CORTLANDT MANOR, WESTCHESTER COUNTY, NEW YORK

CORTLANDT MILL SOLAR FARM

PREPARED FOR: CVE NORTH AMERICA INC.

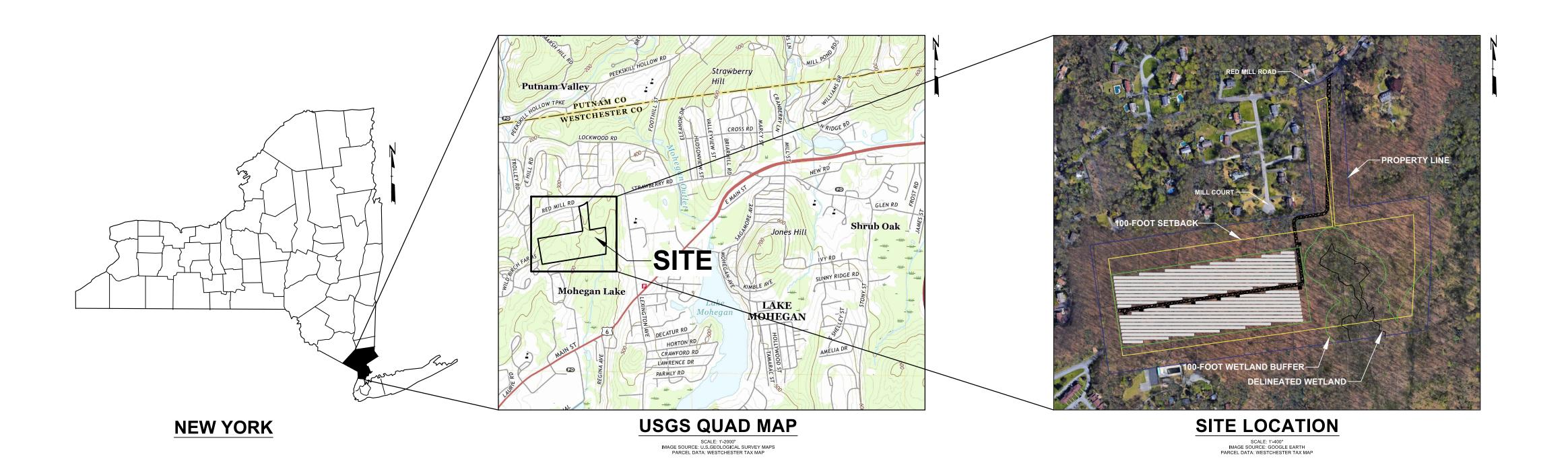
109 WEST 27TH STREET, 8TH FLOOR

NEW YORK, NEW YORK 10001

PREPARED BY: TRC ENGINEERS, INC.

1430 BROADWAY, 10TH FLOOR **NEW YORK, NEW YORK 10018**

DATE: JUNE 2020



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	SITE DATA									
TAX ID#	PROPERTY OWNER	SITE ADDRESS								
13.18-2-2.4	KIRQUEL DEVELOPMENT LTD	0 MILL COURT ROAD								
13.14-5-25	PARR PATRICK J & SHARON	CORTLANDT, NY, 10520								

	SYSTEM SUMMARY
DC SYSTEM SIZE: 4,6	65.60 KW
AC SYSTEM SIZE: 3,00	00.00 KW
MODULE: HANWHA Q	CELLS QPEAK (400W)
MODULE QUANTITY:	11,664
INVERTER: SUNGROV	V SG125HV

INVERTER QUANTITY: 40

LAND USE INFORMATION										
LAND USE	UNIT	EXISTING	PROPOSED							
DISTURBED AREA	ACRES		19.4							
SOLAR AREA	ACRES	N/A	12.5							
WETLAND AREA	ACRES	7.14	7.14							

	ZONING DATA CHART - R-40										
	(ONE-FAMILY RESIDENCE DISTRICT)										
LOT DESCRIPTIO N	LOT AREA (SF)	LOT WIDTH (FT)	FRONT YARD SETBACK (FT)	SIDE YARD SETBACK (FT)	REAR YARD SETBACK (FT)	BUILDING COVERAGE (SF)	LANDSCAPE COVERAGE (%)	BUILDING HEIGHT (FT)	BUILDING FLOOR AREA (SF)	FLOOR AREA RATIO	
REQUIRED/ PERMITTED	40,000 MIN.	150 MIN.	50 MIN.	30' MAX. OR 20% OF WIDTH	30 MIN.	121,906 MAX. *	50% MIN.	2 ^{1/2} STORIES OR 35' MAX.	187,548 MAX. **	0.1 MAX. ***	
PROPOSED	1,873,678	811.8 / 2,073.1	215	114.5 / 772.8	163.1		70%				
* BUILDING CC)\/FRAGE = 65º	6 OF ALLOWE	D FLOOR AREA	RATIO = (0.65)	* (187 548 / 1 8	73 678)) * 1 87	3 678 = 121 906	SSF			

MAXIMUM FLOOR AREA (MFA) = $7.675 + ((1.873.678) / 1.000) \times 96) = 187.548$ SF PER ZONING REGULATIONS (SEE TABLE OF DIMENSIONAL REGULATIONS. MAXIMUM FLOOR AREA IN RESIDENTIAL DISTRICTS. SECTION 307-17. ATTACHMENT 4. NOTE **

*** FLOOR AREA RATIO = MAXIMUM BUILDING FLOOR AREA / LOT AREA = 187.548 SF / 1.873.678 SF = 0.1

LOCAL LAW #8										
REGULATION OF SOLAR ENERGY SYSTEMS WITHIN THE TOWN OF CORTLANDT										
LOT DESCRIPTION	LOT SIZE (SF/AC)	FRONT YARD SETBACK (FT)	SIDE YARD SETBACK (FT)	REAR YARD SETBACK (FT)	STRUTURE HEIGHT (FT)	LANDSCAPE COVERAGE (%)	FENCE HEIGHT (FT)			
MINIMUM REQUIRED	435,600 / 10	200	200	200	25' / 2 STORIES	50%	8			
PROPOSED	1,873,678 / 43	215 (N)	114.5 (W) / 772.8 (E)	163.1 (S)	9'	70%	8			

GENERAL NOTES

- 1. THE PROJECT HORIZONTAL COORDINATES SYSTEM IS BASED ON NAD83 NEW YORK STATE PLANE (US SURVEY FEET, EAST ZONE, NY83-E). ELEVATIONS ARE BASED ON NAVD88 (US SURVEY FEET).
- 2. TOPOGRAPHY SHOWN ON THESE PLANS WAS COMPLETED BY LAND DESIGN ASSOCIATES ENGINEERING, SURVEYING AND LAND ARCHITECTURE D.P.C. USING A BASE & ROVER RTKGPS SYSTEM TO DEVELOP CONTOURS AT A 2 FOOT INTERVAL.
- 3. PROJECT PROPERTY BOUNDARIES ARE BASED ON INFORMATION PROVIDED BY LAND DESIGN ASSOCIATES ENGINEERING, SURVEYING AND LAND ARCHITECTURE D.P.C. LAND SURVEYING FROM A SURVEY COMPLETED IN OCTOBER 2019.
- 4. EXISTING UTILITIES ARE APPROXIMATE AND SHOULD BE VERIFIED BY CONTRACTOR. DIG SAFELY NEW YORK (811) SHALL BE NOTIFIED A MINIMUM OF 72-HOURS PRIOR TO COMMENCING ANY **EXCAVATION**
- 5. THIS IS A PRELIMINARY DESIGN PLAN PROVIDED FOR PERMITTING ONLY. FINAL DESIGN SHALL BE MODIFIED TO SUPPORT CONSTRUCTION. MATCH FINAL ELECTRICAL INTERCONNECTION STUDIES. EQUIPMENT PURCHASED, AND POSSIBLE PERMIT CONSTRAINTS REVEALED DURING PROJECT'S REVIEW.
- 6. ALL WORK DETAILED ON THESE PLANS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS, AND ANY OTHER APPLICABLE TECHNICAL REPORTS. WHERE INDICATED, STATE AND/OR LOCAL CODES AND STANDARD SPECIFICATIONS SHALL APPLY.
- 7. THE CONTRACTOR SHALL ABIDE BY ALL LOCAL, STATE, AND FEDERAL LAWS, RULES AND REGULATIONS WHICH APPLY TO THE CONSTRUCTION OF THESE IMPROVEMENTS, INCLUDING STATE AND FEDERAL REQUIREMENTS.
- 8. THE CONTRACTOR IS RESPONSIBLE FOR PROTECTING ALL EXISTING UTILITY LINES WITHIN OR ADJACENT TO THE CONSTRUCTION AREA. ANY DAMAGE TO EXISTING FACILITIES CAUSED BY CONSTRUCTION ACTIVITY SHALL BE REPAIRED OR REPLACED AT THE CONTRACTOR'S EXPENSE.
- 9. CONSTRUCTION SHALL NOT OCCUR IN ANY PUBLIC RIGHTS OF WAY, PUBLIC OR PRIVATE EASEMENTS, BEYOND THE LIMITS OF DISTURBANCE, OR OUTSIDE THE PROPERTY LIMITS WITHOUT NECESSARY PERMITS AND APPROVALS. ANY PUBLIC OR PRIVATE PROPERTY OR IMPROVEMENTS DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED TO THE SATISFACTION OF THE OWNER AT THE COST OF THE CONTRACTOR.
- 10. OVERNIGHT PARKING OF CONSTRUCTION EQUIPMENT SHALL NOT OBSTRUCT DRIVEWAYS OR DESIGNATED TRAFFIC LANES. THE CONTRACTOR SHALL NOT STORE ANY EQUIPMENT OR MATERIAL WITHIN THE PUBLIC RIGHT OF WAY. OVERNIGHT PARKING OF CONSTRUCTION VEHICLES ON PRIVATE PROPERTY IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
- 11. ALL PROPERTY CORNERS OR MONUMENTS DESTROYED DURING CONSTRUCTION SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE. ALL PROPERTY CORNERS MUST BE RESET BY A PROFESSIONAL LAND SURVEYOR LICENSED IN THE STATE OF NEW YORK.
- 12. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING DRAINAGE THROUGHOUT THE CONSTRUCTION OF THE PROJECT.
- 13. CONTRACTOR SHALL FIELD FIT ALL PROPOSED CULVERT INVERTS TO PROVIDE POSITIVE DRAINAGE IN THE DIRECTION OF EXISTING SLOPES. ALL CULVERTS TO BE INSTALLED AT ADEQUATE DEPTHS AND TO DAYLIGHT. INLETS AND OUTLETS OF ALL CULVERTS TO BE STABILIZED WITH RIP RAP IN ACCORDANCE WITH EROSION CONTROL PLAN.
- 14. THE CONTRACTOR SHALL SECURE PERMITS FROM THE STATE, COUNTY, AND TOWN AUTHORITIES AS NECESSARY BEFORE DRIVING CONSTRUCTION EQUIPMENT OVER AND ACROSS STATE, COUNTY OR TOWN MAINTAINED ROADS.
- 15. ALL WORK IN THE PUBLIC RIGHT OF WAYS SHALL CONFORM WITH THE NEW YORK DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS, CONSTRUCTION AND MATERIALS", DATED JANUARY 1, 2019 OR CURRENT EDITION.
- 16. WETLANDS AND WATERCOURSES SHOWN IN THIS PLAN ARE SUBJECT TO FUTURE CONFIRMATION BY NYSDEC.
- 17. THE EROSION AND SEDIMENTATION CONTROL MEASURES FOR THIS PROJECT SHALL BE IN COMPLIANCE WITH THE STORMWATER POLLUTION PREVENTION PLAN (SWPPP) PREPARED FOR THE PROJECT.
- 18. TREES AND OTHER VEGETATION IN AREAS OF IDENTIFIED CLEARING AND GRUBBING MAY BE REDUCED TO CHIPS BY THE USE OF CHIPPING MACHINES OR STUMP GRINDER AND BE PREPARED FOR USE AS EROSION CONTROL MIX. ALL OTHER CHIPS AND WOOD WASTE RESULTING FROM CLEARING AND GRUBBING OPERATIONS SHALL BE DISPOSED OF OFF-SITE AT AN APPROPRIATELY LICENSED FACILITY AND IN A MANNER AS APPROVED BY THE OWNER.
- 19. CONTRACTOR SHALL TAKE NECESSARY PRECAUTIONS TO AVOID DAMAGE TO EXISTING IMPROVEMENTS AND FACILITIES TO REMAIN IN PLACE. THE CONTRACTOR IS RESPONSIBLE FOR REPAIR AND REPLACEMENT OF DAMAGED ITEMS AS A RESULT OF CONSTRUCTION OF THE PROPOSED FACILITY.
- 20. THE WORK SHALL BE CARRIED OUT NEAR AND UNDER ENERGIZED EQUIPMENT. EXTREME CAUTION IS REQUIRED AT ALL TIMES. THE CONTRACTOR SHALL STRICTLY FOLLOW ALL APPLICABLE SAFETY REQUIREMENTS.
- 21.EARTHWORK: UNLESS EXPLICITLY STATED OTHERWISE, REFER TO THE LATEST EDITION OF THE STATE OF NEW YORK. DEPARTMENT OF TRANSPORTATION. STANDARDS SPECIFICATIONS. CONSTRUCTION AND MATERIALS, FOR GENERAL REQUIREMENTS, PRODUCTS, AND EXECUTION RELATED TO THE COMPLETION OF PROPOSED WORK.

NOTE: UNDER NEW YORK STATE EDUCATION LAW ARTICLE 145 (ENGINEERING), SECTION 7209 (2), IT IS A VIOLATION FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

NOT FOR CONSTRUCTION







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, INC. R FARM AR SYSTEM IERICA, I SOLAR NT SOLA CVE NORTH A
CORTLANDT MII
MW GROUND MOI

