



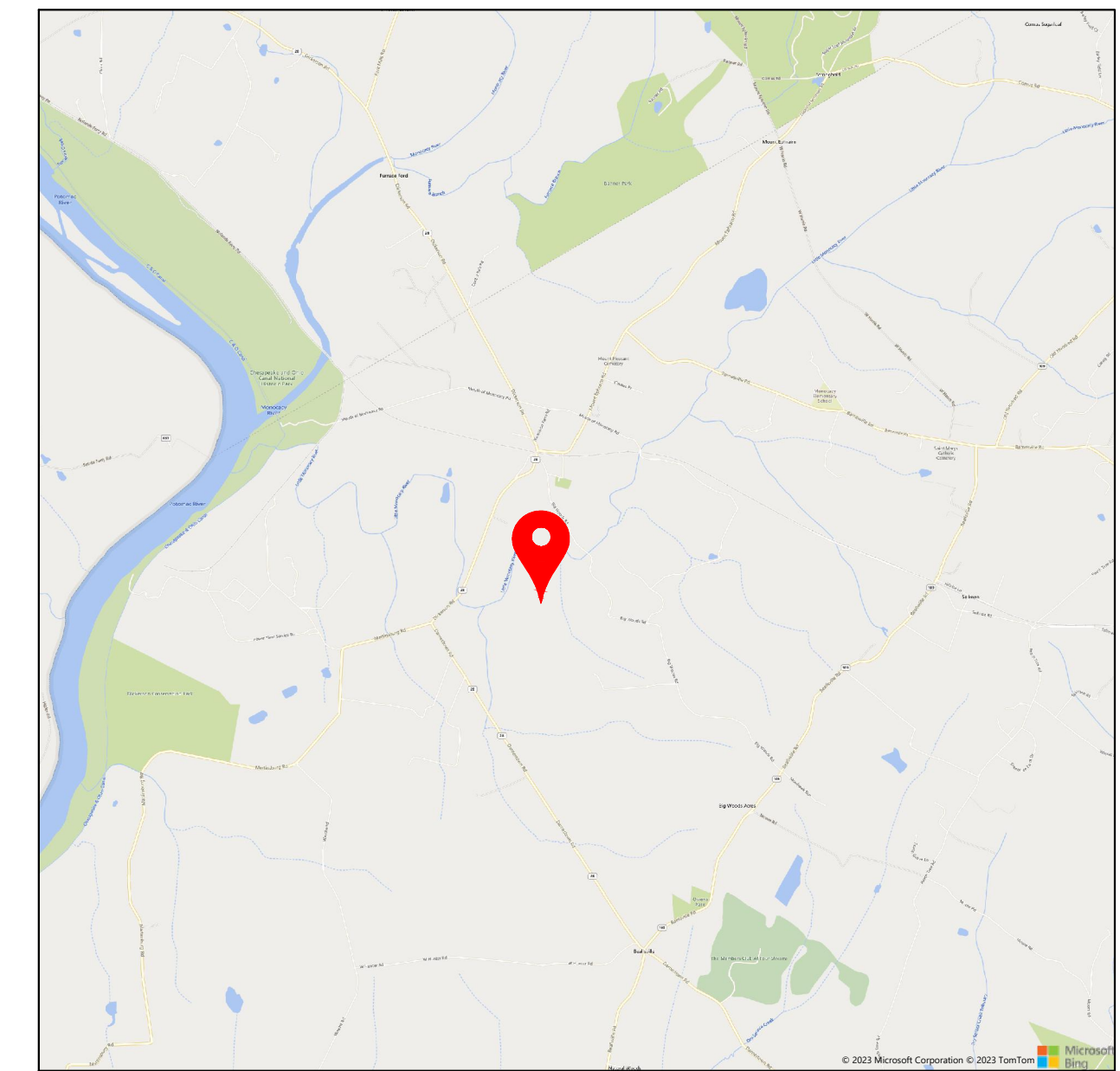
SITE: SATELLITE VIEW

CHABERTON SOLAR SUGARLOAF LLC

CHABERTON SOLAR SUGARLOAF

5,922.24 kWdc / 4,000.00 kWac SOLAR GROUND MOUNT AT
 20507 DARNESTOWN RD. DICKERSON, MD 20842
 MONTGOMERY COUNTY, MD
 39.2080°N, -77.4233°W

10% DESIGN PACKAGE



SITE: MAP VIEW

SHEET INDEX		
SHEET NUMBER	SHEET TITLE	REVISION
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6 OF 6	PROPOSED SITE DETAILS	-

SYSTEM SUMMARY	
DC SYSTEM SIZE	5,922.24 kWdc
AC SYSTEM SIZE	4,000.00 kWac
DC/AC RATIO	1.481
MODULES	QCELL Q.TRON XL-G2 620 (620Wp) OR EQUIV.
MODULE QUANTITY	9,552
INVERTERS	CHINT CPS SCH125KTL-DO/US-600 OR EQUIV.
INVERTER QUANTITY	34
AZIMUTH/TILT	180° / SINGLE AXIS TRACKER
PITCH	16.2 ft

**NOT FOR
CONSTRUCTION**

10% DESIGN 01/04/2024

**DRAWING TITLE
COVER SHEET &
INDEX**

REVISION C	DRAWING NO. G-001
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PROJECT
 CHABERTON SOLAR SUGARLOAF LLC
 5.92 MWdc / 4.00 MWac GROUND MOUNT AT
 20507 DARNESTOWN RD. DICKERSON, MD 20842
 39.2080°N, -77.4233°W

DEVELOPER
 CHABERTON ENERGY
 1700 Rockville Pike, Suite 305
 Rockville, MD 20852

REV.	DESCRIPTION	DATE
D	LAYDOWN UPDATE	07/30/2024
C	ROAD LAYOUT UPDATE	07/24/2024
B	PIER HEIGHT REVISION	07/02/2024

APPROVED BY:
JSG
 CHECKED BY:
EJA
 DESIGNED BY:
AOK

ABBREVIATIONS		STANDARD SYMBOLS		EXAMPLE WILDFLOWER SEEDING MIX LIST			
A	AMPERES		BREAKER	DESCRIPTION	BULK QTY	PLS QTY	UOM
AC	ALTERNATING CURRENT			ROUNDSEED PANICGRASS	0.377	0.350	LB PLS
AF	AMPERE FRAME	52R	BREAKER WITH RECLOSER	PATH RUSH, PA ECOTYPE	0.066	0.060	LB PLS
AHJ	AUTHORITY HAVING JURISDICTION			PURPLE LOVEHRASS, FORT INDIANTOWN GAP, PA ECOTYPE	0.023	0.020	LB PLS
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE		CONDUCTOR IDENTIFIER	SENSITIVE PEA, NC ECOTYPE	0.082	0.080	LB PLS
ASCE	AMERICAN SOCIETY OF CIVIL ENGINEERS			BLACKEYED SUSAN	0.123	0.120	LB PLS
AT	AMPERE TRIP		CURRENT TRANSFORMER	LANCELEAF COREOPSIS	0.113	0.100	LB PLS
AUX	AUXILIARY			MISTFLOWER, VA ECOTYPE	0.008	0.005	LB PLS
AWG	AMERICAN WIRE GAUGE		DISCONNECT SWITCH	BUTTERFLY MILKWEED	0.020	0.015	LB PLS
BESS	BATTERY ENERGY STORAGE SYSTEM			AROMATIC ASTER, PA ECOTYPE	0.019	0.010	LB PLS
BKR	BREAKER		ELECTRIC POLE	NARROWLEAF MOUNTAINMINT	0.024	0.020	LB PLS
CAT	CATEGORY			GOLDEN ALEXANDERS, PA ECOTYPE	0.023	0.020	LB PLS
CEH	CHABERTON ENERGY HOLDINGS		EQUIPMENT IDENTIFIER	NARROWLEAF BLUE EYED GRASS	0.032	0.030	LB PLS
CKT	CIRCUIT			EASTERN GRAY BEARDTONGUE	0.005	0.005	LB PLS
CT	CURRENT TRANSFORMER		FUSE	HAIRY BEARDTONGUE	0.006	0.005	LB PLS
DAS	DATA ACQUISITION SYSTEM			CALICO ASTER	0.013	0.010	LB PLS
DC	DIRECT CURRENT		OUTLET	AUTUMN BENTGRASS, ALBANY PINE BUSH, NY ECOTYPE	0.157	0.150	LB PLS
EGC	EQUIPMENT GROUNDING CONDUCTOR				INVERTER	POLLINATOR NOTES:	
EMT	ELECTRIC METALLIC TUBING		SURGE ARRESTER			1. SUGGESTED SEED RATE IS 3 PLS POUNDS PER ACRE, ALONG WITH 30 POUNDS OF COVER CROP (GRAIN OATS OR GRAIN RYE).	
EPC	ENGINEERING, PROCUREMENT, & CONSTRUCTION COMPANY				TRANSFORMER	2. POLLINATOR SEEDING MIX SUBJECT TO CHANGE AFTER FINAL APPROVAL.	
EST	ESTIMATED	ANSI STANDARD DEVICE NUMBERS					
EXIST	EXISTING						
GEC	GROUND ELECTRODE CONDUCTOR	50	INSTANTANEOUS OVERCURRENT RELAY				
GFCI	GROUND FAULT CURRENT INTERRUPTER	51	TIMED OVERCURRENT RELAY				
GND	GROUND	52	CIRCUIT BREAKER				
IC	INTERCONNECTION CUSTOMER	59	OVERVOLTAGE RELAY				
IEEE	INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS	81	FREQUENCY RELAY				
IFC	ISSUED FOR CONSTRUCTION	<p>3. ALL AREAS WITHIN PROJECT FENCE TO RECEIVE POLLINATOR WILDFLOWER SEEDING MIX.</p> <p>ELECTRICAL TESTING:</p> <ol style="list-style-type: none"> EPC SHALL PERFORM AT MINIMUM WITNESSED ELECTRICAL TESTING FOR CEH AND UTILITY FOR PERMISSION TO OPERATE. FOR LAB CERTIFIED OR FIELD APPROVED EQUIPMENT, VERIFICATION (EITHER BY AN ON-SITE OBSERVATION OR REVIEW OF DOCUMENTS) BY THE UTILITY THAT THE INTERCONNECTION INSTALLATION EVALUATION REQUIRED BY IEEE STANDARD 1547 SECTION 5.3 AND THE COMMISSIONING TEST REQUIRED BY IEEE STANDARD 1547 SECTION 5.4 HAVE BEEN ADEQUATELY PERFORMED. FOR INTERCONNECTION EQUIPMENT THAT HAS NOT BEEN LAB CERTIFIED OR FIELD APPROVED, THE WITNESS TEST SHALL ALSO INCLUDE THE VERIFICATION BY THE UTILITY OF THE ON-SITE DESIGN TESTS AS REQUIRED BY IEEE STANDARD 1547 SECTION 5.1 AND VERIFICATION BY THE UTILITY OF PRODUCTION TESTS REQUIRED BY IEEE STANDARD 1547 SECTION 5.2. ALL TESTS VERIFIED BY THE UTILITY ARE TO BE PERFORMED IN ACCORDANCE WITH THE TEST PROCEDURES SPECIFIED BY IEEE STANDARD 1547.1. ANY ADDITIONAL TESTING REQUIRED BY THE ELECTRIC UTILITY, AHJ, OR PROJECT OWNER SHALL BE PERFORMED BY THE EPC. 					
Imp	CURRENT MAXIMUM POWER						
Isc	CURRENT SHORT CIRCUIT						
IX	INTERCONNECTION						
LV	LOW VOLTAGE						
MCOV	MAXIMUM CONTINUOUS OPERATING VOLTAGE						
MFR	MULTI-FUNCTION RELAY						
MPPT	MAXIMUM POWER POINT TRACKING						
MV	MEDIUM VOLTAGE						
NEC	NATIONAL ELECTRICAL CODE						
NO	NUMBER / NORMALLY OPEN						
NTS	NOT TO SCALE						
PLS	PURE LIVE SEED						
PRI	PRIMARY						
PSF	POUNDS PER SQUARE FOOT						
PT	POTENTIAL TRANSFORMER						
PV	PHOTOVOLTAIC						
QTY	QUANTITY						
SEC	SECONDARY						
SWBD	SWITCHBOARD						
SWGR	SWITCHGEAR						
TBD	TO BE DETERMINED						
TYP.	TYPICAL						
UL	UNDERWRITERS LABORATORIES						
UOM	UNIT OF MATERIAL						
V	VOLTS						
VA	VOLT-AMPERE						
Vmp	VOLTAGE MAXIMUM POWER						
Voc	VOLTAGE OPEN CIRCUIT						
W	WATT						
WP	WEATHERPROOF						
XFMR	TRANSFORMER						

PROJECT NOTES:

- PROJECT CONSISTS OF A SINGLE 4.00 MWac INTERCONNECTION TO SERVE POTOMAC EDISON COMMUNITY SOLAR PROGRAM.
- PROJECT IS CURRENTLY DESIGNED WITH QCELL Q.TRON XL-G2 620 (620WP) OR EQUIV. MODULES TO BE PROVIDED BY PROJECT OWNER OR EPC.

GENERAL NOTES:

- THIS DESIGN PACKAGE INDICATED THE INTENT OF THE DESIGN AND SHALL BE CONSIDERED DIAGRAMMATIC ONLY OF REQUIRED EQUIPMENT FOR ACCURATE BID PRICING. FULL ENGINEERING DESIGN TO BE SUBMITTED BY EPC AND APPROVED BY CEH. EPC SHALL ENGINEER THE SYSTEM FOR A SAFE AND COMPLIANT SYSTEM AT MAXIMUM ENERGY PRODUCTION AT OPTIMAL COST.
- ALL SUBMITTED EPC DESIGNS INCLUDING ANY DEVIATIONS FROM THE DESIGN SET FORTH IN THIS DESIGN PACKAGE MUST BE APPROVED IN WRITING.
- 60/90/IFC DRAWINGS TO BE SUBMITTED TO CEH BY EPC. WRITTEN APPROVAL REQUIRED BEFORE EPC MAY PROCEED.
- AT SUBSTANTIAL COMPLETION OF CONSTRUCTION AS-BUILT DRAWINGS TO BE SUBMITTED BY THE EPC FOR CEH.
- ANY DEVIATIONS FROM APPROVED DESIGN DRAWINGS MUST BE APPROVED BY CEH IN WRITING.
- INSTALLATION SHALL COMPLY WITH LATEST STATE ADOPTED NEC, BUILDING CODE, AND ANY ADDITIONAL REQUIREMENTS AND REGULATIONS IMPOSED BY THE AHJ AND/OR ELECTRIC UTILITY.
- RELAY PROTECTION SETTINGS PROVIDED ARE PRELIMINARY AND SUBJECT TO COORDINATION WITH LOCAL UTILITY.
- ALL EQUIPMENT REQUIRED FOR A FULLY FUNCTIONING SYSTEM NOT MENTIONED IN THIS OR FUTURE DRAWINGS SHALL BE FURNISHED AND INSTALLED BY THE EPC AT NO ADDITIONAL COST.
- ALL EQUIPMENT AND SERVICES NOT NOTED AS "TO BE PROVIDED BY OTHERS" OR "TO BE PROVIDED BY CEH" SHALL BE PROVIDED BY THE PROJECT OWNER OR EPC.
- PERMISSION TO OPERATE IS NOT AUTHORIZED UNTIL COMPLETION OF COMMISSIONING/TESTING, CEH APPROVAL, APPROVAL OF AHJ, AND APPROVAL OF ELECTRIC UTILITY.
- ALL ELECTRICAL EQUIPMENT SHALL CONFORM TO REQUIREMENTS OF THE NEC. WHERE UNDERWRITERS' LABORATORIES HAVE SET STANDARDS, LISTED PRODUCTS AND ISSUED LABELS, PRODUCTS USED SHALL BE LISTED AND LABELED TO THOSE STANDARDS BY UL OR ANOTHER AGENCY ACCEPTABLE TO THE AUTHORITY HAVING JURISDICTION. PRODUCTS SHALL BE INSTALLED IN ACCORDANCE WITH THE LISTING OF THE EQUIPMENT.
- CONTRACTOR SHALL PROVIDE ALL REQUIRED SIGNAGE AS PER ARTICLES 690 & 705 OF THE NEC.
- ELECTRICAL GROUNDING SHALL COMPLY WITH ALL REQUIREMENTS SPECIFIED ABOVE AND AT A MINIMUM INCLUDE DETAILS SHOWN IN E-200.
- ALL WIRING IN PANELS SHALL BE NEATLY TIE-WRAPPED AND LIE WITHIN GUTTER SPACES.
- ALL ALUMINUM TERMINATIONS NEED ANTI-OXIDATION COMPOUND APPLIED.

SYSTEM SUMMARY	
DC SYSTEM SIZE	5,922.24 kWdc
AC SYSTEM SIZE	4,000.00 kWac
DC/AC RATIO	1.481
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MODULE QUANTITY	9,552
INVERTERS	CHINT CPS SCH125KTL-DO/US-600 OR EQUIV.
INVERTER QUANTITY	34
AZIMUTH/TILT	180° / SINGLE AXIS TRACKER
PITCH	16.2 ft

NOT FOR CONSTRUCTION

10% DESIGN 01/04/2024

APPROVED BY: JSG
 CHECKED BY: EJA
 DESIGNED BY: AOK

DRAWING TITLE
GENERAL SYMBOLS & NOTES

REVISION **A** DRAWING NO. **G-010**

PROJECT

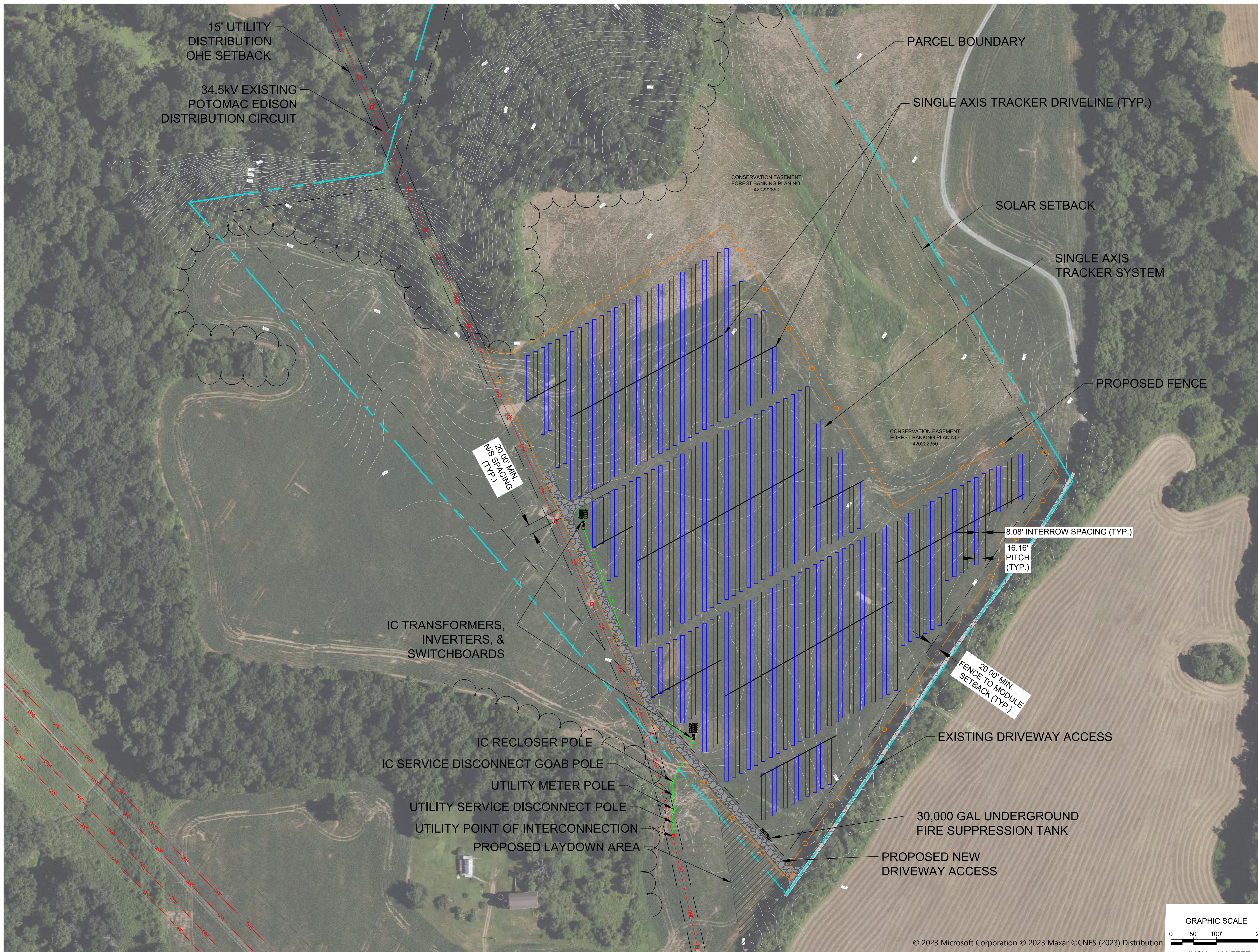
CHABERTON SOLAR SUGARLOAF LLC
 5.92 MWdc / 4.00 MWac GROUND MOUNT AT
 20507 DARNESTOWN RD. DICKERSON, MD 20842
 39.2080°N, -77.4233°W

