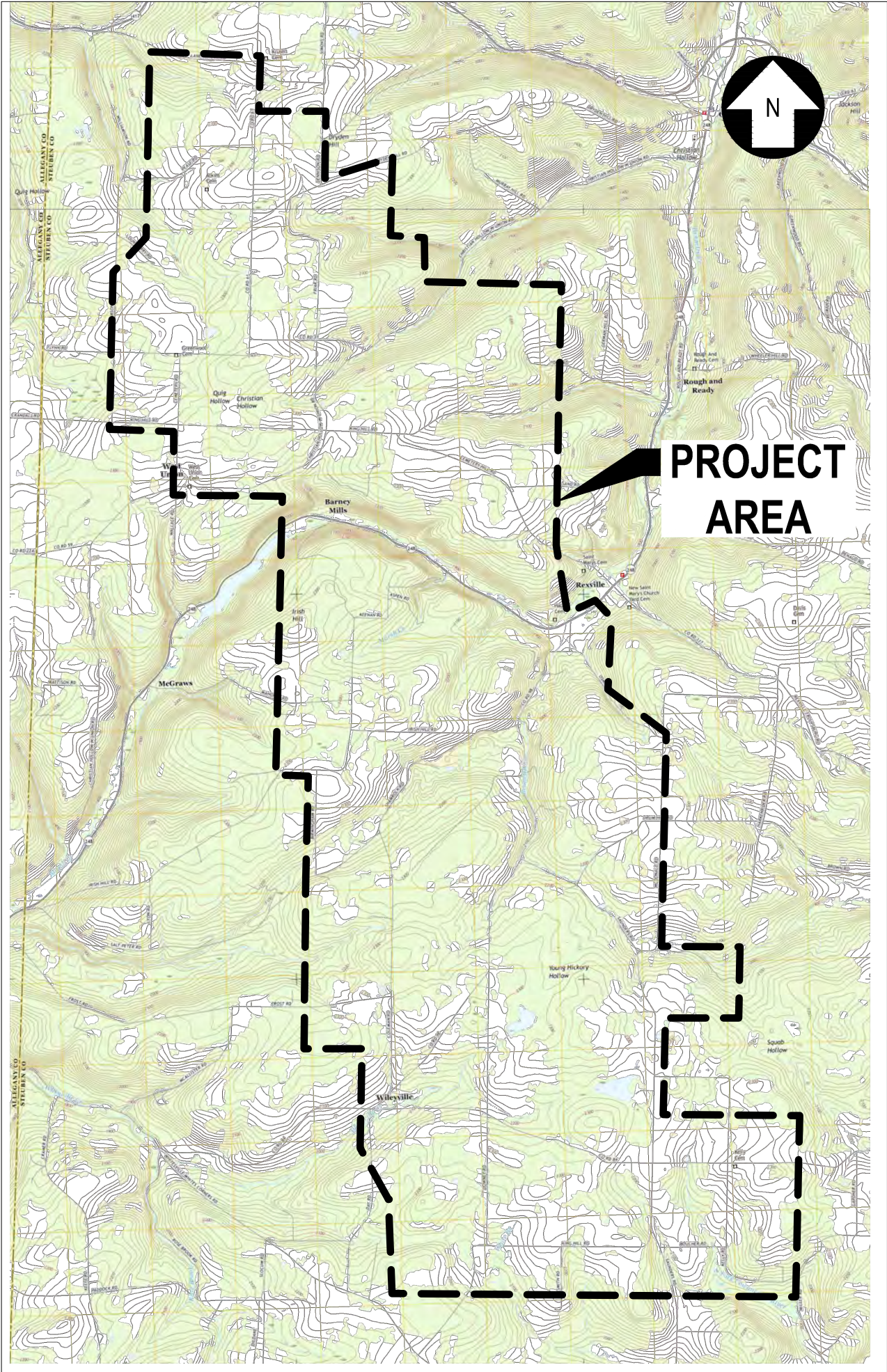
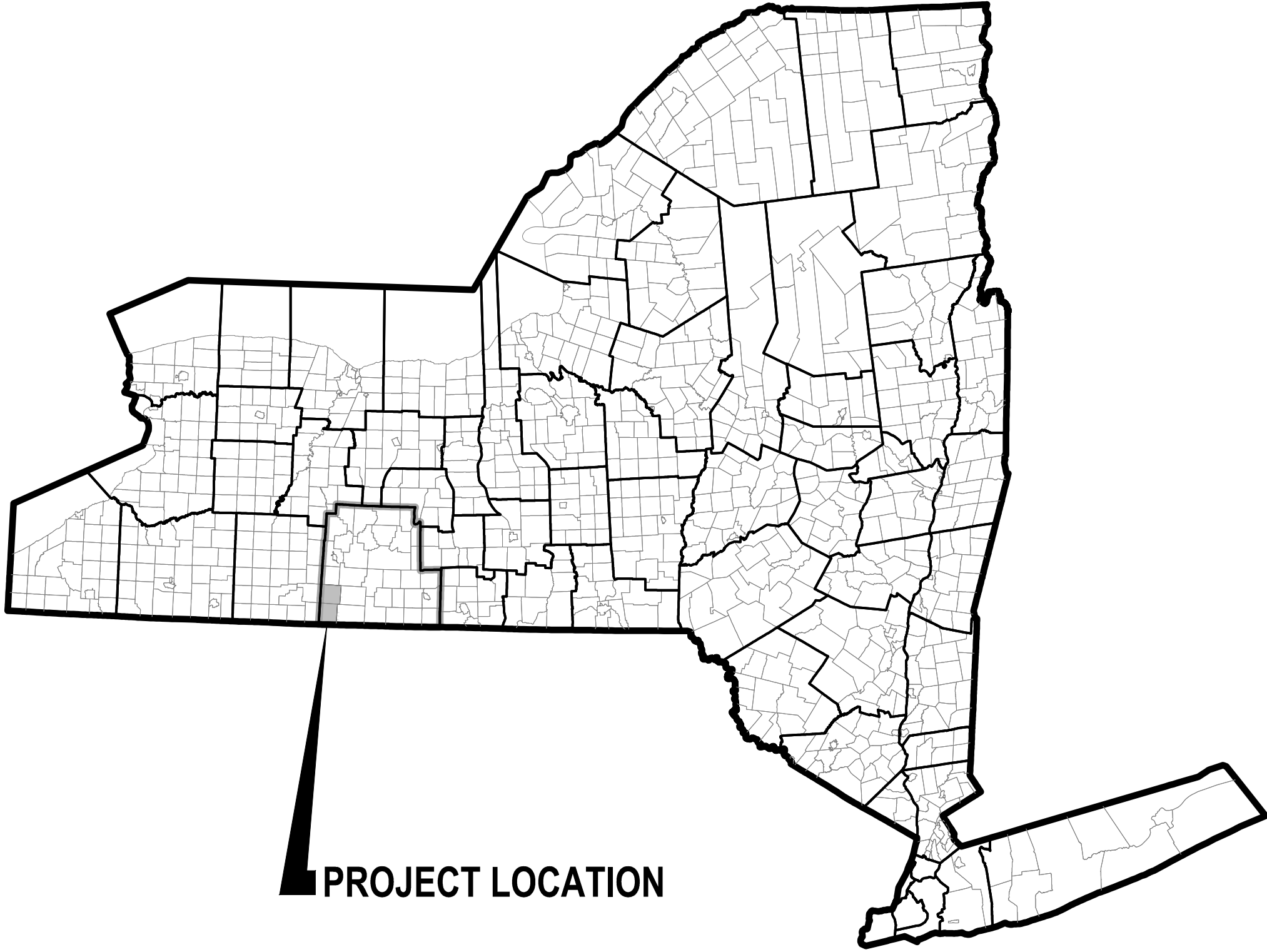


# EIGHT POINT WIND ENERGY CENTER

## TOWNS OF GREENWOOD AND WEST UNION

## STEUBEN COUNTY

## NEW YORK



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### APPLICANT:

**EIGHT POINT WIND, LLC**

2686 MAIN STREET  
GREENWOOD, NEW YORK 14839

### PREPARED BY:



249 WESTERN AVENUE  
AUGUSTA, MAINE 04330

PRELIMINARY NOT FOR CONSTRUCTION

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





COORDINATE CONTROL NOTES:

1. ALL COORDINATES AND ELEVATIONS ARE STATED IN U.S. DECIMAL FEET UNLESS NOTED OTHERWISE.

A. HORIZONTAL DATUM: NEW YORK STATE PLANE COORDINATE SYSTEM-NEW YORK CENTRAL REGION

B. VERTICAL DATUM: NORTH AMERICAN VERTICAL DATUM, 1988 (NAVD88)

C. TURBINE SITE AND ACCESS ROAD TOPOGRAPHY IS BASED ON AN AERIAL (LIDAR) SURVEY CONDUCTED BY BERGMAN ASSOCIATES AND SURVEYING AND MAPPING, LLC, IN APRIL 2017. TOPOGRAPHY ALONG THE GENERATOR COLLECTOR ROUTE IS BASED ON USGS 30-METER SURVEY DATA INTERPOLATED TO 2-FOOT CONTOURS.

D. UNDERGROUND UTILITY LOCATIONS SHOWN ON DRAWINGS ARE APPROXIMATE AND BASED ON SITE OBSERVATIONS OR PUBLIC DOMAIN INFORMATION. THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO PROTECT EXISTING UTILITIES, PAVEMENTS, AND MONUMENTS WHETHER SHOWN OR NOT SHOWN ON THESE DRAWINGS.
2. TEMPORARY SITE ACCESS ROAD LAYOUT AND CONTROL POINTS ARE PROVIDED ON EACH TURBINE ACCESS ROAD PLAN. WITHIN LIMITS ESTABLISHED BY THE WTG MANUFACTURER, DEVIATION FROM THE GEOMETRY SHOWN IS PERMITTED SUBJECT TO APPROVAL BY THE LAND OWNER AND STATE ENVIRONMENTAL MONITOR.
3. PERMANENT ACCESS ROADS ARE TO FOLLOW NATURAL CONTOURS, FIELD EDGES, WOOD LINES, AND OTHER LAND FEATURES APPROXIMATELY AS INDICATED. AS SUCH, GEOMETRIC DESIGNS AND CONTROLS ARE NOT PROVIDED. CARE SHALL BE TAKEN TO ENSURE THE PERMANENT ACCESS ROADS DO NOT DEVIATE FROM THE PARCELS INTENDED.

PRELIMINARY CONTRACTOR NOTES:

1. PRIOR TO THE START OF CONSTRUCTION THE CONTRACTOR SHALL MARK OR DELINEATE THE FOLLOWING PROJECT FEATURES USING APPROPRIATE MEANS, INCLUDING BUT NOT LIMITED TO LATH MARKERS, SURVEYORS RIBBON, PIN FLAGS, BARRIER FENCE, OR SUITABLE EQUIVALENT.

A. PROPOSED FACILITY COMPONENTS DEPICTED ON THE CONSTRUCTION DRAWINGS

B. STREAMS, WETLANDS, AND WETLAND BUFFER ZONES

C. VEHICLE TRAVEL CORRIDORS, STREAM CROSSING LOCATIONS

D. LIMITS OF CLEARING AND DISTURBANCE

E. PROTECTED CULTURAL AND NATURAL RESOURCES
2. THE CONTRACTOR SHALL NOTE THE CONDITION OF ANY EXISTING FENCE OR STONE WALL THAT MAY BE IMPACTED BY PROJECT CONSTRUCTION. A TEMPORARY GATE SHALL BE INSTALLED WHEREVER A FENCE IS REMOVED AND/OR CUT UNLESS WAIVED IN WRITING BY THE LANDOWNER. UPON COMPLETION OF CONSTRUCTION, THE FENCE OR STONE WALL SHALL BE REBUILT TO MATCH ITS ORIGINAL CONDITION.
3. DISRUPTION TO REGULATED WETLANDS AND PROTECTED HABITAT SHALL BE MINIMIZED. THE CONTRACTOR SHALL NOTIFY NYSDEC'S FIELD REPRESENTATIVE, THE DPS STAFF REPRESENTATIVE, AND THE APPLICANT'S REPRESENTATIVE OF ANY ACTIVITIES THAT VIOLATE OR MAY VIOLATE EITHER THE TERMS OF THE CERTIFICATE OR THE ENVIRONMENTAL CONSERVATION LAW, DPS AND DEC STAFFS' FIELD REPRESENTATIVES WILL WORK COOPERATIVELY TO DETERMINE WHETHER STOP WORK AUTHORITY WILL BE EXERCISED, OR WHETHER TO DIRECT THE APPLICANT TO TAKE ACTION TO FURTHER MINIMIZE IMPACTS TO STREAMS AND WETLANDS.
4. RESTRICTED ACTIVITIES PERTAIN TO A BUFFER ZONE OF 100 FEET ON EITHER SIDE OF THE BOUNDARIES OF WATER-RELATED RESOURCES (STREAMS, WETLANDS, SPRINGS, WELLS, DRAINAGE, ETC.) AND INCLUDE THE FOLLOWING RESTRICTIONS:

A. NO DEPOSITION OF SLASH WITHIN IDENTIFIABLE STREAM CHANNELS OR WOOD CHIPS WITHIN 25 FEET OF WETLANDS;

B. NO UNNECESSARY REMOVAL OF WOOD VEGETATION OR DEGRADATION OF STREAM BANKS;

C. NO EQUIPMENT WASHING OR REFUELING EXCEPT AS SPECIFIED IN THE FINAL CONSTRUCTION DRAWINGS;

D. AND NO STORAGE, MIXING, OR HANDLING OF ANY PETROLEUM OR CHEMICAL MATERIALS IN OPEN CONTAINERS
5. "AVOID, DO NOT CROSS" INDICATES THAT AN AREA DOES NOT HAVE A DESIGNATED ACCESS ROUTE AND THAT EQUIPMENT IS RESTRICTED FROM CROSSING OR OPERATING IN THAT AREA. THIS DESIGNATION IS APPLIED TO ALL WETLANDS, STREAMS, AND ASSOCIATED BUFFERS THAT DO NOT HAVE APPROVED EQUIPMENT ACCESS, AS INDICATED.
6. PERMANENT SITE ACCESS ROADS ARE INTENDED TO FOLLOW THE NATURAL CONTOURS UNLESS OTHERWISE INDICATED, GENERALLY ALONG THE ALIGNMENT SHOWN. CARE SHALL BE TAKEN TO ENSURE THE PERMANENT ACCESS ROADS DO NOT DEVIATE FROM THE PARCELS INTENDED.
7. TURBINE WORKING PLATFORMS SHALL BE GENERALLY LAID OUT AS SHOWN. FINAL DIMENSIONS AND LAYOUT MAY BE ADJUSTED IN THE FIELD TO ACCOUNT FOR PLANNED CONSTRUCTION OPERATIONS AND LOCAL CONDITIONS.

PRELIMINARY GENERAL ENVIRONMENTAL RESTRICTIONS:

1. ALL EQUIPMENT ACCESS, STORAGE OF EQUIPMENT AND MATERIALS, AND OTHER CONSTRUCTION ACTIVITIES ARE RESTRICTED TO THE DESIGNATED ACCESS ROADS, TURBINE SITES, LAYDOWN AREAS, SUBSTATION SITE, COLLECTION LINE AND TRANSMISSION LINE ROUTES AS INDICATED ON THE PERMIT DRAWINGS.
2. EROSION CONTROL DEVICES SHALL BE INSTALLED AFTER CLEARING, BUT PRIOR TO SOIL DISTURBANCE.
3. FUGITIVE DUST RESULTING FROM CONSTRUCTION ACTIVITIES SHALL BE MINIMIZED TO THE MAXIMUM EXTENT PRACTICAL BY IMPLEMENTING APPROPRIATE CONTROL MEASURES. THESE MEASURES INCLUDE THE APPLICATION OF MULCH, WATER, OR STONE ON ACCESS ROADS, EXPOSED SOILS, STOCKPILED SOILS, OR UNPAVED PUBLIC ROADS WHEN DRY AND WINDY CONDITIONS EXIST. A WATERING VEHICLE (OR A VEHICLE CONTAINING AN APPROVED CHEMICAL TREATMENT) SHALL BE MADE AVAILABLE AS NEEDED.
4. CONTRACTOR SHALL MAINTAIN ALL EQUIPMENT IN GOOD OPERATING CONDITION. ALL MOTORS AND ENGINES WILL BE MUFFLED ACCORDING TO MANUFACTURER'S SPECIFICATIONS AND SHALL COMPLY WITH STATE ENVIRONMENTAL LAW, SUBCHAPTER E, PART 450 (NOISE FROM HEAVY MOTOR VEHICLES). ANY FAULTY NOISE SUPPRESSOR SHALL BE REPAIRED OR REPLACED IMMEDIATELY. EQUIPMENT SHALL NOT BE LEFT RUNNING UNNECESSARILY. EXISTING TALL GROWING VEGETATION SHALL BE RETAINED TO THE MAXIMUM EXTENT PRACTICABLE, TO SERVE AS A NOISE BUFFER.
5. CONSTRUCTION ACTIVITY WILL BE RESTRICTED TO THE HOURS OF 7:00 A.M. AND 10:00 P.M. MONDAY THROUGH SATURDAY AND 7AM TO 8PM ON SUNDAY UNLESS PRIOR WRITTEN APPROVAL FOR EXTENDED WORK HOURS HAS BEEN AUTHORIZED.
6. MINIMIZE VEGETATION REMOVAL WITHIN WETLAND BUFFER ZONES (100 FEET FROM STATE REGULATED WETLANDS AND 50 FEET FROM OTHER WATER BODIES).
7. INDIRECT IMPACTS TO STREAMS AND WETLANDS SHALL BE CONTROLLED THROUGH THE EMPLOYMENT OF APPROPRIATE EROSION AND SEDIMENT CONTROL MEASURES IN ACCORDANCE WITH APPROVED PROJECT STORMWATER POLLUTION PREVENTION PLAN (SWPPP). MEASURES TO BE EMPLOYED SHALL INCLUDE, BUT NOT BE LIMITED TO, SILT FENCES, CHECK DAMS, MULCH, TEMPORARY SEEDING, AND OTHER PRACTICES AS OUTLINED IN THE NEW YORK STATE STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL (LATEST EDITION).
8. EXPOSED SOIL SHALL BE SEEDED AND/OR MULCHED AS SOON AS PRACTICABLE AFTER FINAL GRADING. TEMPORARY SEED AND MULCH SHALL BE USED DURING PERIODS OF PLANNED EXTENDED SHUT-DOWNS, INTERRUPTED CONSTRUCTION AND DURING PERIODS HOT WEATHER WHEN PERMANENT SEEDING IS LIKELY TO FAIL.
9. IN THE EVENT THAT ARCHAEOLOGICAL MATERIALS, HUMAN REMAINS, OR EVIDENCE OF HUMAN BURIALS ARE ENCOUNTERED DURING CONSTRUCTION, ALL WORK IN THE VICINITY OF THE FIND SHALL BE IMMEDIATELY HALTED AND THE "UNANTICIPATED DISCOVERY PLAN" SHALL BE IMPLEMENTED.
10. THE CONTRACTOR SHALL LOCATE AND DISTRIBUTE EXCESS EXCAVATION MATERIAL IN NON-AGRICULTURE UPLAND AREAS (I.E., OUTSIDE OF WETLANDS, STREAMS, AND AGRICULTURAL FIELDS). WHERE PRACTICAL, SUCH MATERIAL SHALL BE USED AS ROAD FILL OR BACKFILL AROUND STRUCTURES. EROSION CONTROL PRACTICES SHALL BE INSTALLED, AND EXPOSED SOILS STABILIZED IN ACCORDANCE WITH THE SWPPP.

PRELIMINARY SPECIFIC STREAM CROSSING RESTRICTIONS:

1. CONSTRUCTION WORK IN STREAMS SHALL CONFORM TO APPROPRIATE TIMING RESTRICTIONS IMPLEMENTED TO PROTECT IMPORTANT FISHERIES RESOURCES, DURING SPAWNING AND PRIMARY MIGRATION PERIODS. STREAMS SUBJECT TO SUCH RESTRICTIONS WILL BE DETERMINED IN THE FIELD BY REPRESENTATIVES OF THE DEC AND THE APPLICANT. PRIOR TO CONSTRUCTION, FOR COLD WATER FISHERIES IN THE PROJECT AREA, CONSTRUCTION WORK IN STREAMS WILL BE PROHIBITED BETWEEN OCTOBER 1 AND MAY 31 TO AVOID TROUT SPAWNING PERIODS. FOR WARM WATER FISHERIES, CONSTRUCTION WORK IN STREAMS WILL BE PROHIBITED BETWEEN MARCH 1 AND JULY 15. HOWEVER, ONCE INSTALLED, SUCH CROSSINGS CAN BE USED BY CONSTRUCTION VEHICLES THROUGHOUT THE DURATION OF PROJECT CONSTRUCTION. ANY EXCEPTIONS TO THESE PROHIBITED PERIODS REQUIRE PRIOR APPROVAL BY DPS STAFF, IN CONSULTATION WITH DEC.

PRELIMINARY SPECIFIC WETLAND CROSSING RESTRICTIONS:

1. TEMPORARY ACCESS ACROSS WETLANDS SHALL BE REMOVED AT THE EARLIEST TIMEFRAME PRACTICAL.
2. WORK WITHIN AND ACCESS ACROSS WETLANDS SHALL BE DESIGNED AND EXECUTED SO AS NOT TO ALTER THE PRE-DISTURBANCE FLOW REGIME.
3. DURING EXCAVATION IN WETLANDS, TEMPORARY SPOIL STOCKPILES SHALL BE PLACED ON CONSTRUCTION MATTING. FOLLOWING BACKFILL, ANY EXCESS SPOIL NOT USED AS STRUCTURE BACKFILL SHALL BE DISPOSED OF AT AN UPLAND SITE AS APPROVED BY THE ENVIRONMENTAL INSPECTOR (NO BULL-DOZING, BACK-BLADING, OR OTHERWISE SPREADING OF EXCESS SPOIL OVER THE WETLAND SURFACE SHALL BE PERMITTED).
4. EROSION CONTROL AND OTHER WETLAND PROTECTION MEASURES SHALL BE IMPLEMENTED AS SPECIFIED IN THE SWPPP.
5. CONTRACTOR SHALL INSTALL AND MAINTAIN SILT FENCING AND SEDIMENT BARRIERS AS INDICATED WHENEVER EXCAVATION OR FILLING ACTIVITIES OCCUR ADJACENT TO OR WITHIN WETLAND AREAS.

PRELIMINARY AGRICULTURAL LAND-RELATED RESTRICTIONS:

1. AGRICULTURAL MITIGATION, RESTORATION, AND CLEAN UP MAY INCLUDE, BUT IS NOT LIMITED TO, THE FOLLOWING:

A. USE OF CONSTRUCTION MATTING,

B. CONSTRUCTION OF TEMPORARY HAUL ROADS AND HAUL ROAD REMOVAL,

C. TOPSOIL STRIPPING,

D. PLACEMENT OF GEOTEXTILE AND STONE BEARING LAYER,

E. REGRADING AND SPREADING PREVIOUSLY STRIPPED TOPSOIL,

F. SURFACE AND DEEP TILLAGE,

G. DRAINAGE SYSTEM REPAIR OR ALTERATION.
2. IN ACTIVE LIVESTOCK-USE AREAS, ANY CHERRY TREE SLASH (TOXIC TO LIVESTOCK) GENERATED DURING CLEARING SHALL BE REMOVED AND DISPOSED OF SO AS NOT TO BE AVAILABLE TO LIVESTOCK.
3. ANY WORK ON AGRICULTURAL LANDS SHALL INCLUDE THE FOLLOWING PRE-CONSTRUCTION TREATMENTS:

A. ALL TOPSOIL WILL BE PROTECTED BY APPROPRIATE MEANS, TO AND INCLUDING STRIPPING AND STOCKPIILING.

B. UPON COMPLETION OF CONSTRUCTION ACTIVITIES ALL IMPORTED MATERIAL SUCH AS GRAVEL SHALL BE COMPLETELY REMOVED, AND THE UNDERLYING SOIL RESTORED AS DESCRIBED IN ARTICLE 10 APPLICATION.
4. TEMPORARY GRAVEL ROADS, TEMPORARY CULVERTS, TIMBER MATS, AND SIMILAR TEMPORARY MEASURES SHALL BE REMOVED AND THE IMPACTED AREAS RESTORED WITHIN FOUR (4) MONTHS OF INITIAL DISTURBANCE. UNDER SPECIAL CIRCUMSTANCES A TWO (2) MONTH EXTENSION MAY BE GRANTED.
5. ACCESS ROUTES SHALL BE CONSTRUCTED AS INDICATED ON THE FINAL CONSTRUCTION DRAWINGS, WITH CONSTRUCTION ACTIVITIES RESTRICTED TO DESIGNATED CORRIDORS/RIGHTS-OF-WAY.
6. ALL ACCESS ROUTES ACROSS AGRICULTURAL FIELDS SHALL BE THE MINIMUM WIDTH NECESSARY TO ACCOMMODATE CONSTRUCTION TRAFFIC.
7. TO PREVENT DAMAGE TO ADJACENT AGRICULTURAL LAND, ALL VEHICLE TRAFFIC AND PARKING SHALL BE CONFINED TO THE ACCESS ROADS, DESIGNATED WORK AREAS AT THE STRUCTURE SITES, AND/OR DESIGNATED PARKING AND MATERIAL LAYDOWN AREAS. ANY NECESSARY PULL-OFFS AND PARKING AREAS SHALL BE DEVELOPED OUTSIDE OF ACTIVE AGRICULTURAL FIELDS.
8. IMMEDIATELY FOLLOWING CONSTRUCTION ACTIVITY, THE WORK AREAS SHALL BE THOROUGHLY CLEARED OF ALL CONSTRUCTION DEBRIS, REFUSE AND METAL OBJECTS SUCH AS NUTS, BOLTS, SPIKES, WIRE, PIECES OF STEEL, AND OTHER ASSORTED ITEMS.
9. EXISTING FARM FENCES SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION. WHERE EXISTING FENCE OR GATES MUST BE REMOVED OR ALTERED, TEMPORARY FENCING AND GATES SHALL BE PROVIDED TO MATCH THE FUNCTION OF THE EXISTING SYSTEM. AT THE END OF CONSTRUCTION, RESTORE THE FENCE AND GATE TO AT MINIMUM MATCH THAT EXISTING AT THE START OF THE WORK.
10. LIMITS OF WORK, RIGHTS-OF-WAY AND OTHER TEMPORARY MARKINGS SHALL UTILIZE WOOD STAKES, BARRIER FENCES AND SIMILAR METHODS. NO PIN FLAGS SHALL BE USED IN AGRICULTURAL FIELDS.
11. THE NEW YORK DEPARTMENT OF AGRICULTURE AND MARKETS (NYDAM) GUIDELINES FOR AGRICULTURE AND MITIGATION FOR WINDPOWER PROJECTS SHALL BE FOLLOWED TO THE EXTENT PRACTICABLE. WHEN DEVIATIONS FROM THE GUIDELINES ARE NECESSARY NYS DAM SHALL BE CONSULTED.

PRELIMINARY EROSION & SEDIMENT CONTROL NOTES:

1. REFER TO THE CONSTRUCTION SEQUENCE IN THE PRELIMINARY SWPPP.
2. THE BOP CONTRACTOR SHALL INSTALL EROSION AND SEDIMENT CONTROL PRACTICES IN ACCORDANCE WITH THE DESIGN AND SWPPP THROUGHOUT ALL PHASES OF CONSTRUCTION.
3. CONSTRUCTION ENTRANCES SHALL BE INSTALLED FOR THE ACCESS ROUTES AT EACH JUNCTION WITH A PUBLIC ROAD UNLESS OTHERWISE INDICATED.
4. INSTALL SILT FENCE ON THE DOWNSTREAM SIDE OF DISTURBED AREAS AS NECESSARY.
5. PLACE CHECK DAMS IN ALL SWALES/DITCHES SPECIFIED IN THE FINAL CONSTRUCTION DRAWINGS IN ACCORDANCE WITH THE 2016 NYS STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL.
6. THE CONTRACTOR SHALL PLACE SOIL AND EXCESS EXCAVATED EARTH IN TEMPORARY STOCK PILE AREAS THAT DO NOT INTERFERE WITH CONSTRUCTION ACTIVITIES, STORMWATER RUNOFF, AND ARE NOT IN ENVIRONMENTALLY SENSITIVE AREAS. STOCK PILES SHALL BE STABILIZED PER THE DESIGN.
7. ALL DISTURBED AREAS SHALL BE STABILIZED PER THE NYS STANDARDS FOR EROSION AND SEDIMENT CONTROL AS NECESSARY.
8. AFTER CONSTRUCTION IS COMPLETE, THE CONTRACTOR SHALL ROUGH GRADE, RE-APPLY STOCKPILED TOPSOIL, FINE GRADE, SEED, AND MULCH ALL DISTURBED AREAS PLANNED FOR VEGETATIVE COVER.
9. CONSTRUCTION WORK AREAS AND ACCESS ROUTES MAY BE IMPROVED AS NECESSARY TO ALLOW CONSTRUCTION ACCESS. ANY IMPROVEMENTS, UNLESS DEEMED PERMANENT, MUST BE REMOVED AT THE COMPLETION OF CONSTRUCTION AND THE AREA RESTORED TO PRE-CONSTRUCTION CONDITION.
10. THE CONTRACTOR IS RESPONSIBLE FOR THE PLACEMENT, DESIGN, APPROVAL, AND OPERATION OF CONCRETE WASHOUTS. THE CONCRETE WASHOUTS SHALL BE INSTALLED A MINIMUM OF 50 FEET AWAY FROM STORM DRAINAGE, SURFACE WATER, OR OTHER SENSITIVE AREAS. CONCRETE WASTE MATERIAL SHALL NOT BE ALLOWED TO DISCHARGE FROM THE CONCRETE WASHOUT.

PRELIMINARY SAFETY NOTES:

1. SMOKING IS PROHIBITED ON THE PROJECT SITE EXCEPT WITHIN DESIGNATED SMOKING AREAS.
2. PROVIDE SANITARY FACILITIES AT EACH WORK SITE AS REQUIRED BY STATE OR UNION REGULATIONS.
3. OPEN FLAMES, BURNING, AND GRINDING IS PROHIBITED UNLESS PERMITTED BY LOCAL FIRE OFFICIALS.
4. EACH CONSTRUCTION VEHICLE SHALL HAVE AT LEAST ONE A, B, C FIRE EXTINGUISHER AND A SUITABLE CLASS II FIRST AID KIT.
5. EACH WORK SITE SHALL HAVE AT LEAST ONE ANSI COMPLIANT CLASS B FIRST AID KIT.
6. NO EXCAVATION SHALL TAKE PLACE PRIOR TO CONTACTING THE APPROPRIATE UTILITY LOCATING SERVICE FOR A DIG-SAFE CLEARANCE.
7. MECHANICAL EXCAVATION USING POWER EQUIPMENT SHALL APPROACH NO CLOSER THAN TWO (2) FEET FROM MARKED UNDERGROUND UTILITIES UNTIL THE ACTUAL LOCATION OF THE UTILITY HAS BEEN VERIFIED BY EXPOSING IT. UTILITIES SUBJECT TO THIS REQUIREMENT INCLUDE, BUT ARE NOT LIMITED TO GAS LINES, LIQUID FUEL, WATER, ELECTRIC, TELEPHONE, DATA LINES (FIBER OR COPPER), SANITARY SEWER, AND STORM DRAINS. MARKED UTILITIES SHALL BE EXPOSED BY HAND DIGGING OR VACUUM EXCAVATION TO VERIFY THE UTILITY LOCATION, DEPTH AND ORIENTATION.
8. ROAD OR LANE CLOSINGS AND ALL TRAFFIC CONTROL PLANS SHALL BE SUBJECT TO APPROVAL OF TOWN OR STATE ROAD OFFICIALS. PROPOSED CONTROL PLANS SHALL BE SUBMITTED TO THE TOWN OR STATE ROAD OFFICIALS FOR REVIEW AND APPROVAL WELL AHEAD OF THE WORK.
9. CONSTRUCTION VEHICLES SHALL OBSERVE AND COMPLY WITH ESTABLISHED SAFETY REQUIREMENTS INCLUDING POSTED SPEED LIMITS.

PRELIMINARY ARCHAEOLOGICAL SITE NOTES:

1. THE FOLLOWING TABLE OUTLINES THE ARCHAEOLOGICAL SITES IDENTIFIED DURING THE ARCHAEOLOGICAL SURVEY FOR THE EIGHT POINT WIND ENERGY CENTER PROJECT IN 2017. THE SITES RECOMMENDED FOR AVOIDANCE SHOULD BE AVOIDED BY ALL POTENTIALLY EARTH-DISTURBING ACTIVITIES RELATED TO THE CONSTRUCTION. THE MAPPED LOCATIONS OF ALL ARCHAEOLOGICAL SITES RECOMMENDED FOR AVOIDANCE THAT OCCUR WITHIN 100 FEET (31 METERS) OF PROPOSED WORK WILL BE IDENTIFIED AS "ENVIRONMENTALLY SENSITIVE AREAS" OR SIMILAR ON THE FINAL CONSTRUCTION DRAWINGS, AND MARKED IN THE FIELD BY CONSTRUCTION FENCING WITH SIGNS THAT RESTRICT ACCESS. THESE MEASURES SHOULD BE ADEQUATE TO ENSURE THAT IMPACTS TO ARCHAEOLOGICAL RESOURCES ARE AVOIDED.

ARCHEOLOGICAL SITES	
RESOURCE NO.	SITE TYPE / CULTURAL AFFILIATION
EPW-TRC-1	19TH -20TH CENTURY HISTORIC FARMSTEAD
EPW-TRC-2	19TH -20TH CENTURY HISTORIC RESIDENCE
EPW-TRC-3	PREHISTORIC LITHIC SCATTER
EPW-IF-1	HISTORIC ISOLATED FIND
RPW-IF-2	HISTORIC ISOLATED FIND
EPW-IF-3	PREHISTORIC ISOLATED FIND
EPW-IF-4	PREHISTORIC ISOLATED FIND
EPW-IF-5	HISTORIC ISOLATED FIND
EPW-IF-7	HISTORIC ISOLATED FIND
EPW-IF-8	HISTORIC ISOLATED FIND
1929 GEODETIC SURVEY MARKER	HISTORIC FEATURE

PRELIMINARY TURBINE SETBACKS:

1. THE FOLLOWING TURBINE SETBACKS WERE UTILIZED IN THE LAYOUT OF THE WIND FARM FACILITIES. WHERE SETBACK REQUIREMENTS TO PRIVATE PROPERTY COULD NOT BE MET, LANDOWNER ACKNOWLEDGEMENT / CO HAS BEEN RECEIVED.

