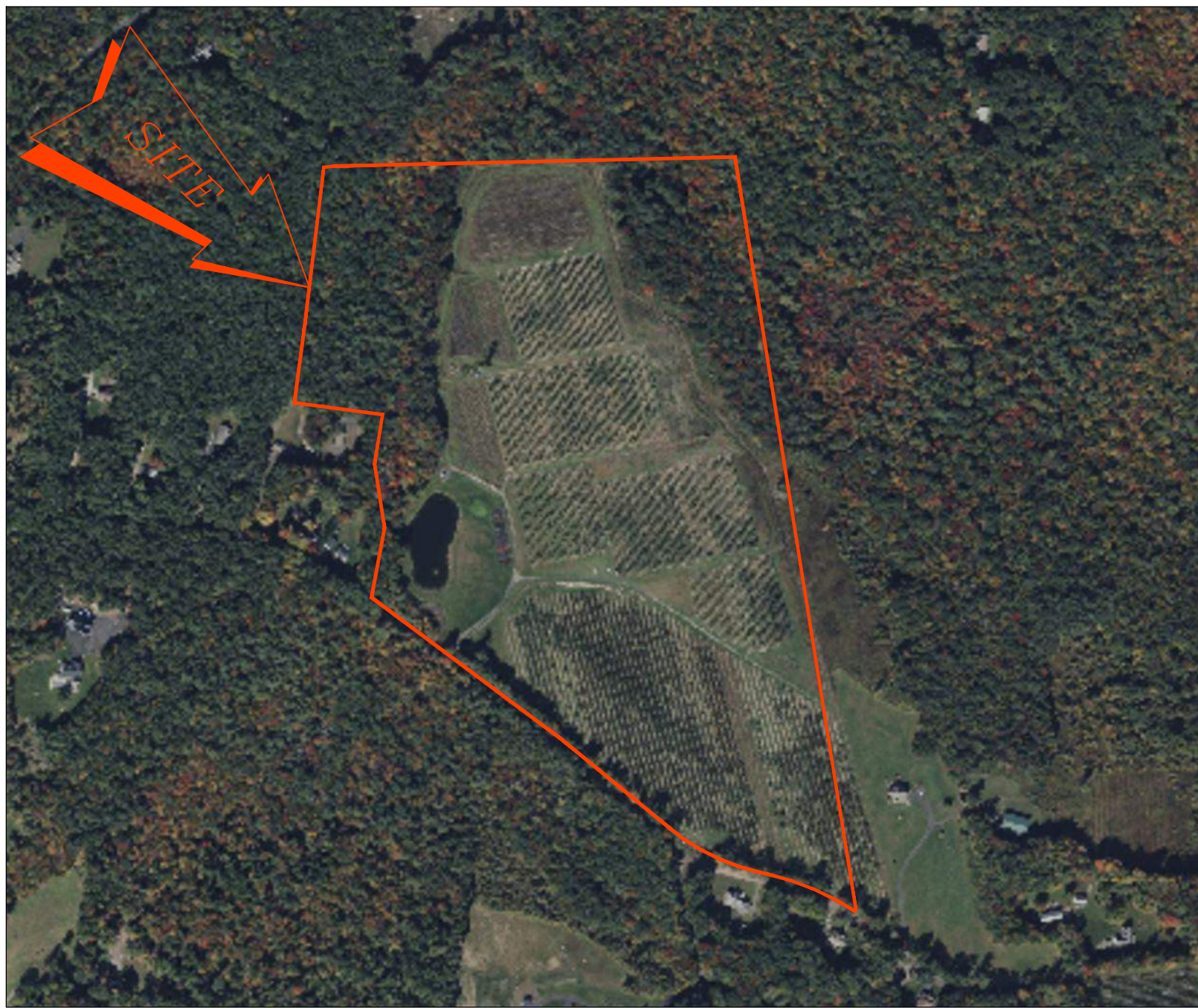


GREENSKIES CLEAN ENERGY
SUNSET SOLAR
SOLAR ARRAY DEVELOPMENT

PRELIMINARY CIVIL DESIGN PLANS
SCHOOLHOUSE ROAD
ELLINGTON, CONNECTICUT



 LOCATION MAP



SITE MAP
NTS

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C113	CONSTRUCTION DETAILS & NOTES
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REFERENCE NOTE:

1. AERIAL IMAGERY OBTAINED FROM MICROSOFT.
2. PARCEL MAP OBTAINED FROM TOWN OF ELLINGTON GEOGRAPHIC INFORMATION SYSTEM (GIS).

MAY 2026

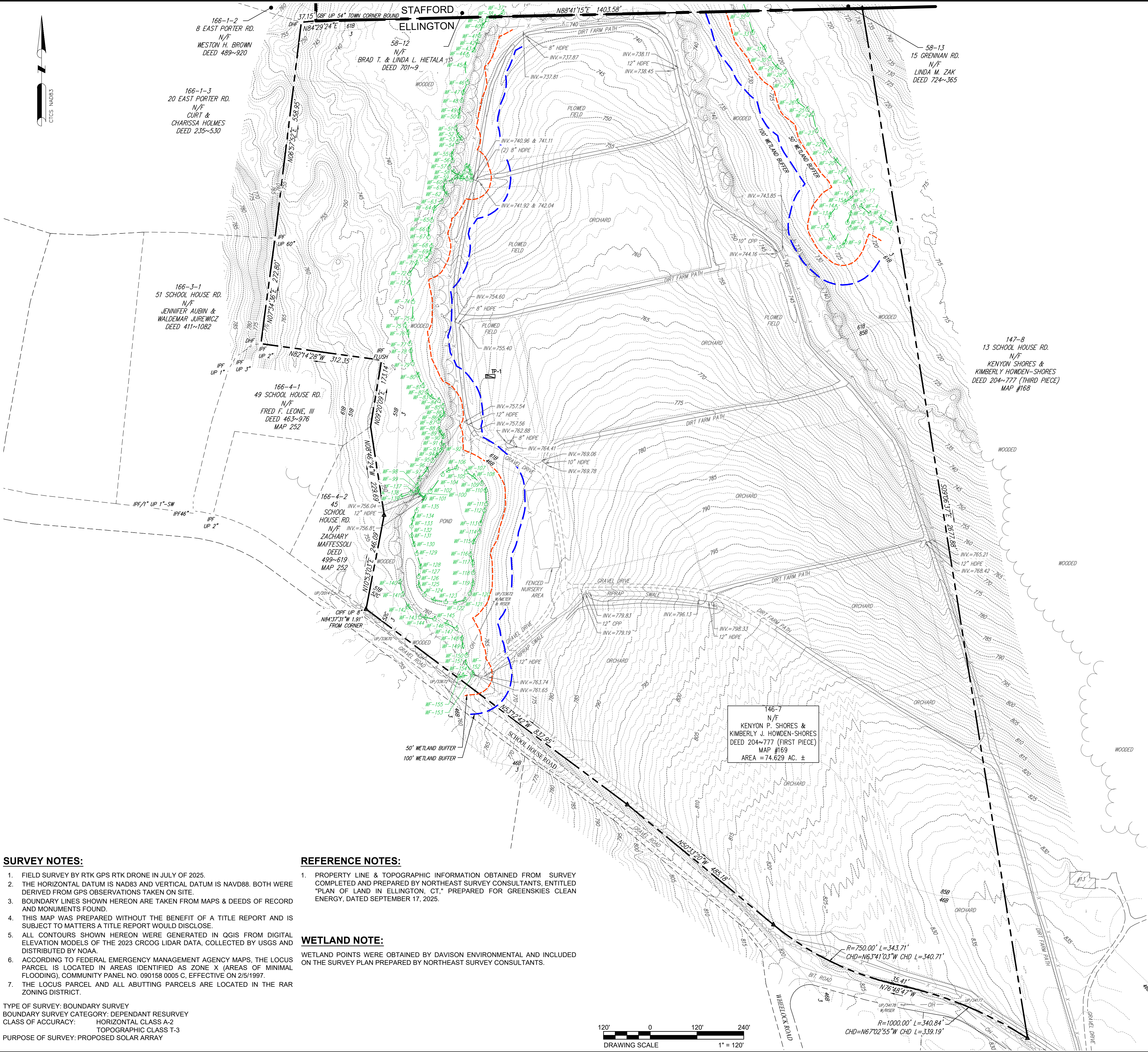
CONNECTICUT SITING COUNCIL

PREPARED BY:

verdantas
213 COURT STREET, SUITE 1200
MIDDLETOWN, CT 06457

Project No. 38399

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SURVEY NOTES:

1. FIELD SURVEY BY RTK GPS RTK DRONE IN JULY OF 2025.
2. THE HORIZONTAL DATUM IS NAD83 AND VERTICAL DATUM IS NAVD88. BOTH WERE DERIVED FROM GPS OBSERVATIONS TAKEN ON SITE.
3. BOUNDARY LINES SHOWN HEREON ARE TAKEN FROM MAPS & DEEDS OF RECORD AND MONUMENTS FOUND.
4. THIS MAP WAS PREPARED WITHOUT THE BENEFIT OF A TITLE REPORT AND IS SUBJECT TO MATTERS A TITLE REPORT WOULD DISCLOSE.
5. ALL CONTOURS SHOWN HEREON WERE GENERATED IN QGIS FROM DIGITAL ELEVATION MODELS OF THE 2023 CROCG LIDAR DATA, COLLECTED BY USGS AND DISTRIBUTED BY NOAA.
6. ACCORDING TO FEDERAL EMERGENCY MANAGEMENT AGENCY MAPS, THE LOCUS PARCEL IS LOCATED IN AREAS IDENTIFIED AS ZONE X (AREAS OF MINIMAL FLOODING), COMMUNITY PANEL NO. 090158 0005 C, EFFECTIVE ON 2/5/1997.
7. THE LOCUS PARCEL AND ALL ABUTTING PARCELS ARE LOCATED IN THE RAR ZONING DISTRICT.

TYPE OF SURVEY: BOUNDARY SURVEY
BOUNDARY SURVEY CATEGORY: DEPENDANT RESURVEY
CLASS OF ACCURACY: HORIZONTAL CLASS A-2
TOPOGRAPHIC CLASS T-3
PURPOSE OF SURVEY: PROPOSED SOLAR ARRAY

REFERENCE NOTES:

1. PROPERTY LINE & TOPOGRAPHIC INFORMATION OBTAINED FROM SURVEY COMPLETED AND PREPARED BY NORTHEAST SURVEY CONSULTANTS, ENTITLED "PLAN OF LAND IN ELLINGTON, CT," PREPARED FOR GREENSKIES CLEAN ENERGY, DATED SEPTEMBER 17, 2025.

WETLAND NOTE:

WETLAND POINTS WERE OBTAINED BY DAVISON ENVIRONMENTAL AND INCLUDED ON THE SURVEY PLAN PREPARED BY NORTHEAST SURVEY CONSULTANTS.

ABBREVIATIONS

AC	ACRES	LOC	LIMIT OF CONSTRUCTION
APPROX	APPROXIMATE	LOD	LIMIT OF DISTURBANCE
BGS	BELOW GROUND SURFACE	MAX	MAXIMUM
BIT	BITUMINOUS	MIN	MINIMUM
CBF	CONCRETE BOUND FOUND	N	NORTH
CHD	CHORD	N/F	NOW OR FORMERLY
CL	CENTERLINE	NAD83	NORTH AMERICAN DATUM OF 1983
CPP	CORRUGATED PLASTIC PIPE	NAVD88	NORTH AMERICAN VERTICAL DATUM OF 1988
E	EAST	NTS	NOT TO SCALE
ELEV	ELEVATION	OHW	OVERHEAD WIRE(S)
EXIST	EXISTING	PROP	PROPOSED
DIA	DIAMETER	R	RADIUS
FG	FINISHED GRADE	S	SOUTH
FS	FILTER SOCK (SILT SOCK)	SD	STORM DRAIN
FT	FEET	SW	SWALE
HDPE	HIGH DENSITY POLYETHYLENE	TP	TEST PIT
IN	INCHES	TYP	TYPICAL
INV	INVERT	UP	UTILITY POLE
IPF	IRON PIPE FOUND	W	WEST
IRF	IRON ROD FOUND	W/	WITH
L	LENGTH		
LF	LINEAR FEET		

LEGEND

	EXISTING	PROPOSED
CONTOURS		
MAJOR	805	805
MINOR		804
EROSION & SEDIMENT CONTROL		
LIMIT OF WORK (DEMOLITION)		LOD
LIMIT OF WORK (CONSTRUCTION)		LOC
SILT FENCE		FS12
SILT SOCK		
PROPERTY INFORMATION		
50' SETBACK LINE		
200' SETBACK LINE		
ABUTTER PROPERTY LINE (APPROXIMATE)		
ASSESSOR'S IDENTIFICATION		
CALCULATED POINT		
CONCRETE BOUND FOUND	CBF	
IRON PIPE FOUND	IPF	
IRON ROD FOUND	IRF	
LOCUS PROPERTY LINE		
NRCS SOILS BOUNDARY		
TEST PIT		
RESOURCE AREAS		
50-FOOT UNDISTURBED WETLAND BUFFER		
100-FOOT WETLAND JURISDICTIONAL LINE		
WETLAND DELINEATION		
WETLAND FLAG & IDENTIFICATION		
SITE FEATURES		
FENCE		
SECURITY FENCE		
STONEWALL		
TREELINE		
UTILITIES		
GUY WIRE ANCHOR		
GUY POLE		
INTERCONNECTION PATH		
OVERHEAD WIRE(S)		
STORM DRAIN PIPE/CULVERT		
UTILITY POLE		

verdantas

213 COURT STREET, SUITE 1200
MIDDLETOWN, CT 06457

PROFESSIONAL ENGINEER NO. 38447

STATE CONNECTICUT

DESIGNED BY
JAB

DRAWN BY
JAB

CHECKED BY
END

PROJECT NO.
38399

CHK'D BY
DATE

REVISION

No.

ELLINGTON-TOLLAND COUNTY-CONNECTICUT

EXISTING CONDITIONS PLAN

SUNSET SOLAR

GREENSKIES CLEAN ENERGY

SCHOOLHOUSE ROAD

DATE

MAY 2026

SCALE

1"=120'

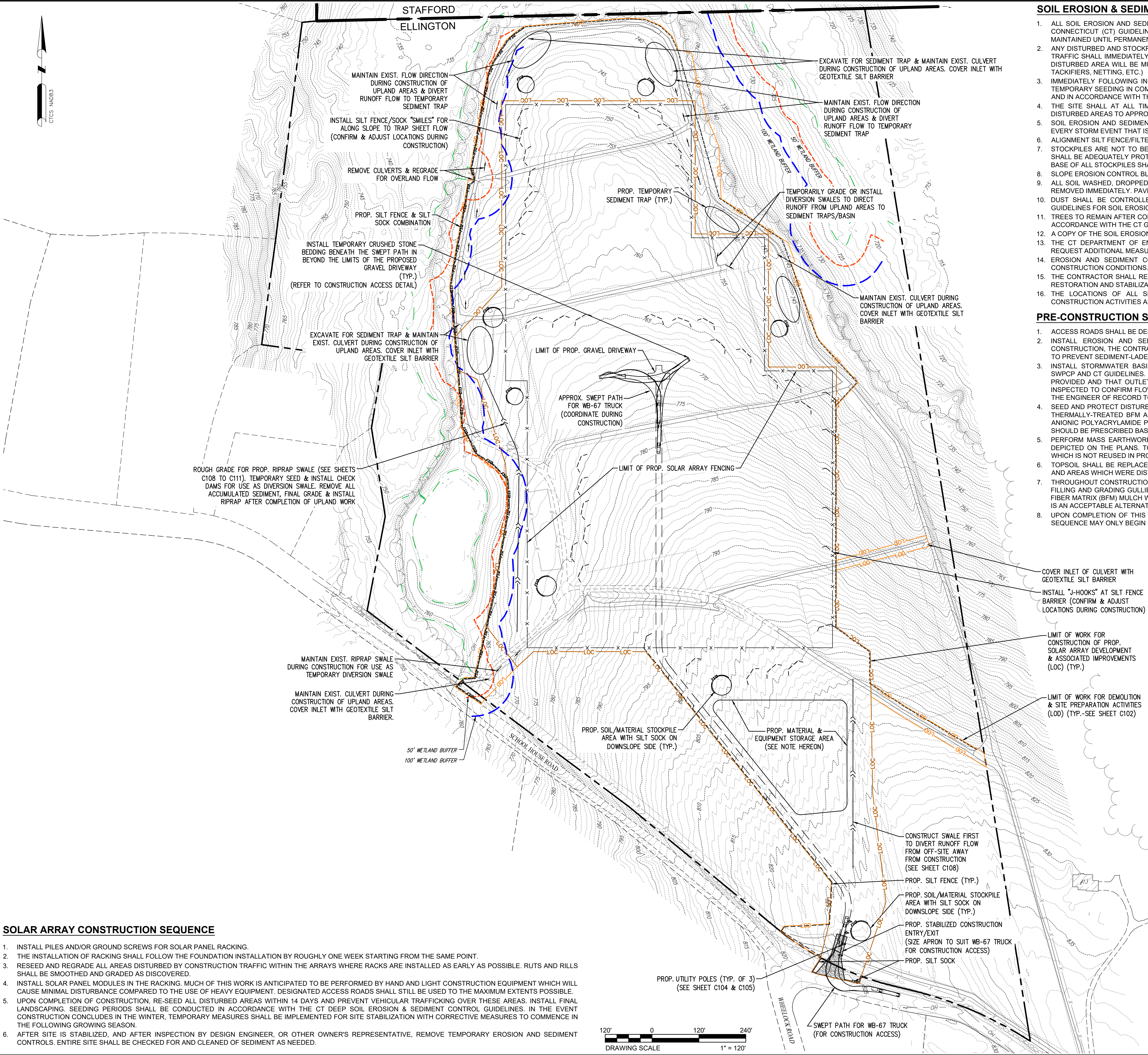
SHEET

C101



1. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT A BURIED IRRIGATION SYSTEM IS PRESENT WITHIN THE SITE. THE EXACT LOCATION OF THIS SYSTEM IS NOT SHOWN ON THESE PLANS. THE CONTRACTOR SHALL VERIFY THE LOCATION OF THIS SYSTEM IN THE FIELD PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL REMOVE OR ABANDON THE SYSTEM WHERE IN CONFLICT WITH THE PROPOSED WORK. ANY ABANDONED IRRIGATION PIPES SHALL BE CUT AND CAPPED.
2. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATIONS AND ELEVATIONS OF ALL EXISTING UTILITIES SHOWN ON THESE PLANS IN THE FIELD PRIOR TO CONSTRUCTION. THE ENGINEER SHALL BE NOTIFIED IN WRITING OF ANY UTILITIES INTERFERING WITH THE PROPOSED CONSTRUCTION AND APPLICATION OF MEDICATION SHALL BE TAKEN PRIOR TO PROCEEDING WITH THE PROPOSED WORK. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ANY UTILITIES INTERFERING WITH THE PROPOSED WORK.
3. SEE SHEET C103 FOR SOIL EROSION AND SEDIMENT CONTROL PLAN.
4. WHERE CULVERTS ARE REMOVED, THE ADJACENT AREA SHALL BE GRADED TO PROMOTE OVERLAND FLOW OF STORMWATER RUNOFF. SEE SHEETS C108 TO C112 FOR DRAINAGE PLAN.
5. THE EXISTING WOOD POST/WIRE FENCE TO REMAIN EXCEPT AT THE PROPOSED DRIVEWAY ENTRANCE WHERE IT SHALL BE REMOVED. WHERE OTHERWISE IN CONFLICT WITH THE PROPOSED WORKED, THE FENCE SHALL BE TEMPORARILY REMOVED AND RESET.
6. WORK PROPOSED WITHIN WETLAND BUFFER LIMITED TO REMOVAL OF EXISTING INFRASTRUCTURE. AREA TO BE RESTORED WITH NEW ENGLAND WETLAND PLANTS, INC. (NEWP) WETMIX OR APPROVED EQUAL.