DEVELOPER

CHABERTON ENERGY
 1700 Rockville Pike, Suite 305
 Rockville, MD 20852

REV.	DESCRIPTION	DATE
A	CPCN UPDATE/MANDATORY REFERRAL PROCESS	05/31/2024

APPROVED BY:	DESCRIPTION	DATE
JSG		
EJA		
AOK		



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LAYER LEGEND		
PROP. UNDERGROUND ELECTRIC		U/E
PROP. OVERHEAD ELECTRIC		O/E
EX. UNDERGROUND ELECTRIC		U/E
EX. OVERHEAD ELECTRIC		O/E
PROP. FENCE		F
PROPERTY LINE		P
SOLAR PV MODULES		
ROAD		
CONCRETE		
LAYDOWN AREA		
LANDSCAPE BUFFER		
WETLANDS		
FLOODPLAINS		
WATER		

- NOTES:**
- DRAWING FOR INTERCONNECTION APPROVAL AND EPC BID ONLY. NOT FOR CONSTRUCTION.
 - ALL EQUIPMENT SHALL BE UL LISTED FOR USE IN SYSTEM CONFIGURATION.
 - INSTALLATION SHALL COMPLY WITH THE LATEST STATE ADOPTED NEC. EQUIPMENT LOCATIONS FOR PRELIMINARY DESIGN ONLY. EQUIPMENT LOCATION MAY BE SUBSTITUTED BY THE EPC AS APPROVED BY CEH.
 - SEE CIVIL ENGINEERING DRAWINGS FOR CIVIL SITE DETAILS.
 - PROPOSED INTERCONNECTION PATH AND POINT MAY BE SUBSTITUTED BY THE EPC AS APPROVED BY CEH.
 - INVERTER AC OUTPUT SHALL BE FACTORY LIMITED TO VALUES SHOWN IN THE INVERTER SUMMARY TABLE ON E-110.
 - MODULE AND FENCE LAYOUT ON E-001 SUPERSEDES THOSE SHOWN ON LAYOUT CIVIL DRAWINGS.
 - CONTRACTOR TO LOCATE TRANSFORMER PAD ON CREST OF HILL AND TO ENSURE PROPER DRAINAGE AWAY FROM PAD.

NOT FOR CONSTRUCTION

10% DESIGN 01/04/2024

APPROVED BY: JSG	DRAWING TITLE ELECTRICAL SITE PLAN
CHECKED BY: EJA	
DESIGNED BY: ACA	REVISION D
DRAWING NO. E-001	

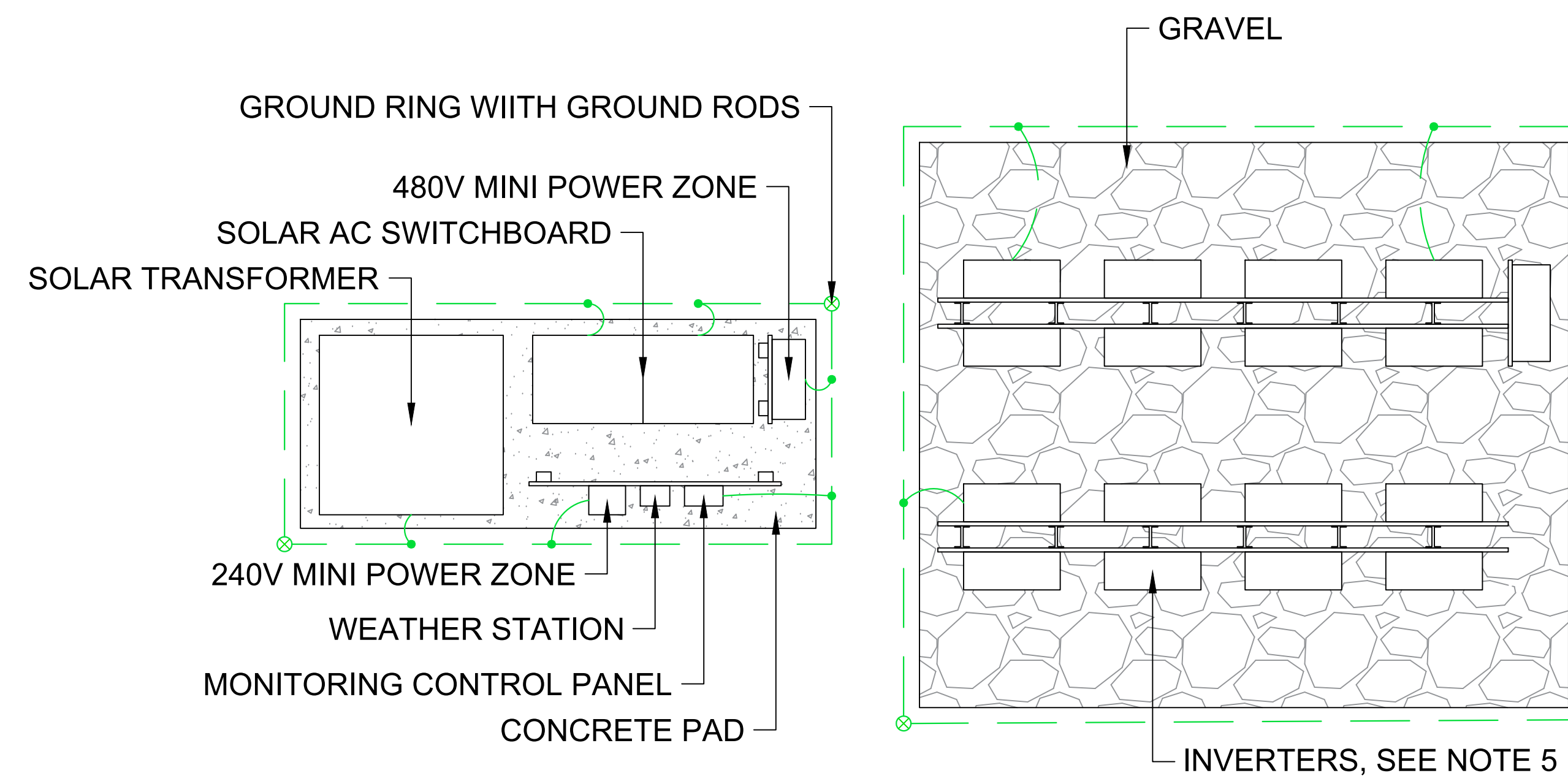
<p>PROJECT</p> <p>CHABERTON SOLAR SUGARLOAF LLC 5.92 MWdc / 4.00 MWac GROUND MOUNT AT 20507 DARNESTOWN RD. DICKERSON, MD 20842 39.2080°N, -77.4233°W</p>	<p>DEVELOPER</p> <p>CHABERTON ENERGY 1700 Rockville Pike, Suite 305 Rockville, MD 20852</p>		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 5%; text-align: center;">D</td> <td style="width: 70%;">LAYDOWN UPDATE</td> <td style="width: 25%;">07/30/2024</td> </tr> <tr> <td style="text-align: center;">C</td> <td>ROAD LAYOUT UPDATE</td> <td>07/23/2024</td> </tr> <tr> <td style="text-align: center;">B</td> <td>CPCN UPDATE/MANDATORY REFERRAL PROCESS</td> <td>05/31/2024</td> </tr> <tr> <td style="text-align: center;">REV.</td> <td>DESCRIPTION</td> <td>DATE</td> </tr> </table>	D	LAYDOWN UPDATE	07/30/2024	C	ROAD LAYOUT UPDATE	07/23/2024	B	CPCN UPDATE/MANDATORY REFERRAL PROCESS	05/31/2024	REV.	DESCRIPTION	DATE
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REV.	DESCRIPTION	DATE													

SYSTEM SUMMARY

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INVERTER QUANTITY	34
AZIMUTH/TILT	180° / SINGLE AXIS TRACKER
PITCH	16.2 ft

NOTES:

1. DRAWING FOR INTERCONNECTION APPROVAL AND EPC BID ONLY - NOT FOR CONSTRUCTION.
2. INSTALLATION SHALL COMPLY WITH THE LATEST STATE ADOPTED NEC.
3. PV EQUIPMENT SHOWN FOR PRELIMINARY DESIGN ONLY. EQUIPMENT MAY BE SUBSTITUTED BY THE EPC AS APPROVED BY CEH.
4. PV EQUIPMENT PAD LAYOUT TYPICAL ONLY. EPC MAY SUBMIT PREFERRED LAYOUT FOR CEH APPROVAL.
5. INVERTERS MAY BE STACKED ONE OR TWO HIGH.
6. EQUIPMENT TO MEET ALL UTILITY INTERCONNECTION REQUIREMENTS.
7. EQUIPMENT MUST MEET ALL WORKING CLEARANCE REQUIREMENTS PER NEC 110.26 AND EQUIPMENT INSTALLATION MANUALS.



PV EQUIPMENT PAD
SCALE 1/4" = 1'

**NOT FOR
CONSTRUCTION**

10% DESIGN 01/04/2024

DRAWING TITLE
**EQUIPMENT PAD
DETAILS**

REVISION A **DRAWING NO.** E-200

PROJECT
CHABERTON SOLAR SUGARLOAF LLC
5.92 MWdc / 4.00 MWac GROUND MOUNT AT
20507 DARNESTOWN RD. DICKERSON, MD 20842
39.2080°N, -77.4233°W

DEVELOPER
CHABERTON ENERGY
1700 Rockville Pike, Suite 305
Rockville, MD 20852



APPROVED BY:	JSG
CHECKED BY:	EJA
DESIGNED BY:	AOK
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REV.	DESCRIPTION
	DATE
	05/31/2024

APPROVED BY:
CHECKED BY:
DESIGNED BY:



100/125kW, 1500Vdc String Inverters for North America



The 100 & 125kW high power CPS three phase string inverters are designed for ground mount applications. The units are high performance, advanced and reliable inverters designed specifically for the North American environment and grid. High efficiency at 99.1% peak and 98.5% CE, wide operating voltages, broad temperature ranges and a NEMA Type 4X enclosure enable this inverter platform to operate at high performance across many applications. The CPS 100/125kW products ship with the Standard or Centralized Wire-box, each fully integrated and separable with AC and DC disconnect switches. The Standard Wire-box includes touch safe fusing for up to 20 strings. The CPS FlexOM Gateway enables communication, controls and remote product upgrades.

Key Features

- NFPA 70, NEC 2014 and 2017 compliant
- Touch safe DC Fuse holders adds convenience and safety
- CPS FlexOM Gateway enables remote FW upgrades
- Integrated AC & DC disconnect switches
- 1 MPPT with 20 fused inputs for maximum flexibility
- Copper and Aluminum compatible AC connections
- NEMA Type 4X outdoor rated, tough tested enclosure
- Advanced Smart-Grid Features (CA Rule 21 certified)
- kVA Headroom yields 100kW @ 480V and 125kW @ 0.95PF
- Generous 1.87 and 1.5 DC/AC Inverter Load Ratios
- Separable wire-box design for fast service
- Standard 5 year warranty with extensions to 20 years



100/125KTL Standard Wire-box



100/125KTL Centralized Wire-box

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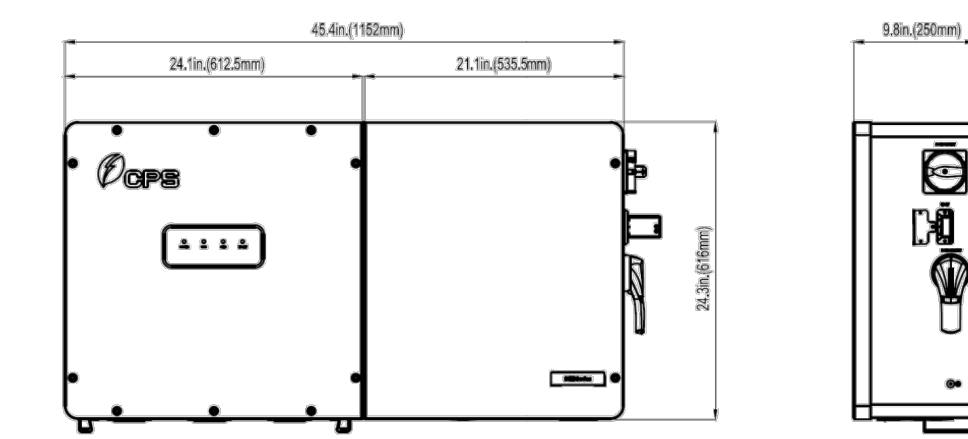
Model Name	CPS SCH100KTL-DO/US-600	CPS SCH125KTL-DO/US-600
DC Input		
Max. PV Power	187.5kW	150kW
Max. DC Input Voltage	1500V	1500V
Operating DC Input Voltage Range	800-1450Vdc	800-1450Vdc
Start-up DC Input Voltage / Power	900V / 250W	900V / 250W
Number of MPPT Trackers	1	1
MPPT Voltage Range ¹	870-1300Vdc	870-1300Vdc
Max. PV Input Current (ac x1.25)	275A	275A
Number of DC Inputs	20 PV source circuits, max. 4 string fused (Standard Wire-box) 1 PV output circuit, 1.2 terminations per pole, non-fused (Centralized Wire-box)	20 PV source circuits, max. 4 string fused (Standard Wire-box) 1 PV output circuit, 1.2 terminations per pole, non-fused (Centralized Wire-box)
DC Disconnection Type	Type II MOV (with indicator/remote signaling), Up=25kV, In=20kA (820uS)	Type II MOV (with indicator/remote signaling), Up=25kV, In=20kA (820uS)
DC Surge Protection	Type II MOV (with indicator/remote signaling), Up=25kV, In=20kA (820uS)	Type II MOV (with indicator/remote signaling), Up=25kV, In=20kA (820uS)
AC Output		
Rated AC Output Power	100kW	125kW
Max. AC Output Power ²	100kVA (110kVA @ PF=0.9)	125kVA (130kVA @ PF=0.95)
Rated Output Voltage	600Vdc	600Vdc
Output Voltage Range ³	528-660Vdc	528-660Vdc
Grid Connection Type ⁴	3ø / PE / N (Neutral optional)	3ø / PE / N (Neutral optional)
Max. AC Output Current @600Vdc	96.2/106.8A	120.3/127.0A
Rated Output Frequency ⁵	60Hz	60Hz
Output Frequency Range ⁶	57-63Hz	57-63Hz
Power Factor	>0.99 (±0.8 adjustable)	>0.99 (±0.8 adjustable)
Current THD	<3%	<3%
Max. Fault Current Contribution (1-cycle RMS)	41.47A	41.47A
Max. OCPD Rating	200A	200A
AC Disconnection Type	Load-rated AC switch	Load-rated AC switch
AC Surge Protection	Type II MOV (with indicator/remote signaling), Up=25kV, In=20kA (820uS)	Type II MOV (with indicator/remote signaling), Up=25kV, In=20kA (820uS)
System		
Topology	Transformerless	Transformerless
Max. Efficiency	99.1%	99.1%
CEC Efficiency	98.5%	98.5%
Stand-by / Input Consumption	<5W	<5W
Environment		
Enclosure Protection Degree	NEMA Type 4X	NEMA Type 4X
Cooling Method	Variable speed cooling fans	Variable speed cooling fans
Operating Temperature Range ⁷	-22°F to +140°F / -30°C to +50°C (operating from +100°F / +42°C)	-22°F to +140°F / -30°C to +50°C (operating from +100°F / +42°C)
Non-Operating Temperature Range ⁸	-40°F to +158°F / -40°C to +70°C maximum	-40°F to +158°F / -40°C to +70°C maximum
Operating Humidity	0-100%	0-100%
Non-Operating Humidity	0-100%	0-100%
Operating Altitude	8202ft / 2500m (no derating)	8202ft / 2500m (no derating)
Ambient Noise	<65dBA@1m and 25°C	<65dBA@1m and 25°C
Display and Communication		
User Interface and Display	LED Indicator, Web + APP	LED Indicator, Web + APP
Inverter Monitoring	Modbus RTU/485	Modbus RTU/485
Site Level Monitoring	CPS FlexOM Gateway (1 per 32 inverters)	CPS FlexOM Gateway (1 per 32 inverters)
Modbus Data Mapping	SurtoProCPS	SurtoProCPS
Remote Diagnostic / FW Upgrade Functions	Standard (with FlexOM Gateway)	Standard (with FlexOM Gateway)
Mechanical		
Dimensions (WxHxD)	45.26x24.25x6.64in (1150x615x200mm) with Standard Wire-box 39.37x24.25x6.64in (1000x615x200mm) with Centralized Wire-box	45.26x24.25x6.64in (1150x615x200mm) with Standard Wire-box 39.37x24.25x6.64in (1000x615x200mm) with Centralized Wire-box
Weight	Inverter: 121lbs / 55kg Wire-box: 55lbs / 25kg (Standard Wire-box), 33lbs / 15kg (Centralized Wire-box)	Inverter: 121lbs / 55kg Wire-box: 55lbs / 25kg (Standard Wire-box), 33lbs / 15kg (Centralized Wire-box)
Mounting / Installation Angle	15 - 90 degrees from horizontal (vertical or angled)	15 - 90 degrees from horizontal (vertical or angled)
AC Termination	M10 Stud Type Terminal (20) (Wire range 10AWG - 500kcmil CU/AL, 1 termination per pole), Screw Clamp Terminal Block (N) (#12 - 1/0AWG CU/AL)	M10 Stud Type Terminal (20) (Wire range 10AWG - 500kcmil CU/AL, 1 termination per pole), Screw Clamp Terminal Block (N) (#12 - 1/0AWG CU/AL)
DC Termination	Screw Clamp Fuse Holder (Wire range #12 - #5AWG CU) - Standard Wire-box Busbar, M10 Bolt (Wire range #1AWG - 500kcmil CU/AL, 1 termination per pole), #1AWG - 300kcmil CU/AL (2 terminations per pole), Lug not supplied - Centralized Wire-box	Screw Clamp Fuse Holder (Wire range #12 - #5AWG CU) - Standard Wire-box Busbar, M10 Bolt (Wire range #1AWG - 500kcmil CU/AL, 1 termination per pole), #1AWG - 300kcmil CU/AL (2 terminations per pole), Lug not supplied - Centralized Wire-box
Fused String Inputs	20A fuses provided (Fuse values up to 30A acceptable)	20A fuses provided (Fuse values up to 30A acceptable)
Safety		
Safety and EMC Standard	UL1741-5a-2016, CSA C22.2 No. 107.1-01, IEEE1547a-2014, FCC PART15	UL1741-5a-2016, CSA C22.2 No. 107.1-01, IEEE1547a-2014, FCC PART15
Selection Grid Standard	IEEE 1547-2014, CA Rule 21, 65.0A	IEEE 1547-2014, CA Rule 21, 65.0A
Smart-Grid Features	Volt-Ride-Thru, Freq-Ride-Thru, Ramp-Rate, Specified PF, Volt-VAr, Freq-VAr, Volt-Watt	Volt-Ride-Thru, Freq-Ride-Thru, Ramp-Rate, Specified PF, Volt-VAr, Freq-VAr, Volt-Watt
Warranty		
Standard ⁹	5 years	5 years
Extended Terms	10, 15 and 20 years	10, 15 and 20 years

