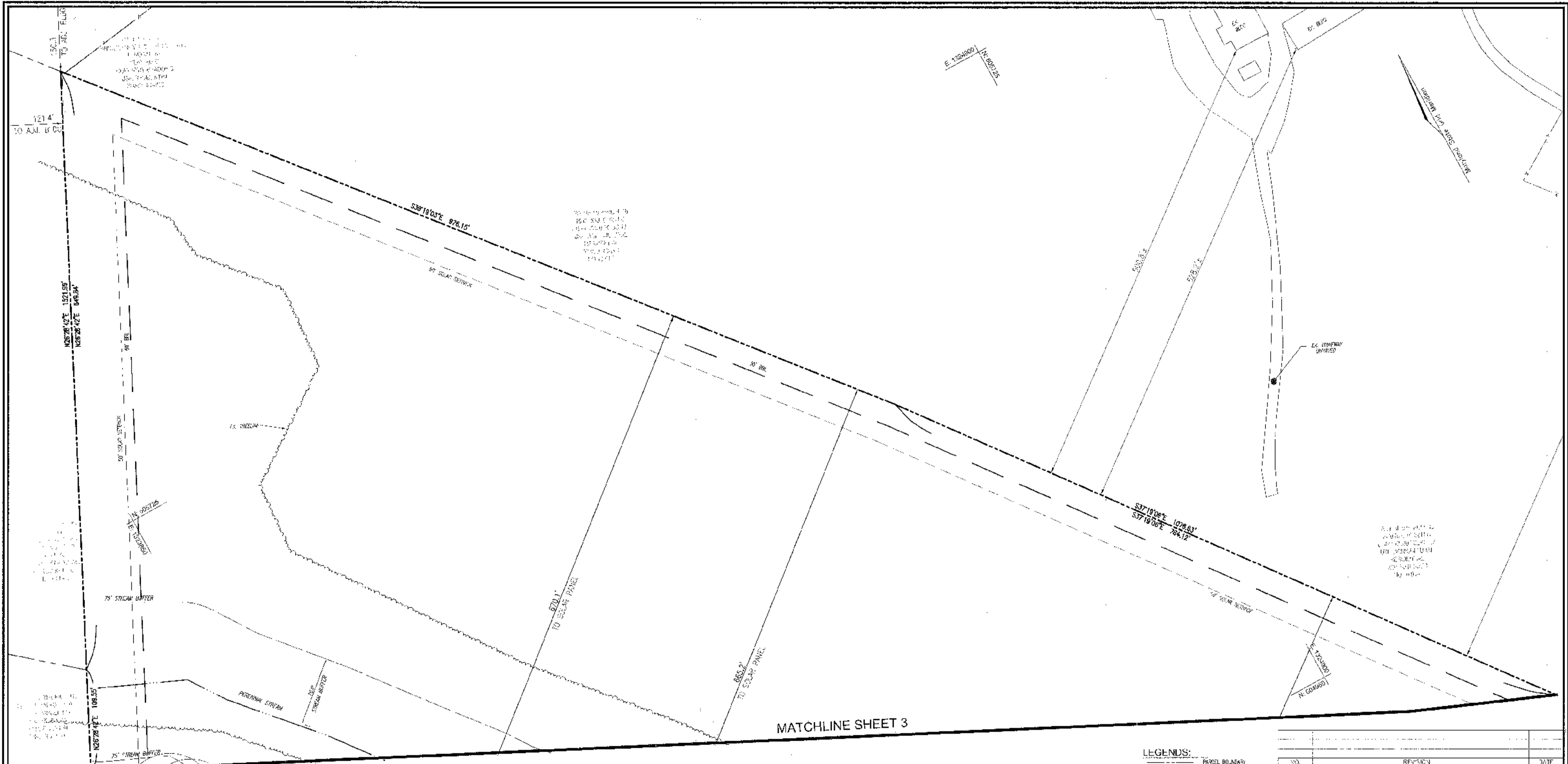


DESIGN BY: RHY
DRAWN BY: MH
CHECKED BY: RHV
DATE: 12/28/2021
SCALE: AS SHOWN
W.D. NO.: 41992

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
Chief of Department: [Signature]
DATE: 12/23/2021
DEVELOPMENT ENGINEERING DIVISION
DATE: 12/28/2021
DIVISION OF LAND DEVELOPMENT
DATE: 12/28/2021
DIRECTOR: [Signature]

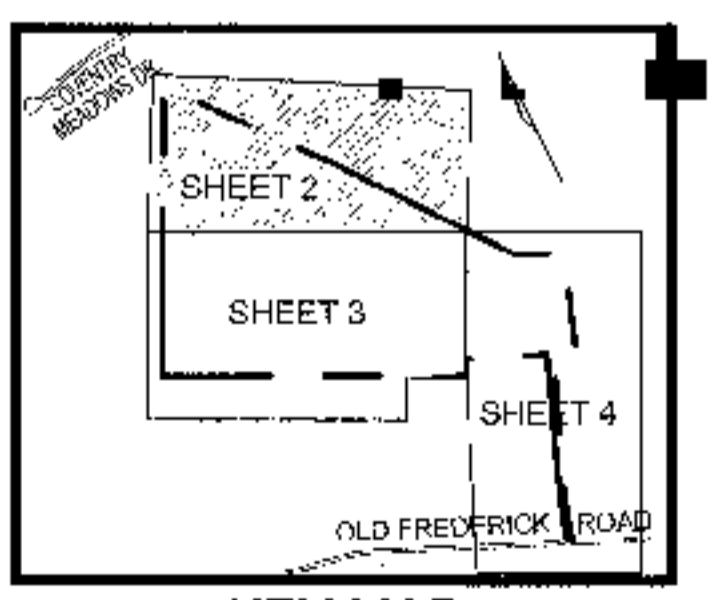
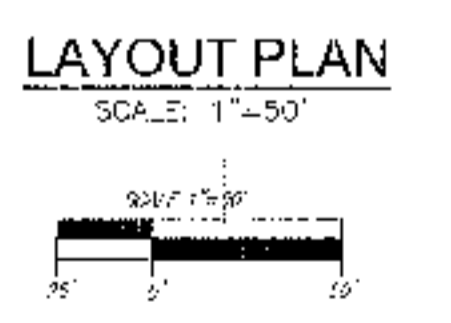
STORMWATER MANAGEMENT PRACTICES table with columns: PARCEL NO., STREET ADDRESS, FACILITY TYPE & SIZE NO., PUBLIC, PRIVATE, MAINTENANCE BY.

ADDRESS CHART table with columns: BUILDING NO., STREET ADDRESS.
PERMIT INFORMATION CHART table with columns: SUBDIVISION NAME, SECTION/AREA, LOT/PARCEL NUMBER.





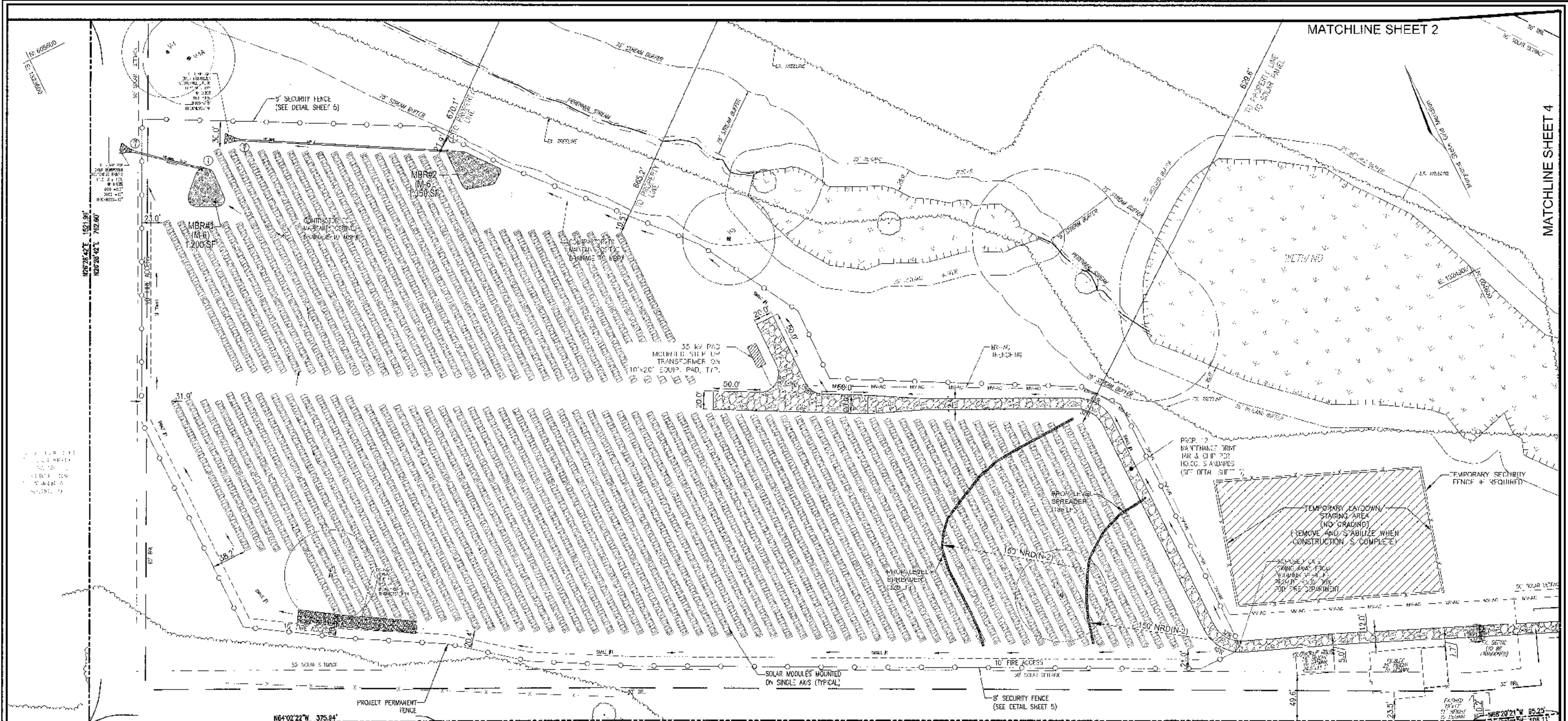
MATCHLINE SHEET 3

- LEGENDS:**
- PARCEL BOUNDARY
 - - - 30' SOLAR SETBACK
 - - - 75' STREAM BUFFER
 - - - 30' STREAM BUFFER
 - - - EXISTING FENCE
 - - - EXISTING FENCE



APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING	
<i>Clare Edmondson</i>	12/23/2021
CHIEF DEVELOPMENT ENGINEERING DIVISION	DATE
<i>Clare Edmondson</i>	12/28/2021
CHIEF DIVISION OF LAND DEVELOPMENT	DATE
<i>Ray Brown</i>	12/28/2021
DIRECTOR	DATE

VO		REFVISION	DATE
SITE DEVELOPMENT PLAN LAYOUT PLAN VICEROY SOLAR 12750 OLD FREDERICK ROAD, SYKESVILLE, MD 21784 DEED L.15397 F.476 TAX MAP 9 BLOCK 23 3RD ELECTION DISTRICT ZONED RC-DEO HOWARD COUNTY, MARYLAND			
VOGEL ENGINEERING  TIMMONS GROUP 3300 NORTH RIDGE ROAD, SUITE 110, ELLICOTT CITY, MD 21043 P: 410.461.7666 F: 410.461.8961 www.timmons.com			
OWNER VICEROY SOLAR, LLC C/O STANDARD SOLAR, INC. 500 GAIL AVE. PO BOX 500 ROCKHILL, MD 20850 PHONE: 301-244-5192		DEVELOPER UNIVERSITY OF WASHINGTON 2025 WASHINGTON SQUARE SUITE 225 SEATTLE, WA 98121 PH: 206-922-7072 ATTENTION: KATE JARON	
DESIGN BY: <i>RLV</i> DRAWN BY: <i>IML</i> CHECKED BY: <i>THY</i> DATE: SEPTEMBER 2021 SCALE: AS SHOWN W.C. NO.: 41993		PROFESSIONAL CERTIFICATE I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A duly licensed PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. EXPIRES 09-27-2022  ROBERT A. VOGEL, PE No. 18193	
2		17	



MATCHLINE SHEET 2

MATCHLINE SHEET 4

- 1. DATE: 12/23/2021
- 2. TIME: 10:00 AM
- 3. BY: [Signature]
- 4. FOR: [Signature]

N64°02'22"W 375.84'
N64°02'22"W 565.85'

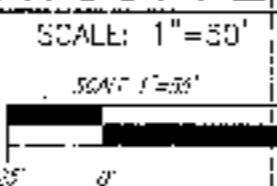
N64°02'22"W 189.91'

N83°35'21"W 934.18'

N68°20'21"W 85.23'
N68°20'42"W 108.11'

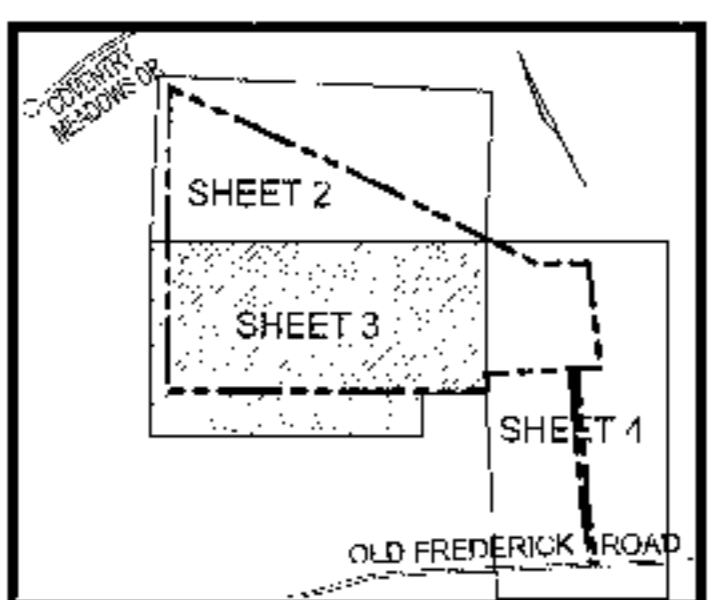
NOTE:
LOCATION OF EXISTING SEPTIC TO BE DETERMINED PRIOR TO CONSTRUCTION. IF REQUIRED, CONTACT THE HEALTH DEPARTMENT AND PROPERTY ADJACENT LANDOWNER.

LAYOUT PLAN



- LEGENDS:**
- Parcel Boundary
 - 8' Solar Setback
 - Stream Centerline
 - Stream Buffer
 - Wetland
 - Wetland Buffer
 - Disturbance Tree Line
 - Underground Medium Voltage
 - Transformer Pad
 - Proposed Fence
 - Temporary Security Fence
 - New Access Road
 - Temporary Laydown / Staging Area

- NOTES:**
- PROVIDE 10' MINIMUM CLEARANCE BETWEEN TYPE 'D' UTILITY AND EXISTING CHICKEN HOUSE FOUNDATION FOR MOIVING FOOTPRINT ACCESS.
 - ACCESS DRIVE ALIGNMENT TO UTILIZE THE EXISTING FARM ACCESS TO THE GREATEST EXTENT POSSIBLE ALONG THE SOUTH PROPERTY BOUNDARY.
 - ACCESS DRIVE TO BE WITHIN 5' OF NORTHERN SIDE OF 2 EXISTING FARM BUILDINGS.
 - PROVIDE 10' MINIMUM CHICKEN FOUNDATION AND PROPOSED DRIVEWAY.



KEY MAP
NOT TO SCALE

APPROVED, HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
 [Signature] 12/23/2021
 CHIEF DEVELOPMENT ENGINEERS DIVISION
 [Signature] 12/28/2021
 DIVISION OF LAND DEVELOPMENT
 [Signature] 12/28/2021
 DIRECTOR

NO.	REVISION	DATE

**SITE DEVELOPMENT PLAN
LAYOUT PLAN**

VICEROY SOLAR
12750 OLD FREDERICK ROAD, SYKESVILLE, MD 21784
DEED L. 5397 F.476

TAX MAP 9 BLOCK 23 3RD ELECTION DISTRICT ZONED RC-DCO PARCEL 19 HOWARD COUNTY, MARYLAND

VOGEL ENGINEERING

TIMMONS GROUP
 3300 NORTH RIDGE ROAD, SUITE 130, ELLCOTT CITY, MD 21043
 P: 410.461.7666 F: 410.461.8991 www.timmons.com

OWNER
VICEROY SOLAR, LLC
C/O STANDARD SOLAR, INC.
530 GATHEBY ROAD, SUITE 300
ROCKVILLE, MD 20850
PHONE: 301-944-8102

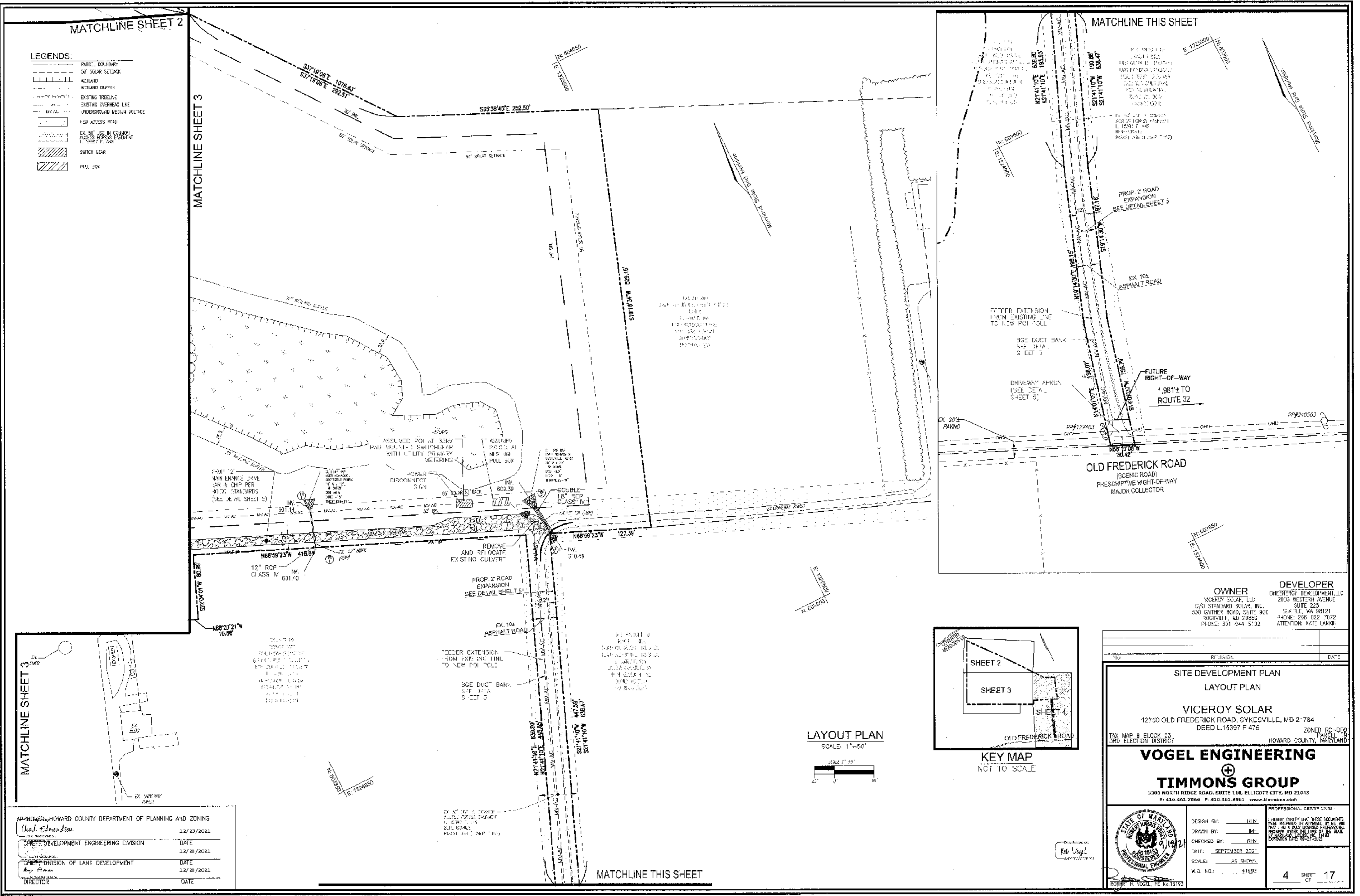
DEVELOPER
SOLAR ENERGY DEVELOPMENT, LLC
2003 WESTERN AVENUE
SUITE 226
SEATTLE, WA 98122
PHONE: 206-322-7072
ATTENTION: KYLE LARSEN

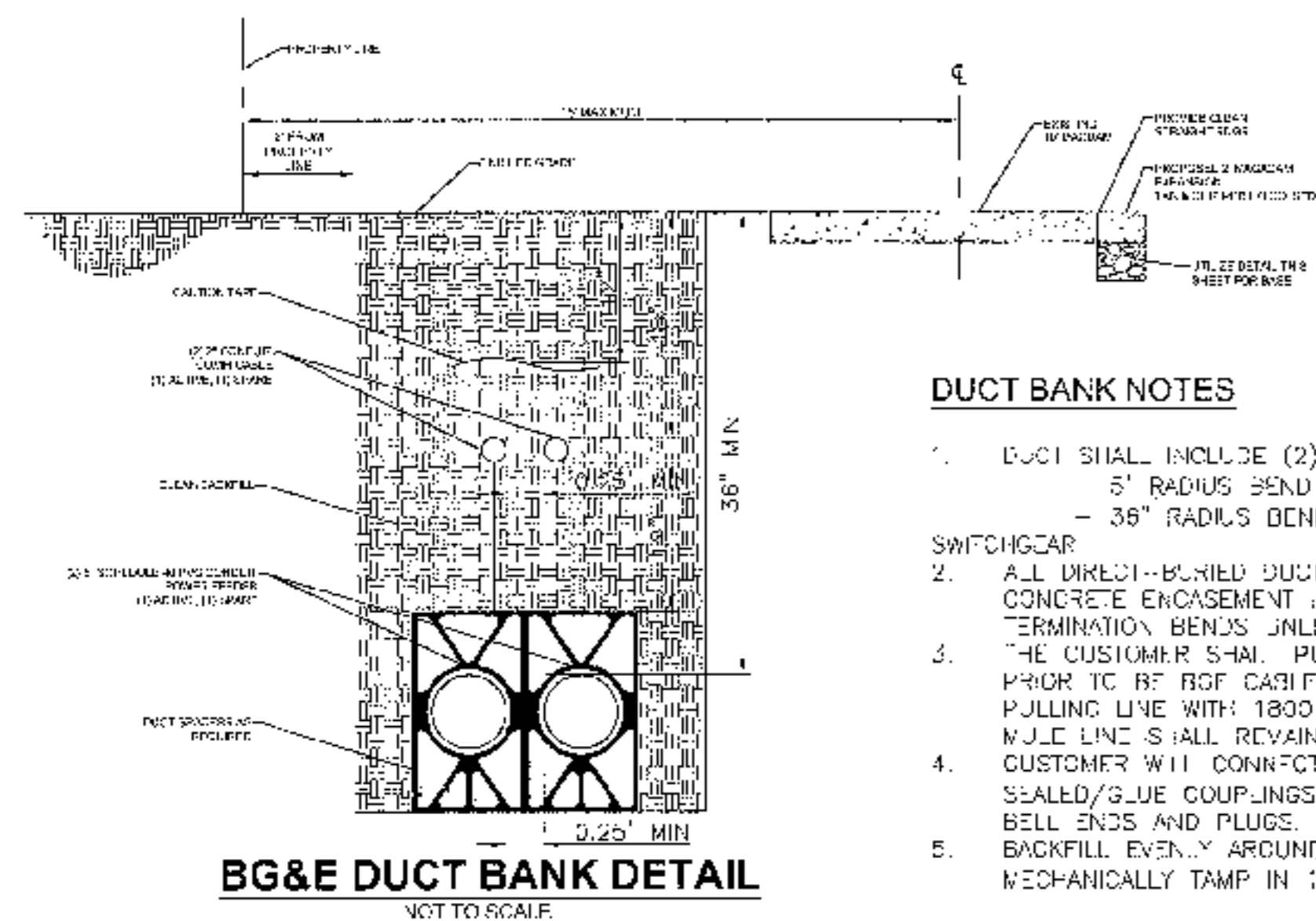
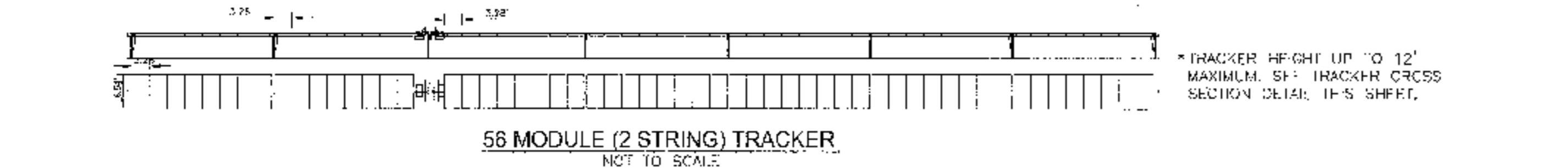
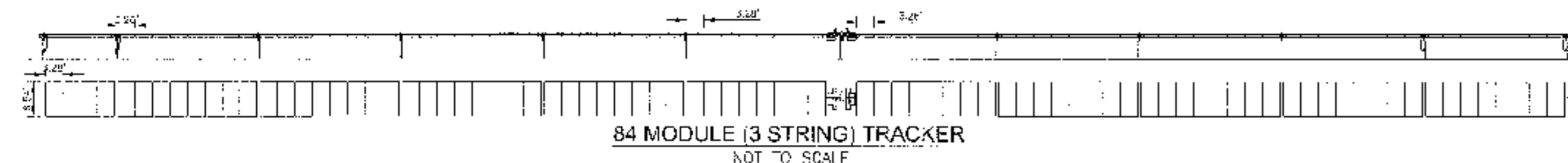
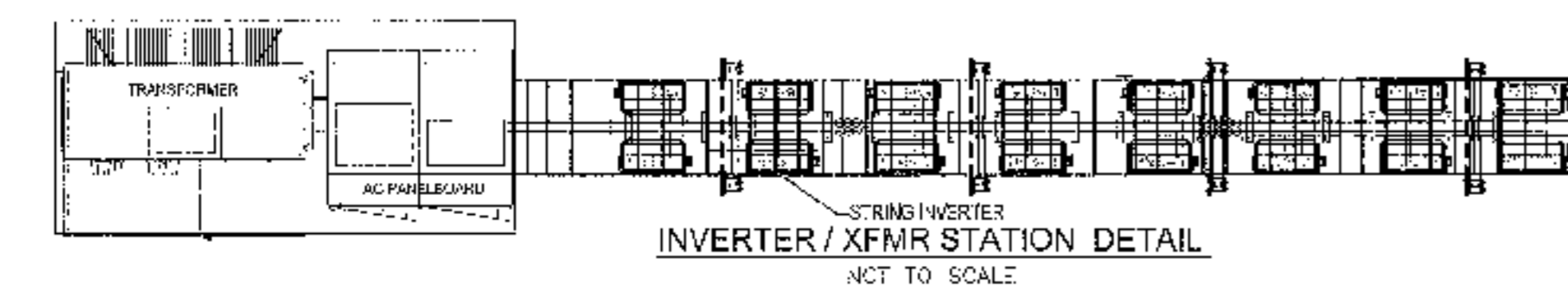
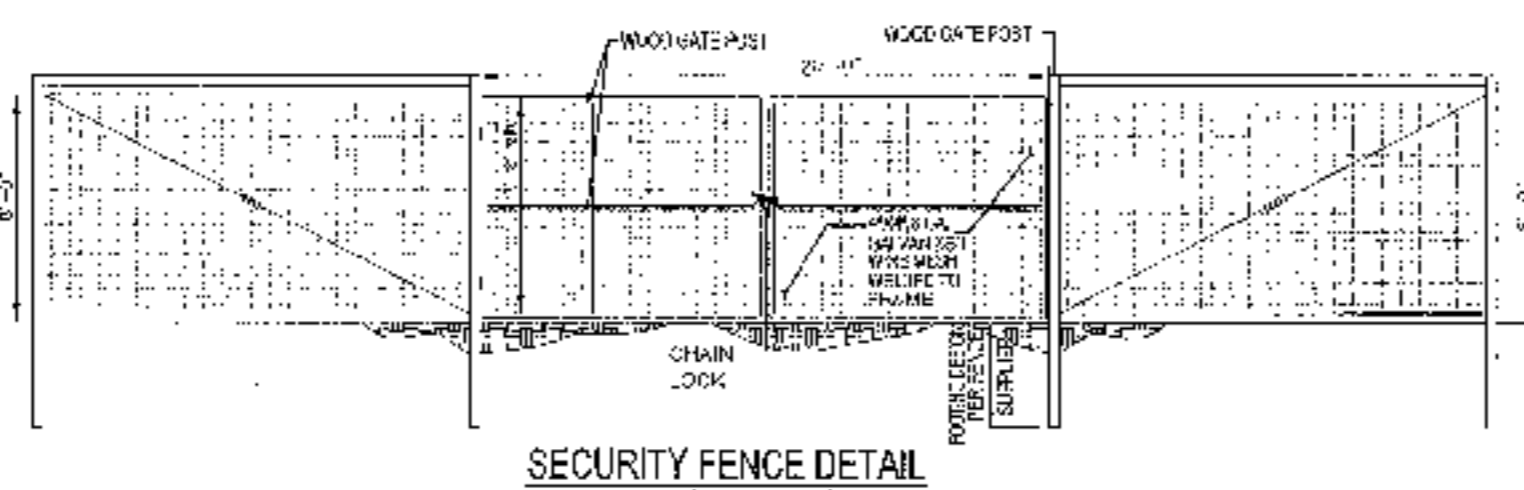
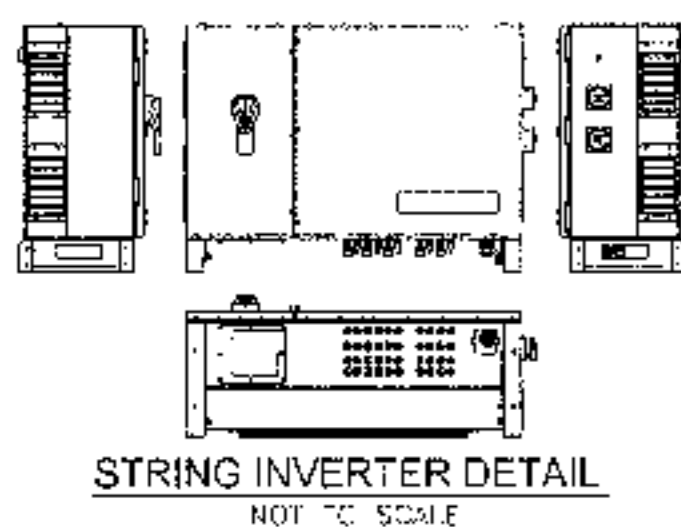
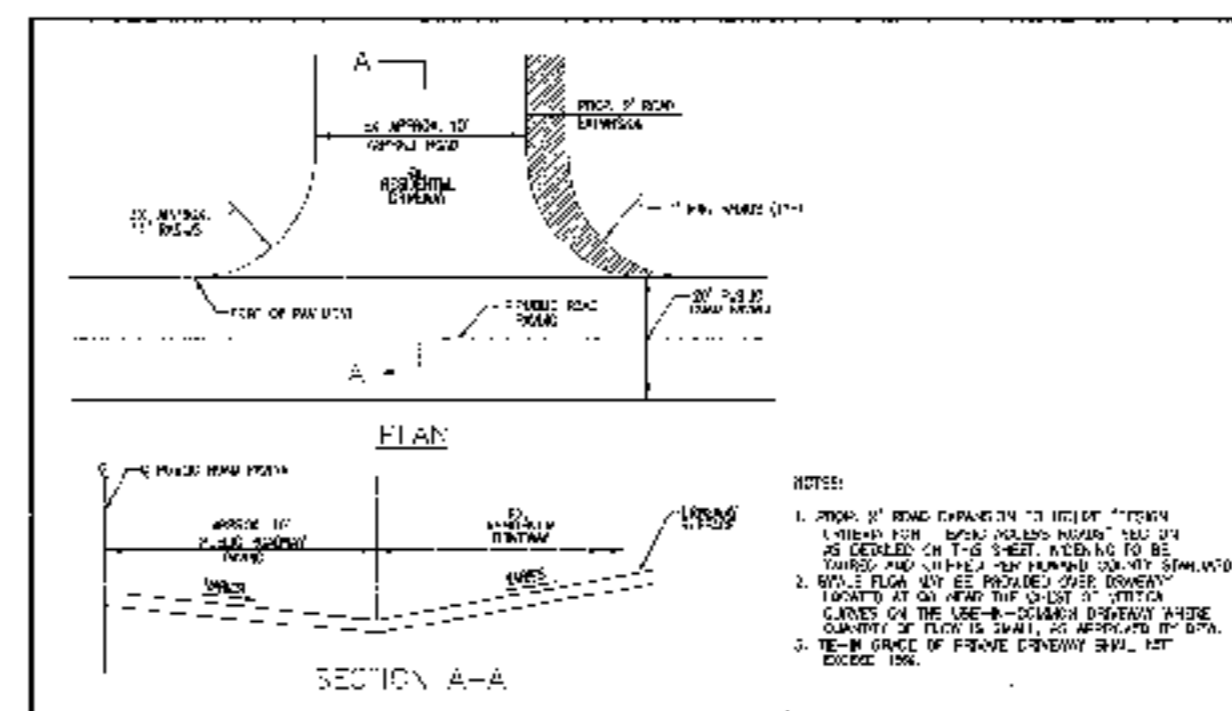
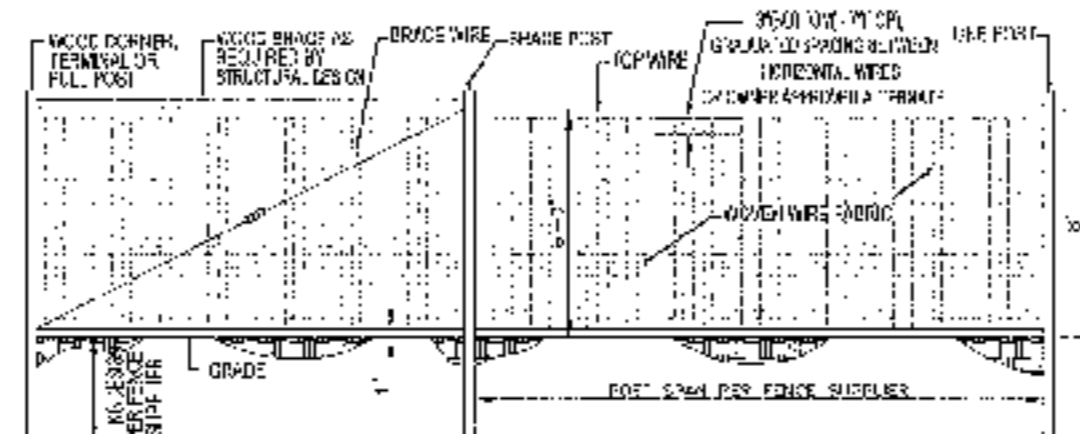
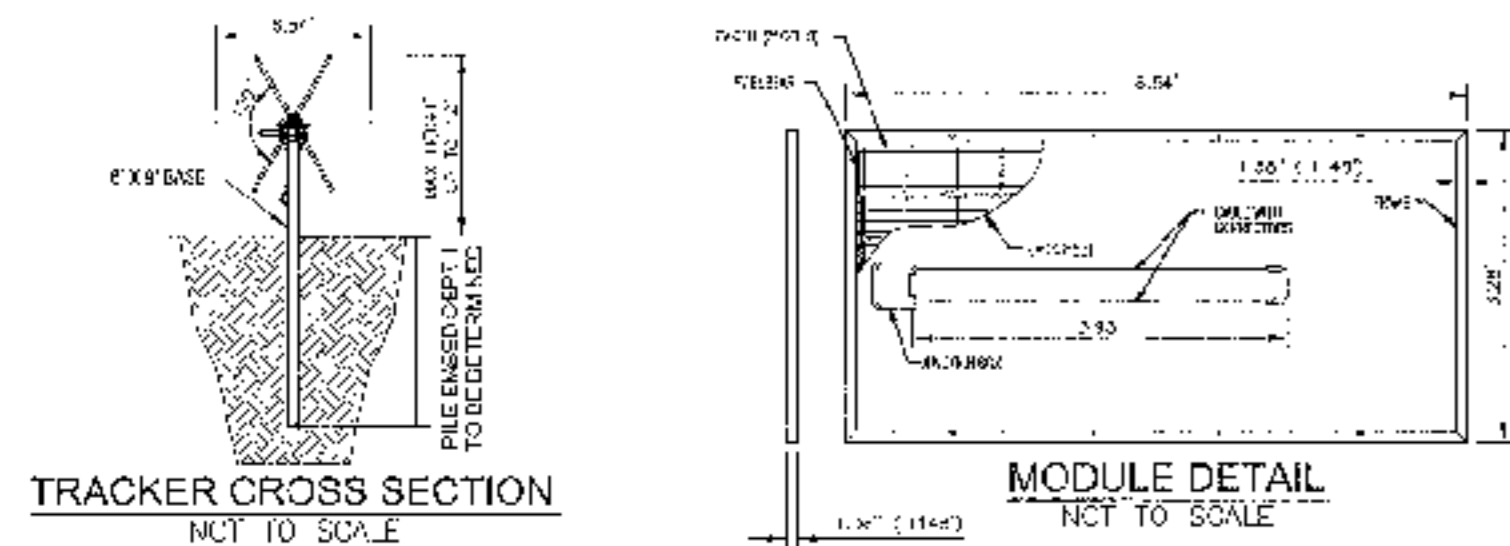
PROFESSIONAL CERTIFICATE
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND LICENSE NO. 17458 EXPIRES ON 12/27/2022

DESIGN BY: [Signature] PEV
 DRAWN BY: [Signature] IME
 CHECKED BY: [Signature] REV
 DATE: SEPTEMBER 2021
 SCALE: AS SHOWN
 W.D. NO.: 41932

3 SHEET OF 17

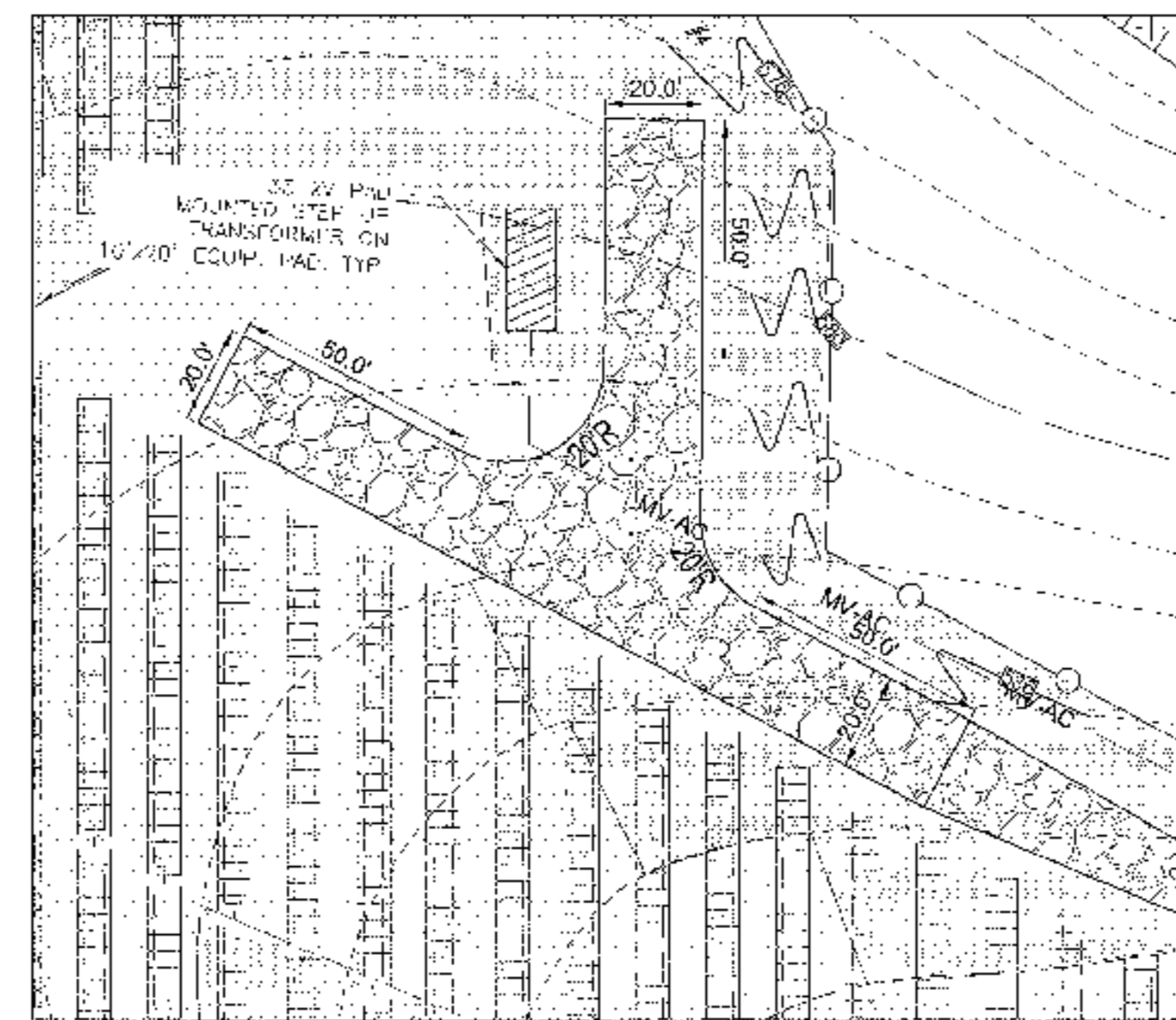
SDP-21-049





DUCT BANK NOTES

- DUCT SHALL INCLUDE (2) 90 DEGREE BENDS 5' RADIUS BEND AT THE BGE RISER TOLL - 36" RADIUS BEND AT THE BGE PRIMARY SWITCHGEAR.
- ALL DIRECT-BURIED DUCTS SHALL BE UL 94-FLUL-40 CONCRETE ENCASMENT IS ONLY REQUIRED AT THE TERMINATION BENDS UNLESS OTHERWISE NOTED.
- THE CUSTOMER SHALL PURCH A MANHOLE THROUGH EACH DUCT PRIOR TO BE BGE CABLE INSTALLATION. TO ALLOW FOR A PULLING LINE WITH 1800 LB. MINIMUM TENSILE STRENGTH. WJ.C LINE SHALL REMAIN IN THE DUCT.
- CUSTOMER WILL CONNECT ALL ELECTRIC CONDUIT WITH SEALED/GULIE COUPLINGS AND TERMINATE THEIR CONDUIT WITH BELL ENDS AND PLUGS.
- BACKFILL EVENLY AROUND DUCT WITH CLEAN DRY SAND AND MECHANICALLY TAMP IN 12" LIFTS.



DESIGN CRITERIA FOR BASIC ACCESS ROADS UG 501-17

An access road is defined to be a stone-base road with entry off of a paved street or highway. It is used to permit construction and maintenance vehicles access to an isolated location of pad-mounted equipment.

The following guidelines should be used to design such a road:

- As access road shall be constructed to H-20 highway loading with a maximum of 8% grade. Wherever possible, the access road should be straight without curves, and be a minimum of 12' wide. The location and plans for the access road must be approved by BGE prior to construction.
- The access road shall extend a minimum of 20' from the public highway to the pad-mounted equipment, unless separated by guardrails or jersey walls. This distance allows sufficient length for the vehicle operator to park away from the flow of traffic off the public highway.
- At the location of the pad-mounted equipment, the roadway shall widen to allow construction and maintenance trucks on crew to turn around when exiting the site. This widened area shall be a minimum of 20' x 20'.
- The roadway shall be excavated to a minimum depth of 12" and constructed of two layers of stone. Before the first layer is installed, the bottom and sides of the excavated roadway shall be lined with non-woven filter cloth.
- The base layer shall be a minimum of 8" of #2 stone. The top layer shall be a minimum of 4" of CR6 stone. The top layer of the roadway shall be at "grade." These minimum depths may have to be increased depending on the existing soil conditions to obtain the H-20 highway loading.
- Curbs and gutters are not required.
- Guard rails should be installed when the slope of the road is steeper than a 5:1 ratio.
- If the access road is gated, BGE must have independent 24-hour accommodations, i.e. double locks.

Typical Cross-Section

BGE	UNDERGROUND CONSTRUCTION STANDARDS	LATEST NEW STANDARD	
		REVISED	
		APP. DATE: 12/2/10	APPROVAL: <i>CJM</i>

- NOTES:**
- SEE THIS SECTION FOR SOLAR DRIVEWAY.
 - SEE THIS SECTION FOR DRIVEWAY WIDENING FROM OLD PAVED ROAD TO TIE. WIDENING TO BE TARRED AND CHIPPED PER HOWARD COUNTY STANDARDS.
 - DRIVEWAY TO SHALL MEET MINIMUM HOWARD COUNTY STANDARDS OF A DUST FREE SURFACE.

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

<i>Chad Edmondson</i>	12/23/2021
CHIEF DEVELOPMENT ENGINEERING DIVISION	DATE
<i>Chad Edmondson</i>	12/28/2021
CHIEF DIVISION OF LAND DEVELOPMENT	DATE
<i>Ray Stinner</i>	12/28/2021
DIRECTOR	DATE

OWNER
VICEROY SOLAR, LLC
370 STANDARD SCAR, INC.
530 GATHER ROAD, SUITE 900
ROCKYHILL, MD 20842
PHONE: 301-544-5102

DEVELOPER
SOLAR ENERGY DEVELOPMENT, LLC
2003 WESTERN AVENUE
SUITE 225
SEATTLE, WA 98171
PHONE: 206-922-7572
ATTENTION: KATE LARSON

SITE DEVELOPMENT PLAN
SITE DETAILS
VICEROY SOLAR
12750 OLD FREDERICK ROAD SYKESVILLE, MD 21784
DEED L.15397 F.478

TAX MAP 9 BLOCK 23
3RD ELECTRON DISTRICT

ZONED RC-DEO
PARCEL 19
HOWARD COUNTY, MARYLAND

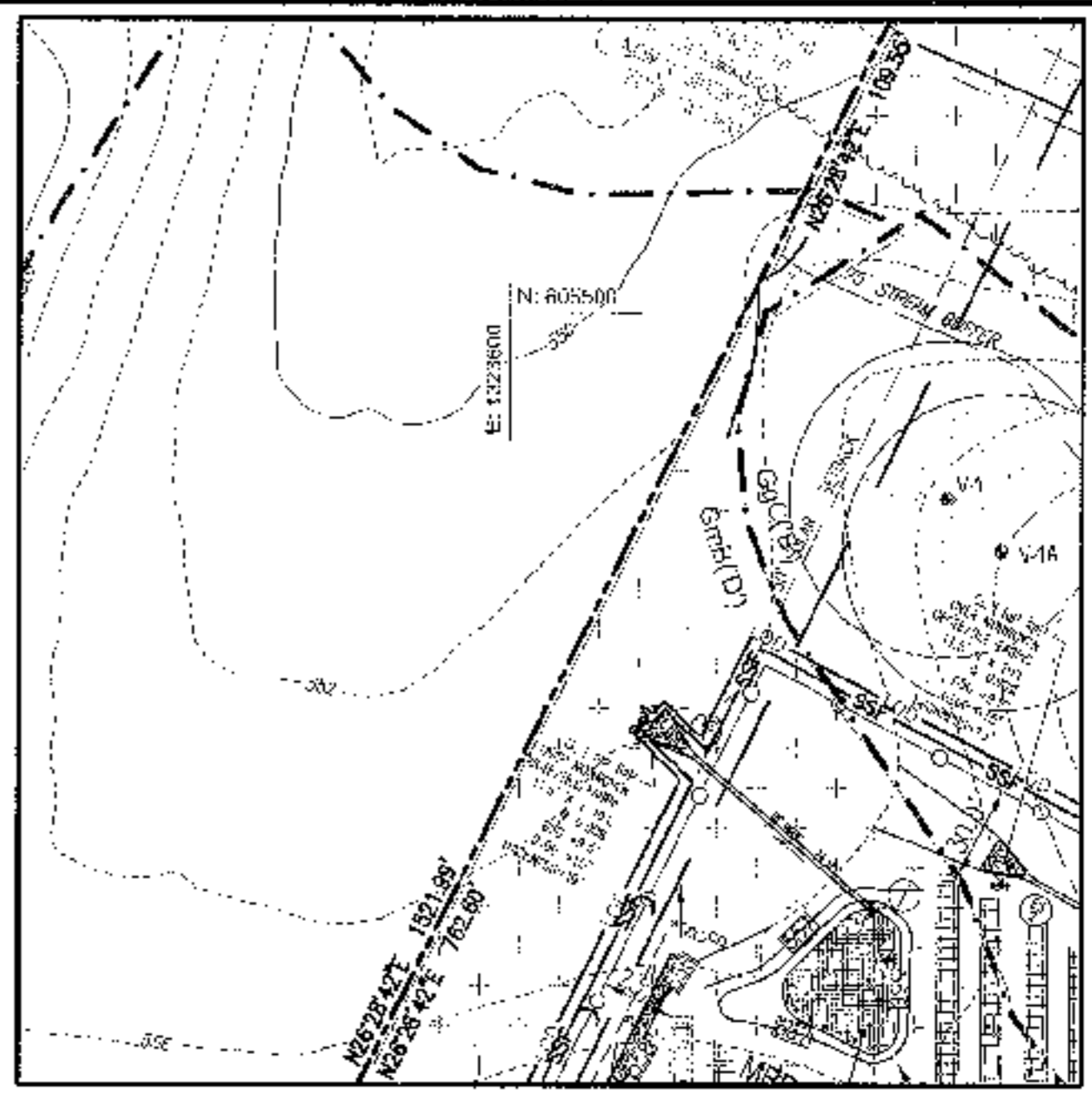
VOGEL ENGINEERING
TIMMONS GROUP
3360 NORTH RIDGE ROAD, SUITE 310, BELLCOTT CITY, MD 21043
P: 410-461-7966 F: 410-461-8961 www.timmons.com

DESIGN BY: *MMH*
DRAWN BY: *MMH*
CHECKED BY: *MMH*
DATE: SEPTEMBER 2021
SCALE: AS SHOWN
W.D. NO.: 41393

PROFESSIONAL SEAL: *Robert H. Vogel*
REGISTERED PROFESSIONAL ENGINEER
STATE OF MARYLAND
NO. 161818
EXPIRES 09/30/22

LIBRARY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A LEGAL, LICENSED PROFESSIONAL ENGINEER UNDER THE JURISDICTION OF THE STATE OF MARYLAND. LICENSE NO. 161818 EXPIRATION DATE: 09/30/22

5 SHEET OF 17



SOILS MAP, GRADING, EROSION AND SEDIMENT CONTROL PLAN
SCALE: 1"=50'

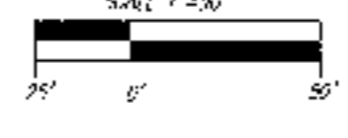
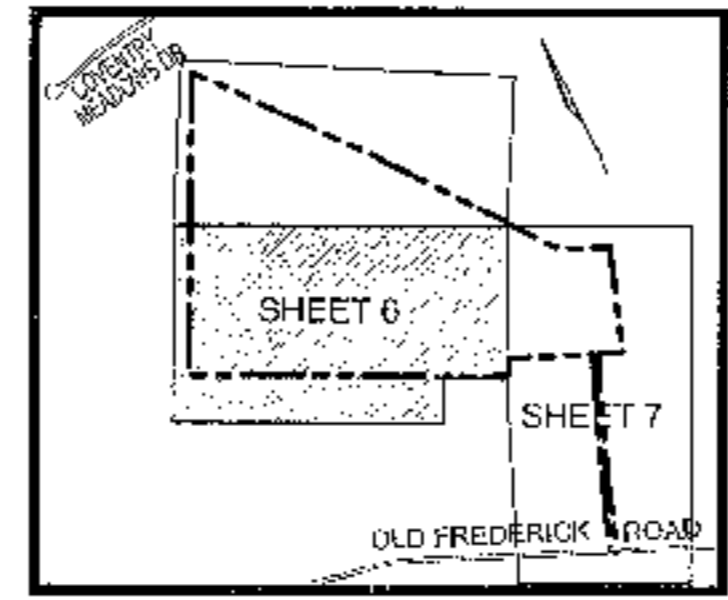
NOTE:
LOCATION OF EXISTING STRUCTS TO BE CONFIRMED PRIOR TO CONSTRUCTION. IF REQUIRED, CONTACT THE HEALTH DEPARTMENT AND MICH-JHONNIE PARK-JONNIE TANK/DISTRICT.

NOTE:
1. CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE IN DITCHES AFTER CONSTRUCTION OF SOLAR ARRAY.
2. CONTRACTOR SHALL MAINTAIN THAT RUNOFF IS DIRECTED TO THE MICH-JHONNIE PARK FACILITIES AS CALLED FOR IN SHEET 8.

NOTE:
- SILT FENCE IS TO BE REPLACED WITH SUPER SILT FENCE AT THE DIRECTION OF THE SEDIMENT CONTROL INSPECTOR.
- SILT FENCE SHALL BE CURLED UP HILL, NO MORE THAN 35 FEET APART.
- DOUBLE ROWS OF SUPER SILT FENCE SHALL BE INSTALLED AT THE DIRECTION OF THE SEDIMENT CONTROL INSPECTOR.

SYMBOL	NAME / DESCRIPTION	GROUP	K-FACTOR	ERODIBLE	HYDRO
G04	SLOPE 15% TO 3 PERCENT SLOPES	H	0.24	NO	NO
G08	SLOPE 15% TO 8 PERCENT SLOPES	H	0.24	NO	NO
G06	SLOPE 8% TO 3 PERCENT SLOPES	H	0.24	NO	NO
G08	SLOPE 15% TO 8 PERCENT SLOPES	H	0.43	NO	NO
G03	SLOPE 3% TO 8 PERCENT SLOPES	S	0.43	YES	YES
G04	SLOPE 15% TO 3 PERCENT SLOPES	S	0.24	YES	YES

SOILS NOTE:
ERODIBLE SOILS ARE THOSE SOILS WITH A K-FACTOR GREATER THAN 0.43 AND WITH A SLOPE GREATER THAN 3 PERCENT.



