

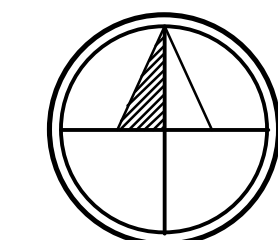
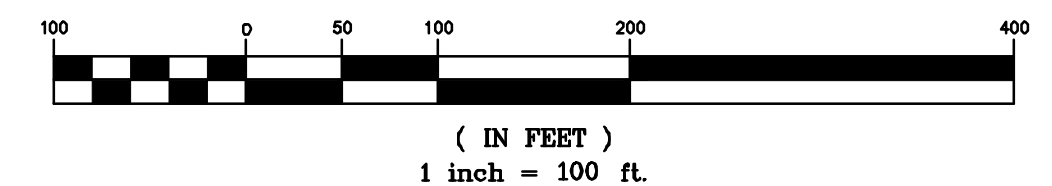
**DRAWING NOTES:**

1. ORTHOGRAPHIC IMAGERY OBTAINED FROM NOAA OFFICE FOR COASTAL MANAGEMENT TAKEN 11/12/2009. ACCESSED 10/16/2020
2. TOPOGRAPHIC DATA DERIVED FROM AERIAL FLIGHTS CONDUCTED ON 3/5/2021 BY HULL INC.
3. WETLAND DELINEATION PERFORMED 3/22/2021 BY WILLIAMS SALE PARTNERSHIP(WSP)
4. MITIGATION STREAMS, WETLAND AND WATER IMPOUNDMENTS FOR CONSOL MINING COMPANY, LLC'S MAHONING VALLEY D2100 AND D2100-2 PERMIT AREAS WERE PROVIDED BY CONSOL ON 12/01/2020.
5. PROPERTY BOUNDARIES APPROXIMATED USING DATA PROVIDED BY HARRISON COUNTY, OH PARCEL MAP VIEWER, ACCESSED 8/18/2020
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7. UNDERGROUND UTILITIES LOCATED BY HULL INC. USING OHIO UTILITIES PROTECTION SERVICE MARKINGS IN MARCH 2021.

**LEGEND**

- 100' OFFSET FROM CONCRETE WASHOUT
- PROPOSED COMPOSITE FILTER SOCK
- PROPOSED FENCING
- EXISTING SOILS
- PROPOSED STOCKPILE AREA
- PROPOSED TEMPORARY CONSTRUCTION ENTRANCE
- PROPOSED TEMPORARY LAYDOWN AREA
- PROPOSED CONCRETE WASHOUT
- PROPOSED STORMWATER MANAGEMENT AREA
- PROPOSED LIMITS OF DISTURBANCE
- FEMA FLOODPLAINS
- PROPOSED SWALE
- EXISTING CONTOUR 10' INTERVAL
- LIMITS OF CONSTRUCTION ACTIVITY

**GRAPHIC SCALE**



NAD83 OH-NORTHERN ZONE  
TRUE NORTH TO BE V.I.F.

**DRAFT**  
**NOT FOR CONSTRUCTION**

REV. No.	ZONE	DATE	BY
<b>NOTTINGHAM SOLAR</b>			
ATHENS TOWNSHIP		HARRISON COUNTY, OH	
<b>PRELIMINARY EROSION LAYOUT PLAN</b>			
<b>SHEET 12</b>			
<b>BQ ENERGY DEVELOPMENT, LLC.</b>			
PROJECT DEVELOPER 400 Market Street Industrial Park, Suite 32 Wappingers Falls, NY 12590			
<b>CRAWFORD &amp; ASSOCIATES</b>			
ENGINEERING, P.C. 4411 Route 9, Suite 200, Hudson New York 12534 tel: (518) 828-2700 www.crawfordandassociates.com fax: (518) 828-2723			
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07/19/2021	DESIGNED BY: JSC		
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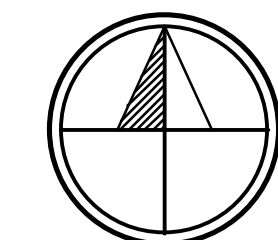
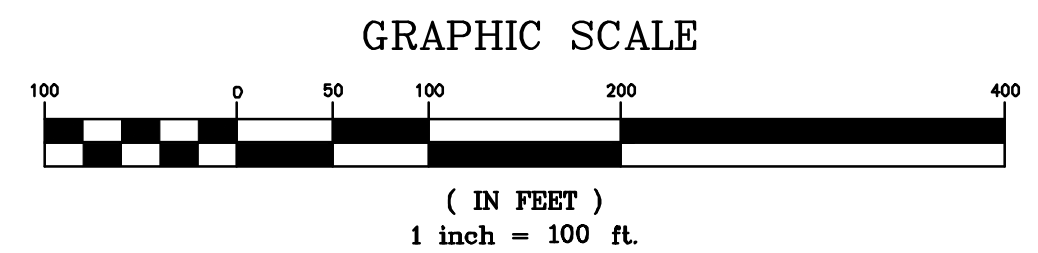


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ATHENS TOWNSHIP		HARRISON COUNTY, OH	
<b>PRELIMINARY EROSION LAYOUT PLAN SHEET 13</b>			
<b>BQ ENERGY DEVELOPMENT, LLC.</b>			
PROJECT DEVELOPER 400 Market Street Industrial Park, Suite 32 Wappingers Falls, NY 12590			
<b>CRAWFORD &amp; ASSOCIATES</b>			
ENGINEERING, P.C. 4411 Route 9, Suite 200, Hudson New York 12534 tel: (518) 828-2700 www.crawfordandassociates.com fax: (518) 828-2723			
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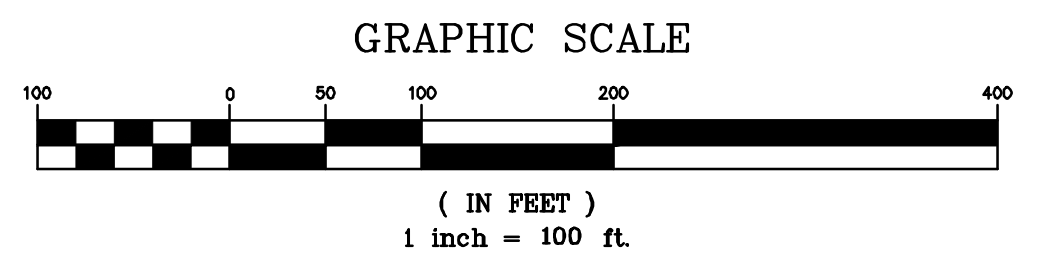


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<b>NOTTINGHAM SOLAR</b>			
ATHENS TOWNSHIP		HARRISON COUNTY, OH	
<b>PRELIMINARY EROSION LAYOUT PLAN</b>			
<b>SHEET 14</b>			

**BQ ENERGY DEVELOPMENT, LLC.**  
 PROJECT DEVELOPER  
 400 Market Street Industrial Park, Suite 32  
 Wappingers Falls, NY 12590

**CRAWFORD & ASSOCIATES**  
 ENGINEERING, P.C.  
 4411 Route 9, Suite 200, Hudson New York 12534 tel: (518) 828-2700  
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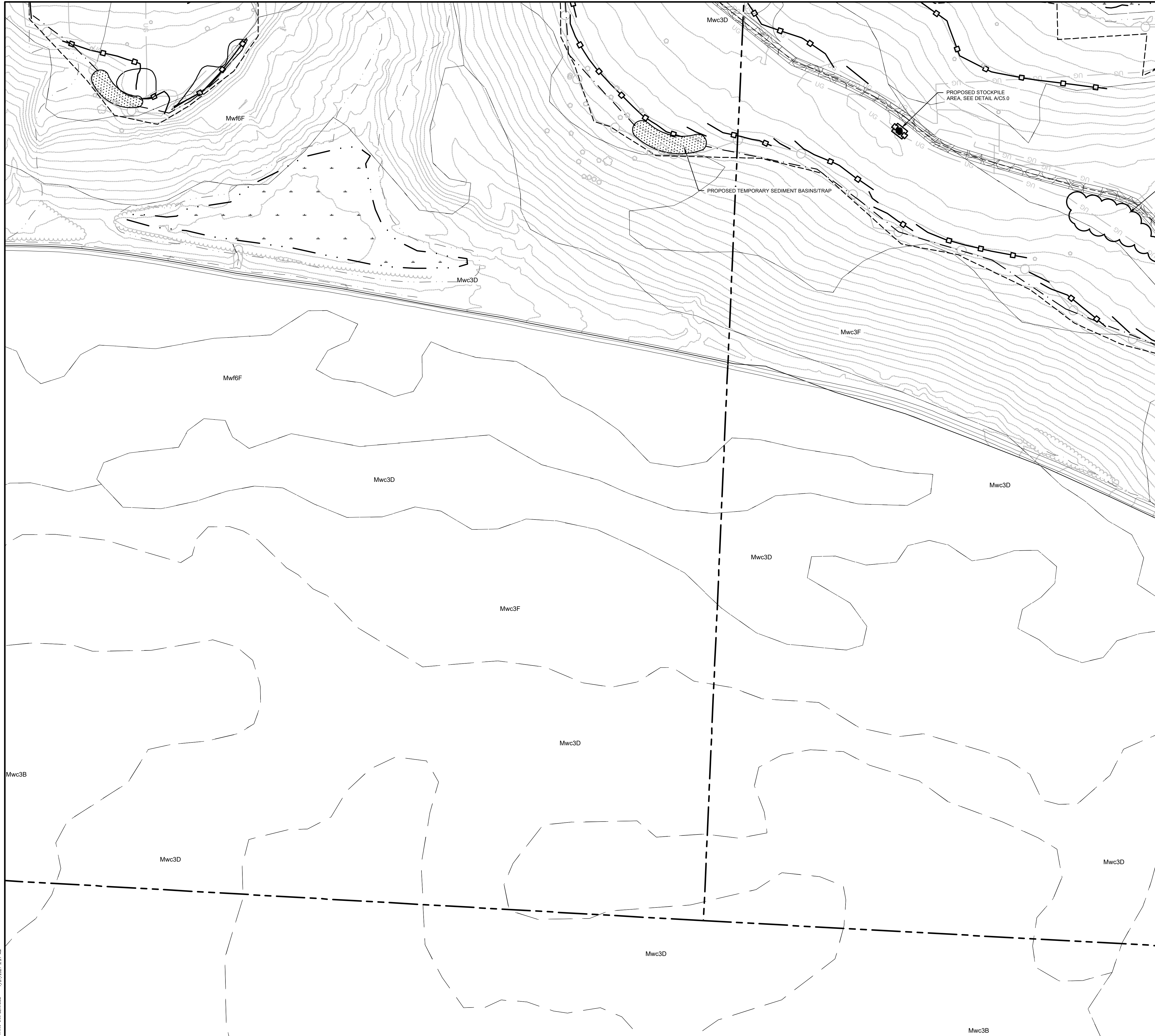
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	JSC			
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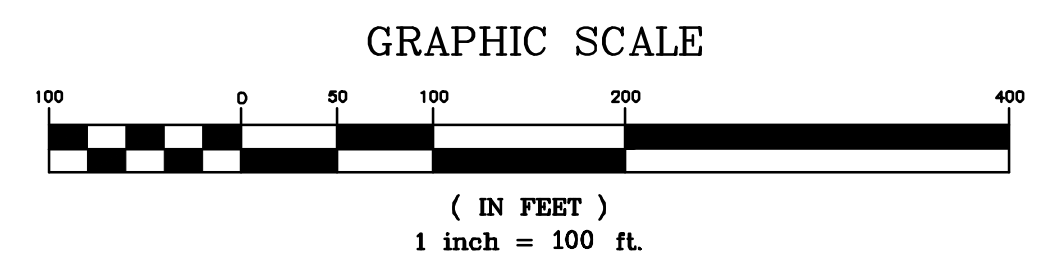


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ATHENS TOWNSHIP		HARRISON COUNTY, OH	
<b>PRELIMINARY EROSION LAYOUT PLAN SHEET 15</b>			
<b>BQ ENERGY DEVELOPMENT, LLC.</b>			
PROJECT DEVELOPER 400 Market Street Industrial Park, Suite 32 Wappingers Falls, NY 12590			
<b>CRAWFORD &amp; ASSOCIATES ENGINEERING, P.C.</b>			
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**EROSION & SEDIMENT CONTROL GENERAL NOTES:**

- ALL EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE INSTALLED IN ACCORDANCE WITH THE LATEST VERSION OF THE OHIO STANDARDS FOR STORMWATER MANAGEMENT (LAND DEVELOPMENT AND URBAN STREET DESIGN) REFERRED TO IN REMAINING TEXT AS "THE OHIO GUIDELINES".
- ALL CONTRACTORS AND SUBCONTRACTORS TAKING PART IN SITE WORK THAT INVOLVES PHYSICAL GROUND DISTURBANCE ON THE PROJECT SITE SHALL SIGN AND DATE A COPY OF THE CERTIFICATION STATEMENT, WHICH IS LOCATED IN THE STORMWATER PREVENTION PLAN (SWP3) BEFORE UNDERTAKING ANY CONSTRUCTION ACTIVITY.
- THE SEDIMENT MEASURES DETAILED ON THE EROSION AND SEDIMENT CONTROL PLAN SHALL BE IN PLACE PRIOR TO CONSTRUCTION STARTUP FOR EACH CONSTRUCTION PHASE. ADDITIONALLY, ALL SEDIMENT CONTROLS MUST BE INSTALLED PRIOR TO GRADING AND WITHIN 7 DAYS OF FIRST GRUBBING. ONCE MEASURES ARE IN PLACE, ALL MEASURES SHALL BE PROPERLY MAINTAINED AND/OR REPLACED AS NECESSARY, AND THEN REMOVED FROM THE SITE BY THE CONTRACTOR ONCE THE SITE IS STABILIZED.
- FOLLOWING THE COMPLETION OF CONSTRUCTION, INSPECTIONS SHALL BE CONDUCTED PER THE FOLLOWING SCHEDULE. CONTRACTORS AND SUB CONTRACTORS ARE RESPONSIBLE FOR HAVING A "OPERATOR" ON SITE DAILY THAT HAS CONTROL OF ALL ACTIVITIES OF THE PROJECT WHICH ARE NECESSARY TO ENSURE COMPLIANCE WITH THE SWP3 FOR THE SITE AND ALL PERMIT CONDITIONS INCLUDING THE ABILITY TO AUTHORIZE MODIFICATIONS TO THE SWP3, CONSTRUCTION PLANS AND SITE SPECIFICATION TO ENSURE COMPLIANCE WITH THE GENERAL PERMIT.
  - FOR CONSTRUCTION SITES WHERE SOIL DISTURBANCE ACTIVITIES ARE ON-GOING, THE QUALIFIED INSPECTION PERSONNEL SHALL CONDUCT A SITE INSPECTION AT LEAST EVERY SEVEN (7) CALENDAR DAYS AND WITHIN 24 HOURS OF 0.5" OR GREATER RAINFALL.
- BASED ON THE WEEKLY SITE INSPECTIONS OR RAINFALL INSPECTIONS, THE EROSION AND SEDIMENT CONTROL MEASURES IDENTIFIED IN THE SWP3 SHALL BE REVISED AS SITE CONDITIONS WARRANT. THE CONTRACTOR SHALL IMPLEMENT THESE REVISIONS AS SOON AS PRACTICABLE.
- THE EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED AND MAINTAINED BY THE CONTRACTOR UNTIL THE FINAL SURFACE TREATMENTS ARE INSTALLED AND THE VEGETATED AREAS HAVE BEEN STABILIZED WITH AT LEAST 70% VEGETATIVE COVER. THE PROPERTY OWNER WILL ASSUME RESPONSIBILITY FOR MAINTAINING THE EROSION AND SEDIMENT SYSTEM(S) THEREAFTER.
- CONSTRUCTION SHALL PROCEED IN ACCORDANCE WITH THE CONSTRUCTION PHASING SCHEDULE SHOWN ON THE PLANS.
- AS PRACTICABLE, EXISTING VEGETATION SHALL BE PRESERVED. SITE PREPARATION ACTIVITIES SHALL BE PLANNED TO MINIMIZE THE AREA AND DURATION OF SOIL DISTURBANCE. ALL UNNECESSARY REMOVAL OF WOODY VEGETATION SHALL BE AVOIDED.
- INLET PROTECTION MEASURES SHALL BE INSTALLED AROUND STORM DRAIN INLETS TO PREVENT SEDIMENT LADEN WATER FROM ENTERING.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL TEMPORARY EROSION AND SEDIMENT CONTROL PRACTICES ONCE THE CONSTRUCTION PHASE HAS BEEN STABILIZED AND FUNCTIONING PROPERLY AS ACCEPTED BY THE ENGINEER.
- DUST CONTROL AT DRIVING AREAS - THE SITE MAY BE SPRAYED WITH WATER UNTIL THE SURFACE IS WET. THIS IS ESPECIALLY EFFECTIVE ON HAUL ROADS AND ACCESS ROUTES. WATERING SHOULD BE DONE AT A RATE THAT PREVENTS DUST BUT DOES NOT CAUSE SOIL EROSION. WETTING AGENTS (LATEX EMULSION, RESIN IN WATER, ACRYLIC EMULSION (TRAFFIC AND NON-TRAFFIC)) ARE ALSO AVAILABLE TO INCREASE THE EFFECTIVENESS OF WATERING AND MUST FOLLOW MANUFACTURER'S INSTRUCTIONS.
- THE BROOKFIELD TOWNSHIP, OHIO EPA, OR THE SITE ENGINEER MAY REQUEST ADDITIONAL MEASURES TO MINIMIZE THE POTENTIAL FOR ONSITE OR OFFSITE EROSION PROBLEMS THAT MAY OCCUR DURING CONSTRUCTION.
- COPIES OF THE SOIL EROSION AND SEDIMENT CONTROL PLANS, SWP3 AND SWP3 INSPECTION REPORTS MUST BE MAINTAINED ON SITE UNTIL NOTICE OF TERMINATION HAS BEEN FILED.

**MAINTENANCE PLAN:**

- CONTRACTOR SHALL BE RESPONSIBLE FOR ALL OPERATION AND MAINTENANCE OF THE NEW DEVELOPMENT PROJECT AND PROJECT ACCESS DURING CONSTRUCTION.
- NO EARTHWORK ACTIVITIES SHALL COMMENCE UNTIL SILT FENCES AND SILT SOCKS HAVE BEEN INSTALLED AS SHOWN ON DRAWINGS.
- AREAS TO BE LEFT EXPOSED TO EROSION FOR MORE THAN 14 DAYS SHALL BE TEMPORARILY STABILIZED WITHIN 7 DAYS OF THE DATE THE AREA BECOMES INACTIVE. AREAS WITHIN 50 FEET OF A STREAM MUST BE STABILIZED WITHIN 2 DAYS OF INACTIVITY. APPLICATION OF ONLY MULCH FOR TEMPORARY STABILIZATION BETWEEN NOVEMBER 1 AND MARCH 31.
- PAVED AREAS SHALL BE KEPT FREE OF SEDIMENT, AND SHALL BE CLEANED PERIODICALLY AS REQUIRED BY CONSTRUCTION ACTIVITIES.
- CATCH BASINS SHALL BE PERIODICALLY INSPECTED FOR ACCUMULATION OF SEDIMENT. ALL CATCH BASINS WITHIN THE PROJECT SHALL BE CLEANED.
- THE CONTRACTOR IS RESPONSIBLE TO INSPECT AND REPAIR EROSION AND SEDIMENT CONTROL MEASURES AS REQUIRED TO PREVENT DAMAGE OR SEDIMENTATION.
- UPON COMPLETION OF CONSTRUCTION AND ESTABLISHMENT OF PERMANENT GROUND COVER, REMOVE AND DISPOSE OF TEMPORARY EROSION CONTROL MEASURES. CLEAN SEDIMENT AND DEBRIS FROM TEMPORARY MEASURES AND FROM PERMANENT STORM DRAIN AND SANITARY SEWER SYSTEMS.

**PERMANENT STABILIZATION**

- ALL AREAS AT FINAL GRADE MUST BE PERMANENTLY STABILIZED WITHIN 7 DAYS OF REACHING FINAL GRADE. THIS IS ACCOMPLISHED BY SEED AND MULCH. UNLESS SPECIAL MEASURES HAVE BEEN IDENTIFIED WITHIN THE SWP3, THESE MEASURES INCLUDE THE ADDITION OF TOPSOIL, EROSION CONTROL MATTING, ROCK RIP-RAP OR RETAINING WALLS. PERMANENT SEEDING SHOULD BE DONE MARCH 1 TO MAY 31 AND AUGUST 1 TO SEPTEMBER 30. DORMANT SEEDING CAN BE DONE FROM NOVEMBER 20 TO MARCH 15. AT ALL TIMES OF THE YEAR, THE AREA SHOULD BE TEMPORARILY STABILIZED UNTIL PERMANENT

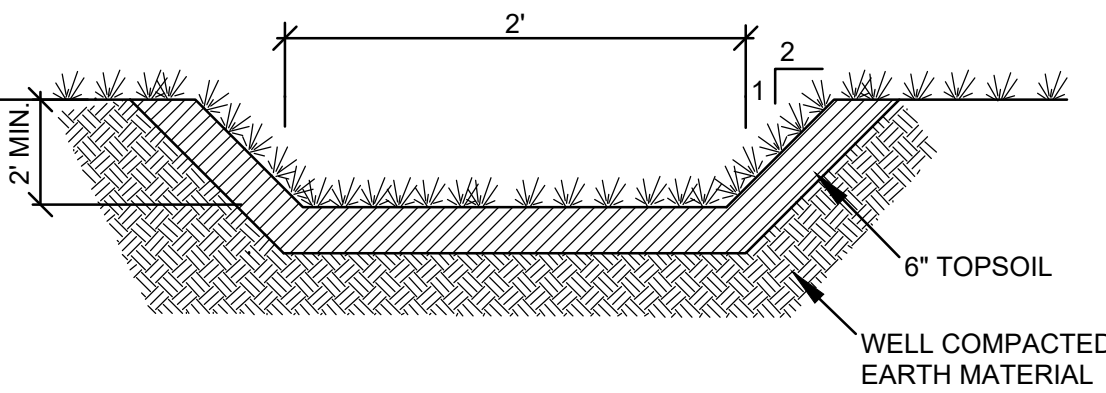
**MULCHING AND SEEDING NOTES:**

- STABILIZING MEASURES SHALL BE INITIATED AS SOON AS PRACTICAL IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, BUT NOT MORE THAN 14 DAYS SHALL ELAPSE WITHOUT STABILIZATION AFTER WORK HAS CEASED. ACCEPTABLE TEMPORARY STABILIZATION INCLUDES MULCH, STRAW, HAY, EROSION CONTROL MATTING, OR OTHER FUNCTIONAL EQUIVALENT.
- TEMPORARY EROSION CONTROL PROTECTION BY MULCHING SHALL BE CARRIED OUT WITHIN 14 DAYS OF FILL PLACEMENT TO FINAL FINISHED GRADE IN ORDER TO AVOID ALL POSSIBLE CONTAMINATION OF PONDS, STREAMS, OR OTHER WATERCOURSES. PLACEMENT OF EROSION CONTROL MATTING OVER THE MULCH IS RECOMMENDED TO PROVIDE POSITIVE "TRACKING" OF THE MULCH AND INCREASED PROTECTION AGAINST EROSION.
- AREAS WITHIN 50 FEET OF A STREAM MUST BE STABILIZED WITHIN 2 DAYS OF INACTIVITY.
- DISTURBED AREAS SHALL BE REVEGETATED IN ACCORDANCE WITH RECOMMENDATIONS CONTAINED IN THE LATEST VERSION OF THE OHIO GUIDELINES.