AS NOTED

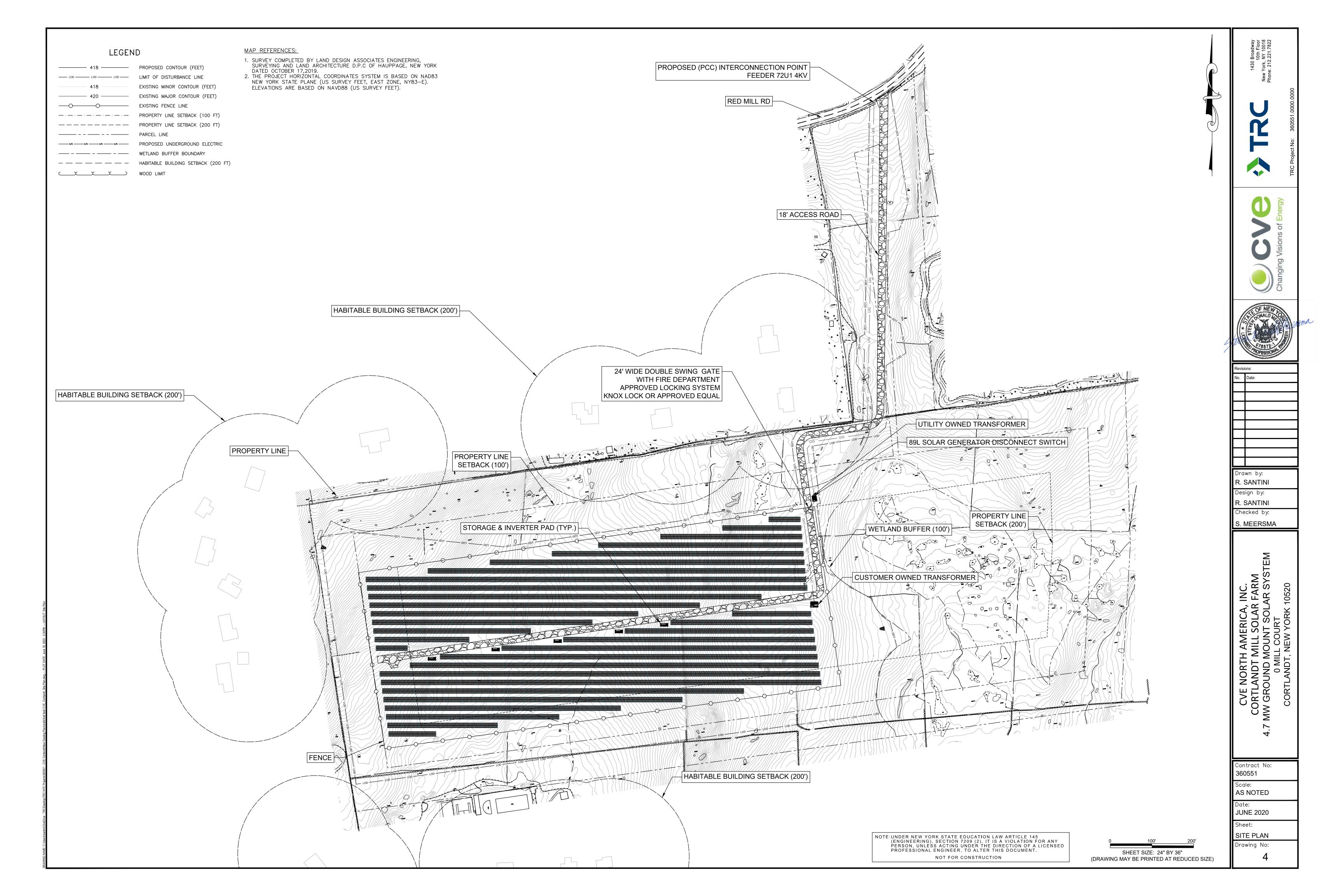
JUNE 2020 GENERAL NOTES

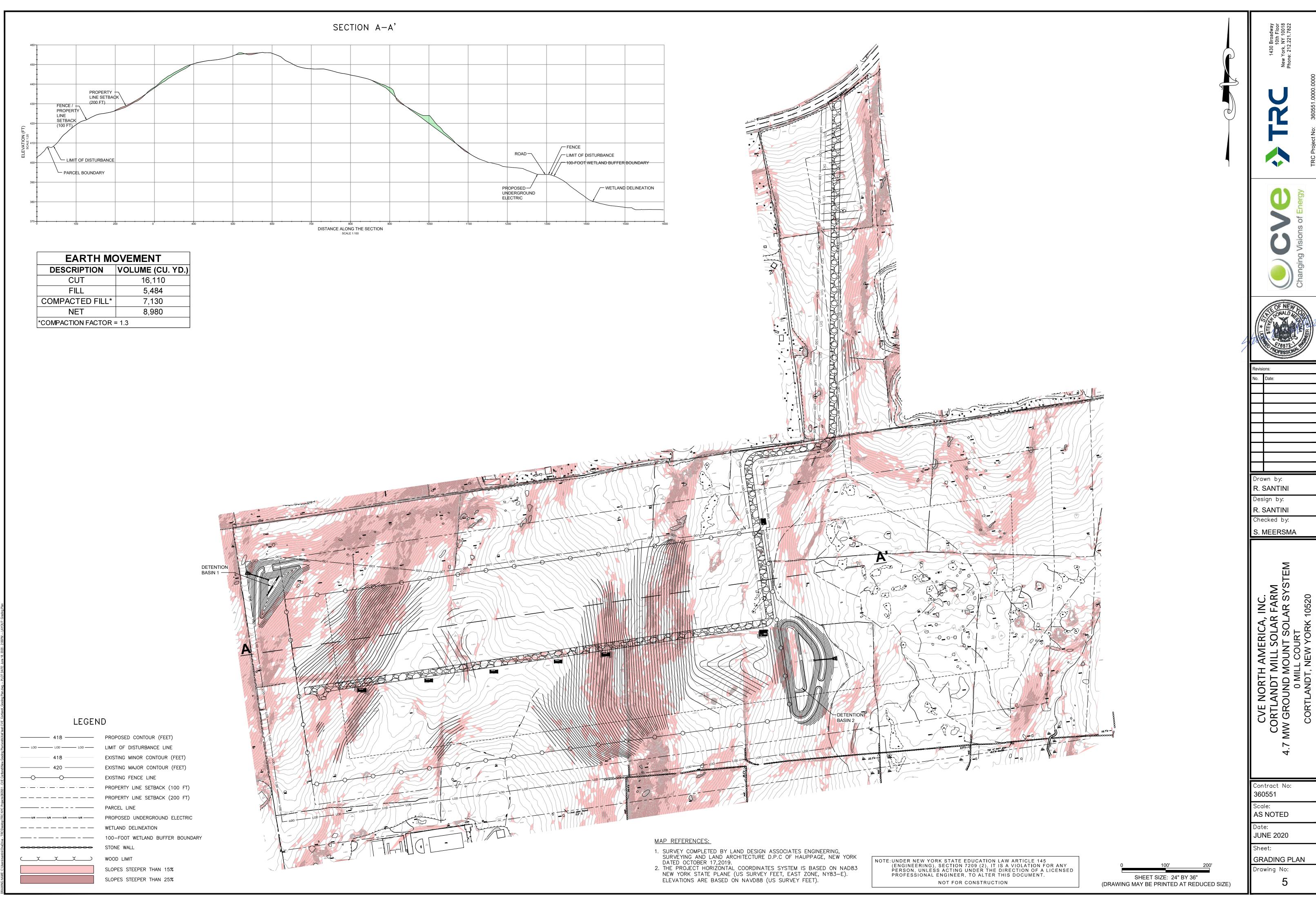
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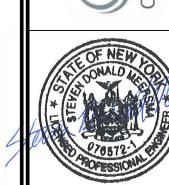


EXISTING CONDITIONS









GRADING PLAN

LEGEND

---- LOD ------ LOD ----- LIMIT OF DISTURBANCE LINE 418 EXISTING MINOR CONTOUR (FEET) ——— – – — PARCEL LINE — — — — — — WETLAND DELINEATION STONE WALL WOOD TO BE REMOVED STONE WALLS TO BE REMOVED ROCKS TO BE REMOVED TREES TO BE REMOVED

MAP REFERENCES:

 SURVEY COMPLETED BY LAND DESIGN ASSOCIATES ENGINEERING, SURVEYING AND LAND ARCHITECTURE D.P.C OF HAUPPAGE, NEW YORK DATED OCTOBER 17,2019.
 THE PROJECT HORIZONTAL COORDINATES SYSTEM IS BASED ON NAD83 NEW YORK STATE PLANE (US SURVEY FEET, EAST ZONE, NY83-E). ELEVATIONS ARE BASED ON NAVD88 (US SURVEY FEET).

PLOT 1 (WESTERN)		PLOT 2 (EASTERN)	
TREE INVENTORY	ACTUAL	TREE INVENTORY	ACTUAL
Tree Sampling Area in Acres	0.25	Tree Sampling Area in Acres	0.25
Number of Trees in 0.25 Acre	44	Number of Trees in 0.25 Acre	40
Tree Density per Acre	176	Tree Density per Acre	160
Disturbance area total Acres	19.37	Disturbance area total Acres	19.37
0-25% Slope acreage	97.66%	0-25% Slope acreage	97.66%
25% Slope or Greater acreage	2.34%	25% Slope or Greater acreage	2.34%
Total Trees per Disturbance Area	3409	Total Trees per Disturbance Area	3099
TREE REPLANTING	REQUIRED	TREE REPLANTING	REQUIRED
Minimum Tree Replanting Density	1 TREE/1,000 SF	Minimum Tree Replanting Density	1 TREE/1,000 SI
Minimum Tree Replanting Ratio		Minimum Tree Replanting Ratio	
Total Trees x 1.5 (0-25%) x 97.66%	4994	Total Trees x 1.5 (0-25%) x 97.66%	4540
Total Trees x 2.0 (25% or Greater) x 2.34%	160	Total Trees x 2.0 (25% or Greater) x 2.34%	145
Total Trees For Mitigation Fund Calculation	5154	Total Trees For Mitigation Fund Calculation	4685



SHEET SIZE: 24" BY 36" (DRAWING MAY BE PRINTED AT REDUCED SIZE)

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Drav	wn by:
R. S	SANTINI
Desi	gn by:
R. S	SANTINI

Checked by: S. MEERSMA

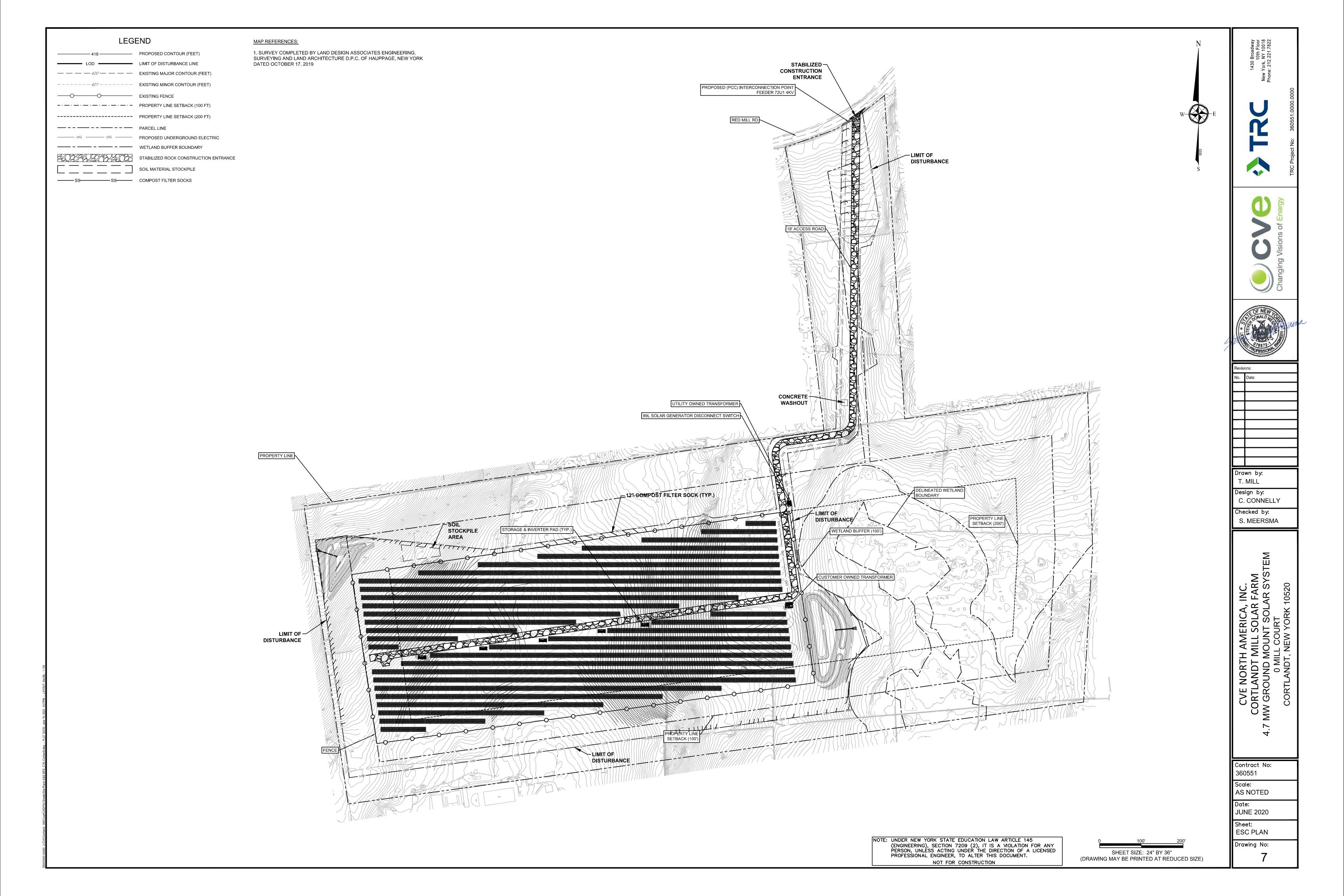
CVE NORTH AMERICA, INC.
CORTLANDT MILL SOLAR FARM
.7 MW GROUND MOUNT SOLAR SYSTEM
0 MILL COURT
CORTLANDT, NEW YORK 10520

Contract No: 360551 Scale:

AS NOTED JUNE 2020

Sheet: DEMOLITION PLAN

Drawing No:



- USE OF THIS DETAIL/CRITERION IS LIMITED TO ACCESS ROADS USED ON AN OCCASIONAL BASIS ONLY (I.E. PROVIDE ACCESS FOR MOWING, EQUIPMENT REPAIR OR MAINTENANCE, ETC.).
- LIMITED USE PERVIOUS ACCESS ROAD IS LIMITED TO LOW IMPACT IRREGULAR MAINTENANCE ACCESS ASSOCIATED WITH RENEWABLE ENERGY PROJECTS IN NEW YORK STATE.
- REMOVE STUMPS, ROCKS AND DEBRIS AS NECESSARY. FILL VOIDS TO MATCH EXISTING NATIVE SOILS AND COMPACTION LEVEL.
- REMOVED TOPSOIL MAY BE SPREAD IN ADJACENT AREAS AS DIRECTED BY THE PROJECT
- ENGINEER. COMPACT TO THE DEGREE OF THE NATIVE INSITU SOIL. DO NOT PLACE IN AN AREA THAT IMPEDES STORMWATER DRAINAGE.
- GRADE ROADWAY, WHERE NECESSARY, TO NATIVE SOIL AND DESIRED ELEVATION. MINOR GRADING FOR CROSS SLOPE CUT AND FILL MAY BE REQUIRED.
- REMOVE REFUSE SOILS AS DIRECTED BY THE PROJECT ENGINEER. DO NOT PLACE IN AN AREA THAT IMPEDES STORMWATER DRAINAGE.
- ROADWAY WIDTH ABOVE MINIMUM TO BE DETERMINED BY CLIENT.
- . THE LIMITED USE PERVIOUS ACCESS ROAD CROSS SLOPE SHALL BE 2% IN MOST CASES AND SHOULD NOT EXCEED 6%. THE LONGITUDINAL SLOPE OF THE ACCESS DRIVE SHOULD NOT
- THE LIMITED USE PERVIOUS ACCESS ROAD IS NOT INTENDED TO BE UTILIZED FOR CONSTRUCTION WHICH MAY SUBJECT THE ACCESS TO SEDIMENT TRACKING. THIS SPECIFICATION IS TO BE DEVELOPED FOR POST-CONSTRUCTION USE. SOIL RESTORATION PRACTICES MAY BE APPLICABLE TO RESTORE CONSTRUCTION RELATED COMPACTION TO PRE-EXISTING CONDITIONS AND SHOULD BE VERIFIED BY SOIL PENETROMETER READINGS. THE PENETROMETER READINGS SHALL BE COMPARED TO THE RESPECTIVE RECORDED READINGS TAKEN PRIOR TO CONSTRUCTION, EVERY 100 LINEAR FEET ALONG THE PROPOSED ROADWAY.
- 10. TO ENSURE THAT SOIL IS NOT TRACKED ONTO THE LIMITED USE PERVIOUS ACCESS ROAD, IT SHALL NOT BE USED BY CONSTRUCTION VEHICLES TRANSPORTING SOIL, FILL MATERIAL, ETC. IF THE LIMITED USE PERVIOUS ACCESS IS COMPLETED DURING THE INITIAL PHASES OF CONSTRUCTION, A STANDARD NEW YORK STATE STABILIZED CONSTRUCTION ACCESS SHALL BE CONSTRUCTED AND UTILIZED TO REMOVE SEDIMENT FROM CONSTRUCTION VEHICLES AND EQUIPMENT PRIOR TO ENTERING THE LIMITED USE PERVIOUS ACCESS ROAD FROM ANY LOCATION ON, OR OFF SITE. MAINTENANCE OF THE PERVIOUS ACCESS ROAD WILL BE REQUIRED IF SEDIMENT IS OBSERVED WITHIN THE CLEAN STONE.
- 1. THE LIMITED USE PERVIOUS ACCESS ROAD SHALL NOT BE CONSTRUCTED OR USED UNTIL ALL AREAS SUBJECT TO RUNOFF ONTO THE PERVIOUS ACCESS HAVE ACHIEVED FINAL STABILIZATION.
- 2. PROJECTS SHOULD AVOID INSTALLATION OF THE LIMITED USE PERVIOUS ACCESS ROAD IN POORLY DRAINED AREAS, HOWEVER IF NO ALTERNATIVE LOCATION IS AVAILABLE, THE PROJECT SHALL UTILIZE WOVEN GEOTEXTILE MATERIAL AS DETAILED IN FOLLOWING NOTES.
- 13. THE DRAINAGE DITCH IS OFFERED IN THE DETAIL FOR CIRCUMSTANCES WHEN CONCENTRATED FLOW COULD NOT BE AVOIDED. THE INTENTION OF THIS DESIGN IS TO MINIMIZE ALTERATIONS TO HYDROLOGY, HOWEVER WHEN DEALING WITH 5%-15% GRADES NOT PARALLEL TO THE CONTOUR, A ROADSIDE DITCH MAY BE REQUIRED. THE NYS STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROLS FOR GRASSED WATERWAYS AND VEGETATED WATERWAYS ARE APPLICABLE FOR SIZING AND STABILIZATION. DIMENSIONS FOR THE GRASSED WATERWAY SPECIFICATION WOULD BE DESIGNED FOR PROJECT SPECIFIC HYDROLOGIC RUNOFF CALCULATIONS, AND A SEPARATE DETAIL FOR THE SPECIFIC GRASSED WATERWAY WOULD BE INCLUDED IN THIS PRACTICE. RUNOFF DISCHARGES WILL BE SUBJECT TO THE OUTLET REQUIREMENTS OF THE REFERENCED STANDARD. INCREASED POST-DEVELOPMENT RUNOFF FROM THE ASSOCIATED ROADSIDE DITCH MAY REQUIRE ADDITIONAL PRACTICES TO ATTENUATE RUNOFF TO PRE-DEVELOPMENT CONDITIONS.
- 14. IF A ROADSIDE DITCH IS NOT UTILIZED TO CAPTURE RUNOFF FROM THE ACCESS ROAD, THE PERVIOUS ACCESS ROAD WILL HAVE A WELL-ESTABLISHED PERENNIAL VEGETATIVE COVER, WHICH SHALL CONSIST OF UNIFORM VEGETATION (I.E. BUFFER), 20 FEET WIDE AND PARALLEL TO THE DOWN GRADIENT SIDE OF THE ACCESS ROAD. POST-CONSTRUCTION OPERATION AND MAINTENANCE PRACTICES WILL MAINTAIN THIS VEGETATIVE COVER TO ENSURE FINAL STABILIZATION FOR THE LIFE OF THE ACCESS ROAD.
- 15. THE DESIGN PROFESSIONAL MUST ACCOUNT FOR THE LIMITED USE PERVIOUS ACCESS ROAD IN THEIR SITE ASSESSMENT/HYDROLOGY ANALYSIS. IF THE HYDROLOGY ANALYSIS SHOWS THAT THE HYDROLOGY HAS BEEN ALTERED FROM PRE- TO POST-DEVELOPMENT CONDITIONS (SEE APPENDIX A OF GP-0-20-001 FOR THE DEFINITION OF "ALTER THE HYDROLOGY ... "), THE DESIGN MUST INCLUDE THE NECESSARY DETENTION/RETENTION PRACTICES TO ATTENUATE THE RATES (10 AND 100 YEAR EVENTS) TO PRE-DEVELOPMENT CONDITIONS.