1) See user manual for further information regarding MPPT Voltage Range when operating at low voltage PV
2) Max. AC Output Power: when using MPPT voltage range and temperature range at 25°C (77°F) ±2°F (±1.1°C) at 100% PF and 100% VAr
3) Output Voltage Range: when using MPPT voltage range and temperature range at 25°C (77°F) ±2°F (±1.1°C) at 100% PF and 100% VAr
4) Wire range per pole, Data may not be complete
5) See user manual for further information regarding inverter operating conditions
6) 1 year warranty effective for units purchased after October 16, 2016

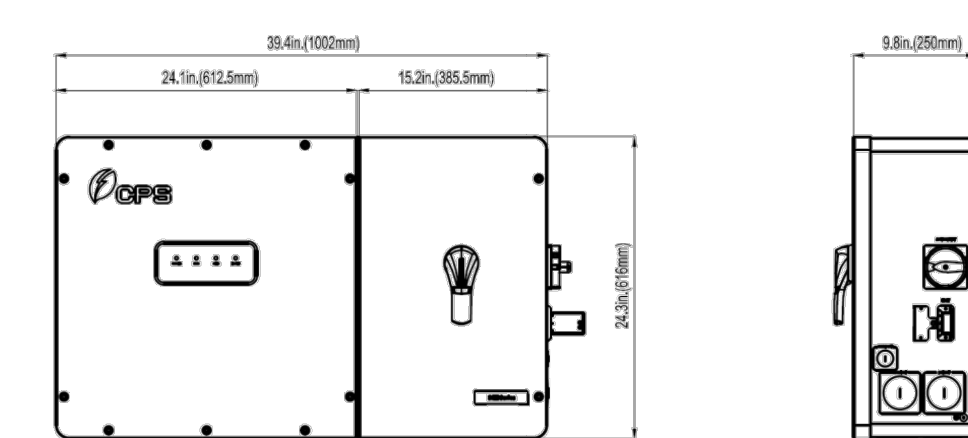


3.2 Mechanical Installation

(1) Dimensions



100/125kW Standard Wire-box



100/125kW Centralized Wire-box

Figure 3-1 Dimensions of CPS SCH100/125KTL-DO/US-600 and CPS SCH100KTL-DO/US-480 Inverter

INVERTER DATA SHEET

INVERTER DATA SHEET

INVERTER DATA SHEET

ITEMS:

- BASE OF TRANSFORMER.
- TRANSFORMER LIFTING LUGS.
- TRANSFORMER GROUND PADS.
- SLIPPERED BOLT ON TOP COVER WITH LIFTING EYES FOR COVER ONLY.
- COOLING RADIIATORS HOT DIPPED GALVANIZED UNPAINTED, BOLT-ON TYPE (WITHOUT ISOLATION VALVES).
- HV DEADBREAK BUSHING, 35KV, 200KV BIL, 900A (7).
- LV EPOXY BUSHING, 1.2KV, 300V BIL, 300A, 10 HOLES NEMA SPADE (4).
- COMBINATION LOWER DRAIN AND FILTER VALVE 1" NPT WITH SAMPLER.
- UPPER FILTER VALVE 1" NPT AND PLUG.
- PRESSURIZATION TEST POINT AND GAS SAMPLING WITH 1/2" NPT BALL VALVE.
- LIQUID LEVEL GAUGE WITHOUT CONTACTS, GAUGE CENTER IS 29°C OIL LEVEL MARK.
- LIQUID TEMPERATURE GAUGE WITHOUT CONTACTS.
- PRESSURE VACUUM GAUGE WITH BLEEDER.
- PRESSURE RELIEF DEVICE WITH FLAG, WITHOUT CONTACTS.
- DE-ENERGIZED, NO LOAD MANUAL, TAP CHANGER WITH PROVISION FOR PADLOCKING.
- TWO-POSITION LOADBREAK SWITCH, 38KV, 300A, HOTSTICK OPERATED.
- HV/LV CABINET BOLTED ON OPEN BOTTOM, PROVISION FOR PADLOCK AND DOOR STOP IN OPEN POSITION.
- STAINLESS STEEL LASER PRINTED NAMEPLATE ON LV/AT DOOR.
- PENICULAR DUPLICATED NAMEPLATE INSIDE ATC.
- ISOLATION BARRIER.
- PARKING STANDERS.
- DOOR HOLDING BARS UP TO 120° OPENING IN BOTTOM.
- STAINLESS STEEL HINGES FOR TCO DOORS.
- TRANSFORMER JACKING PAD.
- RADIACABLE HANDLE, DURABLE ZINC DIE CAST WITH POWDER COAT FINISH.
- BOX FOR DRAIN VALVE.
- BOX FOR PRESSURE RELIEF DEVICE.
- GAUGE BOX WITH PROVISION FOR PADLOCK.
- MANHOLE WITH COVER, BOLTED AND GASKETED WITH PENTHEAD BOLTS (2), AND PROVISION FOR PADLOCK.
- HV/LV UNISTRUT P1000T CABLE SUPPORT.

NOTES:

- LIQUID FILLED TRANSFORMER INVERTER STEP UP.
- ENVIRONMENT PROOF FILLED TRANSFORMER, APPROXIMATELY 560 GALLONS.
- EXTERIOR COLOR: ANSI Z90, ZINC RICH PRIMER, URETHANE OVER EPOXY (VTC PAINT SYSTEM); BASE UNCOATED WITH COAL-TAR EPOXY.
- TOUCH UP PAINT KIT PROVIDED.
- WEAK LINK FUSES 3kV CURVE B3.
- CURRENT-LIMITING BACK UP FUSES 23 kV 100A (2 PER PHASE) UNDER OIL.
- BUSHINGS ARE EXTERNALLY CLAMPED.
- BOTTOM OF AIR TERMINAL CHAMBER COVERED FOR SHIPMENT PURPOSES.
- UNIT DESIGNED FOR OPERATION AT 20 deg C.
- UNIT DESIGNED FOR SEALED TANK OIL PRESERVATION.
- ALL EXTERNAL BOXES HINGED WITH PENTHEAD AND PROVISION FOR PADLOCK.
- ELECTROSTATIC SHIELD (NOT BROUGHT OUT).
- HS EXTERNALLY CONNECTED BY CUSTOMER (DO NOT OPERATE WITH HD UNGROUNDING).
- K FACTOR = 2
- UNIT DESIGNED FOR OPERATION AT AN ALTITUDE UP TO 6600 F.A.S.L.
- ALL EXTERNAL HARDWARE IS STAINLESS STEEL.
- DO NOT USE FORK-LIFT TRUCK TO HANDLE THE UNIT. THE USE OF FORK-LIFT TRUCK COULD AFFECT TRANSFORMER INTEGRITY AND PERFORMANCE.

Customer: CHABERTON ENERGY HOLDINGS, INC.

JOB NUMBER	DESIGN NUMBER	PROJECT
VAS25A	252500009W	Chaberton Solar, Blue Hill LLC
VAS26A	252500009W	Chaberton Solar, Cresskill LLC
VAS27A	252500009W	Chaberton Solar, Blackburn LLC
VAS28A	252500009W	Chaberton Solar, Rockville LLC

Warranty Field Work: If, at the job site, the equipment is found to have not conformed to specifications or needs repair, we will provide the necessary parts and labor to repair the equipment at no charge to the customer. This warranty is void if the equipment is not installed and maintained in accordance with the instructions provided by Virginia Transformer Corp. or their representatives to work on the unit(s) at the job site. The amount of warranty work will be determined solely by Virginia Transformer Corp.

ALL DIMENSIONS IN INCHES UNLESS OTHERWISE SPECIFIED. DIMENSIONS IN PARENTHESES ARE FOR INFORMATION ONLY.

VT VIRGINIA TRANSFORMER CORP. 200 SCALE 1/8" = 1" 141, ROCKVILLE, VA 24117 (540) 345-8992

VT VIRGINIA TRANSFORMER CORP. 200 SCALE 1/8" = 1" 141, ROCKVILLE, VA 24117 (540) 345-8992

VT VIRGINIA TRANSFORMER CORP. 200 SCALE 1/8" = 1" 141, ROCKVILLE, VA 24117 (540) 345-8992

TRANSFORMER DATA SHEET

VIRGINIA TRANSFORMER CORP.
VIC WEST S.A. DE C.V. DURANGO, DGO, MEXICO
A SUBSIDIARY OF SPECIAL TRANSFORMER CORP., ROCKVILLE, VA, U.S.A.
GENERATOR STEP UP

SERIAL NUMBER: 452000A009W-V4045A

KVA: 2000/2240 65/75°C RISE 60 Hz

HV: 24900Grdy/14376 BIL: 125 KV PHASES: 3

LV: 600Grdy/346 BIL: 30 KV CLASS: KNAV

6600 F.A.S.L. K FACTOR = 2

HV WDG: ALUMINUM LV WDG: ALUMINUM IMPEDANCE: % AT 85°C

MFG DATE: MONTH/YEAR: LIQUID: ENVIROTEMP (FR3)

*HS EXTERNALLY CONNECTED BY CUSTOMER (DO NOT OPERATE WITH HD UNGROUNDING).

VOLTS	AMPS @ 2240 KVA	POS	CAUTION
26145	49.5	1/2A	DE-ENERGIZE TRANSFORMER BEFORE CHANGING TAPS
25520	50.7	2/B	REFER INSTRUCTION MANUAL LF-5 BEFORE ENERGIZATION
24900	51.9	3/C	
24280	53.3	4/D	
23655	54.7	5/E	
LV	600	2155	

MAX. OPERATING PRESSURE: 100 PSI POSITIVE, 100 PSI NEGATIVE

TANK DESIGNED FOR 100 PSI VACUUM FILLING, 25°C LIQUID LEVEL TO TOP FLANGE OF MANHOLE

IN PER 10°C CHANGE IN LIQUID TEMPERATURE, CONTAINS NO DETECTABLE LEVEL OF PCB (C2, PPM) AT THE TIME OF MANUFACTURE.

APPROXIMATE WEIGHT LBS:

CORE & COILS: _____ TOTAL WEIGHT _____

TANK & FITTINGS: _____ UNTANKING WEIGHT _____

LIQUID U.S. GALLONS: _____

ITEM	CAT. NO.	MANUFACTURER
CL FUSE	HTSS252100	HI-TEC
LINK FUSE	345B995031	ABB

VECTOR DIAGRAM

MATERIAL: 0.10 STAINLESS STEEL
NON-CORROSIVE
LETTER LASER ENGRAVED
0.25 DIA. HOLES (2)

NOTES:
FINAL IMPEDANCE, WEIGHTS, DATE PRESSURES & LEVELS WILL BE ENTERED ON NAMEPLATE AFTER TESTING. FOR NOMINAL DESIGN IMPEDANCE SEE OUTLINE DWG.

VT VIRGINIA TRANSFORMER CORP. 200 SCALE 1/8" = 1" 141, ROCKVILLE, VA 24117 (540) 345-8992

VT VIRGINIA TRANSFORMER CORP. 200 SCALE 1/8" = 1" 141, ROCKVILLE, VA 24117 (540) 345-8992

VT VIRGINIA TRANSFORMER CORP. 200 SCALE 1/8" = 1" 141, ROCKVILLE, VA 24117 (540) 345-8992

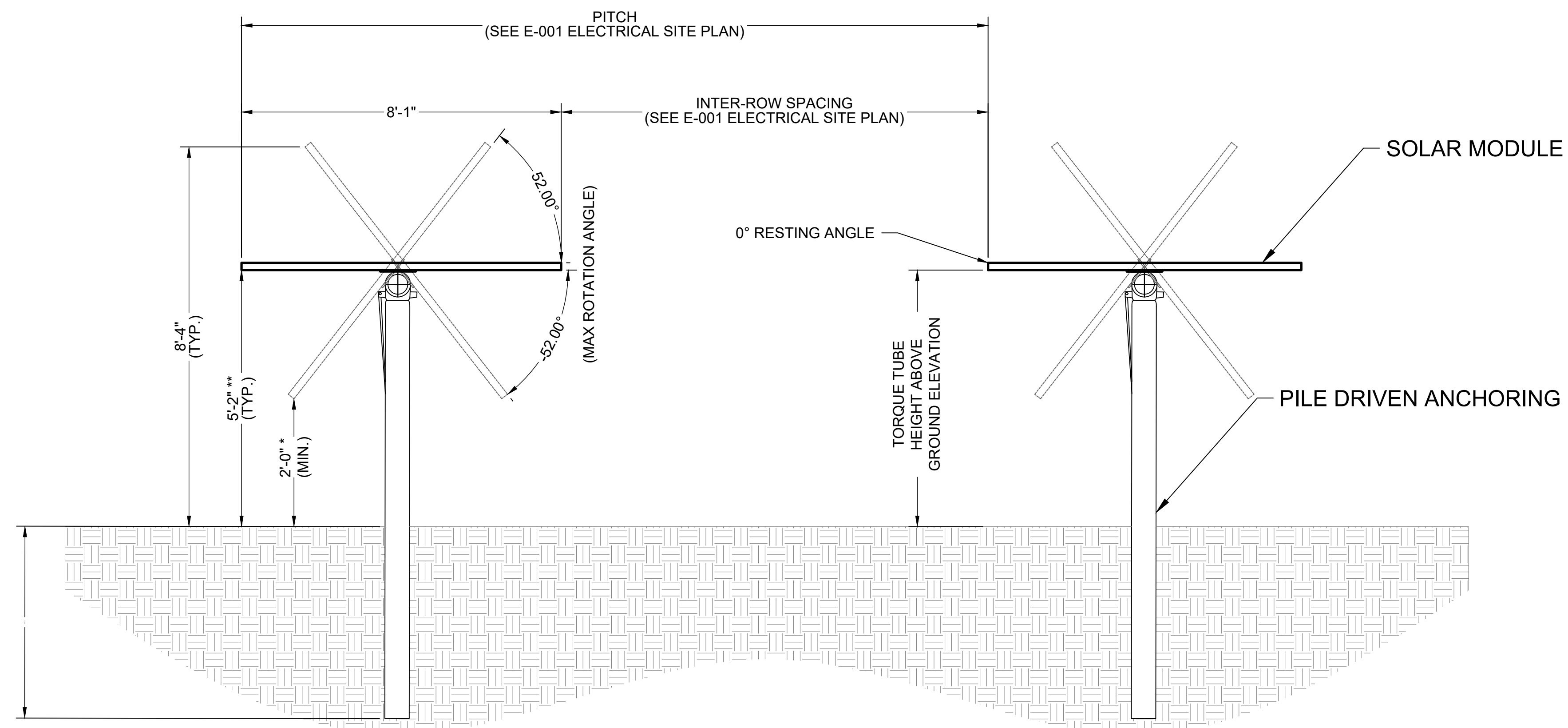
TRANSFORMER DATA SHEET

NOT FOR CONSTRUCTION

10% DESIGN	01/04/2024
APPROVED BY:	JSG
CHECKED BY:	EJA
DESIGNED BY:	AOK
DRAWING TITLE	EQUIPMENT DATASHEETS
REVISION	A
DRAWING NO.	E-500

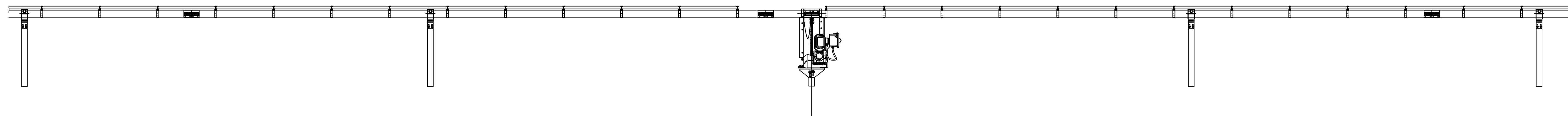
PROJECT	CHABERTON SOLAR SUGARLOAF LLC 5.92 MWdc / 4.00 MWac GROUND MOUNT AT 20507 DARNESTOWN RD. DICKERSON, MD 20842 39.2080°N, -77.4233°W	DEVELOPER	CHABERTON ENERGY 1700 Rockville Pike, Suite 305 Rockville, MD 20852	APPROVED BY:	JSG	DATE	05/31/2024
REV.	A	DESCRIPTION	CPCN UPDATE/MANDATORY REFERRAL PROCESS	REVISION	A	DRAWING NO.	E-500





* SEE NOTE 8.6
 ** SEE NOTE 8.7

TYP. SIDE VIEW AT MAX 52° TILT
 NOT TO SCALE



TYP. MODULE INTERIOR ROW
 SCALE 1/4" = 1'

SYSTEM SUMMARY

DC SYSTEM SIZE	5,922.24 kWdc
AC SYSTEM SIZE	4,000.00 kWac
DC/AC RATIO	1.481
MODULES	QCELL Q.TRON XL-G2 620 (620Wp) OR EQUIV.
MODULE QUANTITY	9,552
INVERTERS	CHINT CPS SCH125KTL-DO/US-600 OR EQUIV.
INVERTER QUANTITY	34
AZIMUTH/TILT	180° / SINGLE AXIS TRACKER
PITCH	16.2 ft

NOTES:

- DRAWING IS DIAGRAMMATIC AS SHOWN AND INTENDED TO COMMUNICATE INTENT.
- PILE SURVEYING SHALL BE PERFORMED BY A LICENSED SURVEYOR USING THE APPLICABLE STATE-PLANE COORDINATE SYSTEM.
- EPC TO DETERMINE PILE EMBEDMENT AND FOUNDATIONS PER STRUCTURAL CALCULATIONS FOR EACH TORQUE TUBE HEIGHT AND BASE.
- FOUNDATION AND RACKING SHALL BE INSTALLED PER MANUFACTURER'S INSTALLATION MANUAL AND WITHIN STATED TOLERANCES.
- ALL GRADING AND DRAINAGE SHALL BE PER CIVIL CONSTRUCTION DRAWINGS.
- EPC TO DETERMINE RACKING SPACING.
- ALL STRUCTURAL AND MECHANICAL DESIGNS TO BE PERFORMED BY A QUALIFIED LICENSED PROFESSIONAL ENGINEER.
- DESIGN CRITERIA:
 - 105 MPH WIND SPEED, ASCE 7-10, CAT I OR COUNTY MINIMUM REQUIREMENTS; WHICHEVER IS HIGHER
 - 25 PSF GROUND SNOW EXPOSURE OR COUNTY MINIMUM REQUIREMENTS; WHICHEVER IS HIGHER
 - ANCHORING IS PILE DRIVEN UNLESS OTHERWISE REQUIRED BY SITE CONDITIONS.
 - PANELS AZIMUTH TO BE 180°
 - FINAL DESIGN MAY BE ADJUSTED PRIOR TO CONSTRUCTION. MAXIMUM HEIGHT NOT TO BE INCREASED WITHOUT APPROVAL FROM THE ENGINEER AND AHJ.
 - <20% OF LEADING EDGES TO BE WITHIN 2' OF GROUND FOR PURPOSES OF POLLINATOR GROWTH.
 - <5% OF TORQUE TUBE TO BE >8' ABOVE GROUND ELEVATION.
 - RACKING TO BE SINGLE PORTRAIT ORIENTATION.
 - MAXIMUM RACKING TOLERANCE ASSUMED AT 15%