LEGENDS:

- PARCEL BOUNDARY
- 50' SOAK PIT
- SURFACE DRAINAGE
- SLOPE (15%-24.99%)
- SLOPE (3-28%)
- ERODIBLE SOILS
- PROPOSED CONTOUR (10')
- EXISTING CONTOUR (2')
- NEW ACCESS ROAD
- TEMPORARY CADDIS / STORM AREA
- SOILS BOUNDARY
- EXISTING TREE LINE
- UNDERGROUND WED J.V. VOLTAGE
- TRANSFORMER PAD
- PROPOSED CONTOUR (10')
- EXISTING CONTOUR (2')
- PROPOSED CONTOUR (10')
- EXISTING CONTOUR (2')
- PROPOSED CONTOUR (10')
- EXISTING CONTOUR (2')
- SUPER SILT FENCE
- SILT FENCE

OWNER:
VICEROY SOLAR, LLC
530 CANTER ROAD, SUITE 200
ROCKVILLE, MD 20850
PHONE: 301-444-5110

DEVELOPER:
ONEENERGY DEVELOPMENT, LLC
SUITE 225
18411 W. WA 98121
PHONE: 206-922-2072
ATTENTION: KATE LARKIN

APPROVED, HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
Chad Edmondson 12/23/2021
DATE
CITY DEVELOPMENT ENGINEERING DIVISION
DATE
12/28/2021
DATE
SUPERVISOR OF LAND DEVELOPMENT
DATE
12/28/2021
DATE
DIRECTOR
DATE

OWNER/DEVELOPER CERTIFICATION:
I HEREBY CERTIFY THAT ANY CLEARING, GRADING, CONSTRUCTION, OR DEVELOPMENT WILL BE DONE PURSUANT TO THIS APPROVED EROSION AND SEDIMENT CONTROL PLAN INCLUDING INSPECTING AND MAINTAINING CONTROLS, AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AS A MANDATED REQUIREMENT OF THE ENVIRONMENT (MPT) APPROVED TRAINING PROGRAM FOR THE CONTROL OF EROSION AND SEDIMENT PRIOR TO BEGINNING THE PROJECT. I CERTIFY THAT I AM AN EMPLOYEE OF THE HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.

Robert H. Vogel 10/16/2021
DATE
OWNER/DEVELOPER SIGNATURE
PRINTED NAME & TITLE

DESIGNER CERTIFICATION:
I HEREBY CERTIFY THAT THIS PLAN HAS BEEN DESIGNED IN ACCORDANCE WITH CURRENT HOWARD COUNTY EROSION AND SEDIMENT CONTROL LAWS, REGULATIONS, AND STANDARDS, THAT IT REPRESENTS A PRACTICE AND REASONABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.

Robert H. Vogel 9/16/21
DATE
DESIGNER'S SIGNATURE
PRINTED NAME
NO. REGISTRATION NO. 16193
P.E., R.L.S., OF P.L.A. (CHECK ONE)

KEY MAP NOT TO SCALE
THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.
Robert H. Vogel 09/22/21
DATE
HOWARD COUNTY

SITE DEVELOPMENT PLAN
GRADING, EROSION AND SEDIMENT CONTROL PLAN
12750 OLD FREDERICK ROAD, SYKESVILLE, MD 21784
DEED L 15397 F.476

VOGEL ENGINEERING
TIMMONS GROUP
3360 NORTH RIDGE ROAD, SUITE 110, ELLICOTT CITY, MD 21043
P: 410.461.7666 F: 410.461.8561 www.timmons.com

OWNER:
VICEROY SOLAR, LLC
530 CANTER ROAD, SUITE 200
ROCKVILLE, MD 20850
PHONE: 301-444-5110

DEVELOPER:
ONEENERGY DEVELOPMENT, LLC
SUITE 225
18411 W. WA 98121
PHONE: 206-922-2072
ATTENTION: KATE LARKIN

DESIGN BY: RHW
DRAWN BY: SHH
CHECKED BY: RHW
DATE: SEPTEMBER 2021
SCALE: AS SHOWN
W.D. NO.: 4-3902

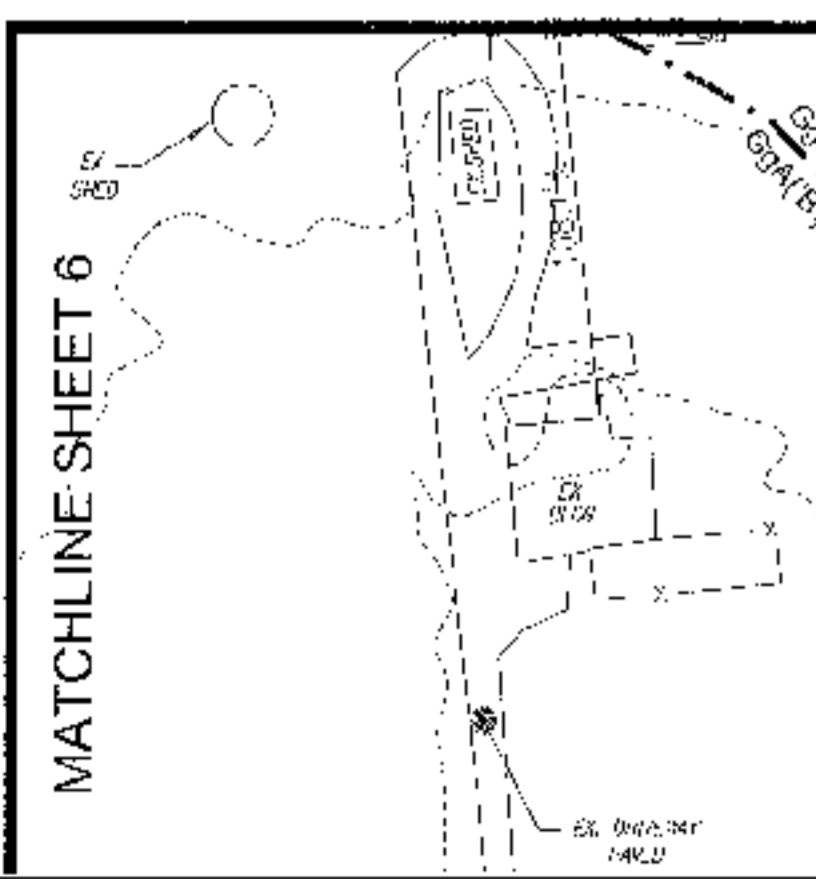
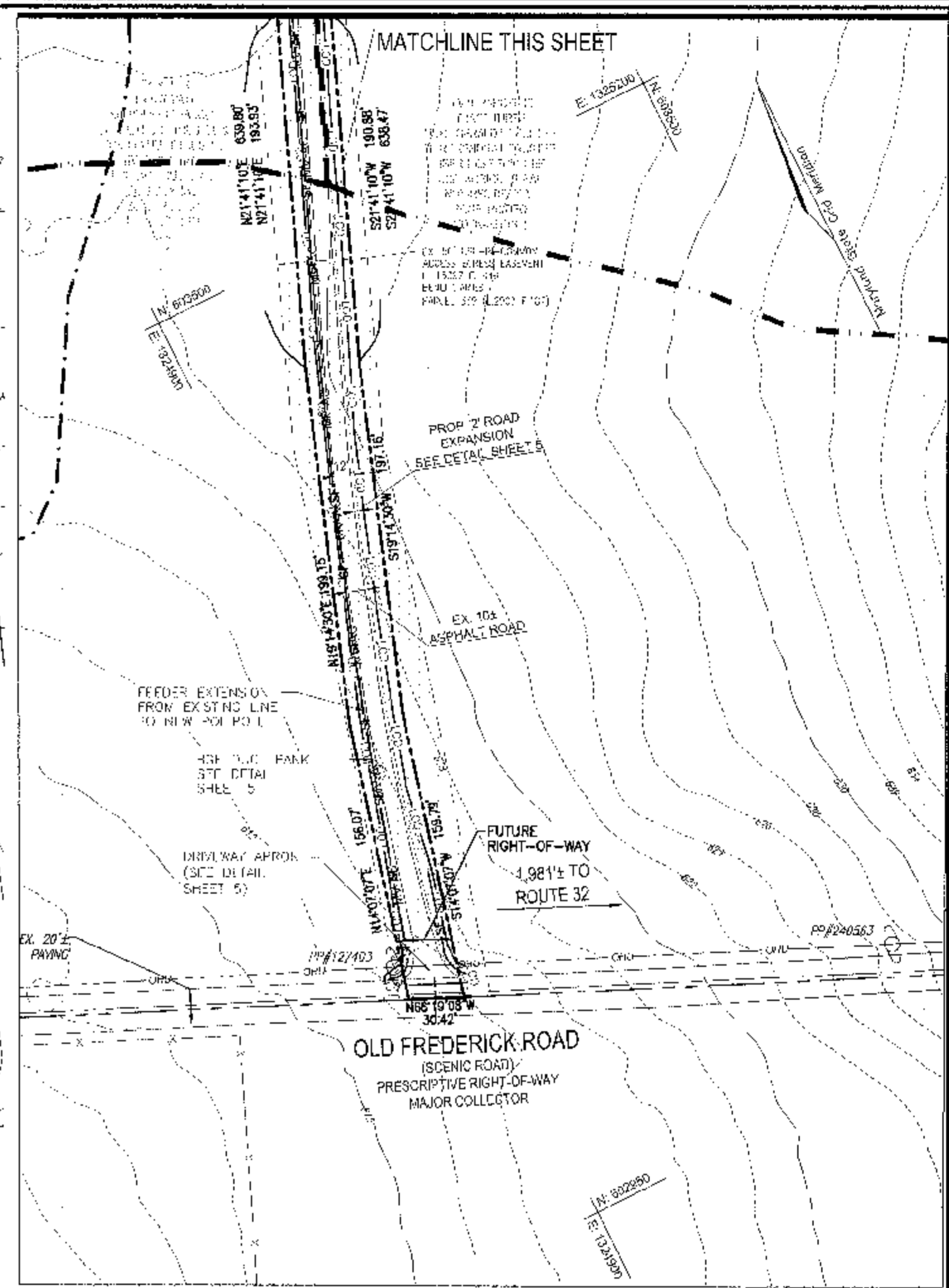
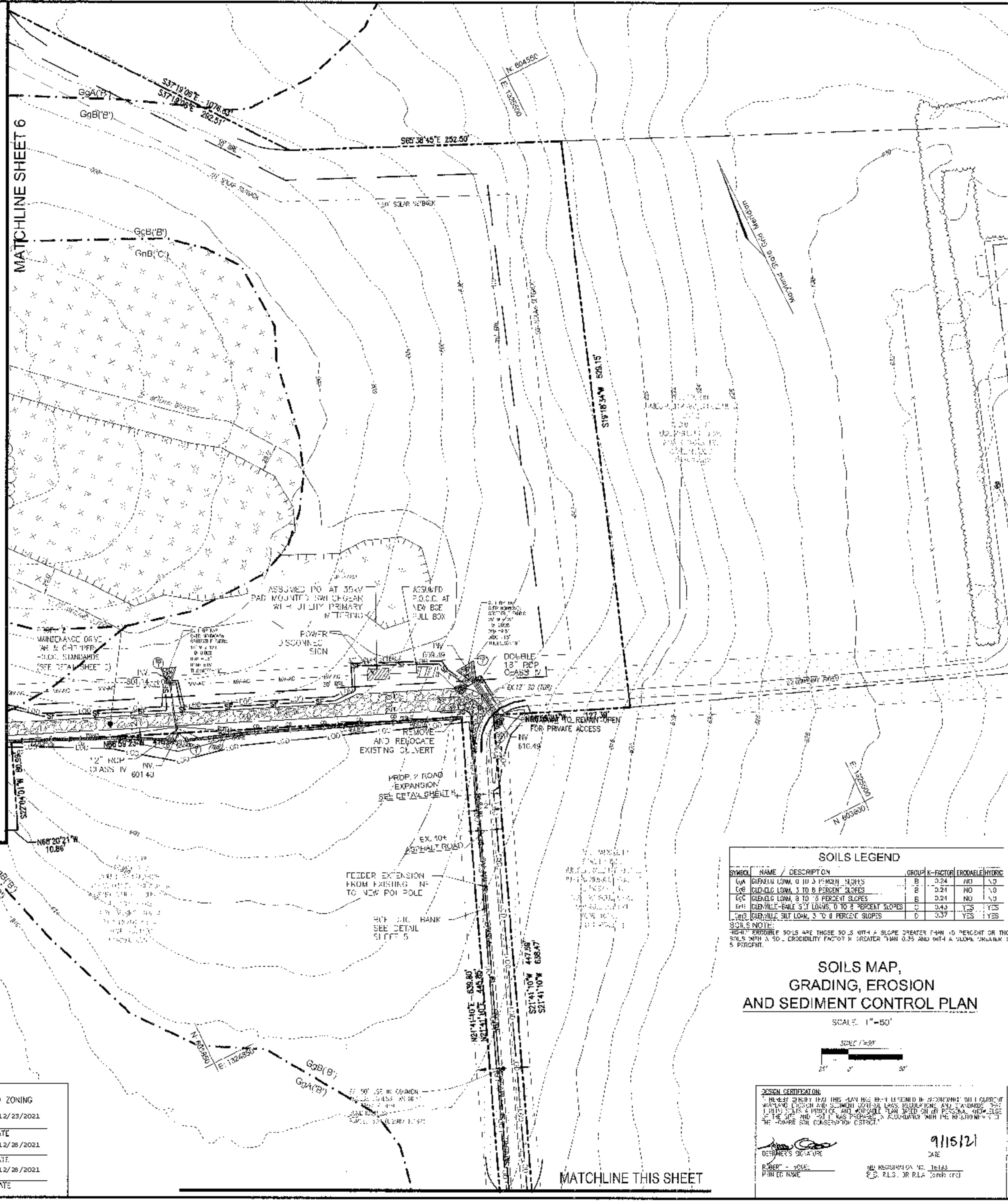
PROFESSIONAL CERTIFICATE:
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A duly LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND UNDER NO. 16193 EXPIRES 09-17-2022

6 SHEET OF **17**

- LEGENDS:**
- PARCEL BOUNDARY
 - 50' SOLAR SETBACK
 - WETLAND
 - WETLAND BUFFER
 - EXISTING CONTOUR (10')
 - EXISTING CONTOUR (2')
 - SOILS BOUNDARY
 - EXISTING TREE
 - EXISTING POWER LINE
 - UNDERGROUND MEDIUM VOLTAGE
 - NEW ACCESS ROAD
 - EXISTING SOILS
 - DO NOT USE A COMMON PROPERTY (30' x 30' WITH L. 15587 F. 748)
 - SWITCH CASE
 - WETLAND BUFFER
 - PROPOSED CONTOUR (10')
 - PROPOSED CONTOUR (2')
 - LIMIT OF DISTURBED AREA
 - SSP SUPER SILT FENCE
 - SF SILT FENCE

NOTE:
 1. CONTRACTOR TO MAINTAIN POSITIVE DRAINAGE IN DITCHES AFTER CONSTRUCTION OF SOLAR ARRAY.
 2. CONTRACTOR SHALL ENSURE THAT CONTRIBUTING DRAINAGE AREAS TO DRIVEWAY OULVERTS SHALL BE STABILIZED SAME-DAY.

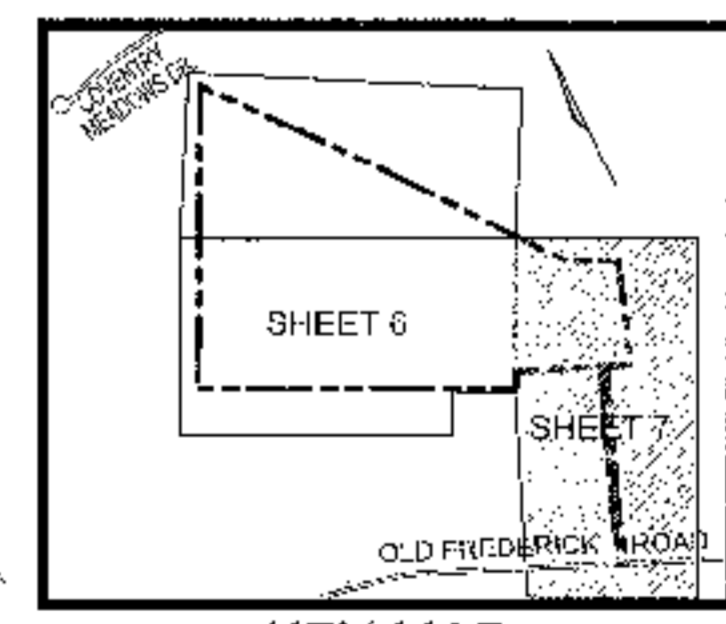
NOTE:
 SILT FENCE IS TO BE REPLACED WITH SUPER SILT FENCE AT THE DIRECTION OF THE SEDIMENT CONTROL INSPECTOR.
 SILT FENCE SHALL BE CURLED UPHILL NO MORE THAN 36 FEET APART.
 DOUBLE ROWS OF SUPER SILT FENCE SHALL BE INSTALLED AT THE DIRECTION OF THE SEDIMENT CONTROL INSPECTOR.



SOILS LEGEND

SYMBOL	NAME / DESCRIPTION	GROUP	K-FACTOR	ERODIBILITY	HYDRO
U1A	CLAYEY LOAM, 0 TO 3 PERCENT SLOPES	B	0.24	NO	N, S
U1B	CLAYEY LOAM, 3 TO 8 PERCENT SLOPES	B	0.24	NO	N, S
U1C	CLAYEY LOAM, 8 TO 15 PERCENT SLOPES	B	0.24	NO	N, S
U1D	CLAYEY-SANDY SILT LOAMS, 0 TO 2 PERCENT SLOPES	C	0.43	YES	YES
U1E	CLAYEY-SANDY SILT LOAM, 3 TO 8 PERCENT SLOPES	D	0.37	YES	YES

SOILS MAP, GRADING, EROSION AND SEDIMENT CONTROL PLAN
 SCALE: 1"=50'
 SCALE: 1"=30'



OWNER:
 VICEROY SOLAR, LLC
 C/O STANDARD SOLAR, INC.
 330 CANTER ROAD, SUITE 300
 ROCKVILLE, MD 20855
 PHONE: 301-944-5102

DEVELOPER:
 ONEENERGY DEVELOPMENT LLC
 3093 WESTERN AVENUE
 SUITE 225
 SEATTLE, WA 98121
 PHONE: 206-922-7072
 ATTENTION: KATE PARKS

**SITE DEVELOPMENT PLAN
 GRADING, EROSION AND SEDIMENT CONTROL PLAN
 VICEROY SOLAR**
 12750 OLD FREDERICK ROAD, SYKESVILLE, MD 21784
 DEED L.15397 F.476

VOGEL ENGINEERING
TIMMONS GROUP
 3309 NORTH RIDGE ROAD, SUITE 130, BELLEFLORE CITY, MD 21043
 P: 410.461.7800 F: 410.461.8061 www.timmons.com

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
 Chad Edmondson 12/23/2021
 CHIEF DEVELOPMENT ENGINEERING DIVISION
 DATE 12/28/2021
 CHIEF DIVISION OF LAND DEVELOPMENT
 DATE 12/28/2021
 DIRECTOR

DESIGN CERTIFICATION:
 I HEREBY CERTIFY THAT THIS PLAN HAS BEEN PREPARED BY ME OR UNDER MY CLOSE PERSONAL SUPERVISION AND THAT I AM A LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. THIS CERTIFICATION IS VALID FOR THE PROJECT DESCRIBED HEREIN.
 DATE 9/15/21
 SIGNATURE: [Signature]
 TITLE: PROFESSIONAL ENGINEER
 NO. 111111
 EXPIRES: 09/15/24

OWNER/DEVELOPER CERTIFICATION:
 I HEREBY CERTIFY THAT THIS PLAN HAS BEEN PREPARED BY ME OR UNDER MY CLOSE PERSONAL SUPERVISION AND THAT I AM A LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. THIS CERTIFICATION IS VALID FOR THE PROJECT DESCRIBED HEREIN.
 DATE 09/22/21
 SIGNATURE: [Signature]
 TITLE: PROFESSIONAL ENGINEER
 NO. 111111
 EXPIRES: 09/22/24

PROFESSIONAL CERTIFICATE:
 I HEREBY CERTIFY THAT THESE INSTRUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. THIS CERTIFICATION IS VALID FOR THE PROJECT DESCRIBED HEREIN.
 DESIGN BY: [Signature]
 DRAWN BY: [Signature]
 CHECKED BY: [Signature]
 DATE: SEPTEMBER 2021
 SCALE: AS SHOWN
 W.O. NO.: 4-993
 7 SHEET OF 17

STANDARD SEDIMENT CONTROL NOTES

- 1. ALL PERMANENT SEDIMENTATION STRUCTURES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE MARYLAND STANDARDS AND SPECIFICATIONS FOR PERMANENT SEDIMENTATION STRUCTURES...
- 2. PERMANENT SEDIMENTATION STRUCTURES SHALL BE CONSTRUCTED WITHIN 14 DAYS OF THE DATE OF THE PERMIT...
- 3. PERMANENT SEDIMENTATION STRUCTURES SHALL BE CONSTRUCTED WITHIN 14 DAYS OF THE DATE OF THE PERMIT...

- 4. PERMANENT SEDIMENTATION STRUCTURES SHALL BE CONSTRUCTED WITHIN 14 DAYS OF THE DATE OF THE PERMIT...
- 5. PERMANENT SEDIMENTATION STRUCTURES SHALL BE CONSTRUCTED WITHIN 14 DAYS OF THE DATE OF THE PERMIT...
- 6. PERMANENT SEDIMENTATION STRUCTURES SHALL BE CONSTRUCTED WITHIN 14 DAYS OF THE DATE OF THE PERMIT...

- 7. PERMANENT SEDIMENTATION STRUCTURES SHALL BE CONSTRUCTED WITHIN 14 DAYS OF THE DATE OF THE PERMIT...
- 8. PERMANENT SEDIMENTATION STRUCTURES SHALL BE CONSTRUCTED WITHIN 14 DAYS OF THE DATE OF THE PERMIT...
- 9. PERMANENT SEDIMENTATION STRUCTURES SHALL BE CONSTRUCTED WITHIN 14 DAYS OF THE DATE OF THE PERMIT...

DATE: 04/22/21
DESIGNER: Alexander Butcher
PROJECT: 12760 OLD FREDERICK ROAD, SYKESVILLE, MD 21784

PERMANENT SEDIMENTATION

- 1. PERMANENT SEDIMENTATION STRUCTURES SHALL BE CONSTRUCTED WITHIN 14 DAYS OF THE DATE OF THE PERMIT...
- 2. PERMANENT SEDIMENTATION STRUCTURES SHALL BE CONSTRUCTED WITHIN 14 DAYS OF THE DATE OF THE PERMIT...
- 3. PERMANENT SEDIMENTATION STRUCTURES SHALL BE CONSTRUCTED WITHIN 14 DAYS OF THE DATE OF THE PERMIT...

- 4. PERMANENT SEDIMENTATION STRUCTURES SHALL BE CONSTRUCTED WITHIN 14 DAYS OF THE DATE OF THE PERMIT...
- 5. PERMANENT SEDIMENTATION STRUCTURES SHALL BE CONSTRUCTED WITHIN 14 DAYS OF THE DATE OF THE PERMIT...
- 6. PERMANENT SEDIMENTATION STRUCTURES SHALL BE CONSTRUCTED WITHIN 14 DAYS OF THE DATE OF THE PERMIT...

- 7. PERMANENT SEDIMENTATION STRUCTURES SHALL BE CONSTRUCTED WITHIN 14 DAYS OF THE DATE OF THE PERMIT...
- 8. PERMANENT SEDIMENTATION STRUCTURES SHALL BE CONSTRUCTED WITHIN 14 DAYS OF THE DATE OF THE PERMIT...
- 9. PERMANENT SEDIMENTATION STRUCTURES SHALL BE CONSTRUCTED WITHIN 14 DAYS OF THE DATE OF THE PERMIT...

NO.	SPACES	AREA (SQ. FT.)	SEEDING DATE	SEEDING TYPE	NO. OF SEEDS PER SQ. FT.	NO. OF SEEDS PER AC.
1	1	10,000	04/22/21	HYBRID GRASS	12,000	120,000
2	1	10,000	04/22/21	HYBRID GRASS	12,000	120,000
3	1	10,000	04/22/21	HYBRID GRASS	12,000	120,000

3-4 STANDARDS AND SPECIFICATIONS FOR

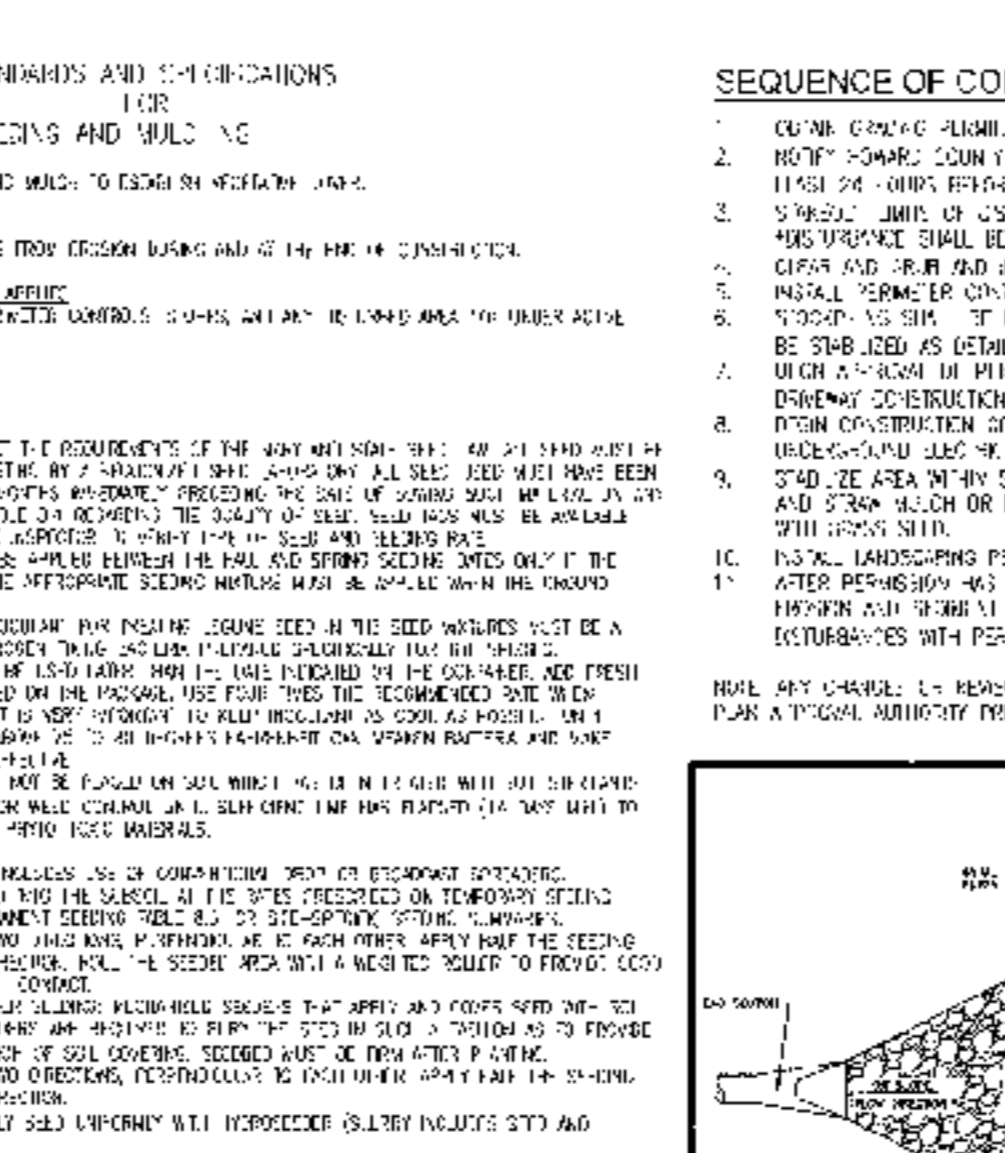
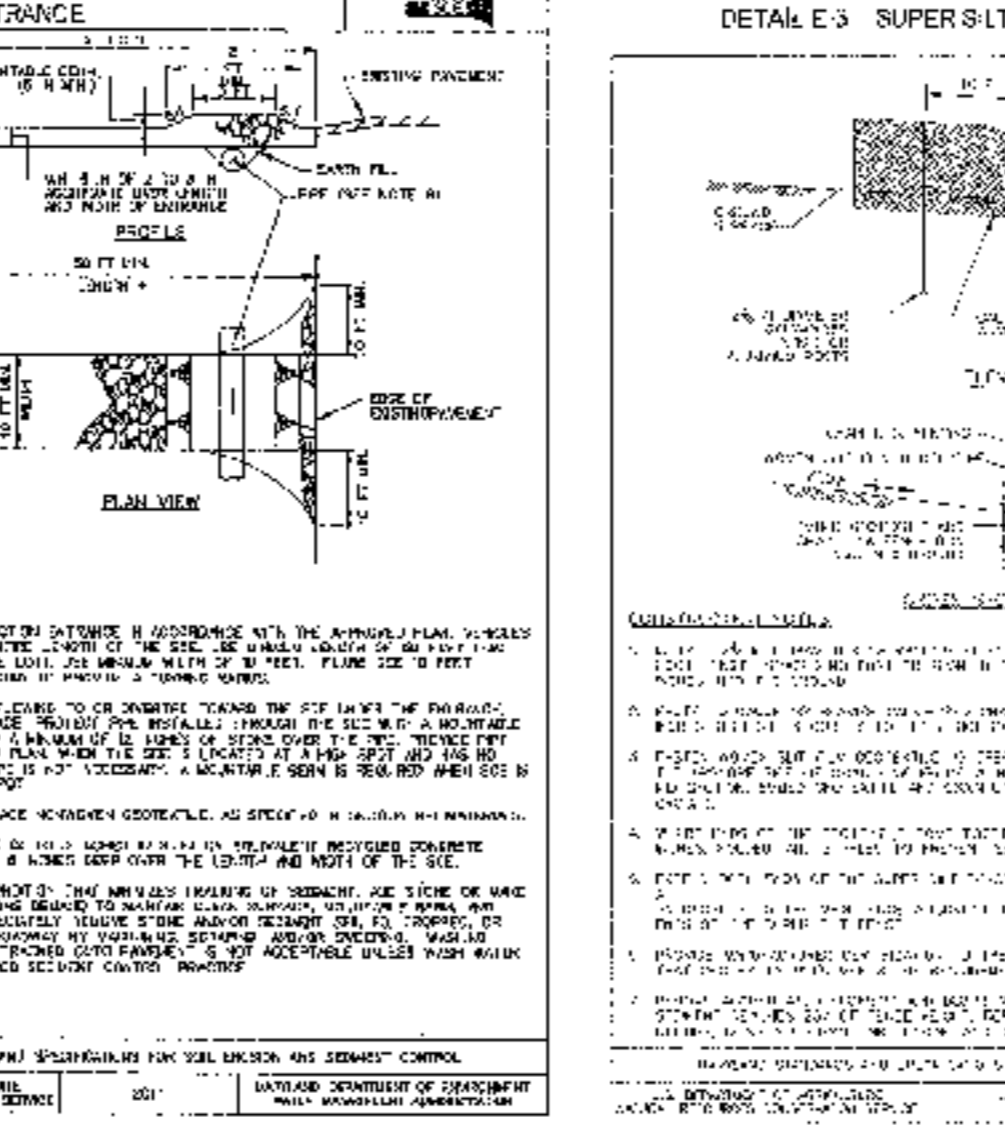
- 1. PERMANENT SEDIMENTATION STRUCTURES SHALL BE CONSTRUCTED WITHIN 14 DAYS OF THE DATE OF THE PERMIT...
- 2. PERMANENT SEDIMENTATION STRUCTURES SHALL BE CONSTRUCTED WITHIN 14 DAYS OF THE DATE OF THE PERMIT...
- 3. PERMANENT SEDIMENTATION STRUCTURES SHALL BE CONSTRUCTED WITHIN 14 DAYS OF THE DATE OF THE PERMIT...

- 4. PERMANENT SEDIMENTATION STRUCTURES SHALL BE CONSTRUCTED WITHIN 14 DAYS OF THE DATE OF THE PERMIT...
- 5. PERMANENT SEDIMENTATION STRUCTURES SHALL BE CONSTRUCTED WITHIN 14 DAYS OF THE DATE OF THE PERMIT...
- 6. PERMANENT SEDIMENTATION STRUCTURES SHALL BE CONSTRUCTED WITHIN 14 DAYS OF THE DATE OF THE PERMIT...

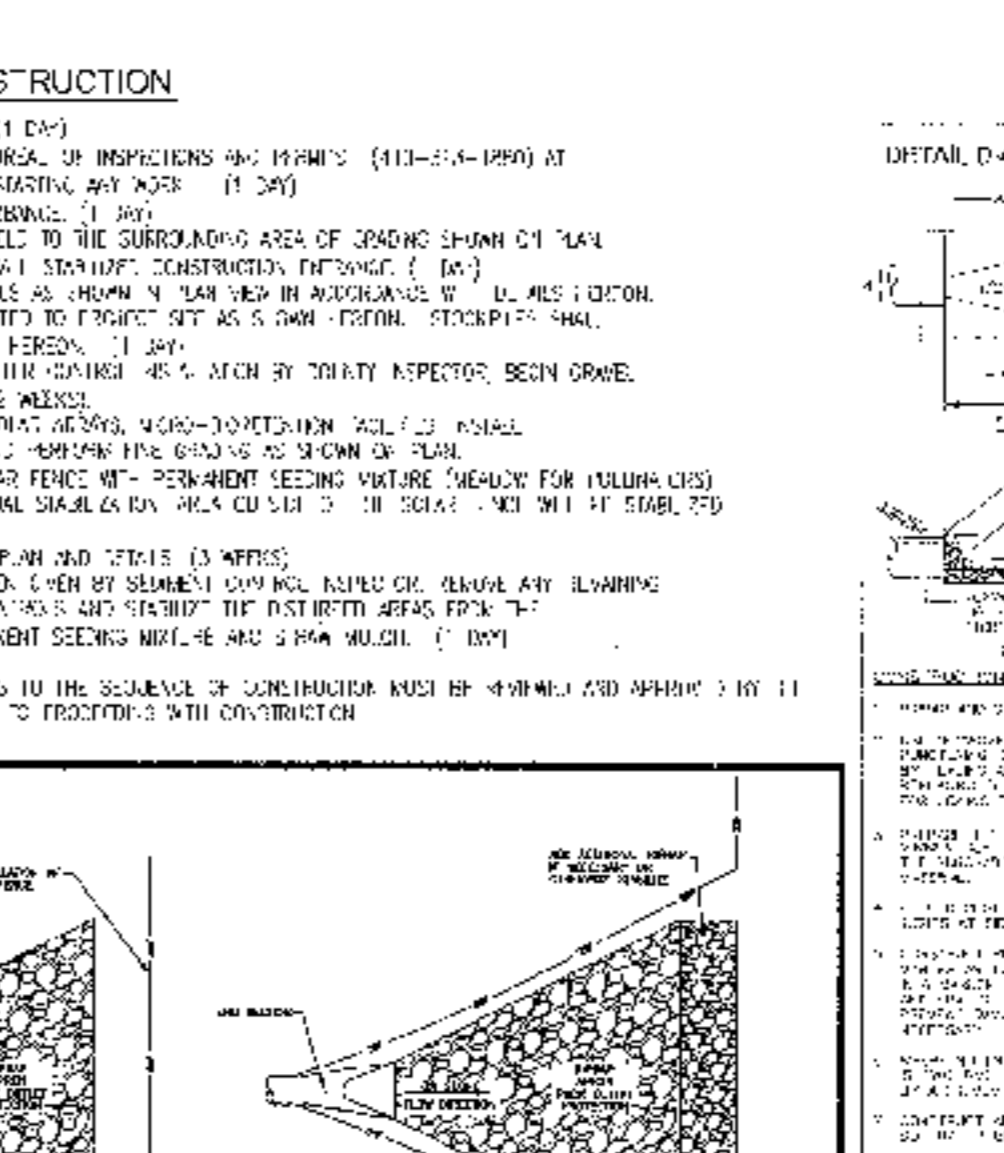
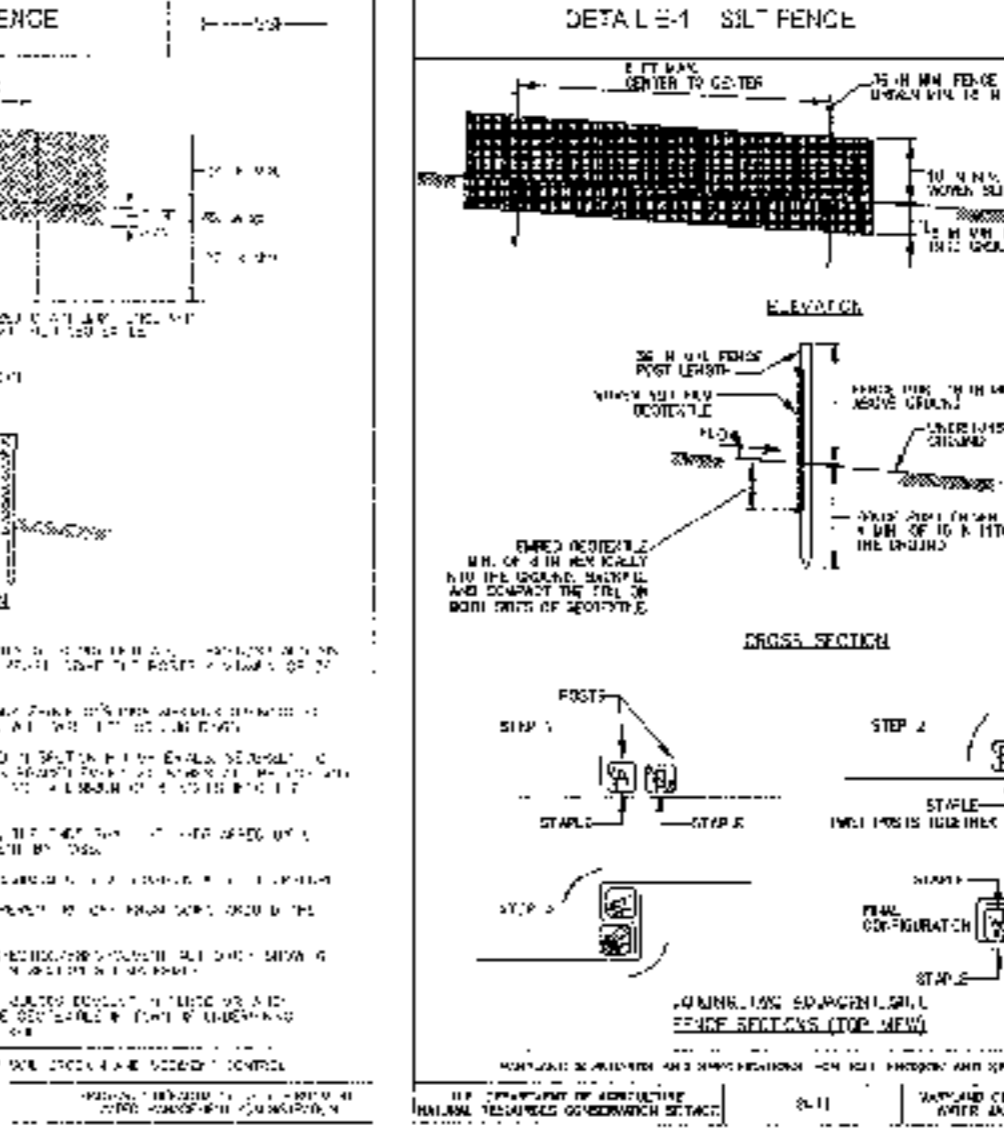
- 7. PERMANENT SEDIMENTATION STRUCTURES SHALL BE CONSTRUCTED WITHIN 14 DAYS OF THE DATE OF THE PERMIT...
- 8. PERMANENT SEDIMENTATION STRUCTURES SHALL BE CONSTRUCTED WITHIN 14 DAYS OF THE DATE OF THE PERMIT...
- 9. PERMANENT SEDIMENTATION STRUCTURES SHALL BE CONSTRUCTED WITHIN 14 DAYS OF THE DATE OF THE PERMIT...

NO.	SPACES	AREA (SQ. FT.)	SEEDING DATE	SEEDING TYPE	NO. OF SEEDS PER SQ. FT.	NO. OF SEEDS PER AC.
1	1	10,000	04/22/21	HYBRID GRASS	12,000	120,000

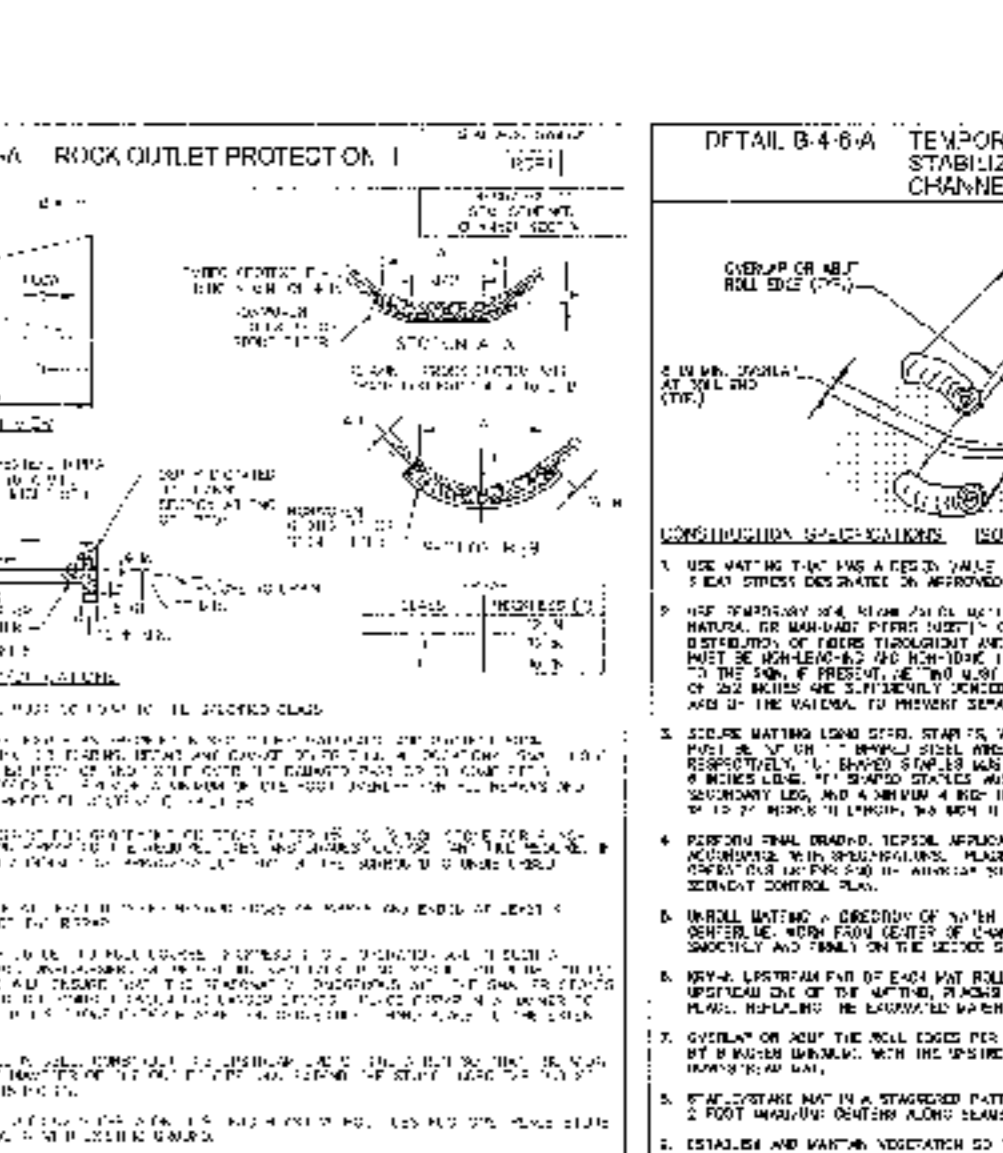
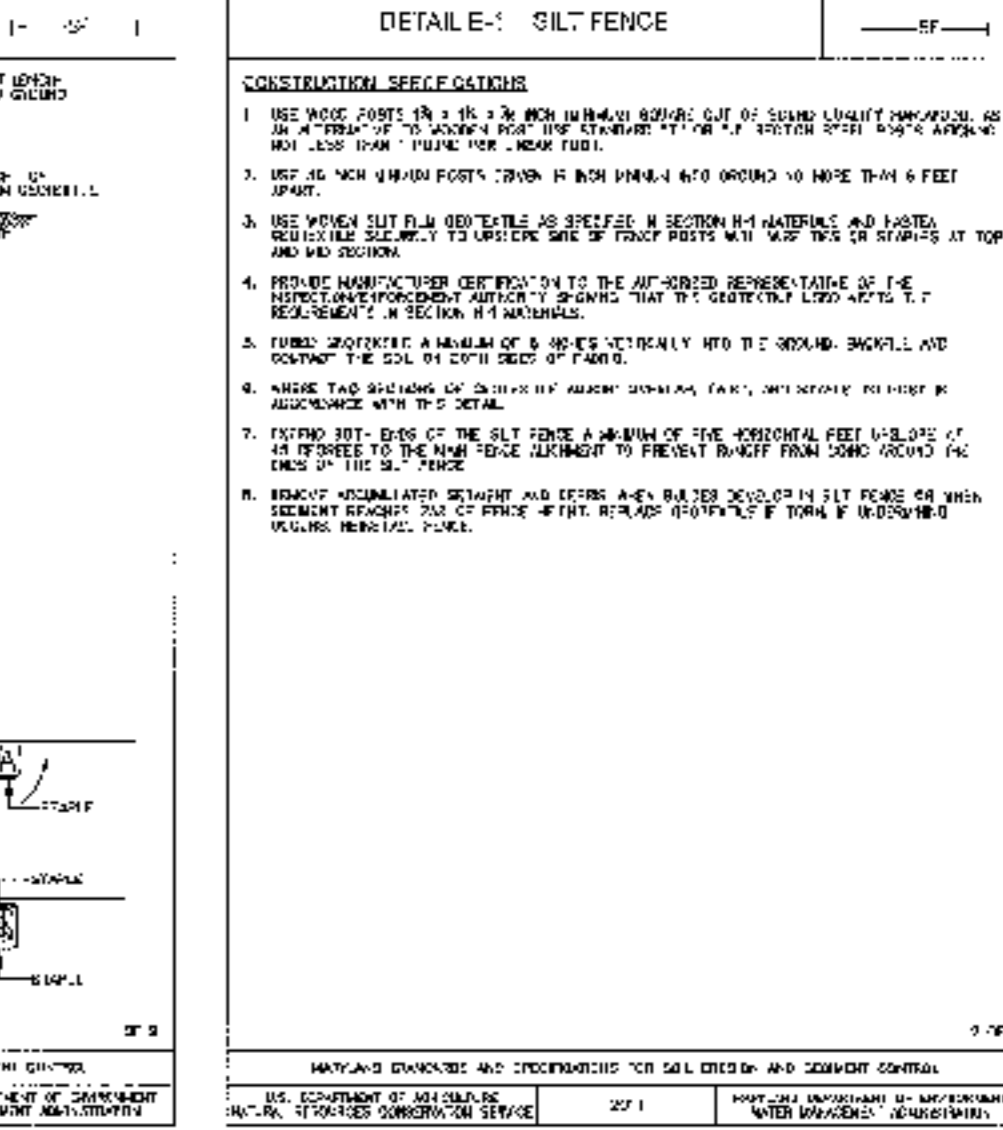
DETAIL B-1 STABILIZED CONSTRUCTION ENTRANCE



DETAIL E-3 SUPER-SILT FENCE

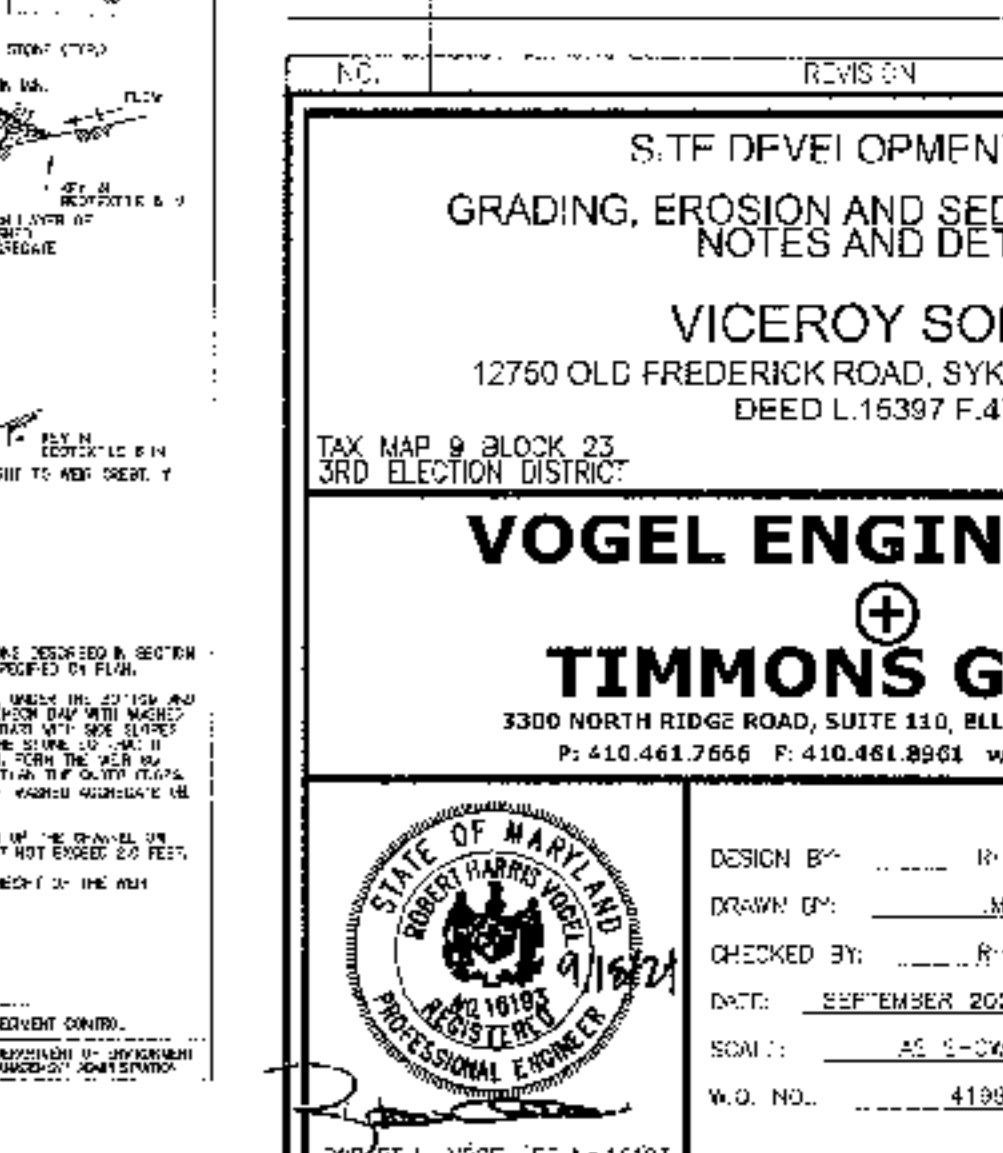
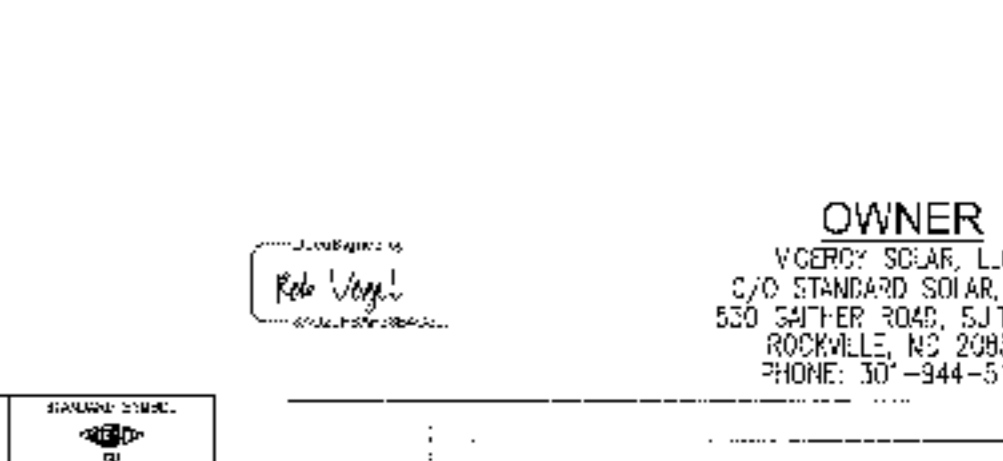
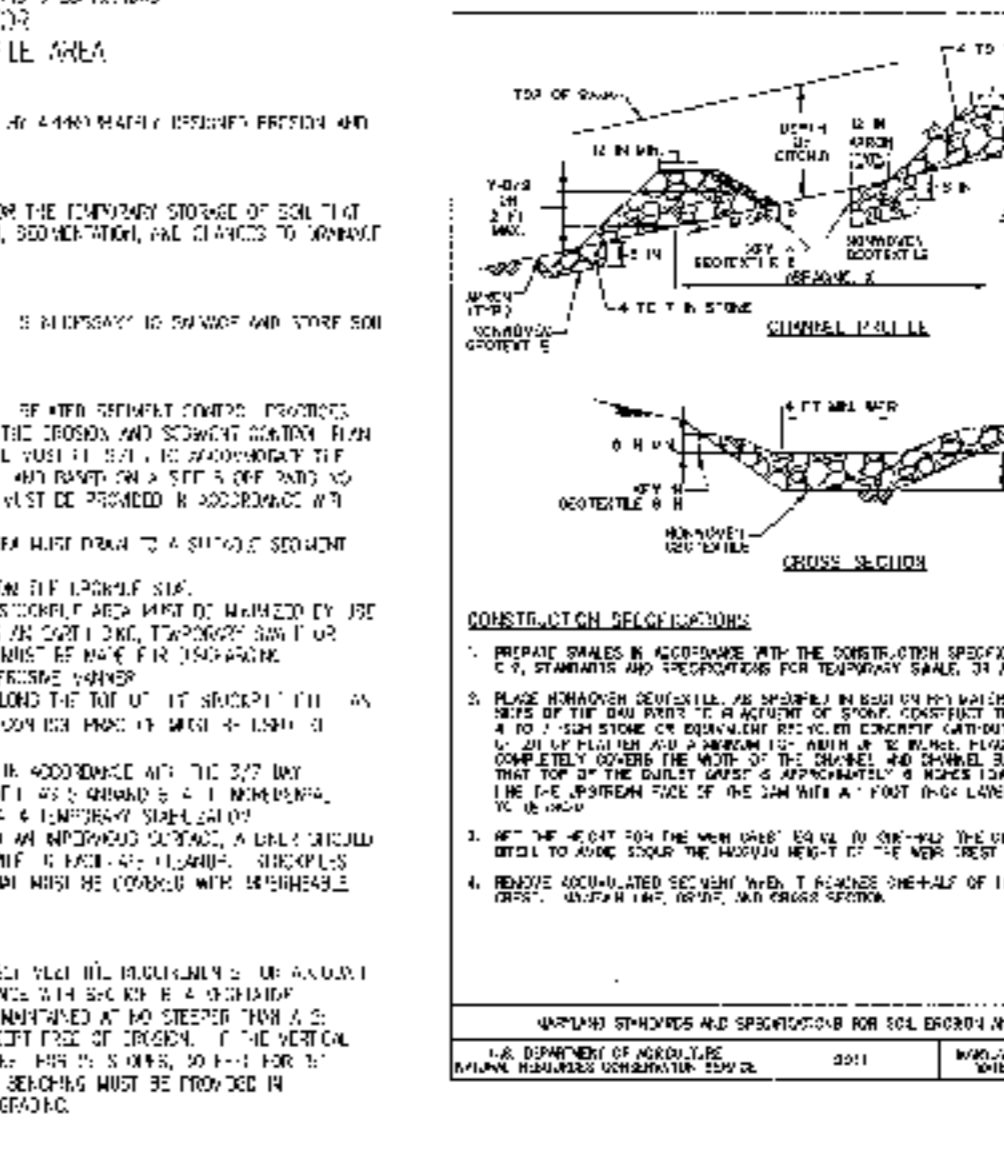


DETAIL E-1 SILT FENCE



SEQUENCE OF CONSTRUCTION

- 1. PERMANENT SEDIMENTATION STRUCTURES SHALL BE CONSTRUCTED WITHIN 14 DAYS OF THE DATE OF THE PERMIT...
- 2. PERMANENT SEDIMENTATION STRUCTURES SHALL BE CONSTRUCTED WITHIN 14 DAYS OF THE DATE OF THE PERMIT...
- 3. PERMANENT SEDIMENTATION STRUCTURES SHALL BE CONSTRUCTED WITHIN 14 DAYS OF THE DATE OF THE PERMIT...