GEOGRID MATERIAL NOTES:

- THE GEOGRID, OR COMPARABLE PRODUCT, IS INTENDED FOR USE FOR ALL CONDITIONS, IN ORDER TO ASSIST IN MATERIAL SEPARATION FROM NATIVE SOILS AND PRESERVE ACCESS
- GRAVEL FILL MATERIAL SHALL CONSIST OF 1-4" CLEAN, DURABLE, SHARP-ANGLED CRUSHED STONE OF UNIFORM QUALITY, MEETING THE SPECIFICATIONS OF NYSDOT ITEM 703-02, SIZE DESIGNATION 3-5 OF TABLE 703-4. STONE MAY BE PLACED IN FRONT OF, AND SPREAD WITH, A TRACKED VEHICLE. GRAVEL SHALL NOT BE COMPACTED.
- GEOGRID SHALL BE MIRAFI BXG110 OR APPROVED EQUAL. GEOGRID SHALL BE DESIGNED BASED ON EXISTING SOIL CONDITIONS AND PROPOSED HAUL ROAD SLOPES.
- . IF MORE THAN ONE ROLL WIDTH IS REQUIRED, ROLLS SHOULD OVERLAP A MINIMUM OF NINE
- 5. REFER TO MANUFACTURER'S SPECIFICATION FOR PROPER TYING AND CONNECTIONS.
- LIMITED USE PERVIOUS ACCESS ROAD SHALL BE TOP DRESSED AS REQUIRED WITH ONLY 1-4" CRUSHED STONE MEETING NYSDOT ITEM 703-02 SPECIFICATIONS.
- BASIS OF DESIGN: TENCATE MIRAFI BXG110 GEOGRIDS; 365 SOUTH HOLLAND DRIVE, PENDERGRASS, GA;800-685-9990 OR 706-693-2226; WWW.MIRAFI.COM

GEOWEB MATERIAL NOTES:

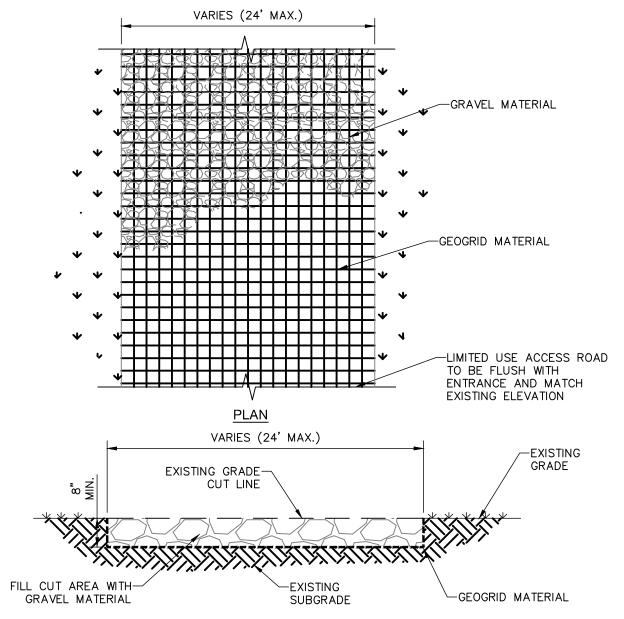
- THE GEOWEB, OR COMPARABLE PRODUCT, IS SUGGESTED FOR USE ON ROAD PROFILES EXCEEDING 10%. THE GEOWEB PRODUCT IS INTENDED TO LIMIT SHIFTING STONE MATERIAL
- INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
- WHERE REQUIRED, A NATIVE SOIL WEDGE SHALL BE PLACED TO ACCOMMODATE ROAD CROSS SLOPE OF 2%. NATIVE SOIL SHALL BE COMPACTED TO MATCH EXISTING SOIL CONDITIONS.
- GRAVEL FILL MATERIAL SHALL CONSIST OF 1-4" CLEAN, DURABLE, SHARP-ANGLED CRUSHED STONE OF UNIFORM QUALITY, MEETING THE SPECIFICATIONS OF NYSDOT ITEM 703-02, SIZE DESIGNATION 3-5 OF TABLE 703-4. STONE MAY BE PLACED IN FRONT OF, AND SPREAD WITH, A TRACKED VEHICLE. GRAVEL SHALL NOT BE COMPACTED.
- GEOWEB SYSTEM SHALL BE PRESTO GEOSYSTEM GEOWEB OR APPROVED EQUAL. GEOWEB SHALL BE DESIGNED BASED ON EXISTING SOIL CONDITIONS AND PROPOSED HAUL ROAD SLOPES.
- LIMITED USE PERVIOUS ACCESS ROAD SHALL BE TOP DRESSED AS REQUIRED WITH ONLY 1-4" CRUSHED STONE, SIZE 3A, MEETING NYSDOT ITEM 703-02 SPECIFICATIONS.
- THE TOP EDGES OF ADJACENT CELL WALLS SHALL BE FLUSH WHEN CONNECTING. ALIGN THE I-SLOTS FOR INTERLEAF AND END TO END CONNECTIONS. THE GEOWEB PANELS SHALL BE CONNECTED WITH ATRA KEYS AT EACH INTERLEAD AND END TO END CONNECTIONS. REFER TO MANUFACTURER'S SPECIFICATION FOR PROPER INSTALLATION, TYING, ANCHORING, AND

BASIS OF DESIGN: PRESTO GEOSYSTEMS GEOWEB; 670 NORTH PERKINS STREET, APPLETON, WI; 800-548-3424 OR 920-738-1222; INFO@PRESTOGEO.COM; WWW.PRESTOGEO.COM

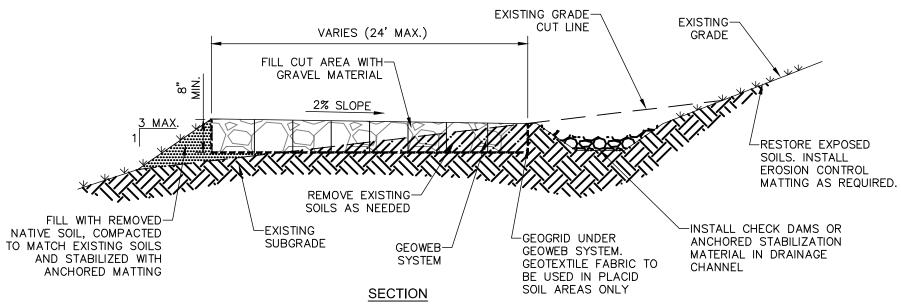
WOVEN GEOTEXTILE MATERIAL NOTES:

CONNECTIONS.

- SPECIFIED GEOTEXTILE WILL ONLY BE UTILIZED IN PLACID SOILS. PLACID SOILS CONSIST OF POORLY DRAINED SOILS COMPOSED OF FINELY TEXTURED PARTICLES AND ARE PRONE TO RUTTING. PLACID SOILS ARE TYPICALLY PRESENT IN LOW-LYING AREAS WITH HYDROLOGIC SOILS GROUP (HSG) OF C OR D, OR AS SPECIFIED BY AN ENGINEER, ENVIRONMENTAL SCIENTIST, SOIL SCIENTIST, OR GEOTECHNICAL DATA.
- THE CONCERN FOR POTENTIAL REDUCTION OF NATIVE INFILTRATION RATES DUE TO THE GEOTEXTILE MATERIAL WOULD NOT BE A SIGNIFICANT CONCERN IN POORLY DRAINED SOILS WHERE SEGREGATION OF PERVIOUS STONE AND NATIVE MATERIALS IS CRUCIAL FOR LONG TERM
- BASIS OF DESIGN: TENCATE MIRAFI RSI-SERIES WOVEN GEOSYNTHETICS; 365 SOUTH HOLLAND DRIVE, PENDERGRASS, GA; 800-685-9990 OR 706-693-2226; WWW.MIRAFI.COM

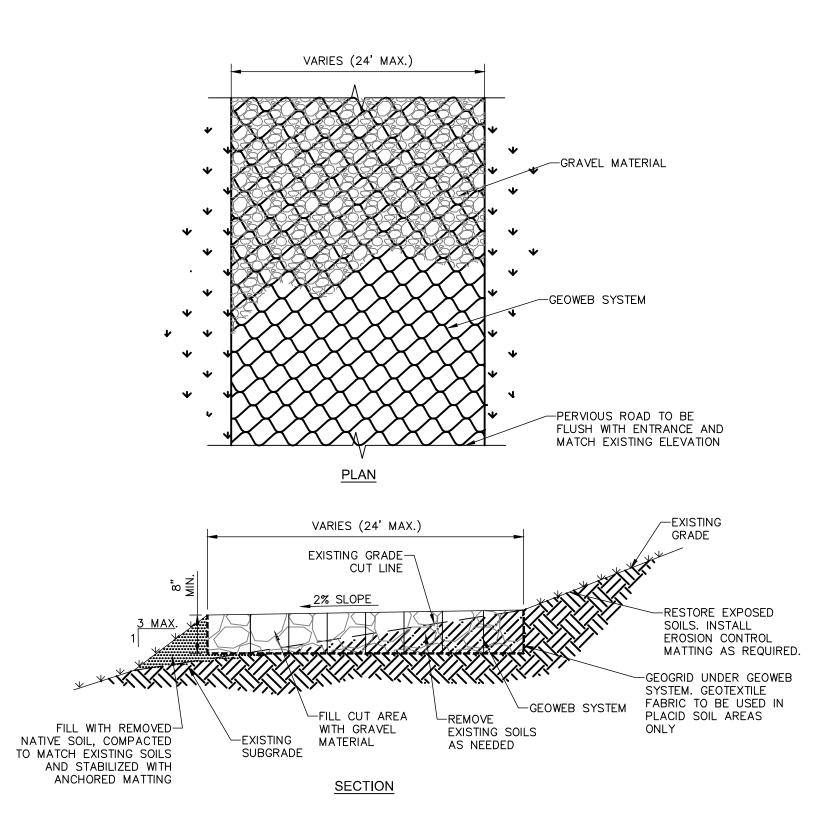


<u>LIMITED USE PERVIOUS ACCESS ROAD - 0% TO 10% SLOPES</u>

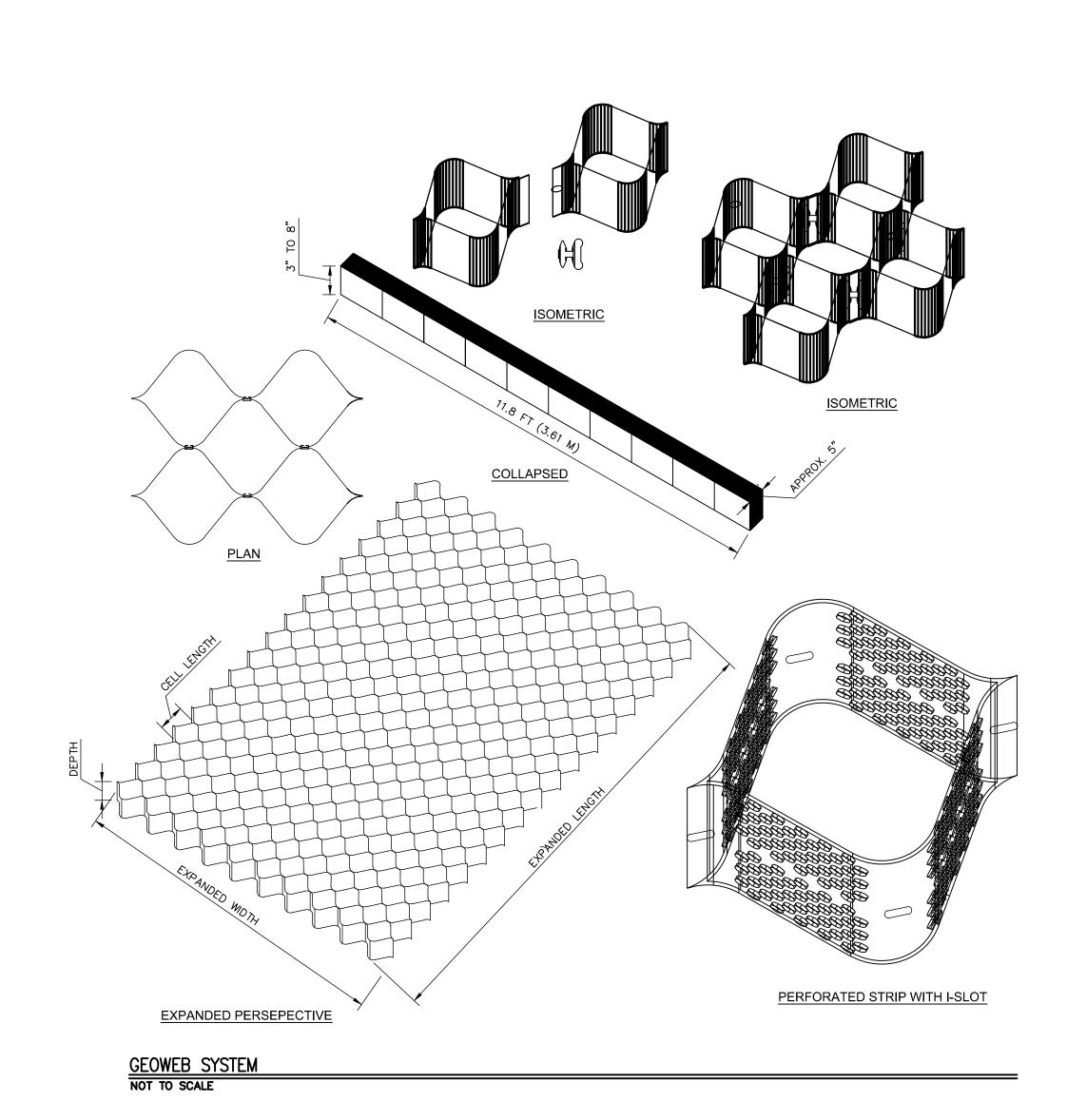


1. THE ROADSIDE DITCH SHALL BE DESIGNED IN ACCORDANCE WITH THE NEW YORK STATE STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROLS FOR GRASSED AND VEGETATED WATERWAYS. ADDITIONAL DETAILS WILL BE

<u>LIMITED USE PERVIOUS ACCESS ROAD - 10% AND GREATER SLOPES WITH DITCH</u>



<u>LIMITED USE PERVIOUS ACCESS ROAD - 10% AND GREATER SLOPES</u>
NOT TO SCALE



NOTE: UNDER NEW YORK STATE EDUCATION LAW ARTICLE 145 (ENGINEERING), SECTION 7209 (2), IT IS A VIOLATION FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT. NOT FOR CONSTRUCTION

SHEET SIZE: 24" BY 36" (DRAWING MAY BE PRINTED AT REDUCED SIZE)





Drawn by: T. MILL Design by: C. CONNELLY Checked by: S. MEERSMA

> , INC. R FARM AR SYST CVE NORTH AMERICA, IN CORTLANDT MILL SOLAR F 7 MW GROUND MOUNT SOLAF 0 MILL COURT CORTLANDT, NEW YORK 10

Contract No: 360551

Scale: AS NOTED

> JUNE 2020 Sheet:

DETAIL SHEET Drawing No:

FENCE INSTALLATION NOTES

- THE OPENINGS IN THE LINKS SHALL BE A MAXIMUM OF 2" • CHAIN LINK FENCE IS TO BE FINISHED WITH BLACK VINYL COATING
- TERMINAL POSTS TO BE $2\frac{1}{2}$ "Ø SCHEDULE 40 PIPING.