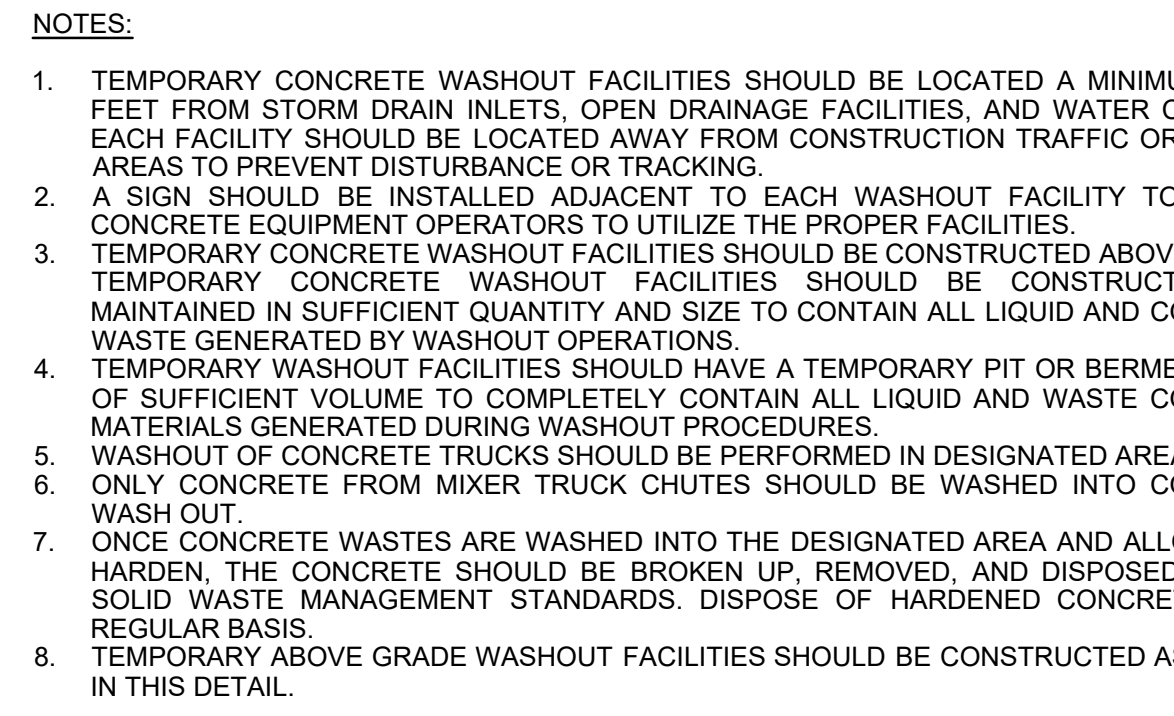
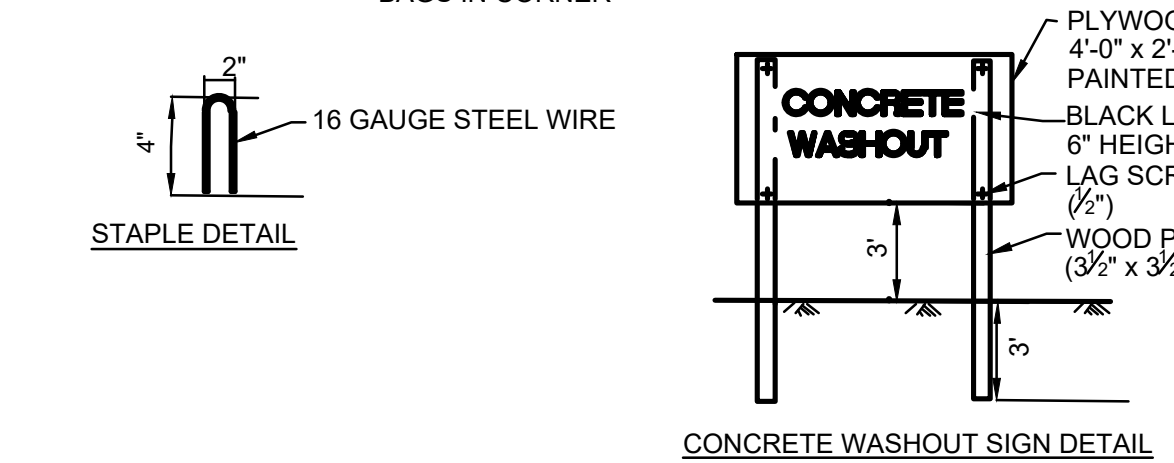
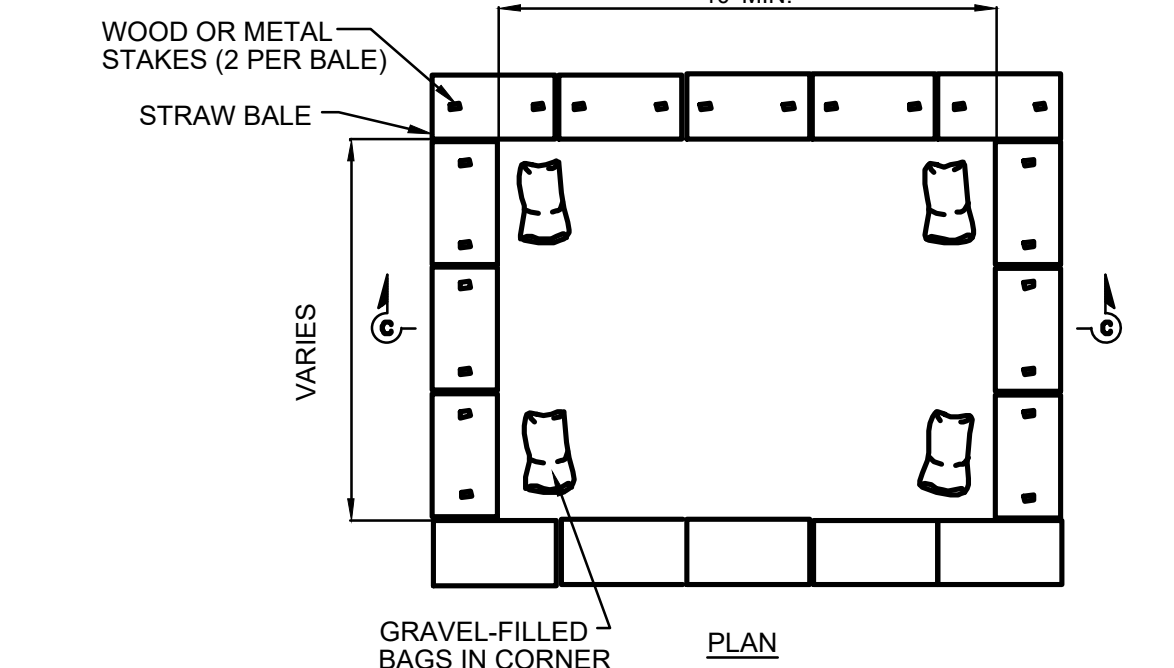
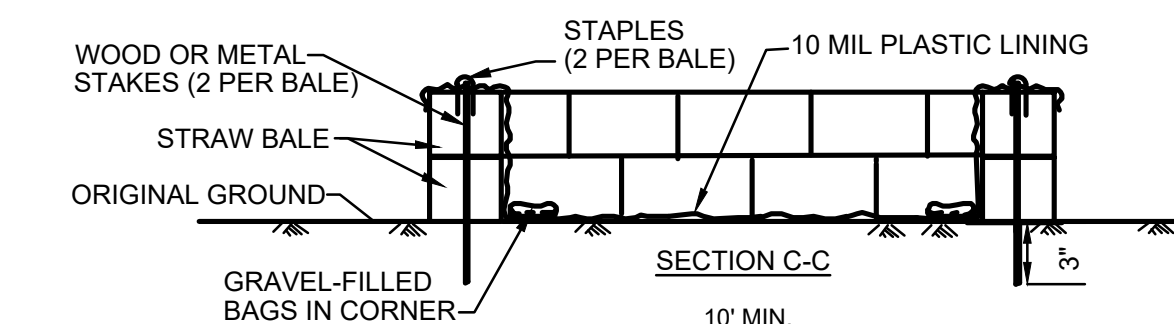
**TEMPORARY SEEDING:**

PER THE OHIO GUIDELINES, TEMPORARY SEEDING SELECTION SHALL BE AS PER THE TABLE BELOW. MULCH AREA WITH STRAW (2 TONS/ACRE OR 90 LB./1,000 FT<sup>2</sup>), HYDROSEEDER WOOD CELLULOSE FIBER (2,000 LB./ACRE OR 46 LB./1,000 FT. WOOD MULCH/CHIPS (10-20 TONS/ACRE) PR MULCH MATTING OR ROLLED EROSION CONTROL PRODUCTS APPLIED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.

SEEDING DATES	SPECIES	LB./1000 FT <sup>2</sup>	LB./ACRE
MARCH 1 TO AUGUST 15	CATS	1	128 (2 BUSHEL)
	TALL FESCUE	1	40
	PRENIAL RYEGRASS	1	40
	TALL FESCUE	1	40
	ANNUAL RYEGRASS	1	40
	PRENIAL RYEGRASS	1.25	55
AUGUST 16 TO NOVEMBER	RYE	3	112 (2 BUSHEL)
	TALL FESCUE	1	40
	ANNUAL RYEGRASS	1	40
	PRENIAL RYEGRASS	1	40
	TALL FESCUE	1	40
	ANNUAL RYEGRASS	1.25	40
NOVEMBER TO FEBRUARY 29	PRENIAL RYEGRASS	0.4	17
	CREEPRING RED FESCUE	0.4	17
	ANNUAL RYEGRASS	0.4	17
	KENTUCKY BLUEGRASS	0.4	17
	WHEAT	3	120 (2 BUSHEL)
	TALL FESCUE	1	40



**G TYPICAL GRASS SWALE DETAIL**  
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**E CONSTRUCTION ENTRANCE DETAIL**  
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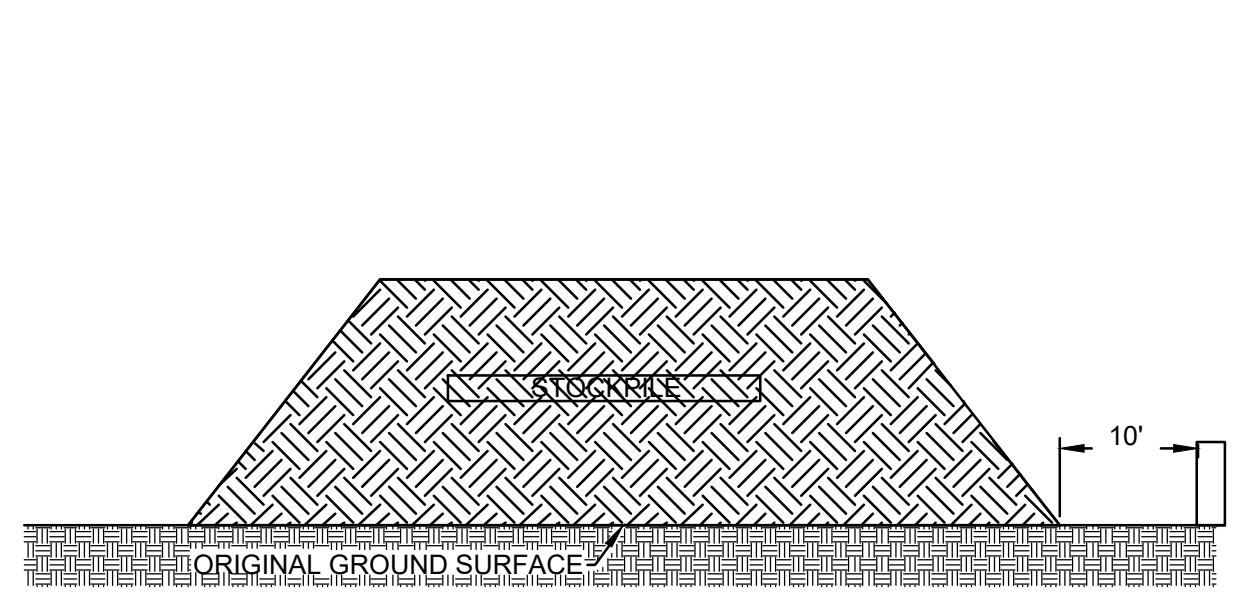
**PERMANENT SEEDING:**

- SUBSOILER, PLOW, OR OTHER IMPLEMENT SHALL BE USED TO REDUCE SOIL COMPACTION AND ALLOW MAXIMUM INFILTRATION.
- SITE SHALL BE GRADED AS NEEDED TO PERMIT THE USE OF CONVENTIONAL EQUIPMENT FOR SEEDBED PREPARATION AND SEEDING.
- TOPSOIL SHALL BE APPLIED WHERE NEEDED TO ESTABLISH VEGETATION.
- SEEDING SHOULD BE DONE MARCH 1 TO MAY 31 OR AUGUST 1 TO SEPTEMBER 30. IF SEEDING OCCURS OUTSIDE OF THESE DATES, ADDITIONAL MULCH AND IRRIGATION MAY BE REQUIRED TO ENSURE A MINIMUM OF 80% GERMINATION.
- TILLAGE FOR SEEDBED PREPARATION SHOULD BE DONE WHEN THE SOIL IS DRY ENOUGH TO CRUMBLE AND NOT FORM RIBBONS WHEN COMPRESSED BY HAND.
- SEEDING SHOULD NOT BE DONE OCTOBER 1 THROUGH NOVEMBER 20. DURING THIS PERIOD, THE SEEDS ARE LIKELY TO GERMINATE BUT PROBABLY NOT SURVIVE THE WINTER.
- FOR WINTER SEEDING METHODS FOR DORMANT SEEDING ARE AS FOLLOWS:
  - FROM OCTOBER 1 THROUGH NOVEMBER 20, PREPARE THE SEEDBED, THEN MULCH AND ANCHOR. AFTER NOVEMBER 20 AND BEFORE MARCH 15, BROADCAST THE SELECTED SEED MIXTURE. INCREASE THE SEEDING RATE BY 50%.
  - FROM NOVEMBER 20 THROUGH MARCH 15, WHEN SOIL CONDITIONS PERMIT, PREPARE THE SEEDBED, APPLY THE SELECTED SEED MIXTURE, MULCH AND ANCHOR. INCREASE THE SEEDING RATE BY 50%.
  - APPLY THE SEED UNIFORMLY WITH CYCLONE SEEDER, DRILL, CULTIPACKER SEEDER, OR HYDRO-SEEDER, ON FIRM MOIST SEEDBED.

**PERMANENT SEEDING MIXTURE:**

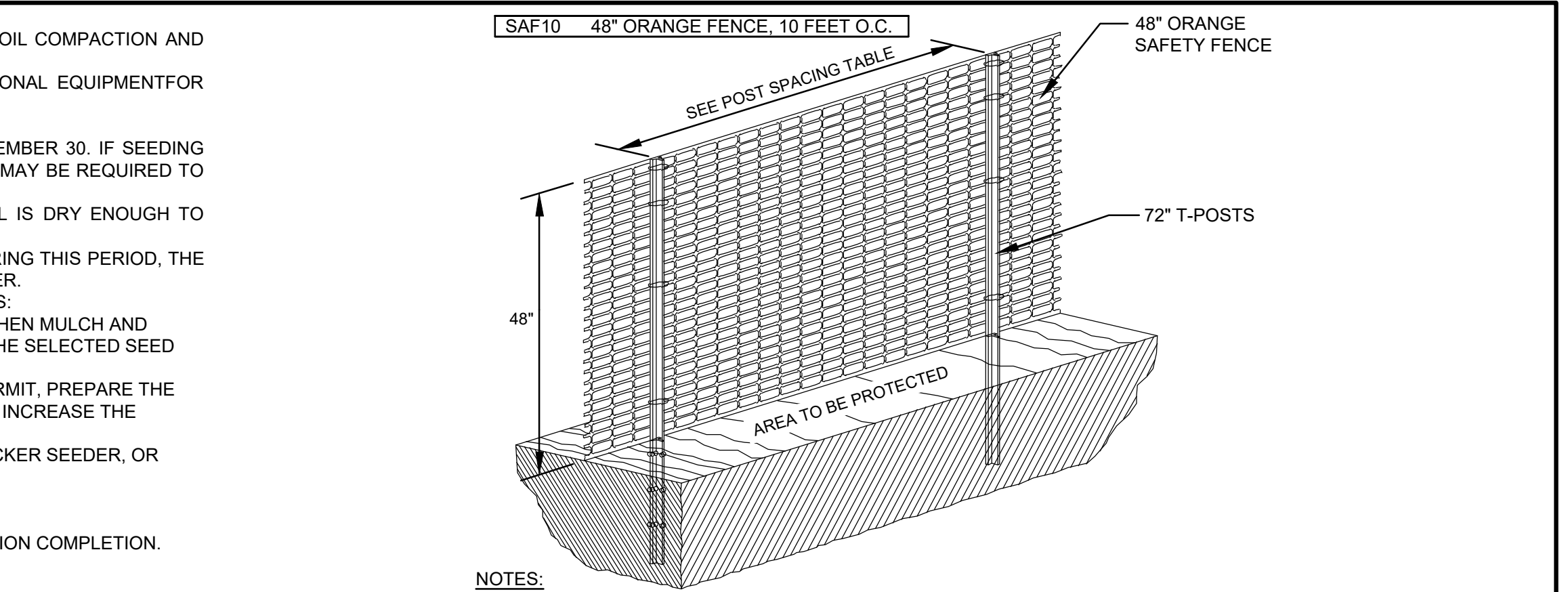
SEEDING TO REDUCE EROSION AND SEDIMENT TRANSPORT AFTER CONSTRUCTION COMPLETION.

- SEED APPLICATION: 260 LBS. PER ACRE MINIMUM.  
ERNST SOLAR FARM SEED MIX:  
35% FESTUCA RUBRA (CREEPING RED FESCUE)  
35% FESTUCA RUBRA SSP. COMMUTATA (CHEWINGS FESCUE)  
10% FESTUCA BREVIPILO, 'BEACON' (HARD FESCUE, 'BEACON')  
10% FESTUCA OVINA VAR. DURIOUSCULA (F. LONGIFOLIA), 'JETTY' (HARD FESCUE, 'JETTY')  
5% POA PRATENSIS, 'CORSAIR' (KENTUCKY BLUEGRASS, 'CORSAIR')  
5% POA PRATENSIS, 'SHAMROCK' (KENTUCKY BLUEGRASS, 'SHAMROCK')



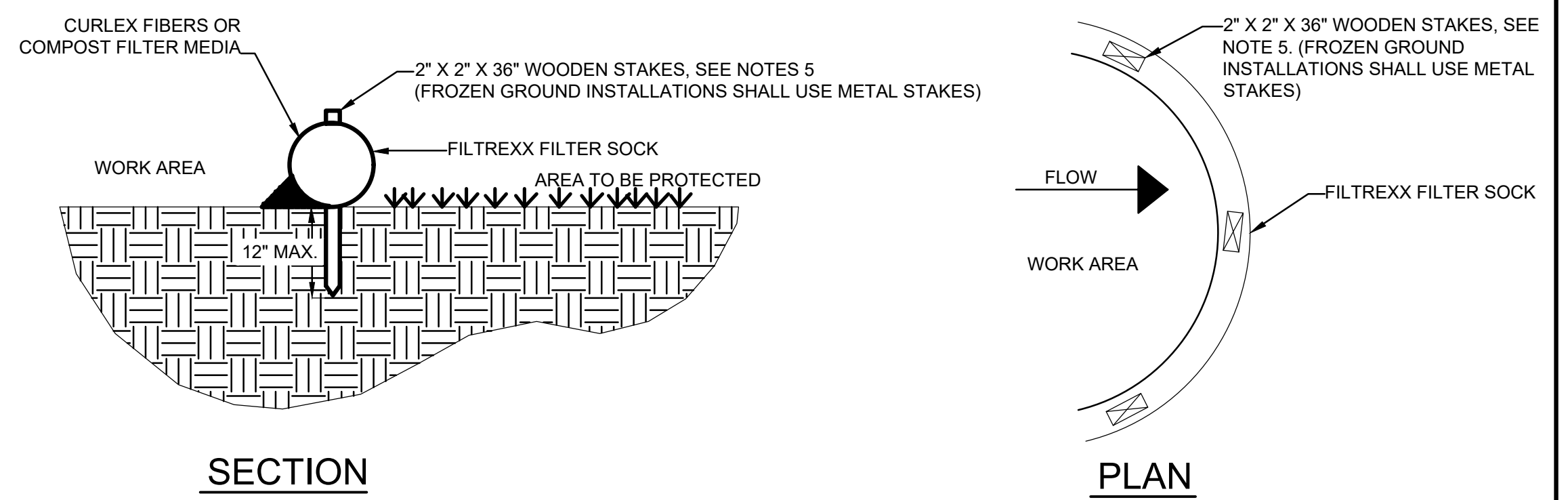
- NOTES:**
- AREA CHOSEN FOR STOCKPILING OPERATIONS SHALL BE DRY AND STABLE. IN NO CASE SHALL MATERIALS BE STOCKPILED WITHIN 25 FEET OF ANY DITCH, STREAM, OR OTHER SURFACE WATER.
  - MAXIMUM SLOPE OF STOCKPILE SHALL BE 1:2.
  - UPON COMPLETION OF SOIL STOCKPILE, EACH PILE SHALL BE SURROUNDED WITH EITHER SILT FENCING OR FILTER SOCK/LOG, THEN IMMEDIATELY STABILIZED WITH VEGETATION OR COVERED. SILT FENCE OR FILTER SOCK/LOG ARE TO REMAIN IN PLACE UNTIL SUCH TIME AS SAID STOCKPILES ARE REMOVED.
  - SILT FENCE OR FILTER SOCK/LOG TO EXTEND AROUND ENTIRE PERIMETER OF STOCKPILE OR TO EXTEND AROUND DOWNSTREAM PORTION IF STOCKPILE IS ON SLOPE.

**A STABILIZED STOCKPILE DETAIL**  
SCALE: N.T.S.



- NOTES:**
- THE LIMITS OF DISTURBANCE ARE TO BE SURVEYED BY A REGISTERED PROFESSIONAL LAND SURVEYOR AS PER THE EROSION SEDIMENT CONTROL PLAN AND MARKED WITH SNOW FENCE PRIOR TO THE START OF CONSTRUCTION.
  - ALL WETLAND AREAS SHALL BE PROTECTED AS PER PLAN.
  - SAFETY FENCE SHOULD BE FASTENED SECURELY TO THE T-POSTS.
  - THE FENCING MUST REMAIN IN PLACE DURING ALL PHASES OF CONSTRUCTION; ANY CHANGE TO THE PROTECTIVE FENCING MUST BE APPROVED BY DESIGN ENGINEER.