OWNER
VICERY SOLAR, LLC
350 SUTHER ROAD, SUITE 100
ROCKVILLE, MD 20853
PHONE: 301-344-5192

DEVELOPER
ONEBRIER DEVELOPMENT, LLC
2018 WISCONSIN AVENUE
SUITE 225
SEATTLE, WA 98127
PHONE: 206-932-7072
Arlington, VA 22204

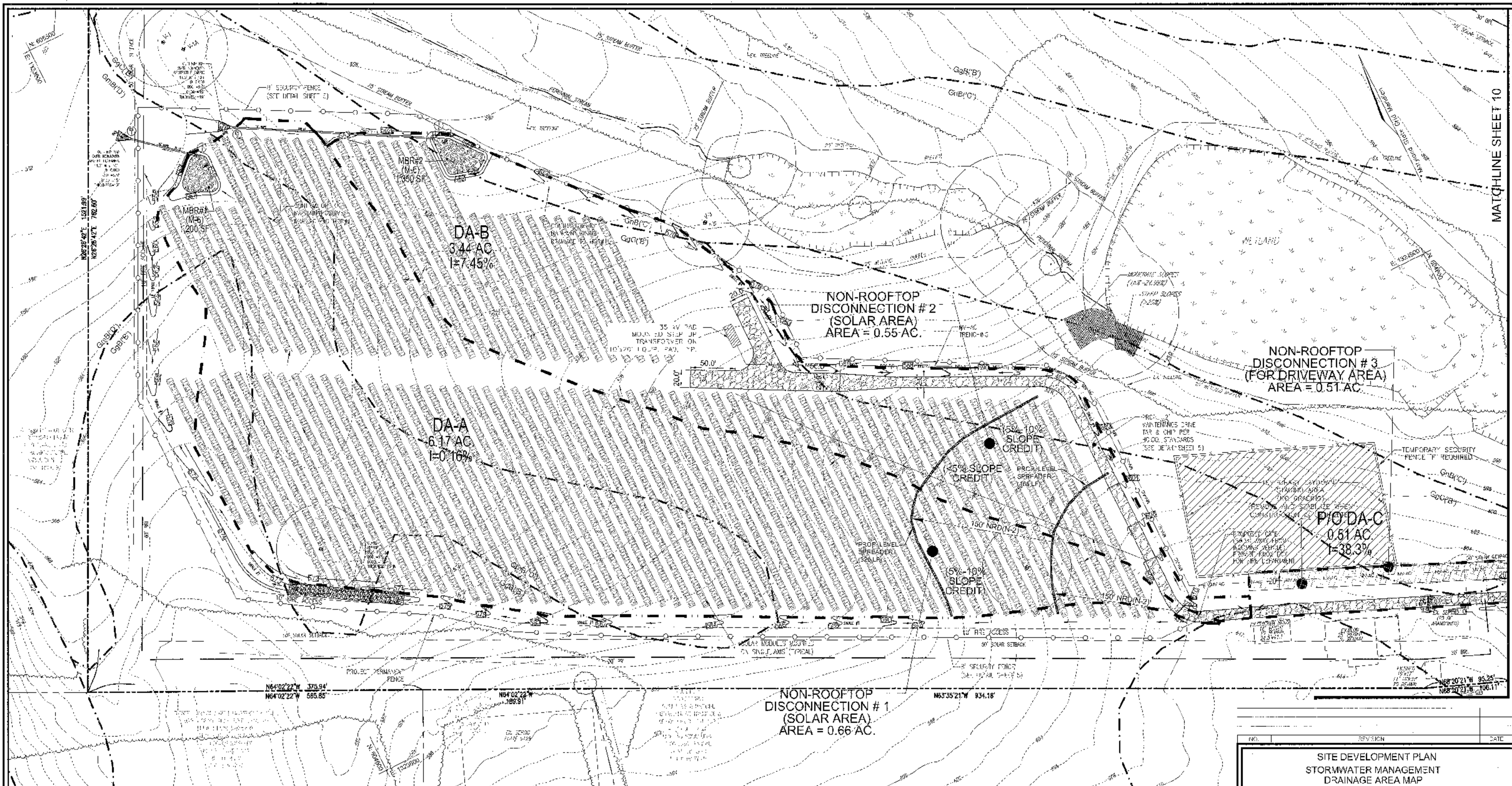
DESIGNER
Vogel Engineering
3300 NORTH RIDGE ROAD, SUITE 110, BELLCOST CITY, MD 21043
P: 410.461.7656 F: 410.461.8901 www.timmons.com

TIMMONS GROUP

DATE: 04/22/21

DESIGNER: Alexander Butcher

PROJECT: 12760 OLD FREDERICK ROAD, SYKESVILLE, MD 21784



MATCHLINE SHEET 10

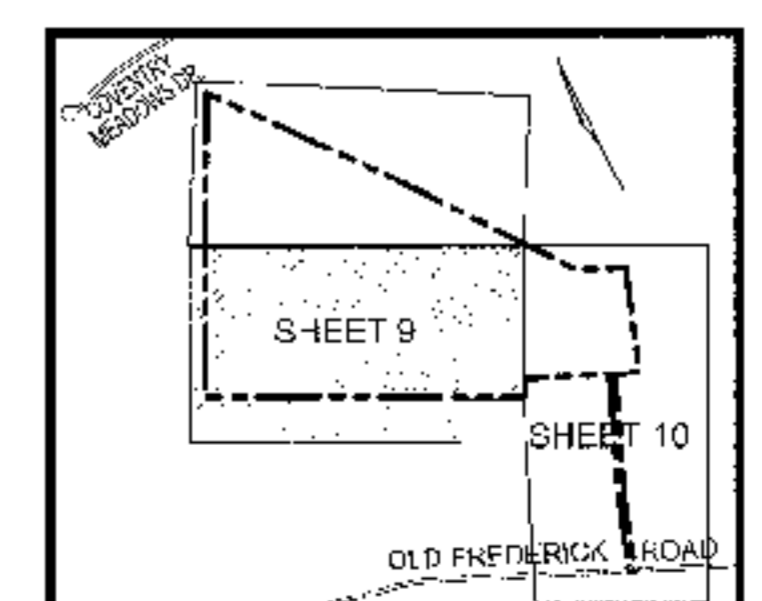
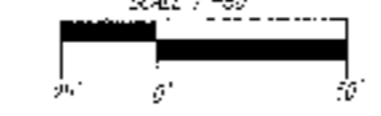
APPROVED BY HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
 12/23/2021
 CHIEF DEVELOPMENT ENGINEERING DIVISION
 DATE 12/28/2021
 CHIEF DIVISION OF LAND DEVELOPMENT
 DATE 02/06/2021
 DIRECTOR

LEGENDS:

Parcel Boundary	Proposed Access Road	Slopes (10%-24.99%)
5' Solar Buffer	Temporary Jurisdiction / Staging Area	Slopes (>24%)
Stream Centerline	Transformer Pad	Micro-Bioretention (M-E)
Stream Buffer (5')	Proposed Fence	Non-Rooftop Disconnections
Relief	Temporary Security Fence	
Existing Contour (1')		
Existing Contour (2')		
Swire Boundary		
Existing Trenchline		
Underground Medium Voltage		
Driveway Area		
Proposed Contour (1')		
Proposed Contour (2')		

STORMWATER MANAGEMENT DRAINAGE AREA MAP

SCALE: 1"=50'



SITE DEVELOPMENT PLAN
STORMWATER MANAGEMENT DRAINAGE AREA MAP
VICEROY SOLAR
 12750 O.D. FREDERICK ROAD, SYKESVILLE, MD 21784
 DEED L. 15397 F.476

TAX MAP 9 BLOCK 23
 3RD ELECTION DISTRICT

ZONED RC-DEO
 PARCEL 13
 HOWARD COUNTY, MARYLAND

VOGEL ENGINEERING
 TIMMONS GROUP
 3309 NORTH RIDGE ROAD, SUITE 110, ELICOTT CITY, MD 21043
 P: 410.461.7666 F: 410.461.8961 www.timmons.com

OWNER:
 VICEROY SOLAR, LLC
 C/O STANDARD SOLAR, INC.
 830 CATLER ROAD, SUITE 000
 ROCKY HILL, MD 20850
 P: (301) 844-5130

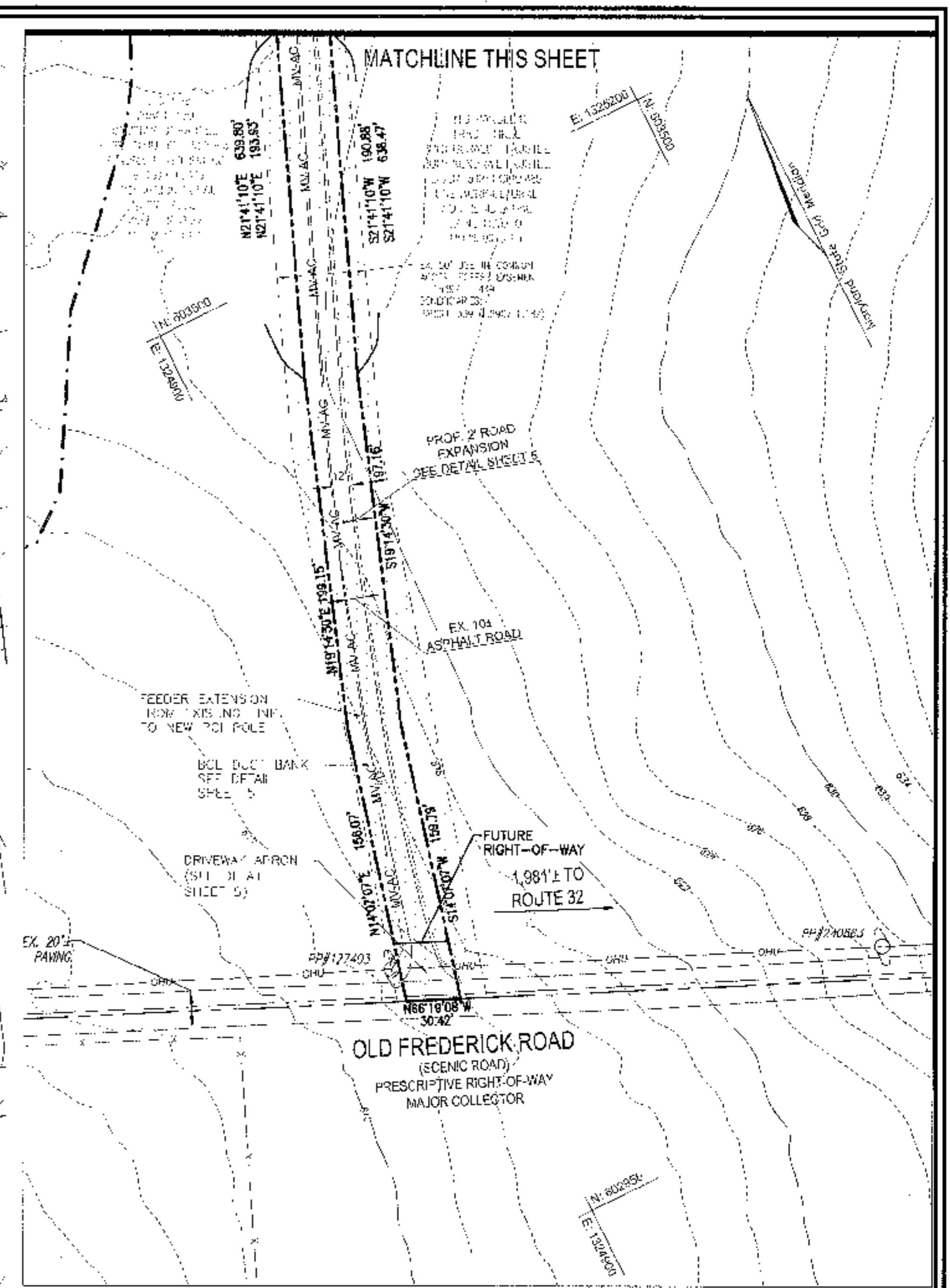
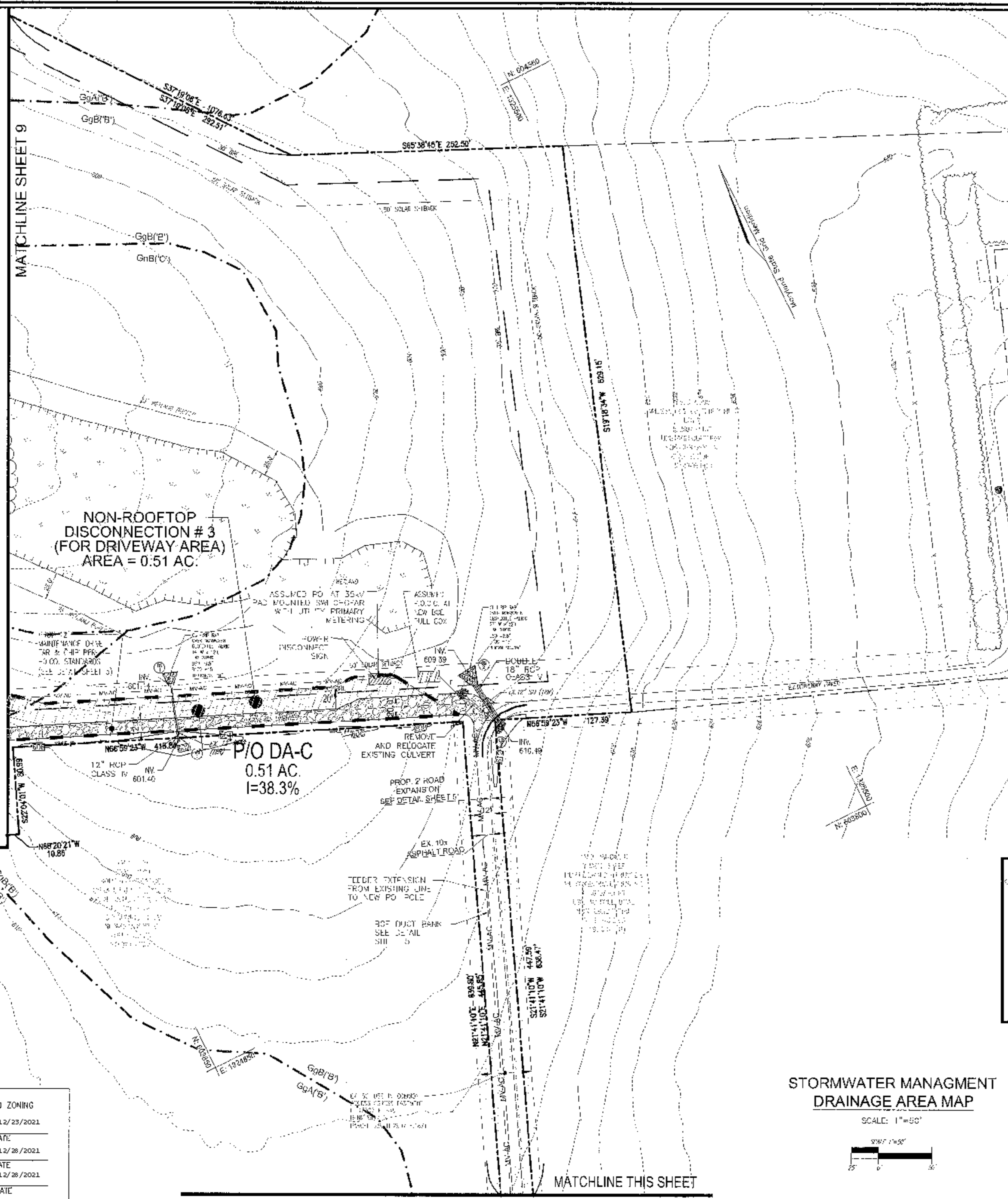
DEVELOPER:
 VICEROY DEVELOPMENT, LLC
 2003 WESTERN AVENUE
 SUITE 203
 SPARTANBURG, VA 23127
 PHONE: 203 822 7070
 ATTENTION: KATE LARSON

DESIGN BY: RHY
 DRAWN BY: SMH
 CHECKED BY: RHY
 DATE: JAN 10, 2022
 SCALE: AS SHOWN
 P.O. NO.: 41995

STATE OF MARYLAND
 PROFESSIONAL ENGINEER
 REG. NO. 117396, P.E. No. 117183

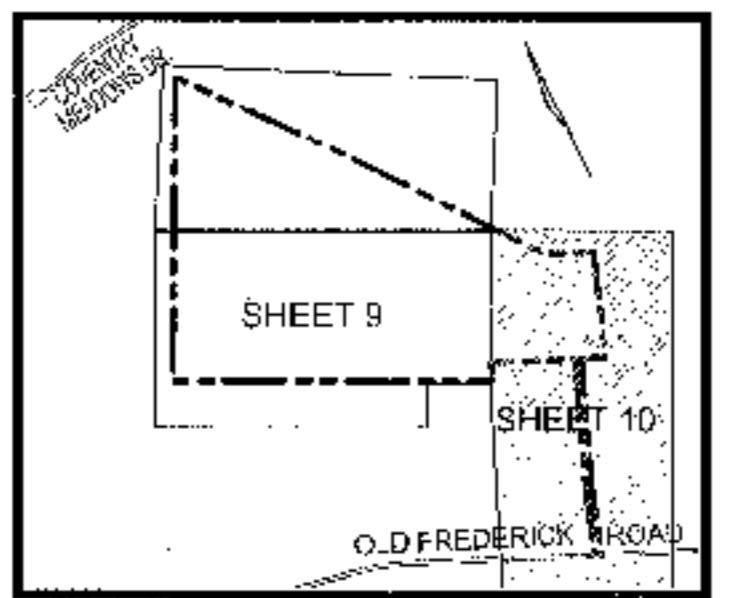
9 SHEET OF 17

- LEGENDS:**
- PARCEL BOUNDARY
 - 30' SOLAR SETBACK
 - WETLAND
 - WETLAND BUFFER
 - EXISTING CONTOUR (10')
 - EXISTING CONTOUR (2')
 - SOLE BOUNDARY
 - EXISTING TIE LINE
 - EXISTING OVERHEAD LINE
 - UNDERGROUND MEDIUM VOLTAGE
 - NEW ACCESS ROAD
 - FEEDER - 30'-5"
 - EX. 20' USE IN COMMON
 - ACCESS POINT ASSEMBLY
 - 1500V F-448
 - SWITCH GEAR
 - NO. LP-36 / DISCONNECT
 - PROPOSED CONTOUR (10')
 - PROPOSED CONTOUR (2')
 - STEIN DRAIN
 - DRAINAGE AREA
 - WICAO-BUILDING (N-6)
 - NO. ROOF TOP DISCONNECTS

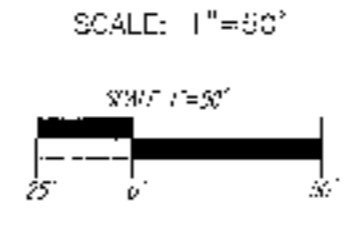


OWNER
 VICEROY SOLAR, INC.
 12750 OLD FREDERICK ROAD, SUITE 900
 ROCKVILLE, MD 20850
 PHONE: 301-944-5102

DEVELOPER
 ONENERGY DEVELOPMENT LLC
 2003 WESTRY AVENUE
 SUITE 225
 SEATTLE, WA 98127
 PHONE: 206-922-7072
 ATTENTION: GATE JARVIN



STORMWATER MANAGEMENT DRAINAGE AREA MAP



APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Chief Administrator	12/23/2021
DEVELOPMENT ENGINEERING DIVISION	DATE
CHEMISTRIAN OF LAND DEVELOPMENT	DATE
12/28/2021	DATE
12/28/2021	DATE
DATE	DATE

NO.	REV	SION	DATE
SITE DEVELOPMENT PLAN STORMWATER MANAGEMENT DRAINAGE AREA MAP VICEROY SOLAR 12750 OLD FREDERICK ROAD, SYKESVILLE, MD 21784 DEED # 15397 F.476 TAX MAP 9 BLOCK 23 3RD ELECTION DISTRICT ZONE 3 RC-100 PARCEL 19 HOWARD COUNTY, MARYLAND			
VOGEL ENGINEERING 3300 NORTH RIDGE ROAD, SUITE 110, ELLCOTT CITY, MD 21043 P: 410.461.7606 F: 410.461.8061 www.vogeleng.com			
TIMMONS GROUP			
PROFESSIONAL CERTIFICATE DESIGNED BY: RHY DRAWN BY: DMV CHECKED BY: MEV DATE: SEPTEMBER 2021 SCALE: AS SHOWN W.D. NO.: 41923			
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A duly licensed PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND LICENSE NO. 01993 EXPIRES 09/30/2022			
STATE OF MARYLAND ROBERT HARRIS BOGGS PROFESSIONAL ENGINEER			10 SHEET OF 17

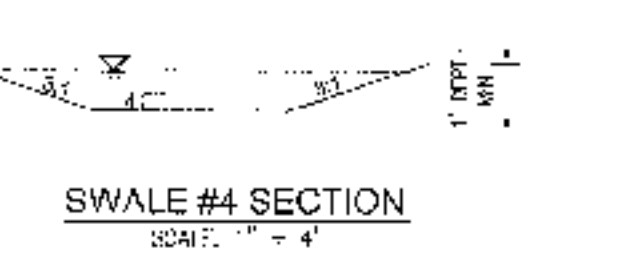
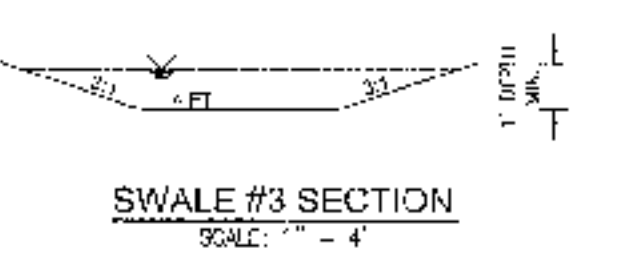
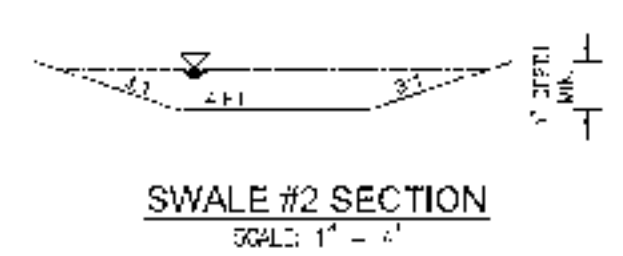
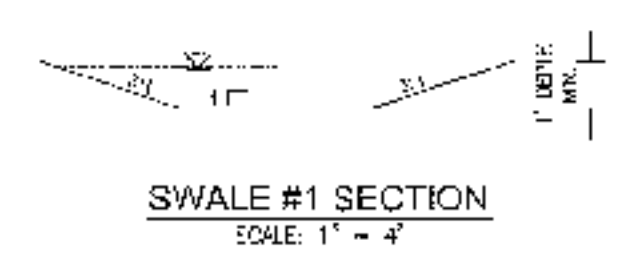
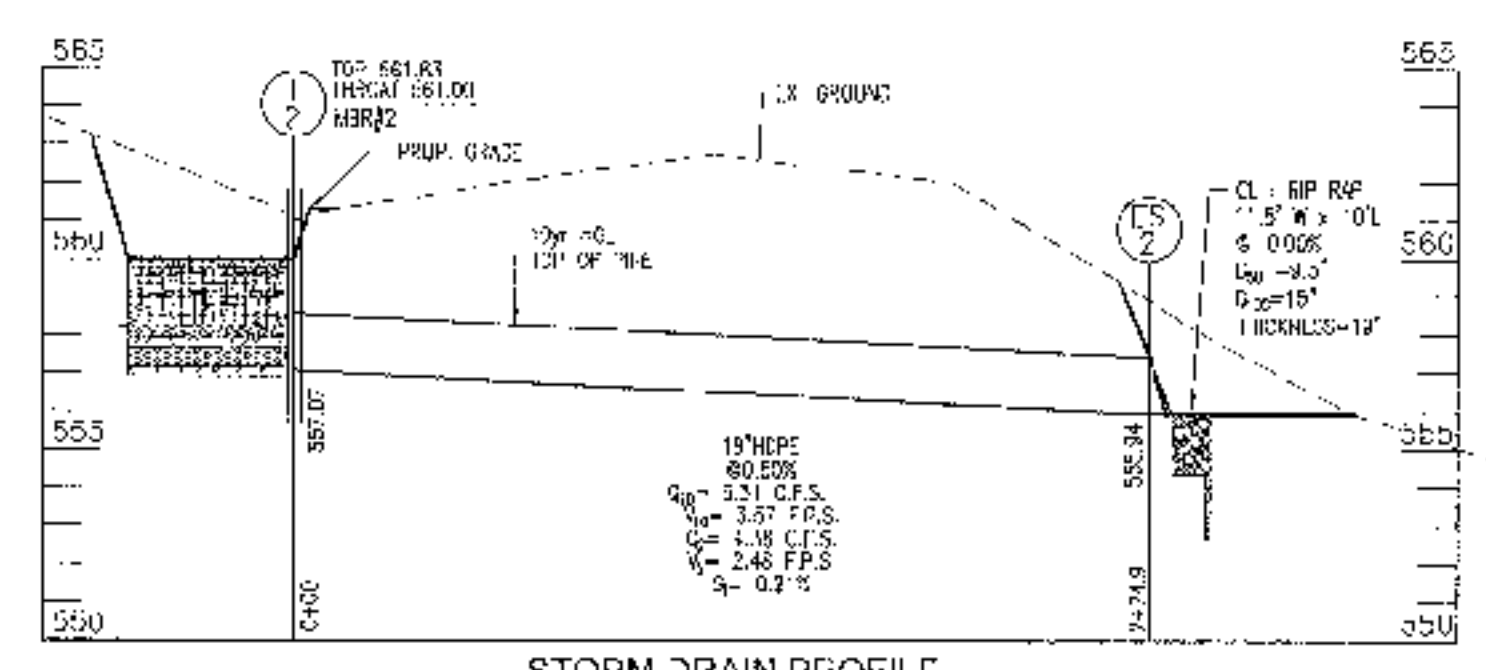
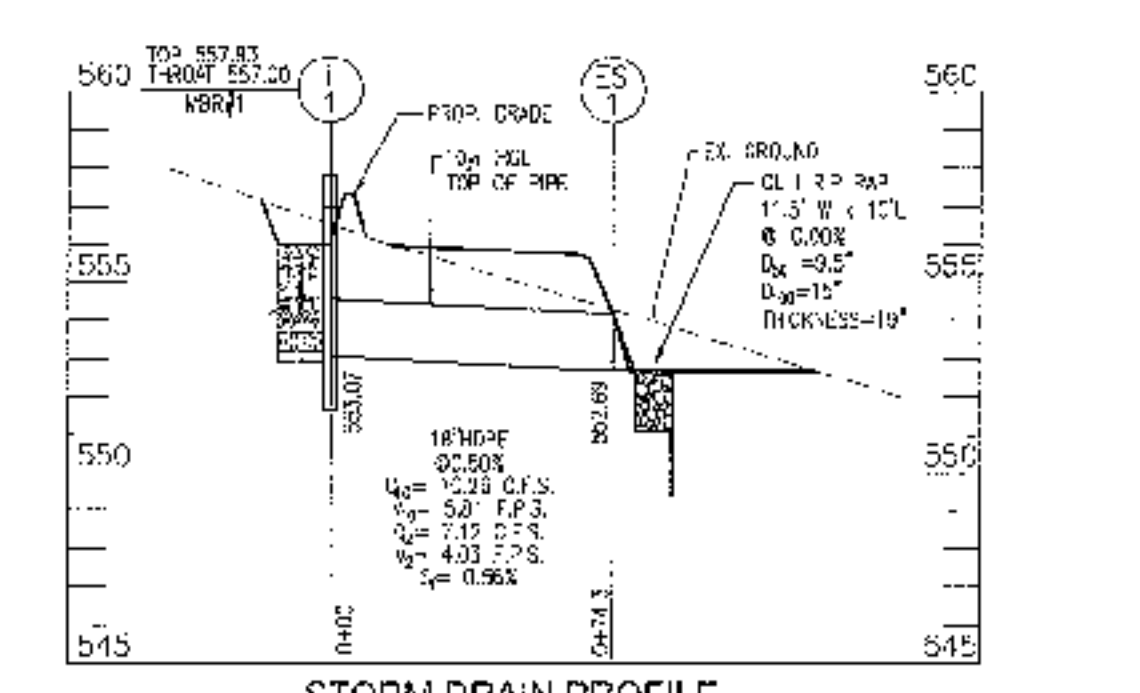
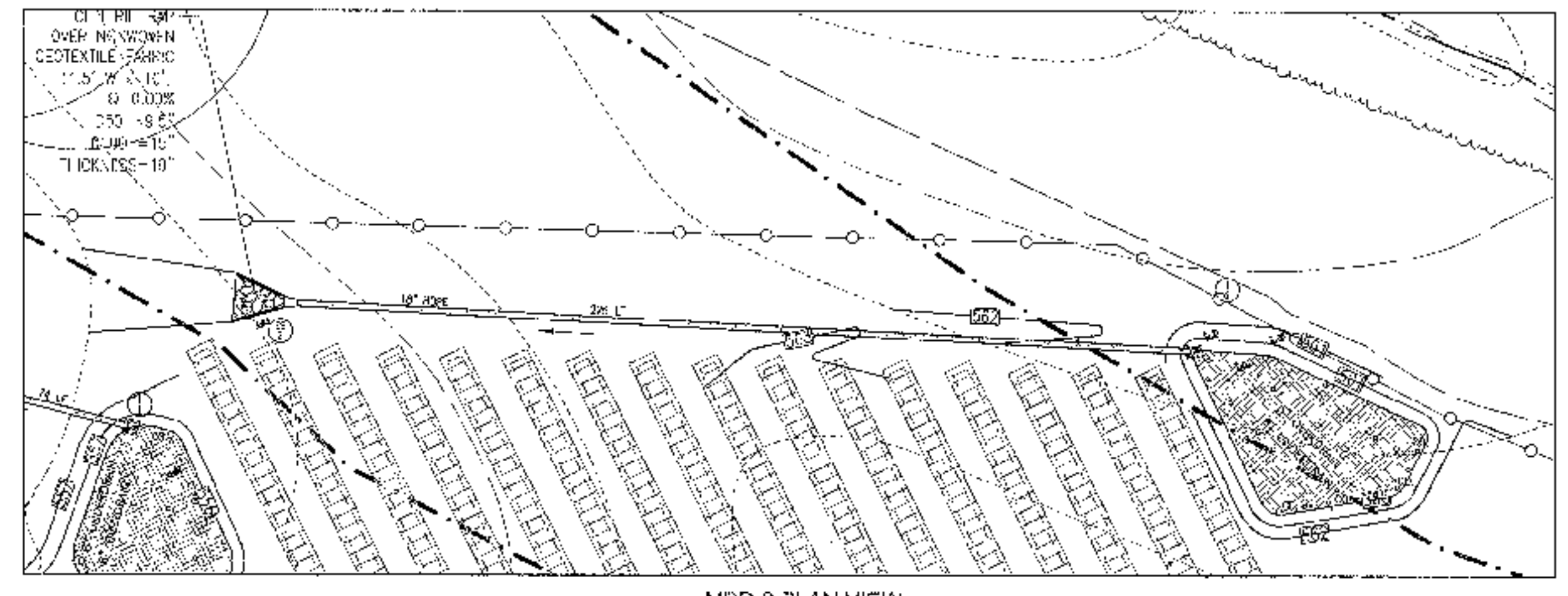
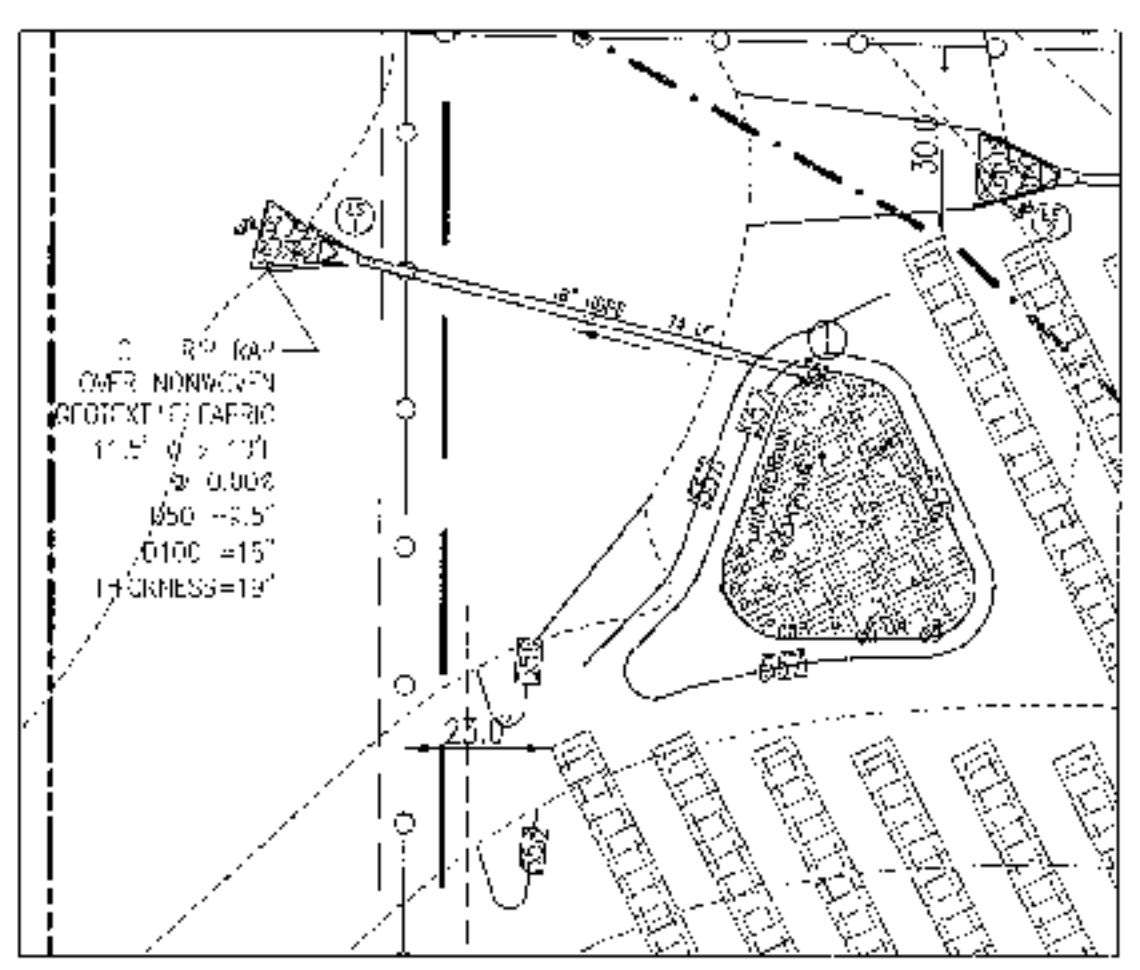
ADS FLARED END SECTION SPECIFICATION

Scope
This specification describes 12- through 36-inch (300 to 900mm) ADS Flared End Sections for use in culvert and drainage outlet applications.

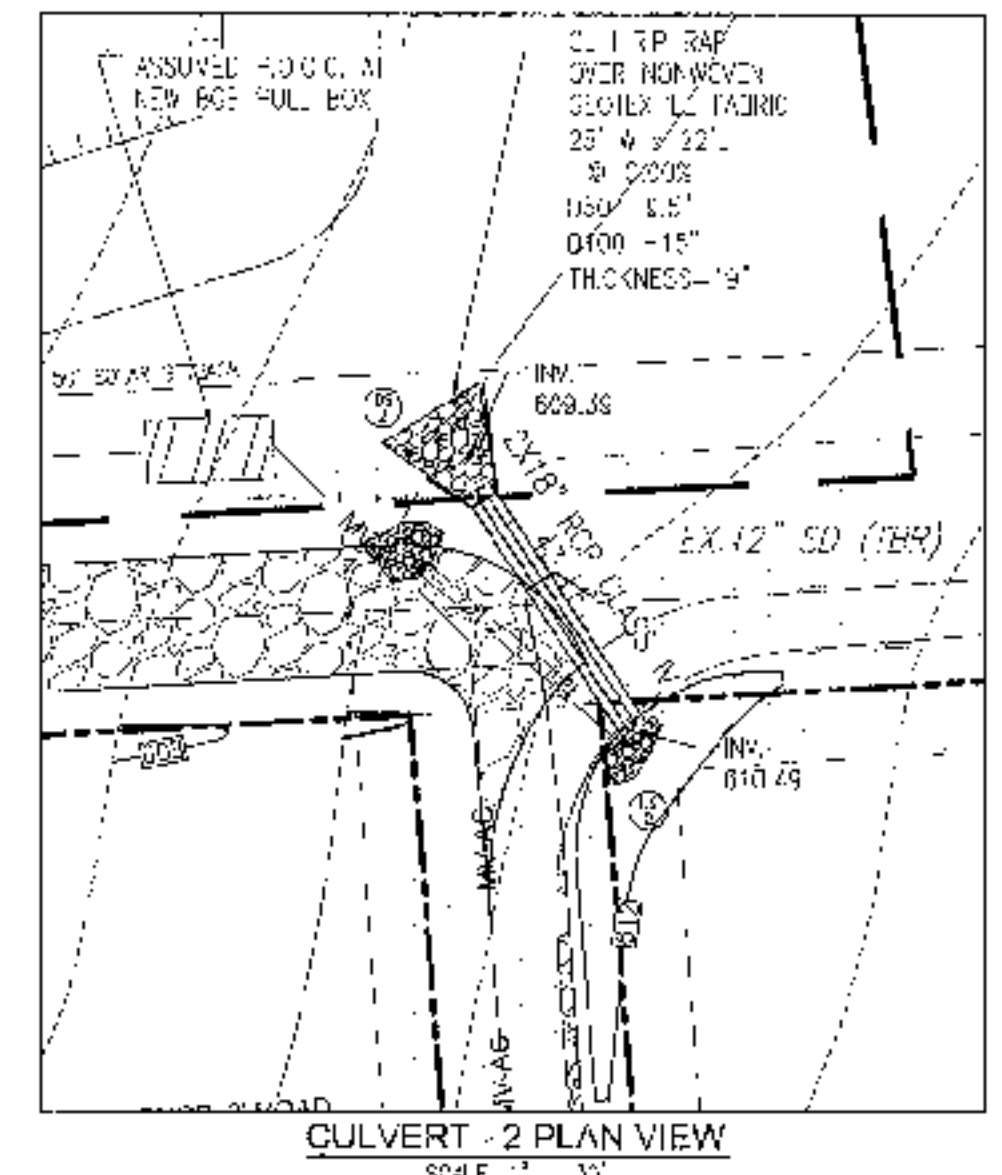
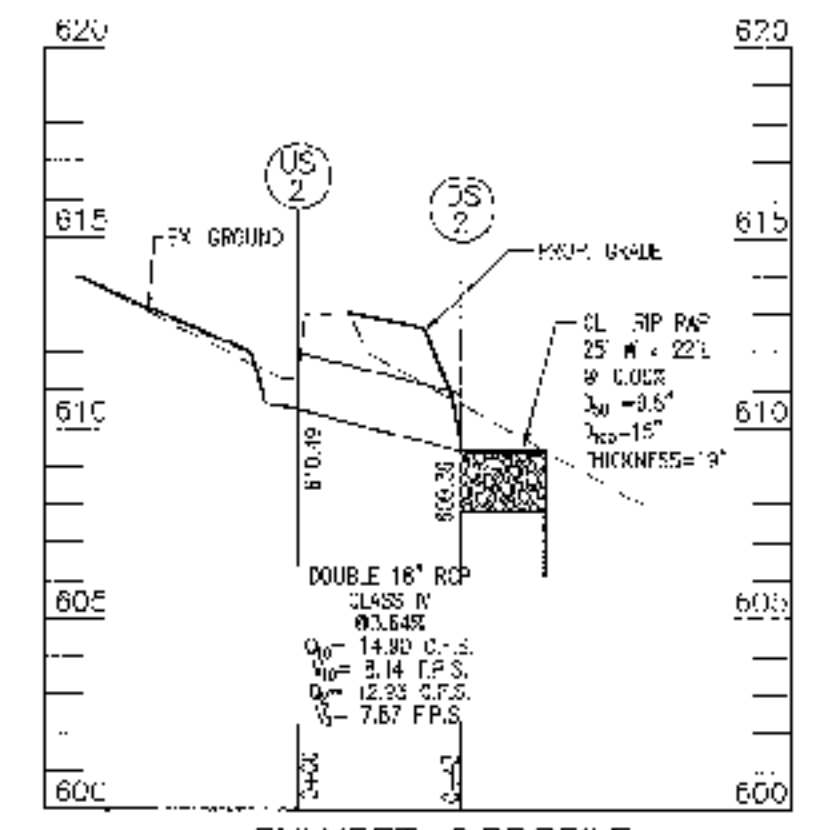
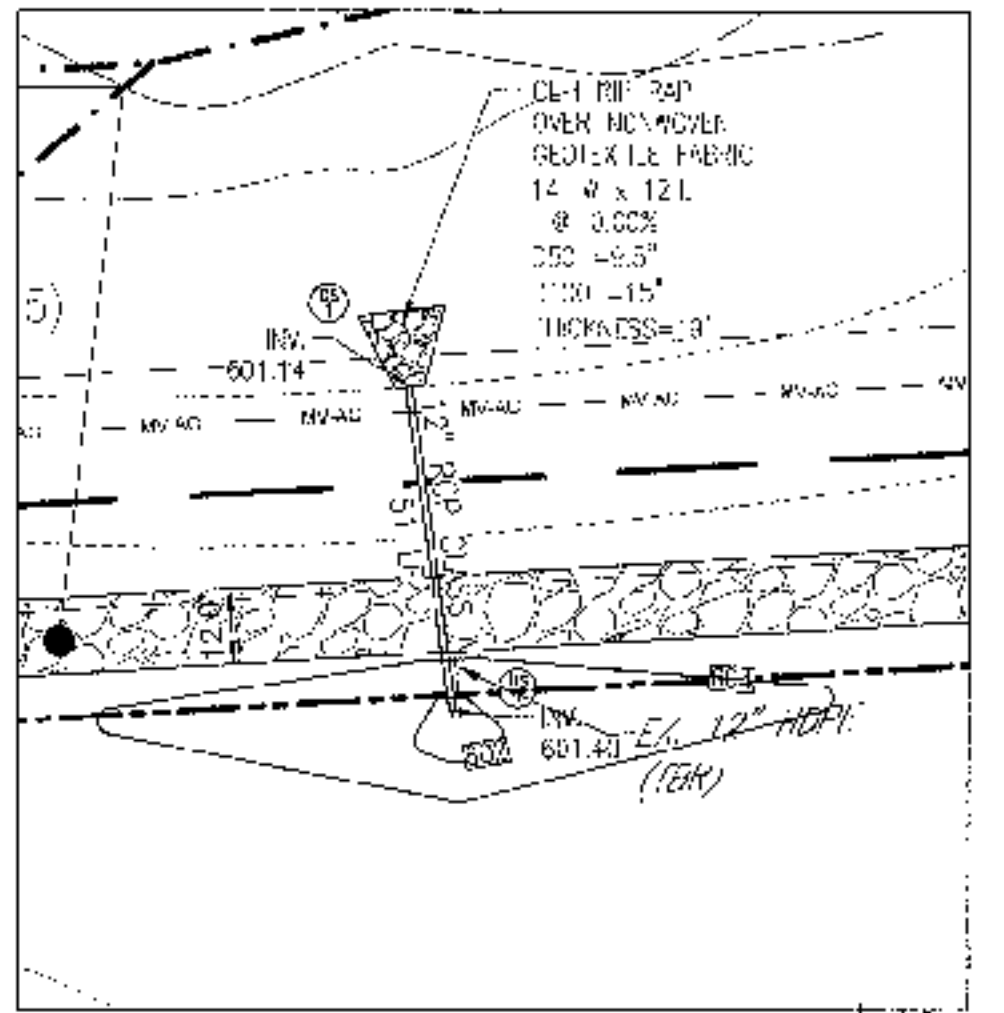
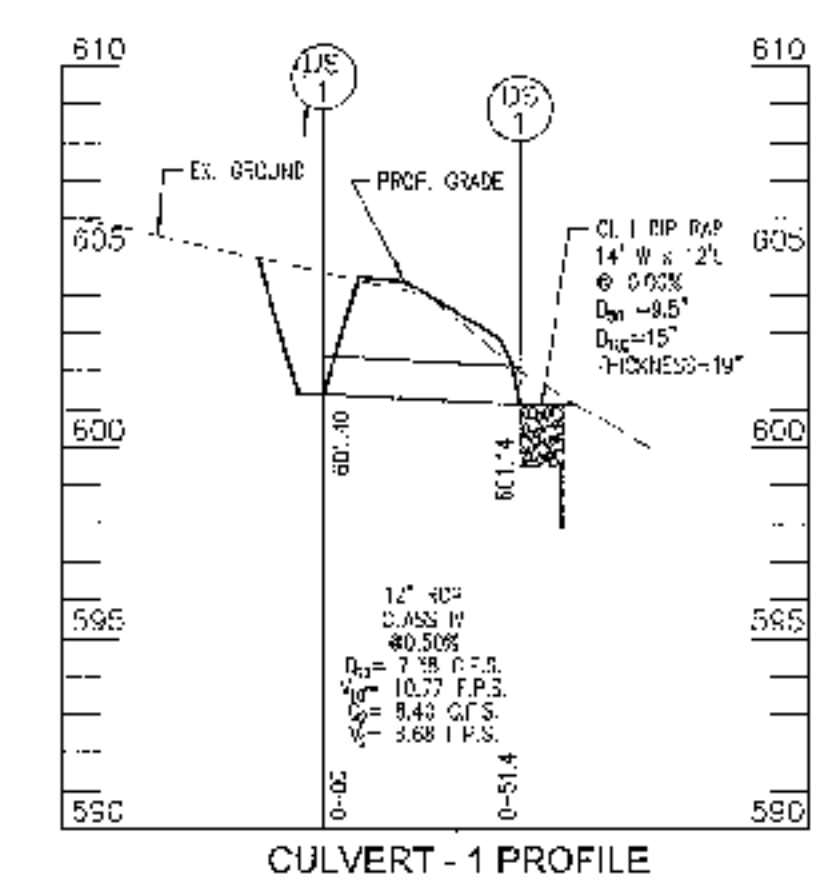
Requirements
The ADS Flared End Section shall be high density polyethylene meeting ASTM D3350 minimum cell classification 2133200; contact manufacturer for additional cell classification information. When provided, the metal flanged fastening, rod shall be stainless steel.

Installation
Installation shall be in accordance with ADS installation instructions and with those issued by state or local authorities. Contact your local ADS representative or visit www.ads-eps.com for the latest installation instructions.

