

GENERAL NOTES:

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

GEOGRID MATERIAL NOTES:

- THE GEOGRID, OR COMPARABLE PRODUCT, IS INTENDED FOR USE FOR ALL CONDITIONS, IN ORDER TO ASSIST IN MATERIAL SEPARATION FROM NATIVE SOILS AND PRESERVE ACCESS LOADS.
- GRAVEL FILL MATERIAL SHALL CONSIST OF 1-2" CLEAN, DURABLE, SHARP-ANGLED CRUSHED STONE OF UNIFORM QUALITY MEETING THE SPECIFICATIONS OF NYSDOT ITEM 703-02. SIZE DESIGNATION 3-5 OF TABLE 703-4. STONE MAY BE PLACED IN FRONT OF, AND SPREAD WITH, A TRACKED VEHICLE. GRAVEL SHALL NOT BE COMPACTED.
- GEOGRID SHALL BE MIRAFI BXG110 OR APPROVED EQUAL. GEOGRID SHALL BE DESIGNED BASED ON EXISTING SOIL CONDITIONS AND PROPOSED HAUL ROAD SLOPES.
- IF MORE THAN ONE ROLL WIDTH IS REQUIRED, ROLLS SHOULD OVERLAP A MINIMUM OF NINE INCHES.
- REFER TO MANUFACTURER'S SPECIFICATION FOR PROPER TYING AND CONNECTIONS.
- LIMITED USE PERVIOUS ACCESS ROAD SHALL BE TOP DRESSED AS REQUIRED WITH ONLY 1-2" CRUSHED STONE MEETING NYSDOT ITEM 703-02 SPECIFICATIONS.

BASIS OF DESIGN: TENCATE MIRAFI BXG110 GEOGRIDS; 365 SOUTH HOLLAND DRIVE, PENDERGRASS, GA; 800-685-9990 OR 706-693-2226; WWW.MIRAFI.COM

GEOWEB MATERIAL NOTES:

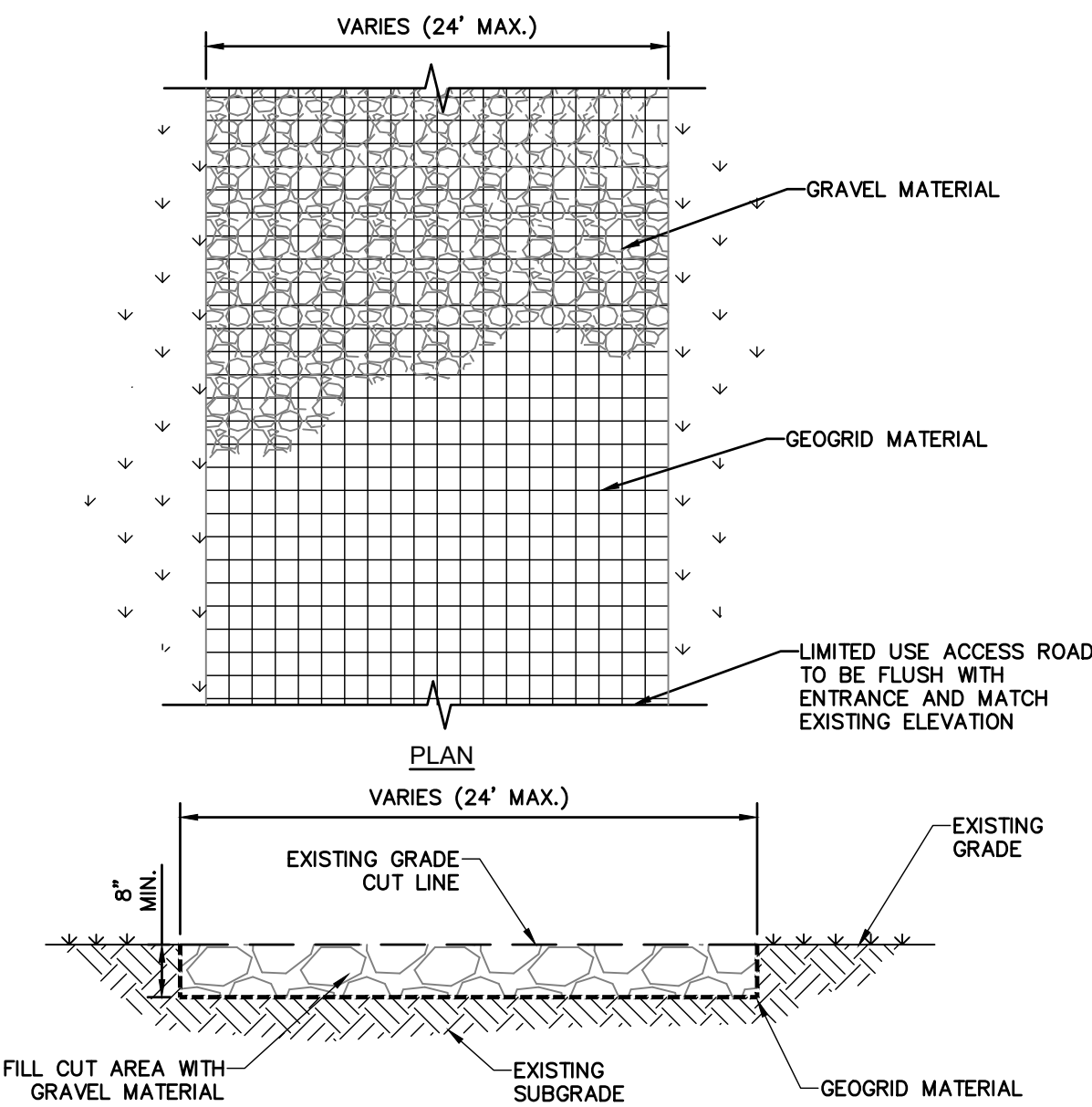
- THE GEOWEB, OR COMPARABLE PRODUCT, IS SUGGESTED FOR USE ON ROAD PROFILES EXCEEDING 10%. THE GEOWEB PRODUCT IS INTENDED TO LIMIT SHIFTING STONE MATERIAL DURING USE.
- INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
- WHERE REQUIRED, A NATIVE SOIL WEDGE SHALL BE PLACED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