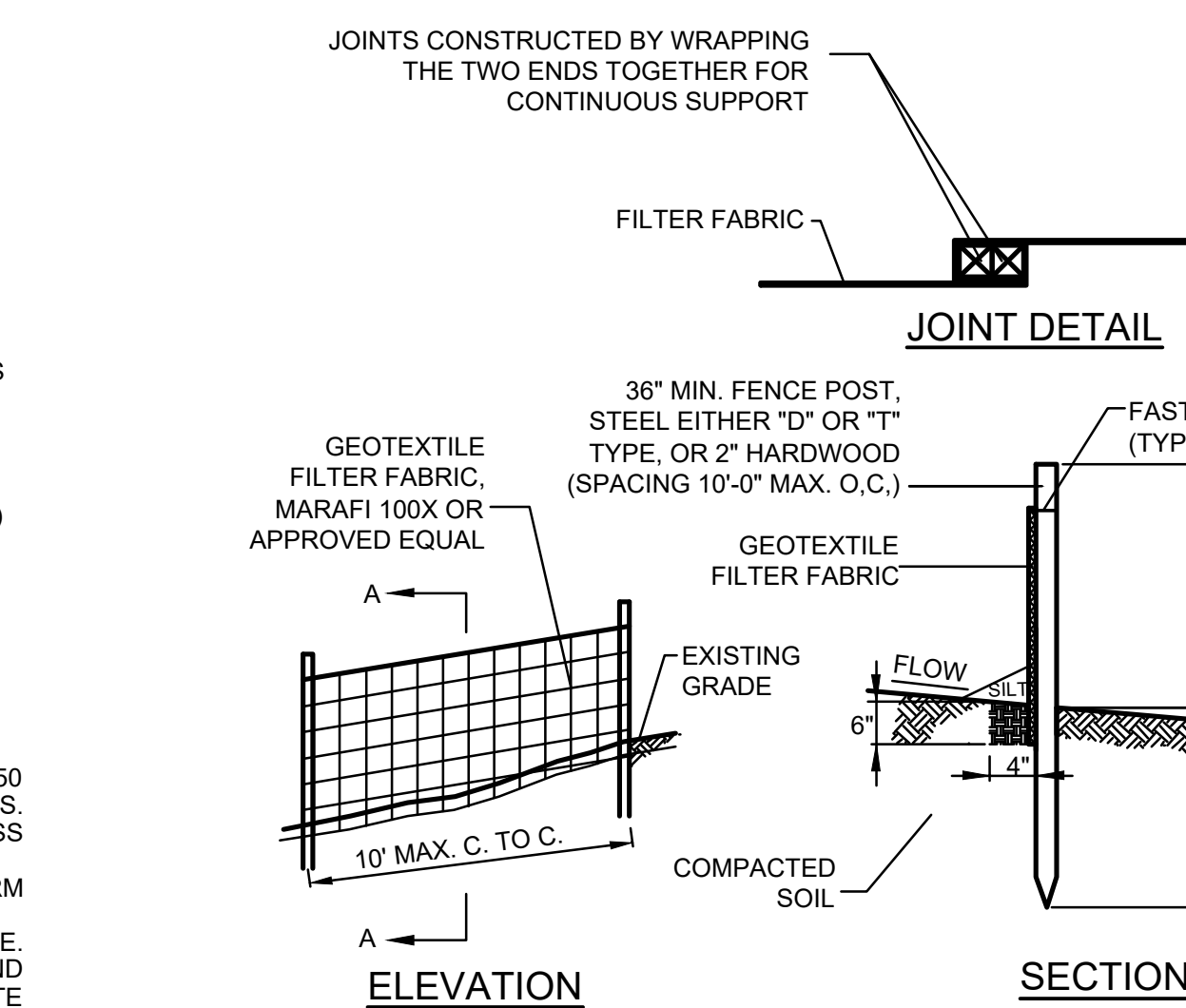
**D SAFETY FENCE DETAIL**  
SCALE: N.T.S.



- INSTALLATION NOTES:**
- FILTER SOCKS ARE APPLICABLE TO SLOPES UP TO 2:1 (H:V), AROUND INLETS, AND IN OTHER DISTURBED AREAS OF CONSTRUCTION SITES REQUIRING SEDIMENT CONTROL.
  - STANDARD SILT FENCE CAN BE REPLACED WITH A 12" DIAMETER FILTER SOCK.
  - COMPOSITE FILTER SOCKS INSTALLED SHALL BE FILTREXX(R) SILT SOCK (TM) OR APPROVED EQUAL.
  - LAND SURFACE SHOULD BE PREPARED BY MOWING GRASS OR MAKING SOIL OR PAVED SURFACES SMOOTH.
  - COMPOSITE FILTER SOCKS SHALL BE PLACED PERPENDICULAR TO STORM WATER FLOW, ACROSS THE SLOPE, SWALE, DITCH OR CHANNEL. COMPOSITE FILTER SOCKS SHALL BE PLACED ON CONTOURS AND WHERE POSSIBLE, 5 FEET OR GREATER FROM THE TOW OF SLOPE.
  - COMPOST/MULCH MATERIAL SHALL BE WEED FREE, REFUSE FREE, CONTAMINANT FREE, AND DERIVED FROM WELL-DECOMPOSED SOURCE OF ORGANIC MATTER. COMPOST SHALL BE PRODUCED USING AN AEROBIC COMPOSTING PROCESS USING CFR 503 REGULATIONS. NON-COMPOSTED PRODUCTS ARE NOT ACCEPTABLE.
  - ON SOIL AND VEGETATED SURFACES, UNDER SHEET FLOW CONDITIONS, COMPOSITE FILTER SOCKS SHALL BE STAKED ON 10-FT CENTERS. UNDER CONCENTRATED FLOW CONDITIONS COMPOSITE FILTER SOCKS SHALL BE STAKED ON 5-FT CENTERS.
  - STAKES SHALL BE DRIVEN THROUGH THE CENTER OF THE COMPOSITE FILTER SOCK AND INSTALLED A MINIMUM OF 8 INCHES AND A MAXIMUM OF 12 INCHES INTO THE EXISTING SOIL, LEAVING A MINIMUM STAKE HEIGHT OF 2 INCHES ABOVE THE COMPOSITE FILTER SOCK.
  - EDGES OF THE COMPOSITE FILTER SOCKS SHALL BE TURNED UPSLOPE TO PREVENT SLOW AROUND THE ENDS OF THE COMPOSITE FILTER SOCKS.

- REMOVAL NOTES:**
- UPON REMOVAL OF THE COMPOSITE FILTER SOCK, THE CONTRACTOR SHALL REMOVE ALL SEDIMENT ACCUMULATION PRIOR TO THE REMOVAL OF THE COMPOSITE FILTER SOCK. THE COMPOSITE FILTER SOCKS SHALL BE REMOVED IN THEIR ENTIRETY.
  - THE DISTURBED AREA SHALL BE SEED, FERTILIZED, AND MULCHED TO ENSURE THE VEGETATIVE COVER IS FULLY RESTORED.
  - MONITOR THE VEGETATIVE RESTORATION AREA UNTIL EXPOSED AREAS ARE FULLY STABILIZED WITH VEGETATIVE COVER.
  - THE COMPOSITE MATERIAL MAY BE SPREAD OVER THE LANDSCAPE OR INCORPORATED INTO THE SOIL AT THE END OF THE PROJECT, THEREBY INCREASING SOIL QUALITY AND REDUCING WASTE.
  - THE SOCK MESH SHALL BE PROPERLY DISPOSED.

**C COMPOSITE FILTER SOCK DETAIL**  
SCALE: N.T.S.



- NOTES:**
- SILT FENCE SHALL BE INSTALLED PRIOR TO COMMENCEMENT OF CONSTRUCTION.
  - SILT FENCE SHALL BE PLACED ON THE DOWN SLOPE SIDE OF EXCAVATED AREAS AND AROUND SOIL STOCKPILES. SILT FENCE SHALL ALSO BE PLACED AROUND THE BOUNDARY OF WETLANDS ADJACENT TO THE WORK AREA AND AT THE EDGE OF THE WETLANDS AFTER CONSTRUCTION IS COMPLETE. WITHIN RESIDENTIAL AREAS THE SILT FENCE SHALL BE INSTALLED ALONG THE PERIMETER OF THE ENTIRE WORK AREA.
  - MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP.
  - SILT FENCE MUST BE REPAIRED OR REPLACED WHEN THE ENDS ARE FRAYED OR WORN, AND THE FENCE IS NOT ANCHORED 6" INTO THE GROUND. WHEN ACCUMULATED SEDIMENT REACHES ONE-HALF THE HEIGHT OF THE SILT FENCE, THE SEDIMENT SHALL BE REMOVED AND DISPOSED OF IN AN APPROPRIATE UPLAND AREA.

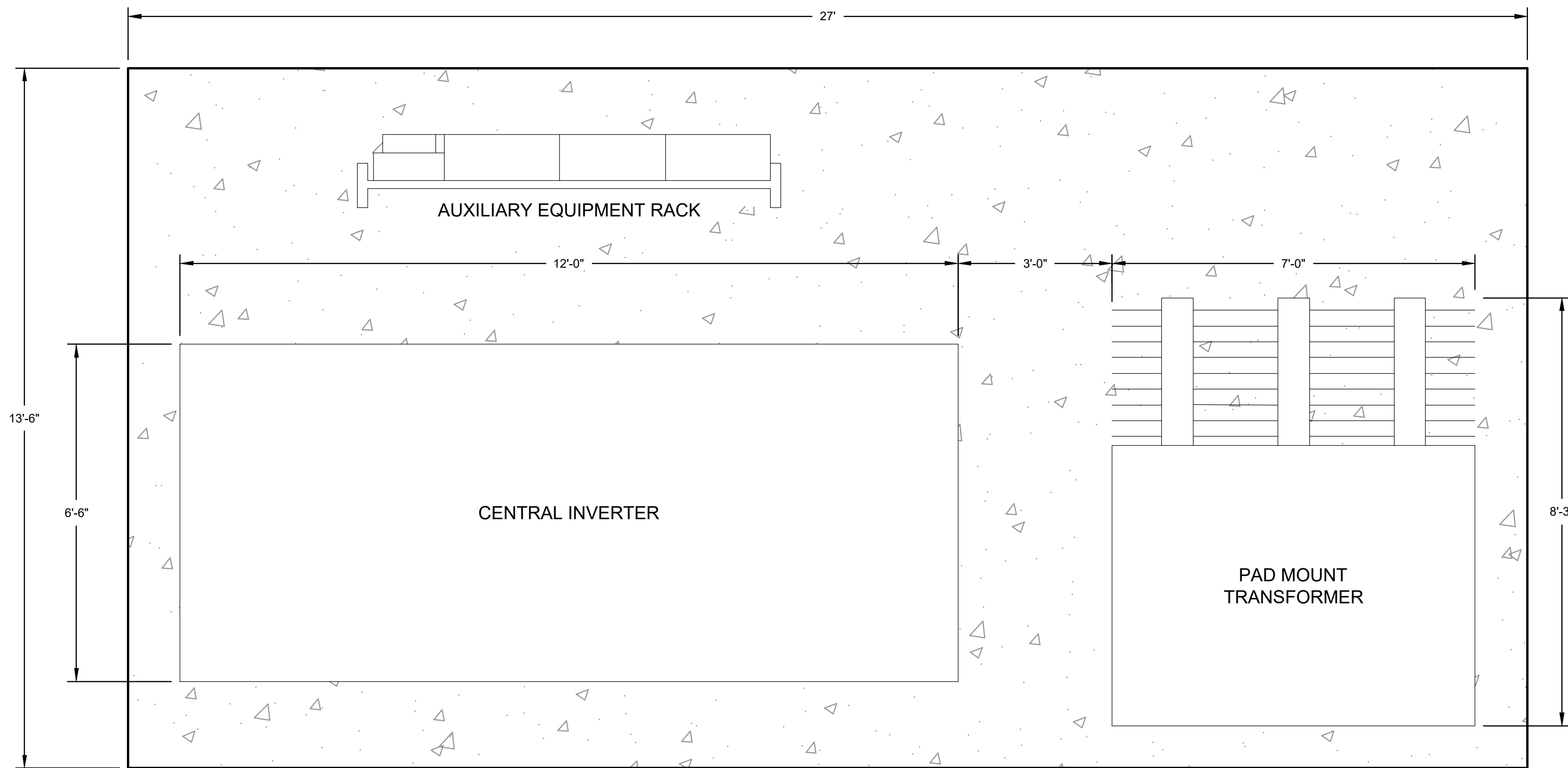
**F SILT FENCE DETAIL**  
SCALE: N.T.S.

REV. No.	ZONE	DATE	BY
<b>NOTTINGHAM SOLAR</b>			
ATHENS TOWNSHIP		HARRISON COUNTY, OH	
<b>CIVIL DETAILS SHEET 1</b>			
<b>BQ ENERGY DEVELOPMENT, LLC.</b>			
PROJECT DEVELOPER: 400 Market Street Industrial Park, Suite 32 Wappingers Falls, NY 12590			
<b>CRAWFORD &amp; ASSOCIATES</b>			
ENGINEERING, P.C. 4411 Route 9, Suite 200, Hudson New York 12534 tel: (518) 828-2700 www.crawfordandassociates.com fax: (518) 828-2723			
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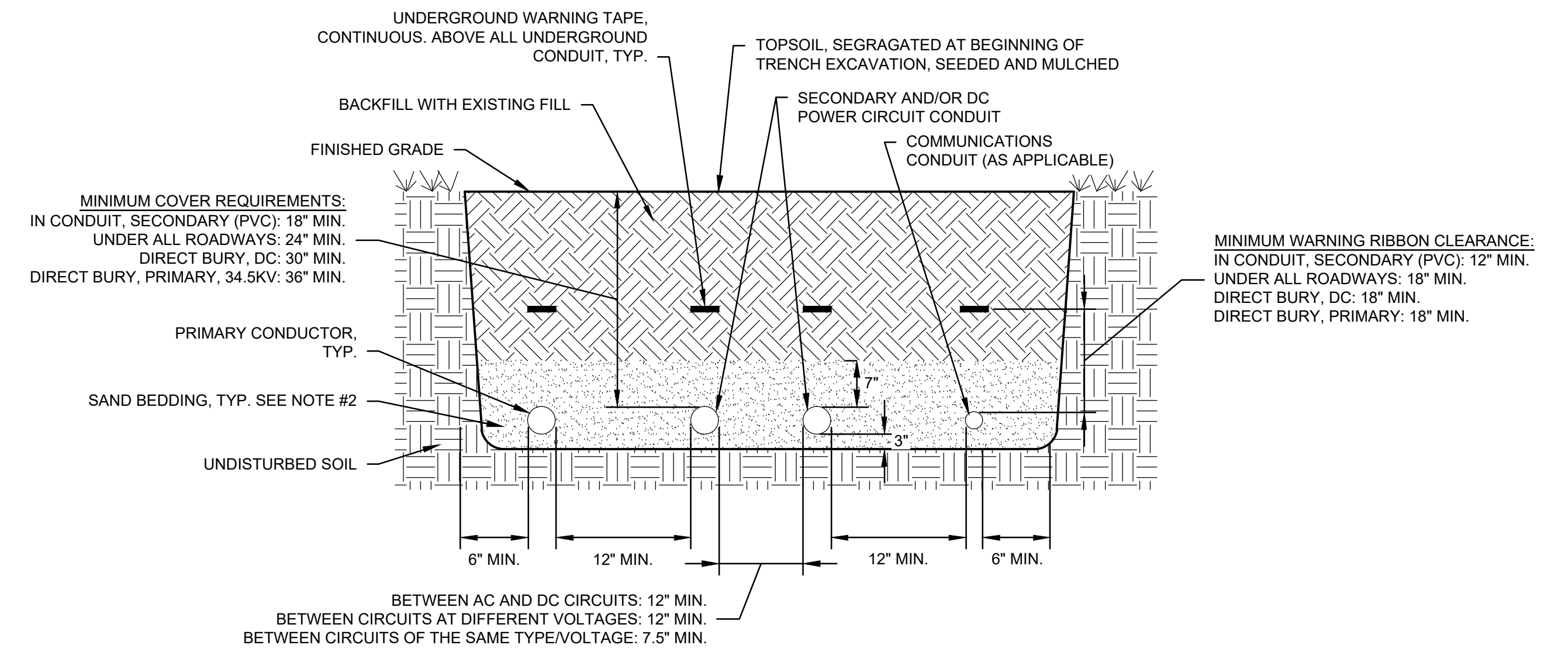
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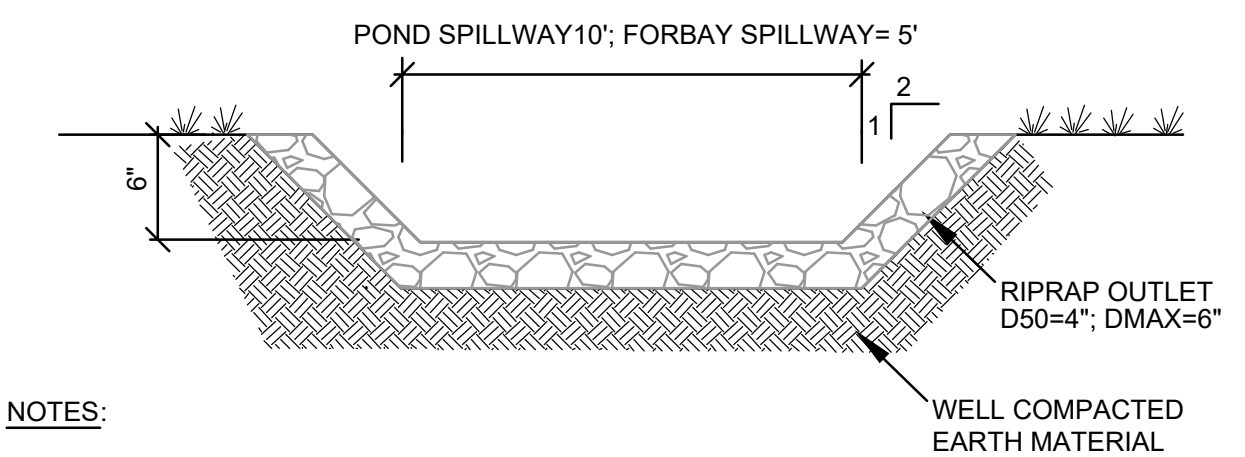
**A TYPICAL EQUIPMENT PAD PLAN VIEW**  
SCALE: N.T.S.



**C CONDUIT TRENCH DETAIL, TYP.**  
SCALE: N.T.S.

**TRENCHING NOTES:**

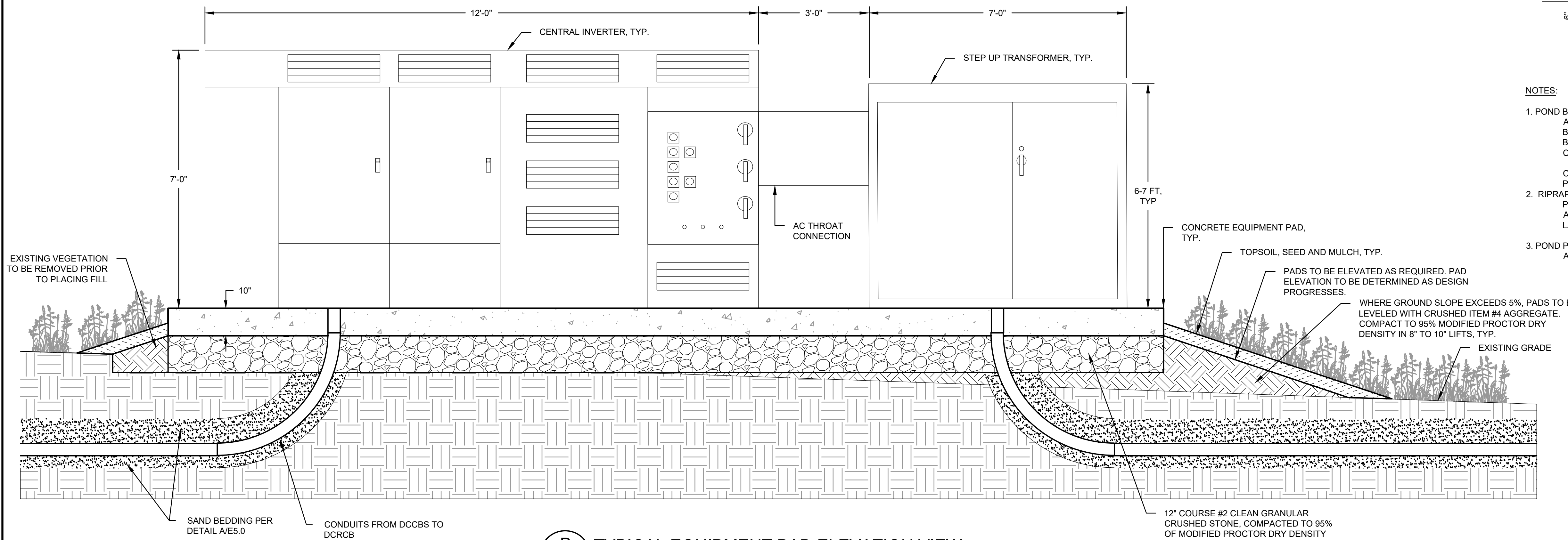
1. VEHICLE ACTIVITY AND SURFACE LOADING OVER THE BURIED CONDUIT OR CONDUCTORS SHALL NOT EXCEED THE RATED CRUSH TEST CAPACITY.
2. EXISTING TOPSOIL TO BE STRIPPED FROM TRENCH AREA AND SEGREGATED ADJACENT TO THE PROPOSED TRENCH LOCATION. TOPSOIL TO BE REPLACED AFTER TRENCH HAS BEEN BACKFILLED. DISTURBED TOPSOIL TO BE SEEDED AND MULCHED PER SWPPP GUIDELINES.
3. BACKFILL MATERIAL SHALL BE SPOILS FROM EXCAVATION COMPACTED. NATIVE BACKFILL MATERIAL ONLY ACCEPTABLE IF IT CAN PASS THROUGH A 6" SCREEN. SAND BEDDING SHALL BE USED AROUND CONDUCTORS FOR PADDING, TYP.
4. NATIVE MATERIAL REMOVED FROM TRENCH TO ALLOW FOR PLACEMENT OF SAND BEDDING TO BE GRADED ACROSS UPLAND AREAS OF THE PROJECT SITE, AND RE-VEGETATED PER SWPPP GUIDELINES.
5. THE NUMBER OF CONDUITS/CIRCUITS SHOWN IS REPRESENTATIVE AND WILL VARY PER THE PLANS AND SCHEDULES.
6. 12" MIN. CLEARANCE SHALL BE MAINTAINED BETWEEN POWER AND DATA WIRING.
7. EDGE OF TRENCH SHALL BE A MIN. OF 3' CLEAR FROM THE EDGE OF EQUIPMENT PAD UNLESS APPROVED BY E.O.R.
8. ALL CONDUIT INSTALLATION TO CONFORM TO NEC TABLE 300.5.



**NOTES:**

1. POND BERM CONSTRUCTION
  - A) EARTHEN FILL MATERIAL TO CONSIST OF INSITU SOIL WITH NO COBBLES OR BOULDERS GREATER THAN 4 INCHES.
  - B) COMPACTION IN LIFTS NO GREATER THAN 6 INCHES. EACH LIFT SHALL BE COMPACTED TO 95% OR GREATER STANDARD PROCTOR DENSITY BEFORE THE NEXT LIFT IS PLACED.
  - C) COMPACTION SHALL BE COMPLETED USING A VIBRATING COMPACTOR OR PNEUMATIC ROLLER.
2. RIPRAP SHALL BE COMPOSED OF A WELL-GRADED MIXTURE OF STONE SIZE SO THAT 50 PERCENT OF THE PIECES, BY WEIGHT, SHALL BE LARGER THAN THE D50 SIZE.
  - A) A WELL-GRADED MIXTURE IS DEFINED AS A MIXTURE COMPOSED PRIMARILY OF LARGER STONESIZES, BUT WITH A SUFFICIENT MIXTURE OF OTHER SIZES TO FILL THE SMALLER VOIDS BETWEEN THE STONES.
3. POND PLANTINGS
  - A) NEW ENGLAND WETMIX (WETLAND SEED MIX-18 LBS/ACRE).

**D TYPICAL FORBAY AND POND OUTLET DETAIL**  
SCALE: N.T.S.



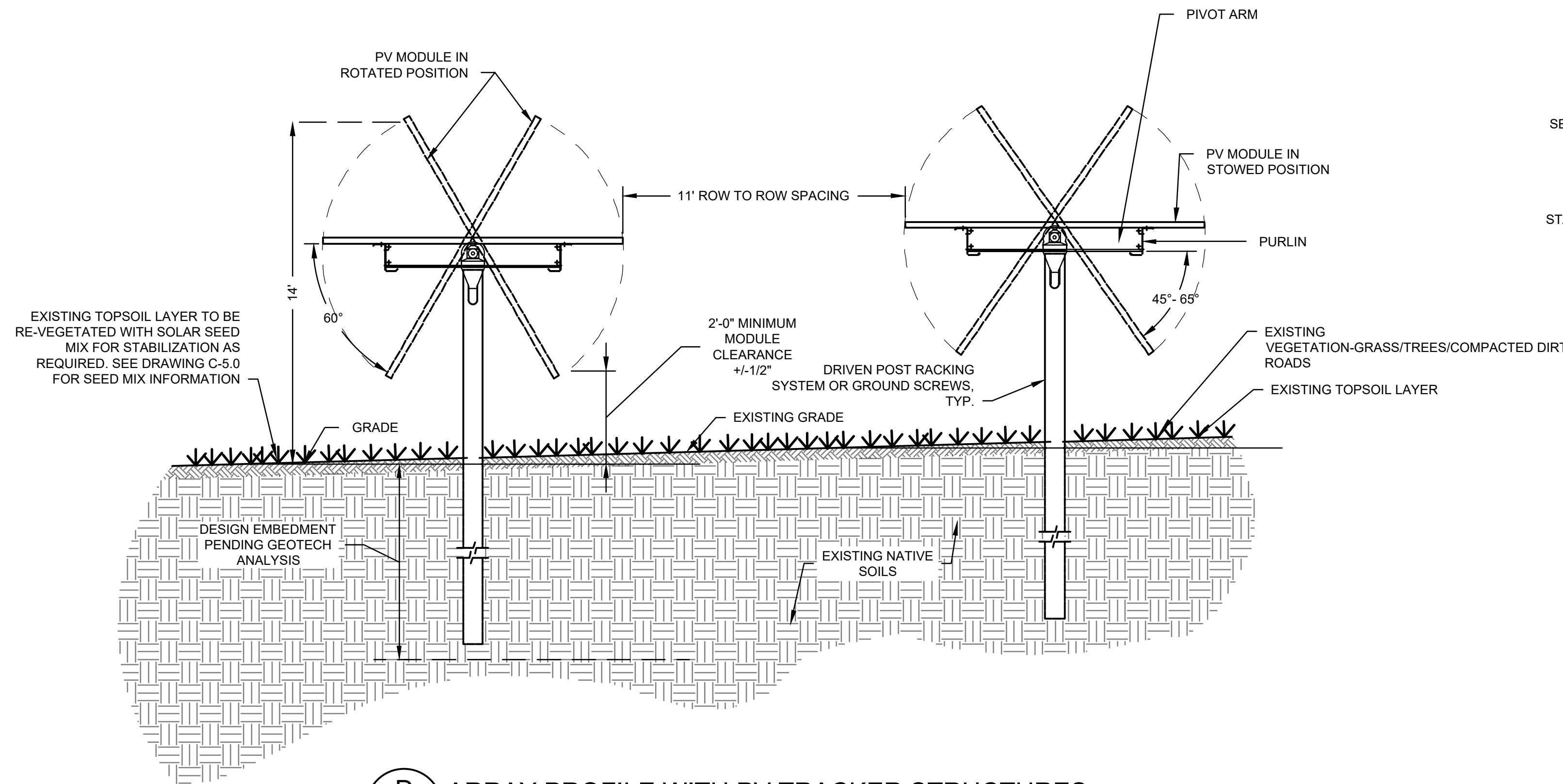
**B TYPICAL EQUIPMENT PAD ELEVATION VIEW**  
SCALE: N.T.S.

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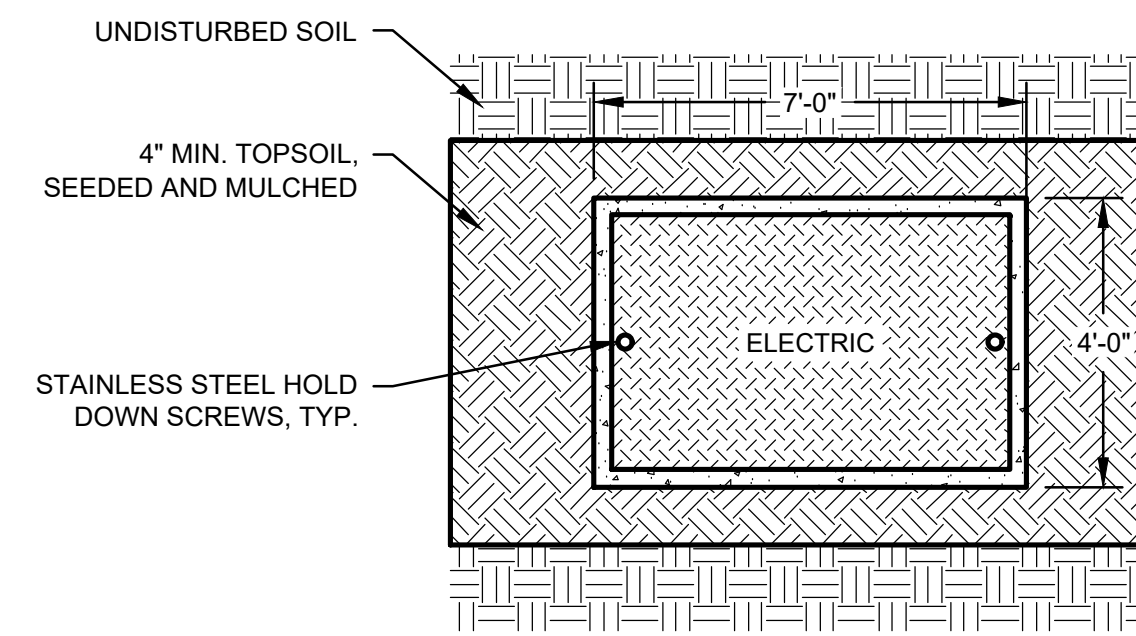
REV. No.	ZONE	DATE	BY
<b>NOTTINGHAM SOLAR</b>			
ATHENS TOWNSHIP		HARRISON COUNTY, OH	
<b>CIVIL DETAILS SHEET 2</b>			
<b>BQ ENERGY DEVELOPMENT, LLC.</b>			
PROJECT DEVELOPER 400 Market Street Industrial Park, Suite 32 Wappingers Falls, NY 12590			
<b>CRAWFORD &amp; ASSOCIATES</b>			
ENGINEERING, P.C. 4411 Route 9, Suite 200, Hudson New York 12534 tel: (518) 828-2700 www.crawfordandassociates.com fax: (518) 828-2723			
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07/19/2021	DESIGNED BY: JSC		
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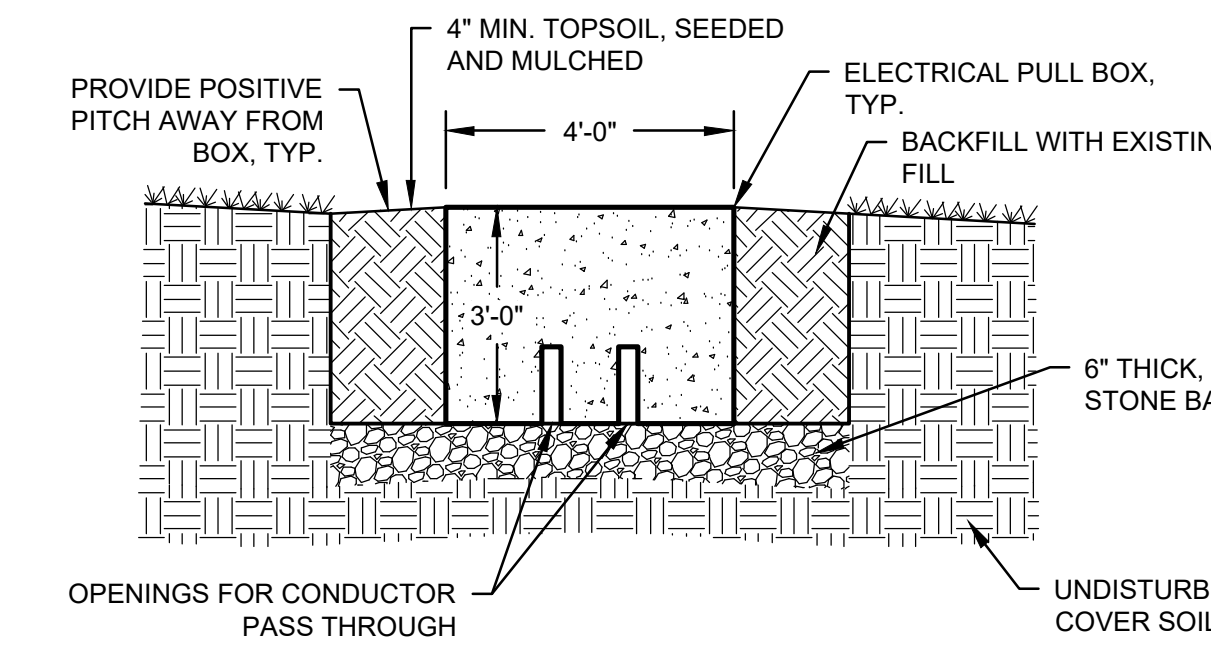




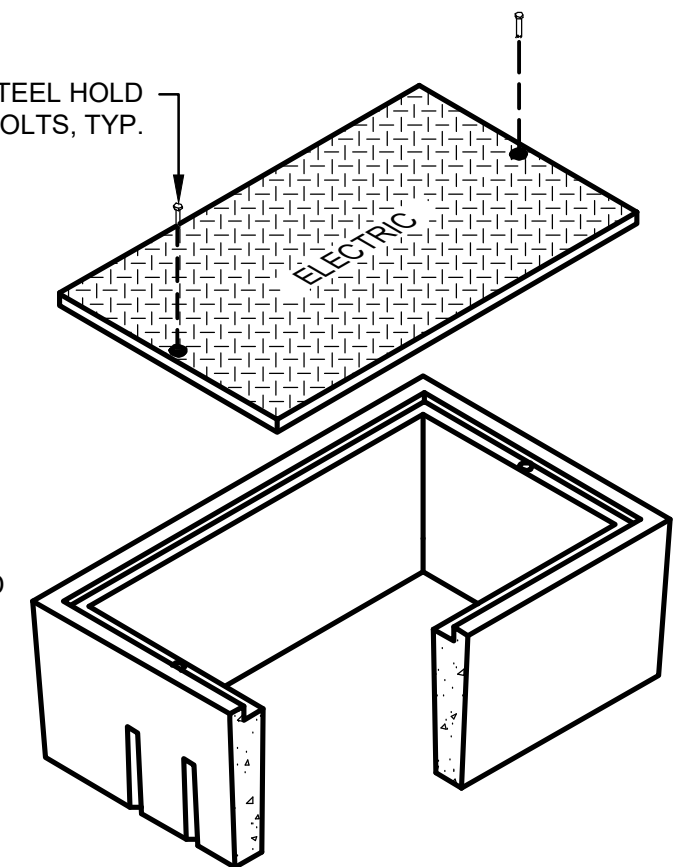
**D** ARRAY PROFILE WITH PV TRACKER STRUCTURES  
C5.2 SCALE: N.T.S.



PLAN VIEW



ELEVATION VIEW

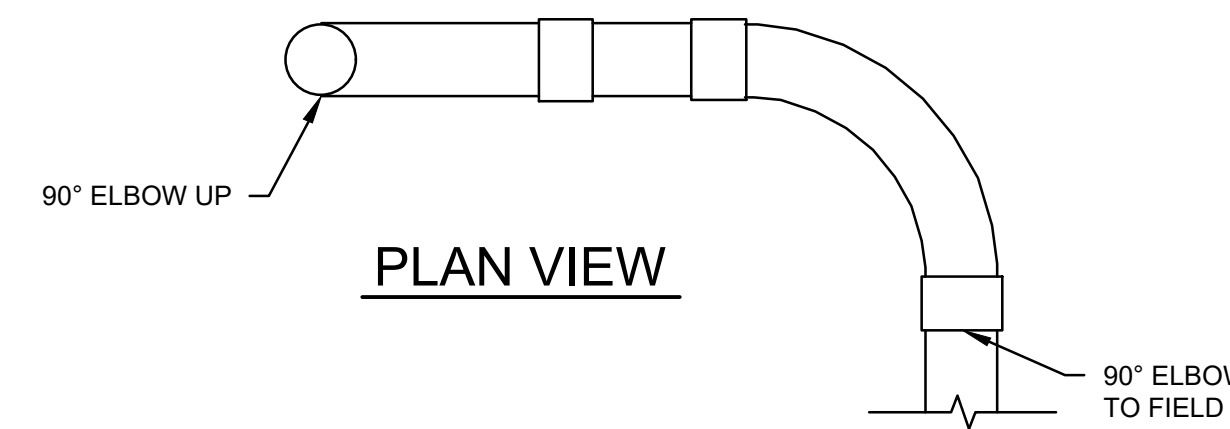


ISOMETRIC VIEW

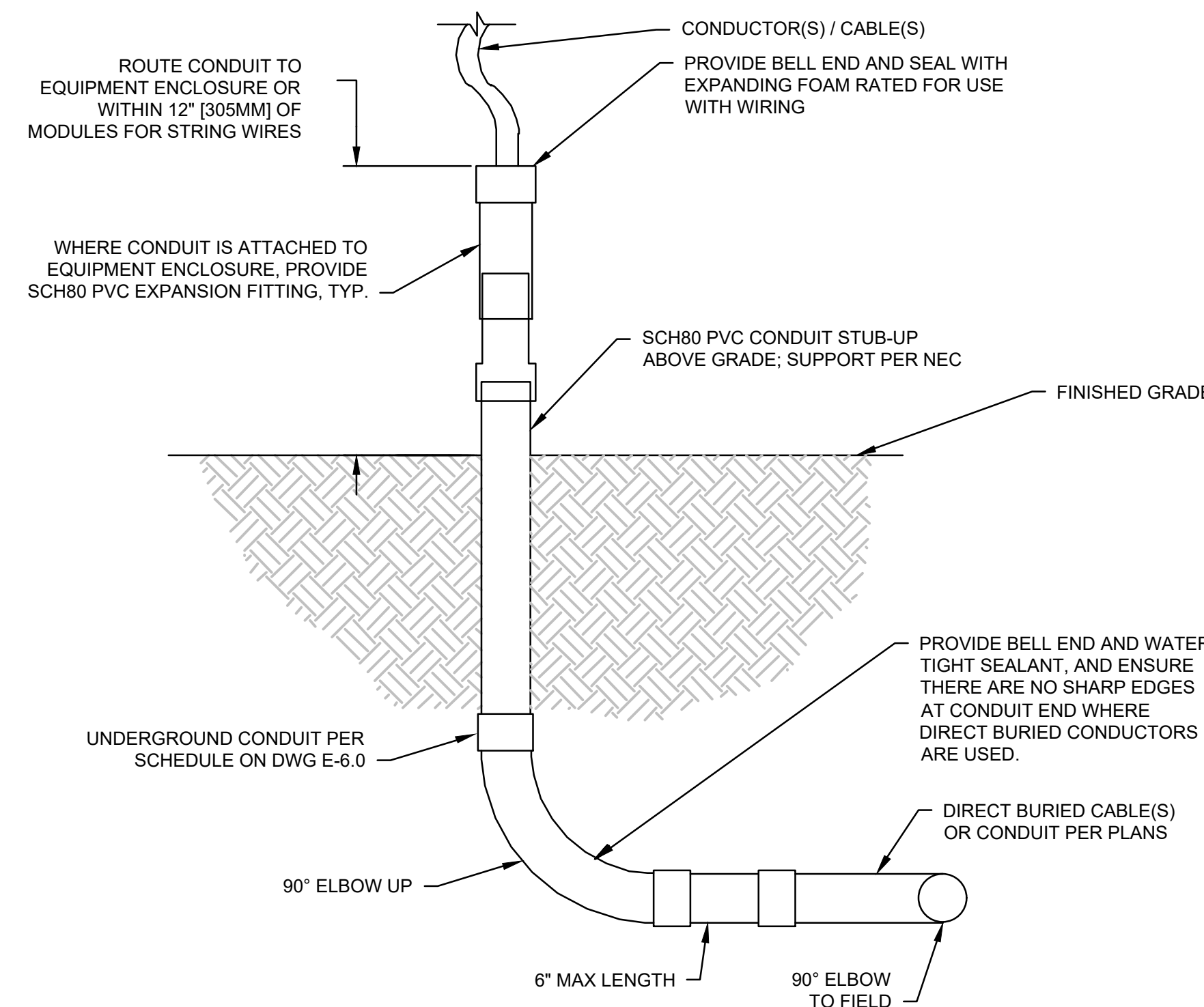
**E** MV PULL BOX DETAIL, TYP.  
C5.2 SCALE: N.T.S.

PULL BOX NOTES:

1. DIMENSIONS SHOWN ARE TYPICAL. FINAL DIMENSIONS TO BE DETERMINED IN DETAILED DESIGN OF PROJECT.
2. COVER TO REQUIRE TOOLS TO REMOVE, OR MINIMUM WEIGHT OF 100 LBS.

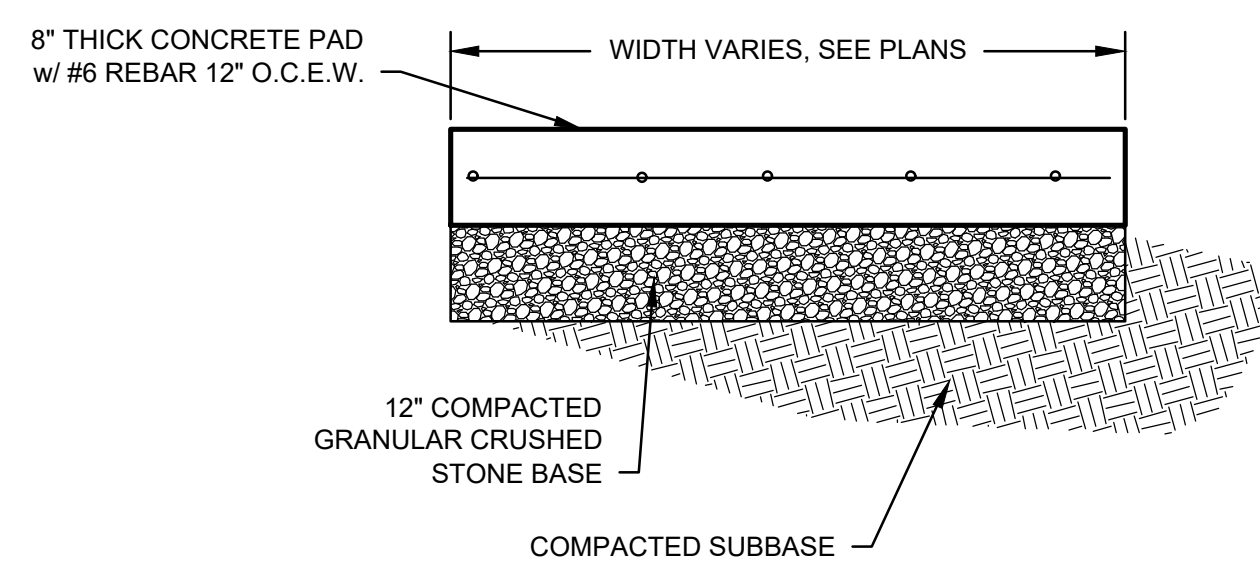


PLAN VIEW

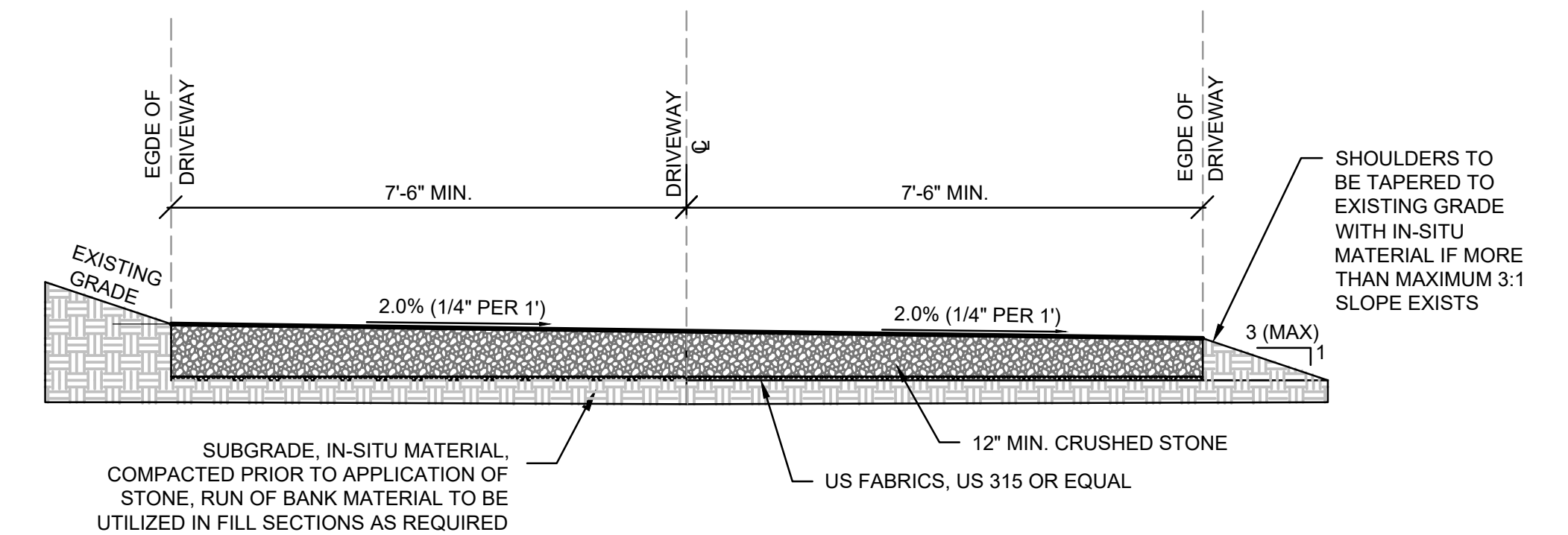


SECTION VIEW

**A** TYPICAL CONDUIT STUB-UP AND TRANSITION BELOW GRADE  
C5.2 SCALE: N.T.S.



**B** CONCRETE PAD DETAIL  
C5.2 SCALE: N.T.S.



NOTES:

1. IN-SITU SOIL WITHIN LIMITS OF ACCESS DRIVE SHALL BE REMOVED UNTIL A SOLID SUB-BASE HAS BEEN REACHED.
2. A GEO-TEXTILE FABRIC SHALL BE INSTALLED ON TOP OF THE SOLID SUB-BASE BEFORE THE STONE BASE IS INSTALLED.
3. THE ACCESS DRIVE SHALL BE A MINIMUM OF 12 INCHES IN DEPTH OF CRUSHED STONE. THE TOP 6 INCHES SHALL BE NO LARGER THAN 2 INCH RUN OF CRUSHER.
4. COMPACTION OF STONE SHALL BE NOT LESS THAN 95% STANDARD PROCTOR MAXIMUM DRY DENSITY, COMPACTED IN 1 FOOT LIFTS.

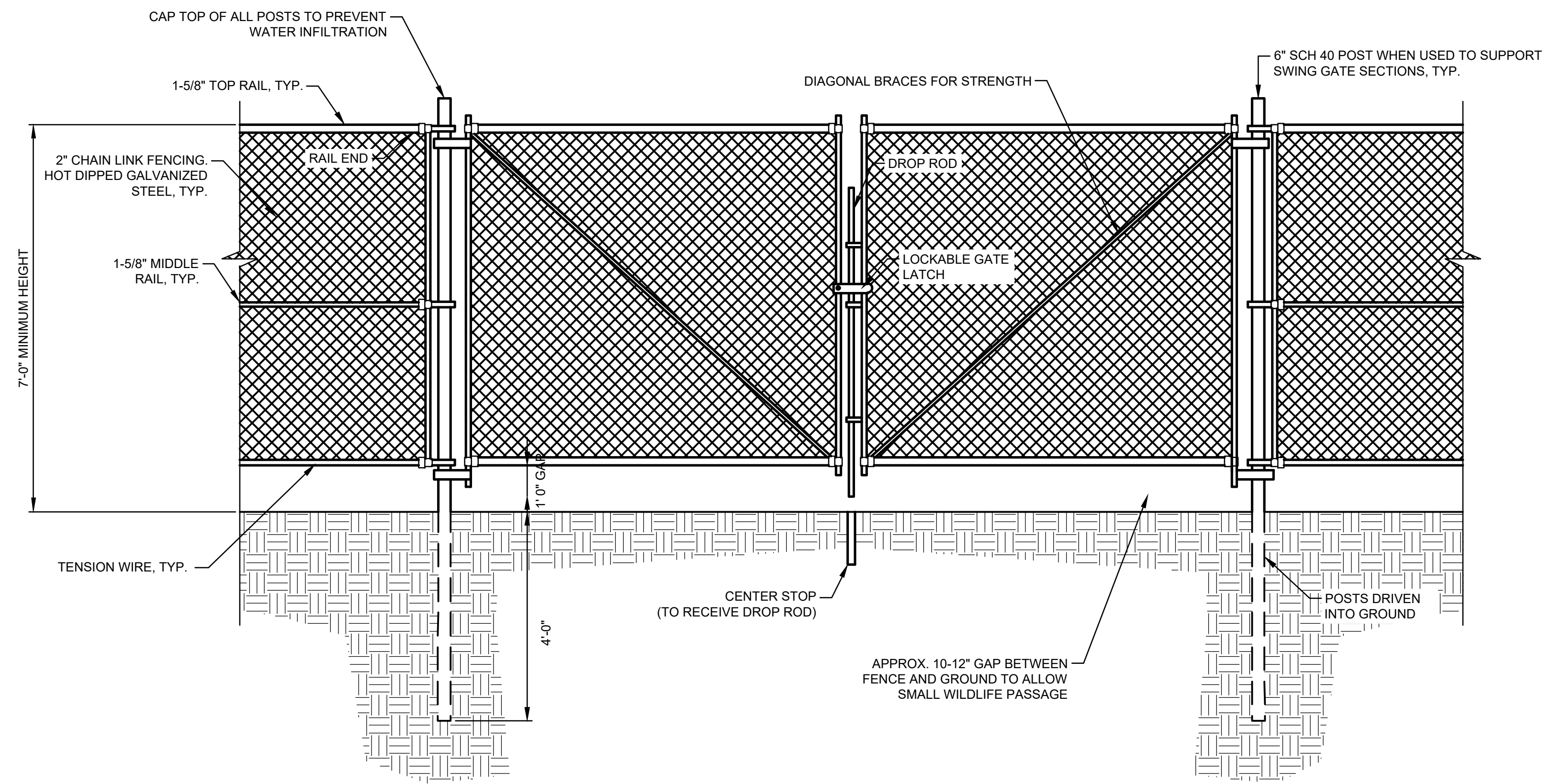
**C** ACCESS DRIVE DETAIL  
C5.2 SCALE: N.T.S.

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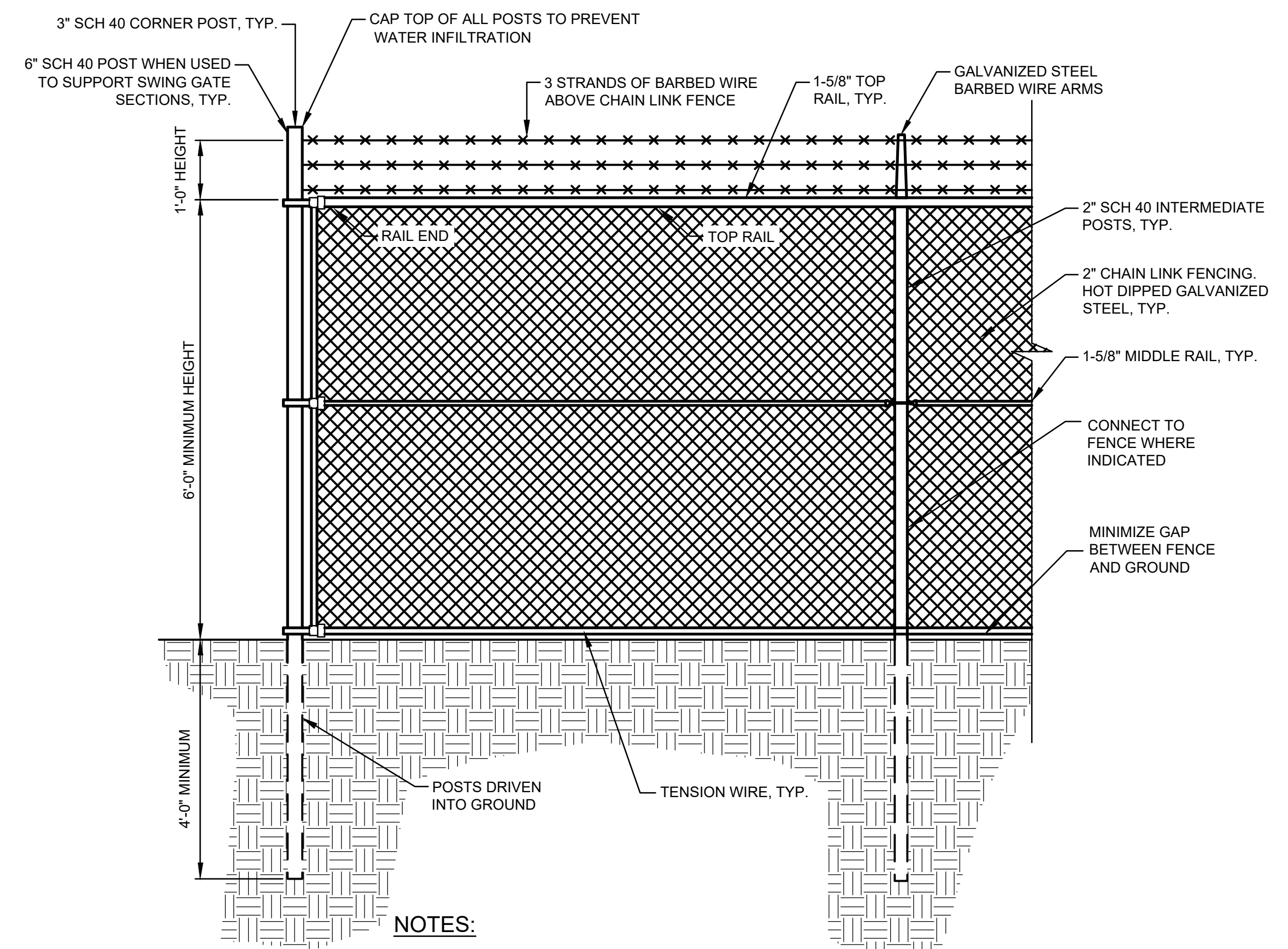
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<b>NOTTINGHAM SOLAR</b>			
ATHENS TOWNSHIP		HARRISON COUNTY, OH	
<b>CIVIL DETAILS SHEET 3</b>			
<b>BQ ENERGY DEVELOPMENT, LLC.</b>			
PROJECT DEVELOPER 400 Market Street Industrial Park, Suite 32 Wappingers Falls, NY 12590			
<b>CRAWFORD &amp; ASSOCIATES</b> ENGINEERING, P.C.			
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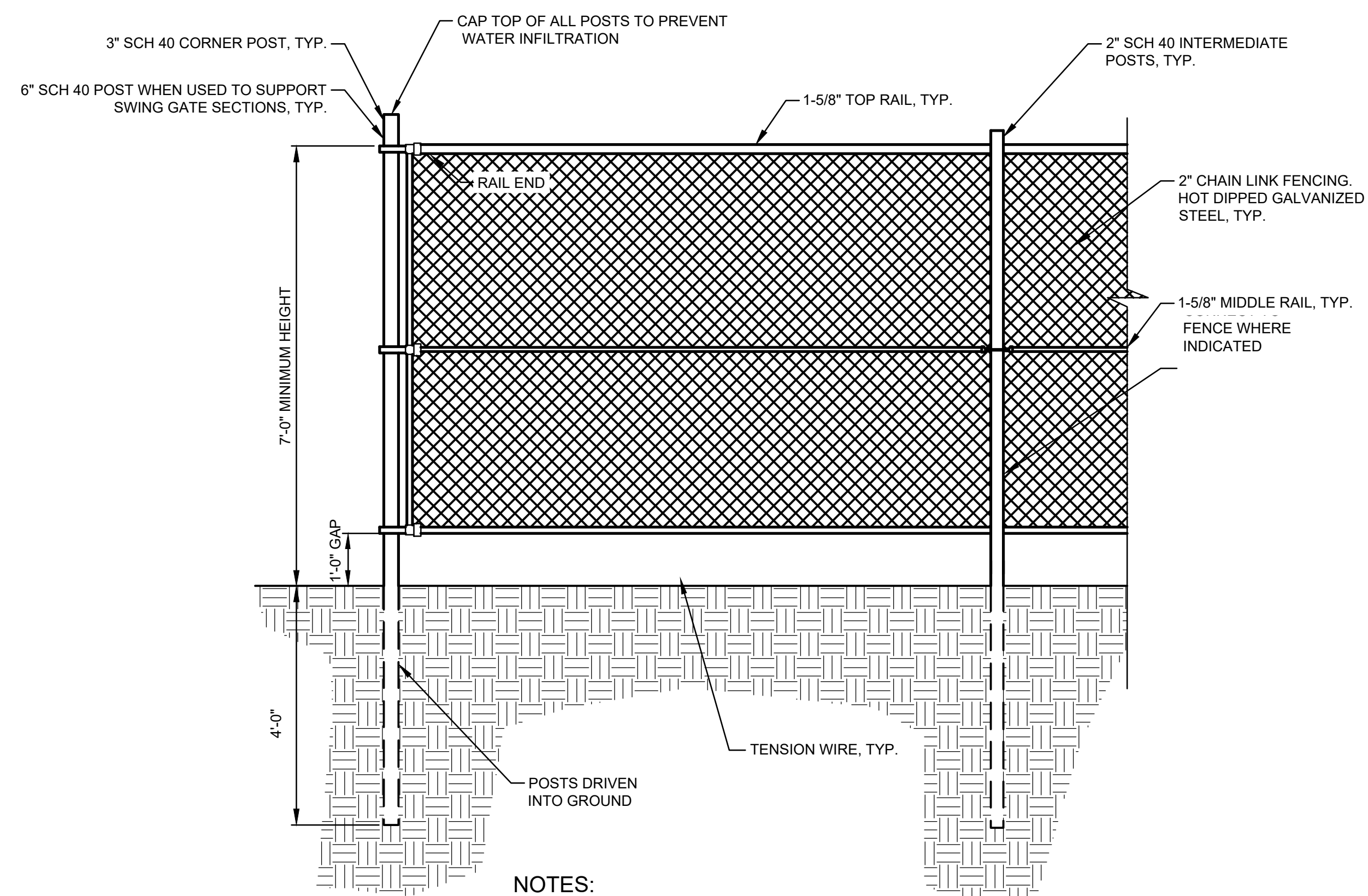


**A** DOUBLE SWING GATE WITH DRIVEN POSTS  
C5.3 N.T.S.



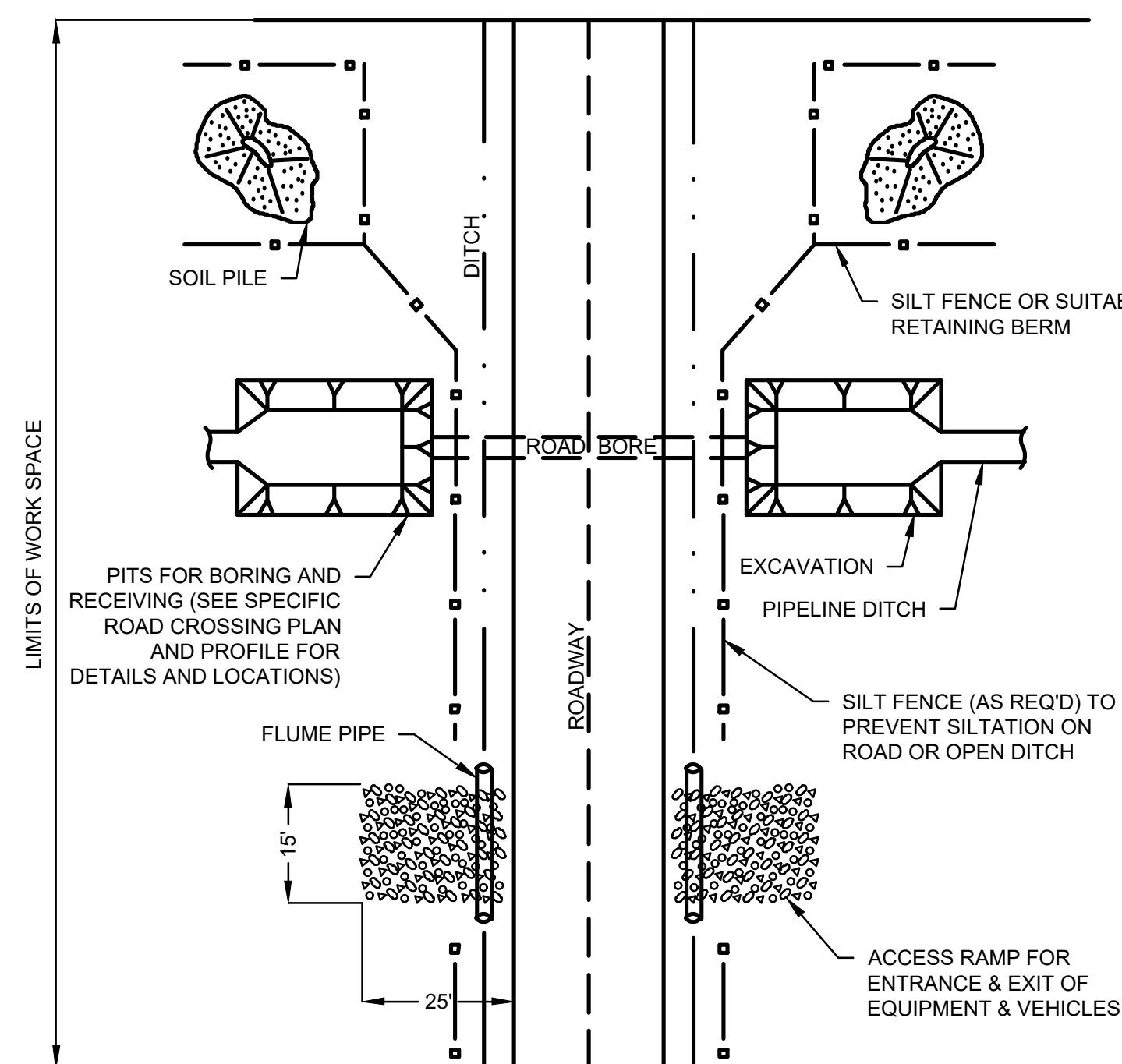
**B** CHAIN LINK FENCE WITH BARBED WIRE DETAIL  
C5.3 N.T.S.

- NOTES:**
1. FOR FENCES 5'-0" AND TALLER, A HORIZONTAL OR DIAGONAL BRACE SHOULD BE USED FOR GREATER STABILITY.
  2. POST SPACING SHOULD BE EQUIDISTANT AND SHOULD NOT EXCEED 10'-0" O.C.
  3. BARBED WIRE IS TO ONLY BE INSTALLED AT COLLECTION SUBSTATION, SEE DETAIL C/C-5.3 FOR GATE DESIGN DETAIL AROUND SOLAR ARRAY.

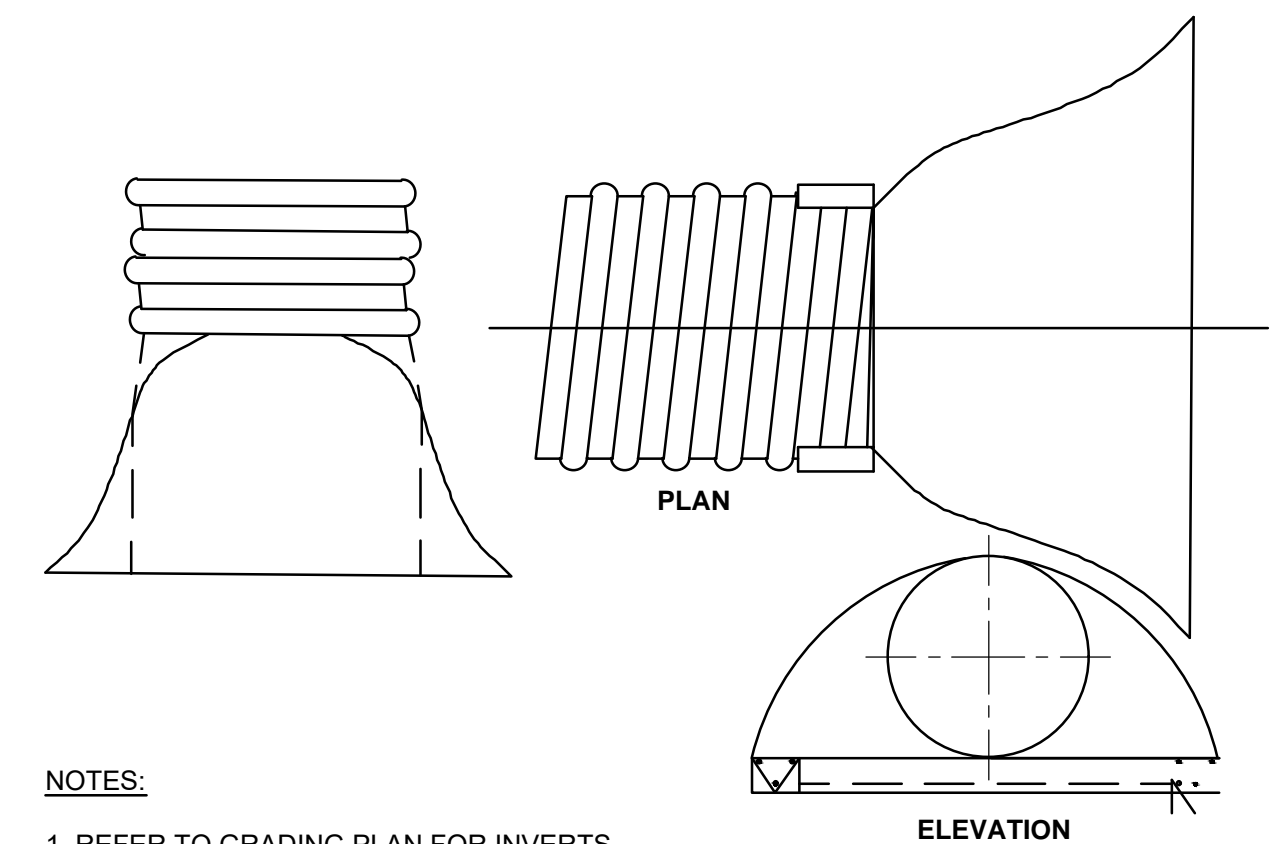


**C** WILDLIFE FRIENDLY CHAIN LINK FENCE DETAIL  
C5.3 N.T.S.

- NOTES:**
1. FOR USE AROUND SOLAR ARRAY, SEE DETAIL B/C-5.3 FOR FENCE DETAIL AROUND THE COLLECTION.



**E** TYPICAL BORED CROSSINGS DETAIL  
C5.3 N.T.S.



- NOTES:**
1. REFER TO GRADING PLAN FOR INVERTS.
  2. CULVERT SHALL BE N-12 HDPE SMOOTH BORE, UNLESS OTHERWISE STATED; DIMENSIONS TO VARY.
  3. A TOE PLATE EXTENSION SHALL BE SUPPLIED. THE TOE PLATE SHALL BE THE SAME BASE METAL AS THE END SECTION AND SHALL BE FASTENED TO THE END SECTION WITH 3/8" DIAMETER BOLTS.

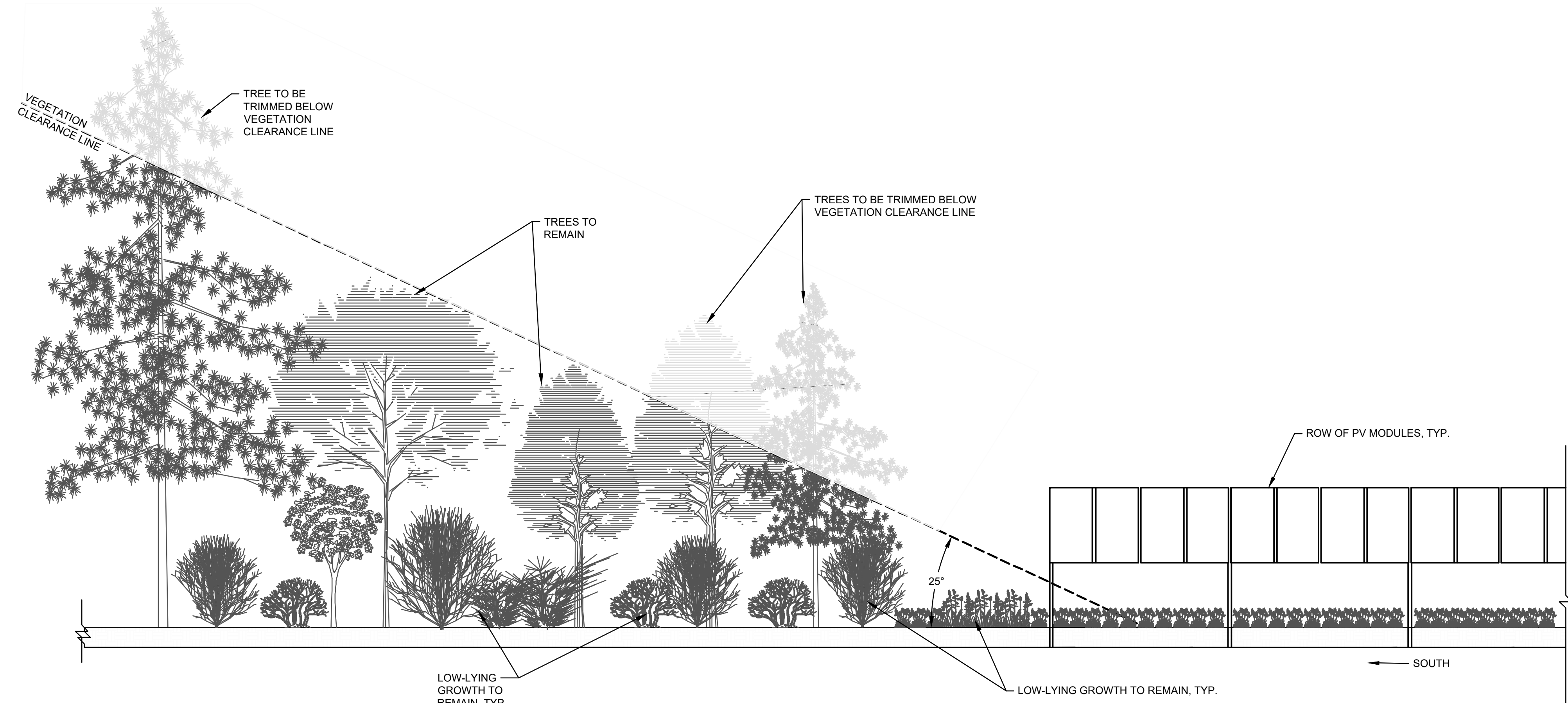
**D** TYPICAL CULVERT DETAIL  
C5.3 SCALE: N.T.S.

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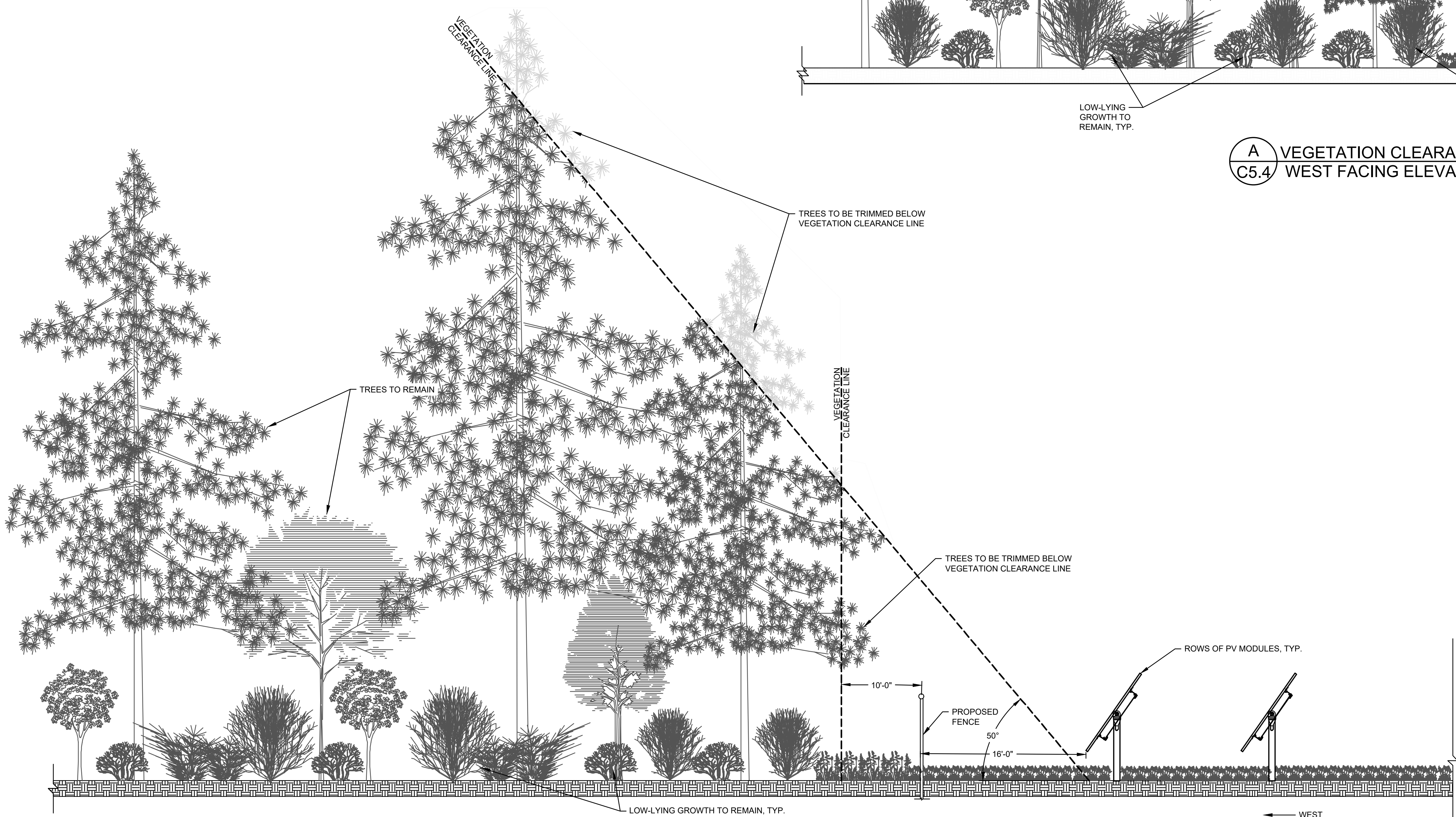
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<b>NOTTINGHAM SOLAR</b>			
ATHENS TOWNSHIP		HARRISON COUNTY, OH	
<b>CIVIL DETAILS SHEET 4</b>			
<b>BQ ENERGY DEVELOPMENT, LLC.</b>			
PROJECT DEVELOPER: 400 Market Street Industrial Park, Suite 32 Wappingers Falls, NY 12590			
<b>CRAWFORD &amp; ASSOCIATES</b>			
ENGINEERING, P.C. 4411 Route 9, Suite 200, Hudson New York 12534 tel: (518) 828-2700 www.crawfordandassociates.com fax: (518) 828-2723			
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**A** VEGETATION CLEARANCE REQUIREMENTS  
**C5.4** WEST FACING ELEVATION  
 SCALE: N.T.S.



**B** VEGETATION CLEARANCE REQUIREMENTS  
**C5.4** NORTH FACING ELEVATION  
 SCALE: N.T.S.

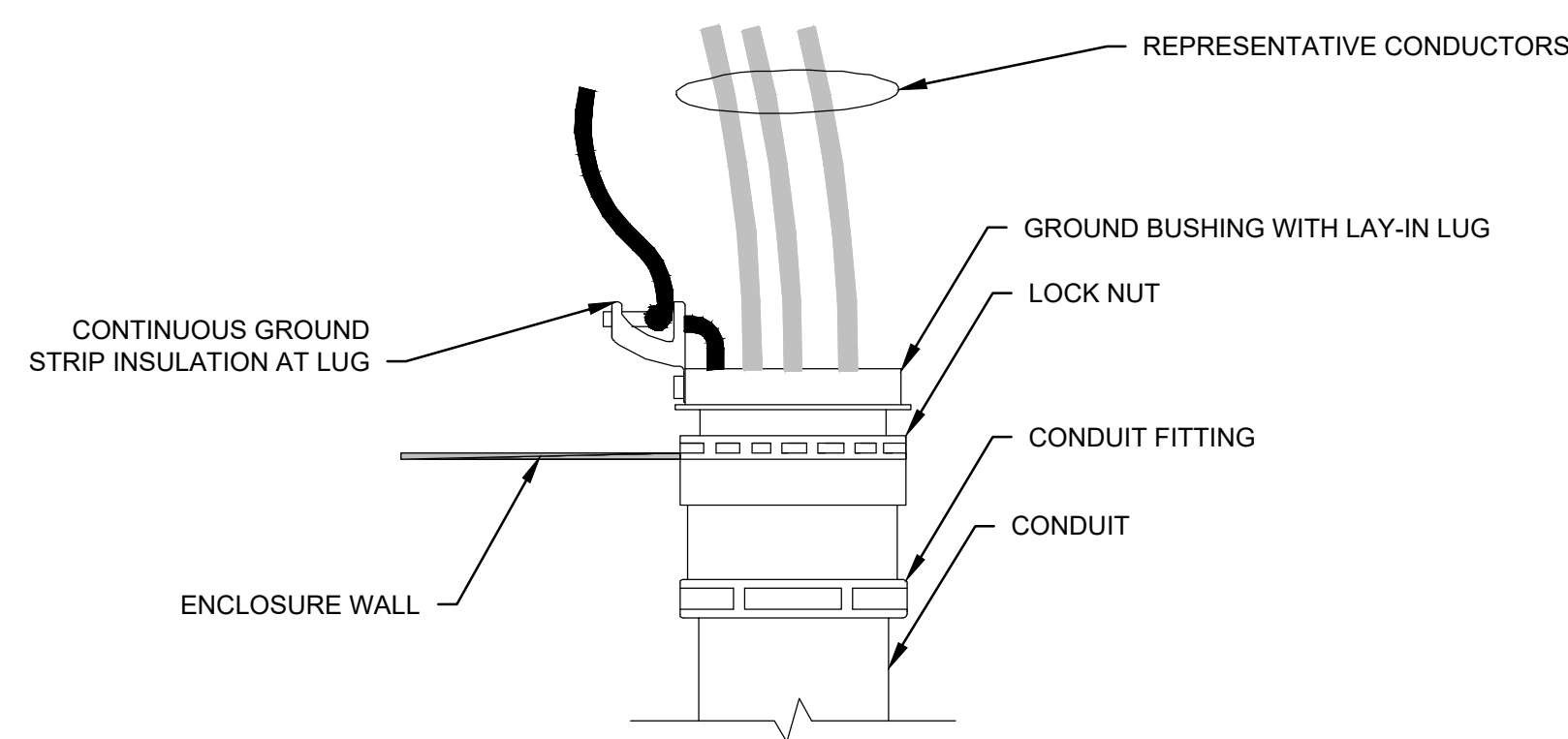
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REV. No.	ZONE	DATE	BY
<b>NOTTINGHAM SOLAR</b>			
ATHENS TOWNSHIP		HARRISON COUNTY, OH	
<b>CIVIL DETAILS</b> SHEET 5			
<b>BQ ENERGY DEVELOPMENT, LLC.</b> PROJECT DEVELOPER 400 Market Street Industrial Park, Suite 32 Wappingers Falls, NY 12590			
<b>CRAWFORD &amp; ASSOCIATES</b> ENGINEERING, P.C. 4411 Route 9, Suite 200, Hudson New York 12534 tel: (518) 828-2700 www.crawfordandassociates.com fax: (518) 828-2723			
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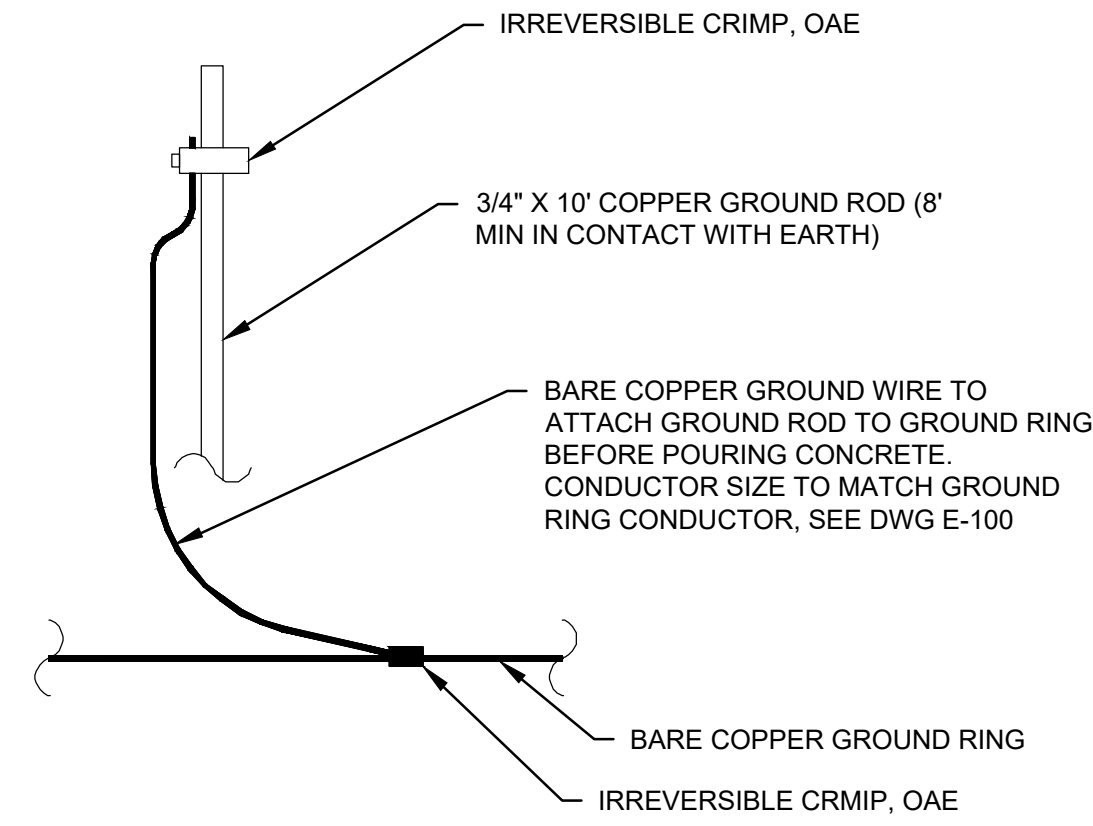
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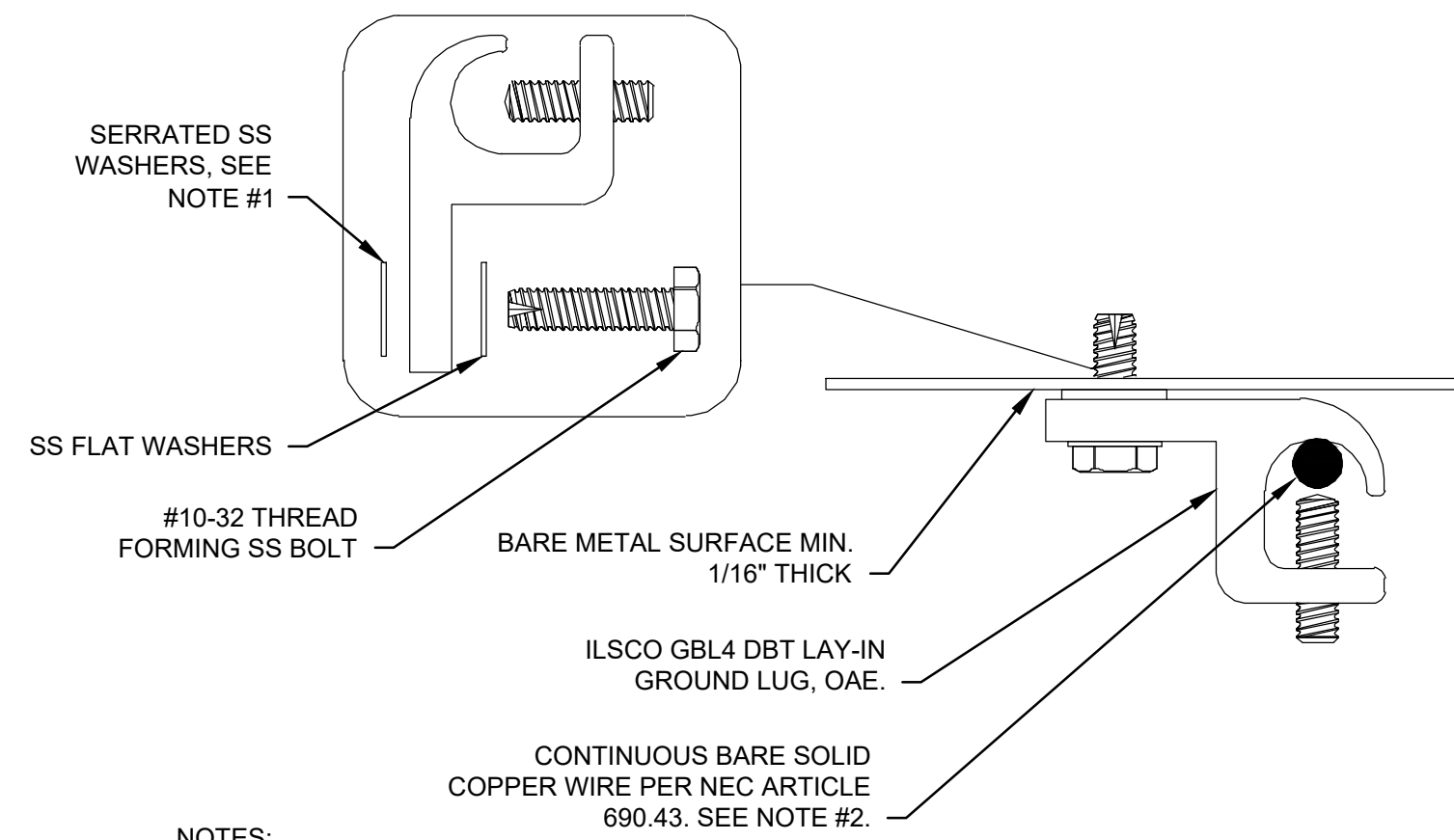




**A CONDUIT GROUNDING DETAIL**  
E5.0 SCALE: N.T.S.

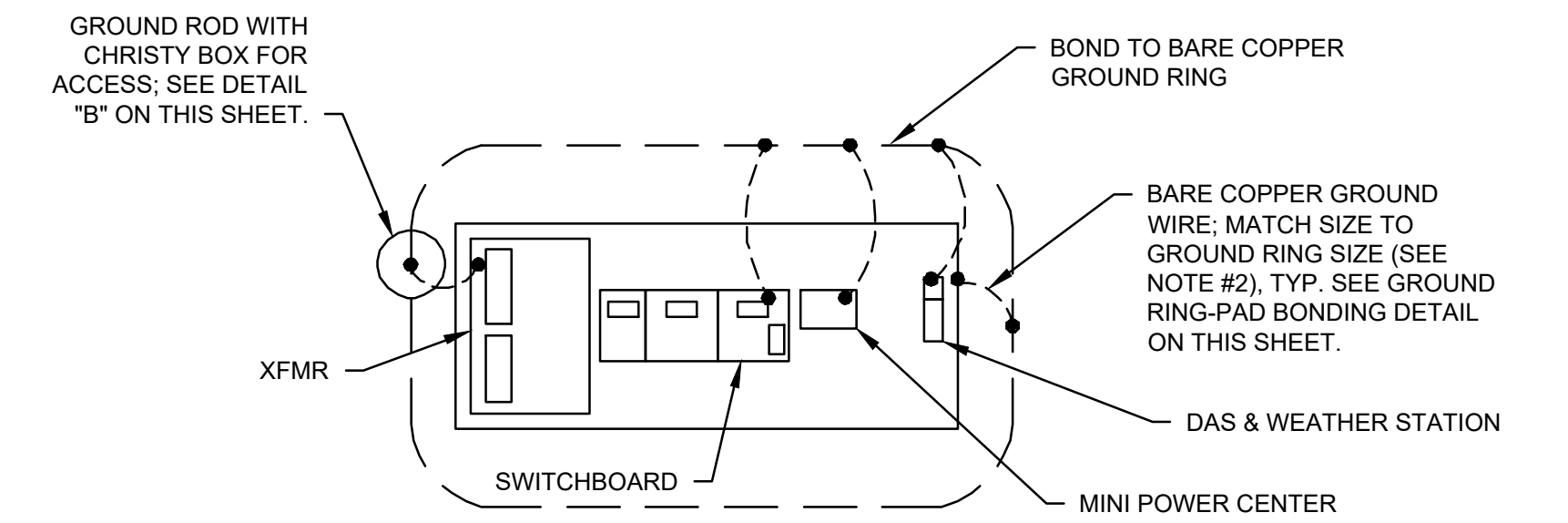


**B GROUNDING ELECTRODE**  
E5.0 SCALE: N.T.S.



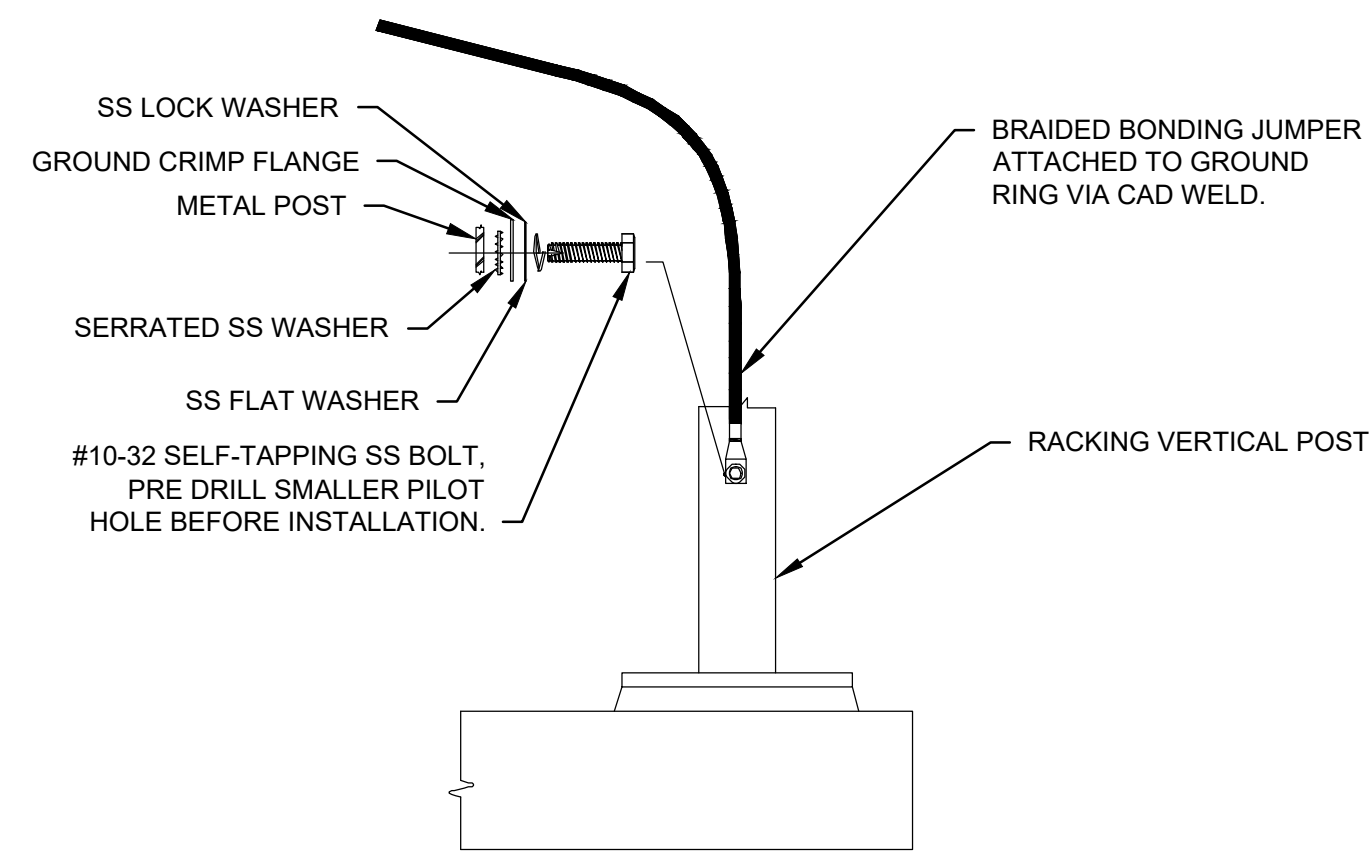
- NOTES:
1. BARE METAL OR GALVANIZED SURFACES DO NOT REQUIRE ADDITIONAL STAR WASHER
  2. ARRAY EGC SHALL BE PROTECTED FROM PHYSICAL DAMAGE PER NEC 250.120(C). IF EGC IS SUBJECT TO PHYSICAL DAMAGE, USE #6 AWG MIN.

**C EQUIPMENT GROUNDING**  
E5.0 SCALE: N.T.S.



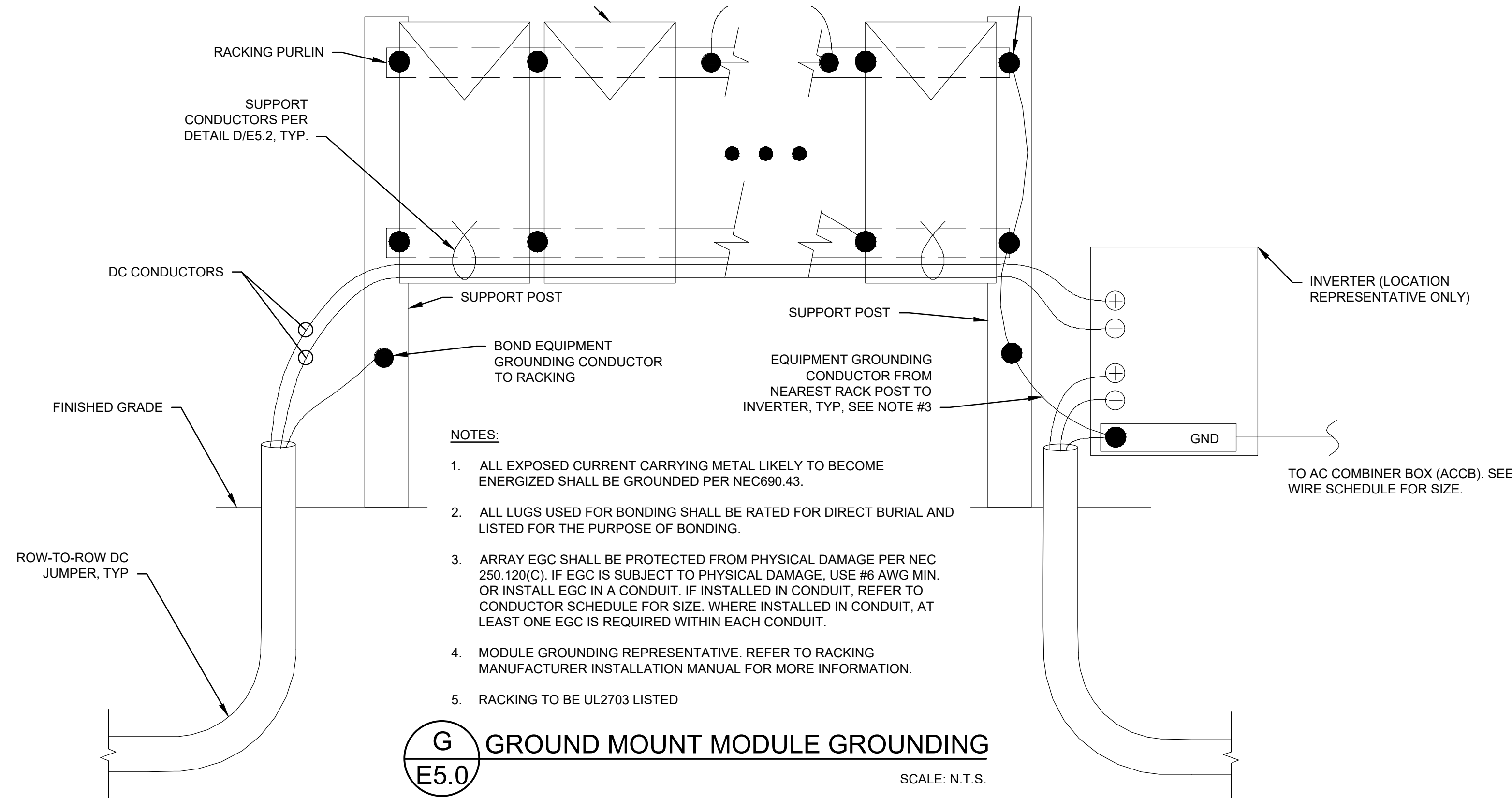
- NOTES:
1. EQUIPMENT LAYOUT IN THIS DETAIL IS ONLY REPRESENTATIVE. SEE DETAIL F/E-5.2 FOR EXACT LOCATION OF EQUIPMENT.
  2. REFER TO DWG E-100 FOR SIZE OF GROUNDING RING.

**D GROUND RING DETAIL**  
E5.0 SCALE: N.T.S.



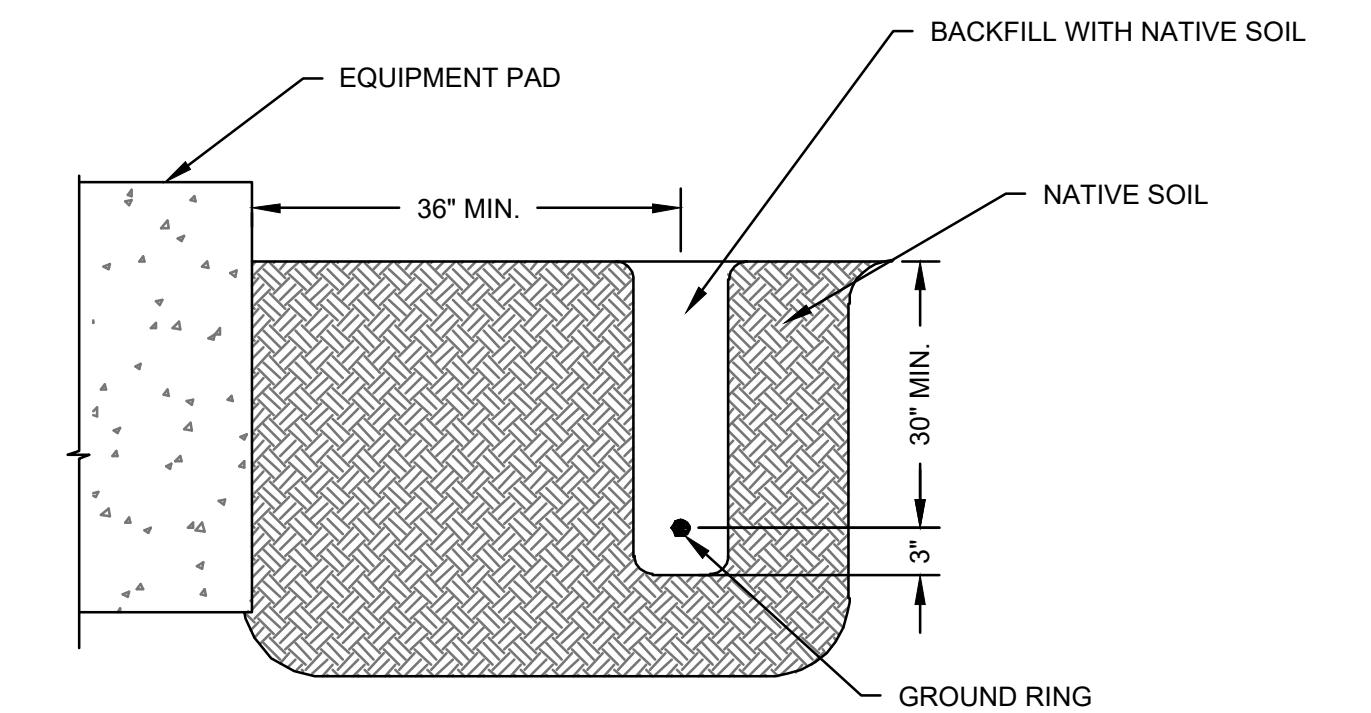
- NOTES:
1. REMOVE ANY PAINT OR COATINGS TO ENSURE ADEQUATE ELECTRICAL CONTACT

**E RACKING GROUNDING**  
E5.0 SCALE: N.T.S.

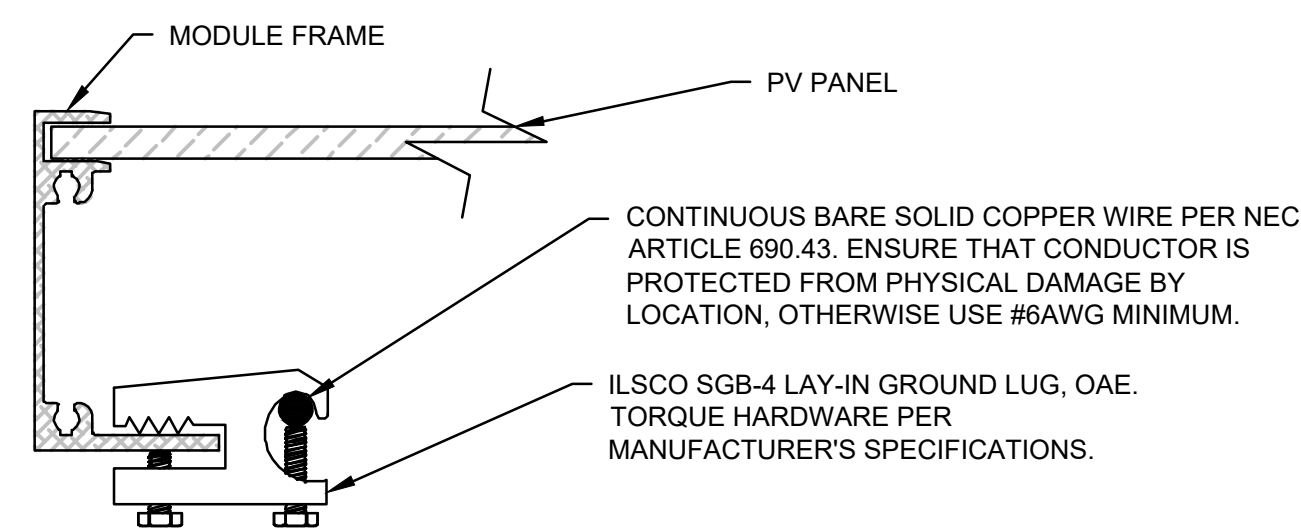


- NOTES:
1. ALL EXPOSED CURRENT CARRYING METAL LIKELY TO BECOME ENERGIZED SHALL BE GROUNDED PER NEC690.43.
  2. ALL LUGS USED FOR BONDING SHALL BE RATED FOR DIRECT BURIAL AND LISTED FOR THE PURPOSE OF BONDING.
  3. ARRAY EGC SHALL BE PROTECTED FROM PHYSICAL DAMAGE PER NEC 250.120(C). IF EGC IS SUBJECT TO PHYSICAL DAMAGE, USE #6 AWG MIN. OR INSTALL EGC IN A CONDUIT. IF INSTALLED IN CONDUIT, REFER TO CONDUCTOR SCHEDULE FOR SIZE. WHERE INSTALLED IN CONDUIT, AT LEAST ONE EGC IS REQUIRED WITHIN EACH CONDUIT.
  4. MODULE GROUNDING REPRESENTATIVE. REFER TO RACKING MANUFACTURER INSTALLATION MANUAL FOR MORE INFORMATION.
  5. RACKING TO BE UL2703 LISTED

**G GROUND MOUNT MODULE GROUNDING**  
E5.0 SCALE: N.T.S.

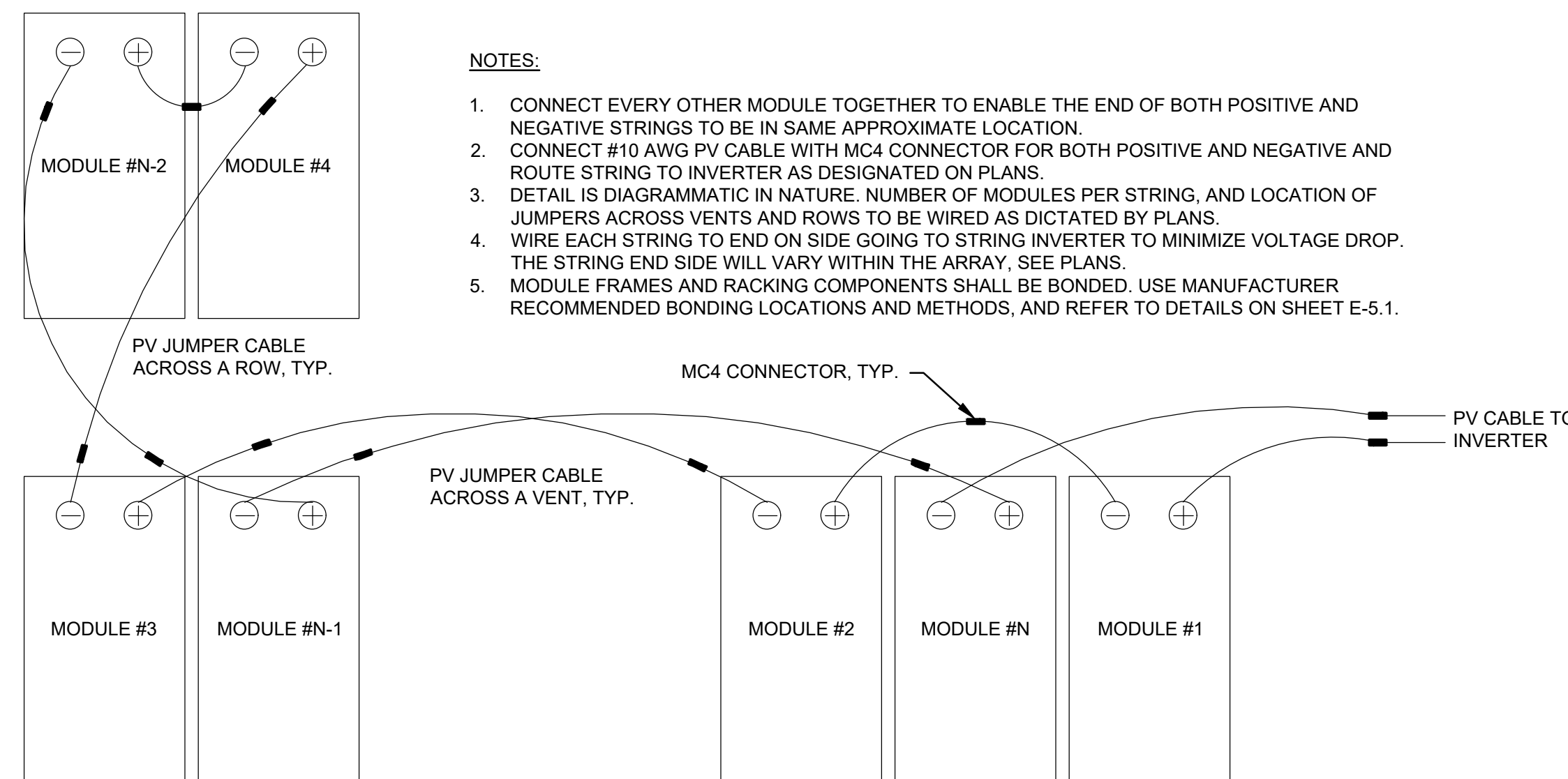


**H GROUND RING TRENCHING DETAIL**  
E5.0 SCALE: N.T.S.



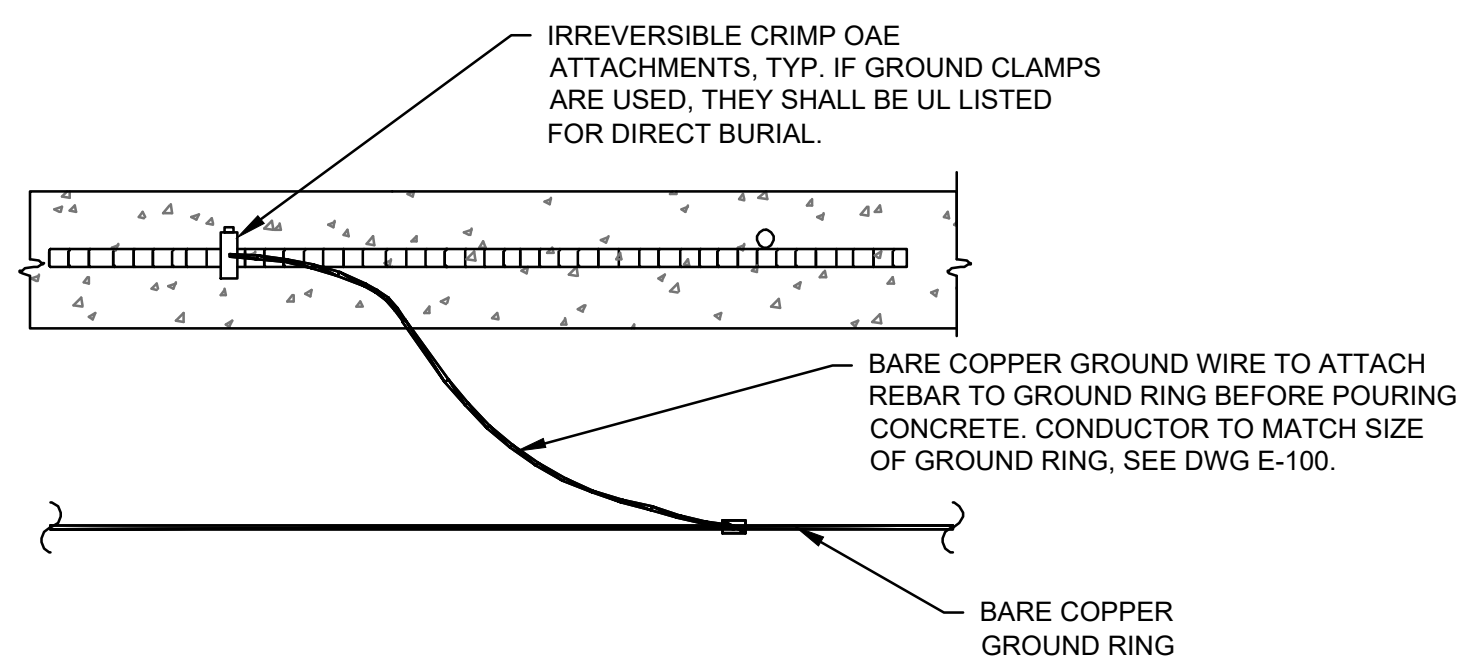
- NOTES:
1. DRILLING A HOLE OR ALTERING MODULE FRAME IN ANY WAY MAY INVALIDATE THE MODULE WARRANTY.

**F MODULE GROUNDING DETAIL**  
E5.0 SCALE: N.T.S.



- NOTES:
1. CONNECT EVERY OTHER MODULE TOGETHER TO ENABLE THE END OF BOTH POSITIVE AND NEGATIVE STRINGS TO BE IN SAME APPROXIMATE LOCATION
  2. CONNECT #10 AWG PV CABLE WITH MC4 CONNECTOR FOR BOTH POSITIVE AND NEGATIVE AND ROUTE STRING TO INVERTER AS DESIGNATED ON PLANS.
  3. DETAIL IS DIAGRAMMATIC IN NATURE. NUMBER OF MODULES PER STRING, AND LOCATION OF JUMPERS ACROSS VENTS AND ROWS TO BE WIRED AS DICTATED BY PLANS.
  4. WIRE EACH STRING TO END ON SIDE GOING TO STRING INVERTER TO MINIMIZE VOLTAGE DROP. THE STRING END SIDE WILL VARY WITHIN THE ARRAY, SEE PLANS.
  5. MODULE FRAMES AND RACKING COMPONENTS SHALL BE BONDED. USE MANUFACTURER RECOMMENDED BONDING LOCATIONS AND METHODS, AND REFER TO DETAILS ON SHEET E-5.1.

**J STRING WIRING DETAIL, TYP.**  
E5.0 SCALE: N.T.S.



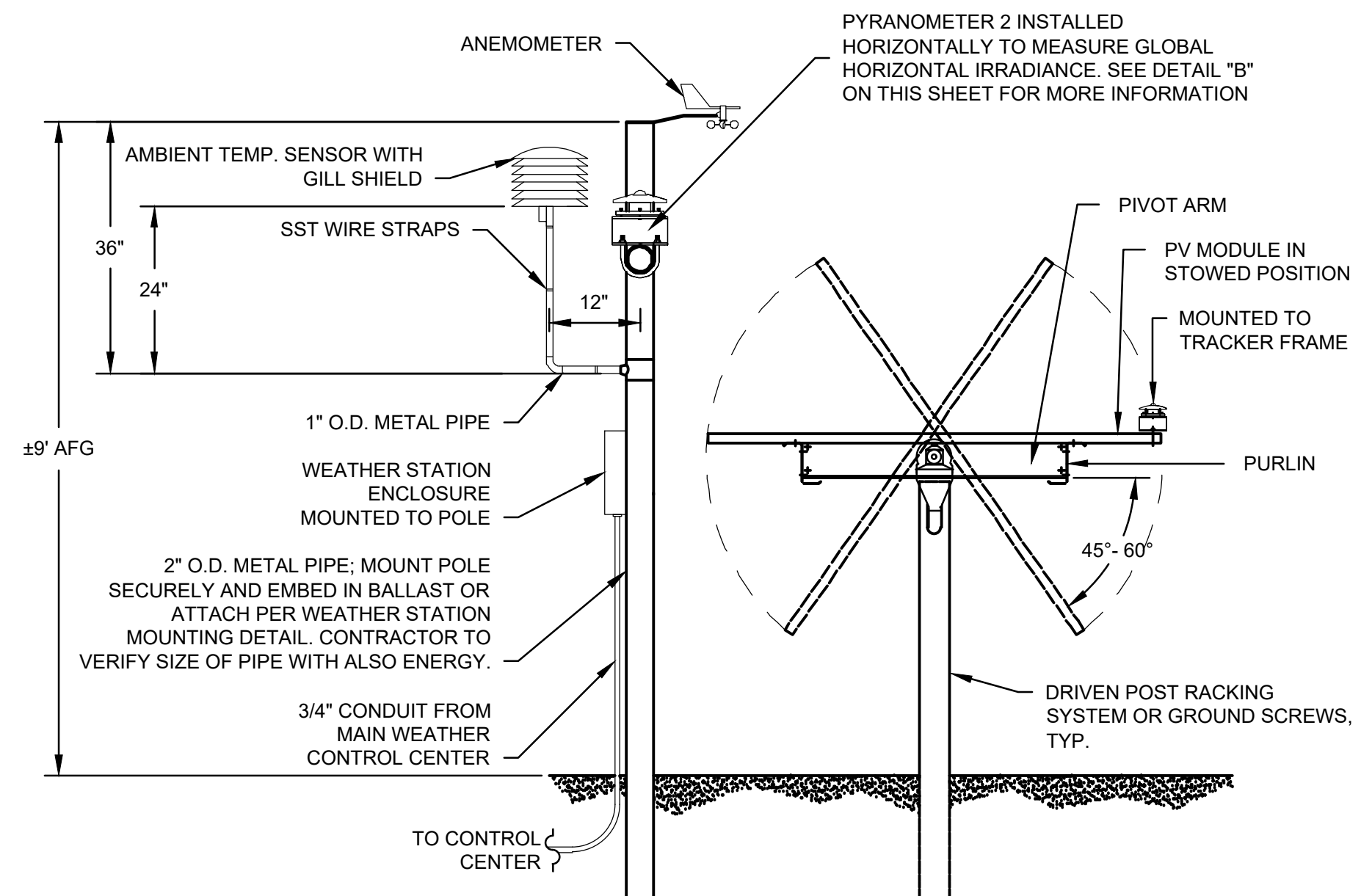
**I GROUND RING-PAD BONDING**  
E5.0 SCALE: N.T.S.

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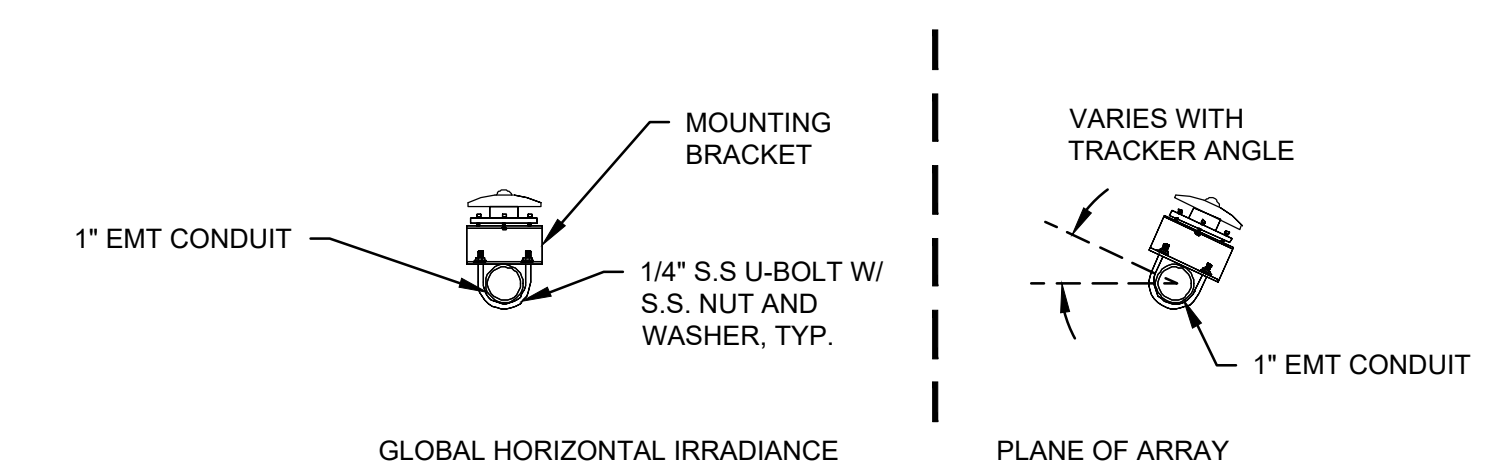
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<b>NOTTINGHAM SOLAR</b>			
ATHENS TOWNSHIP		HARRISON COUNTY, OH	
<b>ELECTRICAL DETAILS SHEET 1</b>			
<b>BQ ENERGY DEVELOPMENT, LLC.</b>			
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DATE 07/19/2021	DRAWN BY: JSC, JSD, JGM	DESIGNED BY: JSC	SCALE AS SHOWN
SCALE AS SHOWN	C&A JOB# 5204.24	DRAWING: E-5.0	

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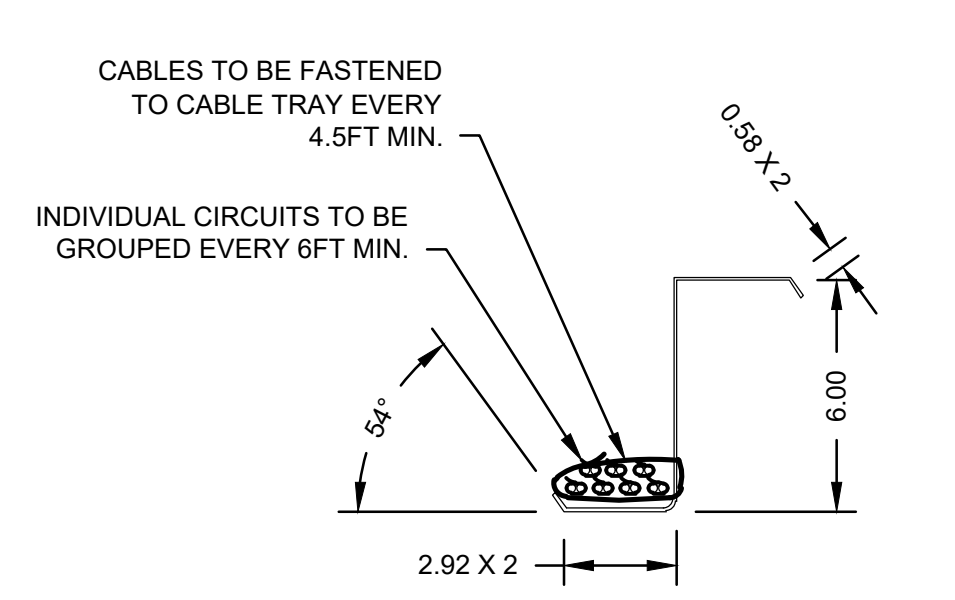




**A** TYPICAL WEATHER STATION SECTION VIEW  
E5.1 SCALE: N.T.S.



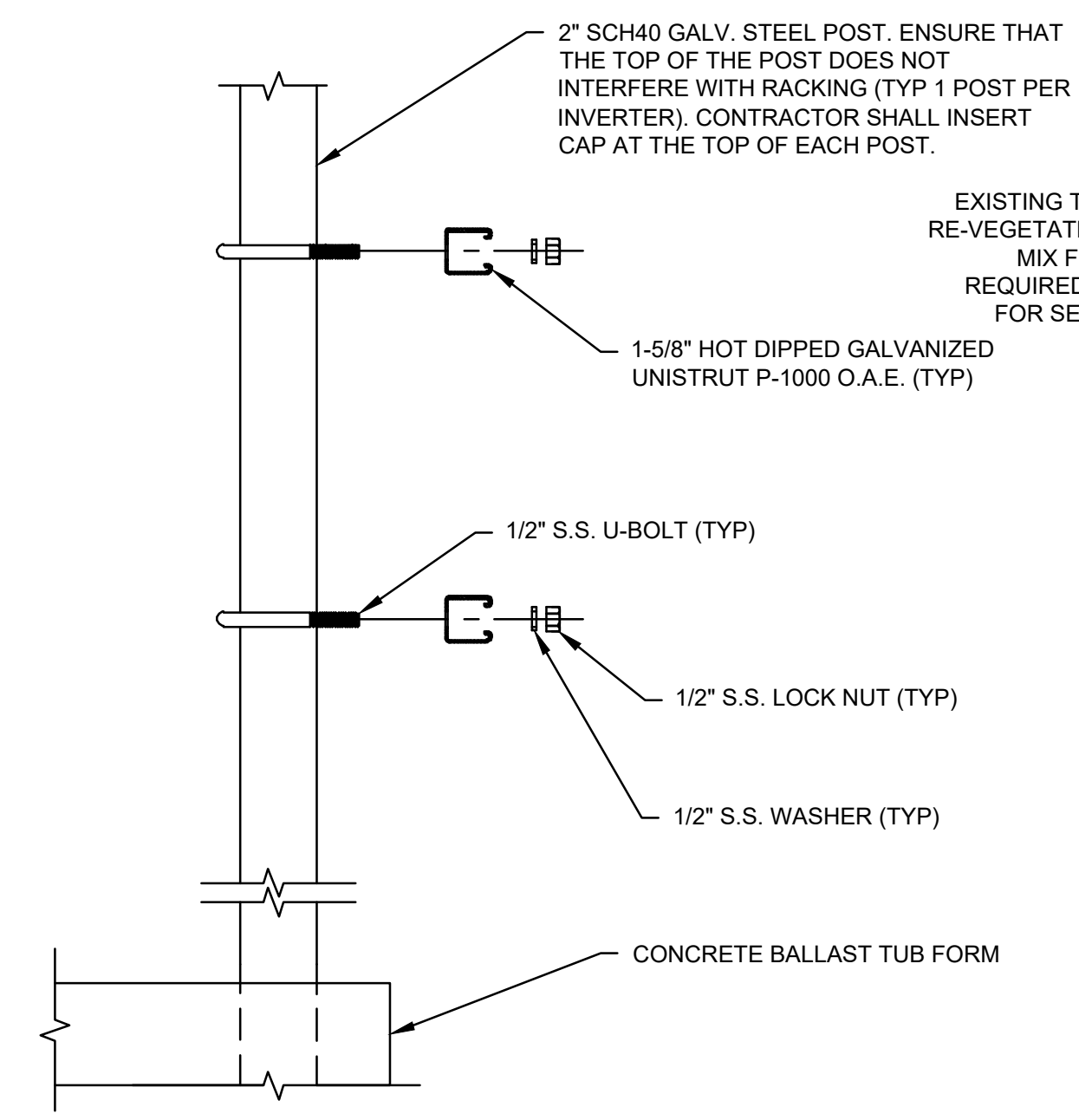
**B** PYRANOMETER EAST ELEVATION  
E5.1 SCALE: N.T.S.



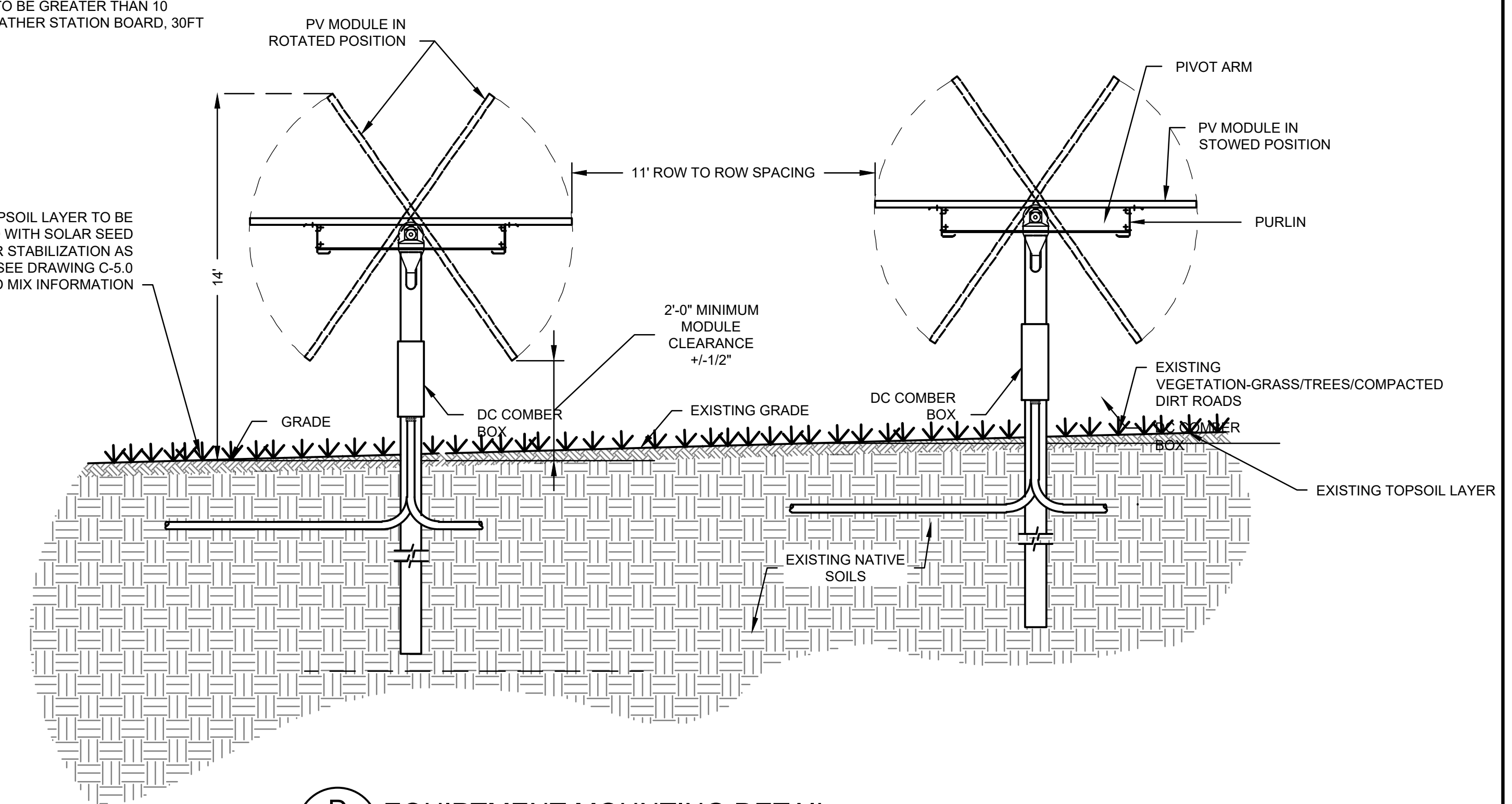
**E** CABLE TRAY DETAIL  
E5.1 SCALE: N.T.S.

- NOTES:**
1. THE CABLE TRAYS ON THE RACKING SYSTEM MAY SUPPORT THE SPECIFIED 1500V PV CABLES. WHERE AC CONDUCTORS RATED LESS THAN 600V ARE INSTALLED IN THE SAME CABLE TRAY, THEY MUST BE SEPARATED BY A SOLID FIXED BARRIER OF MATERIAL COMPATIBLE WITH THE CABLE TRAY.
  2. CABLES SHALL BE SECURED TO THE CABLE TRAY AT LEAST EVERY 4.5FT.
  3. CABLES OF THE SAME CIRCUIT SHALL BE BOUND TOGETHER AT LEAST EVERY 6FT.
  4. WHERE CABLES ENTER AND EXIT THE CABLE TRAY, THEY SHALL BE SECURED SO AS TO PREVENT STRESS ON CABLES. CABLES SHALL BE ROUTED IN A STRAIGHT PATH FROM PANEL CONNECTION TO FASTENER ON CABLE TRAY WHILE MAINTAINING A MINIMUM BEND RADIUS PER THE MANUFACTURER'S SPECIFICATIONS. LOOSE SECTIONS OF CABLE SHALL NOT BE PERMITTED.
  5. ON ROWS CONTAINING MORE THAN (4) STRINGS, PV CABLES SHALL BE DISTRIBUTED TO UTILIZE EACH OF THE (4) CABLE TRAYS PROVIDED BY THE RACKING SYSTEM. NO MORE THAN (17) DC CIRCUITS SHALL BE INSTALLED IN ONE CABLE TRAY.

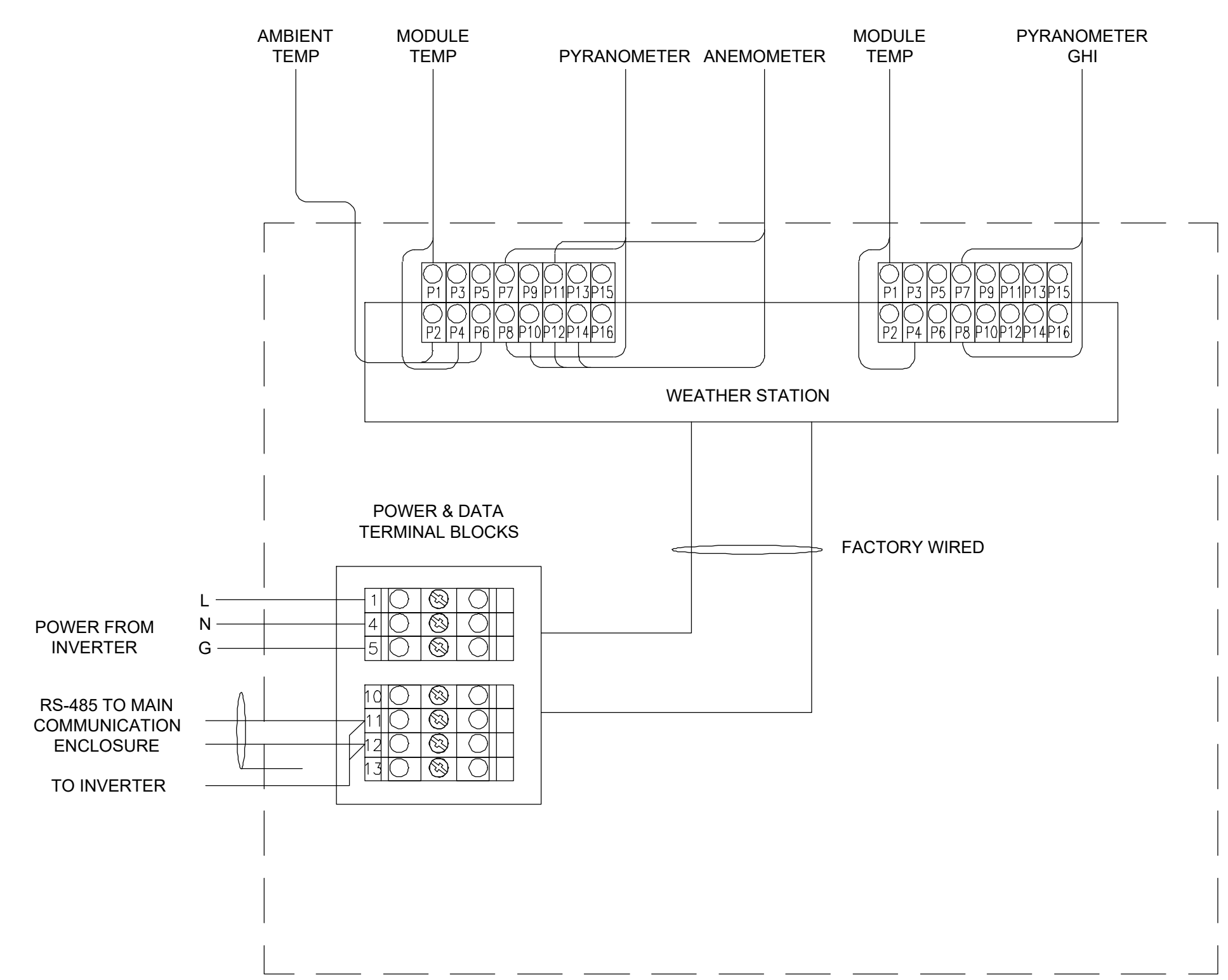
- GENERAL NOTES:**
1. ENCLOSURES SHOULD BE MOUNTED TO NEC STANDARDS AND IN A SHADED AREA.
  2. ALL PENETRATIONS SHOULD BE MADE ON THE BOTTOM WITH WATER TIGHT CONNECTORS.
  3. ONE STRAIN RELIEF COUPLING FOR EACH SENSOR WIRE RUN FREE AIR TO SENSOR WITH PROPER CABLE SECURING AND ROUTING TO INSURE A MAINTENANCE FREE LIFE.
  4. FOR REMOTE WS: ONE TO CONNECT CONDUIT FOR MAIN TO REMOTE CAT 5 COMMUNICATION AND 24 VDC
  5. MODULE TEMP SENSOR (BAPI BA/T1K-RPP-10'-BB2) RATED FOR -47 TO 57°C. THIS MODULE SHALL BE MOUNTED IN A SHADED AREA NEAR A MODULE. SENSOR SHOULD BE SECURED WITH CLEAR EPOXY AND FOIL TAPE IN THE MIDDLE OF A MODULE AND THE MIDDLE OF A STRING. SENSOR PROVIDED IN WEATHER PROOF MOUNTING. 2 WIRES NEED TO BE EXTENDED TO THE WEATHER STATION BOARD WITH INSTALLER SUPPLIED OUTDOOR SHIELDED CAT 5 (STP OR FTP) OR BELDEN 9842.
  6. FOR THE AMBIENT TEMPERATURE SENSOR (BAPI BA/T1K-0-BB2) SHOULD BE MOUNTED IN THE SHADE NEAR THE WEATHER STATION BOARD. AMBIENT TEMPERATURE SENSOR PROVIDED IN WEATHER PROOF MOUNTING. 2 WIRES NEED TO BE EXTENDED (MAX. 30 FT) TO THE WEATHER STATION BOARD WITH INSTALLER SUPPLIED OUTDOOR SHIELDED CAT 5 (STP OR FTP) OR OR BELDEN 9842.
  7. WIND SPEED AND DIRECTION ANEMOMETER SHALL BE A DAVIS 7911. MOUNTING BRACKET, SCREWS AND 1.25 INCHES U-BOLTS INCLUDED. MOUNTED TO A POLE OR STRUT 3 TO 4 FEET ABOVE SURROUNDING SURFACES. CONNECTED TO WEATHER STATION BOARD, INCLUDES 30 FEET OF CAT 5 (STP OR FTP) AND SHOULD NOT BE EXTENDED.
  8. PRECISION PYRANOMETER FOR GLOBAL HORIZONTAL IRRADIATION (GHI) MEASUREMENTS SHOULD BE MOUNTED LEVEL AT THE HIGHEST POINT OF THE ARRAY. CLEAR OF ANY SHADOWS THROUGHOUT THE YEAR. IF ANY OBJECT IS HIGHER IT NEEDS TO BE GREATER THAN 10 TIMES FARTHER AWAY THAN IT IS HIGHER IN ORDER TO NOT EFFECT THE MEASUREMENT. CONNECT TO THE WEATHER STATION BOARD, 30FT CABLE IS PROVIDED AND SHOULD NOT BE EXTENDED OR CUT.



**C** EQUIPMENT MOUNTING  
E5.1 NTS



**D** EQUIPMENT MOUNTING DETAIL  
E5.3 SCALE: N.T.S.



**F** WEATHER STATION ENCLOSURE  
E5.1 SCALE: N.T.S.

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<b>NOTTINGHAM SOLAR</b>			
ATHENS TOWNSHIP		HARRISON COUNTY, OH	
<b>ELECTRICAL DETAILS SHEET 2</b>			
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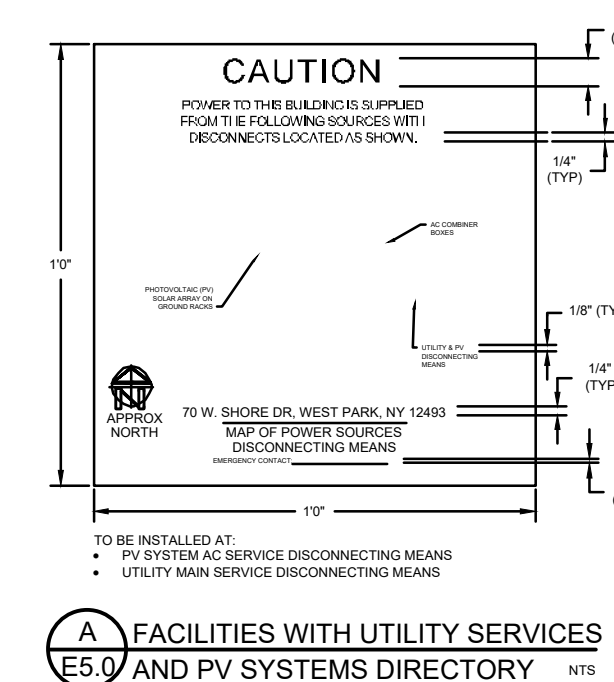
**NOTES:**

1. ALL LABELS AND SIGNAGE SHALL CONFORM TO THE FOLLOWING SPECIFICATIONS, OAE:

- MATERIAL: 0.010 HP12W
- UV LAMINATE
- 3M VHB ADHESIVE
- PRODUCED AT A UL APPROVED LABEL SHOP, SUCH AS BRADLEY NAMEPLATE, LUSTRECAL, OAE

OR

- METAL OR PHENOLIC WITH ENGRAVED OR MACHINE PRINTED LETTERS.
2. LABEL & TEXT SIZES SHOWN ARE ENGINEERING RECOMMENDATIONS. SIZES ARE PERMITTED TO BE ADJUSTED. FINAL LABELS MUST BE LEGIBLE AND MEET ALL CODE REQUIREMENTS.



AC CONDUCTORS		
	277/480 V	120/208V
PHASE A	BROWN	BLACK
PHASE B	ORANGE	RED
PHASE C	YELLOW	BLUE
GROUNDING CONDUCTOR	GRAY OR WHITE	WHITE
GROUNDING CONDUCTOR	GREEN OR BARE	GREEN OR BARE
GROUNDING ELECTRODE CONDUCTOR	GREEN W/ ORANGE	GREEN W/ ORANGE
DC CONDUCTORS		
	STD DC NEG GROUNDED INVERTERS OR NEG GROUNDED HALF OF BI-POLAR INVERTERS	STD DC POS GROUNDED INVERTERS OR POS GROUNDED HALF OF BI-POLAR INVERTERS
	DC NEGATIVE	DC POSITIVE
UNGROUND CONDUCTOR**		(-) FROM MODULE YELLOW WIRE OR BLACK WIRE WITH YELLOW MARKING**
GROUNDING CONDUCTOR	(-) FROM MODULE WHITE OR GRAY WIRE WITH RED MARKING OR BLACK WIRE WITH WHITE MARKING AND RED MARKING * (IF INVERTER IS MONO-POLAR, RED MARKING CAN BE ELIMINATED	
GROUNDING CONDUCTOR	GREEN OR BARE	GREEN OR BARE

\* WHERE BLACK WIRE IS USED FOR GROUNDED CONDUCTOR, WHITE MARKING SHOULD BE PRIMARY AND COLOR MARKING SHOULD BE SECONDARY, ONLY TO INDICATE ASSOCIATION WITH A SPECIFIC ARRAY. WHITE MARKING SHOULD CLEARLY INDICATE THAT THIS IS THE GROUNDED CONDUCTOR.

\*\* WHEN USING PV WIRE FOR A FLOATING (UNGROUND) SYSTEM WHERE BOTH + AND - OF THE ARRAY ARE FUSED BE SURE TO NOT USE WHITE CONDUCTORS. INSTEAD USE THE CHART ABOVE WITH THE APPROPRIATE SELECTION OF COLOR TO THE TERMINAL IT LANDS IN THE INVERTER

NOTE: THE NEGATIVE CONDUCTOR IS THE GROUNDED CONDUCTOR

REV. No.	ZONE	DATE	BY
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