Dimension	12"	18"	24"	30"	36"
Outside Dia.	12.00	18.00	24.00	30.00	36.00
Inside Dia.	11.50	17.50	23.50	29.50	35.50
Flange Dia.	12.00	18.00	24.00	30.00	36.00
Flange Thickness	0.50	0.50	0.50	0.50	0.50
Flange Spacing	1.50	1.50	1.50	1.50	1.50
Flange Material	304 SS	304 SS	304 SS	304 SS	304 SS
Flange Fastener	304 SS	304 SS	304 SS	304 SS	304 SS
Flange Fastener Dia.	0.375	0.375	0.375	0.375	0.375
Flange Fastener Spacing	1.50	1.50	1.50	1.50	1.50
Flange Fastener Length	0.50	0.50	0.50	0.50	0.50
Flange Fastener Material	304 SS	304 SS	304 SS	304 SS	304 SS



SWALE	DEPTH	WIDTH	LENGTH	SLOPE
SWALE #1	2.75	4.67	0.95	0.029
SWALE #2	1.22	2.46	0.19	0.036
SWALE #3	4.58	3.11	0.47	0.031
SWALE #4	5.73	3.76	0.12	0.019



SIZE	PUBLIC/PRIVATE	MATERIAL	LENGTH
2"	PRIVATE	ROP CLASS IV	51
4"	PRIVATE	ROP CLASS IV	26
6"	PRIVATE	HOPE	289

STRUCTURE	TYPE	AV IN	INV. OUT	TOP ELEV.	DETAIL	LOCATION	REMARKS
I-1	D INLET	---	557.87	537.83	D-4.13	E: 605,317.95 L: 1,525,715.42	(1) PRIVATE
I-2	D INLET	---	557.87	551.83	D-4.13	E: 605,216.76 L: 1,523,951.92	(1) PRIVATE
US-1	18" HOPE	---	562.69	554.19	SETA THIS SHEET	A: 605,550.35 E: 1,523,822.57	(2) PRIVATE
CS-2	18" HOPE	---	527.44	502.44	SETA THIS SHEET	E: 605,321.15 L: 1,523,755.57	(2) PRIVATE

(1) COORDINATE FOR PROPOSED STRUCTURE = CENTERLINE OF STRUCTURE
(2) COORDINATE FOR END SECTION = CENTERLINE OF PIPE OR DOWNSTREAM FACE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
 Date: 12/28/2021
 DIRECTOR OF PLANNING AND ZONING
 DATE: 12/28/2021
 DIRECTOR OF LAND DEVELOPMENT
 DATE: 12/28/2021
 DIRECTOR

OWNER
VICEROY SOLAR, LLC
C/O STANDARD SOLAR, INC.
300 GAITHER ROAD, SUITE 900
ROCKVILLE, MD 20850
PHONE: 301-844-1107

DEVELOPER
ENERGY DEVELOPMENT
3033 WESTER AVENUE
SUITE 225
SEATTLE, WA 98127
PHONE: 206-822-7072
ATTENTION: KATE LARSEN

SITE DEVELOPMENT PLAN
STORMWATER MANAGEMENT NOTES AND DETAILS
STORM DRAIN AND CULVERT PROFILES

2750 OLD FREDERICK ROAD, SYKESVILLE, MD 21781
DEED L: 15397 F: 476

TAX MAP 9, BLOCK 23
3RD ELECTION DISTRICT

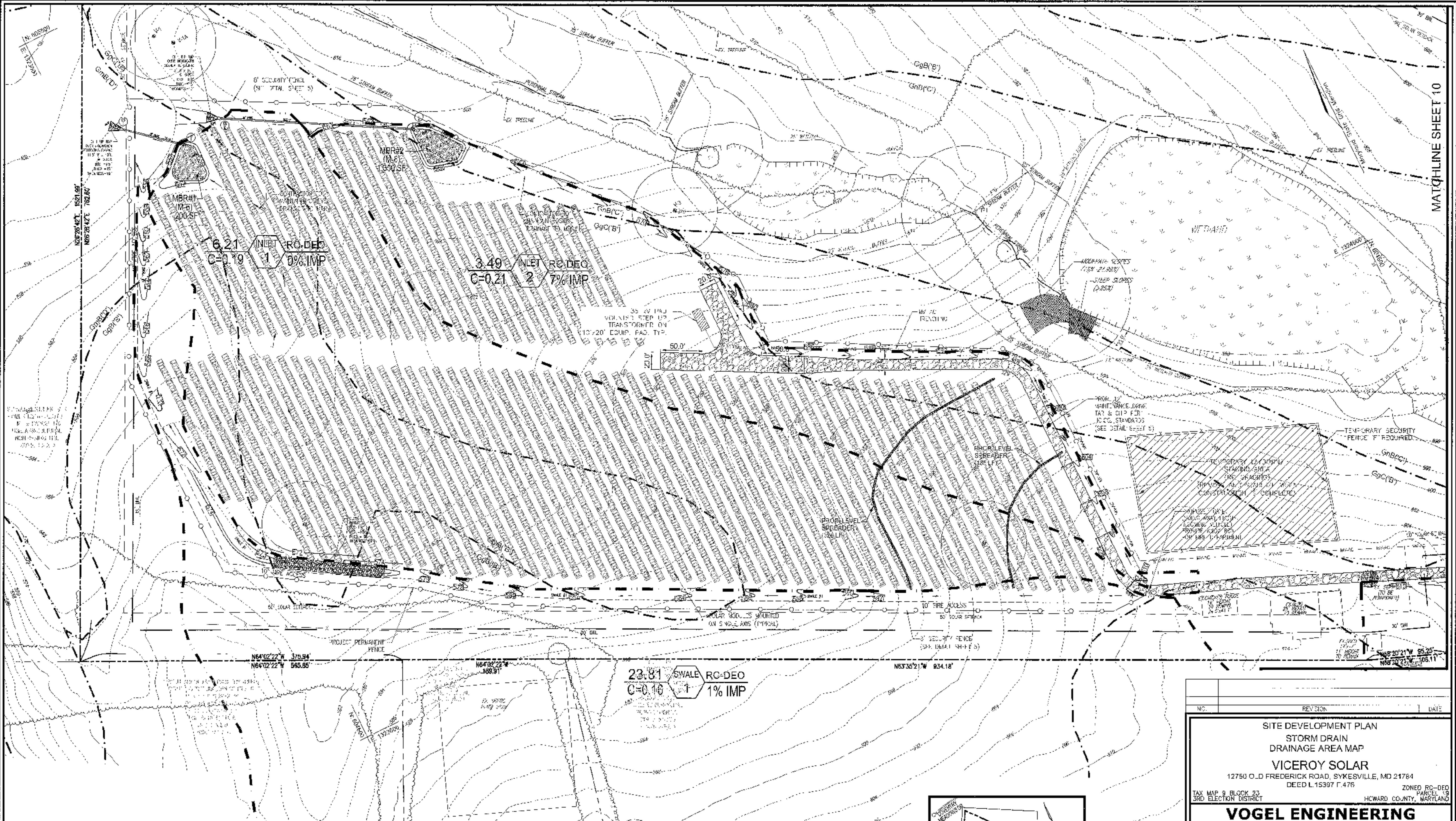
ZONED RC-DEO
PARCEL 15
HOWARD COUNTY, MARYLAND

VOGEL ENGINEERING
TIMMONS GROUP
 3300 NORTH RIDGE ROAD, SUITE 110, BELLCOTT CITY, MD 21043
 P: 410.461.7666 F: 410.461.8561 www.timmons.com

PROFESSIONAL CERTIFICATE
 DESIGN BY: RHY
 DRAWN BY: JPH
 CHECKED BY: RHY
 DATE: SEPT/OCT 2021
 SCALE: AS SHOWN
 N.D. NO.: 4-933

12 SHEET OF 17

MATCHLINE SHEET 10

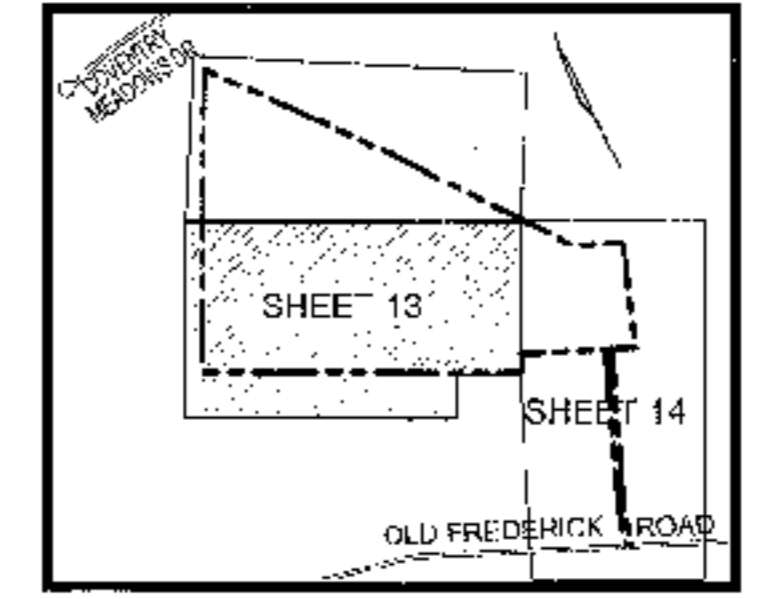
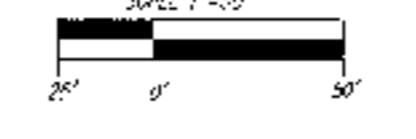


APPROVED BY HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
 12/23/2021
 CHIEF DEVELOPMENT ENGINEERING DIVISION
 DATE 12/28/2021
 CHIEF DIVISION OF LAND DEVELOPMENT
 DATE 12/28/2021
 DIRECTOR DATE

- LEGENDS:**
- PARCEL BOUNDARY
 - 50' SOLAR SETBACK
 - STREAM CENTERLINE
 - STREAM BUFFER
 - ALTITUDE
 - EXISTING CONTOUR (10')
 - PROPOSED CONTOUR (2')
 - SOILS BOUNDARY
 - EXISTING CHLORIDE
 - UNDERGROUND METALLIC UTILITIES
 - ORANGE AREA
 - PROPOSED DRIVEWAY
 - TEMPORARY DRIVEWAY / STAGING AREA
 - TRANSFORMER PAD
 - PROPOSED CHLORIDE
 - TEMPORARY SECURITY FENCE
 - PROPOSED CONTOUR (10')
 - PROPOSED CONTOUR (2')
 - STORM DRAIN
 - SLOPES (1:30-24:900)
 - SLOPES (2:50)
 - MUD-DEPOSITION (M-D)

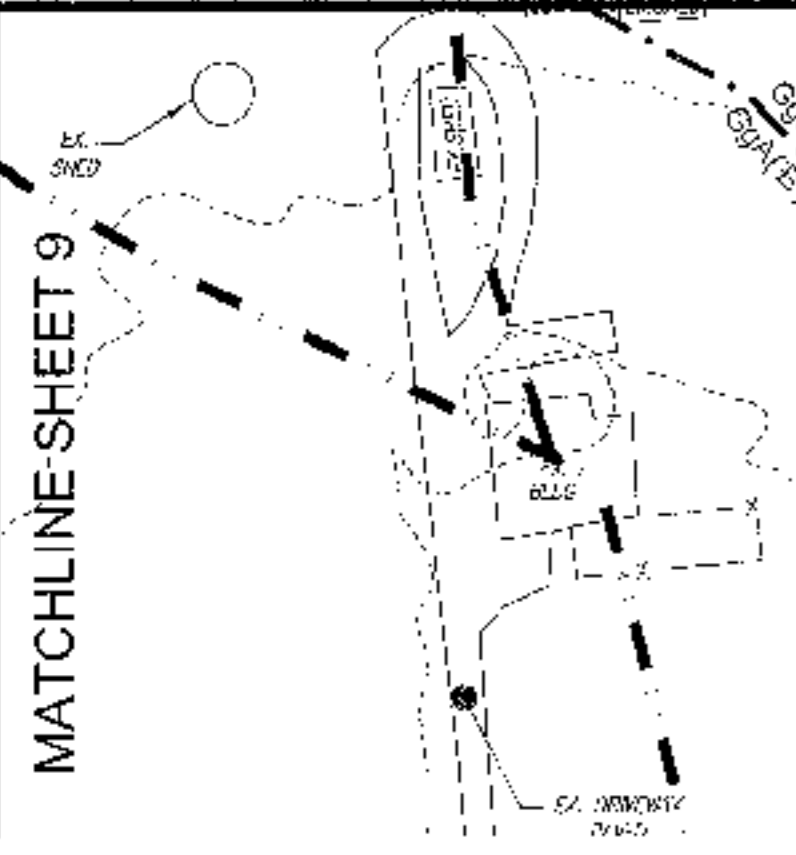
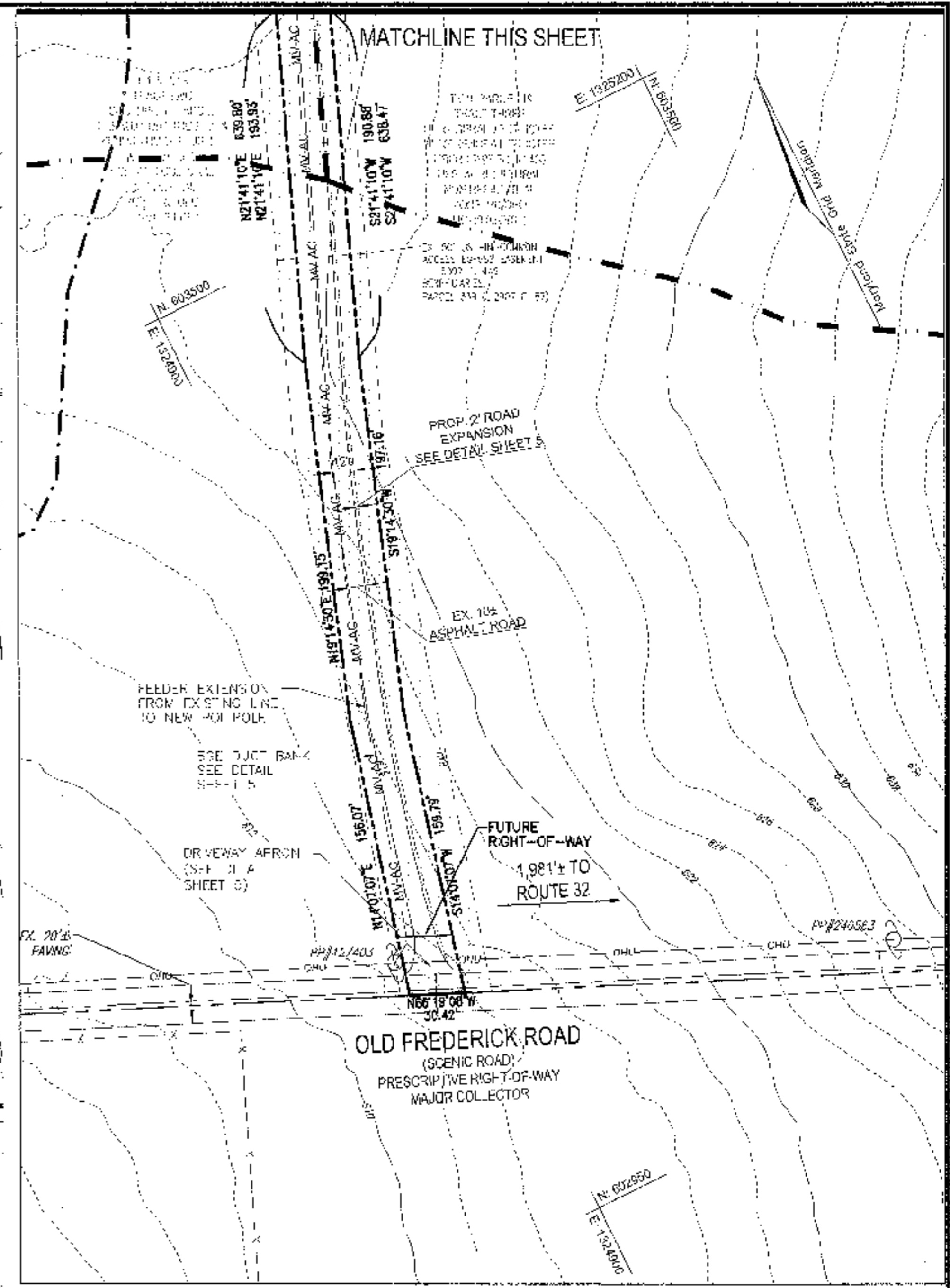
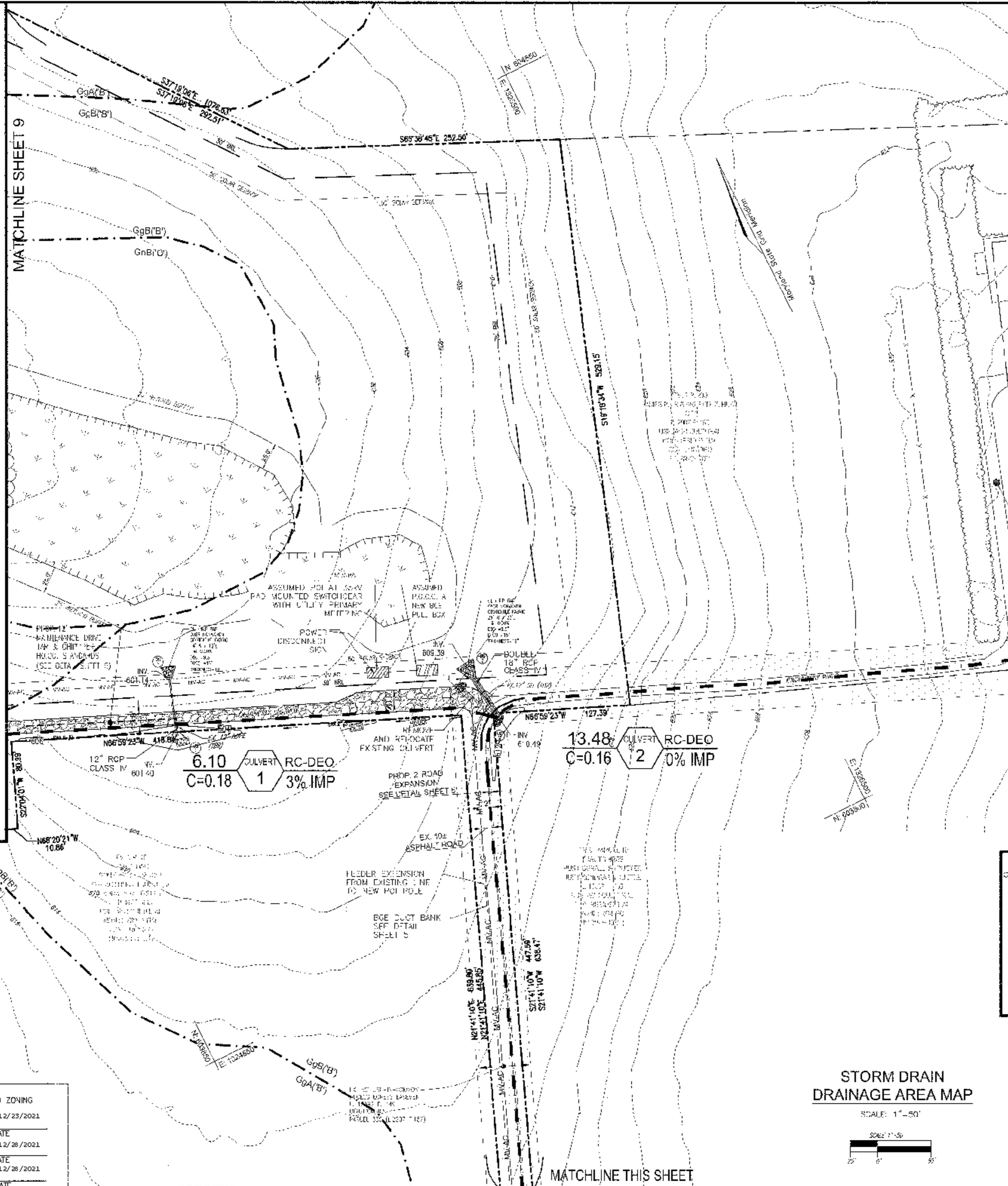
STORM DRAIN DRAINAGE AREA MAP

SCALE: 1"=50'



NO.	REVISION	DATE
SITE DEVELOPMENT PLAN STORM DRAIN DRAINAGE AREA MAP VICEROY SOLAR 12750 O.D. FREDERICK ROAD, SYKESVILLE, MD 21784 DEED L.15397 F.476		
TAX MAP 9 BLOCK 23 3RD ELECTION DISTRICT		ZONED RC-DEO PARCEL 19
VOGEL ENGINEERING + TIMMONS GROUP 3300 NORTH RIDGE ROAD, SUITE 110, ELLICOTT CITY, MD 21043 P: 410.461.7666 F: 410.461.8961 www.timmons.com		
OWNER: VICEROY SOLAR, LLC C/O STANBRO SOLAR, LLC 530 GAITHER ROAD, SUITE 300 ROCKVILLE, MD 20850 PHONE: 301-044-5192		
DEVELOPER: ONE ENERGY DEVELOPMENT, LLC 2003 WESTERN AVENUE SUITE 223 SEATTLE, WA 98121 PHONE: 206-922-7072 ATTENTION: KATIE ARKIN		
DESIGN BY: RHY	PROFESSIONAL CERTIFICATE	
DRAWN BY: IMB	I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR SUPERVISED BY ME AND THAT I AM A duly Licensed Professional Engineer under the laws of the State of Maryland, License No. 16928, EXPIRES DATE 06-30-2022	
CHECKED BY: RHY	DATE: SEPTEMBER 2021	
SCALE: AS SHOWN	W.O. NO.: 11893	
13		17

- LEGENDS:**
- PARCEL BOUNDARY
 - 60' SOLAR SETBACK
 - WETLAND
 - WETLAND BUFFER
 - EXISTING CONTOUR (10')
 - EXISTING CONTOUR (2')
 - SOILS BOUNDARY
 - EXISTING TIELINE
 - EXISTING OVERHEAD LINE
 - IMPROVED ASPHALT DRIVEWAY
 - NEW ACCESS ROAD
 - ERODIBLE SOILS
 - EX. 50 USE 1/4 CORNER ACCESS EASEMENT (15397 F. 443)
 - SWITCH GRAB
 - METERING / DISCONNECT
 - PROPOSED CONDUIT (12")
 - IMPROVED CONDUIT (2")
 - STORM DRAIN
 - UPGRADE AREA



APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Chad Edmondson 12/23/2021

DEVELOPMENT ENGINEERING DIVISION DATE 12/28/2021

CHIEF DIVISION OF LAND DEVELOPMENT DATE 12/28/2021

DIRECTOR DATE

STORM DRAIN DRAINAGE AREA MAP

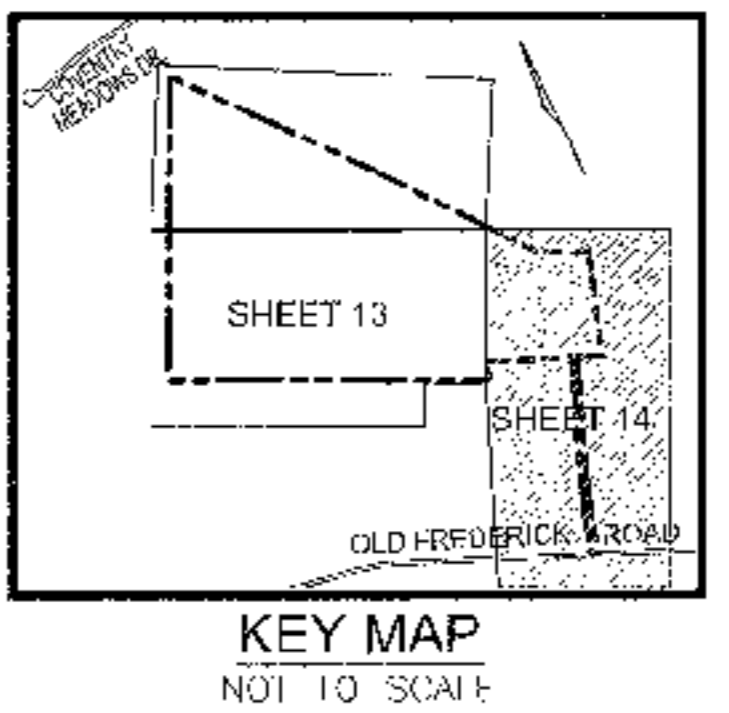
SCALE: 1"=50'

SCALE: 1"=50'

20' 0' 50'

OWNER
VICEROY SOLAR, LLC
270 SHAMBER SOLAR, INC.
530 GAITHER ROAD, SUITE 900
ROCKVILLE, MD 20850
14938 301-914-5102

DEVELOPER
CAENERGY DEVELOPMENT, LLC
2003 WESTERN AVENUE
SUITE 225
SEATTLE, WA 98112
PHONE: 206-522-7072
ATTENTION: KATE LARKIN



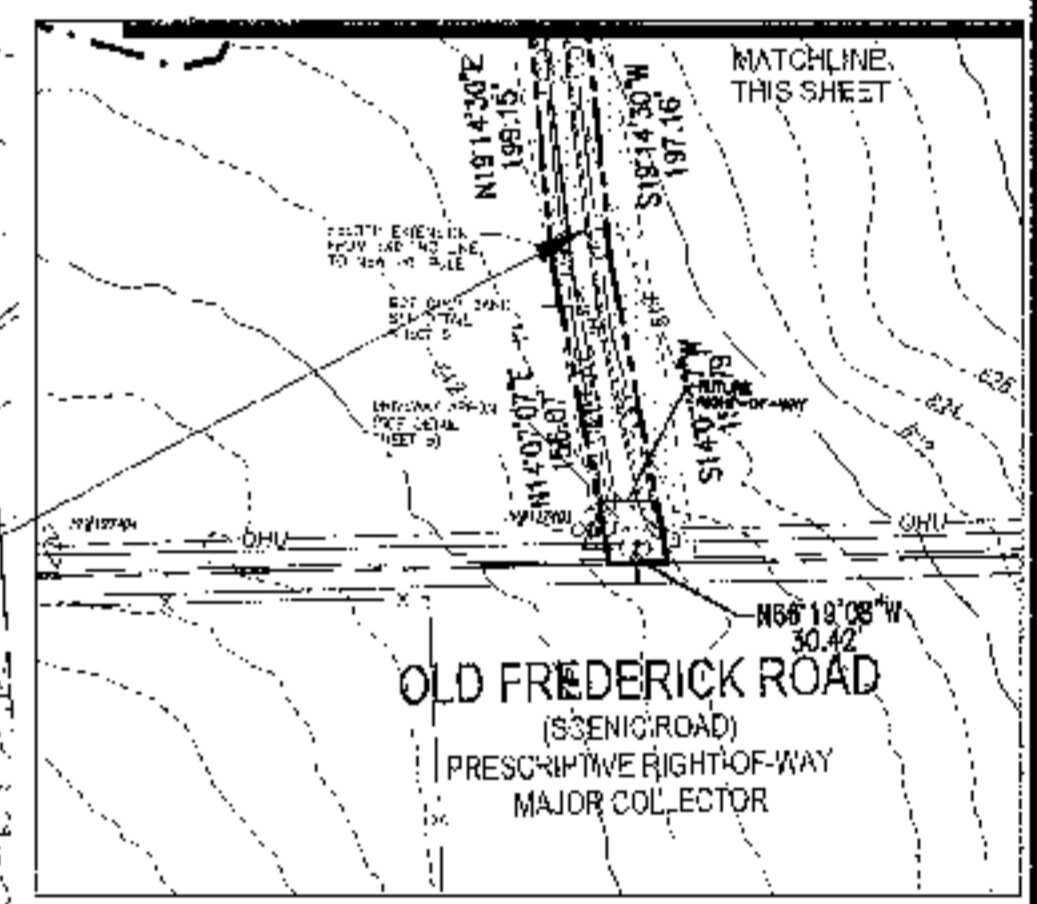
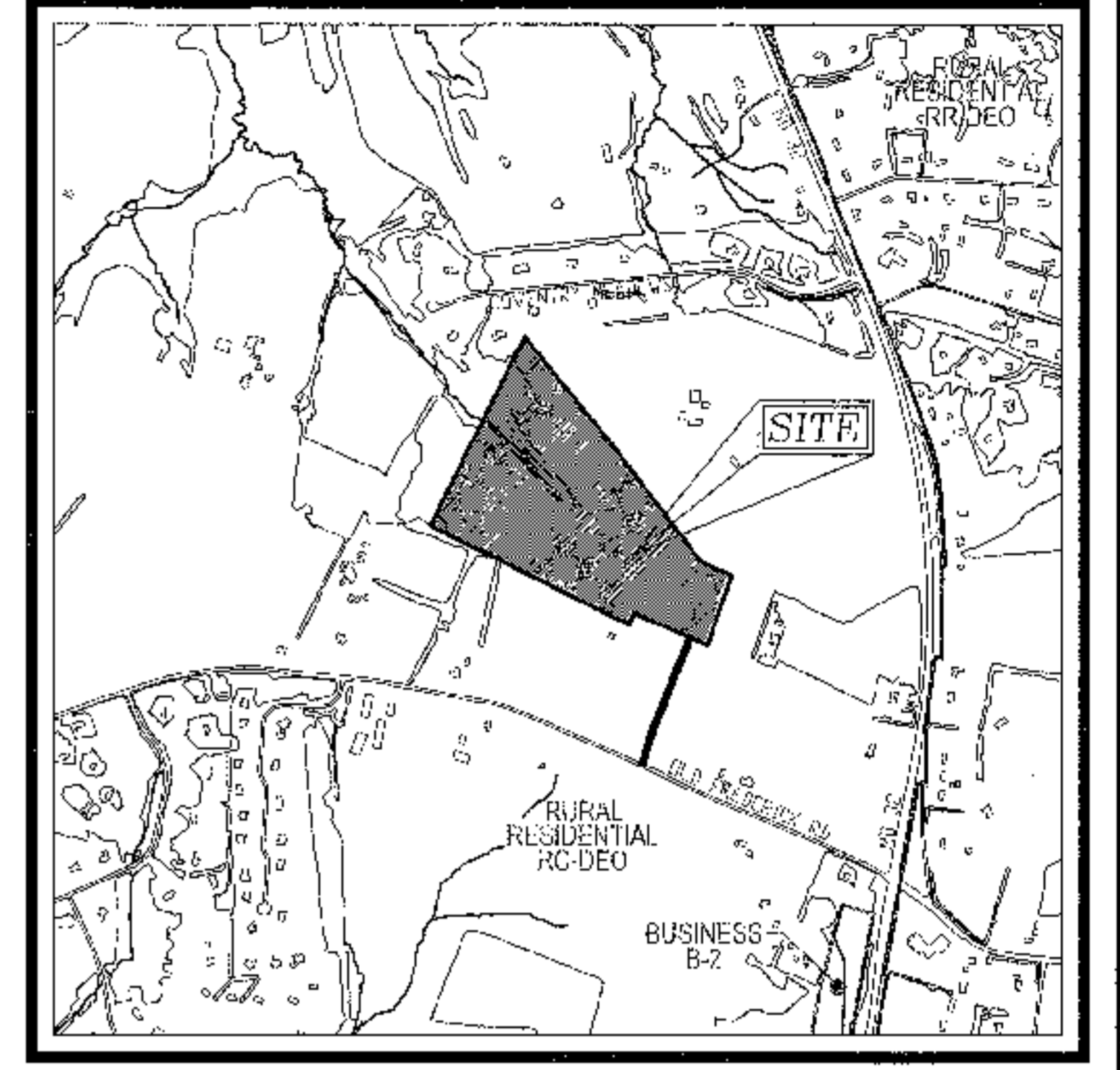
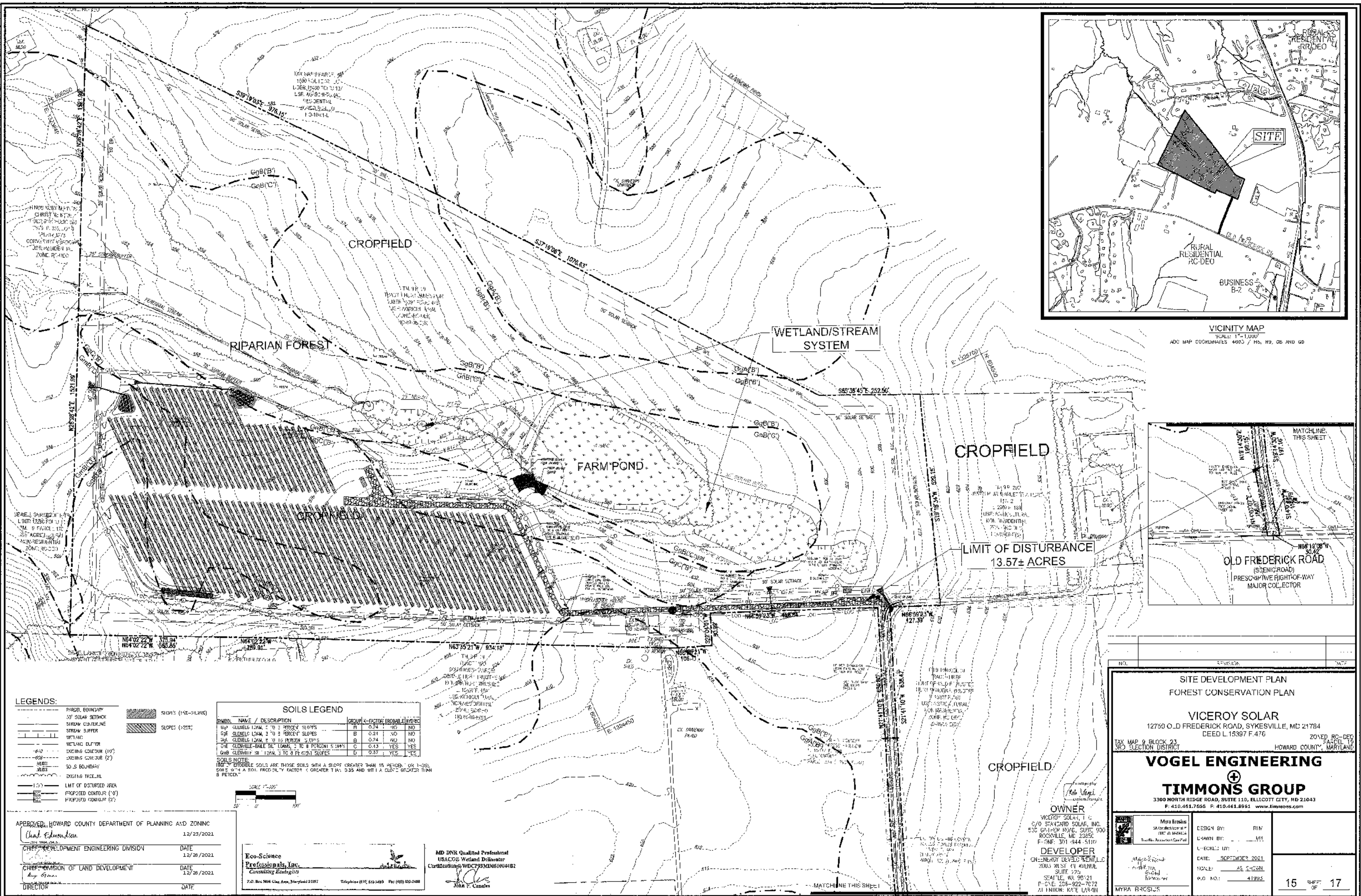
SITE DEVELOPMENT PLAN
STORM DRAIN DRAINAGE AREA MAP
VICEROY SOLAR
12750 OLD FREDERICK ROAD, SYKESVILLE, MD 21784
DEED L.15397 F.476 ZONED RC-DEO PARCEL 19
TAX MAP 9 BLOCK 23 3RD ELECTION DISTRICT HOWARD COUNTY, MARYLAND

VOGEL ENGINEERING
TIMMONS GROUP
3300 NORTH RIDGE ROAD, SUITE 110, ELLECCOTT CITY, MD 21043
P: 410.463.7666 F: 410.463.8961 www.vogeleng.com



DESIGN BY: R.V.
DRAWN BY: R.V.
CHECKED BY: R.V.
DATE: 12/14/2021
SCALE: AS SHOWN
W.G. NO.: 11993

PROFESSIONAL CERTIFICATE
I, HENRY GERRY VOGEL, ENGINEER, HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A duly Licensed Professional Engineer under the laws of the State of Maryland, License No. 16093, EXPIRES DATE 09-15-2022.



LEGENDS:

	PARCEL BOUNDARY		SLOPE 14% TO 24.99%
	30' SOLAR SETBACK		SLOPE 25%
	STREAM CENTERLINE		
	STREAM BUFFER		
	WETLAND		
	WETLAND BUFFER		
	EXISTING CONTOUR (10')		
	EXISTING CONTOUR (2')		
	30' S BOUNDARY		
	EXISTING TREE HILL		
	LIMIT OF DISTURBED AREA		
	PROPOSED CONTOUR (10')		
	PROPOSED CONTOUR (2')		

SOILS LEGEND

SYMBOL	NAME / DESCRIPTION	GROUP	K-FACTOR	ERODIBLE	HYDRO
	GLEBELS LOM, 2 TO 3 PERCENT SLOPES	B	0.24	NO	NO
	GLEBELS LOM, 3 TO 8 PERCENT SLOPES	B	0.24	NO	NO
	GLEBELS LOM, 8 TO 15 PERCENT SLOPES	B	0.24	NO	NO
	GLEBELS LOM, 15 TO 35 PERCENT SLOPES	B	0.24	NO	NO
	GLEBELS LOM, 35 TO 45 PERCENT SLOPES	B	0.24	NO	NO
	GLEBELS LOM, 45 TO 60 PERCENT SLOPES	B	0.24	NO	NO
	GLEBELS LOM, 60 TO 80 PERCENT SLOPES	B	0.24	NO	NO
	GLEBELS LOM, 80 TO 100 PERCENT SLOPES	B	0.24	NO	NO
	GLEBELS LOM, 100 PERCENT SLOPES	B	0.24	NO	NO
	GLEBELS LOM, 100 PERCENT SLOPES	B	0.24	NO	NO
	GLEBELS LOM, 100 PERCENT SLOPES	B	0.24	NO	NO

SOILS NOTE:
 1. ERODIBLE SOILS ARE THOSE SOILS WITH A SLOPE GREATER THAN 15 PERCENT OR 1:5. SOILS WITH A SOIL FREQUENCY FACTOR (K-FACTOR) GREATER THAN 0.35 AND WITH A CLOR (CL) GREATER THAN 5 PERCENT.

APPROVED, HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
 12/23/2021
 CHIEF DEVELOPMENT ENGINEERING DIVISION
 DATE 12/28/2021
 CHIEF DIVISION OF LAND DEVELOPMENT
 DATE 12/28/2021
 DIRECTOR

Eco-Science Professionals, Inc.
 Consulting Ecologists
 710, Box 5006 Clarks Ave, Maryland 21087
 Telephone (410) 831-2489 Fax (410) 831-2488

MD DNR Qualified Professional
 USACOE Wetland Delineator
 Curt McCarty, WDCP93MIN01004102
 John P. Canales

OWNER
 VICEROY SOLAR, LLC
 C/O STANBARD SOLAR, INC.
 530 GRIMPER ROAD, SUITE 900
 ROCKVILLE, MD 20850
 P-ONE: 301-344-5119

DEVELOPER
 ONE ENERGY DEVELOPMENT, LLC
 2005 WEST 4TH AVENUE
 SUITE 224
 SEATTLE, WA 98121
 P-ONE: 206-922-7072
 21 UNION WAY EAST

SITE DEVELOPMENT PLAN
FOREST CONSERVATION PLAN

VICEROY SOLAR
 12750 OLD FREDERICK ROAD, SYKESVILLE, MD 21784
 DEED L 15397 F 476 ZONED RC-DEO

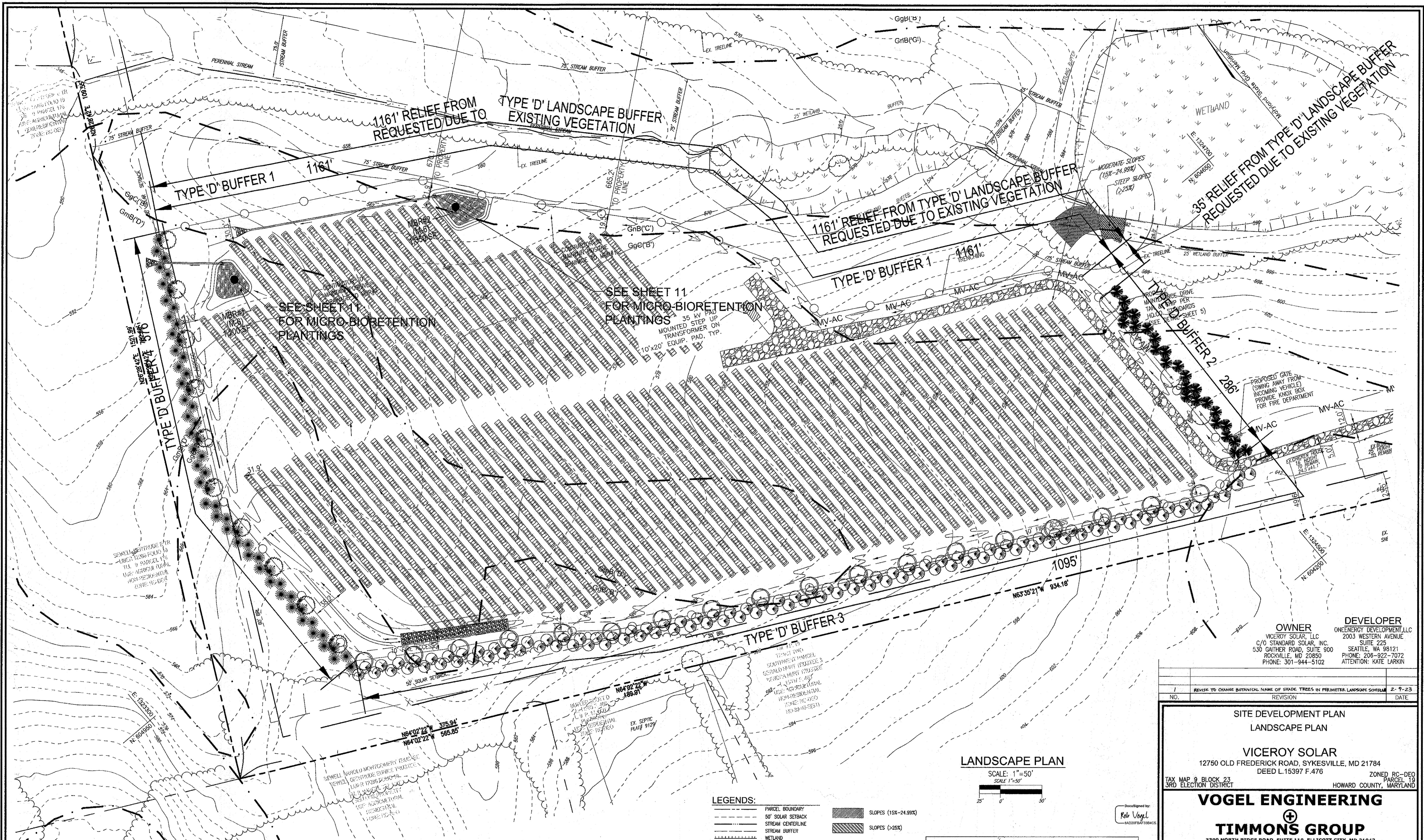
TAX MAP 9, BLOCK 23, 5RD ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

VOGEL ENGINEERING
 TIMMONS GROUP
 3300 NORTH RIDGE ROAD, SUITE 110, ELLICOTT CITY, MD 21043
 P: 410-461-7656 F: 410-461-8961 www.timmons.com

Myra Brosius
 Design Engineer
 L-EXCEL: 10/1
 DATE: SEPTEMBER 2021
 SCALE: AS SHOWN
 P.O. NO.: 41995

DESIGN BY: RIM
 L-DRAWN BY: MYL
 L-CHECKED BY:
 DATE: SEPTEMBER 2021
 SCALE: AS SHOWN
 P.O. NO.: 41995

15 SHEET OF 17



OWNER
VICEROY SOLAR, LLC
C/O STANDARD SOLAR, INC.
530 GAITHER ROAD, SUITE 900
ROCKVILLE, MD 20850
PHONE: 301-944-5102

DEVELOPER
ONEENERGY DEVELOPMENT, LLC
2003 WESTERN AVENUE
SUITE 225
SEATTLE, WA 98121
PHONE: 206-922-7072
ATTENTION: KATE LARKIN

1	REVISE TO CHANGE BOTANICAL NAME OF SHADE TREES IN PERIMETER LANDSCAPE SCHEDULE	2-9-23
NO.	REVISION	DATE

SITE DEVELOPMENT PLAN
LANDSCAPE PLAN

VICEROY SOLAR
12750 OLD FREDERICK ROAD, SYKESVILLE, MD 21784
DEED L. 15397 F.476

TAX MAP 9 BLOCK 23
3RD ELECTION DISTRICT

ZONED RC-DEO
PARCEL 18
HOWARD COUNTY, MARYLAND

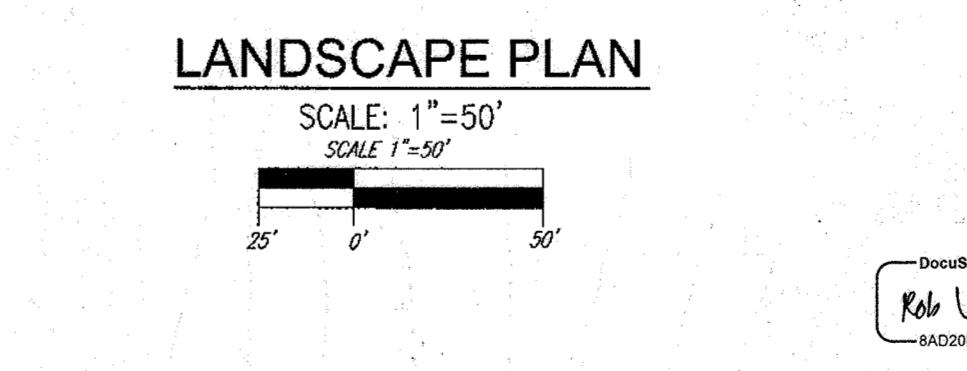
VOGEL ENGINEERING
⊕
TIMMONS GROUP
3300 NORTH RIDGE ROAD, SUITE 110, ELLICOTT CITY, MD 21043
P: 410.461.7666 F: 410.461.8961 www.timmons.com

PROFESSIONAL CERTIFICATE

DESIGN BY: RHV
DRAWN BY: IMH
CHECKED BY: RHV
DATE: SEPTEMBER 2021
SCALE: AS SHOWN
W.O. NO.: 41993

STATE OF MARYLAND
ROBERT H. VOGEL
PROFESSIONAL ENGINEER
NO. 16193
EXPIRES 09/15/22

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A FULLY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 16193 EXPIRATION DATE 09-15-2022



LEGENDS:

--- (dashed)	PARCEL BOUNDARY	▨ (diagonal lines)	SLOPES (15%-24.99%)
--- (dashed)	50' SOLAR SETBACK	▨ (diagonal lines)	SLOPES (>25%)
--- (dashed)	STREAM CENTERLINE		
--- (dashed)	STREAM BUFFER		
--- (dashed)	WETLAND BUFFER		
--- (dashed)	EXISTING CONTOUR (10')		
--- (dashed)	EXISTING CONTOUR (2')		
--- (dashed)	SOILS BOUNDARY		
--- (dashed)	EXISTING TREELINE		
--- (dashed)	PROPOSED CONTOUR (10')		
--- (dashed)	PROPOSED CONTOUR (2')		
--- (dashed)	PROPOSED PERIMETER LANDSCAPING		

SOILS LEGEND

SYMBOL	NAME / DESCRIPTION	GROUP	K-FACTOR	ERODIBLE	HYDRIC
GgA	GLENGLE LOAM, 0 TO 3 PERCENT SLOPES	B	0.24	NO	NO
GgB	GLENGLE LOAM, 3 TO 8 PERCENT SLOPES	B	0.24	NO	NO
GgC	GLENGLE LOAM, 8 TO 15 PERCENT SLOPES	B	0.24	NO	NO
GgB	GLENGLE-BAILE SILT LOAMS, 0 TO 8 PERCENT SLOPES	C	0.43	YES	YES
GgB	GLENGLE SILT LOAM, 3 TO 8 PERCENT SLOPES	D	0.37	YES	YES

SOILS NOTE:
HIGHLY ERODIBLE SOILS ARE THOSE SOILS WITH A SLOPE GREATER THAN 15 PERCENT OR THOSE SOILS WITH A SOIL ERODIBILITY FACTOR K GREATER THAN 0.35 AND WITH A SLOPE GREATER THAN 6 PERCENT.

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Chad Edmondson
CHIEF DEVELOPMENT ENGINEERING DIVISION
DATE: 12/23/2021

Angy Groman
CHIEF DIVISION OF LAND DEVELOPMENT
DATE: 12/28/2021

DIRECTOR

DEVELOPER'S/BUILDER'S CERTIFICATE

I/WE CERTIFY THAT THE LANDSCAPING SHOWN ON THIS PLAN WILL BE DONE ACCORDING TO THE PLAN, SECTION 18.24 OF THE HOWARD COUNTY CODE AND THE HOWARD COUNTY LANDSCAPE MANUAL. I/WE FURTHER CERTIFY THAT UPON COMPLETION, A CERTIFICATION OF LANDSCAPE INSTALLATION, ACCOMPANIED BY AN EXECUTED ONE (1) YEAR GUARANTEE OF PLANT MATERIALS, WILL BE SUBMITTED TO THE DEPARTMENT OF PLANNING AND ZONING.

[Signature]
SIGNATURE OF DEVELOPER
DATE: 10/6/2021

GENERAL NOTES

WATERSHED NAME: SOUTH BRANCH PATAPSCO RIVER
WATERSHED NUMBER: 02130908

- A. GROSS SITE AREA: 12.36 AC. (PER CONDITIONAL USE PLAN)
- NET SITE AREA: 12.36 AC. (PER CONDITIONAL USE PLAN)
- B. AREA OF 100-YEAR FLOODPLAIN: 0.00 AC. DFORM
- C. AREA OF WETLANDS AND BUFFERS(ONSITE): 5.29 AC.
- AREA OF STREAM AND BUFFERS(ONSITE): 3.99 AC.
- D. AREA OF > 25% STEEP SLOPES: 0.00 AC.
- E. EXISTING FOREST: 0.00 AC.
- F. ZONED: RC-DEO
- G. EXISTING USE: AGRICULTURE
- H. PROPOSED USE: SOLAR PANEL FARM

1. NO RARE, THREATENED OR ENDANGERED SPECIES OR THEIR HABITAT WERE OBSERVED ON THE PROPERTY SURROUNDING LAND USE PRIMARILY FARMLAND, RURAL RESIDENTIAL DEVELOPMENT, AND FOREST.
2. NO AREAS ONSITE ARE LARGE ENOUGH TO BE CONSIDERED FOREST.
3. THE STREAM CHANNEL THAT FLOWS THROUGH THE PROJECT SITE IS THE AN UNNAMED TRIBUTARY OF THE SOUTH BRANCH PATAPSCO RIVER WHICH IS CLASSIFIED AS A USE 1 STREAM, WATERSHED NUMBER 02-13-09.
4. THE WETLANDS WILL REQUIRE A 25 FOOT BUFFER, THE STREAM CHANNEL REQUIRES A 75 FOOT BUFFER.
5. NO 100 YEAR FLOODPLAIN IS PRESENT ON THE PROPERTY.
6. NO STEEP SLOPES (15% OR GREATER) ON THE SUBJECT PROPERTY.
7. THERE ARE NO HISTORIC STRUCTURES OR CEMETERIES ON THIS PROPERTY.
8. THERE ARE NO SPECIMEN TREES WITHIN THE SITE AREA.

****FOREST CONSERVATION WORKSHEET BASED ON COUNCIL BILL CB62-2019****

FOREST CONSERVATION WORKSHEET FOR VICEROY SOLAR

Net Tract Area		A =	12.36
A. Total (Gross) Tract Area		B =	0.00
B. Area within 100-year Floodplain		C =	0.00
C. Other Deductions (Identify)		D =	12.36
D. Net Tract Area			
Land Use Category			
Insert the number "1" under the appropriate land use (limit to only one entry)			
Resid.	Resid.	Resid.	Inst./
Rural LD	Rural MD	Suburban	Linear
0	0	0	0
E. Afforestation Threshold (Net Tract Area x 15%)		E =	1.90
F. Reforestation Threshold (Net Tract Area x 15%)		F =	1.90
Existing Forest Cover			
G. Existing Forest Cover within the Net Tract Area		G =	0.00
H. Area of Forest above Afforestation Threshold		H =	0.00
I. Area of Forest above Reforestation Threshold		I =	0.00
Break Even Point			
J. Break Even Point		J =	0.00
K. Forest Clearing Permitted without Mitigation		K =	0.00
Proposed Forest Clearing			
L. Total Area of Forest to be Cleared		L =	0.00
M. Total Area of Forest to be Retained		M =	0.00
Planting Requirements Inside Watershed			
N. Reforestation for Clearing above the Reforestation Threshold		N =	0.00
P. Reforestation for Clearing below the Reforestation Threshold		P =	0.00
Q. Credit for Retention above the Reforestation Threshold		Q =	0.00
R. Total Reforestation Required		R =	0.00
S. Total Afforestation Required		S =	1.90
T. Total Reforestation and Afforestation Requirement		T =	1.90
U. 75% of Total Obligation (Retention + Planting)		U =	1.43
V. Planting Required Onsite to meet 75% Obligation		V =	1.43
Planting Requirements Outside Watershed			
W. Total Planting within Development Site Watershed		W =	1.90
X. Total Afforestation Required		X =	1.90
Y. Remaining Planting within Watershed for Reforestation Credit		Y =	0.00
Z. Reforestation for Clearing above the Reforestation Threshold		Z =	0.00
AA. Reforestation for Clearing below the Reforestation Threshold		AA =	0.00
BB. Credit for Retention above the Reforestation Threshold		BB =	0.00
CC. Total Reforestation Required		CC =	0.00
DD. Total Afforestation and Reforestation Requirement		DD =	1.90

* PER POLICY 3.2.5, COMMERCIAL USE ON AN AGRICULTURAL PROPERTY, OF THE FOREST CONSERVATION MANUAL ADOPTED BY CR12-2021, THE NET TRACT AREA IS DEFINED AS THE AREA UNDERGOING THE LAND USE CHANGE.

THE FOREST CONSERVATION OBLIGATION FOR THIS PROJECT IS 1.90 ACRES OF AFFORESTATION, WHICH SHALL BE SATISFIED BY THE PURCHASE OF FOREST PLANTING IN AN OFF-SITE FOREST MITIGATION BANK.

THE FOREST CONSERVATION OBLIGATION OF THIS PROJECT TO BE FULFILLED BY:

- 1) THE PURCHASE OF 0.03 ACRES OF AFFORESTATION AND 1.86 ACRES (1.86 / 2 = 0.93 ACRES) OF RETENTION CREDIT IN THE ROSHAN PROPERTY FOREST BANK; SDP-16-041.
- 2) THE PURCHASE OF 0.44 ACRES OF AFFORESTATION AND 1.00 ACRES (1.00 / 2 = 0.50 ACRES) OF RETENTION CREDIT IN THE MILLERS MILL PROPERTY FOREST BANK; SDP-19-092.

GENERAL NOTES

1. THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL. A FINANCIAL SURETY IN THE AMOUNT OF \$38,550 FOR THE REQUIRED LANDSCAPING (REQUIRED 32 SHADE TREES \$9,500, AND 193 EVERGREEN TREES \$28,950) SHALL BE POSTED WITH THE FINAL DEVELOPERS AGREEMENT.
2. IN A PLAN PREPARED BY ECO-SCIENCE PROFESSIONALS, INC. DATED FEBRUARY, 2020 AND MR. JOHN CANOLES IDENTIFIED THE ONSITE FOREST, WETLANDS AND STREAMS. NO SPECIMEN TREES OR FOREST ARE WITHIN THE PROJECT SITE.
3. NO GRADING, REMOVAL OF VEGETATIVE COVER OR TREES, PAVING AND NEW STRUCTURES SHALL BE PERMITTED WITHIN THE WETLANDS, STREAMS OR THEIR BUFFERS, FOREST CONSERVATION EASEMENT AREAS AND 100-YEAR FLOODPLAIN.

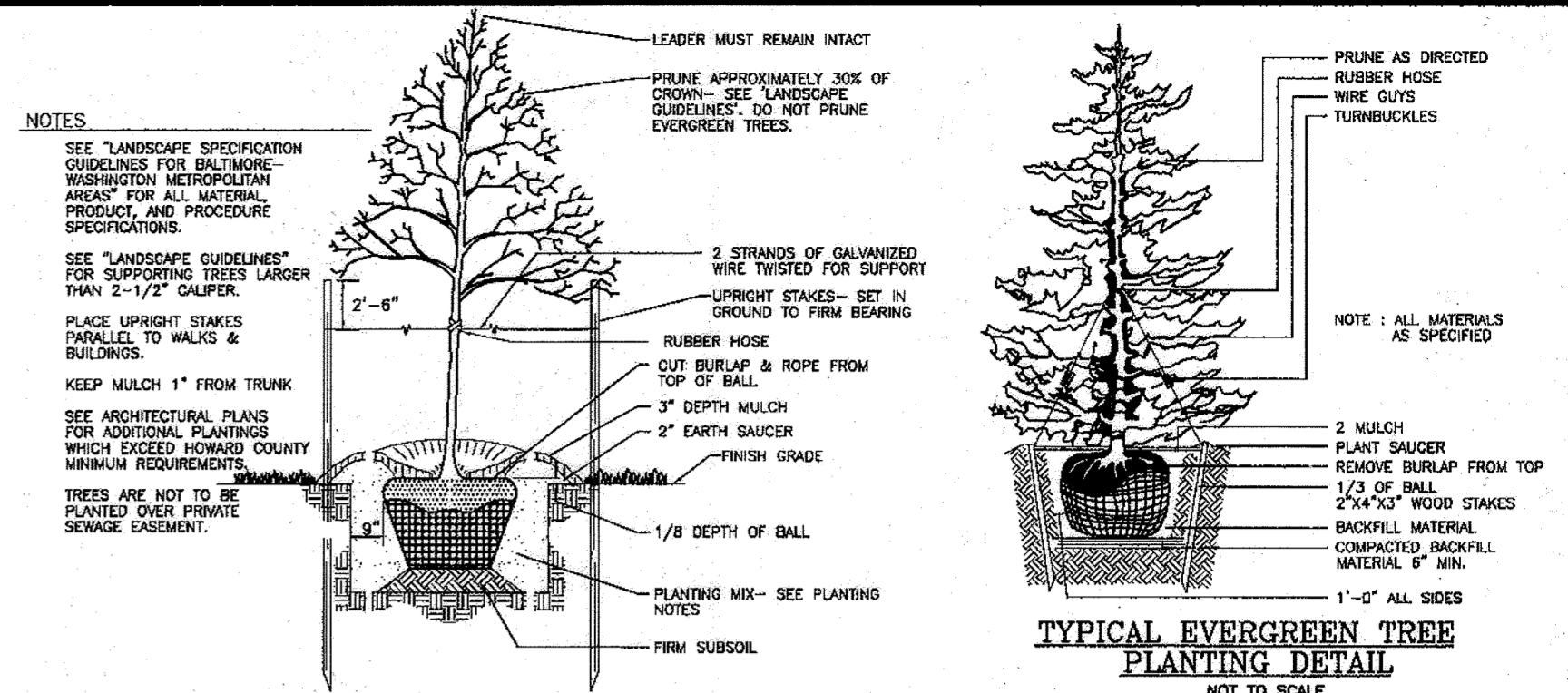
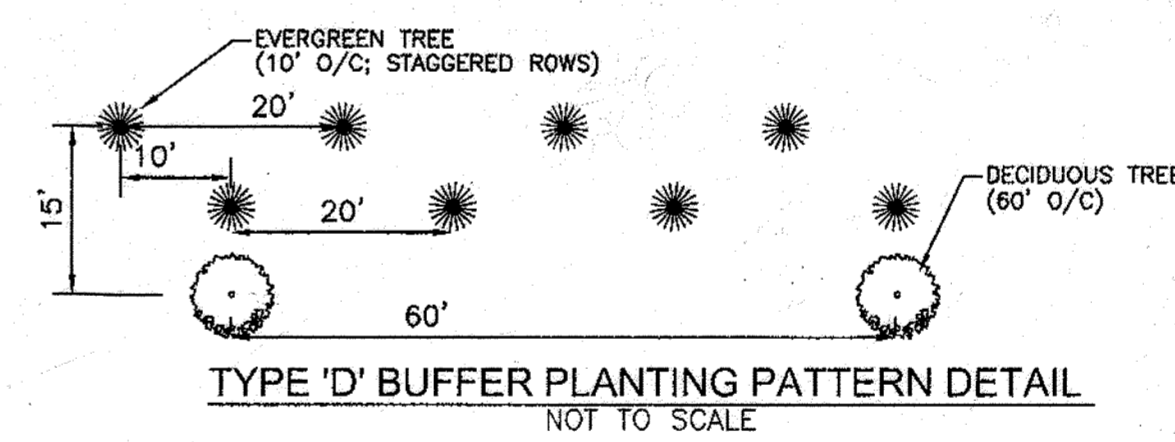
LANDSCAPE NOTES

1. AT THE TIME OF PLANT INSTALLATION, ALL SHRUBS AND TREES LISTED AND APPROVED ON THE LANDSCAPE PLAN, SHALL COMPLY WITH THE PROPER HEIGHT REQUIREMENT IN ACCORDANCE WITH THE HOWARD COUNTY LANDSCAPE MANUAL. IN ADDITION, NO SUBSTITUTIONS OR RELOCATIONS OF THE REQUIRED PLANTINGS MAY BE MADE WITHOUT PRIOR REVIEW AND APPROVAL FROM THE DEPARTMENT OF PLANNING AND ZONING. ANY DEVIATION FROM THE APPROVED LANDSCAPE PLAN MAY RESULT IN DENIAL OR DELAY IN THE RELEASE OF LANDSCAPE SURETY UNTIL SUCH TIME AS ALL REQUIRED MATERIALS ARE PLANTED AND/OR REVISIONS ARE MADE TO THE APPROVED PLANS.
2. THE FACILITY OPERATOR AND/OR THEIR AGENTS SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE REQUIRED LANDSCAPING INCLUDING BOTH PLANT MATERIALS AND BERMS, FENCES AND WELLS. ALL PLANT MATERIALS SHALL BE MAINTAINED IN GOOD GROWING CONDITION, AND WHEN NECESSARY, REPLACED WITH NEW MATERIALS TO ENSURE CONTINUED COMPLIANCE WITH APPLICABLE REGULATIONS. ALL OTHER REQUIRED LANDSCAPING SHALL BE PERMANENTLY MAINTAINED IN GOOD CONDITION, AND WHEN NECESSARY, REPAIRED OR REPLACED.
3. SHOULD ANY TREE, DESIGNATED FOR PRESERVATION FOR WHICH LANDSCAPING CREDIT IS OBTAIN PRIOR TO RELEASE OF BONDS, THE OWNER WILL BE REQUIRED TO REPLACE THE TREE WITH THE EQUIVALENT SPECIES OR WITH A TREE WHICH WILL OBTAIN THE SAME HEIGHT, SPREAD, AND GROWTH CHARACTERISTICS. THE REPLACEMENT TREE MUST BE A MINIMUM OF 3 INCHES IN CALIPER AND INSTALLED AS REQUIRED IN THE HOWARD COUNTY LANDSCAPE MANUAL.
4. PLANTINGS SHOWN HEREON ARE THE RESPONSIBILITY OF THE DEVELOPER TO INSTALL DURING THE CONSTRUCTION OF THE FINAL PLAN.
5. SURETY FOR THE PROPOSED LANDSCAPING SHALL BE BASED ON THE NUMBER OF PLANTINGS REQUIRED.