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SOLAR ARRAY CONSTRUCTION SEQUENCE

1. INSTALL PILES AND/OR GROUND SCREWS FOR SOLAR PANEL RACKING.
2. THE INSTALLATION OF RACKING SHALL FOLLOW THE FOUNDATION INSTALLATION BY ROUGHLY ONE WEEK STARTING FROM THE SAME POINT.
3. RESEED AND REGRADE ALL AREAS DISTURBED BY CONSTRUCTION TRAFFIC WITHIN THE ARRAYS WHERE RACKS ARE INSTALLED AS EARLY AS POSSIBLE. RUTS AND RILLS SHALL BE SMOOTHED AND GRADED AS DISCOVERED.
4. INSTALL SOLAR PANEL MODULES IN THE RACKING. MUCH OF THIS WORK IS ANTICIPATED TO BE PERFORMED BY HAND AND LIGHT CONSTRUCTION EQUIPMENT WHICH WILL CAUSE MINIMAL DISTURBANCE COMPARED TO THE USE OF HEAVY EQUIPMENT. DESIGNATED ACCESS ROADS SHALL STILL BE USED TO THE MAXIMUM EXTENTS POSSIBLE.
5. UPON COMPLETION OF CONSTRUCTION, RE-SEED ALL DISTURBED AREAS WITHIN 14 DAYS AND PREVENT VEHICULAR TRAFFICKING OVER THESE AREAS. INSTALL FINAL LANDSCAPING. SEEDING PERIODS SHALL BE CONDUCTED IN ACCORDANCE WITH THE CT DEEP SOIL EROSION & SEDIMENT CONTROL GUIDELINES. IN THE EVENT CONSTRUCTION CONCLUDES IN THE WINTER, TEMPORARY MEASURES SHALL BE IMPLEMENTED FOR SITE STABILIZATION WITH CORRECTIVE MEASURES TO COMMENCE IN THE FOLLOWING GROWING SEASON.
6. AFTER SITE IS STABILIZED, AND AFTER INSPECTION BY DESIGN ENGINEER, OR OTHER OWNER'S REPRESENTATIVE, REMOVE TEMPORARY EROSION AND SEDIMENT CONTROLS. ENTIRE SITE SHALL BE CHECKED FOR AND CLEANED OF SEDIMENT AS NEEDED.



SOIL EROSION & SEDIMENT CONTROL NOTES

1. ALL SOIL EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES (BMP'S) WILL BE INSTALLED IN ACCORDANCE WITH THE CONNECTICUT (CT) GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL AND WILL BE INSTALLED IN PROPER SEQUENCE AND MAINTAINED UNTIL PERMANENT STABILIZATION IS ESTABLISHED.
2. ANY DISTURBED AND STOCKPILE AREAS THAT WILL BE LEFT EXPOSED FOR MORE THAN 30 DAYS AND NOT SUBJECT TO CONSTRUCTION TRAFFIC SHALL IMMEDIATELY RECEIVE A TEMPORARY SEEDING AND MULCHING. IF THE SEASON PROHIBITS TEMPORARY SEEDING, THE DISTURBED AREA WILL BE MULCHED WITH STRAW, HAY, OR EQUIVALENT AND BOUND IN ACCORDANCE WITH THE CT STANDARDS (I.E., TACKIFIERS, NETTING, ETC.).
3. IMMEDIATELY FOLLOWING INITIAL DISTURBANCE OR ROUGH GRADING, ALL CRITICAL AREAS SUBJECT TO EROSION WILL RECEIVE A TEMPORARY SEEDING IN COMBINATION WITH STRAW MULCH OR A SUITABLE EQUIVALENT, AT A MINIMUM RATE OF 40 POUNDS PER ACRE AND IN ACCORDANCE WITH THE CT STANDARDS.
4. THE SITE SHALL AT ALL TIMES BE GRADED AND MAINTAINED SUCH THAT ALL STORM WATER RUNOFF IS DIVERTED AWAY FROM DISTURBED AREAS TO APPROPRIATE SEDIMENT CONTROLS.
5. SOIL EROSION AND SEDIMENT CONTROL MEASURES WILL BE INSPECTED AND MAINTAINED ON A REGULAR BASIS, INCLUDING AFTER EVERY STORM EVENT THAT IS 0.1 INCHES OR GREATER, THROUGHOUT THE DURATION OF THE WORK.
6. ALIGNMENT SILT FENCE/FILTER SOCK SHALL BE INSTALLED AS NECESSARY TO MAINTAIN SOIL EROSION AND SEDIMENT CONTROLS.
7. STOCKPILES ARE NOT TO BE LOCATED WITHIN 50' OF A 3:1 OR STEEPER SLOPE, ROADWAY OR DRAINAGE FACILITY. ALL STOCKPILES SHALL BE ADEQUATELY PROTECTED FROM THE 100-YEAR FLOOD EVENT AND LOCATED AT LEAST 50 FEET FROM A WATER COURSE. THE BASE OF ALL STOCKPILES SHALL BE CONTAINED BY SILT FENCE OR OTHER APPROVED SEDIMENT BARRIER.
8. SLOPE EROSION CONTROL BLANKETS SHALL BE UTILIZED ON SLOPES IN EXCESS OF 10%.
9. ALL SOIL WASHED, DROPPED, SPILLED, OR TRACKED OUTSIDE THE LIMIT OF WORK OR ONTO PUBLIC/Private RIGHT-OF-WAYS WILL BE REMOVED IMMEDIATELY. PAVED ROADWAYS MUST BE KEPT CLEAN AT ALL TIMES AS DIRECTED BY THE OWNER'S REPRESENTATIVE.
10. DUST SHALL BE CONTROLLED VIA THE APPLICATION OF WATER, OR OTHER APPROVED METHOD IN ACCORDANCE WITH THE CT GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL, CHAPTER 5, SECTION 2, DUST CONTROL.
11. TREES TO REMAIN AFTER CONSTRUCTION ARE TO BE PROTECTED WITH A SUITABLE FENCE INSTALLED AT THE DRIP LINE OR BEYOND IN ACCORDANCE WITH THE CT GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL, CHAPTER 5, SECTION 1, TREE PROTECTION.
12. A COPY OF THE SOIL EROSION AND SEDIMENT CONTROL PLAN MUST BE AVAILABLE AT THE PROJECT SITE THROUGHOUT CONSTRUCTION.
13. THE CT DEPARTMENT OF ENERGY AND ENVIRONMENTAL PROTECTION (CTDEEP), TOWN OF ELLINGTON, AND/OR THE OWNER MAY REQUEST ADDITIONAL MEASURES TO MINIMIZE ON OR OFF-SITE EROSION PROBLEMS DURING CONSTRUCTION.
14. EROSION AND SEDIMENT CONTROL BMP'S SHALL BE MODIFIED AND/OR AUGMENTED AS REQUIRED TO REFLECT ACTUAL SITE CONSTRUCTION CONDITIONS.
15. THE CONTRACTOR SHALL REMOVE ALL TEMPORARY SOIL EROSION AND SEDIMENT CONTROL MEASURES UPON COMPLETION OF FINAL RESTORATION AND STABILIZATION OF THE SITE.
16. THE LOCATIONS OF ALL SEDIMENT TRAPS/BASINS SHOWN HEREON SHALL BE CONFIRMED BY THE CONTRACTOR BASED ON CONSTRUCTION ACTIVITIES AND SEQUENCING. SEDIMENT TRAPS/BASINS SHALL BE RELOCATED AS NEEDED.

PRE-CONSTRUCTION SITE PROTECTION SEQUENCE

1. ACCESS ROADS SHALL BE DESIGNATED AS EARLY AS FEASIBLE AND USED PRIMARILY FOR CONSTRUCTION TRAFFIC.
2. INSTALL EROSION AND SEDIMENT CONTROLS FOLLOWING THE CT GUIDELINES AND MANUFACTURER'S DIRECTIONS. DURING CONSTRUCTION, THE CONTRACTOR SHALL INSTALL MEASURES AS REQUIRED BY THE ENGINEER OF RECORD OR QUALIFIED INSPECTOR, TO PREVENT SEDIMENT-LADEN RUNOFF FROM REACHING WETLANDS OR DISCHARGING OFFSITE.
3. INSTALL STORMWATER BASIN/SEDIMENT TRAPS AND CONVEYANCE SWALES IN ACCORDANCE WITH THE APPROVED SITE-SPECIFIC SWPCP AND CT GUIDELINES. THE ENGINEER OF RECORD SHALL INSPECT FEATURES TO CONFIRM REQUIRED STORAGE CAPACITIES ARE PROVIDED AND THAT OUTLETS AND/OR SPILLWAYS ARE CONSTRUCTED CORRECTLY. DISCHARGE AREAS BELOW OUTFALLS MUST BE INSPECTED TO CONFIRM FLOW WILL BE OVER STABLE GROUND AND SHEET FLOW IS ENCOURAGED. IF DISTURBED SOILS ARE PRESENT, THE ENGINEER OF RECORD TO PROVIDE CORRECT MEASURES TO ADDRESS CONDITION.
4. SEED AND PROTECT DISTURBED SOILS AROUND SEDIMENT TRAPS AND BASINS WITHIN 14 DAYS OF COMPLETION. SECURE SEED WITH A THERMALLY-TREATED BFM APPLIED FOLLOWING MANUFACTURER'S SPECIFICATIONS FOR USE AT SPECIFIED APPLICATION RATES. AN ANIONIC POLYACRYLAMIDE PRODUCT MAY BE INCLUDED WITH THE TACKIFIER TO PROMOTE SOIL STABILITY. ALL OTHER AMENDMENTS SHOULD BE PRESCRIBED BASED ON THE RESULT OF SOIL TESTS.
5. PERFORM MASS EARTHWORK ON THE SITE. MASS EARTHWORK SHALL ONLY MEAN REGRADE TO MEET THE PROPOSED GRADING DEPICTED ON THE PLANS. TOPSOIL SHALL BE STRIPPED AND STOCKPILED FROM AREAS PROPOSED FOR REGRADE. EXCESS SOIL WHICH IS NOT REUSED IN PROPOSED SITE GRADING AS DEPICTED ON PLANS SHALL BE HANDLED PER THE OWNER.
6. TOPSOIL SHALL BE REPLACED TO 3" MINIMUM DEPTH OVER REGRADED AREAS UPON COMPLETION OF MASS EARTHWORK ACTIVITIES AND AREAS WHICH WERE DISTURBED BY MASS EARTHWORK OPERATIONS SHALL BE RESEED WITHIN 14 DAYS OF COMPLETION.
7. THROUGHOUT CONSTRUCTION, THE CONTRACTOR SHALL ADDRESS ONGOING EROSION PROBLEMS USING TEMPORARY DIVERSIONS AND FILLING AND GRADING GULLIES. TRACK GULLIES UP AND DOWN SLOPE AND HYDROSEED WITH A THERMALLY-TREATED WOOD BONDED FIBER MATRIX (BFM) MULCH WITH TACKIFIER. A STAPLED BIODEGRADABLE EROSION CONTROL BLANKET WITHOUT MONOFLAMENT MESH IS AN ACCEPTABLE ALTERNATIVE FOR HYDROSEED AND BFM.
8. UPON COMPLETION OF THIS CONSTRUCTION PHASE, ALL DISTURBED AREAS SHALL BE SEED WITH TACKIFIER AND CONSTRUCTION SEQUENCE MAY ONLY BEGIN IN AREAS DISPLAYING ADEQUATE VEGETATION WITHIN PROPOSED ARRAY AREA.

CONSTRUCTION SEQUENCING

ALL CONSTRUCTION ACTIVITIES ARE EXPECTED TO BEGIN IN THE SPRING OF 2027 AND BE COMPLETED BY THE END OF 2027. THE GENERAL CONSTRUCTION NOTES ARE AS FOLLOWS:

1. THE SITE CONTRACTOR SHALL BE FULLY RESPONSIBLE TO CONTROL CONSTRUCTION SUCH THAT SEDIMENTATION SHALL NOT AFFECT ROADS/HIGHWAYS AND THEIR DRAINAGE SYSTEM, NEIGHBORING PROPERTIES, WETLANDS AND REGULATORY PROTECTED AREAS, WHETHER SUCH SEDIMENTATION IS CAUSED BY WATER, WIND, OR DIRECT DEPOSIT. DESIGNATED ACCESS DRIVES MUST BE USED TO THE MAXIMUM EXTENTS POSSIBLE. IT IS REQUIRED THAT THE SITE CONTRACTOR PERFORM A DAILY INSPECTION OF ALL EROSION AND SEDIMENT CONTROL MEASURES EMPLOYED AT THE SITE.
2. A CTDEEP-APPROVED QUALIFIED INSPECTOR SHALL BE ASSIGNED TO BE RESPONSIBLE FOR PERFORMING INSPECTIONS AND PREPARING REPORTS IN ACCORDANCE WITH SECTION 8(B)(4)(B) OF THE CONSTRUCTION GENERAL PERMIT. THESE INSPECTIONS SHALL TAKE PLACE WEEKLY, AT A MINIMUM, AND SHALL BE REQUIRED WITHIN 24 HOURS OF A RAINFALL EVENT EXCEEDING 0.5 INCHES. THE ENGINEER OF RECORD SHALL BE REQUIRED TO REVIEW AND COUNTER-SIGN THE PREPARED WEEKLY REPORTS. IT IS ALSO ANTICIPATED THAT REPRESENTATIVES FROM CTDEEP AND/OR THE STATE CONSERVATION DISTRICT WILL PERFORM PERIODIC INSPECTIONS.
3. ENGINEER OF RECORD WILL PERFORM MONTHLY PLAN IMPLEMENTATION INSPECTIONS AND PREPARE REPORTS OF THE FINDINGS. THESE INSPECTIONS SHALL LAST A MINIMUM OF THREE (3) MONTHS OR UNTIL THE COMPLETION AND STABILIZATION OF ALL EROSION CONTROL MEASURES AT THE SITE.
4. THROUGHOUT THE COURSE OF THE CONSTRUCTION PROJECT, ADDITIONAL SEDIMENT AND EROSION CONTROL MEASURES MAY BE WARRANTED AT THE DISCRETION OF THE QUALIFIED INSPECTOR AND/OR DESIGN ENGINEER. THESE IMPROVEMENTS MUST BE IMPLEMENTED IN A TIMELY FASHION IN ACCORDANCE WITH THE REQUIREMENTS OF THE CONSTRUCTION GENERAL PERMIT. ADDITIONALLY, AREAS OF PROPOSED COMPACTED NATIVE SOIL ROADS SHALL BE CONVERTED TO STABLE GRAVEL ROADS IF/AS DETERMINED BY THE QUALIFIED INSPECTOR OR ENGINEER OF RECORD.
5. PRIOR TO CONSTRUCTION, THE APPLICANT SHALL PROVIDE THE TOWN OF ELLINGTON WITH THE NAME OF CONTACT AND 24-HOUR CONTACT INFORMATION.
6. CONTRACTOR SHALL ADHERE TO 2023 CONNECTICUT GUIDELINES FOR EROSION AND SEDIMENT CONTROL, AS AMENDED.
7. THE CONTRACTOR SHALL HOLD PRE-CONSTRUCTION MEETING(S). ATTENDEES SHALL INCLUDE, BUT NOT BE LIMITED TO, REPRESENTATIVES OF THE GENERAL CONTRACTOR, SITE CONTRACTOR, CTDEEP, TOWN OF ELLINGTON, ENGINEER OF RECORD, AND QUALIFIED SWPPP INSPECTOR.
8. THE CONTRACTOR SHALL CONTACT CALL-BEFORE-YOU-DIG (1-800-922-4455) PRIOR TO ENGAGING IN ANY EXCAVATION ACTIVITIES AT THE SITE.
9. THE CONTRACTOR SHALL NOTIFY THE TOWN OF ELLINGTON AGENT, ZONING ENFORCEMENT OFFICER, AND ENGINEERING DEPARTMENT, 48 HOURS PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION ACTIVITY.
10. NO CONSTRUCTION OF SITE IMPROVEMENTS MAY BEGIN UNTIL THE PROPER EROSION CONTROL MEASURES SERVING THE AREA TO BE DISTURBED ARE IN PLACE.
11. ANTICIPATED WORK HOURS WILL BE BETWEEN 7:00 AM AND 5:00 PM.

MATERIAL AND EQUIPMENT STORAGE AREA NOTE:

CONTRACTOR SHALL CONFIRM EXACT DIMENSIONS/SIZE OF MATERIAL AND EQUIPMENT STORAGE AREA. MATERIALS AND EQUIPMENT SHALL BE STORED ON A 4" TO 6" THICK COMPACTED STONE (3/4" MINUS) OR EQUAL BEDDING. CONTRACTOR TO COORDINATE WITH DEVELOPER ON SUITABLE MATERIAL AND ALIGNMENT FOR CONSTRUCTION VEHICULAR TRAFFIC BEDDING TO ASSIST IN TURNAROUND UPON DELIVERY OF EQUIPMENT/MATERIALS.

verdantas

PROFESSIONAL ENGINEER NO. 38447

DESIGNED BY

JAB

DRAWN BY

JAB

CHECKED BY

END

PROJECT NO.

38399

STATE CONNECTICUT

CHKO BY

DATE

REVISION

PRELIMINARY FOR CONNECTICUT SITING COUNCIL

No.

ELLINGTON-TOLLAND COUNTY-CONNECTICUT

SOIL EROSION & SEDIMENT CONTROL PLAN

SUNSET SOLAR

GREENSKIES CLEAN ENERGY

SCHOOLHOUSE ROAD

DATE

MAY 2026

SCALE

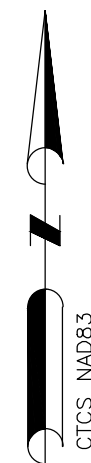
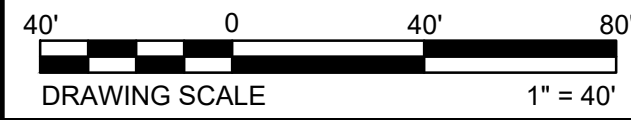
1"=120'

SHEET

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▲ MATCHLINE SHEET C106
▼ MATCHLINE SHEET C105

GRAVEL ROAD

SCHOOL HOUSE ROAD

30' SETBACK (TYP.)

WHELOCK ROAD

BIT. ROAD

200' SETBACK (TYP.)

PROP. INTERCONNECTION PATH
PROP. 15' WIDE GRAVEL DRIVEWAY (TYP.)

CUSTOMER RECLOSER
CUSTOMER GOAB
UTILITY PRIMARY METER
UTILITY RECLOSER

ASSUMED POINT OF INTERCONNECTION AT UP/34178

DIRT FARM PATH

UP/34178 W/RISE

UP/34177

UP/34176 W/RISE

WOOD FENCE

HEAVY IRON FENCE

ELLINGTON-TOLLAND COUNTY-CONNECTICUT
PROPOSED LAYOUT PLAN 1
SUNSET SOLAR
GREENSKIES CLEAN ENERGY
SCHOOLHOUSE ROAD

APPLICATION NO.
DATE MAY 2026
SCALE 1"=40'
SHEET **C105**

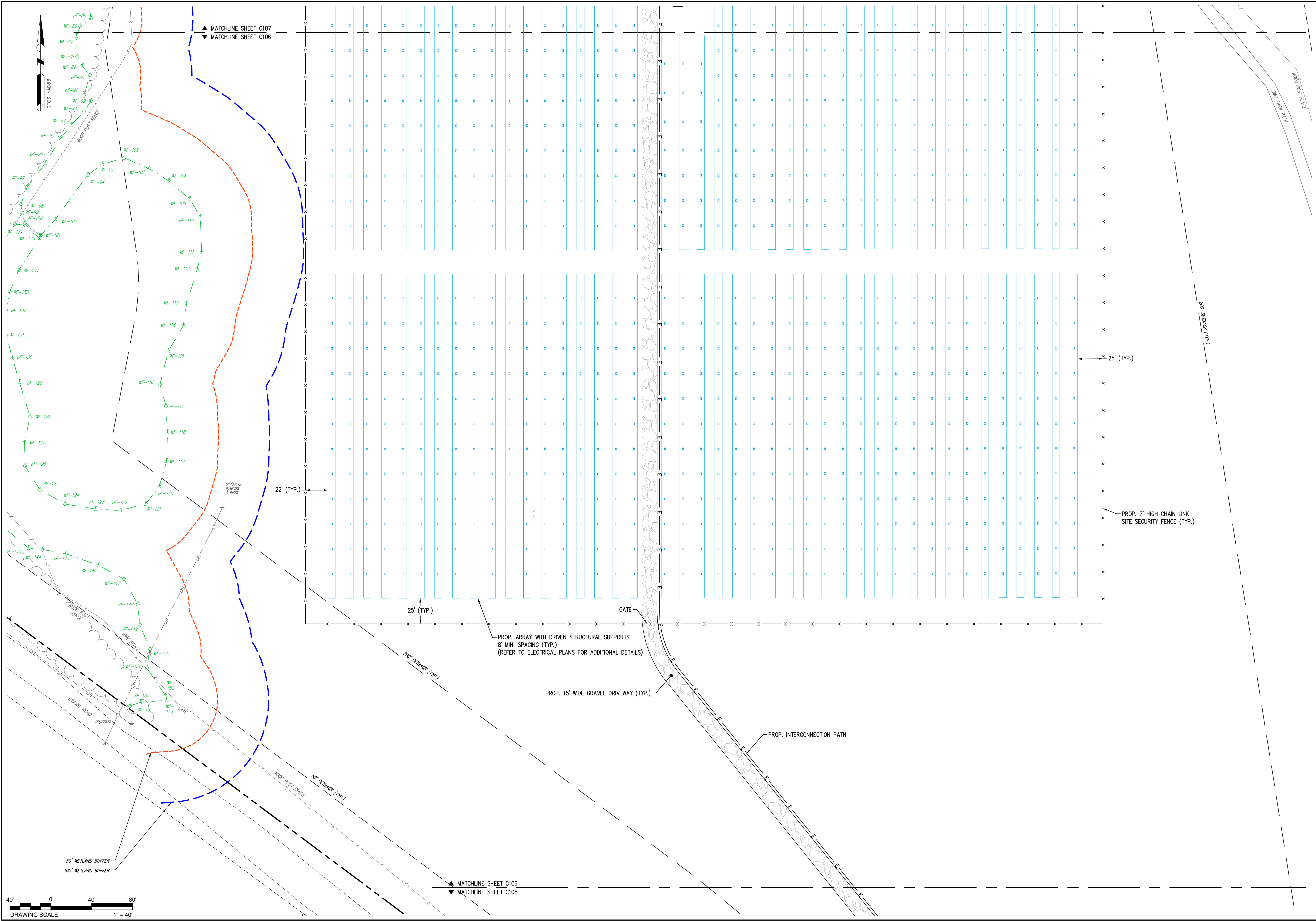
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DESIGNED BY JMB
DRAWN BY JMB
CHECKED BY EMB
PROJECT NO. 38399

PROFESSIONAL ENGINEER NO. 38447
STATE CONNECTICUT

verdantas
213 COURT STREET, SUITE 1200
MIDDLETOWN, CT 06457

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verdantas

213 COURT STREET, SUITE 1200
MIDDLETOWN, CT 06457

PROFESSIONAL ENGINEER NO. 38447

DESIGNED BY
JMB

DRAWN BY
JMB

CHECKED BY
END

PROJECT NO.
38399

STATE: CONNECTICUT

ELLINGTON-TOLLAND COUNTY-CONNECTICUT

PROPOSED LAYOUT PLAN 2

SUNSET SOLAR

GREENSKIES CLEAN ENERGY

SCHOOLHOUSE ROAD

DATE

MAY 2026

SCALE

1"=40'

SHEET

C106

REVISION

PRELIMINARY FOR CONNECTICUT SITING COUNCIL

No.

CHKD BY

DATE

25' (TYP.)

22' (TYP.)

25' (TYP.)

200' STRACK (TYP.)

50' STRACK (TYP.)

WOOD POST FENCE

UP/CURVE WATER & RISER

GATE

PROP. 15' WIDE GRAVEL DRIVEWAY (TYP.)

PROP. INTERCONNECTION PATH

PROP. 7' HIGH CHAIN LINK SITE SECURITY FENCE (TYP.)

PROP. ARRAY WITH DRIVEN STRUCTURAL SUPPORTS 8' MIN. SPACING (TYP.) (REFER TO ELECTRICAL PLANS FOR ADDITIONAL DETAILS)

50' WETLAND BUFFER

100' WETLAND BUFFER

GRAVEL ROAD

WOOD POST FENCE

UP/CURVE

WF-86

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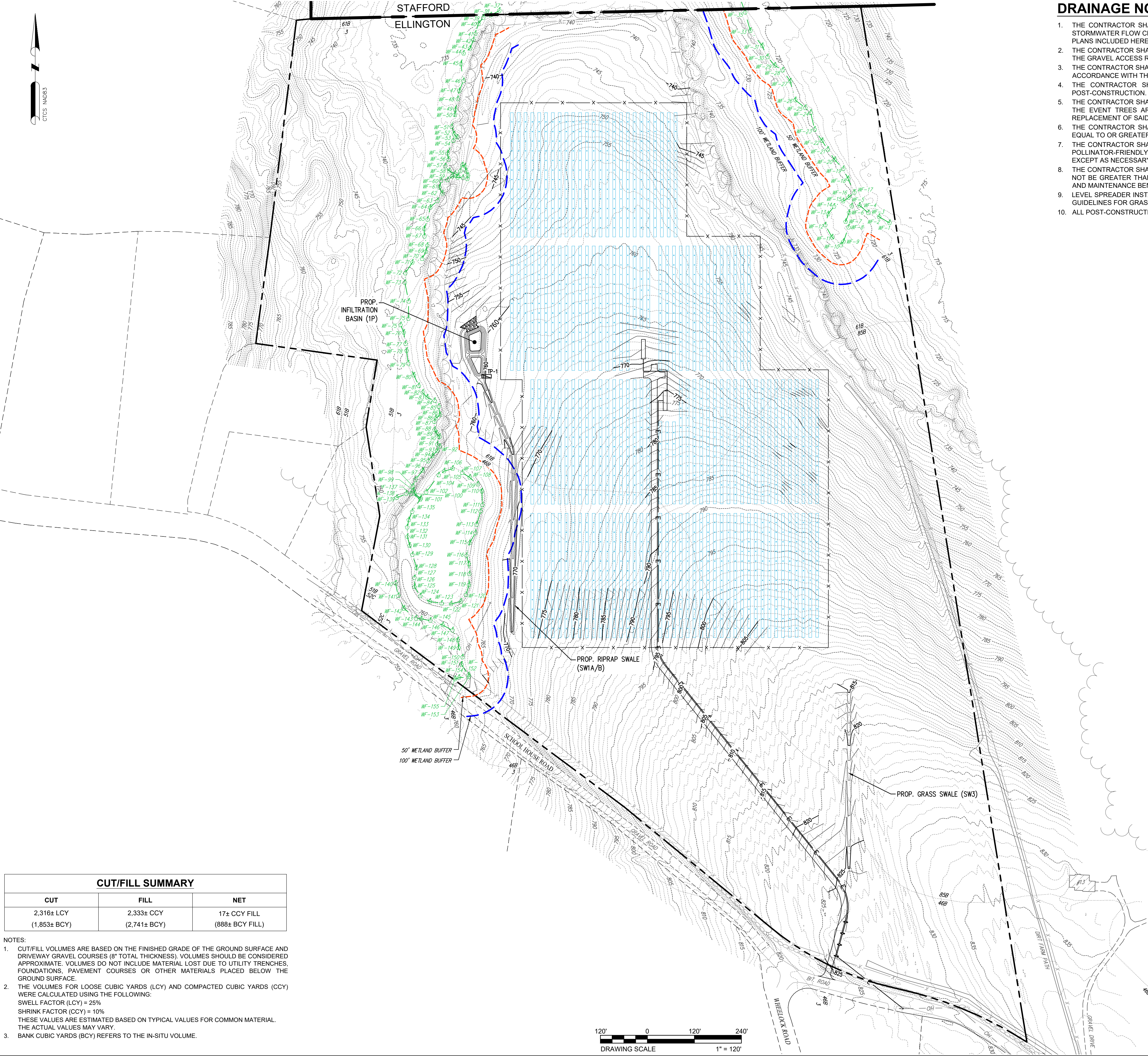
WF-152

WF-153

WF-154

WF-155

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DRAINAGE NOTES

1. THE CONTRACTOR SHALL MAINTAIN ALL EXISTING GRADES TO THE BEST EXTENT POSSIBLE TO ENSURE PRE-DEVELOPMENT STORMWATER FLOW CHARACTERISTICS ARE CONSISTENT POST-CONSTRUCTION, UNLESS OTHERWISE SPECIFIED BY THE DESIGN PLANS INCLUDED HEREIN.
2. THE CONTRACTOR SHALL MINIMIZE SOIL COMPACTION AS PART OF DEVELOPMENT BEYOND THAT THAN WHAT IS REQUIRED FOR THE GRAVEL ACCESS ROADWAY AND EQUIPMENT PAD.
3. THE CONTRACTOR SHALL ADHERE TO A PHASED APPROACH TO LIMIT THE TOTAL ACREAGE DISTURBED TO LESS THAN 5 ACRES IN ACCORDANCE WITH THE CONNECTICUT SOIL EROSION AND SEDIMENT CONTROL GUIDELINES.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR AN AS-BUILT TOPOGRAPHIC SURVEY TO CONFIRM SITE COMPLIANCE POST-CONSTRUCTION.
5. THE CONTRACTOR SHALL BE RESPONSIBLE TO LIMIT VEGETATION CLEARING WITHIN THE APPROVED LIMITS OF DISTURBANCE. IN THE EVENT TREES ARE REMOVED BEYOND THE LIMIT OF DISTURBANCE, THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACEMENT OF SAID TREES AT AN APPROVED FREQUENCY BY THE OWNER.
6. THE CONTRACTOR SHALL ENSURE THAT THE VEGETATED AREAS RECEIVING RUNOFF BETWEEN ROWS OF SOLAR PANELS IS EQUAL TO OR GREATER THAN THE AVERAGE WIDTH OF THE ROW OF SOLAR PANELS DRAINING TO THE VEGETATED AREA.
7. THE CONTRACTOR SHALL ENSURE THAT SOLAR PANELS SHALL BE CONSTRUCTED IN SUCH A WAY TO ALLOW FOR GROWTH OF POLLINATOR-FRIENDLY VEGETATION, WITH NO USE OF CHEMICAL FERTILIZERS. HERBICIDES, OR PESTICIDES CANNOT BE USED EXCEPT AS NECESSARY TO INITIALLY ESTABLISH VEGETATION.
8. THE CONTRACTOR SHALL ENSURE THAT THE LOWEST VERTICAL CLEARANCE OF THE SOLAR PANELS ABOVE THE GROUND SHALL NOT BE GREATER THAN 10-FEET. THE PANELS SHALL, HOWEVER, BE AT ADEQUATE HEIGHT TO SUPPORT VEGETATIVE GROWTH AND MAINTENANCE BENEATH AND BETWEEN THE PANELS.
9. LEVEL SPREADER INSTALLED IN PARALLEL WITH EXISTING TOPOGRAPHY IN ACCORDANCE WITH CT DEEP STORMWATER MANUAL GUIDELINES FOR GRASS OVERLAND RUNOFF MANAGEMENT.
10. ALL POST-CONSTRUCTION SLOPES WITHIN ARRAY AREAS SHALL BE LIMITED TO 15% MAX.

CUT/FILL SUMMARY		
CUT	FILL	NET
2,316± LCY (1,853± BCY)	2,333± CCY (2,741± BCY)	17± CCY FILL (888± BCY FILL)

- NOTES:
1. CUT/FILL VOLUMES ARE BASED ON THE FINISHED GRADE OF THE GROUND SURFACE AND DRIVEWAY GRAVEL COURSES (8" TOTAL THICKNESS). VOLUMES SHOULD BE CONSIDERED APPROXIMATE. VOLUMES DO NOT INCLUDE MATERIAL LOST DUE TO UTILITY TRENCHES, FOUNDATIONS, PAVEMENT COURSES OR OTHER MATERIALS PLACED BELOW THE GROUND SURFACE.
 2. THE VOLUMES FOR LOOSE CUBIC YARDS (LCY) AND COMPACTED CUBIC YARDS (CCY) WERE CALCULATED USING THE FOLLOWING:
SWELL FACTOR (LCY) = 25%
SHRINK FACTOR (CCY) = 10%
THESE VALUES ARE ESTIMATED BASED ON TYPICAL VALUES FOR COMMON MATERIAL. THE ACTUAL VALUES MAY VARY.
 3. BANK CUBIC YARDS (BCY) REFERS TO THE IN-SITU VOLUME.

NRCS SOILS LEGEND

- 3 RIDGEBURY, LIECESTER, AND WHITMAN SOILS, 0 TO 8 PERCENT SLOPES, EXTREMELY STONY (HSG D)
- 46B WOODBRIDGE FINE SANDY LOAM, 0 TO 8 PERCENT SLOPES, VERY STONY (HSG C/D)
- 47C WOODBRIDGE FINE SANDY LOAM, 3 TO 15 PERCENT SLOPES, EXTREMELY STONY (HSG C/D)
- 51B SUTTON FINE SANDY LOAM, 0 TO 8 PERCENT SLOPES, VERY STONY (HSG B/D)
- 61B CANTON AND CHARLTON FINE SANDY LOAMS, 0 TO 8 PERCENT SLOPES, VERY STONY (HSG B)
- 85B PAXTON AND MONTAUK FINE SANDY LOAMS, 3 TO 8 PERCENT SLOPES, VERY STONY (HSG C)
- 85C PAXTON AND MONTAUK FINE SANDY LOAMS, 8 TO 15 PERCENT SLOPES, VERY STONY (HSG C)

verdantas

213 COURT STREET, SUITE 1200
MIDDLETOWN, CT 06457

PROFESSIONAL ENGINEER NO. 38447

DESIGNED BY
JAB

DRAWN BY
JAB

CHECKED BY
END

PROJECT NO.
38399

STATE CONNECTICUT

ELLINGTON-TOLLAND COUNTY-CONNECTICUT

PROPOSED OVERALL DRAINAGE PLAN

SUNSET SOLAR

GREENSKIES CLEAN ENERGY

SCHOOLHOUSE ROAD

DATE

MAY 2026

SCALE

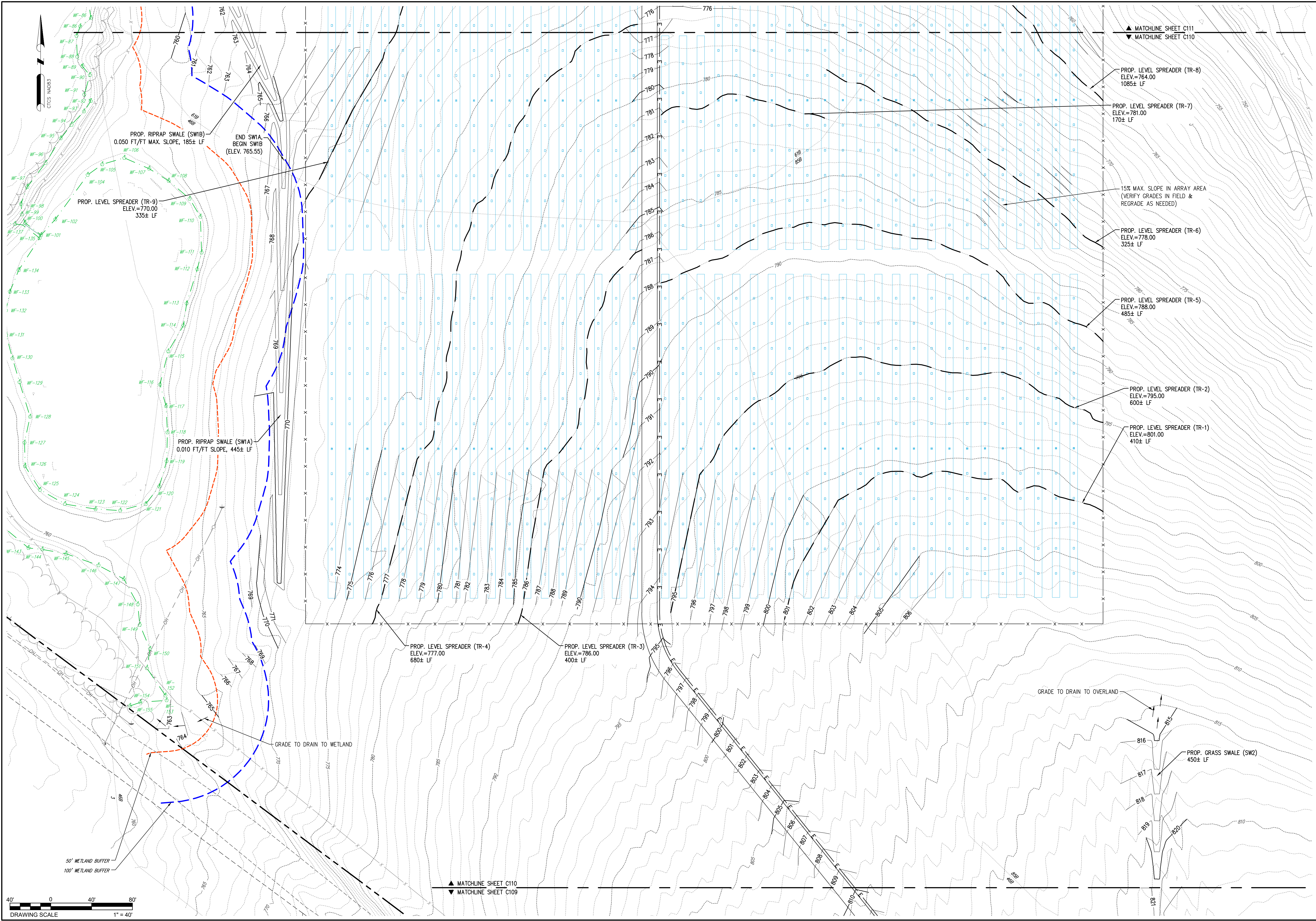
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SHEET

C108



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213 COURT STREET, SUITE 1200
MIDDLETOWN, CT 06457

PROFESSIONAL ENGINEER NO. 38447

DESIGNED BY
JMB

DRAWN BY
JMB

CHECKED BY
END

PROJECT NO.
38399

STATE: CONNECTICUT

CHKD BY
DATE

REVISION

PRELIMINARY
FOR
CONNECTICUT
SITING
COUNCIL

No.

ELLINGTON-TOLLAND COUNTY-CONNECTICUT

PROPOSED DRAINAGE PLAN 2

SUNSET SOLAR

GREENSKIES CLEAN ENERGY

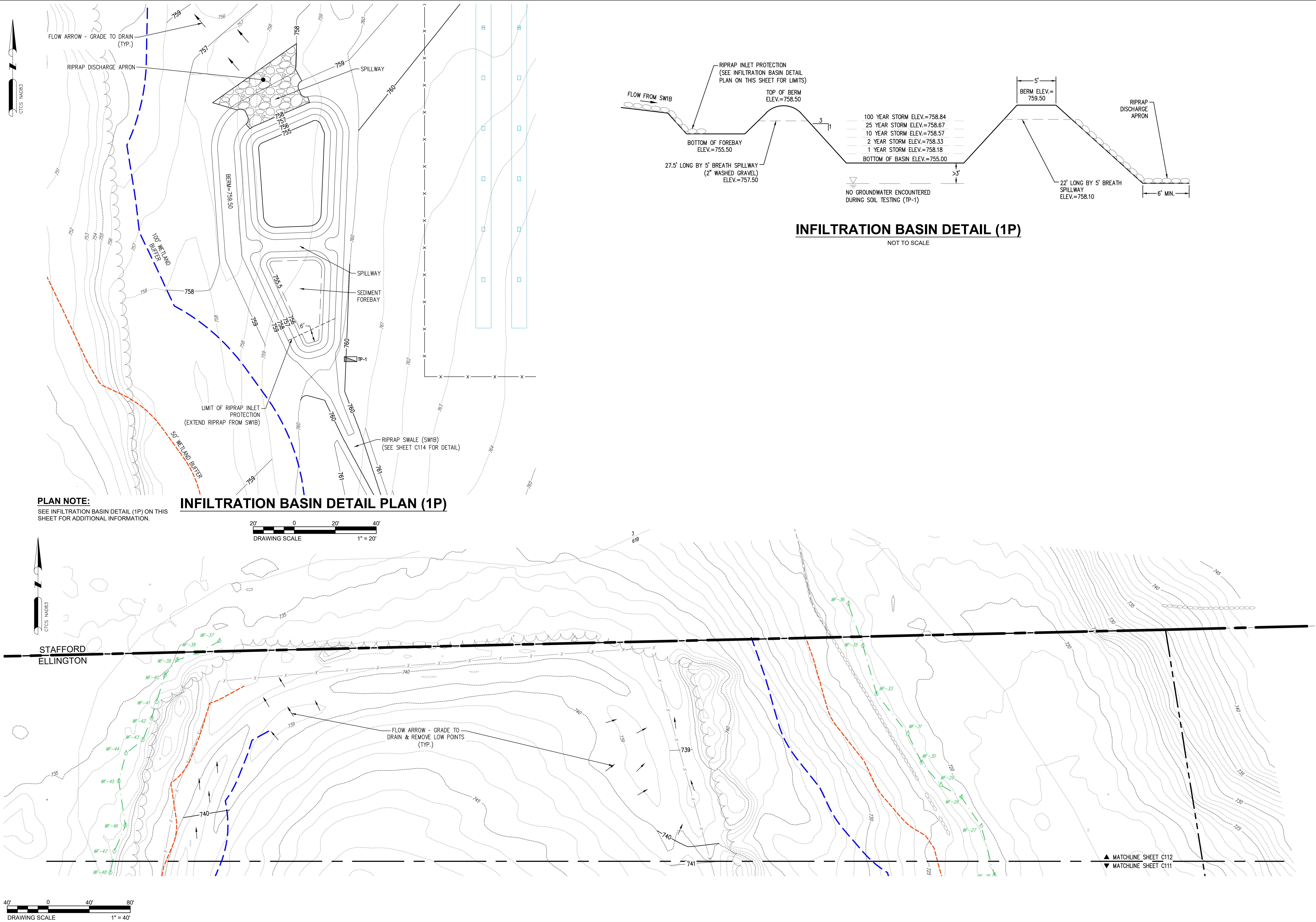
SCHOOLHOUSE ROAD

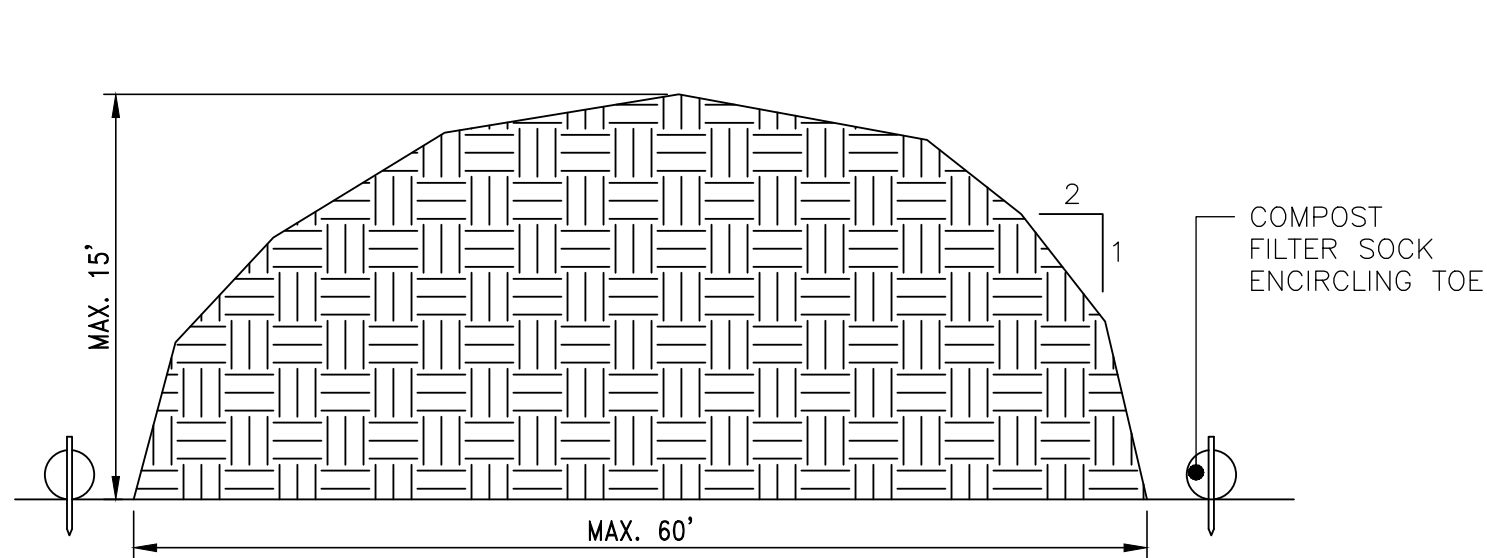
DATE
MAY 2026

SCALE
1"=40'

SHEET
C110

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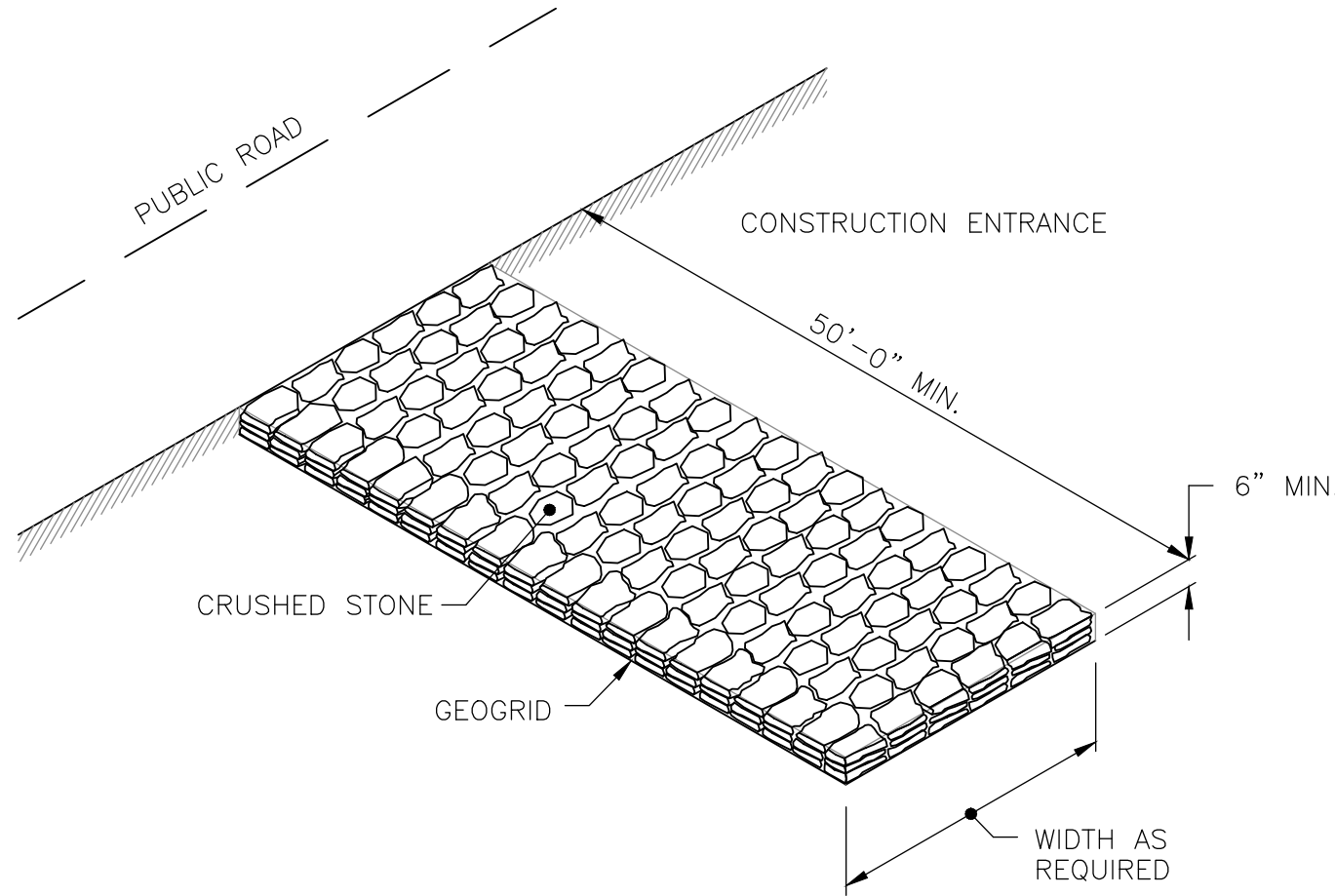




- NOTES:
1. THE CONTRACTOR SHALL REQUIRE WRITTEN APPROVAL FROM THE ENGINEER IN THE EVENT THE STOCKPILE LOCATION DIFFERS FROM THE APPROVED PLAN.
 2. STOCKPILE AREA SHALL NOT EXCEED DIMENSIONS WITHOUT APPROVAL FROM ENGINEER.

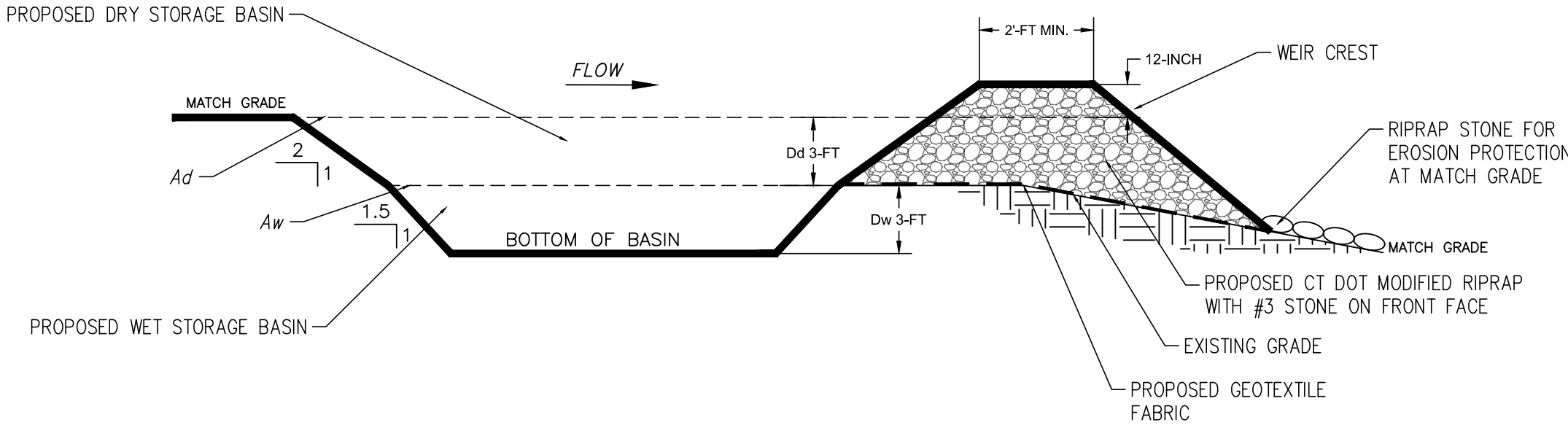
ERODIBLE MATERIAL STOCKPILE DETAIL

NOT TO SCALE



CONSTRUCTION ACCESS

NOT TO SCALE



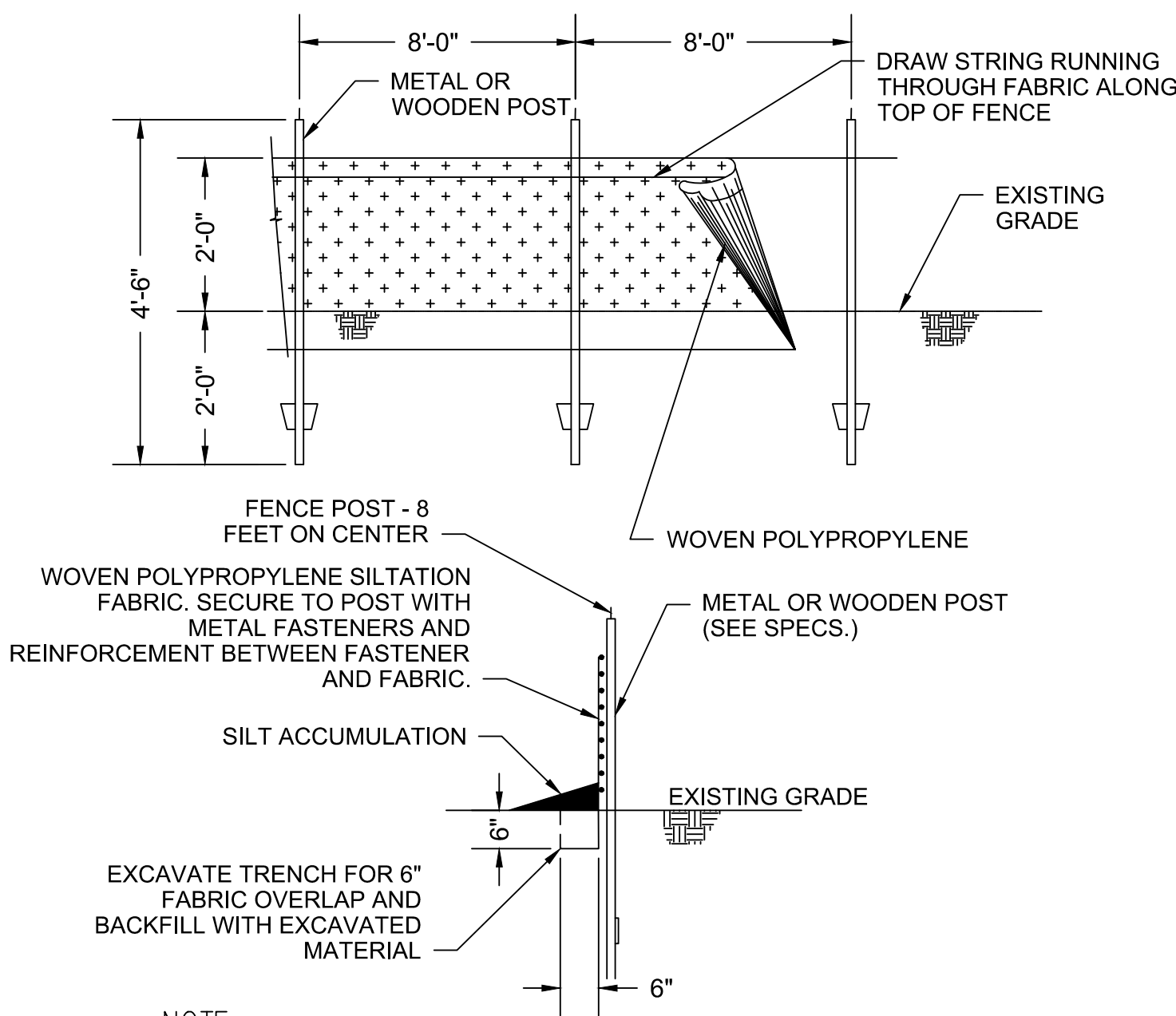
TEMPORARY SEDIMENT TRAP (TST) DETAIL

TEMPORARY SEDIMENT TRAP NOTES:

1. TEMPORARY SEDIMENT TRAPS SHALL BE CONSTRUCTED AS NECESSARY DETERMINED BY ENGINEER OF RECORD.
2. CLEAR, GRUB, AND STRIP ANY VEGETATION AND ROOT MAT FROM ANY PROPOSED EMBANKMENT AND OUTLET AREA, REMOVE STONES AND ROCKS WHOSE DIAMETER IS GREATER THAN 3-INCHES AND OTHER DEBRIS.
3. EXCAVATE WET STORAGE AND CONSTRUCT THE EMBANKMENT AND/OR OUTLET AS NEEDED TO ATTAIN THE NECESSARY STORAGE REQUIREMENTS. USE ONLY FILL MATERIAL FOR THE EMBANKMENT THAT IS FREE FROM EXCESSIVE ORGANICS, DEBRIS, LARGE ROCKS (OVER 6-INCHES) OR OTHER UNSUITABLE MATERIALS. COMPACT THE EMBANKMENT IN 9-INCH LAYERS BY TRAVERSING THE EQUIPMENT WHILE IT IS BEING CONSTRUCTED.
4. STABILIZE THE EARTHEN EMBANKMENT USING ANY OF THE FOLLOWING MEASURES: TEMPORARY SEEDING, PERMANENT SEEDING, OR STONE SLOPE PROTECTION IMMEDIATELY AFTER INSTALLATION.
5. CARRY OUT CONSTRUCTION OPERATIONS IN SUCH A MANNER THAT EROSION AND WATER POLLUTION ARE MINIMIZED.

TEMPORARY SEDIMENT TRAP MAINTENANCE NOTES:

1. INSPECT THE TEMPORARY SEDIMENT TRAP AT LEAST ONCE A WEEK AND WITHIN 24 HOURS OF THE END OF A STORM WITH A RAINFALL AMOUNT OF 0.5 INCHES OR GREATER. CHECK THE OUTLET TO ENSURE THAT IT IS STRUCTURALLY SOUND AND HAD NOT BEEN DAMAGED BY EROSION OR CONSTRUCTION EQUIPMENT. THE HEIGH OF THE STONE OUTLET SHOULD MAINTAIN AT LEAST 1 FOOT BELOW THE CREST OF OF THE EMBANKMENT. ALSO CHECK FOR SEDIMENT ACCUMULATION AND FILTRATION PERFORMANCE.
2. WHEN SEDIMENTS HAVE ACCUMULATED TO ONE HALF THE MINIMUM REQUIRED VOLUME OF THE WET STORAGE, DEWATER THE TRAP AS NEEDED, REMOVE SEDIMENTS AND RESTORE THE TRAP TO ITS ORIGINAL DIMENSIONS. DISPOSED OF THE SEDIMENT REMOVED FROM THE BASIN IN A SUITABLE AREA AND IN SUCH A MANNER THAT IT WILL NOT ERODE AND CAUSE SEDIMENTATION ISSUES.
3. THE TEMPORARY SEDIMENT TRAP MAY BE REMOVED AFTER THE CONTRIBUTING DRAINAGE AREA IS STABILIZED.

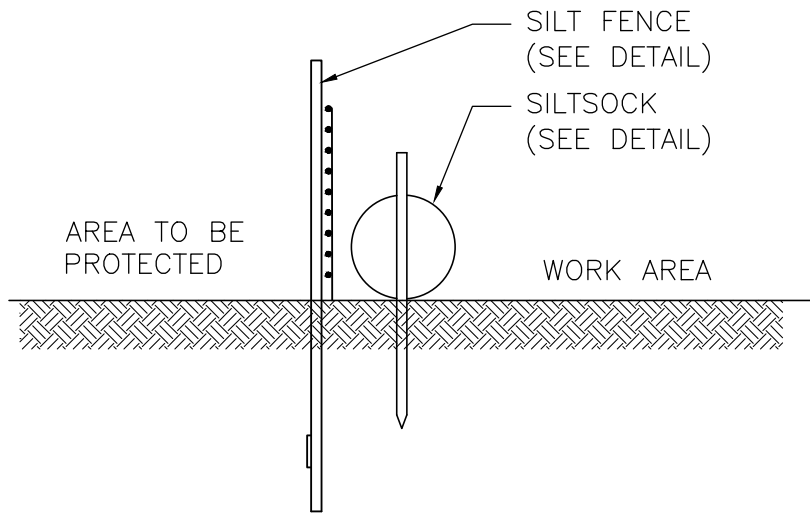


NOTE:

WHERE REQUIRED AT CRITICAL LOCATIONS, SILTATION FENCE REINFORCED WITH HOG OR CHIKEN WIRE OR INTEGRAL PLASTIC MESH REINFORCING SHALL BE USED

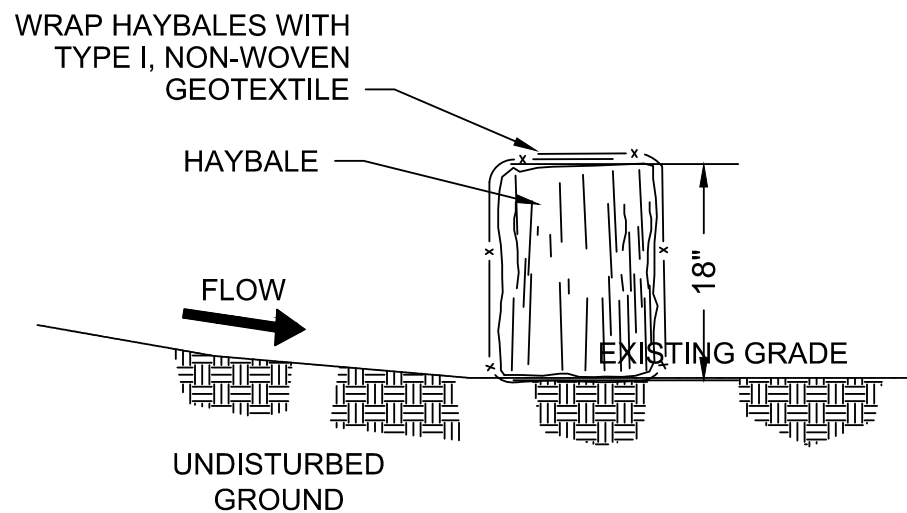
SILT FENCE DETAIL

NOT TO SCALE



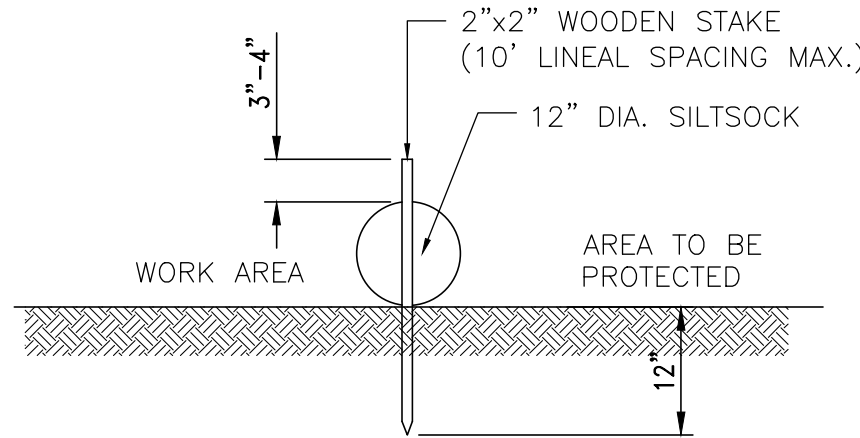
SILT FENCE/SILT SOCK COMBINATION DETAIL

NOT TO SCALE



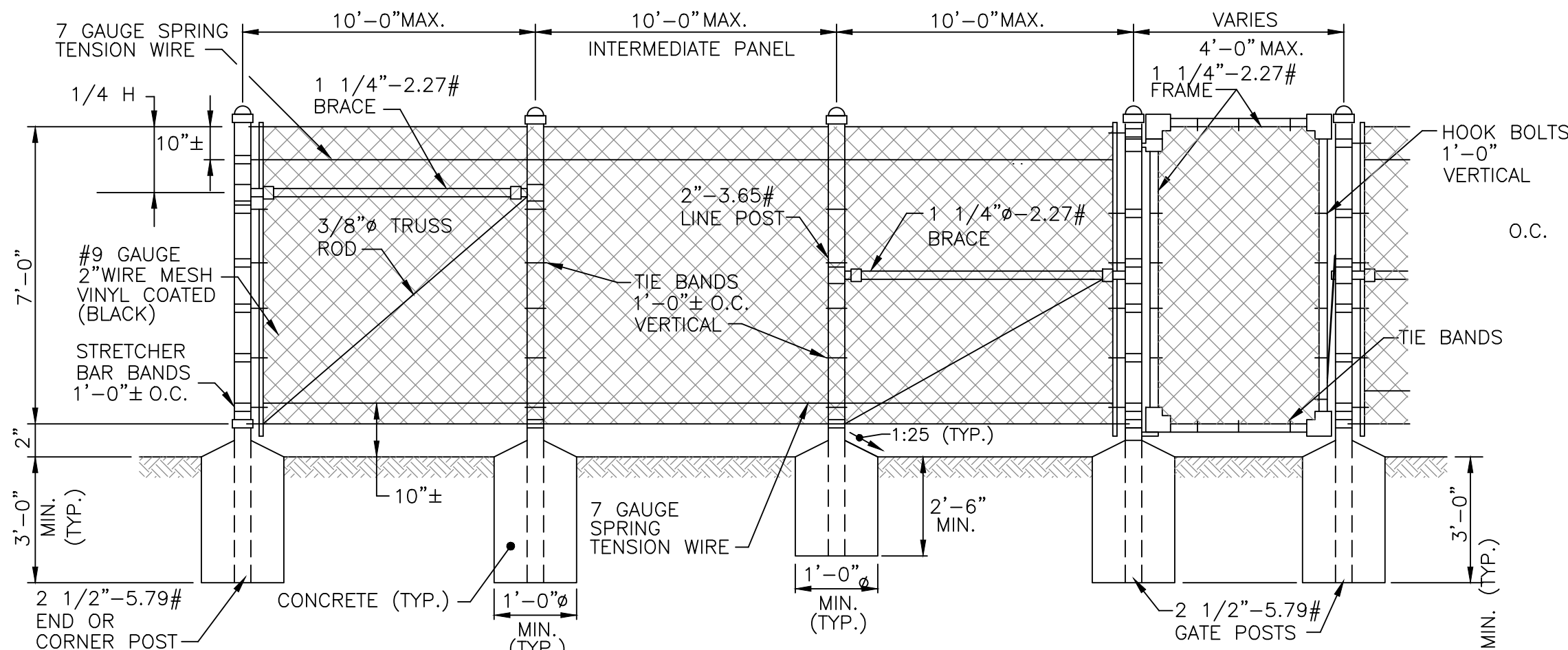
SEDIMENT BARRIER (SB) DETAIL

NOT TO SCALE



SILT SOCK DETAIL

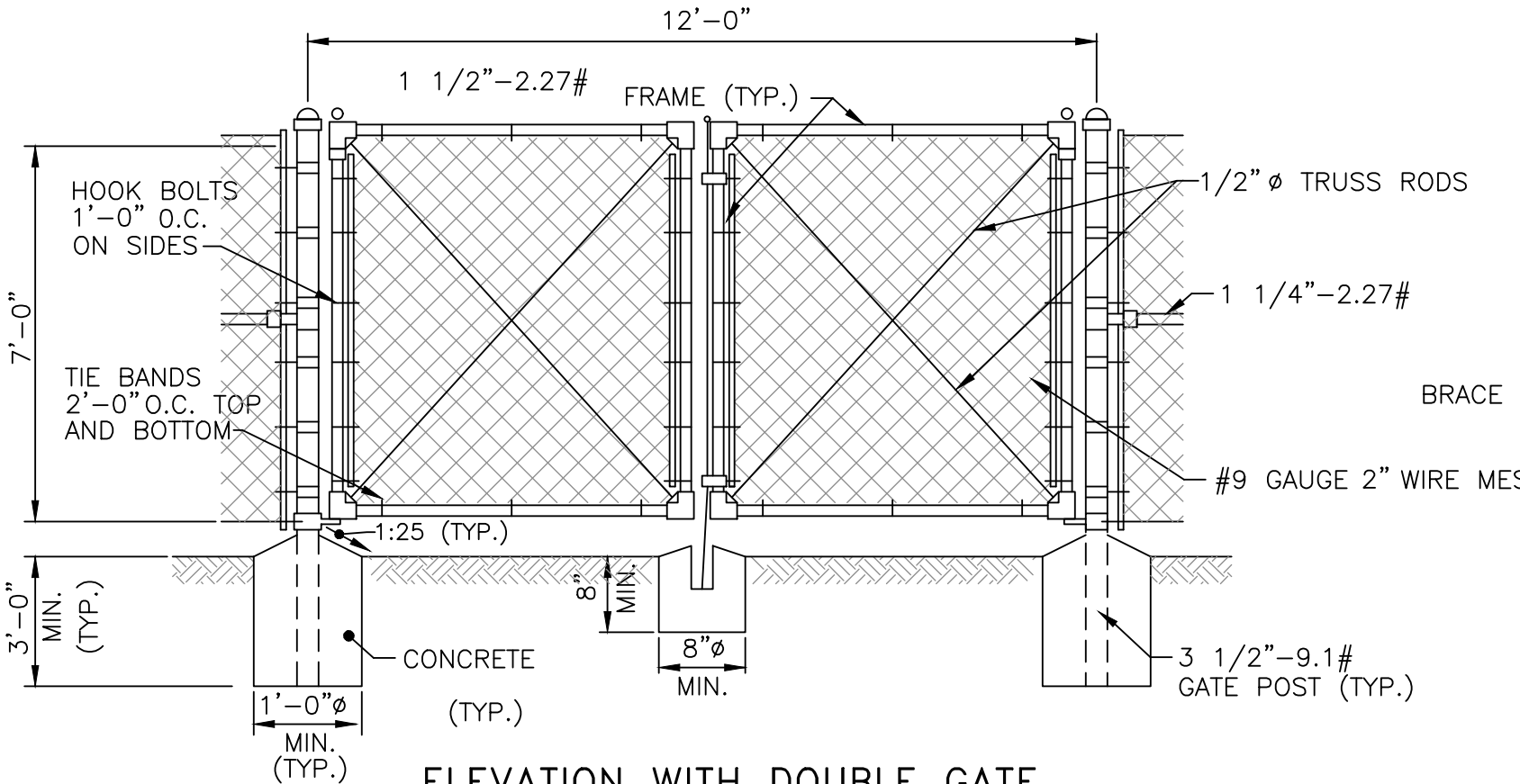
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ELEVATION WITH SINGLE GATE

NOTES:

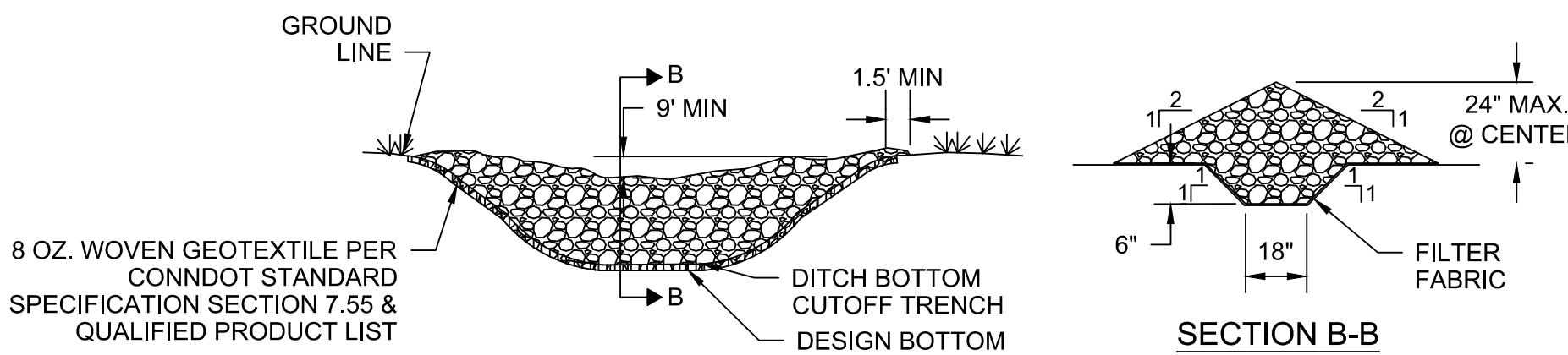
1. 6 GAUGE STREET CLIPS TO BE USED TO FASTEN SPRING TENSION WIRE TO LINE POST.
2. SPRING TENSION WIRE - NO. 7 GAUGE CORRUGATED HEAVILY GALVANIZED (2.0 OZ. PER SQ. FT.) ALUMINUM COATED (0.4 OZ. PER SQ. FT.)
3. ALL PIPES REFER TO SCHEDULE 40 NOMINAL PIPE SIZES.
4. A 1 1/4"-2.27# TOP RAIL MAY BE SUBSTITUTED FOR THE TOP TENSION WIRE WHEN THE FENCE IS NOT LOCATED IN THE CLEAR ZONE.
5. WHEN A TOP RAIL IS USED, LOCATE THE BRACE RAIL AT 1/2 H.
6. WHEN A TOP RAIL IS USED, DELETE THE BOTTOM SPRING TENSION WIRE.



ELEVATION WITH DOUBLE GATE

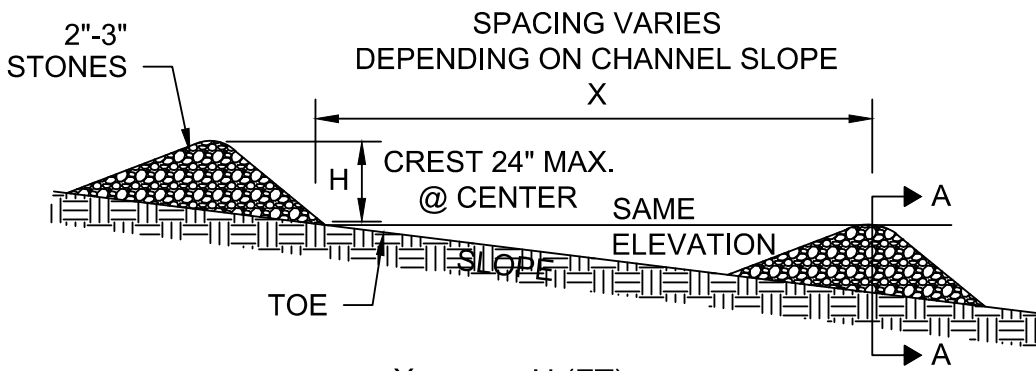
CHAIN LINK FENCE DETAIL

NOT TO SCALE



SECTION A-A

SECTION B-B



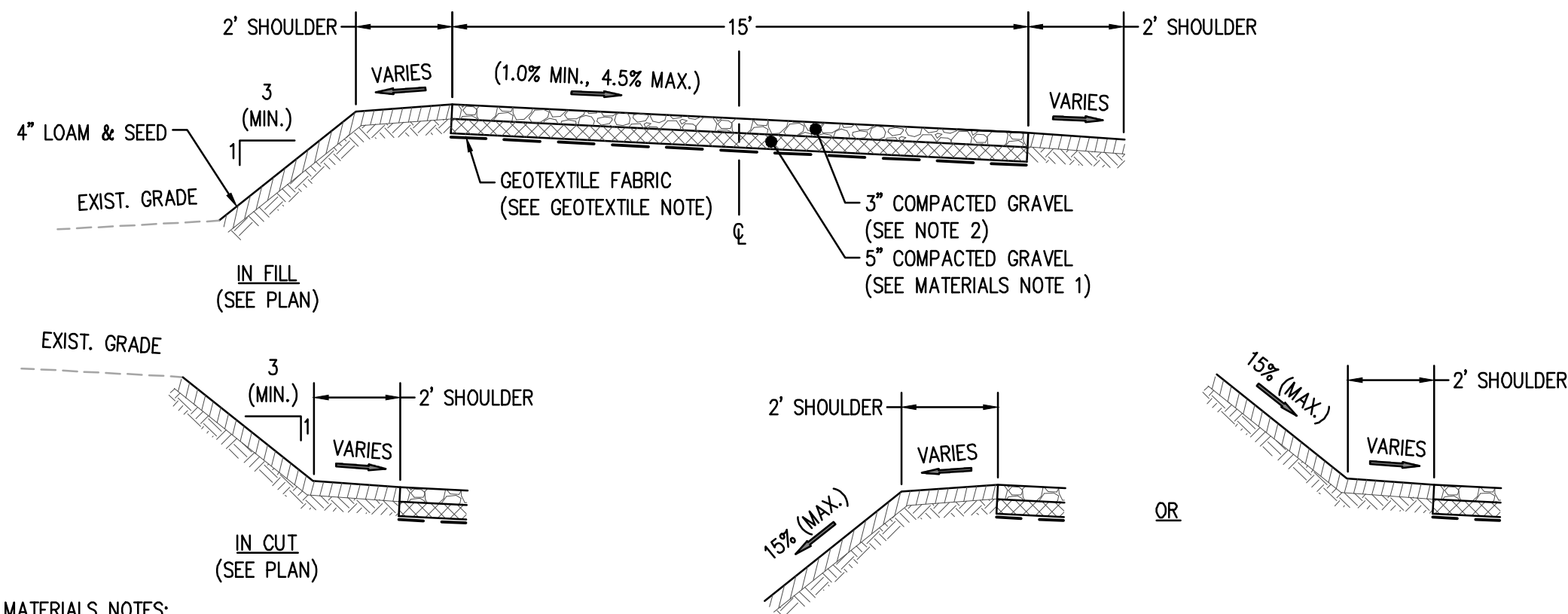
TEMPORARY ROCK CHECK DAM

NOT TO SCALE

NOTES:

1. STONES SHALL BE PLACED ON A FILTER FOUNDATION TO THE LINES, GRADES, AND LOCATIONS SHOWN ON PLANS OR AS DIRECTED BY THE ENGINEER.
2. SET SPACING OF CHECK DAMS TO ASSUME THAT THE ELEVATIONS OF THE CREST OF THE DOWNSTREAM DAM IS AT THE SAME ELEVATION OF THE TOE OF THE UPSTREAM DAM.
3. EXTEND THE STONE A MINIMUM OF 1.5 FEET BEYOND DITCH BANKS TO PREVENT CUTTING AROUND THE DAM.
4. PROTECT THE CHANNEL DOWNSTREAM OF THE LOWEST CHECK DAM FROM SCOUR AND EROSION WITH STONE OR LINER AS APPROPRIATE.
5. ENSURE THAT CHANNEL APPURTENANCES SUCH AS CULVERT ENTRANCES BELOW CHECK DAMS ARE NOT SUBJECT TO DAMAGE OR BLOCKAGE FROM DISPLACED STONE.

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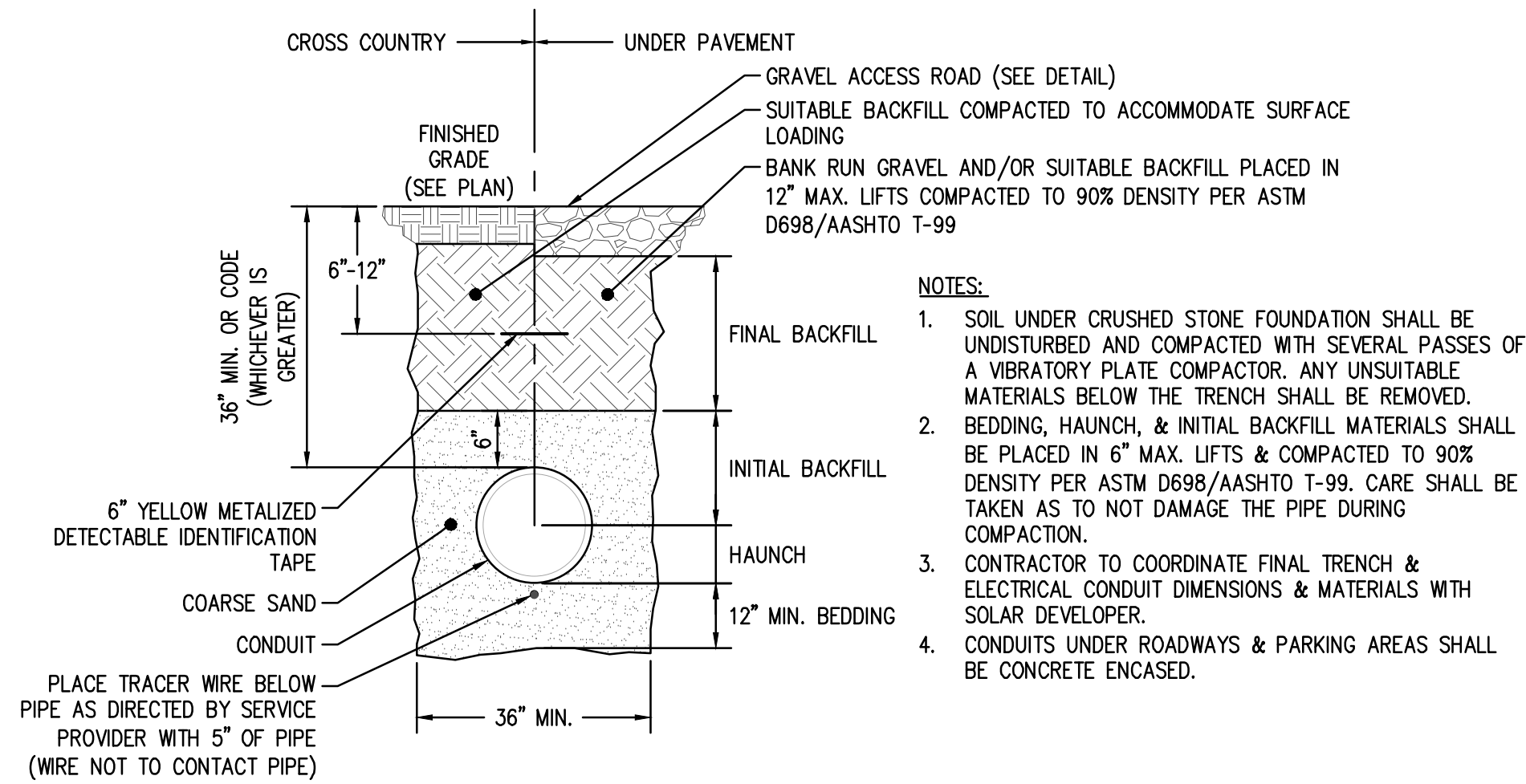


- MATERIALS NOTES:**
1. BASE GRAVEL COURSE SHALL BE 3.5-INCH GRAVEL MEETING CONNECTICUT DEPARTMENT OF TRANSPORTATION SPECIFICATION M.02.06 GRADING "A" OR APPROVED EQUAL.
 2. TOP GRAVEL COURSE SHALL BE 1.5-INCH GRAVEL MEETING CONNECTICUT DEPARTMENT OF TRANSPORTATION SPECIFICATION M.02.06 GRADING "C" OR APPROVED EQUAL.
 3. PLACE GRAVEL IN 6-INCH MAX. LIFTS AND COMPACT WITH A MINIMUM OF FOUR PASSES WITH A VIBRATORY PLATE COMPACTOR WEIGHING A MINIMUM OF 1,000 POUNDS AND WITH A MINIMUM CENTRIFUGAL FORCE OF 10,000 POUNDS.
 4. COMPACT SUBGRADE TO 95% OF MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D1557.
 5. SEE PLANS FOR GRADES AND EDGE CONDITIONS.

- GEOTEXTILE NOTE:**
- REQUIREMENTS FOR THE WOVEN GEOTEXTILE FABRIC ARE AS FOLLOWS:
- | | |
|---------------------------------------|-----------------------|
| TENSILE STRENGTH (LBS) | 180 MIN. |
| ELONGATION AT FAILURE (%) | < 50 |
| PUNCTURE (LBS) | 60 MIN. |
| UV LIGHT (% RESIDUE TENSILE STRENGTH) | 70 MIN. |
| APPARENT OPENING SIZE (AOS) | NO SMALLER THAN 0.212 |
| PERCENT OPEN AREA (%) | 1.0 MIN. |
| PERMITTIVITY (1/SEC) | 0.10 MIN. |

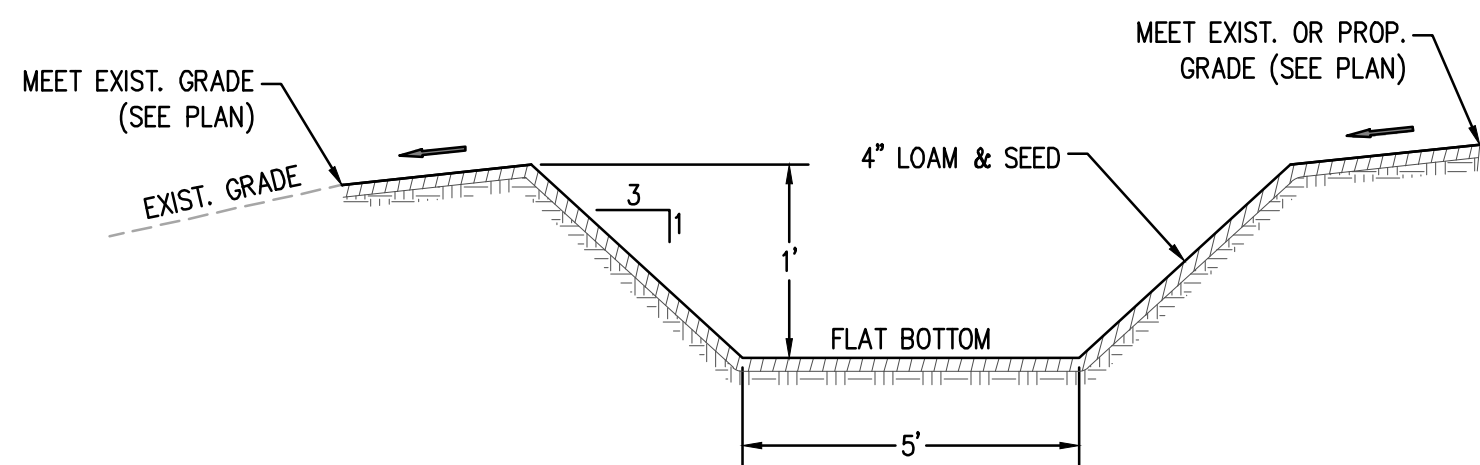
GRAVEL ACCESS ROAD DETAIL

NOT TO SCALE



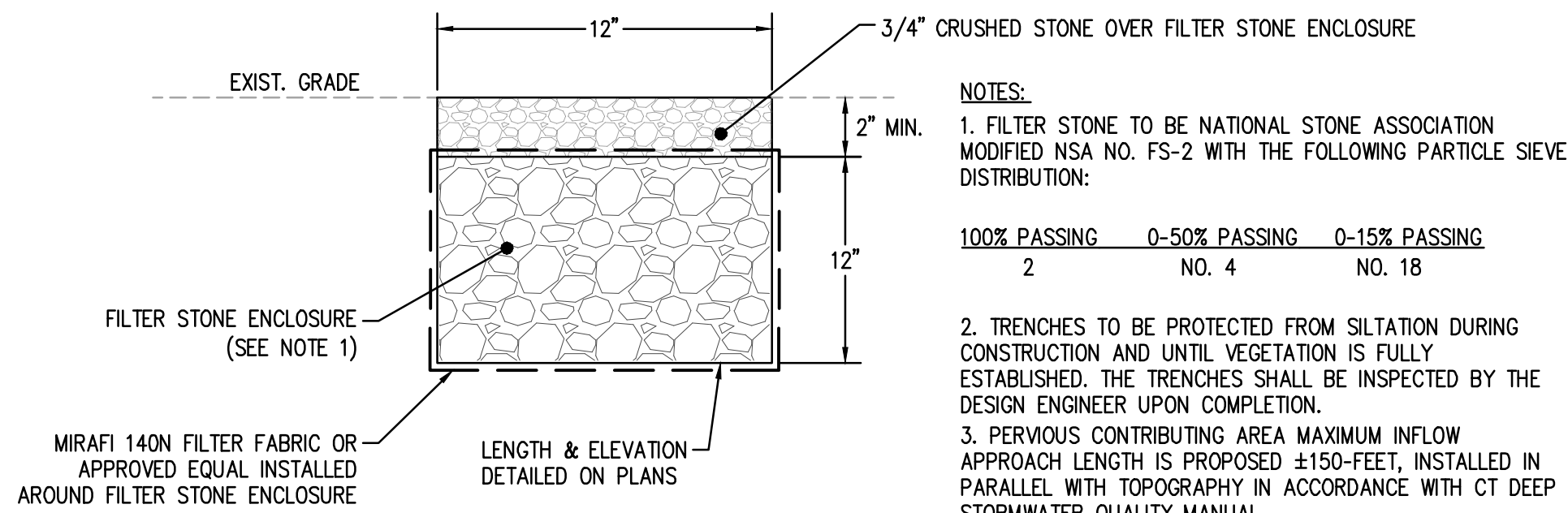
CONDUIT TRENCH DETAIL

NOT TO SCALE



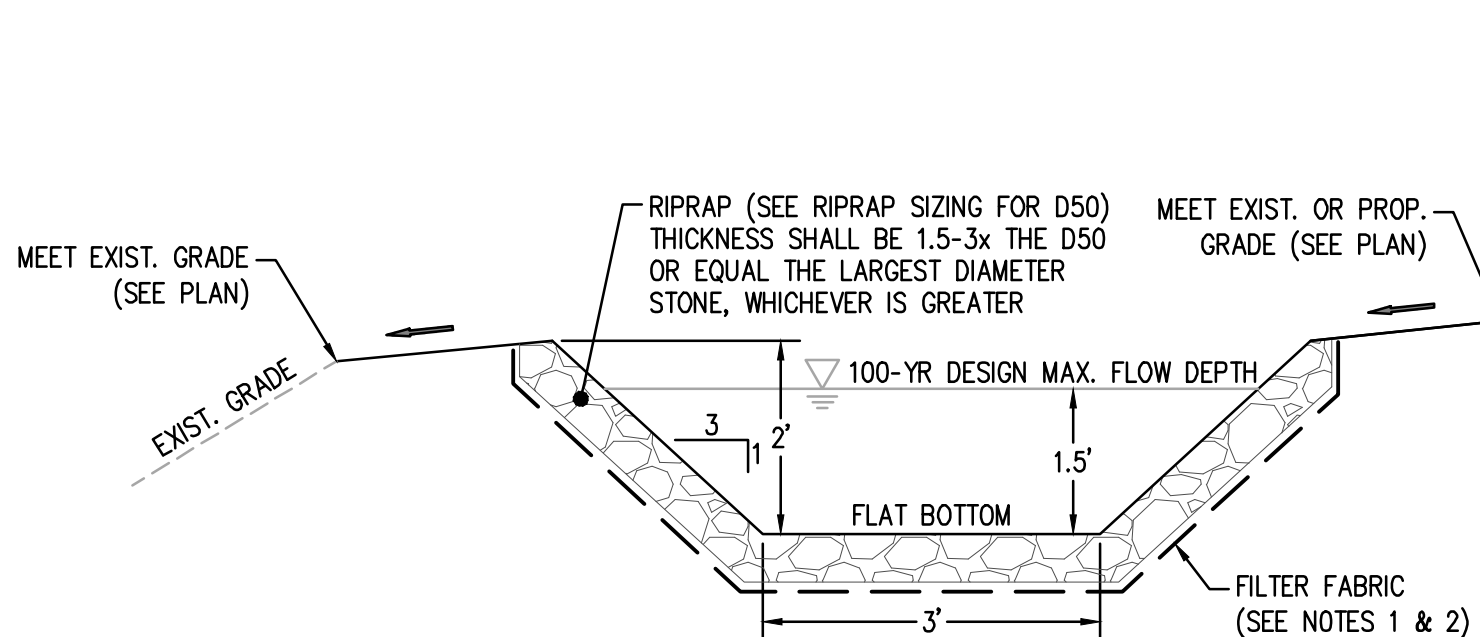
GRASS SWALE DETAIL (SW2)

NOT TO SCALE



LEVEL SPREADER CROSS SECTIONAL DETAIL

NOT TO SCALE



RIPRAP SIZING

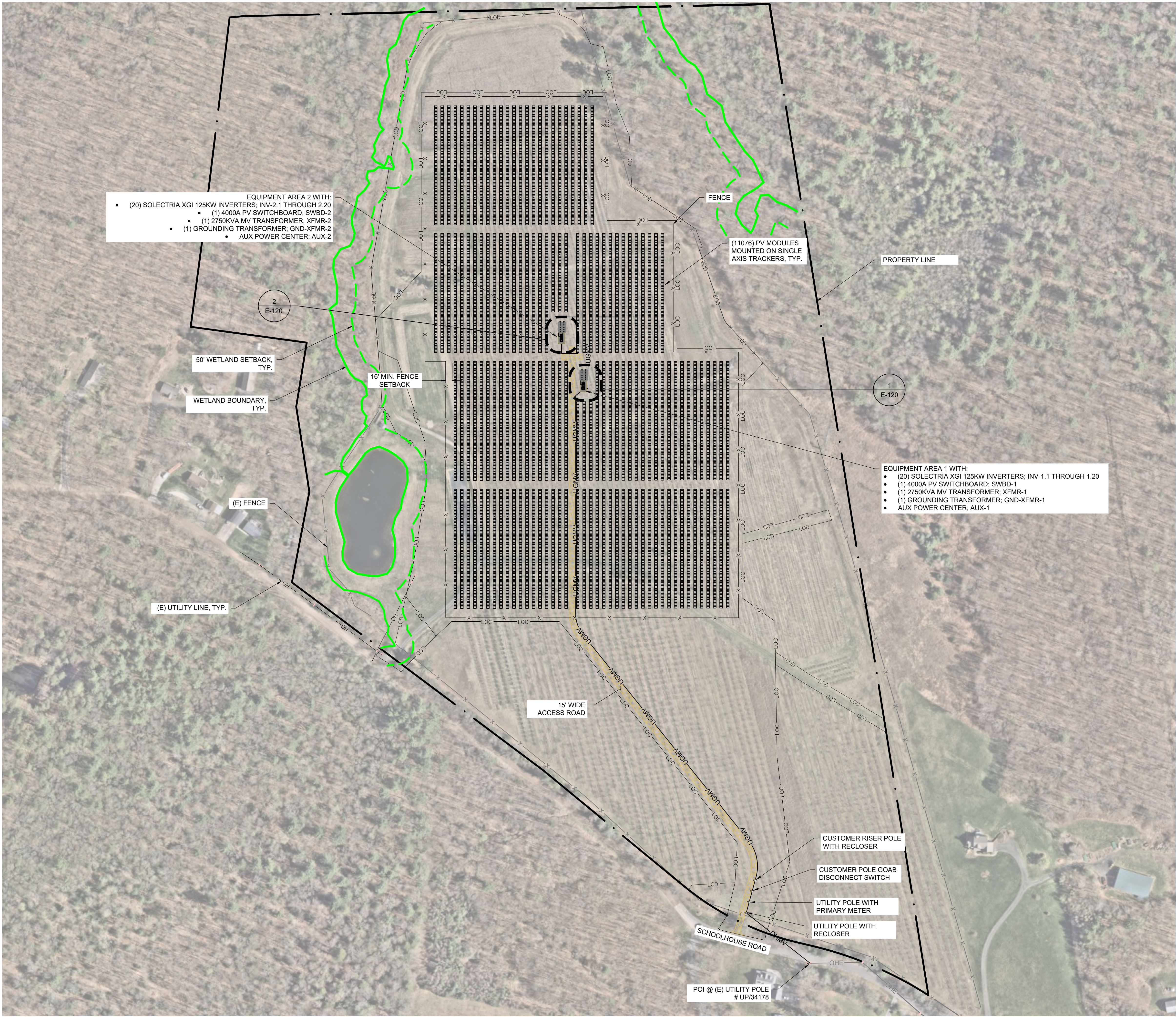
SWALE ID	D50 (IN)
SW1A	2.5
SW1B	9

RIPRAP SWALE DETAIL (SW1A & SW1B)

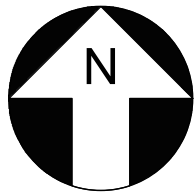
NOT TO SCALE

- NOTES:**
1. CONTRACTOR SHALL VERIFY UNDERLYING SOIL TYPE IN THE FIELD. REQUIREMENTS FOR THE FILTER FABRIC ARE AS FOLLOWS:
- | SOIL TYPE | MAXIMUM APPARENT OPENING SIZE (AOS) (MM) |
|---|--|
| NON COHESIVE, LESS THAN 15 PERCENT PASSING THE 0.075 MM (US #200) SIEVE | 0.43 |
| NON COHESIVE, 15 TO 50 PERCENT PASSING THE 0.075 MM (US #200) SIEVE | 0.25 |
| NON COHESIVE, MORE THAN 50 PERCENT PASSING THE 0.075 MM (US #200) SIEVE | 0.22 |
| COHESIVE, PLASTICITY INDEX GREATER THAN 7 | 0.30 |
- THE FILTER FABRIC MAY BE OMITTED WITH APPROVAL FROM THE ENGINEER & ONLY IF ALL OF THE FOLLOWING ARE TRUE:
- D15 (UPPER)/D85 (LOWER) < 5
 - 5 < D15 (UPPER)/D15 (LOWER) < 40
 - D50 (UPPER)/D50 (LOWER) < 40
- WHERE UPPER IS THE RIPRAP & LOWER IS THE UNDERLYING SOIL.
2. THE FILTER FABRIC MAY BE SUBSTITUTED WITH A GRANULAR FILTER BLANKET THAT SATISFIES THE RATIOS IN NOTE 1, WHERE UPPER IS THE RIPRAP & LOWER IS THE GRANULAR FILTER BLANKET & LOWER IS THE UNDERLYING SOIL. IN SUCH CASE, THE THICKNESS OF THE GRANULAR FILTER BLANKET SHALL BE THE MAXIMUM SIZE OF THE FILTER GRADATION OR 6" MINIMUM.
 3. RIPRAP GRADATION SHALL FOLLOW A SMOOTH SIZE DISTRIBUTION CURVE (D100/D50 & D50/D20 BETWEEN 3.0 TO 1.5) & WHEN PLACED RIPRAP SHALL FORM A DENSE, UNIFORM, WELL-GRADED MASS WITH FEW VOIDS. CRUSHED CONCRETE & FLAT OR SLAB-LIKE STONES SHALL NOT BE USED.

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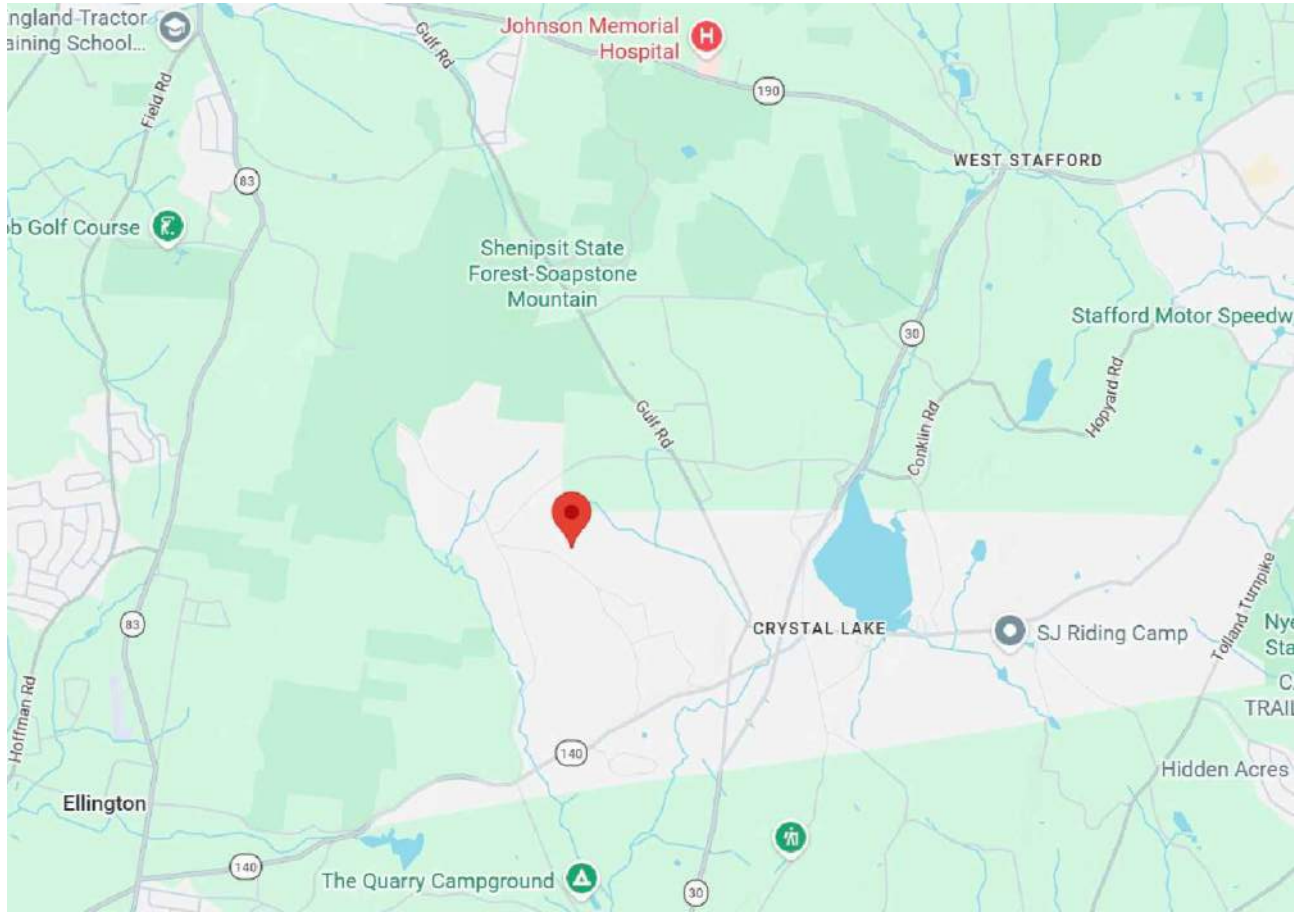
SHEET NOTES	
1.	DIMENSIONS, PROPERTY BOUNDARY, AND SITE FEATURES BASED ON CIVIL CAD FILE NAMED "GCE_ELLINGTON WEST CIVIL_2026_05_11"



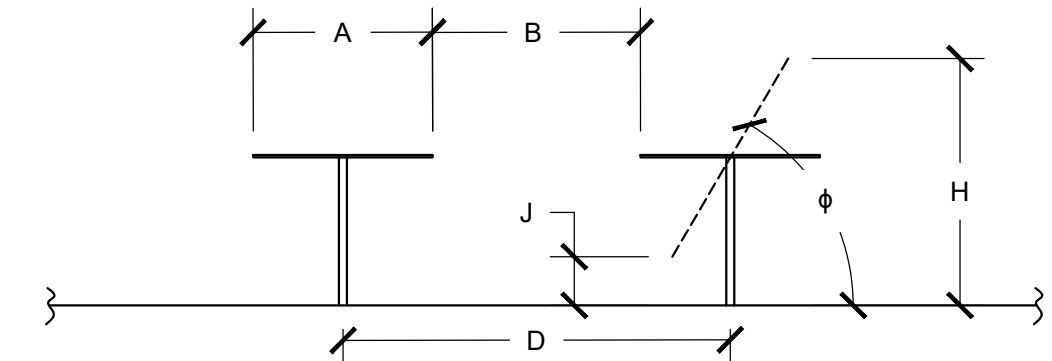
SITE PLAN
Scale: 1" = 125'

LEGEND	
	1PX26 SINGLE AXIS TRACKER
	MV TRANSFORMER (TYP.)
	LV SWITCHBOARD WITH DAS RACK (TYP.)
	INVERTER RACK (TYP.)
	FENCE
	PROPERTY LINE
	LIMIT OF CONSTRUCTION
	LIMIT OF DISTURBANCE
	UNDERGROUND MV CABLE
	OVERHEAD MV CABLE
	(E) UTILITY OVERHEAD LINES
	GRAVEL ACCESS ROAD
	POLE

PROJECT DETAILS	
PV SYSTEM SIZE DC:	5953.35 KW
PV SYSTEM SIZE AC:	4999.00 KW
DC/AC RATIO:	1.19
MODULE 1 MODEL:	LONGI HI-MO5 LR5-72HBD-535M
MODULE 1 RATING (STC):	535 W
MODULE 1 QTY:	8307
MODULE 2 MODEL:	LONGI HI-MO5 LR5-72HBD-545M
MODULE 2 RATING (STC):	545 W
MODULE 2 QTY:	2769
INVERTER MODEL:	SOLECTRIA XGI 1500-125/150
INVERTER QTY.:	40
INVERTER RATING:	(39) 125kW/137.5KVA, (1) 124kW/137.5KVA
RACKING:	ATI OMNITRACK SINGLE AXIS TRACKER
AZIMUTH:	180°
TILT:	+/- 52°
GCR	42.5%
FENCED AREA:	21.64 AC



VICINITY MAP



GCR TABLE			
	FEET	METER	DESCRIPTION
A	7.402	2.26	TRACKER WIDTH (MODULE LENGTH)
B	10	3.05	INTER-ROW SPACING
D	17.40	5.30	PITCH (TRACKER SPACING, O.C.)
GCR	42.5%		= A/D = (D-B)/D
RACK HEIGHTS			
H	9	2.71	MAX. HEIGHT ABOVE GRADE
J	3	0.91	MIN. LEADING EDGE HEIGHT
φ	52°		MAX. TRACKER ANGLE

1 MODULE RACK ELEVATION
Scale: 1/8" = 1'

2315 LINCOLN AVE.
ALAMEDA, CA 94501
WWW.SOLREBEL.COM

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ELLINGTON WEST
PV POWER SYSTEM
13 SCHOOLHOUSE ROAD
ELLINGTON, CT 06029

POCC/POI COORDINATES:
41.9347, -72.4020

REV.	DATE	DESCRIPTION	DRAWN BY	CHECKED BY
A	05/22/26	30% SET	SA	KRB

SHEET TITLE:
SITE PLAN

DRAWING NO.
G-100

9/16 CAD TEMPLATE 36x48-26

EQUIPMENT AREA 1 EQUIPENT WEIGHTS			
EQUIPMENT	WEIGHT (LBS) PER UNIT	QUANTITY	TOTAL WEIGHT (LBS)
INV	270	20	5400
DAS	~40	1	~40
AUX	~55	1	~55
SWBD	TBD	1	TBD
GND-XFMR	TBD	1	TBD
XFMR	TBD	1	TBD

EQUIPMENT AREA 2 EQUIPENT WEIGHTS			
EQUIPMENT	WEIGHT (LBS) PER UNIT	QUANTITY	TOTAL WEIGHT (LBS)
INV	270	20	5400
DAS	~40	1	~40
AUX	~55	1	~55
SWBD	TBD	1	TBD
GND-XFMR	TBD	1	TBD
XFMR	TBD	1	TBD

SR_PSV
11/24/25

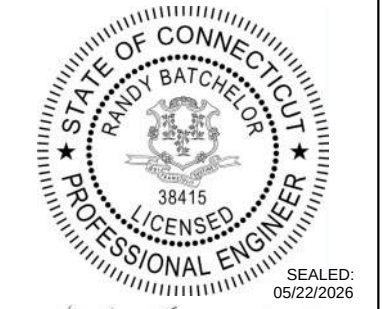
SHEET NOTES

1. EQUIPMENT DIMENSIONS ARE APPROXIMATE, VERIFY ALL DIMENSIONS WITH APPROVED EQUIPMENT RECORD DRAWINGS.
2. CONCRETE PAD DIMENSIONS (IF REQUIRED) SHALL BE COORDINATED WITH FINAL EQUIPMENT CUT SHEETS AND STRUCTURAL DETAILS.
3. NEWLY INSTALLED AC DISCONNECTING EQUIPMENT HEIGHT TO COMPLY WITH 240.24(A).
4. WHERE FIELD INSTALLATION VARIES FROM THE DESIGN DRAWINGS, CONTRACTOR SHALL PROVIDE A SKETCH OF THE PROPOSED EQUIPMENT PLACEMENT AND CONDUIT ROUTING TO THE ENGINEER FOR REVIEW AND APPROVAL.
5. UTILITY METERING AND SERVICE EQUIPMENT SHALL MEET ALL UTILITY REQUIREMENTS FOR METERING, DISCONNECTS, HEIGHTS, WORKING CLEARANCE AND PROTECTION. CONTRACTOR SHALL VERIFY INSTALLATION AGAINST THE UTILITY SERVICE REQUIREMENTS AND NOTIFY EEOB IF THERE ARE ANY DISCREPANCIES WITH THESE PLANS.



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ALAMEDA, CA 94501
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**ELLINGTON WEST
PV POWER SYSTEM**
13 SCHOOLHOUSE ROAD
ELLINGTON, CT 06029

POCC/POI COORDINATES: 41.9347, -72.4020
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[illegible]

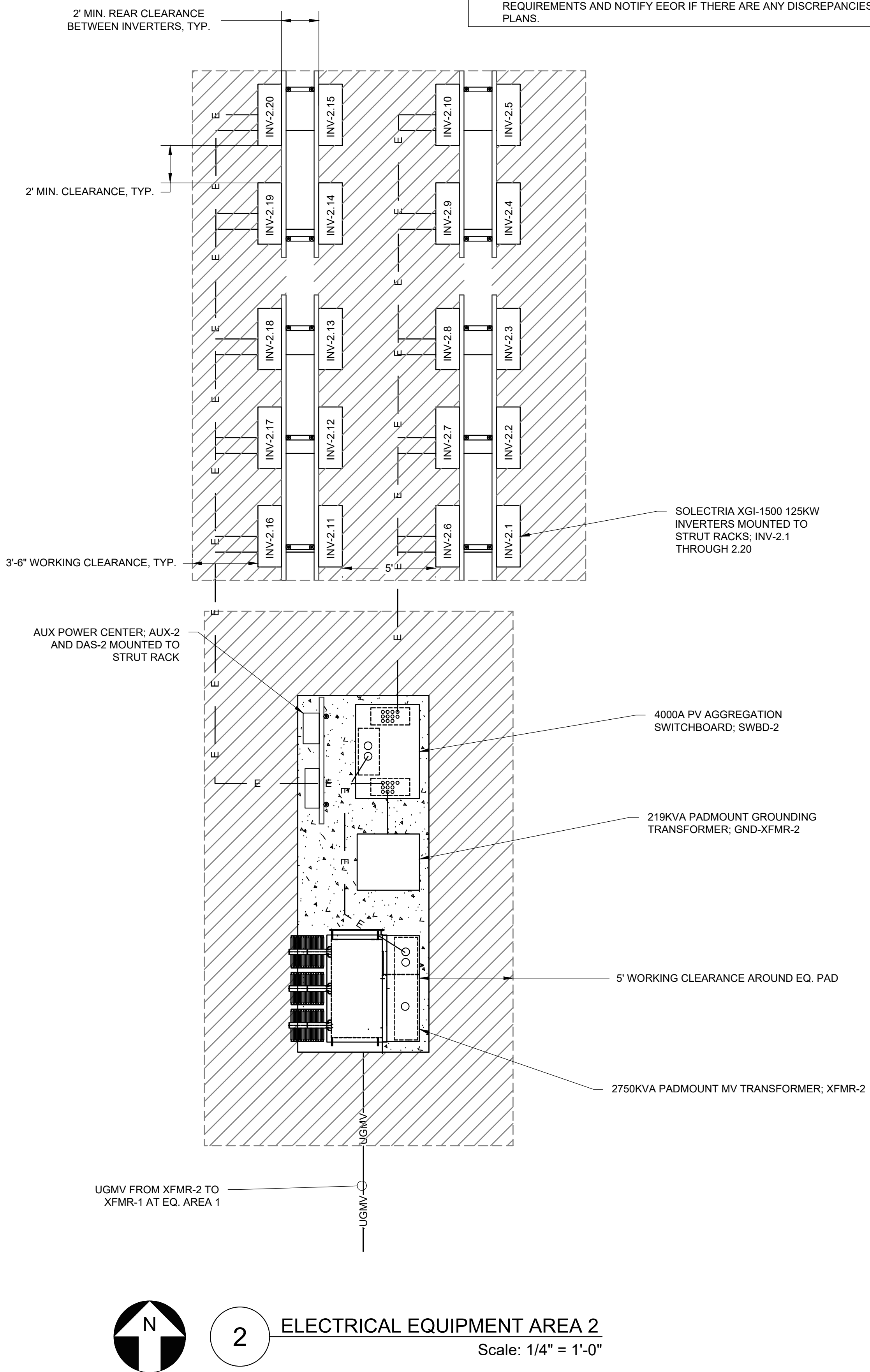
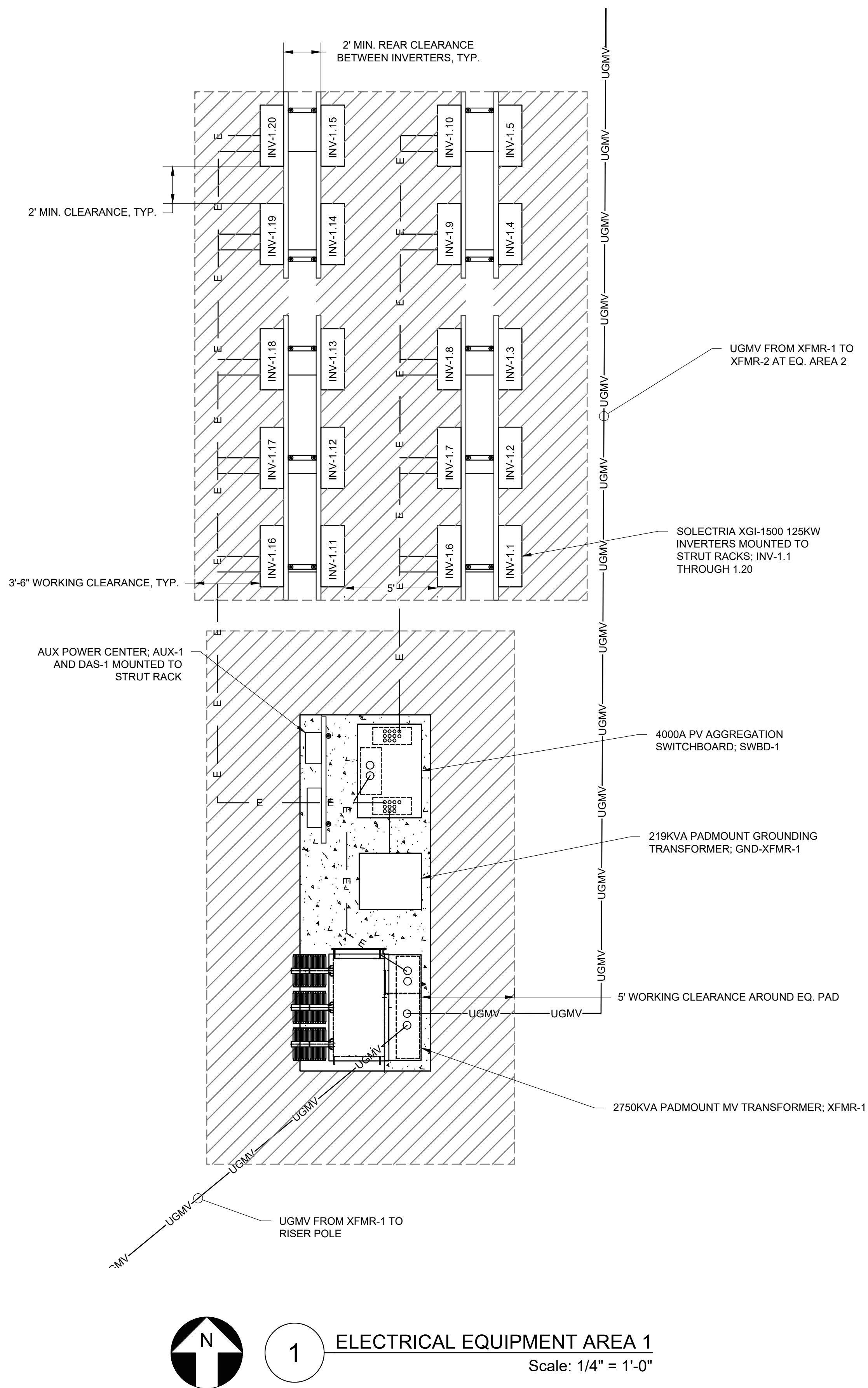
LINE IS 1"
AT FULL SIZE
IF NOT 1"
SCALE ACCORDINGLY

SHEET SIZE:
24" x 36"

SHEET TITLE:

ELECTRICAL
EQUIPMENT AREA

DRAWING NO.
E-120

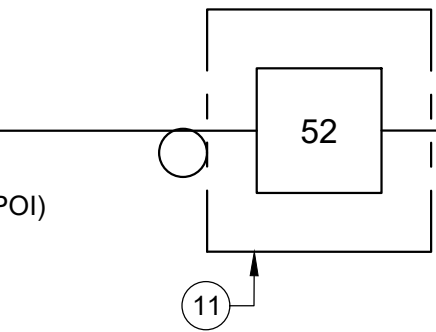


PRINTED: 05/22/26 FILE LOCATION: G:\Shared drives\SR-Clients\Greenskies\Projects - Greenskies\Ellington West\CAD\E-301_SINGLE LINE DIAGRAM.dwg

PV FAULT CURRENT CONTRIBUTION
MAX. 3 ϕ FAULT CONTRIBUTION LL, RMS, 3 CYCLE PER INVERTER: 144A
MAX. 3 ϕ FAULT CONTRIBUTION FROM ALL INVERTERS: 5,760A
MAX. SHORT CIRCUIT CONTRIBUTION FROM INVERTERS DOES NOT EXCEED 1.2 PU.

EXISTING UTILITY 23KV DISTRIBUTION CIRCUIT

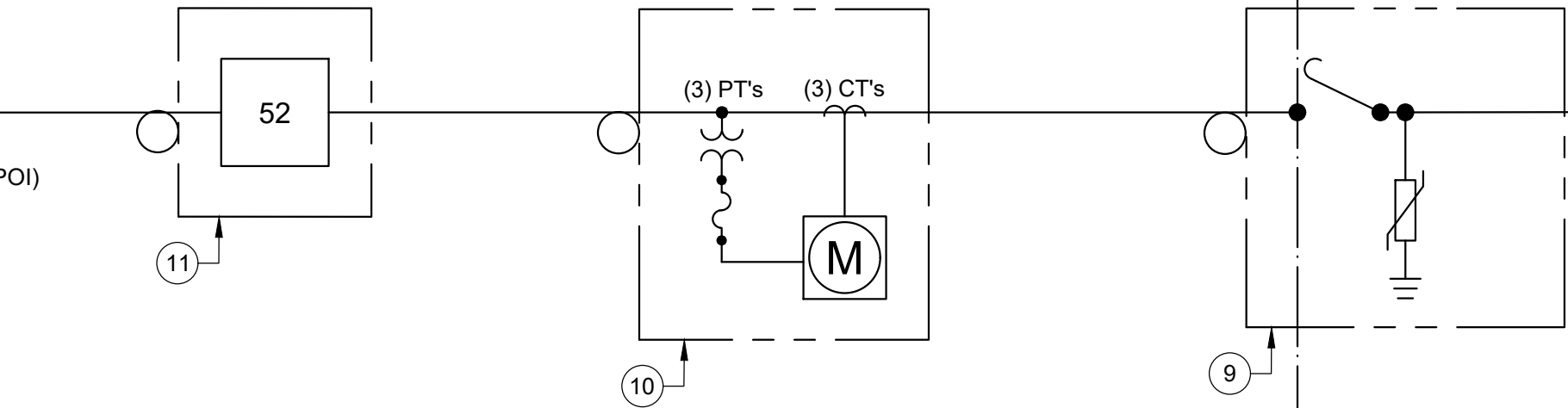
POINT OF INTERCONNECTION (POI)
@ (E) UTILITY POLE# UP/34178
41.9347, -72.4020



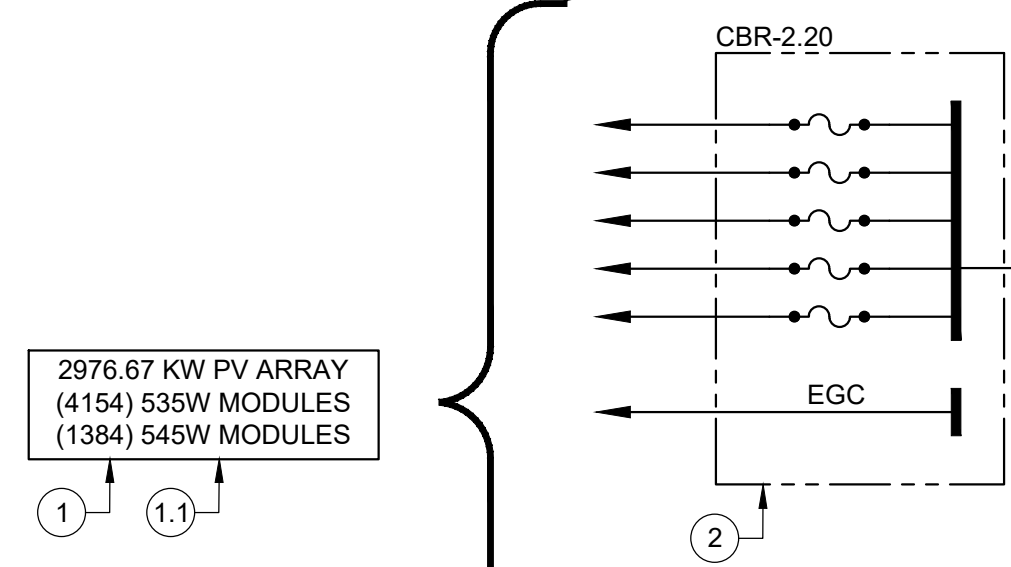
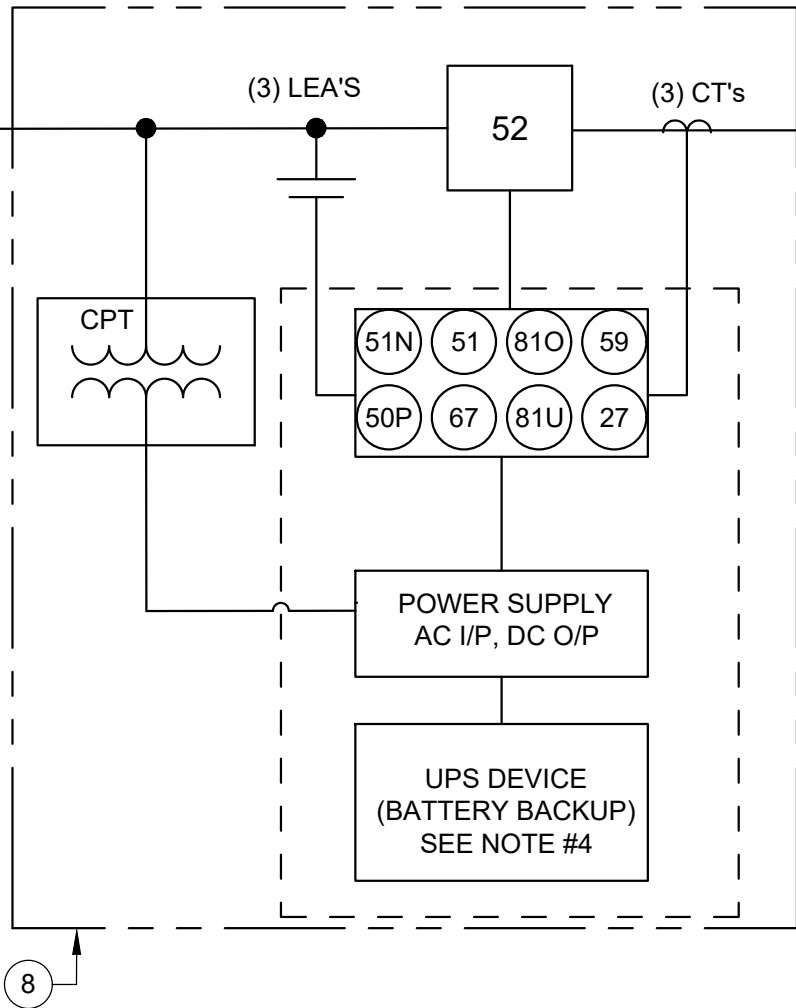
POINT OF COMMON COUPLING (POCC)

UTILITY'S SCOPE OF WORK
(TBD AFTER INTERCONNECTION AGREEMENT)

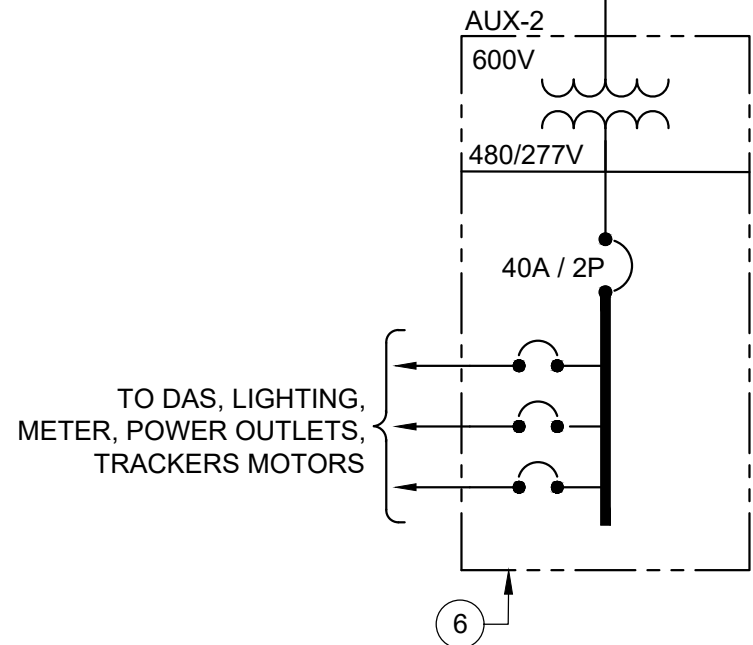
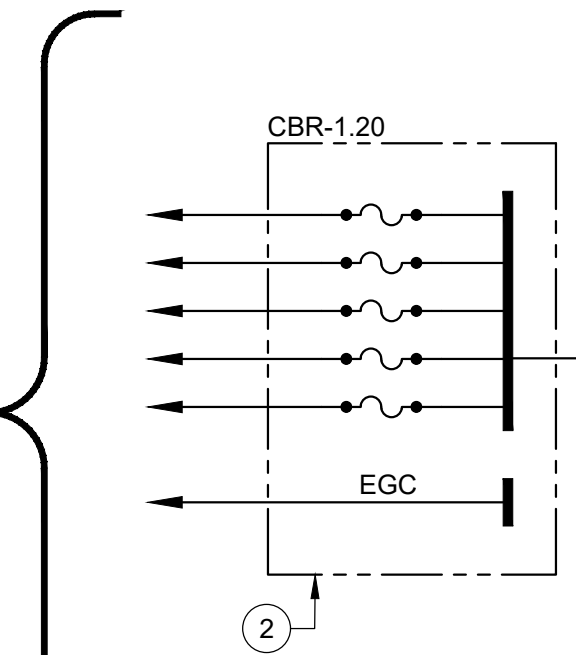
CUSTOMER SCOPE OF WORK



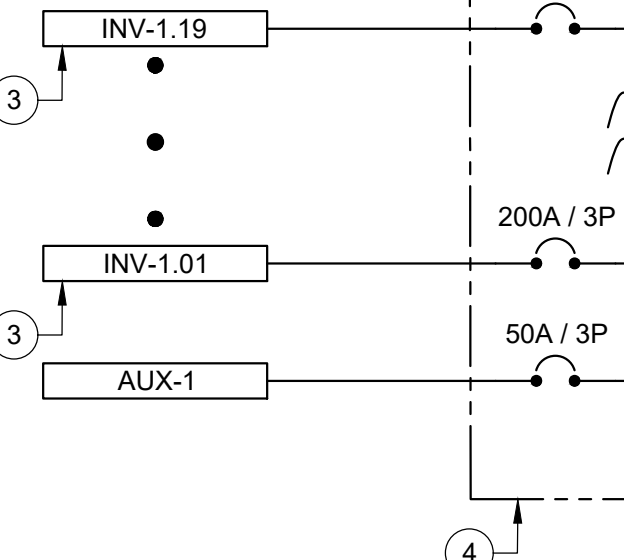
(3) 1/0 AAC, 25KV, (1) 1/0 AAC NEUTRAL
OVERHEAD WIRE
FROM RISER POLE TO POI, ~310'



2,976.68 KW PV ARRAY
(4153) 535W MODULES
(1385) 545W MODULES

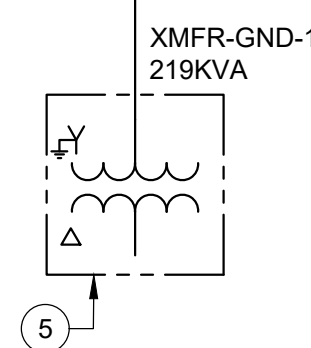


INV-1.20 (TYP. OF 20)
125KW/137.5KVA
 $I_{MAX} = 120A$, TYP.



INV-1.19
INV-1.01
AUX-1

SWBD-1
4,000A
200A / 3P
200A / 3P
200A / 3P
50A / 3P
300A / 3P
AUX



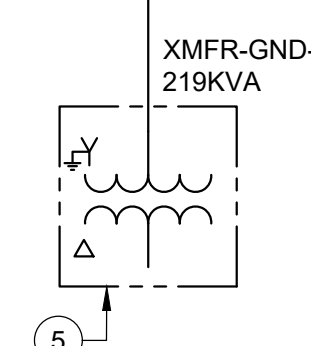
XMFR-GND-1
219KVA

$I_{MAX} = 2400A$ | 2500KW | 2750kVA

4000A / 3P
LSIGA
TRIP
GFR

200A / 3P
200A / 3P
200A / 3P
50A / 3P
300A / 3P
AUX

SWBD-2
4,000A
200A / 3P
200A / 3P
20A / 3P
300A / 3P
AUX

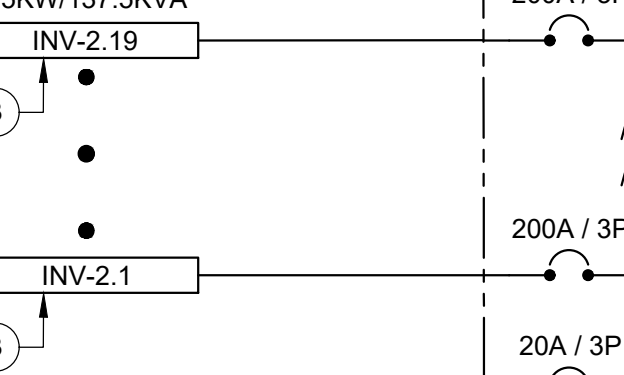


XMFR-GND-2
219KVA

$I_{MAX} = 2399.04A$ | 2499kW | 2750kVA

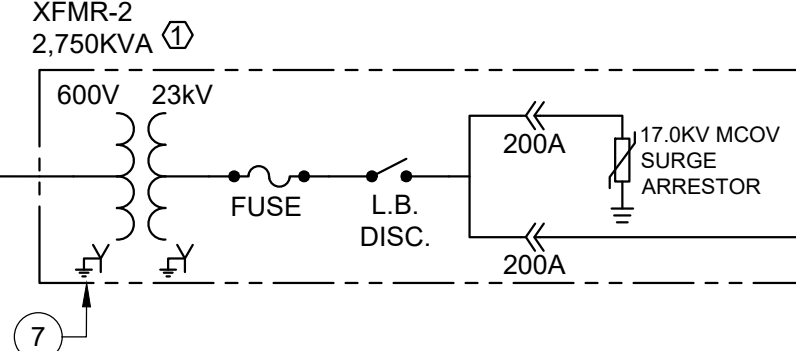
4000A / 3P
LSIGA
TRIP
GFR

INV-2.19 (TYP. OF 19)
125KW/137.5KVA
 $I_{MAX} = 119A$, TYP.



INV-2.1

SWBD-2
4,000A
200A / 3P
200A / 3P
20A / 3P
300A / 3P
AUX



XFMR-2
2,750KVA
600V 23KV
FUSE
L.B. DISC.
200A
17.0KV MCOV
SURGE ARRESTOR

(3) 1/0 AL, 25KV, XLPE, MV-105, 1/3
CONCENTRIC NEUTRAL POWER
CABLE IN 5" CONDUIT, ~180'

(3) 1/0 AL, 25KV, XLPE, MV-105, 1/3
CONCENTRIC NEUTRAL POWER
CABLE IN 5" CONDUIT, ~1510'

- UTILITY INTERCONNECTION NOTES**
- CUSTOMER ELECTRICAL EQUIPMENT WILL BE SERVICE-ENTRANCE RATED AS IS REQUIRED BY THE LATEST EDITION OF THE NATIONAL ELECTRICAL CODE (NEC).
 - TRANSFORMER PRIMARY NEUTRAL BUSHING TO BE FULLY INSULATED.
 - DG SYSTEM WILL HAVE A 5-MINUTE HEALTHY GRID RECONNECT FEATURE PROGRAMMED INTO THE RECLOSER. THIS WILL BE PROGRAMMED INTO THE RECLOSER TO DEFEAT THE CLOSE BUTTON AND BLOCK CLOSE UNTIL THE 5 MINUTE TIMER HAS COMPLETED. SETTINGS WILL BE PER IEEE 1547 SECTION 4.2.6 FOR 5 MINUTES. VOLTAGES WILL BE WITHIN ANSI C84.1 TABLE 1, RANGE B 95-105% (6.84-7.56KV ON 7.2KVA BASE) AND FREQUENCY WILL BE WITHIN 59.5-60.5HZ. THE 5 MINUTE TIME INTERVAL WILL RESTART IF VOLTAGE OR FREQUENCY FALLS OUT OF THIS WINDOW.
 - RELAY TO BE PROVIDED WITH 8 HOUR BATTERY BACKUP. FAIL-SAFE HARDWARE ALARM (HALARM) TO BE PROGRAMMED INTO RELAY WITH MAXIMUM 2.0 SEC DELAY. SWITCHGEAR TO BE LISTED AS SERVICE ENTRANCE RATED PER NEC
 - PROTECTIVE RELAY ALARM CIRCUIT TO BE WIRED OR PROGRAMMED TO TRIP SWITCH FOR REDUNDANCY PER UTILITY REQUIREMENTS. FOR SEL RELAY THE HALARM WORD BIT IS USED TO TRIP (AND BLOCK CLOSE) ON LOSS OF DC POWER. BTFAIL IS USED FOR BATTERY FAILURE. LOSS OF 120VAC POWER TO THE RELAY WILL TRIP AND BLOCK/CLOSE. TRIP WILL BE IN LESS THAN 2.0 SECONDS.

SHEET NOTES

① POWER FACTOR OF THE INVERTERS TO BE TUNED DOWN SO AS TO NOT EXCEED THE 2.750KVA RATING OF EACH TRANSFORMER.

*PROPOSED INVERTER INTERNAL CONTROL SETTINGS IN GRID-TIED MODE: (600V NOMINAL - 346V BASE)

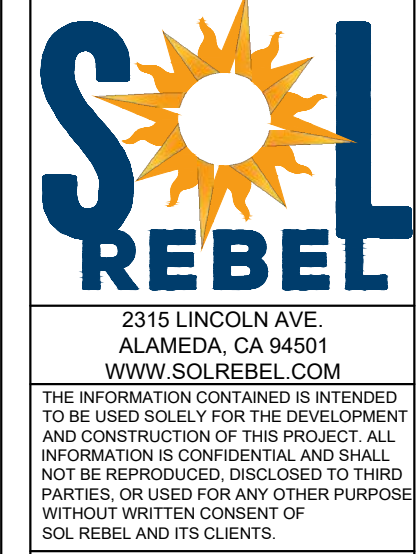
DEVICE	PICKUP	TIME DELAY
27-1	50% (173V)	66 CYC (1.1 SEC)
27-2	88% (304V)	120 CYC (2.0 SEC)
59-1	110% (381V)	120 CYC (2.0 SEC)
59-2	120% (415V)	10 CYC (0.16 SEC)
81U-2	56.5 HZ	10 CYC (0.16 SEC)
81U-1	58.5 HZ	18,000 CYC (300 SEC)
81O-1	61.2 HZ	18,000 CYC (300 SEC)
81O-2	62.0 HZ	10 CYC (0.16 SEC)

SETTINGS ARE BASED ON UTILITY RIDE-THROUGH REQUIREMENTS.

PROPOSED 651R RELAY SETTINGS - EVERSOURCE

DEVICE	PICKUP	DELAY SETTING	TOTAL CLEAR
27-2	50% (60V)	63 CYC (1.05 SEC)	66 CYC (1.1 SEC)
27-1	88% (105.6V)	177 CYC (2.95 SEC)	180 CYC (3.00 SEC)
59-1	110% (132V)	57 CYC (0.95 SEC)	120 CYC (2.00 SEC)
59-2	120% (144V)	7 CYC (0.12 SEC)	9.6 CYC (.16 SEC)
79-UV	95% (114V)	17,997 CYC (299.95 SEC)	18,000 CYC (300 SEC)
79-OV	105% (126V)	17,997 CYC (299.95 SEC)	18,000 CYC (300 SEC)
79-UF	59.5 HZ	17,997 CYC (299.95 SEC)	18,000 CYC (300 SEC)
79-OF	60.5 HZ	17,997 CYC (299.95 SEC)	18,000 CYC (300 SEC)
81U-2	56.5 HZ	7 CYC (0.12 SEC)	9.6 CYC (.16 SEC)
81U-1	58.5 HZ	17,997 CYC (2.95 SEC)	18,000 CYC (300 SEC)
81O-1	61.2 HZ	17,997 CYC (2.95 SEC)	18,000 CYC (300 SEC)
81O-2	62.0 HZ	7 CYC (0.12 SEC)	9.6 CYC (.16 SEC)
59N	17% (20.4V)	117 CYC (1.95 SEC)	120 CYC (2 SEC)
51P	150%	2.0TD U4	
50P	12000%		3 CYC (.05 SEC)
51G	20%	2.0TD U4	
50G	100%		3 CYC (.05 SEC)

REF#	QTY.	DESCRIPTION
1	8307	LONGI HI-MO5 LR5-72HBD-535M PV MODULE; 535W
1.1	2769	LONGI HI-MO5 LR5-72HBD-545M PV MODULE; 545W
2	40	COMBINER BOX; 1500V RATED
3	39	SOLECTRIA YASAKAWA XGI 1500-125/150 INVERTER; 3 ϕ , 600V, 125KW / SET TO 137.5 KVA MAX
3.1	1	SOLECTRIA YASAKAWA XGI 1500-125/150 INVERTER; 3 ϕ , 600V, SET TO 124KW MAX / SET TO 137.5 KVA MAX
4	2	SWITCHBOARD; 4000A, 600V, 3 ϕ , 4W, NEMA 3R, KAIC RATING TBD
5	2	GROUNDING TRANSFORMER; 600V WYE-GROUND TO 600V DELTA, 219KVA, 0.665 OHMS, X/R=4, 1128A 3S WITHSTAND RATING
6	2	POWER CENTER WITH 30KVA TRANSFORMER & AUX. PANELBOARD; 1 ϕ , 3W, 600V TO 120/240V
7	2	2.750 KVA PADMOUNT TRANSFORMER; 23KV GROUNDED WYE TO 600V GROUNDED WYE; 3 ϕ , Z=5.75%, X/R=10.5
8	1	CUSTOMER-OWNED RISER POLE WITH: POLE-MOUNTED RECLOSER WITH SEL 651 RELAY; 3 ϕ , 25KV, 200A, 95KV BIL
9	1	CUSTOMER-OWNED POLE WITH: LOAD BREAK DISCONNECT SWITCH; 25KV MAIN GENERATOR DISCONNECT, GOAB SWITCH, 200A, 95KV BIL, VERTICAL, GROUP-OPERATED, VISIBLE OPEN, LOCKABLE, 24/7 UTILITY ACCESSIBLE, 17.0KV MCOV SURGE ARRESTOR
10	1	UTILITY OWNED POLE WITH: METER
11	1	UTILITY OWNED POLE WITH: RECLOSER



2315 LINCOLN AVE.
ALAMEDA, CA 94501
WWW.SOLREBEL.COM

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**ELLINGTON WEST
PV POWER SYSTEM**
13 SCHOOLHOUSE ROAD
ELLINGTON, CT 06029

POCC/POI COORDINATES:
41.9347, -72.4020

REV.#	DESCRIPTION	DATE	DRAWN BY	CHECKED BY
A	30% SET	05/22/26	SA	KRB

LINE IS 1"
AT FULL SIZE
IF NOT 1"
SCALE ACCORDINGLY

SHEET SIZE:
24" x 36"

SHEET TITLE:
**SINGLE LINE
DIAGRAM**

DRAWING NO.
E-301

3P, 3W, 3PHASE, 3W, 3PHASE

Yaskawa Solectria Solar 1-978-683-9700 | Email: sales@solectria.com | solectria.com
Document No. FLXGI1500.01 | 05/07/2025 | © 2021 Yaskawa America, Inc.

Engineered to reduce or eliminate grading, OmniTrack® maintains natural terrain. This leads to far less ground disturbance, which preserves natural water flow and protects the surrounding land from erosion.

Specifications included in this datasheet are subject to change without notice. LONGi reserves the right of final interpretation. (20220815/16)

IT'S PERSONAL

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STRUCTURAL & MECHANICAL FEATURES/SPECIFICATION		CONTROL SYSTEM DETAILS	
Tracker Type	Horizontal single axis (1 module in portrait)	Baseline Solar Tracking Method	SANDIA's Ephemeris Model
Ground Coverage Ratio (GCR)	Site configurable. Typical: 28-45%	Control Electronics	SmarTrack Controller Site Data Controller 6X Motor Controllers
Linked Rows per Drive Motor	Up to 32	Communications	MODBUS TCP
Drive Type	Rotating gear drive connected by drivelines (no driveline or bearing lubrication required)	Backtracking	Yes (Optional terrain adaptive backtracking with SmarTrack)
Array Height	Torque Tube Elevation: 54" standard, adjustable (48" min height above grade)	Diffuse Light Response	Optional with SmarTrack
Tracking Range of Motion	+/- 52°	Night-time Slow	Yes (configurable)
Terrain Flexibility (N-S)	Up to 8.5° standard and up to 2° slope change post-to-post as design limit (Installation tolerances allow for >2° slope change)	Tracking Accuracy	+/- .2°
Terrain Flexibility (E-W)	Up to 30° combined angle	Motor Type	2HP, 3 Phase, 480V AC
Wind Protection	Autonomous passive mechanical system No sensors or grid power required to activate	INSTALLATION, OPERATION, & MAINTENANCE	
Max Wind Speed	Max 3-second gust wind speed of 140 mph (225 km/h) per ASCE 7-22 (Risk Category II). For coastal or hurricane-prone regions, refer to ASCE 7-22 wind speed maps to determine site-specific gust values	Annual Power Consumption (kWh per 1 MW)	Approximately 60 kWh per MW
Operating Temp Range	Standard: -4°F to 140°F (-20°C to 60°C) Optional: -40°F to 104°F (-40°C to 40°C)	PE Stranded Structural Calculations & Drawings	Yes
Materials	Pre-galv steel, HDG steel and aluminum structural members, as required	On-site Training and System Commissioning	Yes
MODULE COMPATIBILITY			
c-Si Modules per Row (1500V DC)	Typical: 84-112 Maximum: 120	Connection	No drilling, cutting or welding on-site or in-field fabrication
First Solar Modules per Row (1500V DC)	Series 6 Plus: 84-108 Series 7: 96-114	Scheduled Maintenance	None required
Modules Supported	Most commercially available, including framed or frameless crystalline, thin film, bifacial, and back rails	Module Cleaning Compatibility	Robotic, Tractor, Manual
Module Attachment	Single fastener, high-speed mounting clamps with integrated grounding. Traditional rails for crystalline in landscape, custom racking for thin film and frameless crystalline and bifacial per manufacturer specs		

ARRAY Tech, Inc. reserves the right to make changes without notice

AOS-99-DS-0019 - REV 4 - 11MAY2026

E-500