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

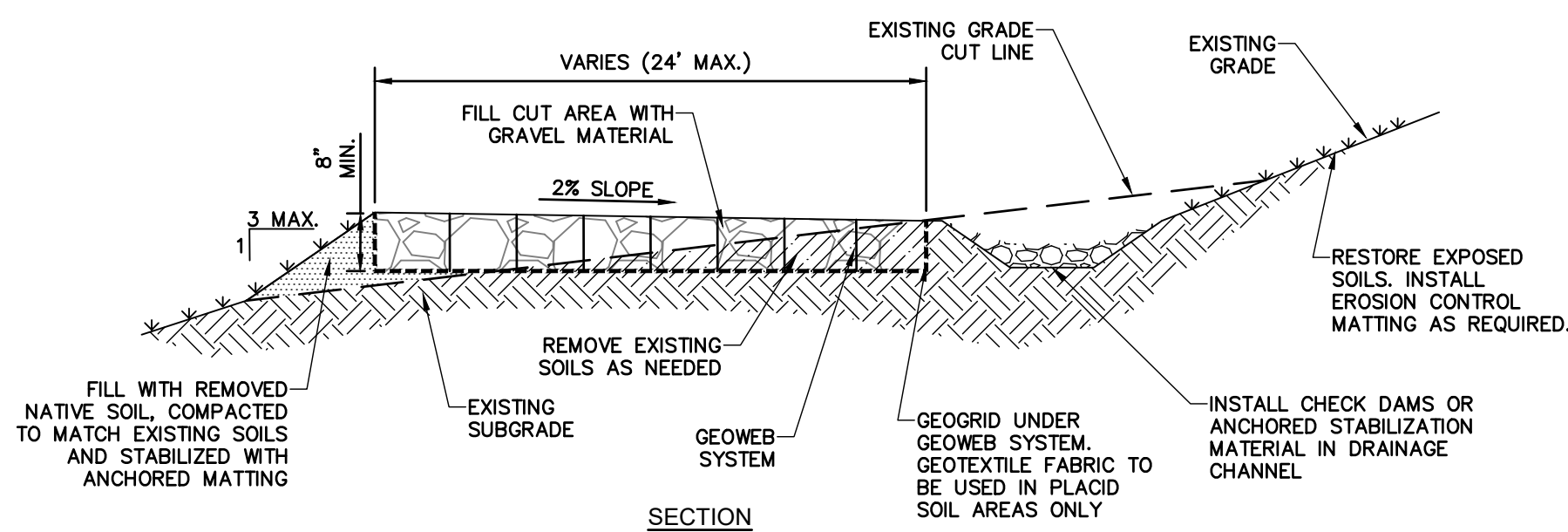
WOVEN GEOTEXTILE MATERIAL NOTES:

- SPECIFIED GEOTEXTILE WILL ONLY BE UTILIZED IN PLACID SOILS. PLACID SOILS CONSIST OF POORLY DRAINED SOILS COMPOSED OF FINELY TEXTURED PARTICLES AND ARE PRONE TO RUTTING. PLACID SOILS ARE TYPICALLY PRESENT IN LOW-LYING AREAS WITH HYDROLOGIC SOILS GROUP (HSG) OF C OR D, OR AS SPECIFIED BY AN ENGINEER, ENVIRONMENTAL SCIENTIST, SOIL SCIENTIST, OR GEOTECHNICAL DATA.
- THE CONCERN FOR POTENTIAL REDUCTION OF NATIVE INFILTRATION RATES DUE TO THE GEOTEXTILE MATERIAL WOULD NOT BE A SIGNIFICANT CONCERN IN POORLY DRAINED SOILS WHERE SEGREGATION OF PERVIOUS STONE AND NATIVE MATERIALS IS CRUCIAL FOR LONG TERM OPERATION AND MAINTENANCE.

BASIS OF DESIGN: TENCATE MIRAFI RSI-SERIES WOVEN GEOSYNTHETICS; 365 SOUTH HOLLAND DRIVE, PENDERGRASS, GA; 800-685-9990 OR 706-693-2226; WWW.MIRAFI.COM



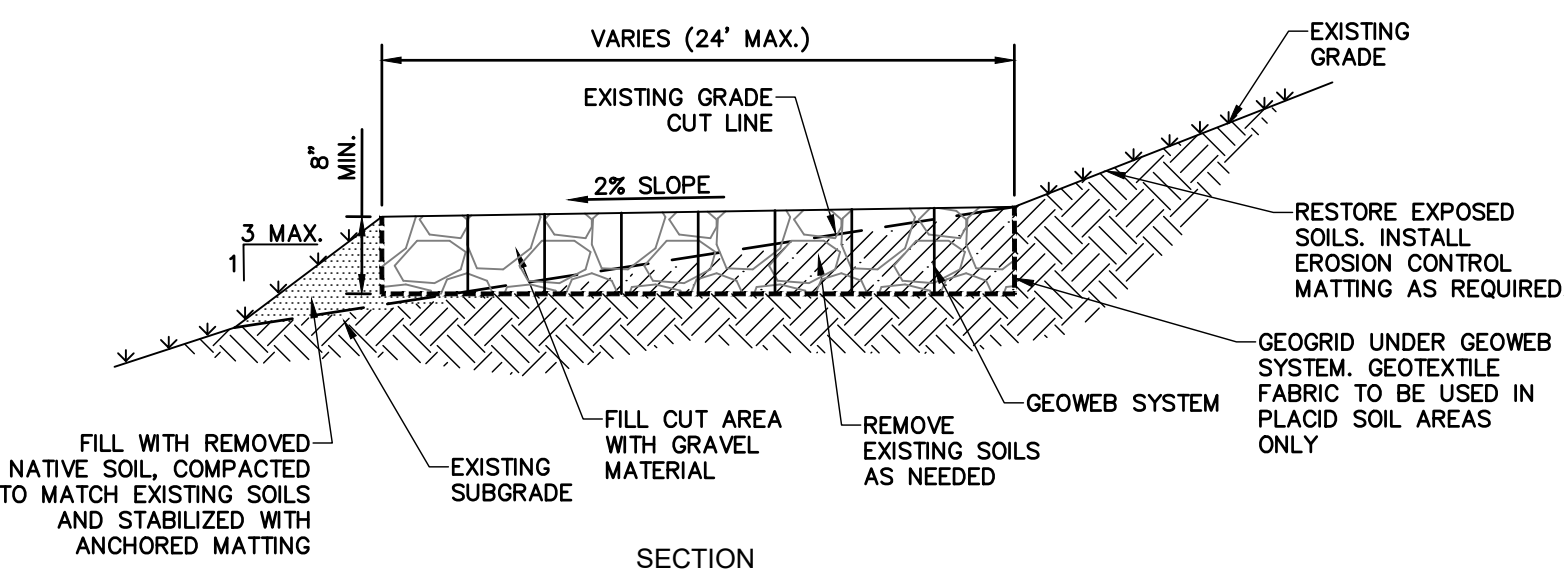
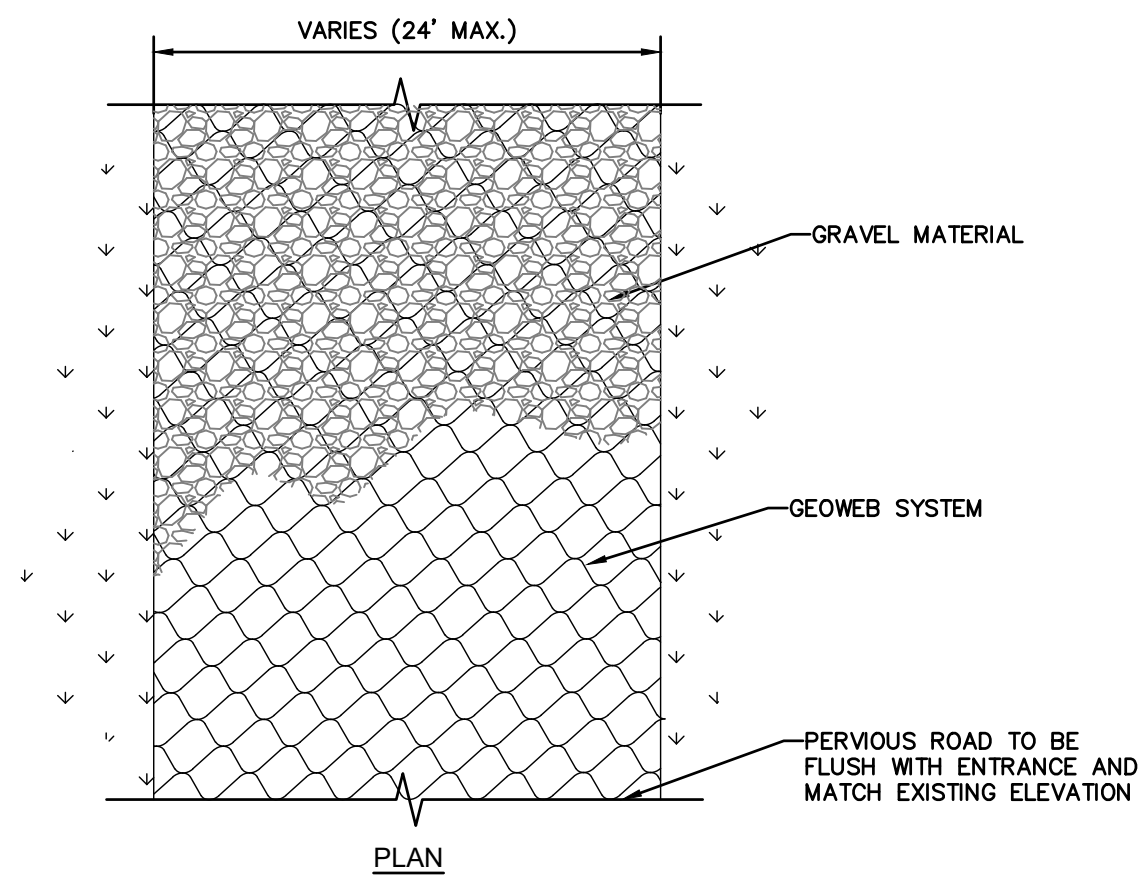
LIMITED USE PERVIOUS ACCESS ROAD - 0% TO 10% SLOPES
NOT TO SCALE