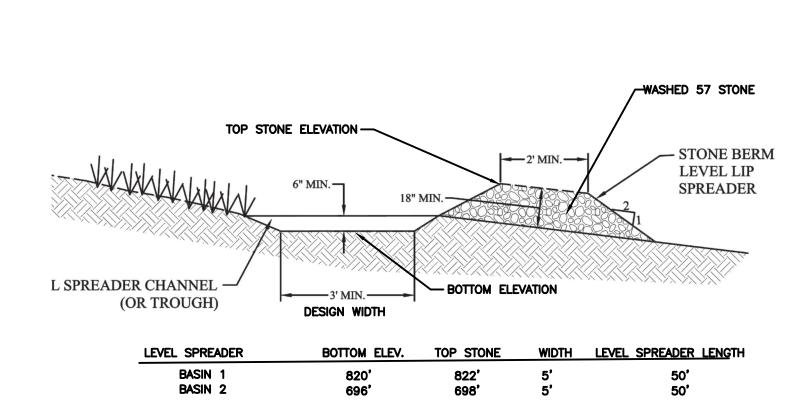
CHAIN LINK FENCE & GATE DETAIL NOT TO SCALE

MILL COURT CORTLANDT, NY

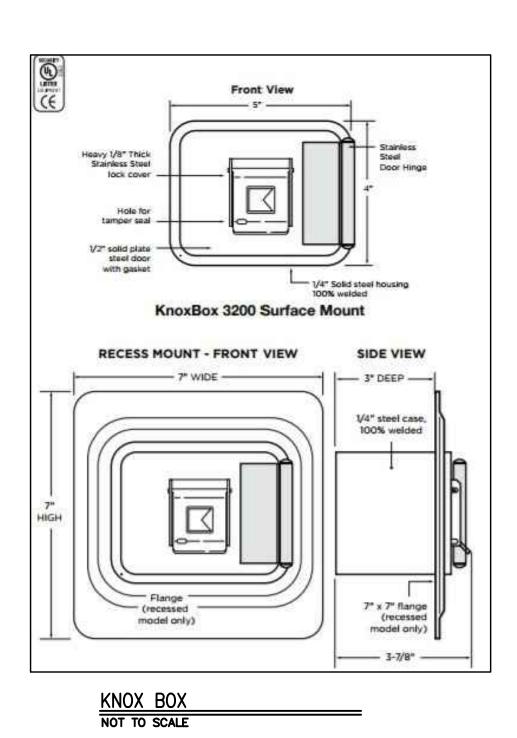
SITE OWNER: CVE NORTH AMERICA, INC. SITE OWNER NUMBER: 914.847.0043

O & M COMPANY: CVE NORTH AMERICA, INC. O & M COMPANY NUMBER: 914.847.0043

> CONTACT PLAQUE NOT TO SCALE



LEVEL SPREADER TOE OF SLOPE NOT TO SCALE



PROVIDE WATERTIGHT CONNECTION— 12 IN. THICK (MIN.) CAST-IN-PLACE OR-PRECAST CONCRETÉ COLLAR (MIN. 2000 RISER TO COLLAR NO. OF FIRST COLLAR SPACING SIZE TRAP COLLARS (FT)

ALL COLLARS SHALL BE INSTALLED SO AS TO BE WATERTIGHT.

COLLAR SIZE AND SPACING SHALL BE AS INDICATED WITHIN TABLE.

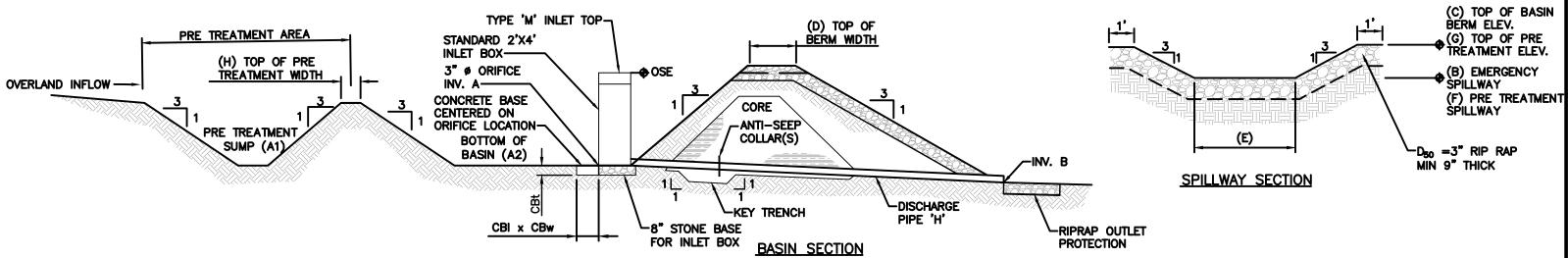
CONCRETE ANTI-SEEP COLLAR NOT TO SCALE

Trespassing



- SIGNS SHALL CONFORM TO THE 2013 OSHA AND ANSI REQUIREMENTS.
- SIGNS SHALL BE 20" WIDE BY 14" HIGH.
 SIGNS SHALL HAVE A MOUNTING HEIGHT OF BETWEEN 45 TO 66 INCHES.
 SIGN PANELS SHALL BE 10 GAUGE ALUMINUM WITH HIGH VISIBILITY REFLECTIVE SHEETING.
 MOUNT A SET OF SIGNS NOT MORE THAN EVERY 100 FEET ALONG PERIMETER FENCING.

FENCE WARNING SIGNS NOT TO SCALE



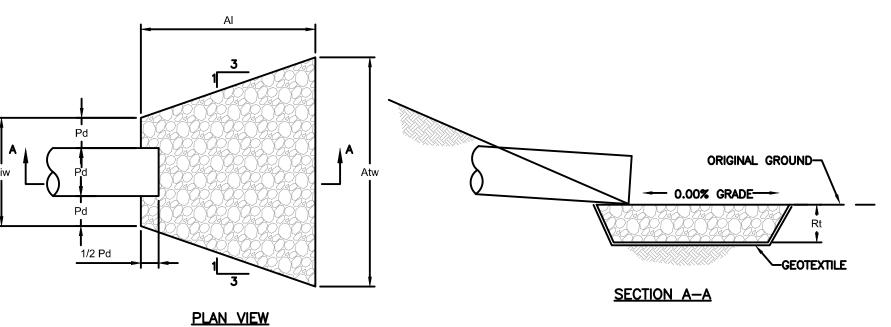
BASIN EARTHWORK NOTES:

- 1. FILL MATERIAL SHOULD BE TAKEN FROM APPROVED DESIGNATED EXCAVATION AREAS. IT SHOULD BE FREE OF ROOTS, STUMPS, WOOD, RUBBISH, STONES GREATER THAN 6 INCHES, OR OTHER OBJECTIONABLE MATERIALS. MATERIALS ON THE OUTPOORT MEGE
- TO SUPPORT VEGETATION. 2. AREAS WHERE FILL IS TO BE PLACED SHOULD BE SCARIFIED PRIOR TO PLACEMENT. FILL MATERIALS THE EMBANKMENT SHOULD BE PLACED IN MAXIMUM 6-INCH LIFTS. THE PRINCIPAL SPILLWAY SHOULD BE INSTALLED CONCURRENTLY WITH FILL PLACEMENT AND NOT EXCAVATED INTO THE

3. FILL MATERIAL MUST MEET ALL STATE REGULATIONS.

			_											·	CONCRETE BA	SE
BASIN #	A1 (FT)	A2 (FT)	B (FT)	C (FT)	D (FT)	E (FT)	F (FT)	G (FT)	H (FT)	OSE (FT)	DISCHARGE PIPE 'H'	INV. A (FT)	INV. B (FT)	LENGTH - CBI (IN)	WIDTH - CBw (IN)	THICKNESS CBt (IN)
1	394.00	394.50	399.85	401.00	8.00	20.00	394.75	395.00	1.00	400.00	48' 18" SLCPP • 2.08%	395.00	394.00	24.00	24.00	6.00
2	382.00	382.50	386.75	388.00	8.00	15.00	382.75	383.00	3.00	386.00	48' 18" SLCPP • 2.08%	382.00	381.00	24.00	24.00	6.00

TYPICAL INFILTRATION BASIN SECTION NOT TO SCALE

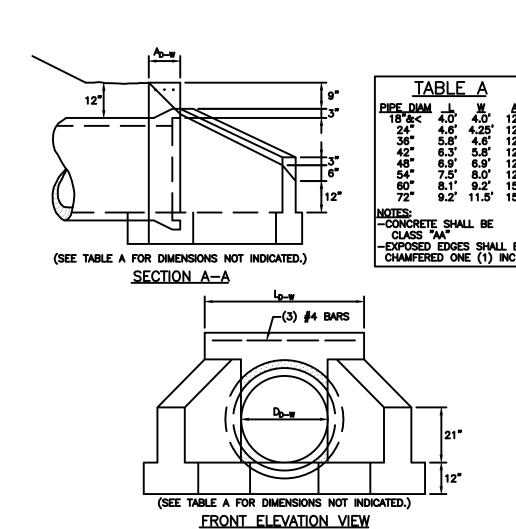


ALL APRONS SHALL BE CONSTRUCTED TO THE DIMENSIONS SHOWN. TERMINAL WIDTHS SHALL BE ADJUSTED AS NECESSARY TO MATCH RECEIVING CHANNELS.

ALL APRONS SHALL BE INSPECTED AT LEAST WEEKLY AND AFTER EACH RUNOFF EVENT. DISPLACED RIPRAP WITHIN THE APRON SHALL BE REPLACED IMMEDIATELY.

EXTEND RIPRAP ON BACK SIDE OF APRON TO AT LEAST 1/2 DEPTH OF PIPE ON BOTH SIDES TO PREVENT SCOUR AROUND THE PIPE.

	PIPE	RIP	RAP	APRON			
OUTLET NO.	DIA Pd (IN)	SIZE D ₅₀ - (IN)	THICK. Rt (IN)	LENGTH AI (FT)	INITIAL WIDTH Aiw (FT)	TERMINAL WIDTH Atw (FT)	
1	18	9	18	12	4	10	
2	18	9	18	12	4	10	



NOTE: ALL ENDWALLS AND HEADWALLS SHALL HAVE A TRASH SCREEN (SEE DETAIL)

RIP RAP OUTLET PROTECTION NOT TO SCALE

NOTE: UNDER NEW YORK STATE EDUCATION LAW ARTICLE 145 (ENGINEERING), SECTION 7209 (2), IT IS A VIOLATION FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT. NOT FOR CONSTRUCTION

SHEET SIZE: 24" BY 36" (DRAWING MAY BE PRINTED AT REDUCED SIZE) 1430 F 1 New York, I Phone: 212.

Drawn by: T. MILL

Design by: C. CONNELLY

Checked by: S. MEERSMA

CVE NORTH AMERICA, INC.
CORTLANDT MILL SOLAR FARM
7 MW GROUND MOUNT SOLAR SYSTEM
0 MILL COURT
CORTLANDT, NEW YORK 10520 /

Contract No: 360551

Scale: **AS NOTED**

Date: JUNE 2020

Sheet: DETAIL SHEET 2

Drawing No:



Easy 0&M

Virtual central solution, easy for 0&M

Compact design and light weight for easy installation

Grid Support

Efficiency Curve

ramp rate control

Compact design and light weight for easy

· Compliance with both IEC and UL safety,

· Low/High voltage ride through (L/HVRT)

Active & reactive power control and power

EMC and grid support regulations

Normalized Output Power

SUNGROW

High Yield

• Patent five-lev
European effic

Circuit Diagram

Saved Investment

transformer and labor cost

· Max. DC/AC ratio up to 1.5

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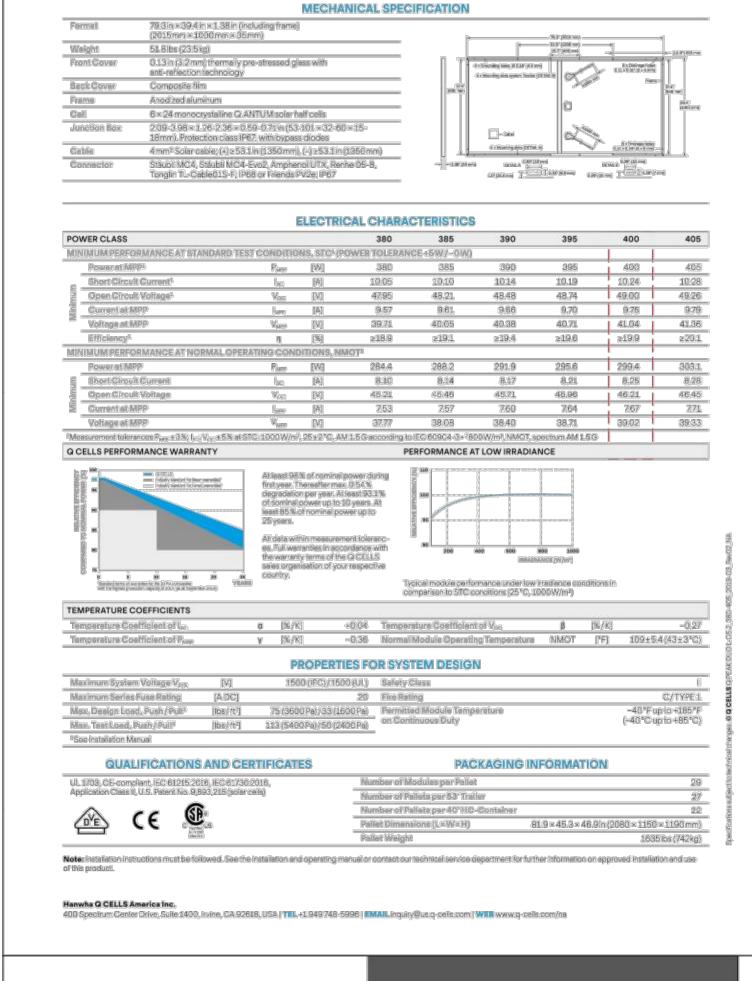
Patent five-level topology, max. efficiency 98.9 %, European efficiency 98.7 %, CEC efficiency 98.5 %

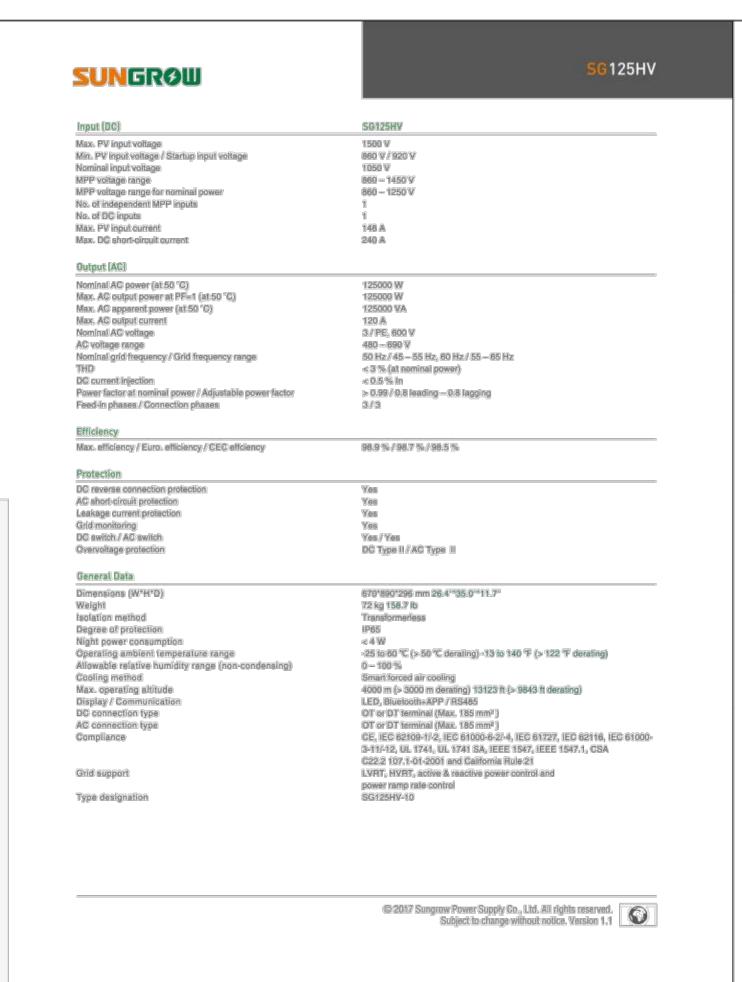
Full power operation without derating at 50 °C