PERIMETER LANDSCAPE EDGE LANDSCAPE SCHEDULE

KEY	QUAN	BOTANICAL NAME	SIZE	REM
SHADE=32				
OM	10	ACER RUBRUM 'OCTOBER GLORY'	2 1/2"-3" CAL.	B & B
		OCTOBER GLORY RED MAPLE		
AR	18	AMELENCHIER GRANIFLORA APPLE SERVICE BERRY	2 1/2"-3" CAL.	B & B
BH	4	BETULA NIGRA HERITAGE HERITAGE CLUMP BIRCH	2 1/2"-3" CAL.	B & B
EVERGREEN=193				
PS	58	PINUS STROBUS EASTERN WHITE PINE	6'-8' HGT.	B & B
IO	110	ILEX OPECA AMERICAN HOLLY	5'-6' HGT.	B & B
CL	25	CYPRESS COCYPARIS LEYLAND LEYLAND CYPRESS	5'-6' HGT.	B & B

NOTE: WITH PERMISSION FROM HOWARD COUNTY, PLANTINGS SPECIFIED HEREON MAY BE SUBSTITUTED WITH APPROVED SPECIES LISTED IN APPENDIX B & C OF THE HOWARD COUNTY LANDSCAPE MANUAL.



TREE PLANTING AND STAKING
DECIDUOUS TREES UP TO 2-1/2" CALIPER
NOT TO SCALE

NOTE: PLANTING SHALL BE IN ACCORDANCE WITH THE LATEST STANDARD FROM THE LANDSCAPE CONTRACTORS ASSOCIATION OF MD, DC AND VA.

SCHEDULE A PERIMETER LANDSCAPE EDGE

CATEGORY	ADJACENT TO ROADWAYS AND PERIMETER PROPERTIES				TOTAL
	1	2	3	4	
PERIMETER FRONTAGE DESIGNATION					
LANDSCAPE TYPE	D	D	D	D	
LINEAR FEET OF ROADWAY FRONTAGE/PERIMETER	1161	286	1095	576	
CREDIT FOR EXISTING VEGETATION (YES, NO, LINEAR FEET DESCRIBE BELOW IF NEEDED)	1161	35	NO	NO	
CREDIT FOR WALL, FENCE OR BERM (YES, NO, LINEAR FEET DESCRIBE BELOW IF NEEDED)	NO	NO	NO	NO	
NUMBER OF PLANTS REQUIRED					
SHADE TREES	180 + 0	160 + 4	150 + 18	150 + 10	32
EVERGREEN TREES	110 + 0	110 + 20	110 + 110	110 + 58	193
NUMBER OF PLANTS PROVIDED					
SHADE TREES	0	4	18	10	32
EVERGREEN TREES	0	25	110	58	193
OTHER TREES (2:1 SUBSTITUTION)	-	-	-	-	-
SHRUBS (10:1 SUBSTITUTION)	-	-	-	-	-
EX. SPECIMEN TREES TO REMAIN	-	-	-	-	-
DESCRIBE PLANT SUBSTITUTION CREDITS BELOW IF NEEDED					

LANDSCAPE SCHEDULE NOTES:

1. ALL PLANT MATERIALS SHALL BE FULL AND HEAVY, BE WELL FORMED AND SYMMETRICAL, CONFORM TO THE MOST CURRENT ANN SPECIFICATIONS AND BE INSTALLED IN ACCORDANCE WITH HED PLANTING SPECIFICATIONS.
2. CONTRACTOR SHALL VERIFY LOCATION OF ALL UNDERGROUND UTILITIES PRIOR TO DIGGING.
3. FINAL LOCATION OF PLANT MATERIAL MAY NEED TO VARY TO MEET FINAL FIELD CONDITIONS. TREES SHALL NOT BE PLANTED IN THE BOTTOM OF DRAINAGE SWALES.
4. CONTRACTOR SHALL VERIFY PLANT QUANTITIES PRIOR TO BIDDING. IF PLANT DIFFERS FROM LANDSCAPE SCHEDULE, THE PLAN SHALL GOVERN.

OWNER
VICEROY SOLAR, LLC
C/O STANDARD SOLAR, INC.
530 GATHER ROAD, SUITE 900
ROCKVILLE, MD 20850
PHONE: 301-944-5102

DEVELOPER
ONEENERGY DEVELOPMENT, LLC
2003 WESTERN AVENUE
SUITE 225
SEATTLE, WA 98121
PHONE: 206-922-7072
ATTENTION: KATE LARKIN

NO.	REVISION	DATE
1	PERMITS TO CHANGE BOTANICAL NAME OF SHADE TREES IN PERIMETER LANDSCAPE SCHEDULE	2-9-23

SITE DEVELOPMENT PLAN
FOREST CONSERVATION & LANDSCAPE NOTES AND DETAILS
VICEROY SOLAR
12750 OLD FREDERICK ROAD, SYKESVILLE, MD 21784
DEED L.15397 F.476

TAX MAP 8 BLOCK 23
3RD ELECTION DISTRICT

ZONED RC-DEO
PARCEL 19
HOWARD COUNTY, MARYLAND

VOGEL ENGINEERING
TIMMONS GROUP
3300 NORTH RIDGE ROAD, SUITE 110, ELLICOTT CITY, MD 21043
P: 410.461.7666 F: 410.461.8961 www.timmons.com

DESIGN BY: RHV
DRAWN BY: IMH
CHECKED BY: RHV
DATE: SEPTEMBER 2021
SCALE: AS SHOWN
W.O. NO.: 41993

PROFESSIONAL CERTIFICATE
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND LICENSE NO. 16193 EXPIRATION DATE 09-27-2022

STATE OF MARYLAND
ROBERT H. VOGEL, PE No. 16193

17 SHEET OF 17

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
12/23/2021
DEVELOPMENT ENGINEERING DIVISION
12/28/2021
DIVISION OF LAND DEVELOPMENT
12/28/2021
DIRECTOR

DEVELOPER'S/BUILDER'S CERTIFICATE
I/WE CERTIFY THAT THE LANDSCAPING SHOWN ON THIS PLAN WILL BE DONE ACCORDING TO THE PLAN, SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE HOWARD COUNTY LANDSCAPE MANUAL. I/WE FURTHER CERTIFY THAT UPON COMPLETION, A CERTIFICATION OF LANDSCAPE INSTALLATION, ACCOMPANIED BY AN EXECUTED ONE (1) YEAR GUARANTEE OF PLANT MATERIALS, WILL BE SUBMITTED TO THE DEPARTMENT OF PLANNING AND ZONING.
12/28/2021

- ### GENERAL NOTES
- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY STANDARDS AND SPECIFICATIONS. ALL WORK AND MATERIALS SHALL COMPLY WITH O.S.A.A. STANDARDS.
 - THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS/CONSTRUCTION INSPECTION DIVISION AT (410) 313-8800 AT LEAST 72 HOURS PRIOR TO START OF WORK.
 - THE CONTRACTOR IS TO NOTIFY THE DEPARTMENT OF PUBLIC WORKS/CONSTRUCTION INSPECTION DIVISION AT (410) 313-8800 AT LEAST 72 HOURS PRIOR TO START OF WORK.

SITE DEVELOPMENT PLAN

VICEROY SOLAR

12750 OLD FREDERICK ROAD

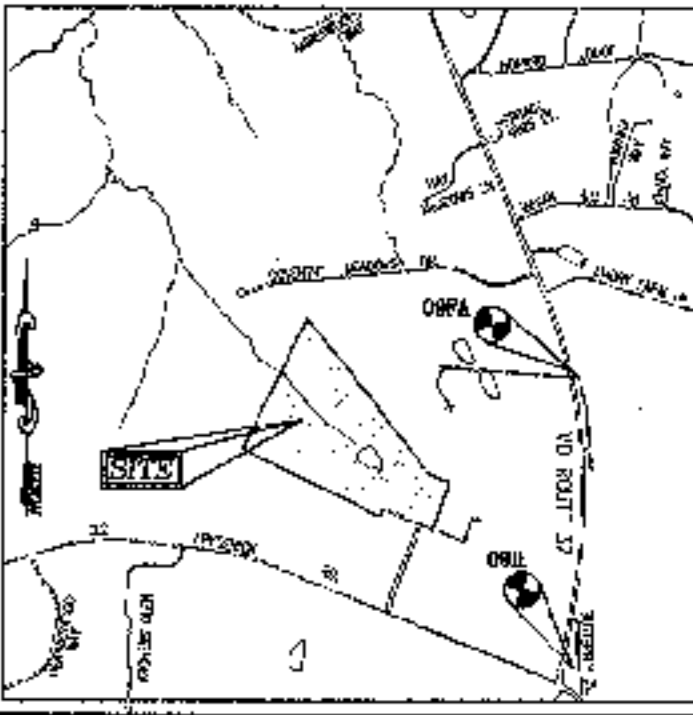
HOWARD COUNTY, MARYLAND

BENCHMARKS

HOWARD COUNTY BENCHMARK 0981
 N 802,989.297 E 1,326,821.484 DIST. 652.439
 HOWARD COUNTY BENCHMARK 0984
 N 505,227.562 E 1,326,994.888 DIST. 824.257

LEGENDS:

- Parcel Boundary
- 50' Solar Setback
- Building Footprint



SHEET INDEX

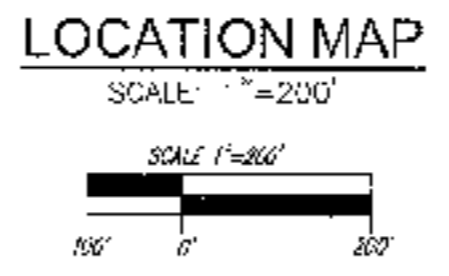
DESCRIPTION	SHEET NO.
COVER SHEET	01 OF 17
LAYOUT PLAN	02 OF 17
SITE DETAILS	03 OF 17
GRADING, EROSION AND SEDIMENT CONTROL PLAN	04 OF 17
GRADING, EROSION AND SEDIMENT CONTROL NOTES AND DETAILS	05 OF 17
WATER MANAGEMENT PLAN	06 OF 17
WATER MANAGEMENT NOTES AND DETAILS	07 OF 17
SWAMP AND WETLANDS REPORT	08 OF 17
SWAMP AND WETLANDS NOTES AND DETAILS	09 OF 17
FOREST CONSERVATION PLAN	10 OF 17
FOREST CONSERVATION NOTES AND DETAILS	11 OF 17
LANDSCAPE PLAN	12 OF 17
LANDSCAPE NOTES AND DETAILS	13 OF 17



- THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS/CONSTRUCTION INSPECTION DIVISION AT (410) 313-8800 AT LEAST 72 HOURS PRIOR TO START OF WORK.
- ANY DAMAGE TO PUBLIC RIGHT-OF-WAY, PAVING OR EXISTING UTILITIES WILL BE CORRECTED AT THE CONTRACTOR'S EXPENSE.
- THE SURFACE PROPERTY IS ZONED R-2000 IN ACCORDANCE WITH THE 2015 ZONING REGULATIONS AND IS SUBJECT TO THE SUBDIVISION AND DEVELOPMENT REGULATIONS EFFECTIVE 02/03/2015 (COMBINED BY 25-2015).
- THE PROJECT BOUNDARY SHOWN HEREON IS BASED ON THE SURVEY PERFORMED BY VOGEL ENGINEERING/TIMMONS GROUP ON SEPTEMBER 2021.
- THE EXISTING TOPOGRAPHY SHOWN HEREON IS BASED ON A TOPOGRAPHIC SURVEY PERFORMED BY VOGEL ENGINEERING/TIMMONS GROUP ON SEPTEMBER 2021.
- THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS/CONSTRUCTION INSPECTION DIVISION AT (410) 313-8800 AT LEAST 72 HOURS PRIOR TO START OF WORK.
- ANY DAMAGE TO PUBLIC RIGHT-OF-WAY, PAVING OR EXISTING UTILITIES WILL BE CORRECTED AT THE CONTRACTOR'S EXPENSE.
- THE SURFACE PROPERTY IS ZONED R-2000 IN ACCORDANCE WITH THE 2015 ZONING REGULATIONS AND IS SUBJECT TO THE SUBDIVISION AND DEVELOPMENT REGULATIONS EFFECTIVE 02/03/2015 (COMBINED BY 25-2015).
- THE PROJECT BOUNDARY SHOWN HEREON IS BASED ON THE SURVEY PERFORMED BY VOGEL ENGINEERING/TIMMONS GROUP ON SEPTEMBER 2021.
- THE EXISTING TOPOGRAPHY SHOWN HEREON IS BASED ON A TOPOGRAPHIC SURVEY PERFORMED BY VOGEL ENGINEERING/TIMMONS GROUP ON SEPTEMBER 2021.
- THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS/CONSTRUCTION INSPECTION DIVISION AT (410) 313-8800 AT LEAST 72 HOURS PRIOR TO START OF WORK.
- ANY DAMAGE TO PUBLIC RIGHT-OF-WAY, PAVING OR EXISTING UTILITIES WILL BE CORRECTED AT THE CONTRACTOR'S EXPENSE.
- THE SURFACE PROPERTY IS ZONED R-2000 IN ACCORDANCE WITH THE 2015 ZONING REGULATIONS AND IS SUBJECT TO THE SUBDIVISION AND DEVELOPMENT REGULATIONS EFFECTIVE 02/03/2015 (COMBINED BY 25-2015).
- THE PROJECT BOUNDARY SHOWN HEREON IS BASED ON THE SURVEY PERFORMED BY VOGEL ENGINEERING/TIMMONS GROUP ON SEPTEMBER 2021.
- THE EXISTING TOPOGRAPHY SHOWN HEREON IS BASED ON A TOPOGRAPHIC SURVEY PERFORMED BY VOGEL ENGINEERING/TIMMONS GROUP ON SEPTEMBER 2021.
- THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS/CONSTRUCTION INSPECTION DIVISION AT (410) 313-8800 AT LEAST 72 HOURS PRIOR TO START OF WORK.
- ANY DAMAGE TO PUBLIC RIGHT-OF-WAY, PAVING OR EXISTING UTILITIES WILL BE CORRECTED AT THE CONTRACTOR'S EXPENSE.
- THE SURFACE PROPERTY IS ZONED R-2000 IN ACCORDANCE WITH THE 2015 ZONING REGULATIONS AND IS SUBJECT TO THE SUBDIVISION AND DEVELOPMENT REGULATIONS EFFECTIVE 02/03/2015 (COMBINED BY 25-2015).
- THE PROJECT BOUNDARY SHOWN HEREON IS BASED ON THE SURVEY PERFORMED BY VOGEL ENGINEERING/TIMMONS GROUP ON SEPTEMBER 2021.
- THE EXISTING TOPOGRAPHY SHOWN HEREON IS BASED ON A TOPOGRAPHIC SURVEY PERFORMED BY VOGEL ENGINEERING/TIMMONS GROUP ON SEPTEMBER 2021.

OWNER: VICEROY SOLAR, LLC
 C/O STANDARD SOLAR, INC.
 530 GAITHER ROAD, SUITE 903
 ROCKVILLE, MD 20850
 PHONE: 301-944-5192

DEVELOPER: VOGEL ENGINEERING/TIMMONS GROUP
 3300 NORTH RIDGE ROAD, SUITE 210, BELLEVILLE, MD 21043
 PHONE: 410-461-7666



APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
 12/23/2021
 DEVELOPMENT ENGINEERING DIVISION
 DATE: 12/28/2021
 DIRECTOR OF PLANNING AND ZONING
 DATE: 12/28/2021

STORMWATER MANAGEMENT PRACTICES

PARCEL NO.	STREET ADDRESS	FACILITY TYPE & SIZE NO.	PUBLIC	PRIVATE	MAINTENANCE BY
9	12750 OLD FREDERICK ROAD	NON-ROOFTOP CONNECTION (N-2), MICRO-BIOTRETENTION (M-8)		X	OWNER

ADDRESS CHART

BUILDING NO.	STREET ADDRESS
12750	OLD FREDERICK ROAD

PERMIT INFORMATION CHART

SUBDIVISION NAME	SECTION/AREA	LOT/PARCEL NUMBER
VICEROY SOLAR	01	19

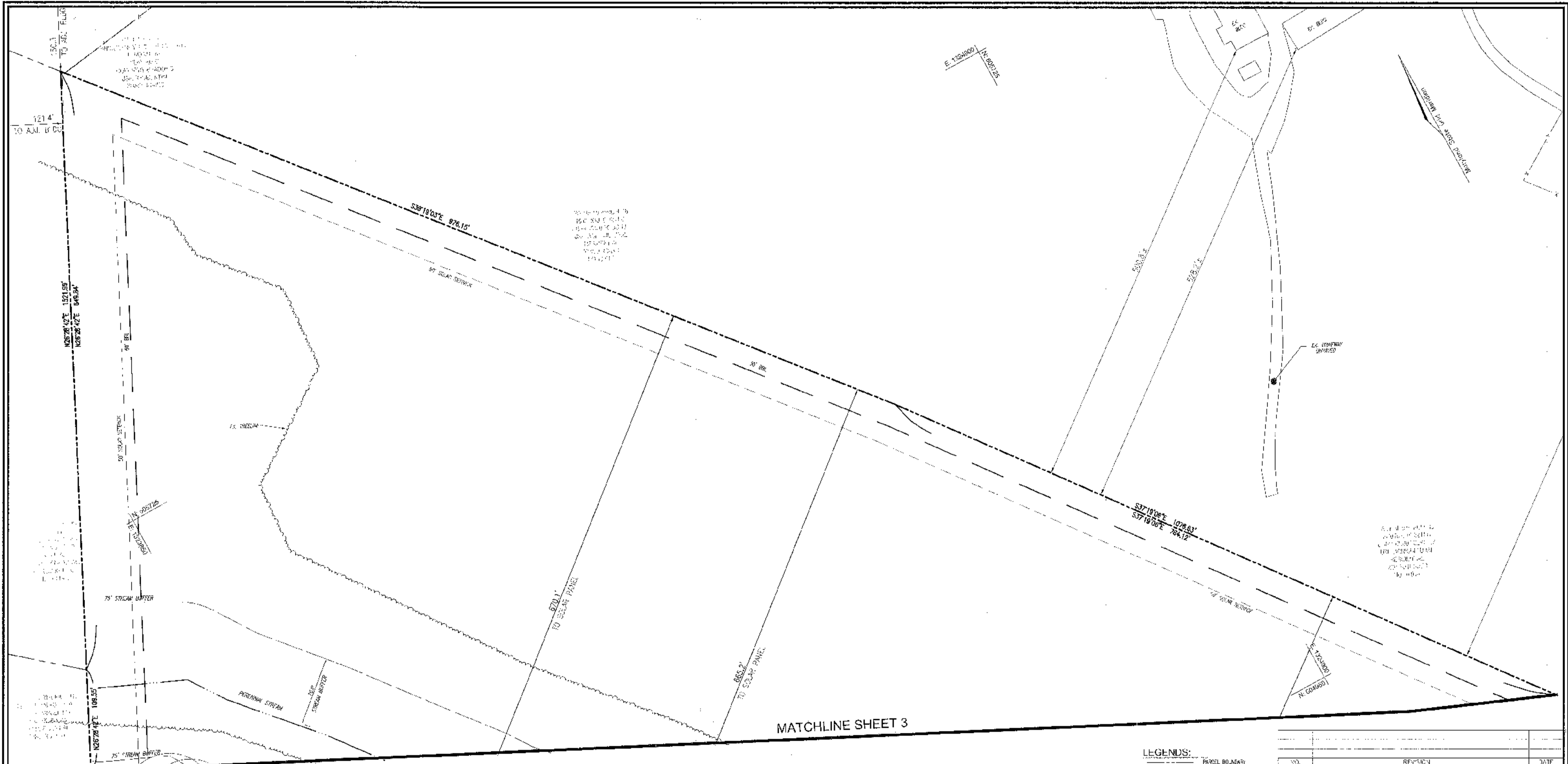
CENSUS TR.

PLAT OR L/P	GRID NO.	ZONING	TAX MAP NO.	ELECT. DIST.	CENSUS TR.
L1537/F.476	23	RC-350	0	3RD	603001



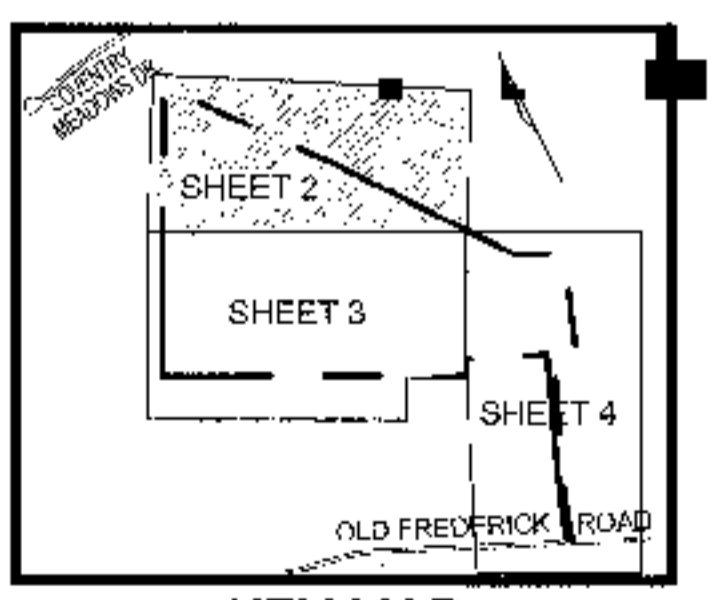
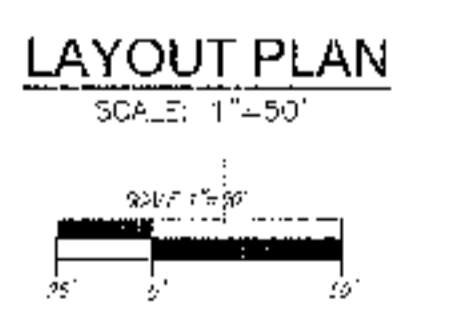
DESIGN BY: RHY
 DRAWN BY: MH
 CHECKED BY: RHY
 DATE: 12/28/2021
 SCALE: AS SHOWN
 W.D. NO.: 41992

1 SHEET OF 17



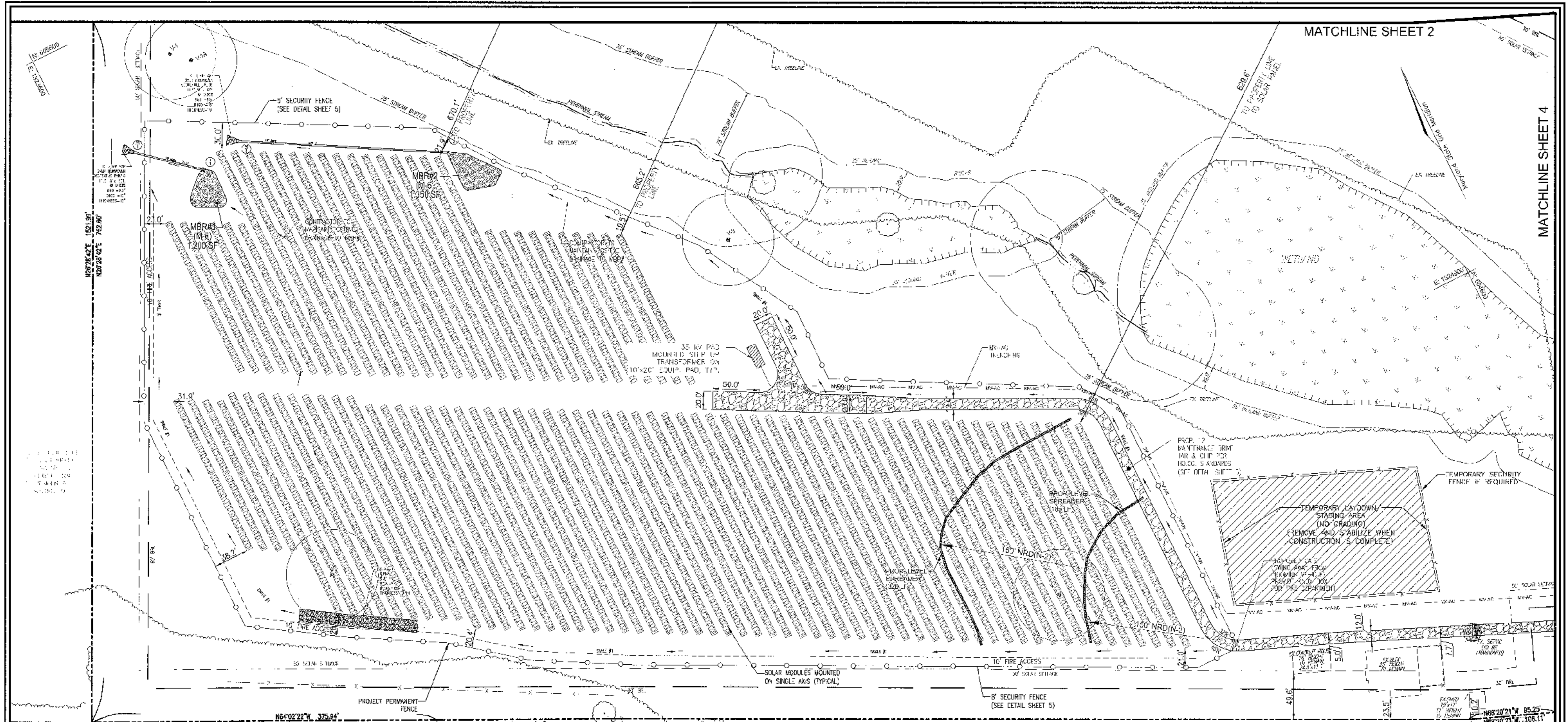
MATCHLINE SHEET 3

- LEGENDS:**
- PARCEL BOUNDARY
 - - - 30' SOLAR SETBACK
 - - - 75' STREAM BUFFER
 - - - 60' TO SOLAR PANEL
 - - - 65' TO SOLAR PANEL
 - - - EXISTING FENCE
 - - - EXISTING FENCE



APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING	
<i>Chad Edmondson</i>	12/23/2021
CHEIEF DEVELOPMENT ENGINEERING DIVISION	DATE
<i>Chad Edmondson</i>	12/28/2021
CHEIEF DIVISION OF LAND DEVELOPMENT	DATE
<i>Ray Brown</i>	12/28/2021
DIRECTOR	DATE

NO.	REVISION	DATE
SITE DEVELOPMENT PLAN LAYOUT PLAN VICEROY SOLAR 12750 OLD FREDERICK ROAD, SYKESVILLE, MD 21784 DEED L.15397 F.476 TAX MAP 9 BLOCK 23 3RD ELECTION DISTRICT ZONED RC-DEO HOWARD COUNTY, MARYLAND		
VOGEL ENGINEERING TIMMONS GROUP 3300 NORTH RIDGE ROAD, SUITE 110, ELLICOTT CITY, MD 21043 P: 410.461.7666 F: 410.461.8961 www.timmons.com		
OWNER VICEROY SOLAR, LLC C/O STANDARD SOLAR, INC. 500 GAIL AVE. PO BOX 500 ROCKY HILL, MD 20850 PHONE: 301-244-5192	DEVELOPER UNIVERSITY OF MARYLAND 2025 WASHINGTON BLVD SUITE 225 SEATTLE, WA 98121 PH: 206-922-7072 ATTENTION: KATE JARON	PROFESSIONAL CERTIFICATE I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A duly licensed PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 11812 EXPIRATION DATE 09-27-2022
DESIGN BY: <u> </u> RBY DRAWN BY: <u> </u> RBY CHECKED BY: <u> </u> RBY DATE: <u> </u> SEPTEMBER 2021 SCALE: <u> </u> AS SHOWN W.C. NO.: 41993	2 SHEET OF 17 ROBERT A. VOGEL, PE No. 18193	



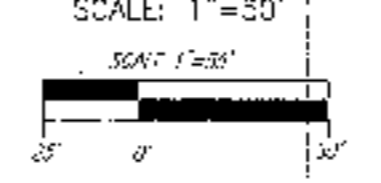
MATCHLINE SHEET 2

MATCHLINE SHEET 4

N64°02'22"W 375.84' N64°02'22"W 565.85' N63°35'21"W 934.18' N68°20'21"W 85.23' N68°20'41"W 108.11'

NOTE:
LOCATION OF EXISTING SEPTIC TO BE DETERMINED PRIOR TO CONSTRUCTION. IF REQUIRED, CONTACT THE HEALTH DEPARTMENT AND PROPERTY ADJACENT LANDOWNER.

LAYOUT PLAN

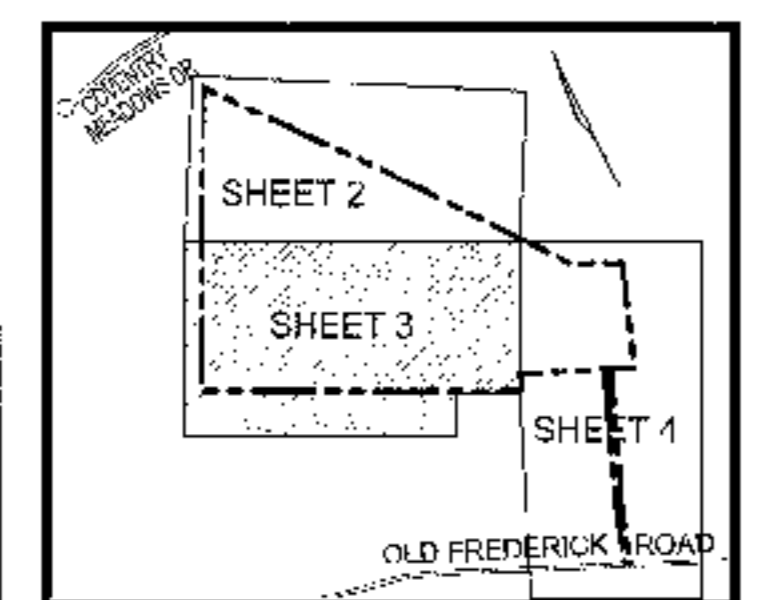


LEGENDS:

- PARCEL BOUNDARY
- 8' SOLAR SETBACK
- STREAM CENTERLINE
- STREAM BUFFER
- WETLAND
- WETLAND BUFFER
- DISTANCE TREE LINE
- MVAC UNDERGROUND MEDIUM VOLTAGE
- TRANSFORMER PAD
- PROPOSED FENCE
- TEMPORARY SECURITY FENCE
- NEW ACCESS ROAD
- TEMPORARY LAYDOWN / STAGING AREA

NOTES:

1. PROVIDE 10' MINIMUM CLEARANCE BETWEEN TYPE 'D' EUTER AND EXISTING CHICKEN HOUSE FOUNDATION FOR MOWING EQUIPMENT ACCESS.
2. ACCESS DRIVE ALIGNMENT TO UTILIZE THE EXISTING FARM ACCESS TO THE GREATEST EXTENT POSSIBLE ALONG THE SOUTH PROPERTY BOUNDARY.
3. ACCESS DRIVE TO BE WITHIN 5' OF NORTHERN SIDE OF 2 EXISTING FARM BUILDINGS.
4. PROVIDE 10' MINIMUM CHICKEN FOUNDATION AND PROPOSED DRIVEWAY.



APPROVED, HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
 Chief Administrator
 DATE: 12/23/2021
 CHIEF OF DEVELOPMENT ENGINEERING DIVISION
 DATE: 12/28/2021
 CHIEF DIVISION OF LAND DEVELOPMENT
 DATE: 12/28/2021
 DIRECTOR
 DATE:

NO.	REVISION	DATE

SITE DEVELOPMENT PLAN
LAYOUT PLAN
VICEROY SOLAR
 12750 OLD FREDERICK ROAD, SYKESVILLE, MD 21784
 DEED L. 5397 F.476 ZONED RC-DCO PARCEL 19
 TAX MAP 9 BLOCK 23 3RD ELECTION DISTRICT HOWARD COUNTY, MARYLAND

VOGEL ENGINEERING
 +
TIMMONS GROUP
 3300 NORTH RIDGE ROAD, SUITE 130, ELLCOTT CITY, MD 21043
 P: 410.461.7666 F: 410.461.8991 www.timmonsgroup.com

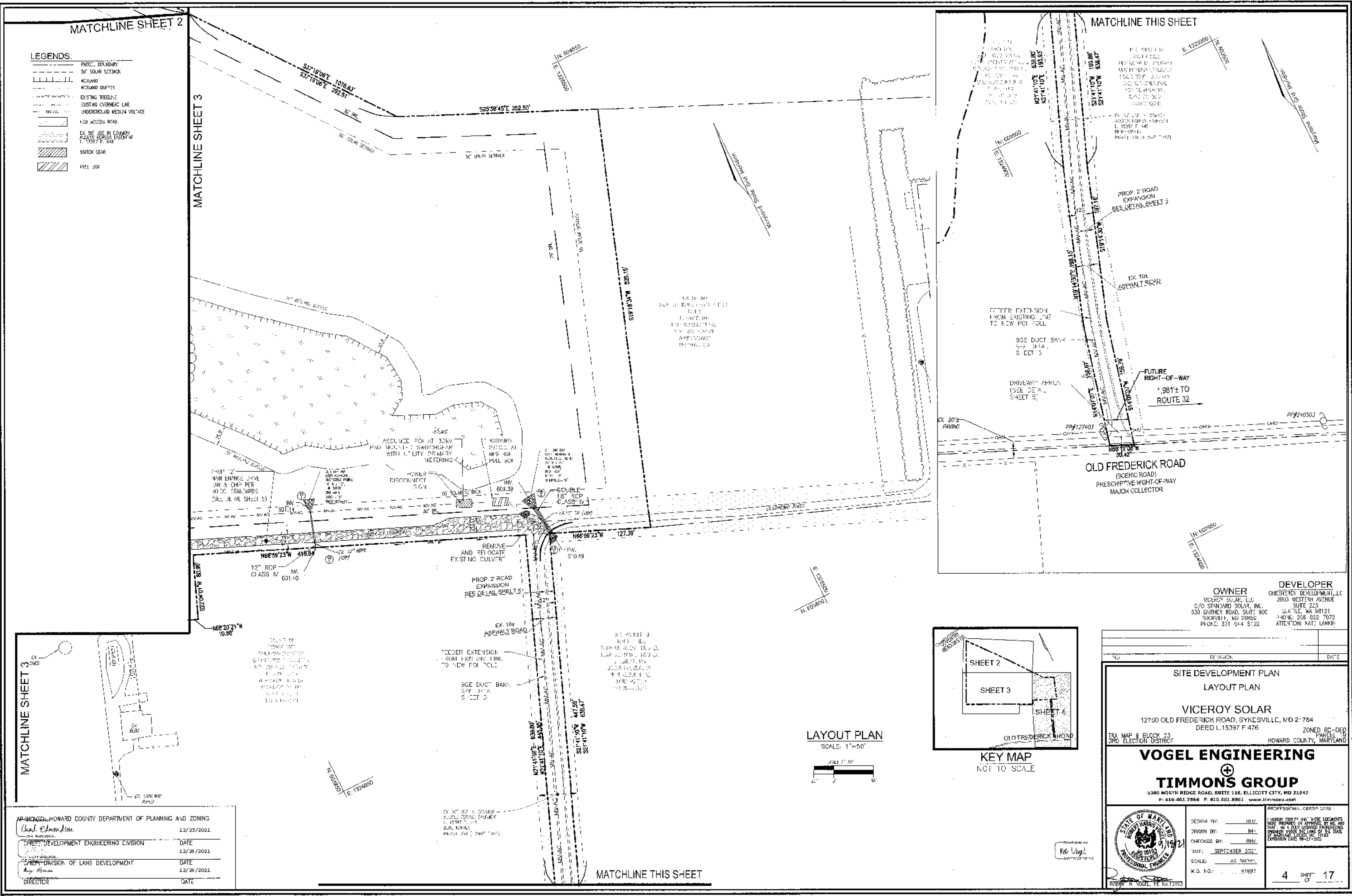
OWNER
 VICEROY SOLAR, LLC
 C/O STANDARD SOLAR, INC.
 530 GATHIE ROAD, SUITE 300
 ROCKVILLE, MD 20850
 PHONE: 301-811-8102

DEVELOPER
 SENERGY DEVELOPMENT, LLC
 2003 WESTERN AVENUE
 SUITE 225
 SEATTLE, WA 98122
 PHONE: 206-322-7072
 ATTENTION: KYLE LARSEN

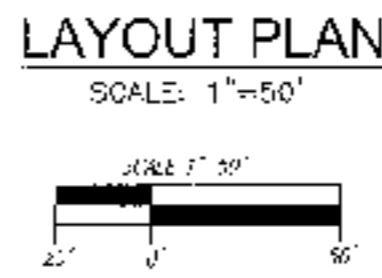
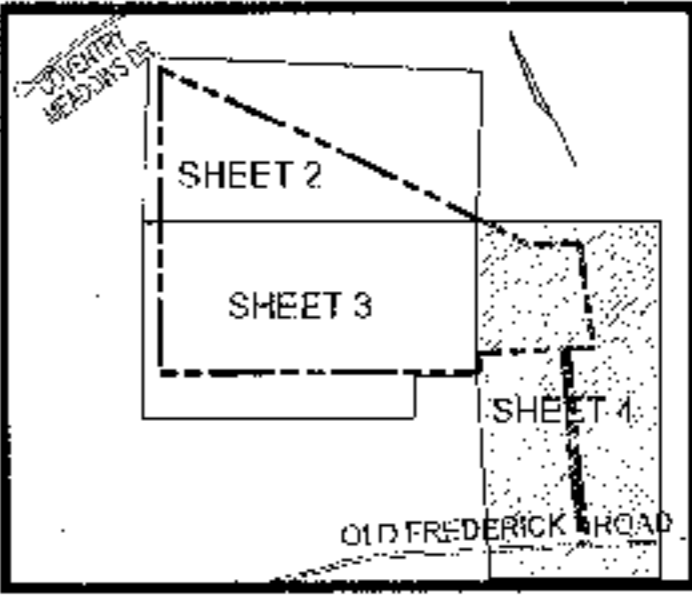
PROFESSIONAL CERTIFICATE
 I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND LICENSE NO. 19-27-3022

DESIGN BY: RHY
 DRAWN BY: IME
 CHECKED BY: RHY
 DATE: SEPTEMBER 2021
 SCALE: AS SHOWN
 W.D. NO.: 41932

3 SHEET 17



- LEGENDS:**
- PARCEL BOUNDARY
 - 50' SOLAR SETBACK
 - WETLAND BUFFER
 - EXISTING TREELINE
 - EXISTING OVERHEAD LINE
 - UNDERGROUND MEDIUM VOLTAGE
 - NEW ACCESS ROAD
 - EX. 50' USE IN COMMON
 - ACCESS EGRESS EASEMENT
 - SWITCH GEAR
 - PULL BOX



OWNER
VICEROY SOLAR, LLC
330 STANFORD ROAD, SUITE 90C
ROCKVILLE, MD 20850
PHONE: 301-944-5702

DEVELOPER
ONESOURCE DEVELOPMENT, LLC
2003 WESTERN AVENUE
SUITE 223
GAITHERSBURG, MD 20878
ATTENTION: KATE LAMPKIN

SITE DEVELOPMENT PLAN
LAYOUT PLAN

VICEROY SOLAR
12760 OLD FREDERICK ROAD, SYKESVILLE, MD 21784
DEED L15397 F 476

TAX MAP 8 BLOCK 23, 3RD ELECTION DISTRICT
ZONED RC-DEP
HOWARD COUNTY, MARYLAND

VOGEL ENGINEERING
TIMMONS GROUP
3300 NORTH RIDGE ROAD, SUITE 116, ELLICOTT CITY, MD 21043
P: 410-461-7866 F: 410-461-8961 www.timmons.com

PROFESSIONAL CERTIFICATE

DESIGN BY: IM
DRAWN BY: IM
CHECKED BY: RHY
DATE: SEPTEMBER 2021
SCALE: AS SHOWN
W.O. NO.: 1189

STATE OF MARYLAND
REGISTERED PROFESSIONAL ENGINEER
11821

4 SHEET OF 17

APPROVED BY HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

12/23/2021

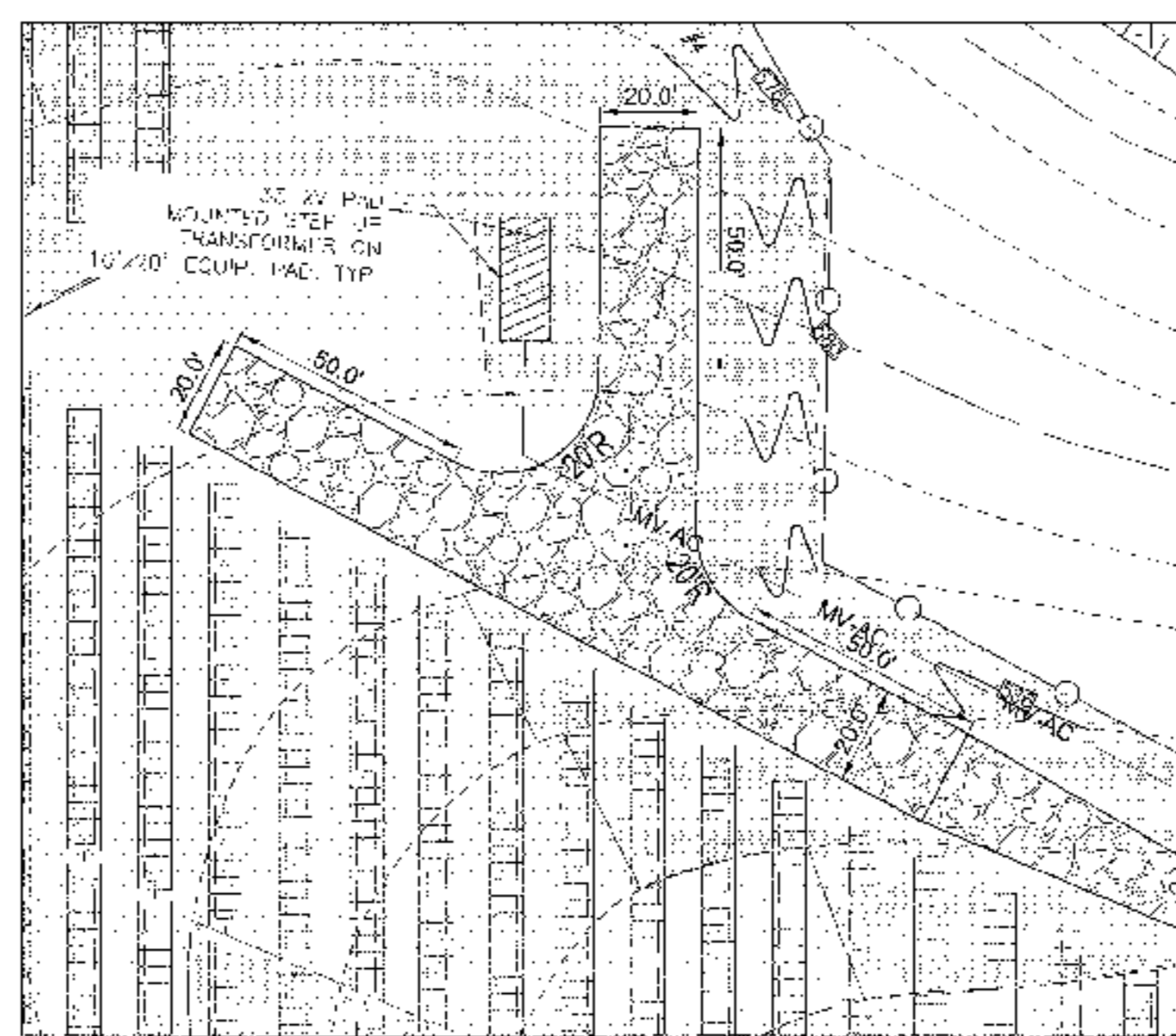
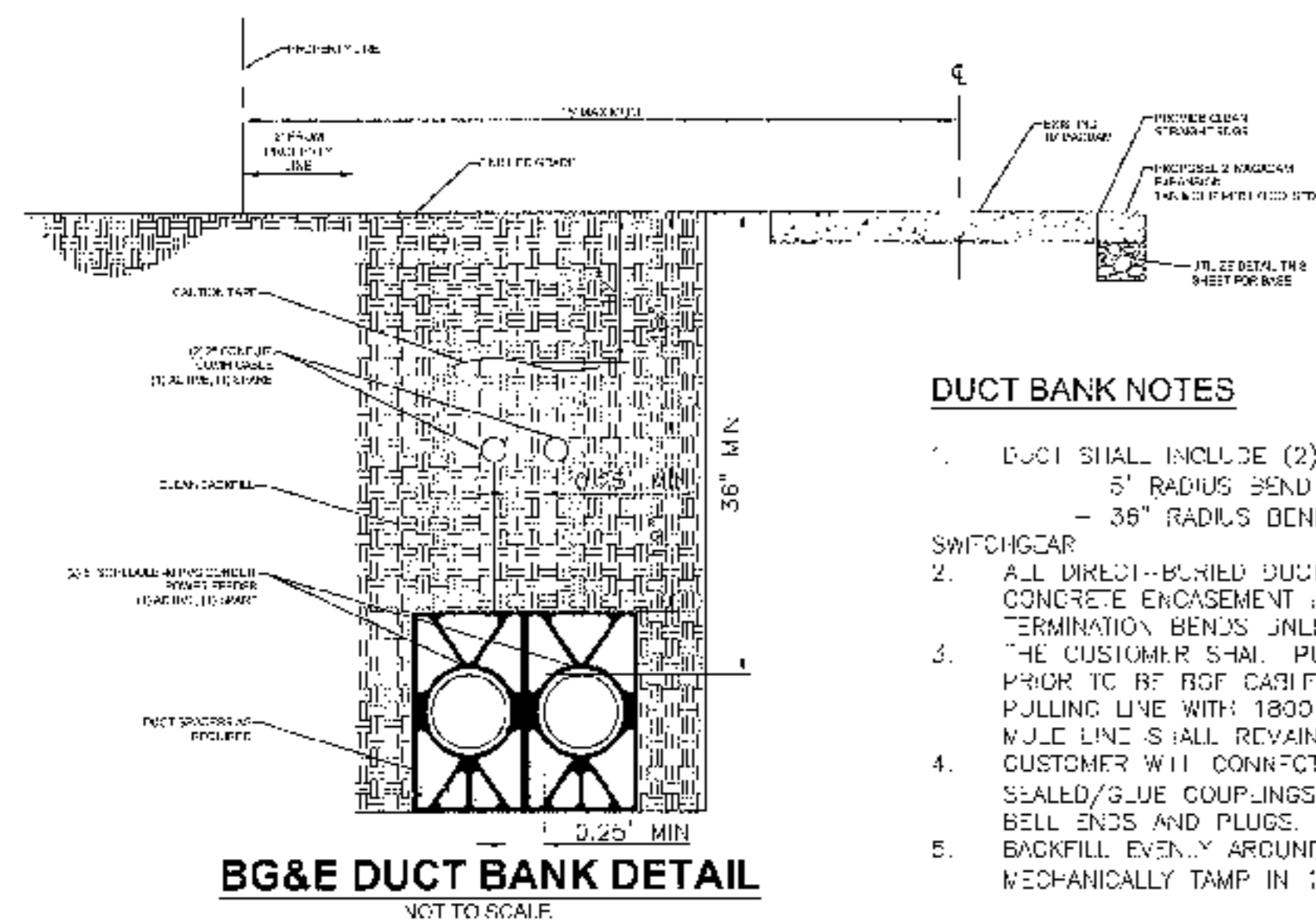
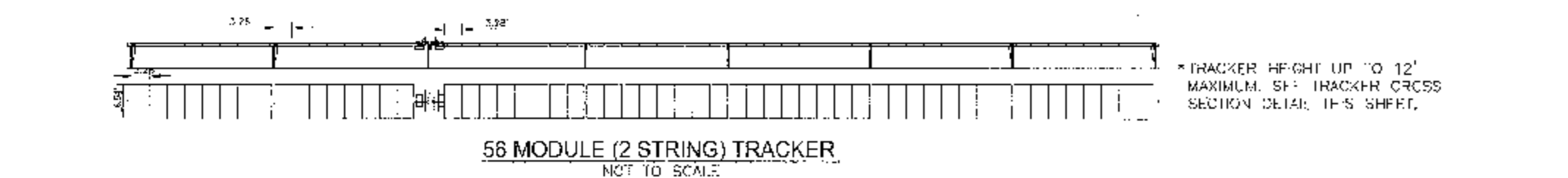
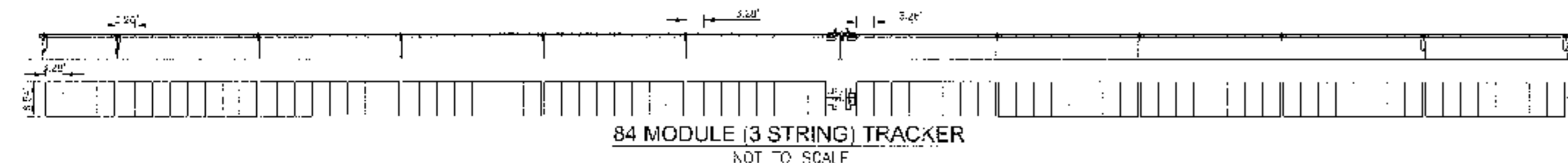
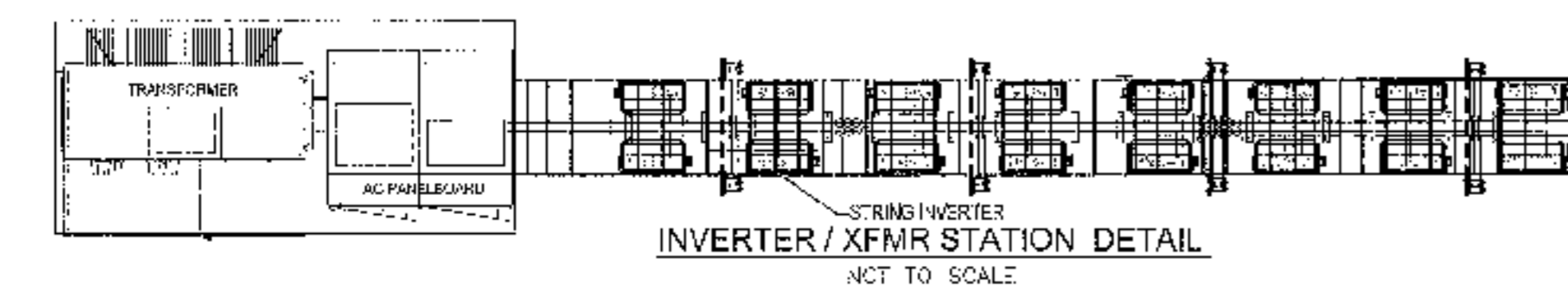
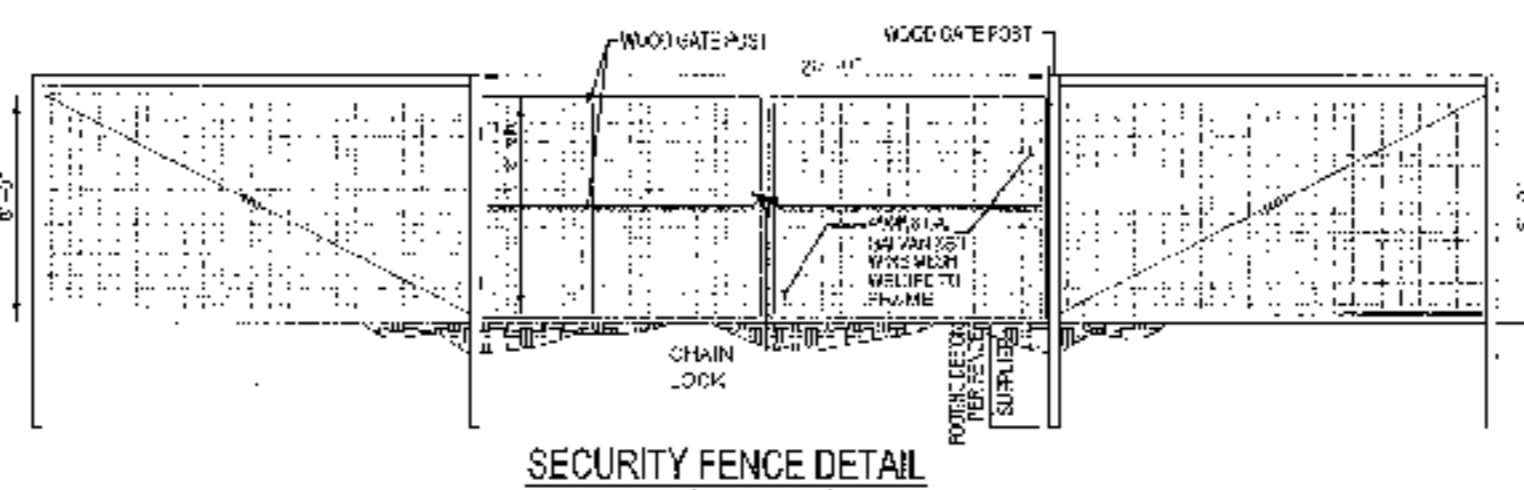
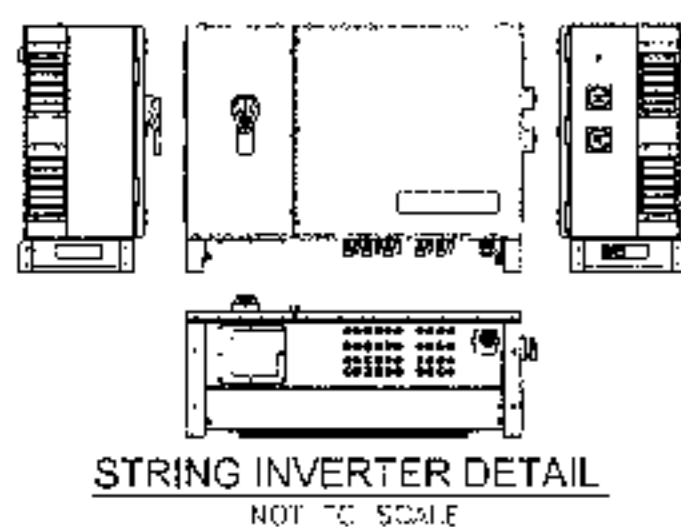
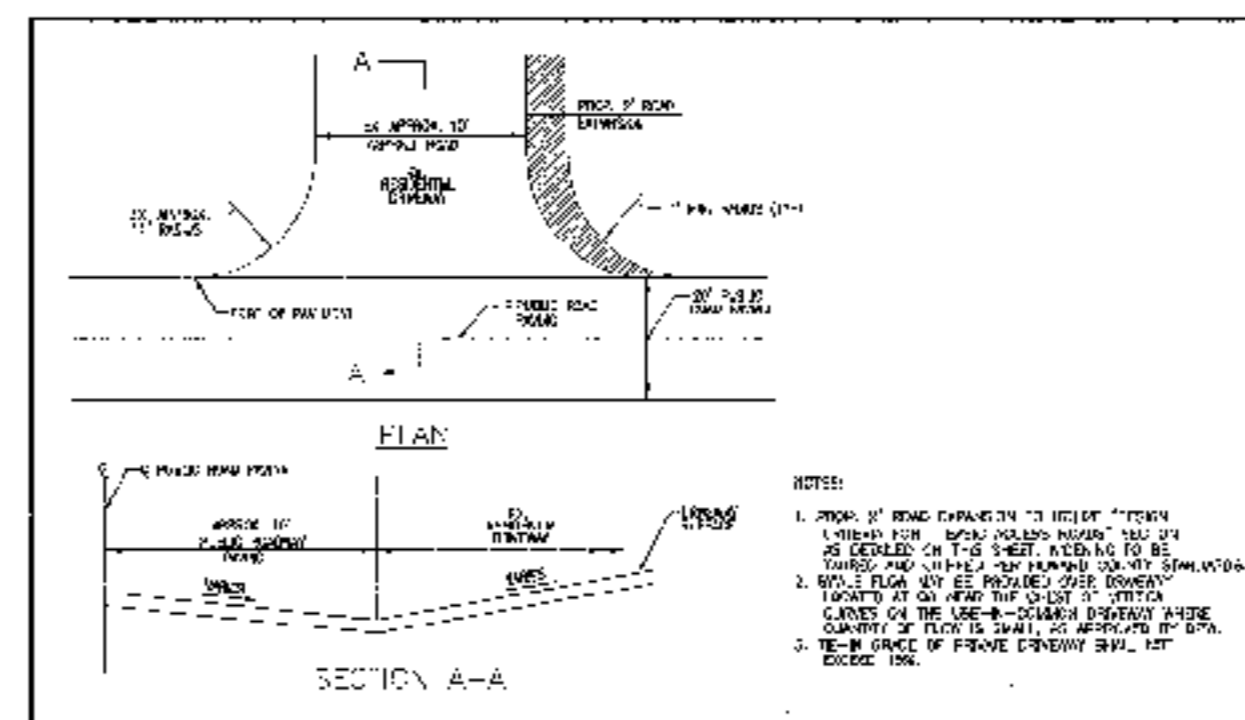
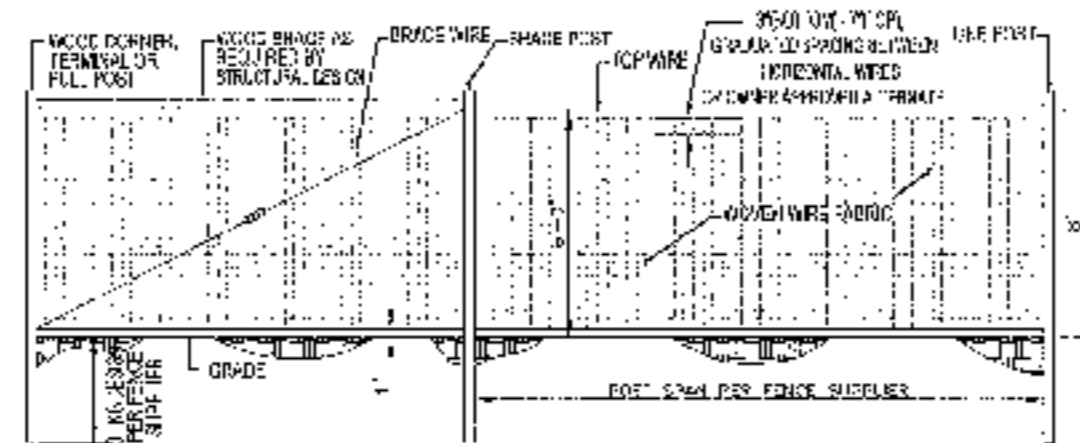
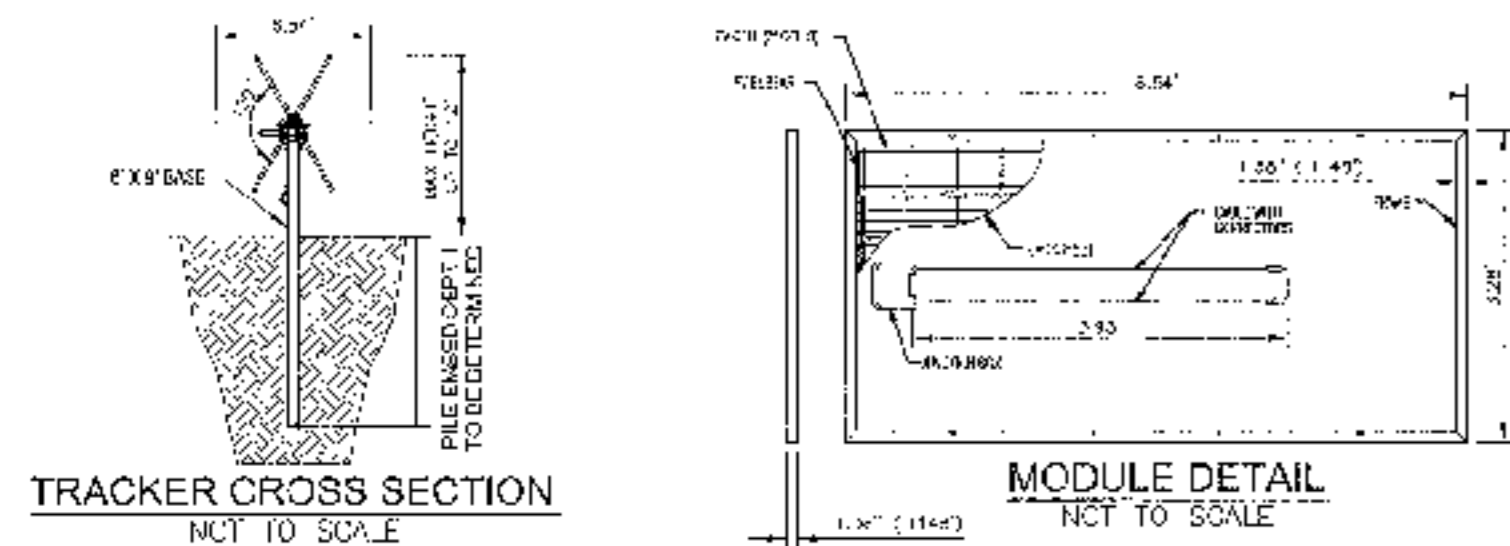
DATE