**NOT FOR
 CONSTRUCTION**

10% DESIGN 01/04/2024

DRAWING TITLE

RACKING DETAILS

REVISION **A** DRAWING NO. **M-001**

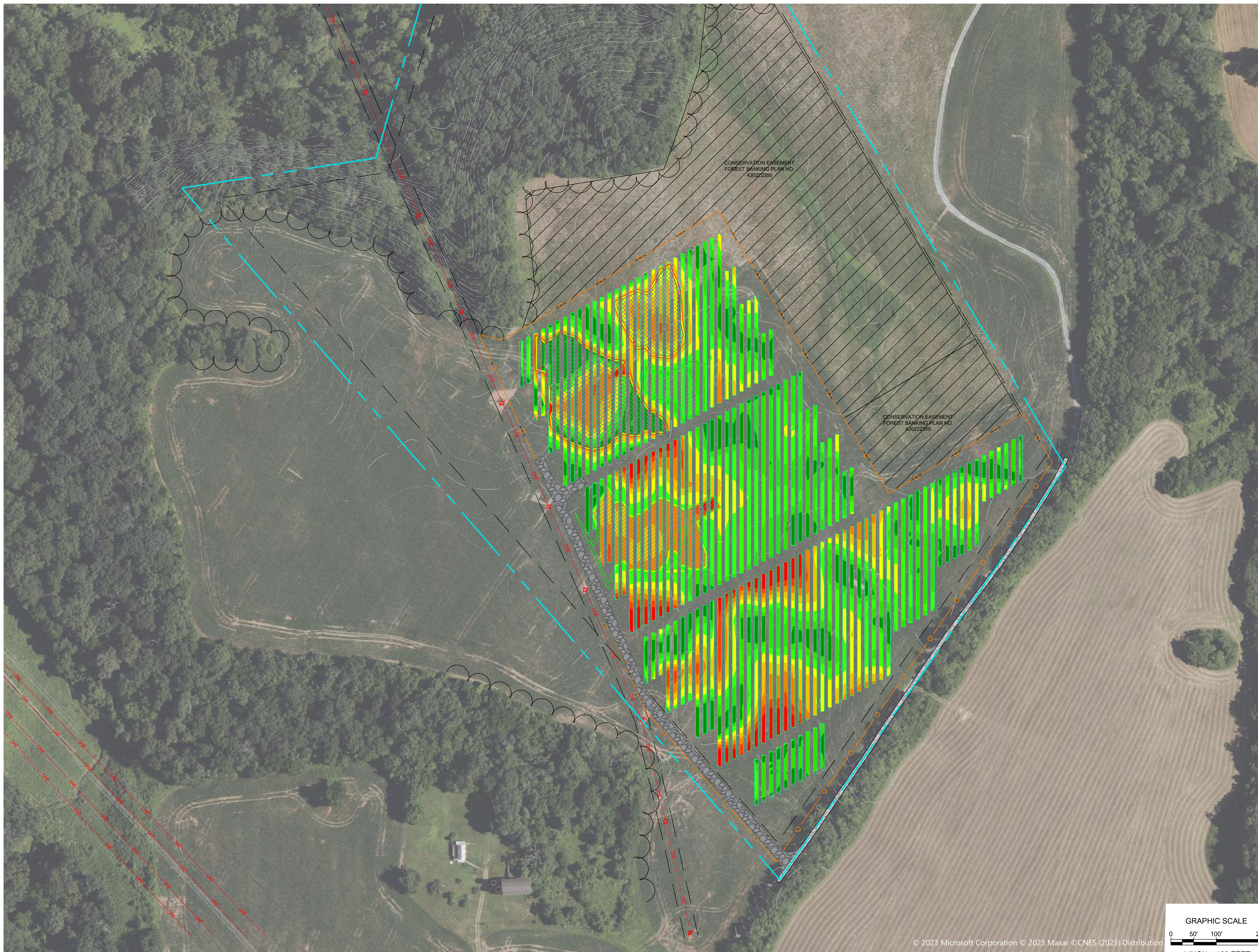
PROJECT
 CHABERTON SOLAR SUGARLOAF LLC
 5.92 MWdc / 4.00 MWac GROUND MOUNT AT
 20507 DARNESTOWN RD. DICKERSON, MD 20842
 39.2080°N, -77.4233°W

DEVELOPER
 CHABERTON ENERGY
 1700 Rockville Pike, Suite 305
 Rockville, MD 20852



APPROVED BY:	JSG	
CHECKED BY:	EJA	
DESIGNED BY:	AOK	
REV.	B	CPCN UPDATE/MANDATORY REFERRAL PROCESS
		05/31/2024
		DATE

APPROVED BY:	JSG
CHECKED BY:	EJA
DESIGNED BY:	AOK
REV.	B
	05/31/2024
	DATE



SYSTEM SUMMARY

DC SYSTEM SIZE	5,922.24 kWdc
AC SYSTEM SIZE	4,000.00 kWac
DC/AC RATIO	1.481
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INVERTERS	CHINT CPS SCH125KTL-DO/US-600 OR EQUIV.
INVERTER QUANTITY	34
AZIMUTH/TILT	180° / SINGLE AXIS TRACKER
PITCH	16.2 ft

LAYER LEGEND

PROP UNDERGROUND ELECTRIC	
PROP OVERHEAD ELECTRIC	
EX UNDERGROUND ELECTRIC	
EX OVERHEAD ELECTRIC	
PROP FENCE	
PROPERTY LINE	
SOLAR PV MODULES	

ELEVATION TABLE

COLOR	MIN HEIGHT	MAX HEIGHT	AREA (sf)	PERCENT AREA
	4.274	5.180	43,531	14.49%
	5.180	5.500	60,579	20.16%
	5.500	6.000	71,159	23.68%
	6.000	6.500	44,619	14.85%
	6.500	7.000	35,817	11.92%
	7.000	7.500	27,707	9.22%
	7.500	8.000	8,083	2.69%
	8.000	9.738	8,976	2.99%

NOTES:

- MINIMAL GRADING NECESSARY FOR CONSTRUCTION OF ROADS AND TRANSFORMERS ARE TO BE BALANCED ON-SITE.
- ELEVATIONS ARE MEASURED FROM THE LONGITUDINAL MIDPOINT OF THE ARRAY TO THE GROUND ELEVATION.

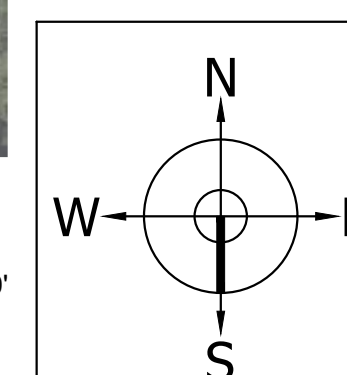


AREA OF FILL: 1.16 FT DEPTH



AREA OF CUT: 0.75 FT DEPTH

NOTE: THERE IS APPROXIMATELY 1,600 CY OF CUT AND 1,600 CY OF FILL GRADING FOR THIS SITE UNDERNEATH THE SOLAR ARRAYS. MINIMAL GRADING NECESSARY FOR CONSTRUCTION OF ROADS AND TRANSFORMERS ARE TO BE BALANCED ON-SITE.



NOT FOR CONSTRUCTION

10% DESIGN 01/04/2024

APPROVED BY:

DRAWING TITLE

JSG

PLANAR STUDY

CHECKED BY:

EJA

DESIGNED BY:

REVISION

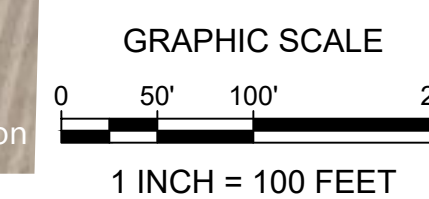
AOK

B

DRAWING NO.

M-101

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PROJECT
 CHABERTON SOLAR SUGARLOAF LLC
 5.92 MWdc / 4.00 MWac GROUND MOUNT AT
 20507 DARNESTOWN RD. DICKERSON, MD 20842
 39.2080°N, -77.4233°W

DEVELOPER
 CHABERTON ENERGY
 1700 Rockville Pike, Suite 305
 Rockville, MD 20852



REV.	DESCRIPTION	DATE
C	GRADING QUANTITY CORRECTION	07/16/2024
B	PIER HEIGHT REVISION	07/02/2024
A	CPCN UPDATE/MANDATORY REFERRAL PROCESS	05/31/2024

APPROVED BY:	JSG
CHECKED BY:	EJA
DESIGNED BY:	AOK

DRAWINGS FOR CONCEPT STORMWATER PLAN

SUGARLOAF 4.0 MW AC SOLAR PROJECT

DICKERSON, MONTGOMERY COUNTY, MARYLAND

TECHNICAL REVIEW OF SEDIMENT CONTROL	
REVIEWED	DATE
TECHNICAL REVIEW OF STORMWATER MANAGEMENT	
REVIEWED	DATE
ADMINISTRATIVE REVIEW	
REVIEWED	DATE
SMALL LOT DRAINAGE APPROVAL	
N/A: <input type="checkbox"/> OR	
REVIEWED	DATE
NOTE: MCDPS APPROVAL DOES NOT NEGATE THE NEED FOR A MCDPS ACCESS PERMIT.	
MCDPS APPROVAL OF THIS PLAN WILL EXPIRE TWO YEARS FROM THE DATE OF APPROVAL IF THE PROJECT HAS NOT STARTED.	
DPS approval of a sediment control or stormwater management plan is for demonstrated compliance with minimum environmental runoff treatment standards and does not create or imply any right to divert or concentrate runoff onto any adjacent property without that property owner's permission. It does not relieve the design engineer or other responsible person of professional liability or ethical responsibility for the adequacy of the drainage design as it affects uphill or downhill properties.	
-	
SEDIMENT CONTROL PERMIT NO.	
-	
SM. FILE NO.	
STORMWATER MANAGEMENT:	

ARM Group LLC
 Engineers and Scientists
 www.armgroup.net

ISSUED FOR CONCEPT SWM REVIEW 06/18/2024 ARM By:

Rev	Date	By
0	06/18/2024	ARM

AS NOTED
 CDW KJM CDW
 07/29/2024
 23010892

COVER SHEET
 CONCEPT STORMWATER PLAN
 DICKERSON
 SUGARLOAF SOLAR PROJECT
 CHABERTON SOLAR SUGARLOAF LLC
 MONTGOMERY COUNTY, MARYLAND

Sheet 1

JULY 2024

LIST OF SHEETS

SHEET NO.	DESCRIPTION
1	COVER SHEET
2	EXISTING SITE CONDITIONS PLAN
3	PROPOSED SITE CONDITIONS PLAN (SHEET 1 OF 2)
4	PROPOSED SITE CONDITIONS PLAN (SHEET 2 OF 2)
5	PROPOSED SITE DETAILS (SHEET 1 OF 2)
6	PROPOSED SITE DETAILS (SHEET 2 OF 2)



VICINITY MAP
SCALE: 1" = 6 Miles

PREPARED FOR DEVELOPER:
CHABERTON SOLAR SUGARLOAF LLC
 1700 ROCKVILLE PIKE, SUITE 305
 ROCKVILLE, MD 20852
 (804) 929-8418

PROPERTY OWNER:
DOUGLAS BOUCHER
 20507 DARNESTOWN ROAD
 DICKERSON, MD 20842

SITE ADDRESS:
 20507 DARNESTOWN ROAD, DICKERSON, MD 20842 (39.2080°N, -77.4233°W)

PROJECT SITE:

- EXISTING ZONING: AGRICULTURAL RESERVE (AR) ZONE
- EXISTING USE: AGRICULTURAL
- PROPOSED USE: COMMUNITY SOLAR ENERGY GENERATING SYSTEM (CSEGS)
- TOTAL SITE AREA: 52.46 AC
- TOTAL PROPOSED DEVELOPMENT AREA (LIMIT OF DISTURBANCE): 860,462 SF (19.8± AC)
- TAX MAP NO. 11-03023873, DEED BOOK: 12458, PAGE: 017
- SYSTEM SIZE: 5,886 kW DC / 4,000 kW AC

August 2023

RELATED REQUIRED PERMITS					
To be completed by the consultant and placed on the first sheet of the Sediment Control / Stormwater Management plan set for all projects.					
IT IS THE RESPONSIBILITY OF THE PERMITTEE/OWNER OF THIS SITE TO OBTAIN ALL REQUIRED PERMITS PRIOR TO ISSUANCE OF THE SEDIMENT CONTROL PERMIT					
TYPE OF PERMIT	REQD	NOT REQD	PERMIT #	EXPIRATION DATE	WORK RESTRICTION DATES
MCDPS Floodplain District		X			
WATERWAYS/WETLANDS:		X			
a. Corps of Engineers					
b. MDE					
c. MDE Water Quality Certification					
MDE Dam Safety		X			
MSCD Small Pond Approval		X			
* DPS Roadside Trees Protection Plan		X		Approval Date	
** N.P.D.E.S. NOTICE OF INTENT	X				
FEMA LOMR (Required Post Construction)		X			
OTHERS (Please List):					

*A copy of the approved Roadside Trees Protection Plan must be delivered to the Sediment Control Inspector at the Preconstruction Meeting.

**When a Notice of Intent is required, the sediment control permit may not be issued until confirmation of authorization under the MDE's 20-CP permit has been submitted to DPS.

OWNER'S/DEVELOPER'S CERTIFICATION

I/We hereby certify that all clearing, grading, construction, and/or development will be done pursuant to this plan and that any responsible personnel involved in the construction project will have a Certificate of Attendance at a Department of Natural Resources approved training program for the control of sediment and erosion before beginning the project.

Signature _____ Date _____
 Printed Name and Title _____

DESIGN CERTIFICATION

I hereby certify that this plan has been prepared in accordance with the "2011 Maryland Standards and Specification for Soil Erosion and Sediment Control," Montgomery County Department of Permitting Services Executive Regulations 5-90, 7-02AM and 36-90, and Montgomery County Department of Public Works and Transportation "Storm Drain Design Criteria" dated August 1988.

Signature _____ Date 7/31/24
 Printed Name and Title Charles D. Walker 61081 Registration Number

SWM Concept Summary Table:

Contact Information for Design Engineer (for technical issues): Charles Walker
 ARM Group LLC 9175 Guilford Road Suite 310 Columbia, MD 21046
 Phone: 667-240-2533

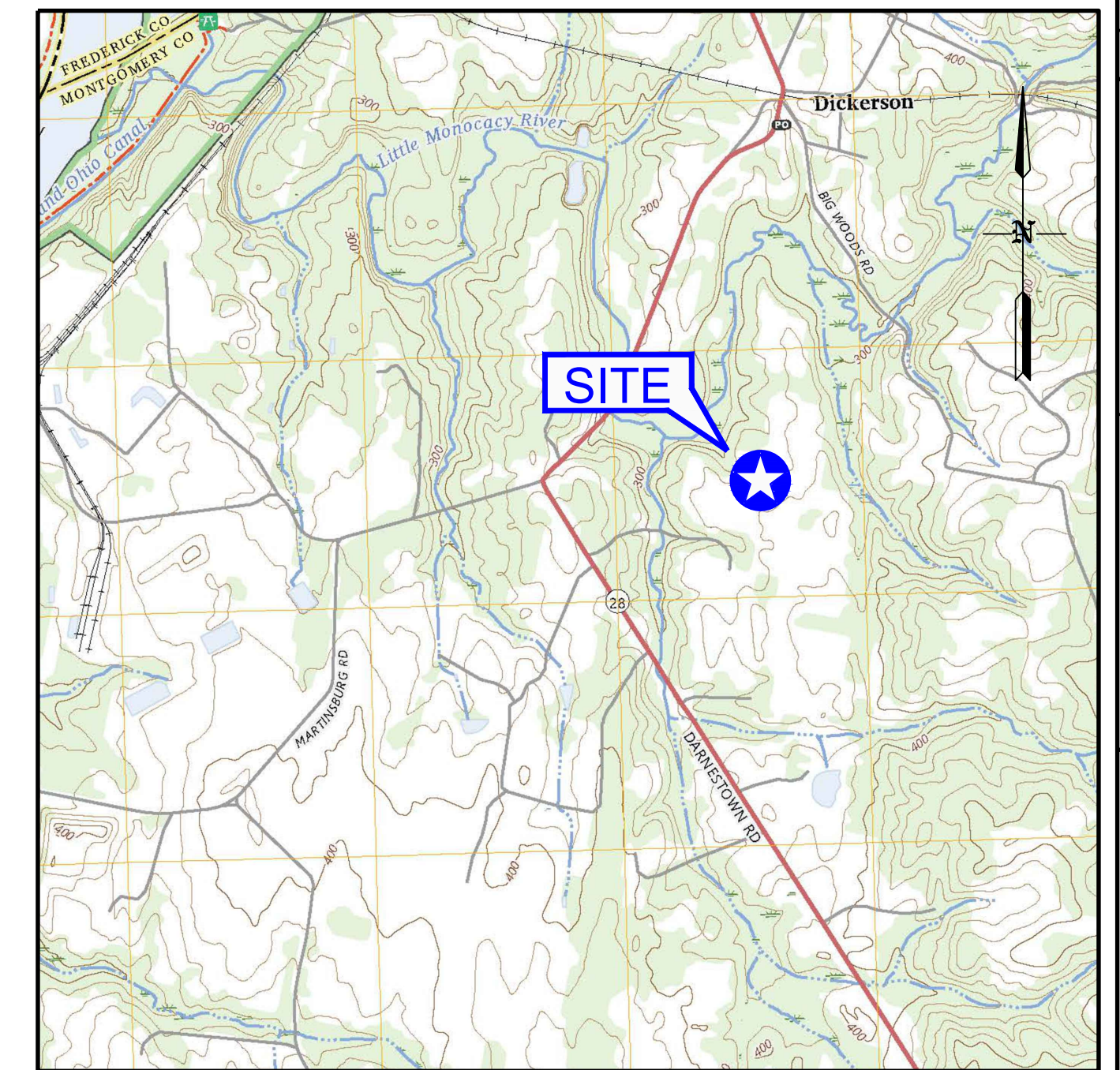
General Property Information:

SM# 293586
 Type of Concept: SWM Concept
 MNCP&PC Process/No: Mandatory Referral
 Property Address: 20507 Darnestown Road Dickerson, MD 20842
 Property Legal Description: Parcel 127
 Property Size (ac/sq. ft.): 52.46 ac / 2,284,997 sq. ft.
 Total Concept Area (ac./sq. ft.): 19.8 ac. / 860,462 sq. ft.
 Zoning: AR (Agricultural Reserve)
 Watershed(s) and Stream Class: Middle Potomac River Watershed/ Class I-P
 Special Protection Area: n/a
 100 YR Floodplain: FEMA 24031C0135D
 Ex. % impervious / Redevelopment or New Development: 5% impervious / New Development
 SWM Summary:
 Target PE/Proposed PE : 1.0" / 3.44"
 Target ESDv/Provided ESDv: 7.067 cf / 24,309 cf
 ESD Measures: Non-rooftop Disconnect
 Structural Storage Required/Provided: n/a
 Structural Measures: n/a
 Waiver Request/QL/QN/Both: No
 Provided ESDv + Structural Storage Provided + Requested to be Waived = 24,309 cf
 Other Information:

CERTIFICATION OF THE QUANTITIES

I hereby certify that the estimated total amount of excavation and fill as shown on these plans has been computed to be 789 cubic yards of excavation, 789 cubic yards of fill and the total area to be disturbed as shown on these plans has been determined to be 860,462 square feet.