Type	Method	RD	HH	DISTANCE
Non-participating and competition land parcels	1.2 tip height + 10 Meters	137	110	224 Meters
Development T-line	1.5 tip height	137	110	276 Meters
Oil feature from site	1.1 tip height + 10 Meters	137	110	224 Meters
pending targeted and lease	1.0 blade + 10 Meters	137	110	78.5 Meters
project boundary line	1.2 tip height + 10 Meters	137	110	224 Meters
tower	1.1 tip height	137	110	196.35 Meters
cell tower	1.1 tip height	137	110	196.35 Meters
media tower	1.1 tip height	137	110	196.35 Meters
private airstrip	1.1 blade	137	110	75.35 Meters
beam path	1.0 blade + 10 Meters	137	110	78.5 Meters
NYSDEC wetlands	300 Feet	137	110	91.44 Meters
Receptors	1500 Feet	137	110	457.2 Meters
NIT Parcels with houses - in greenwood	0.5 Miles	137	110	804.672 Meters
Parcel lines pending targeted and lease	1.0 blade + 10 Meters	130	110	75.0 Meters
	1.2 tip height + 10 Meters	137	110	224 Meters
Towns	1 Mile	137	110	1609.344 Meters
Pipelines	1.1 tip height + 10 Meters	137	110	206.35 Meters
Gas storage	1.1 tip height + 10 Meters	137	110	206.35 Meters
County lines	1.1 tip height + 10 Meters	137	110	206.35 Meters
state highway 417	1.5RD + 1.5HH + 10 Meters	137	110	380.5 Meters
substation	1.1 tip height + 20 Meters	137	110	216.35 Meters
Railroads	1.1 tip height + 20 Meters	137	110	216.35 Meters
Local Water	300 Feet	137	110	91.44 Meters
Local rivers	300 Feet	137	110	91.44 Meters

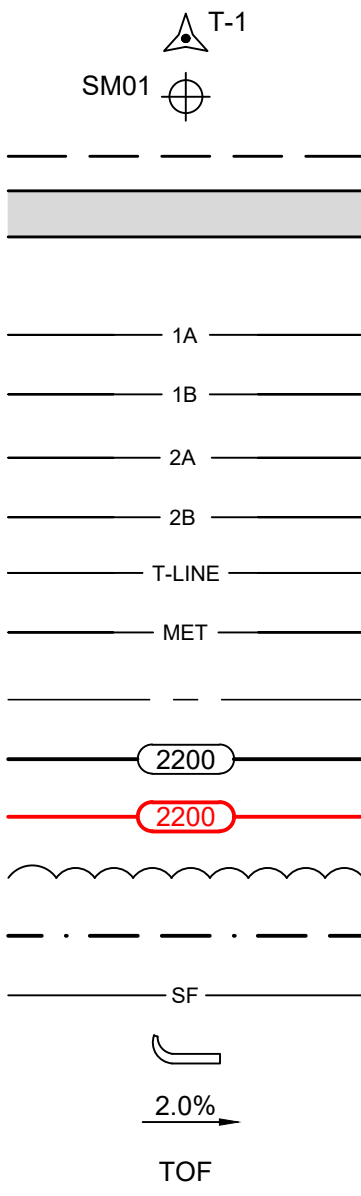
West Union	Greenwood
1400 from residences	1400 from residences
1.2 site property line	1.2 site property line
1.2 public roads	1.2 public roads
1.2 utilities	1.2 utilities
1.5 occupied structures	1.5 occupied structures

<div><div>TRC</div><div>249 Western Avenue Augusta, ME 04330</div></div>		PROJECT NO: 246409			
REV	DESCRIPTION	DATE	DES	CHK	APP
C	ISSUED FOR CLIENT REVIEW	03/02/18	TRC	PMM	AMW
B	PRE-FINAL CLIENT REVIEW	08/04/17	DED	PMM	AMW
A	ISSUED FOR CLIENT REVIEW	04/17	DED	PMM	AW

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

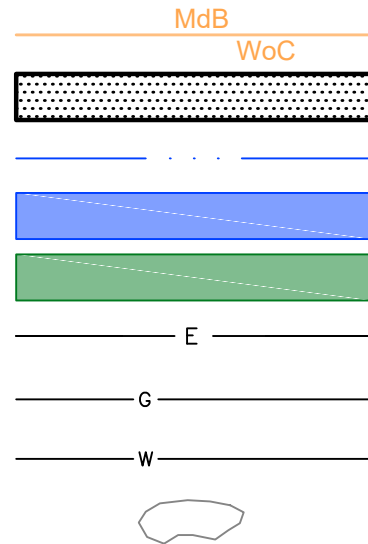
LEGEND

PROPOSED



EXISTING

TOWN LINE - NY CIVIL BOUNDARIES  
2015 STEUBEN COUNTY TAX PARCELS  
TURBINE  
MET TOWER  
TEMPORARY ACCESS ROAD / PAD OR CRANE WALK PATH  
PERMANENT GRAVEL ROAD  
COLLECTION LINE  
CIRCUIT 1A  
CIRCUIT 1B  
CIRCUIT 2A  
CIRCUIT 2B  
TRANSMISSION LINE  
MET TOWER  
CENTERLINE  
CONTOUR  
TEMPORARY CONTOUR  
CLEARING LIMIT  
LIMIT OF DISTURBANCE  
SILT FENCE  
DITCH TURNOUT / FLOW DIFFUSER TO VEGETATED FILTER STRIP  
SLOPE AND DIRECTION  
TOP OF FOUNDATION  
USDA SSURGO SOILS  
STEUBEN COUNTY FEMA 100 YR FLOOD HAZARD AREA - ZONE A  
TRC DELINEATED STREAM CENTERLINE  
TRC DELINEATED STREAM  
TRC DELINEATED WETLAND  
ELECTRICAL LINE  
GAS LINE  
WATER LINE  
TREE LINE



TURBINE TABLE					
ID	SIZE (MW)	TOP OF FOUNDATION (FT)	NORTHING (FT)	EASTING (FT)	
SM01	MET	2330.85	743856.55	515781.06	
SM01-ALT	MET	2222.57	774920.41	510826.63	
SM02	MET	2328.55	743620.81	515413.81	
SM02-ALT	MET	2203.51	775321.04	510820.28	
T-1	3.4	2257.40	779423.63	510394.33	
T-2	3.4	2358.30	779693.26	514800.01	
T-3	3.4	2308.30	777884.50	512633.89	
T-4	3.4	2358.20	772532.88	509323.67	
T-5	3.4	2292.20	774798.92	511761.62	
T-6	3.4	2363.50	774092.57	515040.72	
T-7	3.4	2343.56	772761.19	516577.15	
T-8	3.4	2281.96	773551.39	519147.56	
T-9	3.4	2346.70	766785.11	511116.00	
T-10	3.4	2353.50	769557.64	514033.16	
T-11	2.3	2314.90	769824.48	520350.74	
T-12	3.4	2347.00	770886.53	522506.96	
T-13	2.3	2298.30	771956.27	524646.10	
T-14	3.4	2327.40	765483.22	521222.33	
T-15	3.4	2252.26	761723.87	515019.76	
T-16	3.4	2386.50	759755.66	514674.29	

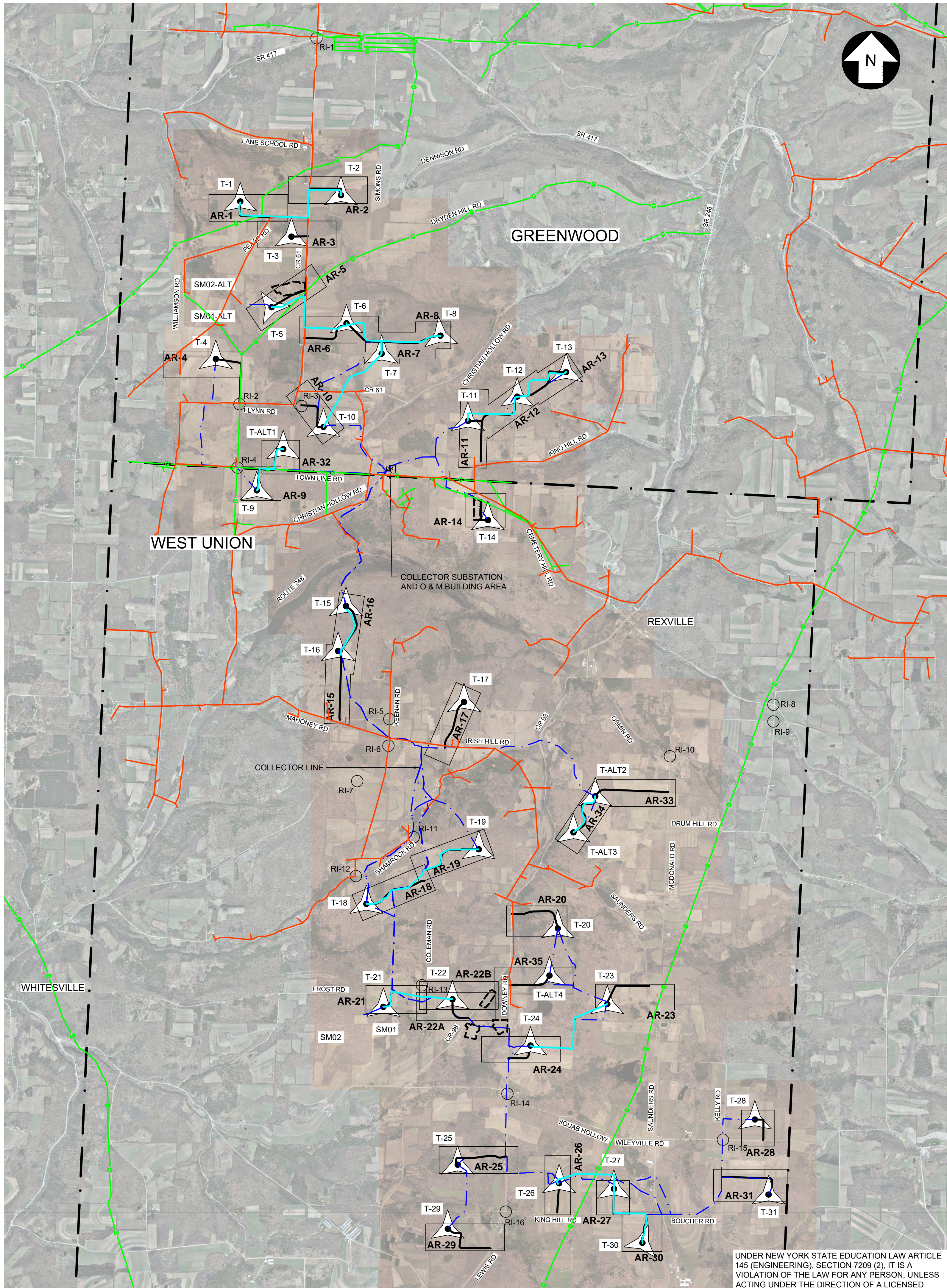
TURBINE TABLE					
ID	SIZE (MW)	TOP OF FOUNDATION (FT)	NORTHING (FT)	EASTING (FT)	
T-17	3.4	2266.95	757522.33	520178.56	
T-18	3.4	2271.95	748695.37	515910.87	
T-19	3.4	2336.20	751084.97	520823.32	
T-20	3.4	2279.40	747624.56	524283.81	
T-21	3.4	2306.90	744191.80	516652.79	
T-22	3.4	2342.35	744522.78	519672.47	
T-23	3.4	2342.30	744312.32	526445.90	
T-24	3.4	2281.15	742499.82	523087.95	
T-25	3.4	2265.70	737287.20	519903.86	
T-26	2.3	2263.90	736477.40	524342.20	
T-27	2.3	2267.00	736235.93	526736.96	
T-28	3.4	2270.10	739262.72	532905.52	
T-29	3.4	2272.20	734483.60	519471.08	
T-30	3.4	2246.30	733866.01	527982.92	
T-31	3.4	2257.80	735981.80	533499.73	
T-ALT1	3.4	2367.90	768587.50	512273.34	
T-ALT2	3.4	2302.76	753405.52	525920.89	
T-ALT3	3.4	2185.60	751823.44	524966.87	
T-ALT4	3.4	2295.40	745561.30	523917.52	

PRELIMINARY NOT FOR CONSTRUCTION



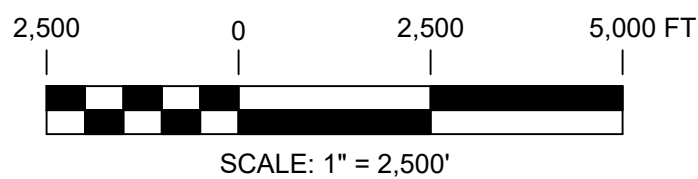
GENERAL NOTES AND LEGEND			
EIGHT POINT WIND ENERGY CENTER			
EIGHT POINT WIND, LLC			
GREENWOOD / WEST UNION		NEW YORK	
REVIEW 1	03/17 DATE AS NOTED SCALE	<div><div>TRC</div></div>	G-1
REVIEW 2			
			REV. C







**LEGEND - SHEET G-2**

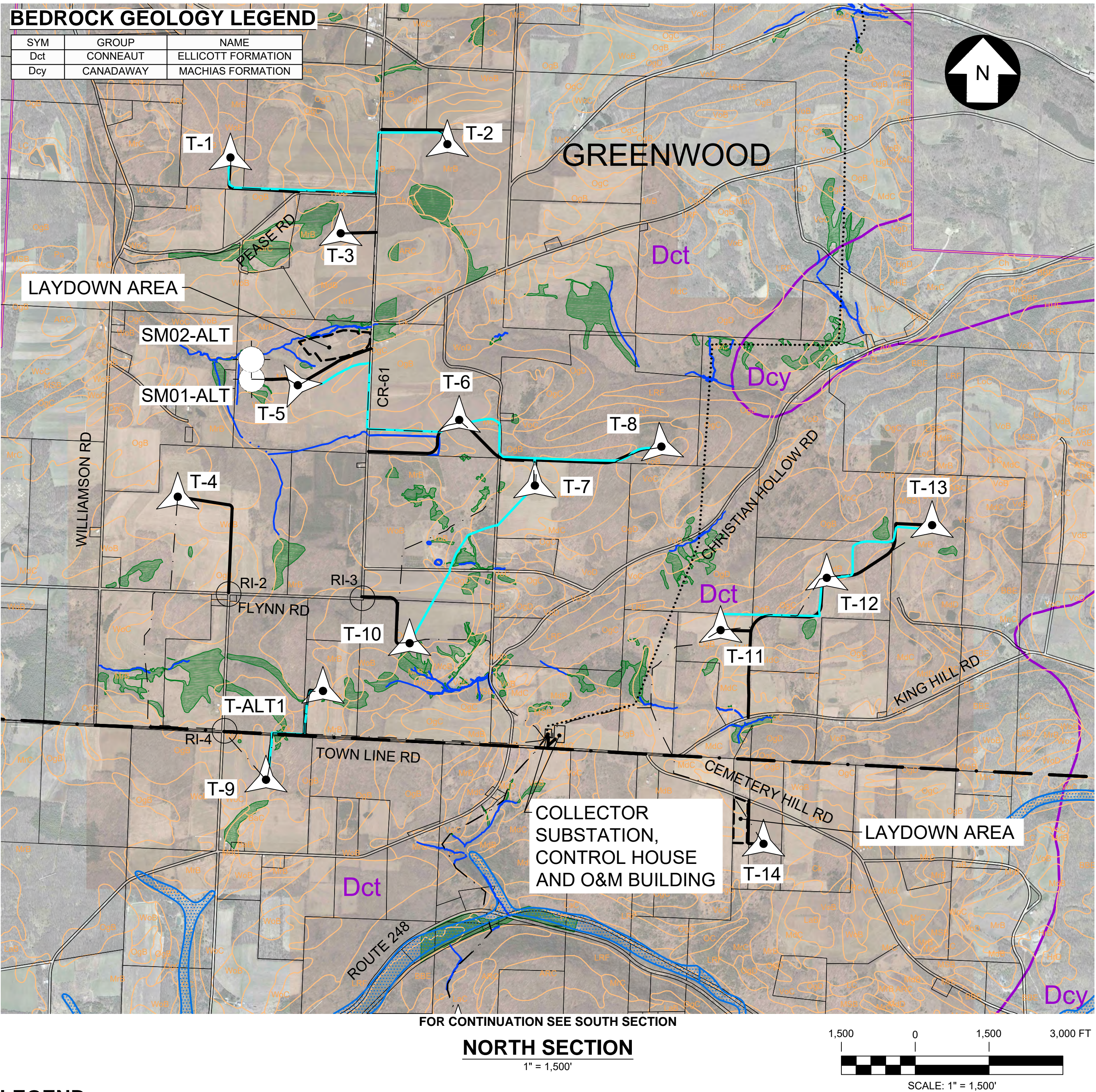
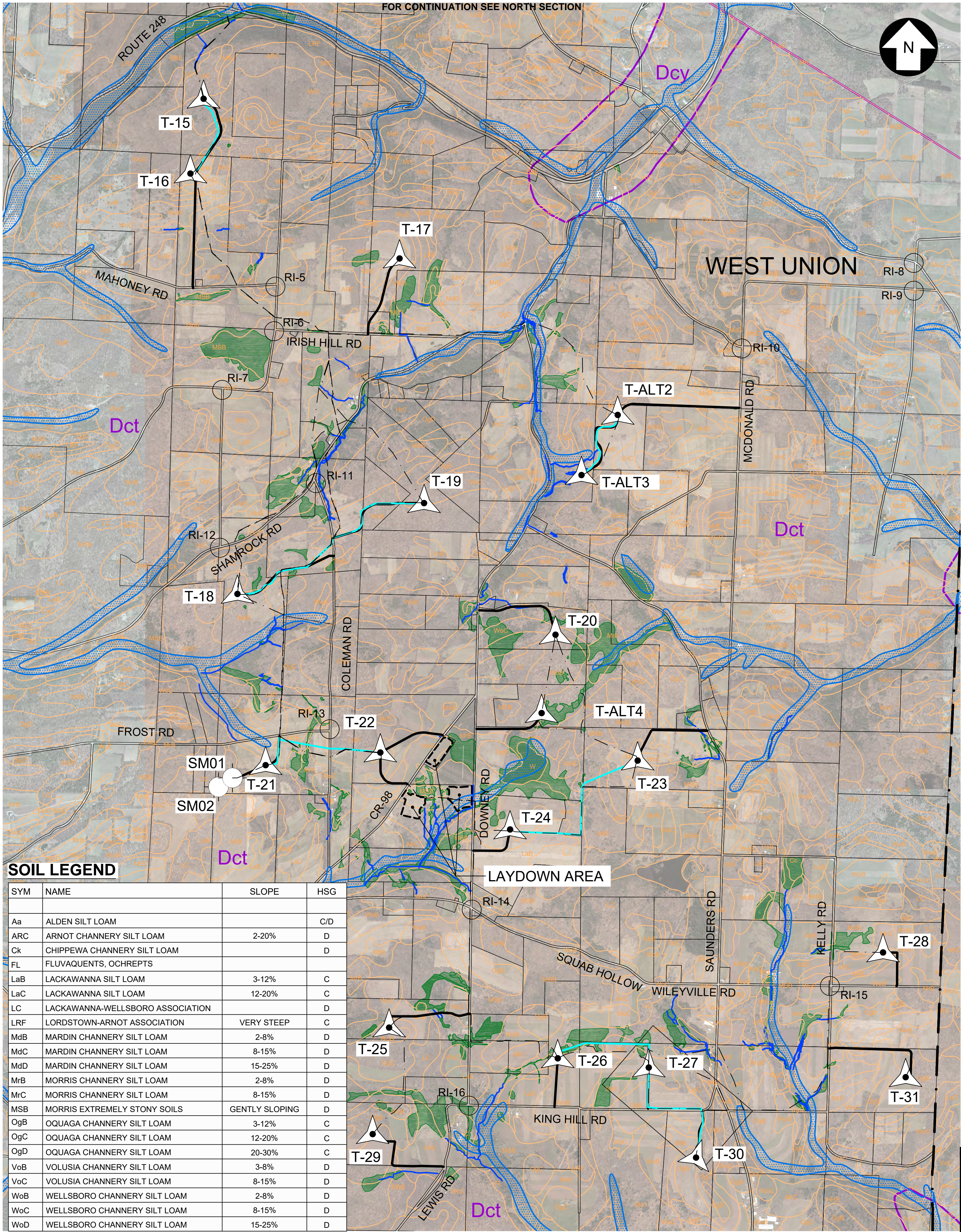
- TOWN LINE
- TURBINE
- MET TOWER
- ACCESS ROAD
- CRANE PATH
- COLLECTOR LINE
- TRANSMISSION LINE
- LAY DOWN AREA
- POTENTIAL HAUL ROUTE ROAD IMPROVEMENT AREAS
- EXISTING GAS UTILITIES
- EXISTING ELECTRIC UTILITIES



**PRELIMINARY NOT FOR CONSTRUCTION**

<div><div>249 Western Avenue Augusta, ME 04330</div></div>						PROJECT NO: 246409						<div><div>PMM DESIGNED</div><div>DED DRAWN</div><div>AMW CHECKED</div><div>AJW APPROVED</div></div>		OVERALL PROJECT PLAN						
REV	DESCRIPTION					DATE	DES	CHK	APP	EIGHT POINT WIND ENERGY CENTER										
										EIGHT POINT WIND, LLC										
										GREENWOOD / WEST UNION										
										NEW YORK										
C	ISSUED FOR CLIENT REVIEW					03/02/18	TRC	PMM	AMW	<div><div><div></div><div>G-2</div></div><div><div>03/17 DATE</div><div>1" = 2500' SCALE</div></div></div>										REV.
B	PRE-FINAL CLIENT REVIEW					08/04/17	DED	PMM	AMW											C
A	ISSUED FOR CLIENT REVIEW					04/17	DED	PMM	AW											





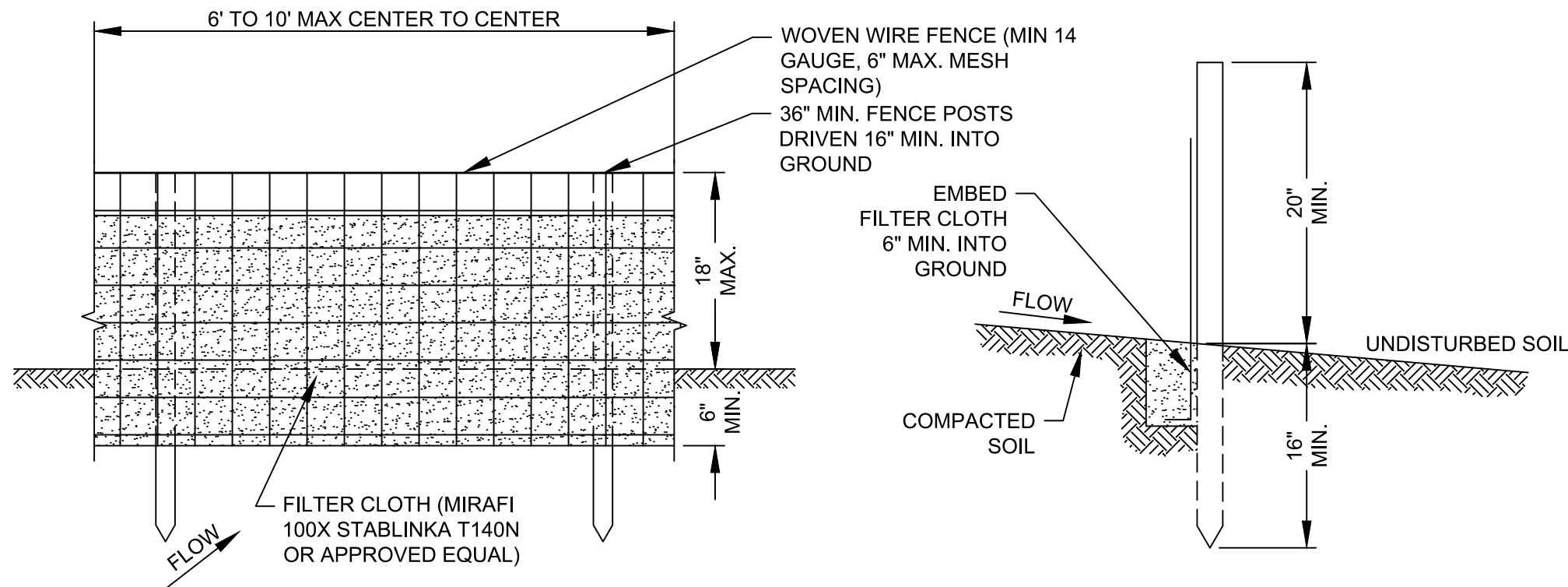
		249 Western Avenue Augusta, ME 04330		PROJECT NO: 246409		PMM DESIGNED		NATURAL RESOURCE MAP	
REV		DESCRIPTION		DATE		DES		EIGHT POINT WIND ENERGY CENTER	
C		ISSUED FOR CLIENT REVIEW		3/2/18		TRC		EIGHT POINT WIND, LLC	
C		PRE-FINAL CLIENT REVIEW		08/04/17		DED		GREENWOOD / WEST UNION	
A		ISSUED FOR CLIENT REVIEW		04/17		DED		NEW YORK	
								PMM DRAWN	
								AMW CHECKED	
								AJW APPROVED	
								REVIEW 1	
								03/17 DATE	
								AS NOTED SCALE	
								G-3	
								REV. C	

246409-BASE-OVERALL.dwg 2018.03.01

PRELIMINARY NOT FOR CONSTRUCTION

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

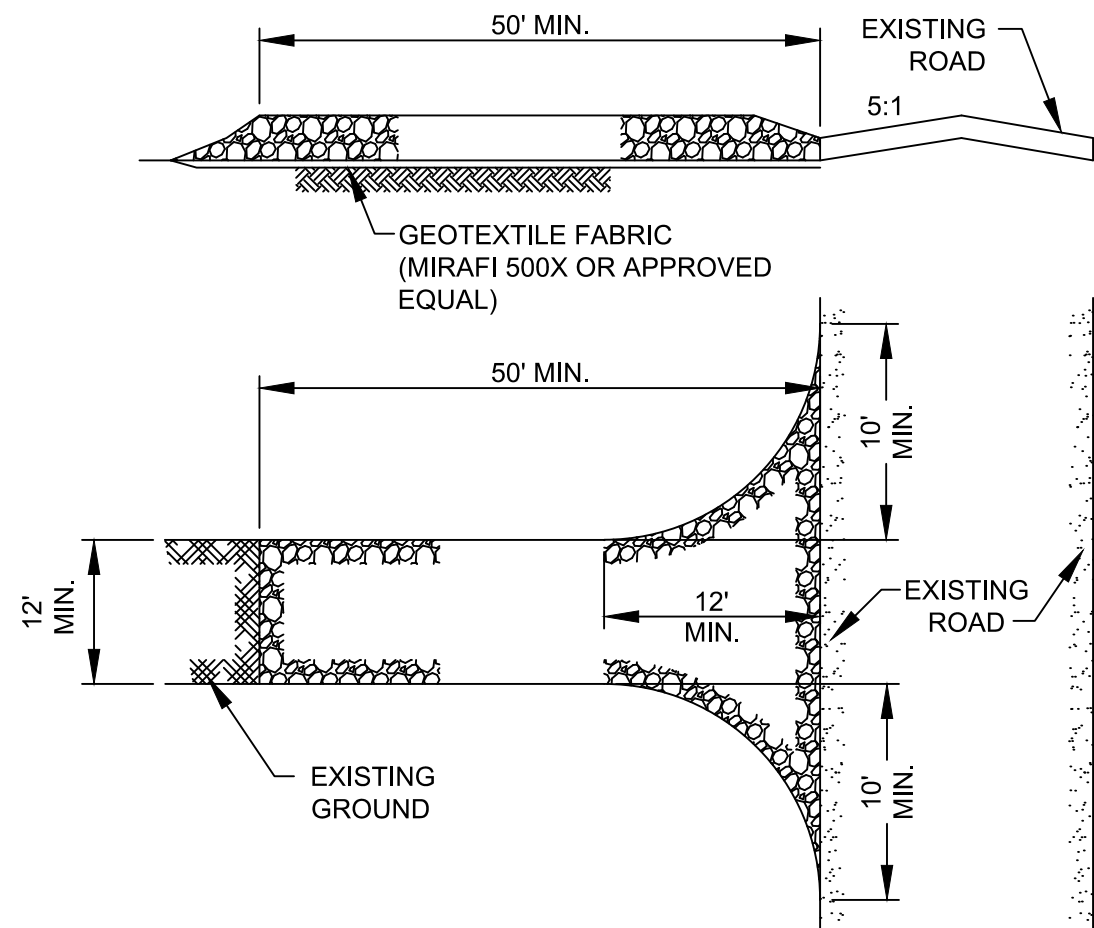




1. WOVEN WIRE FENCE TO BE FASTENED TO FENCE POSTS WITH WIRE TIES OR STAPLES.
2. FILTER CLOTH TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24\"/>

### SILT FENCE DETAILS

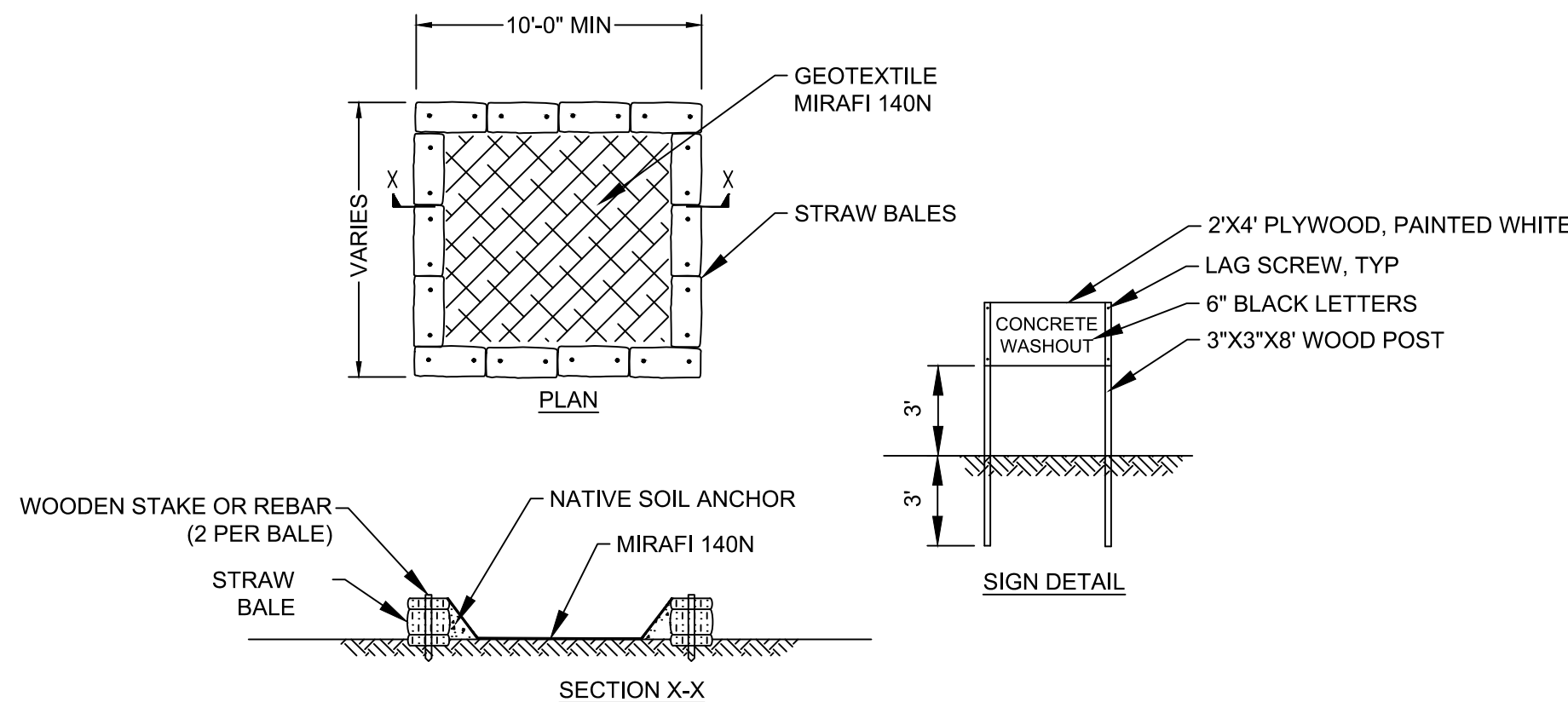
SCALE: N.T.S.



1. STONE SIZE - USE 1\"/>

### STABILIZED CONSTRUCTION ENTRANCE

SCALE: N.T.S.

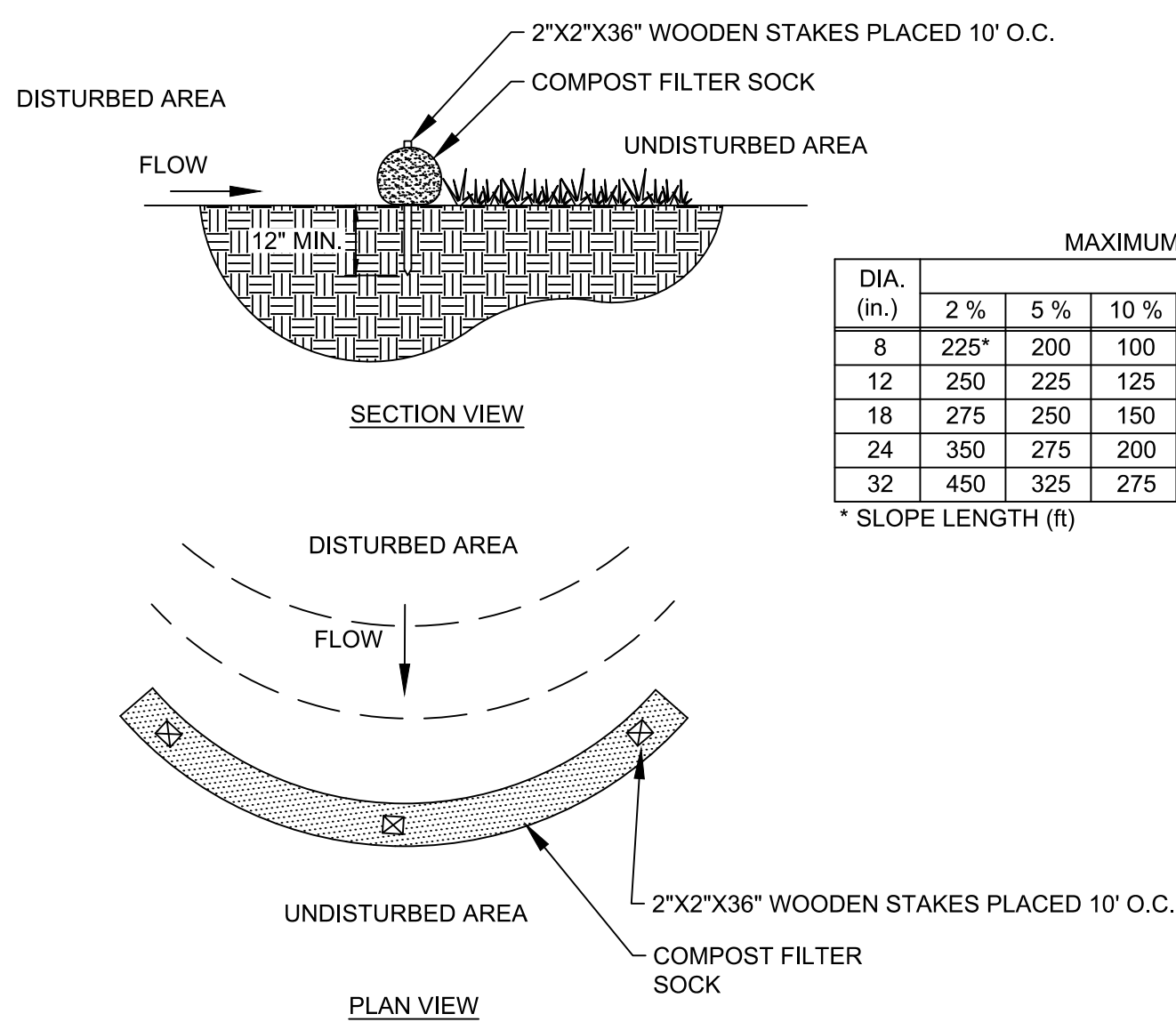


#### NOTES:

1. SUMP(S) SHALL BE LOCATED IN YARD BUT SHALL BE PLACED AS FAR AWAY FROM WETLANDS, BUFFERS AND DRAINAGE SWALES AS PRACTICAL.
2. SUMP(S) SHALL BE CLEANED AND WASTE CONCRETE REMOVED AND PROPERLY DISPOSED OF PERIODICALLY UPON COMPLETION OF WORK.

### TYPICAL CONCRETE WASHOUT

SCALE: N.T.S.

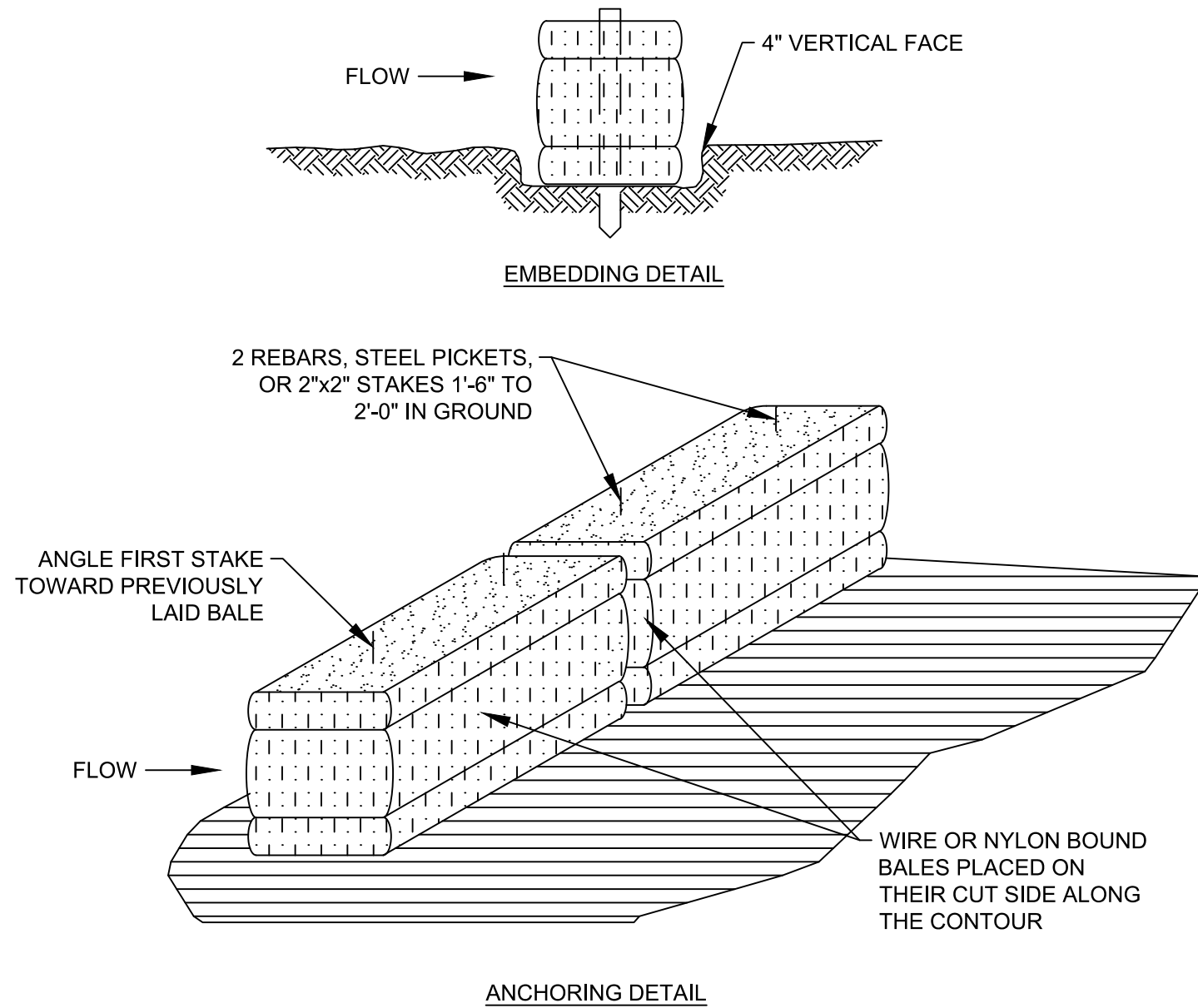


DIA. (in.)	SLOPE						
	2 %	5 %	10 %	20 %	25 %	33 %	50 %
8	225*	200	100	50	20	--	--
12	250	225	125	65	50	40	25
18	275	250	150	70	55	45	30
24	350	275	200	130	100	60	35
32	450	325	275	150	120	75	50

\* SLOPE LENGTH (ft)

### TYPICAL COMPOST FILTER SOCK

SCALE: N.T.S.

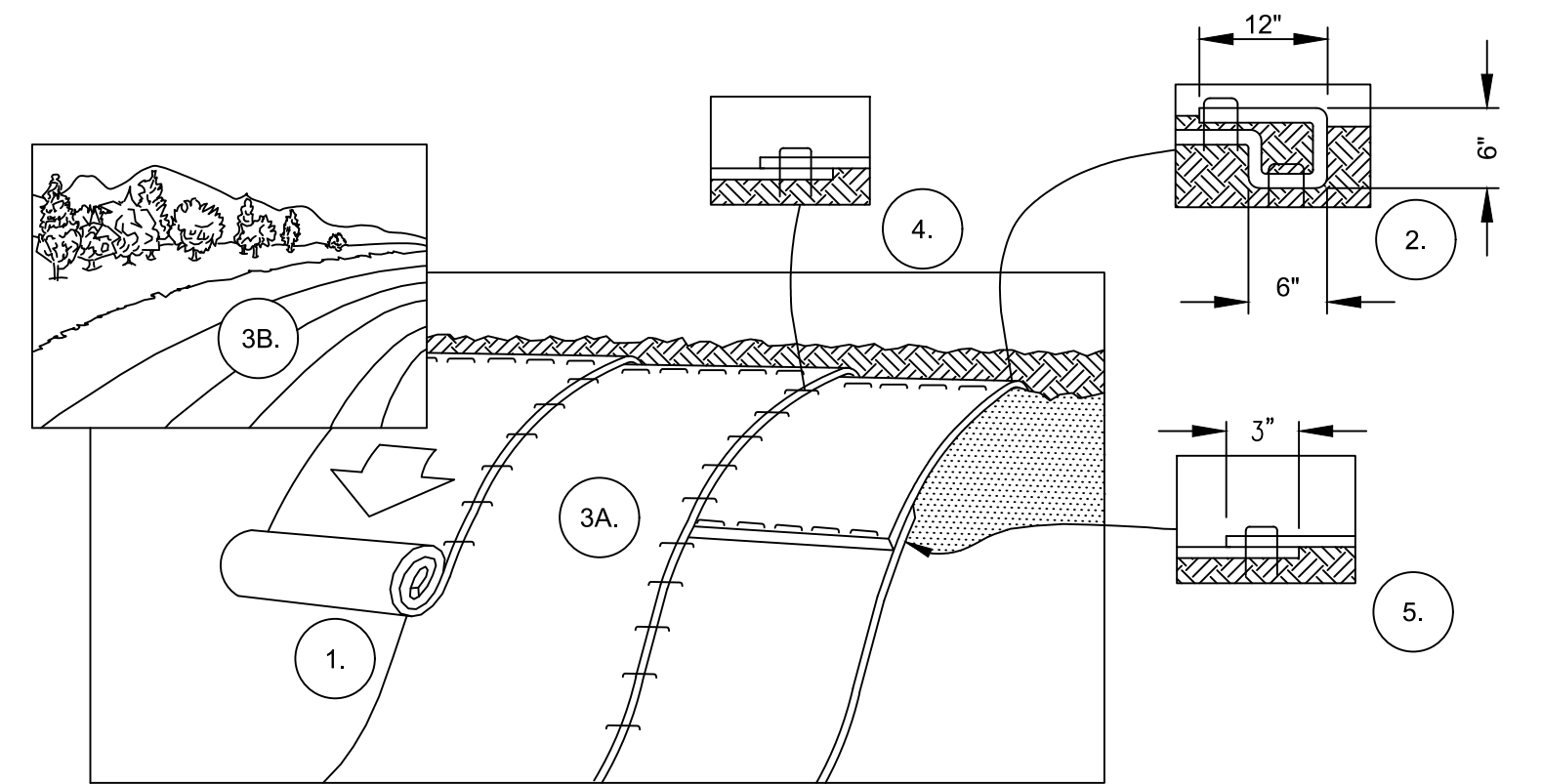


#### NOTES:

1. BALES SHALL BE PLACED IN A ROW AT THE TOE OF A SLOPE OR ON THE CONTOUR, WITH ENDS TIGHTLY ABUTTING THE ADJACENT BALES.
2. EACH BALE SHALL BE EMBEDDED IN THE SOIL A MINIMUM OF (4) INCHES, AND PLACED SO THE BINDINGS ARE HORIZONTAL.
3. BALES SHALL BE SECURELY ANCHORED IN PLACE BY EITHER TWO STAKES OR RE-BARS DRIVEN THROUGH THE BALE. THE FIRST STAKE IN EACH BALE SHALL BE DRIVEN TOWARD THE PREVIOUSLY LAID BALE AT AN ANGLE TO FORCE THE BALES TOGETHER. STAKES SHALL BE DRIVEN FLUSH WITH THE BALE.
4. INSPECTION SHALL BE FREQUENT AND REPAIR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED.
5. BALES SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFULNESS SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE.

### STRAW BALE BARRIER

SCALE: N.T.S.



EROSION CONTROL BLANKET SHALL BE NORTH AMERICAN GREEN S150 OR APPROVED EQUAL.

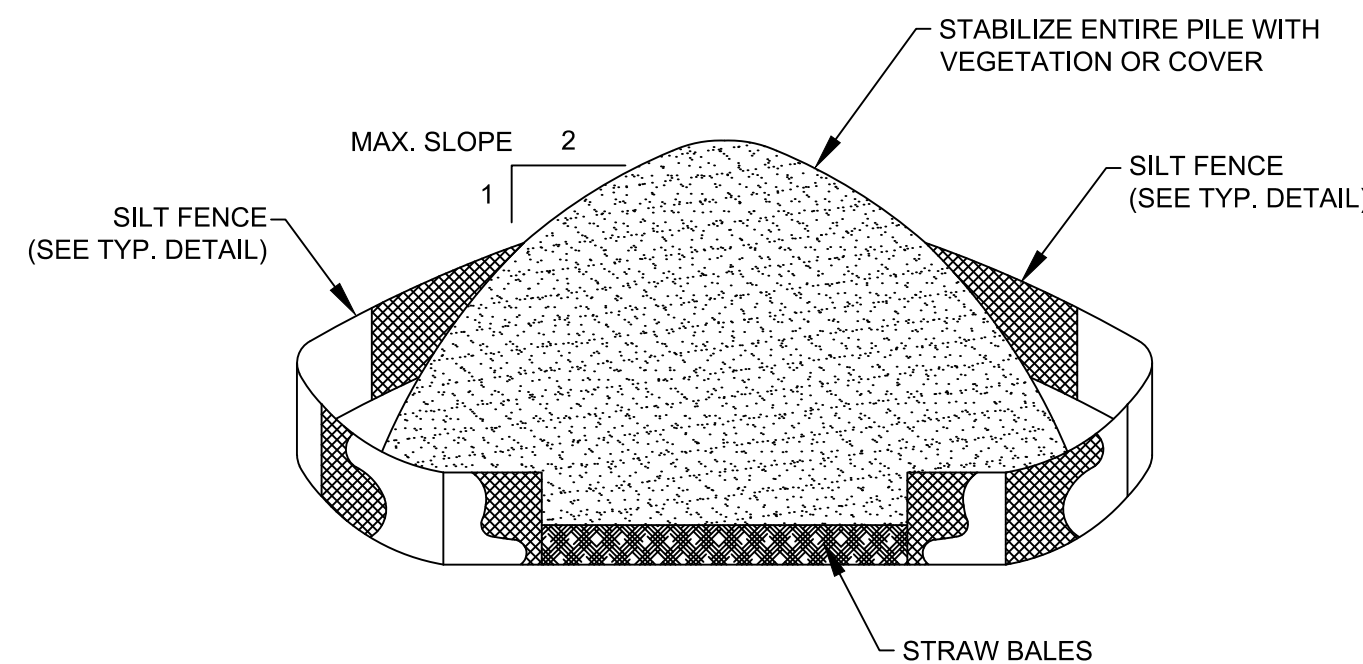
1. PREPARE SOIL BEFORE INSTALLING BLANKETS BY SMOOTHING THE SURFACE, REMOVING DEBRIS AND LARGE STONES, AND ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED. NOTE: WHEN USING CELL-O-SEED DO NOT SEED PREPARED AREA. CELL-O-SEED MUST BE INSTALLED WITH PAPER SIDE DOWN.
2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE BLANKET IN A 6\"/>

#### NOTE:

\*IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6\"/>

### EROSION CONTROL BLANKET INSTALLATION

SCALE: N.T.S.





#### INSTALLATION NOTES:

1. AREA CHOSEN FOR STOCKPILING OPERATIONS SHALL BE DRY AND STABLE.
2. MAXIMUM SLOPE OF STOCKPILE SHALL BE 2H:1V.
3. UPON COMPLETION OF SOIL STOCKPILING, EACH PILE SHALL BE SURROUNDED WITH EITHER SILT FENCING OR STRAW BALES, THEN STABILIZED WITH VEGETATION OR COVERED.

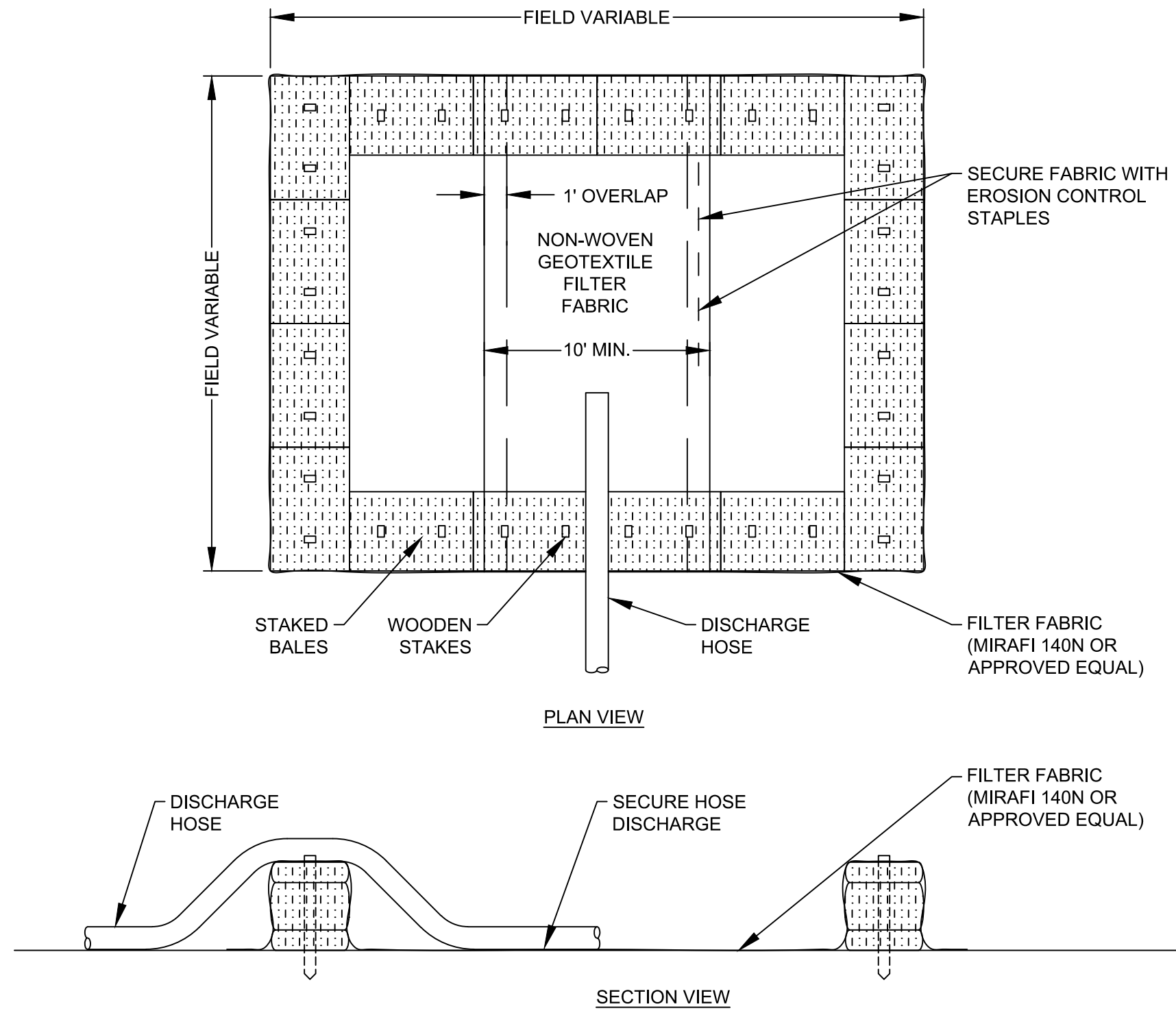
### TYPICAL TOPSOIL STOCKPILE

SCALE: N.T.S.

 <div>249 Western Avenue Augusta, ME 04330</div>						PROJECT NO: 246409						<div>PMM DESIGNED</div> <div>PMM DRAWN</div> <div>AMW CHECKED</div> <div>AJW APPROVED</div>		SWPPP / ESC DETAILS			
REV	DESCRIPTION					DATE	DES	CHK	APP	EIGHT POINT WIND ENERGY CENTER							
C	ISSUED FOR CLIENT REVIEW					3/2/18	TRC	PMM	AMW	EIGHT POINT WIND, LLC							
B	PRE-FINAL CLIENT REVIEW					08/04/17	TRC	PMM	AMW	GREENWOOD / WEST UNION							
A	ISSUED FOR CLIENT REVIEW					04/14/17	TRC	PMM	AJW	NEW YORK							
										REVIEW 1	03/17 DATE			D-1	REV. C		
										REVIEW 2	AS NOTED SCALE						



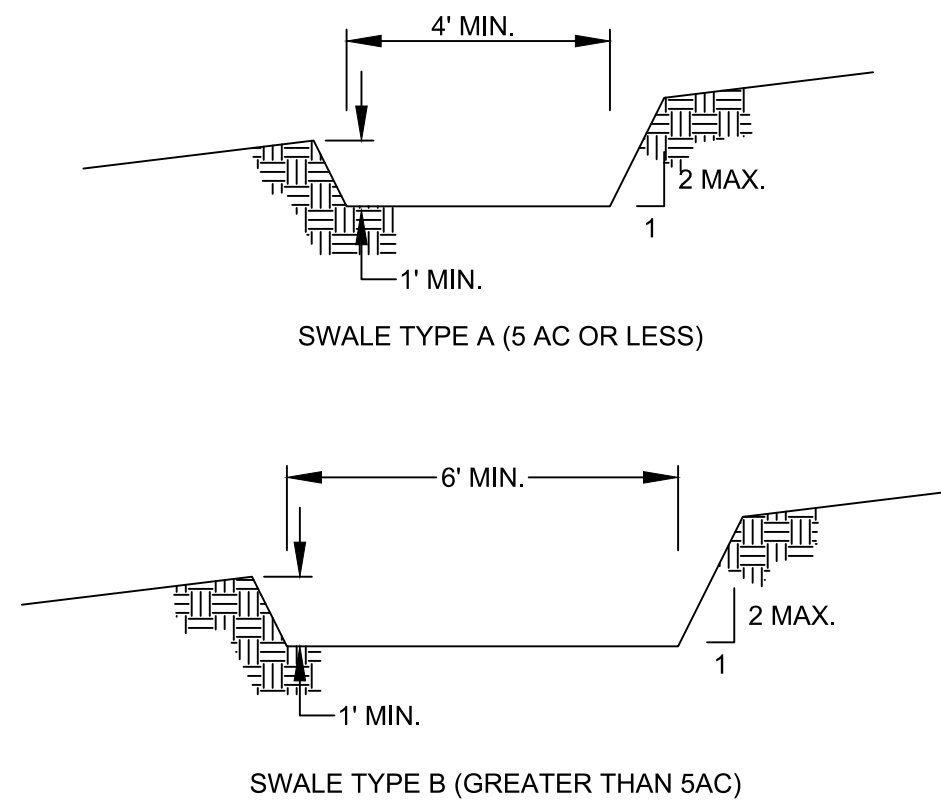
246409-DETAILS ESC.dwg 2017.08.08



- NOTES:
1. NUMBER OF BALES MAY VARY DEPENDING ON SITE CONDITIONS.
  2. THE BASIN TO BE SIZED TO PREVENT DISCHARGE WATER FROM OVERTOPPING BASIN.
  3. KEEP AS FAR FROM WETLANDS AS PRACTICAL.
  4. CLEAN AND REMOVE AS SOON AS DEWATERING IS COMPLETE.

### TYPICAL DEWATERING BASIN

SCALE: N.T.S.



- NOTE:
1. ALL CONSTRUCTION DITCHES SHALL HAVE UNINTERRUPTED POSITIVE GRADE TO AN OUTLET.
  2. DIVERTED RUNOFF FROM A DISTURBED AREA SHALL BE CONVEYED TO A SEDIMENT TRAPPING DEVICE.
  3. DIVERTED RUNOFF FROM AN UNDISTURBED AREA SHALL OUTLET DIRECTLY INTO AN UNDISTURBED STABILIZED AREA AT A NON-EROSIVE VELOCITY.
  4. ALL TREES, BRUSH, STUMPS, OBSTRUCTIONS, AND OTHER OBJECTIONABLE MATERIAL SHALL BE REMOVED AND DISPOSED OF SO AS NOT TO INTERFERE WITH THE PROPER FUNCTION OF THE DITCH.
  5. DITCHES SHALL BE EXCAVATED OR SHAPED TO LINE, GRADE, AND CROSS SECTION AS REQUIRED TO MEET THE CRITERIA SPECIFIED HEREIN AND BE FREE OF BANK PROJECTIONS OR OTHER IRREGULARITIES WHICH IMPEDE NORMAL FLOW.
  6. FILLS SHALL BE COMPACTED BY EARTH MOVING EQUIPMENT.
  7. ALL EXCAVATED MATERIAL NOT NEEDED FOR CONSTRUCTION SHALL BE PLACED SUCH THAT IT WILL NOT INTERFERE WITH THE FUNCTIONING OF THE DITCH.
  8. STABILIZATION SHALL BE AS PER THE FLOW CHANNEL STABILIZATION CHART BELOW:

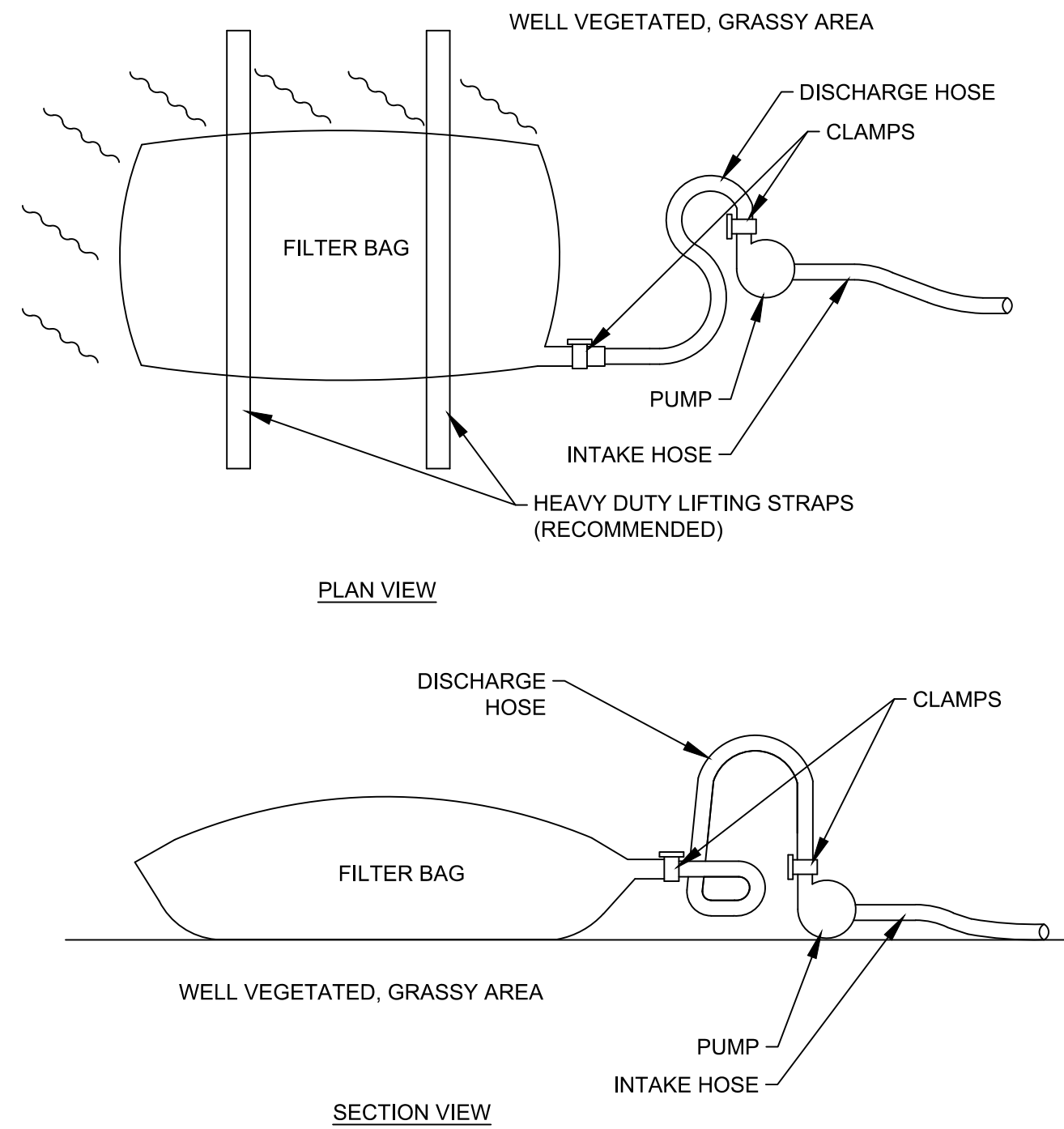
CHANNEL GRADE	TYPE A DITCH (5 AC OR LESS)	TYPE B DITCH (GREATER THAN 5 AC)
0.5-3.0%	SEED & STRAW MULCH	SEED & STRAW MULCH
3.1-5.0%	SEED & STRAW MULCH	SEED AND COVER W/ RECP
5.1-8.0%	SEED AND COVER W/ RECP	LINED 4-8" RIP RAP OR GEOTEXTILE
8.1-10%	LINED 4-8" RIP RAP OR GEOTEXTILE	ENGINEERED DESIGN

9. INSPECT AND PROVIDE MAINTENANCE AFTER EACH RAIN EVENT.
10. FIGURE IS BASED ON NYS STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL.

### TEMPORARY SWALE DETAIL

SCALE: N.T.S.

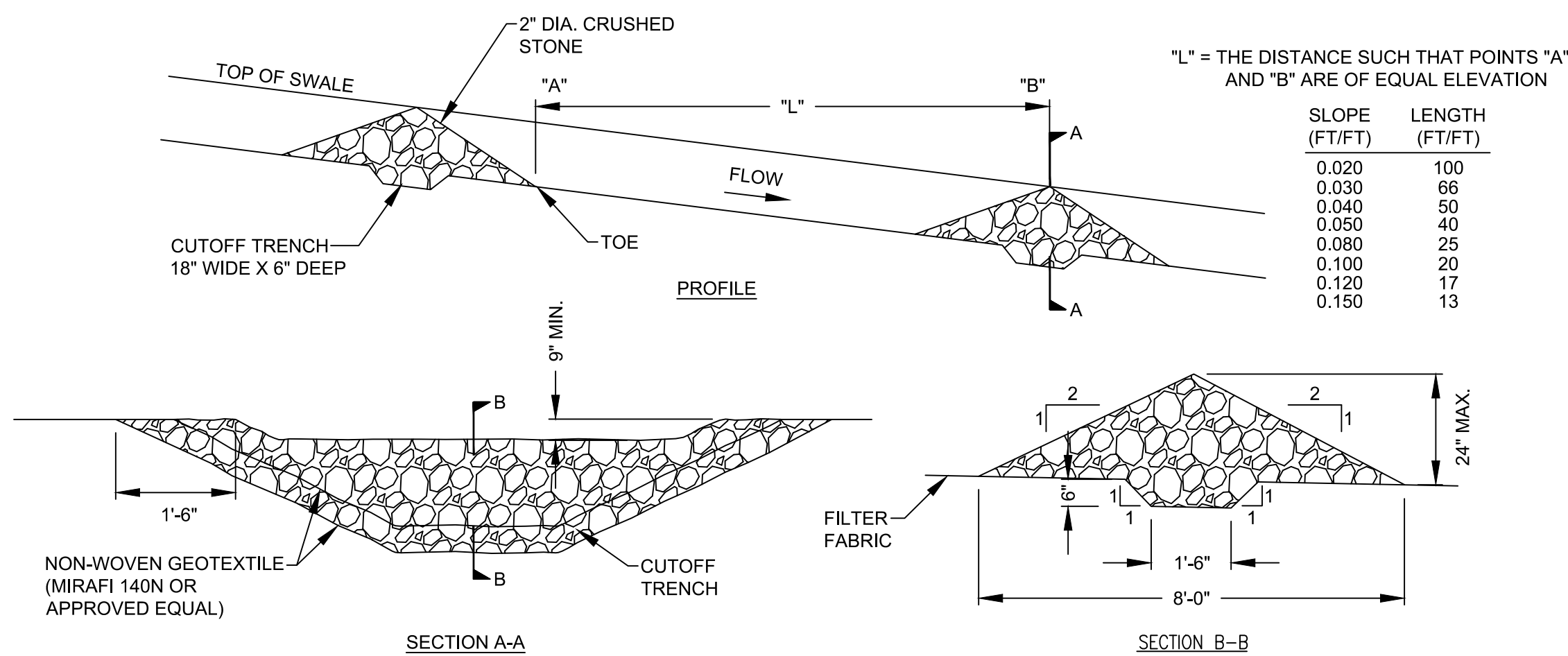
PRELIMINARY NOT FOR CONSTRUCTION



- NOTES:
1. THE GEOTEXTILE MATERIAL USED TO CONSTRUCT THE FILTER BAG SHALL MEET OR EXCEED THE SPECIFICATIONS PROVIDED IN THE "NEW YORK STATE STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL - 2016" OR LATEST EDITION. THE BAG SHALL BE SEWN WITH A DOUBLE NEEDLE MACHINE USING HIGH STRENGTH DOUBLE STITCHED "J" TYPE SEAMS (ASTM D4884).
  2. GEOTEXTILE FILTER BAGS SHALL BE SIZED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS BASED ON THE PUMP DISCHARGE RATE.
  3. A SUITABLE MEANS OF ACCESSING THE BAG WITH MACHINERY REQUIRED FOR DISPOSAL PURPOSES MUST BE PROVIDED. FILTER BAGS SHALL BE REPLACED WHEN THEY BECOME 75% FULL. THE ACCUMULATED SEDIMENT DISPOSAL SHALL BE MANAGED IN CONFORMANCE WITH THE PROJECT SWPPP.
  4. SPARE BAGS SHALL BE KEPT AVAILABLE FOR REPLACEMENT OF THOSE THAT HAVE FAILED OR ARE FILLED. IT IS RECOMMENDED THAT BAGS BE PLACED ON STRAPS AS SHOWN TO FACILITATE REMOVAL.
  5. BAGS SHALL BE LOCATED IN A WELL-VEGETATED (GRASSY) AREA AND DISCHARGE ONTO STABLE, EROSION RESISTANT AREAS. WHERE THIS IS NOT POSSIBLE, A GEOTEXTILE UNDERLAYMENT AND FLOW PATH SHALL BE PROVIDED. BAGS MAY BE PLACED ON FILTER STONE TO INCREASE THEIR DISCHARGE CAPACITY.
  6. BAGS SHALL NOT BE PLACED ON SLOPES GREATER THAN 5%. FOR SLOPES EXCEEDING 5%, CLEAN ROCK OR OTHER NON-ERODIBLE AND NON-POLLUTING MATERIAL MAY BE PLACED UNDER THE BAG TO REDUCE SLOPE STEEPNESS.
  7. BAGS SHALL NOT BE PLACED WITHIN 50 FEET OF WETLANDS, STREAMS, OR OTHER SURFACE WATERS.
  8. NO DOWNSLOPE SEDIMENT BARRIER IS REQUIRED FOR MOST INSTALLATIONS. A COMPOST FILTER SOCK SHALL BE INSTALLED BELOW BAGS PLACED WHERE A GRASSY AREA IS NOT AVAILABLE. A COMPOST FILTER SOCK MUST BE PLACED BELOW ANY BAG DISCHARGING TO A SPECIAL PROTECTION SURFACE WATER.
  9. THE PUMP DISCHARGE HOSE SHALL BE INSERTED INTO THE BAGS IN THE MANNER SPECIFIED BY THE MANUFACTURER AND SECURELY CLAMPED. A PIECE OF PVC PIPE IS RECOMMENDED FOR THIS PURPOSE.
  10. THE PUMPING RATE SHALL BE NO GREATER THAN 750 GPM OR 1/2 THE MAXIMUM RATE SPECIFIED BY THE MANUFACTURER, WHICHEVER IS LESS. PUMP INTAKES SHOULD BE FLOATING AND SCREENED.
  11. FILTER BAGS SHALL BE INSPECTED DAILY. IF ANY PROBLEM IS DETECTED, PUMPING SHALL CEASE IMMEDIATELY AND NOT RESUME UNTIL THE PROBLEM IS CORRECTED.

### SEDIMENT FILTER BAG

SCALE: N.T.S.

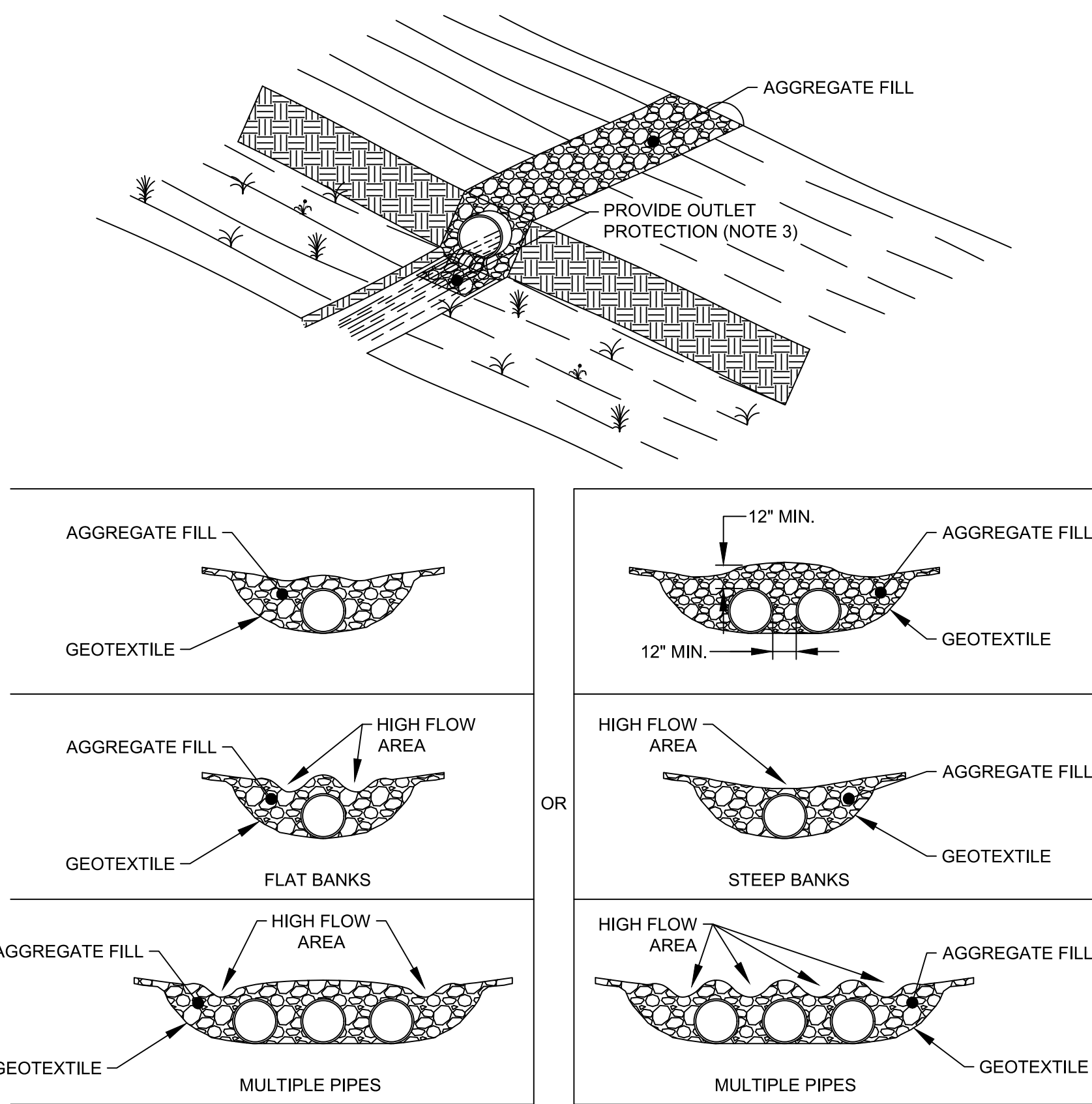


NOTE: INSTALL WHERE INDICATED ON SITE GRADING PLAN AND AS NEEDED BY SPACING REQUIREMENTS.

### TYPICAL CHECK DAM DETAIL

SCALE: N.T.S.

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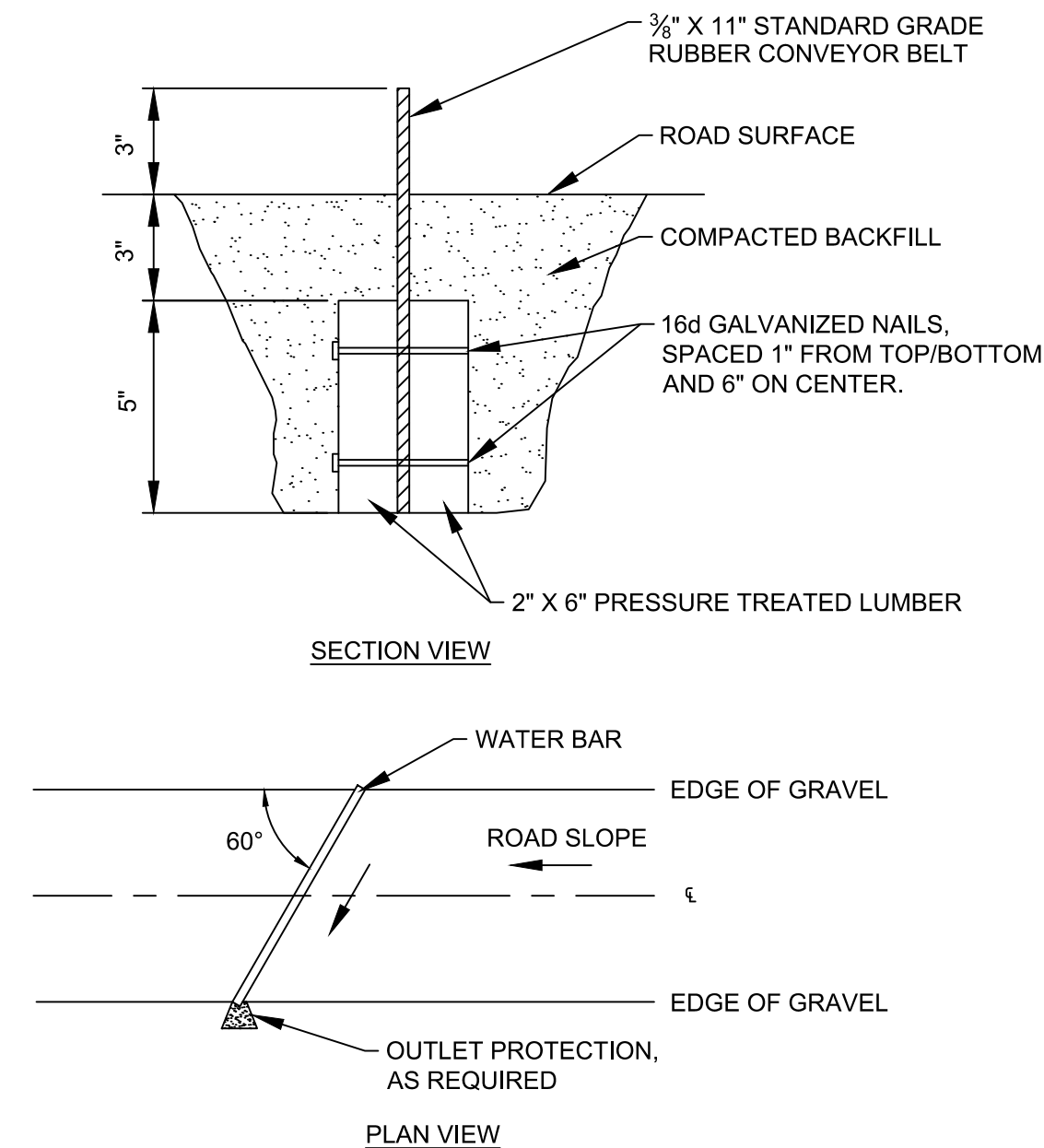


- NOTES:
1. AGGREGATE FILL SHALL BE NYDOT BASE COURSE MATERIAL, 3/4" CRUSHED STONE, OR APPROVED EQUAL.
  2. GEOTEXTILE SHALL BE MIRAFI 140N OR APPROVED EQUAL.
  3. PROVIDE OUTLET PROTECTION IN ACCORDANCE WITH REQUIREMENTS OF NY STATE STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL.

### TEMPORARY CULVERT


SCALE: N.T.S.

WATER BAR SPACING CRITERIA	
ROAD SLOPE	SPACING (FT)
< 5%	125
5%-10%	100
10%-20%	75
20%-35%	50
> 35%	25



### TEMPORARY WATER BAR

SCALE: N.T.S.



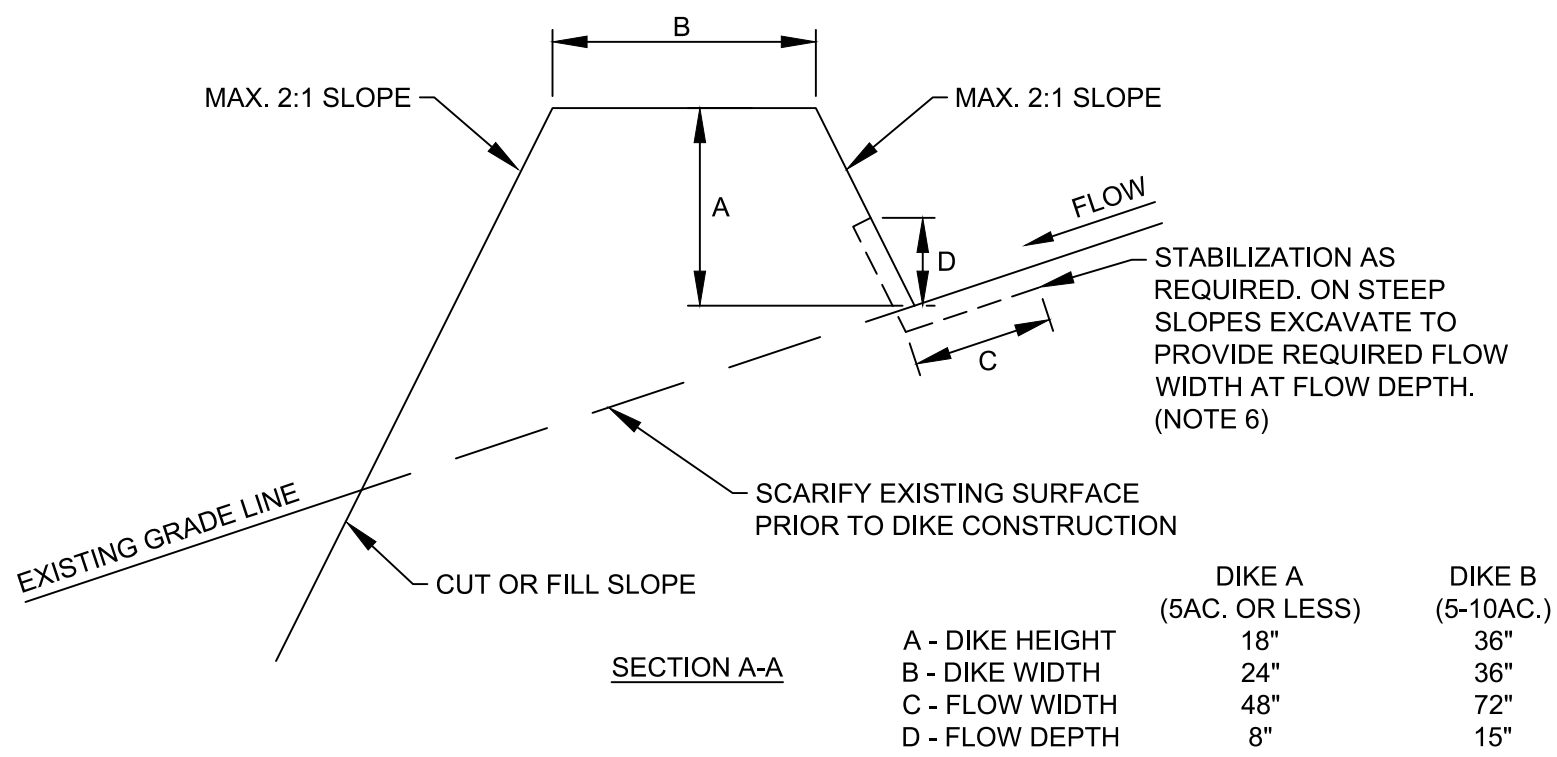
249 Western Avenue  
 Augusta, ME 04330

PROJECT NO: 246409

REV	DESCRIPTION	DATE	DES	CHK	APP
C	ISSUED FOR CLIENT REVIEW	3/2/18	TRC	PMM	AMW
B	PRE-FINAL CLIENT REVIEW	08/04/17	TRC	PMM	AMW
A	ISSUED FOR CLIENT REVIEW	04/14/17	TRC	PMM	AJW

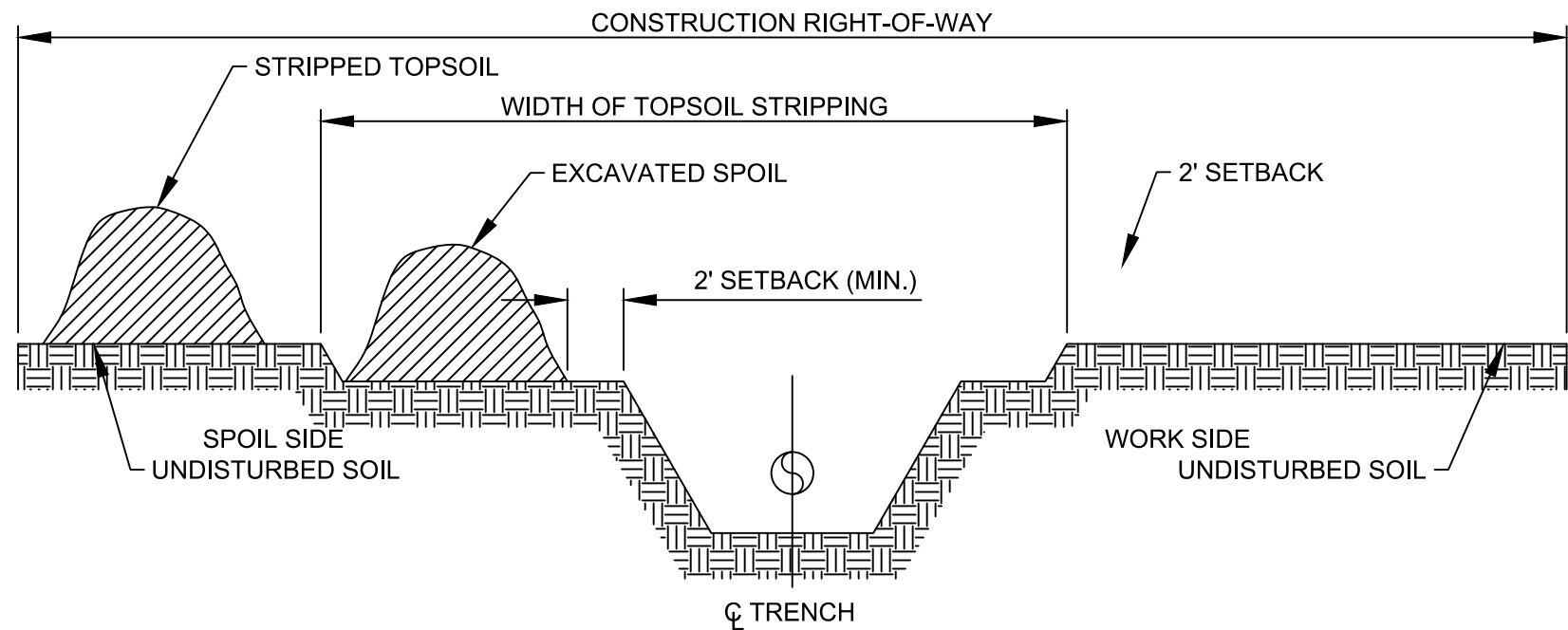
PMM DESIGNED	SWPPP / ESC DETAILS			
PMM DRAWN	EIGHT POINT WIND ENERGY CENTER			
AMW CHECKED	EIGHT POINT WIND, LLC			
AJW APPROVED	GREENWOOD / WEST UNION NEW YORK			
REVIEW 1	03/17 DATE	TRC		REV. C
REVIEW 2	AS NOTED SCALE	D-2		



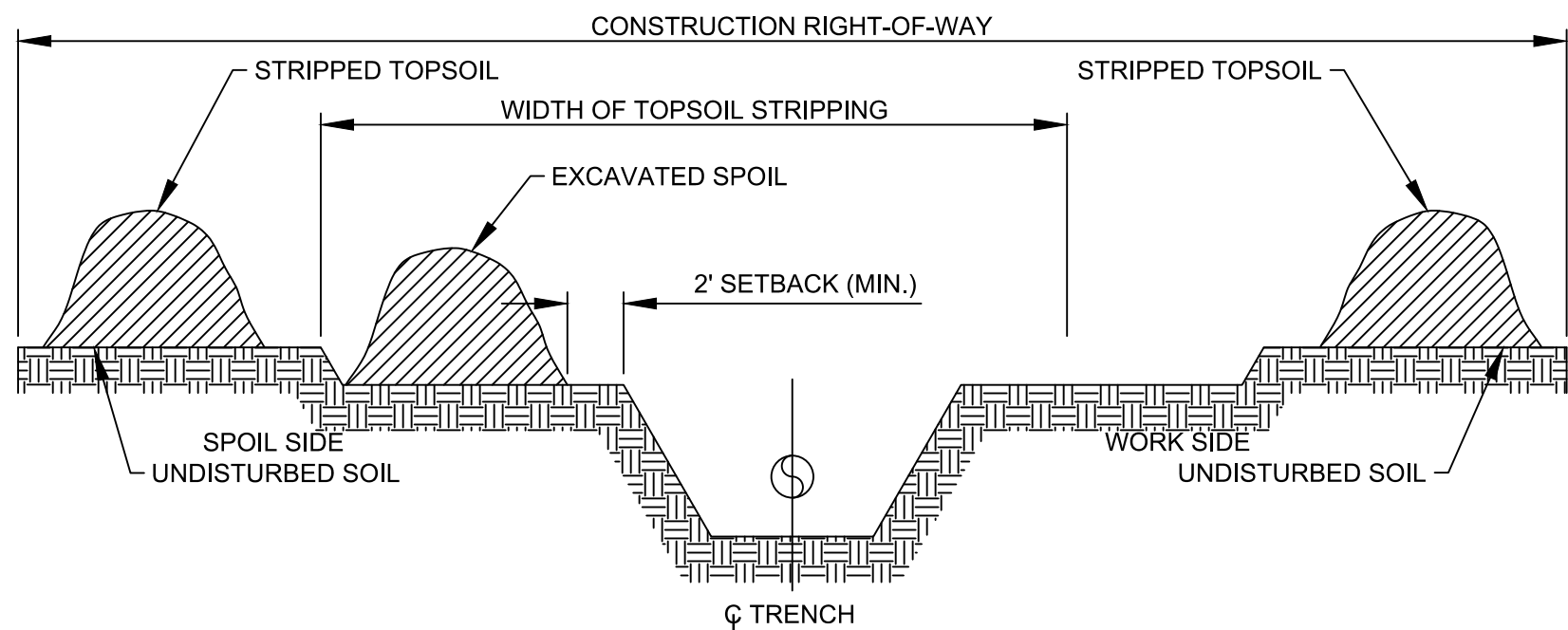


- NOTES:
1. DIKES SHALL BE COMPACTED TO NOT LESS THAN THE IN-SITE SOIL DENSITY.
  2. PROVIDE POSITIVE DRAINAGE TO AN APPROVED, STABILIZED OUTLET.
  3. TOP WIDTH MAY BE WIDER AND SIDE SLOPES FLATTER AS REQUIRED TO FACILITATE CROSSING BY CONSTRUCTION TRAFFIC.
  4. FIELD LOCATION SHOULD BE ADJUSTED AS NEEDED TO UTILIZE A STABILIZED OUTLET.
  5. EARTH DIKES SHALL HAVE AN OUTLET THAT FUNCTIONS WITH A MINIMUM OF EROSION. RUNOFF SHALL BE CONVEYED TO A SEDIMENT TRAPPING DEVICE SUCH AS A SEDIMENT TRAP OR SEDIMENT BASIN.
  6. PROVIDE FLOW CHANNEL STABILIZATION IN ACCORDANCE WITH THE REQUIREMENTS OF THE "NEW YORK STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL (2016)".

TYPICAL EARTH DIKE DETAIL  
SCALE: N.T.S.



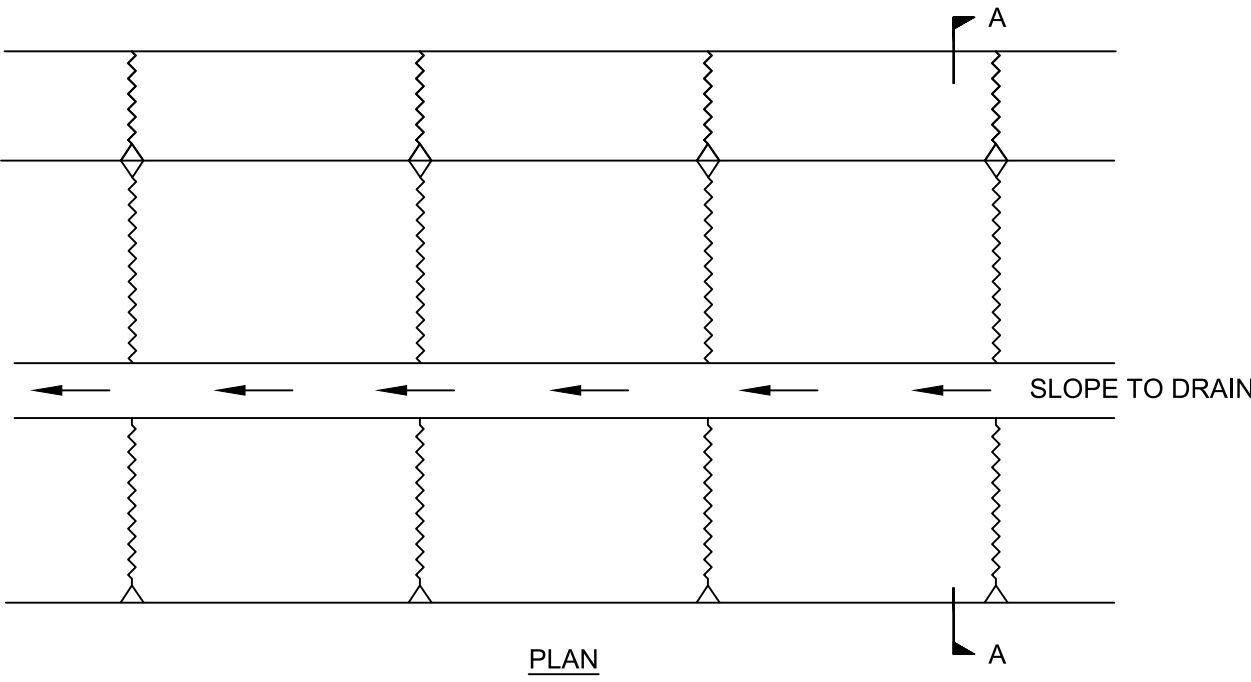
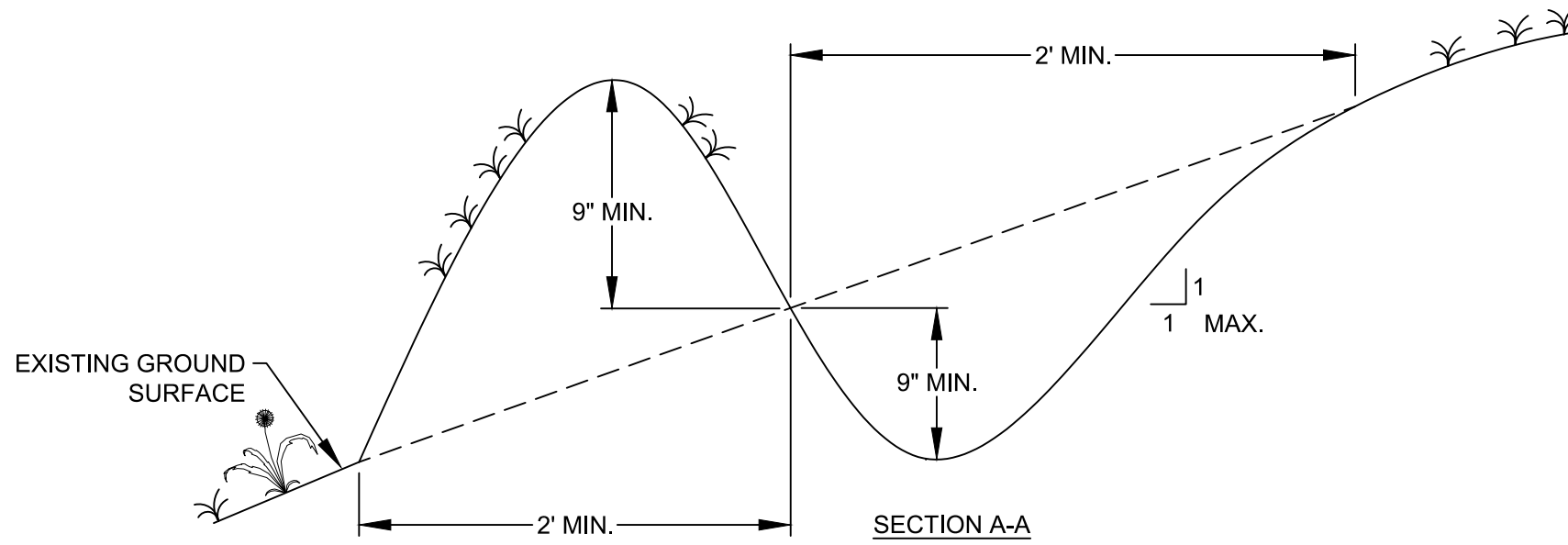
DITCH PLUS SPOILSIDE TOPSOIL SEGREGATION



FULL RIGHT-OF-WAY TOPSOIL STRIPPING

- NOTES:
1. TOPSOIL MAY BE STORED IN LOCATIONS AS SHOWN ABOVE, OR AT OTHER COMPANY APPROVED LOCATIONS WITHIN THE CONSTRUCTION R.O.W.
  2. LEAVE GAPS IN SPOIL PILES FOR WATER RUN-OFF.
  3. CONSTRUCTION R.O.W. MAY BE EXPANDED UP TO FULL R.O.W. WIDTH IN NON-WETLAND AREAS, FOR TOPSOIL SALVAGE.

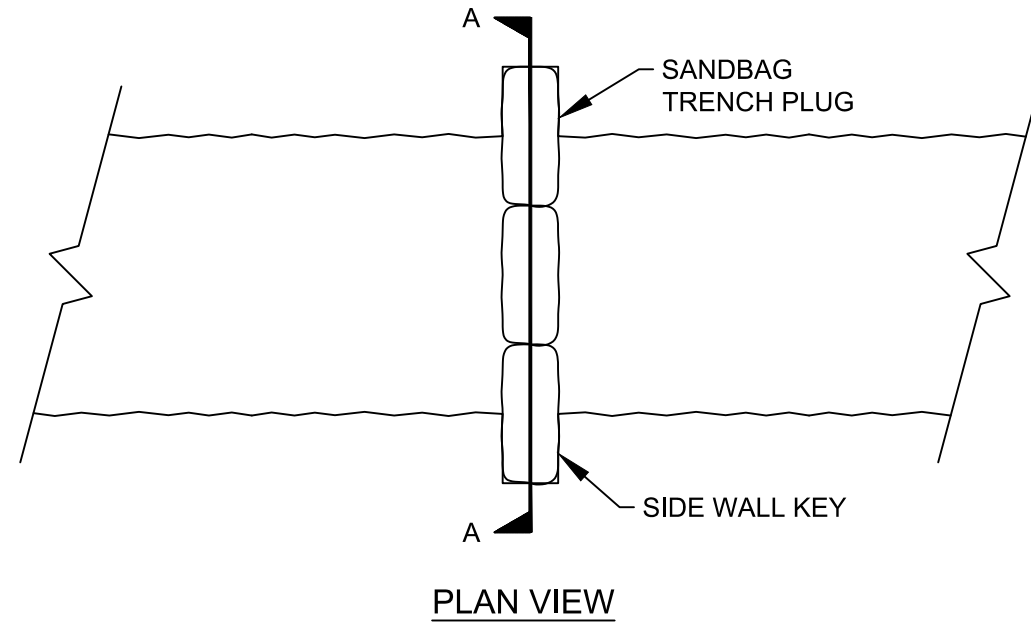
TOPSOIL SEGREGATION METHODS - COLLECTOR  
SCALE: N.T.S.



- NOTES:
1. ALL PERIMETER DIKE/SWALE SHALL HAVE UNINTERRUPTED POSITIVE GRADE TO AN OUTLET.
  2. DIVERTED RUNOFF FROM A DISTURBED AREA SHALL BE CONVEYED TO A SEDIMENT TRAPPING DEVICE.
  3. DIVERTED RUNOFF FROM AN UNDISTURBED AREA SHALL OUTLET INTO AN UNDISTURBED STABILIZED AREA AT NON-EROSION VELOCITY.
  4. THE SWALE SHALL BE EXCAVATED OR SHAPED TO LINE, GRADE, AND CROSS SECTION AS REQUIRED TO MEET THE CRITERIA SPECIFIED IN THE "NEW YORK STATE STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL - 2016".
  5. STABILIZATION OF THE AREA DISTURBED BY THE DIKE AND SWALE SHALL BE DONE IN ACCORDANCE WITH THE STANDARD AND SPECIFICATIONS FOR THE TEMPORARY SEEDING AND MULCHING, AND SHALL BE DONE WITHIN 2 DAYS.
  6. PERIODIC INSPECTION AND REQUIRED MAINTENANCE AFTER EACH RAIN EVENT.

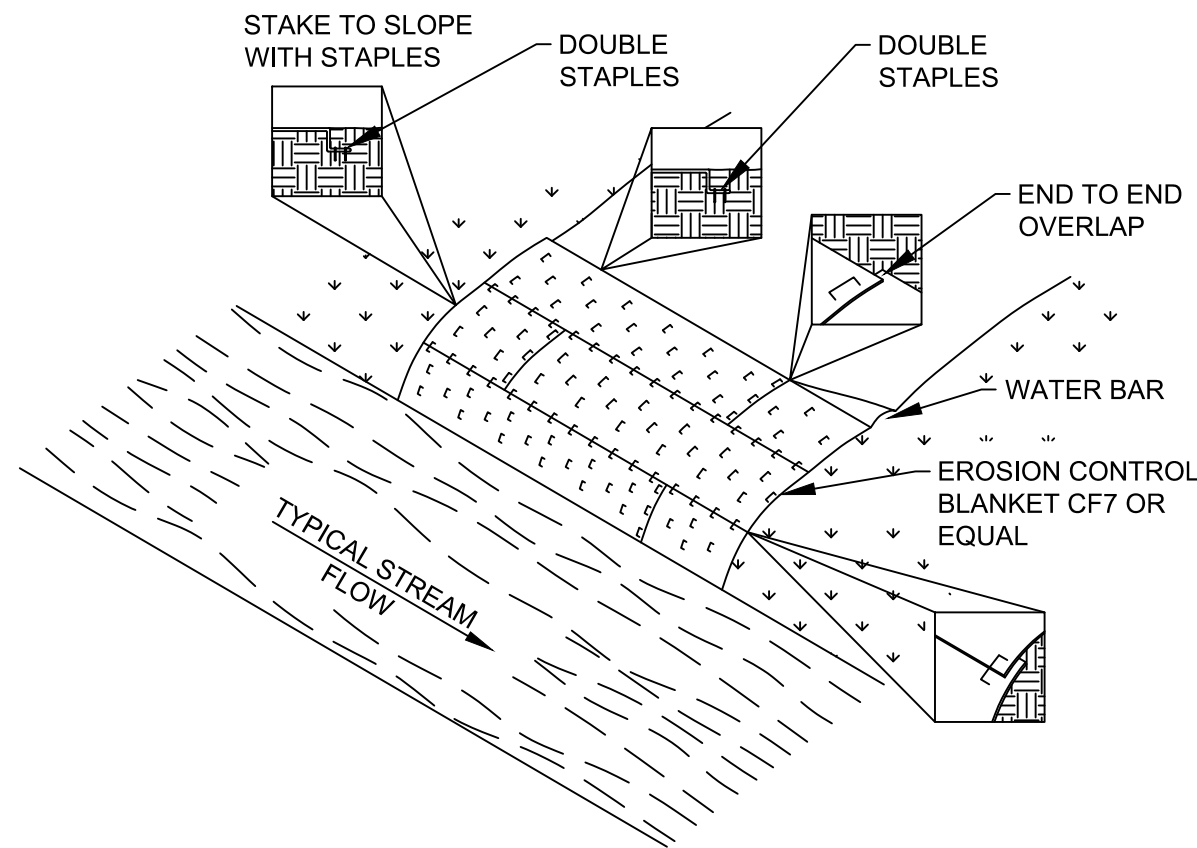
MAX. DRAINAGE AREA LIMIT= 2 ACRES

TYPICAL PERIMETER DIKE/SWALE  
SCALE: N.T.S.



- NOTES:
1. AFTER TRENCH EXCAVATION TO EDGE OF STREAM, HAND DRESS BOTTOM OF TRENCH IN VICINITY OF PLANNED PLUG CONSTRUCTION.
  2. EXCAVATE KEY INTO TRENCH SIDE WALL. EXCAVATE TO PROVIDE VERTICAL SURFACE NOT LESS THAN 6" INTO BANK.
  3. CONSTRUCT SANDBAG TRENCH PLUG USING SANDBAGS FILLED WITH CLEAN, FINE SAND.
  4. BACK FILL KEY WAY TO PROVIDE COMPACTED NATIVE SOIL AGAINST SANDBAGS.
  5. BACK FILL TRENCH CONCURRENT WITH CABLE PLACEMENT. REMOVE SANDBAG TRENCH PLUG AS CABLE IS PLACED.
  6. PROVIDE STREAM BED AND EMBANKMENT PROTECTION PER "NEW YORK STATE STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL" - 2016.

TYPICAL TRENCH PLUG  
SCALE: N.T.S.



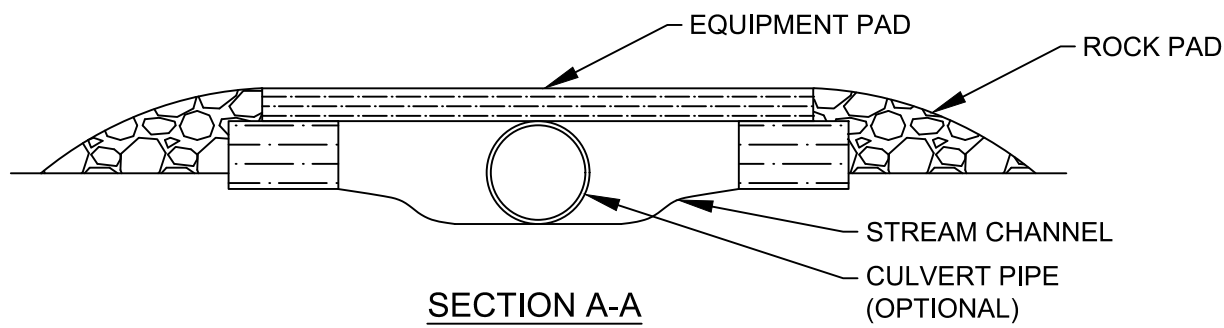
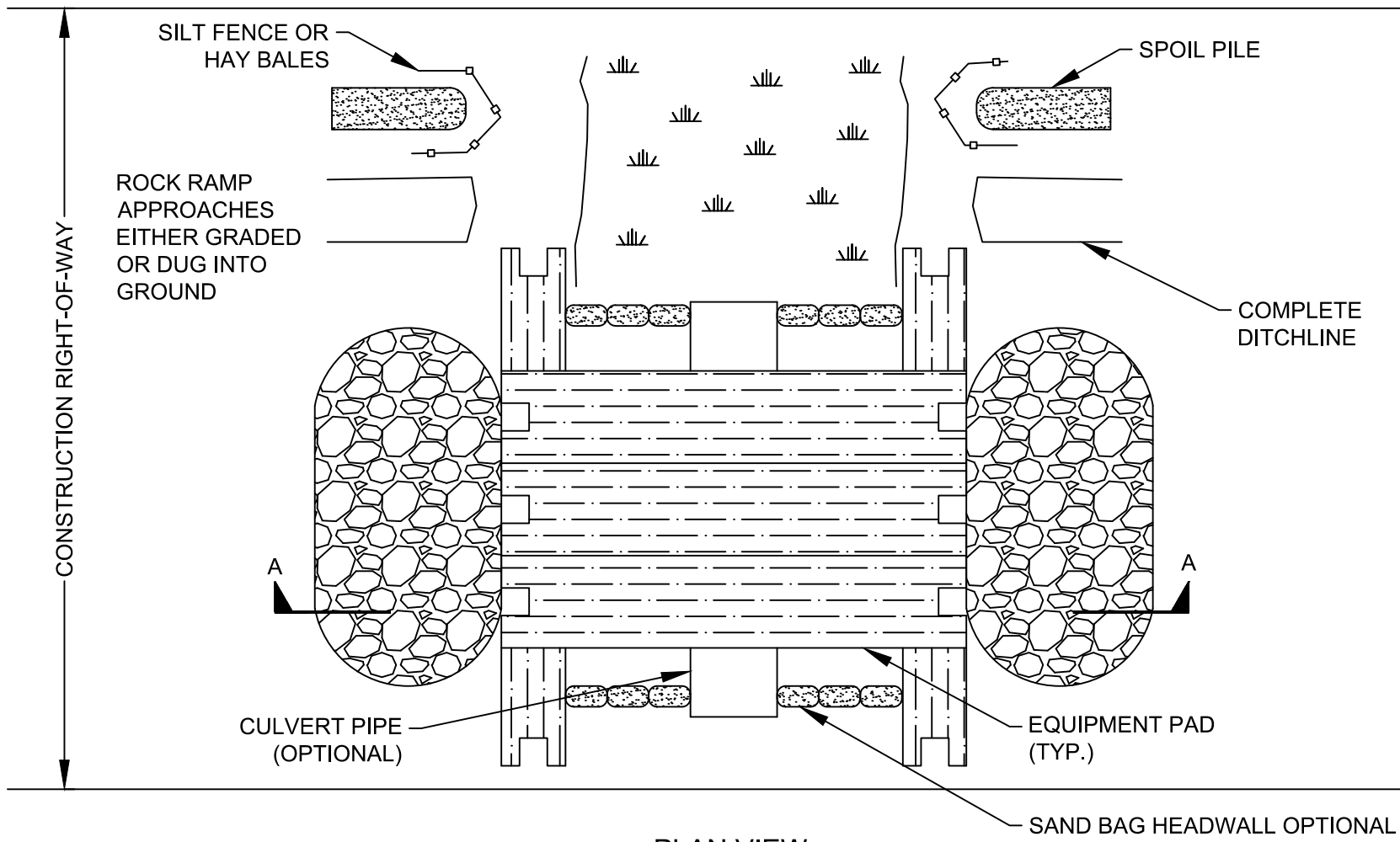
- NOTES:
1. EROSION CONTROL MATTING SHALL BE PLACED ON THE BANKS OF FLOWING STREAMS WHERE VEGETATION HAS BEEN REMOVED OR AS DIRECTED BY THE ENVIRONMENTAL INSPECTOR.
  2. THE EROSION CONTROL MATTING SHALL MEET THE REQUIREMENTS SPECIFIED IN THE "NEW YORK STATE STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL" - 2016 AND/OR AS DIRECTED BY THE ENVIRONMENTAL INSPECTOR.
  3. STAPLES SHALL BE MADE OF 11 GAUGE WIRE, U-SHAPED WITH 6" LEGS AND A 1" CROWN. STAPLES SHALL BE DRIVEN INTO THE GROUND FOR THE FULL LENGTH OF THE STAPLE LEGS. ALTERNATELY 1" WOODEN PEGS 6" LONG AND BEVELED TO SECURE MATTING.
  4. MATTING SHALL BE INSTALLED ACCORDING TO MANUFACTURER SPECIFICATIONS OR AS FOLLOWS:
    - 4.1. \*THE TOP OF THE BLANKET SHALL EXTEND 2' PAST THE UPPER EDGE OF THE HIGH WATER MARK. IF A WATERBED IS PRESENT ON THE APPROACH SLOPE, THE BLANKET SHALL BEGIN ON THE UPHILL SIDE OF THE WATERBED.
    - 4.2. \*INSTALL BLANKET(S) ACROSS THE SLOPE IN THE DIRECTION OF WATER FLOW. \*
    - 4.3. ANCHOR ("KEY") THE UPSTREAM EDGE OF THE BLANKET(S) INTO THE SLOPE USING A 6" WIDE BY 6" DEEP TRENCH. DOUBLE STAPLE EVERY 12" BEFORE BACK FILLING AND COMPACTING TRENCH.
    - 4.4. \*ANCHOR ("KEY") THE UPPER EDGE OF THE BLANKET INTO THE SLOPE USING A 6" WIDE BY 6" DEEP TRENCH. DOUBLE STAPLE EVERY 12" BEFORE BACK FILLING AND COMPACTING TRENCH.
    - 4.5. \*THE EDGES OF PARALLEL BLANKETS SHALL BE OVERLAPPED A MINIMUM OF 6". THE UPPER BLANKET SHALL BE PLACED OVER THE LOWER BLANKET (SHINGLE STYLE) AND STAPLED EVERY 12" ALONG THE LENGTH OF THE EDGE.
    - 4.6. \*WHEN BLANKET ENDS ARE TO ADJOINING BLANKETS, THE UPSTREAM BLANKET SHALL BE PLACED OVER THE DOWNSTREAM BLANKET (SHINGLE STYLE) WITH APPROXIMATELY 6" OF OVERLAP, STAPLE THROUGH THE OVERLAP AREA EVERY 12".
    - 4.7. \*STAPLE DOWN THE CENTER OF THE BLANKET(S), THREE STAPLES IN EVERY SQUARE YARD.
  5. IN LIVESTOCK AREAS WHERE EROSION CONTROL MATTING IS APPLIED TO STREAM BANKS, FENCING WILL BE USED IF NECESSARY TO EXCLUDE LIVESTOCK, WITH PERMISSION OF THE LANDOWNER.
  6. MONITOR FOR WASHOUTS, STAPLE INTEGRITY OR MAT MOVEMENT. REPLACE OR REPAIR AS NECESSARY.

TYPICAL STREAM BANK MATTING  
SCALE: N.T.S.

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C	ISSUED FOR CLIENT REVIEW	3/2/18	TRC	PMM	AMW	
B	PRE-FINAL CLIENT REVIEW	08/04/17	TRC	PMM	AMW	
A	ISSUED FOR CLIENT REVIEW	04/14/17	TRC	PMM	AJW	

PMM DESIGNED		SWPPP / ESC DETAILS	
PMM DRAWN		EIGHT POINT WIND ENERGY CENTER	
AMW CHECKED		EIGHT POINT WIND, LLC	
AJW APPROVED		GREENWOOD / WEST UNION NEW YORK	
REVIEW 1	03/17 DATE		D-3
REVIEW 2	AS NOTED SCALE		
			REV. C

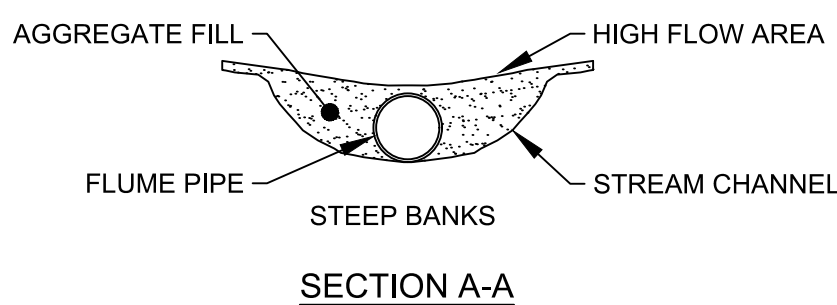
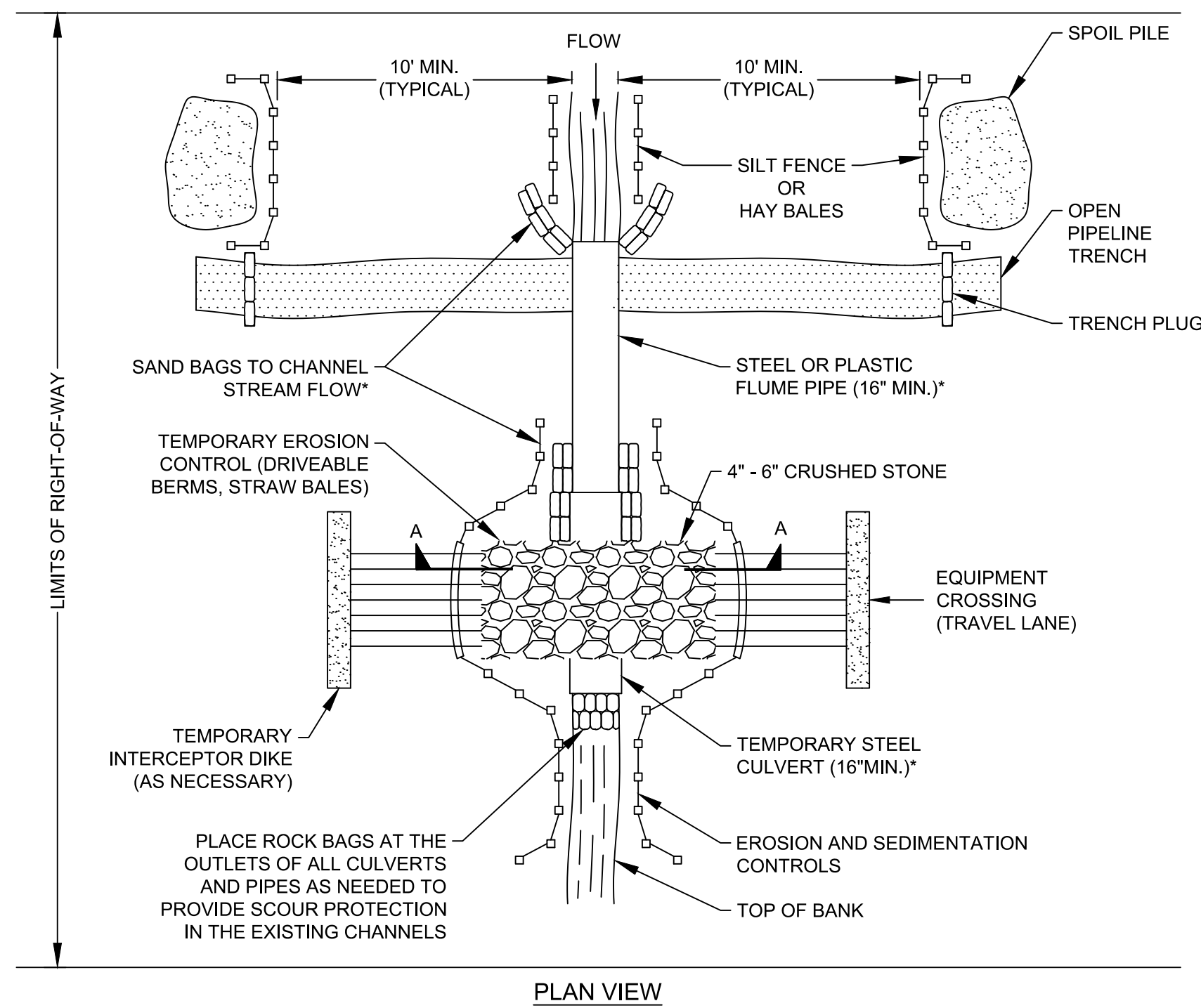




- NOTES:
1. CULVERT PIPE UTILIZED IF ADDITIONAL SUPPORT IS REQUIRED.
  2. ADDITIONAL PADS CAN BE PUT SIDE BY SIDE IF EXTRA WIDTH IS REQUIRED.
  3. EQUIPMENT PAD TYPICALLY CONSTRUCTED OF HARDWOOD; MUST ACCOMMODATE THE LARGEST EQUIPMENT USED.
  4. ROCK PADS OR CRUSHED STONE SHALL BE USED AT ENTRANCE TO THE EQUIPMENT PADS (IF NECESSARY).

### TEMPORARY EQUIPMENT BRIDGE

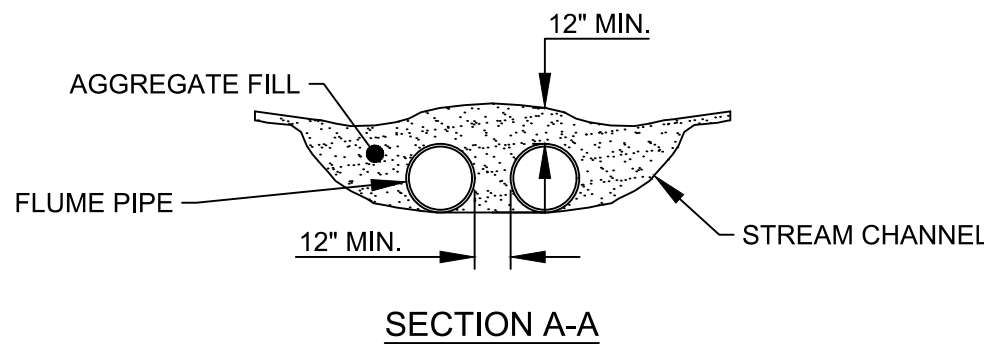
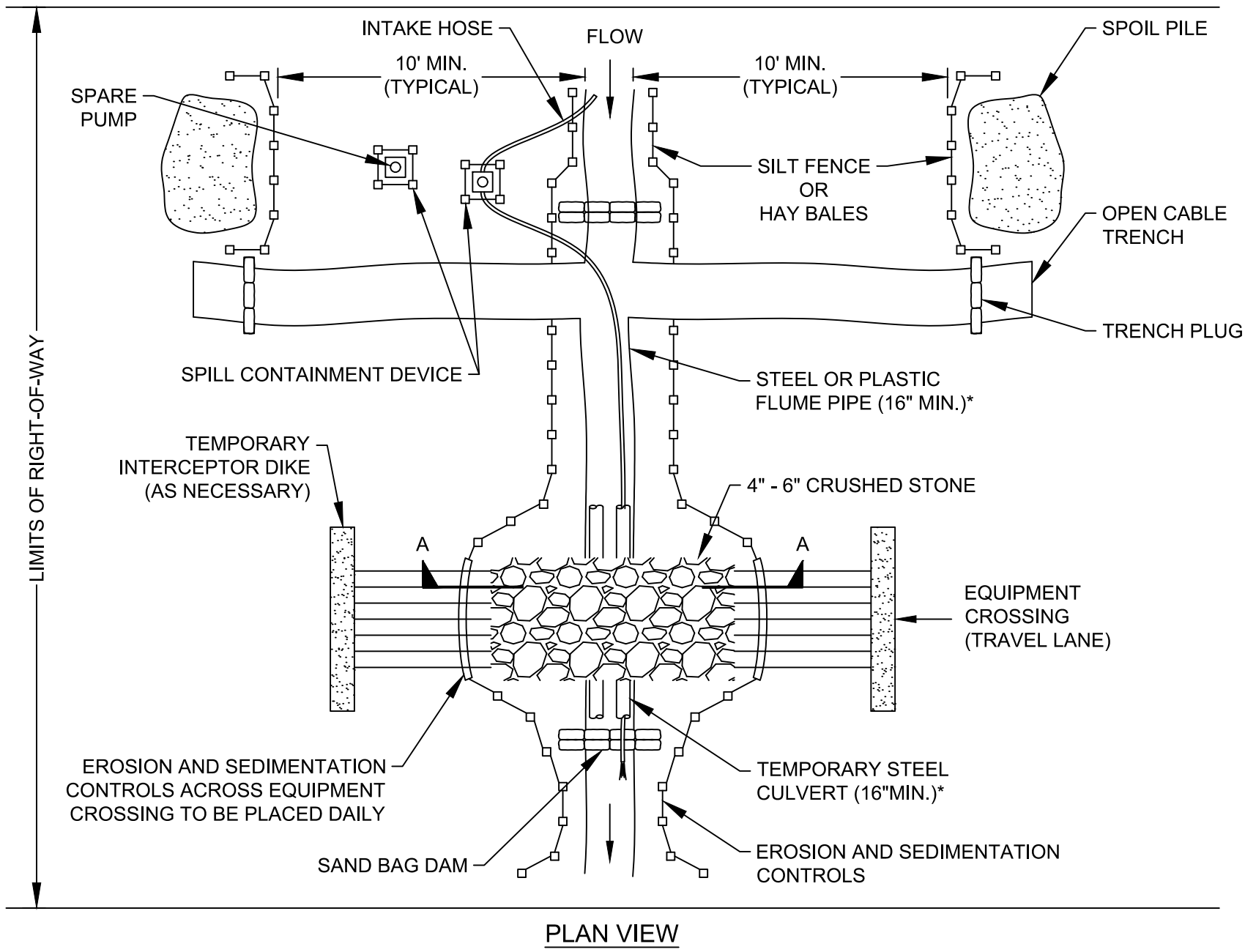
SCALE: N.T.S.



\* IF WELDED PIPE IS USED SAND BAGS AT JOINTS NOT REQUIRED. ACTUAL NUMBERS OF FLUMES AND CULVERT PIPE REQUIRED TO BE DETERMINED BY STREAM WIDTH.

### TYPICAL FLUMED STREAM CROSSING

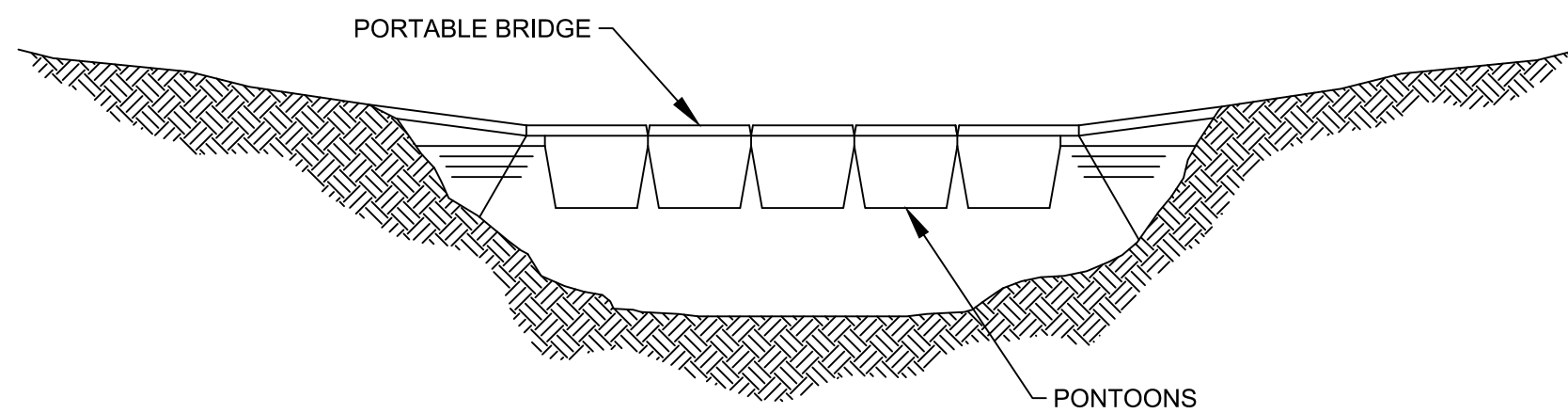
SCALE: N.T.S.



- NOTES:
1. EXCAVATE ACROSS STREAM CHANNEL FOLLOWING WATER RE-ROUTING.
  2. LOWER PIPE UNDER HOSE AND BACKFILL.
  3. MONITOR PUMPS AT ALL TIMES DURING STREAM CROSSING PROCEDURE.
  4. REMOVE SILT FENCE/HAY BALES ACROSS EQUIPMENT CROSSING AS NEEDED FOR ACCESS, AND REPLACE AT THE END OF EACH DAY.
  5. NUMBER OF FLUME PIPES WILL VARY DEPENDING ON SITE CONDITIONS.

### TYPICAL DAM & PUMP STREAM CROSSING

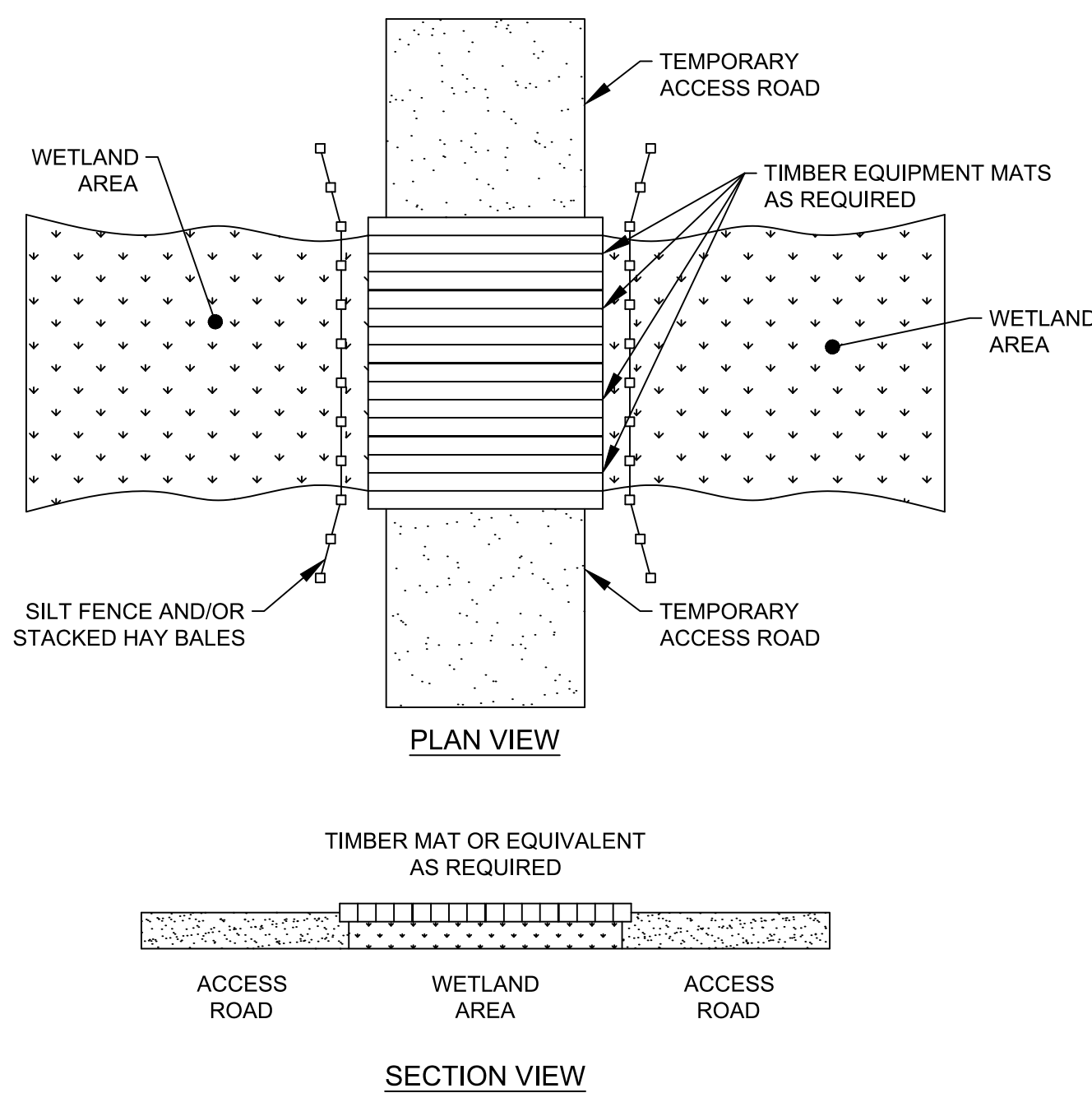
SCALE: N.T.S.



- NOTES:
1. STABILIZE EDGES WITH SANDBAGS OR STONE.
  2. REMOVE BRIDGE DURING CLEANUP.

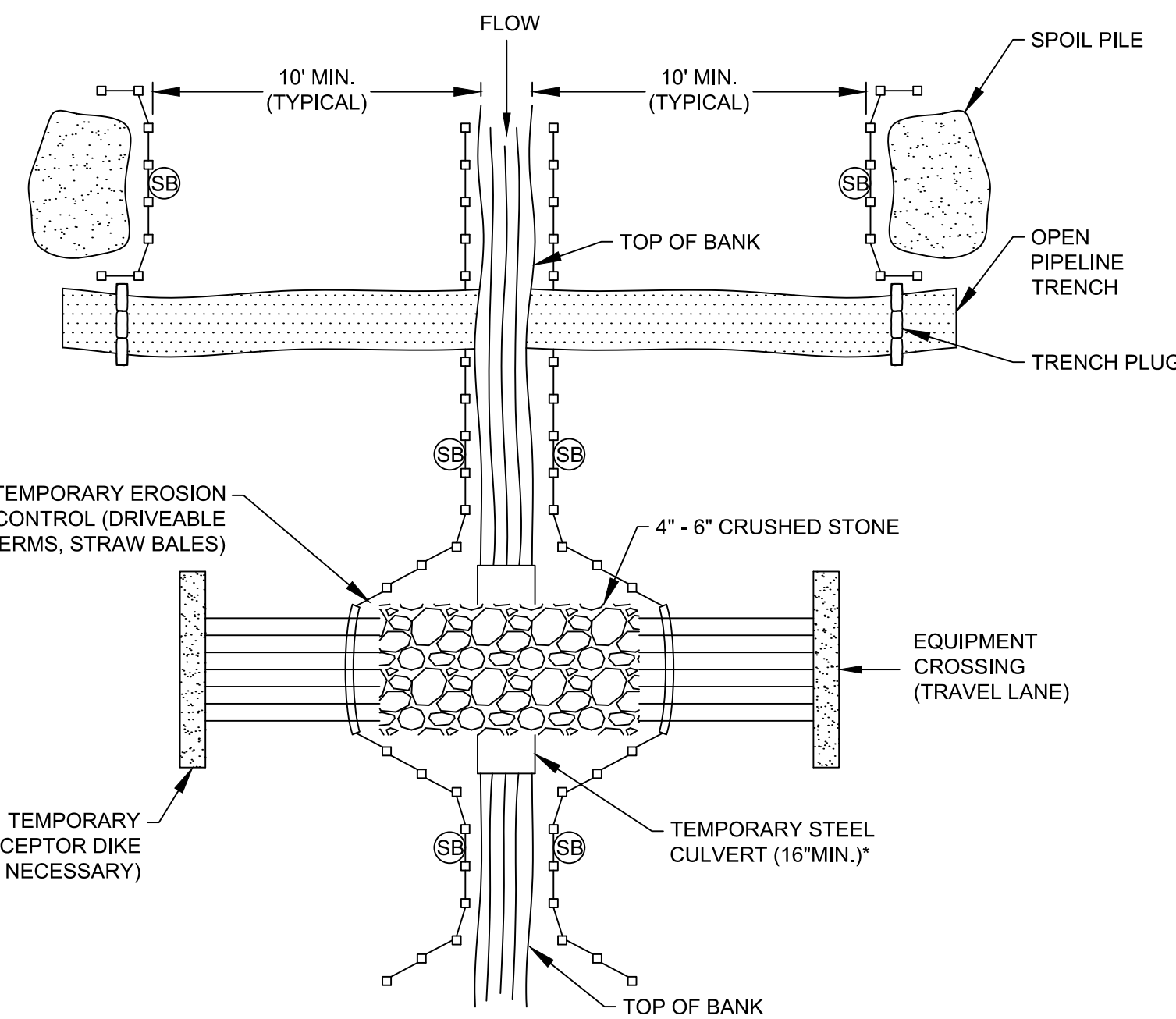
### TEMPORARY EQUIPMENT BRIDGE

SCALE: N.T.S.



### TEMPORARY WETLAND CROSSING

SCALE: N.T.S.



- NOTES:
1. SB TEMPORARY SEDIMENT BARRIER OF SILT FENCE AND/OR STRAW BALES, OR APPROPRIATE MATERIALS.
  2. FOR MINOR WATERBODIES, COMPLETE TRENCHING AND BACKFILL IN THE WATERBODY (NOT INCLUDING BLASTING OR OTHER ROCK BREAKING MEASURES) WITHIN 24 CONTINUOUS HOURS. IF A FLUME IS INSTALLED WITHIN THE WATERBODY DURING MAINLINE ACTIVITIES, IT CAN BE REMOVED JUST PRIOR TO LOWERING IN THE CABLE OR CONDUIT. THE 24-HOUR TIMEFRAME STARTS AS SOON AS THE FLUME IS REMOVED.
  3. FOR INTERMEDIATE WATERBODIES, COMPLETE TRENCHING AND BACKFILLING IN THE WATERBODY (NOT INCLUDING BLASTING OR OTHER ROCK BREAKING MEASURES) WITHIN 48 CONTINUOUS HOURS, IF FEASIBLE.


\* ACTUAL NUMBERS OF FLUMES AND CULVERT PIPE REQUIRED TO BE DETERMINED BY STREAM WIDTH.


### TYPICAL OPEN CUT STREAM CROSSING

SCALE: N.T.S.

PRELIMINARY NOT FOR CONSTRUCTION

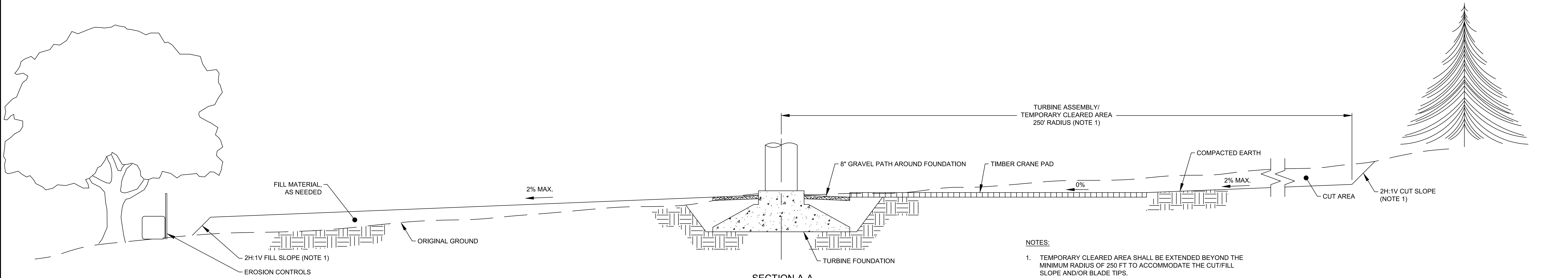
UNDER NEW YORK STATE EDUCATION LAW ARTICLE 145 (ENGINEERING), SECTION 7209 (2), IT IS A VIOLATION OF THE LAW FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

 249 Western Avenue Augusta, ME 04330					
PROJECT NO: 246409					
REV	DESCRIPTION	DATE	DES	CHK	APP
C	ISSUED FOR CLIENT REVIEW	3/2/18	TRC	PMM	AMW
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PMM DESIGNED		SWPPP / ESC DETAILS	
PMM DRAWN		EIGHT POINT WIND ENERGY CENTER	
AMW CHECKED		EIGHT POINT WIND, LLC	
AJW APPROVED		GREENWOOD / WEST UNION	
REVIEW 1		03/17	
REVIEW 2		DATE AS NOTED SCALE	
		D-4	
		REV. C	

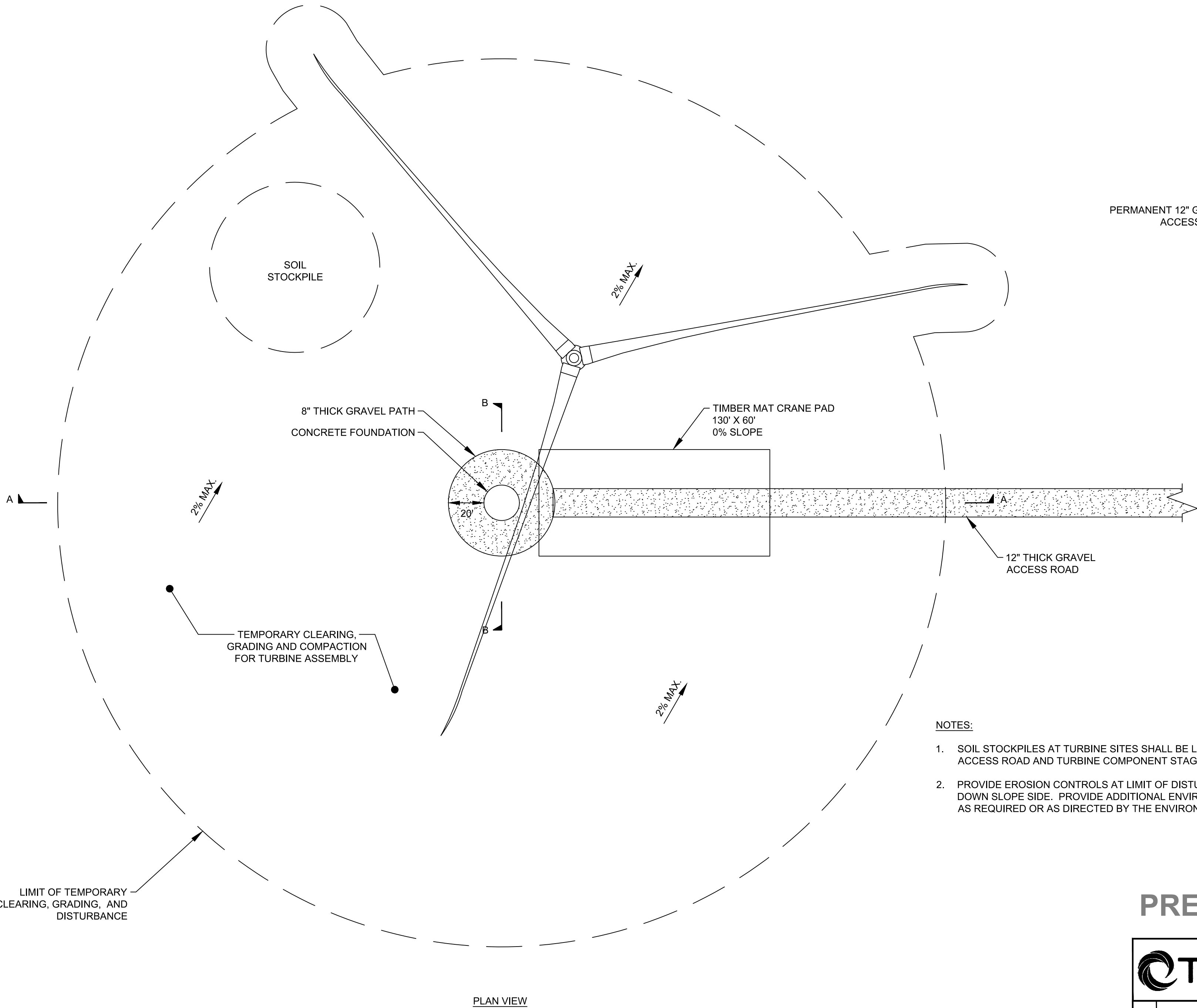






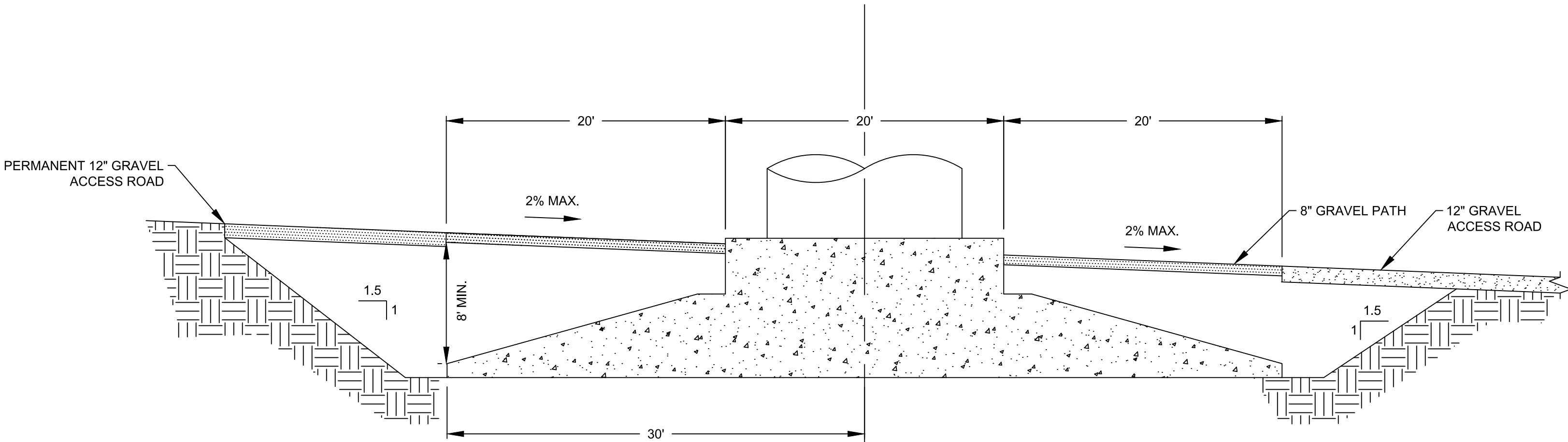
SECTION A-A  
TYPICAL TURBINE SITE  
SCALE: 1" = 20'

- NOTES:
1. TEMPORARY CLEARED AREA SHALL BE EXTENDED BEYOND THE MINIMUM RADIUS OF 250 FT TO ACCOMMODATE THE CUT/FILL SLOPE AND/OR BLADE TIPS.



PLAN VIEW  
TYPICAL TURBINE SITE  
SCALE: 1" = 40'

- NOTES:
1. SOIL STOCKPILES AT TURBINE SITES SHALL BE LOCATED AWAY FROM ACCESS ROAD AND TURBINE COMPONENT STAGING AREAS.
  2. PROVIDE EROSION CONTROLS AT LIMIT OF DISTURBANCE ON THE DOWN SLOPE SIDE. PROVIDE ADDITIONAL ENVIRONMENTAL CONTROLS AS REQUIRED OR AS DIRECTED BY THE ENVIRONMENTAL MONITOR.



- NOTES:
1. DIMENSIONS SHOWN ARE APPROXIMATE.
  2. STANDARD SPREAD FOOTING FOUNDATION IN SOIL SHOWN. FOUNDATIONS ON COMPETENT ROCK WILL BE SMALLER AND ANCHORED WITH HIGH STRENGTH TENDONS EMBEDDED IN THE ROCK FORMATION. REFER TO EXHIBIT II FOR ALTERNATIVE PROPRIETARY FOUNDATION OPTION.

TYPICAL WIND TURBINE FOUNDATION  
SCALE: N.T.S.

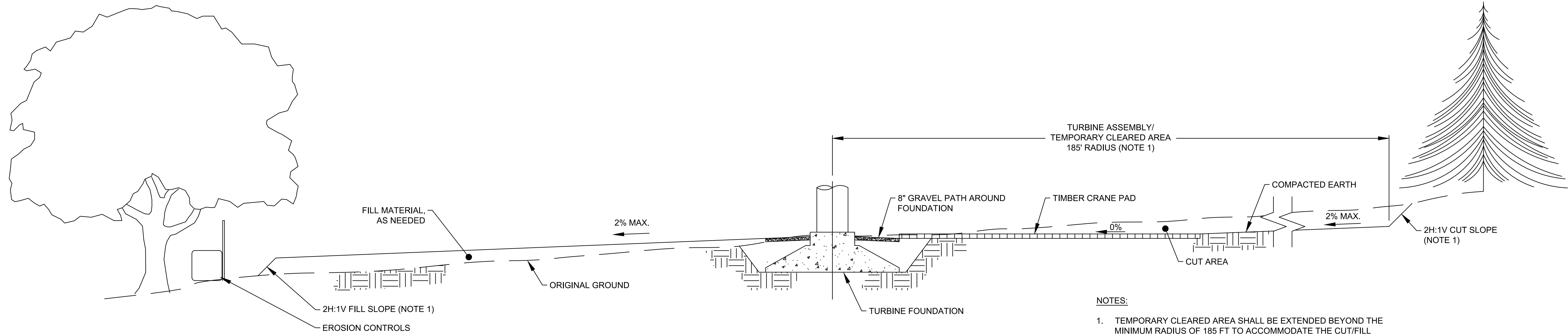
PRELIMINARY NOT FOR CONSTRUCTION

		249 Western Avenue Augusta, ME 04330		PROJECT NO: 246409	
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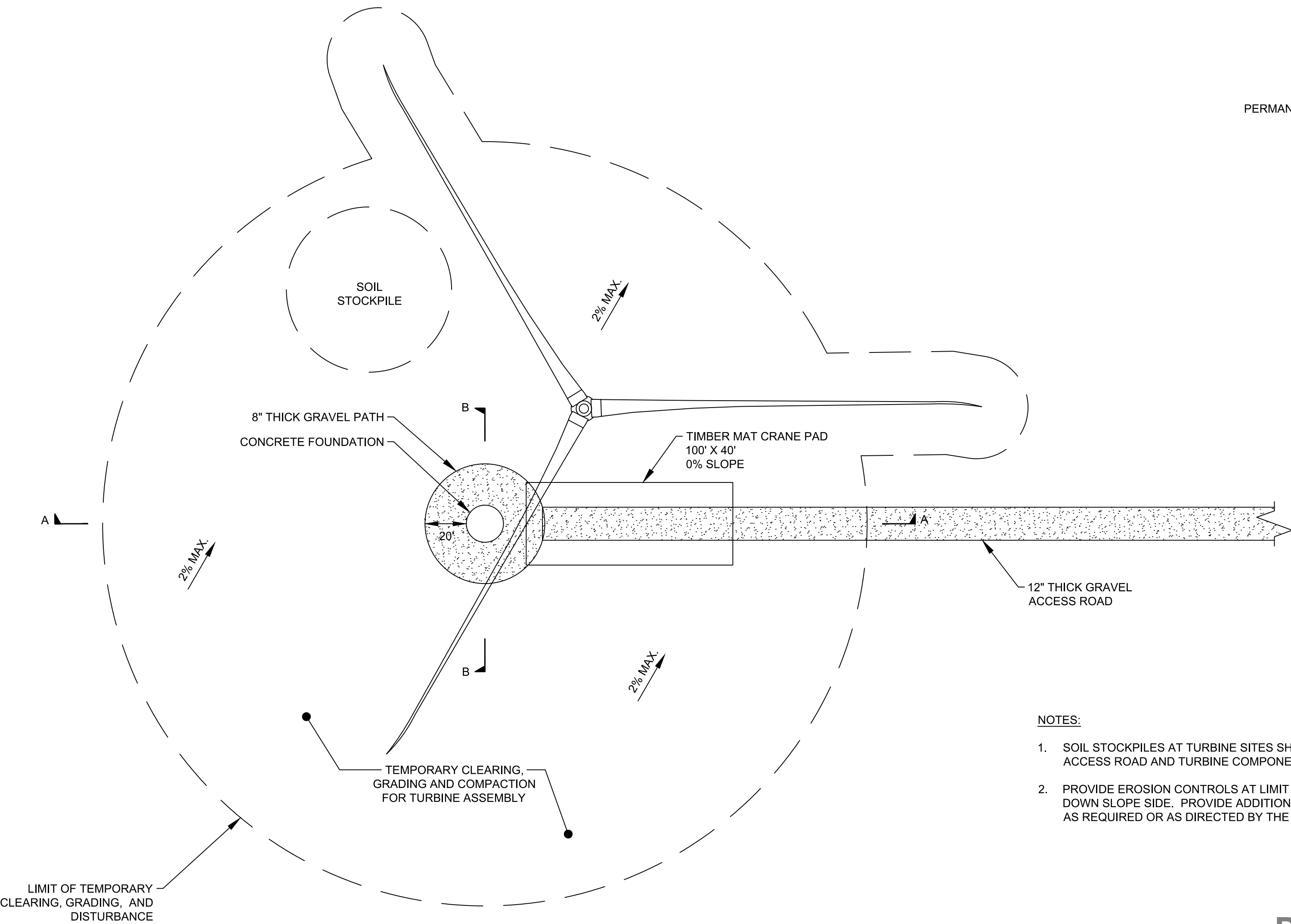
PMM DESIGNED		SITE DETAILS	
PMM DRAWN		3.4 MW WIND TURBINE GENERATOR	
AMW CHECKED		EIGHT POINT WIND ENERGY CENTER	
AJW APPROVED		EIGHT POINT WIND, LLC	
REVIEW 1		GREENWOOD / WEST UNION	
REVIEW 2		NEW YORK	
DATE AS NOTED SCALE		03/17	
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		REV. C	





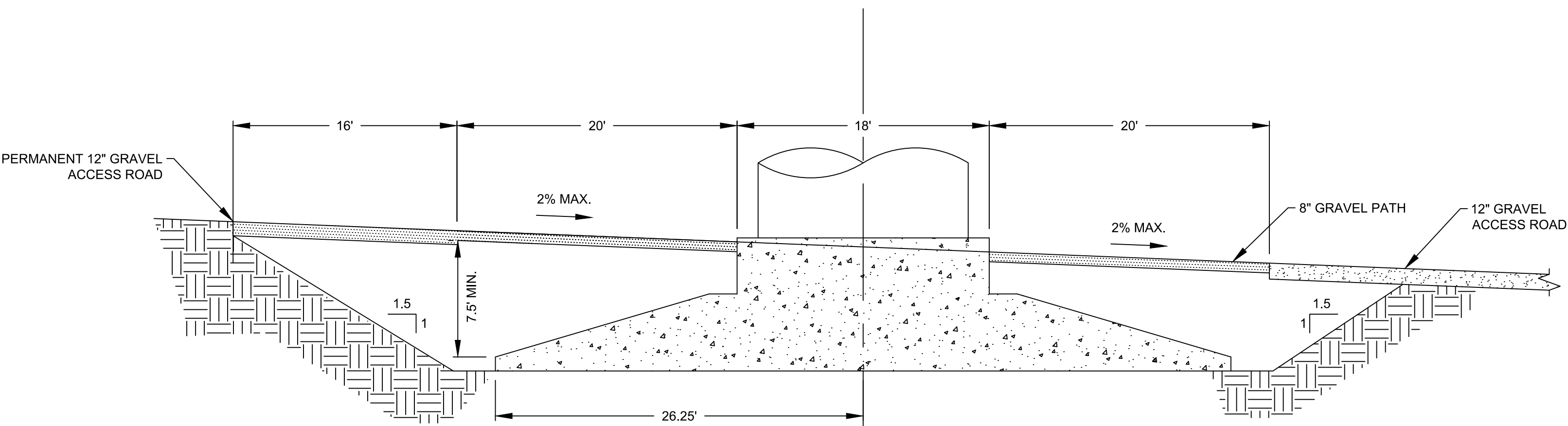
SECTION A-A  
TYPICAL TURBINE SITE  
SCALE: 1" = 20'

- NOTES:
1. TEMPORARY CLEARED AREA SHALL BE EXTENDED BEYOND THE MINIMUM RADIUS OF 185 FT TO ACCOMMODATE THE CUT/FILL SLOPE AND/OR BLADE TIPS.



PLAN VIEW  
TYPICAL TURBINE SITE  
SCALE: 1" = 40'


- NOTES:
1. SOIL STOCKPILES AT TURBINE SITES SHALL BE LOCATED AWAY FROM ACCESS ROAD AND TURBINE COMPONENT STAGING AREAS.
  2. PROVIDE EROSION CONTROLS AT LIMIT OF DISTURBANCE ON THE DOWN SLOPE SIDE. PROVIDE ADDITIONAL ENVIRONMENTAL CONTROLS AS REQUIRED OR AS DIRECTED BY THE ENVIRONMENTAL MONITOR.



SECTION B-B  
TYPICAL WIND TURBINE FOUNDATION  
SCALE: N.T.S.

- NOTES:
1. DIMENSIONS SHOWN ARE APPROXIMATE.
  2. STANDARD SPREAD FOOTING FOUNDATION IN SOIL SHOWN. FOUNDATIONS ON COMPETENT ROCK WILL BE SMALLER AND ANCHORED WITH HIGH STRENGTH TENDONS EMBEDDED IN THE ROCK FORMATION. REFER TO EXHIBIT II FOR ALTERNATIVE PROPRIETARY FOUNDATION OPTION.

PRELIMINARY NOT FOR CONSTRUCTION

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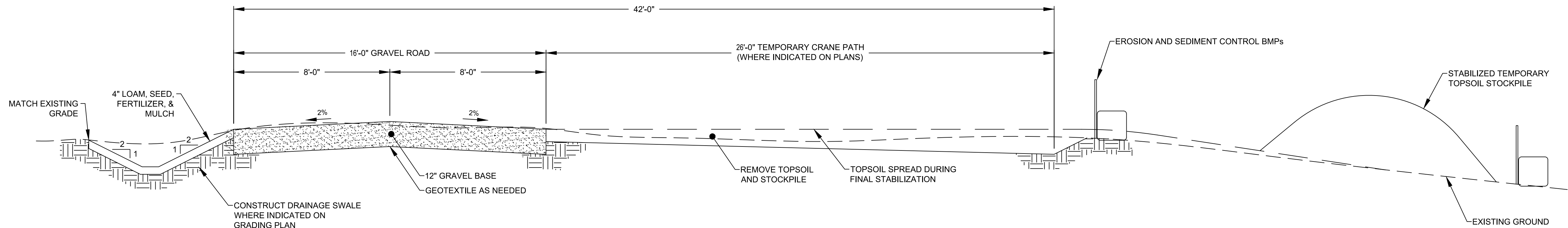
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								EIGHT POINT WIND ENERGY CENTER	
								EIGHT POINT WIND, LLC	
								GREENWOOD / WEST UNION	
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REVIEW 1		03/17							
REVIEW 2		DATE							
		AS NOTED							
		SCALE							



D-6

REV.  
C

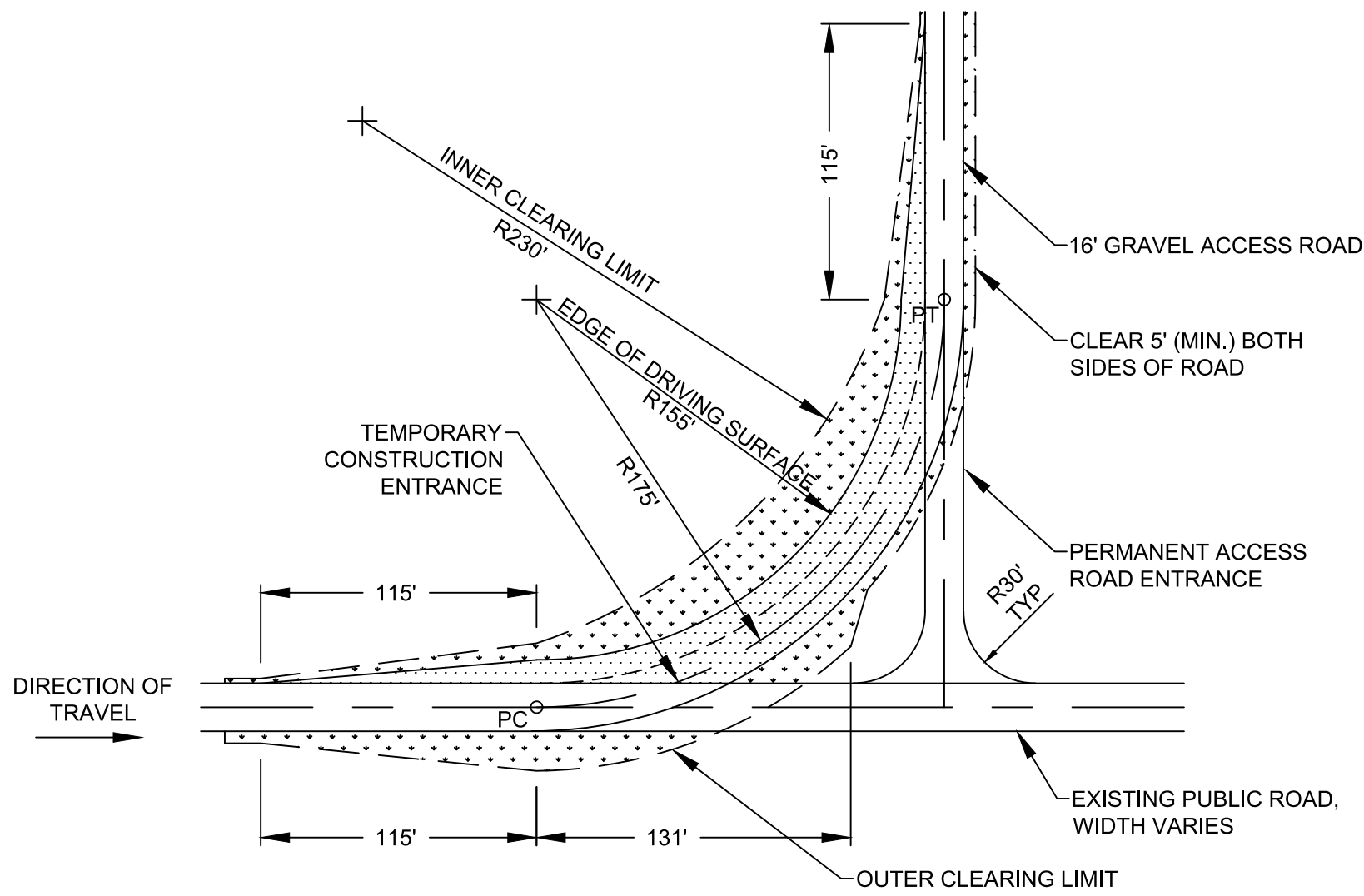




- NOTES:
1. ACCESS ROAD SHALL BE CONSTRUCTED WITH GEOTEXTILE AS NEEDED BASED ON EXISTING SOIL CONDITIONS.
  2. TEMPORARY CRANE PATH SHALL BE CONSTRUCTED AS COMPACTED EARTH, TEMPORARY TIMBER MATS, OR TEMPORARY GRAVEL. METHOD WILL BE BASED ON EXISTING SOIL CONDITIONS.

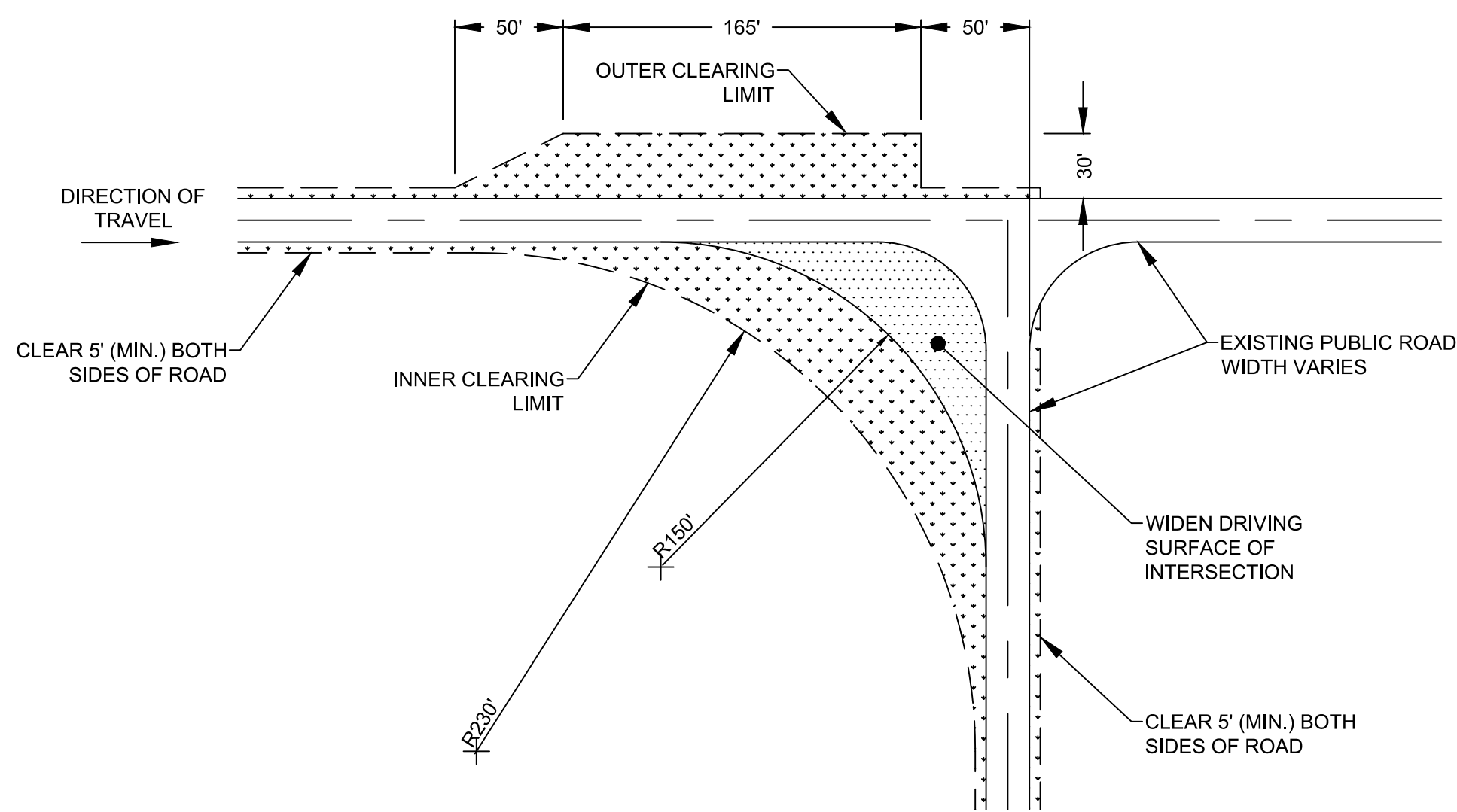
### TYPICAL ACCESS ROAD SECTION

SCALE: 1" = 3'



### TYPICAL ACCESS ROAD ENTRANCE DETAIL

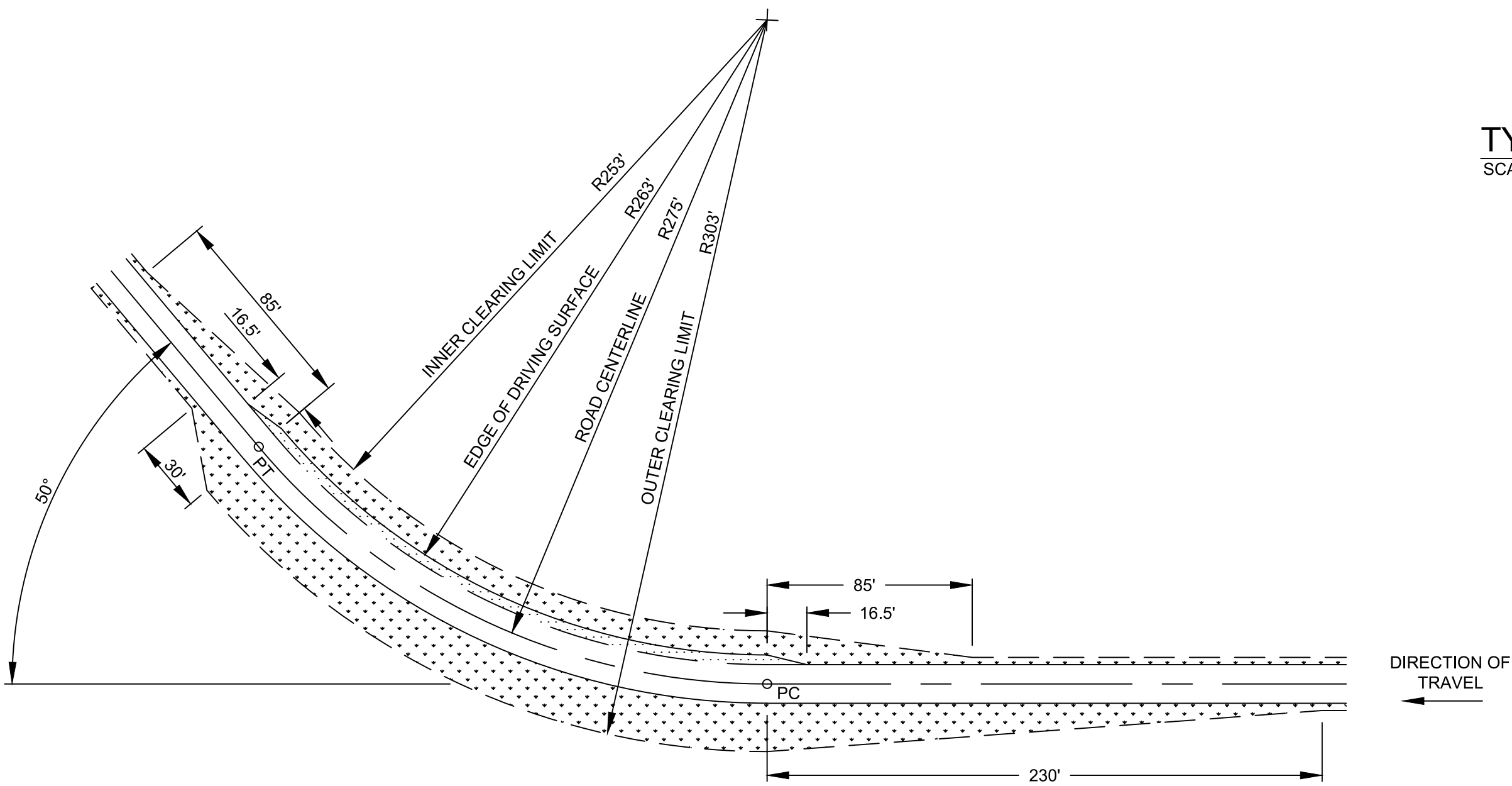
SCALE: N.T.S.



- NOTES:
1. OUTER CLEARING: NO OBSTRUCTIONS HIGHER THAN 5 FEET ABOVE ROAD SURFACE ELEVATION.
  2. INNER CLEARING: NO OBSTRUCTIONS HIGHER THAN 6 INCHES ABOVE ROAD SURFACE ELEVATION.

### TYPICAL ROADWAY INTERSECTION IMPROVEMENT

SCALE: N.T.S.




### TYPICAL ACCESS ROAD WIDENING DETAIL

10d - 50d CURVES

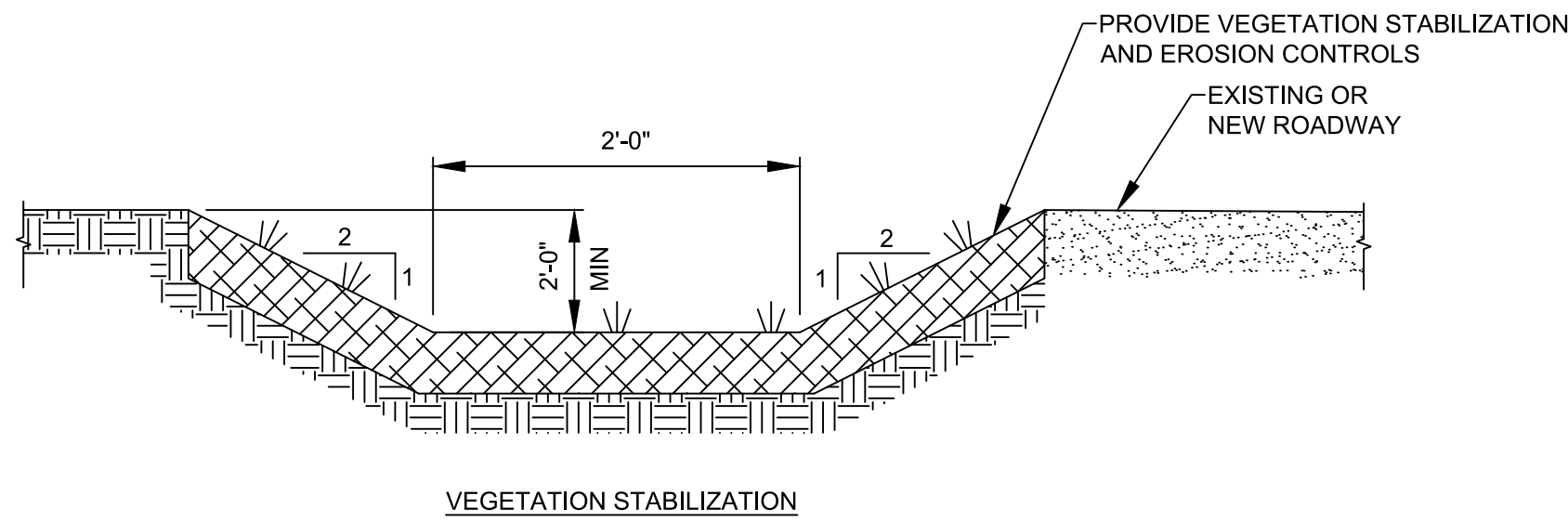
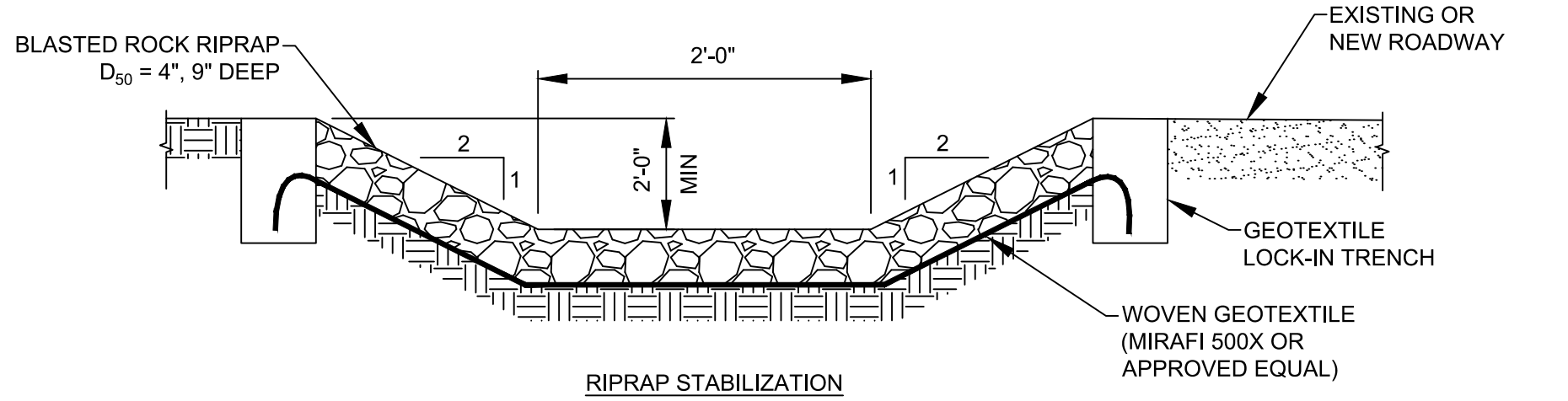
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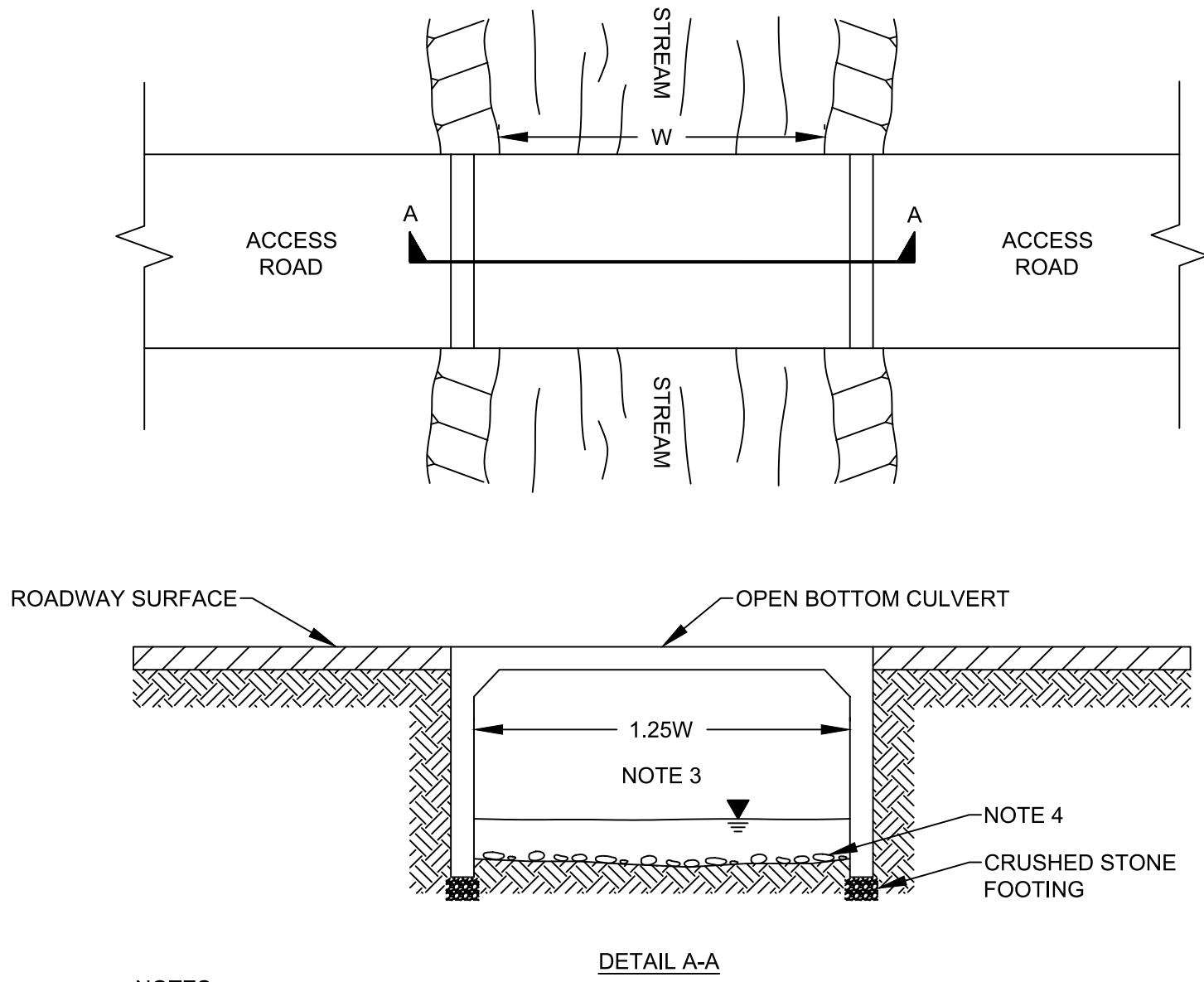
<div><div>249 Western Avenue Augusta, ME 04330</div></div>						PROJECT NO: 246409						<div><div>PMM DESIGNED</div><div>PMM DRAWN</div><div>AMW CHECKED</div><div>AJW APPROVED</div></div>		SITE DETAILS							
EIGHT POINT WIND ENERGY CENTER						EIGHT POINT WIND, LLC						GREENWOOD / WEST UNION						NEW YORK			
REV						DESCRIPTION						DATE		DES		CHK		APP		REV	
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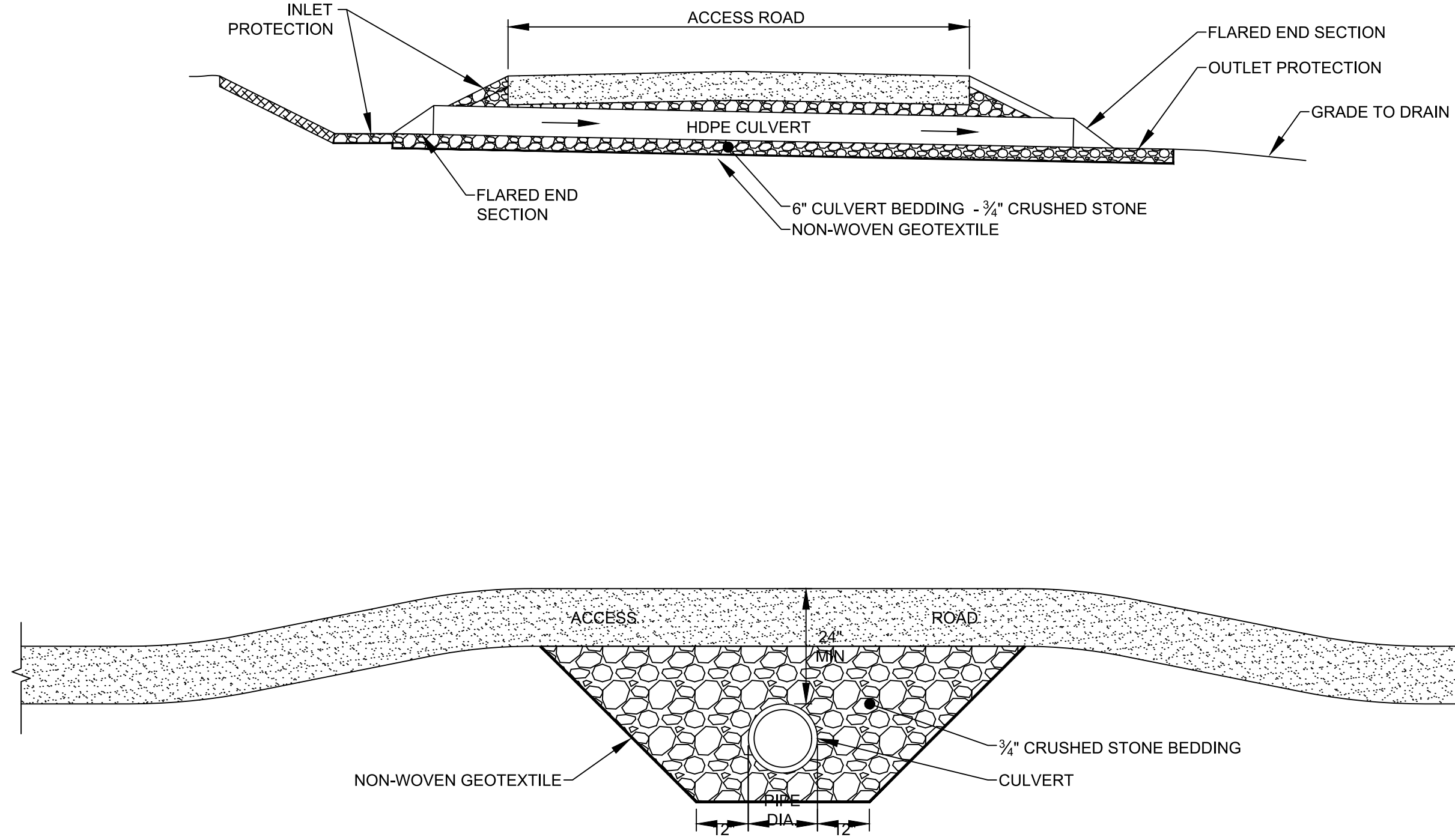
- NOTES:**
1. DRAINAGE SWALE PROFILE SHALL BE MODIFIED TO TRANSITION WHERE IT TIES INTO EXISTING SWALES. TRANSITION LENGTH SHALL BE COORDINATED WITH ON-SITE ENVIRONMENTAL INSPECTOR.
  2. SWALE SHALL DISCHARGE TO STABILIZED LEVEL SPREADERS, CONTAINMENT OR OTHER STRUCTURES PROVIDED TO CONTROL EROSION RUN-OFF.
  3. PROVIDE STABILIZATION AND EROSION CONTROLS AS REQUIRED BY THE ON-SITE ENVIRONMENTAL INSPECTOR IN ACCORDANCE WITH THE NEW YORK STATE STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL.

**TYPICAL DRAINAGE SWALE**  
SCALE: N.T.S.

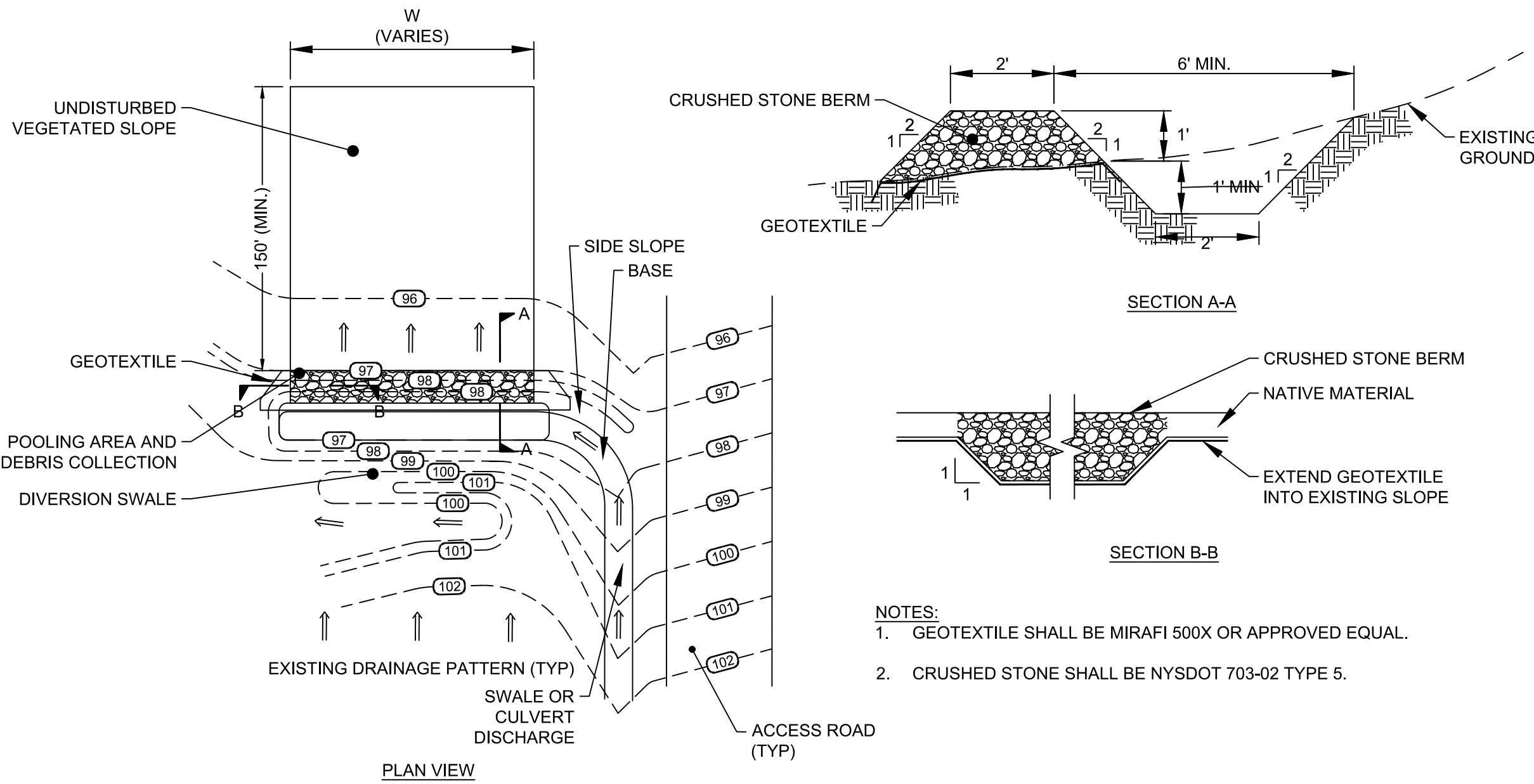


- NOTES:**
1. PROVIDE ENVIRONMENTAL CONTROLS AND STABILIZATION TECHNIQUES AS REQUIRED PRIOR TO THE START OF CONSTRUCTION. ENVIRONMENTAL CONTROLS SHALL BE IN ACCORDANCE WITH NY STATE STANDARD SPECIFICATION FOR EROSION AND SEDIMENT CONTROL.
  2. OPEN BOTTOM CULVERT SHALL BE SUPERIOR CONCRETE 3 - SIDED BRIDGE OR EQUAL.
  3. BRIDGE SPAN SHALL BE MIN. 1.25 X NATURAL CHANNEL WIDTH MEASURED AT TOP OF BANK.
  4. CHANNEL BOTTOM SHALL BE RESTORED TO MATCH EXISTING CHANNEL CONDITIONS USING NATURAL MATERIALS SALVAGED FROM BRIDGE EXCAVATION AREA.
  5. WING WALLS, RIP-RAP AND OTHER PERMANENT FLOW DIVERTERS SHALL NOT BE INSTALLED WITHOUT PRIOR NYDEC APPROVAL.
  6. ABOVE SKETCH IS INTENDED TO CONVEY CONCEPT. MORE RESTRICTIVE REQUIREMENTS OF THE MUNICIPALITY, STATE OR OTHER AUTHORITY HAVING JURISDICTION SHALL BE REFLECTED IN THE DETAIL DESIGN REQUIREMENTS AT THE EM & CP DOCUMENTS.

**PERMANENT STREAM CROSSING**  
SCALE: N.T.S.

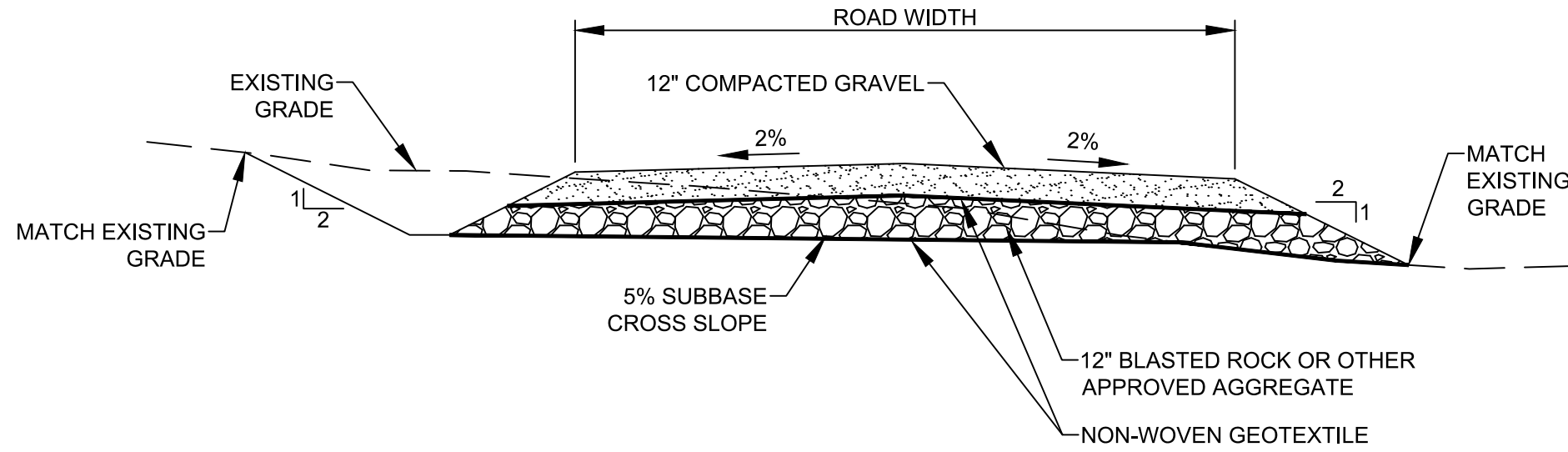


**TYPICAL PERMANENT CULVERT**  
SCALE: N.T.S.



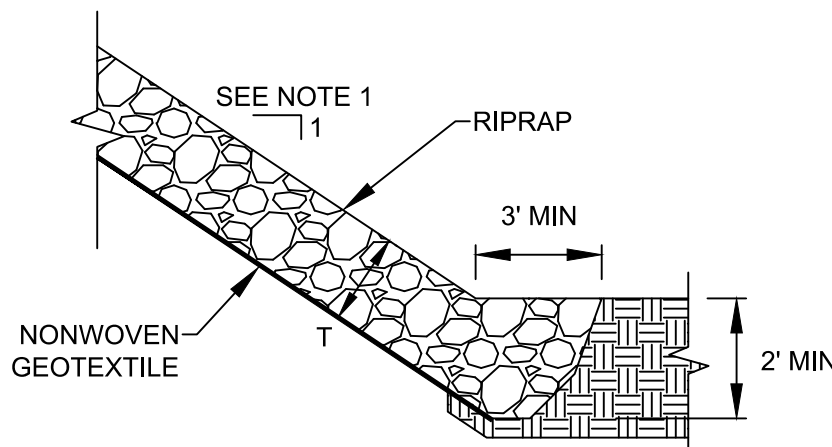
- NOTES:**
1. GEOTEXTILE SHALL BE MIRAFI 500X OR APPROVED EQUAL.
  2. CRUSHED STONE SHALL BE NYSDOT 703-02 TYPE 5.

**TYPICAL FLOW DIFFUSER DETAIL**  
SCALE: N.T.S.



- NOTES:**
1. NON-WOVEN GEOTEXTILE SHALL BE MIRAFI 140N OR APPROVED EQUAL. INSTALL GEOTEXTILE UNDER AND OVER BASE COURSE. DO NOT COVER LATERAL SIDES.
  2. PERMEABLE BASE SHALL BE MINIMUM 12" COURSE OF CLEAN 3'-6" DIAMETER STONE.

**TYPICAL PERMEABLE BASE SECTION**  
SCALE: N.T.S.



- NOTES:**
1. ALL SLOPES STEEPER THAN 3:1 SHALL BE STABILIZED WITH RIPRAP.
  2. RIPRAP GRADATION SHALL BE D<sub>90</sub>=6".
  3. MINIMUM RIPRAP THICKNESS (T) OF RIPRAP COVER SHALL BE 15".
  4. GEOTEXTILE SHALL BE MIRAFI 140NL OR APPROVED EQUAL.

**TYPICAL RIPRAP SLOPE DETAIL**  
SCALE: N.T.S.

**PRELIMINARY NOT FOR CONSTRUCTION**

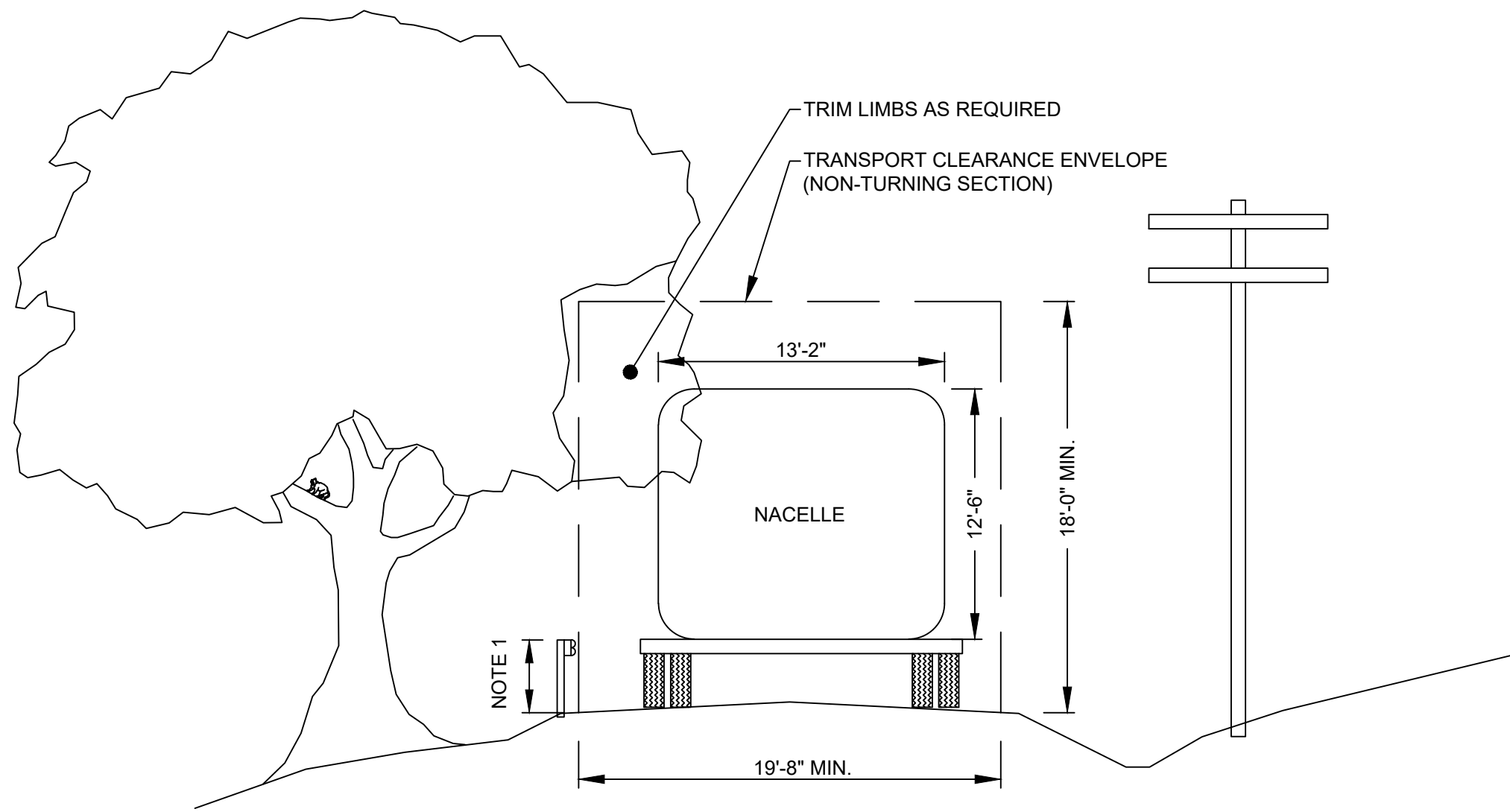
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		249 Western Avenue Augusta, ME 04330		PROJECT NO: 246409	
REV	DESCRIPTION	DATE	DES	CHK	APP
C	ISSUED FOR CLIENT REVIEW	3/2/18	TRC	PMM	AMW
B	PRE-FINAL CLIENT REVIEW	08/04/17	TRC	PMM	AMW
A	ISSUED FOR CLIENT REVIEW	04/14/17	TRC	PMM	AJW

PMM DESIGNED PMM DRAWN AMW CHECKED AJW APPROVED		SITE DETAILS  EIGHT POINT WIND ENERGY CENTER EIGHT POINT WIND, LLC GREENWOOD / WEST UNION NEW YORK	
REVIEW 1 REVIEW 2	03/17 DATE AS NOTED SCALE		REV. C





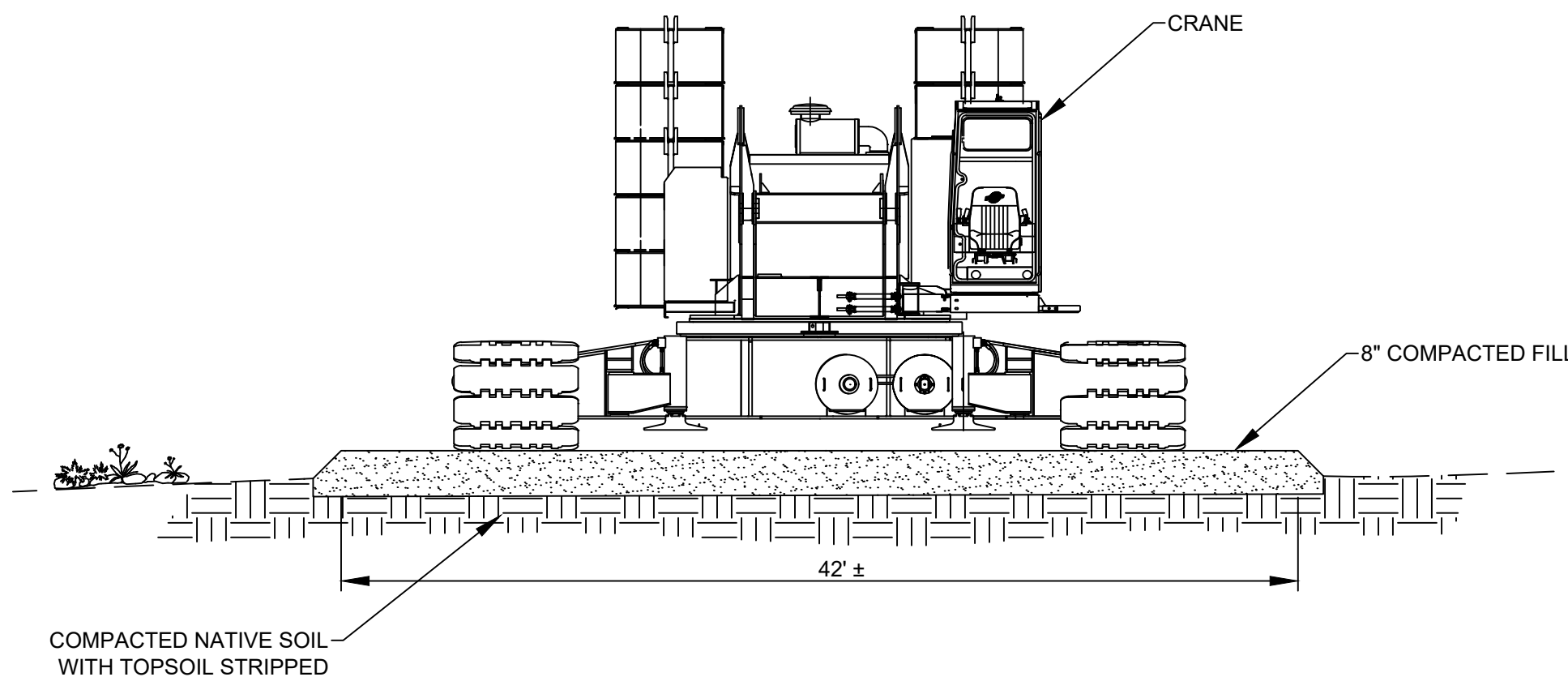


NOTES:

1. AT ROAD CURVES, MAXIMUM PROJECTION ON INSIDE OF CURVE IS 6 INCHES ABOVE ROAD SURFACE. ON THE EXTERIOR OF CURVES, PROJECTION MAY BE UP TO 5 FEET.
2. WIDTH OF CLEARANCE ENVELOPE AT CURVES VARIES WITH THE DEGREE OF CURVATURE AND COMPONENT TRANSPORTED.

ROAD CLEARANCE REQUIREMENTS

SCALE: N.T.S.

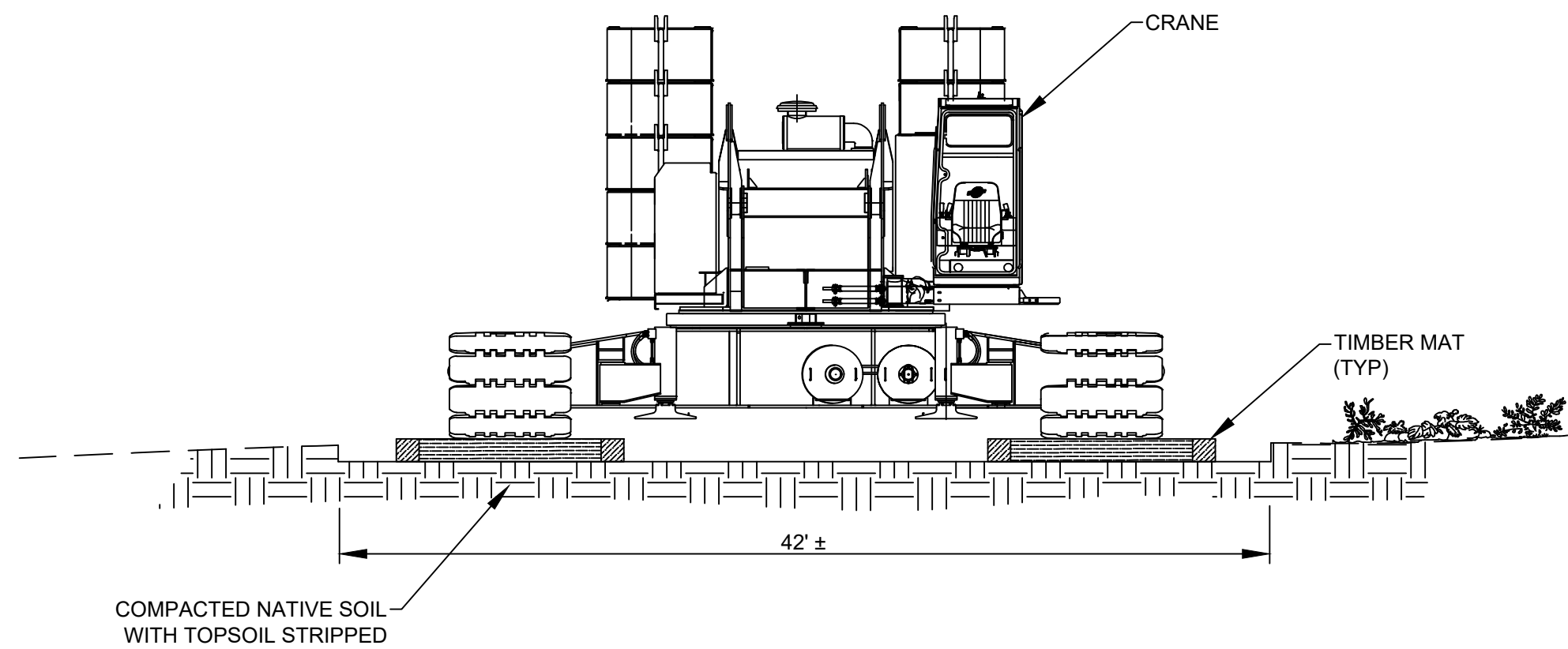


NOTES:

1. FILL SHALL BE REMOVED AT THE COMPLETION OF THE WORK. COMPACTED SOIL SHALL BE LOOSENEED AND RESHAPED. TOPSOIL SHALL BE RE-SPREAD AND APPROPRIATE EROSION PREVENTION MEASURES APPLIED.

TEMPORARY CONSTRUCTION ROUTE - COMPACTED FILL

SCALE: N.T.S.

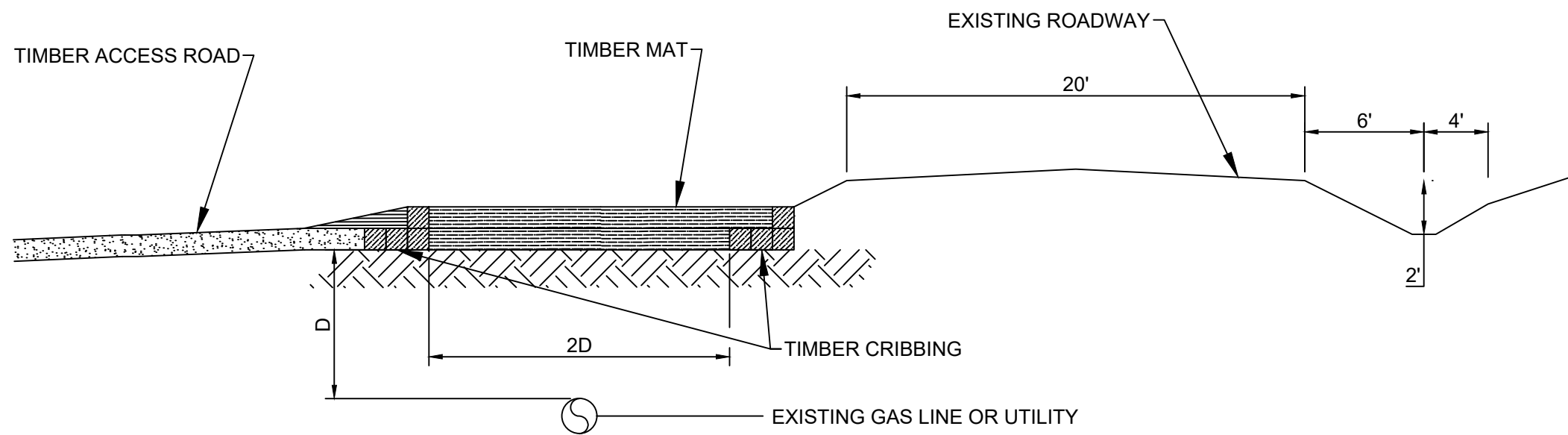


NOTES:

1. AT COMPLETION OF WORK, REMOVE TIMBER MATS, LOOSEN COMPACTED SOIL, AND RESHAPE SUBGRADE. TOPSOIL SHALL BE RE-SPREAD AND APPROPRIATE EROSION PREVENTION MEASURES APPLIED.

TEMPORARY CONSTRUCTION ROUTE - TIMBER MATS

SCALE: N.T.S.

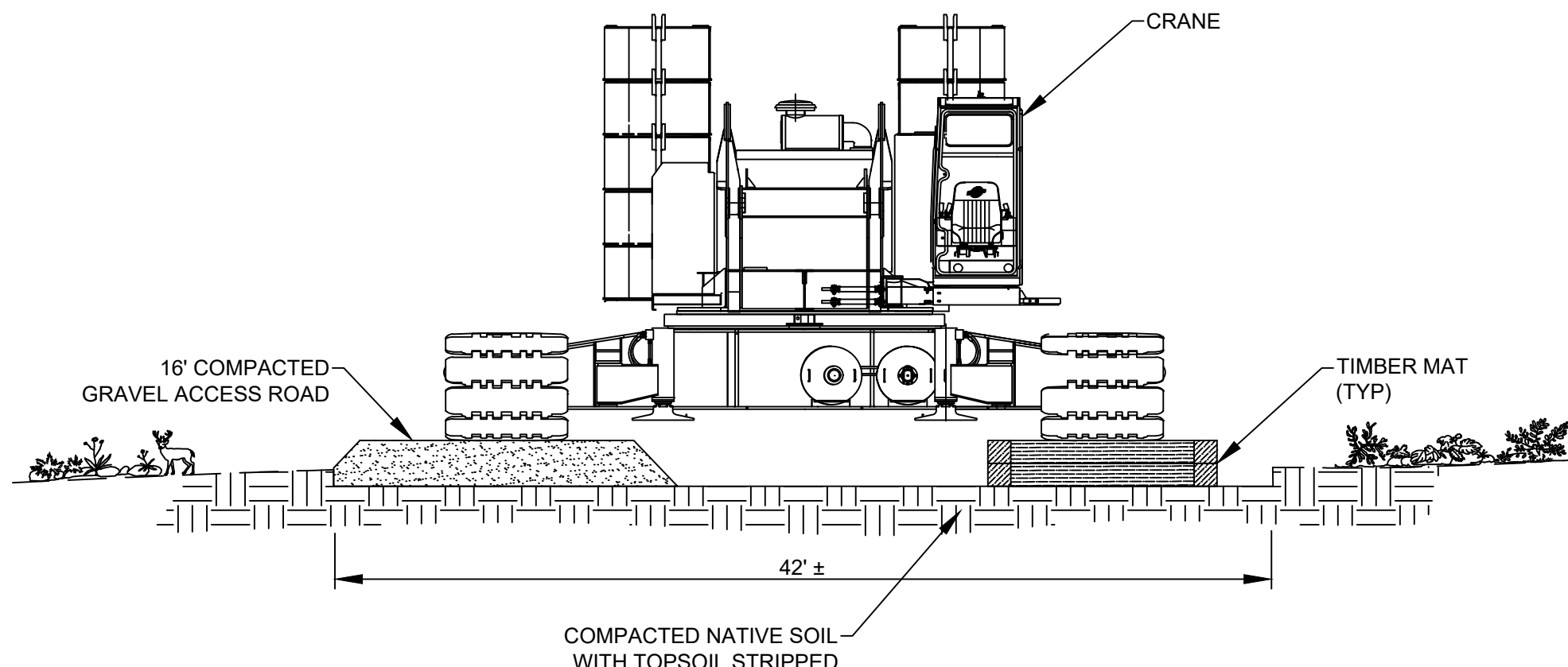


NOTES:

1. PROVIDE CRIBBING AND TIMBER MATS AS REQUIRED TO BRIDGE EXISTING UTILITY.
2. WHEN CONSTRUCTION IS COMPLETE, REMOVE TIMBER MATS/CRIBBING, DECOMPRESS SOIL, RE-SHAPE SUBGRADE AND SPREAD TOPSOIL. APPLY APPROPRIATE EROSION CONTROL MEASURES.
3. FOR PERMANENT UTILITY CROSSINGS PROVIDE CROSSING IMPROVEMENTS IN ACCORDANCE WITH UTILITY OWNER CROSSING AGREEMENT.

UTILITY CROSSING DETAIL (TEMPORARY ROAD)

SCALE: NTS

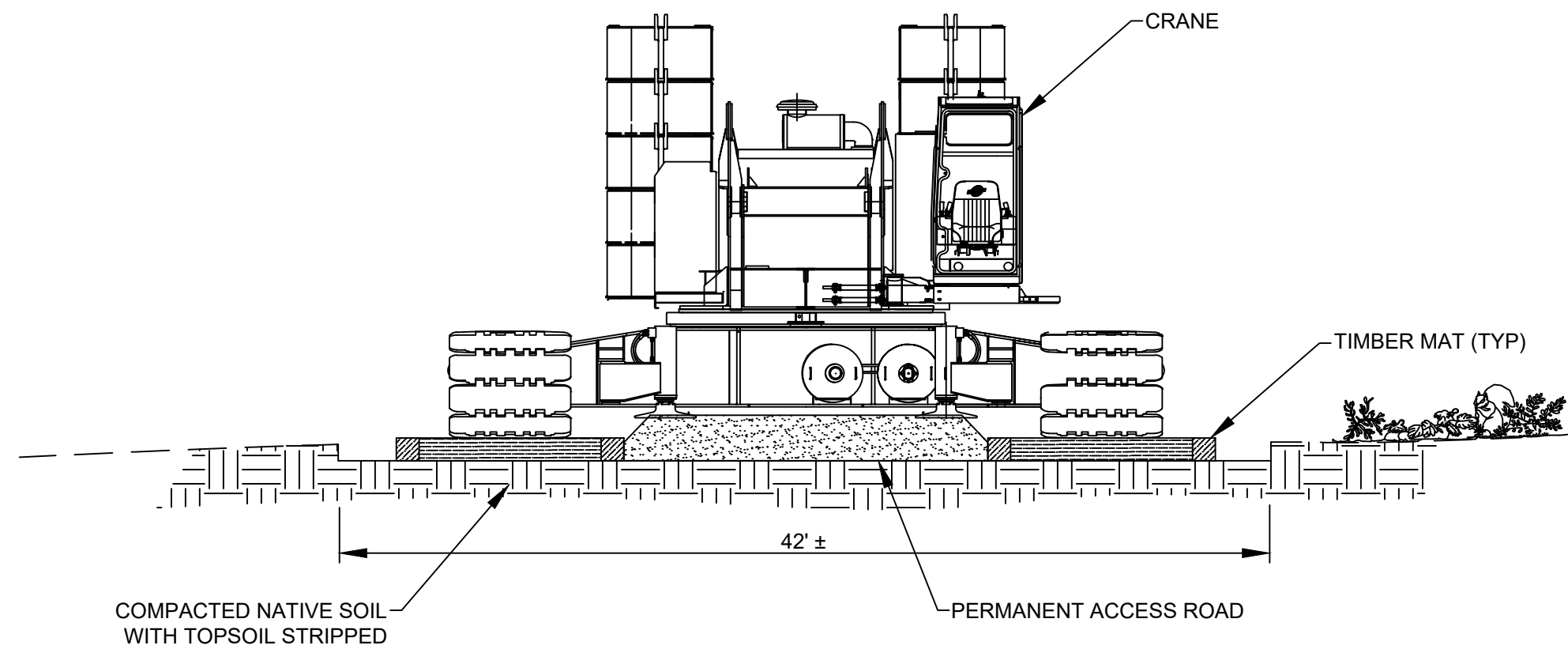


NOTES:

1. AT COMPLETION OF WORK, REMOVE TIMBER MATS, LOOSEN COMPACTED SOIL, AND RESHAPE SUBGRADE. TOPSOIL SHALL BE RE-SPREAD AND APPROPRIATE EROSION PREVENTION MEASURES APPLIED.

TEMPORARY CONSTRUCTION ROUTE - ACCESS ROAD & MAT 1

SCALE: NTS



NOTES:

1. AT COMPLETION OF WORK, REMOVE TIMBER MATS, LOOSEN COMPACTED SOIL, AND RESHAPE SUBGRADE. TOPSOIL SHALL BE RE-SPREAD AND APPROPRIATE EROSION PREVENTION MEASURES APPLIED.

TEMPORARY CONSTRUCTION ROUTE - ACCESS ROAD & MAT 2

SCALE: NTS

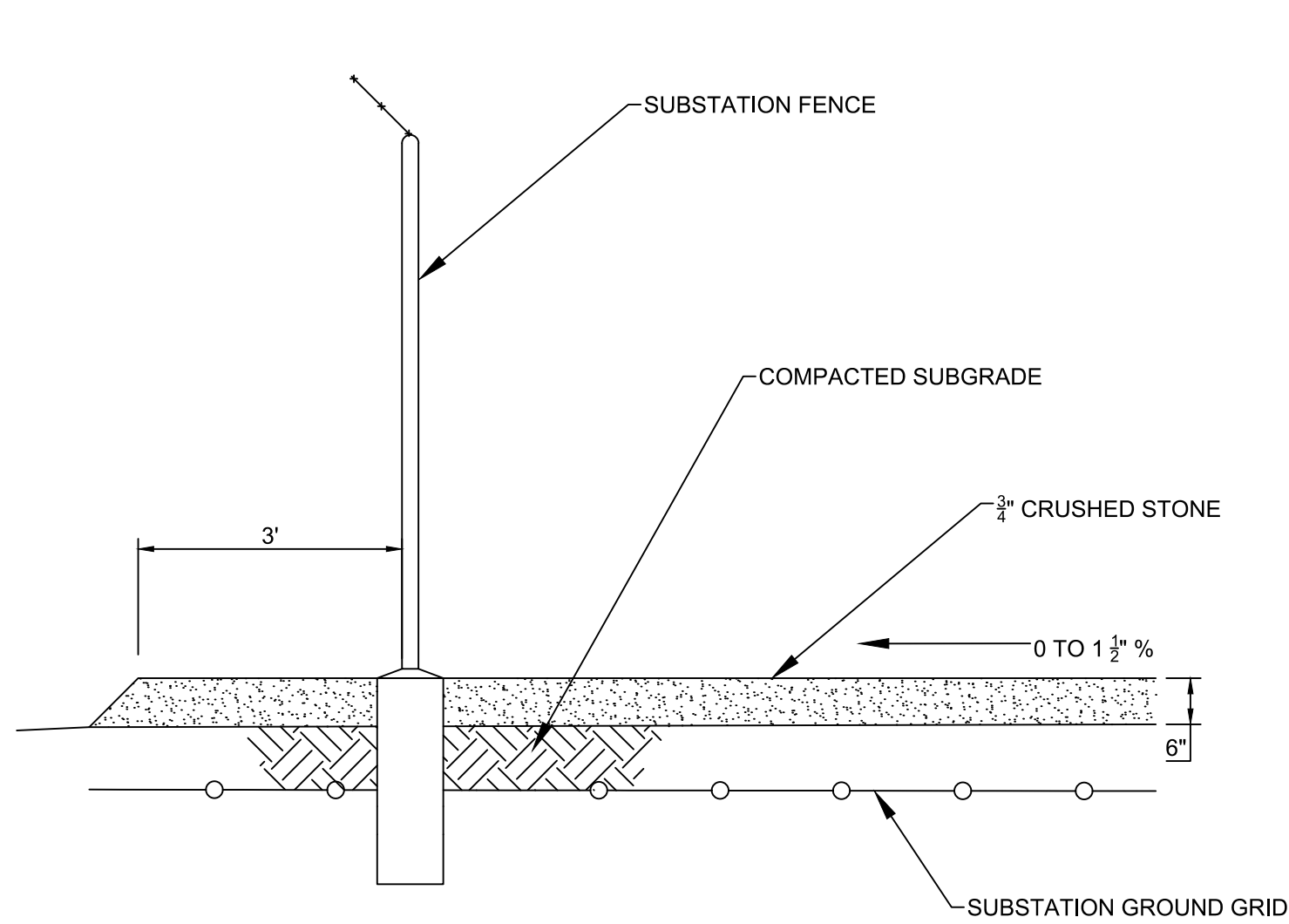
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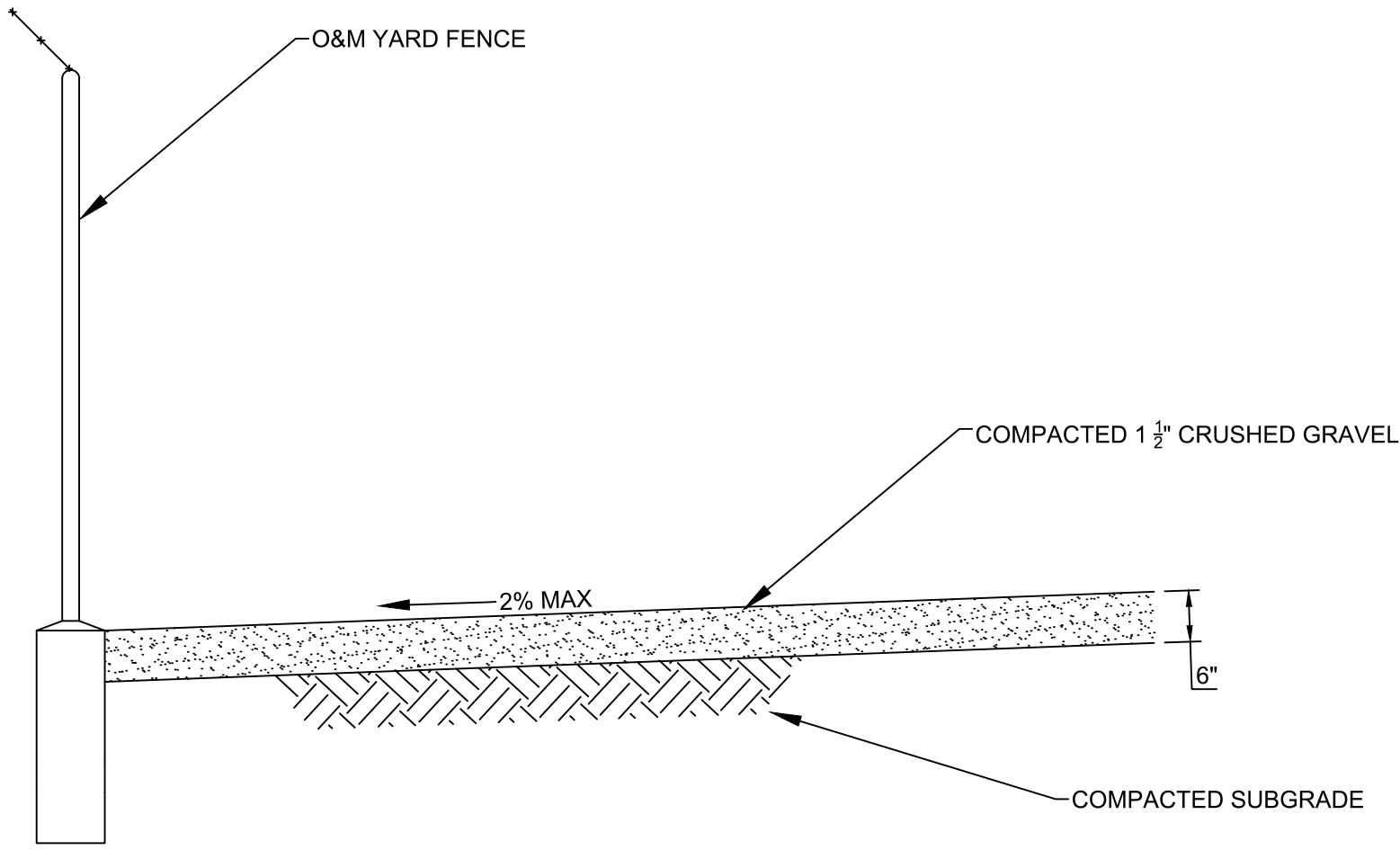
<div><div><div>TRC</div><div>249 Western Avenue Augusta, ME 04330</div></div><div>PROJECT NO: 246409</div></div>						SITE DETAILS		
REV	DESCRIPTION	DATE	DES	CHK	APP	EIGHT POINT WIND ENERGY CENTER EIGHT POINT WIND, LLC GREENWOOD / WEST UNION NEW YORK		
C	ISSUED FOR CLIENT REVIEW	3/2/18	TRC	PMM	AMW	<div><div>REVIEW 1</div><div>REVIEW 2</div></div> <div>03/17 DATE AS NOTED SCALE</div> <div><div>TRC</div><div>D-9</div></div> <div>REV. C</div>		
B	PRE-FINAL CLIENT REVIEW	08/04/17	TRC	PMM	AMW			
A	ISSUED FOR CLIENT REVIEW	04/14/17	TRC	PMM	AJW			
						PMM DESIGNED		
						PMM DRAWN		
						AMW CHECKED		
						AJW APPROVED		





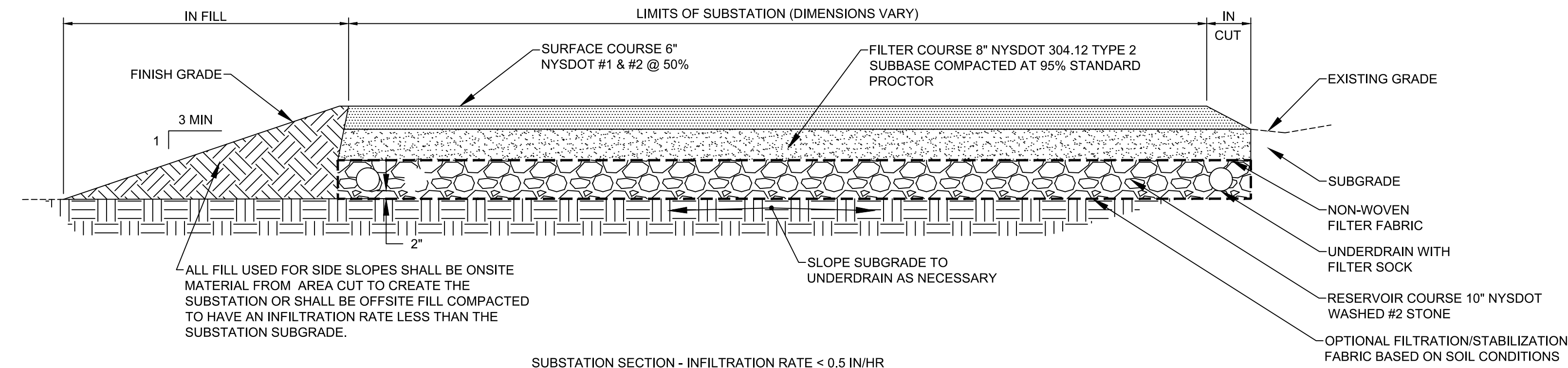


**SUBSTATION STONE TOPPING**  
SCALE: NTS



**O&M BUILDING YARD**  
SCALE: NTS

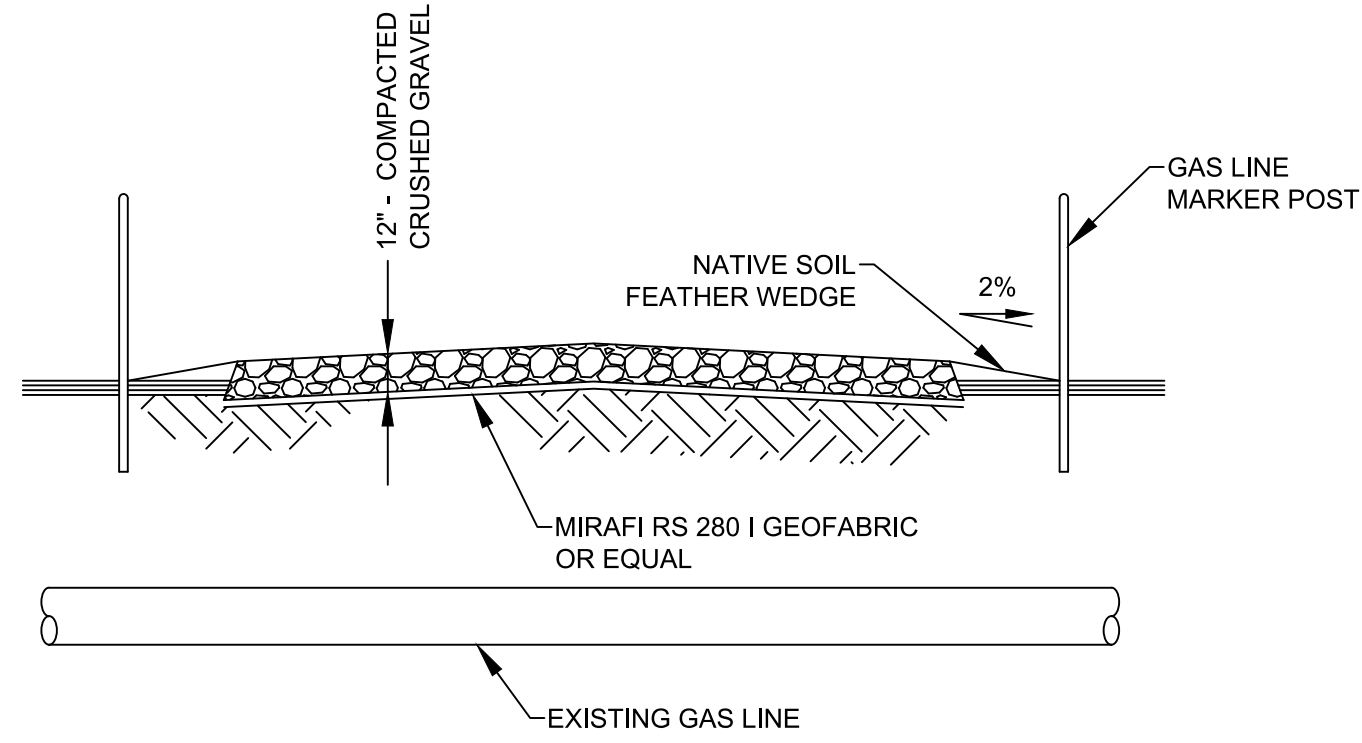
**APPLICABLE TO DETENTION POND OPTION**  
SCALE: NTS



**SUBSTATION STORMWATER MANAGEMENT NOTES:**

1. APPLICANT IS PRESENTING TWO DESIGN OPTIONS FOR THE O&M YARD AND SUBSTATION STORMWATER MANAGEMENT; TRADITIONAL INFILTRATION PONDS AND PERVIOUS YARD PAVEMENT. SELECTION OF THE STORMWATER MANAGEMENT OPTION TO BE EMPLOYED IS PENDING ON-SITE SOIL TESTING.
2. THE ALTERNATIVE STORMWATER MANAGEMENT OPTION IS BASED ON THE SYSTEM DEVELOPED BY NATIONAL GRID IN CONJUNCTION WITH EDR AND APPROVED BY THE STATE OF NEW YORK. THE NATIONAL GRID DISCLAIMER REQUIRED BY THEIR APPROVAL LETTER DATED FEBRUARY 25, 2016 IS INCORPORATED HEREIN BY REFERENCE.
3. ALTERNATIVE STORMWATER ALTERNATIVE OPTION SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE NOTES AND DETAILS PROVIDED IN THE NATIONAL GRID LETTER ENTITLED APPROVAL OF NATIONAL GRID'S ALTERNATIVE STORMWATER MANAGEMENT PRACTICES FOR SUBSTATION DATED FEBRUARY 25, 2016.
4. FOR SITES WITH NATIVE SOIL INFILTRATION RATES GREATER THAN 0.5 IN/HR THE SUBDRAIN SYSTEM SHALL BE ELIMINATED.

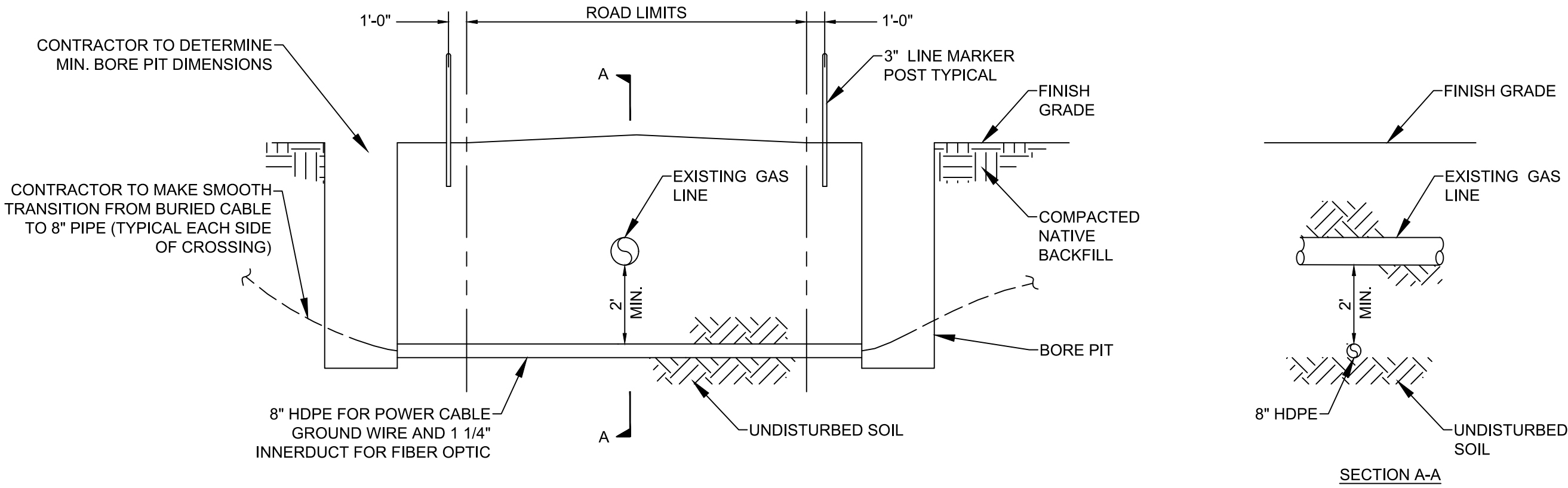
**APPLICABLE TO ALTERNATE STORMWATER MANAGEMENT OPTION**  
SCALE: NTS



**NOTES:**

1. ACCESS ROAD CROSSING DETAILS SHALL BE ADJUSTED PER GAS COMPANY REQUIREMENTS.
2. ABOVE SECTION IS INTENDED FOR LIGHT WEIGHT LOW TRAFFIC VOLUME. GRAVEL ROAD SURFACE SHALL BE ADJUSTED WHEN HEAVY LOADS AND/OR HIGHER TRAFFIC VOLUME IS EXPECTED.
3. PROVIDE UNDERGROUND GAS LINE MARKERS IN ACCORDANCE WITH GAS COMPANY REQUIREMENTS.

**TYPICAL ACCESS ROAD GAS LINE CROSSING DETAIL**  
SCALE: NTS



**NOTES:**

1. ANY DAMAGE TO THE EXISTING PIPELINE, INCLUDING BUT NOT LIMITED TO THE PIPELINE COATING, SHALL BE REPAIRED BY THE CONTRACTOR IN ACCORDANCE WITH THE PIPELINE OWNER INSTRUCTIONS.
2. ALL POWER CABLES CROSSING OF PIPELINES TO BE AS CLOSE TO 90 DEGREES AS POSSIBLE.
3. THE PIPELINE OWNER REPRESENTATIVE WILL DETERMINE THE AMOUNT OF COVER OVER THE PIPELINE THAT MAY BE REQUIRED.
4. PLANS FOR ANY EXCAVATION IN THE RIGHT-OF-WAY MUST BE APPROVED IN WRITING BY THE PIPELINE OWNER PRIOR TO COMMENCING WORK. EXCAVATING CLOSER THAN 2 FEET TO THE PIPELINE SHALL BE DONE BY HAND UNTIL THE PIPELINE IS EXPOSED AND SHALL BE DONE ONLY UNDER THE SUPERVISION OF AN AUTHORIZED PIPELINE COMPANY REPRESENTATIVE.

**34.5KV COLLECTOR GAS LINE CROSSING DETAIL**  
SCALE: NTS

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<div><div><div><div>TRC</div><div>249 Western Avenue Augusta, ME 04330</div></div><div>PROJECT NO: 246409</div></div></div>						PMM DESIGNED			SITE DETAILS		
						PMM DRAWN			EIGHT POINT WIND ENERGY CENTER		
						AMW CHECKED			EIGHT POINT WIND, LLC		
						AJW APPROVED			GREENWOOD / WEST UNION		
						REVIEW 1			03/17		
						REVIEW 2			DATE AS NOTED SCALE		
									TRC		
									D-10		
									REV. C		





246405-DETAILS SITE.dwg 2018.02.26

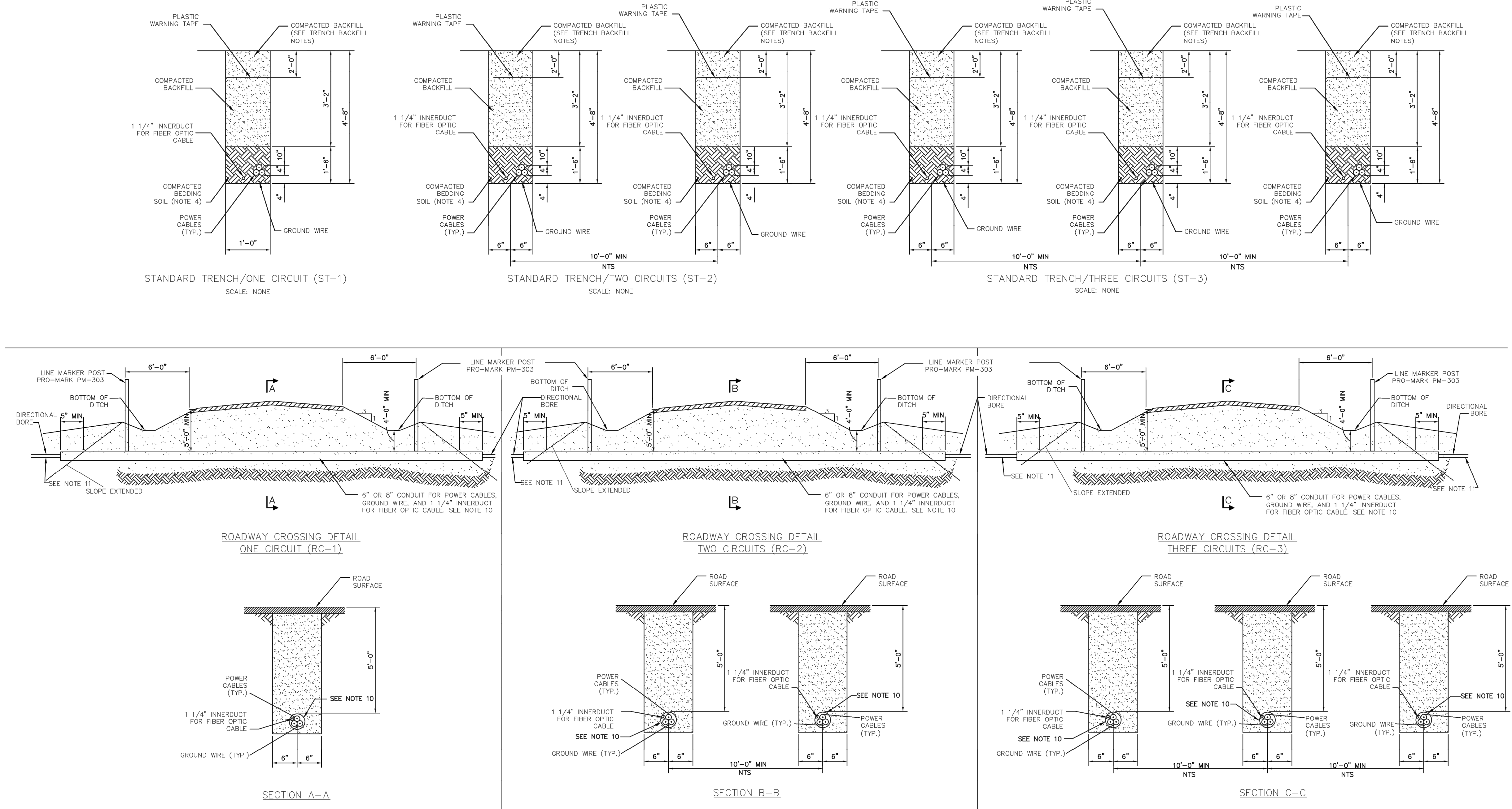
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B	ISSUED FOR CLIENT REVIEW	3/2/18	TRC	PMM	AMW	
A	PRE-FINAL CLIENT REVIEW	08/04/17	TRC	PMM	AMW	

PMM DESIGNED		34.5KV U/G COLLECTION SYSTEM TRENCH, BORING AND CROSSING DETAILS EIGHT POINT WIND ENERGY CENTER EIGHT POINT WIND, LLC GREENWOOD / WEST UNION		NEW YORK	
PMM DRAWN		03/17 DATE		REV. B	
AMW CHECKED		AS NOTED SCALE			
AJW APPROVED				D-11	



- TRENCH BACKFILL NOTES
- BACKFILLING OPERATIONS SHALL NOT BE CONDUCTED UNDER FREEZING TEMPERATURE OR FROZEN SOIL CONDITIONS.
  - THE BEDDING AND PADDING BACKFILL MATERIAL FOR THE TRENCH SHALL BE EXCAVATED SOIL FREE OF ROCKS (NO ROCKS LARGER 3/8" DIAMETER) AND FREE OF WOOD, ROOTS, VEGETABLE MATTER, TOPSOIL OR OTHER DELETERIOUS MATERIAL.
  - TOPSOIL CONSISTS OF ORGANIC SILT AND SILTY SAND IN ACCORDANCE WITH THE UNITED SOIL CLASSIFICATION SYSTEMS (USCS).
  - SUITABLE PROTECTIVE BEDDING AND PADDING SOIL WITH A MINIMUM COVER ON ALL SIDES OF ALL CABLE AND / OR CONDUIT SYSTEMS SHALL BE PROVIDED. CONTRACTOR TO INSTALL 3M 1422-XR/ID GPS BALL MARKER AT EACH BORING PIT, NO DEEPER THAN 5'-0"
  - ALL THE LAYERS SHALL BE SUFFICIENTLY COMPACTED TO ACHIEVE THE NECESSARY THERMAL RESISTIVITY. COMPACTING BY FLOODING SHALL NOT BE PERMITTED.
  - BACKFILL SHALL BE PLACED IN THREE LIFTS (1 FOOT BOTTOM LIFT, 1 FOOT CENTER LIFT AND 2 FOOT TOP LIFT WITH TOPSOIL HEAPED FOR FINAL COMPLETION.
  - COMPACTED BACKFILL ABOVE CABLE SHALL NOT HAVE ROCKS LARGER THAN 1/2" DIAMETER.
  - ALL BACKFILL WITH 1405-CM/W (RHO VALUE), OR LESS, AND MINIMUM OF 2% MOISTURE CONTENT SHALL BE USED.
  - ALL BACKFILL SHOULD BE COMPACTED TO AT LEAST 85 PERCENT OF THE ASTM D698 DRY-DENSITY VALUE.
  - USE 6" BORE-GARD SCHEDULE 40 FOR POWER CABLES 4/0 AWG TO 500 MCM. USE 8" HDPE SDR 13.5 FOR POWER CABLES 750 MCM TO 1250 MCM.
  - CONTRACTOR TO INSTALL 3M 1422-XR/ID GPS BALL MARKER AT EACH BORING PIT, NO DEEPER THAN 5'-0"

UNDERGROUND OR EMBEDDED UTILITIES MAY BE LOCATED WITHIN OR ADJACENT TO THE AREA IN WHICH EXCAVATION, DEMOLITION, FOUNDATION, OR MODIFICATION WORK IS TO BE PERFORMED.

REFERENCES RELATING TO THE UNDERGROUND OR EMBEDDED UTILITIES ARE PROVIDED TO ASSIST THE CONTRACTOR/INSTALLER IN THE FIELD LOCATING THOSE UTILITIES AND OTHER POSSIBLE UNDERGROUND OR EMBEDDED INTERFERENCES WITH THE WORK.

THE CONTRACTOR/INSTALLER SHALL EXERCISE DUE CAUTION DURING ALL EXCAVATION/FOUNDATION/DEMOLITION WORK.

HOLD INFORMATION		
NO.	DATE	DESCRIPTION
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RELEASE INFORMATION		
REV.	DATE	DESCRIPTION
A	01-16-2016	ISSUED FOR REVIEW
ISSUE PURPOSE: ISSUED FOR REVIEW		
SPECIFICATION: N/A		
PROJECT NO.: 13139-045		
I HEREBY CERTIFY THAT THIS ENGINEERING DOCUMENT WAS PREPARED BY ME OR UNDER MY DIRECT PERSONAL SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF NEW YORK.		
MY LICENSE RENEWAL DATE IS:		
CAD FILE NAME: 13139-045-CS-2000		
PREPARED BY: K. PARIKH		
REVIEWED BY: M. RANKIN		
APPROVED BY:		
ANY MODIFICATION OR ADDITION TO THIS DRAWING BY AN ORGANIZATION OTHER THAN SARGENT & LUNDY, IS NOT THE RESPONSIBILITY OF SARGENT & LUNDY.		
 SARGENT & LUNDY LLC 55 EAST MONROE STREET CHICAGO, ILLINOIS 60603-5780		
PROJECT EIGHT POINT WIND FARM, LLC COLLECTION SYSTEM NEXTERA ENERGY RESOURCES, LLC STEBEN COUNTY, NY		
DRAWING TITLE 34.5KV U/G COLLECTION SYSTEM TRENCH, BORING AND CROSSING DETAILS		
DRAWING NUMBER 13139-045-CS-2000		REVISION A
SHEET 1	OF 1	





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<div><div>PMM DESIGNED</div><div>PMM DRAWN</div><div>AMW CHECKED</div><div>AJW APPROVED</div></div>		34.5KV U/G COLLECTION SYSTEM TRENCH, BORING AND CROSSING DETAILS EIGHT POINT WIND ENERGY CENTER EIGHT POINT WIND, LLC GREENWOOD / WEST UNION NEW YORK		
REVIEW 1	03/17 DATE		D-12	REV. B
REVIEW 2	AS NOTED SCALE			

E

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C

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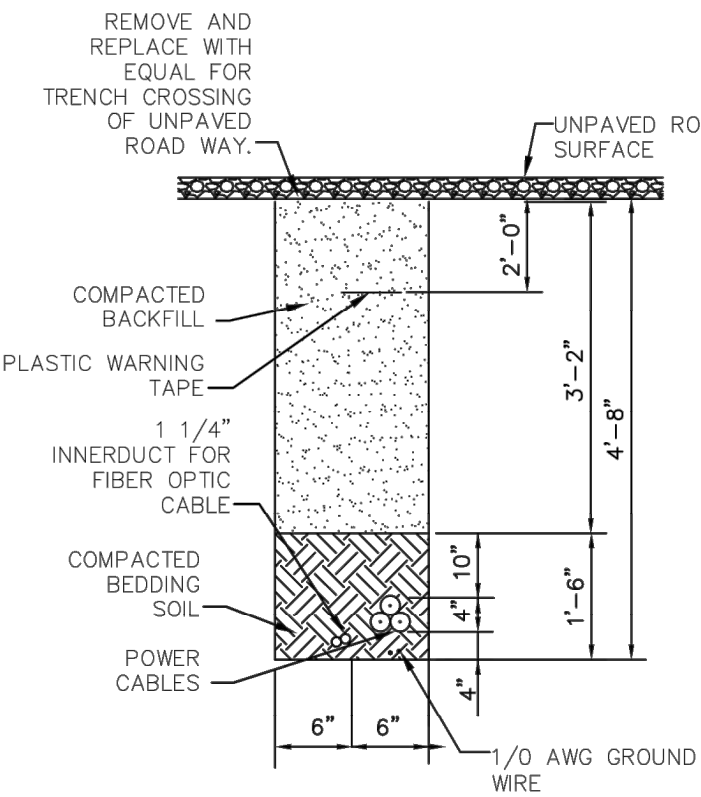
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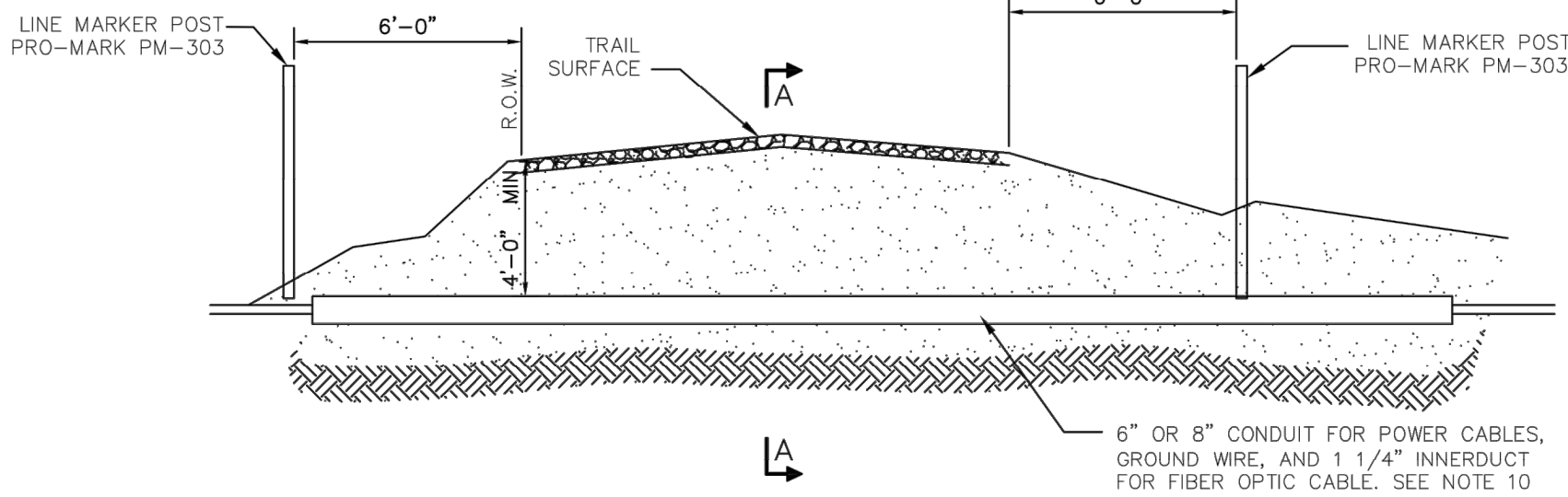
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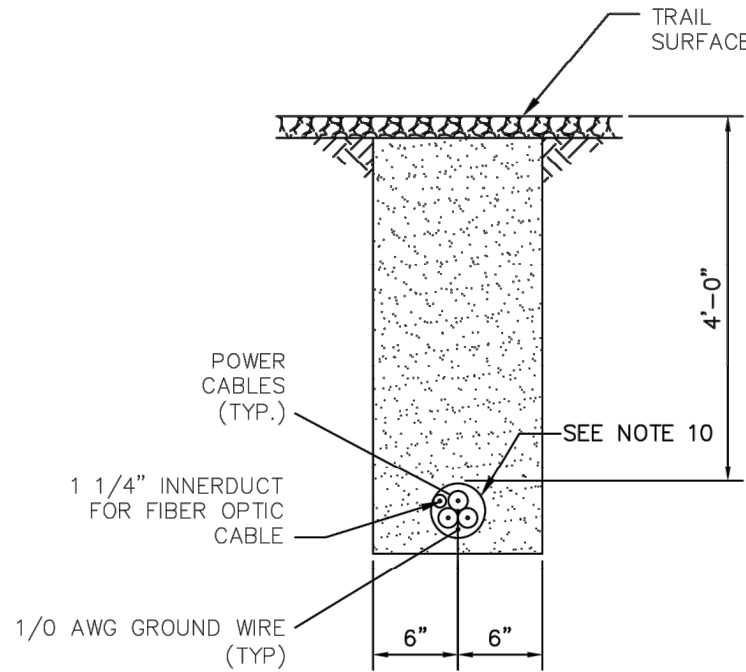
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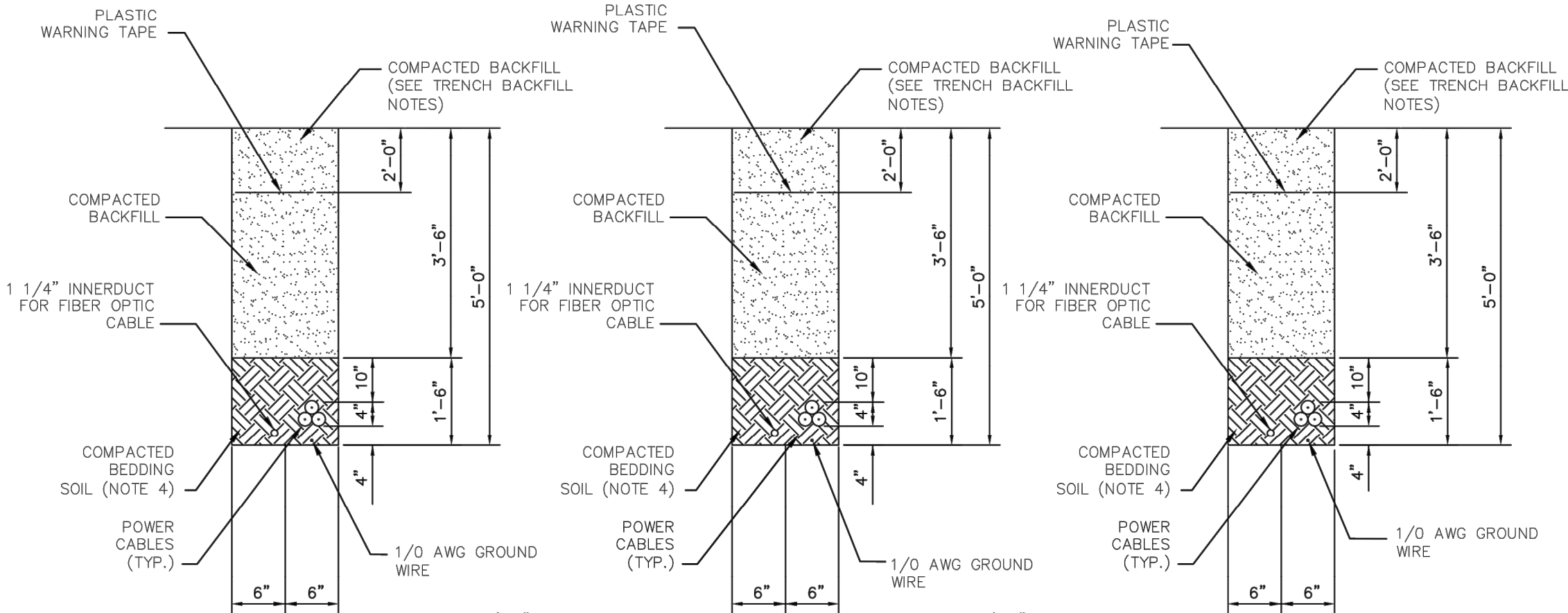
UNPAVED ROAD WAY ONE  
CIRCUIT CROSSING URC-1



TRAIL CROSSING DETAIL  
ONE CIRCUIT (TC-1)



SECTION A-A



DEEPER TRENCH/THREE CIRCUITS (DT-3)  
SCALE: NONE

TRENCH BACKFILL NOTES

1. ALL BACKFILLING OPERATIONS SHALL NOT BE CONDUCTED UNDER FREEZING TEMPERATURE OR FROZEN SOIL CONDITIONS.
2. THE BEDDING AND PADDING BACKFILL MATERIAL FOR THE TRENCH SHALL BE EXCAVATED SOIL FREE OF ROCKS (NO ROCKS LARGER 3/8" DIAMETER) AND FREE OF WOOD, ROOTS, VEGETABLE MATTER, TOPSOIL OR OTHER DELETERIOUS MATERIAL.
3. TOPSOIL CONSISTS OF ORGANIC SILT AND SILTY SAND IN ACCORDANCE WITH THE UNITED SOIL CLASSIFICATION SYSTEMS (USCS).
4. SUITABLE PROTECTIVE BEDDING AND PADDING SOIL WITH A MINIMUM COVER ON ALL SIDES OF ALL CABLE AND / OR CONDUIT SYSTEMS SHALL BE PROVIDED.
5. ALL THE LAYERS SHALL BE SUFFICIENTLY COMPACTED TO ACHIEVE THE NECESSARY THERMAL RESISTIVITY. COMPACTING BY FLOODING SHALL NOT BE PERMITTED.
6. ALL BACKFILL SHALL BE PLACED IN THREE LIFTS (1 FOOT BOTTOM LIFT, 1 FOOT CENTER LIFT AND 2 FOOT TOP LIFT WITH TOPSOIL HEAPED FOR FINAL COMPLETION.
7. COMPACTED BACKFILL ABOVE CABLE SHALL NOT HAVE ROCKS LARGER THAN 1.5" DIAMETER.
8. ALL BACKFILL PROVIDED SHALL HAVE A 140°C-CM/W (RHO VALUE), OR LESS, AND MINIMUM OF 2% MOISTURE.
9. ALL BACKFILL SHALL BE COMPACTED TO AT LEAST 85 PERCENT OF THE ASTM D698 DRY-DENSITY VALUE.
10. USE 6" BORE-GARD SCHEDULE 40 FOR POWER CABLES 4/0 AWG TO 500 MCM. USE 8" HDPE SDR 13.5 FOR POWER CABLES 750 MCM TO 1250 MCM.

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RELEASE INFORMATION		
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ISSUE PURPOSE: ISSUED FOR REVIEW

SPECIFICATION: N/A

PROJECT NO.: 13139-045

I HEREBY CERTIFY THAT THIS ENGINEERING DOCUMENT WAS PREPARED BY ME OR UNDER MY DIRECT PERSONAL SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF NEW YORK.

MY LICENSE RENEWAL  
DATE IS:

CAD FILE NAME: 13139-045-CS-2002

PREPARED BY: K. PARIKH

REVIEWED BY: M. RANKIN

APPROVED BY:

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SARGENT & LUNDY LLC  
55 EAST MONROE STREET  
CHICAGO, ILLINOIS 60603-5780



PROJECT

EIGHT POINT WIND FARM, LLC  
COLLECTION SYSTEM  
NEXTERA ENERGY  
RESOURCES, LLC  
STEBEN COUNTY, NY

DRAWING TITLE

34.5KV COLLECTION SYSTEM  
TRENCH, BORING AND  
CROSSING DETAILS

DRAWING NUMBER	REVISION
13139-045-CS-2002	A
SHEET 1 OF 1	