12/28/2021

DATE

12/28/2021

DATE



DESIGN CRITERIA FOR BASIC ACCESS ROADS UG 501-17

An access road is defined to be a stone-base road with entry off of a paved street or highway. It is used to permit construction and maintenance vehicles access to an isolated location of pad-mounted equipment.

The following guidelines should be used to design such a road:

1. An access road shall be constructed to H-20 highway loading with a maximum of 8% grade. Wherever possible, the access road should be straight without curves, and be a minimum of 12' wide. The location and plans for the access road must be approved by BGE prior to construction.
2. The access road shall extend a minimum of 20' from the public highway to the pad-mounted equipment, unless separated by guardrails or jersey walls. This distance allows sufficient length for the vehicle operator to park away from the flow of traffic off the public highway.
3. At the location of the pad-mounted equipment, the roadway shall widen to allow construction and maintenance trucks on crew to turn around when exiting the site. This widened area shall be a minimum of 20' x 20'.
4. The roadway shall be excavated to a minimum depth of 12" and constructed of two layers of stone. Before the first layer is installed, the bottom and sides of the excavated roadway shall be lined with non-woven filter cloth.
5. The base layer shall be a minimum of 8" of #2 stone. The top layer shall be a minimum of 4" of CR6 stone. The top layer of the roadway shall be at "grade." These minimum depths may have to be increased depending on the existing soil conditions to obtain the H-20 highway loading.
6. Curbs and gutters are not required.
7. Guard rails should be installed when the slope of the road is steeper than a 5:1 ratio.
8. If the access road is gated, BGE must have independent 24-hour access, i.e. double locks.

Typical Cross-Section

Filter Cloth, 12 Foot Minimum, CR6 Stone, Existing Undisturbed Soil Surface, #2 Stone

BGE	UNDERGROUND CONSTRUCTION STANDARDS	LATEST NEW STANDARD	
		REVISED	
		APP. DATE: 12/2/10	APPROVAL: <i>CJM</i>

- NOTES:**
1. SITE OF THIS SECTION FOR SOLAR DRIVEWAY.
 2. SITE OF THIS SECTION FOR DRIVEWAY WIDENING FROM OLD PAVED ROAD TO TEE. WIDENING TO BE TARRED AND CHIPPED PER HOWARD COUNTY STANDARDS.
 3. DRIVEWAY TO SHALL MEET MINIMUM HOWARD COUNTY STANDARDS OF A DUST FREE SURFACE.

APPROVED, HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

<i>David Edmondson</i>	12/23/2021
CHEIE DEVELOPMENT ENGINEERING DIVISION	DATE
<i>[Signature]</i>	12/28/2021
CHEIE DIVISION OF LAND DEVELOPMENT	DATE
<i>Ray Green</i>	12/28/2021
DIRECTOR	DATE

OWNER
VICEROY SOLAR, LLC
330 STANDARD SCAR, INC.
530 GATHER ROAD, SUITE 900
ROCKYHILL, MD 20842
PHONE: 301-544-5112

DEVELOPER
SNEENERGY DEVELOPMENT, C.
2003 WESTERN AVENUE
SUITE 225
SEATTLE, WA 98171
PHONE: 206-922-7572
ATTENTION: KATE LARSON

SITE DEVELOPMENT PLAN
SITE DETAILS
VICEROY SOLAR
12750 OLD FREDERICK ROAD SYKESVILLE, MD 21784
DEED L.15397 F.478

TAX MAP 9 BLOCK 23
3RD ELECTRON DISTRICT

ZONED RC-DEO
PARCEL 19
HOWARD COUNTY, MARYLAND

VOGEL ENGINEERING
TIMMONS GROUP
3360 NORTH RIDGE ROAD, SUITE 110, BELLCOTT CITY, MD 21043
P: 410-461-7966 F: 410-461-8961 www.timmons.com

DESIGN BY: *IMV*
DRAWN BY: *IMV*
CHECKED BY: *IMV*
DATE: SEPTEMBER 2021
SCALE: AS SHOWN
W.D. NO.: 41393

PROFESSIONAL SEAL: *Robert H. Vogel*
REGISTERED PROFESSIONAL ENGINEER
STATE OF MARYLAND
NO. 16181

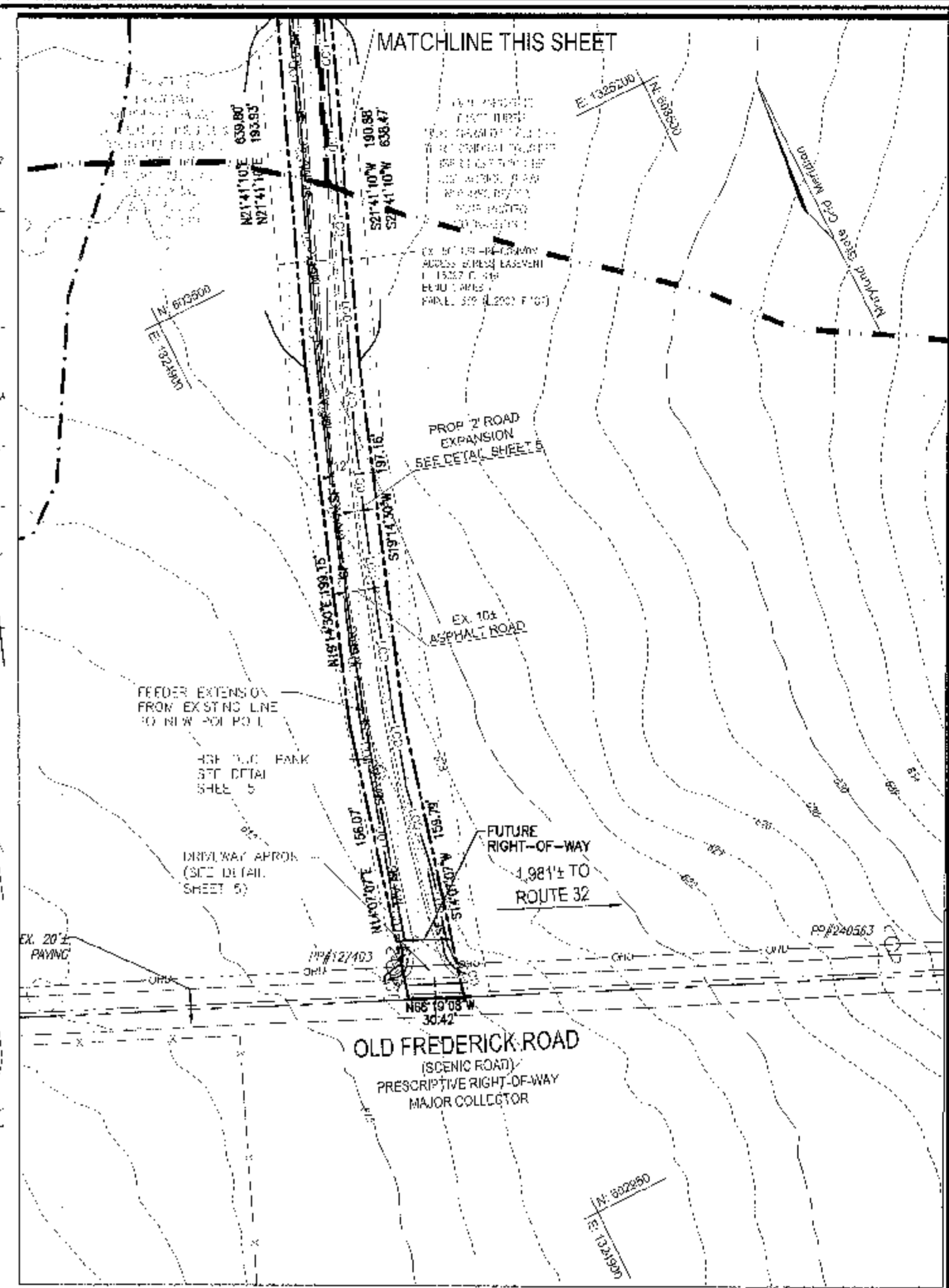
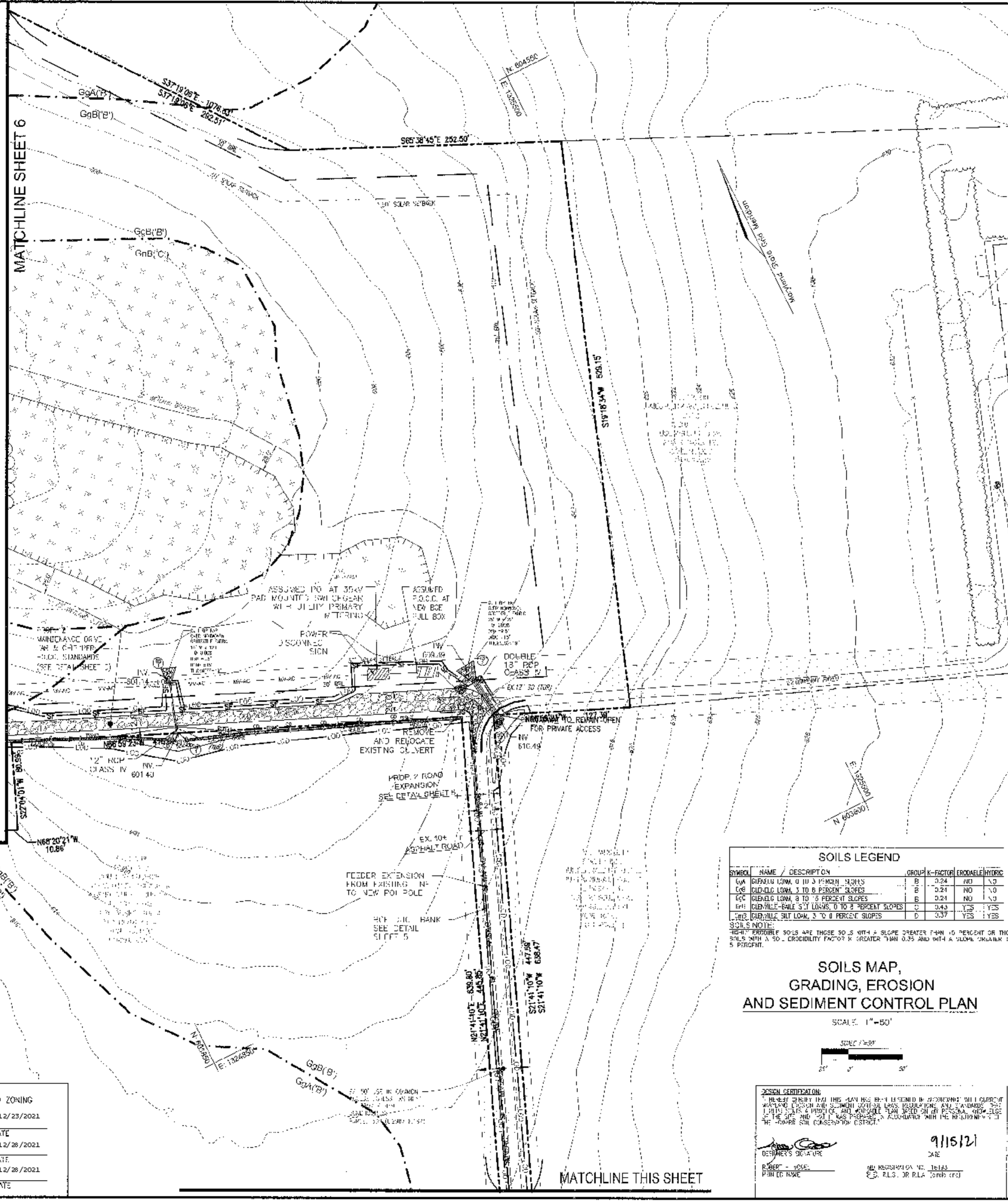
LIBRARY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A LEGAL, LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO. 16181. EXPIRATION DATE: 09-27-2025

5 SHEET OF 17

- LEGENDS:**
- PARCEL BOUNDARY
 - 50' SOLAR SETBACK
 - WETLAND
 - WETLAND BUFFER
 - EXISTING CONTOUR (10')
 - EXISTING CONTOUR (2')
 - PROPOSED CONTOUR (10')
 - PROPOSED CONTOUR (2')
 - MIT OF DISTURBED AREA
 - SUPER SILT FENCE
 - SILT FENCE

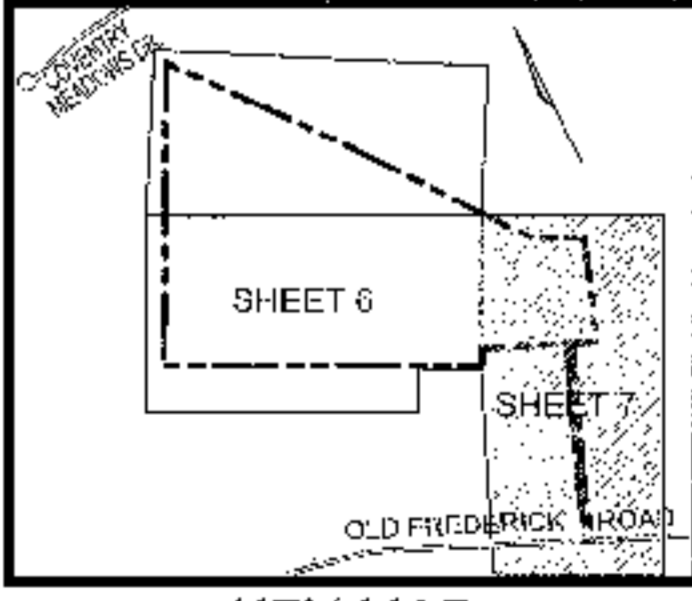
NOTE:
 1. CONTRACTOR TO MAINTAIN POSITIVE DRAINAGE IN DITCHES AFTER CONSTRUCTION OF SOLAR ARRAY.
 2. CONTRACTOR SHALL ENSURE THAT CONTRIBUTING DRAINAGE AREAS TO DRIVEWAY OULVERTS SHALL BE STABILIZED SAME-DAY.

NOTE:
 SILT FENCE IS TO BE REPLACED WITH SUPER SILT FENCE AT THE DIRECTION OF THE SEDIMENT CONTROL INSPECTOR.
 SILT FENCE SHALL BE CURLED UPHILL, NO MORE THAN 36 FEET APART.
 DOUBLE ROWS OF SUPER SILT FENCE SHALL BE INSTALLED AT THE DIRECTION OF THE SEDIMENT CONTROL INSPECTOR.



SOILS LEGEND

SYMBOL	NAME / DESCRIPTION	GROUP	K-FACTOR	ERODIBILITY	HYDROLOGIC
U1A	UPPER LOAM, 0 TO 3 PERCENT SLOPES	B	0.24	NO	N.0
U1B	UPPER LOAM, 3 TO 8 PERCENT SLOPES	B	0.24	NO	N.0
U1C	UPPER LOAM, 8 TO 15 PERCENT SLOPES	B	0.24	NO	N.0
U1D	UPPER LOAM, 15 TO 25 PERCENT SLOPES	B	0.24	NO	N.0
U1E	UPPER LOAM, 25 TO 35 PERCENT SLOPES	B	0.24	NO	N.0
U1F	UPPER LOAM, 35 TO 45 PERCENT SLOPES	B	0.24	NO	N.0
U1G	UPPER LOAM, 45 TO 55 PERCENT SLOPES	B	0.24	NO	N.0
U1H	UPPER LOAM, 55 TO 65 PERCENT SLOPES	B	0.24	NO	N.0
U1I	UPPER LOAM, 65 TO 75 PERCENT SLOPES	B	0.24	NO	N.0
U1J	UPPER LOAM, 75 TO 85 PERCENT SLOPES	B	0.24	NO	N.0
U1K	UPPER LOAM, 85 TO 95 PERCENT SLOPES	B	0.24	NO	N.0
U1L	UPPER LOAM, 95 TO 100 PERCENT SLOPES	B	0.24	NO	N.0
U1M	UPPER LOAM, 100 PERCENT SLOPES	B	0.24	NO	N.0
U1N	UPPER LOAM, 100 PERCENT SLOPES	B	0.24	NO	N.0
U1O	UPPER LOAM, 100 PERCENT SLOPES	B	0.24	NO	N.0
U1P	UPPER LOAM, 100 PERCENT SLOPES	B	0.24	NO	N.0
U1Q	UPPER LOAM, 100 PERCENT SLOPES	B	0.24	NO	N.0
U1R	UPPER LOAM, 100 PERCENT SLOPES	B	0.24	NO	N.0
U1S	UPPER LOAM, 100 PERCENT SLOPES	B	0.24	NO	N.0
U1T	UPPER LOAM, 100 PERCENT SLOPES	B	0.24	NO	N.0
U1U	UPPER LOAM, 100 PERCENT SLOPES	B	0.24	NO	N.0
U1V	UPPER LOAM, 100 PERCENT SLOPES	B	0.24	NO	N.0
U1W	UPPER LOAM, 100 PERCENT SLOPES	B	0.24	NO	N.0
U1X	UPPER LOAM, 100 PERCENT SLOPES	B	0.24	NO	N.0
U1Y	UPPER LOAM, 100 PERCENT SLOPES	B	0.24	NO	N.0
U1Z	UPPER LOAM, 100 PERCENT SLOPES	B	0.24	NO	N.0



OWNER
 VICEROY SOLAR, LLC
 C/O STANDARD SOLAR, INC.
 330 CANTER ROAD, SUITE 300
 ROCKVILLE, MD 20855
 PHONE: 301-944-5102

DEVELOPER
 ONEENERGY DEVELOPMENT LLC
 3093 WESTERN AVENUE
 SUITE 225
 SEATTLE, WA 98121
 PHONE: 206-922-7072
 ATTENTION: KATE PARKS

SITE DEVELOPMENT PLAN
GRADING, EROSION AND SEDIMENT CONTROL PLAN
VICEROY SOLAR
 12750 OLD FREDERICK ROAD, SYKESVILLE, MD 21784
 DEED L.15397 F.476

TAX MAP 3 BLOCK 23, 3RD ELECTION DISTRICT

ZONED RC DEO PARCE 19
 HOWARD COUNTY, MARYLAND

VOGEL ENGINEERING
TIMMONS GROUP
 3309 NORTH RIDGE ROAD, SUITE 130, BELLEFONTE, MD 21033
 P: 410.461.7800 F: 410.461.8961 www.timmons.com

PROFESSIONAL CERTIFICATE
 I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A FULLY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. THIS EXPIRES ON 08-01-2024.

DESIGN BY: TIV
 DRAWN BY: LBI
 CHECKED BY: JPK
 DATE: SEPTEMBER 2021
 SCALE: AS SHOWN
 W.O. NO.: 4-993

7 SHEET OF 17

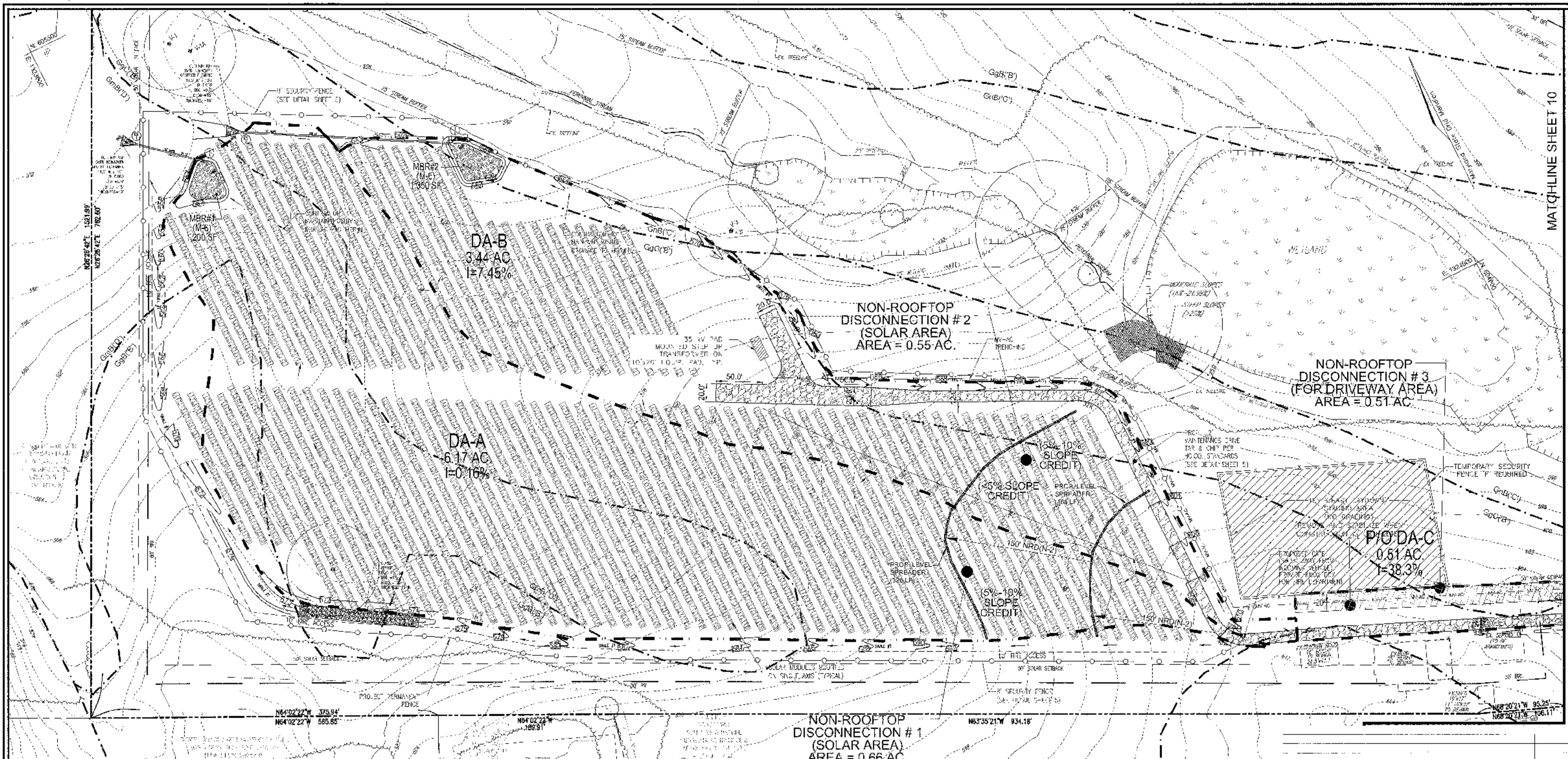
APPROVED, HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
 Chad Edmondson 12/23/2021
 CHIEF DEVELOPMENT ENGINEERING DIVISION
 DATE 12/28/2021
 CHIEF DIVISION OF LAND DEVELOPMENT
 DATE 12/28/2021
 DIRECTOR

DESIGN CERTIFICATION
 I HEREBY CERTIFY THAT THIS PLAN HAS BEEN PREPARED BY ME OR UNDER MY CLOSE PERSONAL SUPERVISION AND THAT I AM A FULLY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. THIS EXPIRES ON 08-01-2024.

DATE 9/15/21
 PROJECT NO. 12145
 SHEET NO. 7 OF 17

OWNER/DEVELOPER CERTIFICATION
 I HEREBY CERTIFY THAT THIS PLAN HAS BEEN PREPARED BY ME OR UNDER MY CLOSE PERSONAL SUPERVISION AND THAT I AM A FULLY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. THIS EXPIRES ON 08-01-2024.

DATE 09/22/21
 PROJECT NO. 12145
 SHEET NO. 7 OF 17



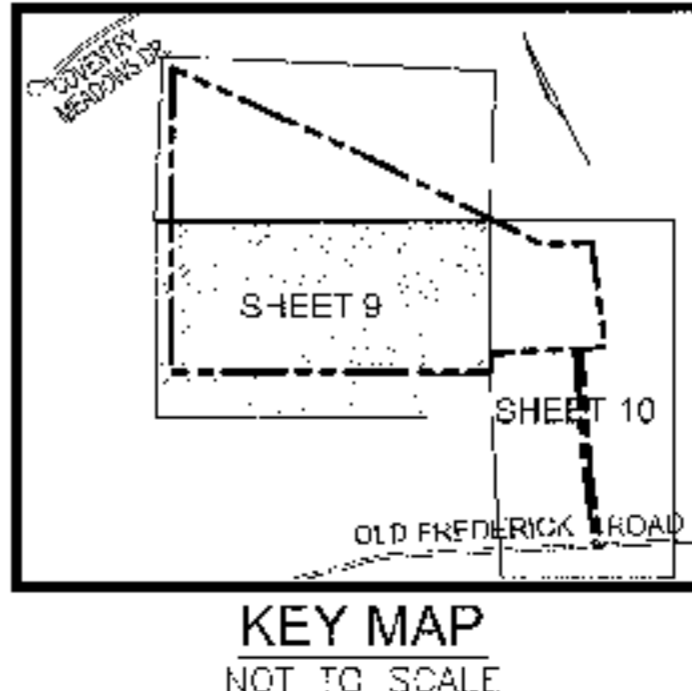
MATCHLINE SHEET 10

NOTE:
 RIPRAP PADS (PROPOSED) WILL REDUCE VELOCITY OF T-E DISCHARGE FROM THE CUTFILL TO A NON-EROSIVE STATE. SEE RIPRAP DETAILS T13-S111 AND M11A1P DETAIL ON SHEET 9.

LEGENDS:

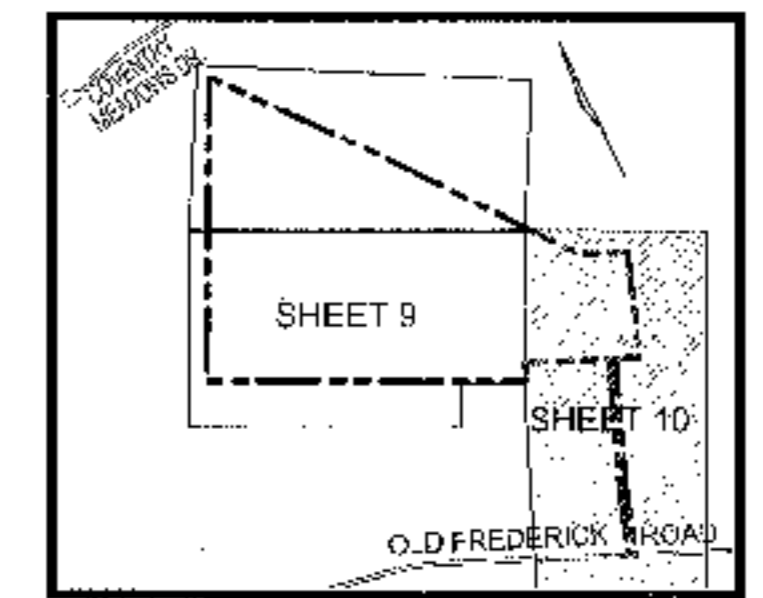
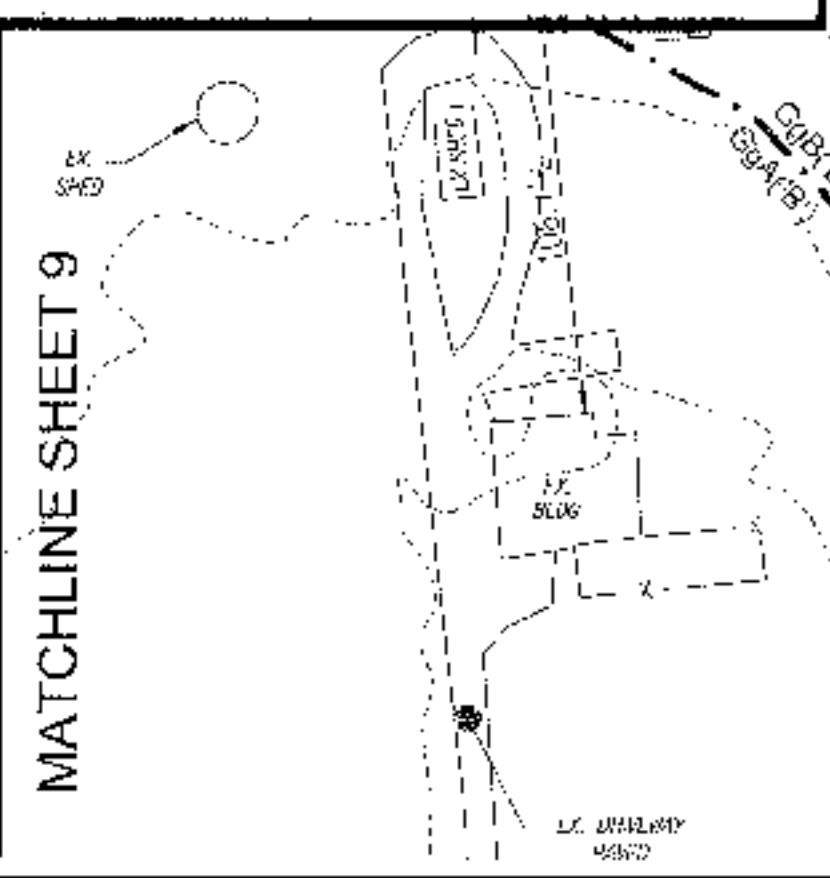
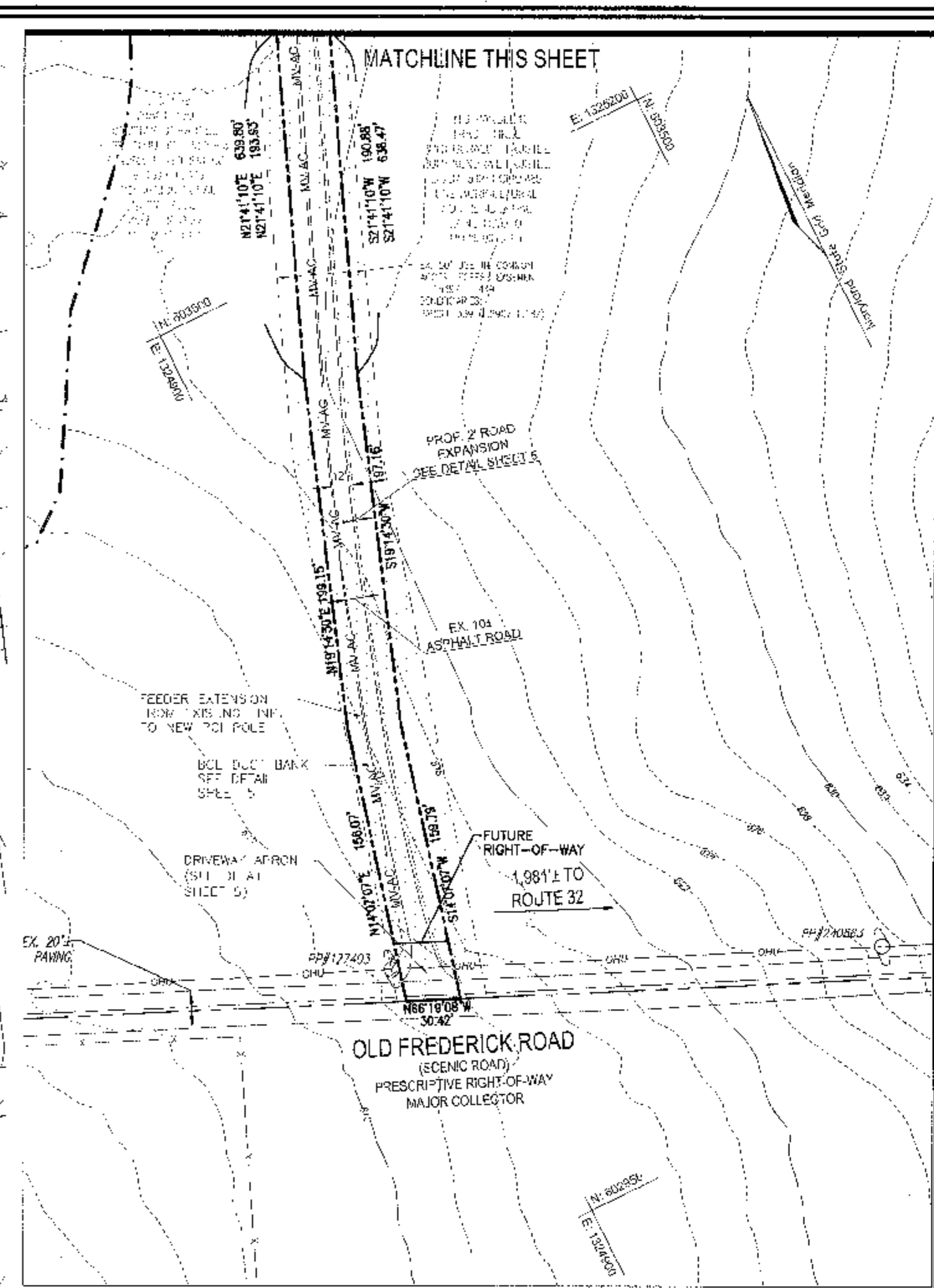
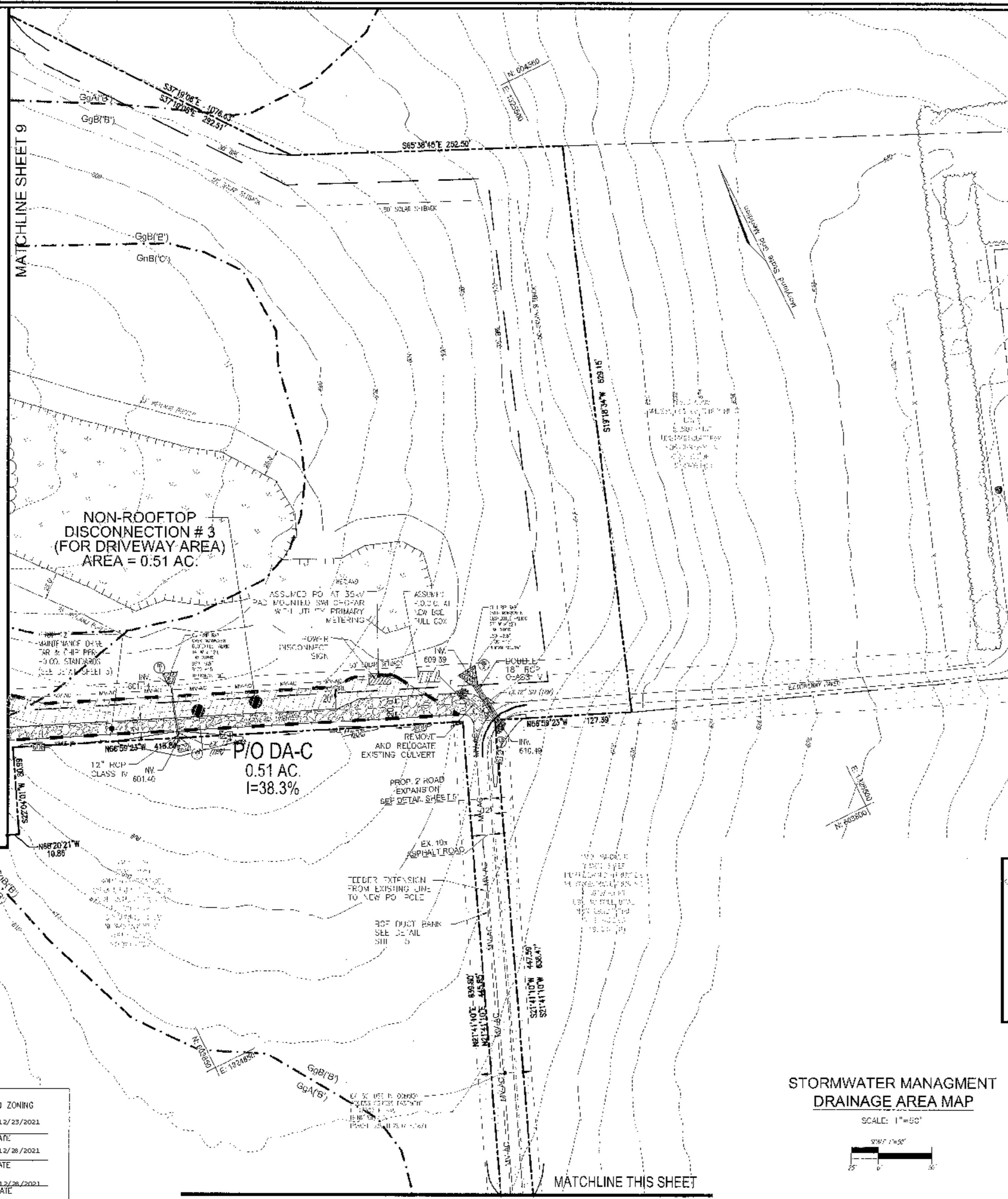
Parcel Boundary	Proposed Access Road	Slopes (10%-24.99%)
5' Solar Buffer	Temporary Jurisdiction / Staging Area	Slopes (>24%)
Stream Centerline	Transformer Pad	Micro-Bioretention (M-E)
Stream Buffer (5')	Proposed Fence	Non-Rooftop Disconnections
Retaining	Temporary Security Fence	
Existing Trelene		
Underground Medium Voltage		
Driveway Area		
Proposed Contour (10')		
Proposed Contour (2')		

STORMWATER MANAGEMENT DRAINAGE AREA MAP
 SCALE: 1"=50'

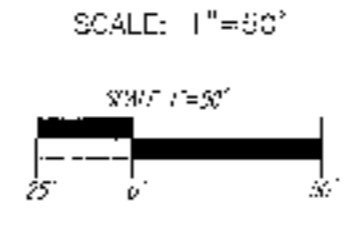


NO.	REVISION	DATE
SITE DEVELOPMENT PLAN STORMWATER MANAGEMENT DRAINAGE AREA MAP VICEROY SOLAR 12750 O.D. FREDERICK ROAD, SYKESVILLE, MD 21784 DEED L. 15397 F.476		
TAX MAP 9 BLOCK 23 3RD ELECTION DISTRICT		ZONED RC-DEO PARCEL 13
HOWARD COUNTY, MARYLAND VOGEL ENGINEERING 3309 NORTH RIDGE ROAD, SUITE 110, ELICOTT CITY, MD 21043 P: 410.461.7666 F: 410.461.8961 www.timmons.com		
TIMMONS GROUP 3309 NORTH RIDGE ROAD, SUITE 110, ELICOTT CITY, MD 21043 P: 410.461.7666 F: 410.461.8961 www.timmons.com		DESIGN BY: RHY DRAWN BY: SMH CHECKED BY: RHY DATE: 12/28/2021 SCALE: AS SHOWN P.O. NO.: 41995
OWNER: VICEROY SOLAR, LLC C/O STANDARD SOLAR, INC. 830 CATLER ROAD, SUITE 000 ROCKY HILL, MD 20850 P: (301) 844-5130		DEVELOPER: VICEROY DEVELOPMENT, LLC 2003 WESTERN AVENUE SUITE 203 SPARTANBURG, VA 22117 PHONE: 203 822 7070 ATTENTION: KATE LARSON
APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING Charles Edmondson 12/23/2021 CHIEF DEVELOPMENT ENGINEERING DIVISION DATE: 12/28/2021 CHIEF DIVISION OF LAND DEVELOPMENT DATE: 12/28/2021 DIRECTOR		
STATE OF MARYLAND PROFESSIONAL ENGINEER REG. NO. 11709E, P.E. No. 117183		I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER IN THE STATE OF MARYLAND UNDER THE PROFESSIONAL ENGINEERING ACT OF 1950, AS AMENDED, AND THAT I AM NOT PROVIDING ENGINEERING SERVICES TO ANY OTHER PARTY FOR THE SAME PROJECT AS OF THE DATE OF THIS DOCUMENT. 9 SHEET OF 17

- LEGENDS:**
- PARCEL BOUNDARY
 - 30' SOLAR SETBACK
 - WETLAND
 - WETLAND BUFFER
 - EXISTING CONTOUR (10')
 - EXISTING CONTOUR (2')
 - SOLE BOUNDARY
 - EXISTING TIE LINE
 - EXISTING OVERHEAD LINE
 - UNDERGROUND MEDIUM VOLTAGE
 - NEW ACCESS ROAD
 - FEEDER - 30' S
 - EX. 20' USE IN COMMON
 - ACCESS POINT ASSEMBLY
 - 1500V F-448
 - SWITCH GEAR
 - NO. LP-36 / DISCONNECT
 - PROPOSED CONTOUR (10')
 - PROPOSED CONTOUR (2')
 - STEIN DRAIN
 - DRAINAGE AREA
 - WICAO-BUILDING (N-6)
 - NO. ROOF TOP DISCONNECTS



STORMWATER MANAGEMENT DRAINAGE AREA MAP



APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Chief Administrator	12/23/2021
Director of Planning and Zoning	12/28/2021
Director of Land Development	12/28/2021
Director	12/28/2021

OWNER
 VICEROY SOLAR, LLC
 12750 OLD FREDERICK ROAD, SUITE 900
 ROCKVILLE, MD 20850
 PHONE: 301-944-5102

DEVELOPER
 ONENERGY DEVELOPMENT LLC
 2003 WESTRY AVENUE
 SUITE 225
 SEATTLE, WA 98127
 PHONE: 206-922-7072
 ATTENTION: GATE JARVIN

NO.	REV.	DATE

**SITE DEVELOPMENT PLAN
 STORMWATER MANAGEMENT
 DRAINAGE AREA MAP**

VICEROY SOLAR
 12750 OLD FREDERICK ROAD, SYKESVILLE, MD 21784
 DEED # 15397 F.476

TAX MAP 9 BLOCK 23
 3RD ELECTION DISTRICT

ZONE 3 RC-100
 PARCEL 19
 HOWARD COUNTY, MARYLAND

VOGEL ENGINEERING
 3300 NORTH RIDGE ROAD, SUITE 110, ELLCOTT CITY, MD 21043
 P: 410.461.7606 F: 410.461.8061 www.vogeleng.com

TIMMONS GROUP

PROFESSIONAL CERTIFICATE

DESIGN BY:	RY-
DRAWN BY:	DM-
CHECKED BY:	ME-V
DATE:	SEPTEMBER 2021
SCALE:	AS SHOWN
W.D. NO.:	41923

STATE OF MARYLAND
 ROBERT HANCOCK
 PROFESSIONAL ENGINEER

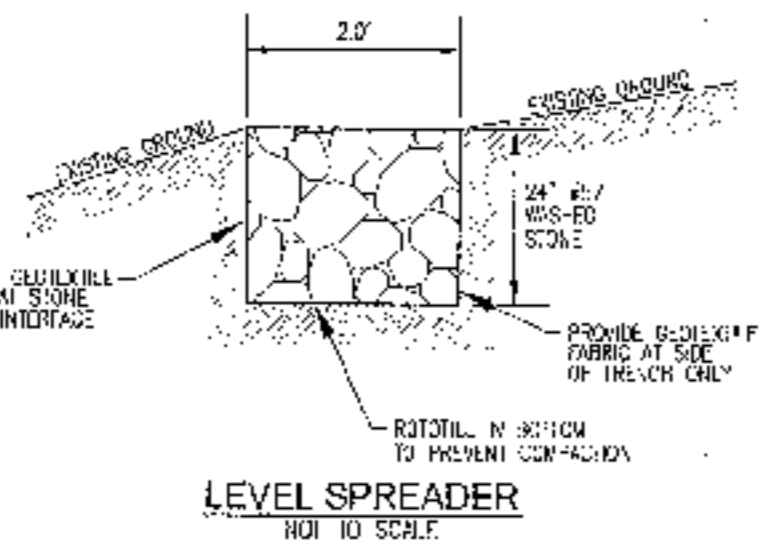
DESIGNER: Rob Vogel

10 SHEET OF 17

N-2. DISCONNECTION OF NON ROOFTOP RUNOFF

CONSTRUCTION CRITERIA: THE FOLLOWING ITEMS SHOULD BE ADHERED TO IN THE CONSTRUCTION OF PROJECTS WITH PLANNED ROOFTOP DISCONNECTIONS:

- EROSION AND SEDIMENT CONTROL MEASURES AND SEDIMENT CONTROL PRACTICES (E.S., SEDIMENT TRAPS) SHALL NOT BE LOCATED IN AREAS RECEIVING DISCONNECTED RUNOFF
- SITE DISTURBANCE: CONSTRUCTION VEHICLES AND EQUIPMENT SHOULD AVOID AREAS RECEIVING DISCONNECTED RUNOFF TO MINIMIZE DISTURBANCE AND COMPACTION SENSITIVE AREAS



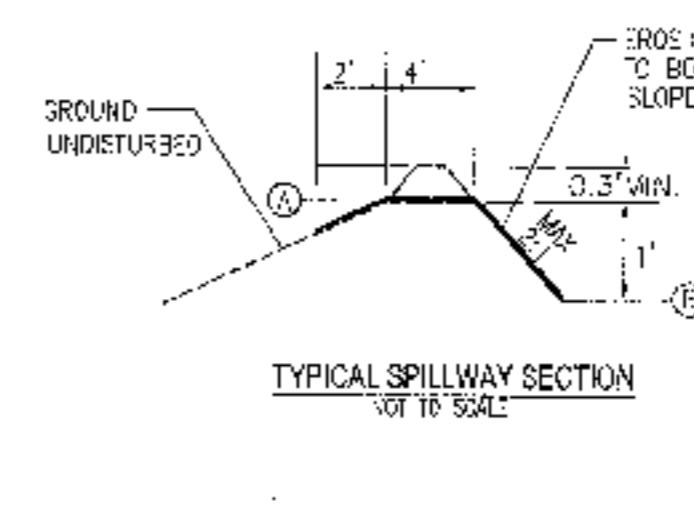
Appendix A. Landscaping Criteria for Stormwater Management - Bioretention Criteria

Table with 3 columns: Plant Name, Species, and Recommended Location. Lists plants like Arbutus menziesii, Rosa rugosa, etc., and their suitable locations like 'Decorative shrubbery', 'Perennial garden', etc.