Signature _____ Date 7/31/24
 Printed Name and Title Charles D. Walker 61081 Registration Number



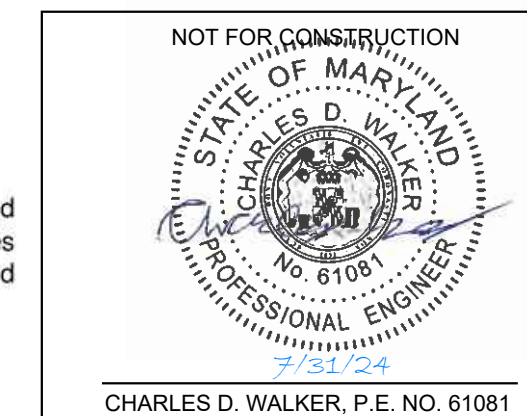
LOCATION MAP
SCALE: 1" = 200'

PREPARED BY:



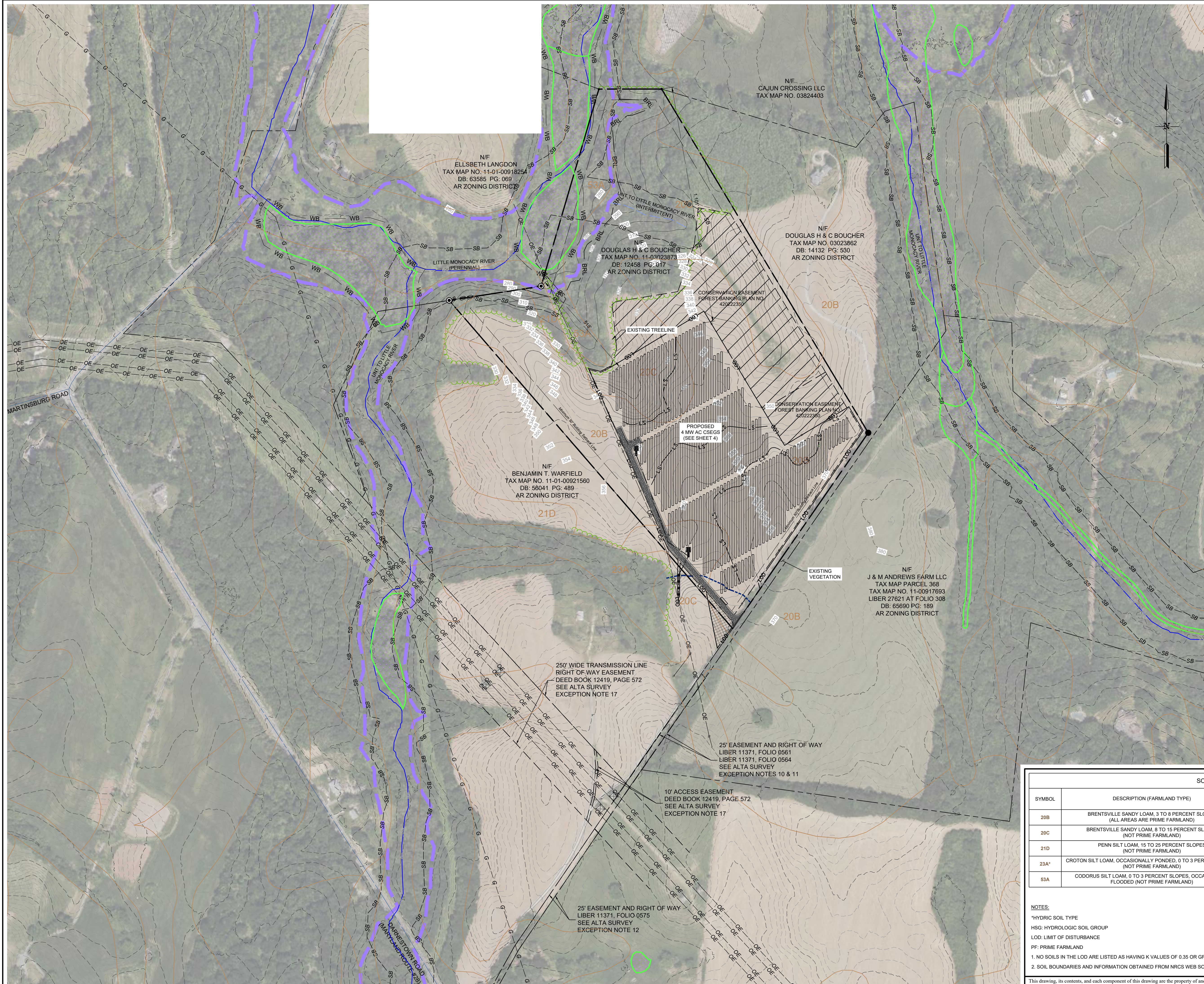
ARM Group LLC
 Engineers and Scientists
 www.armgroup.net

HEADQUARTERS:
 1129 West Governor Road • Hershey, PA 17033-0797
 Ph: (717) 533-8600 Fax: (717) 533-8605



CHARLES D. WALKER, P.E. NO. 61081
 PROFESSIONAL CERTIFICATION. I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO. 61081. EXPIRATION DATE: 05-11-25.

MISS UTILITY
 CALL "MISS UTILITY" AT 1-800-257-7777, 48 HOURS PRIOR TO THE START OF WORK. THE EXCAVATOR MUST NOTIFY ALL PUBLIC UTILITY COMPANIES WITH UNDER GROUND FACILITIES IN THE AREA OF PROPOSED EXCAVATION AND HAVE THOSE FACILITIES LOCATED BY THE UTILITY COMPANIES PRIOR TO COMMENCING EXCAVATION. THE EXCAVATOR IS RESPONSIBLE FOR COMPLIANCE WITH REQUIREMENTS OF CHAPTER 36A OF THE MONTGOMERY COUNTY CODE.



- NOTES:**
1. THE BASE MAP HAS BEEN CREATED USING AERIAL PHOTOGRAPHY, EXISTING TOPOGRAPHY, AND PROPERTY LINES OBTAINED FROM A LIMITED TOPOGRAPHIC AND BOUNDARY SURVEY AND ALTA / NSPS LAND TITLE SURVEY PREPARED BY JHA COMPANIES, DATED JULY 12, 2023.
 2. WETLANDS AND OTHER SURFACE WATERS WERE DELINEATED BY ARM GROUP LLC ON JULY 13, 2023.
 3. PHASE 1 ENVIRONMENTAL SITE ASSESSMENT (ESA) WAS CONDUCTED BY ARM GROUP LLC ON JULY 12, 2023.
 4. SOIL BOUNDARIES OBTAINED FROM THE NRCS WEB SOIL SURVEY.
 5. ALL LOCATIONS ARE CONCEPTUAL AND SUBJECT TO CHANGE AT TIME OF FINAL ENGINEERING.
 6. THIS PLAN IS IN THE MARYLAND STATE PLANE, NORTH AMERICAN DATUM 1983 (NAD 83) COORDINATE SYSTEM.
 7. ALL DIMENSIONS TO BE CONFIRMED ONSITE PRIOR TO CONSTRUCTION. ALL DIMENSIONS ARE INDICATIVE ONLY AND IN FEET, UNLESS OTHERWISE SPECIFIED.
 8. COMMUNITY SOLAR ENERGY GENERATING SYSTEMS (CSEGS) ARE PERMITTED IN AGRICULTURAL RESERVE (AR) ZONE PER MONTGOMERY COUNTY ZONING ORDINANCE SUBSECTION 3.7.2. FOR SOLAR COLLECTION SYSTEMS LESS THAN 2 MW AC. HOWEVER, BASED ON THE SIZE OF THE PROPOSED CSEGS, A CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY (CPCN) APPROVAL IS ANTICIPATED BY THE MARYLAND PUBLIC SERVICE COMMISSION (PSC).
 9. SETBACKS SHALL BE PROVIDED PER MONTGOMERY COUNTY ZONING ORDINANCE SUBSECTION 3.7.2.B. USE STANDARDS. NO PROPOSED LANDSCAPING IS REQUIRED BECAUSE EXISTING VEGETATION MEETS BUFFERING REQUIREMENTS.
 10. SOLAR ARRAY IS AN UNMANNED FACILITY AND WILL NOT REQUIRE WATER OR SEWERAGE FACILITIES.
 11. THIS PROJECT DOES NOT DISTURB ANY STREAM, WETLANDS OR THEIR ASSOCIATED BUFFERS.
 12. THERE ARE NO SLOPES GREATER THAN 15% WITHIN THE SOLAR ARRAY. HOWEVER, LIMITED AREAS WITH SLOPES GREATER THAN 15% OCCUR ALONG FENCE INSTALLATION.

LEGEND

NOTE: LEGEND IS TYPICAL, NOT ALL OBJECTS IN LEGEND APPEAR IN PLAN.

- 350 --- EXISTING CONTOURS
- [Purple outline] DELINEATED WETLANDS
- [Green outline] NATIONAL WETLAND INVENTORY (NWI) FEATURE
- [Hatched box] CONSERVATION EASEMENT
- PROPERTY LINE
- ADJOINING PROPERTY LINE
- PROPERTY LINE SETBACK
- OE --- OE EXISTING OVERHEAD ELECTRIC LINE W/ UTILITY POLE
- G --- G EXISTING UNDERGROUND GAS LINE
- EXISTING STREAM/ POND
- EXISTING VERIFIED STREAM
- STREAM BUFFER
- WB --- WETLAND BUFFER
- EXISTING 100-YR FEMA FLOODPLAIN
- BRL --- 100-YR FEMA FLOODPLAIN BUILDING RESTRICTION LINE
- EXISTING DRAINAGE FEATURE
- 20B --- EXISTING SOIL BOUNDARY AND DESCRIPTOR
- [Green wavy line] EXISTING TREELINE
- x --- EXISTING FENCE
- EXISTING CULVERT
- EXISTING EDGE OF PAVED ROAD
- EXISTING EDGE OF UNPAVED ROAD
- EXISTING ROAD CENTERLINE
- EXISTING EASEMENT
- o---o---o EXISTING ROCK WALL
- 350 --- PROPOSED CONTOURS
- x --- PROPOSED SECURITY FENCE
- UE --- UE PROPOSED UNDERGROUND ELECTRIC LINE W/ POLE
- OE --- OE PROPOSED OVERHEAD ELECTRIC LINE W/ POLE
- [Grey rectangle] PROPOSED ACCESS ROAD/ EQUIPMENT PAD
- [Hatched box] PROPOSED LAYDOWN AREA
- [Black rectangle] PROPOSED SOLAR MODULES

SOILS LEGEND

SYMBOL	DESCRIPTION (FARMLAND TYPE)	HSG	AREA OF PARCEL (AC)	% OF PARCEL	AREA OF PF WITHIN LOD (AC)	% OF LOD
20B	BRENTSVILLE SANDY LOAM, 3 TO 8 PERCENT SLOPES (ALL AREAS ARE PRIME FARMLAND)	C	27.2	51.5	15.0	78.7
20C	BRENTSVILLE SANDY LOAM, 8 TO 15 PERCENT SLOPES (NOT PRIME FARMLAND)	C	20.2	38.2	0.0	0.0
21D	PENN SILT LOAM, 15 TO 25 PERCENT SLOPES (NOT PRIME FARMLAND)	B	1.0	2.0	0.0	0.0
23A*	CROTON SILT LOAM, OCCASIONALLY PONDED, 0 TO 3 PERCENT SLOPES (NOT PRIME FARMLAND)	D	0.00	0.0	0.0	0.0
53A	CODORUS SILT LOAM, 0 TO 3 PERCENT SLOPES, OCCASIONALLY FLOODED (NOT PRIME FARMLAND)	C	4.3	8.2	0.0	0.0
	TOTAL		52.7	100	15.0	78.7

NOTES:

*HYDRIC SOIL TYPE
HSG: HYDROLOGIC SOIL GROUP
LOD: LIMIT OF DISTURBANCE
PF: PRIME FARMLAND

1. NO SOILS IN THE LOD ARE LISTED AS HAVING K VALUES OF 0.35 OR GREATER (HIGHLY ERODIBLE).
2. SOIL BOUNDARIES AND INFORMATION OBTAINED FROM NRCS WEB SOIL SURVEY.

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CDW	KJM	CDW	ARM	ARM
06/18/2024	07/29/2024	23010892	06/18/2024	ARM
0	0	0	0	0
No.	Rev.	Date	By	Date

PROPOSED SITE CONDITIONS PLAN (SHEET 1 OF 2)
CONCEPT STORMWATER PLAN

DICKERSON
MONTGOMERY COUNTY, MARYLAND

SUGARLOAF SOLAR PROJECT
CHABERTON SOLAR SUGARLOAF LLC

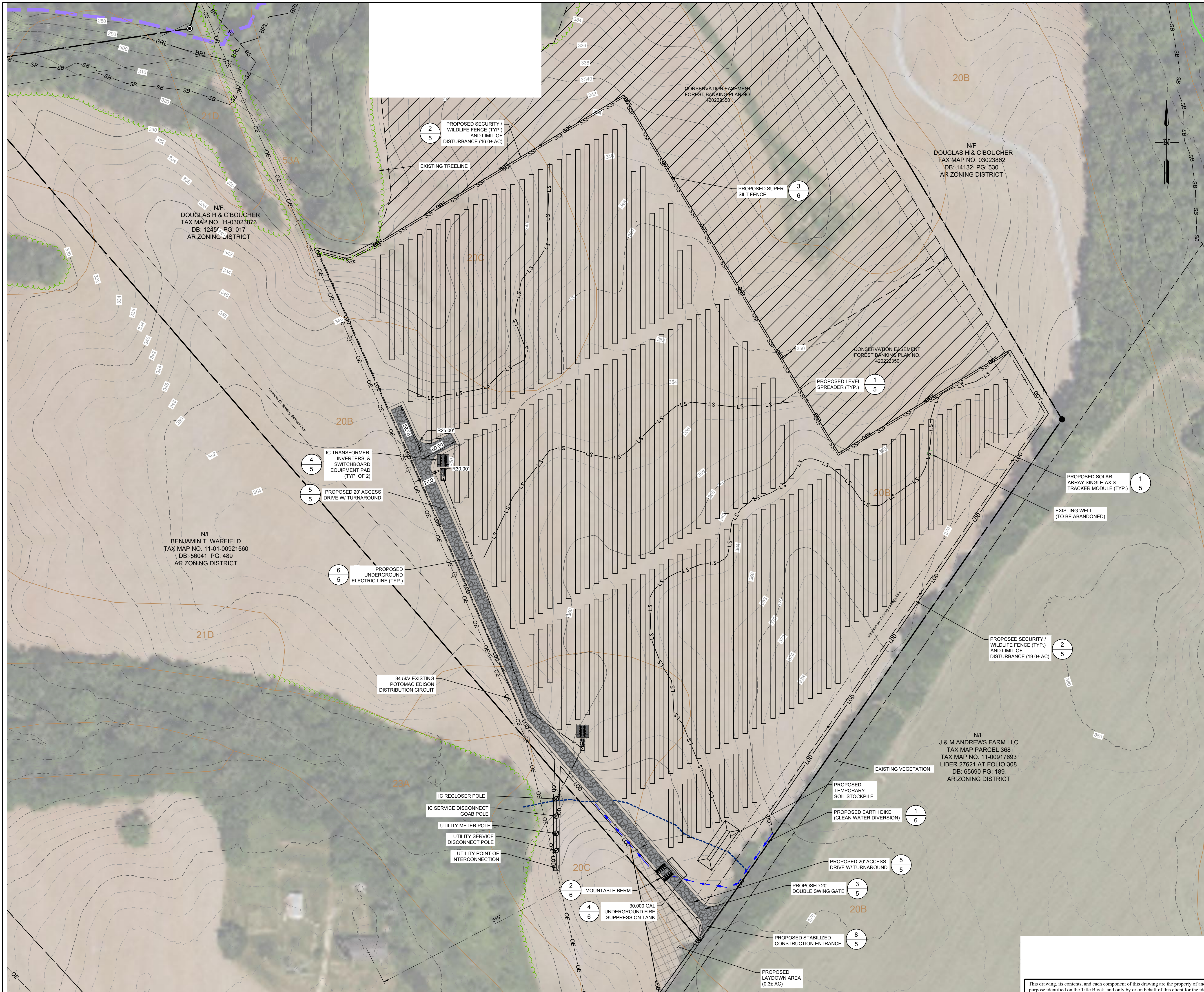
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SCALE IN FEET

CDW
KJM
CDW

Sheet **3**

06/18/2024



- NOTES:**
- THE BASE MAP HAS BEEN CREATED USING AERIAL PHOTOGRAPHY, EXISTING TOPOGRAPHY, AND PROPERTY LINES OBTAINED FROM A LIMITED TOPOGRAPHIC AND BOUNDARY SURVEY AND ALTA / NSPS LAND TITLE SURVEY PREPARED BY JHA COMPANIES, DATED JULY 12, 2023.
 - WETLANDS AND OTHER SURFACE WATERS WERE DELINEATED BY ARM GROUP LLC ON JULY 13, 2023.
 - PHASE 1 ENVIRONMENTAL SITE ASSESSMENT (ESA) WAS CONDUCTED BY ARM GROUP LLC ON JULY 12, 2023.
 - SOIL BOUNDARIES OBTAINED FROM THE NRCS WEB SOIL SURVEY.
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LEGEND

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---	EXISTING CONTOURS
---	DELINEATED WETLANDS
---	NATIONAL WETLAND INVENTORY (NWI) FEATURE
---	CONSERVATION EASEMENT
---	PROPERTY LINE
---	ADJOINING PROPERTY LINE
---	PROPERTY LINE SETBACK
---	EXISTING OVERHEAD ELECTRIC LINE W/ UTILITY POLE
---	EXISTING UNDERGROUND GAS LINE
---	EXISTING STREAM/ POND
---	EXISTING VERIFIED STREAM
---	STREAM BUFFER
---	WETLAND BUFFER
---	EXISTING 100-YR FEMA FLOODPLAIN
---	100-YR FEMA FLOODPLAIN BUILDING RESTRICTION LINE
---	EXISTING DRAINAGE FEATURE
---	EXISTING SOIL BOUNDARY AND DESCRIPTOR
---	EXISTING TREELINE
---	EXISTING FENCE
---	EXISTING CULVERT
---	EXISTING EDGE OF PAVED ROAD
---	EXISTING EDGE OF UNPAVED ROAD
---	EXISTING ROAD CENTERLINE
---	EXISTING EASEMENT
---	EXISTING ROCK WALL
---	LIMITS OF DISTURBANCE
---	PROPOSED CONTOURS
---	PROPOSED SECURITY FENCE
---	PROPOSED UNDERGROUND ELECTRIC LINE
---	PROPOSED OVERHEAD ELECTRIC LINE W/ POLE
---	PROPOSED EARTH DIKE
---	PROPOSED SUPER SILT FENCE
---	PROPOSED ACCESS ROAD/ EQUIPMENT PAD
---	PROPOSED LAYDOWN AREA
---	PROPOSED SOLAR MODULES

PROPOSED SITE CONDITIONS PLAN (SHEET 2 OF 2)
CONCEPT STORMWATER PLAN

CDW	KJM	CDW
DATE: 07/29/2024	PROJECT NO: 23010892	SCALE: 1" = 75'
ISSUED FOR CONCEPT SWM REVIEW	06/18/2024	ARM
By: [Signature]	Rev: [Signature]	Date: [Signature]