- DC 1500 V, AC 600 V, low system initial

1 to 5 MW power block design for lower MV

SG125HV String Inverter for 1500 Vdc System





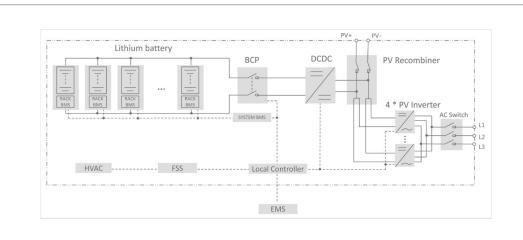
SUNGROW SAMSUNG SDI ST548KWH-D250HV +4xSG125HV

Storage System

CIRCUIT DIAGRAM



SYSTEM FEATURES ESS system integrated with PV inverter • 1500V DC coupled PV+ESS system Compact mechanical design, minimized footprint High efficient system with safe and long lifecycle lithiun-ion battery • Integrated local controller, HVAC and FSS to enable unified communication and ensure system safety

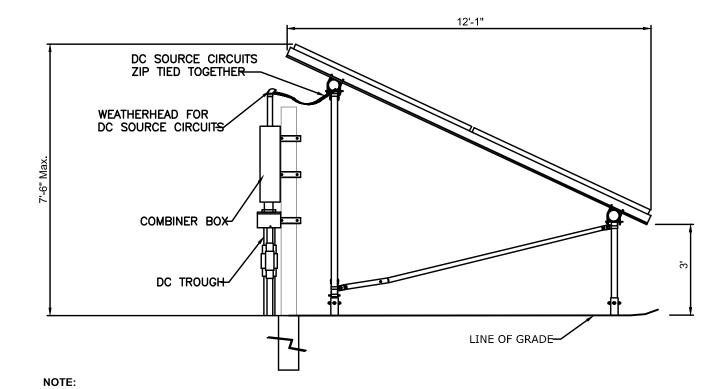


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ST548KWH-D250HV+4xSG125HV

System Type	ST548KWH-D250HV+4xSG125HV
PV Data	
Max PV input voltage	1,500 V
MPPT voltage range at nominal power	860 ~ 1,250 V
Number of DC inputs	5
Max. PV input current	1,250 A
DCDC Data	
Working voltage range	500 ~ 1,500 V
Nominal power	250 KW
Max. current	344 A
Battery Data	
Cell type	Samsung SDI Mega E2, 3.68 V / 94 Ah
Configuration of system	264S6P
Battery capacity (BOL)	548 kWh
Battery voltage range	844 ~1,095 V
AC Data	
AC output power	500kVA @ 50 °C
Max. AC output current	480 A
Nominal AC voltage	3 / PE, 600 V
AC voltage range	480 ~ 690 V
Nominal grid frequency / Grid frequency range	60 Hz / 55 ~ 65 Hz
Power factor at nominal power / Adjustable power factor	> 0.99 / 0.8 leading ~ 0.8 lagging
Feed-in phases / connection phases	3/3
General Data	
Dimensions (W * H * D)	6,058 * 2,896 * 2,438 mm / 238.5" * 114.0" * 96.0"
Weight (with / without battery)	12.5 T / 8.6 T 27,558 lbs /18,960 lbs
Degree of protection	IP 54 / NEMA 3R
Operating temperature range	-30 to 50 °C / -22 to 122 °F
Relative humidity	0 ~ 95 % (non-condensing)
Max. working altitude	2,000 m / 6,562 ft
Cooling concept of battery chamber	Heating, Ventilation and Air Conditioning
Fire suppression system of battery unit	FM-200 extinguishment system
Communication interfaces	RS485, Ethernet
Communication protocols	Modbus RTU, Modbus TCP
Compliance	UL9540

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-PROVIDE EDGE GUARD OR ADEQUATE PROTECTION FOR PV WIRES AND SHARP EDGES OF RACKING SYSTEM. -PROVIDE DRIP LOOP AND SUPPORT.

SOLAR PANEL DETAIL

NOT TO SCALE

1430 Broadway 10th Floor New York, NY 10018 Phone: 212.221.7822

Drawn by: T. MILL Design by: C. CONNELLY

Checked by: S. MEERSMA

CVE NORTH AMERICA, INC.
CORTLANDT MILL SOLAR FARM
7 MW GROUND MOUNT SOLAR SYSTEM
0 MILL COURT
CORTLANDT, NEW YORK 10520

Contract No: 360551 Scale:

/

Date: JUNE 2020

AS NOTED

Sheet: **DETAIL SHEET 3** Drawing No:

EROSION CONTROL MEASURES

EROSION AND SEDIMENT CONTROL MEASURES SHALL CONSIST OF NON-WOVEN FILTER FABRIC MATERIAL WITH A WIRE MESH BACKING, OR A WOVEN FABRIC (SILT FENCE). ALL MATERIAL SHALL BE NEW AND FREE FROM DEFECTS THAT WOULD COMPROMISE THE EFFECTIVENESS OF THE CONTROL MEASURES. AFTER COMPLETION, ALL MATERIAL SHALL BE DISPOSED PROPERLY. LOCATION OF EROSION AND SEDIMENT CONTROL STRUCTURES CAN BE SEEN ON THE SITE PLAN. NOTE: ALL WATER CONTROL MEASURES ARE LOCATED DOWN-GRADIENT FROM DISTRIBUTED STREET. IF TOPSOIL IS TO BE STORED IN AN AREA NOT SHOWN ON THE SITE PLAN, DUE TO UNFORESEEN EVENTS, PRIOR TO STORING, THE DOWN-GRADIENT PERIMETER OF THE STORAGE AREA SHALL BE PROPERLY PROTECTED PER THE SPECIFICATIONS

CONSTRUCTION HOUSEKEEPING

CONTRACTOR SHALL MAINTAIN THE PROJECT SITES IN ACCORDANCE WITH THE FOLLOWING PERFORMANCE STANDARDS:

MATERIAL STOCKPILING: MATERIAL RESULTING FROM CLEARING AND GRUBBING, GRADING, AND OTHER CONSTRUCTION ACTIVITIES, OR NEW MATERIAL DELIVERED TO THE SITE, SHALL BE STOCKPILED UPSLOPE OF DISTURBED AREAS. THE STOCKPILE AREAS SHALL HAVE THE PROPER EROSION AND SEDIMENT CONTROLS INSTALLED TO PREVENT MIGRATION OF

STAGING. STORAGE. AND MARSHALLING AREAS: CONSTRUCTION MATERIALS AND EQUIPMENT SHALL BE STORED IN DESIGNATED STAGING AREAS AS INDICATED ON THE CONSTRUCTION DRAWINGS OR AS DIRECTED BY THE OWNER OR OWNER'S REPRESENTATIVE, OR ENGINEER. STAGING, STORAGE, AND MARSHALLING AREAS SHALL BE LOCATED IN AN AREA THAT MINIMIZES IMPACTS TO STORMWATER QUALITY. CHEMICALS, SOLVENTS FERTILIZERS, AND OTHER TOXIC MATERIALS SHALL BE COLLECTED AND DISPOSED OF AT AN APPROVED SOLID WASTE OR CHEMICAL DISPOSAL FACILITY. BULK STORAGE OF FUEL MATERIALS WILL BE STAGED AT THE PROJECT MARSHALLING YARD PER SAFETY DATA SHEET (SDS) SPECIFICATION AND ENVIRONMENTAL HEALTH AND SAFETY STANDARDS, WHICHEVER IS MORE RESTRICTIVE.

EQUIPMENT CLEANING AND MAINTENANCE: ALL ONSITE CONSTRUCTION VEHICLES SHALL BE MONITORED FOR LEAKS AND SHALL RECEIVE REGULAR PREVENTATIVE MAINTENANCE TO REDUCE THE RISK OF LEAKAGE. ANY EQUIPMENT LEAKING OIL, FUEL, OR HYDRAULIC OIL SHALL BE REPAIRED OR REMOVED FROM THE PROJECT SITE IMMEDIATELY. STORAGE, PARKING, MAINTENANCE, AND SERVICING OF CONSTRUCTION VEHICLES SHALL BE A MINIMUM OF 200-FEET FROM A WETLAND WATERBODY, OR OTHER ECOLOGICALLY SENSITIVE AREA AND STORMWATER CONVEYANCE FEATURES OR WATER QUALITY TREATMENT BMPS. PETROLEUM PRODUCTS AND HYDRAULIC FLUIDS THAT ARE NOT IN VEHICLES SHALL BE STORED IN TIGHTLY SEALED CONTAINERS THAT ARE CLEARLY LABELED. ALL GASOLINE, DIESEL FUEL, OR OTHER FUEL STORAGE VESSELS WITH GREATER THAN 25-GALLON SHELL CAPACITY MUST HAVE SECONDARY CONTAINMENT CONSTRUCTED OF AN IMPERVIOUS MATERIAL CAPABLE OF CONTAINING A MINIMUM OF 110% OF THE SHELL CAPACITY.

DEBRIS AND OTHER MATERIALS: CONTRACTOR SHALL MANAGE ALL LITTER. CONSTRUCTION DEBRIS, AND CONSTRUCTION CHEMICALS EXPOSED TO STORMWATER TO PREVENT MATERIALS FROM BECOMING A SOURCE OF POLLUTION. ALL DEMOLITION WASTE, DEBRIS, AND RUBBISH GENERATED DURING CONSTRUCTION OF THE PROJECT SHALL BE PROPERLY REMOVED FROM THE SITE AS IT OCCURS. ALL MATERIALS SHALL BE PROPERLY DISPOSED OF OFF-SITE IN STRICT ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE, AND FEDERAL REGULATIONS.THE CONTRACTOR SHALL PAY PARTICULAR ATTENTION TO THE PROPER HANDLING, STORAGE, AND DISPOSAL OF HAZARDOUS SUBSTANCES.

TRENCH OR FOUNDATION DEWATERING: TRENCH DEWATERING IS THE REMOVAL OF WATER FROM TRENCHES, FOUNDATIONS, COFFER DAMS, PONDS, SUMPS, BASINS, AND OTHER AREAS WITHIN THE CONSTRUCTION AREA THAT RETAIN WATER AFTER EXCAVATION. IN MOST CASES THE COLLECTED WATER IS HEAVILY SILTED AND HINDERS CORRECT AND SAFE CONSTRUCTION PRACTICES. THE CONTRACTOR SHALL REMOVE COLLECTED WATER FROM THE PONDED AREAS, EITHER THROUGH GRAVITY OR PUMPING, IN A MANNER THAT SPREADS IT THROUGH NATURAL WOODED OR VEGETATED BUFFERS OR TO AREAS THAT ARE SPECIFICALLY DESIGNED TO COLLECT THE MAXIMUM AMOUNT OF SEDIMENT LADEN WATER FROM DEWATERING TO FLOW OVER DISTURBED AREAS OF THE PROJECT SITES. OTHER MEASURES OR METHODS MAY BE UTILIZED AS REVIEWED AND APPROVED BY THE ENGINEER.

NON-STORMWATER DISCHARGES: CONTRACTOR SHALL IDENTIFY AND PREVENT CONTAMINATION BY NON-STORMWATER DISCHARGES.

CONCRETE WASHOUT AREAS: DESIGNATED CONCRETE WASHOUT AREAS SHALL BE PROVIDED AS NEEDED TO ALLOW CONCRETE TRUCKS TO WASHOUT OR DISCHARGE SURPLUS CONCRETE AND WASH WATER ONSITE. CONCRETE WASHOUT AREAS SHALL BE A DIKED IMPERVIOUS AREA LOCATED A MINIMUM OF 100 FEET FROM A DRAINAGE WAY, WATERBODY, WETLAND AREA, OR INFILTRATION BMP. CONCRETE WASHOUT AREAS SHALL HAVE PROPER SIGNAGE AND E CONSTRUCTED TO PREVENT CONTACT BETWEEN WASHWATER AND STORMWATER. THE CONTRACTOR IS RESPONSIBLE FOR IMPLEMENTATION AND MAINTENANCE OF CONCRETE WASHOUT AREAS. CONCRETE WASHOUT AREAS SHALL NOT BE FILLED BEYOND 95 OF DESIGN CAPACITY AND SHALL BE CLEANED OUT ONCE 75% CAPACITY HAS BEEN MET UNLESS A NEW

ADDITIONAL REQUIREMENTS: COMPLETION OF THE WORK WILL REQUIRE FREQUENT ACCESS TO VARIOUS PORTIONS OF THE PROJECT AREA FROM STATE AND LOCAL ROADWAYS. CONTRACTOR SHALL MONITOR PUBLIC ROADWAYS AND SHALL CLEAN PAVEMENT BY MEANS NECESSARY IN THE EVENT THAT SEDIMENT OR TRACKING IS OBSERVED. SIGNAGE SHALL BE POSTED AT INTERSECTIONS OF PROJECT ACCESS ROADS AND PUBLIC WAYS, STATING COMPANY NAME AND 24-HOUR CONTACT PHONE NUMBER.

TEMPORARY STABILIZATION FOR FROZEN CONDITIONS

DICTATE SUCH MEASURES.

SITE STABILIZATION: MULCHING SHOULD BE TRACKED INTO SOIL PRIOR TO FROZEN CONDITIONS, OR ANCHORED WITH NATURAL FIBER NETTING. APPLICATION OF MULCHING SHOULD BE PERFORMED PRIOR TO SIGNIFICANT SNOW FALL. IF STRAW MULCH ALONE IS USED FOR TEMPORARY STABILIZATION, IT SHALL BE APPLIED AT DOUBLE THE STANDARD RATE OF 2 TONS PER ACRE, MAKING THE APPLICATION RATE 4 TONS PER ACRE. OTHER MANUFACTURED MULCHES SHOULD BE APPLIED AT DOUBLE THE MANUFACTURER'S RECOMMENDED RATE. IN AREAS WHERE SOIL DISTURBANCE ACTIVITY HAS TEMPORARILY OR PERMANENTS CEASED, THE APPLICATION OF SOIL STABILIZATION MEASURES SHOULD BE INITIATED BY END OF NEXT BUSINESS DAY AND COMPLETED WITHIN THREE DAYS. ACCUMULATED SNOW AND FROZEN CONDITIONS ALONE ARE NOT CONSIDERED STABILIZATION.

SLOPES: ALL SLOPES AND GRADES MUST BE PROPERLY STABILIZED WITH APPROVED METHODS. ROLLED EROSION CONTROL PRODUCTS MUST BE USED ON ALL SLOPES GREATER THAN 3H:1V, OR WHERE CONDITIONS FOR EROSION

SETBACKS: A MINIMUM 25-FOOT BUFFER SHALL BE MAINTAINED FROM ALL PERIMETER CONTROLS SUCH AS SILT FENCE. MARK SILT FENCE WITH TALL STAKES THAT ARE VISIBLE ABOVE THE SNOW PACK. EDGES OF DISTURBED AREAS THAT DRAIN TO A WATERBODY WITHIN 100-FEET WILL HAVE 2 ROWS OF SILT FENCE, 5-FEET APART, INSTALLED ALONG THE

SOIL STOCKPILES: STOCKPILED SOILS MUST BE PROTECTED BY THE USE OF ESTABLISHED VEGETATION, ANCHORED -DOWN MULCH, ROLLED EROSION CONTROL PRODUCTS, OR OTHER DURABLE COVERING. SEDIMENT CONTROLS MUST BE INSTALLED DOWNSLOPE OF THE PILE TO CONTROL SEDIMENTATION TO UNDISTURBED LOCATIONS.

CONSTRUCTION ENTRANCE: ALL ENTRANCE AND EXIT LOCATIONS TO THE SITE MUST BE PROPERLY STABILIZED AND MUST BE MAINTAINED TO ACCOMMODATE SNOW MANAGEMENT AS SET FORTH IN THE NEW YORK SSESC.