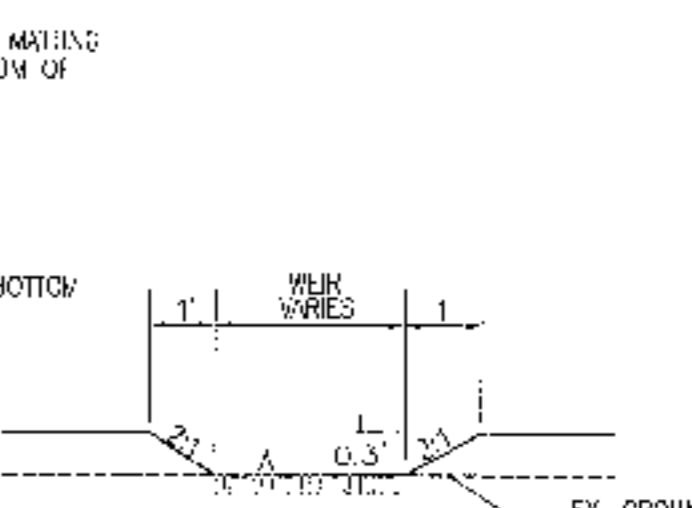
Table titled 'VICEROY SOLAR - SDP - ESDV COMPUTATIONS'. It contains columns for 'VICEROY SOLAR - SDP - ESDV COMPUTATIONS', 'VICEROY SOLAR - SDP - ESDV COMPUTATIONS', and 'VICEROY SOLAR - SDP - ESDV COMPUTATIONS'. It lists various data points and calculations related to stormwater management.

Table titled 'MICRO-BIORETENTION FACILITY - DESIGN ELEVATION ON PROFILES'. It lists design elevations for different parts of the facility, such as 'PROPOSED 500' and 'EXISTING 500'.

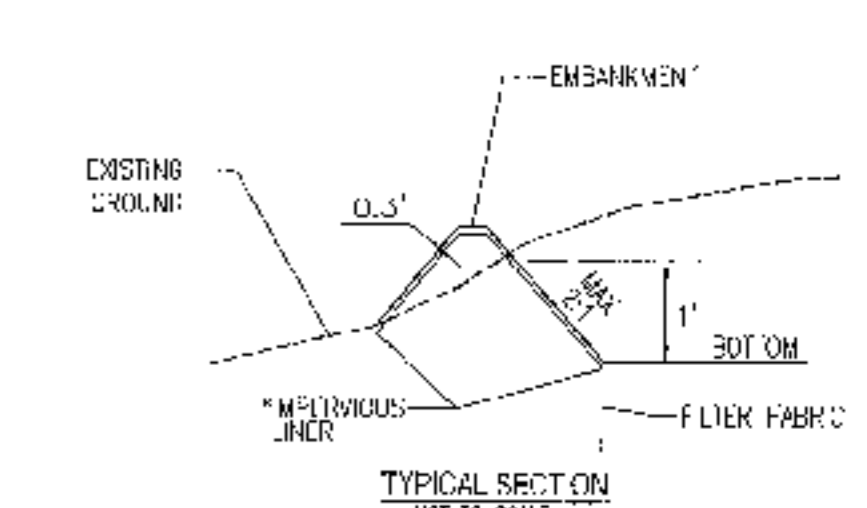
Table titled 'TEST PIT DATA'. It contains columns for 'TEST PIT', 'APPROX. ELEVATION', 'APPROX. DEPTH', 'INSTRUMENT', 'ELEV. (DEPTH)', 'BELOW', and 'NOTES'. It provides data for test pits 7-1, 7-1A, and 7-3.



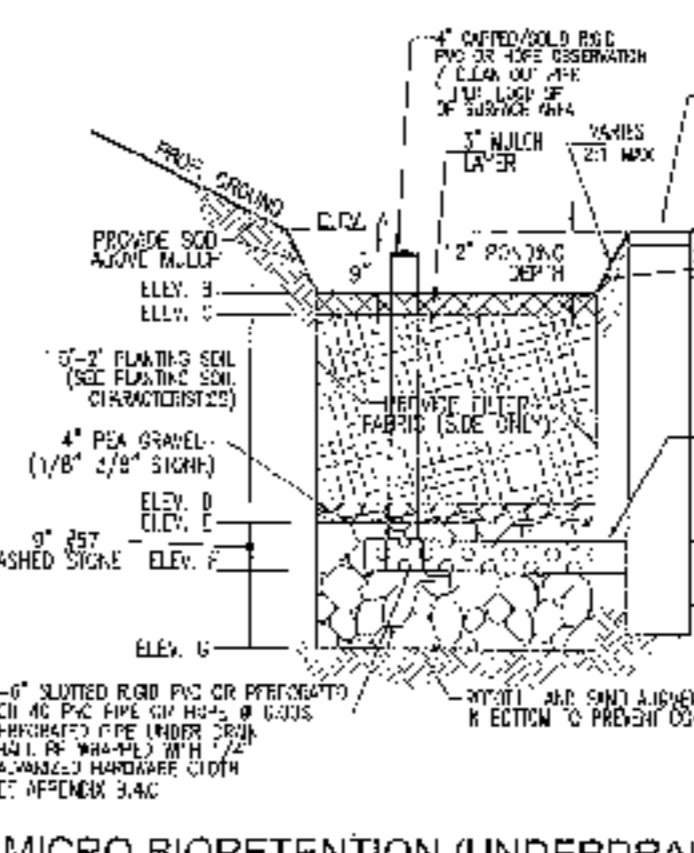
DETAIL WEIR OUTLET BIORETENTION



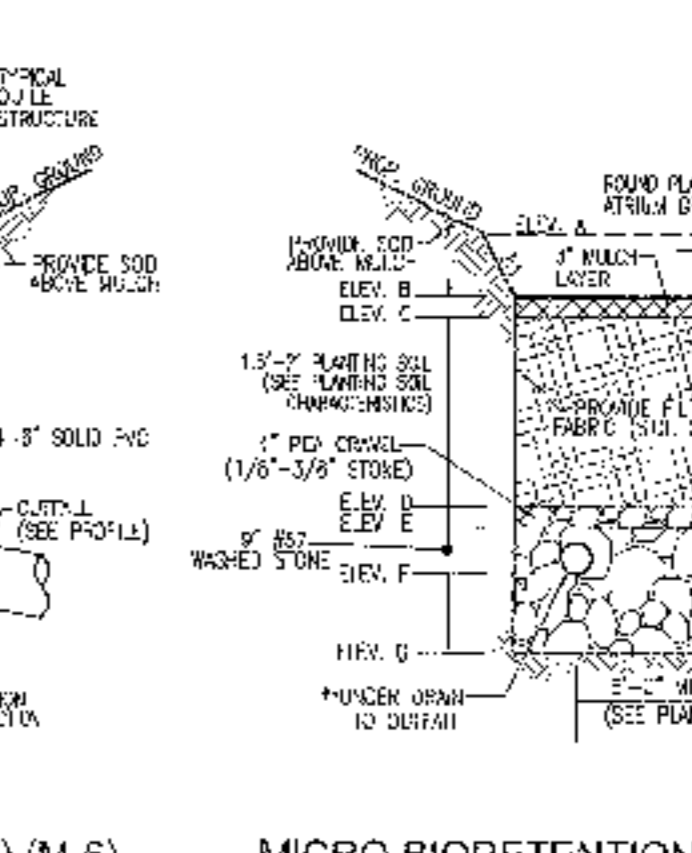
TYPICAL SPILLWAY PROFILE



DETAIL EMBANKMENT



MICRO-BIORETENTION (UNDERDRAIN) (M-6)



MICRO-BIORETENTION (OVERFLOW) (M-6)

3. COMPACTION: IT IS VERY IMPORTANT TO MAINTAIN COMPACTION OF BOTH THE ROOF OF BIORETENTION PRACTICES AND THE DISTURBED AREAS. THE CONTRACTOR SHOULD USE THE FOLLOWING PRACTICES TO MAINTAIN COMPACTION:

4. PLANT MATTER: RECOMMENDED PLANT MATTER FOR MICRO-BIORETENTION PRACTICES CAN BE FOUND IN APPENDIX A, SECTION A-2.3.

5. PLANT INSTALLATION: PLANT INSTALLATION SHOULD BE PERFORMED BY A QUALIFIED PERSONNEL. THE CONTRACTOR SHALL FOLLOW THE FOLLOWING PRACTICES TO MAINTAIN COMPACTION:

6. UNDERDRAINS: UNDERDRAINS SHOULD BE INSTALLED IN ACCORDANCE WITH THE FOLLOWING PRACTICES: 1. PIPE - 4\"/>

7. MISCELLANEOUS: THESE PRACTICES MAY NOT BE CONSTRUCTED UNTIL ALL CONTRIBUTING DRAINAGE AREAS HAVE BEEN STABILIZED.

1. TABLE A.4 IS TAKEN FROM THE '2000 MARYLAND STORMWATER DESIGN MANUAL, VOLUME 1 - APPENDIX A.'

2. CONTRACTOR SHALL BE FAMILIAR WITH APPENDIX A.4.C. CONSTRUCTION SPECIFICATIONS AND PART B.4.1. MATERIAL SPECIFICATIONS IN SECTION 'C' 2000 MARYLAND STORMWATER DESIGN MANUAL - VOLUME 1 - APPENDIX A.

3. NO TESTS SHALL BE PERFORMED WITHIN A MICRO-BIORETENTION FACILITY. USE ONLY SHRUB OR HERBACEOUS SPECIES.

4. WHERE TABLE A.4 IS FOR INFORMATIONAL PURPOSES ONLY. LANDSCAPE CONTRACTOR SHALL INSTALL PLANTINGS SPECIFIED OR USE APPROXIMATE EQUAL SPECIES WHICH ARE TOLERANT TO FLOoding WATER LEVELS.

5. PLANTINGS SHOWN HEREIN ARE THE RESPONSIBILITY OF THE DEVELOPER TO INSTALL DURING THE CONSTRUCTION OF THIS FINAL PLAN.

Table titled 'Appendix B.4. Construction Specifications for Environmental Site Design Plans'. It lists specifications for various materials and plants used in the bioretention facility.

'MICRO-BIORETENTION/BIORETENTION' PLANTING SCHEDULE NOTES

- 1. ALL PLANT MATERIALS SHALL BE FULL AND HEAVY, 2\"/>
- 2. ACCORDANCE WITH HOWARD COUNTY PLANNING SPECIFICATIONS.
- 3. FINAL LOCATION OF PLANT MATERIAL MAY VARY TO VARY TO MEET FINAL FIELD CONDITIONS. TREES SHALL NOT BE PLANTED IN THE BOTTOM OF URNANCE SWALES.

Table titled 'BIORETENTION PLANTING SCHEDULE (SHRUB/ORNAMENTAL/GRASSES)'. It lists plant species, codes, and sizes for the bioretention facility.

Table titled 'BIORETENTION PERENNIALS/GROUND COVER PLANTING SCHEDULE'. It lists plant species, codes, and sizes for the bioretention facility.

Table titled 'MICRO-BIORETENTION (UNDERDRAIN) (M-6)'. It lists plant species, codes, and sizes for the micro-bioretenment facility.

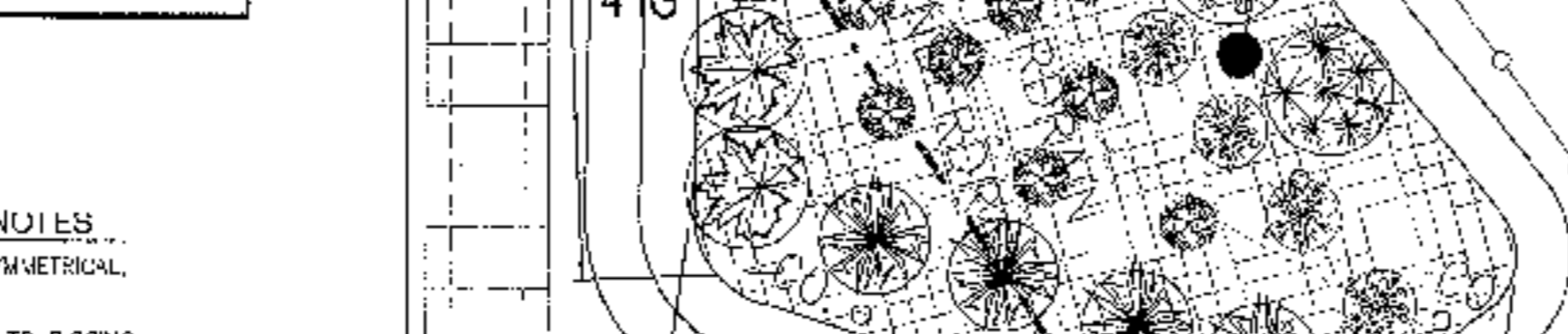
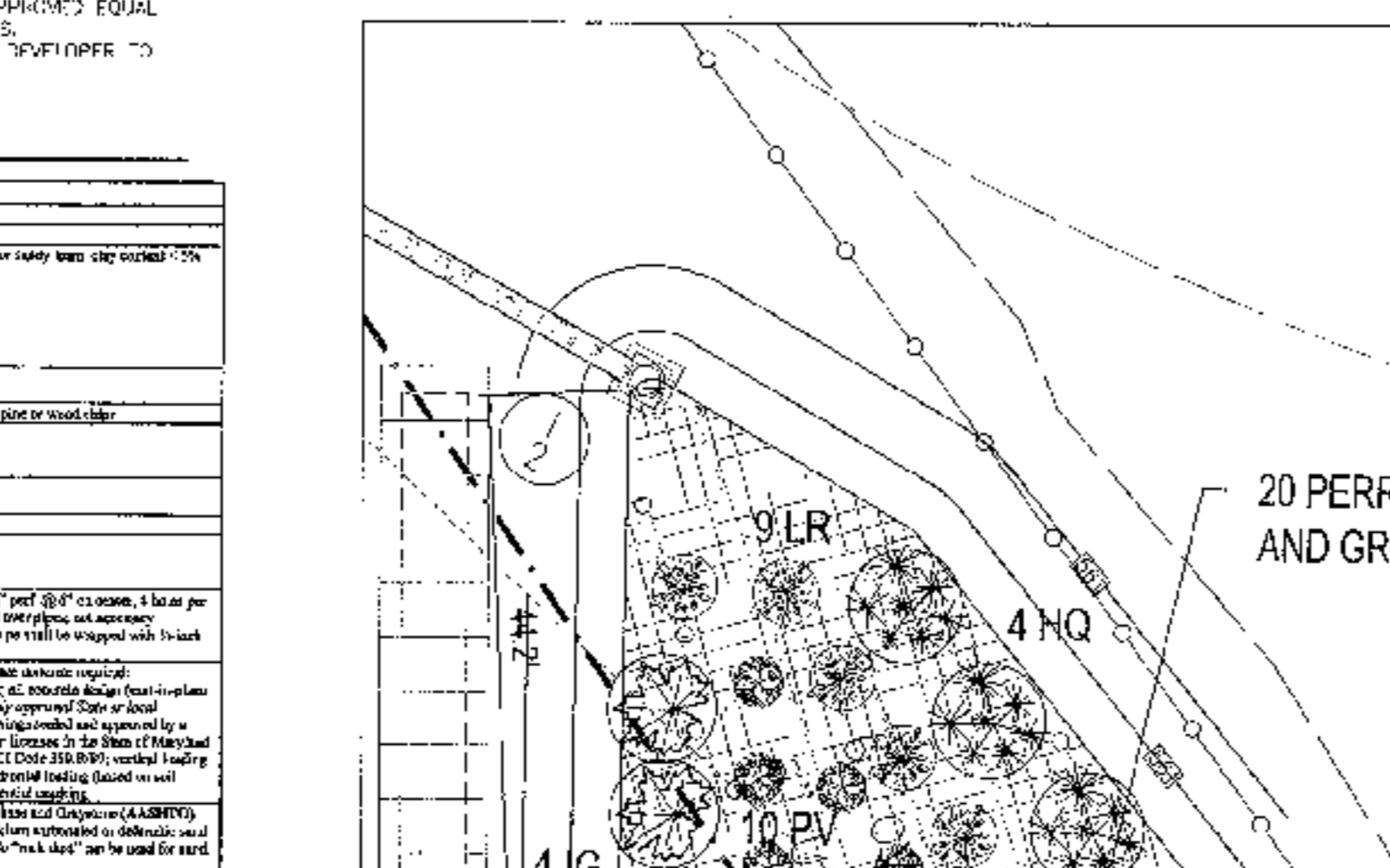


Table titled 'MICRO-BIORETENTION (UNDERDRAIN) (M-6)'. It lists plant species, codes, and sizes for the micro-bioretenment facility.

Table titled 'MICRO-BIORETENTION (OVERFLOW) (M-6)'. It lists plant species, codes, and sizes for the micro-bioretenment facility.

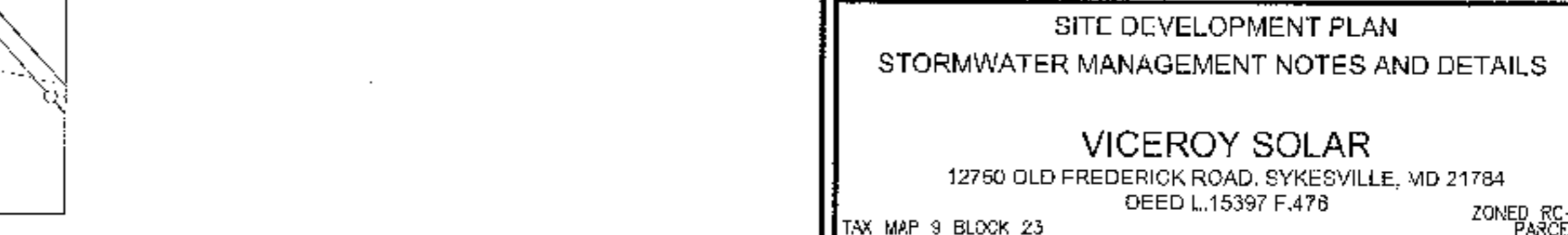
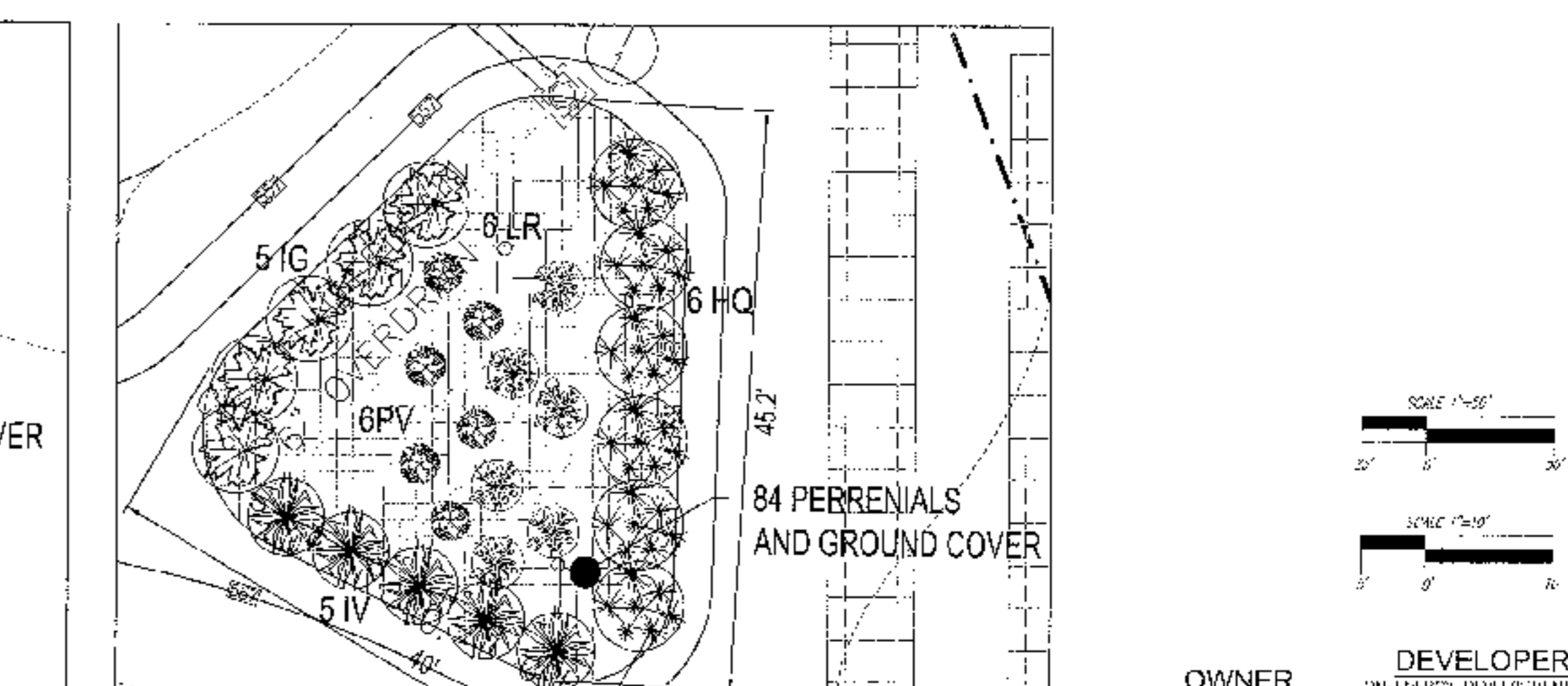


Table titled 'MICRO-BIORETENTION (UNDERDRAIN) (M-6)'. It lists plant species, codes, and sizes for the micro-bioretenment facility.

Table titled 'MICRO-BIORETENTION (OVERFLOW) (M-6)'. It lists plant species, codes, and sizes for the micro-bioretenment facility.

Site development plan information including 'SITE DEVELOPMENT PLAN', 'STORMWATER MANAGEMENT NOTES AND DETAILS', 'VICEROY SOLAR', '12750 OLD FREDERICK ROAD, SYKESVILLE, MD 21784', 'DEED L: 15597 F.478', 'TAX MAP 3 BLOCK 23 3RD ELECTION DISTRICT', 'ZONED RC-BEO PARCEL 15 HOWARD COUNTY, MARYLAND', 'VOGEL ENGINEERING', 'TIMMONS GROUP', '3310 NORTH RIDGE ROAD, SUITE 110, ELLICOTT CITY, MD 21043', 'P: 410.461.7606 F: 410.461.9961 www.timmons.com', 'DESIGN BY: BHV', 'DRAWN BY: BHV', 'CHECKED BY: R.V.', 'DATE: SEPTEMBER 2021', 'SCALE: AS SHOWN', 'W.D. NO.: 41993', '11 SHEET OF 17', 'DEVELOPER: UNENERGY DEVELOPMENT LLC, 2003 WESTVIEW AVENUE, SUITE 225, SCAITIC, VA 9822, P-ONE: 208.922.7070, ATTENTION: KATE LARAIN', 'PROFESSIONAL CERTIFICATE: I HEREBY CERTIFY THAT THESE DOCUMENTS HAVE BEEN PREPARED OR APPROVED BY ME AND THAT I AM A FULLY LICENSED PROFESSIONAL ENGINEER IN THE STATE OF MARYLAND. EXPIRES: 09-30-2022', 'ROBERT H. WHEEL, PE 1616783'

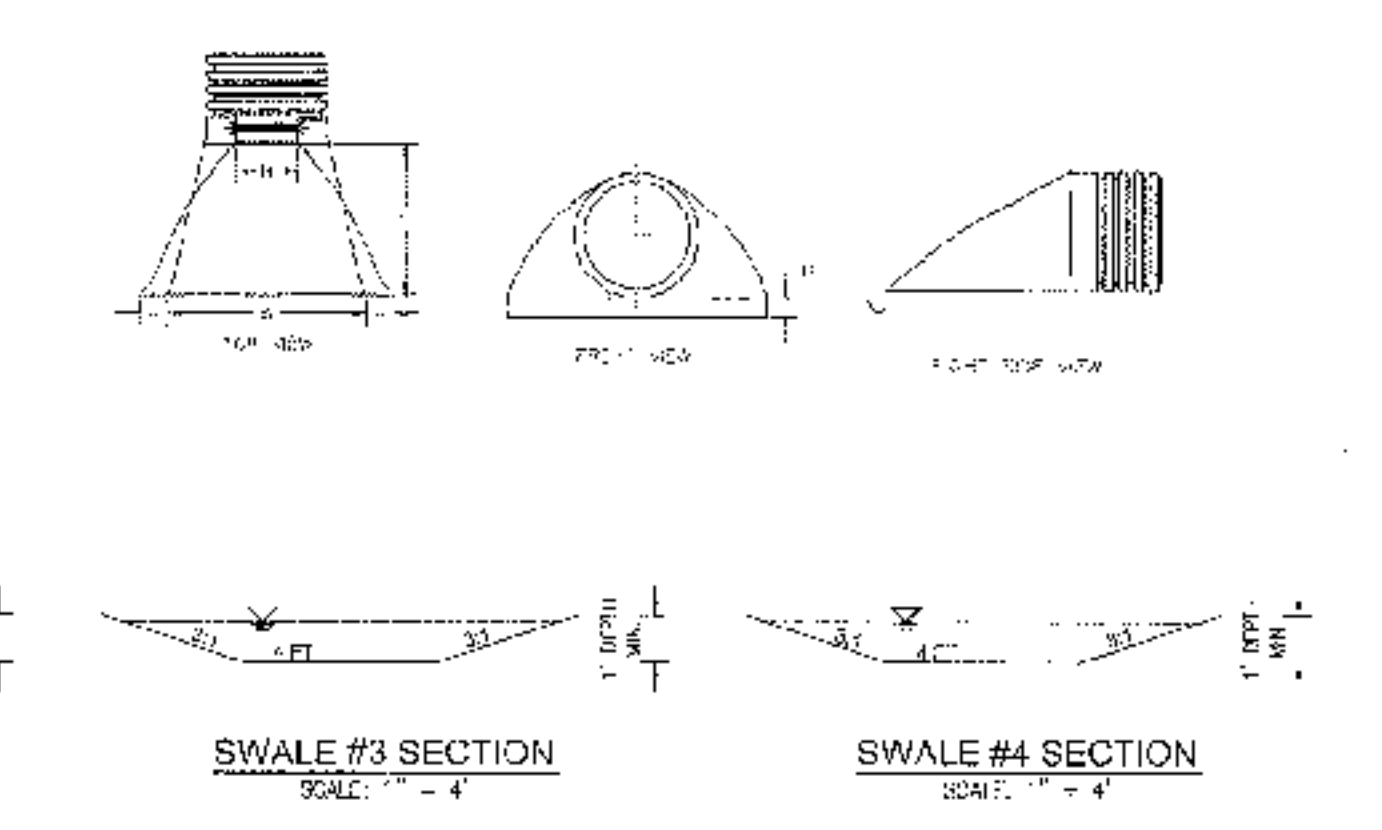
ADS FLARED END SECTION SPECIFICATION

Scope
This specification describes 12- through 36-inch (300 to 900mm) ADS Flared End Sections for use in culvert and drainage outlet applications.

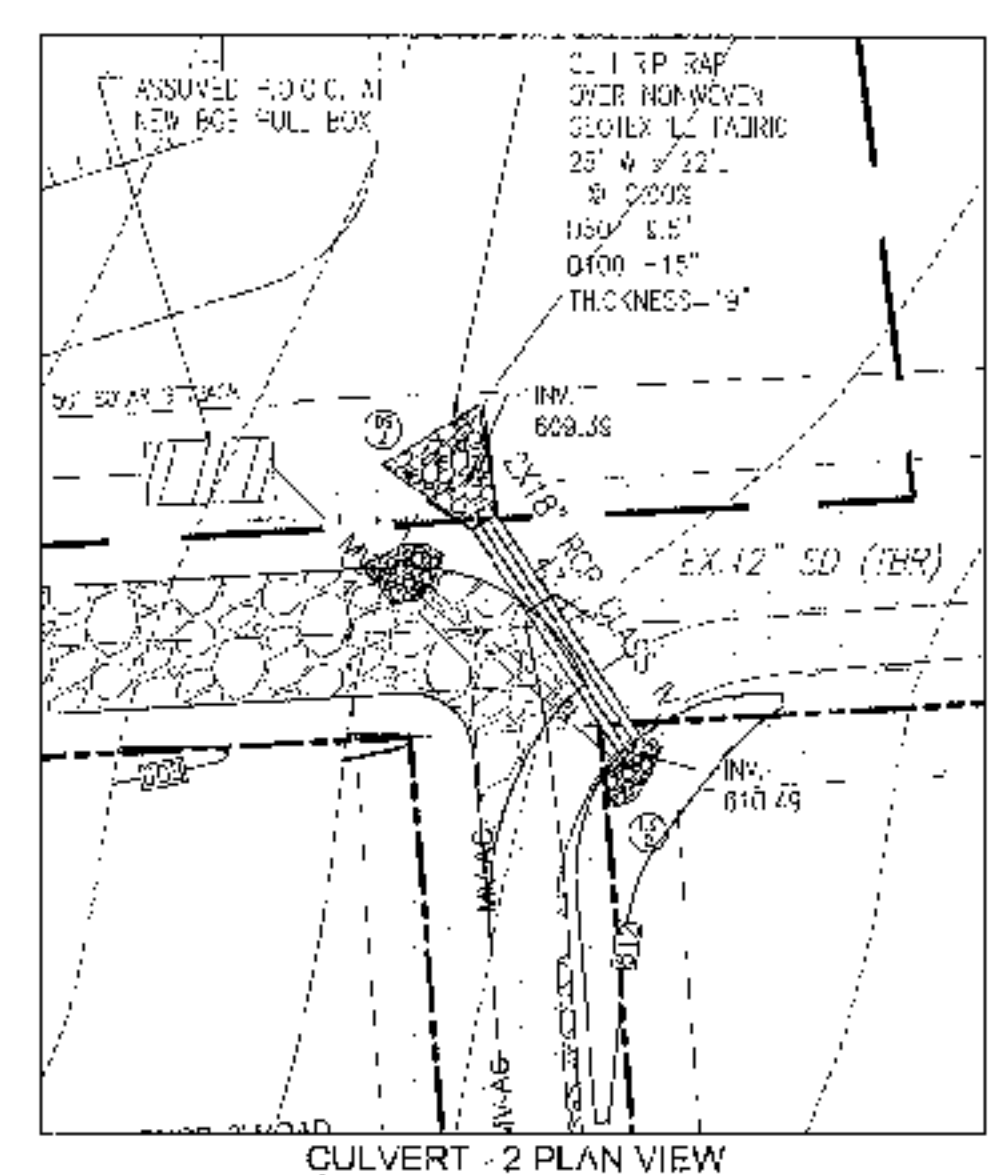
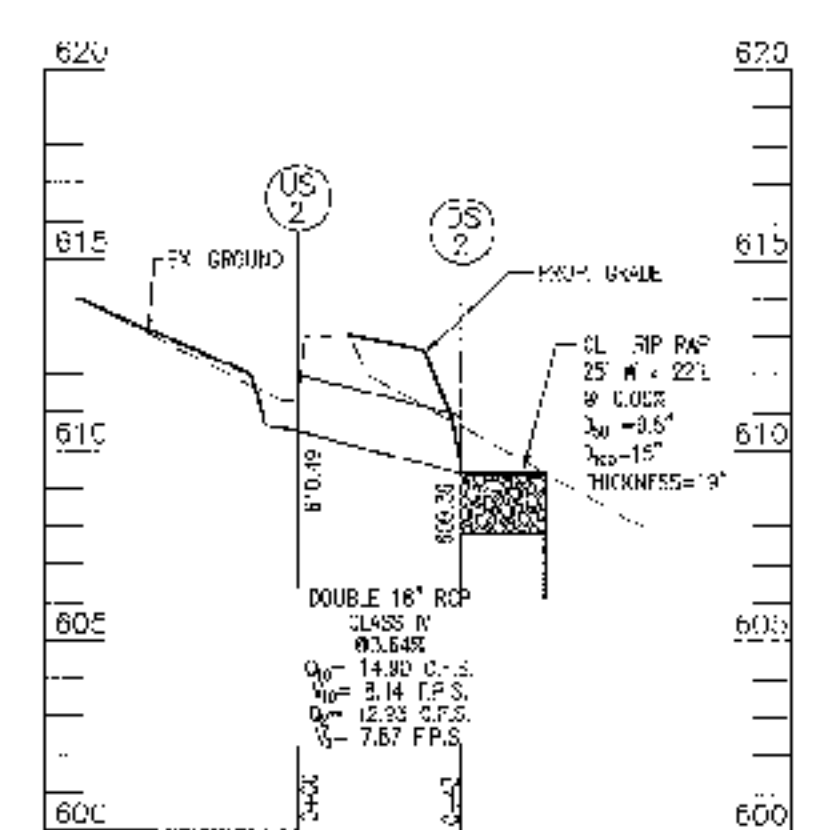
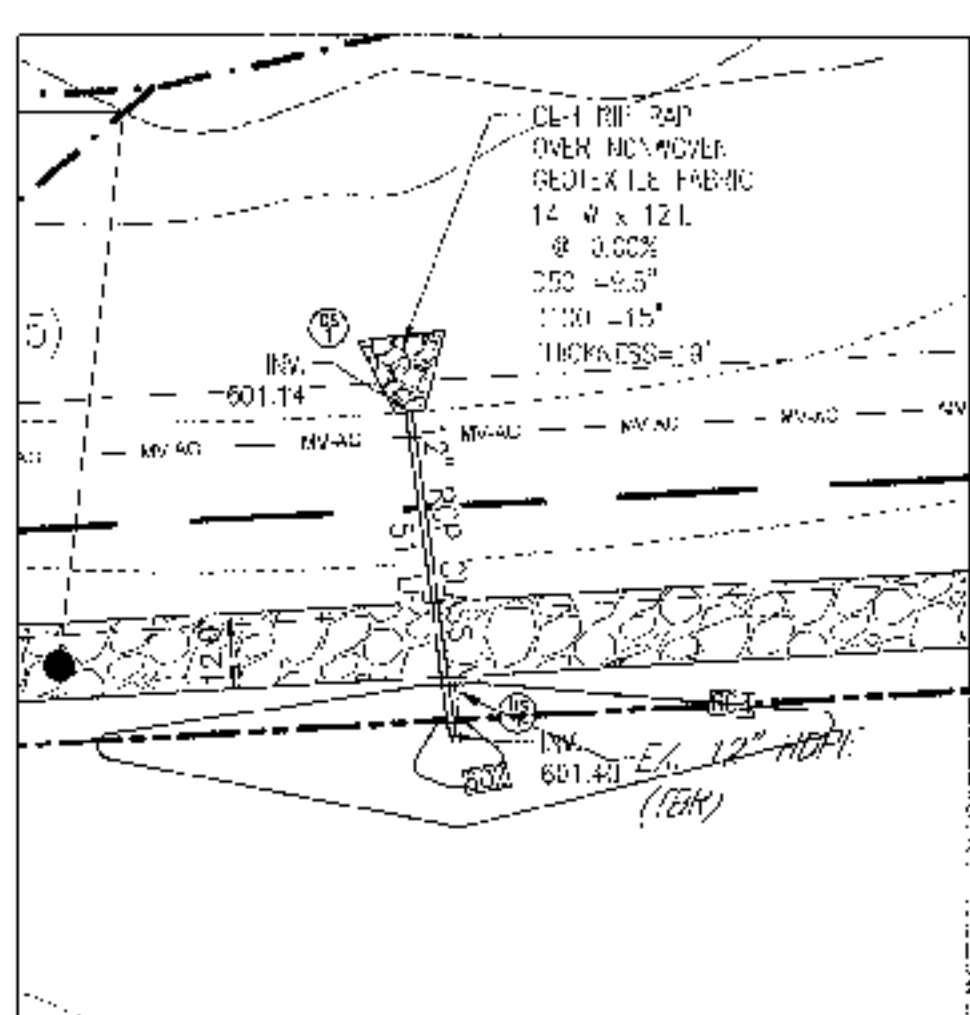
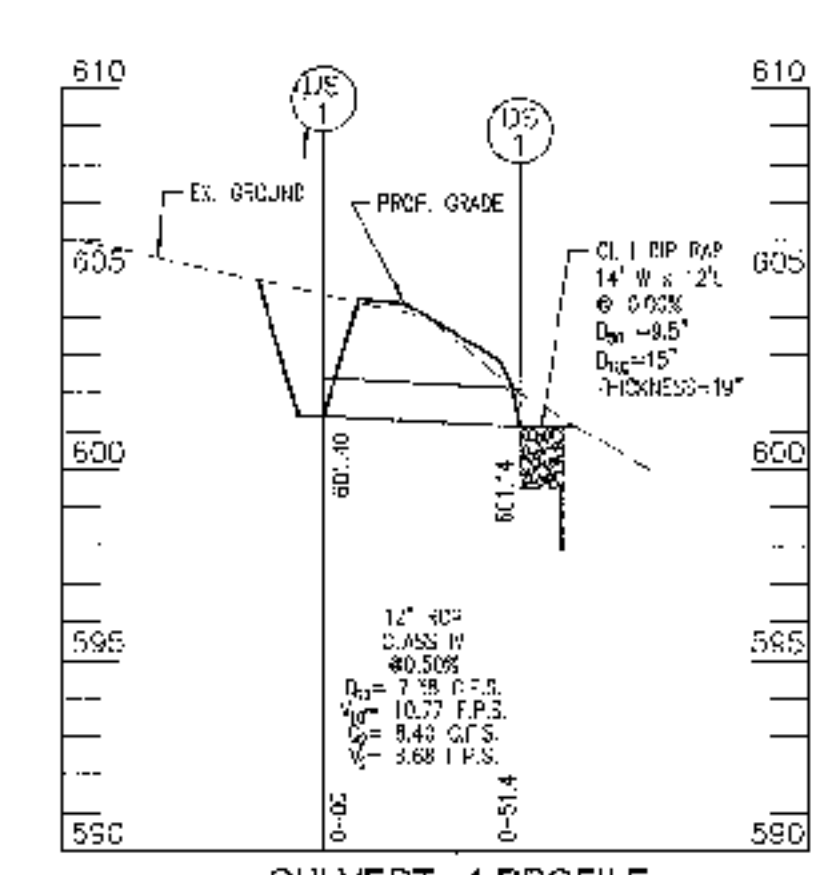
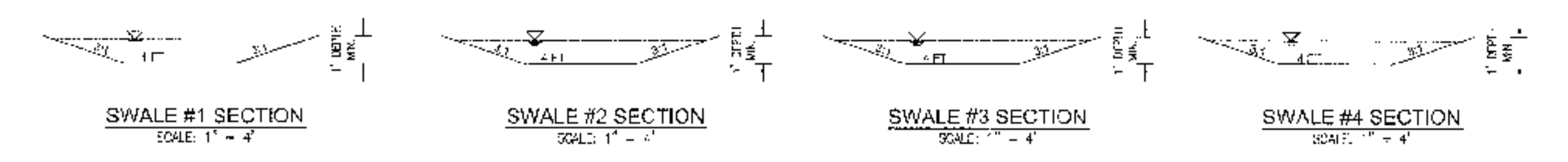
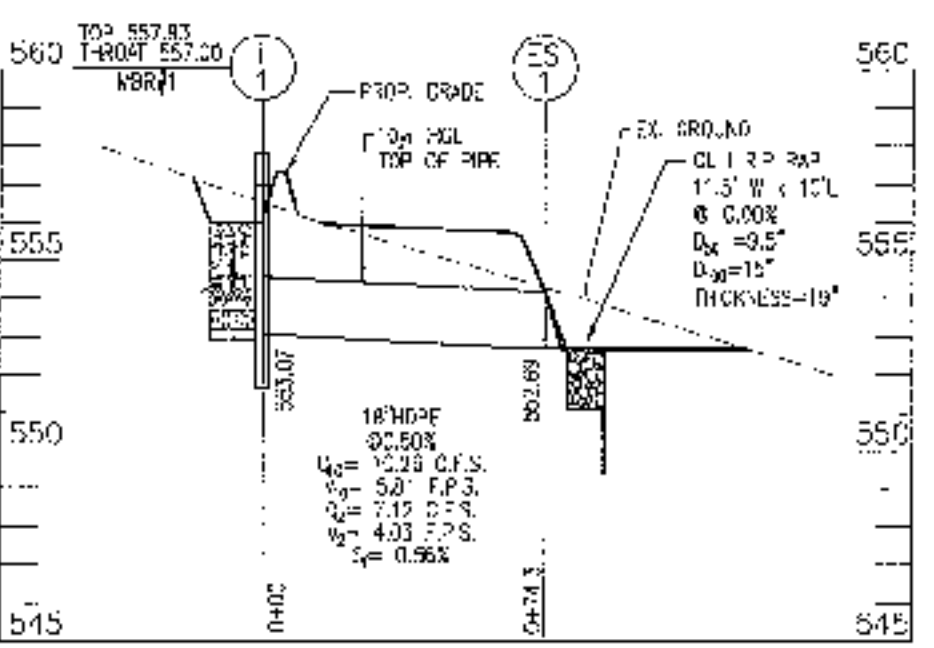
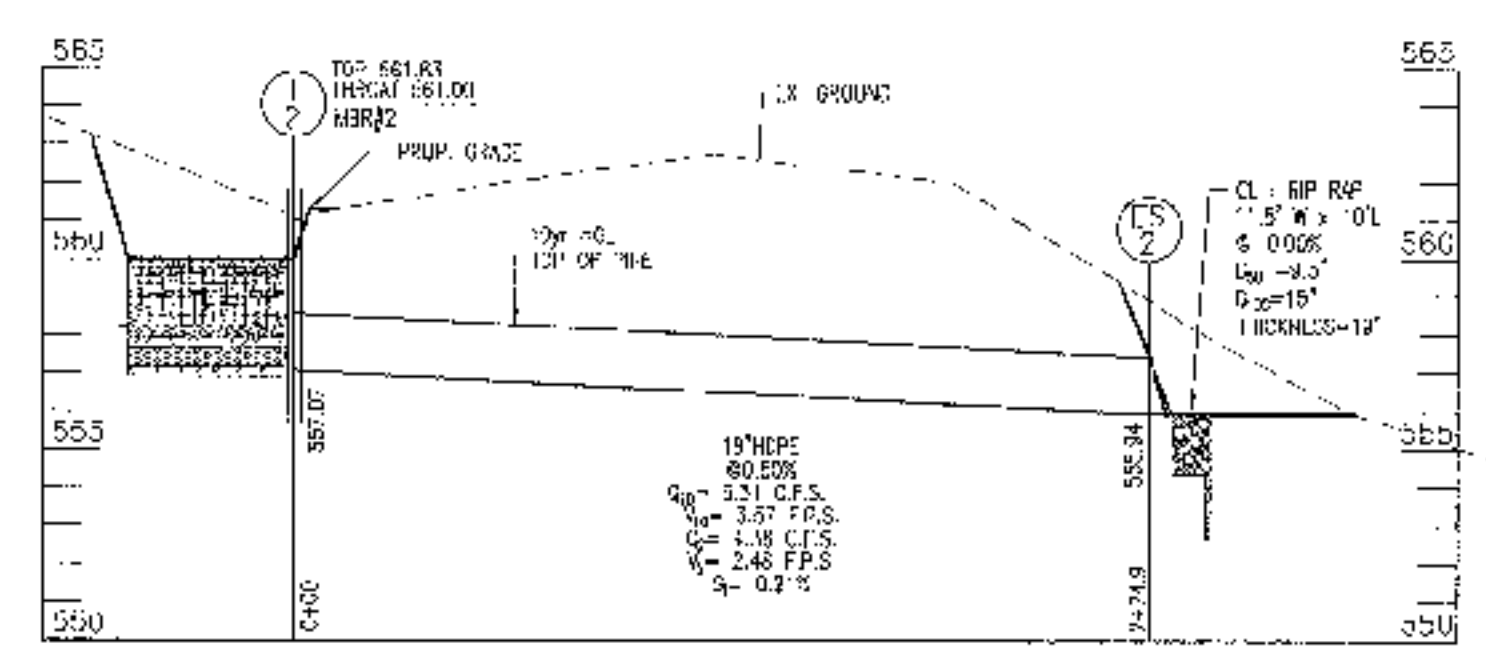
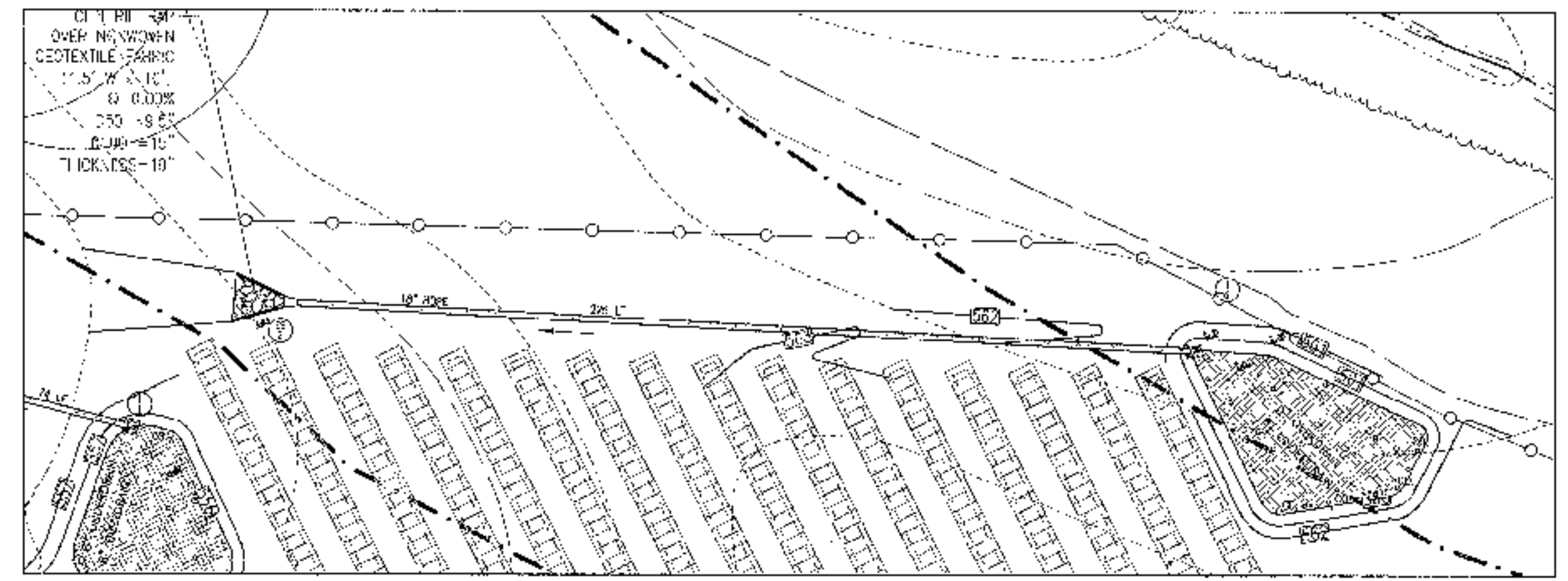
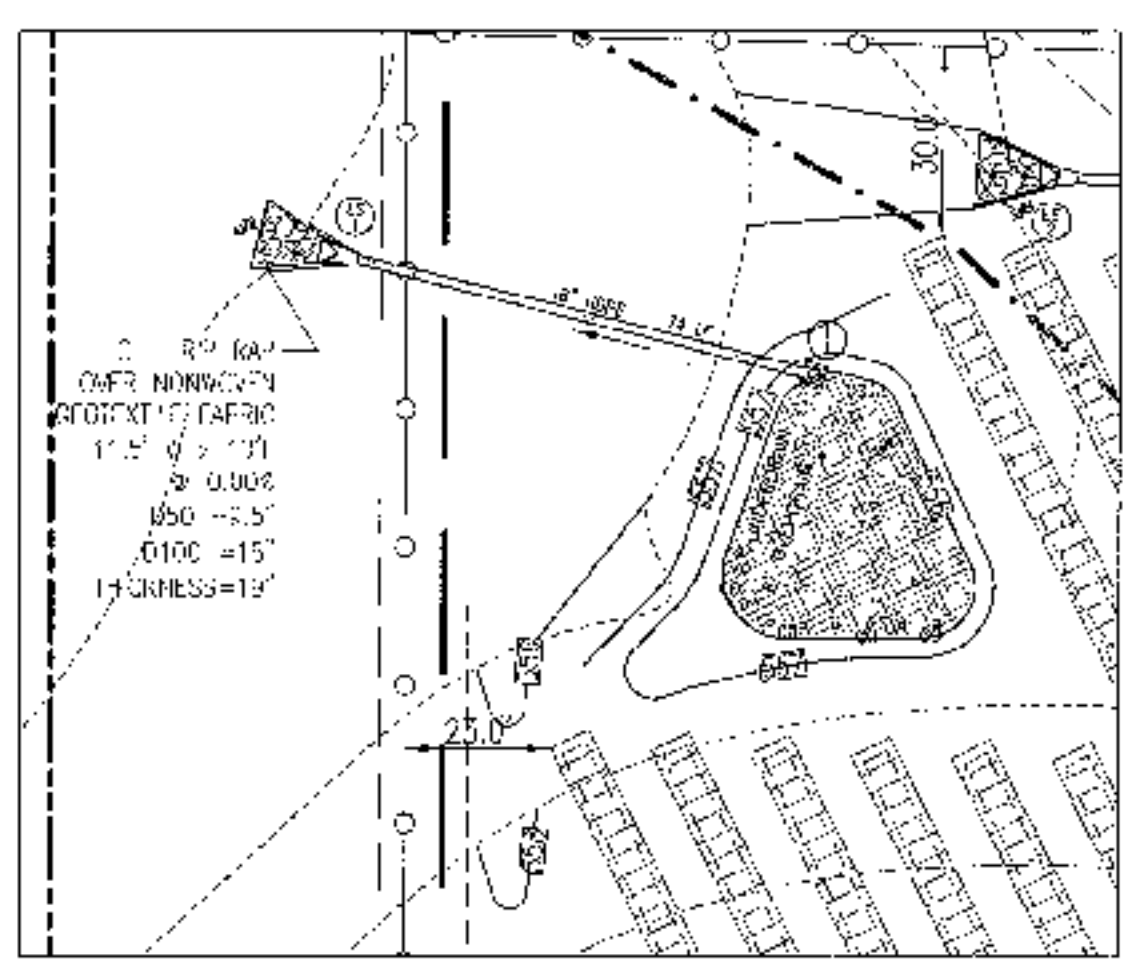
Requirements
The ADS Flared End Section shall be high density polyethylene meeting ASTM D3350 minimum cell classification 2133200; contact manufacturer for additional cell classification information. When provided, the metal flanged fastening, rod shall be stainless steel.

Installation
Installation shall be in accordance with ADS installation instructions and with those issued by state or local authorities. Contact your local ADS representative or visit www.ads-plastic.com for the latest installation instructions.

Dimension	12"	18"	24"	30"	36"
Outside Dia.	12.00	18.00	24.00	30.00	36.00
Inside Dia.	11.50	17.50	23.50	29.50	35.50
Wall Thickness	0.25	0.25	0.25	0.25	0.25
Flange Dia.	12.00	18.00	24.00	30.00	36.00
Flange Thickness	0.50	0.50	0.50	0.50	0.50
Flange Hole Dia.	0.50	0.50	0.50	0.50	0.50
Flange Hole Spacing	1.00	1.00	1.00	1.00	1.00
Flange Hole Diameter	0.50	0.50	0.50	0.50	0.50
Flange Hole Spacing	1.00	1.00	1.00	1.00	1.00
Flange Hole Diameter	0.50	0.50	0.50	0.50	0.50
Flange Hole Spacing	1.00	1.00	1.00	1.00	1.00
Flange Hole Diameter	0.50	0.50	0.50	0.50	0.50
Flange Hole Spacing	1.00	1.00	1.00	1.00	1.00
Flange Hole Diameter	0.50	0.50	0.50	0.50	0.50
Flange Hole Spacing	1.00	1.00	1.00	1.00	1.00



SWALE	TOP WIDTH	DEPTH	SLOPE
SWALE #1	12.00	4.00	0.029
SWALE #2	18.00	4.00	0.036
SWALE #3	24.00	4.00	0.031
SWALE #4	30.00	4.00	0.019



SIZE	PUBLIC/PRIVATE	MATERIAL	LENGTH
2"	PRIVATE	ROP CLASS IV	51
4"	PRIVATE	ROP CLASS IV	26
6"	PRIVATE	HOPE	289

STRUCTURE	TYPE	AV IN	INV. OUT	TOP ELEV.	DETAIL	LOCATION	REMARKS
I-1	D INLET	---	557.87	537.85	D-4.13	K: 605,317.95 L: 1,525,715.42	(1) PRIVATE
I-2	D INLET	---	557.87	551.83	D-4.13	K: 605,210.76 L: 1,523,951.92	(1) PRIVATE
US-1	18" HOPE	---	562.69	554.19	THIS SHEET	K: 605,350.35 L: 1,523,827.57	(2) PRIVATE
CS-2	18" HOPE	---	527.44	502.44	THIS SHEET	K: 605,321.15 L: 1,523,795.57	(2) PRIVATE

(1) COORDINATE FOR PROPOSED STRUCTURES - CENTERLINE OF STRUCTURE
(2) COORDINATE FOR END SECTION - CENTERLINE OF PIPE OR DOWNSTREAM FACE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
 Chief Administrator: *Chad Edmondson* 12/23/2021
 Director: *Angy Strawn* 12/28/2021

OWNER
VICEROY SOLAR, LLC
C/O STANDARD SOLAR, INC.
830 GAITHER ROAD, SUITE 900
ROCKVILLE, MD 20850
PHONE: 301-844-1107

DEVELOPER
ENERGY DEVELOPMENT LLC
2033 WESTER AVENUE
SUITE 225
SEATTLE, WA 98127
PHONE: 206-822-7072
ATTENTION: KATE LARVIN

SITE DEVELOPMENT PLAN
STORMWATER MANAGEMENT NOTES AND DETAILS
STORM DRAIN AND CULVERT PROFILES

2750 OLD FREDERICK ROAD, SYKESVILLE, MD 21781
DEED L: 15397 F: 476

TAX MAP 9, BLOCK 23
3RD ELECTION DISTRICT

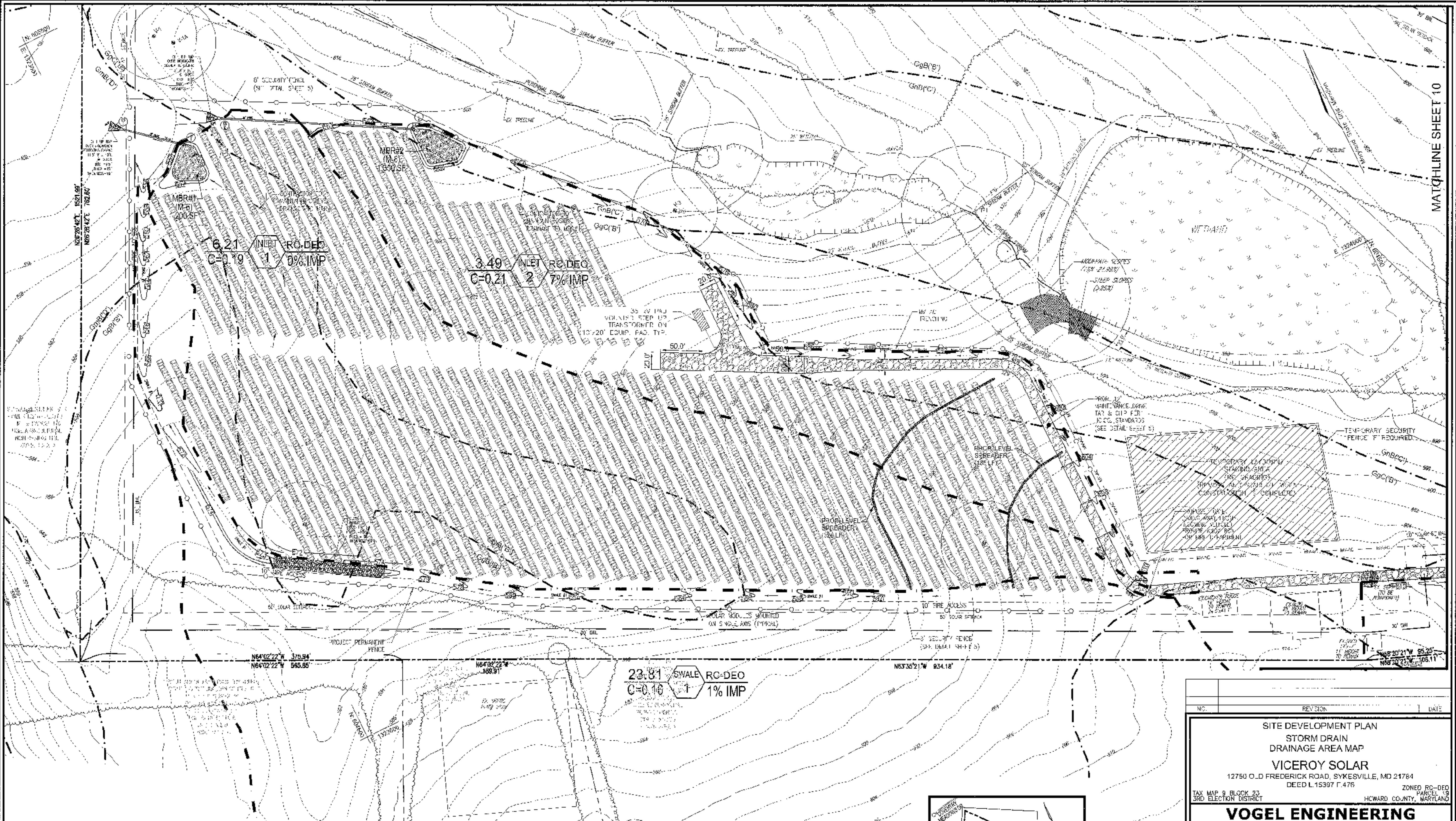
ZONED RC-DEO
PARCEL 15
HOWARD COUNTY, MARYLAND

VOGEL ENGINEERING
TIMMONS GROUP
 3300 NORTH RIDGE ROAD, SUITE 110, BELLCOTT CITY, MD 21043
 P: 410.461.7666 F: 410.461.8561 www.timmons.com

PROFESSIONAL CERTIFICATE
 I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A QUALIFIED PROFESSIONAL ENGINEER UNDER THE PROVISIONS OF THE PROFESSIONAL ENGINEERING ACT OF 1981, EXPIRING DATE 05/31/2022.