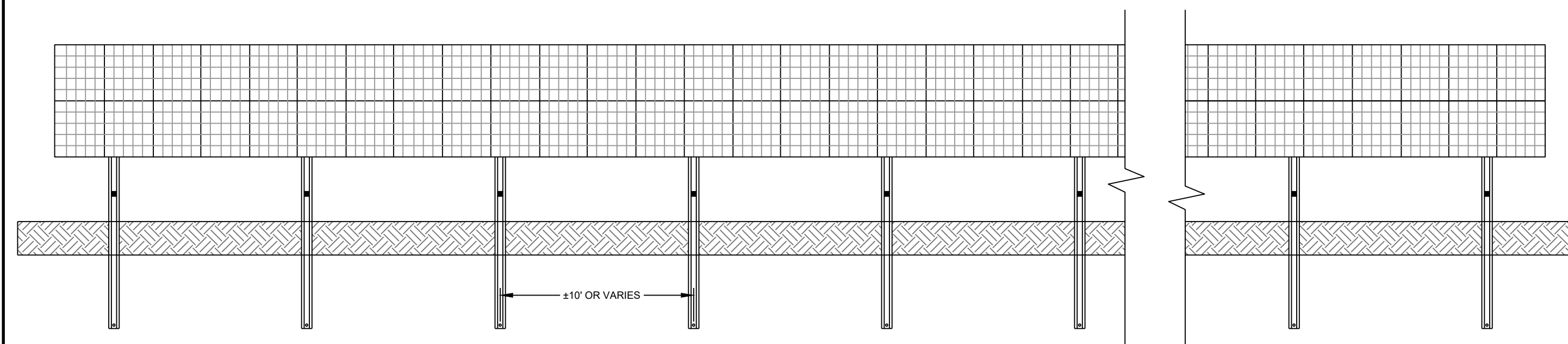
DICKERSON
 SUGARLOAF SOLAR PROJECT
 CHABERTON ROAD SUGARLOAF LLC
 MONTGOMERY COUNTY, MARYLAND

Sheet **4**

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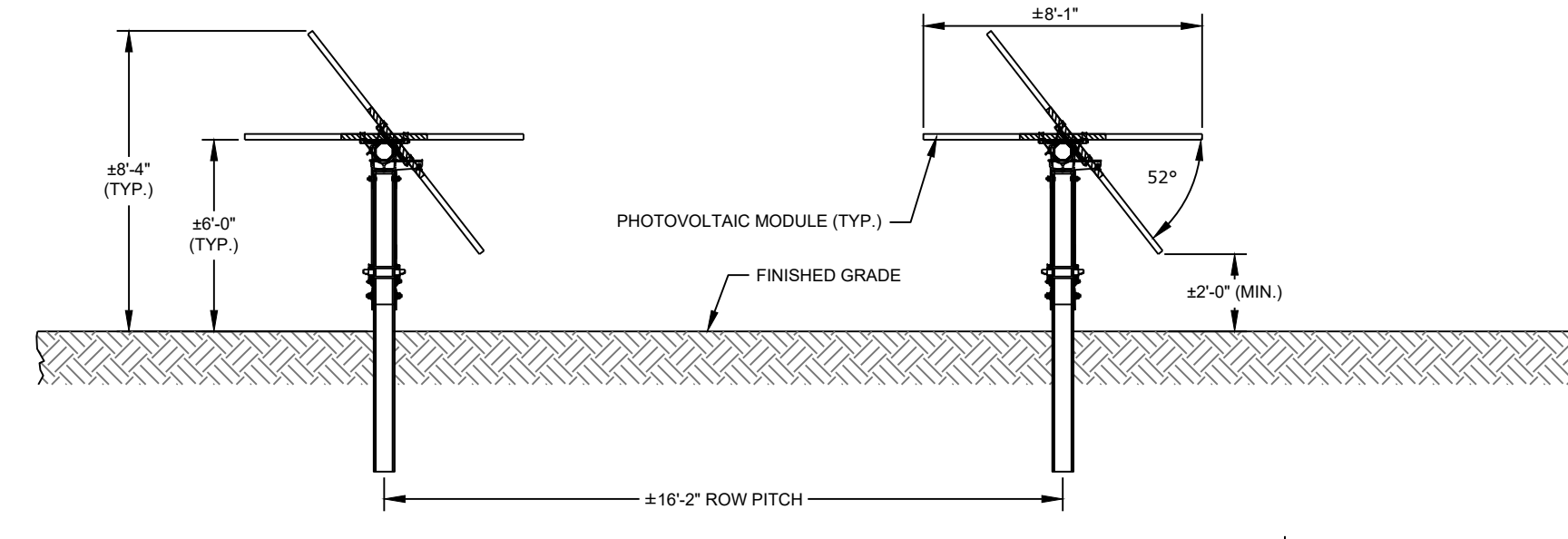
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 SCALE IN FEET

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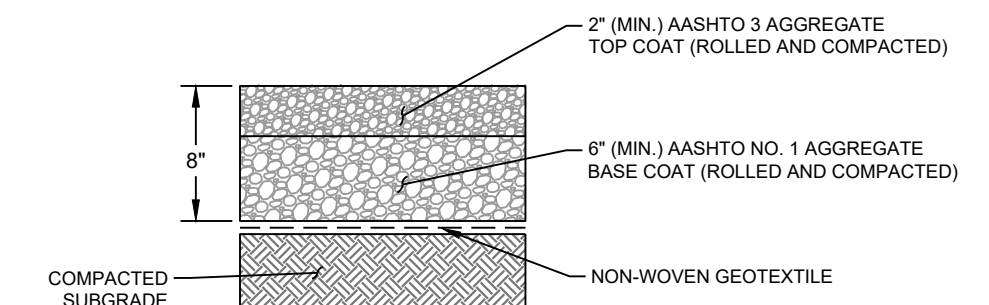


FRONT ELEVATION

NOTES:
1. THE INFORMATION SHOWN HERE IS FOR GENERAL REFERENCE ONLY. ARRAY CONFIGURATION DIMENSIONS SHOWN HERE MAY VARY.

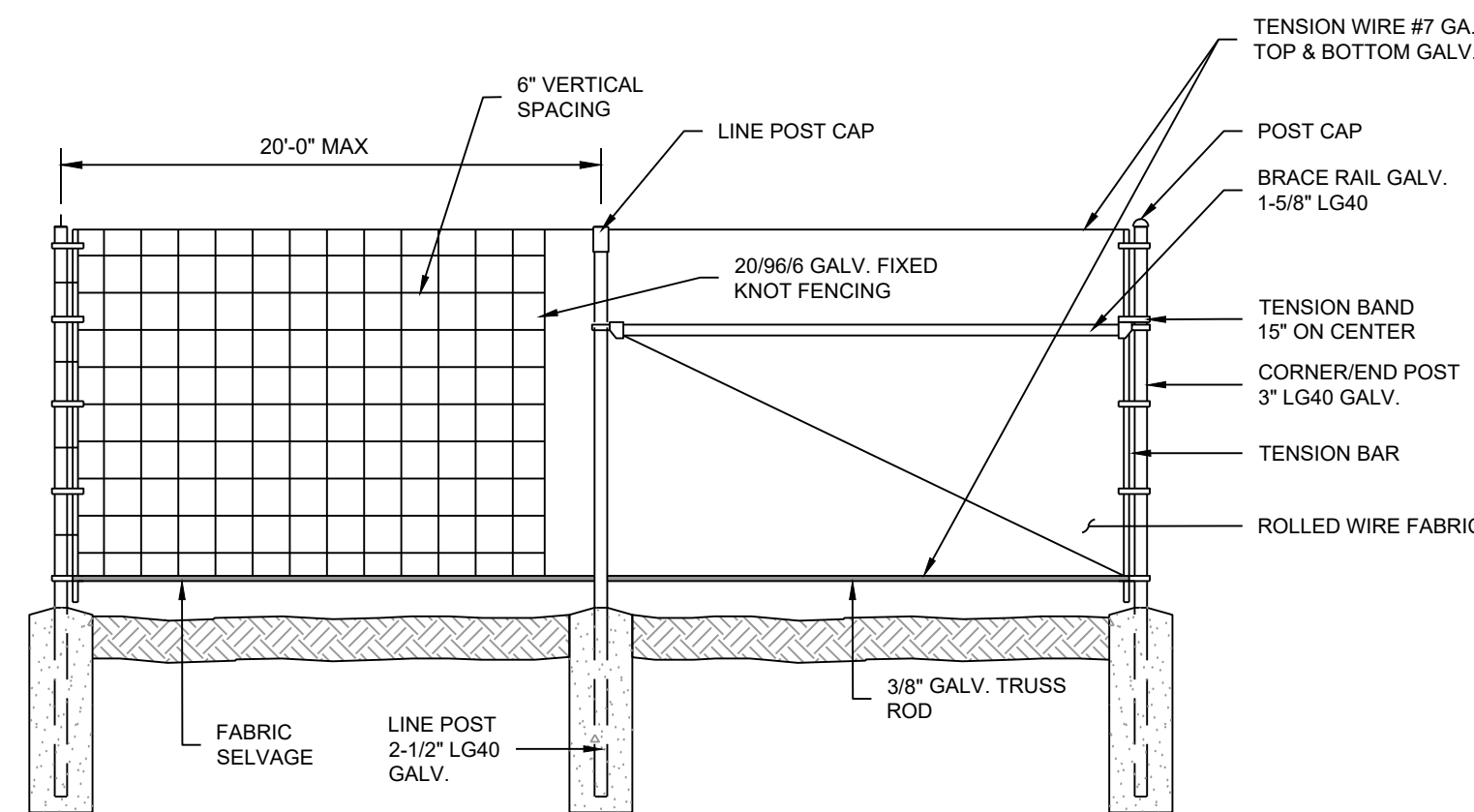


TYPICAL SIDE ELEVATION



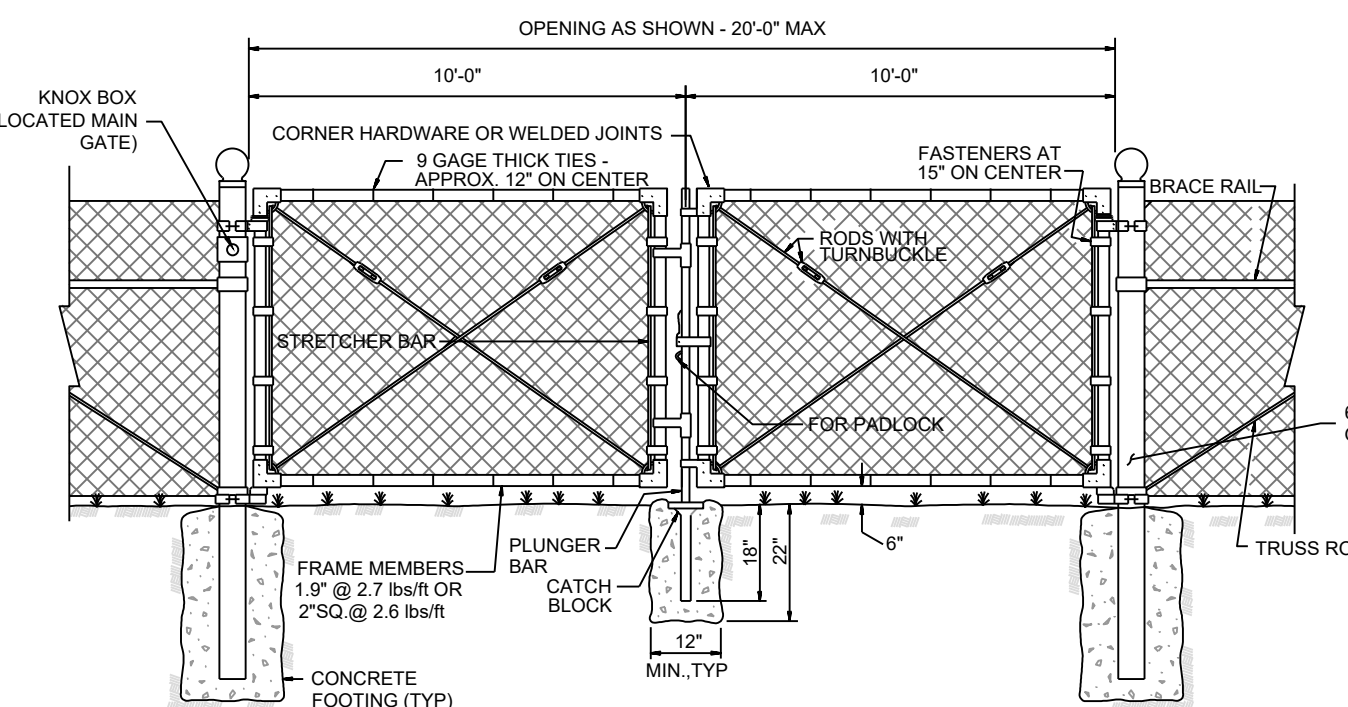
4 DETAIL GRAVEL EQUIPMENT PAD & ACCESS DRIVE SECTION (TYP.) NOT TO SCALE

1 DETAIL PHOTOVOLTAIC ARRAY (TYP.) NOT TO SCALE



- NOTES:
- FENCE SHALL BE PLACED ALONG ENTIRE PROPOSED PROJECT PERIMETER.
 - POSTS SHALL BE SPACED EQUAL DISTANCES APART. MAXIMUM SPACING SHALL BE 20 FEET UNLESS DIRECTED OTHERWISE BY THE ENGINEER.
 - POST TOPS SHALL BE SECURELY FASTENED TO POST.
 - BRACE RAILS AND TRUSS RODS SHALL BE SECURELY FASTENED TO POST WITH BRACE BANDS WITH THREADED TAKE-UP ADAPTOR FOR TRUSS RODS.
 - GROUND WIRE SHALL BE ATTACHED TO FENCE FABRIC BY MEANS OF A SPLIT BOLT.
 - FABRIC SHALL BE STRETCHED TO A SMOOTH UNIFORM BY MEANS OF A SPLIT BOLT.
 - DETAILS SHOWN INDICATE GENERAL DESIGN OF WILDLIFE FENCE WITH GALVANIZED MESH AND POSTS. APPROVED EQUIVALENT WILDLIFE FENCE WITH TIMBER POSTS, CEDAR OR TREATED PINE, AND GALVANIZED MESH MAY BE UTILIZED. DIMENSIONS MAY VARY AMONG MANUFACTURERS.
 - LINE POST SHALL BE SET IN CONCRETE AT CORNERS AND GATES ONLY.

FABRIC	HEIGHT	MESH	GAGE	SELVAGE	FINISH
	7'-0"	F.K.	N/A	N/A	GALV.
FRAMEWORK		O.D.	WALL	WT. PER FT.	LENGTH
END/CORNER POST	3"	0.16	4.64	11'-0"	
LINE POST	2-1/2"	0.13	3.12	11'-0"	
RAILS	1-5/8"	0.11	1.84	20'-0" MAX	
GATE FRAME	1-5/8"	0.11	1.84	VARIES	
GATE POST	6"	0.16	6.56	11'-0"	

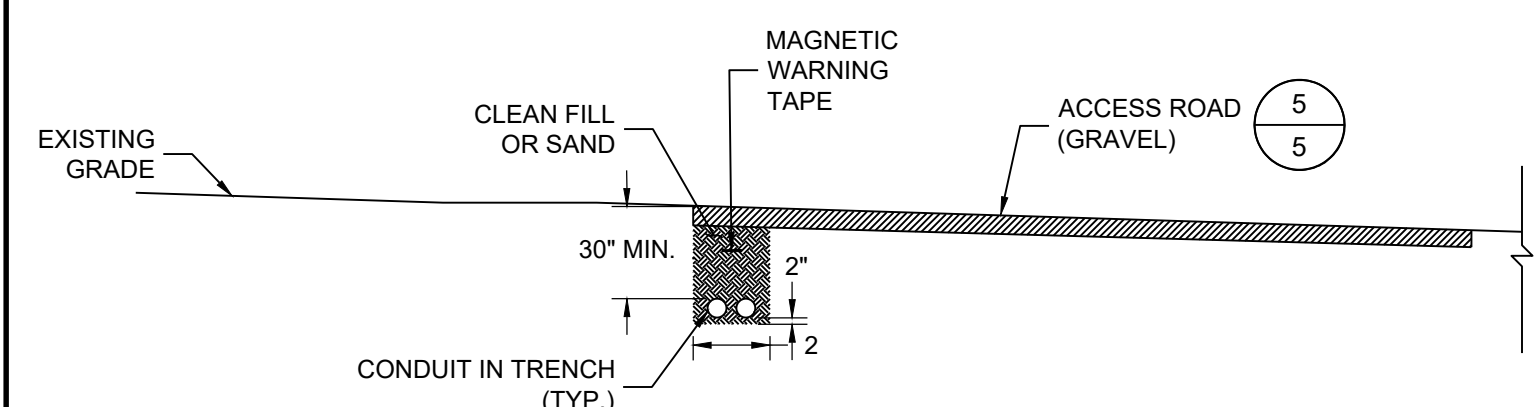


3 DETAIL DOUBLE SWING GATE (20') NOT TO SCALE

- NOTES:
- EXCAVATE TO SUITABLE MATERIAL FOR SUBGRADE AND COMPACT TO PROVIDE SUITABLE SURFACE TO PLACE ROAD.
 - GEOTEXTILE FABRIC SHALL MEET FOLLOWING REQUIREMENTS AND FOLLOW GEOTEXTILE MANUFACTURER INSTALLATION PROCEDURES.
 - TENSILE STRENGTH: 150 LB MIN.
 - ELONGATION: 50%
 - CBR PUNCTURE: 400 LB MIN.
 - MINIMUM FLOW RATE: 120 GPM / FT²
 - WHERE OVERLAPPING OF GEOTEXTILE FABRIC IS REQUIRED, SUBCONTRACTOR SHALL OVERLAP A MINIMUM OF 24".
 - REMOVE TEMPORARY CONSTRUCTION ACCESS ROAD AND RESTORE TO PRE-CONSTRUCTION CONDITIONS TO THE SATISFACTION OF THE OWNER AND THE GOVERNING AGENCIES.