SNOW MANAGEMENT: SNOW MANAGEMENT SHALL NOT DESTROY OR DEGRADE EROSION AND SEDIMENT CONTROL PRACTICES, PLOWING PERFORMED SHOULD NOT MIGRATE PLACED CRUSHED STONE OR ACCUMULATED MATTING DEBRIS WITHIN WATERBODIES, CONVEYANCES OR PROTECTED AREAS. PREPARE A SNOW MANAGEMENT PLAN WITH ADEQUATE STORAGE FOR SNOW AND CONTROL OF MELT WATER, REQUIRING CLEARED SNOW TO BE STORED IN A MANNER NOT AFFECTING ONGOING CONSTRUCTION ACTIVITIES. ENLARGE AND STABILIZE ACCESS POINTS TO PROVIDE FOR SNOW MANAGEMENT AND STOCKPILING. DRAINAGE STRUCTURES MUST BE KEPT OPEN AND FREE OF SNOW AND ICE DAMS. ALL DEBRIS OR ICE DAMS FROM PLOWING OPERATIONS THAT RESTRICT FLOW OF RUNOFF AND MELT WATER SHALL BE

FROST HEAVES: HEAVING FROST, FROZEN GROUND, WINTER CONDITIONS AND EQUIPMENT CAN AFFECT EROSION AND SEDIMENTATION CONTROL PRACTICES. EROSION AND SEDIMENTATION CONTROL DEVICES SHALL BE CHECKED FOR DAMAGE BY TRAINED CONTRACTOR AND QUALIFIED INSPECTORS. DEFICIENCIES SHALL BE REPAIRED AND OR INSTALLED MEASURES SHALL BE REPLACED AS DEEMED NECESSARY. THIS IS ESPECIALLY IMPORTANT DURING THAWING PERIODS AND PRIOR TO

<u>WINTER SHUTDOWN</u>: IN THE EVENT OF TEMPORARY SHUTDOWN TO SOIL DISTURBING ACTIVITIES UNDER WINTER CONDITIONS, TEMPORARY STABILIZATION MEASURES SHALL BE IMPLEMENTED TO ALL DISTURBED AREAS AND SWPPP INSPECTIONS CAN BE REDUCED TO A MONTHLY FREQUENCY. THE CONTRACTOR SHALL REFER TO SOIL STABILIZATION MEASURES IN ACCORDANCE WITH THE NEW YORK STATE STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL (NOVEMBER 2016) AND SPDES GENERAL PERMIT GP-0-20-001.

PERMANENT CONSTRUCTION AREA SEEDING

FINAL STABILIZATION SHOULD BE IMPLEMENTED AT THE COMPLETION OF EACH PHASE. ONCE CONSTRUCTION IS COMPLETE, EXPOSED SOILS REQUIRE FINAL AND PERMANENT STABILIZATION. SOILS SHOULD BE GRADED SMOOTH AND LEVEL TO ELIMINATE RUTTING AND CONCENTRATED FLOWS. PONDING AND UNEVEN SURFACES FOR FUTURE MAINTENANCE ACTIVITIES. UNIMPROVED AREAS SHOULD BE RESTORED TO ORIGINAL GRADE UNLESS PERMITTED AND PLANNED FOR REQUIRED FUTURE MAINTENANCE. CONSERVED STOCKPILED TOPSOIL SHOULD BE UTILIZED FOR TOPDRESSING GRADED SUB-SOILS AT EXCAVATION LOCATIONS. ANY SEVERELY COMPACTED SECTIONS WILL REQUIRE TILLING OR DISKING TO PROVIDE AN ADEQUATE ROOTING ZONE. TO A MINIMUM DEPTH OF 12". THE SEEDBED MUST BE PREPARED TO ALLOW GOOD SOIL TO SEED CONTACT, WITH THE SOIL NOT TOO SOFT AND NOT TOO COMPACT. ADEQUATE SOIL MOISTURE MUST BE PRESENT TO ACCOMPLISH THIS. IF SURFACE IS POWDER DRY OR STICKY WET, POSTPONE OPERATIONS UNTIL MOISTURE CHANGES TO A FAVORABLE CONDITION. REMOVE ALL STONES AND OTHER DEBRIS FROM THE SURFACE THAT ARE GREATER THAN 4 INCHES, OR THAT WILL INTERFERE WITH FUTURE MOWING OR MAINTENANCE.

SOIL AMENDMENTS SHOULD BE INCORPORATED INTO THE UPPER 2 INCHES OF SOIL WHEN FEASIBLE. THE SOIL SHOULD BE TESTED TO DETERMINE THE AMOUNTS OF AMENDMENTS NEEDED. APPLY GROUND AGRICULTURAL LIMESTONE TO ATTAIN A PH OF 6.0 IN THE UPPER 2 INCHES OF SOIL. IF SOIL MUST BE FERTILIZED BEFORE RESULTS OF A SOIL TEST CAN BE OBTAINED TO DETERMINE FERTILIZER NEEDS, APPLY COMMERCIAL FERTILIZER AT 600 LBS. PER ACRE OF 5-5 -10 OR EQUIVALENT.

IF SOILS ARE SOFT, MECHANICAL MULCHING MAY NOT BE AVAILABLE DUE TO THE INEVITABLE RUTTING WITH MULCHING EQUIPMENT.

ANY UPLAND AREAS THAT ARE DISTURBED SHALL BE STABILIZED USING PERMANENT SEED MIX AS SPECIFIED IN THE NEW YORK STATE STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL (SSESC). UNLESS DIRECTED OTHERWISE IN ASSOCIATED PERMITTING DOCUMENTS.

PROJECT CONSTRUCTION SEQUENCING NOTES

THE CONTRACTOR SHALL SUBMIT A CONSTRUCTION SEQUENCING OR CONSTRUCTION PHASING PLAN FOR OWNER APPROVAL THAT COMPLIES WITH THE PERMITTING REQUIREMENTS. THE PROJECT SWPPP, AND OTHER REQUIREMENTS AS IDENTIFIED BY LOCAL AND STATE AUTHORITIES. THE PLAN SHALL SHOW THAT ACTIVE LAND DISTURBANCE WILL BE LIMITED TO LESS THAN FIVE (5) CONTIGUOUS ACRES AND SHALL ADEQUATELY DISCUSS, BUT NOT BE LIMITED TO, THE FOLLOWING ITEMS:

- THE CONTRACTOR SHALL COMPLY WITH THE REQUIREMENTS FOR TEMPORARY AND PERMANENT EROSION AND SEDIMENTATION CONTROL MEASURES AS OUTLINED IN THE PROJECT SWPPP OR AS DIRECTED BY THE OWNER.
- PRIOR TO STARTING ANY WORK ON THE SITE, THE CONTRACTOR SHALL NOTIFY APPROPRIATE AGENCIES AND SHALL INSTALL EROSION CONTROL MEASURES AS SHOWN ON THE PLANS. THE CONTRACTOR SHALL OBTAIN ALL PERMITS, NOTIFY CITY OFFICIALS OF CONSTRUCTION COMMENCEMENT, AND SUBMIT CONSTRUCTION TIMETABLE.
- PRIOR TO COMMENCING ONSITE EARTHWORK ACTIVITIES. THE CONTRACTOR SHALL ESTABLISH THE CONSTRUCTION WORKSPACE LIMITS AND IDENTIFY AND MARK SENSITIVE RESOURCES. THE CONTRACTOR SHALL INSTALL ALL TEMPORARY EROSION AND SEDIMENTATION CONTROL BEST MANAGEMENT
- BE IMPLEMENTED TO DIRECT RUNOFF FROM UPGRADIENT AREAS AROUND THE PROJECT SITE. ON-SITE CONSTRUCTION SEQUENCE SHALL START WITH THE MINIMUM AMOUNT OF CLEARING REQUIRED TO INSTALL EROSION CONTROL MEASURES. THIS INCLUDES, SILTATION FENCING, ANTI-TRACK PADS (STABILIZED CONSTRUCTION ENTRANCE). AND OTHER MEASURES NOTED ON THE PLAN. NO WORK SHALL TAKE PLACE UNTIL THE OWNER'S REPRESENTATIVE HAS INSPECTED AND APPROVED INSTALLED MEASURES.

PRACTICES (BMPs) IN ORDER TO PROTECT DOWN GRADIENT AREAS. WHERE APPROPRIATE, DIVERSION BMPs SHALL

- AFTER PERMANENT EROSION AND SEDIMENTATION CONTROL MEASURES WITHIN THE CURRENT PHASE OF WORK ARE INSTALLED AND FUNCTIONING, THE CONTRACTOR SHALL OBTAIN OWNER APPROVAL BEFORE BEGINNING EARTHWORK IN THE SUBSEQUENT PHASE.
- AFTER EROSION CONTROL MEASURES ARE INSTALLED THE TYPICAL SEQUENCE SHALL BE AS FOLLOWS: REMOVE VEGETATION FROM PROPOSED DEVELOPMENT AREA. ALL STUMPS AND WOOD SHALL BE TAKEN OFF-SITE AND DISPOSED ACCORDINGLY.
- REMOVE AND STOCKPILE TOPSOIL AFTER EROSION AND SEDIMENT CONTROL MEASURES HAVE BEEN INSTALLED. THE TOPSOIL SHALL BE SEEDED IMMEDIATELY AFTER STOCKPILING IN ORDER TO STABILIZE THE SLOPE AND LIMIT SEDIMENT RUNOFF. STOCKPILED TOPSOIL SHALL BE SEEDED AND MULCHED WHEN IT IS TO BE STORED MORE than 30 days from time of stockpiling. The site can now be reformed to proposed final elevations (LESS TOPSOIL DEPTH).
- PROCEED WITH ALL WORK DEPICTED ON THE DEMOLITION PLAN, IF ANY. PREPARE AND COMPACT SUBGRADE (IF AND AS DIRECTED) AND INSTALL DRAINAGE AND STORMWATER BMP'S IN
- ACCORDANCE WITH "GRADING AND STORMWATER MANAGEMENT PLAN". EXCAVATE SOIL TO THE DEPTH NECESSARY TO CONSTRUCT GRAVEL ACCESS ROAD AND POROUS ASPHALT PAVEMENT. ALL REMOVED TOPSOIL SHALL BE UTILIZE ON SITE AS LOAM FOR GRASS AREAS. NO SOILS SHALL BE
- COMPLETE REMAINING GRADING REQUIRED AS SHOWN ON THE GRADING PLANS. INSTALL EROSION CONTROL MATTING ON ALL SLOPES OF 3H:1V OR GREATER (IF ANY), THEN SEED AND MULCH THE AREA.
- INSTALL CONCRETE UTILITY PADS, FOOTINGS, PHOTOVOLTAIC PANELS, UTILITY POLES, FENCE AND GATES AND OTHER IMPROVEMENTS PER THE PLAN. LOAM AND SEED FRONT YARD AND ALL REMAINING DISTURBED AREAS. UTILIZE EXISTING SITE SOIL WHERE
- REMOVE ALL EROSION AND SEDIMENT STRUCTURES AFTER FINAL STABILIZATION AND ACCEPTANCE. IF STABILIZATION DOES NOT OCCUR (INCLUDING DUE TO SEASONAL CONDITIONS) IN ALL AREAS BEFORE CONTRACTOR HAS SATISFIED ALL OTHER CONDITIONS TO FINAL ACCEPTANCE, CONTRACTOR SHALL PROVIDE A PLAN (INCLUDING APPROPRIATE PERFORMANCE ASSURANCES) TO THE OWNER'S REPRESENTATIVE TO REMOVE SUCH EROSION CONTROL MEASURES AFTER STABILIZATION (AND ALLOWING CONTRACTOR TO ACHIEVE FINAL ACCEPTANCE), FOR ACCEPTANCE IN THE SOLE AND ABSOLUTE DISCRETION BY THE OWNER'S REPRESENTATIVE.
- DURING THIS TIME ALL EROSION AND SEDIMENT STRUCTURES SHALL BE MAINTAINED IN PROPER WORKING ORDER DISTURBED AREAS SHALL BE KEPT TO A MINIMUM AND SHALL ONLY TAKE PLACE WHERE IMMEDIATELY REQUIRED TO FURTHER CONSTRUCTION. IT IS DESIRABLE FOR AN EROSION PREVENTION TO MINIMIZE DISTURBED AREAS. FINAL GRADING AND SEEDING SHALL TAKE PLACE AS SOON AS PRACTICAL.

MULCH ANCHORING REQUIREMENTS

ON SLOPES GREATER THEN 3 PERCENT, STRAW MULCH WILL BE FIRMLY ANCHORED INTO SOIL UTILIZING ONE OF THE FOLLOWING METHODS: CRIMPING WITH A STRAIGHT OR NOTCHED MULCH CRIMPING TOOL;

TRACK WALKING WITH DEEP-CLEATED EQUIPMENT OPERATING UP AND DOWN THE SLOPE (MULCH CRIMPED PERPENDICULAR TO THE SLOPE) ON SLOPES <25 PERCENT;

APPLICATION OF MULCH NETTING; APPLICATION OF 500 LB./ACRE OF WOOD FIBER MULCH OVER STRAW/HAY MULCH; AND

COMMERCIALLY AVAILABLE TACKIFIERS (EXCEPT WITHIN 100 FEET OF WATERBODIES OR WETLANDS)

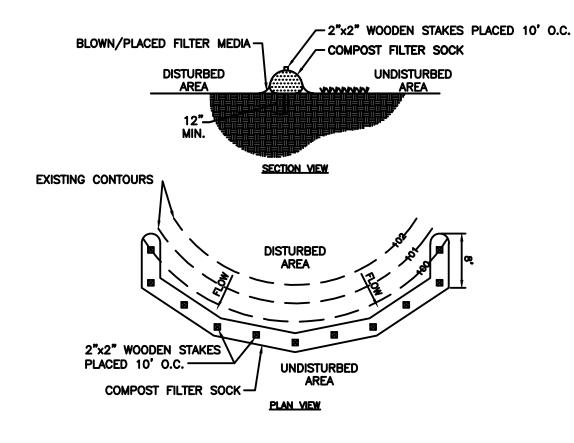
CONSTRUCTION LITTER CONTROL

DURING CONSTRUCTION, ALL WRAPPING, BOXES, SCRAPS OF BUILDING MATERIAL, AND OTHER LITTER ITEMS SHALL BE DISPOSED OF PROPERLY BY USE OF DUMPSTER OR CARTED AWAY. THE SITE SHALL BE INSPECTED AND CLEANED DAILY DURING CONSTRUCTION.

PROTECTION OF POST-CONSTRUCTION STORMWATER BMPs

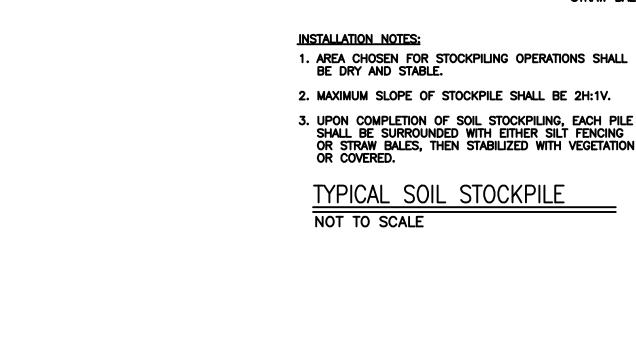
POST—CONSTRUCTION STORMWATER BMPs DESIGNED FOR WATER QUALITY TREATMENT SHALL NOT BE USED AS A SEDIMENT CONTROL DEVICES DURING CONSTRUCTION PHASE OF THE PROJECT. WHEN POSSIBLE, POST CONSTRUCTION STORMWATER BMP INSTALLATION SHALL OCCUR AFTER FINAL STABILIZATION IS ACHIEVED IN UPGRADIENT AREAS.

construction phase stormwater shall be diverted around post—construction stormwater quality bmps UNTIL FINAL STABILIZATION IS ACHIEVED IN UPGRADIENT AREAS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIR OR REPLACEMENT OF BMP FILTER MATERIAL IN THE EVENT CONSTRUCTION PHASE STORMWATER IS DISCHARGED TO CONSTRUCTED BMPs. NATURE AND DEGREE OF REPAIR SHALL BE AS DIRECTED BY THE OWNER.