DESIGN BY: RHY
 DRAWN BY: JPH
 CHECKED BY: RHY
 DATE: 09/14/2021
 SCALE: AS SHOWN
 P.L. NO.: 4-923

12 SHEET OF 17

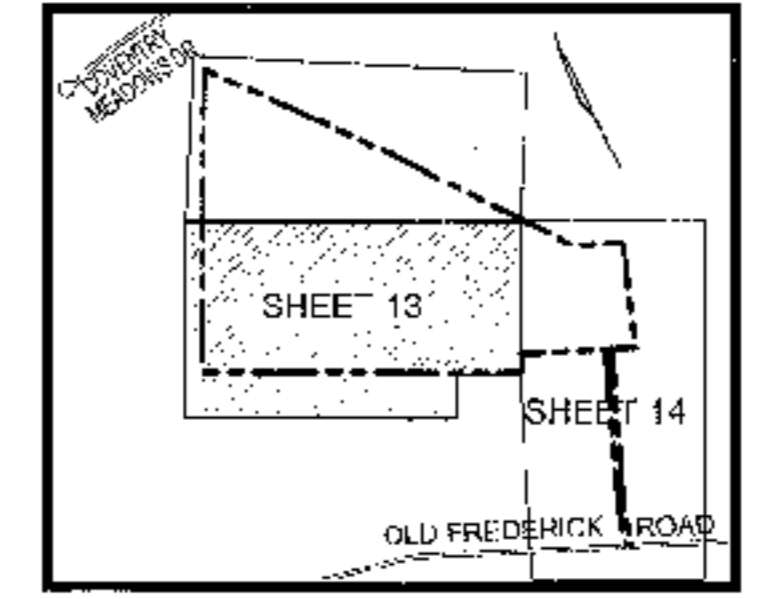
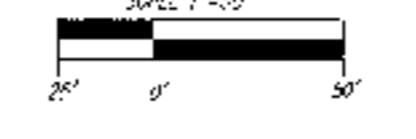


APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
 12/23/2021
 CHIEF DEVELOPMENT ENGINEERING DIVISION
 DATE
 12/28/2021
 CHIEF DIVISION OF LAND DEVELOPMENT
 DATE
 12/28/2021
 DIRECTOR

- LEGENDS:**
- PARCEL BOUNDARY
 - 50' SOLAR SETBACK
 - STREAM CENTERLINE
 - STREAM BUFFER
 - ALTITUDE
 - EXISTING CONTOUR (10')
 - PROPOSED CONTOUR (2')
 - SOILS BOUNDARY
 - EXISTING TIE-IN
 - UNDEVELOPED METAL ROOF
 - ORANGE AREA
 - PROPOSED SWALE ACCESS ROAD
 - TEMPORARY ACCESS / STAGING AREA
 - TRANSFORMER PAD
 - PROPOSED TIE-IN
 - TEMPORARY SECURITY FENCE
 - PROPOSED CONTOUR (10')
 - PROPOSED CONTOUR (2')
 - STORM DRAIN
 - SLOPES (1:30-24:900)
 - SLOPES (>25%)
 - MUD-DEPOSITION (M-D)

STORM DRAIN DRAINAGE AREA MAP

SCALE: 1"=50'



KEY MAP
 NOT TO SCALE

SITE DEVELOPMENT PLAN
STORM DRAIN DRAINAGE AREA MAP
VICEROY SOLAR
 12750 O.D. FREDERICK ROAD, SYKESVILLE, MD 21784
 DEED L.15397 F.476
 TAX MAP 9 BLOCK 23 3RD ELECTION DISTRICT
 ZONED RC-DEO
 PARCEL 19
 HOWARD COUNTY, MARYLAND

VOGEL ENGINEERING
 TIMMONS GROUP
 3300 NORTH RIDGE ROAD, SUITE 110, ELLICOTT CITY, MD 21043
 P: 410.461.7666 F: 410.461.8961 www.timmons.com

OWNER
 VICEROY SOLAR, LLC
 C/O STANDARD SOLAR, LLC
 530 GAITHER ROAD, SUITE 300
 ROCKVILLE, MD 20850
 PHONE: 301-044-5192

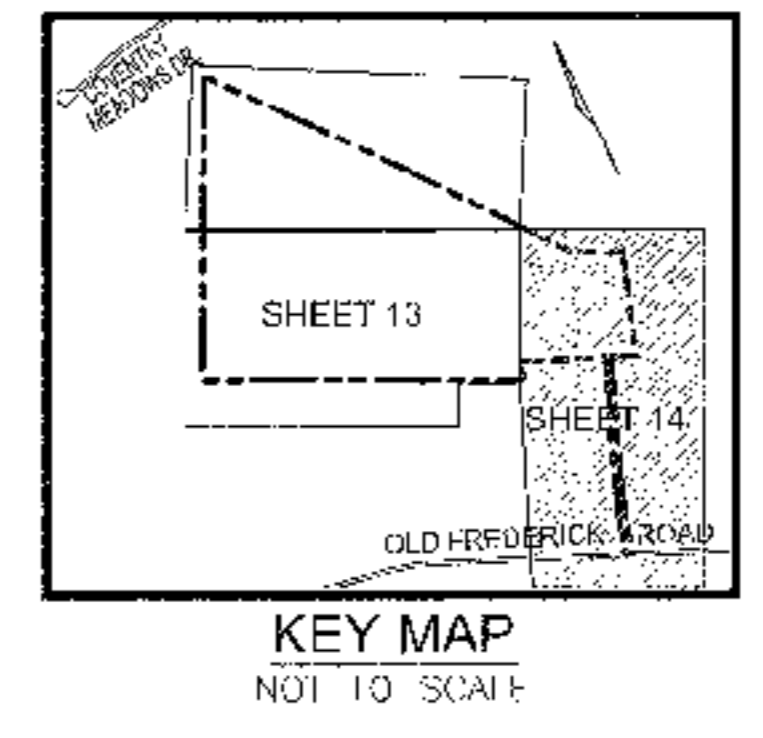
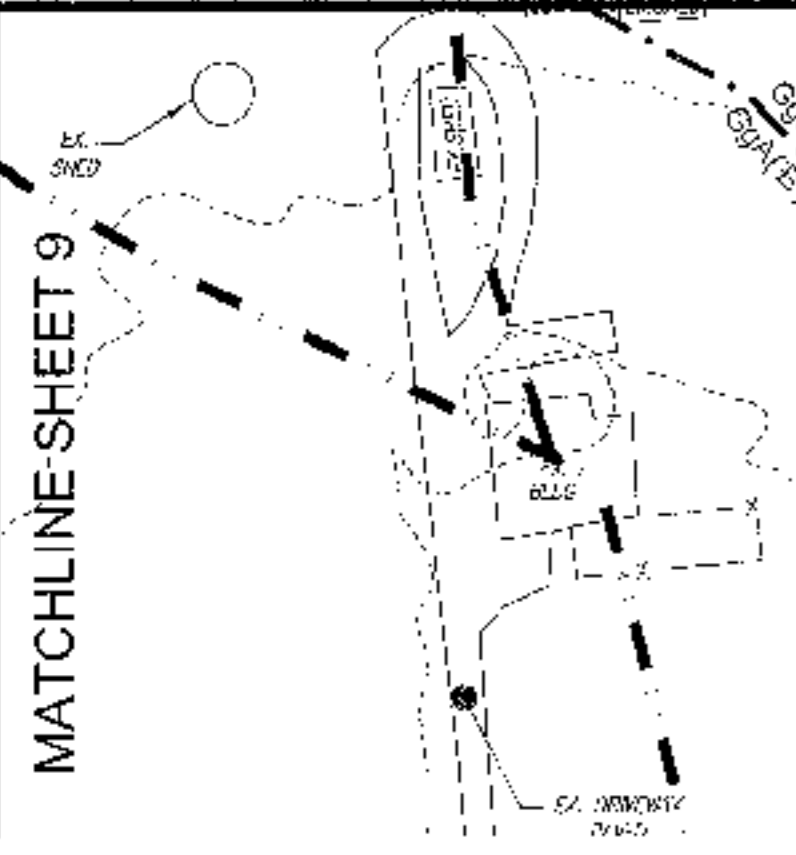
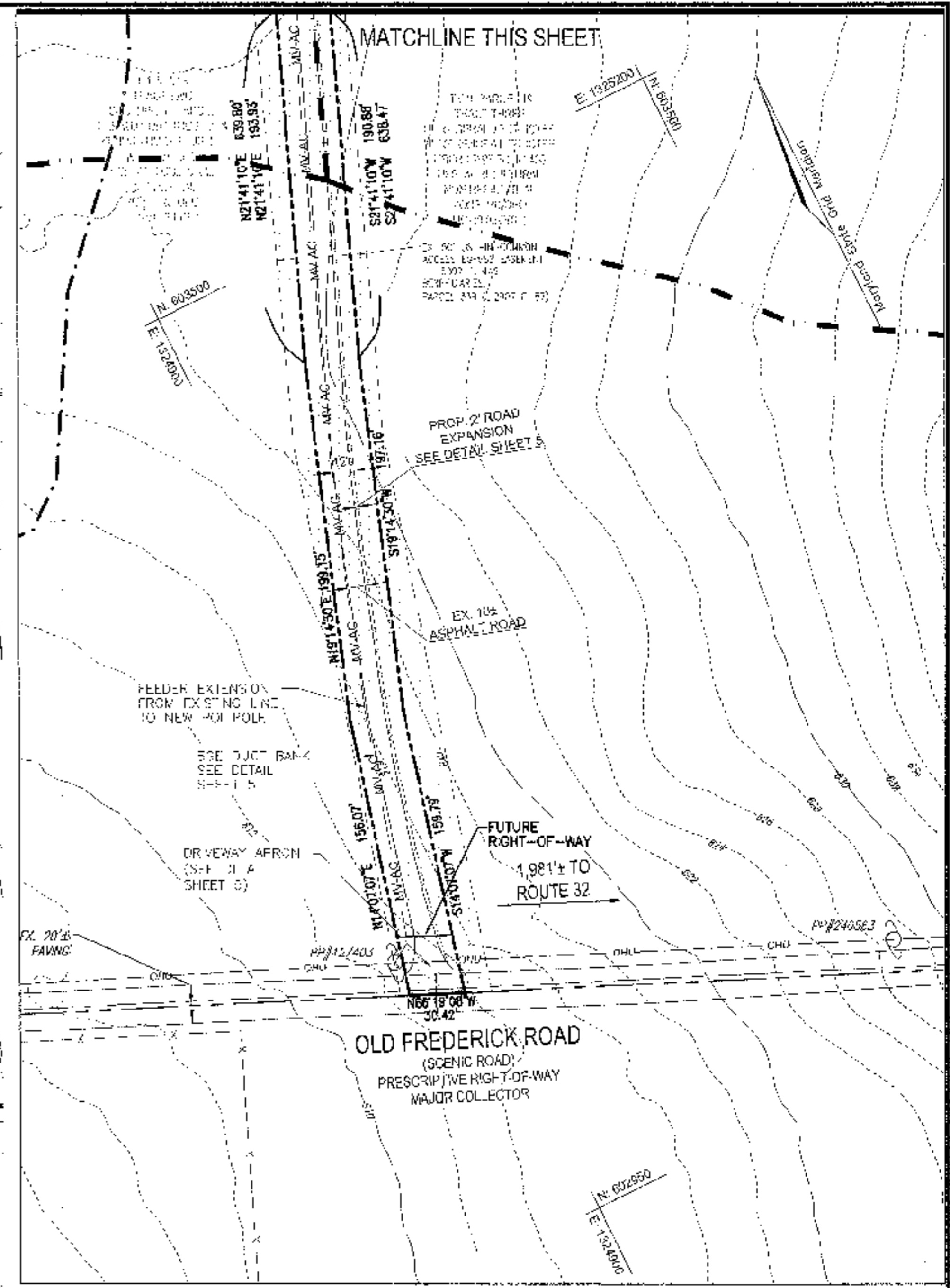
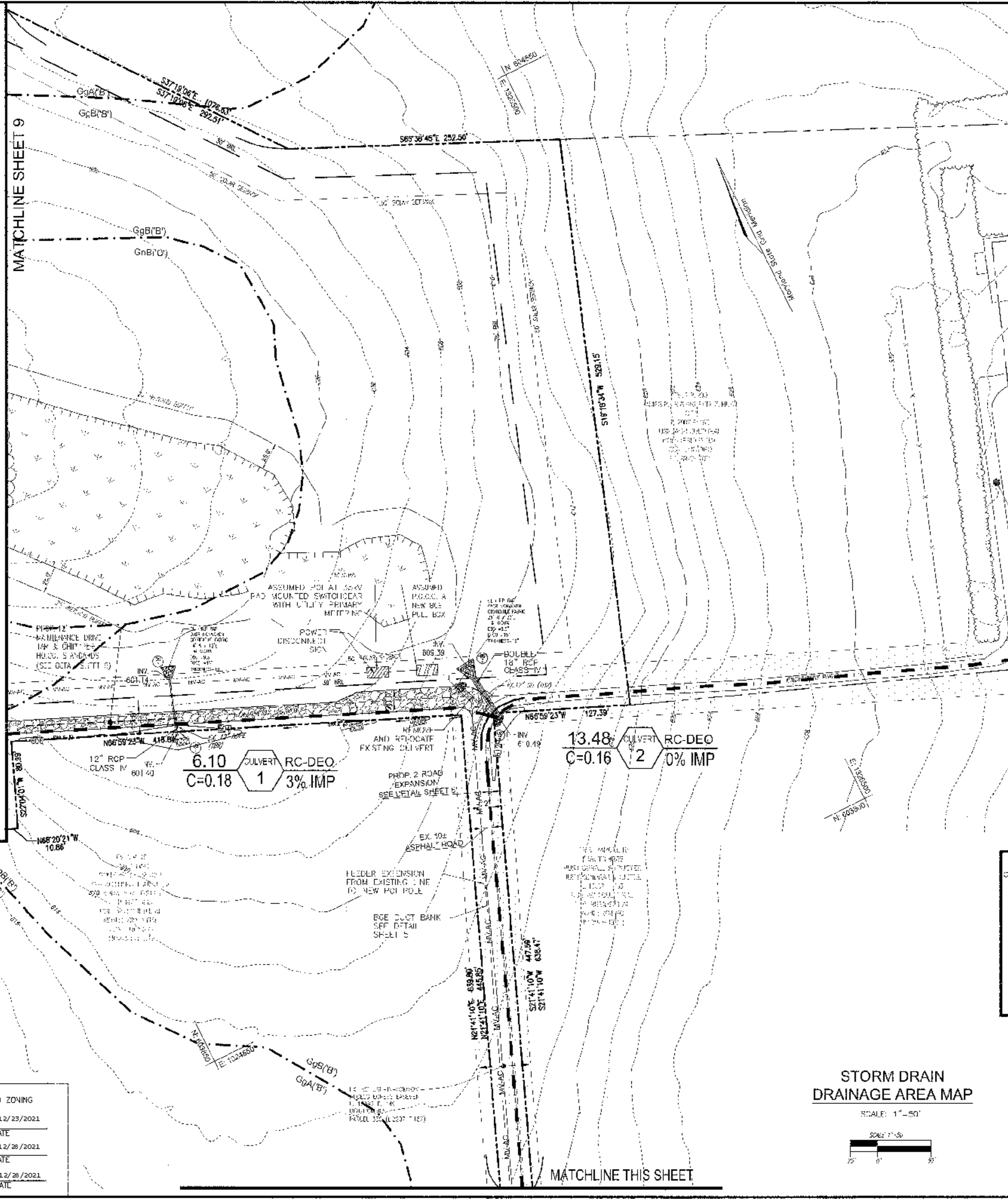
DEVELOPER
 VICEROY DEVELOPMENT, LLC
 SUITE 223
 2903 WESTERN AVENUE
 SEATTLE, WA 98121
 PHONE: 206-922-7072
 ATTENTION: KATIE ARKIN

DESIGN BY: RHY
 DRAWN BY: IMB
 CHECKED BY: RHY
 DATE: SEPTEMBER 2021
 SCALE: AS SHOWN
 W.O. NO.: 11893

PROFESSIONAL CERTIFICATE
 I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR SUPERVISED BY ME AND THAT I AM A duly Licensed Professional Engineer under the laws of the State of Maryland, License No. 16188, EXPIRES DATE 08-31-2022

13 SHEET OF 17

- LEGENDS:**
- PARCEL BOUNDARY
 - 60' SOLAR SETBACK
 - WETLAND
 - WETLAND BUFFER
 - EXISTING CONTOUR (10')
 - EXISTING CONTOUR (2')
 - SOILS BOUNDARY
 - EXISTING TIELINE
 - EXISTING OVERHEAD LINE
 - IMPROVED ASPHALT DRIVEWAY
 - NEW ACCESS ROAD
 - ERODIBLE SOILS
 - EX. 50 USE 1/4 CORNER ACCESS EVIDENCE (LASH) 1/2 15397 F. 443
 - SWITCH GRAB
 - METERING / DISCONNECT
 - PROPOSED CONDUIT (12")
 - IMPROVED CONDUIT (2")
 - STORM DRAIN
 - UPGRADE AREA



APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Clara Edmondson 12/23/2021

CHIEF DEVELOPMENT ENGINEERING DIVISION DATE

12/28/2021

DEPARTMENT OF LAND DEVELOPMENT DATE

12/28/2021

DIRECTOR DATE

STORM DRAIN DRAINAGE AREA MAP

SCALE: 1"=50'

SCALE: 1"=50'

OWNER
 WOLFEY SOLAR, LLC
 C/O SHANNON SOLAR, INC.
 530 GAITHER ROAD, SUITE 900
 ROCKVILLE, MD 20850
 14938-331-014-5102

DEVELOPER
 CAENERGY DEVELOPMENT, LLC
 2003 WESTERN AVENUE
 SUITE 225
 SEATTLE, WA 98112
 PHONE: 206-522-7072
 ATTENTION: KATE LARKIN

SITE DEVELOPMENT PLAN
STORM DRAIN DRAINAGE AREA MAP
VICEROY SOLAR
 12750 OLD FREDERICK ROAD, SYKESVILLE, MD 21784
 DEED L.15397 F.476

TAX MAP 9 BLOCK 23, 3RD ELECTION DISTRICT

ZONED RC-DEO
 PARCEL 19
 HOWARD COUNTY, MARYLAND

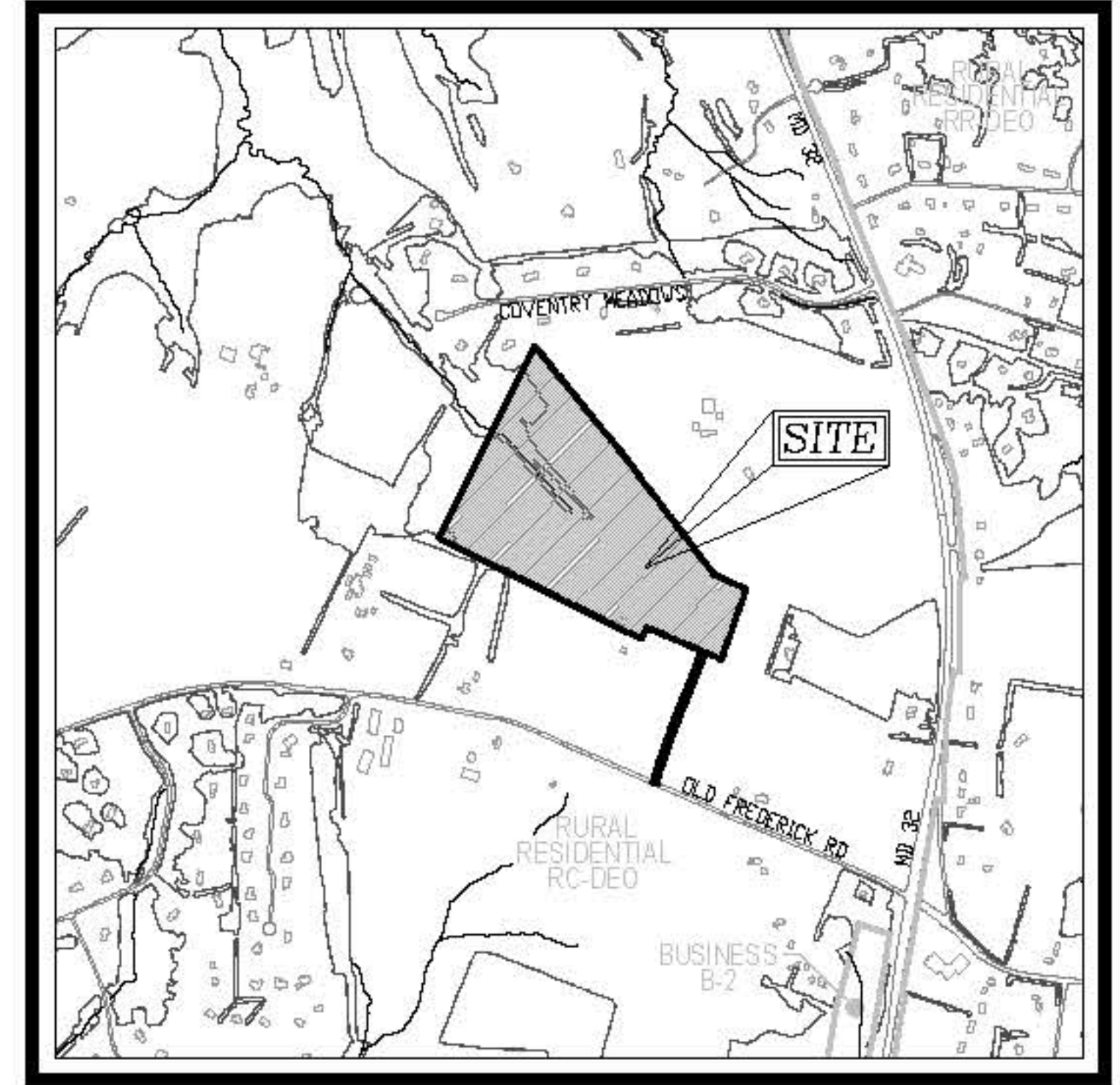
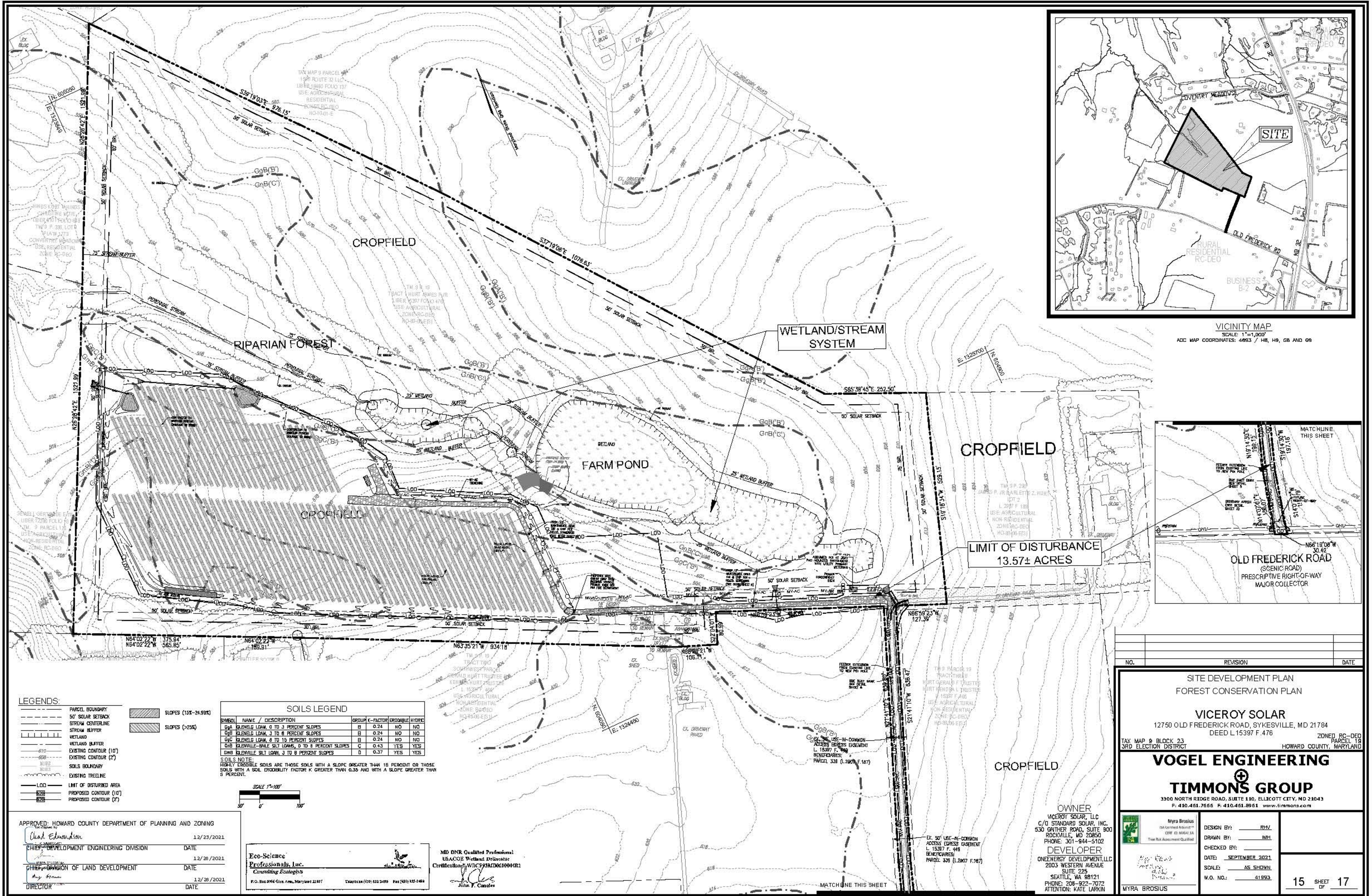
VOGEL ENGINEERING
 TIMMONS GROUP

3300 NORTH RIDGE ROAD, SUITE 110, ELLECCOTT CITY, MD 21043
 P: 410.463.7666 F: 410.463.8961 www.vogeleng.com

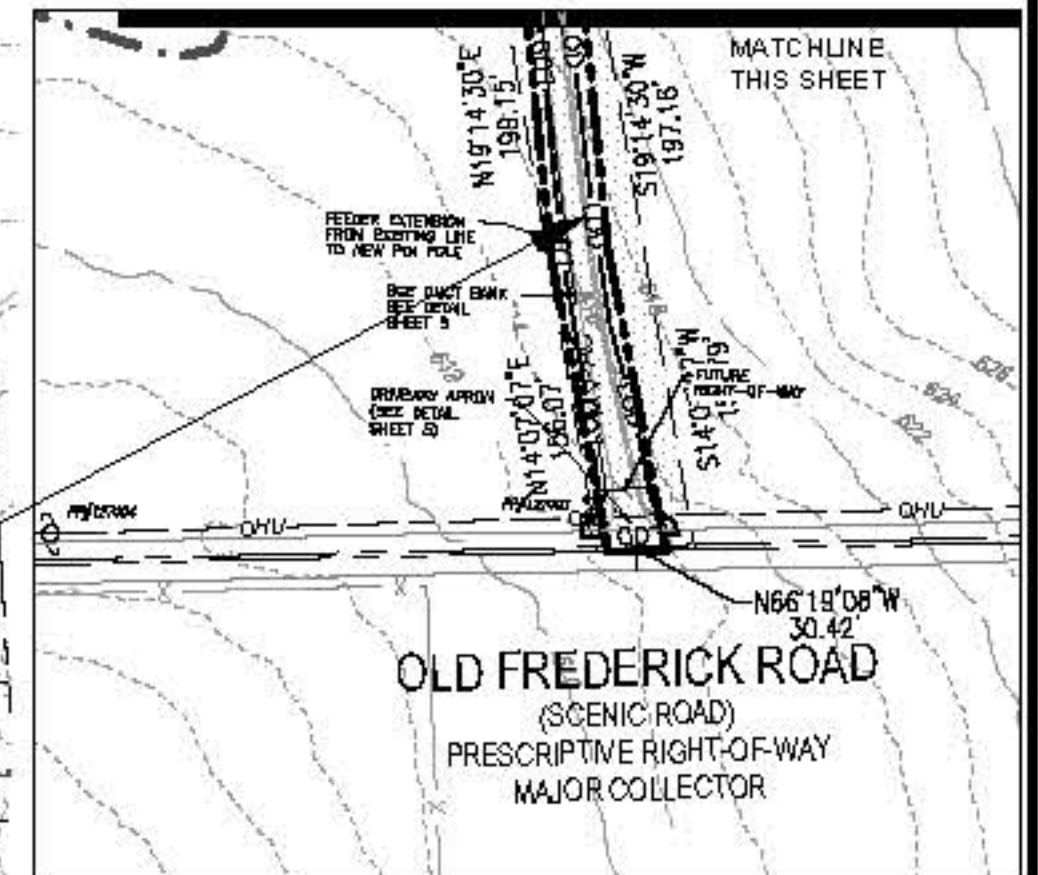
PROFESSIONAL CERTIFICATE

DESIGN BY: RHY
 DRAWN BY: RHY
 CHECKED BY: RHY
 DATE: 12/14/2021
 SCALE: AS SHOWN
 W.G. NO.: 11993

14 SHEET OF 17



VICINITY MAP
SCALE: 1"=1,000'
AOC MAP COORDINATES: 4893 / H8, H9, G8 AND G9



LEGENDS:

- PARCEL BOUNDARY
- - - 50' SOLAR SETBACK
- - - STREAM CENTERLINE
- - - STREAM BUFFER
- ||||| WETLAND
- WETLAND BUFFER
- - - EXISTING CONTOUR (10')
- - - EXISTING CONTOUR (2')
- SOILS BOUNDARY
- EXISTING TREELINE
- LOD
- PROPOSED CONTOUR (10')
- PROPOSED CONTOUR (2')

SOILS LEGEND

SYMBOL	NAME / DESCRIPTION	GROUP	K-FACTOR	ERODIBLE	HYDRO
G8A	BLENNELD LOAM, 0 TO 3 PERCENT SLOPES	B	0.24	NO	NO
G8B	BLENNELD LOAM, 3 TO 8 PERCENT SLOPES	B	0.24	NO	NO
G8C	BLENNELD LOAM, 8 TO 15 PERCENT SLOPES	B	0.24	NO	NO
G8D	BLENNELD-BAILE SILT LOAMS, 0 TO 8 PERCENT SLOPES	C	0.43	YES	YES
G8E	BLENNELD SILT LOAM, 3 TO 8 PERCENT SLOPES	D	0.37	YES	YES

SOILS NOTES:
HIGHLY ERODIBLE SOILS ARE THOSE SOILS WITH A SLOPE GREATER THAN 15 PERCENT OR THOSE SOILS WITH A SOIL ERODIBILITY FACTOR K GREATER THAN 0.35 AND WITH A SLOPE GREATER THAN 5 PERCENT.

SCALE 1"=100'

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Chad Edmondson
CHIEF DEVELOPMENT ENGINEERING DIVISION
DATE: 12/23/2021

Ray Strawn
CHIEF DIVISION OF LAND DEVELOPMENT
DATE: 12/28/2021

Ray Strawn
DIRECTOR
DATE: 12/28/2021

Eco-Science Professionals, Inc.
Consulting Ecologists
P.O. Box 2044 Glen Arden, Maryland 21117
Tel: 410-221-1111 Fax: 410-221-1112

MD DNR Qualified Professional
USACO2 Wetland Delineator
Certification # WDC 2310061004182
John J. Cavitt

OWNER
VICEROY SOLAR, LLC
C/O STANDARD SOLAR, INC.
530 GRATHER ROAD, SUITE 900
ROCKVILLE, MD 20850
PHONE: 301-944-5102

DEVELOPER
ONEENERGY DEVELOPMENT, LLC
SUITE 225
2003 WESTERN AVENUE
SEATTLE, WA 98121
PHONE: 206-922-7072
ATTENTION: KATE LARKIN

SITE DEVELOPMENT PLAN
FOREST CONSERVATION PLAN

VICEROY SOLAR
12750 OLD FREDERICK ROAD, SYKESVILLE, MD 21784
DEED L 15397 F.476

TAX MAP 9 BLOCK 23
3RD ELECTION DISTRICT

ZONED RC-DEO
PARCEL 19
HOWARD COUNTY, MARYLAND

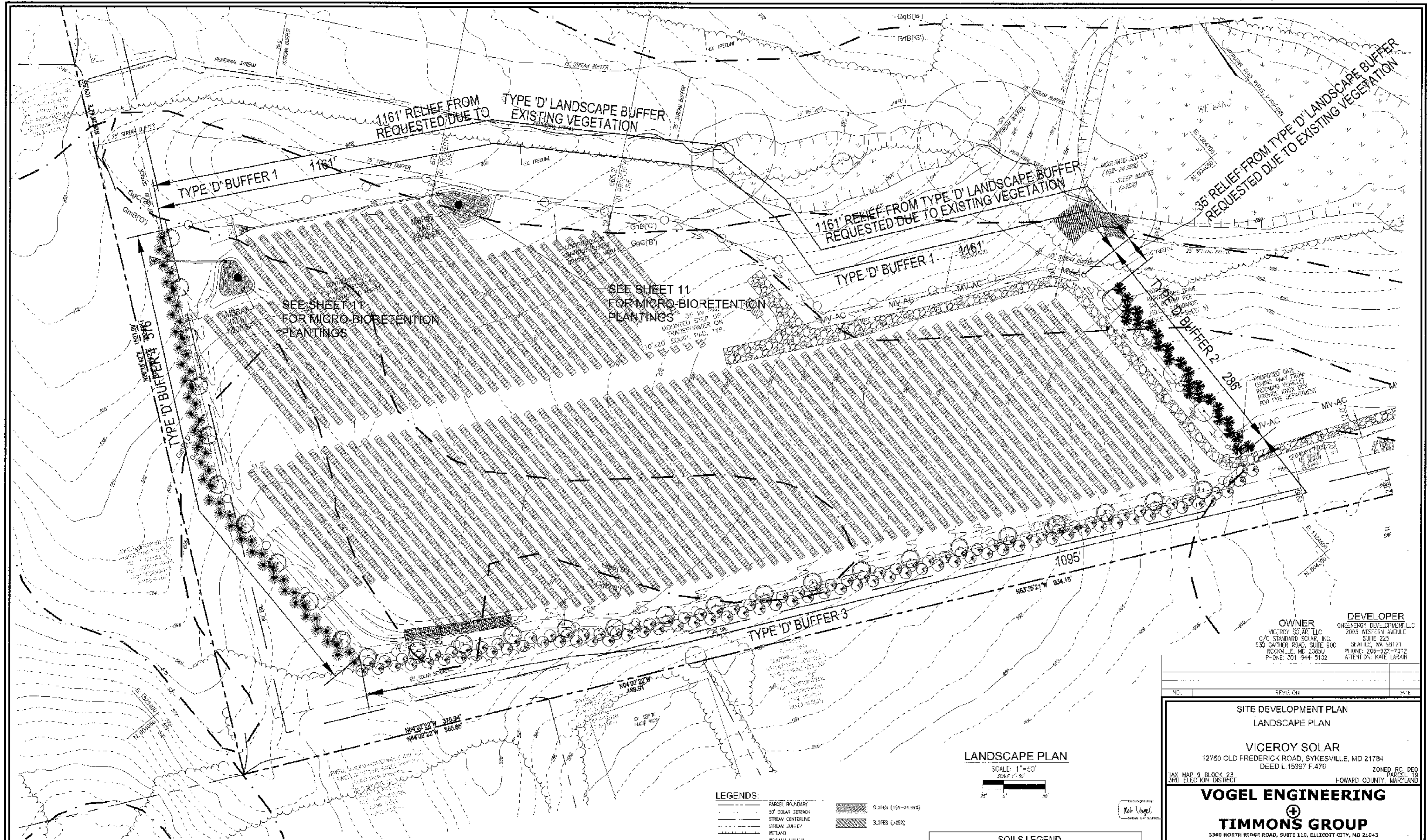
VOGEL ENGINEERING
TIMMONS GROUP
3300 NORTH RIDGE ROAD, SUITE 110, ELLICOTT CITY, MD 21043
P. 410.461.7656 F. 410.461.8961 www.timmons.com

NO.	REVISION	DATE

DESIGN BY: RMV
DRAWN BY: IMH
CHECKED BY:
DATE: SEPTEMBER 2021
SCALE: AS SHOWN
W.O. NO.: 41993

MYRA BROSIUS

15 SHEET OF 17



OWNER
 VICEROY SOLAR, LLC
 C/O STANDARD SOLAR, INC.
 530 GATHER ROAD, SUITE 500
 ROCKVILLE, MD 20850
 P-ONE: 301-944-5132

DEVELOPER
 OWEN ENERGY DEVELOPMENT, LLC
 2023 WESTERN AVENUE, SUITE 225
 SEATTLE, WA 98121
 PHONE: 206-927-7372
 ATTENTION: KATE LARSON

LANDSCAPE PLAN

SCALE: 1"=50'
 GRAPHIC SCALE: 0' 25' 50'

LEGENDS:

- PARCEL BOUNDARY
- 30' COLOR STRIPS
- STREAM CENTERLINE
- STREAM BUFFER
- WEALD
- WETLAND BUFFER
- STREAM CENTERLINE (10')
- STREAM CENTERLINE (25')
- SOILS ECONOMY
- EXISTING 100' R.E.
- PROPOSED CONTOUR (10')
- PROPOSED CONTOUR (25')
- PROPOSED PARALLEL LANDSCAPING
- SLOPES (15%-24.25%)
- SLOPES (>25%)

SOILS LEGEND

SYMBOL	NAME / DESCRIPTION	GROUP	PERCENT ERODIBLE	PERCENT HYDROIC
CB	BLENNIE LOAM, 0 TO 2 PERCENT SLOPES	B	0.24	N3
CB	BLENNIE LOAM, 3 TO 8 PERCENT SLOPES	B	0.74	N3
CB	BLENNIE LOAM, 9 TO 10 PERCENT SLOPES	B	0.74	N3
UB	BLENNIE-SILT LOAM, 0 TO 4 PERCENT SLOPES	D	0.43	YES
UB	BLENNIE-SILT LOAM, 5 TO 8 PERCENT SLOPES	D	0.37	YES

SOILS NOTE:
 HIGHLY ERODIBLE SOILS ARE THOSE SOILS WITH A SLOPE GRADIENT THAT IS FLIGHT OR HIGHER AND WITH A SUB-LEVELING FACTOR OF GREATER THAN 0.15 AND WITH A SLOPE GRADIENT THAT IS GREATER THAN 2 PERCENT.

APPROVED, HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Charles Edmondson
 CHIEF OF DEVELOPMENT ENGINEERING DIVISION
 DATE: 12/23/2021

Ray Simon
 CHIEF DIVISION OF LAND DEVELOPMENT
 DATE: 12/28/2021

DATE: 12/28/2021

DEVELOPER'S/BUILDER'S CERTIFICATE

I/WE CERTIFY THAT THE LANDSCAPING SHOWN ON THIS PLAN WILL BE DONE ACCORDING TO THE PLAN, SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE HOWARD COUNTY LANDSCAPE MANUAL. I/WE FURTHER CERTIFY THAT UPON COMPLETION, A CERTIFICATION OF LANDSCAPE INSTALLATION, ACCOMPANIED BY AN EXECUTED ONE (1) YEAR GUARANTEE OF PLANT MATERIALS, WILL BE SUBMITTED TO THE DEPARTMENT OF PLANNING AND ZONING.

[Signature]
 SIGNATURE OF DEVELOPER
 DATE: 10/16/2021

SITE DEVELOPMENT PLAN
LANDSCAPE PLAN

VICEROY SOLAR
 12750 OLD FREDERICK ROAD, SYKESVILLE, MD 21784
 DEED L. 15397 F. 470

TAX MAP 9 BLOCK 23
 3RD ELECTION DISTRICT

ZONED RC DEO
 PARCEL 19
 HOWARD COUNTY, MARYLAND

VOGEL ENGINEERING
 3300 NORTH RIDGE ROAD, SUITE 110, ELICOTT CITY, MD 21043
 P: 410.461.7666 F: 410.461.8961 www.timmons.com

TIMMONS GROUP

DESIGN BY: RBY
 DRAWN BY: IMV
 CHECKED BY: IMV
 DATE: SEP 16, 2021
 SCALE: AS SHOWN
 W.D. NO.: 41993

PROFESSIONAL CERTIFICATE
 I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A duly licensed PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO. 15153

16 SHEET OF 17

GENERAL NOTES

- WATERSHED NAME: SOUTH BRANCH PATAPSCO RIVER
WATERSHED NUMBER: 021.50908
A. GROSS SITE AREA: 12.36 AC. (PER CONDITIONAL USE PLAN)
NET SITE AREA: 12.36 AC. (PER CONDITIONAL USE PLAN)
B. AREA OF 100-YEAR FLOODPLAIN: 0.00 AC. (PER CONDITIONAL USE PLAN)
C. AREA OF WETLANDS AND BUFFERS (ONSITE): 0.79 AC.
D. AREA OF STREAM AND BUFFERS (ONSITE): 0.99 AC.
E. AREA OF > 25% STEEP SLOPES: 0.00 AC.
F. EXISTING FOREST: 0.00 AC.
G. ZONING: FC-DEO
H. EXISTING USE: AGRICULTURE
I. PROPOSED USE: SOLAR PANEL FARM

- 1. NO RARE, THREATENED OR ENDANGERED SPECIES OR THEIR HABITAT WERE OBSERVED ON THE PROPERTY
2. SURROUNDING LAND USE IS PRIMARILY FARMLAND, RURAL RESIDENTIAL DEVELOPMENT, AND LOCAL
3. NO AREAS ON SITE ARE LARGE ENOUGH TO BE CONSIDERED FOREST
4. THE STREAM CHANNEL THAT FLOWS THROUGH THE PROJECT SITE IS THE UNKNOWN TRIBUTARY OF THE SOUTH BRANCH PATAPSCO RIVER
5. WHICH IS CLASSIFIED AS A USE 1 STREAM, WATERSHED NUMBER 021.50908
6. THE WETLANDS WILL REQUIRE A 25 FOOT BUFFER, THE STREAM CHANNEL, REQUIRES A 75 FOOT BUFFER,
7. NO 100 YEAR FLOODPLAIN IS PRESENT ON THE PROPERTY.
8. NO STEEP SLOPES (15% - 24.99%) ON THE SUBJECT PROPERTY
9. THERE ARE NO HISTORIC STRUCTURES OR CEMETERIES ON THIS PROPERTY.
10. THERE ARE NO SPECIFIC TREES WITHIN THE SITE AREA.

FOREST CONSERVATION WORKSHEET BASED ON COUNCIL BILL CB62-2019

FOREST CONSERVATION WORKSHEET FOR VICEROY SOLAR

Table with columns for Net Tract Area (A-D), Land Use Category (E-F), Existing Forest Cover (G-I), Break Even Point (J-K), Proposed Forest Clearing (L-M), Planting Requirements Inside Watershed (N-V), and Planting Requirements Outside Watershed (W-DD).

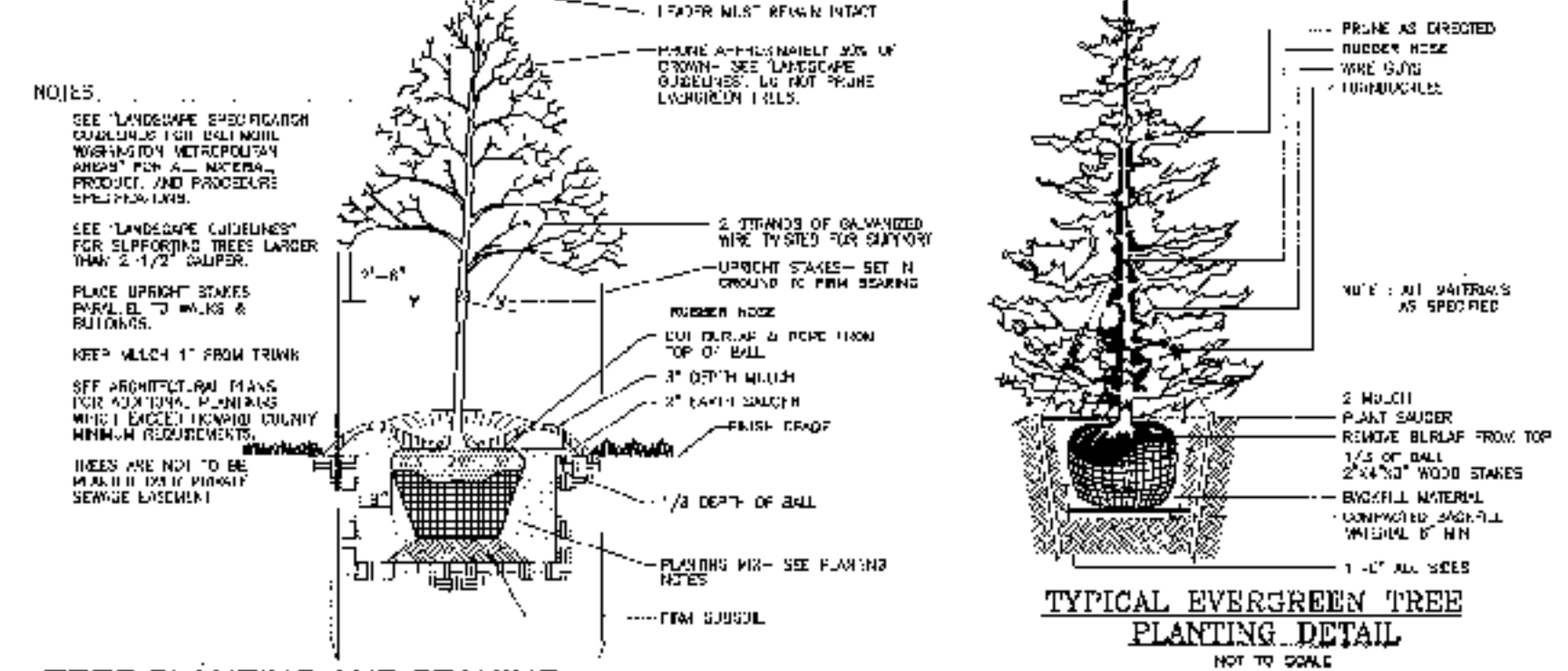
1. THE PURPOSE OF THIS DOCUMENT IS TO... THE FOREST CONSERVATION REGULATION FOR THE PROJECT IS 1.50 ACRES OF AFFORESTATION... THE FOREST CONSERVATION REGULATION OF THIS PROJECT TO BE FULLY FILLED IS:

GENERAL NOTES

- 1. THIS PLAN WAS PREPARED IN ACCORDANCE WITH SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL.
2. A PLANTING SCHEDULE IN THE AMOUNT OF \$18,500 FOR THE REQUIRED LANDSCAPING...
3. ALL OF THE TREES WITHIN THE DEVELOPMENT AGREEMENT...
4. NO GRADING, REMOVAL OF VEGETATION COVER OR TREES, PAVING AND NEW STRUCTURES SHALL BE PERMITTED WITHIN THE BUFFER ZONES, BUFFER AREAS AND 100 YEAR FLOODPLAIN.

LANDSCAPE NOTES

- 1. AT THE TIME OF PLANT INSTALLATION ALL SHRUBS AND TREES...
2. THE CONTRACTOR AND/OR THEIR AGENTS SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE REQUIRED LANDSCAPING...
3. SHOULD ANY TREE OBSERVED FOR PRESERVATION FOR WHICH LANDSCAPING CREDIT IS GIVEN...
4. PLANTING SCHEDULE HEREON ARE THE RESPONSIBILITY OF THE CONTRACTOR TO INSTALL...
5. SURETY FOR THE PROPOSED LANDSCAPING SHALL BE BASED ON THE NUMBER OF PLANTINGS SPECIFIED.



TREE PLANTING AND STAKING

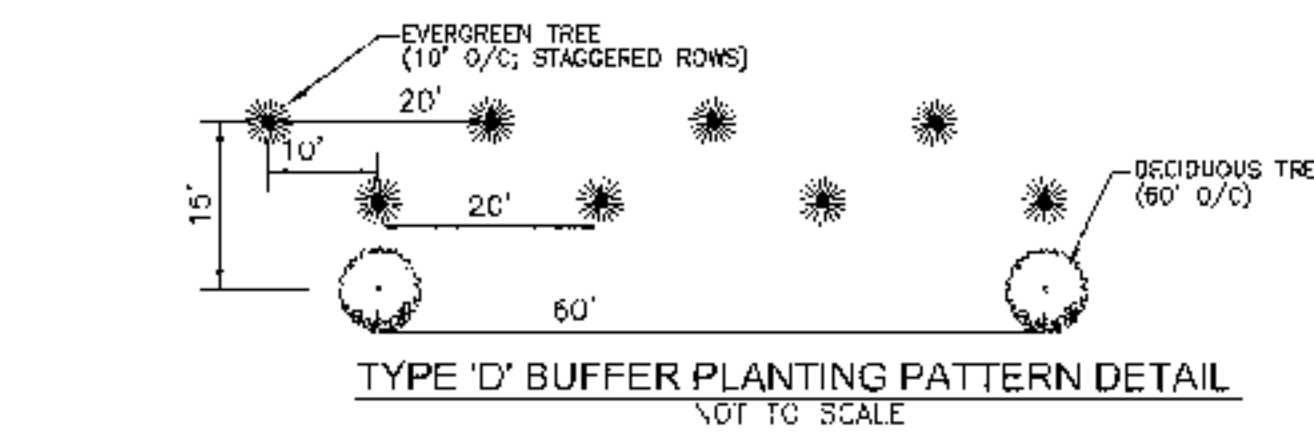
DECIDUOUS TREES UP TO 2-1/2" CALIPER NOT TO SCALE
EVERGREEN TREES UP TO 2-1/2" CALIPER NOT TO SCALE

SCHEDULE A PERIMETER LANDSCAPE EDGE table with columns for Species, Size, and Quantity.

LANDSCAPE SCHEDULE NOTES:

- 1. ALL PLANT MATERIALS SHALL BE FULL AND READY TO BE PLANTED AND STAKED...
2. CONTRACTOR SHALL VERIFY LOCATION OF ALL UNDERGROUND UTILITIES PRIOR TO DIGGING...
3. THE LOCATION OF PLANT MATERIALS, MAY NEED TO BE ADJUSTED TO MEET PERMITS...
4. CONTRACTOR SHALL VERIFY PLANT QUANTITIES PRIOR TO ORDERING... IF PLANT QUANTITIES FROM LANDSCAPE SCHEDULE, THE PLAN SHALL COVER.

PERIMETER LANDSCAPE EDGE LANDSCAPE SCHEDULE table with columns for Species, Size, and Quantity.



OWNER: VICEROY SOLAR, LLC
DEVELOPER: ONEVEREST DEVELOPMENT, LLC
OWNER ADDRESS: 530 GANTHER ROAD, SUITE 900, ROCKY HILL, MD 20850
DEVELOPER ADDRESS: 2003 WESTERN AVENUE, SUITE 225, SEATTLE, WA 98121

Site Development Plan title block containing project name, address, zoning, and engineering information for Vogel Engineering and Timmons Group.

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
Signature of Chad Edwards, Director

DEVELOPER'S/BUILDER'S CERTIFICATE
I/WE CERTIFY THAT THE LANDSCAPING SHOWN ON THIS PLAN WILL BE DONE ACCORDING TO THE PLAN, SECTION 16.124 OF THE HOWARD COUNTY CODE...