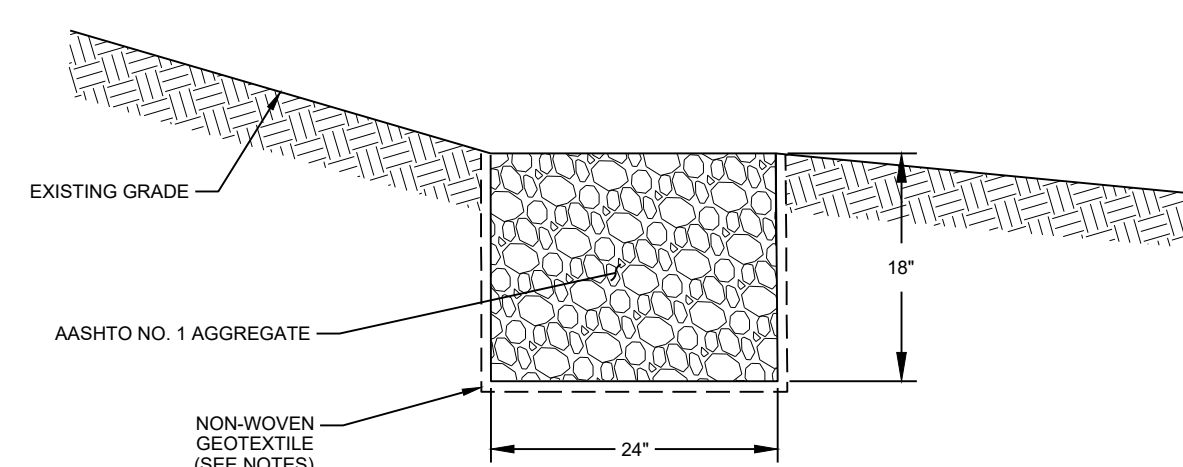
5 DETAIL GRAVEL ACCESS ROAD NOT TO SCALE

2 DETAIL SECURITY / WILDLIFE FENCE (TYP.) NOT TO SCALE



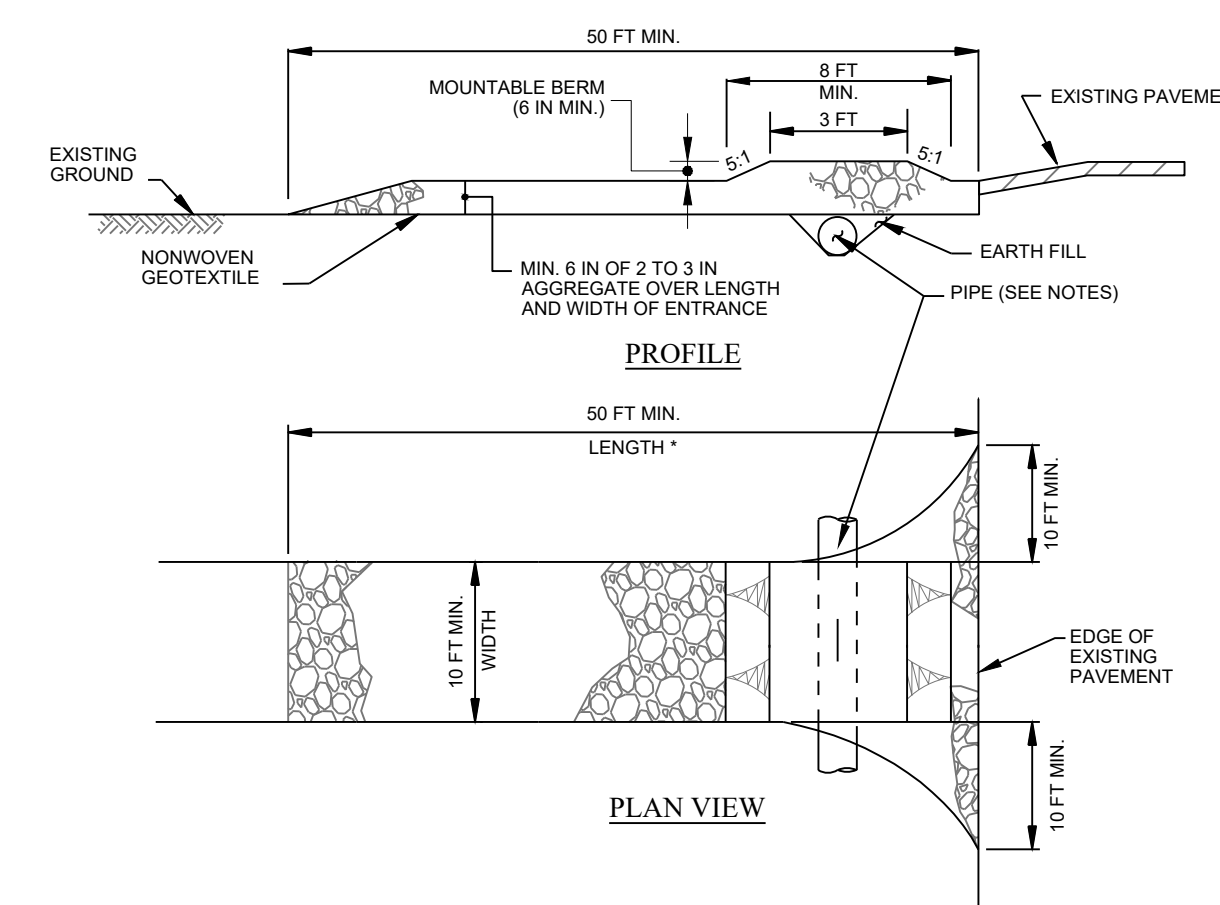
NOTES:
1. CONDUIT LAYOUTS TO BE DETERMINED.

6 DETAIL CONDUIT TRENCH (TYP.) NOT TO SCALE



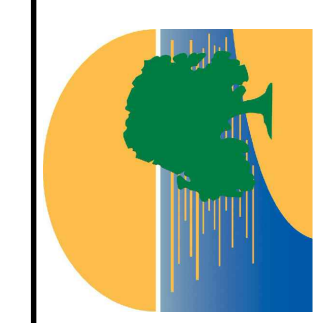
- NOTES:
- LEVEL SPREADER DESIGN AS PER MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL.
 - ESTABLISH PREPARED SUBGRADE AND STABILIZE SIDES OF LEVEL SPREADER TRENCH PRIOR TO INSTALLATION OF GEOTEXTILE FABRIC AND BACKFILLING WITH STONE.
 - GEOTEXTILE TO BE INSTALLED ON ALL SIDE FACES AND BOTTOM SURFACE OF TRENCH. GEOTEXTILE TO BE NON-WOVEN, 8 OZ/SY MINIMUM, OR APPROVED EQUAL.
 - LEVEL SPREADERS SHALL BE INSTALLED PARALLEL TO CONTOURS AT MAXIMUM INTERVALS OF 300 FEET.

7 DETAIL LEVEL SPREADER (TYP.) NOT TO SCALE



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

8 DETAIL ROCK CONSTRUCTION ENTRANCE (TYP.) NOT TO SCALE

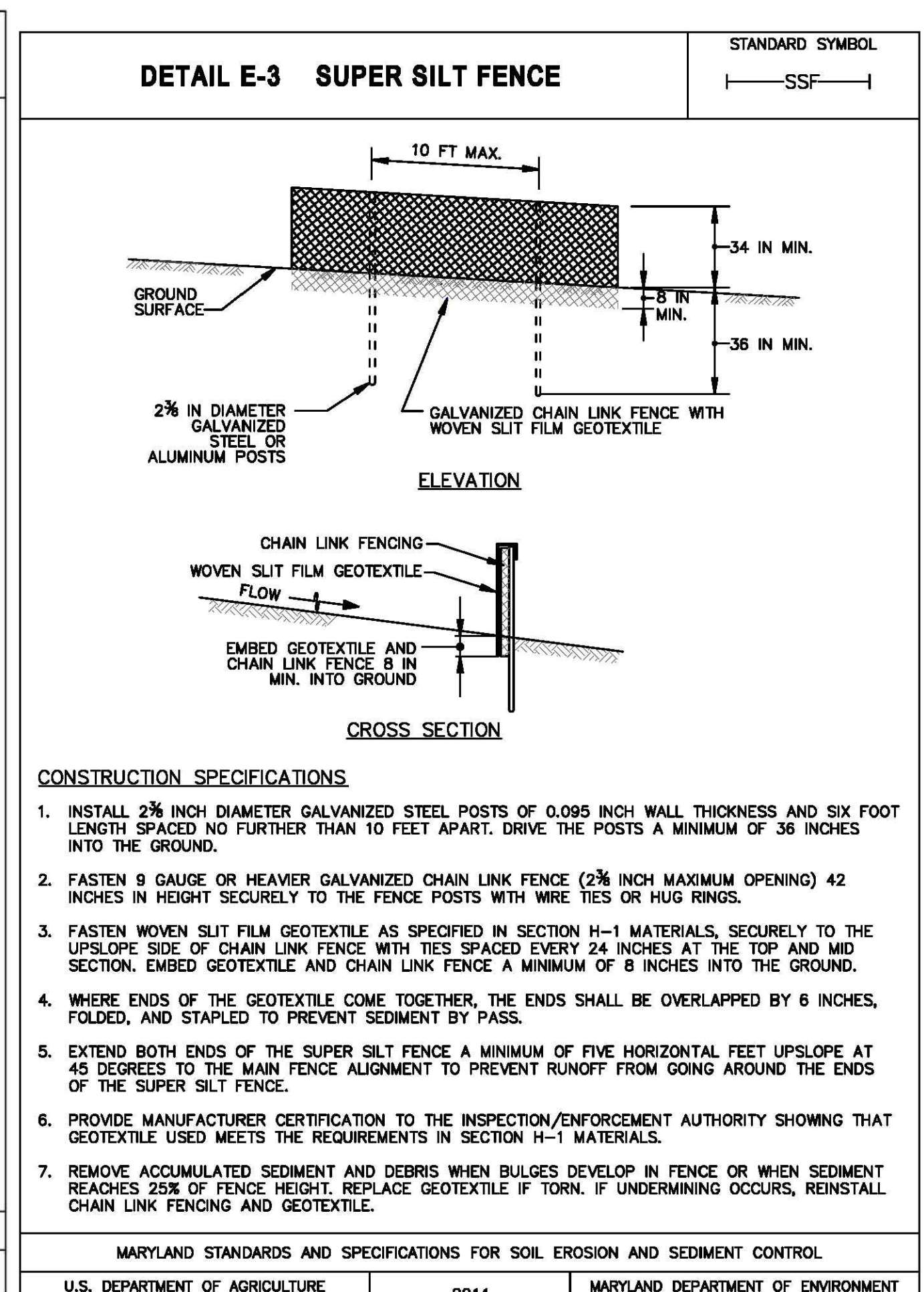
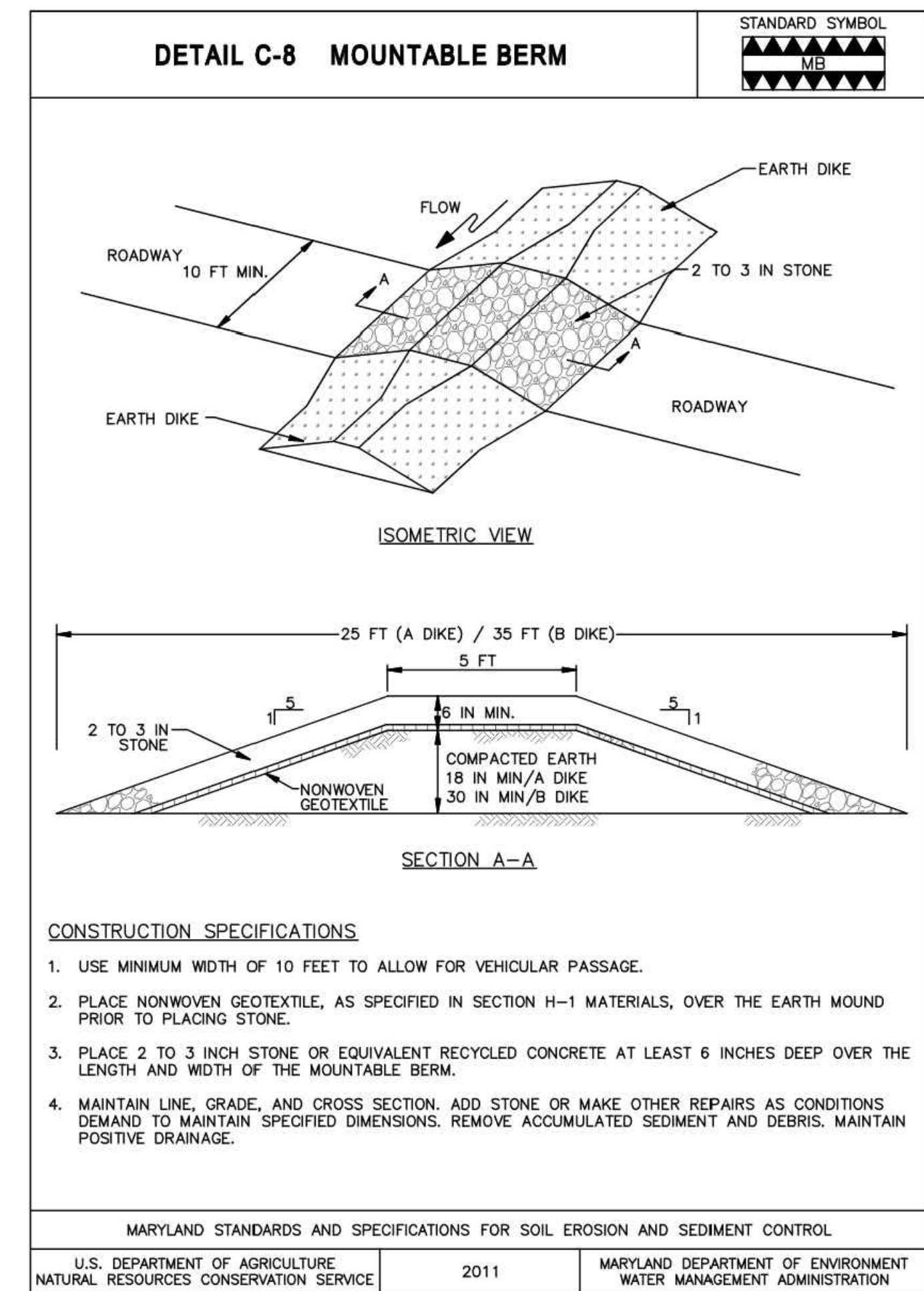
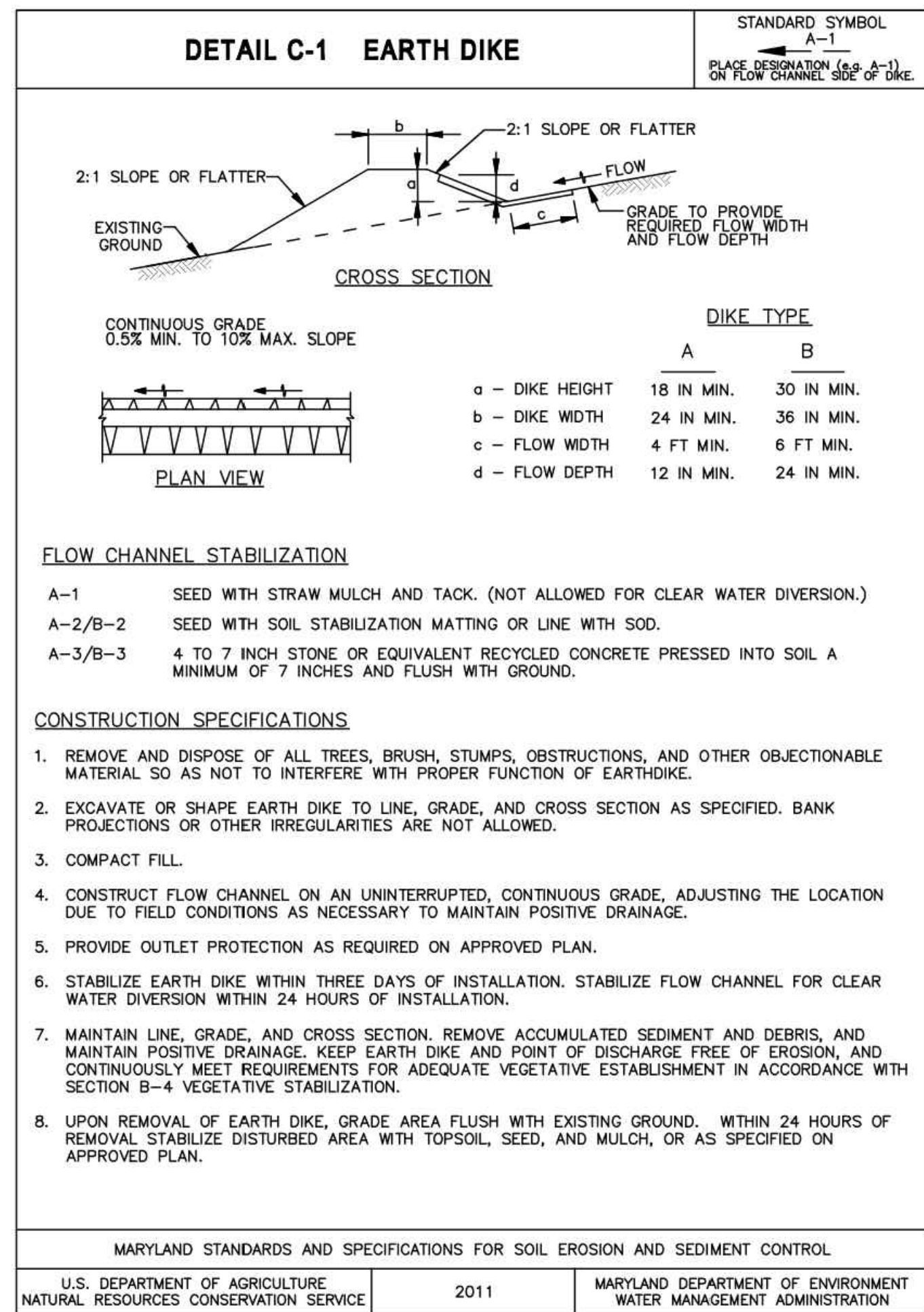


0	ISSUED FOR CONCEPT SWM REVIEW	06/18/2024	ARM
	Revision		By

AS NOTED	DATE	BY
CDW	07/29/2024	KJM
CDW	23010892	CDW

PROPOSED SITE DETAILS	DICKERSON
CONCEPT STORMWATER PLAN	MONTGOMERY COUNTY, MARYLAND
SUGARLOAF SOLAR PROJECT	
CHABERTON SOLAR SUGARLOAF LLC	

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1 DETAIL EARTH DIKE NOT TO SCALE

2 DETAIL MOUNTABLE BERM NOT TO SCALE

3 DETAIL SUPER SILT FENCE NOT TO SCALE

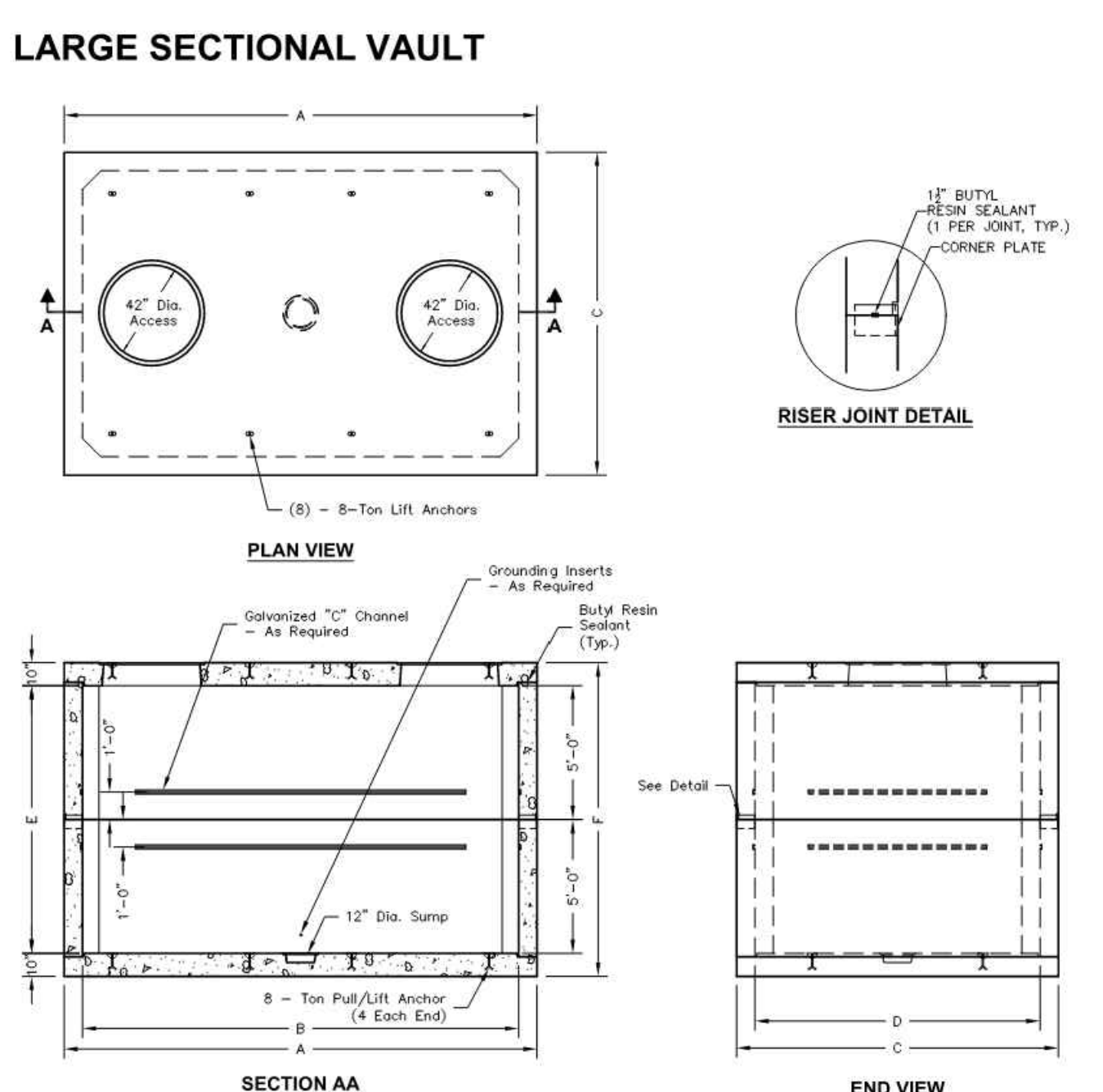
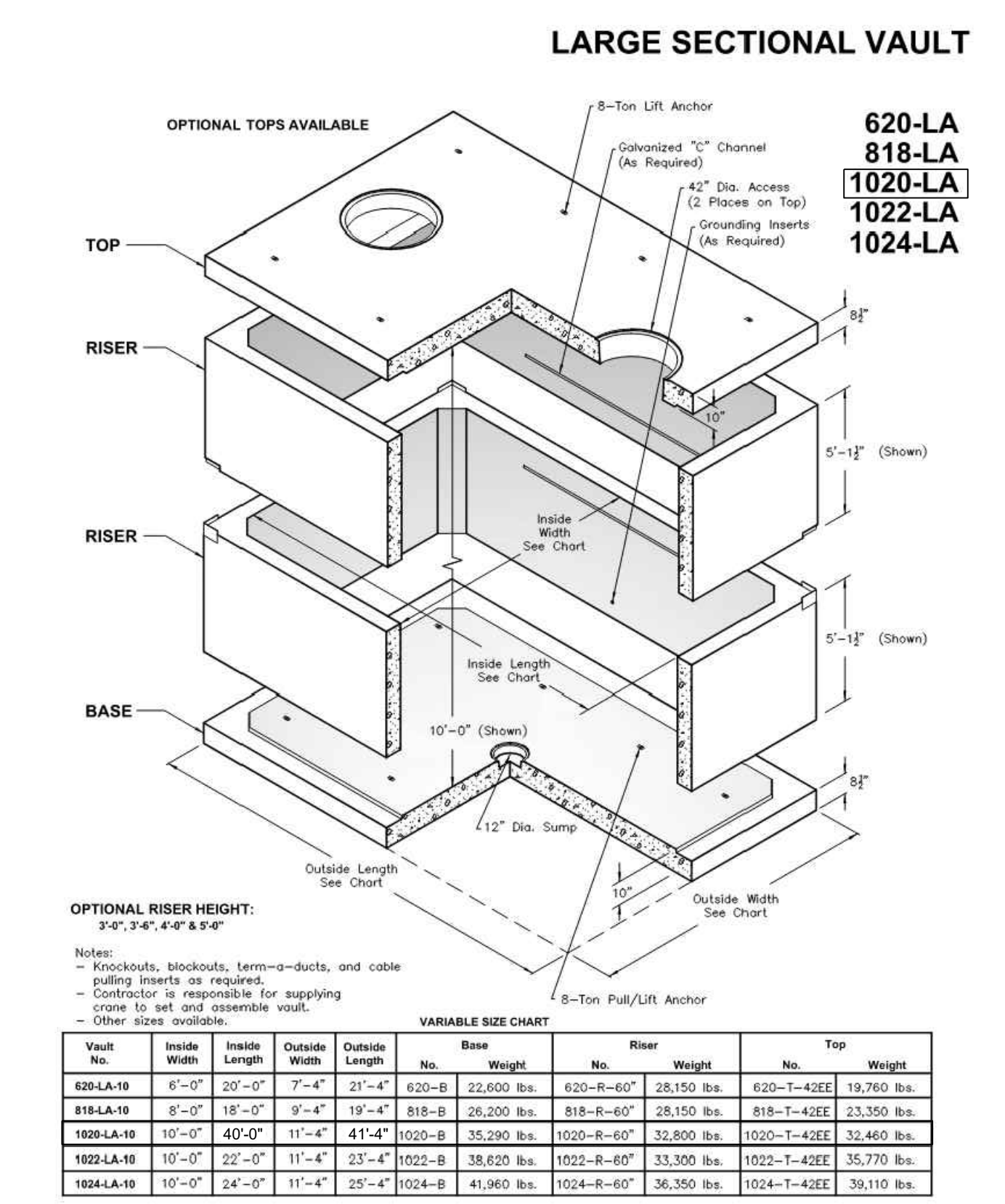
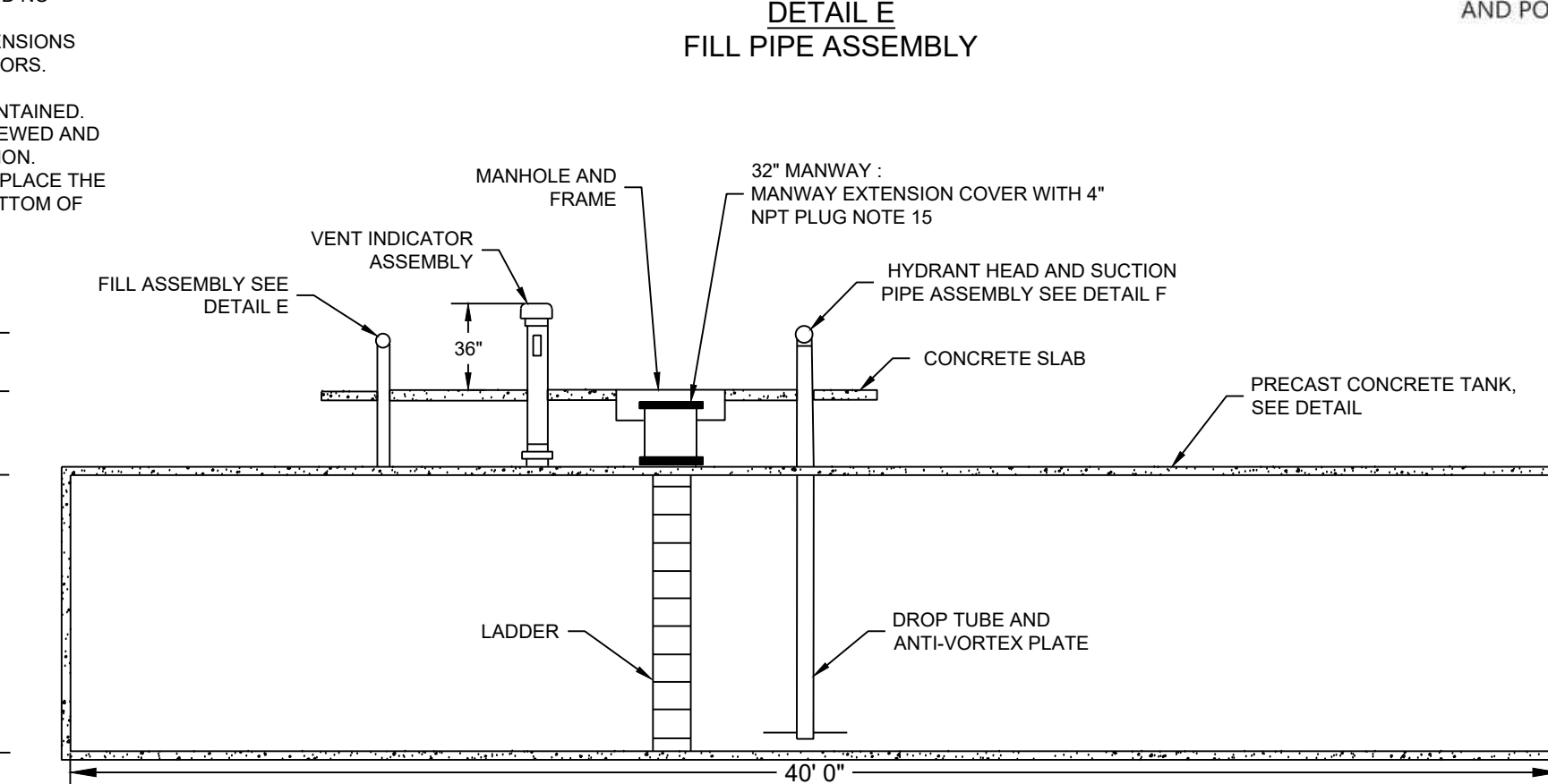
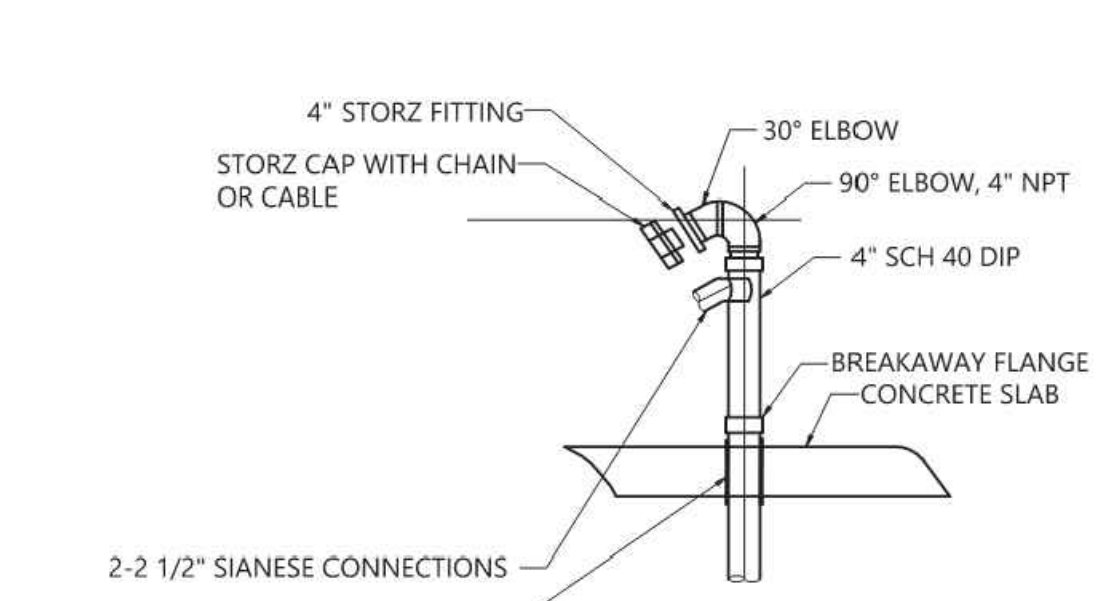
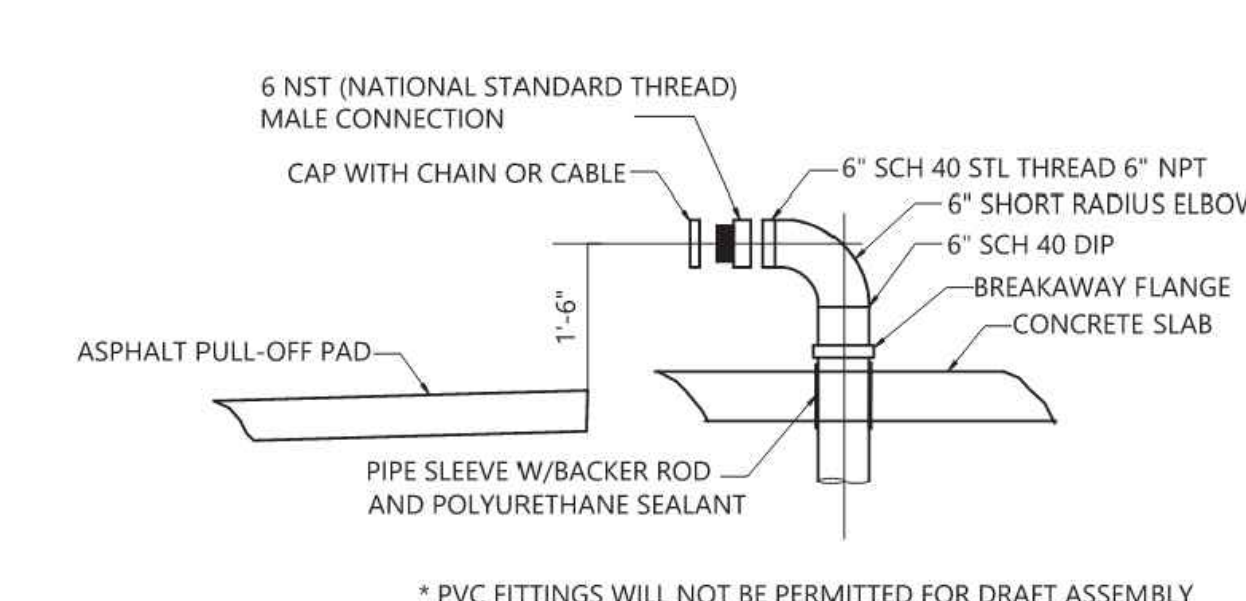
- NOTES:**
- A VERIFICATION OF SITE STAKING AND LAYOUT SHALL BE CONDUCTED PRIOR TO EXCAVATION.
 - ALL EXCAVATION, BACKFILL, AND COVER SHALL BE PERFORMED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS. DIMENSIONS AND DETAILS SHOWN ARE FOR REFERENCE AND SHALL NOT SUPERSEDE MANUFACTURER'S REQUIREMENTS. EXCAVATION DEPTH SHALL BE DETERMINED BY SITE CONDITIONS AND MANUFACTURER'S SPECIFICATIONS. SHORE AS NECESSARY. ELEVATIONS SHOWN IN TABLE 2 REPRESENT THE MAXIMUM ALLOWABLE CONDITION FOR PROPER TANK OPERATION AND SHALL NOT BE EXCEEDED.
 - ALL WORK SHALL BE COMPLETED IN A TIMELY AND WORKMANLIKE MANNER. ALL WORK SHALL CONFORM TO APPLICABLE CODES AND STANDARDS.
 - EXCAVATION AND SITE WORK SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE AND CURRENT OSHA AND MSHA REGULATIONS.
 - PRESSURE TEST PROCEDURES SHALL BE PERFORMED BY THE INSTALLER PRIOR TO AND AFTER INSTALLATION IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
 - AN OPERATIONAL TEST SHALL BE CONDUCTED AFTER INSTALLATION PER THE SPECIFICATIONS.
 - ALL STEEL PIPING BELOW GRADE SHALL BE WRAPPED AND COATED WITH AN APPROVED MATERIAL TO PREVENT CORROSION.
 - ALL STEEL AND PVC PIPE AND FITTINGS ABOVE GRADE SHALL BE PAINTED WITH EXTERIOR ENAMEL UNLESS OTHERWISE SPECIFIED, COLOR YELLOW.
 - INSTALLER SHALL RETURN SITE TO ORIGINAL CONDITION AFTER FINAL TESTING, INCLUDING BUT NOT LIMITED TO FINE GRADING, SEEDING, MULCHING AND GENERAL CLEANUP.
 - DISTANCE FROM THE CENTERLINE OF THE DRAFT FITTING SHALL BE 7' 0" OR LESS TO THE EDGE OF THE ROADWAY OR PULLOFF. THIS DIMENSION SHALL APPLY TO BOTH -1 AND -2 CONFIGURATIONS.
 - WATER LEVEL INDICATOR ON THE VENT ASSEMBLY SHALL BE ORIENTED TOWARD THE ACCESS AREA OR PULLOFF FOR VISIBILITY.
 - INSTALL POST AND DOT RY STYLE NO PARKING SIGN. TOP OF POST SHALL BE 7' ABOVE GRADE.
 - UNLESS OTHERWISE SPECIFIED, 4" DIA. CONCRETE FILLED PIPE BOLLARDS SHALL BE PLACED AS SHOWN TO PROTECT FITTINGS NEAR TRAFFIC AREAS. BOLLARDS SHALL BE PAINTED FOR HIGH VISIBILITY. PLACE BOLLARDS 12" FROM EDGES OF CONCRETE SLAB AND NO DEEPER THAN 1/2 DEPTH OF FILL OVER TANK.
 - VARIATION IN FITTING LOCATIONS OF UP TO 10" FROM DIMENSIONS SHOWN ARE ALLOWABLE IN TANKS FROM DIFFERENT VENDORS. SECTION NUMBERS USED WILL BE THE SAME. THE BASIC CONFIGURATION AND CRITICAL DIMENSIONS SHALL BE MAINTAINED. OTHER VARIATIONS OR SPECIAL FEATURES SHALL BE REVIEWED AND APPROVED BY THE DESIGN ACTIVITY PRIOR TO INSTALLATION.
 - MANWAY EXTENSION SHALL BE ADJUSTED FOR HEIGHT TO PLACE THE TOP OF BOLT COVER WITHIN AND NO LOWER THAN THE BOTTOM OF THE MANHOLE FRAME.

TABLE 1 - FITTING SCHEDULE

FITTING	SPECIFICATION	-1 CENTER DRAFT		-2 END DRAFT	
		SECTION	OFFSET	SECTION	OFFSET
DRAFT	6" NST FULL COUPLING	16	20' - 7 1/2"	1	0'-0"
FILL	4" NST HALF COUPLING	6	6' - 10 1/2"	6	6' - 10 1/2"
VENT	10" CLASS 150 FLANGE	10	12' - 4 1/2"	10	12' - 4 1/2"
MANWAY	32" MANWAY, EXTENSION, 4" NPT COUPLING AND PLUG	12/13	15' - 9 3/4"	12/13	15' - 9 3/4"

TABLE 2 - ELEVATIONS

ELEVATION	DESCRIPTION
15' - 0" MAX	DRAFT PIPE CENTERLINE
13' - 0"	TOP OF SLAB
0	BOTTOM OF TANK
-10"	BOTTOM OF EXCAVATION



Oldcastle Precast

PO Box 323, Wilsonville, Oregon 97070-0323
 Tel: (503) 682-2844 Fax: (503) 682-2857

SECTIONAL VAULT
 File Name: 020-LG-SECTIONAL
 Issue Date: 2016
 oldcastleprecast.com/wilsonville

SECTIONAL VAULT - SIZE AS REQUIRED - WATER MODIFIED

Oldcastle Precast

PO Box 323, Wilsonville, Oregon 97070-0323
 Tel: (503) 682-2844 Fax: (503) 682-2857

SECTIONAL VAULT
 File Name: 020-LG-SECTIONAL
 Issue Date: 2016
 oldcastleprecast.com/wilsonville

SECTIONAL VAULT - SIZE AS REQUIRED - WATER MODIFIED

5 DETAIL FIRE SUPPRESSION TANK DETAIL NOT TO SCALE

6 DETAIL FIRE SUPPRESSION TANK SECTION NOT TO SCALE

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PROPOSED SITE DETAILS
CONCEPT STORMWATER PLAN

DICKERSON
 MONTGOMERY COUNTY, MARYLAND

SUGARLOAF SOLAR PROJECT
 CHABERTON SOLAR SUGARLOAF LLC

AS NOTED
 DATE: 07/29/2024
 DRAWN BY: KJM
 CHECKED BY: CDW
 PROJECT NO.: 23010892

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Sheet **6**