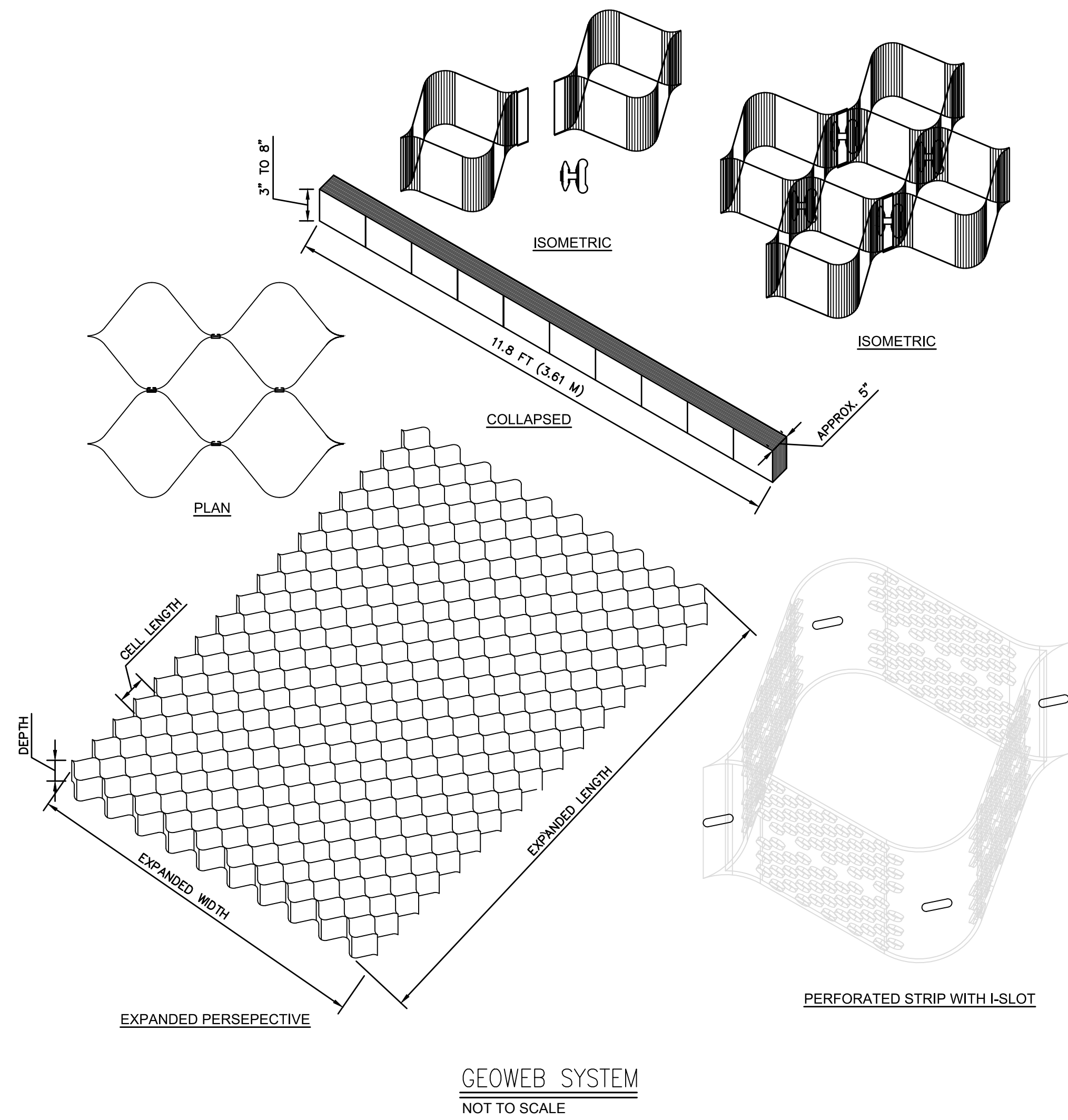
NOTE:

- THE ROADSIDE DITCH SHALL BE DESIGNED IN ACCORDANCE WITH THE NEW YORK STATE STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROLS FOR GRASSED AND VEGETATED WATERWAYS. ADDITIONAL DETAILS WILL BE PROVIDED SPECIFIC TO THE SITE DESIGN.

LIMITED USE PERVIOUS ACCESS ROAD - 10% AND GREATER SLOPES WITH DITCH
NOT TO SCALE



LIMITED USE PERVIOUS ACCESS ROAD - 10% AND GREATER SLOPES
NOT TO SCALE



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

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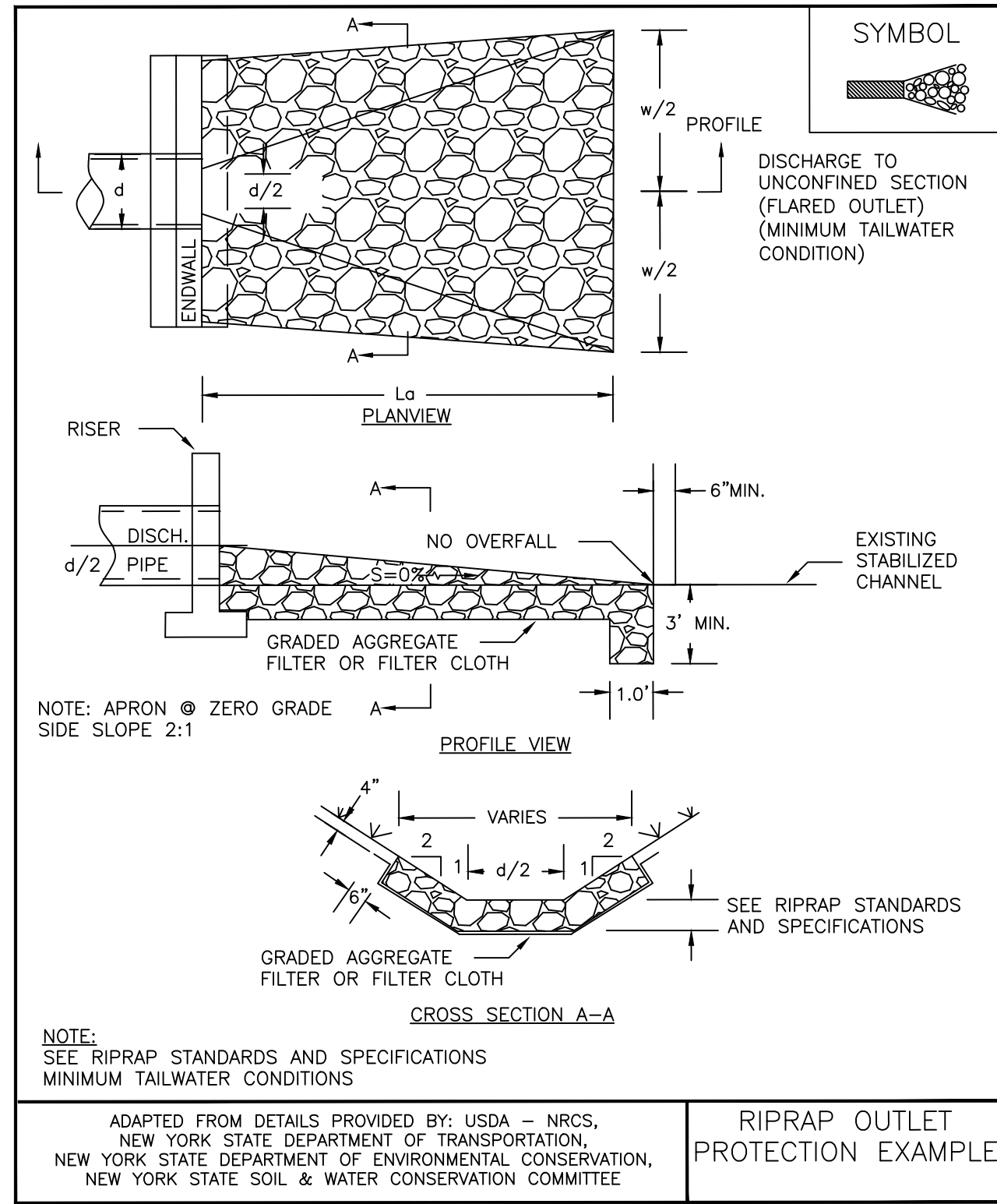
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A. REXROAT
Checked by:
S. MEERSMA
Approved by:
C. DUNCAN

SCS DELL 014136 YORKTOWN, LLC
DELL AVENUE SOLAR FARM
FIXED-TILT GROUND MOUNT SOLAR ENERGY SYSTEM
DELL AVENUE, YORKTOWN, NEW YORK 10514

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DETAIL SHEET 1

Drawing No:
D-101



NOTES:

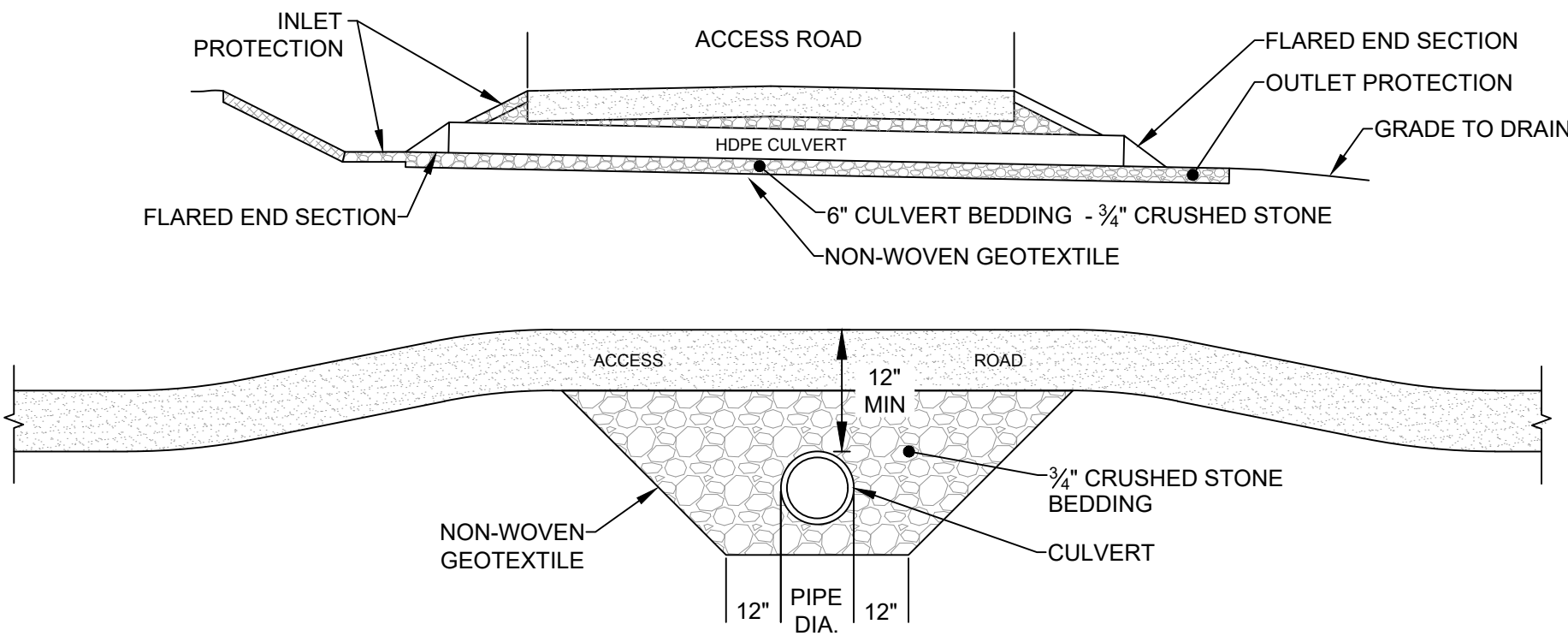
ALL APRONS SHALL BE CONSTRUCTED TO THE DIMENSIONS SHOWN. TERMINAL WIDTHS SHALL BE ADJUSTED AS NECESSARY TO MATCH RECEIVING CHANNELS.

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

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

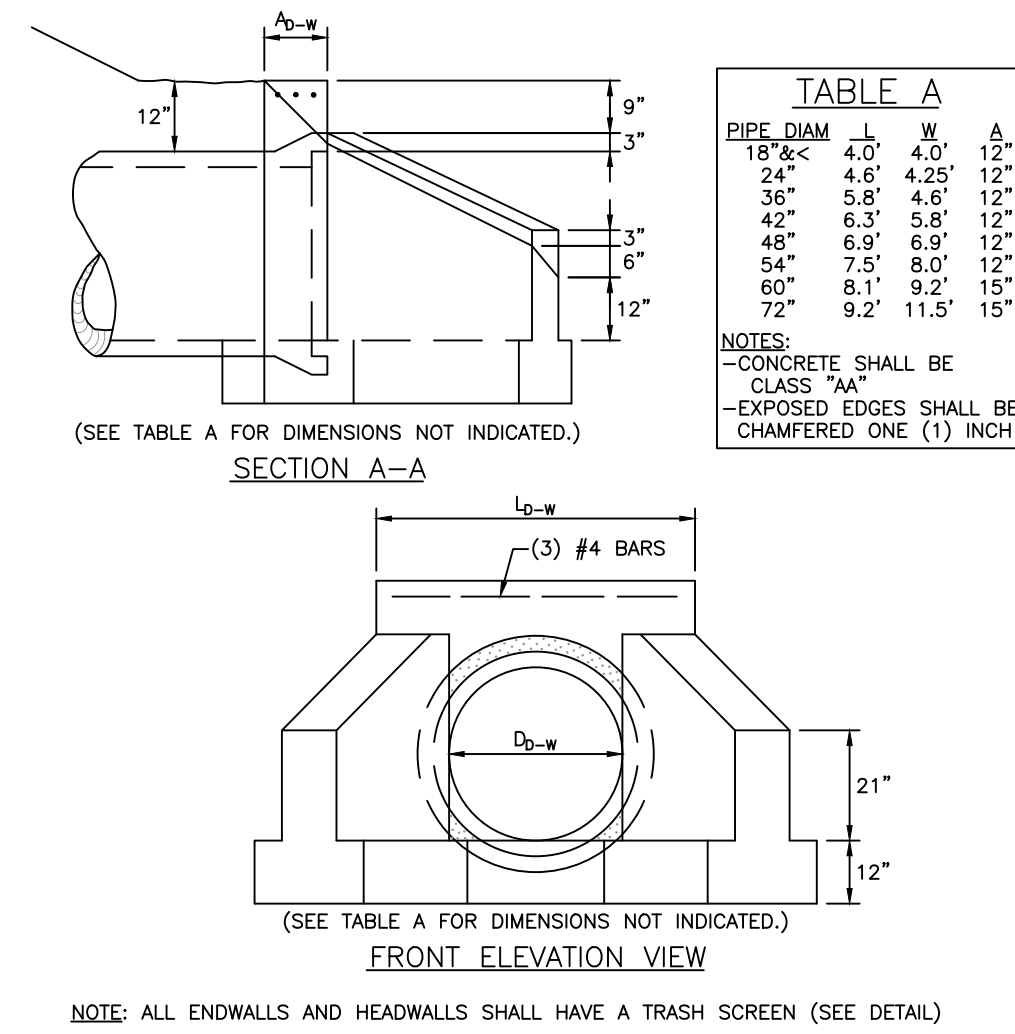
RIPRAP APRON SCHEDULE				
ID	LENGTH (FT.)	WIDTH AT DISCHARGE (FT.)	WIDTH AT OUTLET (FT.)	REQ'D RIPRAP DIAMETER (FT.)
SD-01	15	5	19	0.5
SD-02	11	5	16	0.5
SD-03	11	5	15	0.5
SD-04	14	5	18	0.9
SD-1A	11	5	15	0.5
SD-2A 1	11	5	9	0.5
SD-2A 2	11	5	15	0.5
SD-2B 1	11	5	9	0.5
SD-2B 2	11	5	15	0.5
SD-3A 1	11	5	9	0.5
SD-3A 2	11	5	15	0.5

RIP RAP OUTLET PROTECTION
NOT TO SCALE

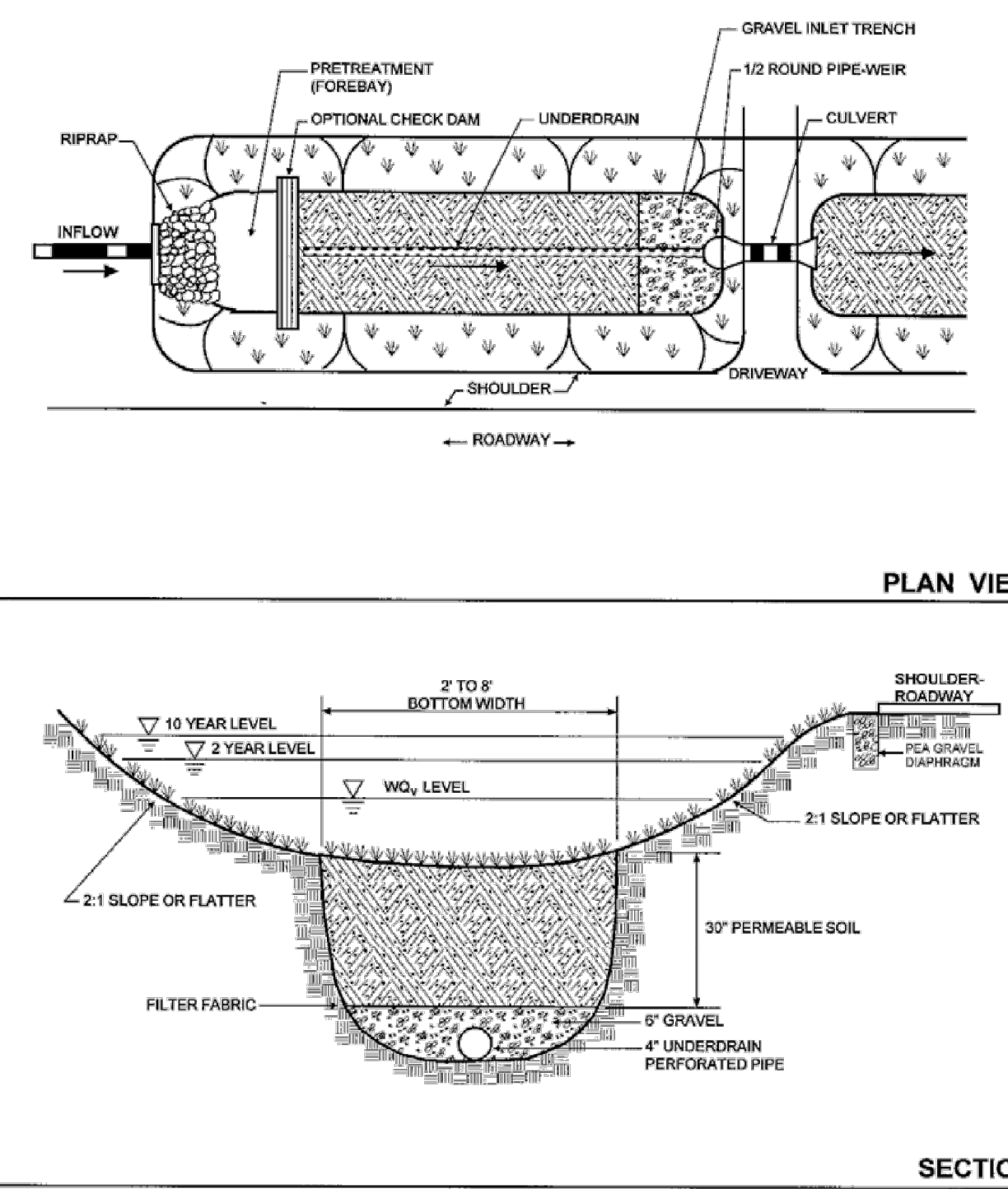


CULVERT SCHEDULE					
ID	DESCRIPTION	INV. IN	INV. OUT	LENGTH (FT)	SLOPE
SD-01	18" HDPE	263.36	263.10	25	0.01
SD-02	18" HDPE	261.00	260.00	37	0.03
SD-03	18" HDPE	309.00	308.64	34	0.01
SD-04	18" HDPE	287.75	287.01	87	0.01
SD-1A	18" HDPE	236.00	225.00	60	0.18
SD-2A 1	18" HDPE	277.50	277.00	35	0.01
SD-2A 2	18" HDPE	273.00	272.00	30	0.03
SD-2B 1	18" HDPE	246.50	246.00	30	0.02
SD-2B 2	18" HDPE	242.00	240.00	33	0.06
SD-3A 1	18" HDPE	281.50	281.00	30	0.02
SD-3A 2	18" HDPE	277.00	276.00	100	0.01

TYPICAL PERMANENT CULVERT
NOT TO SCALE



ENDWALL AND HEADWALL DETAIL
NOT TO SCALE



NOTES:

- PERMEABLE SOIL TO MEET REQUIREMENTS IN NEW YORK STATE STORMWATER MANAGEMENT DESIGN MANUAL APPENDIX H.
- MAINTAIN GRASS HEIGHT OF 4" TO 6" WITHIN DRY SWALE.
- GRAVEL BEDDING TO CONSIST OF AASHTO NO. 2 STONE.
- FILTER FABRIC TO BE MIRAFI 140N OR EQUAL.

DRY SWALE SECTION
NOT TO SCALE

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Drawn by:
A. REXROAT

Checked by:
S. MEERSMA

Approved by:
C. DUNCAN

**SCS DELL 014136 YORKTOWN, LLC
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FIXED-TILT GROUND MOUNT SOLAR ENERGY SYSTEM
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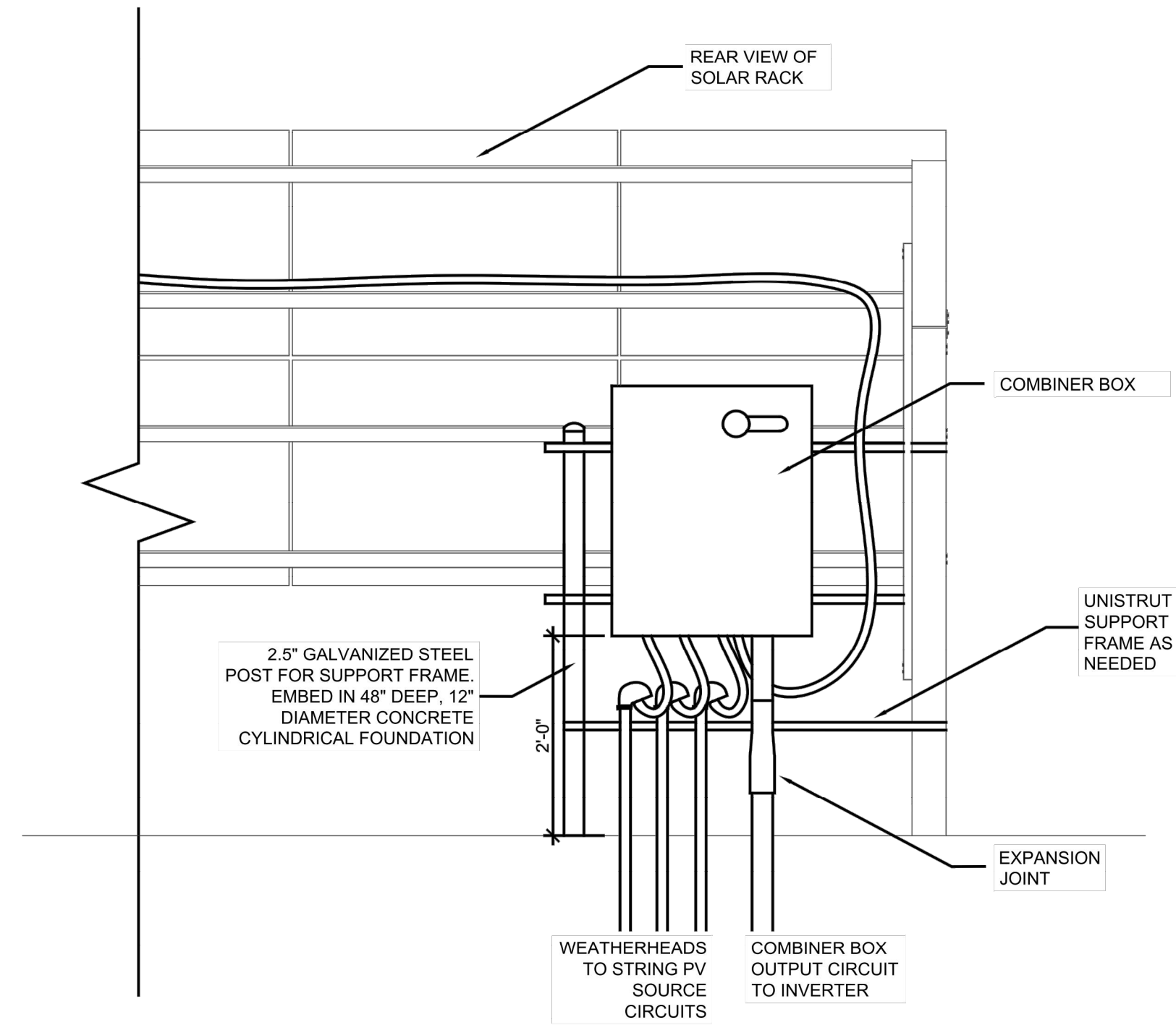
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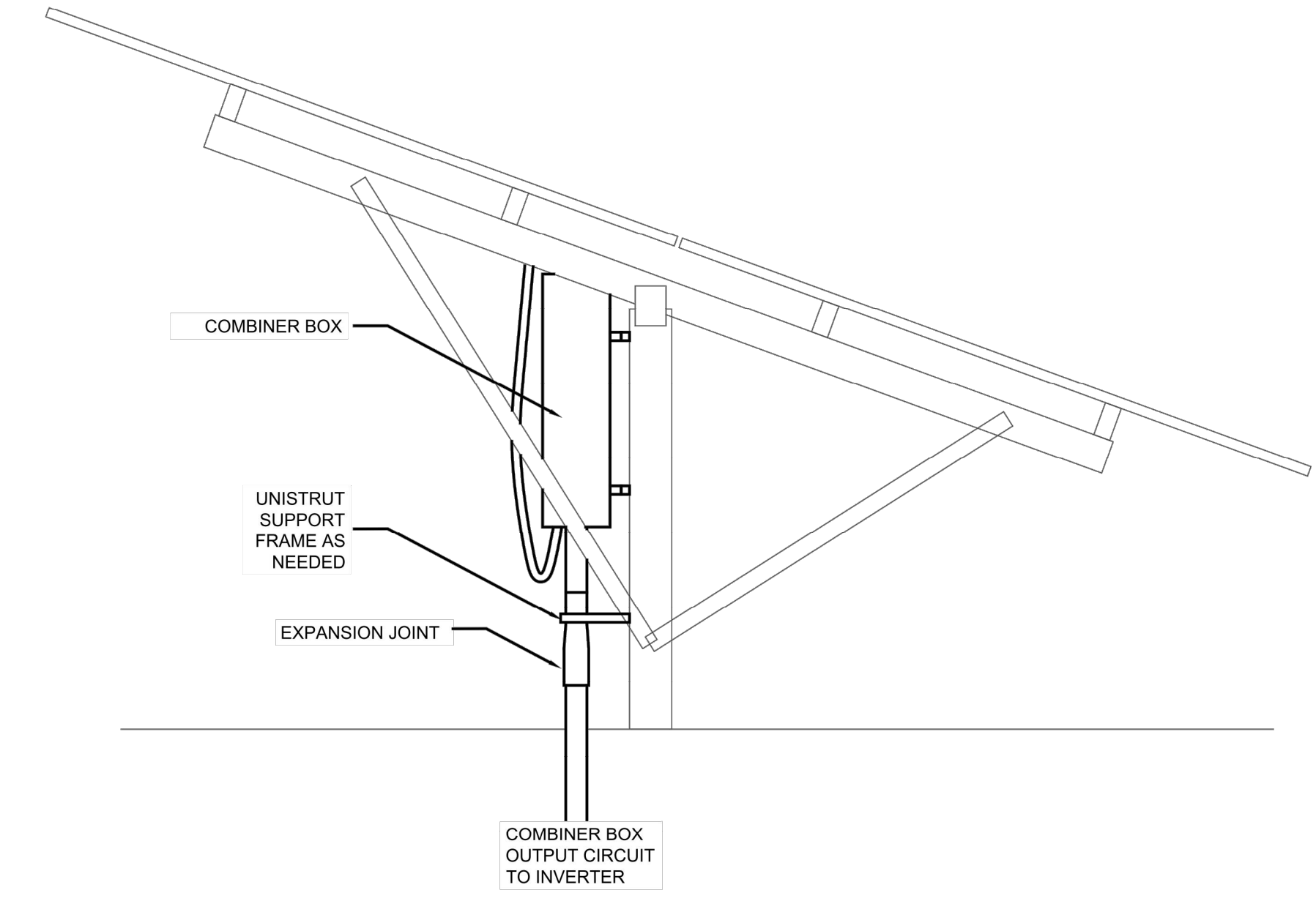
Date:
SEPTEMBER 21, 2022

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DETAIL SHEET 3

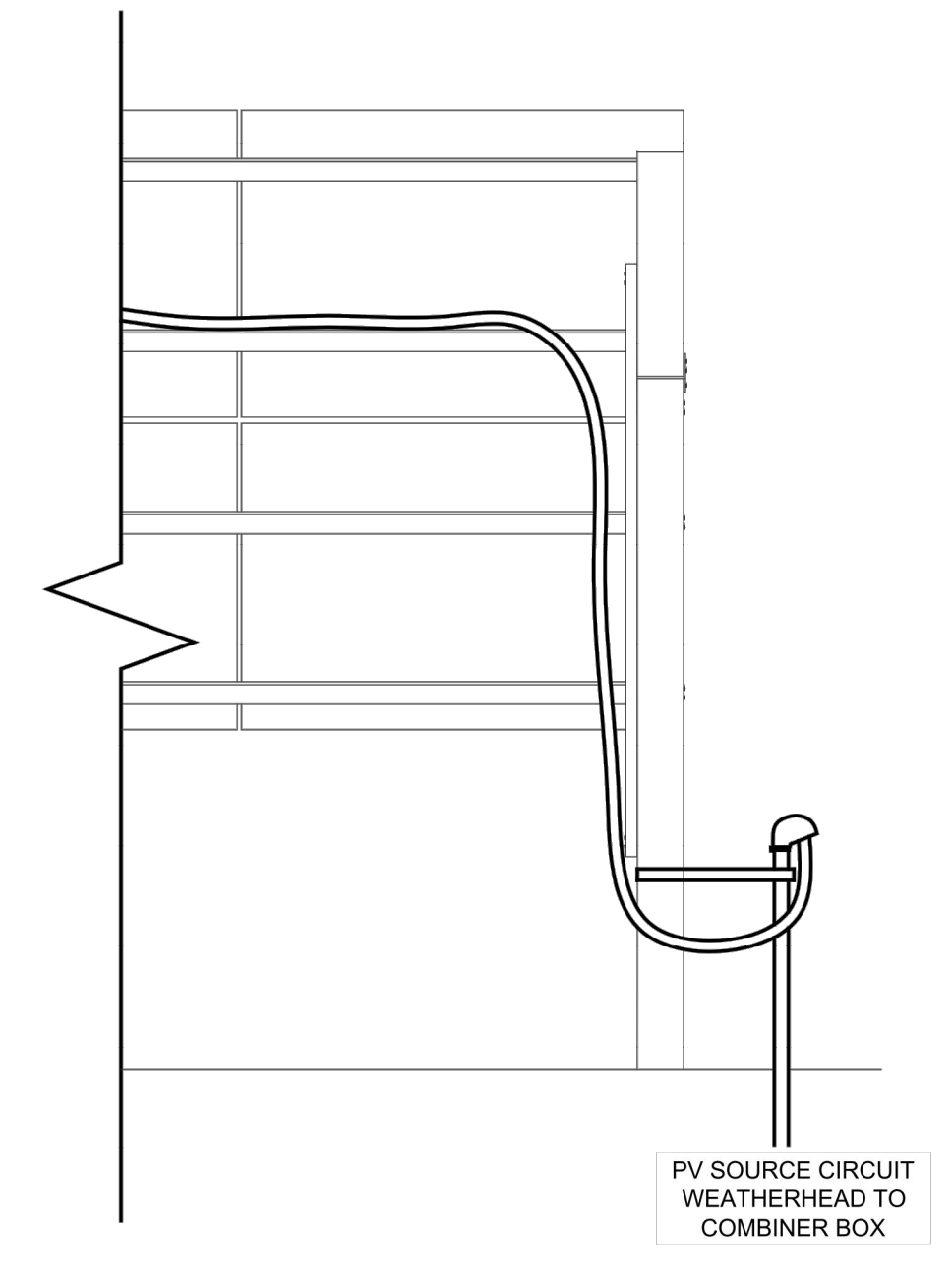
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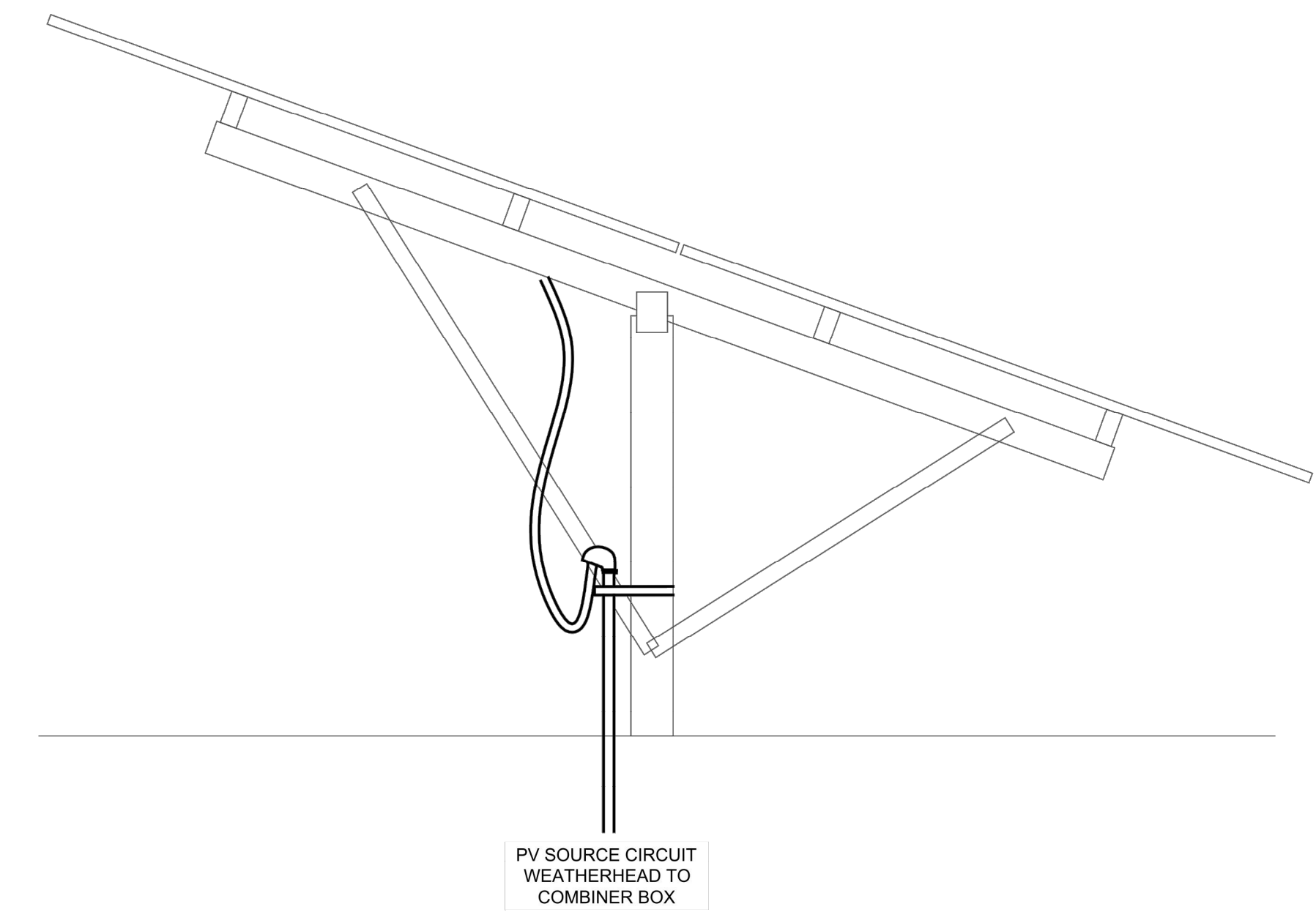
1 COMBINER BOX FRONT
E-412 3/4" = 1'-0"



2 COMBINER BOX SIDE
E-412 3/4" = 1'-0"



3 STRING CONDUIT WEATHERHEAD
E-412 3/4" = 1'-0"



4 STRING CONDUIT WEATHERHEAD SIDE
E-412 3/4" = 1'-0"

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