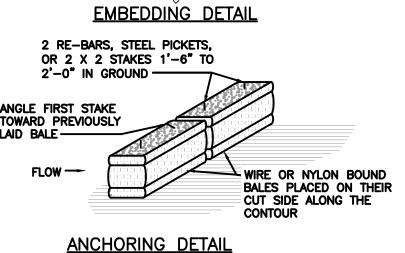
COMPOST FILTER SOCK

VERTICAL FACE

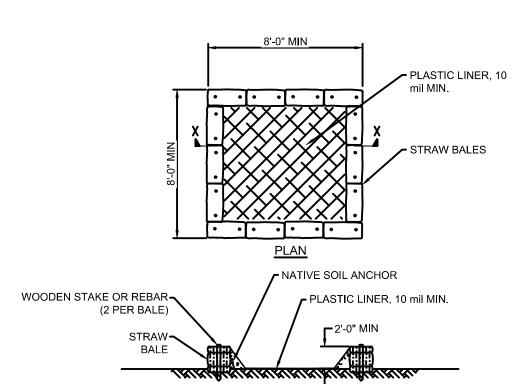


SEE TYP. DETAIL

SLOPE OR LESS



STRAW BALE BARRIER NOT TO SCALE

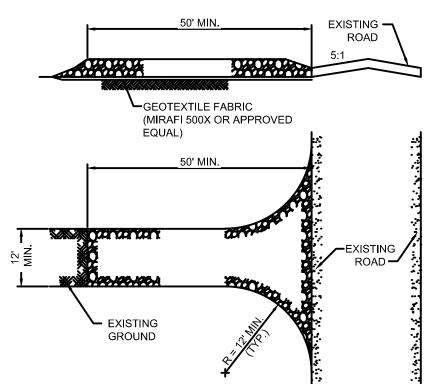


1. SUMP(S) SHALL BE LOCATED NEAR WORK SITES BUT SHALL BE PLACED AS FAR AWAY FROM WETLANDS, BUFFERS AND DRAINAGE SWALES AS PRACTICAL. SUMP(S) SHALL BE CLEANED AND WASTE CONCRETE REMOVED AND PROPERLY

DISPOSED OF PERIODICALLY AND UPON COMPLETION OF WORK. 3. A SIGN SHALL BE INSTALLED INDICATING "CONCRETE WASHOUT"

SECTION X-X

CONCRETE WASHOUT AREA

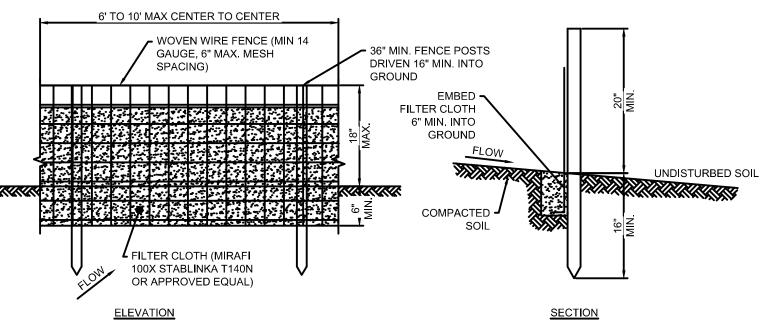


- 1. WIDTH OF STABILIZED CONSTRUCTION ENTRANCE VARIES PER LOCATION. PROVIDE WIDTHS AS INDICATED ON PLAN SET.
- 2. STONE SIZE USE 1" 4" STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT. LENGTH - NOT LESS THAN 50 FEET.

WITH VEGETATION OR

- 4. THICKNESS NOT LESS THAN SIX (6) INCHES. 5. WIDTH - TWELVE (12) FOOT MIN. BUT NOT LESS THAN THE FULL ROAD WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS. PROVIDE TWENTY-FOUR (24) FOOT WIDTH IF THERE IS ONLY A SINGLE ENTRANCE
- 6. GEOTEXTILE SHALL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING THE STONE. SURFACE WATER - ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCE SHALL BE PIPED BENEATH THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED 8. MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT
- TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY, ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMM 9. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE

STABILIZED CONSTRUCTION ENTRANCE



1. WOVEN WIRE FENCE SHALL BE FASTENED TO FENCE POSTS

WITH WIRE TIES OR STAPLES 2. FILTER CLOTH SHALL BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MIDSECTION. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY 6" AND FOLDED.

MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN BUILD-UP REACHES ⅓ THE HEIGHT POSTS: STEEL "T" OR "U" TYPE OR 2" HARDWOOD. FENCE: WOVEN WIRE. 141/2 GA 6" MAX MESH

FILTER CLOTH: FILTER X, MIRAFI 100X. STABLINKA T140N OR APPROVED EQUAL. PREFABRICATED UNIT: ENVIROFENCE OR APPROVED EQUAL

NOTE: UNDER NEW YORK STATE EDUCATION LAW ARTICLE 145 (ENGINEERING), SECTION 7209 (2), IT IS A VIOLATION FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT NOT FOR CONSTRUCTION

SHEET SIZE: 24" BY 36" (DRAWING MAY BE PRINTED AT REDUCED SIZE) ork, 212

Drawn by: T. MILL Design by: C. CONNELLY

Checked by: S. MEERSMA

, INC. R FARM AR SYST E NORTH AMERICA, II LANDT MILL SOLAR F SOUND MOUNT SOLAR 0 MILL COURT STLANDT, NEW YORK 10 CVE JRTL ' GRC

Contract No: 360551 Scale:

AS NOTED

Date:

JUNE 2020 Sheet:

DETAIL SHEET 4 Drawing No:

GENERAL LANDSCAPE AND SEEDING NOTES

- THE LANDSCAPE PLAN AND DETAILS ARE FOR LANDSCAPING INFORMATION ONLY. PLEASE REFER TO THE SITE LAYOUT PLAN, GRADING PLAN AND/OR UTILITIES PLAN FOR ALL OTHER INFORMATION.
- THE CONTRACTOR SHALL MONITOR AND GUARANTEE THAT ALL PLANTS, TREES, AND SHRUBS SHALL BE HEALTHY AND FREE OF DISEASE FOR THE LIFETIME OF THE PROJECT AFTER SUBSTANTIAL COMPLETION AND ACCEPTANCE BY THE OWNER. CONTRACTOR SHALL REPLACE ANY DEAD OR UNHEALTHY PLANTS AT CONTRACTOR'S EXPENSE. FINAL ACCEPTANCE SHALL BE MADE IF ALL PLANTS MEET THE GUARANTEE REQUIREMENTS INCLUDING MAINTENANCE. MAINTENANCE RESPONSIBILITIES INCLUDE INVASIVE SPECIES MONITORING, REMOVAL, AND SUPPLEMENTATION. MONITORING OF THE PROJECT SITE SHALL OCCUR IN THE SPRING AND THE FALL TO DETERMINE THE PRESENCE OF INVASIVE SPECIES. SHOULD ANY INVASIVE SPECIES BE IDENTIFIED WITHIN THE PROJECT SITE, THE INVASIVE SPECIES SHALL BE REMOVED ACCORDING TO METHODS MOST LIKELY TO BE EFFECTIVE IN CONTROLLING THAT SPECIES AND SUPPLEMENTING ITS REPLACEMENT WITH APPROPRIATE VEGETATION AND SEED MIX IDENTIFIED (AND APPROVED) ON THIS PLAN AND/OR AN APPROVED EQUAL. ADDITIONAL MAINTENANCE RESPONSIBILITIES INCLUDE: APPROVED CULTIVATING, SPRAYING, WEEDING, WATERING, TIGHTENING OF TREE STRAP GUYS, PRUNING, FERTILIZING, MULCHING, AND ANY OTHER OPERATIONS NECESSARY TO MAINTAIN PLANT VIABILITY, MAINTENANCE SHALL BEGIN IMMEDIATELY AFTER PLANTING AND CONTINUE FOR THE DURATION OF SOLAR ARRAY USE BY THE OWNER/OPERATOR AFTER FINAL ACCEPTANCE. WATERING
- THE CONTRACTOR SHALL SUPPLY ALL LABOR, PLANTS, APPROVED SEEDING MIX, AND MATERIALS IN QUANTITIES SUFFICIENT TO COMPLETE THE WORK SHOWN ON THE DRAWING(S) AND LISTED IN THE PLANT SCHEDULE(S) AND/OR SEEDING TABLE(S). IN THE EVENT OF A DISCREPANCY BETWEEN QUANTITIES SHOWN IN THE PLANT SCHEDULE AND/OR SEEDING TABLE AND THOSE REQUIRED BY THE DRAWINGS, THE LARGER SHALL APPLY. ALL PLANTS SHALL BE ACCLIMATED BY THE SUPPLY NURSERY TO THE LOCAL HARDINESS ZONE AND BE CERTIFIED THAT THE PLANTING MATERIAL HAS BEEN GROWN FOR A MINIMUM OF (2) TWO YEARS AT THE SOURCE AND OBTAINED WITHIN 200 MILES OF PROJECT SITE UNLESS OTHERWISE APPROVED BY OWNER, CERTIFIED LANDSCAPE INSPECTOR, OR LANDSCAPE

OF THE LANDSCAPE BUFFER AREAS SHALL BE IMPLEMENTED BY THE USE OF A WATERING TRUCK.

- THE LOCATIONS FOR PLANT MATERIAL ARE APPROXIMATE AND ARE SUBJECT TO FIELD ADJUSTMENT DUE TO SLOPE. VEGETATION, AND SITE FACTORS SUCH AS THE LOCATION OF ROCK OUTCROPS. PRIOR TO PLANTING THE CONTRACTOR SHALL ACCURATELY STAKE OUT THE LOCATIONS FOR ALL PLANTS. THE OWNER, CERTIFIED LANDSCAPE INSPECTOR, OR LANDSCAPE ARCHITECT SHALL APPROVE THE FIELD LOCATIONS OR ADJUSTMENTS OF THE PLANT MATERIAL.
- ALL SHRUB MASSING SHALL BE MULCHED TO A DEPTH OF 2" AND SHREDDED HARDWOOD BARK MULCH SHALL BE USED FOR SHRUB MASSING AREAS.
- NO PLANT SHALL BE PLACED IN THE GROUND BEFORE ROUGH GRADING HAS BEEN COMPLETED AND APPROVED BY THE OWNER, CERTIFIED LANDSCAPE INSPECTOR, OR LANDSCAPE CONTRACTOR. STAKING THE LOCATION OF ALL TREES AND SHRUBS SHALL BE COMPLETED PRIOR TO PLANTING FOR APPROVAL BY THE OWNER, CERTIFIED LANDSCAPE INSPECTOR, OR LANDSCAPE ARCHITECT. STAKING OF THE INSTALLED TREE MUST BE COMPLETED THE SAME DAY AS IT IS INSTALLED. ALL TREES SHALL BE STAKED OR GUYED AS PER THE DETAIL. SEE LANDSCAPING PLAN(S) FOR PLANTING
- COORDINATE PLANT MATERIAL LOCATIONS WITH SITE UTILITIES. SEE SITE LAYOUT, GRADING AND/OR UTILITY PLANS FOR STORM, SANITARY, GAS, ELECTRIC, TELEPHONE AND WATER LINES. UTILITY LOCATIONS ARE APPROXIMATE. EXERCISE CARE WHEN DIGGING IN AREAS OF POTENTIAL CONFLICT WITH UNDERGROUND OR OVERHEAD UTILITIES. THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE DUE TO CONTRACTOR'S NEGLIGENCE AND SHALL REPLACE OR REPAIR ANY DAMAGE AT CONTRACTOR'S EXPENSE.
- LANDSCAPE PLANTING PITS MUST BE FREE DRAINING. PAVEMENT, COMPACTED SUBGRADE, AND BLASTED ROCK SHALL BE REMOVED TO A DEPTH OF 2' OR TO A GREATER DEPTH IF REQUIRED BY PLANTING DETAILS OR SPECIFICATIONS. REPLACE SOIL WITH MODERATELY COMPACTED LOAM OR SANDY LOAM FREE FROM STONES AND RUBBISH 1" OR GREATER IN DIAMETER AND ANY OTHER MATERIAL HARMFUL TO PLANT GROWTH AND DEVELOPMENT. PLANTING INSTALLATION SHALL BE AS DETAILED AND CONTAIN PLANTING MIX AS SPECIFIED UNLESS RECOMMENDED OTHERWISE BY SOIL ANALYSIS.
 - PLANTING SOIL MIXTURE:
 - 2 PARTS PEAT MOSS 5 PARTS TOPSOIL

MYCORHIZA INOCULANT - "TRANSPLANT 1-STEP" AS MANUFACTURED BY ROOTS, INC. OR APPROVED EQUAL. USE PER MANUFACTURER'S RECOMMENDATIONS FOR TREES AND SHRUBS. FERTILIZER/LIME APPLY AS RECOMMENDED BY

- . TREES, AND SHRUBS: TREES AND SHRUBS SHALL BE NURSERY GROWN UNLESS OTHERWISE NOTED AND HARDY UNDER CLIMATIC CONDITIONS SIMILAR TO THOSE IN THE LOCATION OF THE PROJECT. THEY SHALL BE TYPICAL OF THEIR SPECIES OR VARIETY, WITH NORMAL HABIT OF GROWTH. THEY SHALL BE SOUND, HEALTHY, VIGOROUS, WELL-BRANCHED AND DENSELY FOLIATED WHEN IN LEAF. THEY SHALL BE FREE OF DISEASE, INSECT PESTS, EGGS OR LARVAE. THEY SHALL HAVE HEALTHY AND WELL-DEVELOPED ROOT SYSTEMS. ALL TREES SHALL HAVE STRAIGHT SINGLE TRUNKS WITH THEIR MAIN LEADER INTACT UNLESS OTHERWISE STATED. THE OWNER, CERTIFIED LANDSCAPE INSPECTOR. LANDSCAPE ARCHITECT. QUEEN ANNE'S COUNTY PLANNING AND ZONING BOARD SHALL ONLY PERMIT SUBSTITUTIONS UPON WRITTEN APPROVAL. THEIR SIZES SHALL CONFORM TO THE MEASUREMENT SPECIFIED ON THE DRAWINGS. PLANTS LARGER THAN SPECIFIED ON THE DRAWINGS MAY BE USED IF APPROVED. THE USE OF SUCH PLANTS SHALL NOT INCREASE THE CONTRACT PRICE. ALL TREES AND SHRUBS SHALL BE MULCHED IN ACCORDANCE WITH THE RESPECTIVE PLANTING DETAIL(S) PROVIDED IN THE LANDSCAPING PLAN.
- ALL PRUNING SHALL CONFORM TO THE TREE CARE INDUSTRY ASSOCIATION (TCIA) ANSI A300 (PART 1) 2017 PRUNING STANDARDS. PRUNING STANDARDS SHALL RECOGNIZE BUT, ARE NOT LIMITED TO, THE FOLLOWING PRUNING OBJECTIVES: MANAGE RISK, MANAGE HEALTH, DEVELOP STRUCTURE, PROVIDE CLEARANCE, MANAGE SIZE OR SHAPE, IMPROVE AESTHETICS, MANAGE PRODUCTION OF FRUIT, FLOWERS, OR OTHER PRODUCTS, AND/OR MANAGE WILDLIFE HABITAT. DEVELOPING STRUCTURE SHALL IMPROVE BRANCH AND TRUNK ARCHITECTURE, PROMOTI OR SUBORDINATE CERTAIN LEADERS, STEMS, OR BRANCHES; PROMOTE DESIRABLE BRANCH SPACING; PROMOTE OR DISCOURAGE GROWTH IN A PARTICULAR DIRECTION (DIRECTIONAL PRUNING); MINIMIZE FUTURE INTERFERENCE WITH TRAFFIC, LINES OF SIGHT, INFRASTRUCTURE, OR OTHER PLANTS; RESTORE PLANTS FOLLOWING DAMAGE; AND/OR REJUVENATE SHRUBS. PROVIDING CLEARANCE SHALL ENSURE SAFE AND RELIABLE UTILITY SERVICES; MINIMIZE CURRENT INTERFERENCE WITH TRAFFIC, LINES OF SITE, INFRASTRUCTURE, OR OTHER PLANTS; RAISE CROWN(S) FOR MOVEMENT OF TRAFFIC OR LIGHT PENETRATION; ENSURE LINES OF SIGHT OR DESIRED VIEWS; PROVIDE ACCESS TO SITES, BUILDINGS, OR OTHER STRUCTURES; AND/OR COMPLY WITH REGULATIONS.
- TOPSOIL SHALL BE INSTALLED AT A MINIMUM DEPTH OF 4 INCHES. CONTRACTOR SHALL SUBMIT TOPSOIL TO A CERTIFIED TESTING LABORATORY TO DETERMINE PH, FERTILITY, ORGANIC CONTENT AND MECHANICAL COMPOSITION. THE CONTRACTOR SHALL SUBMIT THE TEST RESULTS FROM REGIONAL EXTENSION OFFICE OF USDA TO THE OWNER, CERTIFIED LANDSCAPE INSPECTOR. OR LANDSCAPE ARCHITECT FOR REVIEW AND APPROVAL. CONTRACTOR SHALL INCORPORATE AMENDMENTS FOR GOOD PLANT GROWTH AND PROPER SOIL ACIDITY RECOMMENDED FROM THE
- NO PHOSPHOROUS SHALL BE USED AT PLANTING TIME UNLESS SOIL TESTING HAS BEEN COMPLETED AND TESTED. BY A HORTICULTURAL TESTING LAB AND SOIL TESTS SPECIFICALLY INDICATE A PHOSPHOROUS DEFICIENCY THAT IS HARMFUL, OR WILL PREVENT NEW LAWNS/GRASSES AND PLANTINGS FROM ESTABLISHING PROPERLY.
- . IF SOIL TESTS INDICATE A PHOSPHOROUS DEFICIENCY THAT WILL IMPACT PLANT AND LAWN ESTABLISHMENT, PHOSPHOROUS SHALL BE APPLIED AT THE MINIMUM RECOMMENDED LEVEL PRESCRIBED IN THE SOIL TEST FOLLOWING ALL APPLICABLE STANDARDS, REQUIREMENTS, AND/OR REGULATIONS.
- ALL SLOPES GREATER THAN 3:1 RECEIVING A WILDFLOWER, WETLAND, AND/OR GRASS SEEDING MIXTURE SHALL BE COVERED WITH AN EROSION CONTROL BLANKET.
- ALL WILDFLOWERS AND GRASSES SOWED SHALL BE ALLOWED TO GROW TO THEIR NATURALLY OCCURRING HEIGHTS WHENEVER POSSIBLE. NATIVE WILDFLOWERS AND/OR GRASSES CAN BE MOWED/MAINTAINED (WITHIN ACCEPTABLE AREAS IDENTIFIED AND/OR APPROVED BY APPROPRIATE REGULATORY AGENCIES) AS OFTEN AS NEEDED TO KEEP THE VEGETATION AT A DESIRED AND/OR MANAGEABLE/MANICURED HEIGHT.
- NON-NATIVE PLANT SPECIES SHALL NOT TOTAL MORE THAN 50% OF ALL PLANTINGS. INVASIVE SPECIES SHALL NOT BE
- . PLANT MATERIALS SHALL NOT INCLUDE MORE THAN 25% OF ANY SINGLE SPECIES. THE PLANTINGS SHALL INCLUDE A MIX OF EVERGREEN AND DECIDUOUS TREES, UNDERSTORY TREES, SHRUBS, AND FLOWERING HERBACEOUS LAYER.
- ALL PLANT MATERIAL SHALL CONFORM TO THE PLAN SIZE SPECIFICATIONS AS ESTABLISHED BY THE AMERICAN STANDARD FOR NURSERY STOCK LATEST EDITION.

SOLAR FARM GRASS SEED MIXES

NATIVE/NATURALIZED SOLAR FARM SEED MIX OTANICAL NAME CONCENTRATION (LBS/ACRE) (LBS/1000 FT²) FSTUCA RUBRA CREEPING RED FESCUE 34% ESTUCA OVINA HEEP FESCUE 33% FESTUCA BREVIPILA IARD FESCUE 'BEACON 10% 'BEACON' FESTUCA OVINA VAR. ARD FESCUE 'RHINO' DURIUSCULA 'RHINO' FESTUCA OVINA VAR. GLAUCA (F. LUE FESCUE 'BLUE RAY' ARVERNENSIS) (F. GLAUCA), 'BLUE RAY' KENTUCKY BLUEGRAS POA PRATENSIS 'ARGYLE' POA PRATENSIS KENTUCKY BLUEGRAS SHAMROCK' AGROSTIS PERENNANS. AUTUMN BENTGRASS, ALBANY PINE BUSH-NY ALBANY PINE BUSH-NY

-TREES SHALL BE STAKED AT LEAST ONE

HALF AND NO MORE THAN TWO THIRDS

MATERIAL SHALL BE REMOVED AT THE

-REMOVE TOP ONE-THIRD OF

-BACKFILL WITH EXISTING SOIL OR

-SCARIFY/BREAK UP SIDES OF PLANTING HOLE THAT ARE

GLAZED OR HARDENED

-DO NOT PRUNE, STAKE, OR WRAP TREES

ARCHITECT, DESIGNER, OR CERTIFIED

THE END OF ONE YEAR.

TREE WRAP (AS DIRECTED,

SET TOP OF ROOTBALL

FINISHED GRADE

3" BELOW

 $GRADE \angle =$

SLIGHTLY HIGHER ABOVE

FOR TREES \geq 3" CAL.

WITH A STRONG CENTRAL LEADER UNLESS

AMENDED PLANTING MIX

SPECIFIED/RECOMMENDED)

BURLAP AND WIRE BASKET

OF THE WAY UP THE TREE USING

NYLON BELT-LIKE MATERIAL OR

FROM ROOTBALL

-2"-3" DEEP MULCH

(ONLY IF

END OF ONE YEAR.

APPROVED EQUAL. ALL STAKING

GRASS SEED MIXES ARE COMPRISED OF GRASSES THAT ARE NATIVE AND/OR INDIGENOUS TO THE AREA AND/OR CONSIDERED FAVORABLE FOR WILDLIFE HABITAT AND SUSTAINABLE GROWTH. ADDITIONALLY, THE SOLAR FARM SEED MIX WAS DEVELOPED ESPECIALLY FOR NATIVE GRASS PLANTINGS AROUND SOLAR ARRAY FIELDS AND SHALL BE UTILIZED ACCORDINGLY. THESE GRASSES WILL MATURE OUT TO A HEIGHT OF APPROXIMATELY 2 TO 2 1/2 FEET HIGH. THERE ARE NO WILDFLOWER OR POLLINATOR SEED SPECIES CONTAINED IN THESE NATIVE GRASS SEED MIXES.

FLOWERING HERBACEOUS LAYER/NORTHEAST **NATIVE POLLINATOR SEED MIXES**

BOTANICAL NAME	COMMON NAME	MIX CONCENTRATION	RATE (LBS/ACRE)	RATE (LBS/1000 FT ²)
SCHIZACHYRIUM SCOPARIUM	LITTLE BLUESTEM	40%		
BOUTELOUA CURTIPENDULA	SIDEOATS GRAMA	23.40%		
COSMOS BIPINNATUS	COSMOS	7.30%		
COREOPSIS LANCEOLATA	LANCELEAF COREOPSIS	3.50%		
ECHINACEA PURPUREA	PURPLE CONEFLOWER	3.50%		
ELYMUS VIRGINICUS	VIRGINIA WILDRYE	3%		
SORGHASTRUM NUTANS	INDIANGRASS	2.50%		
LUPINUS POLYPHYLLUS	BIGLEAF LUPINE	2.20%		
CHAMAECRISTA FASCICULATA	PARTRIDGE PEA	2%		
DELPHINIUM AJACIS	ROCKET LARKSPUR	2%		
RUDBECKIA HIRTA	BLACKEYED SUSAN	2%		
GAILLARDIA ARISTATA	BLANKET FLOWER	1.50%		
SENNA HEBECARPA	WILD SENNA	1%		
PENSTEMON DIGITALIS	TALL WHITE BEARDTONGUE	1%		
PAPAVER RHOEAS	SHIRLEY MIX (CORN POPPY, SHIRLEY MIX)	0.60%		
ANDROPOGON GERARDII	BIG BLUESTEM	0.50%	20	0.46
ELYMUS CANADENSIS	CANADA WILDRYE	0.50%		
COREOPSIS TINCTORIA	PLAINS COREOPSIS	0.50%		
LIATRIS SPICATA	BLAZING STAR	0.40%		
ASCLEPIAS SYRIACA	COMMON MILKWEED	0.40%		
ASCLEPIAS TUBEROSA	BUTTERFLY MILKWEED	0.40%		
ZIZIA AUREA	GOLDEN ALEXANDERS	0.30%		
ASCLEPIAS INCARNATA	SWAMP MILKWEED	0.30%		
MONARDA FISTULOSA	WILD BERGAMONT	0.20%		
PENSTEMON LAEVIGATUS	APPALACHIAN BEARDTONGUE	0.20%		
SENNA MARILANDICA	MARYLAND SENNA	0.20%		
SOLIDAGO NEMORALIS	GRAY GOLDENROD	0.10%		
TRADESCANTIA OHIENSIS	OHIO SPIDERWORT	0.10%		
ASTER LAEVIS	SMOOTH BLUE ASTER	0.10%		
ASTER NOVAE-ANGLIAE	NEW ENGLAND ASTER	0.10%		
ASTER PRENANTHOIDES	ZIGZAG ASTER	0.10%		
HELIOPSIS	OVEVE CLINELOWED	0.100/		1

NATIVE POLLINATOR SEED MIXES ARE INTENDED TO PROVIDE A EXCELLENT WILDLIFE FOOD AND SHELTER THAT WILL ATTRACT A VARIETY OF POLLINATORS AND SONGBIRDS. THE NATIVE WILDFLOWERS AND GRASSES IN THIS MIX PROVIDE AN ATTRACTIVE DISPLAY OF COLOR FROM SPRING TO FALL. POLLINATOR SEED MIXES ARE INTENDED TO PROVIDE NECTAR AND FOOD SOURCES FOR A VARIETY OF POLLINATORS AND LARVA. THESE MIXES ARE COMPRISED OF A FAIRLY EVEN MIX OF NATIVE AND/OR INDIGENOUS WILDFLOWERS AND GRASSES. THE POLLINATOR SEED MIX IS INTENDED TO BE SOWN IN THE DESIGNATED 10 FOOT WIDE AREA OUTSIDE OF THE SOLAR ARRAY FIELD AND AROUND THE OUTER PERIMETER OF THE VEGETATIVE PLANTING BUFFER.

0.10%

OXEYE SUNFLOWER

-TREES SHALL BE STAKED USING NYLON BELT-LIKE MATERIAL OR APPROVED EQUAL ALL STAKING MATERIAL SHALL BE REMOVED AT SPECIFIED, AND/OR REQUIRED) FINISHED GRADE

NATIVE/DECIDUOUS TREE PLANTING DETAIL

EQUALS 2X ROOTBALL

TOP OF HOLE SHALL EQUAL

3x THE ROOTBALL DIA.

A MIN. OF 12" SHALL BE

PROVIDED AT THE BASE OF

THE ROOTBALL

EVERGREEN TREE PLANTING DETAIL

TREE PLANTING SHALL BEAR SAME RELATIONSHIP TO FINISH GRADE AS IT WAS PRE-DUG IN THE

N.T.S.

• IT IS NOT RECOMMENDED TO AMEND THE EXISTING SOIL BEFORE BACKFILLING THE HOLE UNLESS SOIL

WATER THOROUGHLY TO HELP ENSURE THE REMOVAL OF AIR POCKETS AND PROPERLY SET THE TREE.

DO NOT PRUNE, STAKE, OR WRAP ---

TREES WITH A STRONG CENTRAL

BY THE LANDSCAPE ARCHITECT,

2"x2"x8'-0" CEDAR OR HARDWOOD -

NOT OVERDRAW TREE STAKES.

STAKES OR APPROVED EQUAL. STAKES

SHALL BE DRIVEN 6"-8" OUTSIDE OF

ROOT BALL. STAKING SHOULD ALLOW

(2 PER TREE OPPOSITE OF EACH OTHER)

FOR FLEXIBILITY IN THE TREE TRUNK. DO

SOIL SAUCER OR BERM (APPROXIMATELY 3" DEEP

FINISHED GRADE -

TOPSOIL -

SUBSOIL

ROOTBALL

NEVER CUT THE PRIMARY LEADER.

CONDITIONS ARE POOR FOR PLANTING.

THE DEPTH OF THE HOLE SHALL-EQUAL THE HEIGHT OF THE

UNDER ROOTBALL AND SLOPE

NOTES:

ANY/ ALL PRUNING SHALL BE DONE-

IN ACCORDANCE WITH APPROVED

HORTICULTURAL STANDARDS 1

THE SPECIFIC PLANTS. IF DEEMED NECESSARY AND APPROVED BY THE

LANDSCAPE ARCHITECT, DESIGNER

ONE-FOURTH TO ONE-THIRD OF

THE WOOD AND/OR BRANCHES

SHALL BE REMOVED TO BALANCE ROOT LOSS DUE TO TRANSPLANTING.

2" x 2" x 8'-0" BEVELED CEDAR OR

THE TREE TRUNK. DO NOT

OVERDRAW TREE STAKES.

REMOVE TOP ONE-THIRD OF-

FROM ROOTBALL

TOPSOIL-

SUBSOIL -

BURLAP AND WIRE BASKET

MULCH LAYER 3" - 4" THICK-

CONSTRUCT TOPSOIL SAUCER—

OR BERM 3" HIGH BEYOND

RADIUS OF ROOTBALL (TYP.)

TAMP PLANTING MIX AROUND BASE ---

TO STABILIZE TREE

PERIMETER OF PIT

LOOSEN OR SCARIFY GLAZED-SIDES OR HARDENED SURFACES

COMPACT PLANTING MIX UNDER-

ROOTBALL AND SLOPE TOWARDS

ON TOP OF ROOTBALL

(TYP.) NOT MORE THAN 1" THICK

MULCH LAYER SHALL BE PLACED

HARDWOOD STAKES: USE 3 STAKES

PER TREE. STAKES SHALL BE DRIVEN 6"-8" OUTSIDE OF ROOT BALL AND SHOULD ALLOW FOR FLEXIBILITY IN

OR CERTIFIED ARBORIST

PRESERVE THE NATURAL FORM OF

TOWARDS PERIMETER OF PIT

COMPACT PLANTING MIX-

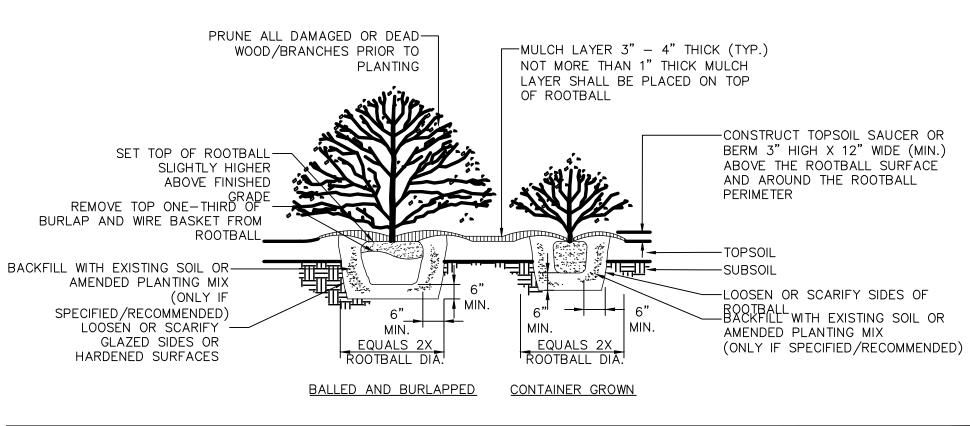
LEADER UNLESS DIRECTED TO DO SO

DESIGNER, OR CERTIFIED ARBORIST.

- TREE PLANTING SHALL BEAR SAME RELATIONSHIP TO FINISH GRADE AS IT WAS PRE-DUG IN THE NURSERY.
- NEVER CUT THE PRIMARY LEADER.

FOR TREES \leq 3" CAL.

- IT IS NOT RECOMMENDED TO AMEND THE EXISTING SOIL BEFORE BACKFILLING THE HOLE UNLESS SOIL CONDITIONS ARE POOR FOR PLANTING.
- WATER THOROUGHLY TO HELP ENSURE THE REMOVAL OF AIR POCKETS AND PROPERLY SET THE TREE.



SHRUB PLANTING DETAIL

• IN AREAS WITH MASS PLANTINGS, CONTINUOUS EXCAVATION AND MULCHING PRACTICES SHALL BE IMPLEMENTED WHENEVER POSSIBLE

N.T.S.

- IT IS NOT RECOMMENDED TO AMEND THE EXISTING SOIL BEFORE BACKFILLING THE HOLE UNLESS SOIL CONDITIONS ARE POOR FOR PLANTING.
- WATER THOROUGHLY TO HELP ENSURE THE REMOVAL OF AIR POCKETS.

NOTE: UNDER NEW YORK STATE EDUCATION LAW ARTICLE 145 (ENGINEERING), SECTION 7209 (2), IT IS A VIOLATION FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT. NOT FOR CONSTRUCTION

SHEET SIZE: 24" BY 36" (DRAWING MAY BE PRINTED AT REDUCED SIZE)



Drawn by: T. MILL Design by: C. CONNELLY

Checked by:

S. MEERSMA

, INC. R FARM AR SYSTE E NORTH AMERICA, II LANDT MILL SOLAR F SOUND MOUNT SOLA! CVE NC ORTLAN V GROUI /

Contract No: 360551 Scale: AS NOTED

JUNE 2020

DETAIL SHEET 5

Drawing No: