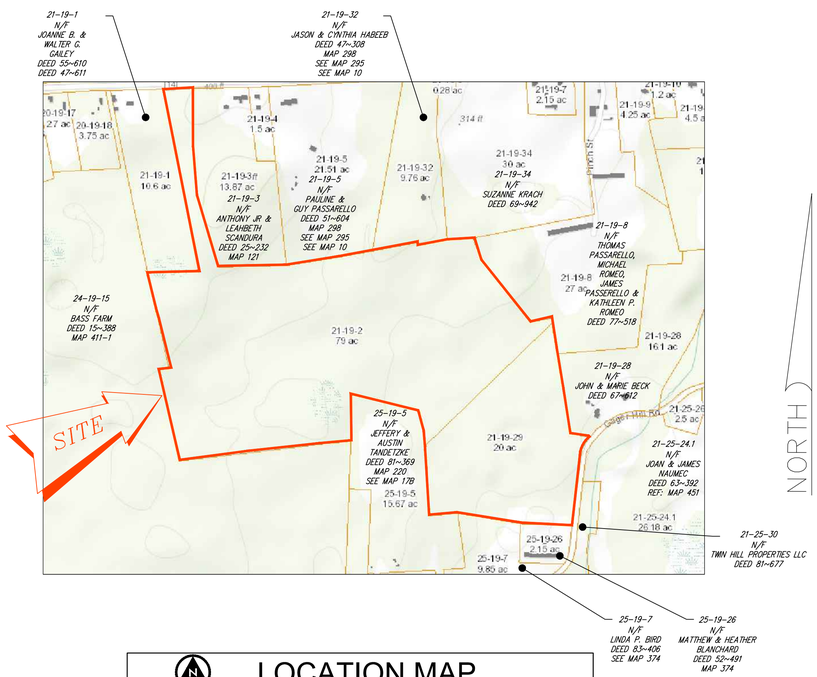
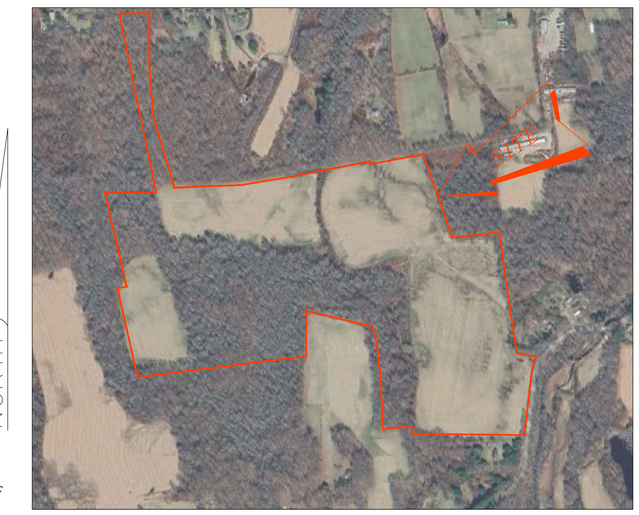
GREENSKIES CLEAN ENERGY
SCOTLAND SOLAR DEVELOPMENT

CIVIL DESIGN PLANS
GAGER HILL ROAD
SCOTLAND, CONNECTICUT



LOCATION MAP



SITE MAP
NTS

INDEX OF DRAWINGS

	DESCRIPTION
CIVIL DESIGN PLANS	
C101	EXISTING CONDITIONS PLAN, GENERAL NOTES, LEGEND & ABBREVIATIONS
C102	SOIL EROSION SEDIMENT CONTROL PLAN
C103	PROPOSED OVERALL LAYOUT PLAN
C104	PROPOSED LAYOUT PLAN 1
C105	PROPOSED LAYOUT PLAN 2
C106	PROPOSED LAYOUT PLAN 3
C107	PROPOSED LAYOUT PLAN 4
C108	PROPOSED OVERALL DRAINAGE PLAN
C109	PROPOSED DRAINAGE PLAN 1
C110	PROPOSED DRAINAGE PLAN 2
C111	PROPOSED DRAINAGE PLAN 3
C112	PROPOSED DRAINAGE PLAN 4
C113	SESC DETAILS & NOTES
C114	CONSTRUCTION DETAILS & NOTES
C115	CONSTRUCTION DETAILS & NOTES
C116	SWEPT PATH ANALYSIS
LANDSCAPE PLANS	
L101	PROPOSED LANDSCAPE PLAN

REFERENCE NOTE:

1. AERIAL IMAGERY OBTAINED FROM GOOGLE EARTH.
2. PARCEL MAP OBTAINED FROM TOWN OF SCOTLAND GEOGRAPHIC INFORMATION SYSTEM (GIS).

JANUARY 2026
REVISED MARCH 2026

ISSUED FOR CONSTRUCTION

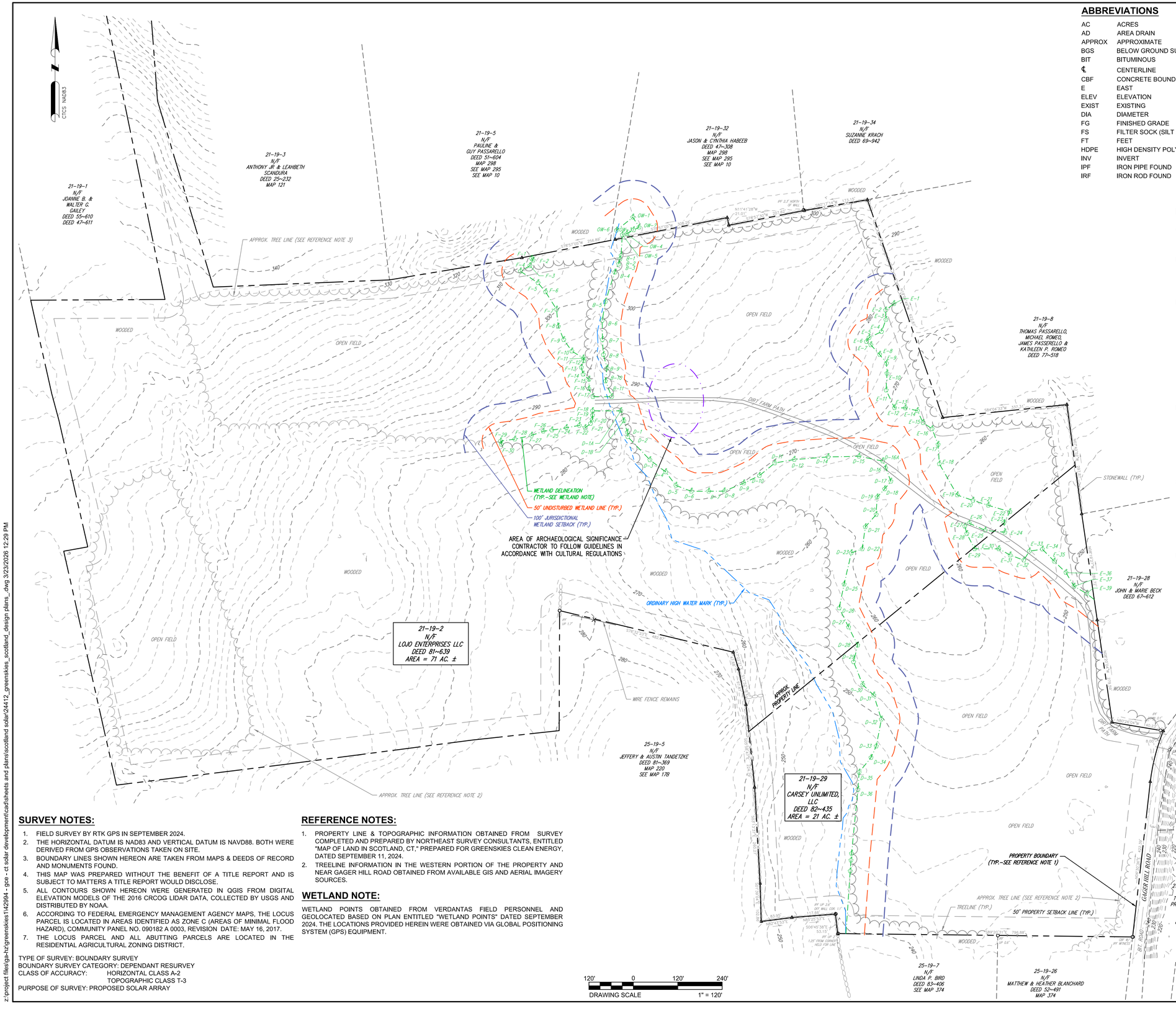
PREPARED BY:

STATE OF CONNECTICUT ERIC DENARDO 36447 LICENSED PROFESSIONAL ENGINEER

verdantas

1005 MAIN STREET, SUITE 8120
PAWTUCKET, RI 02860
TEL. 401.728.6860

Project No. 24412



ABBREVIATIONS

AC	ACRES	L	LENGTH	SL	SLOPE
AD	AREA DRAIN	LF	LINEAR FEET	SB	SEDIMENT BASIN
APPROX	APPROXIMATE	LOD	LIMIT OF DISTURBANCE	SD	STORM DRAIN
BGS	BELOW GROUND SURFACE	MAX	MAXIMUM	SW	SWALE
BIT	BITUMINOUS	MIN	MINIMUM	TP	TEST PIT
℄	CENTERLINE	N	NORTH	TYP	TYPICAL
CBF	CONCRETE BOUND FOUND	N/F	NOW OR FORMERLY	UP	UTILITY POLE
E	EAST	NAD83	NORTH AMERICAN DATUM OF 1983	W	WEST
ELEV	ELEVATION	NAVD88	NORTH AMERICAN VERTICAL DATUM OF 1988	W/	WITH
EXIST	EXISTING	NTS	NOT TO SCALE		
DIA	DIAMETER	OHW	OVERHEAD WIRE(S)		
FG	FINISHED GRADE	PC	POINT OF CURVATURE		
FS	FILTER SOCK (SILT SOCK)	PROP	PROPOSED		
FT	FEET	PT	POINT OF TANGENCY		
HDPE	HIGH DENSITY POLYETHYLENE	PVC	POLYVINYL CHLORIDE		
INV	INVERT	R	RADIUS		
IPF	IRON PIPE FOUND	S	SOUTH		
IRF	IRON ROD FOUND				

LEGEND

	EXISTING	PROPOSED
CONTOURS		
MAJOR	260	260
MINOR		258
EROSION & SEDIMENT CONTROL		
LIMIT OF DISTURBANCE		LOD
SILT FENCE		
SILT SOCK		FS12 FS12
PROPERTY INFORMATION		
50-FOOT PROPERTY LINE SETBACK		
ABUTTER PROPERTY LINE (APPROXIMATE)		
ASSESSOR'S IDENTIFICATION	21-19-2	
CALCULATED POINT		
CONCRETE BOUND FOUND	CBF	
SCS SOILS BOUNDARY	50A 70A	
IRON PIPE FOUND	IPF	
IRON ROD FOUND	IRF	
LOCUS PROPERTY LINE		
RESOURCE AREAS		
50-FOOT UNDISTURBED WETLAND BUFFER		
100-FOOT WETLAND JURISDICTIONAL LINE		
CULTURAL RESOURCE BUFFER		
ORDINARY HIGH WATER MARK		
WETLAND DELINEATION		
WETLAND FLAG & IDENTIFICATION	D-35	
SITE FEATURES		
AGRICULTURAL FENCE		
DRIVEWAY CENTERLINE & STATION		1+00
STONEWALL		
TREELINE/VEGETATION		
TREELINE (APPROXIMATE)		
WIRE FENCE REMAINS	X	
UTILITIES		
AREA DRAIN		
COMMUNICATIONS SERVICE		
GUY WIRE ANCHOR		
OVERHEAD WIRE(S)	OH	OE OE
STORM DRAIN PIPE		SD SD
TEST PIT	TP-#	
UNDERDRAIN PIPE		
UNDERGROUND ELECTRIC SERVICE		E
UNDERGROUND DC CABLES		DC
UTILITY POLE	UP/338	

SURVEY NOTES:

1. FIELD SURVEY BY RTK GPS IN SEPTEMBER 2024.
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 2016 CRCOG 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 C (AREAS OF MINIMAL FLOOD HAZARD), COMMUNITY PANEL NO. 090182 A 0003, REVISION DATE: MAY 16, 2017.
7. THE LOCUS PARCEL AND ALL ABUTTING PARCELS ARE LOCATED IN THE RESIDENTIAL AGRICULTURAL 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 "MAP OF LAND IN SCOTLAND, CT," PREPARED FOR GREENSKIES CLEAN ENERGY, DATED SEPTEMBER 11, 2024.
2. TREELINE INFORMATION IN THE WESTERN PORTION OF THE PROPERTY AND NEAR GAGER HILL ROAD OBTAINED FROM AVAILABLE GIS AND AERIAL IMAGERY SOURCES.

WETLAND NOTE:

WETLAND POINTS OBTAINED FROM VERDANTAS FIELD PERSONNEL AND GEOLOCATED BASED ON PLAN ENTITLED "WETLAND POINTS" DATED SEPTEMBER 2024. THE LOCATIONS PROVIDED HEREIN WERE OBTAINED VIA GLOBAL POSITIONING SYSTEM (GPS) EQUIPMENT.

verdantas
1005 MAIN STREET, SUITE NO.: 8120
PAWTUCKET, RI 02860

PROFESSIONAL ENGINEER NO.: 36447
STATE OF CONNECTICUT · ERIC DENARDO · 36447 · LICENSED PROFESSIONAL ENGINEER
STATE: CONNECTICUT

DESIGNED BY	DRAWN BY	CHECKED BY	PROJECT NO.
ED/JMB	ED/JMB	ED	24412

No.	REVISION	CHK'D BY	DATE
1	GCE COMMENTS	ED	3/20/26

SCOTLAND~WINDHAM COUNTY~CONNECTICUT

EXISTING CONDITIONS PLAN, GENERAL NOTES, LEGEND & ABBREVIATIONS SOLAR ARRAY DEVELOPMENT

GREENSKIES CLEAN ENERGY
19419 GAGER HILL ROAD

APPLICATION NO.

DATE JANUARY 2026

SCALE 1"=120'

SHEET C101

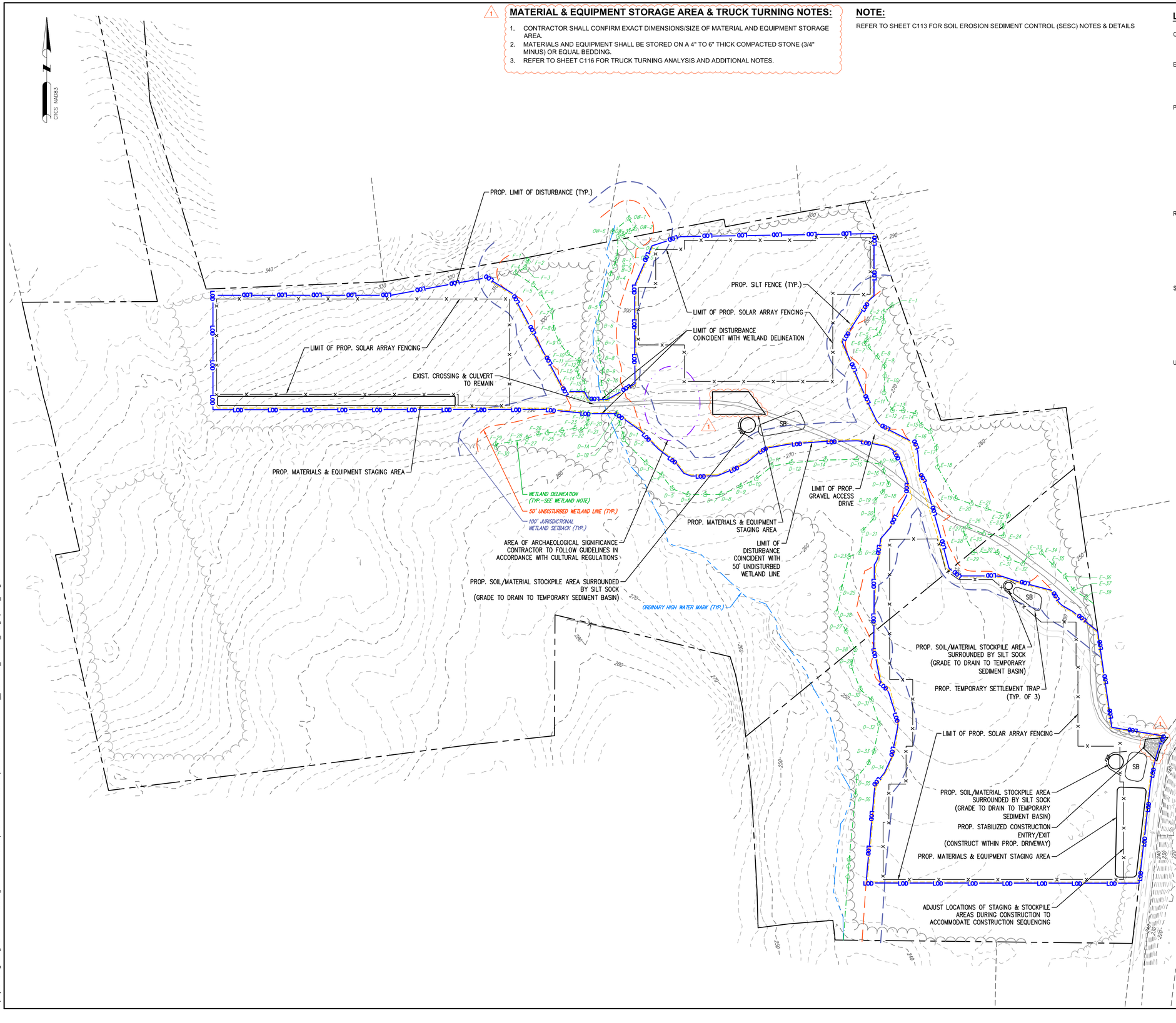
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MATERIAL & EQUIPMENT STORAGE AREA & TRUCK TURNING NOTES:

1. CONTRACTOR SHALL CONFIRM EXACT DIMENSIONS/SIZE OF MATERIAL AND EQUIPMENT STORAGE AREA.
2. MATERIALS AND EQUIPMENT SHALL BE STORED ON A 4" TO 6" THICK COMPACTED STONE (3/4" MINUS) OR EQUAL BEDDING.
3. REFER TO SHEET C116 FOR TRUCK TURNING ANALYSIS AND ADDITIONAL NOTES.

NOTE:

REFER TO SHEET C113 FOR SOIL EROSION SEDIMENT CONTROL (SESC) NOTES & DETAILS



LEGEND

	EXISTING	PROPOSED
CONTOURS		
MAJOR	260	260
MINOR		258
EROSION & SEDIMENT CONTROL		
LIMIT OF DISTURBANCE		LOD
SILT FENCE		
SILT SOCK		FS12
PROPERTY INFORMATION		
50-FOOT PROPERTY LINE SETBACK		
ABUTTER PROPERTY LINE (APPROXIMATE)		
ASSESSOR'S IDENTIFICATION	21-19-2	
CALCULATED POINT		
CONCRETE BOUND FOUND	CBF	
SCS SOILS BOUNDARY	50A / 701A	
IRON PIPE FOUND	IPF	
IRON ROD FOUND	IRF	
LOCUS PROPERTY LINE		
RESOURCE AREAS		
50-FOOT UNDISTURBED WETLAND BUFFER		
100-FOOT WETLAND JURISDICTIONAL LINE		
CULTURAL RESOURCE BUFFER		
ORDINARY HIGH WATER MARK		
WETLAND DELINEATION		
WETLAND FLAG & IDENTIFICATION	D-35	
SITE FEATURES		
AGRICULTURAL FENCE		
DRIVEWAY CENTERLINE & STATION		1+00
STONEWALL		
TREELINE/VEGETATION		
TREELINE (APPROXIMATE)		
WIRE FENCE REMAINS	X	
UTILITIES		
AREA DRAIN		
COMMUNICATIONS SERVICE		
GUY WIRE ANCHOR		
OVERHEAD WIRE(S)	OH	OE
STORM DRAIN PIPE		SD
TEST PIT	TP-#	
UNDERDRAIN PIPE		
UNDERGROUND ELECTRIC SERVICE		E
UNDERGROUND DC CABLES		DC
UTILITY POLE	UP/338	

120' 0 120' 240'
DRAWING SCALE 1" = 120'

verdantas
1005 MAIN STREET, SUITE NO.: 8120
PAWTUCKET, RI 02860

PROFESSIONAL ENGINEER NO.: 36447
STATE OF CONNECTICUT · ERIC DENARDO · 36447 · LICENSED PROFESSIONAL ENGINEER
STATE: CONNECTICUT

DESIGNED BY	DRAWN BY	CHECKED BY	PROJECT NO.
JMB	JMB	ED	24412

CHK'D BY	DATE
ED	3/20/26

No.	REVISION	CHK'D BY	DATE
1	GCE COMMENTS	ED	3/20/26

SCOTLAND–WINDHAM COUNTY–CONNECTICUT

SOIL EROSION SEDIMENT CONTROL PLAN
SOLAR ARRAY DEVELOPMENT
GREENSKIES CLEAN ENERGY
19419 GAGER HILL ROAD

APPLICATION NO.

DATE JANUARY 2026

SCALE 1"=120'

SHEET **C102**

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SURVEY NOTES:

1. FIELD SURVEY BY RTK GPS IN SEPTEMBER 2024.
2. THE HORIZONTAL DATUM IS NAD83 AND VERTICAL DATUM IS NAVD88. BOTH WERE DERIVED FROM GPS OBSERVATIONS TAKEN ON SITE.
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7. THE LOCUS PARCEL AND ALL ABUTTING PARCELS ARE LOCATED IN THE RESIDENTIAL AGRICULTURAL 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

LEGEND

	EXISTING	PROPOSED
CONTOURS		
MAJOR	260	260
MINOR		258
EROSION & SEDIMENT CONTROL		
LIMIT OF DISTURBANCE		LOD
SILT FENCE		
SILT SOCK		FS12 FS12
PROPERTY INFORMATION		
50-FOOT PROPERTY LINE SETBACK		
ABUTTER PROPERTY LINE (APPROXIMATE)		
ASSESSOR'S IDENTIFICATION	21-19-2	
CALCULATED POINT	△	
CONCRETE BOUND FOUND	CBF ⊡	
SCS SOILS BOUNDARY	50A 701A	
IRON PIPE FOUND	IPF ○	
IRON ROD FOUND	IRF ○	
LOCUS PROPERTY LINE		
RESOURCE AREAS		
50-FOOT UNDISTURBED WETLAND BUFFER		
100-FOOT WETLAND JURISDICTIONAL LINE		
CULTURAL RESOURCE BUFFER		
ORDINARY HIGH WATER MARK		
WETLAND DELINEATION		
WETLAND FLAG & IDENTIFICATION	D-35	
SITE FEATURES		
AGRICULTURAL FENCE		
DRIVEWAY CENTERLINE & STATION		1+00
STONEWALL		
TREELINE/VEGETATION		
TREELINE (APPROXIMATE)		
WIRE FENCE REMAINS	X	
UTILITIES		
AREA DRAIN		○
COMMUNICATIONS SERVICE	+	
GUY WIRE ANCHOR		
OVERHEAD WIRE(S)	OH	OE OE
STORM DRAIN PIPE		SD SD
TEST PIT	TP-#	
UNDERDRAIN PIPE		
UNDERGROUND ELECTRIC SERVICE		E
UNDERGROUND DC CABLES		DC
UTILITY POLE	UP/338	

OVERALL SYSTEM SUMMARY	
AC SYSTEM SIZE	5,363.280 KW
AC SYSTEM SIZE	4,625.000 KW
(QTY) MODULE TYPE 1	(5,122) LONGI LR5-72HBD-540M (DOMESTIC) 540W
(QTY) MODULE TYPE 2	(4,810) LONGI LR5-72HBD-540M (NON-DOMESTIC) 540W
(QTY) INVERTER TYPE 1	(37) XGI 1500-125/125-UL
TILT/AZIMUTH	SAT / 0°
UTILITY	EVERSOURCE CT

NOTE: REFER TO ELECTRICAL PLANS FOR ADDITIONAL DETAILS.

EXISTING FARM ROAD REPLACEMENT NOTE:

PER THE CONNECTICUT GENERAL PERMIT FOR THE DISCHARGE OF STORMWATER AND DEWATERING WASTEWATERS FROM CONSTRUCTION ACTIVITIES, APPENDIX I, SECTION (I) DESIGN AND CONSTRUCTION REQURIEMENTS (2)(a)(iii), "THERE SHALL BE AN UNDISTURBED BUFFER OF AT LEAST TEN (10) FEET BETWEEN ANY CONSTRUCTION ACTIVITY AT A SITE ASSOCIATED WITH AN ACCESS ROAD OR THE ELECTRICAL INTERCONNECTION NECESSARY FOR THE SOLAR ARRAY AND ANY WETLAND OR WATERS THAT, PRIOR TO OR AFTER CONSTRUCTION, IS LOCATED DOWNGRADIENT OF SUCH CONSTRUCTION ACTIVITY ("10-FOOT BUFFER"), EXCEPT IF THE ACCESS ROAD OR ELECTRICAL INTERCONNECTION PASSES BETWEEN TWO WETLAND OR WATERS AND THE UNDISTURBED BUFFER CANNOT BE ACHIEVED. ANY CROSSING THROUGH A WETLAND OR WATERS FOR AN ACCESS ROAD OR ELECTRICAL INTERCONNECTION IS EXEMPT FROM SUCH BUFFER REQUIREMENT."

THE PROPOSED ACCESS ROAD WILL BE CONSTRUCTED WITHIN THE EXISTING WETLAND CROSSING AREA AND WILL REPLACE THE EXISTING FARM ROAD. THE EXISTING CULVERT WILL REMAIN AND SHALL BE CLEANED AND ANY NECESSARY MAINTENANCE SHALL BE PERFORMED. THE CONTRACTOR SHALL COORDINATE ALL CULVERT WORK WITH THE CIVIL ENGINEER PRIOR TO CONSTRUCTION. IF DAMAGED DURING CONSTRUCTION, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE CIVIL ENGINEER TO DETERMINE THE APPROPRIATE REMEDIAL ACTION.

THE POST-DEVELOPMENT VOLUME AND PEAK DISCHARGE RATE OF STORMWATER RUNOFF TO THE WETLAND AREA AND SUBSEQUENTLY CONVEYED BY THE CULVERT WILL NOT BE INCREASED TO ENSURE THE CULVERT CAPACITY IS MAINTAINED OR IMPROVED FROM THE PRE-DEVELOPMENT CONDITION. REFER TO THE STORMWATER MANAGEMENT REPORT FOR ADDITIONAL INFORMATION.

GENERAL NOTES:

1. THE CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE WITH ELECTRICAL PLAN FOR FURTHER TECHNICAL SPECIFICATIONS & DETAILS OF THE PANEL AND INTERCONNECTION SYSTEM. THE CONTRACTOR SHALL VERIFY THE LOCATIONS & CONNECTIONS OF ALL ELECTRICAL AND COMMUNICATIONS SERVICES WITH THE ELECTRICAL PLAN.
2. THE CONTRACTOR SHALL BE RESPONSIBLE OR STAKING OF THE LIMIT OF DISTURBANCE PRIOR TO ANY CONSTRUCTION ACTIVITY. THE LIMITS OF DISTURBANCE SHOULD BE MARKED WITH ORANGE CONSTRUCTION FENCE BARRIERS WITH ACCOMPANYING SIGN.

REFERENCE NOTES:

1. PROPERTY LINE & TOPOGRAPHIC INFORMATION OBTAINED FROM SURVEY COMPLETED AND PREPARED BY NORTHEAST SURVEY CONSULTANTS, ENTITLED "MAP OF LAND IN SCOTLAND, CT," PREPARED FOR GREENSKIES CLEAN ENERGY, DATED SEPTEMBER 11, 2024.
2. TREELINE INFORMATION IN THE WESTERN PORTION OF THE PROPERTY AND NEAR GAGER HILL ROAD OBTAINED FROM AVAILABLE GIS AND AERIAL IMAGERY SOURCES.

DRAWING SCALE 1" = 120' (120' 0 120' 240')

verdantas
1005 MAIN STREET, SUITE NO.: 8120
PAWTUCKET, RI 02860

PROFESSIONAL ENGINEER NO.: 36447
STATE OF CONNECTICUT · ERIC DENARDO · 36447 · LICENSED PROFESSIONAL ENGINEER
STATE: CONNECTICUT

DESIGNED BY	DRAWN BY	CHECKED BY	PROJECT NO.
ED/JMB	ED/JMB	ED	24412

No.	REVISION	CK'D BY	DATE
1	GCE COMMENTS	ED	3/20/26

SCOTLAND–WINDHAM COUNTY–CONNECTICUT

PROPOSED OVERALL LAYOUT PLAN
SOLAR ARRAY DEVELOPMENT
GREENSKIES CLEAN ENERGY
19419 GAGER HILL ROAD

APPLICATION NO.
DATE JANUARY 2026
SCALE 1"=120'
SHEET **C103**

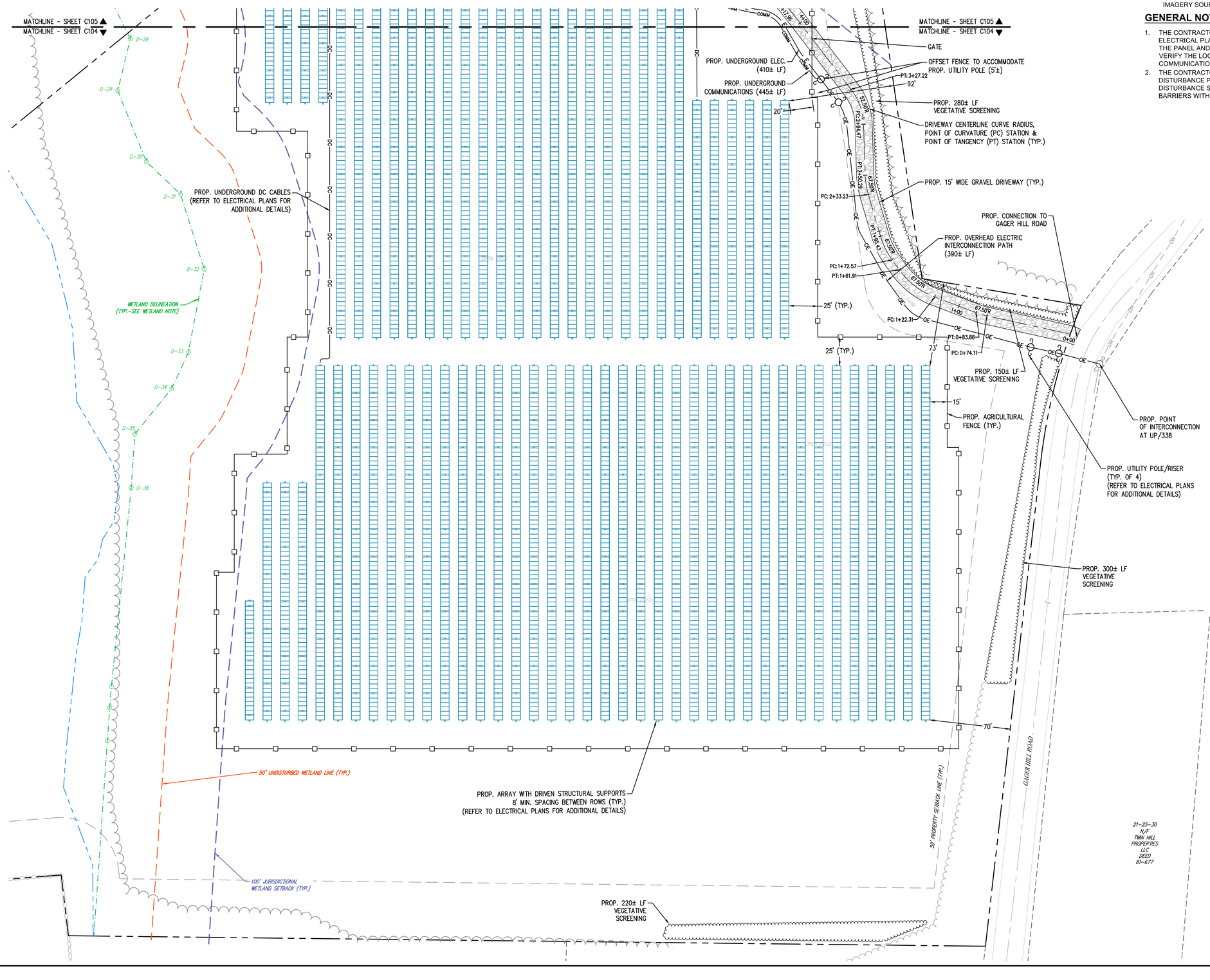
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REFERENCE NOTES:

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verdantas
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STATE: CONNECTICUT

DESIGNED BY	DRAWN BY	CHECKED BY	PROJECT NO.
ED/JMB	ED/JMB	ED	24412

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1	GCE COMMENTS	ED	3/20/26

SCOTLAND-WINDHAM COUNTY-CONNECTICUT

PROPOSED LAYOUT PLAN 1
SOLAR ARRAY DEVELOPMENT
GREENSKIES CLEAN ENERGY
19419 GAGER HILL ROAD

APPLICATION NO.

DATE JANUARY 2026

SCALE 1"=40'

SHEET **C104**

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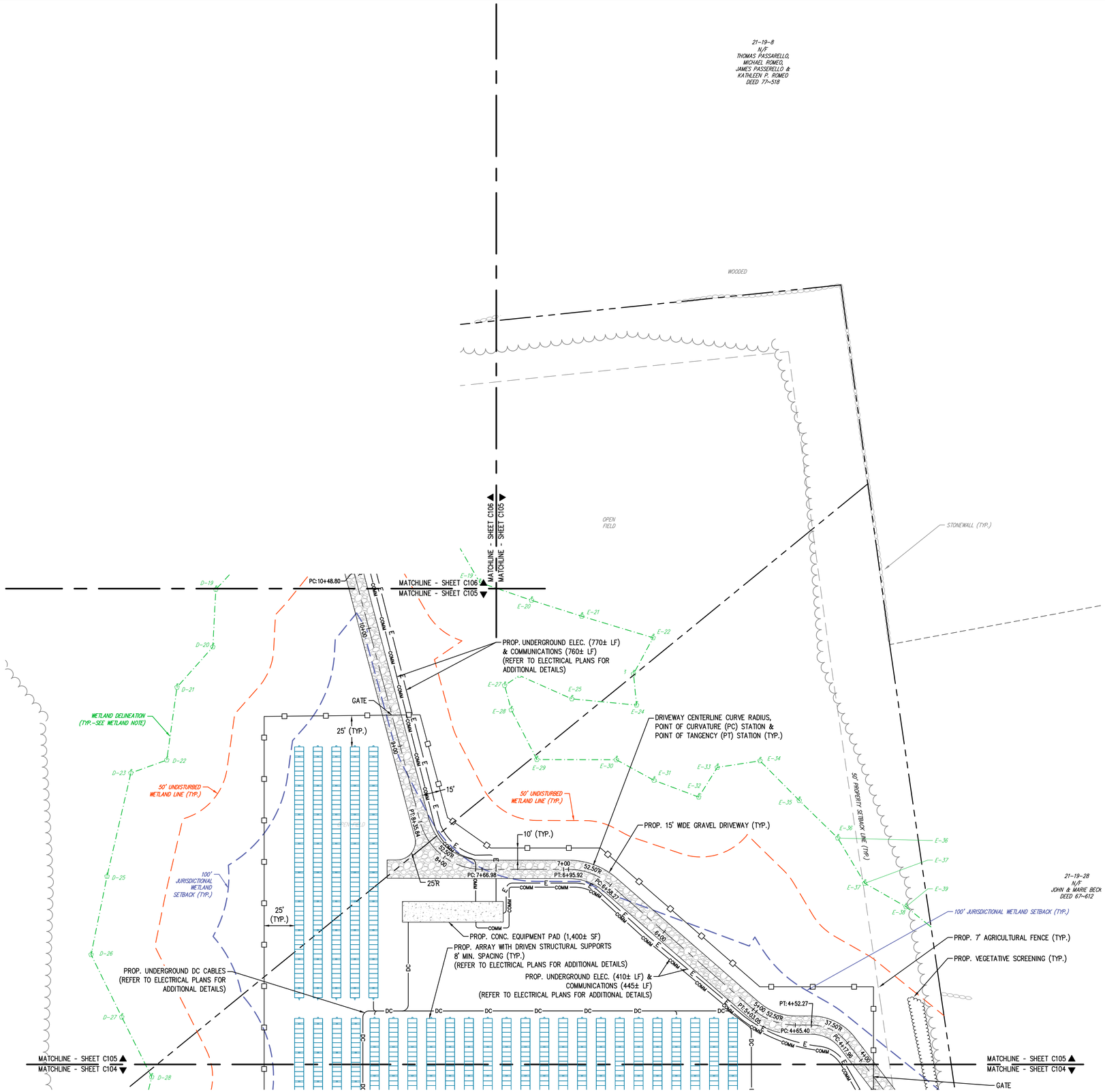
CTCS NAD83

REFERENCE NOTES:

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40' 0 40' 80'
DRAWING SCALE 1" = 40'

verdantas
1005 MAIN STREET, SUITE NO.: 8120
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STATE OF CONNECTICUT · ERIC DENARDO · 36447 · LICENSED PROFESSIONAL ENGINEER
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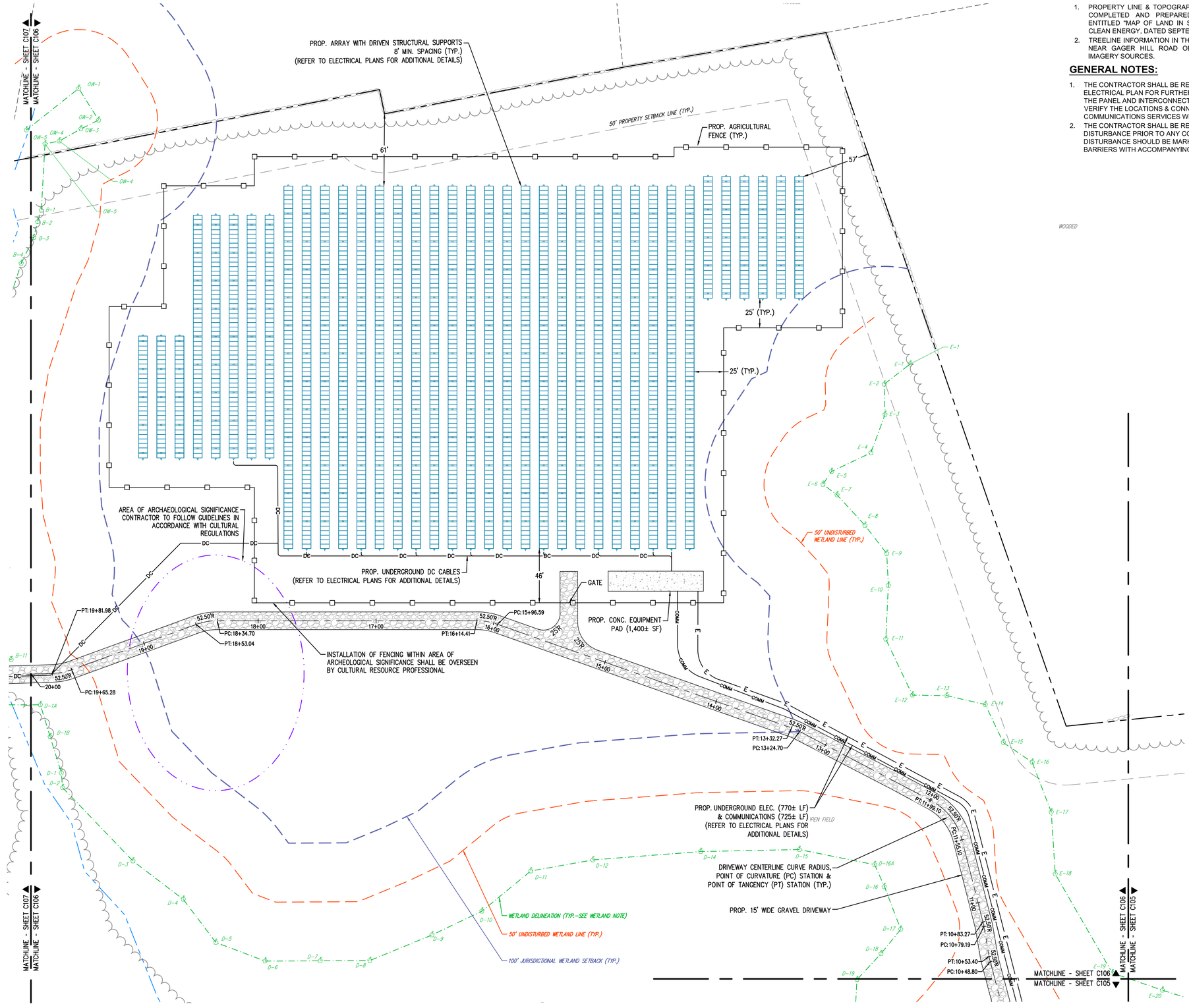
DESIGNED BY: ED/JMB
DRAWN BY: ED/JMB
CHECKED BY: ED
PROJECT NO.: 24412

SCOTLAND-WINDHAM COUNTY-CONNECTICUT

PROPOSED LAYOUT PLAN 2
SOLAR ARRAY DEVELOPMENT
GREENSKIES CLEAN ENERGY
19419 GAGER HILL ROAD

APPLICATION NO.
DATE: JANUARY 2026
SCALE: 1"=40'
SHEET: C105

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REFERENCE NOTES:

1. PROPERTY LINE & TOPOGRAPHIC INFORMATION OBTAINED FROM SURVEY COMPLETED AND PREPARED BY NORTHEAST SURVEY CONSULTANTS, ENTITLED "MAP OF LAND IN SCOTLAND, CT," PREPARED FOR GREENSKIES CLEAN ENERGY, DATED SEPTEMBER 11, 2024.
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PAWTUCKET, RI 02860

PROFESSIONAL ENGINEER NO.: 36447

STATE OF CONNECTICUT · ERIC DENARDO · 36447 · LICENSED PROFESSIONAL ENGINEER

STATE: CONNECTICUT

DESIGNED BY	DRAWN BY	CHECKED BY	PROJECT NO.
ED/JMB	ED/JMB	ED	24412

No.	REVISION	CHK'D BY	DATE
1	GCE COMMENTS	ED	3/20/26

SCOTLAND~WINDHAM COUNTY~CONNECTICUT

PROPOSED LAYOUT PLAN 3
SOLAR ARRAY DEVELOPMENT
GREENSKIES CLEAN ENERGY
19419 GAGER HILL ROAD

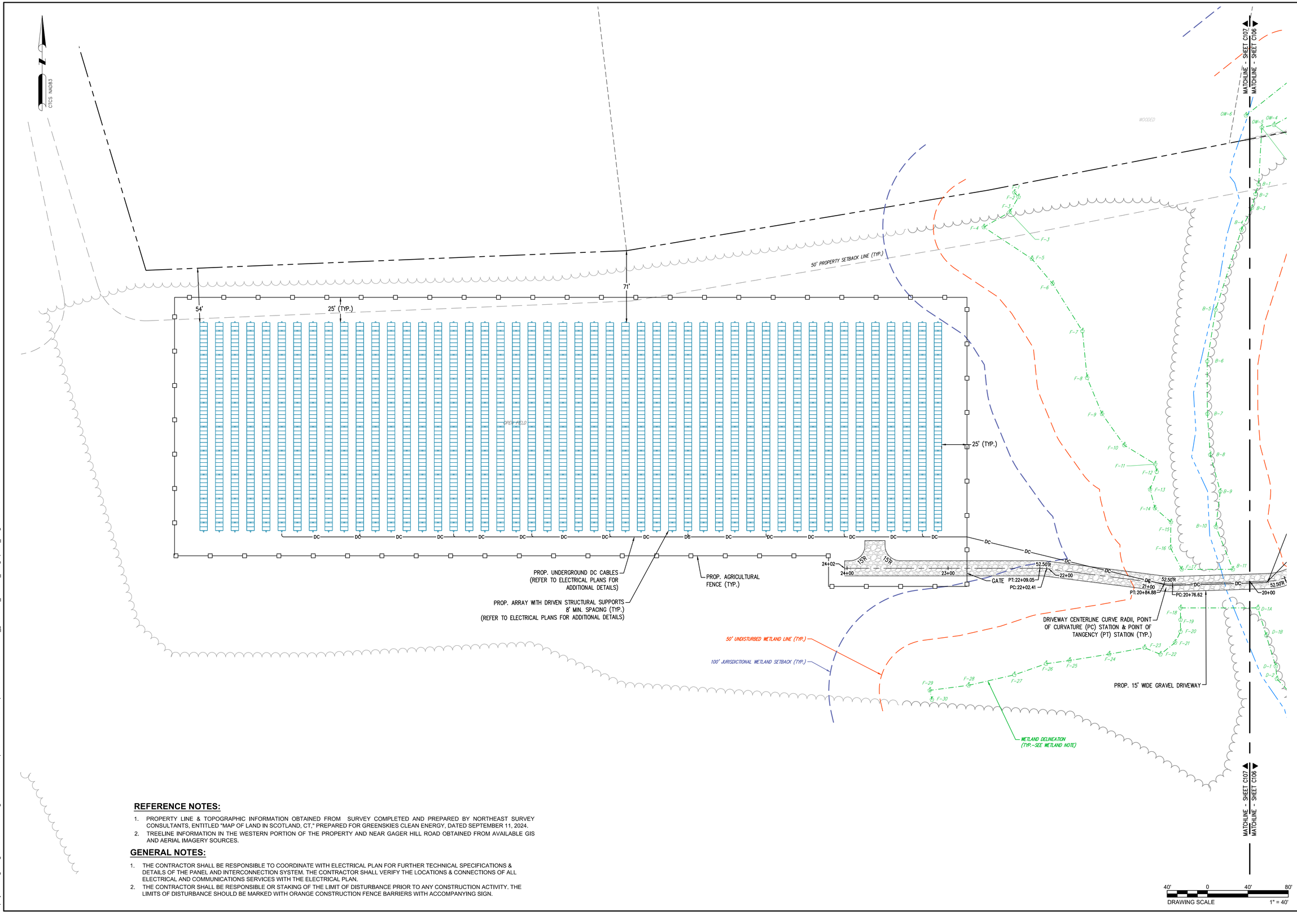
APPLICATION NO.

DATE JANUARY 2026

SCALE 1"=40'

SHEET **C106**

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REFERENCE NOTES:

1. PROPERTY LINE & TOPOGRAPHIC INFORMATION OBTAINED FROM SURVEY COMPLETED AND PREPARED BY NORTHEAST SURVEY CONSULTANTS, ENTITLED "MAP OF LAND IN SCOTLAND, CT," PREPARED FOR GREENSKIES CLEAN ENERGY, DATED SEPTEMBER 11, 2024.
2. TREELINE INFORMATION IN THE WESTERN PORTION OF THE PROPERTY AND NEAR GAGER HILL ROAD OBTAINED FROM AVAILABLE GIS AND AERIAL IMAGERY SOURCES.

GENERAL NOTES:

1. THE CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE WITH ELECTRICAL PLAN FOR FURTHER TECHNICAL SPECIFICATIONS & DETAILS OF THE PANEL AND INTERCONNECTION SYSTEM. THE CONTRACTOR SHALL VERIFY THE LOCATIONS & CONNECTIONS OF ALL ELECTRICAL AND COMMUNICATIONS SERVICES WITH THE ELECTRICAL PLAN.
2. THE CONTRACTOR SHALL BE RESPONSIBLE OR STAKING OF THE LIMIT OF DISTURBANCE PRIOR TO ANY CONSTRUCTION ACTIVITY. THE LIMITS OF DISTURBANCE SHOULD BE MARKED WITH ORANGE CONSTRUCTION FENCE BARRIERS WITH COMPANYING SIGN.

verdantas
1005 MAIN STREET, SUITE NO.: 8120
PAWTUCKET, RI 02860

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SCOTLAND–WINDHAM COUNTY–CONNECTICUT

PROPOSED LAYOUT PLAN 4
SOLAR ARRAY DEVELOPMENT
GREENSKIES CLEAN ENERGY
19419 GAGER HILL ROAD

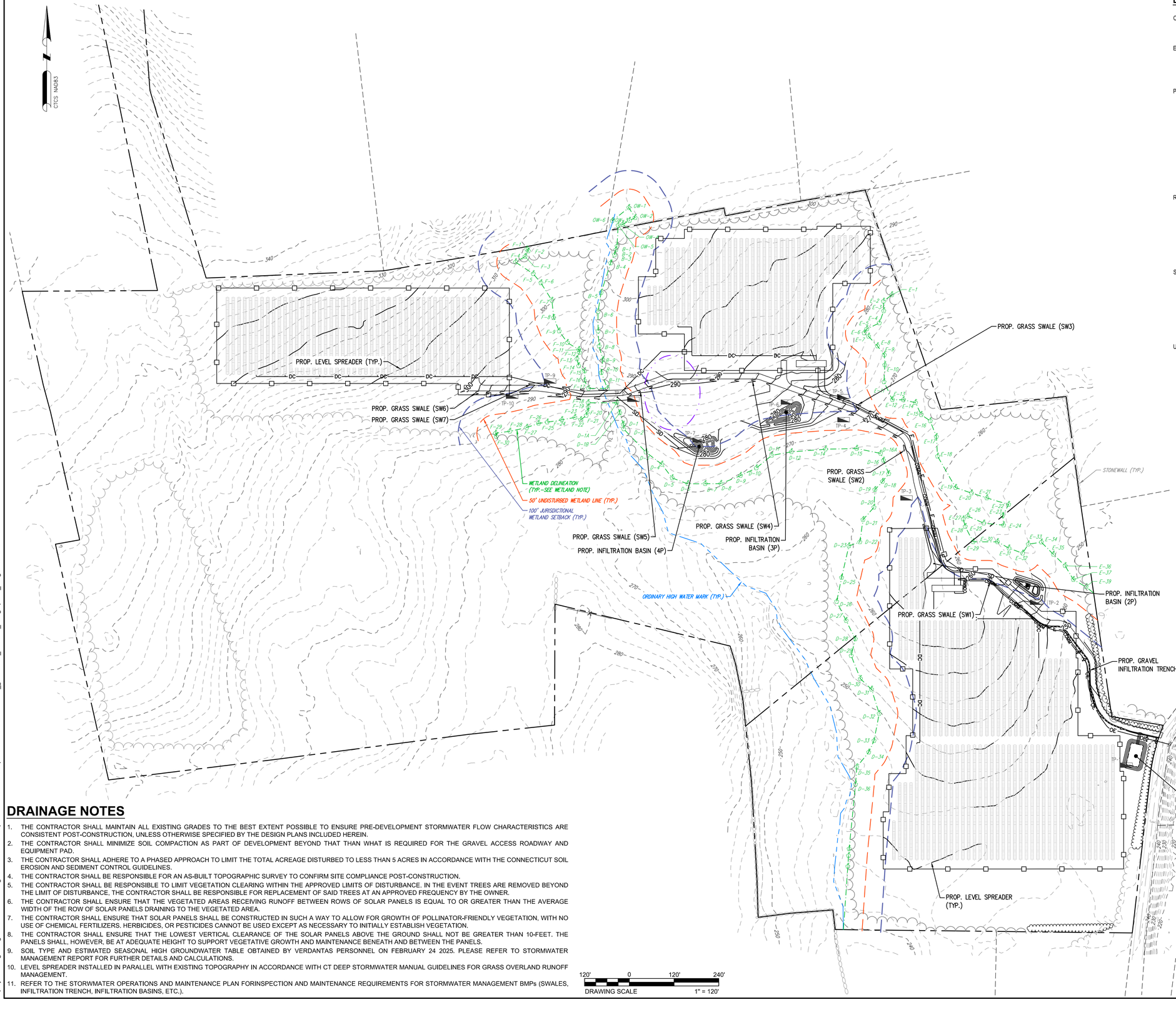
APPLICATION NO.

DATE JANUARY 2026

SCALE 1"=40'

SHEET **C107**

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LEGEND

	EXISTING	PROPOSED
CONTOURS		
MAJOR	260	260
MINOR		258
EROSION & SEDIMENT CONTROL		
LIMIT OF DISTURBANCE		LOD
SILT FENCE		
SILT SOCK		FS12 FS12
PROPERTY INFORMATION		
50-FOOT PROPERTY LINE SETBACK		
ABUTTER PROPERTY LINE (APPROXIMATE)		
ASSESSOR'S IDENTIFICATION	21-19-2	
CALCULATED POINT		
CONCRETE BOUND FOUND	CBF	
SCS SOILS BOUNDARY	50A 70fA	
IRON PIPE FOUND	IPF	
IRON ROD FOUND	IRF	
LOCUS PROPERTY LINE		
RESOURCE AREAS		
50-FOOT UNDISTURBED WETLAND BUFFER		
100-FOOT WETLAND JURISDICTIONAL LINE		
CULTURAL RESOURCE BUFFER		
ORDINARY HIGH WATER MARK		
WETLAND DELINEATION		
WETLAND FLAG & IDENTIFICATION	D-35	
SITE FEATURES		
AGRICULTURAL FENCE		
DRIVEWAY CENTERLINE & STATION		1+00
STONEWALL		
TREELINE/VEGETATION		
TREELINE (APPROXIMATE)		
WIRE FENCE REMAINS	X	
UTILITIES		
AREA DRAIN		
COMMUNICATIONS SERVICE		
GUY WIRE ANCHOR		
OVERHEAD WIRE(S)	OH	OE OE
STORM DRAIN PIPE		SD SD
TEST PIT	TP-#	
UNDERDRAIN PIPE		
UNDERGROUND ELECTRIC SERVICE		E
UNDERGROUND DC CABLES		DC
UTILITY POLE	UP/338	

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. SOIL TYPE AND ESTIMATED SEASONAL HIGH GROUNDWATER TABLE OBTAINED BY VERDANTAS PERSONNEL ON FEBRUARY 24 2025. PLEASE REFER TO STORMWATER MANAGEMENT REPORT FOR FURTHER DETAILS AND CALCULATIONS.
10. LEVEL SPREADER INSTALLED IN PARALLEL WITH EXISTING TOPOGRAPHY IN ACCORDANCE WITH CT DEEP STORMWATER MANUAL GUIDELINES FOR GRASS OVERLAND RUNOFF MANAGEMENT.
11. REFER TO THE STORWMATER OPERATIONS AND MAINTENANCE PLAN FORINSPECTION AND MAINTENANCE REQUIREMENTS FOR STORMWATER MANAGEMENT BMPs (SWALES, INFILTRATION TRENCH, INFILTRATION BASINS, ETC.).

TEST PIT NOTES

1. TEST PITS COMPLETED BY VERDANTAS PERSONNEL ON FEBRUARY 24, 2024. PLEASE REFER TO THE TEST PIT LOG INFORMATION PROVIDED SEPARATELY WITHIN THE STORMWATER MANAGEMENT REPORT.
2. NO GROUNDWATER WAS ENCOUNTERED UP TO A MAXIMUM OF APPROXIMATELY 5 TO 10-FEET BELOW GROUND SURFACE (BGS). REFER TO THE TEST PIT LOGS FOR ADDITIONAL INFORMATION.
3. INFILTRATION TESTS WERE COMPLETED FOR TP-1 TO TP-8 AND PROVIDED WITHIN THE STORMWATER MANAGEMENT REPORT. IN-FIELD CALCULATED INFILTRATION RATES VARIED BETWEEN 1.39 TO 8.44 INCHES PER HOUR.
4. THE TESTS PITS ARE MARKED IN-FIELD WITH SURVEY STAKES IN ACCORDANCE WITH CT DEEP REQUIREMENTS.

verdantas
1005 MAIN STREET, SUITE NO.: 8120
PAWTUCKET, RI 02860

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STATE: CONNECTICUT

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SCOTLAND–WINDHAM COUNTY–CONNECTICUT

PROPOSED OVERALL DRAINAGE PLAN
SOLAR ARRAY DEVELOPMENT
GREENSKIES CLEAN ENERGY
19419 GAGER HILL ROAD

APPLICATION NO.

DATE JANUARY 2026

SCALE 1"=120'

SHEET **C108**

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SCS SOILS LEGEND

2	RIDGEBURY FINE SANDY LOAM, 0 TO 3 PERCENT SLOPES (HSG D)
3	RIDGEBURY, LEICESTER, AND WHITMAN SOILS, 0 TO 8 PERCENT SLOPES EXTREMELY STONY (HSG D)
23A	SUDBURY SANDY LOAM, 0 TO 5 PERCENT SLOPES (HSG A/D)
38C	HINCKLEY LOAMY SAND, 3 TO 15 PERCENT SLOPES (HSG A)
50A	SUTTON FINE SANDY LOAM, 0 TO 3 PERCENT SLOPES (HSG B/D)
50B	SUTTON FINE SANDY LOAM, 3 TO 8 PERCENT SLOPES (HSG B/D)
51B	SUTTON FINE SANDY LOAM, 0 TO 8 PERCENT SLOPES, VERY STONY (HSG B/D)
60B	CANTON AND CHARLTON FINE SANDY LOAMS, 3 TO 8 PERCENT SLOPES (HSG B)
103	RIPPOWAM FINE SANDY LOAM (HSG B/D)
701A	NINIGRET FINE SANDY LOAM, 0 TO 3 PERCENT SLOPES (HSG B/D)

CTCS NAD83

MATCHLINE - SHEET C110 ▲
MATCHLINE - SHEET C109 ▼

MATCHLINE - SHEET C111 ▲
MATCHLINE - SHEET C110 ▼

PROP. LEVEL SPREADER (TR-8)
ELEV.=260.00
217± LF

PROP. LEVEL SPREADER (TR-7)
ELEV.=258.00
225± LF

PROP. LEVEL SPREADER (TR-6)
ELEV.=254.00
250± LF

PROP. LEVEL SPREADER (TR-5)
ELEV.=254.00
180± LF

PROP. LEVEL SPREADER (TR-4)
ELEV.=252.00
410± LF

PROP. LEVEL SPREADER (TR-3)
ELEV.=250.00
210± LF

PROP. LEVEL SPREADER (TR-2)
ELEV.=248.00
510± LF

PROP. LEVEL SPREADER (TR-1)
ELEV.=246.00
315± LF

PROP. INFILTRATION TRENCH (1T)
583± LF
(SEE DETAIL ON SHEET C115)

PROP. 4" HDPE (ADS N-12) UNDERDRAIN

PROP. 4"x6" HDPE TEE
INV.=244.89
(TYP. OF 2)

PROP. AD-1
(18" NYLOPLAST AREA DRAIN)
RIM=245.70
INV.=244.89

PROP. 4"x6" HDPE TEE
INV.=244.89

PROP. 27 LF
6" HDPE (ADS N-12)
SL=0.005 FT/FT

1.0%
246.4 FG

END INFILTRATION TRENCH (1T)

PROP. 28 LF
6" HDPE (ADS N-12)
SL=0.005 FT/FT
INV.=244.75
(TYP. OF 3)

BERM=247.00

PROP. INFILTRATION BASIN (1P)
(SEE DETAIL ON SHEET C115 FOR ELEVATIONS)

WETLAND DELINEATION (TYP.-SEE WETLAND NOTE)

50' UNDISTURBED WETLAND LINE (TYP.)

100' JURISDICTIONAL WETLAND SETBACK (TYP.)

GAGER HILL ROAD

21-25-24.1
N/F
JOAN & JAMES NAUMEC
DEED 63-392
REF: MAP 451

21-25-30
N/F
TWIN HILL PROPERTIES LLC
DEED
81-677

40' 0 40' 80'
DRAWING SCALE 1" = 40'

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verdantas
1005 MAIN STREET, SUITE NO.: 8120
PAWTUCKET, RI 02860

PROFESSIONAL ENGINEER NO.: 36447
STATE: CONNECTICUT

STATE OF CONNECTICUT
ERIC DENARDO
36447
LICENSED
PROFESSIONAL ENGINEER

No.	REVISION	CHK'D BY DATE
1	GCE COMMENTS	ED 3/20/26

DESIGNED BY ED/JMB
DRAWN BY ED/JMB
CHECKED BY ED
PROJECT NO. 24412

SCOTLAND-WINDHAM COUNTY-CONNECTICUT

PROPOSED DRAINAGE PLAN 1
SOLAR ARRAY DEVELOPMENT
GREENSKIES CLEAN ENERGY
19419 GAGER HILL ROAD

APPLICATION NO.
DATE JANUARY 2026
SCALE 1"=40'
SHEET C109

SCS SOILS LEGEND

2	RIDGEBURY FINE SANDY LOAM, 0 TO 3 PERCENT SLOPES (HSG D)
3	RIDGEBURY, LEICESTER, AND WHITMAN SOILS, 0 TO 8 PERCENT SLOPES EXTREMELY STONY (HSG D)
23A	SUDBURY SANDY LOAM, 0 TO 5 PERCENT SLOPES (HSG A/D)
38C	HINCKLEY LOAMY SAND, 3 TO 15 PERCENT SLOPES (HSG A)
50A	SUTTON FINE SANDY LOAM, 0 TO 3 PERCENT SLOPES (HSG B/D)
50B	SUTTON FINE SANDY LOAM, 3 TO 8 PERCENT SLOPES (HSG B/D)
51B	SUTTON FINE SANDY LOAM, 0 TO 8 PERCENT SLOPES, VERY STONY (HSG B/D)
60B	CANTON AND CHARLTON FINE SANDY LOAMS, 3 TO 8 PERCENT SLOPES (HSG B)
103	RIPPOWAM FINE SANDY LOAM (HSG B/D)
701A	NINIGRET FINE SANDY LOAM, 0 TO 3 PERCENT SLOPES (HSG B/D)

CTCS NAD83

21-19-8
N/F
THOMAS PASSARELLO,
MICHAEL ROMEO,
JAMES PASSERELLO &
KATHLEEN R. ROMEO
DEED 77-518

MATCHLINE - SHEET C111
MATCHLINE - SHEET C110

MATCHLINE - SHEET C110
MATCHLINE - SHEET C109

MATCHLINE - SHEET C111
MATCHLINE - SHEET C110

PROP. SWALE (SW2)
633± LF
(SEE DETAIL ON SHEET C115)

WETLAND DELINEATION (TYP.-SEE WETLAND NOTE)

50' UNDISTURBED WETLAND LINE (TYP.)

100' JURISDICTIONAL WETLAND SETBACK (TYP.)

END SW2 & GRADE TO DRAIN TO AD-3

PROP. AD-3
RIM=260.68
INV.=257.50

BEGIN PROP. SWALE (SW1)
150± LF (SEE DETAIL ON SHEET C115)

261.10 FG
TOP ELEV.=261.70
260.70 FG
260.80 FG
261.20 FG

PROP. LEVEL SPREADER (TR-9)
ELEV.=262.00
110± LF

END SW1 & GRADE TO DRAIN TO AD-2

PROP. AD-2
RIM=256.00
INV.=253.40

BEGIN PROP. INFILTRATION TRENCH (1T)
283± LF
(SEE DETAIL ON SHEET C115)

PROP. 228 LF
12" HDPE (ADS N-12)
SL=0.022 FT/FT

PROP. 48 LF
12" HDPE (ADS N-12)
SL=0.017 FT/FT

INV.=252.60

PROP. INFILTRATION BASIN (2P)
(SEE DETAIL ON SHEET C115
FOR ELEVATIONS)

21-19-28
N/F
JOHN & MARIE BECK
DEED 67-612

100' JURISDICTIONAL WETLAND SETBACK (TYP.)

40' 0 40' 80'
DRAWING SCALE 1" = 40'

verdantas
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PROJECT NO.: 24412

SCOTLAND-WINDHAM COUNTY-CONNECTICUT

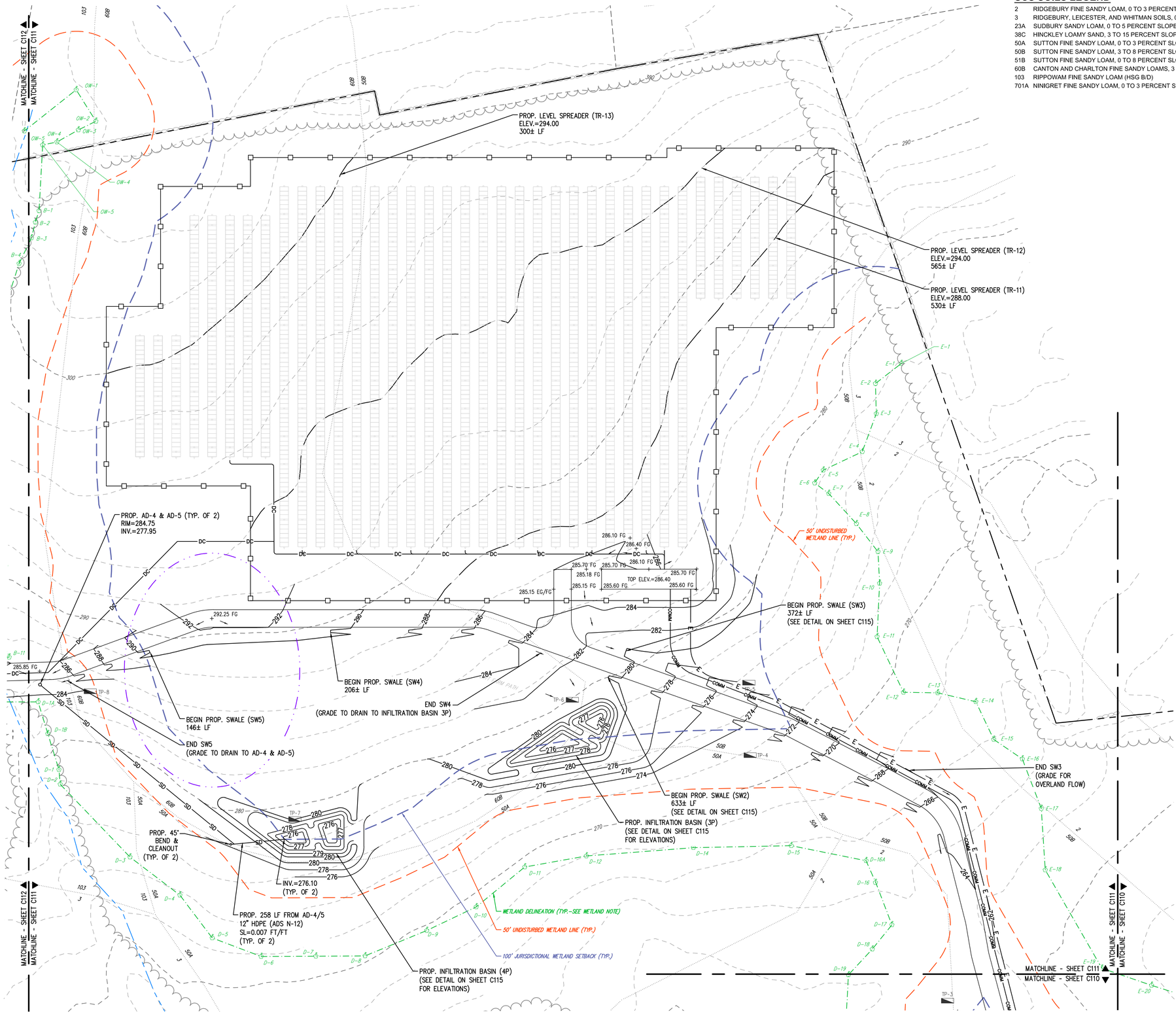
PROPOSED DRAINAGE PLAN 2
SOLAR ARRAY DEVELOPMENT
GREENSKIES CLEAN ENERGY
19419 GAGER HILL ROAD

APPLICATION NO.
DATE: JANUARY 2026
SCALE: 1"=40'
SHEET: C110

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SCS SOILS LEGEND

2	RIDGEBURY FINE SANDY LOAM, 0 TO 3 PERCENT SLOPES (HSG D)
3	RIDGEBURY, LEICESTER, AND WHITMAN SOILS, 0 TO 8 PERCENT SLOPES EXTREMELY STONY (HSG D)
23A	SUDBURY SANDY LOAM, 0 TO 5 PERCENT SLOPES (HSG A/D)
38C	HINCKLEY LOAMY SAND, 3 TO 15 PERCENT SLOPES (HSG A)
50A	SUTTON FINE SANDY LOAM, 0 TO 3 PERCENT SLOPES (HSG B/D)
50B	SUTTON FINE SANDY LOAM, 3 TO 8 PERCENT SLOPES (HSG B/D)
51B	SUTTON FINE SANDY LOAM, 0 TO 8 PERCENT SLOPES, VERY STONY (HSG B/D)
60B	CANTON AND CHARLTON FINE SANDY LOAMS, 3 TO 8 PERCENT SLOPES (HSG B)
103	RIPPOWAM FINE SANDY LOAM (HSG B/D)
701A	NINIGRET FINE SANDY LOAM, 0 TO 3 PERCENT SLOPES (HSG B/D)



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SCOTLAND–WINDHAM COUNTY–CONNECTICUT

PROPOSED DRAINAGE PLAN 1
SOLAR ARRAY DEVELOPMENT

GREENSKIES CLEAN ENERGY
19419 GAGER HILL ROAD

APPLICATION NO.

DATE
JANUARY 2026

SCALE
1"=40'

SHEET
C111

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SCS SOILS LEGEND

2	RIDGEBURY FINE SANDY LOAM, 0 TO 3 PERCENT SLOPES (2) (HSG D)
3	RIDGEBURY, LEICESTER, AND WHITMAN SOILS, 0 TO 8 PERCENT SLOPES EXTREMELY STONY (HSG D)
23A	SUDBURY SANDY LOAM, 0 TO 5 PERCENT SLOPES (HSG A/D)
38C	HINCKLEY LOAMY SAND, 3 TO 15 PERCENT SLOPES (HSG A)
50A	SUTTON FINE SANDY LOAM, 0 TO 3 PERCENT SLOPES (HSG B/D)
50B	SUTTON FINE SANDY LOAM, 3 TO 8 PERCENT SLOPES (HSG B/D)
51B	SUTTON FINE SANDY LOAM, 0 TO 8 PERCENT SLOPES, VERY STONY (HSG B/D)
60B	CANTON AND CHARLTON FINE SANDY LOAMS, 3 TO 8 PERCENT SLOPES (HSG B)
103	RIPPOWAM FINE SANDY LOAM (HSG B/D)
701A	NINIGRET FINE SANDY LOAM, 0 TO 3 PERCENT SLOPES (HSG B/D)

CTCS MA083

MATCHLINE - SHEET C112 ◀
MATCHLINE - SHEET C111 ▶

PROP. LEVEL SPREADER (TR-17)
ELEV.=330.00
380± LF

PROP. LEVEL SPREADER (TR-16)
ELEV.=312.00
575± LF

PROP. LEVEL SPREADER (TR-15)
ELEV.=310.00
410± LF

PROP. LEVEL SPREADER (TR-14)
ELEV.=300.00
120± LF

BEGIN PROP. SWALE (SW7)
155± LF
(SEE DETAIL ON SHEET C115)

BEGIN PROP. SWALE (SW6)
408± LF
(SEE DETAIL ON SHEET C115)

END SW6
(GRADE TO DRAIN TO WETLAND)

END SW6
(GRADE TO DRAIN
TO AD-4 & AD-5)

285.85 FG

50' UNDISTURBED WETLAND LINE (TYP.)

100' JURISDICTIONAL WETLAND SETBACK (TYP.)

WETLAND DELINEATION
(TYP.-SEE WETLAND NOTE)

40' 0 40' 80'
DRAWING SCALE 1" = 40'

verdantas
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SCOTLAND~WINDHAM COUNTY~CONNECTICUT

PROPOSED DRAINAGE PLAN 1
SOLAR ARRAY DEVELOPMENT
GREENSKIES CLEAN ENERGY
19419 GAGER HILL ROAD

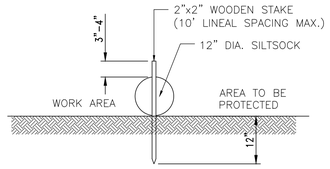
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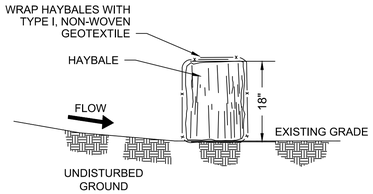
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C112

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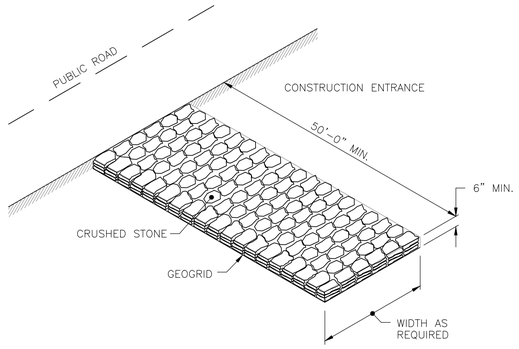
SILTSOCK DETAIL

NOT TO SCALE



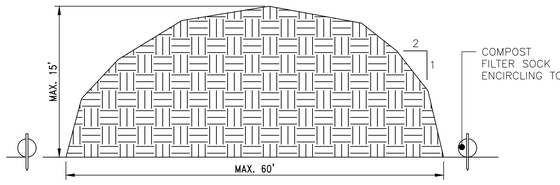
SEDIMENT BARRIER (SB) DETAIL

NOT TO SCALE



CONSTRUCTION ACCESS

NOT TO SCALE



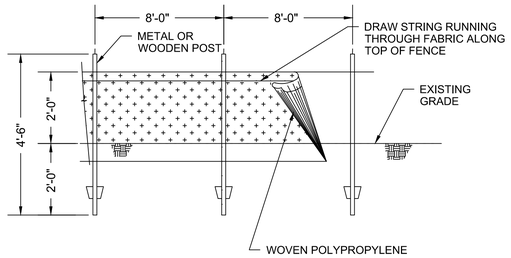
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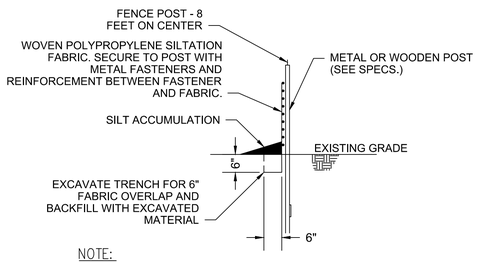
1. THE CONTRACTOR SHALL REQUIRE WRITTEN APPROVAL FROM THE ENGINEER IN THE EVENT THE STOCKPILE LOCATION DIFFERS FROM THE APPROVED PLAN.

2. STOCKPILE AREA SHALL NOT EXCEED DIMENSIONS WITHOUT APPROVAL FROM ENGINEER.

ERODIBLE MATERIAL STOCKPILE DETAIL

NOT TO SCALE



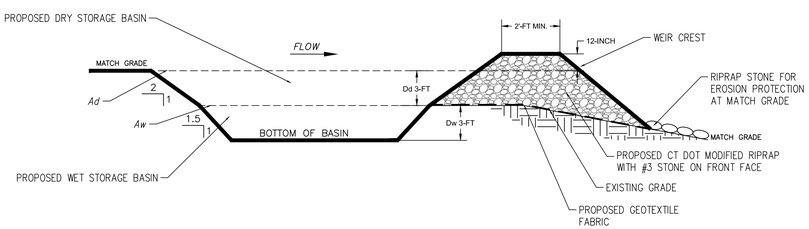


NOTE:

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



NOTES:

1. PERVIOUS STONE DIKE SHALL BE CONSTRUCTED OF CT DOT MODIFIED RIPRAP WITH #3 STONE ON FACE OF EMBANKMENT (BASIN).
2. CONSTRUCTION & MAINTENANCE OF TEMPORARY SEDIMENT TRAP SHALL BE IN ACCORDANCE WITH CONNECTICUT GUIDELINES FOR SOIL EROSION & SEDIMENT CONTROL.

TEMPORARY SEDIMENT TRAP (TST) DETAIL

NOT TO SCALE

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 REGRADING TO MEET THE PROPOSED GRADING DEPICTED ON THE PLANS. TOPSOIL SHALL BE STRIPPED AND STOCKPILED FROM AREAS PROPOSED FOR REGRADING. 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 6" MINIMUM DEPTH OVER REGRADED AREAS UPON COMPLETION OF MASS EARTHWORK ACTIVITIES AND AREAS WHICH WERE DISTURBED BY MASS EARTHWORK OPERATIONS SHALL BE RESEEDED 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 MONOFILAMENT MESH IS AN ACCEPTABLE ALTERNATIVE FOR HYDROSEED AND BFM.
8. UPON COMPLETION OF THIS CONSTRUCTION PHASE, ALL DISTURBED AREAS SHALL BE SEEDED 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 2026 AND BE COMPLETED BY THE END OF 2026. 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 5(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 SCOTLAND 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 SCOTLAND, ENGINEER OF RECORD, AND QUALIFIED SPCP 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 SCOTLAND 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 6:30 AM AND 5:00 PM.
12. ANY DEWATERING BY PUMP SHALL INCLUDE AN INTAKE AND/OR DISCHARGE FILTRATION SYSTEM (I.E. DIRTBAG SYSTEM) AND BE PUMPED TO STABLE GROUND. CONTRACTOR TO ENSURE DISCHARGED WATER IS RUNNING CLEAN OR ALTERIOR METHODS MUST BE EMPLOYED.

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.

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.

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 SCOTLAND, 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.

verdantas
1005 MAIN STREET, SUITE NO.: 8120
PAWTUCKET, RI 02860

PROFESSIONAL ENGINEER NO.: 36447

STATE OF CONNECTICUT · ERIC DENARDO · 36447 · LICENSED PROFESSIONAL ENGINEER

STATE: CONNECTICUT

No.	REVISION	CHK'D BY INIT.	DATE
1	GCE COMMENTS	ED	3/20/26
-			

DESIGNED BY ED/JMB
DRAWN BY ED/JMB
CHECKED BY ED
PROJECT NO. 24412

SCOTLAND–WINDHAM COUNTY–CONNECTICUT

SESC DETAILS & NOTES
SOLAR ARRAY DEVELOPMENT
GREENSKIES CLEAN ENERGY
19419 GAGER HILL ROAD

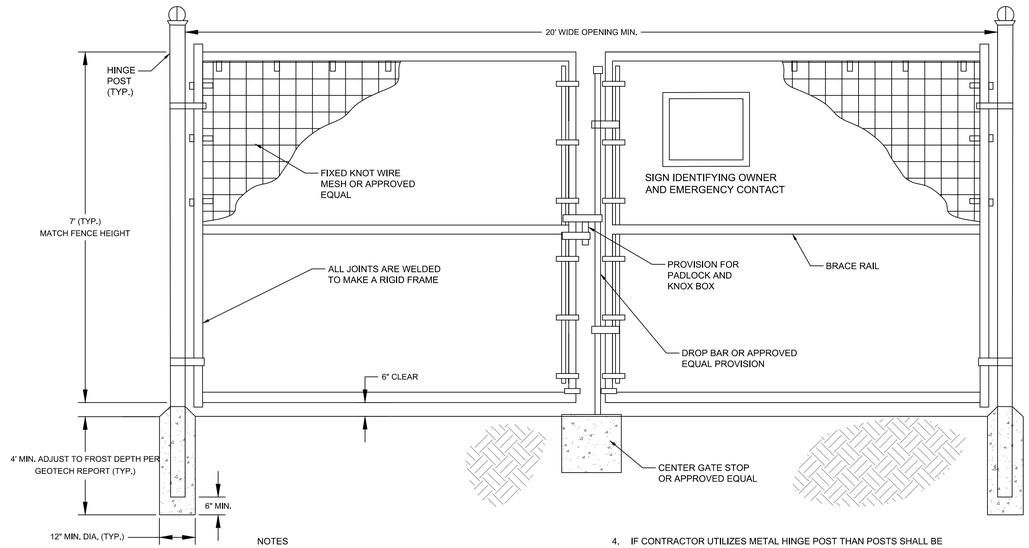
APPLICATION NO.

DATE JANUARY 2026

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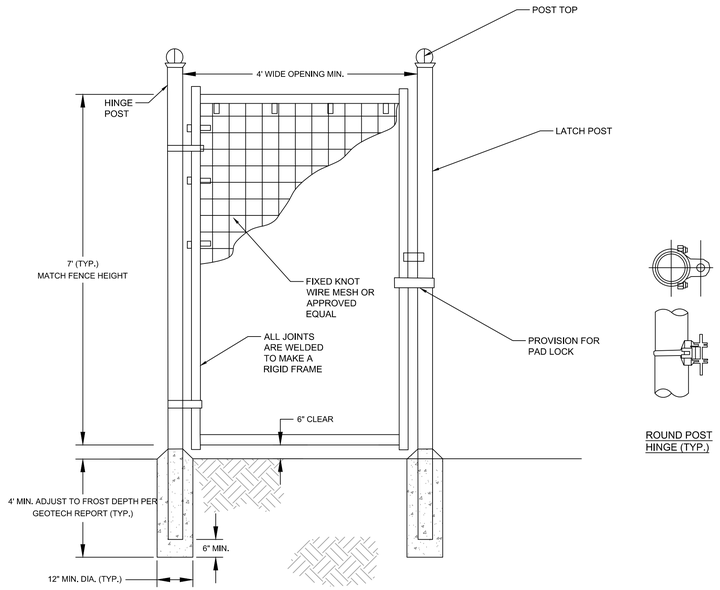
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NOTES
1. INSTALL ALL FENCING COMPONENTS PER MANUFACTURES SPECIFICATIONS.
2. ALL FENCING AND HARDWARE SHALL BE GALVANIZED, UNLESS OTHERWISE NOTED.
3. HINGE POSTS MAY BE TIMBER IF CONTRACTOR DESIRES, TIMBER HINGE POSTS DO NOT NEED TO BE SET IN CONCRETE. UTILIZE HINGE THRU BOLTS TO CONNECT TO TIMBER HINGE POSTS OR LAG SCREWS, PER MANUFACTURERS RECOMMENDATIONS.
4. IF CONTRACTOR UTILIZES METAL HINGE POST THAN POSTS SHALL BE SET IN CONCRETE AS SHOWN ON DETAIL.
5. BRACING REQUIRED AT FOR ALL GATES. SEE FIXED KNOT FARM FENCE DETAIL.
6. FIXED KNOT WIRE MESH TO BE BEKAERT SOLIDLOCK© PRO, 12.5 GAUGE, CLASS 3 GALVANIZED, 6" VERTICAL SPACING OR APPROVED EQUAL
7. BRACE RAIL SHOWN FOR REFERENCE ADDITIONAL BRACE RAILS MAY BE REQUIRED (NOT SHOWN) OR TRUSS RODS MAY BE REQUIRED PER MANUFACTURES RECOMMENDATIONS
8. PROVIDE A MINIMUM 6-INCH CLEARANCE FROM FINAL GRADE TO FACILITATE WILDLIFE PASSAGE

20' WIDE FENCE DOUBLE SWING GATE DETAIL

NOT TO SCALE

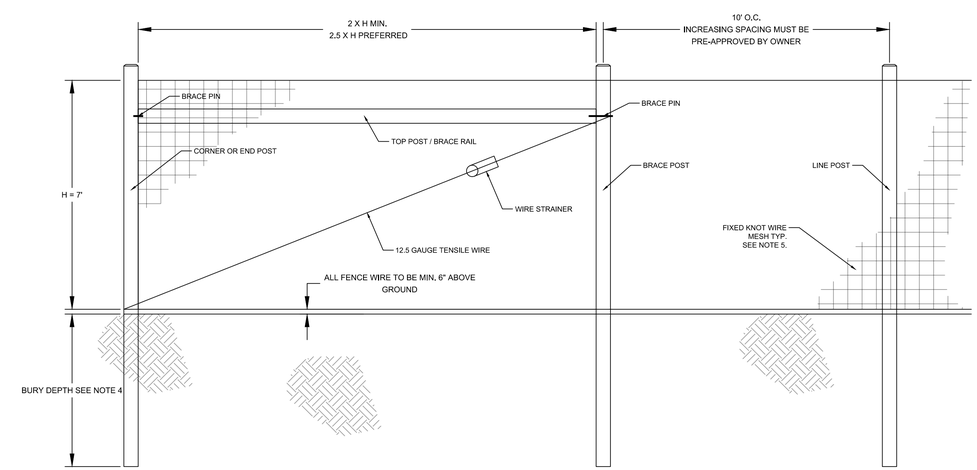


ROUND POST HINGE (TYP.)

NOTES
1. INSTALL ALL FENCING COMPONENTS PER MANUFACTURES SPECIFICATIONS.
2. ALL FENCING AND HARDWARE SHALL BE GALVANIZED, UNLESS OTHERWISE NOTED.
3. HINGE POSTS MAY BE TIMBER IF CONTRACTOR DESIRES, TIMBER HINGE POSTS DO NOT NEED TO BE SET IN CONCRETE. UTILIZE HINGE THRU BOLTS TO CONNECT TO TIMBER HINGE POSTS OR LAG SCREWS, PER MANUFACTURERS RECOMMENDATIONS.
4. IF CONTRACTOR UTILIZES METAL HINGE POST THAN POSTS SHALL BE SET IN CONCRETE AS SHOWN ON DETAIL.
5. BRACING REQUIRED AT FOR ALL GATES. SEE FIXED KNOT FARM FENCE DETAIL.
6. FIXED KNOT WIRE MESH TO BE BEKAERT SOLIDLOCK© PRO, 12.5 GAUGE, CLASS 3 GALVANIZED, 6" VERTICAL SPACING OR APPROVED EQUAL
7. BRACE RAILS AND/ OR TRUSS RODS ARE NOT SHOWN, MAY BE REQUIRED PER MANUFACTURES RECOMMENDATIONS
8. PROVIDE A MINIMUM 6-INCH CLEARANCE FROM FINAL GRADE TO FACILITATE WILDLIFE PASSAGE

FENCE PERSONNEL GATE DETAIL

NOT TO SCALE



NOTES
1. INSTALL ALL FENCING COMPONENTS PER MANUFACTURES SPECIFICATIONS.
2. ALL FENCING AND HARDWARE SHALL BE GALVANIZED, UNLESS OTHERWISE NOTED.
3. ALL SQUARE POSTS TO BE MIN. 5"X5" NOMINAL SIZE OR ROUND POST WITH MIN. 5" OR 6" DIAMETER PRESSURE TREATED WOOD OR APPROVED EQUAL. PREFER POSTS TO HAVE A CHAMFERED TOP.
4. ALL LINE POST TO BE SET TO A MIN. DEPTH OF 4' BELOW GRADE, ALL CORNER, END OR GATE POSTS SHALL BE SET TO A MIN. DEPTH OF 6' BELOW GRADE, UNLESS OTHERWISE NOTED.
5. FIXED KNOT WIRE MESH TO BE BEKAERT SOLIDLOCK© PRO, 12.5 GAUGE, CLASS 3 GALVANIZED, 6" VERTICAL SPACING OR APPROVED EQUAL.
6. BRACING IS REQUIRED AT ALL CORNER, END, AND GATE POSTS. DOUBLE BRACING (TWO BRACE ASSEMBLIES IN A ROW) SHOULD BE USED FOR STRAIGHT RUNS OF FENCE THAT EXCEED 1,000 LF. AN ADDITIONAL BRACE ASSEMBLY SHOULD BE INSTALLED MID SPAN FOR STRAIGHT RUNS OF FENCE THAT EXCEED 1,320 LF. ADDITIONAL BRACING MAY BE STILL BE REQUIRED OVER UNEVEN TERRAIN. CONTRACTOR SHALL INSTALL ADDITIONAL BRACING AS NEEDED IF DEFLECTION IS NOTICED DURING TENSIONING.
8. PROVIDE A MINIMUM 6-INCH CLEARANCE FROM FINAL GRADE TO FACILITATE WILDLIFE PASSAGE

FIXED KNOT FARM FENCE (AGRICULTURAL FENCE)

NOT TO SCALE

verdantas
1005 MAIN STREET, SUITE NO.: 8120
PAWTUCKET, RI 02860

PROFESSIONAL ENGINEER NO.: 36447
STATE: CONNECTICUT

DESIGNED BY ED/JMB
DRAWN BY JMB/ED
CHECKED BY ED
PROJECT NO. 24412
CHK'D BY ED DATE 3/20/26

No.	REVISION	DATE
1	GCE COMMENTS	3/20/26
-		

SCOTLAND–WINDHAM COUNTY–CONNECTICUT

CONSTRUCTION DETAILS & NOTES
SOLAR ARRAY DEVELOPMENT
GREENSKIES CLEAN ENERGY
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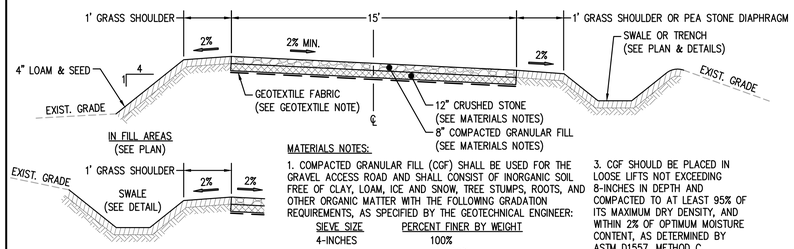
APPLICATION NO.

DATE JANUARY 2026

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GEOTEXTILE NOTE:

REQUIREMENTS FOR THE WOVEN GEOTEXTILE FABRIC ARE AS FOLLOWS:

TENSILE STRENTH (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.

MATERIALS NOTES:

1. COMPACTED GRANULAR FILL (CGF) SHALL BE USED FOR THE GRAVEL ACCESS ROAD AND SHALL CONSIST OF INORGANIC SOIL FREE OF CLAY, LOAM, ICE AND SNOW, TREE STUMPS, ROOTS, AND OTHER ORGANIC MATTER WITH THE FOLLOWING GRADATION REQUIREMENTS, AS SPECIFIED BY THE GEOTECHNICAL ENGINEER:

SIEVE SIZE	PERCENT FINER BY WEIGHT
4-INCHES	100%
NO. 10	30-100%
NO. 40	10-90%
NO. 200	0-12%

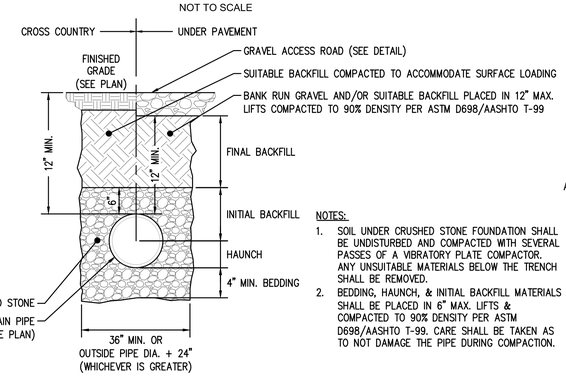
2. CRUSHED STONE FOR USE BELOW THE GRAVEL ACCESS ROAD SHALL CONSIST OF SOUND, TOUGH, DURABLE ROCK WITH THE FOLLOWING GRADATION REQUIREMENTS AS SPECIFIED BY THE GEOTECHNICAL ENGINEER:

SIEVE SIZE	PERCENT FINER BY WEIGHT
5/8-INCHES	100%
1/2-INCH	85-100%
3/8-INCH	15-45%
NO. 4	0-15%
NO. 8	0-5%

3. CGF SHOULD BE PLACED IN LOOSE LIFTS NOT EXCEEDING 8-INCHES IN DEPTH AND COMPACTED TO AT LEAST 95% OF ITS MAXIMUM DRY DENSITY, AND WITHIN 2% OF OPTIMUM MOISTURE CONTENT, AS DETERMINED BY ASTM D1557, METHOD C.
4. CRUSHED STONE IS CONSIDERED TO BE "SELF-COMPACTING" AN WOULD NEGATE THE NEED TO RUN LABORATORY PROCTOR RESTING AND HAVE FIELD DENSITY TESTING OF IN-PLACE LIFTS. THE CRUSHED STONE SHOULD BE PLATE COMPACTED, IN 12-INCH LIFTS AND COMPACTING THE LIFTS 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.

GRAVEL ACCESS ROAD DETAIL

NOT TO SCALE

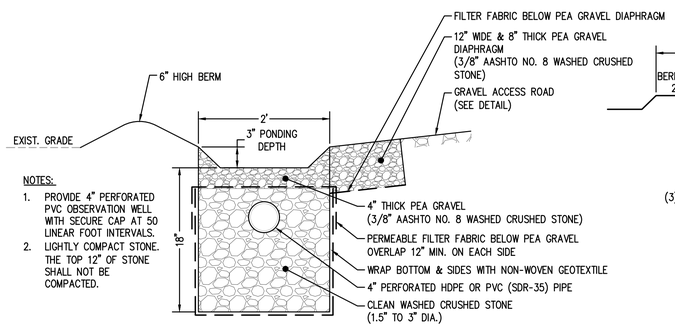


NOTES:

1. SOIL UNDER CRUSHED STONE FOUNDATION SHALL BE UNDISTURBED AND COMPACTED WITH SEVERAL PASSES OF A VIBRATORY PLATE COMPACTOR. ANY UNSUITABLE MATERIALS BELOW THE TRENCH SHALL BE REMOVED.
2. BEDDING, HAUNCH, & INITIAL BACKFILL MATERIALS SHALL BE PLACED IN 6" MAX. LIFTS & COMPACTED TO 90% DENSITY PER ASTM D698/AASHTO T-99. CARE SHALL BE TAKEN AS TO NOT DAMAGE THE PIPE DURING COMPACTION.

DRAIN TRENCH DETAIL

NOT TO SCALE

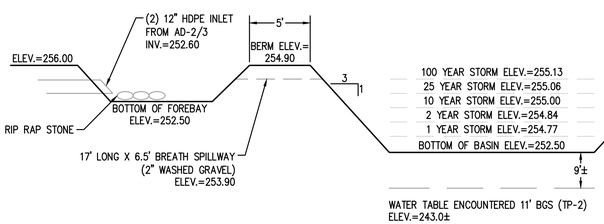


NOTES:

1. PROVIDE 4" PERFORATED PVC OBSERVATION WELL WITH SECURE CAP AT 50 LINEAR FOOT INTERVALS.
2. LIGHTLY COMPACT STONE. THE TOP 12" OF STONE SHALL NOT BE COMPACTED.

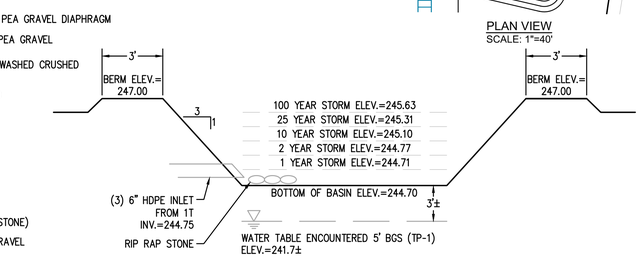
INFILTRATION TRENCH DETAIL

NOT TO SCALE



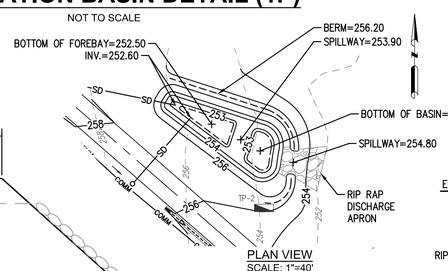
INFILTRATION BASIN DETAIL (2P)

NOT TO SCALE



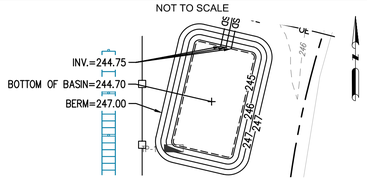
INFILTRATION BASIN DETAIL (1P)

NOT TO SCALE



LEVEL SPREADER CROSS SECTIONAL DETAIL

NOT TO SCALE



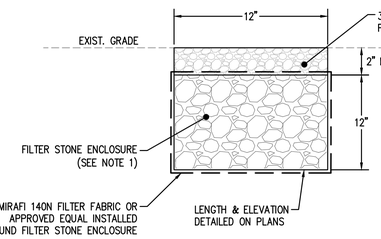
CROSS COUNTRY	UNDER PAVEMENT
FINISHED GRADE (SEE PLAN)	GRAVEL ACCESS ROAD (SEE DETAIL)
6"-12"	SUITABLE BACKFILL COMPACTED TO ACCOMMODATE SURFACE LOADING
36" MIN. OR CODE (WHICHEVER IS GREATER)	BANK RUN GRAVEL AND/OR SUITABLE BACKFILL PLACED IN 12" MAX. LIFTS COMPACTED TO 90% DENSITY PER ASTM D698/AASHTO T-99
6"	FINAL BACKFILL
	INITIAL BACKFILL
	HAUNCH
	12" MIN. BEDDING
6" YELLOW METALIZED DETECTABLE IDENTIFICATION TAPE	
COARSE SAND	
CONDUIT	
PLACE TRACER WIRE BELOW PIPE AS DIRECTED BY SERVICE PROVIDER WITH 5" OF PIPE (WIRE NOT TO CONTACT PIPE)	
36" MIN.	

NOTES:

1. SOIL UNDER CRUSHED STONE FOUNDATION SHALL BE UNDISTURBED AND COMPACTED WITH SEVERAL PASSES OF A VIBRATORY PLATE COMPACTOR. ANY UNSUITABLE MATERIALS BELOW THE TRENCH SHALL BE REMOVED.
2. BEDDING, HAUNCH, & INITIAL BACKFILL MATERIALS SHALL BE PLACED IN 6" MAX. LIFTS & COMPACTED TO 90% DENSITY PER ASTM D698/AASHTO T-99. CARE SHALL BE TAKEN AS TO NOT DAMAGE THE PIPE DURING COMPACTION.
3. CONTRACTOR TO COORDINATE FINAL TRENCH & ELECTRICAL CONDUIT DIMENSIONS & MATERIALS WITH SOLAR DEVELOPER.
4. CONDUITS UNDER ROADWAYS & PARKING AREAS SHALL BE CONCRETE ENCASED.

CONDUIT TRENCH DETAIL

NOT TO SCALE

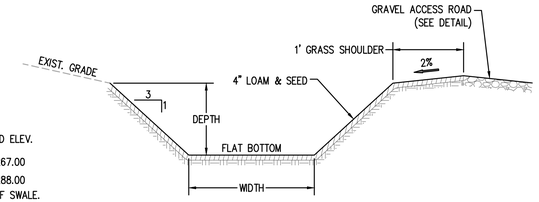


NOTES:

1. FILTER STONE TO BE NATIONAL STONE ASSOCIATION MODIFIED NSA NO. FS-2 WITH THE FOLLOWING PARTICLE SIEVE DISTRIBUTION:

100% PASSING	0-50% PASSING	0-15% PASSING
2	NO. 4	NO. 18

2. TRENCHES TO BE PROTECTED FROM SILTATION DURING CONSTRUCTION AND UNTIL VEGETATION IS FULLY ESTABLISHED. THE TRENCHES SHALL BE INSPECTED BY THE DESIGN ENGINEER UPON COMPLETION.
3. PERVIOUS CONTRIBUTING AREA MAXIMUM INFLOW APPROACH LENGTH IS PROPOSED ±150-FEET, INSTALLED IN PARALLEL WITH TOPOGRAPHY IN ACCORDANCE WITH CT DEEP STORMWATER QUALITY MANUAL.



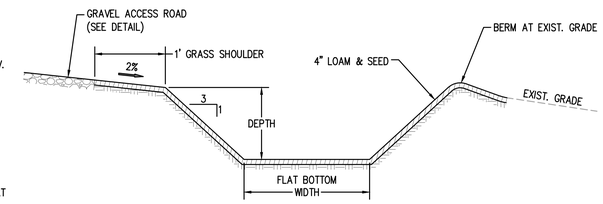
SWALE SIZING

SWALE ID	DEPTH (IN)	WIDTH (FT)	BEGIN ELEV.	END ELEV.
SW3	6	7	280.00	267.00
SW7	6	2	292.00	288.00

NOTE: BEGINNING & ENDING ELEVATIONS REFER TO BOTTOM OF SWALE.

TYPICAL SWALE DETAIL (SW3 & SW7)

NOT TO SCALE



SWALE SIZING

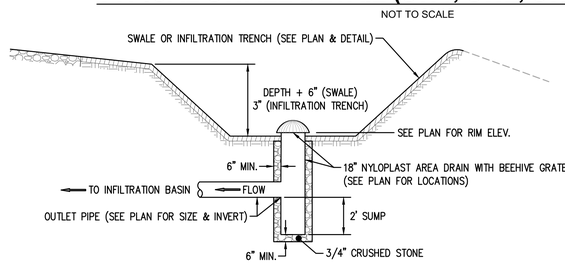
SWALE ID	DEPTH (IN)	WIDTH (FT)	BEGIN ELEV.	END ELEV.
SW1	6	2	261.00	256.50
SW2	6	2	279.50	261.18
SW4	6	2	290.00	282.00
SW5	6	2	291.50	285.25
SW6	6	3.5	299.50	285.25

NOTES:

1. TRANSITION TO SWALE DEPTH SHOWN ABOVE TO DEPTH + 6" AT AREA DRAINS (SEE AREA DRAIN DETAIL).
2. BEGINNING & ENDING ELEVATIONS REFER TO BOTTOM OF SWALE.

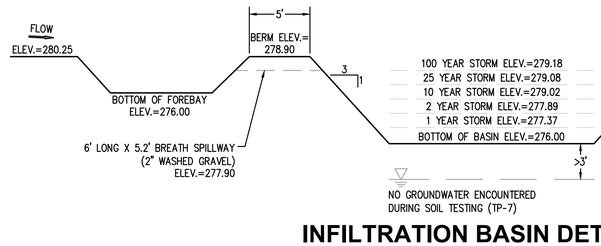
TYPICAL SWALE DETAIL (SW1, SW2, SW5, SW5 & SW6)

NOT TO SCALE



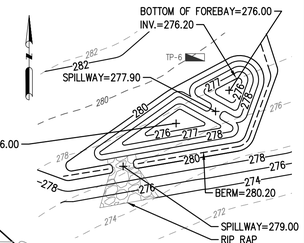
AREA DRAIN DETAIL

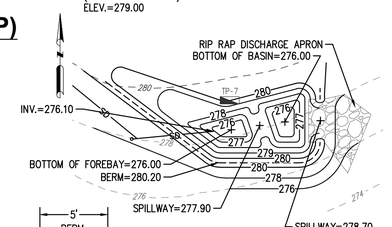
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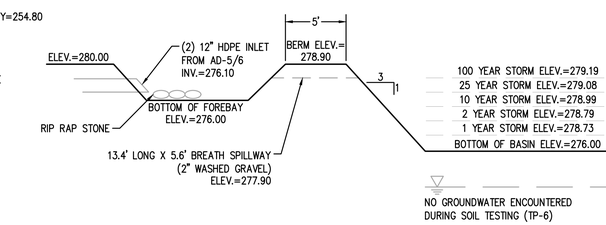


INFILTRATION BASIN DETAIL (3P)

NOT TO SCALE







INFILTRATION BASIN DETAIL (4P)

NOT TO SCALE

verdantas
1005 MAIN STREET, SUITE NO.: 8120
PAWTUCKET, RI 02860

PROFESSIONAL ENGINEER NO.: 36447
STATE OF CONNECTICUT · ERIC DENARDO · 36447 · LICENSED PROFESSIONAL ENGINEER
STATE: CONNECTICUT

DESIGNED BY	DRAWN BY	CHECKED BY	PROJECT NO.
ED/JMB	JMB/ED	ED	24412

CHK'D BY	DATE
ED	3/20/26

No.	REVISION
1	GCE COMMENTS

SCOTLAND~WINDHAM COUNTY~CONNECTICUT

CONSTRUCTION DETAILS & NOTES
SOLAR ARRAY DEVELOPMENT
GREENSKIES CLEAN ENERGY
19419 GAGER HILL ROAD

APPLICATION NO.

DATE JANUARY 2026

SCALE AS SHOWN

SHEET C115

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APPROX. SWEPT PATH FOR WB-67 TRUCK
(COORDINATE DURING CONSTRUCTION)

APPROX. SWEPT PATH FOR WB-67 TRUCK
(COORDINATE DURING CONSTRUCTION)

ENTRY ANALYSIS (SOUTH APPROACH)

60' 0 60' 120'
DRAWING SCALE 1" = 60'

ENTRY ANALYSIS (NORTH APPROACH)

60' 0 60' 120'
DRAWING SCALE 1" = 60'

SEE TURNAROUND ANALYSIS ON THIS SHEET FOR TURNAROUND SWEPT PATH

SEE TURNAROUND ANALYSIS ON THIS SHEET FOR TURNAROUND SWEPT PATH

WETLAND DELINEATION (TYP.-SEE WETLAND NOTE)

50' UNDISTURBED WETLAND LINE (TYP.)

100' JURISDICTIONAL WETLAND SETBACK (TYP.)

ORDINARY HIGH WATER MARK (TYP.)

APPROX. SWEPT PATH FOR WB-67 TRUCK
(COORDINATE DURING CONSTRUCTION)

APPROX. LIMIT OF TEMPORARY GRAVEL FOR TRUCK TURN (TYP.)
(EXTEND PROP. GRAVEL DRIVEWAY-SEE TRUCK TURNING NOTE ON THIS SHEET)

SEE ENTRY ANALYSIS ON THIS SHEET FOR ENTRY SWEPT PATH

EXTEND STABILIZED CONSTRUCTION ENTRY/EXIT TO ACCOMMODATE TRUCK TURNING MOVEMENT

APPROX. LIMIT OF TEMPORARY GRAVEL FOR TRUCK TURN (TYP.)
(EXTEND PROP. GRAVEL DRIVEWAY-TRUCK TURNING NOTE ON THIS SHEET)

PROP. CONC. PAD

APPROX. SWEPT PATH FOR WB-67 TRUCK
(COORDINATE DURING CONSTRUCTION)

PROP. GRAVEL DRIVEWAY

COORDINATE LIMIT TEMPORARY SEDIMENT TRAP WITH TRUCK TURNING

60' 0 60' 120'
DRAWING SCALE 1" = 60'

KEY

BODY ENVELOPE
CHASSIS ENVELOPE

APPROX. LIMIT OF TEMPORARY GRAVEL FOR TRUCK TURN (TYP.)
(EXTEND PROP. GRAVEL DRIVEWAY-SEE TRUCK TURNING NOTE ON THIS SHEET)

PROP. CONC. PAD

APPROX. SWEPT PATH FOR WB-67 TRUCK
(COORDINATE DURING CONSTRUCTION)

TURNAROUND ANALYSIS

120' 0 120' 240'
DRAWING SCALE 1" = 120'

LEGEND

	EXISTING	PROPOSED
CONTOURS		
MAJOR	260	260
MINOR		258
EROSION & SEDIMENT CONTROL		
LIMIT OF DISTURBANCE		LOD
SILT FENCE		
SILT SOCK		FS12
PROPERTY INFORMATION		
50-FOOT PROPERTY LINE SETBACK		
ABUTTER PROPERTY LINE (APPROXIMATE)		
ASSESSOR'S IDENTIFICATION	21-19-2	
CALCULATED POINT		
CONCRETE BOUND FOUND	CBF	
SCS SOILS BOUNDARY	50A / 701A	
IRON PIPE FOUND	IPF	
IRON ROD FOUND	IRF	
LOCUS PROPERTY LINE		
RESOURCE AREAS		
50-FOOT UNDISTURBED WETLAND BUFFER		
100-FOOT WETLAND JURISDICTIONAL LINE		
CULTURAL RESOURCE BUFFER		
ORDINARY HIGH WATER MARK		
WETLAND DELINEATION		
WETLAND FLAG & IDENTIFICATION	D-35	
SITE FEATURES		
AGRICULTURAL FENCE		
DRIVEWAY CENTERLINE & STATION		1+00
STONEWALL		
TREELINE/VEGETATION		
TREELINE (APPROXIMATE)		
WIRE FENCE REMAINS		
UTILITIES		
AREA DRAIN		
COMMUNICATIONS SERVICE		
GUY WIRE ANCHOR		
OVERHEAD WIRE(S)	OH	OE
STORM DRAIN PIPE		SD
TEST PIT	TP-#	
UNDERDRAIN PIPE		
UNDERGROUND ELECTRIC SERVICE		E
UNDERGROUND DC CABLES		DC
UTILITY POLE	UP/338	

TRUCK TURNING NOTE:

CONTRACTOR TO COORDINATE WITH DEVELOPER ON SUITABLE MATERIAL AND ALIGNMENT FOR CONSTRUCTION VEHICULAR TRAFFIC BEDDING TO ASSIST IN TURNAROUND UPON DELIVERY OF EQUIPMENT/MATERIALS. CONTRACTOR SHALL COORDINATE CONSTRUCTION SEQUENCING AND ANY TEMPORARY GRADING REQUIRED FOR TRUCK MOVEMENT WITH DEVELOPER. TEMPORARY GRADING SHALL NOT EXCEED 3 HORIZONTAL TO 1 VERTICAL SLOPES.

verdantas
1005 MAIN STREET, SUITE NO.: 8120
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STATE OF CONNECTICUT · ERIC DENARDO · 36447 · LICENSED PROFESSIONAL ENGINEER
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DESIGNED BY	DRAWN BY	CHECKED BY	PROJECT NO.
JMB	JMB	ED	24412

CHK'D BY	DATE
JMB	
ED	3/20/26

No.	REVISION	GCE COMMENTS
1		

SCOTLAND~WINDHAM COUNTY~CONNECTICUT

SWEPT PATH ANALYSIS
SOLAR ARRAY DEVELOPMENT
GREENSKIES CLEAN ENERGY
19419 GAGER HILL ROAD

APPLICATION NO.

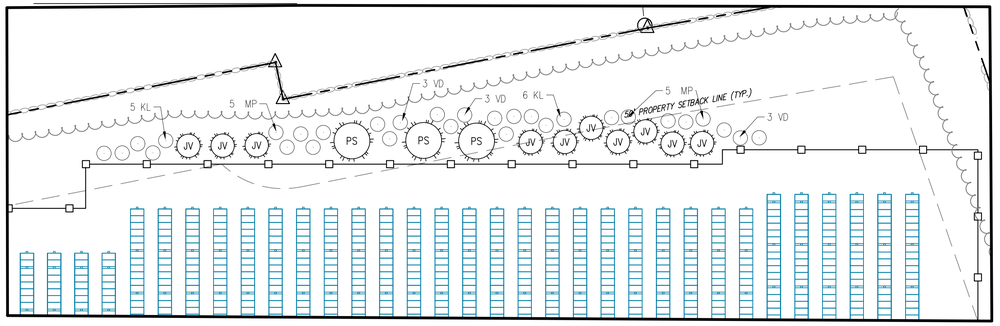
DATE JANUARY 2026

SCALE AS SHOWN

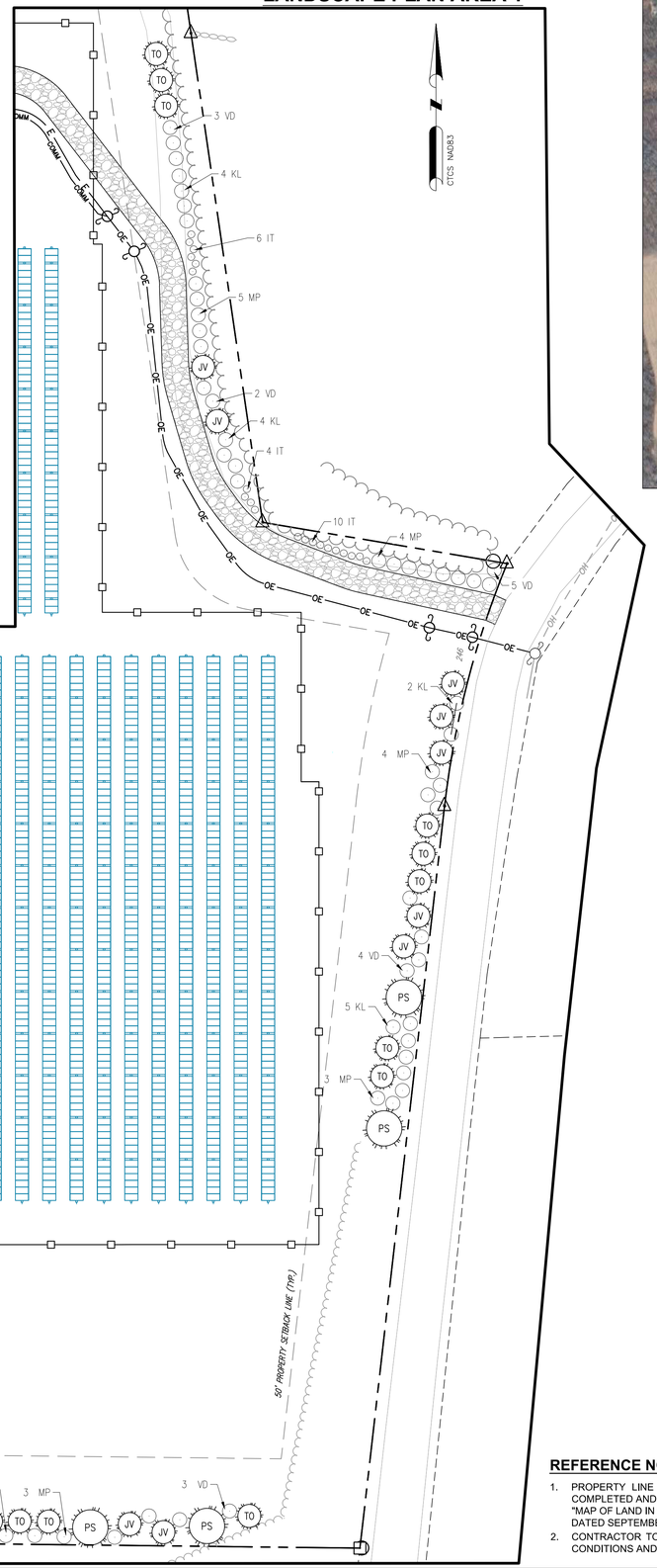
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LANDSCAPE PLAN AREA 2



LANDSCAPE PLAN AREA 1



GREENSKIES SCOTLAND PLANT SCHEDULE

KEY	TOTAL	UNIT	BOTANICAL NAME**	COMMON NAME	SIZE	CONDITION	SPACING*
			EVERGREEN TREES				
JV	21	EA	JUNIPERUS VIRGINIANA	EASTERN RED CEDAR	6' HT.	#7	20' O.C.
PS	8	EA	PINUS STROBUS	EASTERN WHITE PINE	6' HT.	#7	65' O.C.
TO	12	EA	THUJA OCCIDENTAILIS 'NIGRA'	AMERICAN ARBORVITAE	6' HT.	#7	15' O.C.
			SHRUBS				
IT	20	EA	ITEA VIRGINICA 'HENRY'S GARNET'	VIRGINIA SWEETSPIRE	24" HT.	#3	5' O.C.
KL	28	EA	KALMIA LATIFOLIA	MOUNTAIN LAUREL	3-4' HT.	#5	8.5' O.C.
MP	29	EA	MYRICA PENNSYLVANICA	NORTHERN BAYBERRY	3-4' HT.	#5	9' O.C.
VD	28	EA	VIBURNUM DENTATUM	ARROWWOOD VIBURNUM	3-4' HT.	#5	17' O.C.

* MINIMUM SPACING NOTED HEREIN. CONTRACTOR TO UTILIZE LOCATIONS NOTED WITHIN THE CORRESPONDING PLAN VIEW FOR PROPOSED PLANTING LOCATIONS.
**OR APPROVED EQUAL -SEE SUBSTITUTIONS NOTE BELOW IN THE CASE THAT A SPECIES IS UNAVAILABLE.

PLANTING SPECIFICATIONS

SOILS AND AMENDMENTS: FURNISHED TOPSOIL SHALL HAVE CHARACTERISTICS SIMILAR TO HEALTHY, EXISTING TOPSOIL ON THE PROJECT SITE, IF PRESENT, ALL SOIL AMENDMENTS ARE TO BE FREE OF STONES ONE (1) INCH OR LARGER IN ANY DIMENSION, ROOTS, PLANTS, SODS, STONES, TRASH, GLASS, CLAY LUMPS, AND OTHER EXTRANEOUS MATERIALS HARMFUL TO PLANT GROWTH OR PERSONS PERFORMING LANDSCAPE WORK. PLANTING BACKFILL MIX SHALL BE ONE PART EXISTING TOPSOIL, ONE PART FURNISHED TOPSOIL AND , ONE PART SOIL ADDITIVE (HUMUS, SPAGHNUM PEAT OR COMPOSTED MANURE). UNAPPROVED TOPSOIL OR SOIL AMENDMENTS BROUGHT TO THE SITE SHALL BE REMOVED BY THE CONTRACTOR AT NO ADDITIONAL COST. SOILS AND AMENDMENTS ARE NOT TO BE USED OR MOVED IF FROZEN OR MUDDY.

NURSERY STOCK STANDARDS: ALL PLANT MATERIALS ARE TO BE PROVIDED AS SPECIFIED. FURNISH NURSERY-GROWN PLANTS CONFORMING TO THE MOST RECENT EDITION OF THE AMERICAN STANDARD FOR NURSERY STOCK OF THE AMERICAN NURSERY AND LANDSCAPE ASSOCIATION ANSI Z60.1, AND PERENNIAL PLANT ASSOCIATION STANDARDS, WITH HEALTHY ROOT SYSTEMS. PLANTS ARE TO BE WELL-SHAPED, FULLY BRANCHED, HEALTHY, VIGOROUS STOCK FREE OF DISEASES, INSECTS, LARVAE, AND DEFECTS SUCH AS KNOTS, SUN SCALD, INJURIES, ABRASIONS, AND DISFIGUREMENT. PLANTS SHALL BE THE BEST QUALITY AVAILABLE IN FORM, NUMBER OF BRANCHES, COMPACTNESS, AND SYMMETRY. PLANTS PRUNED TO ACHIEVE THE SPECIFIED SIZE ARE UNACCEPTABLE. BALLED AND BURLAPPED PLANTS SHALL HAVE A SOLID ROOT BALL, HELD IN PLACE BY BURLAP AND ROPE. CONTAINER PLANTS SHALL BE WELL ROOTED AND HAVE FIRM SOIL, BUT NOT BE ROOT BOUND IN THE POT.

SUBSTITUTIONS: NO SUBSTITUTIONS SHALL BE PERMITTED, EXCEPT BY WRITTEN PERMISSION OF THE LANDSCAPE ARCHITECT OR OWNER'S REPRESENTATIVE PRIOR TO THE PURCHASE OR DELIVERY OF MATERIALS.

HANDLING: TREES AND SHRUBS ARE TO BE FRESHLY DUG, CENTRAL LEADERS OF TREES ARE NEVER TO BE CUT. ALL MATERIALS ARE TO BE PROTECTED FROM DAMAGE OR DETERIORATION DURING DELIVERY AND WHILE STORED AT SITE. BUDS, BARK, BRANCHES, FLOWERS, AND ROOT SYSTEMS ARE TO BE PROTECTED FROM SUN SCALD, DRYING, WHIPPING, SCRAPING, AND OTHER HANDLING AND TYING DAMAGE. SPECIAL PRECAUTIONS SHALL BE TAKEN TO PROTECT TREE TRUNKS DURING TRANSPORT FROM SHIFTING, SWAYING, AND WORKING LOOSE FROM ROOT BALL. TREES AND SHRUBS SHALL NOT BE BENT OR BIND-TIED IN SUCH A MANNER AS TO DESTROY THEIR NATURAL SHAPE OR STRIP THE BARK. ONLY WOVEN TARPS INTENDED FOR HORTICULTURAL USE ARE TO BE USED AS A PROTECTIVE COVERING DURING DELIVERY, PROTECTING ALL BUDS AND BRANCH TIPS, ESPECIALLY ON MAIN LEADERS. TREES AND SHRUBS ARE NOT TO BE DROPPED. BALLED AND BURLAPPED STOCK IS TO BE MOVED ONLY BY THE ROOT BALL, AND CONTAINER PLANTS ONLY BY THE CONTAINER TO AVOID DAMAGE. DO NOT STOCKPILE PLANT MATERIALS ON SITE. DELIVERIES ARE TO BE SCHEDULED TO ARRIVE AFTER SITE PREPARATIONS FOR PLANTING HAVE BEEN COMPLETED AND PLANTS ARE TO BE INSTALLED UPON DELIVERY. IF PLANTING IS DELAYED MORE THAN SIX (6) HOURS AFTER DELIVERY, PLANTING MATERIALS ARE TO BE PLACED IN AN APPROVED STOCKPILE LOCATION, IN THE SHADE, PROTECTED FROM WEATHER AND MECHANICAL DAMAGE, AND ARE TO HAVE THEIR ROOTS KEPT MOIST. ADDITIONALLY, BALLED AND BURLAPPED STOCK IS TO BE COVERED WITH DOUBLE GROUND HARDWOOD BARK OR ROOT MULCH. PLANT MATERIAL IS NOT TO BE REMOVED FROM CONTAINERS OR BURLAPPING UNTIL PLANTING IS UNDERWAY. PLANTS SHALL BE INSTALLED WITHIN (72) HOURS OF DELIVERY. IT IS THE CONTRACTOR'S RESPONSIBILITY TO SCHEDULE, ORDER, HANDLE, STORE, AND INSTALL THE PLANT MATERIAL.

PLANTING SEASONS: PERFORM OPERATIONS DURING PLANTING SEASONS WHEN SOIL MOISTURE AND WEATHER CONDITIONS ARE SUITABLE, WHEN THE TEMPERATURE IS ABOVE 32 F, AND THE SOIL IS NOT FROZEN. CEASE OPERATIONS WHEN CONDITIONS ARE UNSUITABLE.

MODIFICATION REQUEST: SUBMIT A WRITTEN MODIFICATION REQUEST TO INSTALL PLANTS OUTSIDE OF ACCEPTABLE PLANTING SEASONS LISTED ABOVE TO THE OWNER / ENGINEER. THE ENGINEER IN CONSULTATION WITH THE LANDSCAPE ARCHITECT WILL EVALUATE THE REQUEST. IF GRANTED, NOTICE OF THE APPROVED MODIFICATION WILL BE RETURNED WITHIN 14 DAYS AFTERWARDS.

DRAINAGE: ALL PLANTING AREAS TO BE TESTED FOR POSITIVE DRAINAGE. EXCAVATIONS ARE TO BE FILLED WITH WATER AND ALLOWED TO PERCOLATE OUT BEFORE POSITIONING TREES AND SHRUBS. NOTIFY THE LANDSCAPE ARCHITECT OF ANY AREAS THAT EVIDENCE WATER SEEPAGE OR RETENTION IN TREE OR SHRUB PITS AT TESTING, OR AT ANY TIME DURING PLANTING OPERATIONS, DO NOT PROCEED WITH INSTALLATION UNTIL UNSATISFACTORY CONDITIONS HAVE BEEN CORRECTED.

CONTINUOS BED PREPARATION: PRIOR PLACEMENT OR INCORPORATION OF SOIL AMENDMENTS, CONTINUOUS PLANTING BEDS ARE TO BE LOOSENED TO A MINIMUM DEPTH OF SIX (6) INCHES.

A THREE (3) INCH LAYER OF ACCEPTABLE SOIL AMENDMENTS IS TO BE PLACED OVER ALL CONTINUOUS BEDS TO RECEIVE NEW PLANTINGS. ACCEPTABLE SOIL AMENDMENTS ARE TO BE WORKED INTO THE TOPSOIL AT THE BOTTOM OF THE AMENDMENT ZONE TO CREATE A TRANSITION LAYER, AND THEN ADDITIONAL SOIL AMENDMENTS ARE TO BE PLACED TO MEET THICKNESSES, GRADES, AND ELEVATIONS SPECIFIED AFTER LIGHT ROLLING AND NATURAL SETTLEMENT.

PREPARED PLANTING SOIL: "PREPARED PLANTING SOIL" INDICATED IN THE PLANTING DETAILS IS TO BE DEFINED AS FOLLOWS:

AS BACKFILL SOIL AND SOIL SAUCERS FOR TREES AND SHRUBS: 80% IMPORTED TOPSOIL, 20% ACCEPTABLE SOIL AMENDMENTS PER THE "SOILS AND AMENDMENTS" PARAGRAPH, FOR GROUNDCOVER, PERENNIALS AND IN ALL CONTINUOUS PLANTING BEDS: PER THE "CONTINUOUS BED PREPARATION" PARAGRAPH.

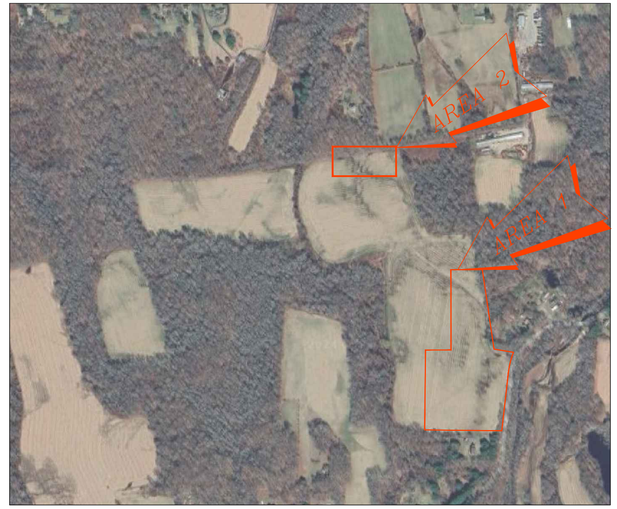
PLANT PLACEMENT: ALL PLANTS SHALL BE SET AT AN ELEVATION SUCH THAT FINISHED CONDITIONS, ESPECIALLY THE ROOT COLLAR, WILL BEAR THE SAME RELATIONSHIP TO THE FINISHED GRADE AS IT DID IN THE NURSERY, PLANTING HOLES ARE TO HAVE VERTICAL SIDES AND THE BOTTOM OF EXCAVATION IS TO BE SLIGHTLY RAISED AT THE CENTER TO ASSIST DRAINAGE WHILE PROVIDING A FIRM BASE FOR THE PLANT TO STAND PLUMB. HARD SUBSOIL IN THE BOTTOM OF THE EXCAVATION IS TO BE LOOSENED. WHEN CONDITIONS DETRIMENTAL TO PLANT GROWTH ARE ENCOUNTERED, SUCH AS RUBBLE FILL, WASTE CONCRETE AND MASONRY WORK SPOILS, CONSTRUCTION DEBRIS, ADVERSE DRAINAGE CONDITIONS, OR OBSTRUCTIONS, NOTIFY THE LANDSCAPE ARCHITECT OR OWNER'S REPRESENTATIVE BEFORE PLANTING. EXCAVATIONS FOR PLANTING HOLES SHALL BE ADEQUATE FOR HEALTHY ROOT GROWTH AND STRUCTURAL PLANT SUPPORT AS SHOWN IN THE PLANTING DETAILS.

TREES AND SHRUBS ARE TO BE PLANTED AND REMAIN PLUMB AND IN THE CENTER OF THE PLANTING HOLE OR TRENCH WITH THE TOP OF THE ROOT BALL RAISED ABOVE THE ADJACENT FINISH GRADES AS SPECIFIED. BURLAP IS TO BE REMOVED WITHOUT PULLING OR OTHER TECHNIQUES THAT WILL CAUSE DAMAGE. WIRE BASKETS ARE TO BE CUT FROM THE TOP 1/3 OF THE ROOT BALLS LEAVING SQUARE (NOT POINTED) CUTS, BUT NOT REMOVED FROM UNDER THE ROOT BALLS. REMOVED BURLAP, CUT WIRE BASKETS AND ROPE ARE TO BE DISPOSED OF OFF SITE, AND NEVER BURIED IN THE PLANTING HOLES. PLANTING STOCK IS NOT TO BE USED IF THE ROOT BALL IS CRACKED OR BROKEN AT ANY TIME DURING PLANTING OPERATIONS. CONTAINERS ARE TO BE REMOVED CAREFULLY SO AS NOT TO DAMAGE ROOT BALLS. IF CONTAINER PLANTS ARE ROOT BOUND, ROOTS ARE TO BE FREED WITH A SHARP BLADE USING A MAXIMUM OF 4 VERTICAL CUTS. BACKFILL IS TO BE PLACED IN LAYERS TO SETTLE BACKFILL AND ELIMINATE GROSS VOIDS AND LARGE AIR POCKETS. THE PLANTING HOLE IS TO BE WATERED THOROUGHLY WHEN APPROXIMATELY 1/2 BACKFILLED BEFORE PLACING THE REMAINDER OF BACKFILL TO ENSURE SETTLING AND PROPER WATERING. BACKFILL IS TO BE FIRMED FOR STEADYING PLANTS BY DIGGING BAR OR OTHER SMALL DIAMETER HAND TOOL TAMPING METHODS IN A SPACED MANNER SUITABLE FOR THE SIZE OF THE PLANT AND EXCAVATION AROUND THE ENTIRE ROOT BALL TO STABILIZE THE PLANT SUCCESSFULLY, BUT NOT WITH FEET OR OTHER BROAD SURFACE METHODS THAT CAN CRUSH ROOTS AND OVER-COMPACT PLANTING SOIL. WATERING IS TO BE REPEATED UNTIL A SLIGHT PUDDLING OCCURS ON THE SURFACE. A FIRM SAUCER MOUND 3 TO 6 INCHES HIGH IS TO BE PROVIDED USING BACKFILL SOIL AROUND THE OUTER RIM OF THE PLANTING HOLE.

PLANT LOCATIONS AND UTILITIES: THE EDGE OF PLANTING HOLE EXCAVATIONS ARE TO BE A MINIMUM OF FIVE LATERAL FEET (5') FROM ALL UTILITIES, CENTERS OF TREES ARE TO BE PLACED A MINIMUM OF EIGHT FEET (8') FROM ALL UTILITIES. TREES ARE NOT TO BE PLANTED UNDER OVERHEAD UTILITIES, CABLES, OR INFRASTRUCTURE. PLANTS ARE TO BE PLACED SO THE MATURE PLANT SPREAD WILL NOT INTERSECT WITH ANY OVERHEAD UTILITIES, CABLES, OR INFRASTRUCTURE. TREES IN PARKING BAY MEDIANS OR PARKING ISLANDS ARE TO BE CENTERED IN THE SPACE BETWEEN THE CURBS UNLESS OTHERWISE INDICATED ON THE PLAN. ANY UTILITIES INSTALLED AFTER PLANTINGS HAVE BEEN INSTALLED ARE TO CONFORM TO THE REQUIREMENTS OF THIS PARAGRAPH.

TYING AND GUYING: TYING AND GUYING SHALL BE INSTALLED AS INDICATED ON TREE PLANTING DETAILS. IF TYING OR GUYING IS REQUIRED, INSTALL IMMEDIATELY AFTER PLANTING. TIES AND GUYS ARE TO REMAIN FOR NO MORE THAN ONE (1) YEAR, AND ARE TO BE REMOVED SOONER IF FEASIBLE.

MULCH: ALL INDIVIDUAL PLANTS AND CONTINUOUS PLANTING AREAS ARE TO BE MULCHED WITH DOUBLE GROUND HARDWOOD BARK OR ROOT MULCH, USING THE SAME TYPE OF MULCH, CONSISTENT IN TEXTURE AND COLOR FOR THE ENTIRE PROJECT. MULCH IS TO BE FREE OF FOREIGN MATERIALS. MULCH IS TO BE APPLIED AT A MINIMUM OF TWO (2) INCHES IN DEPTH AND A MAXIMUM OF THREE (3) INCHES, AND IS TO BE LEVELED WITH ADJACENT GRADES. MULCHING IS NOT TO IMPEDE OR ALTER EXISTING OR PROPOSED DRAINAGE PATTERNS OR CREATE DRAINAGE PROBLEMS. MULCH IS NOT TO BE PLACED IN SUCH A WAY AS TO MIGRATE ONTO PAVED SURFACES OR ADJACENT BUILT ELEMENTS. BARK OR ROOT MULCH IS NOT TO BE PLACED AGAINST TRUNKS OR STEMS, OR ALLOWED TO FALL INTO THE CENTERS OF HERBACEOUS PLANTS OR GROUNDCOVER. DYED MULCH IS NOT TO BE USED. ALL UNDERSTORY TREES, SHRUBS, AND HERBACEOUS PLANTS SHOWN AS CONNECTED OR TOUCHING ON THE PLANS ARE TO BE IN CONTINUOUS MULCH BEDS UNLESS OTHERWISE SPECIFIED BY TEXT NOTE OR BED LINES DRAWN ON THE PLANS.

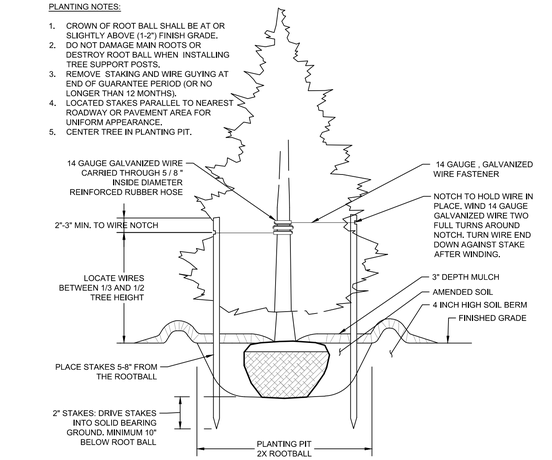


LOCATION MAP

SCALE 1:100

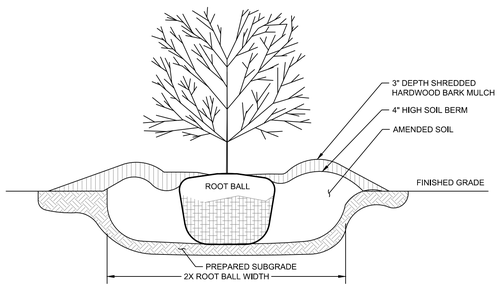
PLANTING NOTES:

1. CROWN OF ROOT BALL SHALL BE AT OR SLIGHTLY ABOVE (1-2") FINISH GRADE.
2. DO NOT DAMAGE MAIN ROOTS OR DESTROY ROOT BALL WHEN INSTALLING TREE SUPPORT POSTS.
3. REMOVE STAKING AND WIRE GUYING AT END OF GUARANTEE PERIOD (OR NO LONGER THAN 12 MONTHS).
4. LOCATED STAKES PARALLEL TO NEAREST ROADWAY OR PAVEMENT AREA FOR UNIFORM APPEARANCE.
5. CENTER TREE IN PLANTING PIT.



EVERGREEN TREE PLANTING DETAIL

SCALE: NOT TO SCALE



SHRUB PLANTING DETAIL

SCALE: NOT TO SCALE

REFERENCE NOTES:

1. PROPERTY LINE & TOPOGRAPHIC INFORMATION OBTAINED FROM SURVEY COMPLETED AND PREPARED BY NORTHEAST SURVEY CONSULTANTS, ENTITLED "MAP OF LAND IN SCOTLAND, CT," PREPARED FOR GREENSKIES CLEAN ENERGY, DATED SEPTEMBER 11, 2024.
2. CONTRACTOR TO REFER FOR C-SERIES PLAN SET FOR FURTHER PROPOSED CONDITIONS AND ADDITIONAL DETAILS.

40' 0 40' 80'
DRAWING SCALE 1" = 40'

verdantas
1005 MAIN STREET, SUITE NO.: 8120
PAWTUCKET, RI 02860

DESIGNED BY IK | DRAWN BY IK | CHECKED BY SAS | PROJECT NO. 24412
CHK'D BY DATE

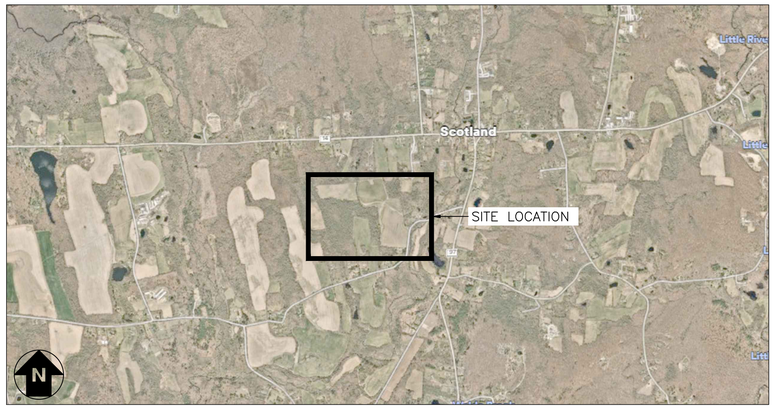
REVISION

| No. | | | | | | |

SOLAR GROUND MOUNT SYSTEM AT

GAGER HILL ROAD

41.692902, -72.090985
SCOTLAND, CT 06264



LOCATION MAP
SCALE: 1" = 2000'-0"



SYSTEM PLAN
SCALE: 1" = 500'-0"

TOTAL SYSTEM SUMMARY:

TOTAL DC SYSTEM SIZE:	5,363.280 kWDC
TOTAL AC SYSTEM SIZE:	4,625.000 kWAC
MODULE MANUFACTURER:	LONGI
(QTY) MODULE TYPE 1:	(5,122) LR5-72HBD-540M 540W (DOMESTIC)
MODULE MANUFACTURER:	LONGI
(QTY) MODULE TYPE 2:	(4,810) LR5-72HBD-540M 540W (NON-DOMESTIC)
MODULE TILT:	SINGLE AXIS TRACKER
MODULE AZIMUTH:	0°
INVERTER MANUFACTURER:	SOLECTRIA
(QTY) INVERTER TYPE:	(37) XGI 1500-125/125-UL

SUBSYSTEM SUMMARIES:

SYSTEM A
DC SYSTEM SIZE: 2,779.920 kWDC
AC SYSTEM SIZE: 2,375.000 kWAC

SYSTEM B
DC SYSTEM SIZE: 2,583.360 kWDC
AC SYSTEM SIZE: 2,250.000 kWAC

NOTES SPECIFIC TO CONNECTICUT

ADOPTED NEC VERSION: 2020
ADOPTED IBC VERSION: 2021
ADOPTED IFC VERSION: 2021

SCOPE OF WORK SUMMARY

GROUND MOUNT PV ARRAY:
- INSTALL SOLAR MODULES AND RACKING SYSTEM ON GROUND LEVEL.
- INSTALL INVERTERS AND ELECTRICAL DISTRIBUTION EQUIPMENT.
- INTERCONNECT AT NEW UTILITY SERVICE.

DEVELOPER:

Greenskies
a Clean Focus company

127 WASHINGTON AVENUE
WEST BUILDING, GARDEN LEVEL
NORTH HAVEN, CT 06473

ENGINEERED BY:

PUREPOWER ENGINEERING

111 RIVER STREET, SUITE 1110
HOBOKEN, NEW JERSEY 07030

DRAWING INDEX

		CONCEPTUAL DESIGN 05/30/2025	CONCEPTUAL DESIGN REV1 06/17/2025	CONCEPTUAL DESIGN REV2 06/20/2025	CONCEPTUAL DESIGN REV3 06/24/2025	90% PERMIT SET 12/11/2025	90% PERMIT SET - REV 1 01/06/2026
GENERAL							
G001	TITLE SHEET	●	●	●	●	●	●
ELECTRICAL							
E001	ELECTRICAL NOTES & SYMBOLS LIST					●	○
E002	ADDITIONAL NOTES					●	○
E100	ELECTRICAL PLAN	●	●	●	●	●	●
E110	EQUIPMENT AREA PLANS					●	○
E111	EQUIPMENT MOUNTING DETAILS IN ARRAY					●	●
E200	DC ELECTRICAL PLAN - SYSTEM A					●	○
E201	PARTIAL DC ELECTRICAL PLAN - SYSTEM B					●	○
E202	PARTIAL DC ELECTRICAL PLAN - SYSTEM B					●	○
E203	STRING WIRING DETAIL					●	○
E300	ONE LINE DIAGRAM - MV & SYSTEM A	●	●	●	○	●	○
E301	ONE LINE DIAGRAM - SYSTEM B	●	○	○	○	●	○
E310	SCHEDULES & CALCULATIONS					●	○
E311	SCHEDULES & CALCULATIONS					●	○
E312	SCHEDULES & CALCULATIONS					●	○
E313	SCHEDULES & CALCULATIONS					●	○
E410	GROUNDING DETAILS					●	○
E420	ELECTRICAL DETAILS					●	○
E421	ELECTRICAL DETAILS					●	○
E500	LABELS & SIGNAGE					●	○
E600	EQUIPMENT DATA SHEETS					●	○

LEGEND:

UPDATED DRAWING ISSUED	●
UNCHANGED, PREVIOUSLY ISSUED DRAWING STILL CURRENT	○
DRAWING REMOVED FROM SET	×

PM	ENG	CHK	DATE	REVISION DESCRIPTION
SK	MxB	MD	01/06/2026	90% PERMIT SET - REV 1
SK	MxB	MD	12/11/2025	90% PERMIT SET
SK	GB	RI	06/24/2025	30% CONCEPTUAL DESIGN REV 3
SK	GB	RI	06/20/2025	30% CONCEPTUAL DESIGN REV 2

PUREPOWER ENGINEERING
111 RIVER STREET, HOBOKEN, NJ
PHONE: (201) 793-1234
MATTHEW M. DONOVAN
CT LICENSE No. PEN.0037514

ENGINEER OF RECORD
MATTHEW M. DONOVAN
CONNECTICUT
PEN.0037514
REGISTERED PROFESSIONAL ENGINEER

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WWW.GREENSKIES.COM

DEVELOPER
Greenskies
a Clean Focus company

PAGE SIZE
36" x 24"

PROJECT #
10036.11

PROJECT
SOLAR GROUND MOUNT SYSTEM AT
GAGER HILL ROAD
41.692902°, -72.090985°
SCOTLAND, CT 06264

DRAWING TITLE
TITLE SHEET

DRAWING #
G001

PLOT DATE: 1/14/2026 2:12 PM

RULER IN INCHES:

PLOT DATE: 1/14/2026 2:12 PM

ELECTRICAL NOTES

1. GENERAL
1.A. ALL WORK AND MATERIALS SHALL BE IN FULL ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE AND ALL EQUIPMENT SHALL BE LISTED BY A NATIONALLY RECOGNIZED TESTING LABORATORY (NRTL) TO APPLICABLE UL STANDARDS. THE CONTRACTOR SHALL PROCURE ALL NECESSARY CERTIFICATIONS FOR ALL WORK INSTALLED, PAY ALL FEES AND CHARGES CONNECTED THEREWITH AND DELIVER ALL CERTIFICATES AND INSPECTION APPROVALS TO THE OWNER THROUGH THE ENGINEER, BEFORE WORK WILL BE FINALLY ACCEPTED.
1.B. ALL INVERTERS SHALL BE CA RULE 21, UL 1741–SA AND UL 1741–SB COMPLIANT, AND SHALL BE INSPECTED BY LOCAL UTILITY BEFORE COMMISSIONING, TESTING AND OPERATION OF THE SYSTEM.
1.C. UNLESS OTHERWISE NOTED, NEW EQUIPMENT SHALL HAVE AN INTERRUPT RATING (kAIC) OR SHORT CIRCUIT CURRENT RATING (SCCR) GREATER THAN OR EQUAL TO THE EXISTING EQUIPMENT.
1.D. UNLESS OTHERWISE NOTED, NEW EQUIPMENT SHALL HAVE MINIMUM 75°C RATED TERMINATIONS.

2. MANNER OF INSTALLATION
2.A. ALL WORK SHALL BE INSTALLED IN A FIRST CLASS, NEAT AND WORKMANLIKE MANNER BY MECHANICS SKILLED IN THE TRADE INVOLVED. ALL DETAILS OF THE INSTALLATION SHALL BE MECAALLY AND ELECTRICALLY CORRECT.
2.B. TORQUE AND MARK ALL RACKING AND MECHANICAL LUGS.

3. CONDUCTORS AND CONDUCTOR INSTALLATION
3.A. ALL ALUMINUM CABLE TERMINATIONS SHALL BE MADE USING COMPRESSION LUGS OR MECHANICAL LUGS RATED FOR ALUMINUM CONDUCTORS.
3.B. IF ALUMINUM MULTICONDUCTOR CABLE IS USED, THHN/THWN–2 INSULATION IS ACCEPTABLE. FOR SINGLE ALUMINUM CONDUCTORS, XHHW–2 SHALL BE USED.
3.C. ANTI–OXIDANT COMPOUND SHALL BE USED WITH ALL ALUMINUM LUGS. CLEAN OXIDATION FROM WIRE STRANDS WITH STEEL WIRE BRUSH PRIOR TO APPLICATION OF COMPOUND.
3.D. PV SYSTEM CONDUCTORS SHALL BE MARKED AND IDENTIFIED PER NEC 690.31(B).
3.E. INSTALL WIRE AND CABLE IN ACCORDANCE WITH THE NEC AND AS HEREINAFTER SPECIFIED. USE THE NATIONAL ELECTRICAL CONTRACTORS ASSOCIATION'S "STANDARD OF INSTALLATION", THE MANUFACTURER'S WRITTEN INSTRUCTIONS, UNLESS SUPERSEDED BY THESE SPECIFICATIONS. IN ALL CASES THE INSTALLATION SHALL BE IN ACCORDANCE WITH RECOGNIZED INDUSTRY PRACTICES.
3.F. THE USE OF WIRE SPLICES AT ANY POINT IN THE INSTALLATION IS STRICTLY PROHIBITED
3.G. THE USE OF WIRE LUBE IS REQUIRED FOR ALL WIRE PULLS THROUGH CONDUIT RUNS OF 20' OR LONGER, OR WITH BENDS IN 180° OR MORE. WIRE LUBE IS REQUIRED EVEN WHEN USING SELF LUBRICATING CABLES SUCH AS SOUTHWIRE 'SIMPULL'.
3.H. STRING WIRING & HOMERUNS SHALL BE SECURED TO UNDERSIDE OF THE RACKING & MODULES USING SUNBUNDLERS OR EQUIVALENT APPROVED BY EEOR. TRANSITION TO EMT OUTSIDE OF ARRAY. NEGATIVE HOMERUN SHALL BE RUN PARALLEL TO POSITIVE HOMERUN.
3.I. EACH DC STRING WIRING CONDUIT SHALL HAVE AN EGC.
3.J. ALL PV SOURCE CIRCUITS WHICH WOULD BE EXPOSED TO PHYSICAL DAMAGE SHALL BE PROTECTED IN CONDUIT OR CABLE TRAY.
3.K. ALL PV SOURCE CIRCUITS WITH DIRECT EXPOSURE TO SUNLIGHT SHALL BE PROTECTED THROUGH THE USE OF CONDUIT, PROTECTIVE WRAP, SPLIT LOOM, OR EQUIVALENT, WHICH ARE DURABLE FOR THE ENVIRONMENT AND RATED FOR THE APPLICATION.
3.L. ALL PLUG AND SOCKET CONNECTORS MATED TOGETHER SHALL BE OF THE SAME TYPE AND OF THE SAME MANUFACTURER. "COMPATIBLE" CONNECTORS SHALL NOT BE ACCEPTED (IEC 62446–1).
3.M. ALL FIELD–MADE PLUG & SOCKET CONNECTORS SHALL BE INSTALLED USING MANUFACTURER APPROVED TOOLS AND METHODS, AND CABLE GLANDS SHALL BE TIGHTENED TO MANUFACTURER'S SPECIFIED TORQUE VALUE.
3.N. ALL CONDUCTORS AND CABLES RATED OVER 1000V SHALL NOT BE BENT AT RADIUS LESS THAN 12X THEIR DIAMETER, OR AS SPECIFIED BY DATASHEET.
3.O. CABLE TIES INSTALLED OUTDOORS SHALL BE TYPE 2, 2S, 21, OR 21S. IN ADDITION TO THESE ALLOWED TYPES, ONLY TIES THAT ARE UV RESISTANT AND HAVE A 25–YEAR SERVICE LIFE SHALL BE USED OUTDOORS. NO UNLISTED OR UNLABELED TIES LACKING MARKINGS SHALL BE USED. CABLE TIES OR SUPPORTS OF STAINLESS 316 SHALL BE CONSIDERED TO HAVE A 25–YEAR SERVICE LIFE.

4. PHASE RELATIONSHIP
4.A. CONNECT FEEDERS TO MAINTAIN PHASE RELATIONSHIP THROUGH SYSTEM. PHASE LEGS OF FEEDERS SHALL MATCH BUS OR CABLE ARRANGEMENTS IN EQUIPMENT TO WHICH THE FEEDERS ARE CONNECTED. COLOR CODING SHALL BE AS FOLLOWS:

208/120 VAC
A PHASE: BLACK, B PHASE: RED, C PHASE: BLUE

480/277VAC OR 600/346 VAC OR 800/462 VAC
A PHASE: BROWN, B PHASE: ORANGE, C PHASE: YELLOW

MEDIUM VOLTAGE AC (GREATER THAN 800 VAC)
A PHASE: BLACK, B PHASE: RED, C PHASE: BLUE

1500 VDC, 1000 VDC, OR 600 VDC
UNGROUNDED POSITIVE CONDUCTOR: RED
UNGROUNDED NEGATIVE CONDUCTOR: BLACK

AC AND DC SYSTEMS:
NEUTRAL CONDUCTOR: WHITE OR GREY
GROUND: GREEN

4.B. GROUNDED CONDUCTORS (NEUTRAL) AND EQUIPMENT GROUNDING CONDUCTORS SMALLER THAN #4 MUST HAVE COLOR CODED INSULATION. WHERE COLOR CODED CABLE IS NOT USED, TAPE CONDUCTOR WITH OVERLAPPED COLORED TAPE FOR A MINIMUM OF 6" IN ACCESSIBLE LOCATIONS. COLOR CODING MUST BE USED CONSISTENTLY FOR THE ENTIRE PROJECT.
4.C. WHERE WIRING OF DIFFERENT VOLTAGES EXIST IN THE SAME ENCLOSURE, RACEWAY, OR WIREWAY, CONDUCTORS USING THE SAME COLOR SCHEME SHALL BE ADDITIONALLY IDENTIFIED WITH MARKING TAPE OR TAGGING PER 250.12(C)(1)(A).

5. CONDUITS AND RACEWAYS
5.A. PROVIDE RACEWAYS MINIMUM SIZE 3/4".
5.B. CONDUITS SHALL BE EMT WHERE NOT SUBJECT TO PHYSICAL DAMAGE. CONDUITS SHALL BE IMC OR RMC WHERE SUBJECT TO PHYSICAL DAMAGE. PVC CONDUITS ONLY PERMITTED IN BELOW GRADE DUCT BANKS.
5.C. DRAWINGS SHOW RACEWAY LOCATIONS DIAGRAMMATICALLY. CONTRACTOR SHALL ADJUST ROUTING TO SUIT FIELD LOCATIONS. ANY CHANGES TO PROPOSED ROUTING SHALL BE SUBMITTED TO ENGINEER FOR REVIEW AND APPROVAL.
5.D. FURNISH AND INSTALL ALL FITTINGS AND SPECIAL DEVICES NECESSARY FOR THE PROPER INSTALLATION, CONNECTION AND OPERATION OF THE SYSTEM. CONDUIT ELBOWS SHALL BE OF THE SAME MAKE, QUALITY AND FINISH AS THE CONDUIT USED.
5.E. A PROTECTIVE COATING OF ASPHALT COMPOUND, PLASTIC SHEATH, OR OTHER EQUIVALENT PROTECTION SHALL BE APPLIED TO ANY GALVANIZED STEEL CONDUITS DIRECTLY BURIED IN EARTH.
5.F. EMT CONDUIT OUTDOORS SHALL USE COMPRESSION RAINTIGHT CONNECTORS, FACTORY STAMPED RAINTIGHT WITH COMPONENTS PROPERLY INSTALLED.
5.G. PROVIDE EXPANSION FITTINGS WITH BONDING JUMPERS FOR EVERY 100' OF STRAIGHT METAL CONDUIT RUN.
5.H. CONDUIT EXPANSION AND DEFLECTION FITTINGS WITH BONDING JUMPERS SHALL BE USED WHENEVER CROSSING BUILDING EXPANSION AND SEISMIC SEPARATION JOINTS.
5.I. LEAVE WIRE SUFFICIENTLY LONG TO PERMIT MAKING FINAL CONNECTIONS. ALL EMPTY CONDUITS OVER 10' IN LENGTH SHALL BE PROVIDED WITH SYNTHETIC FIBER ROPE PULL WIRE.
5.J. PATCH AND REPAIR ALL SURFACES DAMAGED BY TRENCHING TO MATCH THE PREVIOUSLY EXISTING CONDITIONS.
5.K. TRENCHING SHALL BE DONE SUCH THAT THE DISTANCE FROM ANY STRUCTURAL PILE TO THE NEAREST EDGE OF THE TRENCH IS AT LEAST EQUIVALENT TO THE DEPTH OF THE PILE. CONFIRM MINIMUM DISTANCE TO TRENCH WITH STRUCTURAL/RACKING EOR PRIOR TO DIGGING.
5.L. ALL PENETRATIONS SHALL BE SEALED TO MAINTAIN THE EXISTING FIRE RATING.
5.M. ALL CONDUITS ENTERING ENCLOSURES SHALL BE FITTED WITH PROTECTIVE BUSHINGS, INCLUDING CONDUIT WITH CONDUCTOR SIZES SMALLER THAN #4 AWG. METALLIC CONDUIT/BUSHINGS SHALL BE BONDED PER NEC.
5.N. ALL CONDUIT ENTERING ENCLOSURES SHALL BE SEALED WITH AN APPROVED SEALANT (POLYWATER AFT).

6. ELECTRICAL ENCLOSURES
6.A. ALL OUTDOOR ENCLOSURES (PANELBOARDS, DISCONNECT SWITCHES, JUNCTION BOXES, COMBINER BOXES, ETC.) SHALL BE NEMA 3R, 4, OR 4X. ALL WALL OR RACK MOUNTED OUTDOOR ENCLOSURES SHALL HAVE A MINIMUM 2'–0" CLEARANCE ABOVE GRADE, AND A MINIMUM 1/4" CLEARANCE FROM WALL. INDOOR ENCLOSURES SHALL BE NEMA 1.
6.B. PANELBOARD DOORS SHALL BE QUARTER TURN LATCHES OR EXTERNAL HANDLE WITH INTERNAL LATCHES, NO SETS OF EXTERNAL SCREW DOWN CLAMPS.
6.C. NO PENETRATIONS OR CABLE ENTRIES IN THE TOP OF OUTDOOR ENCLOSURES. ENTER OUTDOOR ENCLOSURES FROM THE BOTTOM (PREFERRED) OR SIDE.
6.D. RMC OR IMC CONDUIT TERMINATING IN OUTDOOR ENCLOSURES SHALL USE MYERS–TYPE HUBS WITH GROUND SCREW. UTILIZE RAINTIGHT FITTINGS FOR ALL CABLE ENTRIES. (BOTTOM OR SIDE ENTRY).
6.E. EMT CONDUIT TERMINATING IN OUTDOOR ENCLOSURES SHALL USE RAINTIGHT FITTINGS (BOTTOM OR SIDE ENTRY).
6.F. ALL ELECTRICAL EQUIPMENT SHALL BE LISTED OR LABELED BY A RECOGNIZED TESTING AGENCY.
6.G. ARC FLASH HAZARD WARNING LABELS SHALL BE PROVIDED AND MOUNTED ON EVERY NEW ENCLOSURE CONTAINING SERVICEABLE COMPONENTS SUCH AS CONDUCTOR TERMINATIONS, DISCONNECTS, OR OCPDS. THIS INCLUDES BUT IS NOT LIMITED TO THE FOLLOWING COMPONENTS: COMBINER BOX, TERMINAL BOX, INVERTER, AC AND DC SWITCH, TRANSFORMER, AND SWITCHGEAR.
6.H. HAND HOLES, PULL BOXES, OR CONDUIT BODIES SHALL BE INSTALLED (WHETHER OR NOT SHOWN ON DRAWINGS) WHEN THE RACEWAY HAS MORE THAN 360° OF BENDS, OR AS NECESSARY TO NOT EXCEED MANUFACTURER'S MAXIMUM CABLE PULLING TENSION.
6.I. SWITCHBOARDS AND SWITCHGEARS SHALL BE PROVIDED WITH TEMPORARY INTERNAL HEATERS DURING LONG TERM STORAGE WHILE NOT ENERGIZED AS REQUIRED BY THE MANUFACTURER. ALL OTHER EQUIPMENT SHALL BE STORED IN ACCORDANCE WITH MANUFACTURER INSTRUCTIONS.
6.J. ALL ELECTRICAL EQUIPMENT CONTAINING A CIRCUIT BREAKER OR FUSE SHALL BE INSTALLED IN COMPLIANCE WITH NEC ARTICLE 240.24.
6.K. CONTRACTOR SHALL FIELD VERIFY DESIGN COMPLIES WITH NEC 312.8 PRIOR TO INSTALLATION.
6.L. ALL NEW ELECTRICAL EQUIPMENT INSTALLED INDOORS REQUIRES GFCI OUTLET TO BE INSTALLED WITHIN 25' OF NEW EQUIPMENT.

7. GROUNDING
7.A. THE CONTRACTOR SHALL FURNISH AND INSTALL GROUNDING NECESSARY IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE.

8. TESTS
8.A. ALL TESTS SHALL BE PERFORMED BY TRAINED TECHNICIANS CERTIFIED TO DO THE PROCEDURES.
8.B. FINAL TESTS AND INSPECTIONS SHALL BE HELD IN THE PRESENCE OF THE OWNER'S REPRESENTATIVES AND TO THEIR SATISFACTION.
8.C. ALL APPLICABLE TESTS AND COMMISSIONING SHALL BE PERFORMED IN ACCORDANCE WITH NETA/ANSI ATS–2025 AND NETA ECS–2024 STANDARDS AND PRACTICES.
8.D. ALL APPLICABLE TESTS SHALL BE PERFORMED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
8.E. ALL TESTS SHALL BE PERFORMED PRIOR TO ENERGIZATION.
8.F. TESTING IS LIMITED TO NEW EQUIPMENT RELATED TO THIS PROJECT.
8.G. IV CURVE TRACES OF STRINGS SHALL BE GENERATED USING THE SOLMETRIC PV ANALYZER (OR EQUIVALENT DEVICE) AND SUBMITTED TO THE OWNER FOR APPROVAL. IF MLPE IS USED, MODULE TRACES ARE PERMITTED TO BE GENERATED THROUGH THE INVERTER PORTAL. TESTING TO BE PERFORMED DURING APPROVED WEATHER CONDITIONS.
8.H. OPEN–CIRCUIT VOLTAGE (Voc) MEASUREMENTS SHALL BE PERFORMED ON ALL DC STRING CIRCUITS DURING APPROVED WEATHER CONDITIONS.
8.I. ALL PV CONNECTORS MATED TOGETHER SHALL BE CONFIRMED TO BE OF THE SAME MAKE/MODEL.
8.J. INSULATION TESTS SHALL BE PERFORMED ON ALL STRING AND FEEDER DC CIRCUIT CABLES.
8.K. INSULATION TESTS SHALL BE PERFORMED ON ALL SERVICE AND FEEDER AC CIRCUIT CABLES.
8.L. GROUND FAULT PROTECTION SYSTEMS SHALL BE FUNCTIONALLY TESTED IN ACCORDANCE WITH MANUFACTURER INSTRUCTIONS (NEC 230.95(C)).
8.M. ARC ENERGY REDUCTION SYSTEMS SHALL BE FUNCTIONALLY TESTED IN ACCORDANCE WITH MANUFACTURER INSTRUCTIONS (NEC 240.67(C) AND NEC 240.87(C)).
8.N. RELAY PROTECTION SYSTEM FUNCTIONAL TESTS SHALL BE IN ACCORDANCE WITH THE SETTINGS PROVIDED AND WITHIN THE OPERATIONAL INTENT OF THIS PROJECT NOTED IN EOR DRAWING. TESTING SHALL ENSURE RELAY READS VALUES ACCURATELY AND ALL LOGIC FACILITATES THE NECESSARY OPERATIONAL BEHAVIOR.
8.O. ACCEPTANCE TESTING SHALL BE PERFORMED ON ALL COMBINER BOXES, PANELBOARDS SWITCHBOARDS AND SWITCHGEAR.

GENERAL NOTES

1. THE GENERAL NOTES APPLY TO ALL DRAWINGS UNDER THE CONTRACT. REFER TO INDIVIDUAL DRAWINGS FOR ADDITIONAL NOTES.
2. DRAWINGS ARE DIAGRAMS AND INDICATE GENERAL ARRANGEMENT OF SYSTEMS AND WORK. FOLLOW DRAWINGS IN LAYING OUT OF WORK AND CHECK DRAWINGS OF OTHER TRADES TO VERIFY SPACE CONDITIONS. MAINTAIN HEADROOM, SPACE CONDITIONS, AND REQUIRED CLEARANCES.
3. PV SYSTEM CONTRACTOR SHALL COORDINATE ALL THE WORK WITH THE ENGINEER, THE CONSTRUCTION MANAGER AND ALL OTHER CONTRACTORS TO ENSURE THAT THE PV SYSTEM IS INSTALLED AS SPECIFIED IN THESE DRAWINGS.
4. PERSONAL PROTECTIVE EQUIPMENT (PPE) SHALL BE USED AS REQUIRED IN ACCORDANCE WITH NFPA 70E AND OSHA REQUIREMENTS.
5. LANDSCAPING: RESTORE TO ORIGINAL CONDITIONS.
6. ALL STRUCTURAL AND MISCELLANEOUS EXTERIOR STEEL, INCLUDING STRUT CHANNEL (SUCH AS UNISTRUT OR KINDORF) SHALL BE CORROSION RESISTANT, HOT DIP GALVANIZED OR GALVANNEALED WITH A COATED FINISH MINIMUM.

LEGEND – GENERAL

SYMBOL	DESCRIPTION
———	LIGHT LINE INDICATES EXISTING OR BEYOND THE SCOPE OF PROJECT
———	DARK LINE INDICATES NEW OR WITHIN THE SCOPE OF PROJECT
– – – – –	DASHED LINE INDICATES EQUIPMENT AT A DIFFERENT ELEVATION
EXISTING TEXT	LIGHT TEXT INDICATES EXISTING OR BEYOND THE SCOPE OF PROJECT
NEW TEXT	DARK TEXT INDICATES NEW OR WITHIN THE SCOPE OF PROJECT

LEGEND – CIRCUITS

SYMBOL	DESCRIPTION
—xx———xx—	ABOVE–GROUND CABLE
—xx— – – —xx—	UNDER–GROUND CABLE

NOTE: XX REPRESENTS CIRCUIT TYPE BELOW

ABBREVIATION	DESCRIPTION
DC	DIRECT CURRENT
AC	ALTERNATING CURRENT
MV	MEDIUM VOLTAGE
C	COMMUNICATIONS
GND	GROUND
CAB	CAB MESSENGER
MES	MESSENGER WIRE
FO	FIBER OPTIC

LEGEND – PLAN SYMBOLS

SYMBOL	DESCRIPTION
	RACEWAY TURNING UP OR TOWARDS OBSERVER
	RACEWAY TURNING DOWN OR AWAY FROM OBSERVER
P OR P	PULLBOX
J OR J	JUNCTION BOX
	GROUND FAULT CIRCUIT INTERRUPTER DUPLEX RECEPTACLE, RATED: 125–VOLTS AC, 20A
	GROUND ROD
	GROUND ROD W/ TEST WELL
	SLOPE DIRECTION INDICATOR

LEGEND – ONE LINE DIAGRAM & WIRING DIAGRAM SYMBOLS

SYMBOL	DESCRIPTION
	CIRCUIT BREAKER, FRAME SIZE AND TRIP SETTING AS NOTED
	DISCONNECT SWITCH
	INVERTER
	BUSS CONNECTION POINT
	CROSSING POINT (NO CONNECTION)
	NORMALLY CLOSED – NORMALLY OPEN CONTACTS
	TRANSFORMER CONTROL/POWER, SIZE AND RATING AS NOTED
	CURRENT TRANSFORMER
	POTENTIAL TRANSFORMER
	FUSE, SIZE/RATING AS NOTED
	FUSED DISCONNECT SWITCH
	EARTH GROUND
NC NO	PUSHBUTTON SWITCHES; NUMBER AND TYPE OF CONTACT BLOCKS MAY VARY
NC NO	PUSHBUTTON SWITCHES MUSHROOM HEAD; NUMBER AND TYPE OF CONTACT BLOCKS MAY VARY
K	KEYED INTERLOCK (KIRK KEY OR EQ.)
ST	SHUNT TRIP COIL
	SURGE ARRESTOR

ABBREVIATIONS

ABBREVIATION	DESCRIPTION
A	AMPERES
AERMS	ARC ENERGY REDUCING MAINTENANCE SYSTEM
AF	AMPERE FRAME
A.F.F.	ABOVE FINISH FLOOR
A.F.G.	ABOVE FINISH GRADE
AFDI	ARC FAULT DETECTION & INTERRUPTER
AIC	AMPS INTERRUPTING CAPACITY
AL	ALUMINUM
AT	AMPERE TRIP
ATS	AUTOMATIC TRANSFER SWITCH
AWG	AMERICAN WIRE GAUGE
BKR	CIRCUIT BREAKER
C	CONDUIT
CB	COMBINER BOX
CKT	CIRCUIT
COU	CONDITIONS OF USE
CP	CONTROL PANEL
CT	CURRENT TRANSFORMER
CU	COPPER
DB	DIRECT BURIAL
DISC	DISCONNECT
EGC	EQUIPMENT GROUNDING CONDUCTOR
ELEC	ELECTRIC, ELECTRICAL
EMERG	EMERGENCY
EMT	ELECTRIC METALLIC TUBING
EQUIP	EQUIPMENT
EV	ELECTRIC VEHICLE
EVCS	ELECTRIC VEHICLE CHARGING STATION
G, GND	GROUND
GEC	GROUNDING ELECTRODE CONDUCTOR
GFCI	GROUND–FAULT CIRCUIT INTERRUPTER
GFPE	GROUND–FAULT PROTECTION OF EQUIPMENT
HID	HIGH–INTENSITY DISCHARGE (LIGHTING)
HZ	HERTZ
IMC	INTERMEDIATE METAL CONDUIT
kAIC	1000 AMPS INTERRUPT CAPACITY
kCMIL	1000 CIRCULAR MILS
kVA	KILO–VOLT AMPERE
kW	KILOWATT
LA	LIGHTNING & SURGE ARRESTOR
LED	LIGHT–EMITTING DIODE
LSIG	LONG, SHORT, INSTANTANEOUS, & GROUND–FAULT
LTG	LIGHTING
MCM	1000 CIRCULAR MILS
MFG	MANUFACTURER
MLO	MAIN LUGS ONLY
MLPE	MODULE LEVEL POWER ELECTRONICS
MPPT	MAXIMUM POWER POINT TRACKING
NEMA	NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
NTS	NOT TO SCALE
OH	OVERHEAD
OV	OVER VOLTAGE
P	POLE
PF	POWER FACTOR
PLC	PROGRAMMABLE LOGIC CONTROLLER
POA	PLANE OF ARRAY
POI	POINT OF INTERCONNECTION
PRI	PRIMARY
PT	POTENTIAL TRANSFORMER
PVC	POLYVINYL CHLORIDE
PWR	POWER
RAC	RIGID ALUMINUM CONDUIT
RCPT	RECEPTACLE
RGS	RIGID GALVANIZED STEEL CONDUIT
RMC	RIGID METAL CONDUIT
SA	SURGE ARRESTOR
SEC	SECONDARY
SPD	SURGE PROTECTION DEVICE
SSBJ	SUPPLY SIDE BONDING JUMPER
ST	SHUNT TRIP
STP	SHIELDED TWISTED PAIR
SW	SWITCH
TBD	TO BE DETERMINED
TP	TWISTED PAIR
TYP	TYPICAL
UG	UNDERGROUND
UON	UNLESS OTHERWISE NOTED
UV	UNDER VOLTAGE OR ULTRAVIOLET
V	VOLT
VA	VOLT–AMPERE
W	WATT
WR	WEATHER RESISTANT
XFMR	TRANSFORMER
ø	DIAMETER OR PHASE

PM	ENG	CHK
	SK	MaB
	SK	MaB
	SK	GB
	SK	GB

REVISION DESCRIPTION	DATE
90% PERMIT SET – REV 1	01/06/2026
90% PERMIT SET	12/12/2025
30% CONCEPTUAL DESIGN REV 3	06/24/2025
30% CONCEPTUAL DESIGN REV 2	06/20/2025

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DEVELOPER: Greenskies, a Clean Focus company

PAGE SIZE: 36" x 24"
PROJECT #: 10036.11

PROJECT: SOLAR GROUND MOUNT SYSTEM AT GAGER HILL ROAD
41.692902°, –72.090985°
SCOTLAND, CT 06264

DRAWING TITLE: ELECTRICAL NOTES & SYMBOLS LIST

DRAWING #: E001

RULER IN INCHES: 0 ½ 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18

SOLAR PV GENERAL NOTES

1. INSTALL A COMPLETE AND OPERATIONAL SOLAR PHOTOVOLTAIC SYSTEM INCLUDING THE RECONNECTION OF ANY EXISTING ELECTRICAL EQUIPMENT DISTURBED DURING SOLAR PHOTOVOLTAIC ARRAY INSTALLATION.
2. THESE DRAWINGS ARE DIAGRAMMATIC AND SHOW THE GENERAL LOCATION AND ARRANGEMENT OF THE SOLAR PV SYSTEM. THEY DO NOT SHOW ALL MATERIALS NEEDED. CONTRACTOR IS REQUIRED TO PROVIDE ANY AND ALL CONDUITS, CONNECTORS, SWEEPS, SUPPORTS, BENDS, FITTINGS, HANGERS, COVER PLATES, AND ADDITIONAL PULL AND JUNCTION BOXES WHICH THE CONTRACTOR MUST PROVIDE TO COMPLETE THE SOLAR PV SYSTEM IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE (NEC).
3. THE DEFINITION OF ELECTRICAL TERMS USED SHALL BE AS DEFINED STATES' ADOPTED EDITION OF THE NEC.
4. THE TERM "SIZE" SHALL MEAN ONE OR MORE OF THE FOLLOWING: "LENGTH, CURRENT AND VOLTAGE RATING, NUMBER OF POLES, NEMA SIZE, AND OTHER SIMILAR ELECTRICAL CHARACTERISTICS".
5. CONTRACTOR IS REQUIRED TO SURVEY AND INSPECT ALL AREAS PRIOR TO PERFORMING SERVICES TO ENSURE CLEARANCES CAN BE MET AND NO INTERFERENCES EXIST. NO CUTTING OR DRILLING IS TO BE PERFORMED PRIOR TO LOCATING EXISTING STRUCTURAL MEMBERS AND UTILITIES.
6. SERVICE ENTRANCE RATED EQUIPMENT, C/T CABINETS, AND METER SOCKETS ARE TO BE APPROVED FOR USE BY THE LOCAL UTILITY COMPANY.
7. ELECTRICAL EQUIPMENT INSTALLED MUST BE LABELED, UL LISTED, AND INSTALLED ACCORDINGLY.
8. REQUIRED PERMITS AND INSPECTIONS ARE THE RESPONSIBILITY OF THE CONTRACTOR AND MUST BE COORDINATED WITH THE AUTHORITY HAVING JURISDICTION (AHJ).
9. ALL WORK IS TO BE PERFORMED BY LICENSED WORKMEN AND COMPLETED IN ACCORDANCE WITH THE STATES' ADOPTED NEC.
10. ALL PENETRATIONS THROUGH FIRE AND SMOKE RATED PARTITIONS MUST BE SEALED WITH A FIRE RATED MATERIAL EQUIVALENT IN RATING TO THE PARTITION PENETRATED.
11. THE SOLAR PV SYSTEM EQUIPMENT ON THE DC SIDE IS RATED FOR 1000V AND IS IN COMPLIANCE WITH NEC. THE INVERTERS, MODULES, STRING FEEDERS, AND RELATED COMPONENTS ARE ALL RATED AND LABELED AS 1000V.
12. EMT CONDUIT IS ALLOWED IN EXTERIOR LOCATIONS WHEN RAIN-TIGHT CONNECTORS AND FITTINGS ARE USED, AND THE CONDUIT IS NOT EXPOSED TO ANY POTENTIAL PHYSICAL DAMAGE. ALL SUPPORTS, BOLTS, STRAPS, AND SCREWS SHALL BE CORROSION RESISTANT.
13. ALL RACEWAYS ARE TO BE METALLIC UNLESS OTHERWISE NOTED. APPLY AN ADHESIVE LABEL ALONG ALL RACEWAYS CARRYING PV SYSTEM FEEDERS (AC AND DC) AS "WARNING: PHOTOVOLTAIC POWER SOURCE". REFER TO E500. LABEL SHALL BE APPLIED EVERY 10', AT EVERY TURN, AND ABOVE AND BELOW ALL PENETRATIONS.
14. ALL CONDUCTORS SHALL BE LISTED FOR USE IN APPROPRIATE RACEWAY.
15. ALL BREAKERS INSTALLED AS PART OF THE NEW SOLAR PV SYSTEM MUST BE RATED FOR REVERSE FEED.
16. COMMUNICATIONS CABLES INSTALLED BETWEEN MONITORING EQUIPMENT AND CLIENT NETWORK EQUIPMENT (SWITCHES, ROUTERS, SERVERS, ETC.) SHALL HAVE CABLE TAGS INSTALLED AT BOTH ENDS OF CABLE TO SHOW PROPER IDENTIFICATION.
17. CONTRACTOR SHALL TORQUE TEST ALL FIELD TERMINATED WIRES PER MANUFACTURER'S SPECS AND PROVIDE PERMANENT MARKINGS ACROSS THE BOLT AND WASHER INDICATING ACHIEVED TORQUE.
18. BARE COPPER GROUND CONDUCTORS SHALL BE SIZED PER NEC. EQUIPMENT GROUNDING CONDUCTORS (EGC) SHALL BE INSTALLED IN CONDUIT.
19. POLARIS SPLICES SHALL NOT BE USED ON THIS PROJECT IN ANY CAPACITY. ANY SPLICES SHALL BE APPROVED BY GREENSKIES AND THE ENGINEER OF RECORD.
20. CONTRACTOR SHALL SUBMIT A FORMAL RFI (REQUEST FOR INFORMATION) FOR ANY CONFUSION OR DISCREPANCY ON THE DRAWINGS. CONTRACTOR IS RESPONSIBLE FOR ANY INSTALLATION DEVIATIONS WITHOUT APPROVAL FROM GREENSKIES OR THE ENGINEER OF RECORD.
21. LB CONDUIT BODIES SHALL NOT BE USED ON THIS PROJECT. EXCEPT FOR COMM CABLE ROUTING, ANY OTHER APPLICATION MUST BE REQUESTED AND APPROVED BY GREENSKIES.
22. TEMPERATURE RATINGS OF ALL CONDUCTORS, TERMINATIONS, BREAKERS, OR OTHER DEVICES ASSOCIATED WITH THE SOLAR PV SYSTEM SHALL BE RATED FOR AT LEAST 75 DEGREE C.
23. ALL METALLIC CONDUITS SHALL HAVE BOND BUSHINGS ON BOTH ENDS AND EQUIPMENT GROUNDING CONDUCTORS (EGC) ROUTED THROUGH CONDUIT.
24. ALL DC PV CONNECTORS TO BE LIKE-MATED.
25. ALL LINE-SIDE INTERCONNECTION AC WIRING FROM THE SOLAR SYSTEM AC DISCONNECT TO THE INTERCONNECTION POINT MUST BE COPPER.

PV ARRAY WORK NOTES

1. WORK INCLUDES INSTALLING PROPOSED SOLAR PANEL ARRAY PER THE MANUFACTURERS INSTALLATION PROCEDURES AND INSTRUCTIONS, ALONG WITH ASSOCIATED ELECTRICAL WIRING.
2. WORK AREAS SHALL BE MARKED, FENCED, AND OTHERWISE SECURED SO AS TO PROVIDE PROPER PROTECTION FOR THE PUBLIC AND AS REQUIRED BY THE BUILDING INSPECTOR.
3. DIMENSION OF EXISTING ELEMENTS SHOWN WERE DETERMINED THROUGH A COMBINATION OF EXISTING DRAWINGS AND FIELD INVESTIGATIONS, AND SHOULD BE USED FOR INFORMATIONAL PURPOSES ONLY. ALL EXISTING CONDITIONS AND DIMENSIONS SHALL BE FIELD VERIFIED BY THE CONTRACTOR.
4. ELECTRICAL RUNS SHOWN ON PLAN REPRESENT THE PROPOSED LAYOUT. THE CONTRACTOR SHALL NOT RELOCATE INVERTERS OR PANELBOARDS WITHOUT APPROVAL FROM THE ENGINEER.
5. THE INSTALLER SHALL VERIFY THE PROJECT SOUTH DIRECTION IN THE FIELD, AND INSTALL THE MODULES AS INDICATED ON THE PLANS. THE MODULES SHALL BE INSTALLED AS TILTED TOWARDS THE GENERAL DIRECTION OF PROJECT SOUTH.
6. NO CONDUCTOR OR CONNECTOR SHALL BE EXPOSED TO THE ELEMENTS OUTSIDE OF THE BOUNDARIES OF EACH SUB-ARRAY.
7. CONTRACTOR SHALL ENSURE DC, AC, AND COMMUNICATION WIRING IS SECURED UNDERNEATH THE ARRAY.
8. DC CONDUIT JUMPERS THAT ARE EXPOSED TO ELEMENTS ON OPEN ENDS SHALL HAVE PUTTY INSTALLED TO KEEP OUT MOISTURE.

	DATE	REVISION DESCRIPTION	PM	ENG	CHK
4	01/06/2026	90% PERMIT SET - REV 1	SK	MxB	MD
3	12/12/2025	90% PERMIT SET	SK	MxB	MD
2	06/24/2025	30% CONCEPTUAL DESIGN REV 3	SK	GB	RI
1	06/20/2025	30% CONCEPTUAL DESIGN REV 2	SK	GB	RI

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DEVELOPER: Greenskies, a Clean Focus company

PAGE SIZE: 36" x 24"

PROJECT #: 10036.11

PROJECT: SOLAR GROUND MOUNT SYSTEM AT GAGER HILL ROAD 41.692902°, -72.090985° SCOTLAND, CT 06264

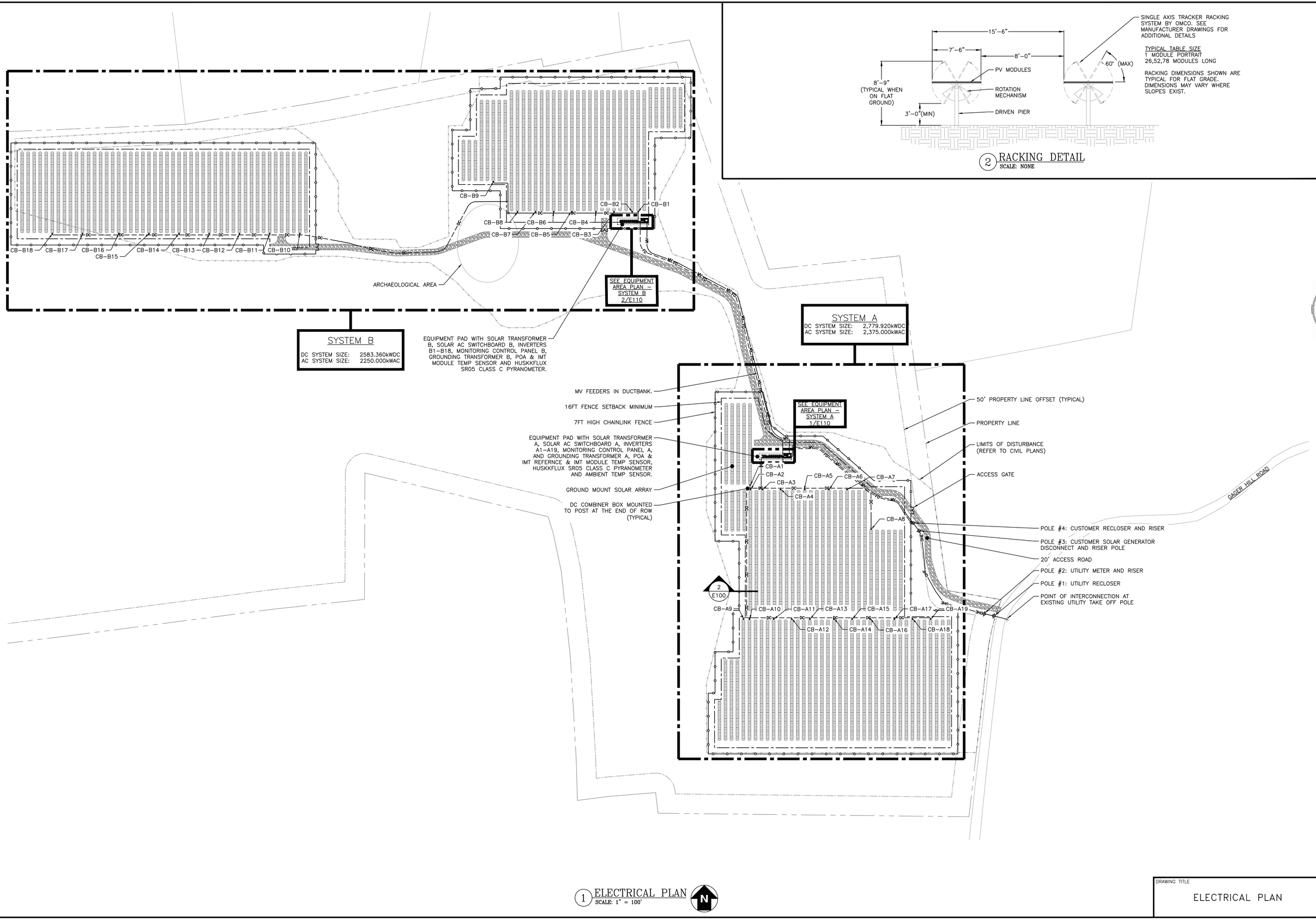
DRAWING TITLE: ADDITIONAL NOTES

DRAWING #: E002

PLOT DATE: 1/14/2026 2:12 PM

RULER IN INCHES: 0 ½ 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18

PLOT DATE: 1/14/2026 2:13 PM



1 ELECTRICAL PLAN
SCALE: 1" = 100'

2 RACKING DETAIL
SCALE: NONE

DATE	REVISION DESCRIPTION	PM	ENG	CHK
01/06/2026	90% PERMIT SET – REV 1	SK	MxB	MD
12/12/2025	90% PERMIT SET	SK	MxB	MD
06/24/2025	30% CONCEPTUAL DESIGN REV 3	SK	GB	RI
06/20/2025	30% CONCEPTUAL DESIGN REV 2	SK	GB	RI

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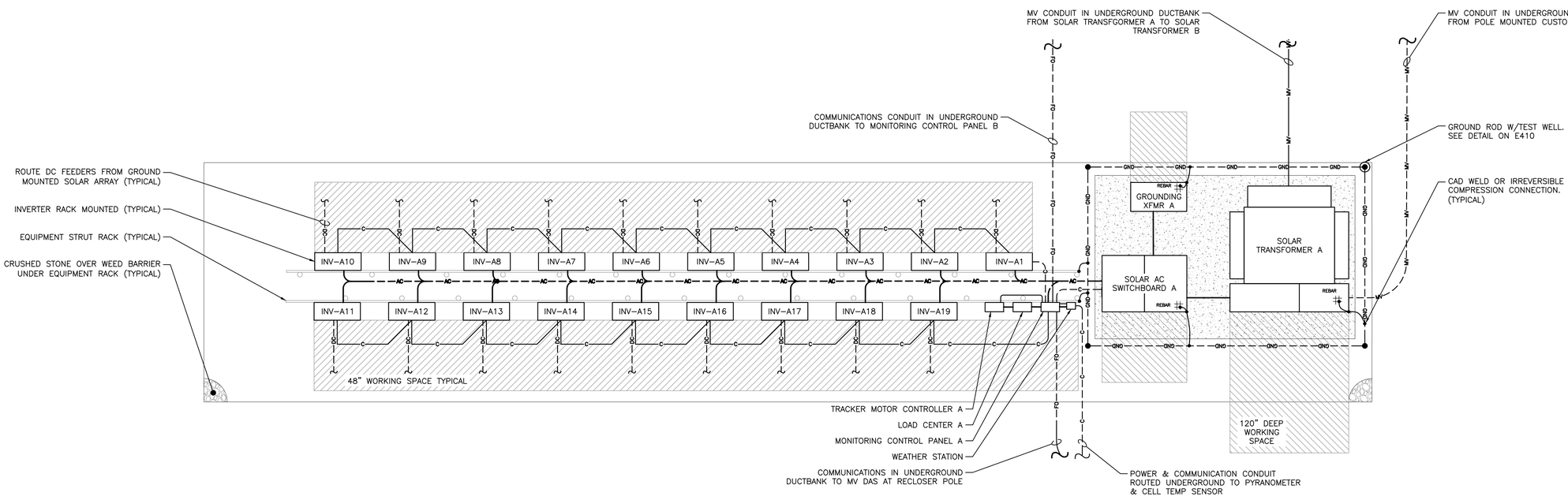
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41.692902°, -72.090985°
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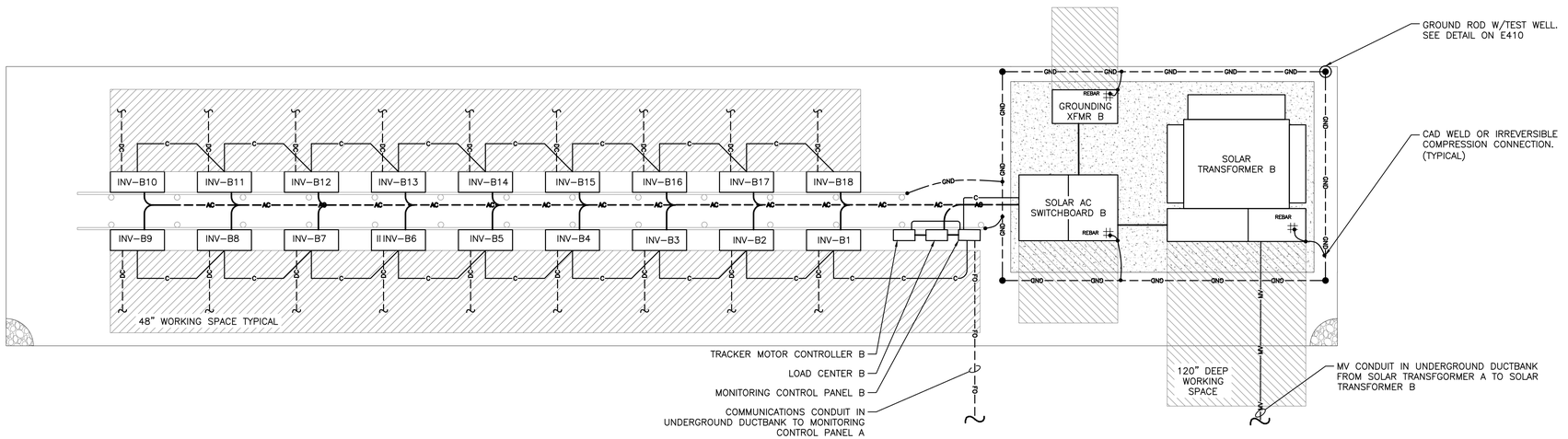
DRAWING TITLE: ELECTRICAL PLAN

DRAWING #: E100

RULER IN INCHES: 0 ½ 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18



1 EQUIPMENT AREA PLAN – SYSTEM A
SCALE: 1/4" = 1'–0"



1 EQUIPMENT AREA PLAN – SYSTEM B
SCALE: 1/4" = 1'–0"

PM	ENG	CHK	REVISION DESCRIPTION	DATE
	SK	MdB	90% PERMIT SET – REV 1	01/06/2026
	SK	MdB	90% PERMIT SET	12/12/2025
	SK	GB	30% CONCEPTUAL DESIGN REV 3	06/24/2025
	SK	GB	30% CONCEPTUAL DESIGN REV 2	06/20/2025

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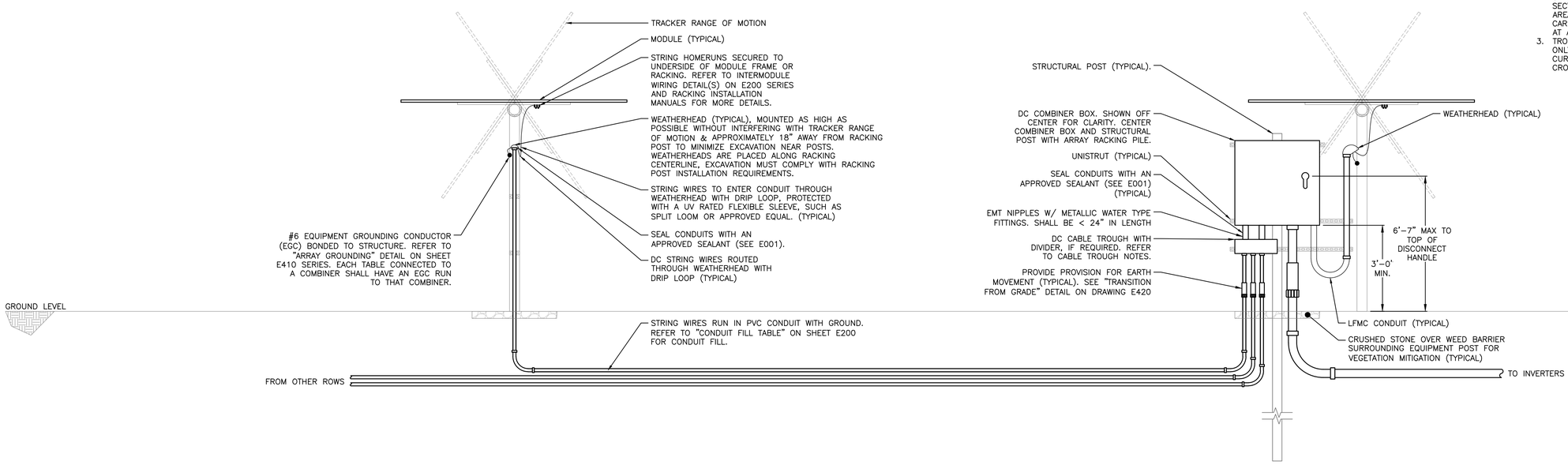
PROJECT: SOLAR GROUND MOUNT SYSTEM AT GAGER HILL ROAD 41.692902°, -72.090985° SCOTLAND, CT 06264

DRAWING TITLE: EQUIPMENT AREA PLAN

DRAWING #: E110

PLOT DATE: 1/14/2026 2:13 PM

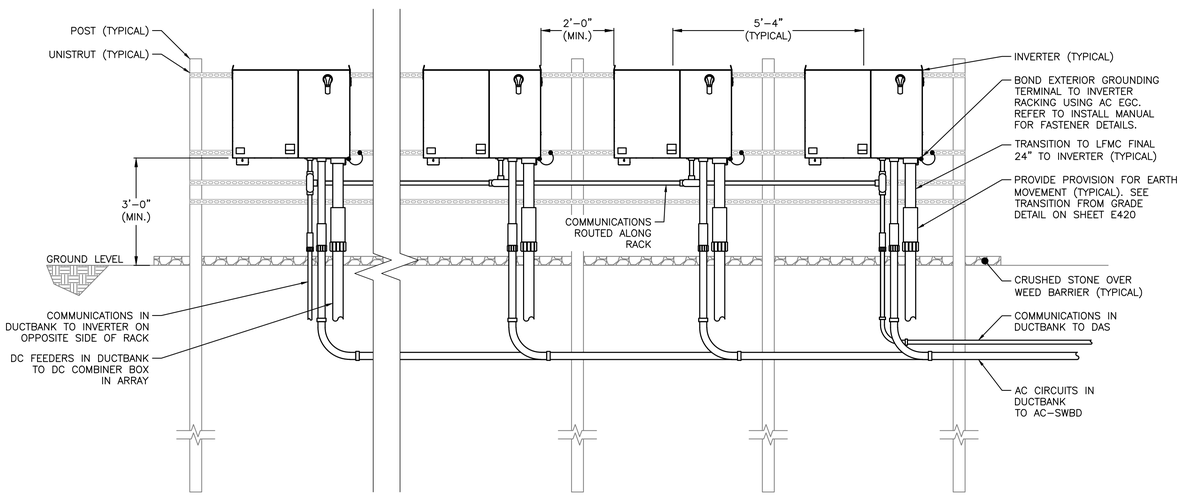
RULER IN INCHES: 0 ½ 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18



1 TYPICAL EQUIPMENT RACKING ELEVATION – SIDE VIEW
SCALE: 1/2" = 1'-0"

CABLE TROUGH NOTES

1. CONDUITS AND TROUGHS SHALL NOT ENCROACH MORE THAN 6" INTO WORKING SPACE OF EQUIPMENT.
2. TROUGHS AND WIREWAYS SHALL BE SIZED SUCH THAT THE SUM OF THE CROSS-SECTIONAL AREAS OF ALL CONDUCTORS AND CABLES AT ANY CROSS SECTION SHALL NOT EXCEED 20 PERCENT OF THE AREA OF THE TROUGH. THE NUMBER OF CURRENT CARRYING CONDUCTORS SHALL NOT EXCEED 30 AT ANY CROSS-SECTION OF THE TROUGH.
3. TROUGH TO BE USED FOR DC STRING CIRCUITS ONLY. UTILIZE DIVIDER TO MAINTAIN MAXIMUM 30 CURRENT CARRYING CONDUCTORS AT ANY CROSS-SECTION.



2 TYPICAL EQUIPMENT ELEVATION – FRONT VIEW
SCALE: 1/2" = 1'-0"

PM	ENG CHK
SK	MxB MD
SK	MxB MD
SK	GB RI
SK	GB RI
SK	GB RI

DATE	REVISION DESCRIPTION
01/06/2026	90% PERMIT SET – REV 1
12/12/2025	90% PERMIT SET
06/24/2025	30% CONCEPTUAL DESIGN REV 3
06/20/2025	30% CONCEPTUAL DESIGN REV 2

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PAGE SIZE 36" x 24"
PROJECT # 10036.11

PROJECT
SOLAR GROUND MOUNT SYSTEM AT
GAGER HILL ROAD
41.692902°, -72.090985°
SCOTLAND, CT 06264

DRAWING TITLE
EQUIPMENT MOUNTING DETAILS IN ARRAY

DRAWING #
E111

PLOT DATE: 1/14/2026 2:14 PM

RULER IN INCHES: 0 ½ 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18

PLOT DATE: 1/14/2026 2:14 PM



CONDUIT FILL TABLE (PVWIRE, 2000VDC MAX) – LONGI 540W DOMESTIC

MAXIMUM NUMBER OF CU #10 PV WIRES.
(WITH ALLOWANCE FOR AN ADDITIONAL GROUND WIRE)

CONDUIT TRADE SIZE	CONDUIT LENGTH 24" OR LESS (60% FILL)	CONDUIT LENGTH OVER 24" (40% FILL – W/ CONDITIONS OF USE)
3/4"	3	1
1"	5	3
1.25"	9	5
1.5"	13	8
2"	23	9
2.5"	33	9
3"	52	9
3.5"	70	9
4"	91	9

TABLE ASSUMING: ANY CONDUIT TYPE AND CU #10 PV WIRE WITH 0.28in O.D., 1 TEMP. DERATE

PV SOURCE CIRCUIT (SIMULATED) WITH 15.08A OUTPUT, 1 IN PARALLEL, AND 25A FUSES

STRING WIRING NOTE:
STRING WIRES TO BE GROUPED BY CIRCUIT INTO SAME CONDUIT OR CABLE TRAY PER NEC 300.3(B)

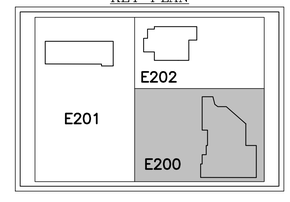
STRING SUMMARY – SYSTEM A

INVERTER NAME	MODULES PER STRING	STRING QUANTITY	MODULE TYPE
A1	26	5	540W (D)
		5	540W (ND)
A2	26	5	540W (D)
		5	540W (ND)
A3	26	6	540W (D)
		5	540W (ND)
A4	26	6	540W (D)
		5	540W (ND)
A5	26	6	540W (D)
		5	540W (ND)
A6	26	6	540W (D)
		5	540W (ND)
A7	26	6	540W (D)
		5	540W (ND)
A8	26	6	540W (D)
		5	540W (ND)
A9	26	6	540W (D)
		5	540W (ND)
A10	26	6	540W (D)
		5	540W (ND)
A11	26	5	540W (D)
		5	540W (ND)
A12	26	5	540W (D)
		5	540W (ND)
A13	26	5	540W (D)
		5	540W (ND)
A14	26	5	540W (D)
		5	540W (ND)
A15	26	5	540W (D)
		5	540W (ND)
A16	26	5	540W (D)
		5	540W (ND)
A17	26	5	540W (D)
		5	540W (ND)
A18	26	5	540W (D)
		5	540W (ND)
A19	26	5	540W (D)
		5	540W (ND)

(D) : DOMESTIC

(ND) : NON DOMESTIC

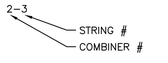
KEY PLAN



IMPORTANT
CONTRACTOR MUST REDLINE DRAWINGS TO REFLECT EXACT AS-BUILT STRINGING AND RETURN TO PURE POWER.

1 DC ELECTRICAL PLAN – SYSTEM A
SCALE: 1" = 50'

STRING LABEL KEY



NO	DATE	REVISION DESCRIPTION	PM	ENG	CHK
5	01/06/2026	90% PERMIT SET – REV 1	SK	MxB	MD
4	12/12/2025	90% PERMIT SET	SK	MxB	MD
3	06/24/2025	30% CONCEPTUAL DESIGN REV 3	SK	GB	RI
2	06/20/2025	30% CONCEPTUAL DESIGN REV 2	SK	GB	RI

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MATTHEW M. DONOVAN
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Greenskies
a Clean Focus company

PAGE SIZE: 36" x 24"
PROJECT #: 100.36.11

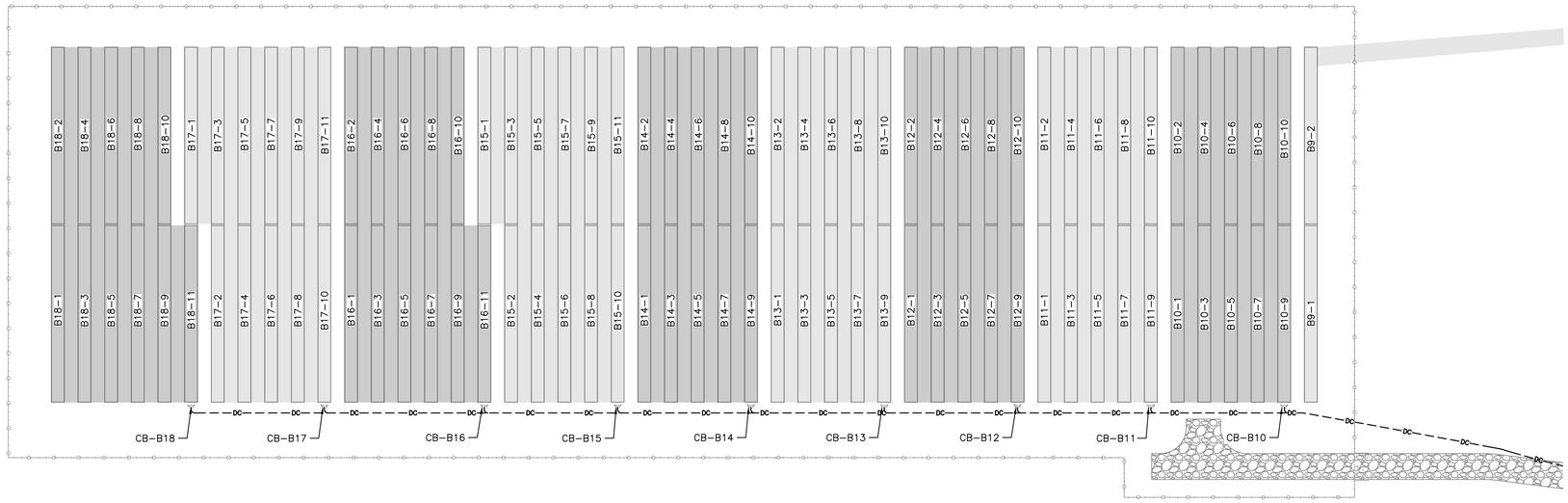
PROJECT
SOLAR GROUND MOUNT SYSTEM AT
GAGER HILL ROAD
41.692902°, -72.090985°
SCOTLAND, CT 06264

DRAWING TITLE
DC ELECTRICAL PLAN – SYSTEM A

DRAWING #
E200

RULER IN INCHES:

PLOT DATE: 1/14/2026 2:14 PM



CONDUIT FILL TABLE (PVWIRE, 2000VDC MAX) – LONGI 540W DOMESTIC		
MAXIMUM NUMBER OF CU #10 PV WIRES. (WITH ALLOWANCE FOR AN ADDITIONAL GROUND WIRE)		
CONDUIT TRADE SIZE	CONDUIT LENGTH 24" OR LESS (60% FILL)	CONDUIT LENGTH OVER 24" (40% FILL – W/ CONDITIONS OF USE)
3/4"	3	1
1"	5	3
1.25"	9	5
1.5"	13	8
2"	23	9
2.5"	33	9
3"	52	9
3.5"	70	9
4"	91	9
TABLE ASSUMING: ANY CONDUIT TYPE AND CU #10 PV WIRE WITH 0.28in O.D., 1 TEMP. DERATE		
PV SOURCE CIRCUIT (SIMULATED) WITH 15.08A OUTPUT, 1 IN PARALLEL, AND 25A FUSES		

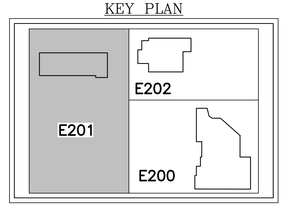
STRING WIRING NOTE:
STRING WIRES TO BE GROUPED BY CIRCUIT INTO SAME CONDUIT OR CABLE TRAY PER NEC 300.3(B)

STRING SUMMARY – SYSTEM B			
INVERTER NAME	MODULES PER STRING	STRING QUANTITY	MODULE TYPE
B1	26	5	540W (D)
		5	540W (ND)
B2	26	5	540W (D)
		5	540W (ND)
B3	26	5	540W (D)
		5	540W (ND)
B4	26	5	540W (D)
		5	540W (ND)
B5	26	5	540W (D)
		5	540W (ND)
B6	26	5	540W (D)
		5	540W (ND)
B7	26	5	540W (D)
		5	540W (ND)
B8	26	5	540W (D)
		5	540W (ND)
B9	26	5	540W (D)
		5	540W (ND)
B10	26	5	540W (D)
		5	540W (ND)
B11	26	5	540W (D)
		5	540W (ND)
B12	26	5	540W (D)
		5	540W (ND)
B13	26	5	540W (D)
		5	540W (ND)
B14	26	5	540W (D)
		5	540W (ND)
B15	26	6	540W (D)
		5	540W (ND)
B16	26	6	540W (D)
		5	540W (ND)
B17	26	6	540W (D)
		5	540W (ND)
B18	26	6	540W (D)
		5	540W (ND)

(D) : DOMESTIC

(ND) : NON DOMESTIC

KEY PLAN



IMPORTANT
CONTRACTOR MUST REDLINE DRAWINGS TO REFLECT EXACT AS–BUILT STRINGING AND RETURN TO PURE POWER.

1 PARTIAL DC ELECTRICAL PLAN – SYSTEM B
SCALE: 1" = 40'

STRING LABEL KEY
2–3
STRING #
COMBINER #

RULER IN INCHES: 0 ½ 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18

PM	ENG CHK
SK	MxB
SK	MxB
SK	GB
SK	GB

DATE	REVISION DESCRIPTION
01/06/2026	90% PERMIT SET – REV 1
12/12/2025	
06/24/2025	90% PERMIT SET
06/24/2025	30% CONCEPTUAL DESIGN REV 3
06/20/2025	30% CONCEPTUAL DESIGN REV 2

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MATTHEW M. DONOVAN
CT LICENSE No. PEN.0037514

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DEVELOPER: Greenskies, a Clean Focus company

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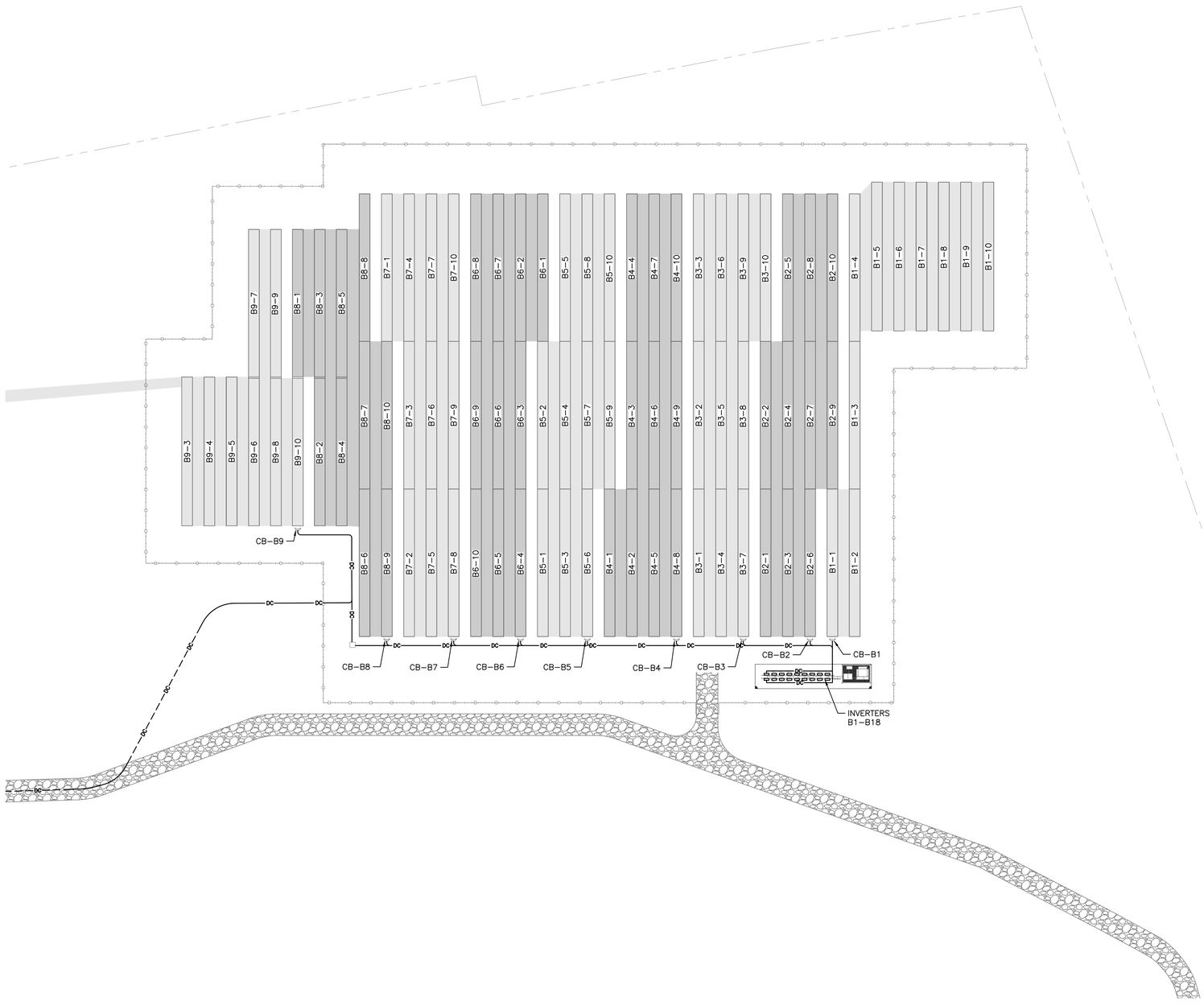
PROJECT #: 10036.11

PROJECT: SOLAR GROUND MOUNT SYSTEM AT GAGER HILL ROAD 41.692902°, -72.090985° SCOTLAND, CT 06264

DRAWING TITLE: PARTIAL DC ELECTRICAL PLAN – SYSTEM B

DRAWING #: E201

PLOT DATE: 1/14/2026 2:14 PM



CONDUIT FILL TABLE (PVWIRE, 2000VDC MAX) – LONGI 540W DOMESTIC		
MAXIMUM NUMBER OF CU #10 PV WIRES. (WITH ALLOWANCE FOR AN ADDITIONAL GROUND WIRE)		
CONDUIT TRADE SIZE	CONDUIT LENGTH 24" OR LESS (60% FILL)	CONDUIT LENGTH OVER 24" (40% FILL – W/ CONDITIONS OF USE)
3/4"	3	1
1"	5	3
1.25"	9	5
1.5"	13	8
2"	23	9
2.5"	33	9
3"	52	9
3.5"	70	9
4"	91	9
TABLE ASSUMING: ANY CONDUIT TYPE AND CU #10 PV WIRE WITH 0.28in O.D., 1 TEMP. DERATE		
PV SOURCE CIRCUIT (SIMULATED) WITH 15.08A OUTPUT, 1 IN PARALLEL, AND 25A FUSES		

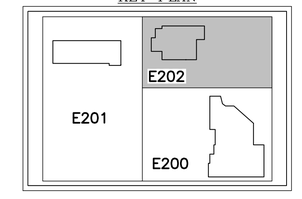
STRING WIRING NOTE:
STRING WIRES TO BE GROUPED BY CIRCUIT INTO SAME CONDUIT OR CABLE TRAY PER NEC 300.3(B)

STRING SUMMARY – SYSTEM B			
INVERTER NAME	MODULES PER STRING	STRING QUANTITY	MODULE TYPE
B1	26	5	540W (D)
		5	540W (ND)
B2	26	5	540W (D)
		5	540W (ND)
B3	26	5	540W (D)
		5	540W (ND)
B4	26	5	540W (D)
		5	540W (ND)
B5	26	5	540W (D)
		5	540W (ND)
B6	26	5	540W (D)
		5	540W (ND)
B7	26	5	540W (D)
		5	540W (ND)
B8	26	5	540W (D)
		5	540W (ND)
B9	26	5	540W (D)
		5	540W (ND)
B10	26	5	540W (D)
		5	540W (ND)
B11	26	5	540W (D)
		5	540W (ND)
B12	26	5	540W (D)
		5	540W (ND)
B13	26	5	540W (D)
		5	540W (ND)
B14	26	5	540W (D)
		5	540W (ND)
B15	26	6	540W (D)
		5	540W (ND)
B16	26	6	540W (D)
		5	540W (ND)
B17	26	6	540W (D)
		5	540W (ND)
B18	26	6	540W (D)
		5	540W (ND)

(D) : DOMESTIC

(ND) : NON DOMESTIC

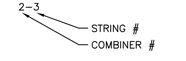
KEY PLAN



IMPORTANT
CONTRACTOR MUST REDLINE DRAWINGS TO REFLECT EXACT AS-BUILT STRINGING AND RETURN TO PURE POWER.

1 DC ELECTRICAL PLAN – SYSTEM B
SCALE: 1" = 40'

STRING LABEL KEY



RULER IN INCHES: 0 ½ 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18

PM	ENG	CHK
	SK	MxB
	SK	MxB
	SK	GB
	SK	GB

DATE	REVISION DESCRIPTION
01/06/2026	90% PERMIT SET – REV 1
12/12/2025	
06/24/2025	90% PERMIT SET
06/24/2025	30% CONCEPTUAL DESIGN REV 3
06/20/2025	30% CONCEPTUAL DESIGN REV 2

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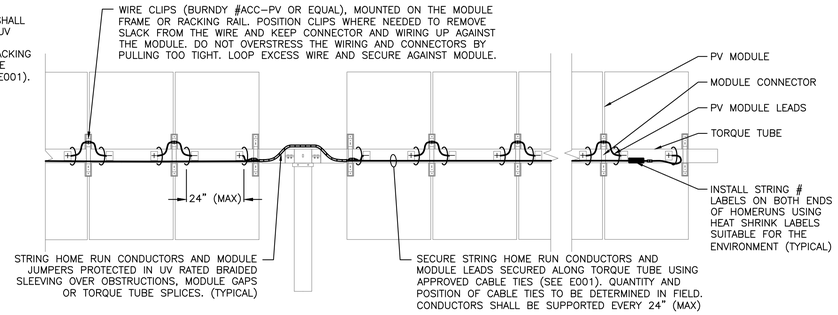
PAGE SIZE: 36" x 24"
PROJECT #: 10036.11

PROJECT
SOLAR GROUND MOUNT SYSTEM AT
GAGER HILL ROAD
41.692902°, -72.090985°
SCOTLAND, CT 06264

DRAWING TITLE
PARTIAL DC ELECTRICAL PLAN – SYSTEM B

DRAWING #
E202

NOTES:
1. CONDUCTORS TRANSITIONING BETWEEN TABLES SHALL BE PROPERLY SECURED AND PROTECTED WITH UV RESISTANT SPLIT LOOM OR SPIRAL WRAP.
2. STRING HOME RUN CONDUCTORS SHALL USE RACKING FOR CABLE MANAGEMENT AND SUPPORT. SECURE CONDUCTORS WITH APROVED CABLE TIES (SEE E001).



1 TRACKER WIRE MANAGEMENT DETAIL
SCALE: NONE

PLOT DATE: 1/14/2026 2:15 PM

RULER IN INCHES: 0 ½ 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18

	DATE	REVISION DESCRIPTION	PM	ENG CHK
	01/06/2026	90% PERMIT SET – REV 1	SK	MxB MD
	12/12/2025	90% PERMIT SET	SK	MxB MD
	06/24/2025	30% CONCEPTUAL DESIGN REV 3	SK	GB RI
	06/20/2025	30% CONCEPTUAL DESIGN REV 2	SK	GB RI

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DEVELOPER: Greenskies, a Clean Focus company

PAGE SIZE: 36" x 24"

PROJECT #: 10036.11

PROJECT: SOLAR GROUND MOUNT SYSTEM AT
GAGER HILL ROAD
41.692902°, -72.090985°
SCOTLAND, CT 06264

DRAWING TITLE: STRING WIRING DETAIL

DRAWING #: E203

PLOT DATE: 1/14/2026 2:15 PM

OVERALL SYSTEM SUMMARY	
DC SYSTEM SIZE	5,363.280 KW
AC SYSTEM SIZE	4,625.000 KW
(QTY) MODULE TYPE 1	(5,122) LONGI LR5-72HBD-540M (DOMESTIC) 540W
(QTY) MODULE TYPE 2	(4,810) LONGI LR5-72HBD-540M (NON-DOMESTIC) 540W
(QTY) INVERTER TYPE 1	(37) XGI 1500-125/125-UL
TILT / AZIMUTH	SAT / 0°
UTILITY	EVERSOURCE CT

RECLOSER BY UTILITY
52R
EXISTING TAKEOFF POLE
POLE #1 UTILITY RECLOSER POLE
UTILITY REVENUE METER
M
POLE #2 UTILITY PRIMARY METER & RISER POLE
UTILITY OWNED AND OPERATED
CUSTOMER OWNED
SOLAR GENERATOR DISCONNECT SWITCH (GOAB)
3PH POLE-MOUNTED GANG-OPERATED AIR-BREAK SWITCH SHALL BE PROVIDED WITH VISIBLE BREAK LOCKABLE IN OFF POSITION 24/7 ACCESS
25KV, 600A
(3)SAs 18KV 15.3MCOV
POLE #3 CUSTOMER GOAB & RISER POLE
5" PVC CONDUIT WITH: (3)#1 AL MV-90 25KV 133% EPR. 1/3 CONCENTRIC NEUTRAL INCLUDE (1)CU #6 EGC (600V)
RELAY CONTROL PANEL
NEMA 4 ENCLOSURE MOUNTED TO BASE OF RECLOSER POLE
CHARGE CONTROLLER
120VAC
12VDC
12VDC BATTERY 8HR RUN TIME
TEST SWITCH
SEL 651R
1" PVC WITH: 2#10 CU-THWN2 1#10 EGC CU-THWN2
UMBILICAL CABLE PROVIDED BY MANUFACTURER, MOUNT TO POLE USING POLE STAPLES
SOLAR RECLOSER
POLE-TOP RECLOSER CTs AND PTs PROVIDED INTERNAL TO RECLOSER
CPT
(3)LEAs 5000:1
12VDC TRIP
(4) #2 ACSR
POLE #4 CUSTOMER RECLOSER POLE & RISER
(3)SAs 18KV 15.3MCOV
(3)CTs 200:1A
52R
VIPER-S RECLOSER
TO EVERSOUCE RTAC SEL-3505-3 COORDINATE EXACT REQUIREMENTS WITH UTILITY
1" LFMC/EMT WITH: 2#12 CU-THWN2 1#12 EGC CU-THWN2
3/4" EMT WITH: BELDEN 3106DB (DATA), 2#12 & 1#12 EGC CU-THWN2 (24VDC)
MV DAS W/ RTAC SEL-3505-3
2" PVC/EMT WITH: 6-STRAND FIBER
TO DAS A
1" LFMC WITH: CAT5E

SCADA NOTES:
1. ALL MAXIMUM AND MINIMUM IMPORT/EXPORT LIMITS SHALL BE PROGRAMMED INSIDE THE CUSTOMER RTAC.
2. ENTIRE LOGIC MUST BE IMPLEMENTED INSIDE THE RTAC.
3. RELAY SETTINGS MUST INCORPORATE REMOTE COMMAND FROM TRAC INTO TRIP AND BLOCK CLOSE EQUATIONS.
4. CUSTOMER RTAC TO ISSUE DELAYED TRIP AFTER 5-MINUTES IF EVERSOURCE RTAC TO CUSTOMER RTAC COMMUNICATION FAILS OR GOES OFFLINE.
5. CUSTOMER RTAC TO ISSUE DELAYED TRIP AFTER 10-MINUTES IF EVERSOURCE RTAC TO DSCADA COMMUNICATION FAILS.
6. RELAY WILL TRIP THE BREAKER AFTER 1-MINUTE IF IT LOSES COMMUNICATION WITH RTAC.

(4) #2 ACSR
5" PVC CONDUIT WITH: (3)#1 AL MV-90 25KV 133% EPR. 1/3 CONCENTRIC NEUTRAL INCLUDE (1)CU #6 EGC (600V)
TO SOLAR TRANSFORMER B
SOLAR TRANSFORMER A
2500KVA
PAD-MOUNT, FR-3 COOLED KNAN
PRI: 23KY/13.28KV
SEC: 600Y/347V
Z=5.75%, X/R=5.7
LOAD-BREAK SWITCH
CLF
EXP
STATIC SHIELD
ALARM CONTACT
NOTES:
1. STATIC SHIELD TO BE EXTERNALLY GROUNDED IN LV CABINET
2. Ho AND Xo TO BE ISOLATED AND BONDED EXTERNAL TO THE TANK
3. GROUND BAR SIZED TO ACCOMMODATE ALL TRANSFORMER GROUNDING CONDUCTORS.
#3/0 CU GEC
8 SETS OF 4" PVC EACH WITH: 4#500MCM CU-THWN2 1#1/0 SSBJ CU-THWN2
(3) CT'S 3000:5A
3000AF/3000AT 3P LSIG
SPD
15A 2P
15A 3P

SOLAR AC SWITCHBOARD A
600Y/347V, 3ø, 4W
3000A, 65KAIC
NEMA 3R
175A 3P LSI (x20)
250A 3P
AUX CONTACT
24VDC
INVERTER A2 INVERTER A3 INVERTER A4 INVERTER A5 INVERTER A6 INVERTER A7 INVERTER A8 INVERTER A9 INVERTER A10 INVERTER A11 INVERTER A12 INVERTER A13 INVERTER A14 INVERTER A15 INVERTER A16 INVERTER A17 INVERTER A18 INVERTER A19
COMBINER BOX CB-A2 COMBINER BOX CB-A3 COMBINER BOX CB-A4 COMBINER BOX CB-A5 COMBINER BOX CB-A6 COMBINER BOX CB-A7 COMBINER BOX CB-A8 COMBINER BOX CB-A9 COMBINER BOX CB-A10 COMBINER BOX CB-A11 COMBINER BOX CB-A12 COMBINER BOX CB-A13 COMBINER BOX CB-A14 COMBINER BOX CB-A15 COMBINER BOX CB-A16 COMBINER BOX CB-A17 COMBINER BOX CB-A18 COMBINER BOX CB-A19
3" EMT/PVC WITH: 3#250MCM CU-THWN2 3#250MCM NEUTRAL CU-THWN2 1#4 EGC CU-THWN2
SOLAR SYSTEM MAIN CIRCUIT BREAKER A
SERVICE ENTRANCE RATED, 24/7 UTILITY ACCESSIBLE ARC ENERGY REDUCTION, GFPD 600V, 3P LOCKABLE IN OFF POSITION
1" EMT/PVC WITH: 3#14 TWISTED PAIRS

LOAD CENTER A
EATON MINI POWER CENTER, NEMA 3R ENCLOSED, 65KAIC
PRI: 600V, 1ø, 2W,
SEC: 120/240V, 1ø, 3W
15A 2P
5KVA 600:240V
30A 2P
15A/1P 15A/1P
20A/1P 15A/1P
3/4" EMT WITH: 2#12 CU-THWN2 1#12 EGC CU-THWN2
3/4" EMT WITH: CAT5E
TRACKER CONTROLLER
SNOW SENSOR
DAS A WITH REVENUE GRADE METER
1" EMT WITH: BELDEN 3106DB (DATA)
DAISY CHAIN TO INVERTERS. LAST DEVICE IN THE DAISY CHAIN WITH EOL RESISTOR PER MONITORING & INVERTER INSTRUCTIONS.
1.5" EMT WITH: (1)6-STRAND MULTIMODE FIBER
TO MV DAS
WEATHER STATION
3/4" EMT WITH: BELDEN 3106DB (DATA), 2#12 & 1#12 EGC CU-THWN2 (24VDC)
TO WEATHER SENSORS
COMMON CU GROUND BUS (TYP)
GROUNDING TRANSFORMER A
200KVA, DRY-TYPE, 2 WINDING HAMMOND NEMA 3R ENHANCED 3 LIMB CORE DESIGN
PRI: 600/346V, 3ø, 4W
SEC: 600V, 3ø, 3W
X_0 = 89 MOHM PER PHASE
Z_0% = 4.9%
X_0/R_0 = 4
6430A @5 SEC WITHSTAND RATING
WR GFCI
3/4" IMC WITH: 2#12 CU-THWN2 1#12 EGC CU-THWN2
1"PVC WITH: 1#6 GEC CU-THWN2 TERMINATE AT GROUND RING

TYPICAL INVERTER: 125KW
UNLESS NOTED OTHERWISE
2.5" EMT/PVC WITH: 3#3/0 AL-XHWN2 1#4 EGC CU-THWN2
SWITCH TO LFMC FOR FINAL 24" AT CONNECTION TO INVERTER
FACTORY INSTALLED JUMPER FOR OPERATION WITH NO N CONDUCTOR
INVERTER A1
SOLECTRIA XGI 1500 125/125, NAMEPLATE: 125KW/125KVA
600V/3ø OUTPUT,
1500VDC INPUT,
FUNCTIONAL GROUND,
DC GFCI,
AC AND DC SPDs
MPPT 1
INSTALL WIRES WITH S-CURVE OR LOOP TO ALLOW SLACK FOR TENSION RELIEF
#" EMT/PVC WITH: 2# ###MCM AL-PV WIRE (2KV) 1# # EGC CU-THWN2 (600V) [SEE E311 FOR SIZES]
EQUIPMENT PAD AREA A
ARRAY AREA A
DC COMBINER BOX A1 (CB-A1)
1500VDC,
400A BUS, 10 STRING,
DC DISCONNECT, DC SPD,
90°C OUTPUT TERMINALS,
FUSED ON POSITIVE,
NEMA 4
SAFETOUCH FUSE HOLDER W/ 25A FUSES
INSTALL WITH A 3" DIAMETER LOOP TO FACILITATE CLAMP METER ACCESS DURING COMMISSIONING.
1-1 1-2 1-3 1-9 1-10
INVERTER INSTALLATION NOTES:
1. TORQUE AC & DC TERMINALS PER INSTALL MANUAL, APPLY TORQUE MARKS.

TYPICAL STRING WIRING
INSTALL STRING # LABELS (TYPICAL) ON BOTH ENDS OF POSITIVE AND NEGATIVE HOMERUNS USING HEAT SHRINK LABELS SUITABLE FOR THE ENVIRONMENT
#10 CU PV WIRE 2000V, 90°C, +RED, -BLACK, WITH #6 EGC CU GREEN THHN. SEE E001 FOR CONDUCTOR INSTALLATION NOTES.
FIELD INSTALLED CONNECTOR, 1500V RATED, MATCH MFG & MODEL ON MODULE. RECONFIRM UPON MODULE DELIVERY, AS MFG/MODEL MAY VARY FROM DATASHEET (TYPICAL)
PV MODULES
26 IN SERIES PER STRING

SYSTEM A SUMMARY	
DC SYSTEM SIZE	2,779.290 KW
AC SYSTEM SIZE	2,375.000 KW
(QTY) MODULE TYPE 1	(2,678) LONGI LR5-72HBD-540M (DOMESTIC) 540W
(QTY) MODULE TYPE 2	(2,470) LONGI LR5-72HBD-540M (NON-DOMESTIC) 540W
(QTY) INVERTER	(19) XGI 1500-125/125-UL
TILT / AZIMUTH	SAT / 0°
UTILITY	EVERSOURCE CT

SHEET NOTES:
1. ALL GROUND BARS AND LUGS SHALL BE DUAL RATED AL/CU.
2. UNLESS OTHERWISE NOTED EQUIPMENT IS PERMITTED TO BE 80% OR 100% RATED. EQUIPMENT SHOWN AS "100% RATED" SHALL INCLUDE AN ASSEMBLY, INCLUDING OVERCURRENT PROTECTION DEVICES, WHICH IS LISTED FOR CONTINUOUS OPERATION AT 100% OF ITS RATED CURRENT.
3. PVC SCH80 REQUIRED WHERE PVC IS SPECIFIED. PVC SCH40 IS PERMITTED FOR UNDERGROUND STRAIGHT RUNS ONLY.
4. CIRCUIT BREAKERS SPECIFIED WITH ADJUSTABLE-TRIP SETTINGS (LS, LSI, OR LSIG) SHALL BE PROVIDED WITH ELECTRONIC TRIP UNITS. SET NEW ADJUSTABLE-TRIP BREAKERS TO THE SETTINGS BELOW, UNLESS OTHERWISE NOTED IN POWER STUDY. "NOMINAL TRIP" REFERS TO BREAKER TRIP RATING INDICATED ON ONELINE. SETTINGS BELOW ARE NOT FOR COORDINATION PURPOSES.
   - L = 100% OF NOMINAL TRIP (EXACT) MINIMUM TIME DELAY
   - S = 125% OF NOMINAL TRIP (OR NEXT HIGHER) MINIMUM TIME DELAY
   - I = MINIMUM VALUE GREATER THAN NOMINAL TRIP
   - G = 20% OF NOMINAL TRIP (OR NEXT HIGHER) 0.5 SEC TIME DELAY

1 ONE LINE DIAGRAM- MV & SYSTEM A
SCALE: NONE

PM	ENG	CHK	REVISION DESCRIPTION	DATE
SK	MxB	MD	90% PERMIT SET - REV 1	01/06/2026
SK	MxB	MD	90% PERMIT SET	12/12/2025
SK	GB	RI	30% CONCEPTUAL DESIGN REV 3	06/24/2025
SK	GB	RI	30% CONCEPTUAL DESIGN REV 2	06/20/2025

PURE POWER ENGINEERING
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MATTHEW M. DONOVAN
CT LICENSE No. PEN.0037514

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GREENSKIES
127 WASHINGTON AVENUE
NORTH HAVEN, CT 06473
WWW.GREENSKIES.COM

DEVELOPER: Greenskies, a Clean Focus company

PAGE SIZE: 36" x 24"
PROJECT #: 10036.11

PROJECT: SOLAR GROUND MOUNT SYSTEM AT GAGER HILL ROAD
41.692902°, -72.090985°
SCOTLAND, CT 06264

DRAWING TITLE: ONE LINE DIAGRAM - MV & SYSTEM A

DRAWING #: E300

RULER IN INCHES:

PLOT DATE: 1/14/2026 2:15 PM

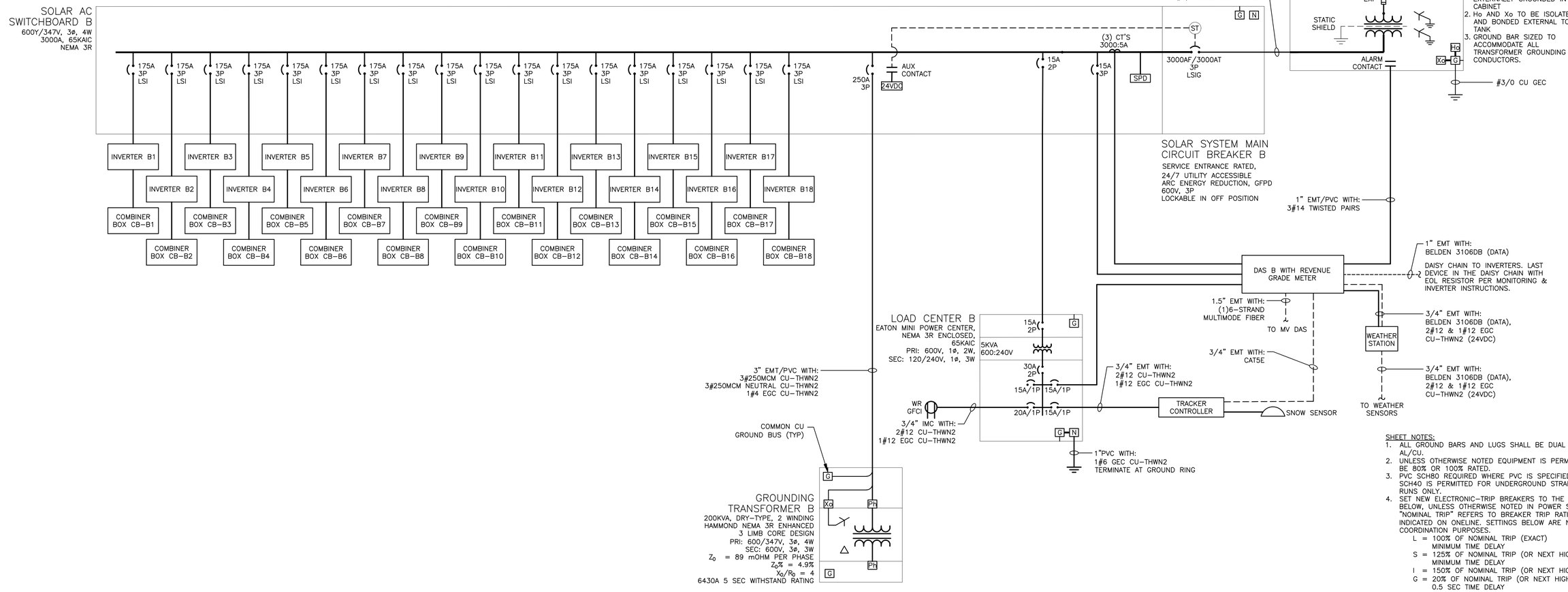
SEL 651R RELAY										
SETTINGS ARE PRELIMINARY PENDING UTILITY APPROVAL AND NOT INTENDED FOR CONSTRUCTION. 50/51 SETTINGS ARE PRELIMINARY AND COORDINATION STUDY BY EOR HAS NOT BEEN COMPLETED.										
Solar System Base AC Size = 4625KVA			116.1A BASE PRIMARY USED FOR 50/51 ELEMENTS				*Total Clear Time = 3 Cycle Breaker Plus Delay (Time Dial or DEF Time)			
3.87A BASE SECONDARY 50/51P,G,N,Q							13279.06V BASE PRIMARY USED FOR 27/59 ELEMENTS			
P,G,N,Q CT RATIO FACTOR = 30							2.66V BASE SECONDARY USED FOR 27/59 ELEMENTS			
P CT Minimum Rating = 200:1 1B0.5 C50 RF = 1 @ 30C							LEA RATIO FACTOR = 5000			
ANSI ELEMENT #	Unit	Pickup (Secondary)	Real (Primary)	Level	Def. Time Delay (s)	Time Dial	Total Clear Time (s)*	Total Clear Time (cyc)*	Curve	Description
27-1	L-N Volt	2.34	11685.57	88.00%	2.95	–	3.00	180.00	–	Slow UV
27-2	L-N Volt	1.33	6639.53	50.00%	1.05	–	1.10	66.00	–	Fast UV
59-1	L-N Volt	2.92	14606.96	110.00%	1.95	–	2.00	120.00	–	Slow OV
59-2	L-N Volt	3.19	15934.87	120.00%	0.11	–	0.16	9.60	–	Fast OV
79-UV	L-N Volt	2.52	12615.10	95.00%	299.95	–	300.00	18000.00	–	Min Permissive Close Voltage
79-OV	L-N Volt	2.79	13943.01	105.00%	299.95	–	300.00	18000.00	–	Max Permissive Close Voltage
59N	3V0 L-N Volt	0.45	2257.44	17.00%	1.95	–	2.00	120.00	–	Zero Sequence Overvolt
81U-1	Hz	58.50	58.50	97.50%	299.95	–	300.00	18000.00	–	Slow UF
81U-2	Hz	56.50	56.50	94.17%	0.11	–	0.16	9.60	–	Fast UF
81O-1	Hz	61.20	61.20	102.00%	299.95	–	300.00	18000.00	–	Slow OF
81O-2	Hz	62.00	62.00	103.33%	0.11	–	0.16	9.60	–	Fast OF
79-UF	Hz	59.50	59.50	99.17%	299.95	–	300.00	18000.00	–	Min Permissive Close Frequency
79-OF	Hz	60.50	60.50	100.83%	299.95	–	300.00	18000.00	–	Max Permissive Close Frequency
51P	A	5.80	174.15	150.00%	–	2	3.9 @2X	234.02 @2X	U4	Time Phase OC
50P	A	46.44	1393.17	1200.00%	0.00	–	0.05	3.00	–	Instantaneous P OC
51G	A	0.77	23.22	20.00%	–	2	3.9 @2X	234.02 @2X	U4	Timed Ground OC
74	–	–	–	–	0.00	–	0.05	3.00	–	Relay Alarm

1 RELAY SETTINGS
SCALE: NONE

INVERTER UL1741-SB Compliant				
ANSI ELEMENT #	Pickup	Level	Delay (sec)	Description
27-1	304.84V	88.0%	3.00	Slow UV
27-2	173.21V	50.0%	1.10	Fast UV
59-1	381.05V	110.0%	2.00	Slow OV
59-2	415.69V	120.0%	0.16	Fast OV
81U-1	56.50Hz	94.2%	0.16	Fast UF
81U-2	58.50Hz	97.5%	300.00	Slow UF
81O-1	62.00Hz	103.3%	0.16	Fast OF
81O-2	61.20Hz	102.0%	300.00	Slow OF
PF Set Point	1.00			Power Factor Control
Var Control	OFF			Reactive Power Control
Ramp Rate	10%/1 sec			dkw / dt
Freq Control	OFF			Speed Control

2 INVERTER SETTINGS
SCALE: NONE

SYSTEM B SUMMARY	
DC SYSTEM SIZE	2,583.360 KW
AC SYSTEM SIZE	2,250.000 KW
(QTY) MODULE TYPE 1	(2,444) LONGI LR5-72HBD-540M (DOMESTIC) 540W
(QTY) MODULE TYPE 2	(2,340) LONGI LR5-72HBD-540M (NON-DOMESTIC) 540W
(QTY) INVERTER	(18) XGI 1500-125/125-UL
TILT / AZIMUTH	SAT / 0°
UTILITY	EVERSOURCE CT



1 ONE LINE DIAGRAM - SYSTEM B
SCALE: NONE

SHEET NOTES:
1. ALL GROUND BARS AND LUGS SHALL BE DUAL RATED AL/CU.
2. UNLESS OTHERWISE NOTED EQUIPMENT IS PERMITTED TO BE 80% OR 100% RATED.
3. PVC SCH80 REQUIRED WHERE PVC IS SPECIFIED. PVC SCH40 IS PERMITTED FOR UNDERGROUND STRAIGHT RUNS ONLY.
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   - S = 125% OF NOMINAL TRIP (OR NEXT HIGHER) MINIMUM TIME DELAY
   - I = 150% OF NOMINAL TRIP (OR NEXT HIGHER)
   - G = 20% OF NOMINAL TRIP (OR NEXT HIGHER) 0.5 SEC TIME DELAY

REVISION DESCRIPTION	DATE	PM	ENG CHK
90% PERMIT SET - REV 1	01/06/2026	SK	MaB MD
90% PERMIT SET	12/12/2025	SK	MaB MD
30% CONCEPTUAL DESIGN REV 3	06/24/2025	SK	GB RI
30% CONCEPTUAL DESIGN REV 2	06/20/2025	SK	GB RI

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DEVELOPER: Greenskies, a Clean Focus company

PAGE SIZE: 36" x 24"
PROJECT #: 10036.11

PROJECT: SOLAR GROUND MOUNT SYSTEM AT GAGER HILL ROAD 41.692902°, -72.090985° SCOTLAND, CT 06264

DRAWING TITLE: ONE LINE DIAGRAM - SYSTEM B

DRAWING #: E301

RULER IN INCHES: 0 ½ 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18

PLOT DATE: 1/14/2026 2:15 PM

MV FEEDER CALCULATIONS (23KV)

EQUIPMENT SUPPLIED	FED FROM	CIRCUIT ROUTING	# OF TRANSFORMERS	APPARENT POWER [KVA]	FEEDER LENGTH (ONE-WAY) [FT]	FULL LOAD AMPS 'FLA' [A]	OCPD TYPE	OCPD TRIP RATING [A]	CONDUCTOR MATERIAL	CONDUCTOR SIZE	TABLE REFERENCE	TEMPERATURE ADJUSTMENT	CONDUCTOR AMPACITY AT 90° TERM [A]	CONDUCTOR AMPACITY [A]	CHECK CONDUCTOR AMPACITY > FLA?	CHECK OCPD RATING > FLA x 1.25?	CHECK OCPD COMPLIANT WITH 240.101(A)?	SEGMENT VOLTAGE DROP AT FLA	TOTAL VOLTAGE DROP AT FLA	PVC CONDUIT SIZE	ADDITIONAL GROUND CABLE
UTILITY RECLOSER	POI	OVERHEAD ACSR	2	5,000	40	125.5	RECLOSER	188	AL	#2 ACSR	MFG DATA SHEET	1.00	184	184	PASS	PASS	PASS	0.01%	0.01%	N/A	NONE
UTILITY METER & RISER	UTILITY RECLOSER	OVERHEAD ACSR	2	5,000	25	125.5	RECLOSER	188	AL	#2 ACSR	MFG DATA SHEET	1.00	184	184	PASS	PASS	PASS	0.01%	0.02%	N/A	NONE
CUSTOMER SOLAR DISCONNECT & RISER	UTILITY METER & RISER	UNDERGROUND IN CONDUIT	2	5,000	310	125.5	RECLOSER	188	AL	#1	311.60(C)(78)	1.00	135	135	PASS	PASS	PASS	0.07%	0.09%	5"	CU #6
CUSTOMER RECLOSER & RISER	CUSTOMER SOLAR DISCONNECT & RISER	OVERHEAD ACSR	2	5,000	25	125.5	RECLOSER	188	AL	#2 ACSR	MFG DATA SHEET	1.00	184	184	PASS	PASS	PASS	0.01%	0.10%	N/A	NONE
SOLAR TRANSFORMER A	CUSTOMER RECLOSER & RISER	UNDERGROUND IN CONDUIT	2	5,000	735	125.5	RECLOSER	188	AL	#1	311.60(C)(78)	1.00	135	135	PASS	PASS	PASS	0.17%	0.28%	5"	CU #6
SOLAR TRANSFORMER B	SOLAR TRANSFORMER A	UNDERGROUND IN CONDUIT	1	2,500	800	62.8	RECLOSER	94	AL	#1	311.60(C)(78)	1.00	135	135	PASS	PASS	PASS	0.09%	0.37%	5"	CU #6

AC FEEDER CALCULATIONS – SYSTEM A

EQUIPMENT SUPPLIED	FED FROM	VOLTAGE	FULL LOAD AMPS (FLA)	FLA x 1.25	OCPD SIZE [A]	CONDUIT TYPE	UNDERGROUND CONFIGURATION	CONDUIT SIZE	CONDUCTORS PER PHASE	PHASE CONDUCTOR SIZE	NEUTRAL CONDUCTOR SIZE	GROUND CONDUCTOR SIZE	75° AMPACITY	90° AMPACITY	90° AMPACITY WITH C.O.U.	CABLE TRAY AMPACITY WITH C.O.U	C.O.U DERATE AMBIENT TEMP	C.O.U. DERATE CONDUIT FILL	FEEDER LENGTH (ONE-WAY) [FT]	SEGMENT VOLTAGE DROP AT FLA	TOTAL VOLTAGE DROP AT FLA
SOLAR AC SWITCHBOARD A	TRANSFORMER A	600	2280.0	2850	3000	PVC	N/A	4"	8	CU 500MCM	CU 500MCM	CU #1/0 SSBJ	3040	3440	3440	N/A	1.00	1.00	10	0.02%	0.02%
INVERTER A1	SOLAR AC SWITCHBOARD A	600	120.0	150	175	PVC	N/A	2.5"	1	AL #3/0	NONE	CU #4	155	175	175	N/A	1.00	1.00	10	0.05%	0.07%
INVERTER A2	SOLAR AC SWITCHBOARD A	600	120.0	150	175	PVC	N/A	2.5"	1	AL #3/0	NONE	CU #4	155	175	175	N/A	1.00	1.00	10	0.05%	0.07%
INVERTER A3	SOLAR AC SWITCHBOARD A	600	120.0	150	175	PVC	N/A	2.5"	1	AL #3/0	NONE	CU #4	155	175	175	N/A	1.00	1.00	15	0.07%	0.09%
INVERTER A4	SOLAR AC SWITCHBOARD A	600	120.0	150	175	PVC	N/A	2.5"	1	AL #3/0	NONE	CU #4	155	175	175	N/A	1.00	1.00	15	0.07%	0.09%
INVERTER A5	SOLAR AC SWITCHBOARD A	600	120.0	150	175	PVC	N/A	2.5"	1	AL #3/0	NONE	CU #4	155	175	175	N/A	1.00	1.00	20	0.09%	0.11%
INVERTER A6	SOLAR AC SWITCHBOARD A	600	120.0	150	175	PVC	N/A	2.5"	1	AL #3/0	NONE	CU #4	155	175	175	N/A	1.00	1.00	20	0.09%	0.11%
INVERTER A7	SOLAR AC SWITCHBOARD A	600	120.0	150	175	PVC	N/A	2.5"	1	AL #3/0	NONE	CU #4	155	175	175	N/A	1.00	1.00	25	0.11%	0.14%
INVERTER A8	SOLAR AC SWITCHBOARD A	600	120.0	150	175	PVC	N/A	2.5"	1	AL #3/0	NONE	CU #4	155	175	175	N/A	1.00	1.00	25	0.11%	0.14%
INVERTER A9	SOLAR AC SWITCHBOARD A	600	120.0	150	175	PVC	N/A	2.5"	1	AL #3/0	NONE	CU #4	155	175	175	N/A	1.00	1.00	30	0.14%	0.16%
INVERTER A10	SOLAR AC SWITCHBOARD A	600	120.0	150	175	PVC	N/A	2.5"	1	AL #3/0	NONE	CU #4	155	175	175	N/A	1.00	1.00	30	0.14%	0.16%
INVERTER A11	SOLAR AC SWITCHBOARD A	600	120.0	150	175	PVC	N/A	2.5"	1	AL #3/0	NONE	CU #4	155	175	175	N/A	1.00	1.00	35	0.16%	0.18%
INVERTER A12	SOLAR AC SWITCHBOARD A	600	120.0	150	175	PVC	N/A	2.5"	1	AL #3/0	NONE	CU #4	155	175	175	N/A	1.00	1.00	35	0.16%	0.18%
INVERTER A13	SOLAR AC SWITCHBOARD A	600	120.0	150	175	PVC	N/A	2.5"	1	AL #3/0	NONE	CU #4	155	175	175	N/A	1.00	1.00	40	0.18%	0.20%
INVERTER A14	SOLAR AC SWITCHBOARD A	600	120.0	150	175	PVC	N/A	2.5"	1	AL #3/0	NONE	CU #4	155	175	175	N/A	1.00	1.00	40	0.18%	0.20%
INVERTER A15	SOLAR AC SWITCHBOARD A	600	120.0	150	175	PVC	N/A	2.5"	1	AL #3/0	NONE	CU #4	155	175	175	N/A	1.00	1.00	45	0.20%	0.23%
INVERTER A16	SOLAR AC SWITCHBOARD A	600	120.0	150	175	PVC	N/A	2.5"	1	AL #3/0	NONE	CU #4	155	175	175	N/A	1.00	1.00	45	0.20%	0.23%
INVERTER A17	SOLAR AC SWITCHBOARD A	600	120.0	150	175	PVC	N/A	2.5"	1	AL #3/0	NONE	CU #4	155	175	175	N/A	1.00	1.00	50	0.23%	0.25%
INVERTER A18	SOLAR AC SWITCHBOARD A	600	120.0	150	175	PVC	N/A	2.5"	1	AL #3/0	NONE	CU #4	155	175	175	N/A	1.00	1.00	50	0.23%	0.25%
INVERTER A19	SOLAR AC SWITCHBOARD A	600	120.0	150	175	PVC	N/A	2.5"	1	AL #3/0	NONE	CU #4	155	175	175	N/A	1.00	1.00	55	0.25%	0.27%

AVERAGE AC VOLTAGE DROP FROM INVERTERS TO POI: 0.16%

AC FEEDER CALCULATIONS – SYSTEM B

EQUIPMENT SUPPLIED	FED FROM	VOLTAGE	FULL LOAD AMPS (FLA)	FLA x 1.25	OCPD SIZE [A]	CONDUIT TYPE	UNDERGROUND CONFIGURATION	CONDUIT SIZE	CONDUCTORS PER PHASE	PHASE CONDUCTOR SIZE	NEUTRAL CONDUCTOR SIZE	GROUND CONDUCTOR SIZE	75° AMPACITY	90° AMPACITY	90° AMPACITY WITH C.O.U.	CABLE TRAY AMPACITY WITH C.O.U	C.O.U DERATE AMBIENT TEMP	C.O.U. DERATE CONDUIT FILL	FEEDER LENGTH (ONE-WAY) [FT]	SEGMENT VOLTAGE DROP AT FLA	TOTAL VOLTAGE DROP AT FLA
SOLAR AC SWITCHBOARD B	SOLAR TRANSFORMER B	600	2160.0	2700	3000	PVC	N/A	4"	8	CU 500MCM	CU 500MCM	CU #1/0 SSBJ	3040	3440	3440	N/A	1.00	1.00	10	0.02%	0.02%
INVERTER B1	SOLAR AC SWITCHBOARD B	600	120.0	150	175	PVC	N/A	2.5"	1	AL #3/0	NONE	CU #4	155	175	175	N/A	1.00	1.00	10	0.05%	0.07%
INVERTER B2	SOLAR AC SWITCHBOARD B	600	120.0	150	175	PVC	N/A	2.5"	1	AL #3/0	NONE	CU #4	155	175	175	N/A	1.00	1.00	10	0.05%	0.07%
INVERTER B3	SOLAR AC SWITCHBOARD B	600	120.0	150	175	PVC	N/A	2.5"	1	AL #3/0	NONE	CU #4	155	175	175	N/A	1.00	1.00	15	0.07%	0.09%
INVERTER B4	SOLAR AC SWITCHBOARD B	600	120.0	150	175	PVC	N/A	2.5"	1	AL #3/0	NONE	CU #4	155	175	175	N/A	1.00	1.00	15	0.07%	0.09%
INVERTER B5	SOLAR AC SWITCHBOARD B	600	120.0	150	175	PVC	N/A	2.5"	1	AL #3/0	NONE	CU #4	155	175	175	N/A	1.00	1.00	20	0.09%	0.11%
INVERTER B6	SOLAR AC SWITCHBOARD B	600	120.0	150	175	PVC	N/A	2.5"	1	AL #3/0	NONE	CU #4	155	175	175	N/A	1.00	1.00	20	0.09%	0.11%
INVERTER B7	SOLAR AC SWITCHBOARD B	600	120.0	150	175	PVC	N/A	2.5"	1	AL #3/0	NONE	CU #4	155	175	175	N/A	1.00	1.00	25	0.11%	0.14%
INVERTER B8	SOLAR AC SWITCHBOARD B	600	120.0	150	175	PVC	N/A	2.5"	1	AL #3/0	NONE	CU #4	155	175	175	N/A	1.00	1.00	25	0.11%	0.14%
INVERTER B9	SOLAR AC SWITCHBOARD B	600	120.0	150	175	PVC	N/A	2.5"	1	AL #3/0	NONE	CU #4	155	175	175	N/A	1.00	1.00	30	0.14%	0.16%
INVERTER B10	SOLAR AC SWITCHBOARD B	600	120.0	150	175	PVC	N/A	2.5"	1	AL #3/0	NONE	CU #4	155	175	175	N/A	1.00	1.00	30	0.14%	0.16%
INVERTER B11	SOLAR AC SWITCHBOARD B	600	120.0	150	175	PVC	N/A	2.5"	1	AL #3/0	NONE	CU #4	155	175	175	N/A	1.00	1.00	35	0.16%	0.18%
INVERTER B12	SOLAR AC SWITCHBOARD B	600	120.0	150	175	PVC	N/A	2.5"	1	AL #3/0	NONE	CU #4	155	175	175	N/A	1.00	1.00	35	0.16%	0.18%
INVERTER B13	SOLAR AC SWITCHBOARD B	600	120.0	150	175	PVC	N/A	2.5"	1	AL #3/0	NONE	CU #4	155	175	175	N/A	1.00	1.00	40	0.18%	0.20%
INVERTER B14	SOLAR AC SWITCHBOARD B	600	120.0	150	175	PVC	N/A	2.5"	1	AL #3/0	NONE	CU #4	155	175	175	N/A	1.00	1.00	40	0.18%	0.20%
INVERTER B15	SOLAR AC SWITCHBOARD B	600	120.0	150	175	PVC	N/A	2.5"	1	AL #3/0	NONE	CU #4	155	175	175	N/A	1.00	1.00	45	0.20%	0.23%
INVERTER B16	SOLAR AC SWITCHBOARD B	600	120.0	150	175	PVC	N/A	2.5"	1	AL #3/0	NONE	CU #4	155	175	175	N/A	1.00	1.00	45	0.20%	0.23%
INVERTER B17	SOLAR AC SWITCHBOARD B	600	120.0	150	175	PVC	N/A	2.5"	1	AL #3/0	NONE	CU #4	155	175	175	N/A	1.00	1.00	50	0.23%	0.25%
INVERTER B18	SOLAR AC SWITCHBOARD B	600	120.0	150	175	PVC	N/A	2.5"	1	AL #3/0	NONE	CU #4	155	175	175	N/A	1.00	1.00	50	0.23%	0.25%

AVERAGE AC VOLTAGE DROP FROM INVERTERS TO POI: 0.16%

SHEET NOTES:
1. DISTANCES ARE ONE-WAY ESTIMATES GENERATED FOR ENGINEER'S CALCULATIONS, CONTRACTOR IS RESPONSIBLE FOR OWN MEASUREMENTS AND TAKEOFFS.

DRAWING TITLE	DRAWING #
SCHEDULES & CALCULATIONS	E310

DATE	REVISION DESCRIPTION	PM	ENG CHK
01/06/2026	90% PERMIT SET – REV 1	SK	MxB MD
12/12/2025	90% PERMIT SET	SK	MxB MD
06/24/2025	30% CONCEPTUAL DESIGN REV 3	SK	GB RI
06/20/2025	30% CONCEPTUAL DESIGN REV 2	SK	GB RI

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RULER IN INCHES: 0 ½ 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18

PLOT DATE: 1/14/2026 2:15 PM

THE STRING MAX CURRENT IS CALCULATED BY SYSTEM ADVISOR MODEL SIMULATION PROGRAM PROVIDED BY THE NATIONAL RENEWABLE ENERGY LABORATORY, REFERENCE SAND 2004-3535, PHOTOVOLTAIC ARRAY PERFORMANCE MODEL, AS ALLOWABLE BY NEC 690.8(A)(1)(2), THE CALCULATED CURRENT IS 90.7% OF THE VALUE USING 690.8(A)(1)(2).

PV DC FEEDER CALCULATIONS

COMBINER BOX	CABLE MANAGEMENT	QTY OF STRINGS	OPERATING VOLTAGE Vmp [V]	STRING MAXIMUM CURRENT (SAM SIMULATED Imax) [A]	FEEDER SHORT CIRCUIT CURRENT (Isc) [A]	FEEDER MAX CURRENT (Imax) [A]	FEEDER CONTINUOUS CURRENT (Imax x 1.25) [A]	OCPD SIZE [A]	CONDUIT TYPE	UNDERGROUND CONFIGURATION	CONDUIT SIZE	CONDUCTORS PER POLE	CONDUCTOR SIZE	GROUND SIZE	75° AMPACITY	90° AMPACITY	90° AMPACITY WITH C.O.U. ADJUSTMENT	CABLE TRAY AMPACITY WITH C.O.U.	C.O.U DERATE AMBIENT TEMP	C.O.U. DERATE CONDUIT FILL	STRING OPERATING CURRENT (STRING Imp) [A]	FEEDER OPERATING CURRENT [A]	FEEDER LENGTH (ONE WAY) [FT]	FEEDER VOLTAGE DROP
CB-A1	CONDUIT	10	1083	15.08	N/A	151	189	NONE	EMT/PVC	2X6	2.5"	1	AL 300MCM	CU #6	230	260	260	N/A	1.00	1.00	12.97	130	170	0.29%
CB-A2	CONDUIT	10	1083	15.08	N/A	151	189	NONE	EMT/PVC	2X6	2.5"	1	AL 300MCM	CU #6	230	260	260	N/A	1.00	1.00	12.97	130	160	0.27%
CB-A3	CONDUIT	11	1083	15.08	N/A	166	207	NONE	EMT/PVC	2X6	2.5"	1	AL 300MCM	CU #4	230	260	260	N/A	1.00	1.00	12.97	143	145	0.27%
CB-A4	CONDUIT	11	1083	15.08	N/A	166	207	NONE	EMT/PVC	2X6	2.5"	1	AL 300MCM	CU #4	230	260	260	N/A	1.00	1.00	12.97	143	185	0.34%
CB-A5	CONDUIT	11	1083	15.08	N/A	166	207	NONE	EMT/PVC	2X6	2.5"	1	AL 300MCM	CU #4	230	260	260	N/A	1.00	1.00	12.97	143	240	0.45%
CB-A6	CONDUIT	11	1083	15.08	N/A	166	207	NONE	EMT/PVC	2X6	2.5"	1	AL 300MCM	CU #4	230	260	260	N/A	1.00	1.00	12.97	143	300	0.56%
CB-A7	CONDUIT	11	1083	15.08	N/A	166	207	NONE	EMT/PVC	2X6	2.5"	1	AL 300MCM	CU #4	230	260	260	N/A	1.00	1.00	12.97	143	340	0.63%
CB-A8	CONDUIT	11	1083	15.08	N/A	166	207	NONE	EMT/PVC	2X6	2.5"	1	AL 300MCM	CU #4	230	260	260	N/A	1.00	1.00	12.97	143	490	0.91%
CB-A9	CONDUIT	11	1083	15.08	N/A	166	207	NONE	EMT/PVC	2X6	2.5"	1	AL 300MCM	CU #4	230	260	260	N/A	1.00	1.00	12.97	143	470	0.88%
CB-A10	CONDUIT	11	1083	15.08	N/A	166	207	NONE	EMT/PVC	2X6	2.5"	1	AL 300MCM	CU #4	230	260	260	N/A	1.00	1.00	12.97	143	590	1.10%
CB-A11	CONDUIT	10	1083	15.08	N/A	151	189	NONE	EMT/PVC	2X6	2.5"	1	AL 300MCM	CU #6	230	260	260	N/A	1.00	1.00	12.97	130	630	1.07%
CB-A12	CONDUIT	10	1083	15.08	N/A	151	189	NONE	EMT/PVC	2X6	2.5"	1	AL 300MCM	CU #6	230	260	260	N/A	1.00	1.00	12.97	130	680	1.15%
CB-A13	CONDUIT	10	1083	15.08	N/A	151	189	NONE	EMT/PVC	2X6	2.5"	1	AL 300MCM	CU #6	230	260	260	N/A	1.00	1.00	12.97	130	710	1.20%
CB-A14	CONDUIT	10	1083	15.08	N/A	151	189	NONE	EMT/PVC	2X6	2.5"	1	AL 300MCM	CU #6	230	260	260	N/A	1.00	1.00	12.97	130	760	1.29%
CB-A15	CONDUIT	10	1083	15.08	N/A	151	189	NONE	EMT/PVC	2X6	2.5"	1	AL 300MCM	CU #6	230	260	260	N/A	1.00	1.00	12.97	130	810	1.37%
CB-A16	CONDUIT	10	1083	15.08	N/A	151	189	NONE	EMT/PVC	2X6	2.5"	1	AL 300MCM	CU #6	230	260	260	N/A	1.00	1.00	12.97	130	880	1.49%
CB-A17	CONDUIT	10	1083	15.08	N/A	151	189	NONE	EMT/PVC	2X6	2.5"	1	AL 300MCM	CU #6	230	260	260	N/A	1.00	1.00	12.97	130	930	1.58%
CB-A18	CONDUIT	10	1083	15.08	N/A	151	189	NONE	EMT/PVC	2X6	2.5"	1	AL 300MCM	CU #6	230	260	260	N/A	1.00	1.00	12.97	130	940	1.59%
CB-A19	CONDUIT	10	1083	15.08	N/A	151	189	NONE	EMT/PVC	2X6	2.5"	1	AL 300MCM	CU #6	230	260	260	N/A	1.00	1.00	12.97	130	985	1.67%

AVERAGE DC VOLTAGE DROP FROM COMBINER BOXES TO INVERTERS: 0.95%

PV DC FEEDER CALCULATIONS – SUBSYSTEM B

COMBINER BOX	CABLE MANAGEMENT	QTY OF STRINGS	OPERATING VOLTAGE Vmp [V]	STRING MAXIMUM CURRENT (SAM SIMULATED Imax) [A]	FEEDER SHORT CIRCUIT CURRENT (Isc) [A]	FEEDER MAX CURRENT (Imax) [A]	FEEDER CONTINUOUS CURRENT (Imax x 1.25) [A]	OCPD SIZE [A]	CONDUIT TYPE	UNDERGROUND CONFIGURATION	CONDUIT SIZE	CONDUCTORS PER POLE	CONDUCTOR SIZE	GROUND SIZE	75° AMPACITY	90° AMPACITY	90° AMPACITY WITH C.O.U. ADJUSTMENT	CABLE TRAY AMPACITY WITH C.O.U.	C.O.U DERATE AMBIENT TEMP	C.O.U. DERATE CONDUIT FILL	STRING OPERATING CURRENT (STRING Imp) [A]	FEEDER OPERATING CURRENT [A]	FEEDER LENGTH (ONE WAY) [FT]	FEEDER VOLTAGE DROP
CB-B1	CONDUIT	10	1083	15.08	N/A	151	189	NONE	EMT/PVC	2X6	2.5"	1	AL 300MCM	CU #6	230	260	260	N/A	1.00	1.00	12.97	130	35	0.06%
CB-B2	CONDUIT	10	1083	15.08	N/A	151	189	NONE	EMT/PVC	2X6	2.5"	1	AL 300MCM	CU #6	230	260	260	N/A	1.00	1.00	12.97	130	50	0.08%
CB-B3	CONDUIT	10	1083	15.08	N/A	151	189	NONE	EMT/PVC	2X6	2.5"	1	AL 300MCM	CU #6	230	260	260	N/A	1.00	1.00	12.97	130	100	0.17%
CB-B4	CONDUIT	10	1083	15.08	N/A	151	189	NONE	EMT/PVC	2X6	2.5"	1	AL 300MCM	CU #6	230	260	260	N/A	1.00	1.00	12.97	130	155	0.26%
CB-B5	CONDUIT	10	1083	15.08	N/A	151	189	NONE	EMT/PVC	2X6	2.5"	1	AL 300MCM	CU #6	230	260	260	N/A	1.00	1.00	12.97	130	220	0.37%
CB-B6	CONDUIT	10	1083	15.08	N/A	151	189	NONE	EMT/PVC	2X6	2.5"	1	AL 300MCM	CU #6	230	260	260	N/A	1.00	1.00	12.97	130	275	0.47%
CB-B7	CONDUIT	10	1083	15.08	N/A	151	189	NONE	EMT/PVC	2X6	2.5"	1	AL 300MCM	CU #6	230	260	260	N/A	1.00	1.00	12.97	130	325	0.55%
CB-B8	CONDUIT	10	1083	15.08	N/A	151	189	NONE	EMT/PVC	2X6	2.5"	1	AL 300MCM	CU #6	230	260	260	N/A	1.00	1.00	12.97	130	375	0.64%
CB-B9	CONDUIT	10	1083	15.08	N/A	151	189	NONE	EMT/PVC	2X6	2.5"	1	AL 300MCM	CU #6	230	260	260	N/A	1.00	1.00	12.97	130	525	0.89%
CB-B10	CONDUIT	10	1083	15.08	N/A	151	189	NONE	EMT/PVC	2X6	2.5"	1	AL 300MCM	CU #6	230	260	260	N/A	1.00	1.00	12.97	130	975	1.65%
CB-B11	CONDUIT	10	1083	15.08	N/A	151	189	NONE	EMT/PVC	2X6	2.5"	1	AL 300MCM	CU #6	230	260	260	N/A	1.00	1.00	12.97	130	1045	1.77%
CB-B12	CONDUIT	10	1083	15.08	N/A	151	189	NONE	EMT/PVC	2X6	2.5"	1	AL 300MCM	CU #6	230	260	260	N/A	1.00	1.00	12.97	130	1120	1.90%
CB-B13	CONDUIT	10	1083	15.08	N/A	151	189	NONE	EMT/PVC	2X6	2.5"	1	AL 300MCM	CU #6	230	260	260	N/A	1.00	1.00	12.97	130	1190	2.02%
CB-B14	CONDUIT	10	1083	15.08	N/A	151	189	NONE	EMT/PVC	2X6	2.5"	1	AL 300MCM	CU #6	230	260	260	N/A	1.00	1.00	12.97	130	1260	2.13%
CB-B15	CONDUIT	11	1083	15.08	N/A	166	207	NONE	EMT/PVC	2X6	2.5"	1	AL 300MCM	CU #4	230	260	260	N/A	1.00	1.00	12.97	143	1335	2.49%
CB-B16	CONDUIT	11	1083	15.08	N/A	166	207	NONE	EMT/PVC	2X6	2.5"	1	AL 300MCM	CU #4	230	260	260	N/A	1.00	1.00	12.97	143	1405	2.62%
CB-B17	CONDUIT	11	1083	15.08	N/A	166	207	NONE	EMT/PVC	2X6	2.5"	1	AL 300MCM	CU #4	230	260	260	N/A	1.00	1.00	12.97	143	1495	2.79%
CB-B18	CONDUIT	11	1083	15.08	N/A	166	207	NONE	EMT/PVC	2X6	2.5"	1	AL 300MCM	CU #4	230	260	260	N/A	1.00	1.00	12.97	143	1555	2.90%

AVERAGE DC VOLTAGE DROP FROM COMBINER BOXES TO INVERTERS: 1.32%

DC STRING WIRING CALCULATION – CONDUIT – LONGI 540W DOMESTIC

STRING IMAX SIMULATED [A]	15.08
MAX CONTINUOUS FAULT CURRENT FROM PARALLEL SOURCES [AMPS]	15.08
1.25x MAX CONTINUOUS FAULT CURRENT [AMPS]	18.85
MAX # OF WIRES PER CONDUIT	9
DERATE FOR # OF CONDUCTORS IN A CONDUIT	0.7
MAX AMBIENT TEMPERATURE	29
TEMPERATURE DERATE	1.00
WIRE GAUGE	CU #10
75 DEG AMPACITY WITHOUT COU ADJUSTMENT [AMPS]	35
IS 75 DEG AMPACITY WITHOUT COU ADJUSTMENT >= 1.25x MAX CIRCUIT CURRENT?	YES. COMPLIES WITH 690.8(B)(1)
90DEG AMPACITY WITH COU ADJUSTMENT [AMPS]	28
IS 90DEG AMPACITY WITH COU ADJUSTMENT >= 1.0x MAX CIRCUIT CURRENT?	YES. COMPLIES WITH 690.8(B)(2)
PV SOURCE CIRCUIT (SIMULATED) FUSE RATING [AMPS]	25
AVAILABLE FAULT CURRENT FROM ALL PARALLEL SOURCES [AMPS]	15.08
IS FUSE RATING >= 1.25x MAX CIRCUIT CURRENT?	YES. COMPLIES WITH 690.9(B)

SAM SIMULATED VALUES – LONGI 540W DOMESTIC

MAXIMUM CURRENT [A]	15.08
MAXIMUM VOLTAGE [V]	1392.13

THE STRING MAX CURRENT IS CALCULATED BY SYSTEM ADVISOR MODEL SIMULATION PROGRAM PROVIDED BY THE NATIONAL RENEWABLE ENERGY LABORATORY, REFERENCE SAND 2004-3535, PHOTOVOLTAIC ARRAY PERFORMANCE MODEL, AS ALLOWABLE BY NEC 690.8(A)(1)(a)(2), THE CALCULATED CURRENT IS 87.1% OF THE VALUE USING 690.8(A)(1)(a)(1).

MODULE SPECIFICATIONS – 540W DOMESTIC

MAKE/MODEL	LONGI LR5-72HBD-540M
POWER [W]	540
ISC [A]	13.85
IMP [A]	12.97
VOC [V]	49.50
VMP [V]	41.65
β VOC [%/degC]	-0.265%
SITE CLIMATE CRITERIA (WINDHAM, CT)	
ASHRAE HIGH [°C]	29.0
ASHRAE LOW [°C]	-19.7
ELEVATION (m)	75
STRING SPECIFICATIONS AT STC	
MODULES/STRING	26
STRING POWER [W]	14040
STRING ISC [A]	13.85
STRING IMP [A]	12.97
STRING VMP [V]	1082.90
STRING MAX VOLTAGE CALCULATION	
VOC TEMP ADJUSTMENT @ -19.7 °C	1.12
VOC @ -19.7 °C [V]	55.36
MAX STRING VOC [V]	1439.45

DC STRING WIRING CALCULATION – CONDUIT – LONGI 540W NON-DOMESTIC

STRING IMAX SIMULATED [A]	15.08
MAX CONTINUOUS FAULT CURRENT FROM PARALLEL SOURCES [AMPS]	15.08
1.25x MAX CONTINUOUS FAULT CURRENT [AMPS]	18.85
MAX # OF WIRES PER CONDUIT	9
DERATE FOR # OF CONDUCTORS IN A CONDUIT	0.7
MAX AMBIENT TEMPERATURE	29
TEMPERATURE DERATE	1.00
WIRE GAUGE	CU #10
75 DEG AMPACITY WITHOUT COU ADJUSTMENT [AMPS]	35
IS 75 DEG AMPACITY WITHOUT COU ADJUSTMENT >= 1.25x MAX CIRCUIT CURRENT?	YES. COMPLIES WITH 690.8(B)(1)
90DEG AMPACITY WITH COU ADJUSTMENT [AMPS]	28
IS 90DEG AMPACITY WITH COU ADJUSTMENT >= 1.0x MAX CIRCUIT CURRENT?	YES. COMPLIES WITH 690.8(B)(2)
PV SOURCE CIRCUIT (SIMULATED) FUSE RATING [AMPS]	25
AVAILABLE FAULT CURRENT FROM ALL PARALLEL SOURCES [AMPS]	15.08
IS FUSE RATING >= 1.25x MAX CIRCUIT CURRENT?	YES. COMPLIES WITH 690.9(B)

SAM SIMULATED VALUES – LONGI 540W NON-DOMESTIC

MAXIMUM CURRENT [A]	15.08
MAXIMUM VOLTAGE [V]	1392.13

THE STRING MAX CURRENT IS CALCULATED BY SYSTEM ADVISOR MODEL SIMULATION PROGRAM PROVIDED BY THE NATIONAL RENEWABLE ENERGY LABORATORY, REFERENCE SAND 2004-3535, PHOTOVOLTAIC ARRAY PERFORMANCE MODEL, AS ALLOWABLE BY NEC 690.8(A)(1)(a)(2), THE CALCULATED CURRENT IS 87.1% OF THE VALUE USING 690.8(A)(1)(a)(1).

MODULE SPECIFICATIONS – 540W NON DOMESTIC

MAKE/MODEL	LONGI LR5-72HBD-540M
POWER [W]	540
ISC [A]	13.85
IMP [A]	12.97
VOC [V]	49.50
VMP [V]	41.65
β VOC [%/degC]	-0.265%
SITE CLIMATE CRITERIA (WINDHAM, CT)	
ASHRAE HIGH [°C]	29.0
ASHRAE LOW [°C]	-19.7
ELEVATION (m)	75
STRING SPECIFICATIONS AT STC	
MODULES/STRING	26
STRING POWER [W]	14040
STRING ISC [A]	13.85
STRING IMP [A]	12.97
STRING VMP [V]	1082.90
STRING MAX VOLTAGE CALCULATION	
VOC TEMP ADJUSTMENT @ -19.7 °C	1.12
VOC @ -19.7 °C [V]	55.36
MAX STRING VOC [V]	1439.45

SHEET NOTES:
1. DISTANCES ARE ONE-WAY ESTIMATES GENERATED FOR ENGINEER'S CALCULATIONS, CONTRACTOR IS RESPONSIBLE FOR OWN MEASUREMENTS AND TAKEOFFS.

	PM	ENG CHK
90% PERMIT SET – REV 1	SK	MxB MD
90% PERMIT SET	SK	MxB MD
30% CONCEPTUAL DESIGN REV 3	SK	GB RI
30% CONCEPTUAL DESIGN REV 2	SK	GB RI

DATE: 01/06/2026, 12/12/2025, 06/24/2025, 06/20/2025

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GREENSKIES
127 WASHINGTON AVENUE
NORTH HAVEN, CT 06473
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DEVELOPER: Greenskies, a Clean Focus company

PAGE SIZE: 36" x 24"

PROJECT #: 10036.11

PROJECT: SOLAR GROUND MOUNT SYSTEM AT GAGER HILL ROAD
41.692902°, -72.090985°
SCOTLAND, CT 06264

DRAWING TITLE: SCHEDULES & CALCULATIONS

DRAWING #: E311

RULER IN INCHES: 0 ½ 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18

STRING VOLTAGE DROP CALCULATIONS				
MAX STRING VOLTAGE DROP		1.05%	MAX TOTAL VOLTAGE DROP	2.67%
AVERAGE STRING VOLTAGE DROP		0.61%	AVERAGE TOTAL VOLTAGE DROP	1.55%
STRING NUMBER	STRING WIRE GAUGE	TOTAL STRING DISTANCE [FT]	STRING VOLTAGE DROP	TOTAL VOLTAGE DROP
A1–1	#10AWG–CU	135	0.42%	0.71%
A1–2	#10AWG–CU	235	0.73%	1.01%
A1–3	#10AWG–CU	120	0.37%	0.66%
A1–4	#10AWG–CU	220	0.68%	0.97%
A1–5	#10AWG–CU	105	0.32%	0.61%
A1–6	#10AWG–CU	205	0.63%	0.92%
A1–7	#10AWG–CU	90	0.28%	0.57%
A1–8	#10AWG–CU	190	0.59%	0.88%
A1–9	#10AWG–CU	75	0.23%	0.52%
A1–10	#10AWG–CU	175	0.54%	0.83%
A2–1	#10AWG–CU	135	0.42%	0.69%
A2–2	#10AWG–CU	120	0.37%	0.64%
A2–3	#10AWG–CU	105	0.32%	0.60%
A2–4	#10AWG–CU	90	0.28%	0.55%
A2–5	#10AWG–CU	280	0.87%	1.14%
A2–6	#10AWG–CU	175	0.54%	0.81%
A2–7	#10AWG–CU	75	0.23%	0.50%
A2–8	#10AWG–CU	295	0.91%	1.18%
A2–9	#10AWG–CU	190	0.59%	0.86%
A2–10	#10AWG–CU	90	0.28%	0.55%
A3–1	#10AWG–CU	75	0.23%	0.50%
A3–2	#10AWG–CU	180	0.56%	0.83%
A3–3	#10AWG–CU	280	0.87%	1.14%
A3–4	#10AWG–CU	295	0.91%	1.18%
A3–5	#10AWG–CU	195	0.60%	0.87%
A3–6	#10AWG–CU	90	0.28%	0.55%
A3–7	#10AWG–CU	105	0.32%	0.59%
A3–8	#10AWG–CU	210	0.65%	0.92%
A3–9	#10AWG–CU	310	0.96%	1.23%
A3–10	#10AWG–CU	325	1.00%	1.27%
A3–11	#10AWG–CU	225	0.70%	0.97%
A4–1	#10AWG–CU	75	0.23%	0.58%
A4–2	#10AWG–CU	90	0.28%	0.62%
A4–3	#10AWG–CU	190	0.59%	0.93%
A4–4	#10AWG–CU	295	0.91%	1.26%
A4–5	#10AWG–CU	310	0.96%	1.30%
A4–6	#10AWG–CU	205	0.63%	0.98%
A4–7	#10AWG–CU	105	0.32%	0.67%
A4–8	#10AWG–CU	120	0.37%	0.72%
A4–9	#10AWG–CU	220	0.68%	1.02%
A4–10	#10AWG–CU	325	1.00%	1.35%
A4–11	#10AWG–CU	340	1.05%	1.40%
A5–1	#10AWG–CU	75	0.23%	0.68%
A5–2	#10AWG–CU	175	0.54%	0.99%
A5–3	#10AWG–CU	295	0.91%	1.36%
A5–4	#10AWG–CU	190	0.59%	1.03%
A5–5	#10AWG–CU	90	0.28%	0.73%
A5–6	#10AWG–CU	105	0.32%	0.77%
A5–7	#10AWG–CU	205	0.63%	1.08%
A5–8	#10AWG–CU	310	0.96%	1.41%
A5–9	#10AWG–CU	325	1.00%	1.45%
A5–10	#10AWG–CU	225	0.70%	1.14%
A5–11	#10AWG–CU	120	0.37%	0.82%
A6–1	#10AWG–CU	75	0.23%	0.79%
A6–2	#10AWG–CU	180	0.56%	1.12%
A6–3	#10AWG–CU	280	0.87%	1.42%
A6–4	#10AWG–CU	295	0.91%	1.47%
A6–5	#10AWG–CU	190	0.59%	1.15%
A6–6	#10AWG–CU	90	0.28%	0.84%
A6–7	#10AWG–CU	105	0.32%	0.88%
A6–8	#10AWG–CU	210	0.65%	1.21%
A6–9	#10AWG–CU	310	0.96%	1.52%
A6–10	#10AWG–CU	325	1.00%	1.56%
A6–11	#10AWG–CU	225	0.70%	1.25%
A7–1	#10AWG–CU	75	0.23%	0.87%
A7–2	#10AWG–CU	90	0.28%	0.91%
A7–3	#10AWG–CU	190	0.59%	1.22%
A7–4	#10AWG–CU	295	0.91%	1.54%
A7–5	#10AWG–CU	310	0.96%	1.59%
A7–6	#10AWG–CU	210	0.65%	1.28%
A7–7	#10AWG–CU	105	0.32%	0.96%
A7–8	#10AWG–CU	120	0.37%	1.00%
A7–9	#10AWG–CU	225	0.70%	1.33%
A7–10	#10AWG–CU	325	1.00%	1.64%
A7–11	#10AWG–CU	340	1.05%	1.68%
A8–1	#10AWG–CU	75	0.23%	1.14%
A8–2	#10AWG–CU	90	0.28%	1.19%
A8–3	#10AWG–CU	195	0.60%	1.52%
A8–4	#10AWG–CU	210	0.65%	1.56%
A8–5	#10AWG–CU	105	0.32%	1.24%
A8–6	#10AWG–CU	120	0.37%	1.28%
A8–7	#10AWG–CU	225	0.70%	1.61%
A8–8	#10AWG–CU	240	0.74%	1.65%
A8–9	#10AWG–CU	135	0.42%	1.33%
A8–10	#10AWG–CU	150	0.46%	1.38%
A8–11	#10AWG–CU	255	0.79%	1.70%
A9–1	#10AWG–CU	75	0.23%	1.11%
A9–2	#10AWG–CU	175	0.54%	1.42%
A9–3	#10AWG–CU	295	0.91%	1.79%
A9–4	#10AWG–CU	280	0.87%	1.74%
A9–5	#10AWG–CU	295	0.91%	1.79%
A9–6	#10AWG–CU	190	0.59%	1.46%
A9–7	#10AWG–CU	205	0.63%	1.51%
A9–8	#10AWG–CU	310	0.96%	1.83%
A9–9	#10AWG–CU	325	1.00%	1.88%
A9–10	#10AWG–CU	340	1.05%	1.93%
A9–11	#10AWG–CU	220	0.68%	1.56%
A10–1	#10AWG–CU	75	0.23%	1.33%
A10–2	#10AWG–CU	175	0.54%	1.64%
A10–3	#10AWG–CU	90	0.28%	1.38%
A10–4	#10AWG–CU	190	0.59%	1.69%
A10–5	#10AWG–CU	295	0.91%	2.01%
A10–6	#10AWG–CU	310	0.96%	2.06%
A10–7	#10AWG–CU	205	0.63%	1.73%
A10–8	#10AWG–CU	105	0.32%	1.42%
A10–9	#10AWG–CU	120	0.37%	1.47%
A10–10	#10AWG–CU	220	0.68%	1.78%
A10–11	#10AWG–CU	325	1.00%	2.10%
A11–1	#10AWG–CU	75	0.23%	1.30%
A11–2	#10AWG–CU	175	0.54%	1.61%
A11–3	#10AWG–CU	280	0.87%	1.93%
A11–4	#10AWG–CU	295	0.91%	1.98%
A11–5	#10AWG–CU	195	0.60%	1.67%
A11–6	#10AWG–CU	90	0.28%	1.35%
A11–7	#10AWG–CU	105	0.32%	1.39%
A11–8	#10AWG–CU	210	0.65%	1.72%
A11–9	#10AWG–CU	310	0.96%	2.02%
A11–10	#10AWG–CU	325	1.00%	2.07%
A12–1	#10AWG–CU	75	0.23%	1.38%
A12–2	#10AWG–CU	175	0.54%	1.69%
A12–3	#10AWG–CU	295	0.91%	2.06%
A12–4	#10AWG–CU	190	0.59%	1.74%
A12–5	#10AWG–CU	90	0.28%	1.43%
A12–6	#10AWG–CU	105	0.32%	1.48%
A12–7	#10AWG–CU	205	0.63%	1.79%
A12–8	#10AWG–CU	310	0.96%	2.11%
A12–9	#10AWG–CU	325	1.00%	2.16%
A12–10	#10AWG–CU	220	0.68%	1.83%
A13–1	#10AWG–CU	75	0.23%	1.43%
A13–2	#10AWG–CU	90	0.28%	1.48%
A13–3	#10AWG–CU	190	0.59%	1.79%
A13–4	#10AWG–CU	295	0.91%	2.11%
A13–5	#10AWG–CU	310	0.96%	2.16%
A13–6	#10AWG–CU	205	0.63%	1.84%
A13–7	#10AWG–CU	105	0.32%	1.53%
A13–8	#10AWG–CU	120	0.37%	1.57%
A13–9	#10AWG–CU	225	0.70%	1.90%
A13–10	#10AWG–CU	325	1.00%	2.21%
A14–1	#10AWG–CU	75	0.23%	1.52%
A14–2	#10AWG–CU	175	0.54%	1.83%
A14–3	#10AWG–CU	280	0.87%	2.15%
A14–4	#10AWG–CU	295	0.91%	2.20%
A14–5	#10AWG–CU	190	0.59%	1.87%
A14–6	#10AWG–CU	90	0.28%	1.57%
A14–7	#10AWG–CU	105	0.32%	1.61%
A14–8	#10AWG–CU	205	0.63%	1.92%
A14–9	#10AWG–CU	310	0.96%	2.25%
A14–10	#10AWG–CU	325	1.00%	2.29%
A15–1	#10AWG–CU	75	0.23%	1.60%
A15–2	#10AWG–CU	175	0.54%	1.91%
A15–3	#10AWG–CU	90	0.28%	1.65%
A15–4	#10AWG–CU	190	0.59%	1.96%
A15–5	#10AWG–CU	295	0.91%	2.28%
A15–6	#10AWG–CU	310	0.96%	2.33%
A15–7	#10AWG–CU	205	0.63%	2.01%
A15–8	#10AWG–CU	105	0.32%	1.70%
A15–9	#10AWG–CU	220	0.68%	2.05%
A15–10	#10AWG–CU	325	1.00%	2.38%
A16–1	#10AWG–CU	75	0.23%	1.72%
A16–2	#10AWG–CU	90	0.28%	1.77%
A16–3	#10AWG–CU	190	0.59%	2.08%
A16–4	#10AWG–CU	295	0.91%	2.40%
A16–5	#10AWG–CU	310	0.96%	2.45%
A16–6	#10AWG–CU	205	0.63%	2.12%
A16–7	#10AWG–CU	105	0.32%	1.81%
A16–8	#10AWG–CU	120	0.37%	1.86%
A16–9	#10AWG–CU	220	0.68%	2.17%
A16–10	#10AWG–CU	325	1.00%	2.49%
A17–1	#10AWG–CU	75	0.23%	1.81%
A17–2	#10AWG–CU	175	0.54%	2.12%
A17–3	#10AWG–CU	280	0.87%	2.44%
A17–4	#10AWG–CU	295	0.91%	2.49%
A17–5	#10AWG–CU	190	0.59%	2.16%
A17–6	#10AWG–CU	90	0.28%	1.85%
A17–7	#10AWG–CU	105	0.32%	1.90%
A17–8	#10AWG–CU	205	0.63%	2.21%
A17–9	#10AWG–CU	310	0.96%	2.53%
A17–10	#10AWG–CU	325	1.00%	2.58%
A18–1	#10AWG–CU	75	0.23%	1.82%
A18–2	#10AWG–CU	180	0.56%	2.15%
A18–3	#10AWG–CU	90	0.28%	1.87%
A18–4	#10AWG–CU	190	0.59%	2.18%
A18–5	#10AWG–CU	295	0.91%	2.50%
A18–6	#10AWG–CU	310	0.96%	2.55%
A18–7	#10AWG–CU	205	0.63%	2.23%
A18–8	#10AWG–CU	105	0.32%	1.92%
A18–9	#10AWG–CU	220	0.68%	2.27%
A18–10	#10AWG–CU	325	1.00%	2.60%
A19–1	#10AWG–CU	75	0.23%	1.90%
A19–2	#10AWG–CU	90	0.28%	1.95%
A19–3	#10AWG–CU	190	0.59%	2.26%
A19–4	#10AWG–CU	295	0.91%	2.58%
A19–5	#10AWG–CU	310	0.96%	2.63%
A19–6	#10AWG–CU	210	0.65%	2.32%
A19–7	#10AWG–CU	105	0.32%	1.99%
A19–8	#10AWG–CU	120	0.37%	2.04%
A19–9	#10AWG–CU	225	0.70%	2.36%
A19–10	#10AWG–CU	325	1.00%	2.67%
	#10AWG–CU		#VALUE!	

SHEET NOTES:
1. DISTANCES ARE ONE–WAY ESTIMATES GENERATED FOR ENGINEER'S CALCULATIONS, CONTRACTOR IS RESPONSIBLE FOR OWN MEASUREMENTS AND TAKEOFFS.

DRAWING TITLE: SCHEDULES & CALCULATIONS

DRAWING #: E312

PROJECT: SOLAR GROUND MOUNT SYSTEM AT GAGER HILL ROAD 41.692902°, -72.090985° SCOTLAND, CT 06264

DEVELOPER: GREENSKIES, 127 WASHINGTON AVENUE, NORTH HAVEN, CT 06473, WWW.GREENSKIES.COM, Greenskies a Clean Focus company

PAGE SIZE: 36" x 24" | PROJECT #: 10036.11

ENGINEER: PURE POWER ENGINEERING, 111 RIVER STREET, HOBOKEN, NJ, WWW.PUREPOWERENGINEERING.COM, MATTHEW M. DONOVAN, CT LICENSE No. PEN.0037514

	DATE	REVISION DESCRIPTION	PM	ENG CHK
5	01/06/2026	90% PERMIT SET – REV 1	SK	MxB MD
4	12/12/2025	90% PERMIT SET	SK	MxB MD
3	06/24/2025	30% CONCEPTUAL DESIGN REV 3	SK	GB RI
2	06/20/2025	30% CONCEPTUAL DESIGN REV 2	SK	GB RI

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PLOT DATE: 1/14/2026 2:15 PM

RULER IN INCHES: 0 ½ 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18

STRING VOLTAGE DROP CALCULATIONS				
MAX STRING VOLTAGE DROP		1.79%	MAX TOTAL VOLTAGE DROP	3.27%
AVERAGE STRING VOLTAGE DROP		0.57%	AVERAGE TOTAL VOLTAGE DROP	1.83%
STRING NUMBER	STRING WIRE GAUGE	TOTAL STRING DISTANCE [FT]	STRING VOLTAGE DROP	TOTAL VOLTAGE DROP
B1–1	#10AWG–CU	75	0.23%	0.29%
B1–2	#10AWG–CU	90	0.28%	0.34%
B1–3	#10AWG–CU	190	0.59%	0.65%
B1–4	#10AWG–CU	295	0.91%	0.97%
B1–5	#10AWG–CU	315	0.97%	1.03%
B1–6	#10AWG–CU	330	1.02%	1.08%
B1–7	#10AWG–CU	350	1.08%	1.14%
B1–8	#10AWG–CU	365	1.13%	1.19%
B1–9	#10AWG–CU	380	1.17%	1.23%
B1–10	#10AWG–CU	395	1.22%	1.28%
B2–1	#10AWG–CU	105	0.32%	0.41%
B2–2	#10AWG–CU	205	0.63%	0.72%
B2–3	#10AWG–CU	90	0.28%	0.36%
B2–4	#10AWG–CU	190	0.59%	0.67%
B2–5	#10AWG–CU	295	0.91%	1.00%
B2–6	#10AWG–CU	75	0.23%	0.32%
B2–7	#10AWG–CU	175	0.54%	0.63%
B2–8	#10AWG–CU	280	0.87%	0.95%
B2–9	#10AWG–CU	190	0.59%	0.67%
B2–10	#10AWG–CU	295	0.91%	1.00%
B3–1	#10AWG–CU	105	0.32%	0.49%
B3–2	#10AWG–CU	205	0.63%	0.80%
B3–3	#10AWG–CU	310	0.96%	1.13%
B3–4	#10AWG–CU	90	0.28%	0.45%
B3–5	#10AWG–CU	190	0.59%	0.76%
B3–6	#10AWG–CU	295	0.91%	1.08%
B3–7	#10AWG–CU	75	0.23%	0.40%
B3–8	#10AWG–CU	175	0.54%	0.71%
B3–9	#10AWG–CU	280	0.87%	1.03%
B3–10	#10AWG–CU	290	0.90%	1.07%
B4–1	#10AWG–CU	120	0.37%	0.63%
B4–2	#10AWG–CU	105	0.32%	0.59%
B4–3	#10AWG–CU	205	0.63%	0.90%
B4–4	#10AWG–CU	310	0.96%	1.22%
B4–5	#10AWG–CU	90	0.28%	0.54%
B4–6	#10AWG–CU	190	0.59%	0.85%
B4–7	#10AWG–CU	295	0.91%	1.17%
B4–8	#10AWG–CU	75	0.23%	0.49%
B4–9	#10AWG–CU	175	0.54%	0.80%
B4–10	#10AWG–CU	280	0.87%	1.13%
B5–1	#10AWG–CU	105	0.32%	0.70%
B5–2	#10AWG–CU	205	0.63%	1.01%
B5–3	#10AWG–CU	90	0.28%	0.65%
B5–4	#10AWG–CU	190	0.59%	0.96%
B5–5	#10AWG–CU	295	0.91%	1.28%
B5–6	#10AWG–CU	75	0.23%	0.60%
B5–7	#10AWG–CU	175	0.54%	0.91%
B5–8	#10AWG–CU	280	0.87%	1.24%
B5–9	#10AWG–CU	190	0.59%	0.96%
B5–10	#10AWG–CU	295	0.91%	1.28%
B6–1	#10AWG–CU	295	0.91%	1.38%
B6–2	#10AWG–CU	280	0.87%	1.33%
B6–3	#10AWG–CU	180	0.56%	1.02%
B6–4	#10AWG–CU	75	0.23%	0.70%
B6–5	#10AWG–CU	90	0.28%	0.74%
B6–6	#10AWG–CU	195	0.60%	1.07%
B6–7	#10AWG–CU	295	0.91%	1.38%
B6–8	#10AWG–CU	310	0.96%	1.42%
B6–9	#10AWG–CU	210	0.65%	1.11%
B6–10	#10AWG–CU	105	0.32%	0.79%
B7–1	#10AWG–CU	325	1.00%	1.55%
B7–2	#10AWG–CU	105	0.32%	0.87%
B7–3	#10AWG–CU	205	0.63%	1.18%
B7–4	#10AWG–CU	310	0.96%	1.51%
B7–5	#10AWG–CU	90	0.28%	0.83%
B7–6	#10AWG–CU	190	0.59%	1.14%
B7–7	#10AWG–CU	295	0.91%	1.46%
B7–8	#10AWG–CU	75	0.23%	0.78%
B7–9	#10AWG–CU	175	0.54%	1.09%
B7–10	#10AWG–CU	280	0.87%	1.42%
B8–1	#10AWG–CU	315	0.97%	1.61%
B8–2	#10AWG–CU	200	0.62%	1.25%
B8–3	#10AWG–CU	300	0.93%	1.56%
B8–4	#10AWG–CU	185	0.57%	1.21%
B8–5	#10AWG–CU	285	0.88%	1.52%
B8–6	#10AWG–CU	90	0.28%	0.91%
B8–7	#10AWG–CU	195	0.60%	1.24%
B8–8	#10AWG–CU	295	0.91%	1.55%
B8–9	#10AWG–CU	75	0.23%	0.87%
B8–10	#10AWG–CU	175	0.54%	1.18%
B9–1	#10AWG–CU	580	1.79%	2.68%
B9–2	#10AWG–CU	525	1.62%	2.51%
B9–3	#10AWG–CU	150	0.46%	1.35%
B9–4	#10AWG–CU	135	0.42%	1.31%
B9–5	#10AWG–CU	120	0.37%	1.26%
B9–6	#10AWG–CU	105	0.32%	1.21%
B9–7	#10AWG–CU	205	0.63%	1.52%
B9–8	#10AWG–CU	90	0.28%	1.17%
B9–9	#10AWG–CU	190	0.59%	1.48%
B9–10	#10AWG–CU	75	0.23%	1.12%
B10–1	#10AWG–CU	135	0.42%	2.07%
B10–2	#10AWG–CU	240	0.74%	2.39%
B10–3	#10AWG–CU	120	0.37%	2.02%
B10–4	#10AWG–CU	225	0.70%	2.35%
B10–5	#10AWG–CU	105	0.32%	1.98%
B10–6	#10AWG–CU	205	0.63%	2.28%
B10–7	#10AWG–CU	90	0.28%	1.93%
B10–8	#10AWG–CU	190	0.59%	2.24%
B10–9	#10AWG–CU	75	0.23%	1.88%
B10–10	#10AWG–CU	175	0.54%	2.19%
B11–1	#10AWG–CU	135	0.42%	2.19%
B11–2	#10AWG–CU	235	0.73%	2.50%
B11–3	#10AWG–CU	120	0.37%	2.14%
B11–4	#10AWG–CU	220	0.68%	2.45%
B11–5	#10AWG–CU	105	0.32%	2.09%
B11–6	#10AWG–CU	205	0.63%	2.40%
B11–7	#10AWG–CU	90	0.28%	2.05%
B11–8	#10AWG–CU	190	0.59%	2.36%
B11–9	#10AWG–CU	80	0.25%	2.02%
B11–10	#10AWG–CU	180	0.56%	2.33%
B12–1	#10AWG–CU	135	0.42%	2.31%
B12–2	#10AWG–CU	240	0.74%	2.64%
B12–3	#10AWG–CU	120	0.37%	2.27%
B12–4	#10AWG–CU	225	0.70%	2.59%
B12–5	#10AWG–CU	105	0.32%	2.22%
B12–6	#10AWG–CU	205	0.63%	2.53%
B12–7	#10AWG–CU	90	0.28%	2.17%
B12–8	#10AWG–CU	190	0.59%	2.48%
B12–9	#10AWG–CU	75	0.23%	2.13%
B12–10	#10AWG–CU	175	0.54%	2.44%
B13–1	#10AWG–CU	140	0.43%	2.45%
B13–2	#10AWG–CU	240	0.74%	2.76%
B13–3	#10AWG–CU	125	0.39%	2.40%
B13–4	#10AWG–CU	225	0.70%	2.71%
B13–5	#10AWG–CU	110	0.34%	2.36%
B13–6	#10AWG–CU	210	0.65%	2.66%
B13–7	#10AWG–CU	95	0.29%	2.31%
B13–8	#10AWG–CU	195	0.60%	2.62%
B13–9	#10AWG–CU	75	0.23%	2.25%
B13–10	#10AWG–CU	180	0.56%	2.57%
B14–1	#10AWG–CU	135	0.42%	2.55%
B14–2	#10AWG–CU	240	0.74%	2.88%
B14–3	#10AWG–CU	120	0.37%	2.50%
B14–4	#10AWG–CU	220	0.68%	2.81%
B14–5	#10AWG–CU	105	0.32%	2.46%
B14–6	#10AWG–CU	205	0.63%	2.77%
B14–7	#10AWG–CU	90	0.28%	2.41%
B14–8	#10AWG–CU	190	0.59%	2.72%
B14–9	#10AWG–CU	75	0.23%	2.37%
B14–10	#10AWG–CU	175	0.54%	2.67%
B15–1	#10AWG–CU	255	0.79%	2.92%
B15–2	#10AWG–CU	140	0.43%	2.56%
B15–3	#10AWG–CU	240	0.74%	2.87%
B15–4	#10AWG–CU	125	0.39%	2.51%
B15–5	#10AWG–CU	225	0.70%	2.82%
B15–6	#10AWG–CU	110	0.34%	2.47%
B15–7	#10AWG–CU	210	0.65%	2.78%
B15–8	#10AWG–CU	90	0.28%	2.41%
B15–9	#10AWG–CU	195	0.60%	2.73%
B15–10	#10AWG–CU	75	0.23%	2.36%
B15–11	#10AWG–CU	180	0.56%	2.68%
B16–1	#10AWG–CU	150	0.46%	2.70%
B16–2	#10AWG–CU	255	0.79%	3.03%
B16–3	#10AWG–CU	135	0.42%	2.66%
B16–4	#10AWG–CU	240	0.74%	2.98%
B16–5	#10AWG–CU	120	0.37%	2.61%
B16–6	#10AWG–CU	225	0.70%	2.94%
B16–7	#10AWG–CU	105	0.32%	2.56%
B16–8	#10AWG–CU	210	0.65%	2.89%
B16–9	#10AWG–CU	90	0.28%	2.52%
B16–10	#10AWG–CU	190	0.59%	2.83%
B16–11	#10AWG–CU	75	0.23%	2.47%
B17–1	#10AWG–CU	250	0.77%	3.16%
B17–2	#10AWG–CU	135	0.42%	2.80%
B17–3	#10AWG–CU	235	0.73%	3.11%
B17–4	#10AWG–CU	120	0.37%	2.75%
B17–5	#10AWG–CU	220	0.68%	3.06%
B17–6	#10AWG–CU	105	0.32%	2.71%
B17–7	#10AWG–CU	205	0.63%	3.02%
B17–8	#10AWG–CU	90	0.28%	2.66%
B17–9	#10AWG–CU	190	0.59%	2.97%
B17–10	#10AWG–CU	75	0.23%	2.62%
B17–11	#10AWG–CU	180	0.56%	2.94%
B18–1	#10AWG–CU	155	0.48%	2.96%
B18–2	#10AWG–CU	255	0.79%	3.27%
B18–3	#10AWG–CU	135	0.42%	2.90%
B18–4	#10AWG–CU	240	0.74%	3.22%
B18–5	#10AWG–CU	120	0.37%	2.85%
B18–6	#10AWG–CU	225	0.70%	3.17%
B18–7	#10AWG–CU	105	0.32%	2.80%
B18–8	#10AWG–CU	210	0.65%	3.13%
B18–9	#10AWG–CU	90	0.28%	2.76%
B18–10	#10AWG–CU	190	0.59%	3.07%
B18–11	#10AWG–CU	75	0.23%	2.71%
	#10AWG–CU		#VALUE!	

SHEET NOTES:
1. DISTANCES ARE ONE–WAY ESTIMATES GENERATED FOR ENGINEER'S CALCULATIONS, CONTRACTOR IS RESPONSIBLE FOR OWN MEASUREMENTS AND TAKEOFFS.

	DATE	REVISION DESCRIPTION	PM	ENG CHK
5	01/06/2026	90% PERMIT SET – REV 1	SK	MxB MD
4	12/12/2025	90% PERMIT SET	SK	MxB MD
3	06/24/2025	30% CONCEPTUAL DESIGN REV 3	SK	GB RI
2	06/20/2025	30% CONCEPTUAL DESIGN REV 2	SK	GB RI

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Greenskies
a Clean Focus company

PAGE SIZE: 36" x 24"
PROJECT #: 10036.11

PROJECT
SOLAR GROUND MOUNT SYSTEM AT
GAGER HILL ROAD
41.692902°, -72.090985°
SCOTLAND, CT 06264

DRAWING TITLE
SCHEDULES & CALCULATIONS

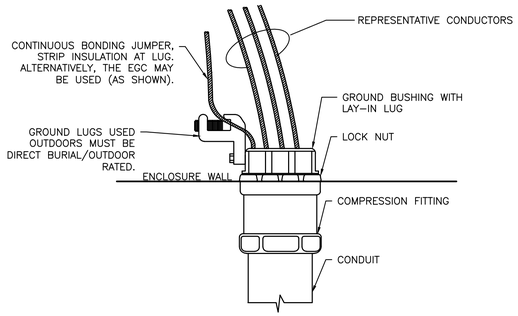
DRAWING #
E313

PLOT DATE: 1/14/2026 2:15 PM

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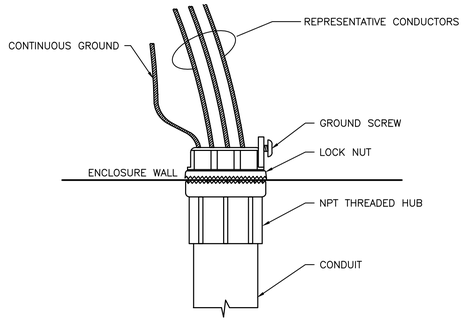
PLOT DATE: 1/14/2026 2:15 PM

NOTES:
1. FITTING SHALL BE LISTED TO UL 517B
2. FITTING SHALL BE LISTED TO UL 517B & UL 467 FOR LINE-SIDE CONNECTIONS PER NEC 250.92(B)



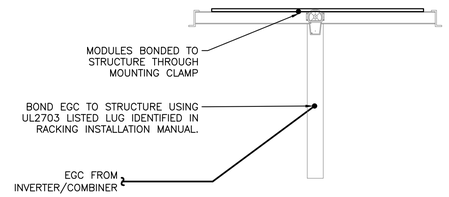
1 CONDUIT BUSHING GROUNDING
SCALE: NONE

NOTES:
1. HUB SHALL BE LISTED TO UL 517B
2. HUB SHALL BE LISTED TO UL 517B & UL 467 FOR LINE-SIDE CONNECTIONS PER NEC 250.92(B)



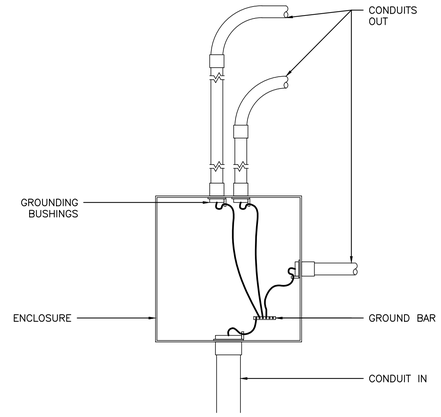
2 MYERS HUB GROUNDING
SCALE: NONE

NOTES:
1. EACH COMBINER (OR STRING INVERTER) SHALL HAVE AN EGC RUNNING TO ANY ROW WITH STRINGS CONNECTED TO THAT COMBINER/INVERTER.
2. PV MODULES AND RAILS GROUNDED PER NEC 690.43, REFER TO INSTALLATION MANUAL FOR DETAILS.
3. ALL EXPOSED METAL PARTS OF THE OMCO ORIGIN TRACKER SYSTEM ARE ELECTRICALLY BONDED TOGETHER. EACH TRACKER ASSEMBLY MUST BE GROUNDED.



OMCO – END POST

3 ARRAY GROUNDING – TRACKER
SCALE: NONE



4 PULL BOX/TROUGH GROUNDING
SCALE: NONE

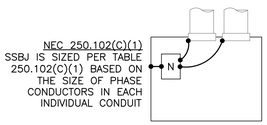


TABLE 250.102(C)(1)

SIZE OF LARGEST UNGROUNDED CONDUCTOR OR EQUIVALENT AREA FOR PARALLEL CONDUCTORS (AWG/KCMIL)		SIZE OF GROUNDED CONDUCTOR OR BONDING JUMPER (AWG/KCMIL)	
COPPER	ALUMINUM OR COPPER-CLAD ALUMINUM	COPPER	ALUMINUM OR COPPER-CLAD ALUMINUM
2 OR SMALLER	1/0 OR SMALLER	8	6
1 OR 1/0	2/0 OR 3/0	6	4
2/0 OR 3/0	4/0 OR 250	4	2
OVER 3/0 THROUGH 350	OVER 250 THROUGH 500	2	1/0
OVER 350 THROUGH 600	OVER 500 THROUGH 900	1/0	3/0
OVER 600 THROUGH 1100	OVER 900 THROUGH 1750	2/0	4/0
OVER 1100	OVER 1750	REFER TO NOTES IN NEC TABLE 250.102(C)(1)	

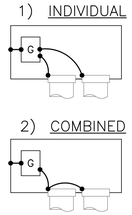
5 SUPPLY SIDE BONDING JUMPERS (SSBJ)
SCALE: NONE

A) FOR CONCENTRIC KNOCKOUTS, USE BONDING JUMPERS AS FOLLOWS:

TABLE 250.122

OVERCURRENT DEVICE CIRCUIT NOT EXCEEDING (AMPERES)	SIZE (AWG OR KCMIL)	
	COPPER	ALUMINUM
15	14	12
20	12	10
60	10	8
100	8	6
200	6	4
300	4	2
400	3	1
500	2	1/0
600	1	2/0
800	1/0	3/0
1000	2/0	4/0
1200	3/0	250
1600	4/0	350
2000	250	400
2500	350	600
3000	400	600
4000	500	750

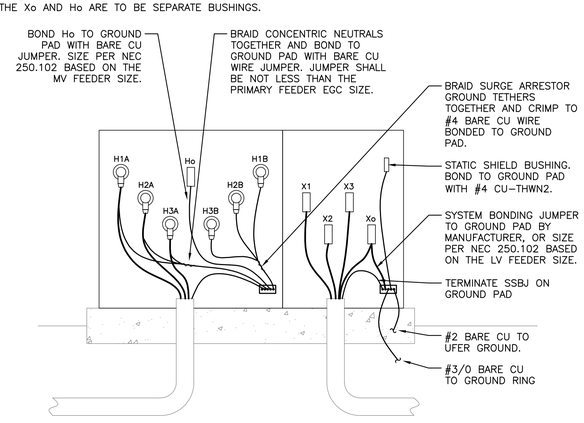
FOR PARALLEL FEEDERS – NEC 250.102(D) EQUIPMENT BONDING JUMPER IS SIZED PER TABLE 250.122, REGARDLESS IF COMBINED OR INDIVIDUAL BONDING JUMPERS ARE USED



B) FOR NON-CONCENTRIC KNOCKOUTS, THE FOLLOWING METHODS SHALL BE PERMITTED (PER NEC 250.97)
1) THREADLESS COUPLINGS AND CONNECTORS FOR CABLES WITH METAL SHEATHS
2) TWO LOCKNUTS, ON RIGID METAL CONDUIT OR INTERMEDIATE METAL CONDUIT, ONE INSIDE AND ONE OUTSIDE OF BOXES AND CABINETS
3) FITTINGS WITH SHOULDERS THAT SEAT FIRMLY AGAINST THE BOX OR CABINET, SUCH AS ELECTRICAL METALLIC TUBING CONNECTORS, FLEXIBLE METAL CONDUIT CONNECTORS, AND CABLE CONNECTORS, WITH ON LOCKNUT ON THE INSIDE OF BOXES AND CABINETS
4) LISTED FITTINGS (SUCH AS MYERS HUB)

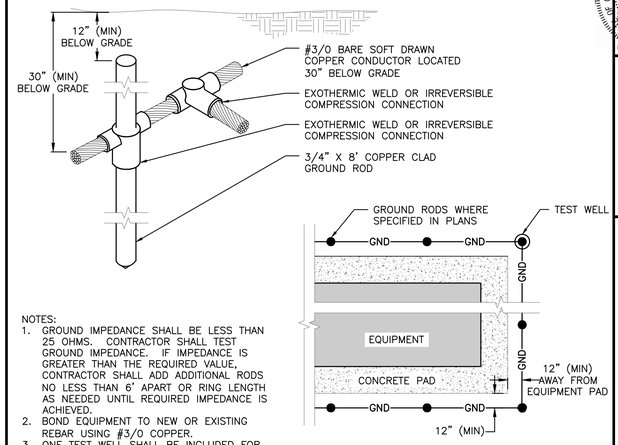
6 LOAD SIDE EQUIPMENT BONDING JUMPER
SCALE: NONE

NOTE:
THE Xo AND Ho ARE TO BE SEPARATE BUSHINGS.



WYE-G/WYE-G (N-G BOND)

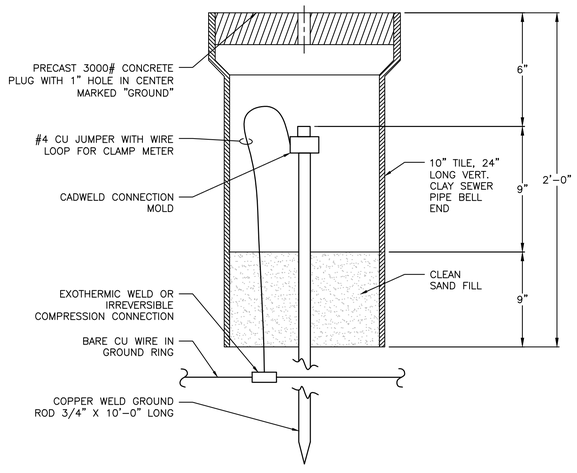
7 TRANSFORMER GROUNDING
SCALE: NONE



NOTES:
1. GROUND IMPEDANCE SHALL BE LESS THAN 25 OHMS. CONTRACTOR SHALL TEST GROUND IMPEDANCE. IF IMPEDANCE IS GREATER THAN THE REQUIRED VALUE, CONTRACTOR SHALL ADD ADDITIONAL RODS NO LESS THAN 6' APART OR RING LENGTH AS NEEDED UNTIL REQUIRED IMPEDANCE IS ACHIEVED.
2. BOND EQUIPMENT TO NEW OR EXISTING REBAR USING #3/0 COPPER.
3. ONE TEST WELL SHALL BE INCLUDED FOR EACH EQUIPMENT PAD TO FACILITATE RESISTANCE TO GROUND TESTING.

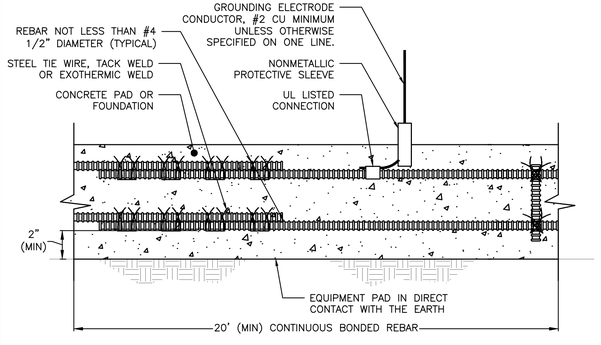
TOP VIEW

8 GROUND RING
SCALE: NONE



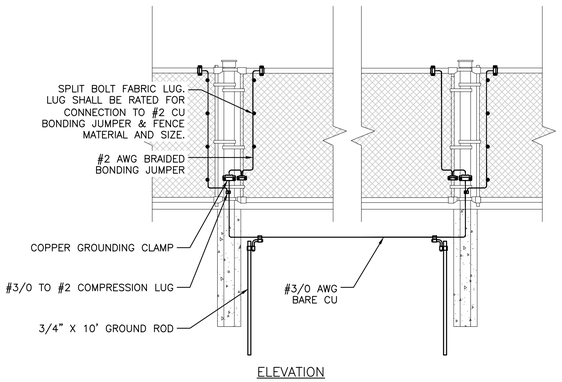
9 GROUND WELL TEST STATION
SCALE: NONE

NOTE:
SHORTER LENGTHS OF REBAR CAN BE CONNECTED TOGETHER TO FORM AN ELECTRODE OF AT LEAST 20' BY STEEL TIE WIRES, EXOTHERMIC WELDING, OR WELDING.



10 EQUIPMENT PAD GROUNDING – UFER
SCALE: NONE

FENCE GROUNDING NOTES:
(1) COORDINATE EXACT GROUNDING HARDWARE REQUIREMENTS WITH FENCE CONTRACTOR. GROUNDING HARDWARE SHALL BE COMPATIBLE WITH PHYSICAL ASPECTS OF THE FENCE DESIGN (I.E. POST DIAMETER).
(2) DETAILS ARE SHOWN FOR ELECTRICAL GROUNDING COORDINATION ONLY. REFER TO CIVIL DRAWINGS FOR FENCE SPECIFICATIONS.
(3) ALL GROUNDING EQUIPMENT SHALL BE RATED FOR OUTDOOR USE.



ELEVATION

11 GROUNDED FENCE GATE
SCALE: NONE

REV	DATE	REVISION DESCRIPTION	PM	ENG CHK
4	01/06/2026	90% PERMIT SET – REV 1	SK	MxB MD
3	12/12/2025	90% PERMIT SET	SK	MxB MD
2	06/24/2025	30% CONCEPTUAL DESIGN REV 3	SK	GB RI
1	06/20/2025	30% CONCEPTUAL DESIGN REV 2	SK	GB RI

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DEVELOPER: Greenskies, a Clean Focus company

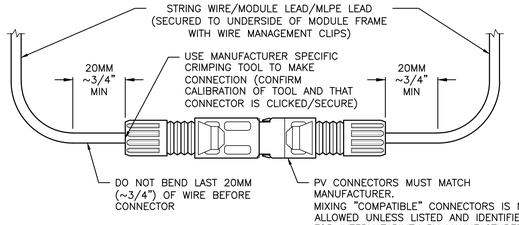
PAGE SIZE: 36" x 24"
PROJECT #: 10036.11

PROJECT: SOLAR GROUND MOUNT SYSTEM AT GAGER HILL ROAD
41.692902°, -72.090985°
SCOTLAND, CT 06264

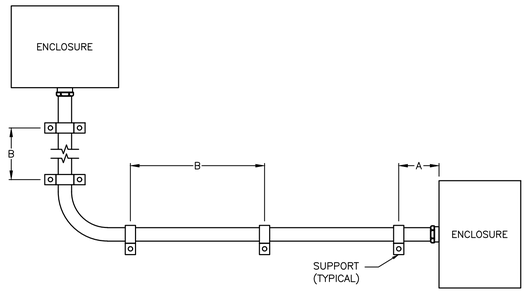
DRAWING TITLE: GROUNDING DETAILS

DRAWING #: E410

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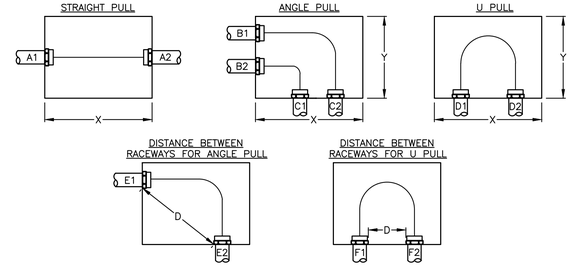
1 MODULE CONNECTORS
SCALE: NONE



MAXIMUM CONDUIT HARDWARE SPACING

CONDUIT TYPE	ENCLOSURE TO SUPPORT (A)	SUPPORT TO SUPPORT (B)	NEC ARTICLE
ELECTRICAL METALLIC TUBING (EMT)	3'	10'	358
INTERMEDIATE METAL CONDUIT (IMC)	3'	10'	342
RIGID METAL CONDUIT (RMC)	3'	10'	344
LIQUIDTIGHT FLEXIBLE METAL CONDUIT (LFMC)	1'	4.5'	350
PVC (SCH40 & 80) [0.5" - 1"]	3'	3'	352
PVC (SCH40 & 80) [1.25" - 2"]	3'	5'	352
PVC (SCH40 & 80) [2.5" - 3"]	3'	6'	352
PVC (SCH40 & 80) [3.5" - 5"]	3'	7'	352
PVC (SCH40 & 80) [6"]	3'	8'	352

2 CONDUIT SUPPORT SPACING
SCALE: NONE

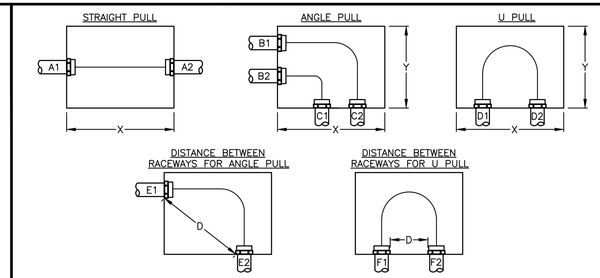


NEC 314.28(A)(1)–(3) PULL BOX SIZING (UP TO 1000V)

BOX TYPE	LENGTH (X)	HEIGHT (Y)	DISTANCE (D)
STRAIGHT PULL	8 X LARGEST OF A1 & A2	AS NEEDED	N/A
ANGLE PULL	6 X (LARGEST OF B1 & B2) + SUM OF OTHER CONDUIT ENTERING THE SAME WALL	6 X (LARGEST OF C1 & C2) + SUM OF OTHER CONDUIT ENTERING THE SAME WALL	6 X LARGEST OF E1 & E2
U PULL	AS NEEDED	6 X (LARGEST OF D1 & D2) + SUM OF OTHER CONDUIT ENTERING THE SAME WALL	6 X LARGEST OF F1 & F2

NOTES:
1. REFER TO NEC 314.28 FOR ADDITIONAL REQUIREMENTS.
2. ENSURE CONDUCTOR BEND RADIUS MINIMUMS ARE MET. REFER TO NEC 312.6 FOR ADDITIONAL REQUIREMENTS.

3 PULL BOX & JUNCTION BOX SIZING
SCALE: NONE



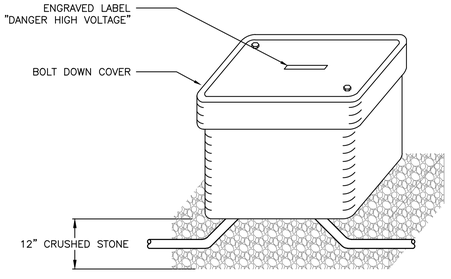
NEC 314.71 PULL BOX SIZING (OVER 1000V)

BOX TYPE	LENGTH (X)	HEIGHT (Y)	DISTANCE (D)
STRAIGHT PULL	48 X OUTER DIAMETER (O.D.) OF LARGEST CONDUCTOR	AS NEEDED	N/A
ANGLE PULL	36 X O.D. OF LARGEST CONDUCTOR	36 X O.D. OF LARGEST CONDUCTOR + SUM OF CONDUCTOR O.D.'S FOR ANY ADDITIONAL ENTRIES THRU SAME SIDE	36 X O.D. OF LARGEST CONDUCTOR
U PULL	AS NEEDED	36 X O.D. OF LARGEST CONDUCTOR + SUM OF CONDUCTOR O.D.'S FOR ANY ADDITIONAL ENTRIES THRU SAME SIDE	36 X O.D. OF LARGEST CONDUCTOR

NOTES:
1. REFER TO NEC 314.70 THROUGH 314.72 FOR ADDITIONAL REQUIREMENTS.
2. ENSURE CONDUCTOR BEND RADIUS MINIMUMS ARE MET. REFER TO NEC 300.34 FOR ADDITIONAL REQUIREMENTS.

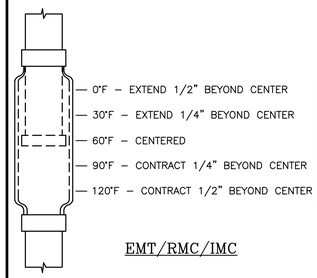
4 MV PULL BOX & JUNCTION BOX SIZING
SCALE: NONE

NOTES:
1. BOX SHALL BE RATED T8 FOR USE IN GRASSY AREAS NOT SUBJECT TO VEHICULAR TRAFFIC, OR RATED T22 FOR USE IN SIDEWALKS OR PARKING LOTS SUBJECT TO OCCASIONAL NON–DELIBERATE HEAVY VEHICULAR TRAFFIC. BOXES TO BE USED IN ROADWAYS OR AREAS FREQUENTLY SUBJECT HEAVY VEHICULAR TRAFFIC SHALL BE SUBMITTED TO EEOR FOR APPROVAL
2. CONDUITS SHALL ENTER FROM BOTTOM AT 45° ANGLE. MINIMUM BURIAL DEPTHS OF CONDUITS IS 24" BELOW FINISHED GRADE.
3. CONDUIT KNOCKOUTS SHALL BE DRILLED OR PUNCHED ON SITE, QUANTITIES AND SIZES TO MATCH TRENCH PLAN AND COMBINER SCHEDULE.
4. SEAL CONDUITS ONLY WHERE THEY TERMINATE INTO EQUIPMENT, BUILDINGS, OR OTHER ENCLOSURES REQUIRING WATERTIGHT ENTRY. DO NOT SEAL CONDUITS WITHIN INTERMEDIATE HANDHOLES INTENDED FOR DRAINAGE.
5. FOLLOW BENDING RADIUS REQUIREMENTS PER CONDUCTOR MANUFACTURER'S SPECIFICATIONS.
6. SPLICES ARE PROHIBITED
7. HANDHOLES SHALL BE PLACED AT STUB–UPS, PULLING POINTS, CHANGES IN ELEVATION, OR OTHER LOCATIONS AS NECESSARY TO ALLOW DRAINAGE. AVOID PLACING HANDHOLES BELOW GROUNDWATER TABLE ELEVATION WHERE WATER MAY ACCUMULATE.
8. BOX SHALL BE SIZED PER DETAIL "PULL BOX & JUNCTION BOX SIZING"



5 HANDHOLE
SCALE: NONE

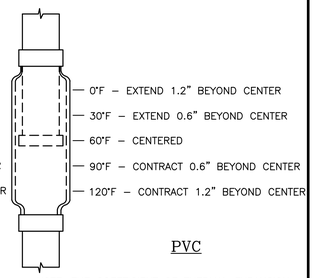
NOTES:
1. INSTALL EXPANSION COUPLING EVERY 100' OF STRAIGHT CONDUIT RUN.
2. IF EXPANSION COUPLINGS ARE INSTALLED AT LENGTHS GREATER OR LESS THAN 100', THE OFFSET FROM CENTER SHALL BE ADJUSTED PROPORTIONALLY.
3. IF EXPANSION JOINT IS NOT PROVIDED WITH INTERNAL BONDING JUMPER, AN EXTERNAL BONDING JUMPER MUST BE INSTALLED.
4. SECURE CONDUIT ON ONE SIDE OF EXPANSION COUPLING WITH OVERSIZED 2–HOLE STRAP (OR EQUIVALENT) TO ALLOW MOVEMENT OF CONDUIT.



EMT/RMC/IMC

NOTE: THE COEFFICIENT OF THERMAL EXPANSION IN STEEL CONDUIT= 0.65 X 10^{-5}IN./IN./°F FOR EVERY 120°F CHANGE IN TEMPERATURE, THE LENGTH CHANGE IS 0.94 INCHES PER 100 FEET OF CONDUIT RUN.

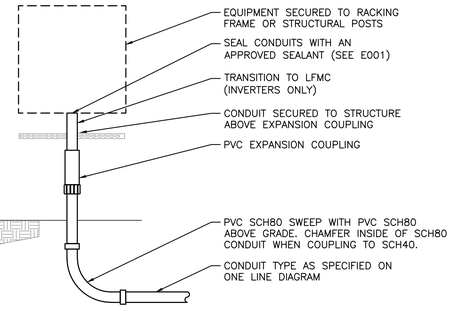
NOTES:
1. INSTALL EXPANSION COUPLING EVERY 50' OF STRAIGHT CONDUIT RUN.
2. IF EXPANSION COUPLINGS ARE INSTALLED AT LENGTHS GREATER OR LESS LESS THAN 50', THE OFFSET FROM CENTER SHALL BE ADJUSTED PROPORTIONALLY.
3. EXPANSION JOINT MUST HAVE AT LEAST 4" OF FREE MOVEMENT (END TO END).
4. SECURE CONDUIT ON ONE SIDE OF EXPANSION COUPLING WITH OVERSIZED 2–HOLE STRAP (OR EQUIVALENT) TO ALLOW MOVEMENT OF CONDUIT.



PVC

NOTE: THE COEFFICIENT OF THERMAL EXPANSION IN PVC CONDUIT= 3.38 X 10^{-5}IN./IN./°F. FOR EVERY 30°F CHANGE IN TEMPERATURE, THE CHANGE IN LENGTH IS 0.6 INCHES PER 50 FEET OF CONDUIT RUN.

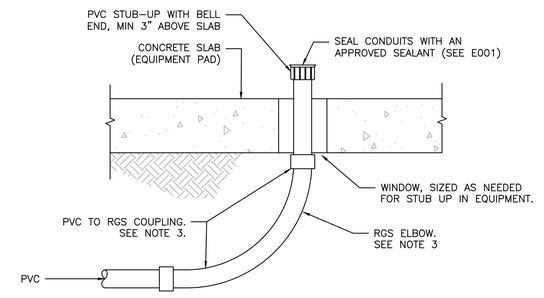
6 EXPANSION COUPLING
SCALE: NONE



NOTES:
1. EXPANSION FITTINGS SHALL BE PROVIDED FOR ALL CONDUITS EXITING FROM GRADE THAT TERMINATE ON FIXED EQUIPMENT. CONDUITS THAT TERMINATE AT WEATHER HEADS DO NOT REQUIRE PROVISION FOR EARTH MOVEMENT.
2. PVC SWEEPS SHALL ONLY BE USED AT END WHERE WIRE REEL IS LOCATED. RMC SWEEPS SHALL BE USED AT END WHERE THE PULLING MACHINE IS LOCATED.

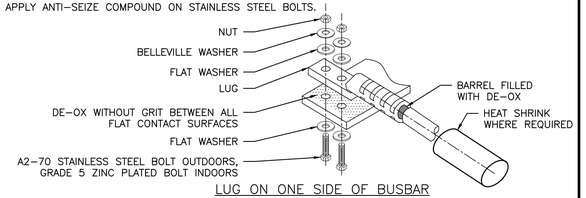
7 TRANSITION FROM GRADE
SCALE: NONE

NOTES:
1. INITIALLY INSTALL COUPLING CAP TO PREVENT DAMAGE TO STUB–UP UNTIL GEAR IS SET.
2. INSTALL ROUNDED FITTING BEFORE PULLING CABLES TO AVOID DAMAGE TO CABLES.
3. RMC ELBOW ONLY REQUIRED ON ONE SIDE OF EACH PULL NEAREST THE LOCATION OF THE PULLING MACHINE. ON OPPOSITE SIDE, PVC SCH80 ELBOWS ARE PERMITTED.

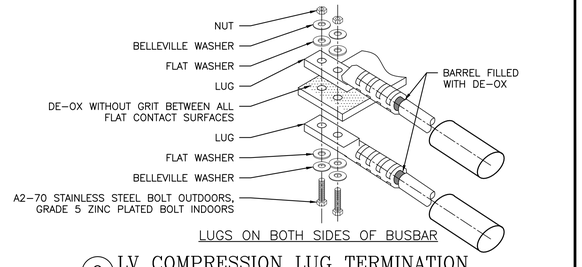


8 EQUIPMENT PAD STUB–UP
SCALE: NONE

NOTES:
1. USE ALUMINUM LUG FOR ALUMINUM CONDUCTORS, TIN–PLATED COPPER LUG FOR COPPER CONDUCTORS.
2. ALL HARDWARE SHALL BE FINE THREAD AND MATCH BOLT MATERIAL.
3. APPLY ANTI–SEIZE COMPOUND ON STAINLESS STEEL BOLTS.

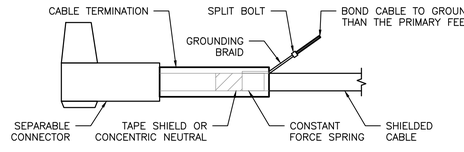


LUG ON ONE SIDE OF BUSBAR

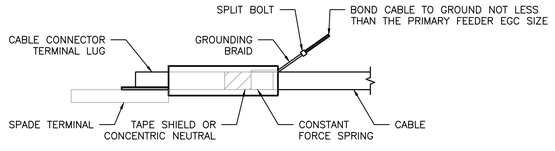


LUGS ON BOTH SIDES OF BUSBAR

9 LV COMPRESSION LUG TERMINATION
SCALE: NONE



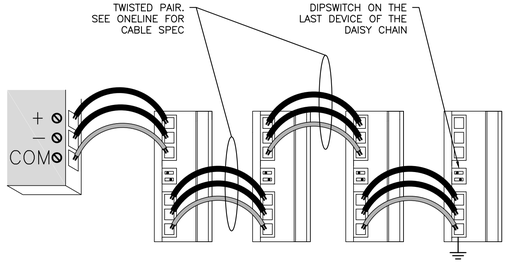
DEAD FRONT MV TERMINATION



LIVE FRONT MV TERMINATION

10 MV CABLE TERMINATION
SCALE: NONE

MONITORING NOTES:
1. REFER TO MONITORING SYSTEM INSTALLATION MANUAL FOR DETAILS ON TERMINAL BLOCKS, CABLE TERMINATIONS, AND SYSTEM CONFIGURATION.
2. WIRELESS TRANSCEIVERS MUST HAVE LINE–OF–SIGHT BETWEEN EACH OTHER.
3. PYRANOMETER MUST BE INSTALLED IN UNSHADED LOCATION.



11 MODBUS COMMUNICATIONS
SCALE: NONE

REVISION DESCRIPTION	DATE	PM	ENG CHK
90% PERMIT SET – REV 1	01/06/2026	SK	MxB MD
90% PERMIT SET	12/12/2025	SK	MxB MD
30% CONCEPTUAL DESIGN REV 3	06/24/2025	SK	GB RI
30% CONCEPTUAL DESIGN REV 2	06/20/2025	SK	GB RI

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DEVELOPER
Greenskies
a Clean Focus company

PAGE SIZE
36" x 24"

PROJECT #
10036.11

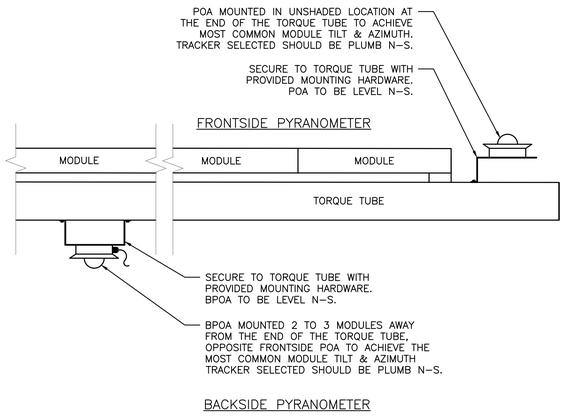
PROJECT
SOLAR GROUND MOUNT SYSTEM AT
GAGER HILL ROAD
41.692902°, -72.090985°
SCOTLAND, CT 06264

DRAWING TITLE
ELECTRICAL DETAILS

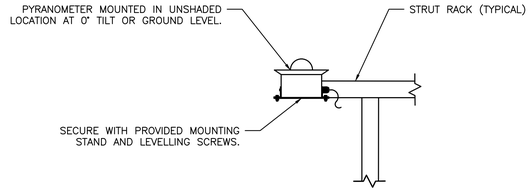
DRAWING #
E420

PLOT DATE: 1/14/2026 2:15 PM

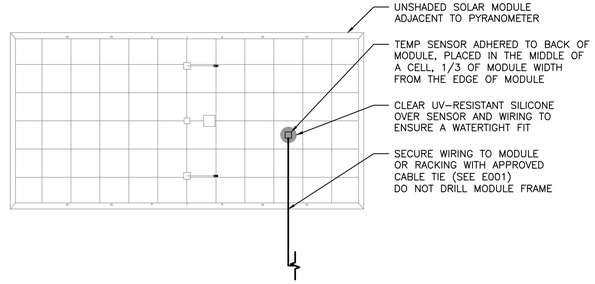
RULER IN INCHES:



1 PYRANOMETER MOUNTING
SCALE: NONE

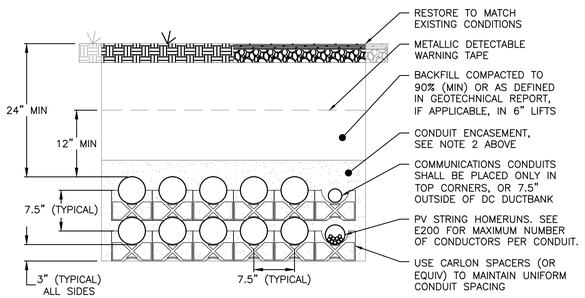


2 GHI SENSOR MOUNTING
SCALE: NONE



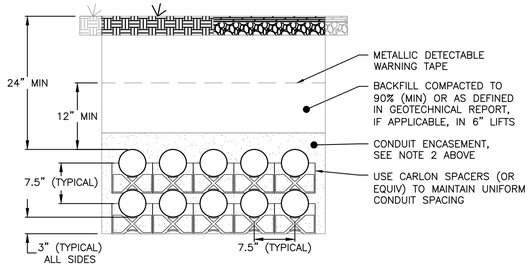
3 MODULE TEMPERATURE SENSOR MOUNTING
SCALE: NONE

NOTES:
1. ALL UNDERGROUND CONDUIT SHALL BE PVC AND TRANSITION TO RMC FOR ELBOW. RMC ELBOW DOES NOT NEED TO BE BONDED IF THE ENTIRE ELBOW IS >= 18" DEEP (NEC 250.86 EXCEPTION 3)
2. UNDER ROADS AND PARKING AREAS ENCASEMENT SHALL BE 2500 PSI CONCRETE. UNDER GRASSY AREAS NOT SUBJECT TO VEHICULAR TRAFFIC ENCASEMENT SHALL BE EITHER SAND, NATIVE BACKFILL CONTAINING NO ROCKS LARGER THAN 3/4" AND FREE FROM SHARP ANGULAR SUBSTANCES, OR SOIL ON SITE AS CONFIRMED ACCEPTABLE BY SITE SUPERVISOR.
3. CALL BEFORE YOU DIG, DIAL 811 TO BE CONNECTED TO THE LOCAL ON-CALL CENTER. YOU MUST CALL AT LEAST 48 HOURS BEFORE EXCAVATING.
4. IF DUCTBANK SLOPES SUCH THAT ANY PART OF THE DUCTBANK IS ABOVE STUB UP ELEVATION, INCLUDE HANDHOLE WITH GRAVEL BASE FOR DRAINAGE. SEE "HANDHOLE" DETAIL FOR ADDITIONAL GUIDANCE.
5. DUCTBANK SIZE SHOWN IS THE MAXIMUM SIZE ALLOWED TO BE INSTALLED ON SITE.
6. RECOMMENDED CARLON SPACER LATERAL INTERVAL IS 8-10 FEET OR PER MANUFACTURER SPEC.



2X5 W/ COMMS & STRINGS

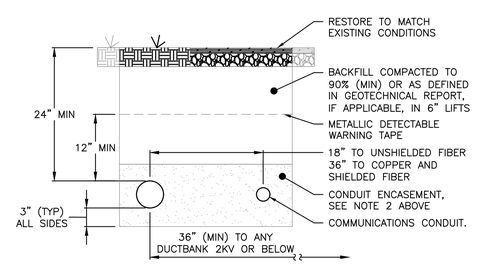
4 TYPICAL DC DUCTBANK
SCALE: NONE



2X5

5 TYPICAL AC DUCTBANK
SCALE: NONE

NOTES:
1. ALL UNDERGROUND CONDUIT SHALL BE PVC AND TRANSITION TO RMC FOR ELBOW. RMC ELBOW DOES NOT NEED TO BE BONDED IF THE ENTIRE ELBOW IS >= 18" DEEP (NEC 250.86 EXCEPTION 3)
2. UNDER ROADS AND PARKING AREAS ENCASEMENT SHALL BE 2500 PSI CONCRETE. UNDER GRASSY AREAS NOT SUBJECT TO VEHICULAR TRAFFIC ENCASEMENT SHALL BE EITHER SAND, NATIVE BACKFILL CONTAINING NO ROCKS LARGER THAN 3/4" AND FREE FROM SHARP ANGULAR SUBSTANCES, OR SOIL ON SITE AS CONFIRMED ACCEPTABLE BY SITE SUPERVISOR.
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4. IF DUCTBANK SLOPES SUCH THAT ANY PART OF THE DUCTBANK IS ABOVE STUB UP ELEVATION, INCLUDE HANDHOLE WITH GRAVEL BASE FOR DRAINAGE. SEE "HANDHOLE" DETAIL FOR ADDITIONAL GUIDANCE.



6 TYPICAL MV DUCTBANK
SCALE: NONE

DATE	REVISION DESCRIPTION	PM	ENG	CHK
01/06/2026	90% PERMIT SET – REV 1	SK	MxB	MD
12/12/2025	90% PERMIT SET	SK	MxB	MD
06/24/2025	30% CONCEPTUAL DESIGN REV 3	SK	GB	RI
06/20/2025	30% CONCEPTUAL DESIGN REV 2	SK	GB	RI

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WWW.PUREPOWERENGINEERING.COM
MATTHEW M. DONOVAN
CT LICENSE No. PEN.0037514

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NORTH HAVEN, CT 06473
WWW.GREENSKIES.COM

DEVELOPER
Greenskies
a Clean Focus company

PAGE SIZE 36" x 24"
PROJECT # 10036.11

PROJECT
SOLAR GROUND MOUNT SYSTEM AT
GAGER HILL ROAD
41.692902°, -72.090985°
SCOTLAND, CT 06264

DRAWING TITLE
ELECTRICAL DETAILS

DRAWING #
E421

PLOT DATE: 1/14/2026 2:15 PM

RULER IN INCHES: 0 ½ 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18

PLOT DATE: 1/14/2026 2:15 PM

GENERAL NOTES FOR LABELS:
1. LABEL SCALE 1:2 UNLESS NOTED
2. LETTERING ON SIGNS SHALL BE CAPITAL LETTERS
3. CLEARLY LABEL ALL CIRCUIT BREAKERS IN SUBPANEL(S) / PANELBOARD(S) / SWITCHBOARD(S). THE LABEL SHALL INDICATE THE NAME OF THE DEVICE IT SERVES. USE LABEL FORMAT 6.
4. ALL LABELS SHALL BE OUTDOOR RATED.

FORMAT	TYPE	BACKGROUND COLOR	TEXT COLOR	TEXT HEIGHT
FORMAT 1	ENGRAVED MELAMINE	RED	WHITE	TITLES (3/8") ALL OTHER TEXT (5/32")
FORMAT 2	ENGRAVED MELAMINE	WHITE	BLACK	TITLES (3/8") ALL OTHER TEXT (5/32")
FORMAT 3	REFLECTIVE UV RATED	RED	WHITE	AT LEAST (3/8")
FORMAT 4	ENGRAVED MELAMINE	ORANGE	BLACK	TITLES (3/8") ALL OTHER TEXT (5/32")
FORMAT 5	ENGRAVED MELAMINE	YELLOW	BLACK	TITLES (3/8") ALL OTHER TEXT (5/32")
FORMAT 6	VINYL FILM	WHITE	BLACK	(3/8")

PER 2023 NEC 690.31(B)(2): PV SYSTEM CIRCUIT CONDUCTORS SHALL BE IDENTIFIED AT ALL ACCESSIBLE POINTS OF TERMINATION, CONNECTION, AND SPLICES.

1. STRING HOMERUNS AT ARRAY
2. DC INPUT TERMINALS OF COMBINER BOX
3. DC OUTPUT TERMINALS OF COMBINER BOX
4. DC INPUT TERMINALS OF INVERTER
5. AC OUTPUT TERMINALS OF INVERTER
6. AC INPUT & OUTPUT TERMINALS OF EACH SUCCESSIVE DEVICE (WHERE APPLICABLE)

CIRCUIT BREAKER AND SWITCH LABELS:
UNLESS LABELED OTHERWISE, ALL CIRCUIT BREAKERS AND SWITCHES SHALL BE LABELED WITH THE NAME OF THE EQUIPMENT IT IS SUPPLYING.

1 NOTES AND FORMATS

4"

PV SYSTEM INSTALLER INFORMATION
INSTALLATION COMPANY: XXXXX SOLAR COMPANY
EMERGENCY PHONE #: (XXX)XXX-XXXX

1"

INSTALL LABEL ON:
- SOLAR SYSTEM AC DISCONNECT

FORMAT: WHITE TEXT ON BLUE BACKGROUND
CODES: NFPA1 11.12.2.1.5
NOTES: FILL WITH SITE O&M PROVIDER'S CONTACT INFORMATION. CONFIRM INFO WITH PROJECT OWNER.

14"

DANGER
HIGH VOLTAGE KEEP OUT

10"

INSTALL LABEL ON:
- EVERY 75' OF FENCELINE

FORMAT: SCALE 1:4

4"

WARNING
ARC FLASH AND SHOCK HAZARD
Appropriate PPE and Tools Required when working on this equipment.

2"

INSTALL LABEL ON:
- ALL EQUIPMENT NOT OTHERWISE LABELED IN POWER STUDY

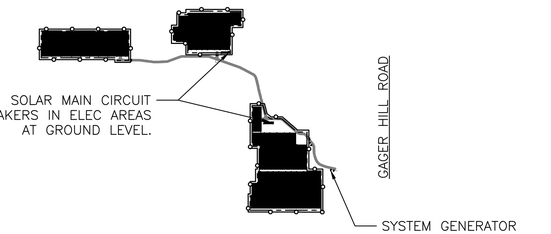
NOTES: OUTDOOR RATED STICKER.

2 GENERAL SIGNAGE

10"

CAUTION:

MULTIPLE POWER SOURCES ARE CONNECTED TO THIS SERVICE WITH DISCONNECTS AS SHOWN:



6"

INSTALL PLACARD ON ALL LISTED EQUIPMENT:
- PV SYSTEM MAIN DISCONNECT
- UTILITY SERVICE DISCONNECTS

FORMAT: ENGRAVED MELAMINE, BLACK TEXT ON YELLOW BACKGROUND, TITLE MIN. 1/2", DESCRIPTION 3/16", ALL OTHER TEXT 1/8"
CODES: NEC 705.10 & 690.56(B)

3 DIRECTORY LABEL
SCALE: 1:1

DISCONNECT(S)

6"

SOLAR SYSTEM AC DISCONNECT
WARNING: PHOTOVOLTAIC POWER SOURCE.
OPERATING CURRENT: **125.5A**
NOMINAL VOLTAGE: **23KV**

3"

INSTALL LABEL ON:
- NAMED EQUIPMENT

FORMAT: 2
CODES: NEC 690.54 & 705.10, NFPA 11.12.2.1.1

SWITCHBOARD(S)

5"

SOLAR AC SWITCHBOARD A
WARNING: SUPPLIED BY UTILITY & PV SOURCES.
OPERATING CURRENT: **2280A**
OPERATING VOLTAGE: **600V**
DO NOT CONNECT NON-SOLAR LOADS TO THIS PANEL

3 1/4"

INSTALL LABEL ON:
- NAMED EQUIPMENT

FORMAT: 2

5"

SOLAR AC SWITCHBOARD B
WARNING: SUPPLIED BY UTILITY & PV SOURCES.
OPERATING CURRENT: **2160A**
OPERATING VOLTAGE: **600V**
DO NOT CONNECT NON-SOLAR LOADS TO THIS PANEL

3 1/4"

INSTALL LABEL ON:
- NAMED EQUIPMENT

FORMAT: 2

TRANSFORMERS

6"

SOLAR TRANSFORMER
PRIMARY & SECONDARY DISCONNECTING MEANS LOCATION:
PRIMARY: POLE MOUNTED CUSTOMER DISCONNECT SWITCH
SECONDARY: SOLAR AC SWITCHBOARD MAIN CIRCUIT BREAKER

4 1/2"

INSTALL LABEL ON:
- SOLAR TRANSFORMER A & B

FORMAT: 2

MONITORING/AUXILIARY

6"

WEATHER STATION

3/4"

INSTALL LABEL ON:
- NAMED EQUIPMENT

FORMAT: 2

6"

SOLAR MONITORING

3/4"

INSTALL LABEL ON:
- NAMED EQUIPMENT

FORMAT: 2

6"

LOAD CENTER

3/4"

INSTALL LABEL ON:
- NAMED EQUIPMENT

FORMAT: 2

6"

TRACKER CONTROLLER

3/4"

INSTALL LABEL ON:
- NAMED EQUIPMENT

FORMAT: 2

INVERTER(S)

8"

INVERTER A1
DC DISCONNECT
MAXIMUM VOLTAGE: **1392V**
AC DISCONNECT
MAXIMUM AC OPERATING CURRENT: **120A**
NOMINAL AC OPERATING VOLTAGE: **600V**

3 1/4"

INSTALL LABEL ON:
- INVERTERS A1-A19 & B1-B18

FORMAT: 2
CODES: NEC 690.53 & 690.54, NFPA 11.12.2.1.1

COMBINER(S)

6"

COMBINER BOX A1
WARNING: ELECTRIC SHOCK HAZARD
DC DISCONNECT
MAXIMUM VOLTAGE: **1392V**

2 1/4"

INSTALL LABEL ON:
- COMBINERS A1-A19 & B1-B18

FORMAT: 2
CODES: NEC 690.53

4 EQUIPMENT LABELS

REVISION DESCRIPTION	DATE	PM	ENG CHK
90% PERMIT SET - REV 1	01/06/2026	SK	MxB MD
90% PERMIT SET	12/12/2025	SK	MxB MD
90% CONCEPTUAL DESIGN REV 3	06/24/2025	SK	GB RI
30% CONCEPTUAL DESIGN REV 2	06/20/2025	SK	GB RI

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127 WASHINGTON AVENUE
NORTH HAVEN, CT 06473
WWW.GREENSKIES.COM

DEVELOPER: Greenskies, a Clean Focus company

PAGE SIZE: 36" x 24"
PROJECT #: 10036.11

PROJECT: SOLAR GROUND MOUNT SYSTEM AT GAGER HILL ROAD 41.692902°, -72.090985° SCOTLAND, CT 06264

DRAWING TITLE: LABELS & SIGNAGE

DRAWING #: E500

RULER IN INCHES: 0 ½ 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18

PLOT DATE: 1/14/2026 2:16 PM

SOLECTRIA® XGI 1500-166 SERIES

PREMIUM 3-PHASE TRANSFORMERLESS UTILITY-SCALE INVERTERS

FEATURES

- Made in the USA with global components
- Buy American Act (BAA) compliant
- Four models:
  - 125kW/125kVA,
  - 125kW/150kVA,
  - 150kW/166kVA,
  - 166kW/166kVA
- Additional models available certified to UL1699b, Photovoltaic DC Arc-Fault Circuit Protection
- 99.0% peak efficiency
- Flexible solution for distributed and centralized system architecture
- Advanced grid-support functionality Rule 21/UL1741SB
- Robust, dependable, & built to last
- Lowest O&M and installation costs
- Access all inverters on site via WiFi from one location
- Remote diagnostics and firmware upgrades
- SunSpec Modbus Certified

OPTIONS

- String combiners for distributed and centralized systems
- Web-based monitoring
- Extended warranty



Yaskawa Solectria Solar's XGI 1500 utility-scale string inverters are designed for high reliability and built of the highest quality components that were selected, tested and proven to last beyond their warranty.

XGI 1500 inverters provide advanced grid-support functionality and meet the latest IEEE 1547 and UL1741SB standards for safety. They are the most powerful 1500 VDC string inverters in the PV market and have been engineered for both distributed and centralized system architecture.

Designed and engineered in Lawrence, MA, XGI inverters are assembled and tested at Yaskawa America's facilities in Buffalo Grove, IL. They are Made in the USA with global components and are compliant with the Buy American Act.

MADE IN THE USA — With U.S. and Global Components

YASKAWA SOLECTRIA SOLAR

Yaskawa Solectria Solar 1-978-683-9700 | Email: sales@solectria.com | solectria.com
Document No. FL_XGI1500.01 | 05/07/2025 | © 2021 Yaskawa America, Inc.

SOLECTRIA® XGI 1500-166 SERIES TECHNICAL DATA

SPECIFICATIONS

PRODUCT SPECIFICATION		XGI 1500 INVERTER MODEL			
		XGI 1500-125/125-UL XGI 1500-125/125-UL-A	XGI 1500-125/150-UL XGI 1500-125/150-UL-A	XGI 1500-150/166-UL XGI 1500-150/166-UL-A	XGI 1500-166/166-UL XGI 1500-166/166-UL-A
DC Input	Absolute Max Input Voltage	1500 VDC	1500 VDC	1500 VDC	1500 VDC
	Max Power Input Voltage Range (MPPT)	860-1250 VDC	860-1250 VDC	860-1250 VDC	860-1250 VDC
	Operating Voltage Range (MPPT)	860-1450 VDC	860-1450 VDC	860-1450 VDC	860-1450 VDC
	Number of MPP Trackers	1 MPPT	1 MPPT	1 MPPT	1 MPPT
	Max Operating Input Current	148.3 A	148.3 A	178.0 A	197.7 A
	Max Operating PV Power	128 kW	128 kW	153 kW	170 kW
	Max DC/AC Ratio | Max Rated PV Power	2.6 | 332 kW	2.6 | 332 kW	2.2 | 332 kW	2.0 | 332 kW
	Max Rated PV Short-Circuit Current (∑Isc x 1.25)	500 A	500 A	500 A	500 A
AC Output	Nominal Output Voltage	600 VAC, 3-Ph	600 VAC, 3-Ph	600 VAC, 3-Ph	600 VAC, 3-Ph
	AC Voltage Range	-12% to +10%	-12% to +10%	-12% to +10%	-12% to +10%
	Continuous Real Output Power	125 kW	125 kW	150 kW	166 kW
	Continuous Apparent Output Power	125 kVA	150 kVA	166 kVA	166 kVA
	Max Output Current	120 A	144 A	160 A	160 A
	Nominal Output Frequency	60 Hz	60 Hz	60 Hz	60 Hz
	Power Factor (Unity default)	+/- 0.80 Adjustable	+/- 0.80 Adjustable	+/- 0.80 Adjustable	+/- 0.80 Adjustable
	Total Harmonic Distortion (THD) @ Rated Load	<3%	<3%	<3%	<3%
	Grid Connection Type	3-Ph + N/GND	3-Ph + N/GND	3-Ph + N/GND	3-Ph + N/GND
	Fault Current Contribution (1 cycle RMS)	144 A	173 A	192 A	192 A
Efficiency	Peak Efficiency	98.9%	98.9%	99.0%	99.0%
	CEC Average Efficiency	98.5%	98.5%	98.5%	98.5%
	Tare Loss	2.75 W	2.75 W	2.75 W	2.75 W
Temperature	Ambient Temp Range	-40°F to 140°F (-40C to 60C)		-40°F to 140°F (-40C to 60C)	
	De-Rating Temperature	122°F (50C)		113°F (45C)	
	Storage Temperature Range	-40°F to 167°F (-40C to 75C)		-40°F to 167°F (-40C to 75C)	
Communications	Relative Humidity (non-condensing)	0 - 95%		0 - 95%	
	Operating Altitude	Full Power up to 9,840 ft (3.0 km); De-Rate to 70% of Full Power at 13,123 ft (4.0 km)			
	Advanced Graphical User Interface	WiFi			
	Communication Interface	Ethernet			
	Third-Party Monitoring Protocol	SunSpec Modbus TCP/IP			
	Web-Based Monitoring	Optional			
	Firmware Updates	Remote and Local			
Testing & Certifications	Safety Listings & Certifications	UL1741SB, IEEE 1547, UL 1699b Photovoltaic Arc-Fault Circuit Protection Certified (-A models)			
	Advanced Grid Support Functionality	Rule 21, UL 1741SB			
	Testing Agency	ETL			
	FCC Compliance	FCC Part 15 (Subpart B, Class A)			
Warranty	Standard and Options	5 Years Standard; Option for 10 Years			
Enclosure	Acoustic Noise Rating	73 dBA @ 1 m ; 67dBA @ 3 m			
	DC Disconnect	Integrated 2-Pole 250 A DC Disconnect			
	Mounting Angle	Vertical only			
	Dimensions	Height: 29.5 in. (750 mm) | Width: 39.4 in. (1000 mm) | Depth: 15.1 in. (380 mm)			
	Weight	270 lbs (122 kg)			
	Enclosure Rating and Finish	Type 4X, Polyester Powder-Coated Aluminum			

ETL LISTED

IT'S PERSONAL

YASKAWA SOLECTRIA SOLAR

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Hi-MO 5

LR5-72HBD
530~550M

- Based on M10 wafer, best choice for ultra-large power plants
- Advanced module technology delivers superior module efficiency
  M10 Gallium-doped Wafer 10-busbar Half-cut Cell
- Globally validated bifacial energy yield
- High module quality ensures long-term reliability

12 12-year Warranty for Materials and Processing

30 30-year Warranty for Extra Linear Power Output



Complete System and Product Certifications

IEC 61215, IEC 61730, UL 61730
ISO9001:2015: ISO Quality Management System
ISO14001: 2015: ISO Environment Management System
ISO45001: 2018: Occupational Health and Safety
IEC62941: Guideline for module design qualification and type approval

LONGi

Hi-MO 5 (V4)

LR5-72HBD
540~560M

- Based on M10 wafer, best choice for ultra-large power plants
- Advanced module technology delivers superior module efficiency
  • M10 Gallium-doped Wafer • Integrated Segmented Ribbons • 18-busbar Half-cut Cell
- Globally validated bifacial energy yield
- High module quality ensures long-term reliability

12 12-year Warranty for Materials and Processing

30 30-year Warranty for Extra Linear Power Output



Complete System and Product Certifications

IEC 61215, IEC 61730, UL 61730
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ISO14001: 2015: ISO Environment Management System
ISO45001: 2018: Occupational Health and Safety
IEC62941: Guideline for module design qualification and type approval

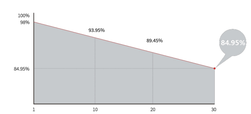
LONGi

Hi-MO 5

LR5-72HBD 530~550M

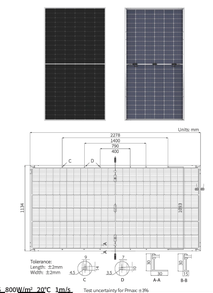
21.3% MAX MODULE EFFICIENCY	0~3% POWER TOLERANCE	<2% FIRST YEAR POWER DEGRADATION	0.45% YEAR 2-30 POWER DEGRADATION	HALF-CELL Lower operating temperature

Additional Value



Mechanical Parameters

Cell	144(2x72) half-cut, made in USA with imported parts
Junction Box	IP68, three diodes
Output Cable	4mm², (-400, -200mm)/±1400mm length can be customized
Glass	Dual glass, 2.0+2.0mm heat strengthened glass
Frame	Anodized aluminum alloy frame
Weight	31.8kg
Dimension	2278×1134×30mm
Packaging (USA)	36pcs per pallet / 180pcs per 20' GP / 576pcs per 40' HC;



Electrical Characteristics

STC : AM1.5 1000W/m² 25℃ NOCT : AM1.5 800W/m² 20℃ 1m/s Test uncertainty for Pmax: ±3%

Module Type	LR5-72HBD-530M		LR5-72HBD-535M		LR5-72HBD-540M		LR5-72HBD-545M		LR5-72HBD-550M	
Testing Condition	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power (Pmax/W)	530	396.2	535	400.0	540	403.6	545	407.4	550	411.1
Open Circuit Voltage (Voc/V)	49.2	46.26	49.35	46.40	49.5	46.54	49.65	46.68	49.80	46.82
Short Circuit Current (Isc/A)	13.71	11.05	13.78	11.11	13.85	11.17	13.92	11.23	13.99	11.29
Voltage at Maximum Power (Vmp/V)	41.35	38.58	41.50	38.72	41.65	38.86	41.80	39.00	41.95	39.14
Current at Maximum Power (Imp/A)	12.84	10.27	12.91	10.33	12.97	10.39	13.04	10.45	13.12	10.51
Module Efficiency(%)	20.5		20.7		20.9		21.1		21.3	

Electical characteristics with different rear side power gain(reference to 530W)

Pmax/W	Voc/V	Isc/A	Vmp/V	Imp/A	Pmax gain
557	49.20	14.39	41.35	13.48	5%
583	49.20	15.08	41.35	14.12	10%
610	49.30	15.76	41.45	14.77	15%
636	49.30	16.45	41.45	15.41	20%
663	49.30	17.13	41.45	16.05	25%

Operating Parameters

Operational Temperature	-40°C ~ +85°C
Power Output Tolerance	0 ~ 3%
Maximum System Voltage	DC1500V (IEC/UL)
Maximum Series Fuse Rating	30A
Nominal Operating Cell Temperature	45±2°C
Protection Class	Class II
Bifaciality	70±5%
Fire Rating	UL type 29 IEC Class C

Mechanical Loading

Front Side Maximum Static Loading	5400Pa
Rear Side Maximum Static Loading	2400Pa
Hailstone Test	25mm Hailstone at the speed of 23m/s

Temperature Ratings (STC)

Temperature Coefficient of Isc	+0.050%/℃
Temperature Coefficient of Voc	-0.265%/℃
Temperature Coefficient of Pmax	-0.340%/℃

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Specifications included in this datasheet are subject to change without notic.
LONGi reserves the right of final interpretation. (2023070BV02)

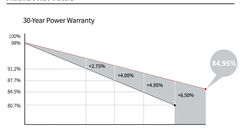
Hi-MO 5

LR5-72HBD 540~560M

21.7% MAX MODULE EFFICIENCY	0~3% POWER TOLERANCE	<2% FIRST YEAR POWER DEGRADATION	0.45% YEAR 2-30 POWER DEGRADATION	HALF-CELL Lower operating temperature

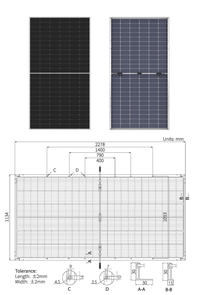
Additional Value

30-Year Power Warranty



Mechanical Parameters

Cell Orientation	144 (6×24)
Junction Box	IP68, three diodes
Output Cable	4mm², (-400, -200mm)/±1400mm length can be customized
Glass	Dual glass, 2.0+2.0mm heat strengthened glass
Frame	Anodized aluminum alloy frame
Weight	31.8kg
Dimension	2278×1134×30mm
Packaging	36pcs per pallet / 180pcs per 20' GP / 720pcs or 576pcs (Only for USA) per 40' HC



Electrical Characteristics

STC : AM1.5 1000W/m² 25℃ NOCT : AM1.5 800W/m² 20℃ 1m/s Test uncertainty for Pmax: ±3%

Module Type	LR5-72HBD-540M		LR5-72HBD-545M		LR5-72HBD-550M		LR5-72HBD-555M		LR5-72HBD-560M	
Testing Condition	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power (Pmax/W)	540	403.6	545	407.4	550	411.1	555	414.8	560	418.6
Open Circuit Voltage (Voc/V)	49.50	46.54	49.65	46.68	49.80	46.82	49.95	46.97	50.10	47.11
Short Circuit Current (Isc/A)	13.85	11.17	13.92	11.23	13.99	11.29	14.05	11.34	14.10	11.38
Voltage at Maximum Power (Vmp/V)	41.65	38.86	41.80	39.00	41.95	39.14	42.10	39.28	42.25	39.42
Current at Maximum Power (Imp/A)	12.97	10.39	13.04	10.45	13.12	10.51	13.19	10.56	13.26	10.62
Module Efficiency(%)	20.9		21.1		21.3		21.5		21.7	

Electical characteristics with different rear side power gain (reference to 550W front)

Pmax /W	Voc/V	Isc /A	Vmp/V	Imp /A	Pmax gain
578	49.80	14.68	41.95	13.77	5%
605	49.80	15.38	41.95	14.43	10%
633	49.90	16.08	42.05	15.08	15%
660	49.90	16.78	42.05	15.74	20%
688	49.90	17.48	42.05	16.39	25%

Operating Parameters

Operational Temperature	-40°C ~ +85°C
Power Output Tolerance	0 ~ 3%
Maximum System Voltage	DC1500V (IEC/UL)
Maximum Series Fuse Rating	30A
Nominal Operating Cell Temperature	45±2°C
Protection Class	Class II
Bifaciality	70±5%
Fire Rating	UL type 29 IEC Class C

Mechanical Loading

Front Side Maximum Static Loading	5400Pa
Rear Side Maximum Static Loading	2400Pa
Hailstone Test	25mm Hailstone at the speed of 23m/s

Temperature Ratings (STC)

Temperature Coefficient of Isc	+0.050%/℃
Temperature Coefficient of Voc	-0.269%/℃
Temperature Coefficient of Pmax	-0.340%/℃

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DATE	REVISION DESCRIPTION	PM	ENG	CHK
01/06/2026	90% PERMIT SET – REV 1	SK	MxB	MD
12/12/2025	90% PERMIT SET	SK	MxB	MD
06/24/2025	90% CONCEPTUAL DESIGN REV. 3	SK	GB	RI
06/20/2025	30% CONCEPTUAL DESIGN REV. 2	SK	GB	RI

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DEVELOPER: Greenskies — a Clean Focus company

PAGE SIZE: 36" × 24"

PROJECT #: 10036.11

PROJECT: SOLAR GROUND MOUNT SYSTEM AT GAGER HILL ROAD 41.692902°, -72.090985° SCOTLAND, CT 06264

DRAWING TITLE: EQUIPMENT DATA SHEETS

DRAWING #: E600

RULER IN INCHES: