

PERMIT SET

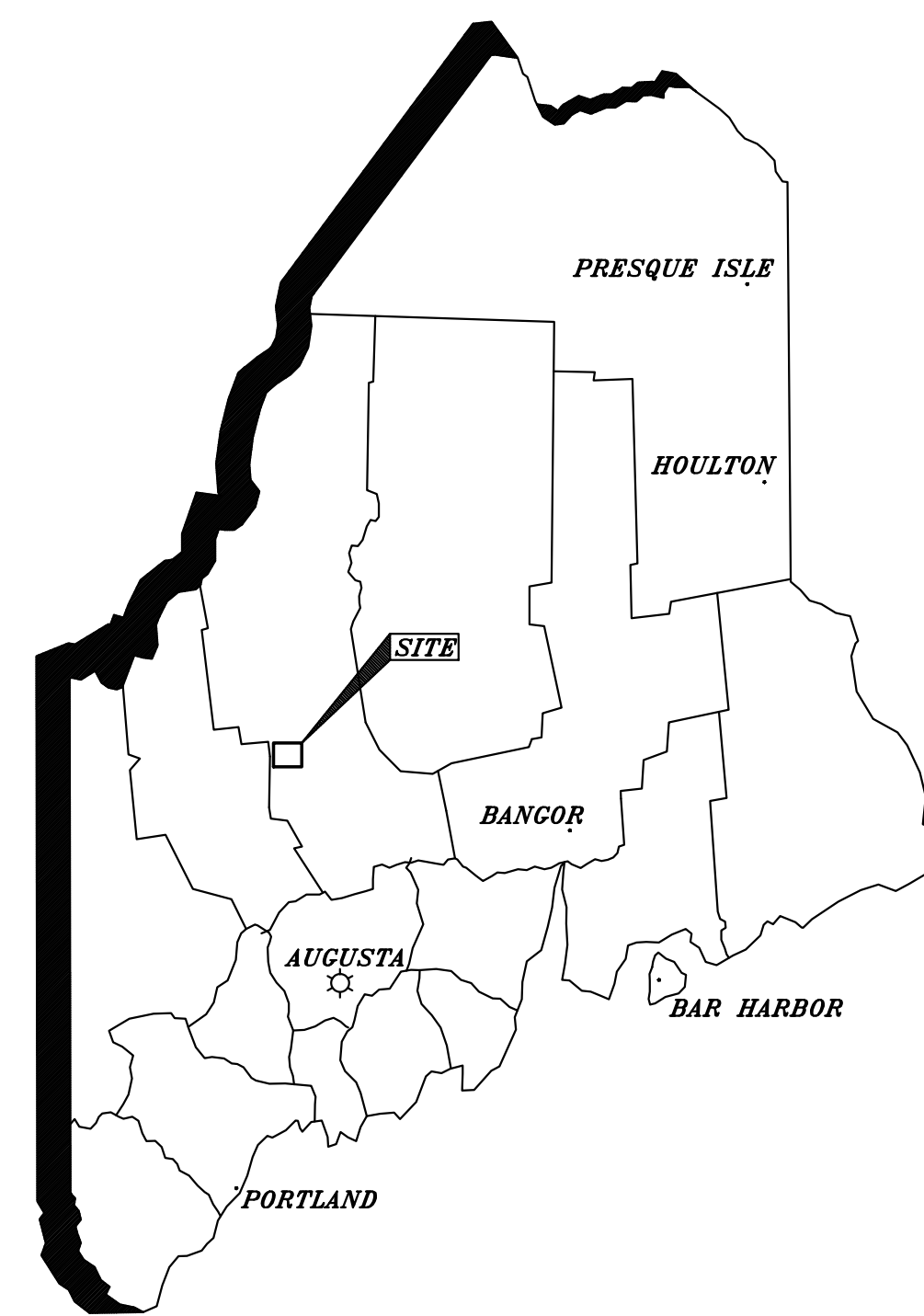
# HIGHLAND WIND PROJECT

## HIGHLAND WIND LLC

HIGHLAND PLANTATION, MAINE

66060E

DECEMBER 20, 2010

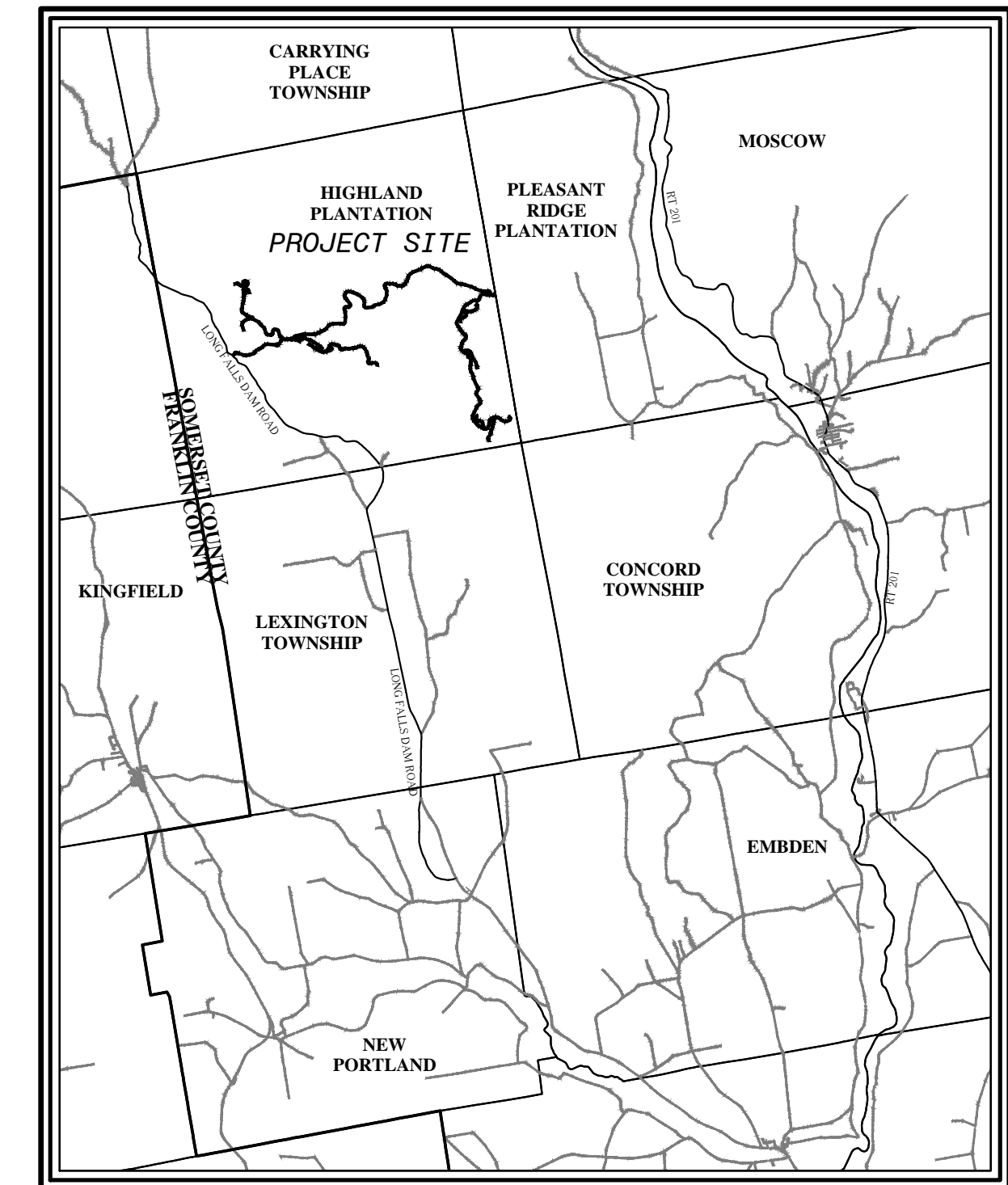


LOCUS MAP

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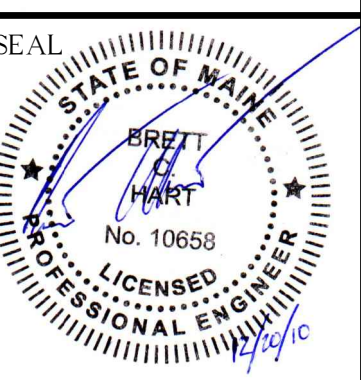
### DESIGN TEAM:



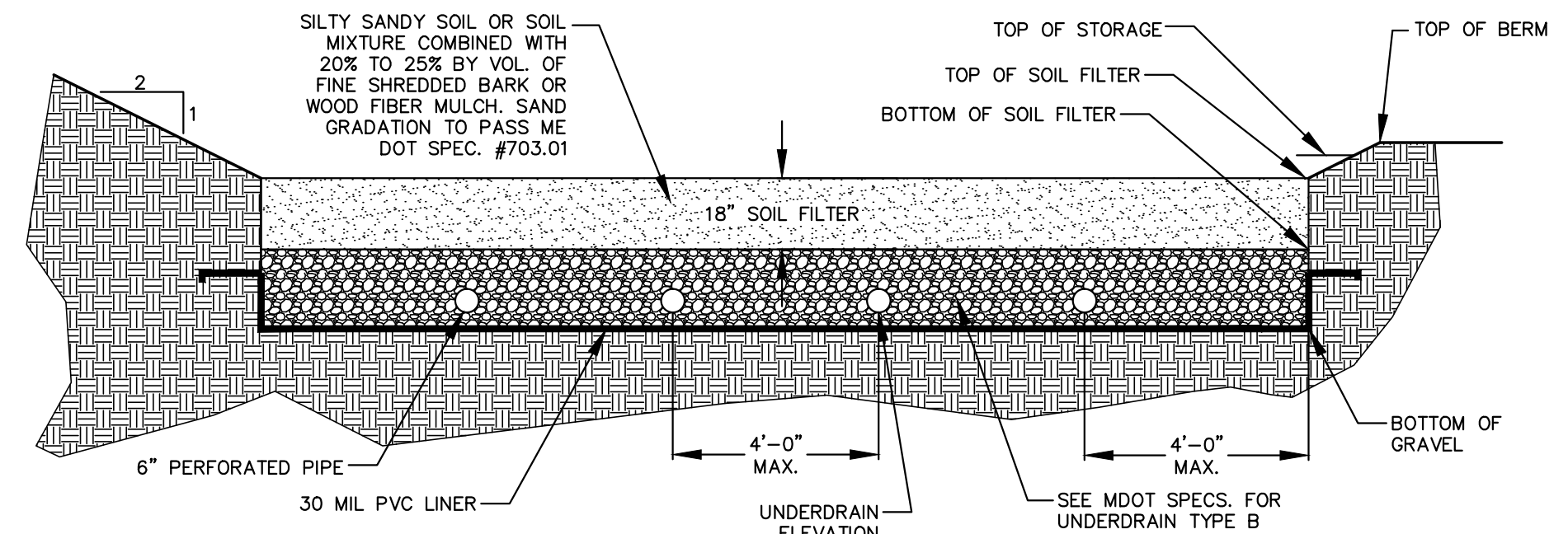
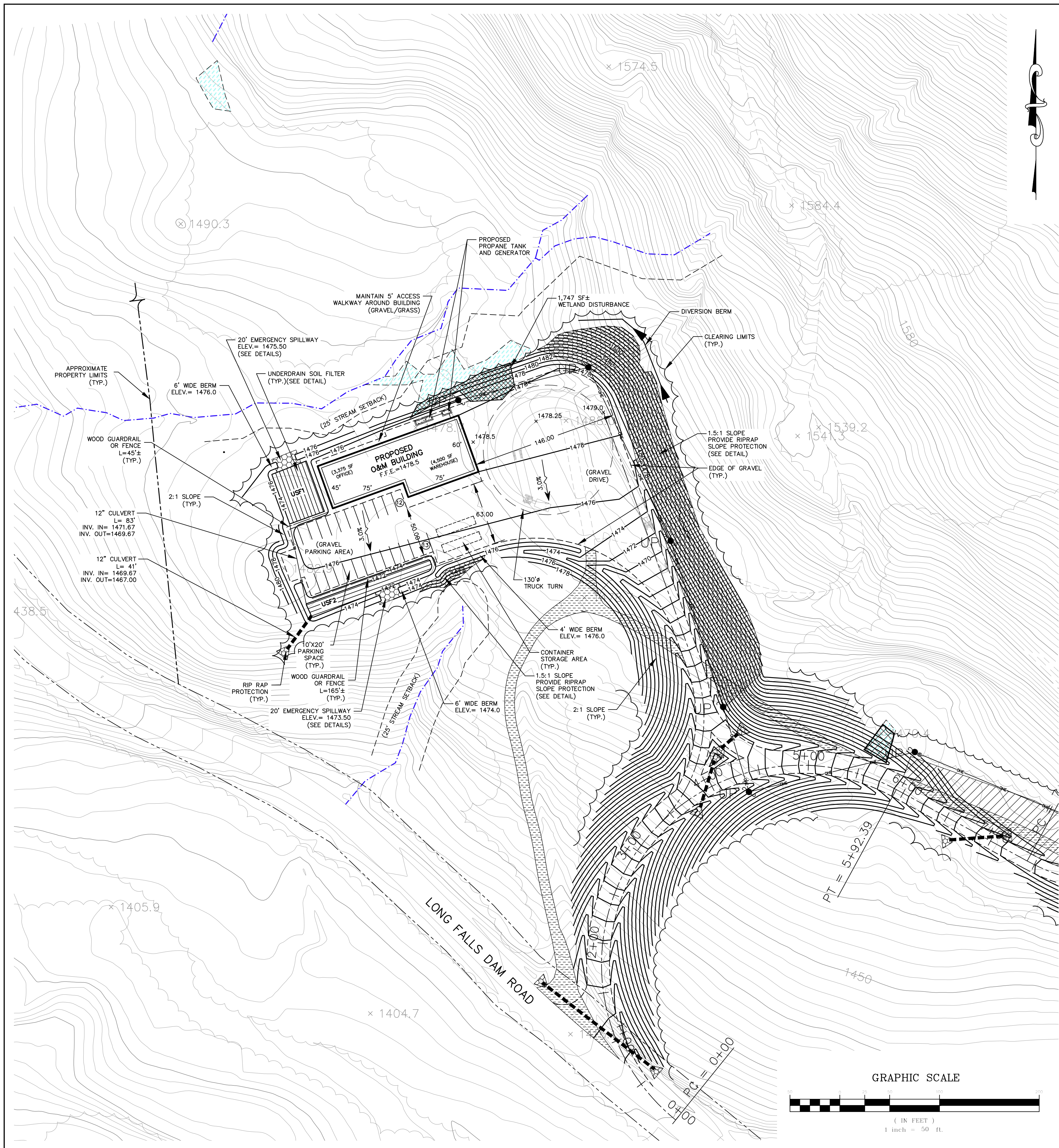
VICINITY MAP



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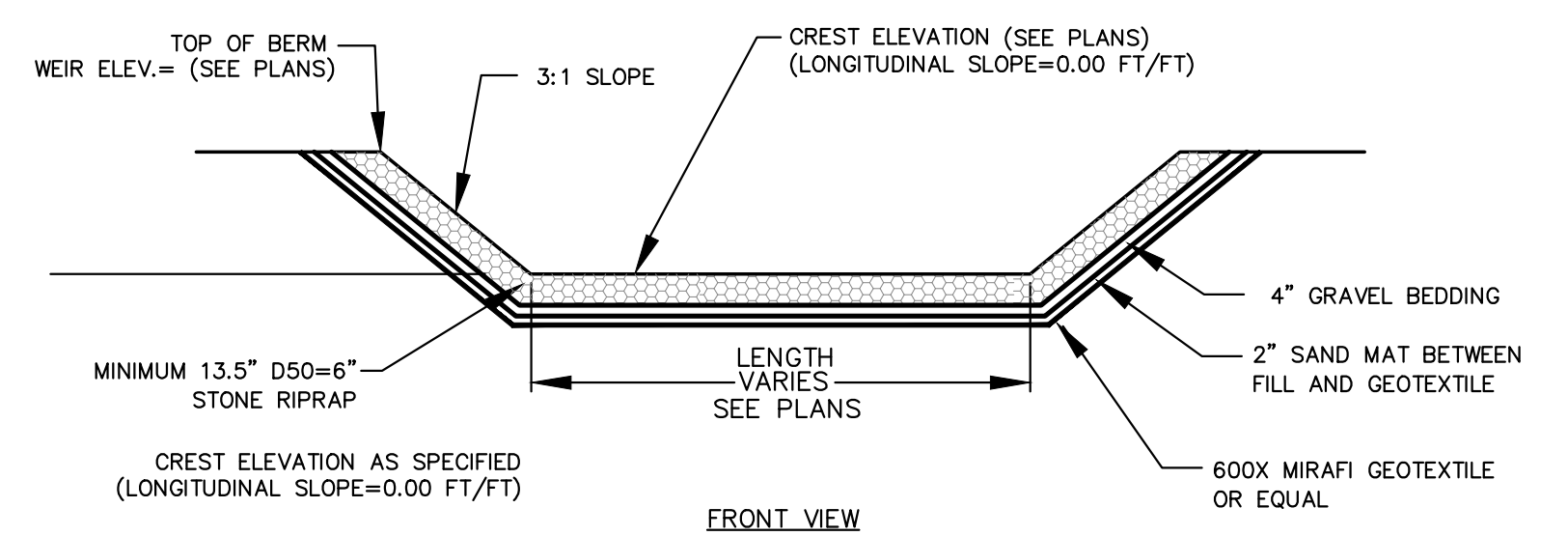
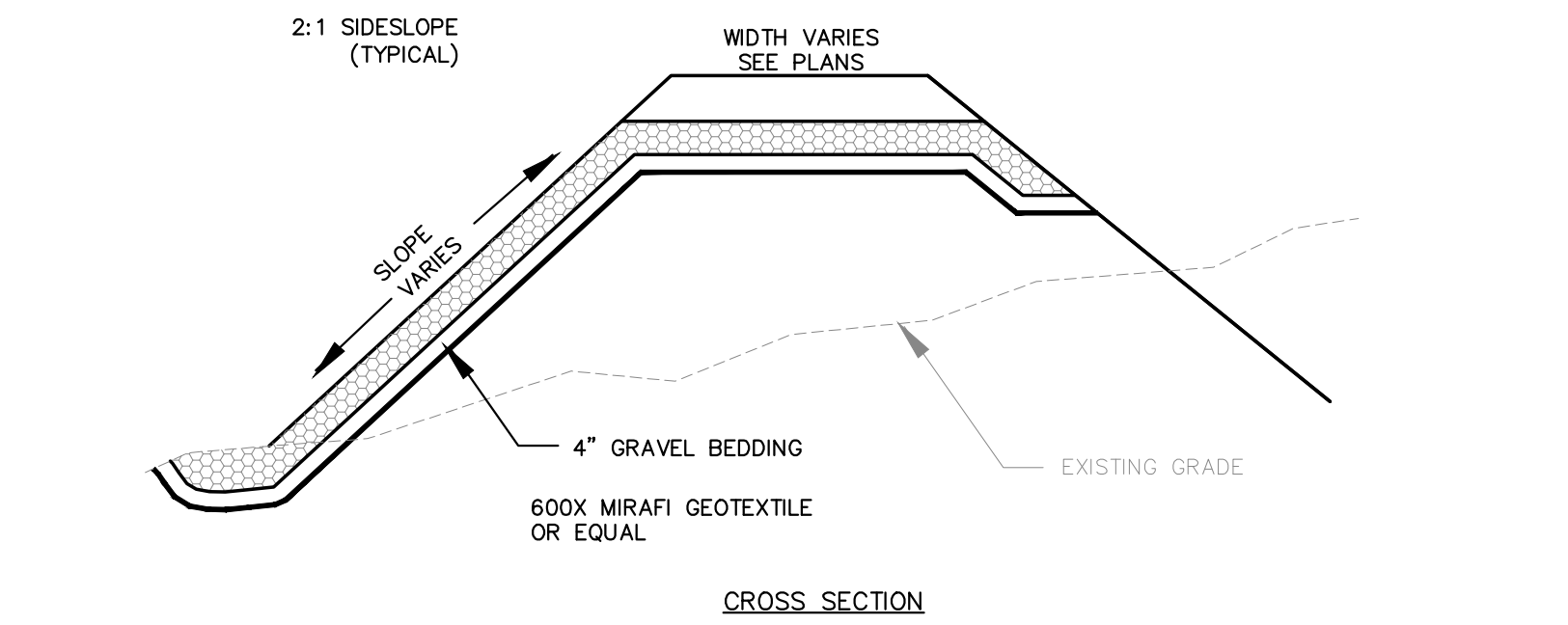
- NOTE:
- UNDERDRAIN PIPE DIAMETER SHALL BE 6" UNLESS OTHERWISE NOTED.
  - SOIL FILTER MEDIA TO MEET THE LATEST MDEP SPECS FOUND IN THE MOST CURRENT VERSION OF THE BMP MANUAL.

Sieve Size	% by Weight
3/4"	100
#4	95-100
#8	80-100
#16	50-85
#30	25-60
#60	10-30
#100	2-10
#200	0-5

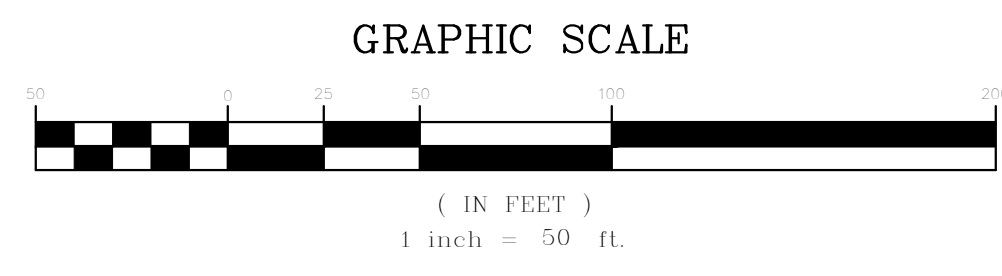
Sieve Size	% by Weight
1"	90-100
1/2"	75-100
#4	50-100
#20	15-80
#50	0-15
#200	0-5

	USF1	USF2
TOP OF BERM	1476.00	1474.00
TOP OF STORAGE	1475.50	1473.50
TOP OF SOIL FILTER MEDIA	1474.00	1472.00
BOTTOM OF SOIL FILTER MEDIA	1472.50	1470.50
BOTTOM OF GRAVEL/USF	1471.33	1469.33
UNDERDRAIN ELEVATION (BOTTOM OF PIPE)	1471.67	1469.67

TYPICAL UNDERDRAIN SOIL FILTER (USF1 & USF2)  
NOT TO SCALE

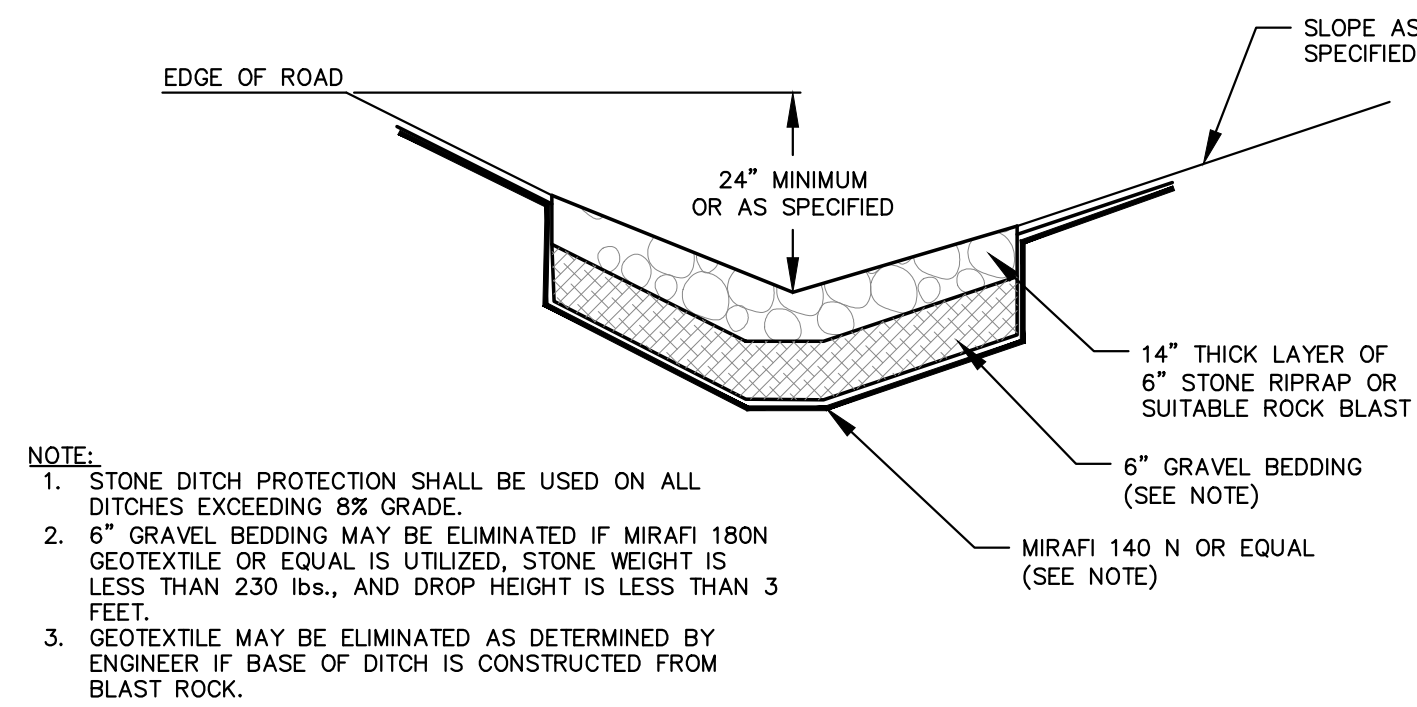


TYPICAL EMERGENCY SPILLWAY DETAIL  
NOT TO SCALE

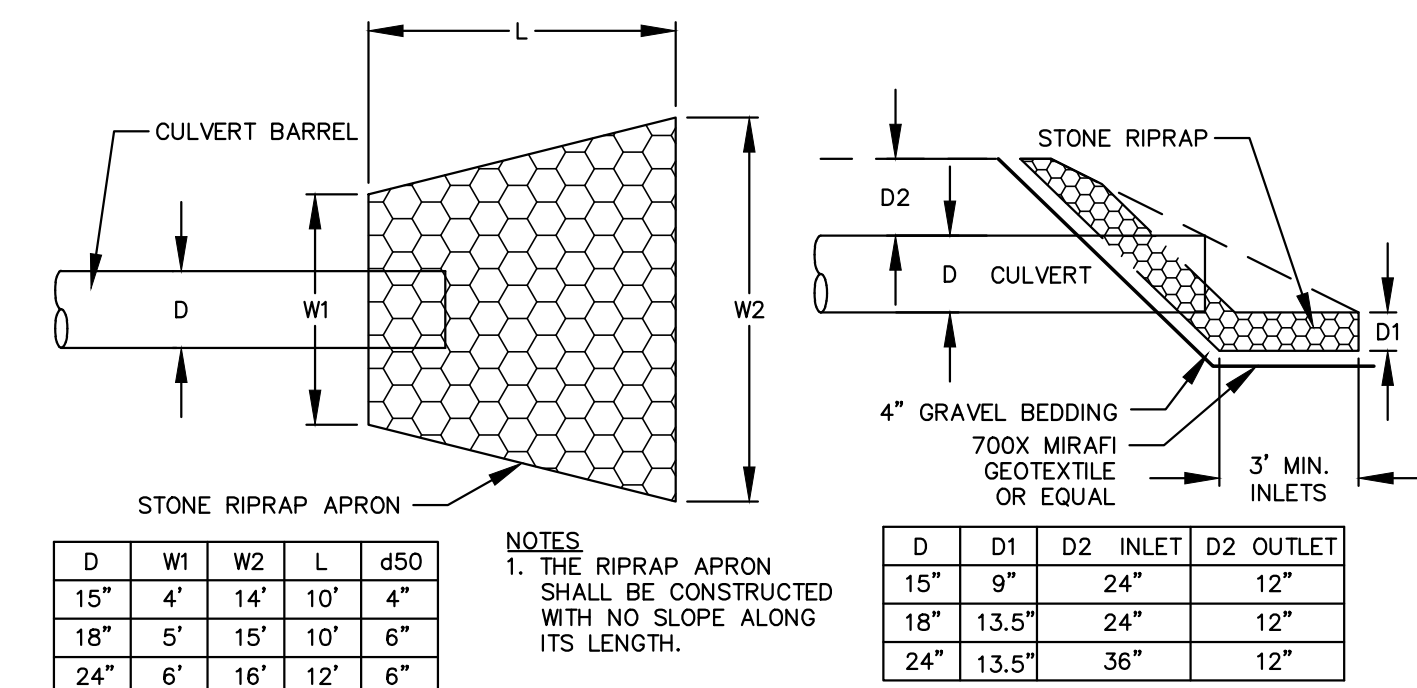


NOT FOR CONSTRUCTION

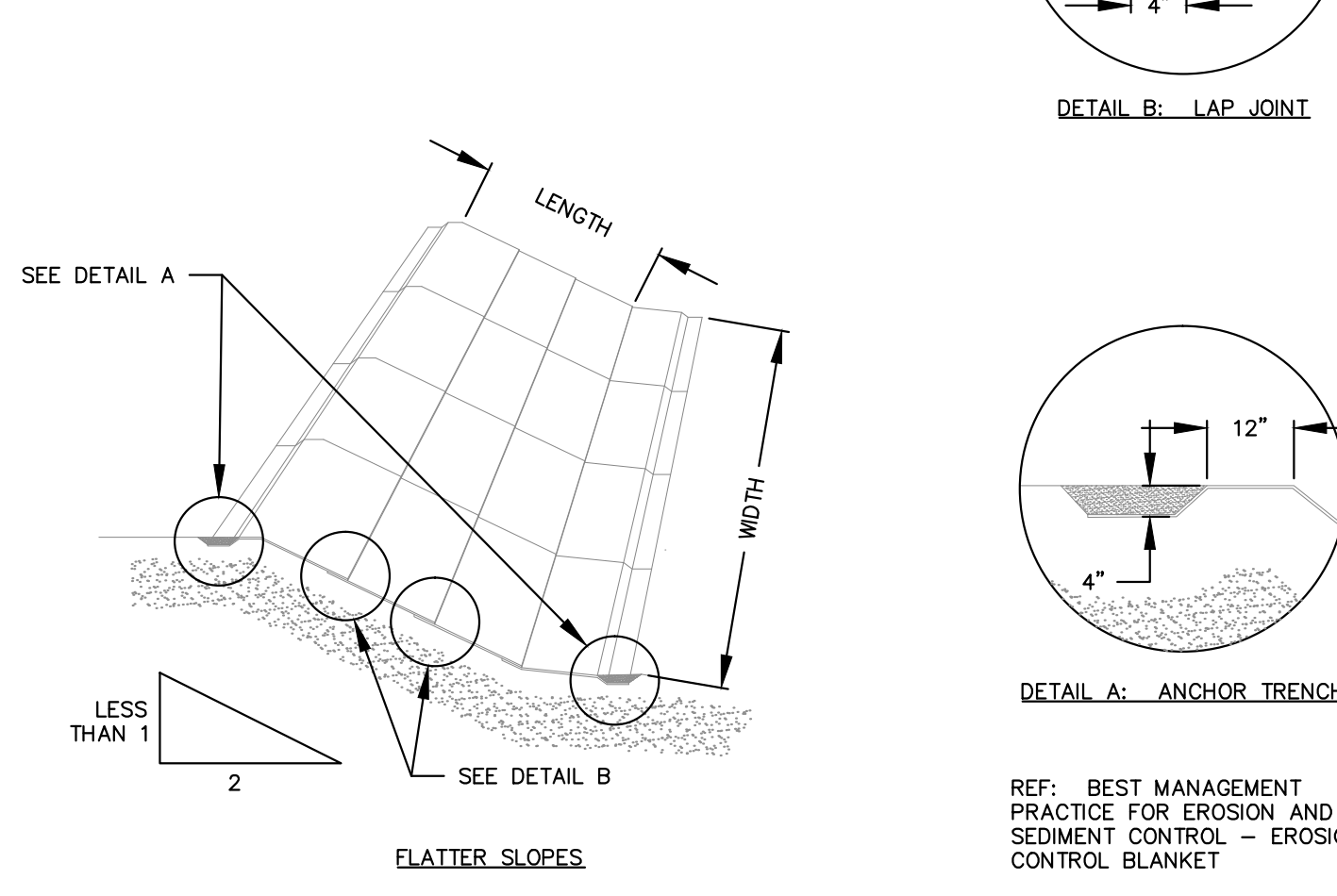
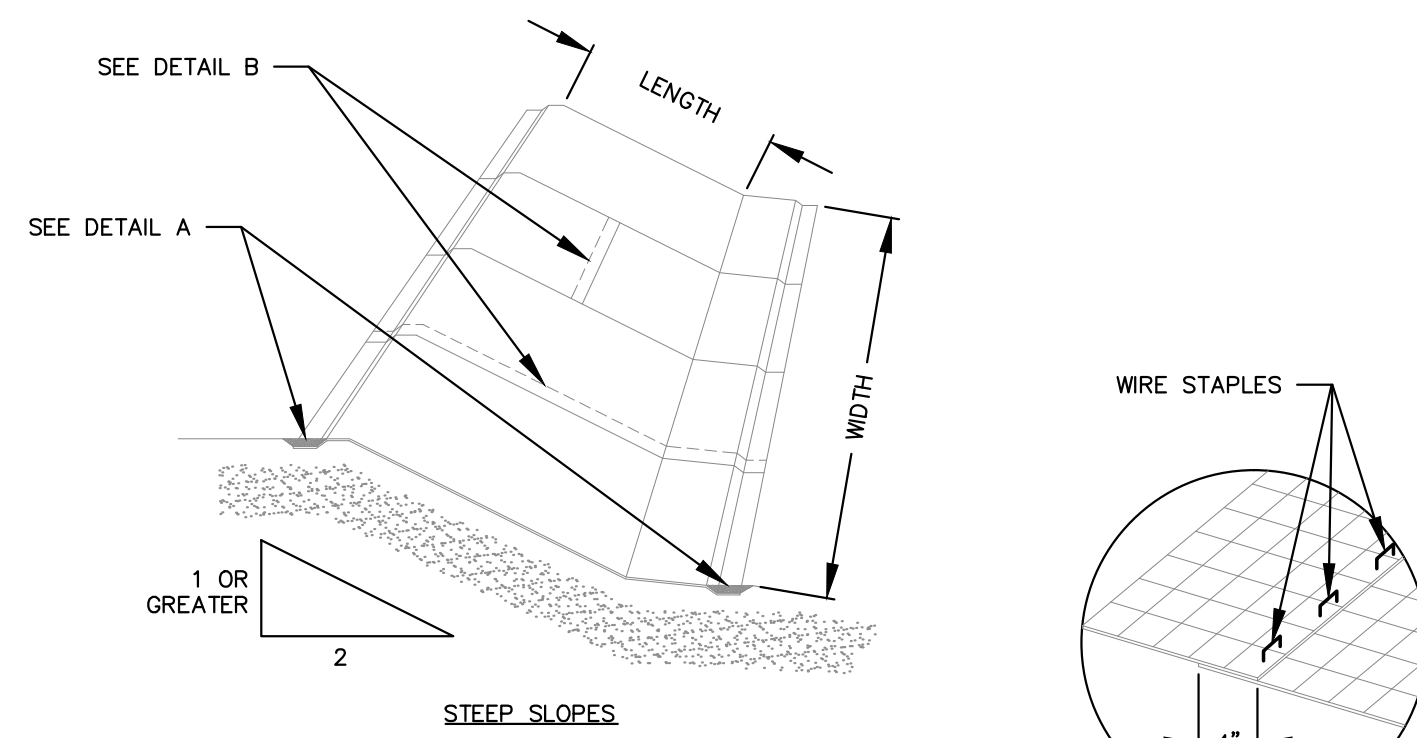
Project No. 66060E	Drawing Description OPERATIONS AND MAINTENANCE BUILDING SITE PLAN	Project Location HIGHLAND PLANTATION	Client HIGHLAND WIND PROJECT HIGHLAND WIND LLC	Date 1/22/2010	Scale 1" = 50'	Checked JT	Approved BOH
an integrated team of <b>SEWALL</b> geospatial engineering, surveying and NATURAL RESOURCE consultants JAMES W. SEWALL COMPANY / Since 1880 SEWALL.COM 800 648 4202							
<b>PERMIT</b>							
<b>C-2</b>							



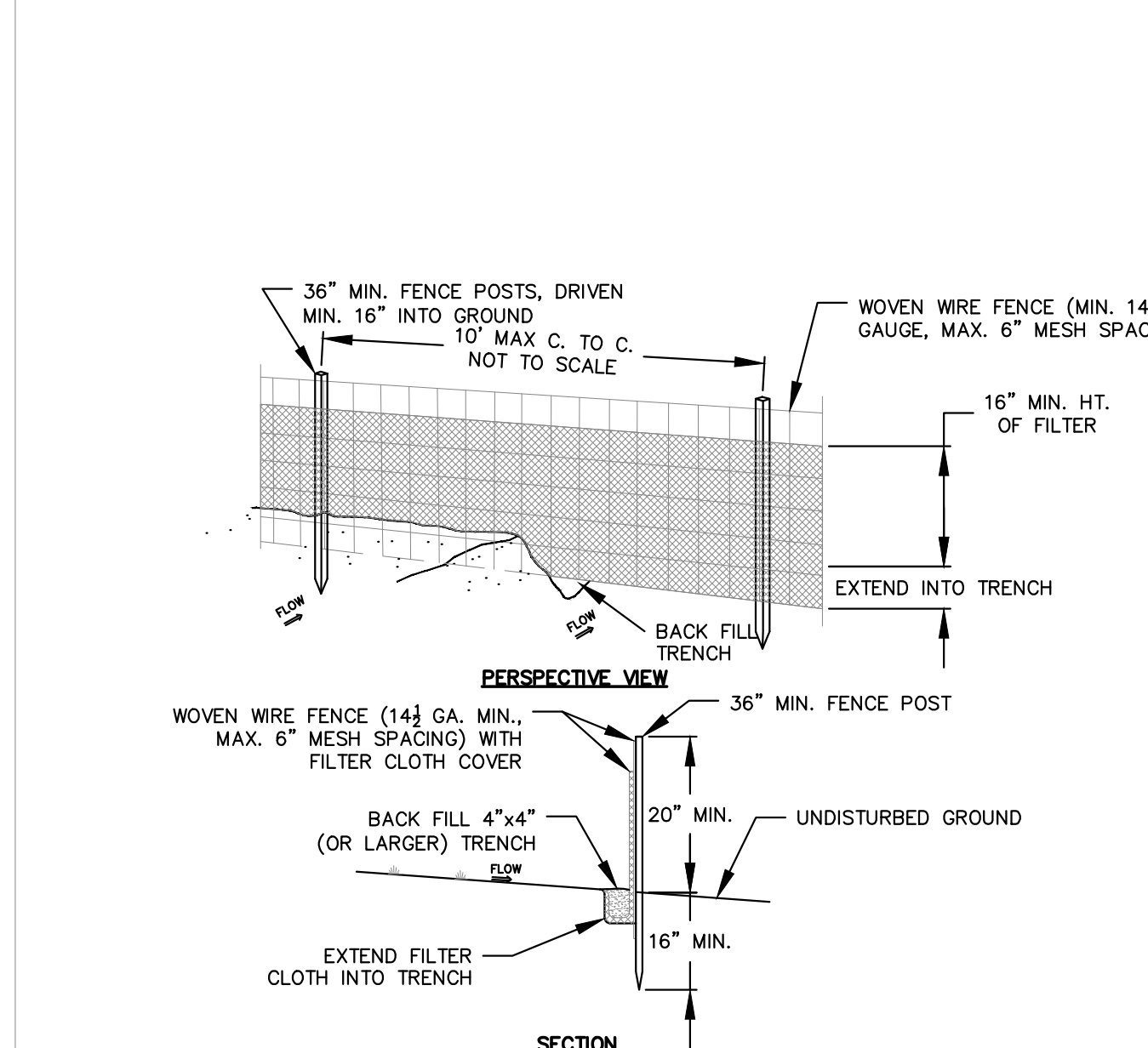
**TYPICAL STONE DITCH PROTECTION DETAIL**  
NOT TO SCALE



**CULVERT OUTLET DETAIL**  
PLAN VIEW  
NOT TO SCALE

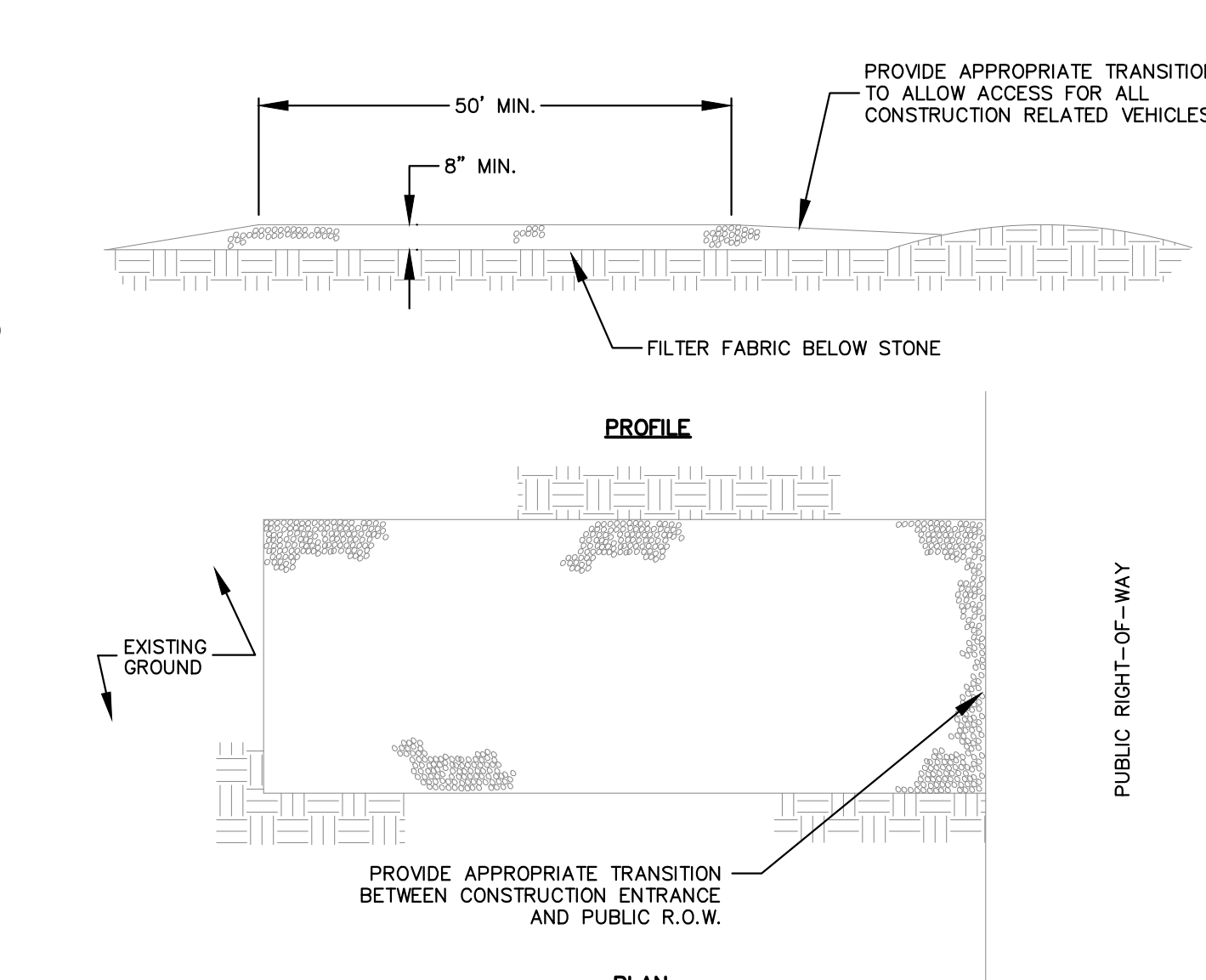


**SLOPE APPLICATION-FOR EROSION CONTROL MESH**  
NOT TO SCALE



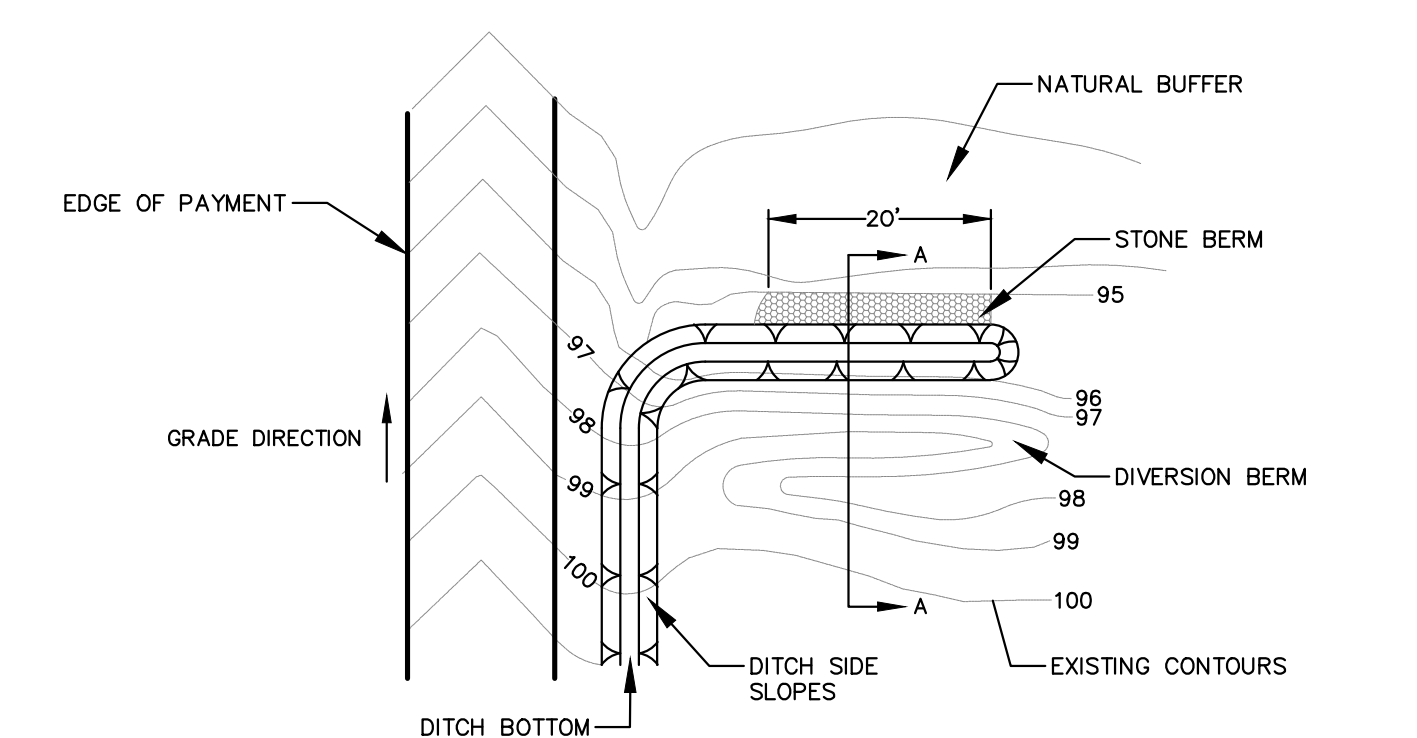
**SILT FENCE DETAIL**  
NOT TO SCALE

- CONSTRUCTION NOTES FOR FABRICATED SILT FENCE**  
NOTE: THE CONTRACTOR HAS THE OPTION TO NOT USE WOVEN WIRE MESH IF STAKE SPACERS ARE REDUCED TO 6' O.C.
- WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES.
  - FILTER CLOTH TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVER 24" AT TOP OF MID SECTION.
  - WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY SIX INCHES AND FOLDED.
  - MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.

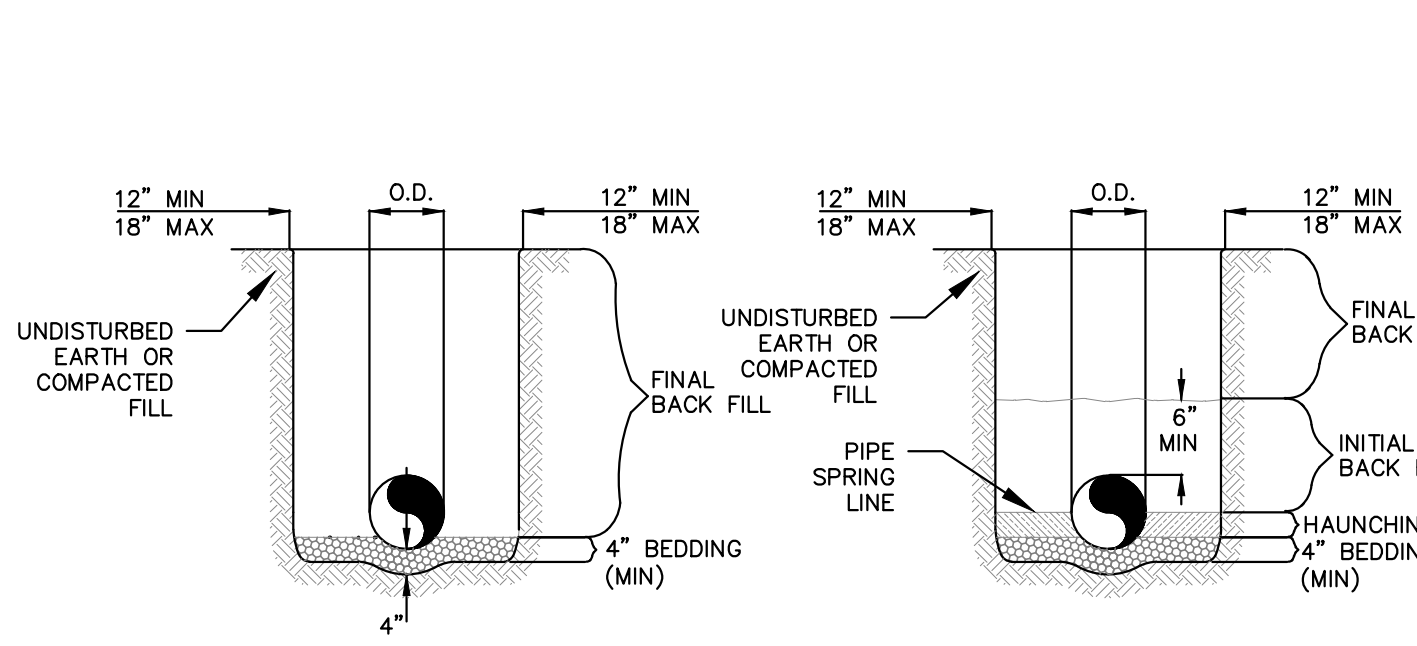


**STABILIZED CONSTRUCTION ENTRANCE**  
NOT TO SCALE

- NOTES:**
- STONE SIZE - AASHTO DESIGNATION M43, SIZE NO. 2 (2 1/2" TO 1 1/2"). USE CRUSHED STONE.
  - LENGTH - AS SHOWN ON GRADING PLAN, MIN. 50 FEET.
  - THICKNESS - NOT LESS THAN EIGHT (8) INCHES.
  - WIDTH - NOT LESS THAN FULL WIDTH OF ALL POINT OF INGRESS OR EGRESS.
  - MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEAN OUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED, OR TRACKED ONTO PUBLIC RIGHT-OF-WAY MUST BE REMOVED IMMEDIATELY.

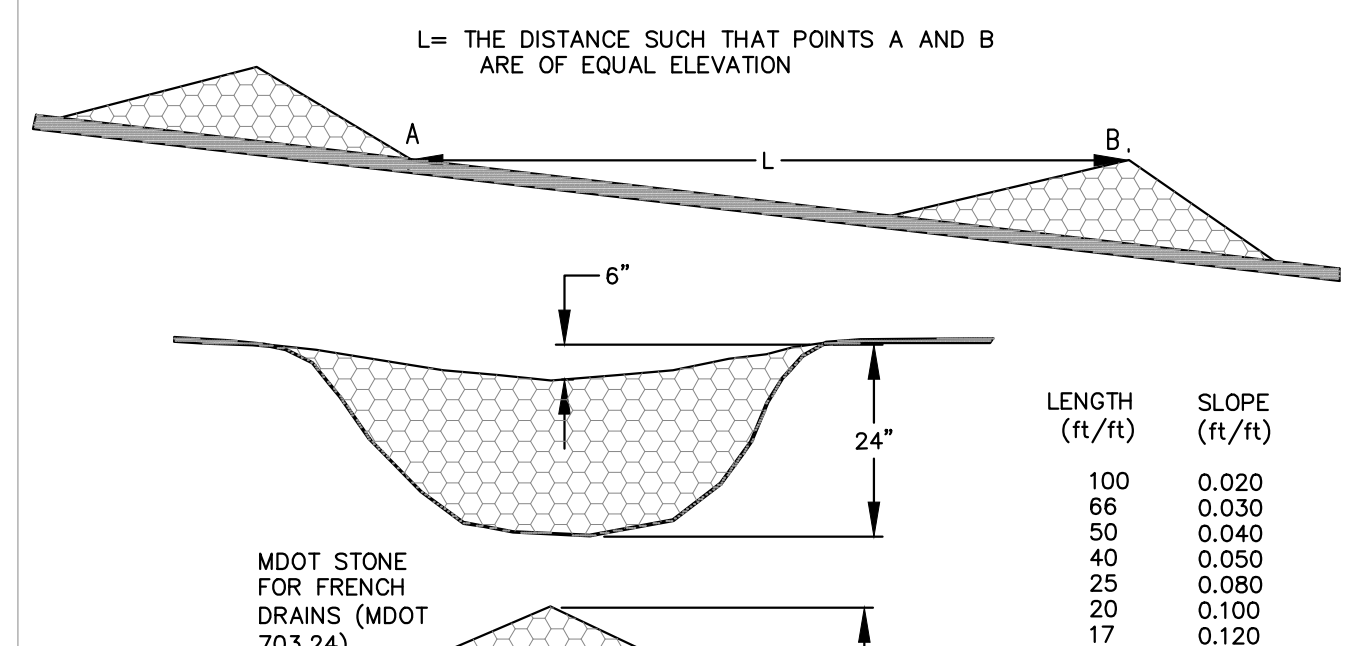


**TYPICAL DITCH TURNOUT**  
NOT TO SCALE



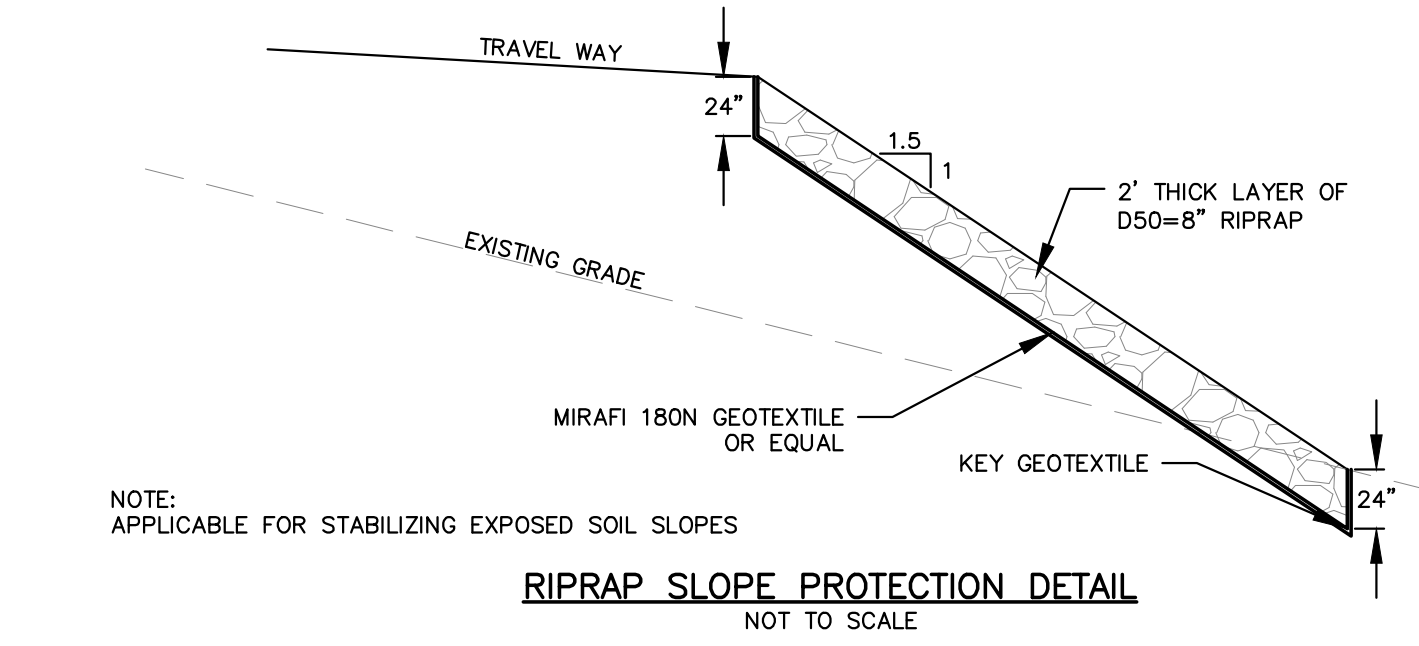
**STORM DRAIN TRENCH AND BEDDING**  
NOT TO SCALE

- GENERAL NOTES**
- BEDDING SHALL BE CLASS I-A WORKED BY HAND. IF GROUNDWATER IS ANTICIPATED, THEN BEDDING SHALL BE CLASS I-B COMPACTED TO 85% STANDARD PROCTOR. (SEE SPECIFICATIONS FOR GRADATION)
  - HAUNCHING SHALL BE WORKED AROUND THE PIPE BY HAND TO ELIMINATE VOIDS AND SHALL BE CLASS I-A OR CLASS I-B OR CLASS II COMPACTED TO 85% PROCTOR.
  - INITIAL BACK FILL SHALL BE CLASS I-A WORKED BY HAND, OR CLASS I-B OR CLASS II COMPACTED TO 85% STANDARD PROCTOR.
  - FINAL BACK FILL SHALL BE CLASS I, II, OR III COMPACTED AS NOTED IN NOTES 3. FINAL COVER OVER PIPE SHALL BE MIN. 24".
  - ALL MATERIALS ARE CLASSIFIED IN ACCORDANCE WITH ASTM D 2321-LATEST EDITION.
  - ALL MATERIALS SHALL BE INSTALLED IN MAXIMUM 8" LOOSE LIFTS IN ACCORDANCE WITH ASTM D 698. CLASS III AND IV-A MATERIALS SHALL BE COMPACTED NEAR OPTIMUM MOISTURE CONTENT.
  - FILL SALVAGED FROM EXCAVATION SHALL BE FREE OF DEBRIS, ORGANICS AND ROCKS LARGER THAN 3".
  - ALL TRENCH EXCAVATIONS SHALL BE SLOPED, SHORED, SHEETED, BRACED, OR OTHERWISE SUPPORTED IN COMPLIANCE WITH OSHA REGULATIONS AND LOCAL ORDINANCES. (SEE SPECIFICATIONS)

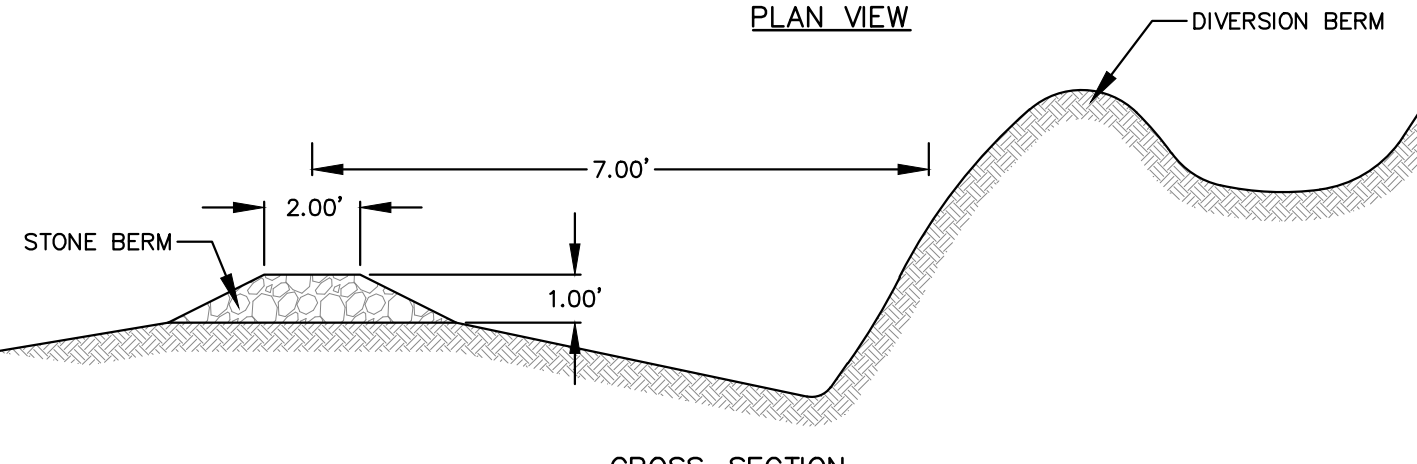


**TYPICAL DITCH CROSS SECTION**  
NOT TO SCALE

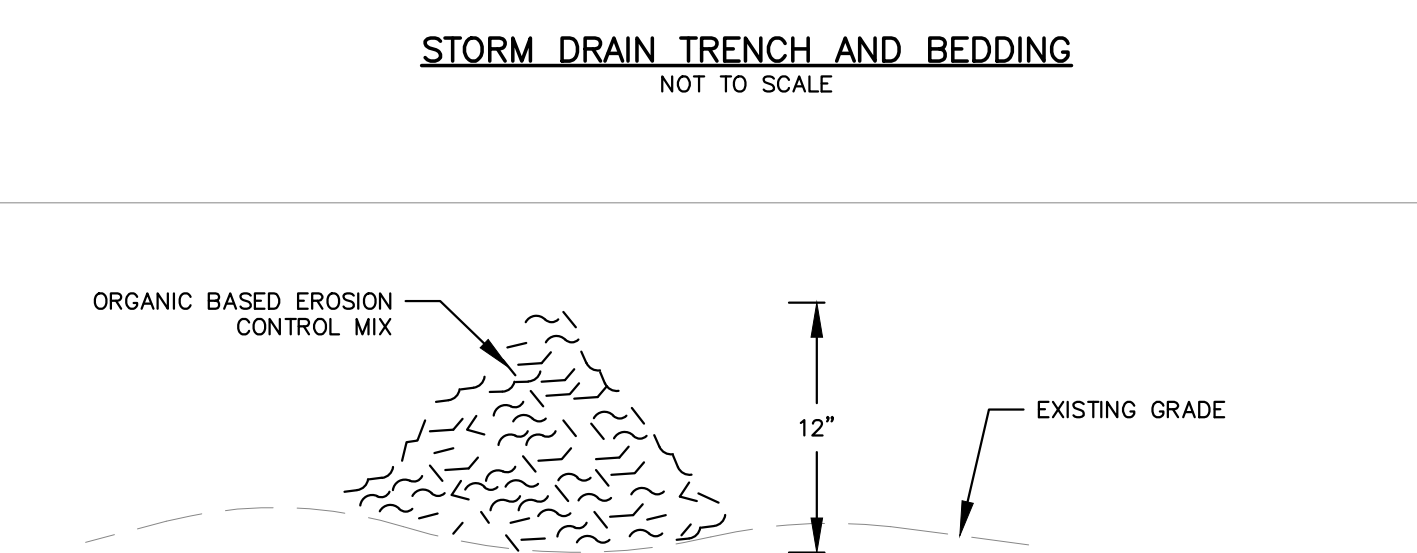
- STONE CHECK DAM DETAILS**  
NOT TO SCALE
- SPACING OF DAMS MAY BE ADJUSTED WITHIN RIPRAP/BLAST ROCK ARMORED DITCHES AS APPROVED BY ENGINEER.
  - EXACT LOCATIONS OF DAMS TO BE FIELD DETERMINED.



**RIPRAP SLOPE PROTECTION DETAIL**  
NOT TO SCALE

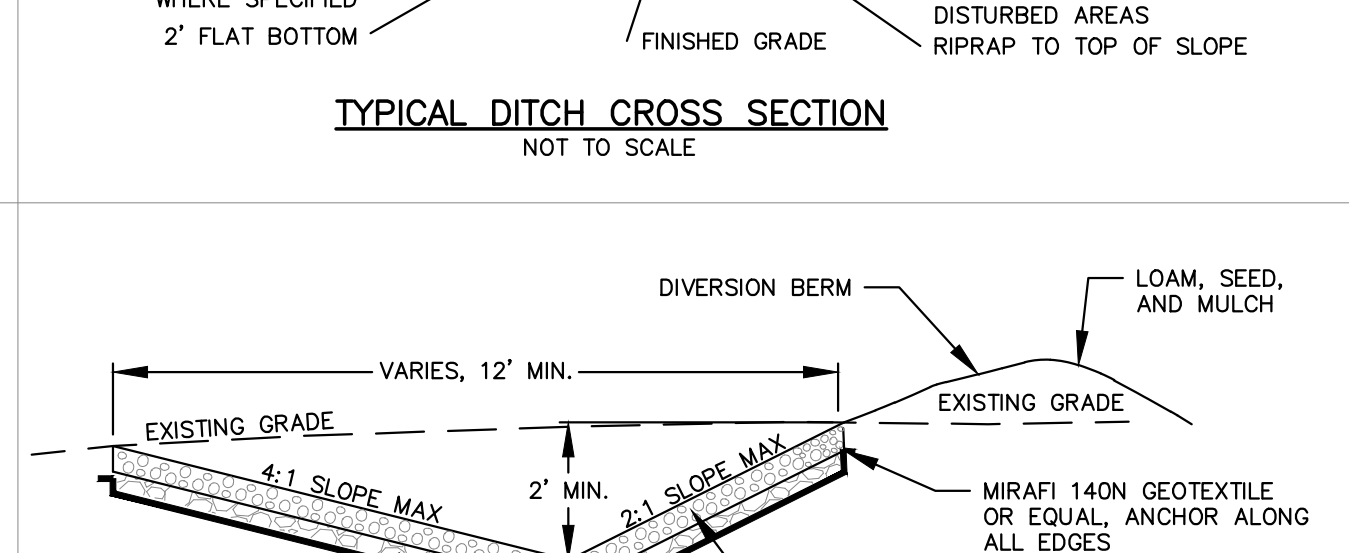


**STONED BERMED LEVEL LIP SPREADER DETAIL**  
NOT TO SCALE



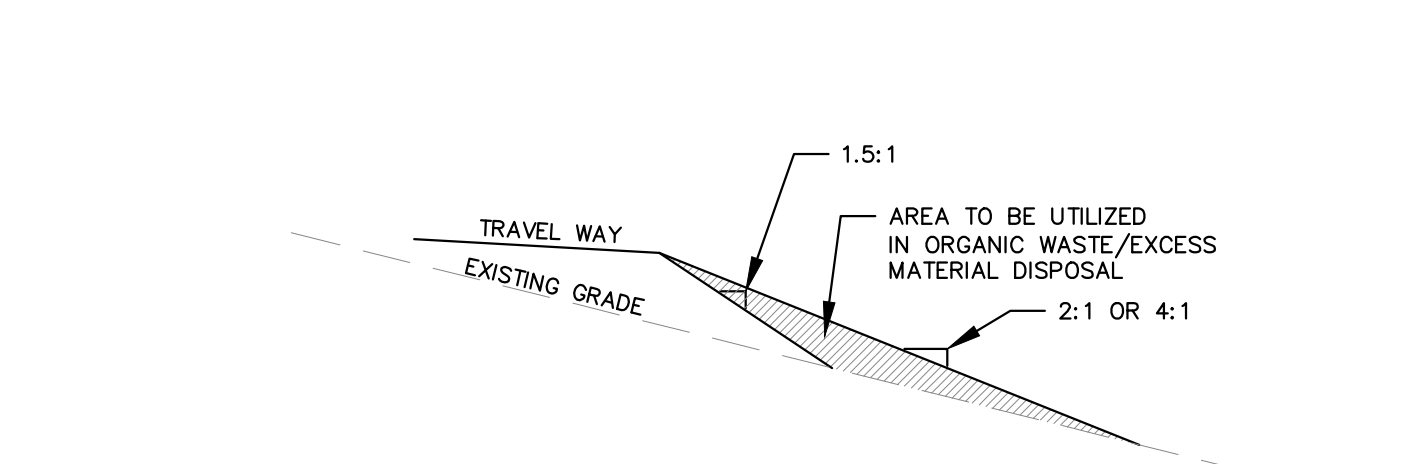
**EROSION CONTROL MIX / WOOD WASTE BERM**  
NOT TO SCALE

- COMPOSITION**  
EROSION CONTROL MIX SHALL BE MANUFACTURED ON OR OFF THE PROJECT SITE SUCH THAT ITS COMPOSITION IS IN ACCORDANCE WITH THE MDEP MAINE EROSION AND SEDIMENT CONTROL BMP MANUAL, LAST REVISED 3/2003 OR LATER. IT MUST CONSIST PRIMARILY OF ORGANIC MATERIAL, SEPARATED AT THE POINT OF GENERATION, AND MAY INCLUDE: SHREDDED BARK, STUMP GRINDINGS, COMPOSTED BARK, OR ACCEPTABLE MANUFACTURED PRODUCTS. WOOD AND BARK CHIPS, GROUND CONSTRUCTION DEBRIS OR REPROCESSED WOOD PRODUCTS WILL NOT BE ACCEPTABLE AS THE ORGANIC COMPONENT OF THE MIX.
- INSTALLATION:**
- THE BARRIER MUST BE PLACED ACROSS THE SLOPE, ALONG THE CONTOUR.
  - EXISTING GROUND SHALL BE PREPARED SUCH THAT THE BARRIER MAY LIE NEARLY FLAT AGAINST THE GROUND TO AVOID THE CREATION OF VOIDS AND BRIDGES IN ORDER TO MINIMIZE THE POTENTIAL OF WASH OUTS UNDER THE BARRIER.
  - THE BARRIER SHALL BE A MINIMUM OF 1 FOOT HIGH (AS MEASURED ON THE UPHILL SIDE) AND 2 FEET WIDE FOR SLOPES LESS THAN 5% IN GRADE AND SHALL BE WIDER TO ACCOMMODATE THE ADDITIONAL RUNOFF.
  - EROSION CONTROL MIX MAY BE INSTALLED WHERE SILT FENCE IS ILLUSTRATED ON THE DESIGN PLANS IN AREAS EXCEPT IN, BUT NOT LIMITED TO, THE FOLLOWING AREAS: WETLAND AREAS, AT POINTS OF CONCENTRATED FLOW, BELOW CULVERT OUTLET APRONS, AROUND CATCH BASINS AND CLOSED STORM SYSTEMS AND AT THE BOTTOM OF STEEP SLOPES THAT ARE MORE THAN 50 FEET FROM TOP TO BOTTOM.

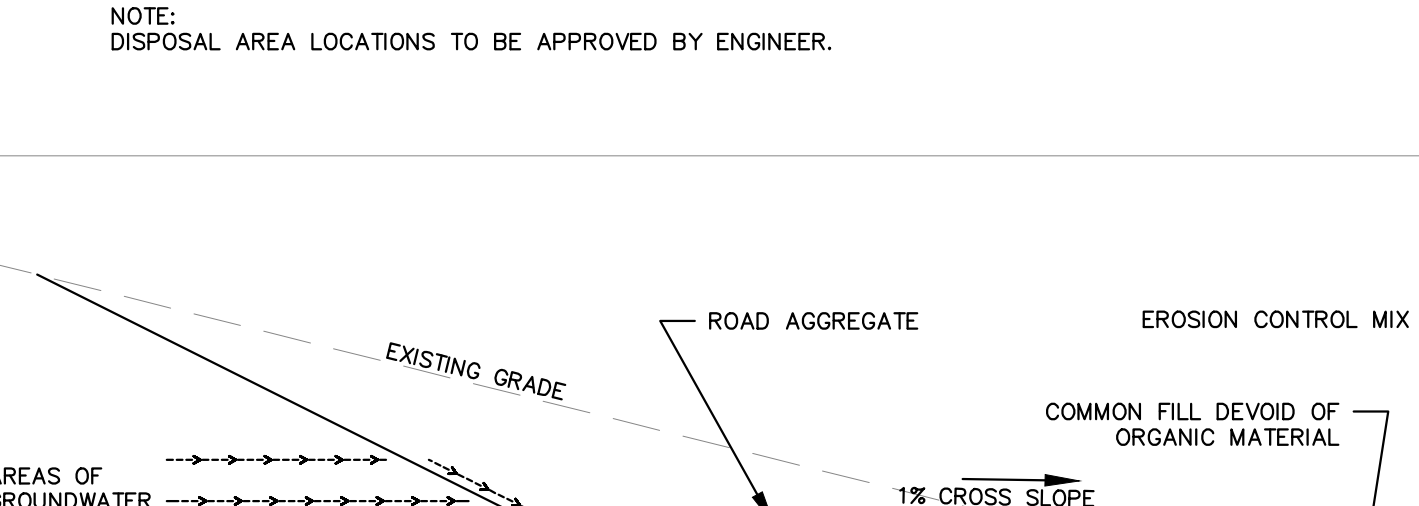


**TYPICAL LEVEL SPREADER**  
NOT TO SCALE

- LEVEL SPREADER NOTES**
- ALL LEVEL SPREADERS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE MAINE EROSION AND SEDIMENTATION CONTROL HANDBOOK FOR CONSTRUCTION.
  - ALL LEVEL SPREADERS SHALL BE CONSTRUCTED IN A CUT SECTION, I.E. THERE SHALL BE NO EARTH FILL ALONG DOWNSTREAM EDGE.
  - ALL LEVEL SPREADERS SHALL BE ALIGNED PARALLEL TO THE EXISTING CONTOURS.
  - THE ENTRANCE DITCH TO THE LEVEL SPREADER SHALL HAVE A MAXIMUM GRADE OF 1.0% FOR AT LEAST 50 FEET IMMEDIATELY PRIOR TO ENTERING THE SPREADER.
  - THE LEVEL SPREADER SHALL HAVE A LONGITUDINAL GRADE OF 0.0%



**ORGANIC/DUFF WASTE DISPOSAL DETAIL**  
NOT TO SCALE



**TYPICAL ROCK SANDWICH DETAIL**  
NOT TO SCALE

- NOTE:**  
ROCK SANDWICHES SHALL BE CONSTRUCTED WITH RELIEF CULVERTS INSTALLED PERIODICALLY. INVERT OF RELIEF CULVERT SHALL BE A MINIMUM OF 6" ABOVE THE ROCK DRAINAGE LAYER. ADJUST INLET INVERT AND ROCK SANDWICH ELEVATION AS REQUIRED TO MAINTAIN APPROPRIATE COVER OVER CULVERT.
- ROCK SANDWICH TYPICALLY UTILIZED IN ROADWAY CUTS TRAVERSING AREAS WITH SHALLOW GROUNDWATER

**HIGHLAND WIND PROJECT**  
**HIGHLAND WIND LLC**

Project Location: HIGHLAND PLANTATION  
Drawing Description: EROSION CONTROL

Scale: NTS  
Date: 12/20/2010  
Designed By: BOH  
Drawn By: JOH  
Checked By: BOH  
Approved By: JT

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**GENERAL NOTES & CONSTRUCTION SPECIFICATIONS**

- FINAL STABILIZATION WILL BE DONE WITHIN 7 DAYS OF FINAL GRADING OR WITHIN 30 DAYS OF INITIAL SOIL DISTURBANCE.
- EVERY WEEK AND AFTER PRECIPITATION PRODUCING THE EQUIVALENT OF ONE-HALF INCH OF RAINFALL, THE CONTRACTOR SHALL INSPECT AND MAINTAIN ALL EROSION CONTROL MEASURES. MAINTENANCE SHALL INCLUDE, BUT NOT BE LIMITED TO, REMOVAL OF SEDIMENT FROM SILT FENCES IF SOIL ACCUMULATES TO A DEPTH OF ONE-HALF THE FABRIC HEIGHT AND REMOVAL OF EXCESS ACCUMULATED SEDIMENT FROM DETENTION BASINS (IF APPLICABLE).
- ALL EROSION CONTROL MEASURES SHALL BE CONSTRUCTED AND MAINTAINED IN ACCORDANCE WITH "MAINE EROSION & SEDIMENT CONTROL BEST MANAGEMENT PRACTICES," BY MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION, MARCH 2003.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL EROSION CONTROL MEASURES, INCLUDING MATERIALS, CONSTRUCTION, MAINTENANCE AND REMOVAL.
- SEE DETAILS FOR SLOPE STABILIZATION OPTIONS.

**CONSTRUCTION SEQUENCE & PHASING NOTES**

**CLEARING OF VEGETATION AND STOCKPILING OF TOPSOIL**

- INSTALL EROSION CONTROL MEASURES PRIOR TO SOIL DISTURBANCE.
- FLAG & MARK R.O.W. OF ACCESS ROADS, CRANE PATHS, & COLLECTION LINES, WITH THE OTHER CONSTRUCTION AREAS TO FOLLOW.
- STUMPS TO BE REMOVED FROM LOCATIONS WHERE STRUCTURES (i.e., TURBINES, SUBSTATION, O&M BUILDING, STORMWATER MANAGEMENT SYSTEMS) ARE TO BE INSTALLED/CONSTRUCTED. STUMPS TO BE GROUND ON-SITE BY THE ROAD CONTRACTOR & USED AS AN EPSC MEASURE.
- LOW GROWING VEGETATION TO REMAIN, WHERE FEASIBLE (e.g., WITHIN THE OVERHEAD COLLECTION LINE R.O.W.) TO PROVIDE SOIL STABILITY.
- EXISTING TOPSOIL IN AREAS OF DEVELOPMENT TO BE STOCKPILED ON-SITE FOR USE IN FINAL STABILIZATION OF ROAD SHOULDERS, TURBINE CLEARINGS AND LAY DOWN AREAS.

**CONSTRUCTION OF ACCESS ROADS, CRANE PATHS, & LAY DOWN/STAGING AREAS**

- 16-FT WIDE ACCESS ROADS & 34-FT WIDE CRANE PATHS TO BE CONSTRUCTED AS DEPICTED HEREIN.
- SURVEY CREWS TO STAKE THE ROADWAY R.O.W. BOUNDARIES & CENTERLINE TO GUIDE OPERATIONS. PROVIDE ADDITIONAL STAKING & MARKING AT LOCATIONS WHERE STORMWATER CONTROL MEASURES WILL BE INSTALLED AS NECESSARY.
- MINOR GRADE AND HORIZONTAL ADJUSTMENTS MAY BE NECESSARY, DEPENDING ON FIELD CONDITIONS. ALL ADJUSTMENTS TO BE APPROVED BY ENGINEER.
- CONSTRUCTION OF ACCESS ROADS, CRANE PATHS, & LAY DOWN/STAGING AREAS WILL OCCUR IN PHASES, MINIMIZING AREAS OF EXPOSED SOIL AT ANY ONE TIME (INCLUSIVE OF ANY OTHER EXPOSED SOIL AREAS WITHIN THE DESIGNATED LIMITS OF DISTURBANCE).

**CONSTRUCTION OF PERMANENT STORMWATER MANAGEMENT SYSTEMS**

- GRADING TO BE CONDUCTED IN ACCORDANCE WITH PERMITTED PERMANENT STORMWATER MANAGEMENT DESIGN.
- ONCE FINAL GRADES ARE ACHIEVED, EXPOSED SOIL SURROUNDING THE STORMWATER MANAGEMENT STRUCTURES TO BE PERMANENTLY STABILIZED.

**CONSTRUCTION OF CRANE PADS**

- AFTER THE SUBGRADE IS ESTABLISHED, CRANE PAD TO BE CONSTRUCTED WITH CRUSHED AGGREGATE SPREAD & COMPACTED OVER A GEOTEXTILE LINER AS NECESSARY; MINOR GRADE ADJUSTMENTS MAY NEED TO OCCUR DEPENDENT ON FIELD CONDITIONS. ADJUSTMENTS TO BE APPROVED BY ENGINEER.
- CRANE PADS TO REMAIN IN PLACE FOR FUTURE MAINTENANCE & OPERATION.
- ALL EXPOSED SOIL SURROUNDING CRANE PADS & TURBINE FOUNDATIONS TO BE STABILIZED.

**CLEAN-UP & FINAL STABILIZATION**

- UPON COMPLETION OF CONSTRUCTION ACTIVITIES, ALL WORK AREAS TO BE CLEARED OF CONSTRUCTION DEBRIS & OTHER MATERIALS.
- SPECIFIC CLEAN-UP REQUIREMENTS TO INVOLVE: REMOVAL OF ALL TEMPORARY WORK TRAILERS; REMOVAL OF MATERIAL & EQUIPMENT; DISPOSAL OF ALL RUBBISH RESULTING FROM CLEARING, CONSTRUCTION, & INSTALLATION; ROUGH GRADING & STABILIZATION OF EMBANKMENTS MADE FOR CONSTRUCTION PURPOSES; FILLING OF ANY EXCAVATIONS; & REPAIRING RUTS IN ACCESS ROADS.
- FINAL STABILIZATION OF ALL AREAS OF DISTURBED SOIL, WHERE FINAL GRADE HAS BEEN ACHIEVED, INVOLVE RESPRADING OF STOCKPILED TOPSOIL MATERIAL & SEEDING, MULCHING WITH WOODWASTE MULCH, OR APPLICATION OF OTHER APPROVED STABILIZATION METHODS. ALL WORK TO BE PERFORMED IN ACCORDANCE WITH THE PROJECTS PERMITS.

**WINTER CONSTRUCTION NOTES**

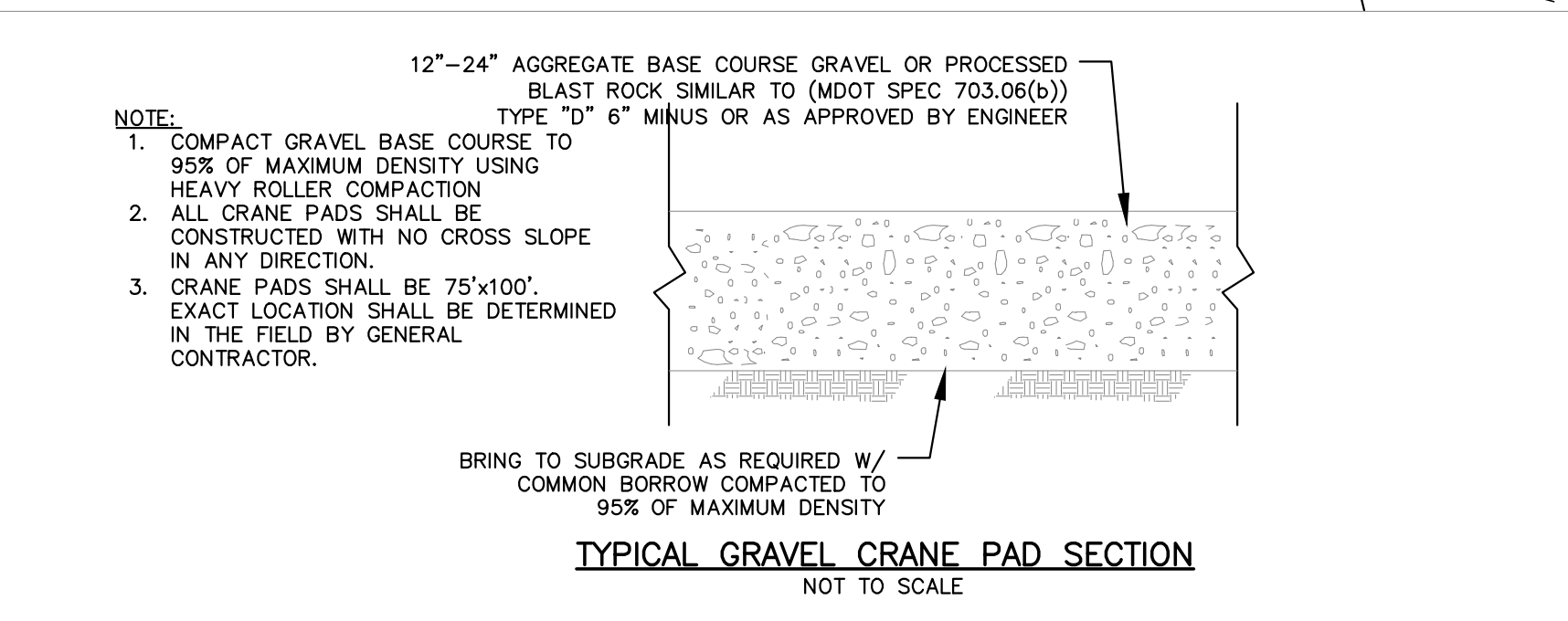
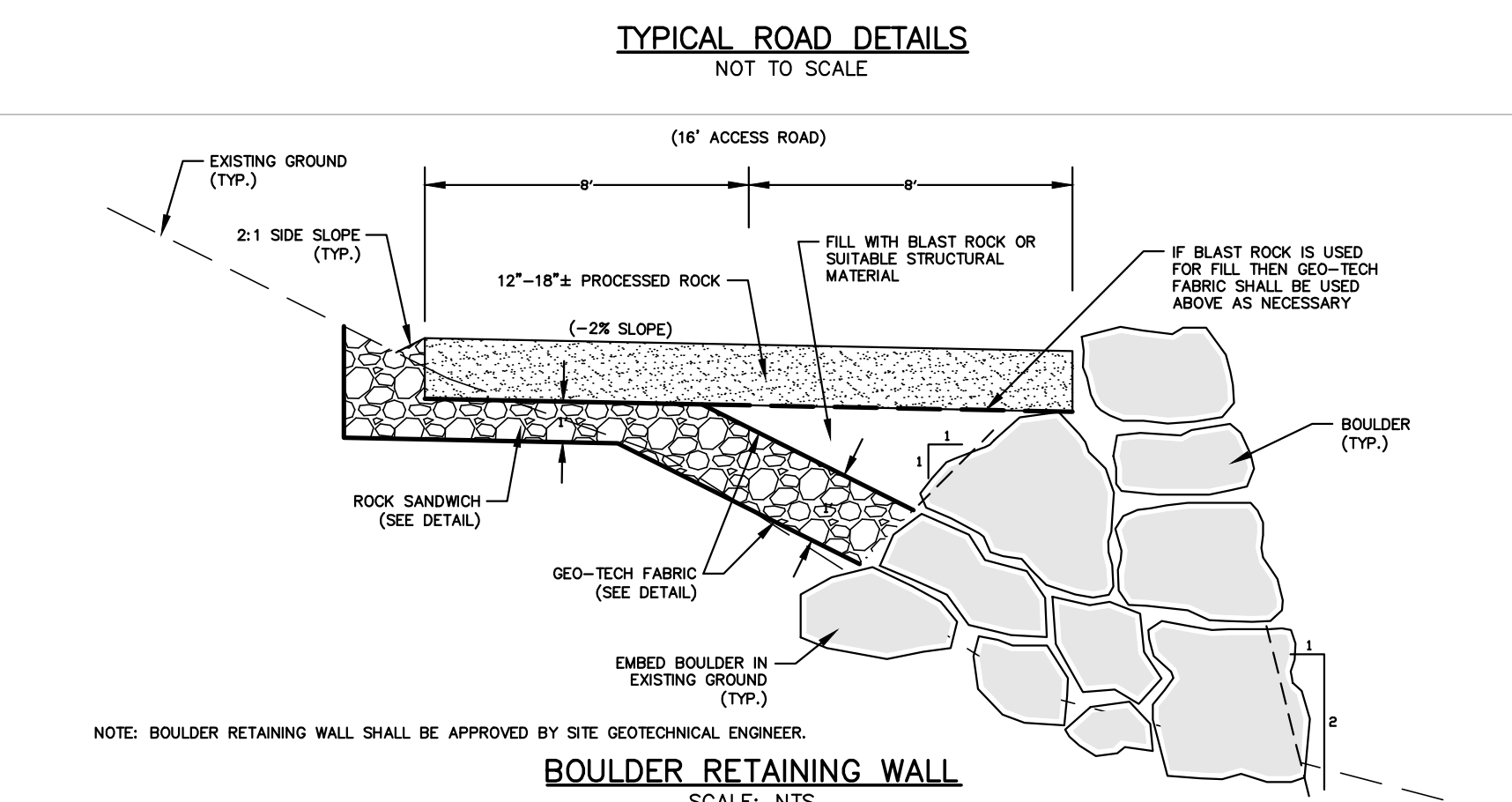
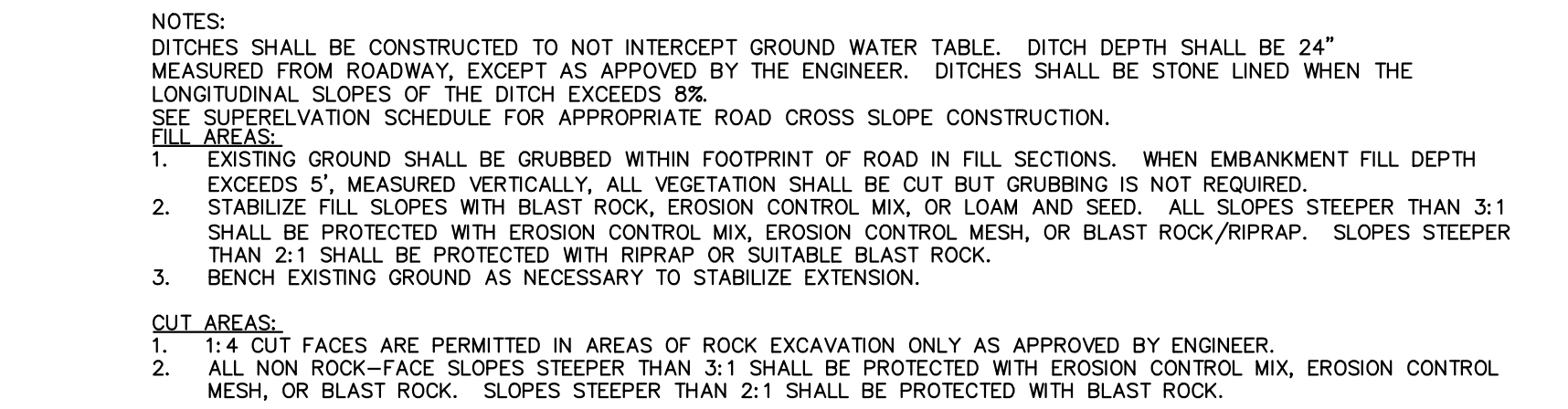
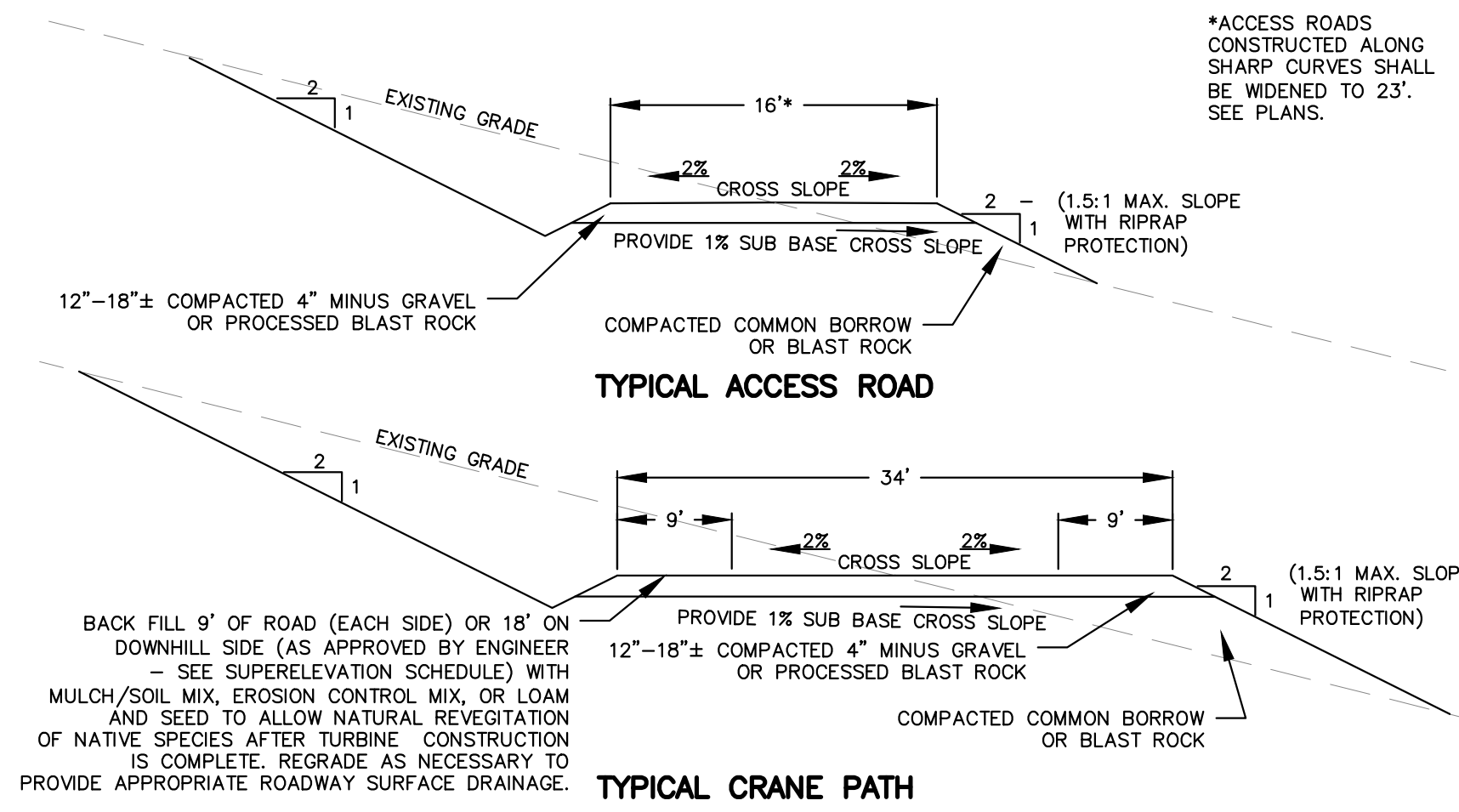
- THE WINTER CONSTRUCTION PERIOD SHALL BE FROM NOVEMBER 1 THROUGH APRIL 15.
- WHERE FEASIBLE, A MINIMUM 25-FT BUFFER SHALL BE MAINTAINED BETWEEN SILT FENCE OR OTHER PERIMETER CONTROLS TO ALLOW FOR SNOW CLEARING AND MAINTENANCE.
- WIRE REINFORCED SILT FENCE SHALL BE UTILIZED IN ALL AREAS (SEE DETAILS).
- DRAINAGE STRUCTURES SHALL BE KEPT OPEN AND FREE OF SNOW AND ICE DAMS.
- ACCEPTABLE OVER-WINTER STABILIZATION SHALL CONSIST OF VEGETATION (MIN. 75% MATURE), MULCHING, EROSION CONTROL MIX, EROSION CONTROL MATS, RIPRAP OR GRAVEL ROAD BASE.
- EROSION PREVENTION AND SEDIMENT CONTROL MEASURES THAT REQUIRE EARTH DISTURBANCE (e.g., CONSTRUCTION FENCE AND SILT FENCE) SHALL BE INSTALLED PRIOR TO THE GROUND FREEZING. DURING FROZEN CONDITIONS, SEDIMENT BARRIERS MAY CONSIST OF EROSION CONTROL MIX BERMS.
- FROM NOVEMBER 1 TO APRIL 15, MULCH SHALL BE INSTALLED AT DOUBLE THE NORMAL RATE. NETTING OR OTHER MEANS APPROVED BY THE ENGINEER SHALL BE USED TO MINIMIZE WIND EROSION OF MULCHING.
- PRIOR TO STABILIZATION, ICE AND SNOW SHALL BE REMOVED TO LESS THAN 1-IN.
- IF VEHICLE TRAFFIC IS ANTICIPATED AROUND STRUCTURES UNDER CONSTRUCTION, THE AREA SHALL BE STABILIZED WITH STONE.
- EXCAVATED FROZEN SOILS SHALL BE STOCKPILED IN LEVEL AREAS AND SHALL NOT BE USED UNTIL THAWED. STOCKPILES SHALL BE ENCRUSTED WITH EROSION CONTROL MIX BERMS AS NECESSARY.
- EXCAVATION OF SOILS IN SHALLOW GROUNDWATER AREAS SHALL BE MINIMIZED IF AT ALL POSSIBLE DURING WINTER, AND LIMITED TO ONLY THOSE AREAS THAT CAN BE STABILIZED DURING THE SAME DAY.
- TO ENSURE COVER OF DISTURBED SOIL IN ADVANCE OF A MELT EVENT, AREAS OF DISTURBED SOIL MUST BE STABILIZED AT THE END OF EACH WORK DAY, WITH THE FOLLOWING EXCEPTIONS:
  - IF NO PRECIPITATION IS FORECAST WITHIN 24 HOURS AND WORK WILL RESUME IN THE SAME DISTURBED AREA WITHIN 24 HOURS, DAILY STABILIZATION IS NOT NECESSARY.
  - DISTURBED AREAS THAT COLLECT AND RETAIN RUNOFF, SUCH AS BUILDING FOUNDATIONS AND OPEN UTILITY TRENCHES.
- THE ENGINEER MAY MAKE NECESSARY ADJUSTMENTS TO THE EROSION PREVENTION AND SEDIMENT CONTROL PLAN AND ASSOCIATED EROSION PREVENTION AND SEDIMENT CONTROL MEASURES (e.g., CONSTRUCTION FENCE AND SILT FENCE) TO ACCOMMODATE ANTICIPATED SNOW STORAGE AREAS.
- AREAS WITHIN 100 FEET FROM ANY NATURAL RESOURCE, IF NOT STABILIZED WITH A MINIMUM OF 75% MATURE VEGETATION, SHALL BE MULCHED BY DECEMBER 1 AND ANCHORED WITH PLASTIC NETTING OR PROTECTED WITH EROSION CONTROL COVER. DURING WINTER CONSTRUCTION A DOUBLE ROW OF SEDIMENT BARRIERS SHALL BE PLACED BETWEEN ANY NATURAL RESOURCE AND THE DISTURBED AREA. NATURAL RESOURCE CROSSINGS SHALL BE PROTECTED A MINIMUM DISTANCE OF 100 FEET ON EITHER SIDE FROM THE RESOURCE.
- STOCKPILES OF SOIL SHALL BE MULCHED FOR OVER-WINTER PROTECTION WITH HAY OR STRAW AT TWICE THE NORMAL RATE OR WITH A 4-INCH LAYER OF EROSION CONTROL MIX.
- MAINTENANCE MEASURES SHALL BE APPLIED AS NEEDED DURING THE ENTIRE CONSTRUCTION SEASON. AFTER EACH RAINFALL, SNOW STORM OR PERIOD OF THAWING AND RUNOFF, THE SITE CONTRACTOR SHALL PERFORM A VISUAL INSPECTION OF ALL INSTALLED EROSION CONTROL MEASURES AND PERFORM REPAIRS AS NEEDED. FOLLOWING THE TEMPORARY AND/OR FINAL SEEDING AND MULCHING, THE CONTRACTOR SHALL, IN THE SPRING, INSPECT AND REPAIR ANY DAMAGES OR BARE SPOTS.
- WINTER CONSTRUCTION SHALL BE IN ACCORDANCE WITH REGULATORY PERMIT. PERMIT REQUIREMENTS SHALL SUPERCEDE ANY DISCREPANCY IN ABOVE LISTED NOTES.

**NOTES:**

- TEMPORARY SEEDING NOTES**
- ANY DISTURBED AREAS TO BE LEFT IN ROUGH GRADED FORM FOR MORE THAN 30 DAYS BUT LESS THAN ONE GROWING SEASON SHALL BE LIMED, FERTILIZED, TEMPORARILY SEEDED AND MULCHED OR OTHERWISE STABILIZED.
  - APPLICATION RATES AND MATERIALS USED SHALL BE THE SAME AS FOR PERMANENT SEEDING EXCEPT SEED MIXTURE SHALL BE ANNUAL RYEGRASS.
- PERMANENT SEEDING NOTES**
- DURING PERIODS FROM APRIL 15 TO OCTOBER 1, AREAS DISTURBED SHALL BE PERMANENTLY SEEDED WITH CONSERVATION SEED MIX (A MIXTURE OF CREEPING RED FESCUE, REDTOP, TALL FESCUE, CLOVER AND ANNUAL RYE), AT A RATE OF 1.0 LB/1,000 SF.
- DORMANT SEEDING NOTES**
- DURING PERIODS FROM OCTOBER 1 TO NOVEMBER 15, AREAS DISTURBED SHALL BE DORMANT SEEDED WITH WINTER RYE, 1.5 LB/1,000 SF. DURING PERIODS BETWEEN NOVEMBER 15 AND APRIL 15, DISTURBED AREAS SHALL BE MULCHED AND IF NECESSARY, STABILIZED WITH EROSION CONTROL MESH.

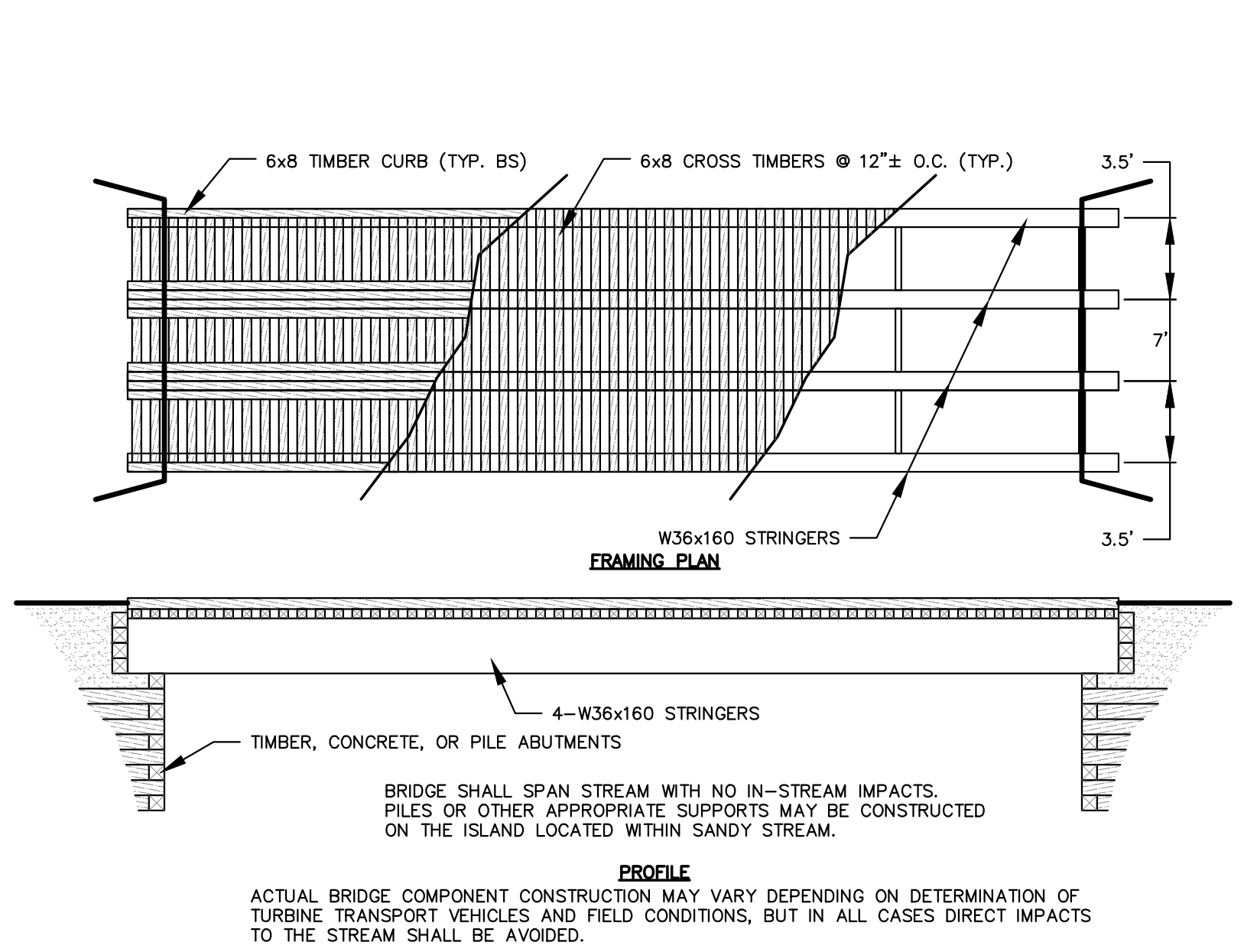
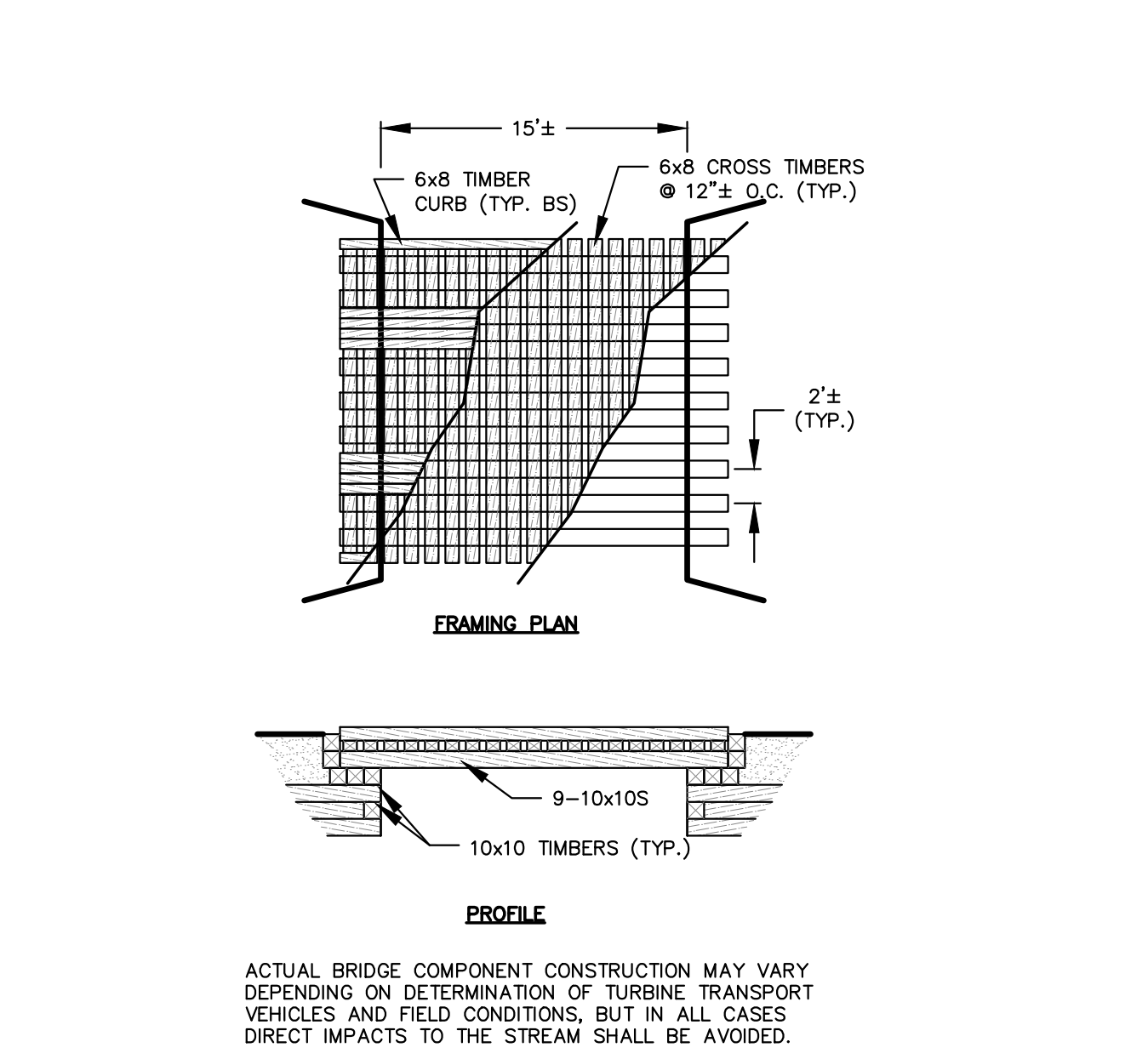
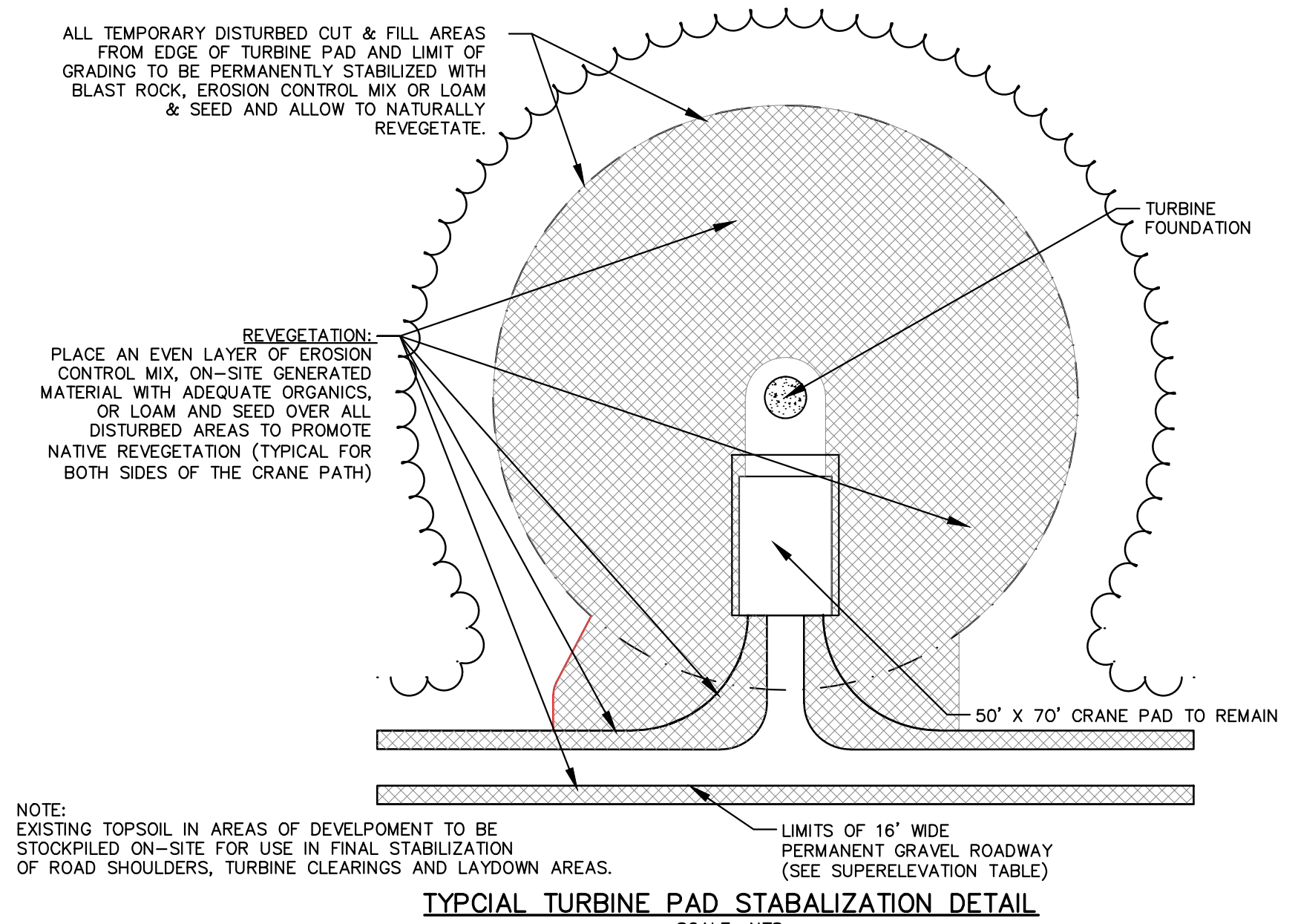
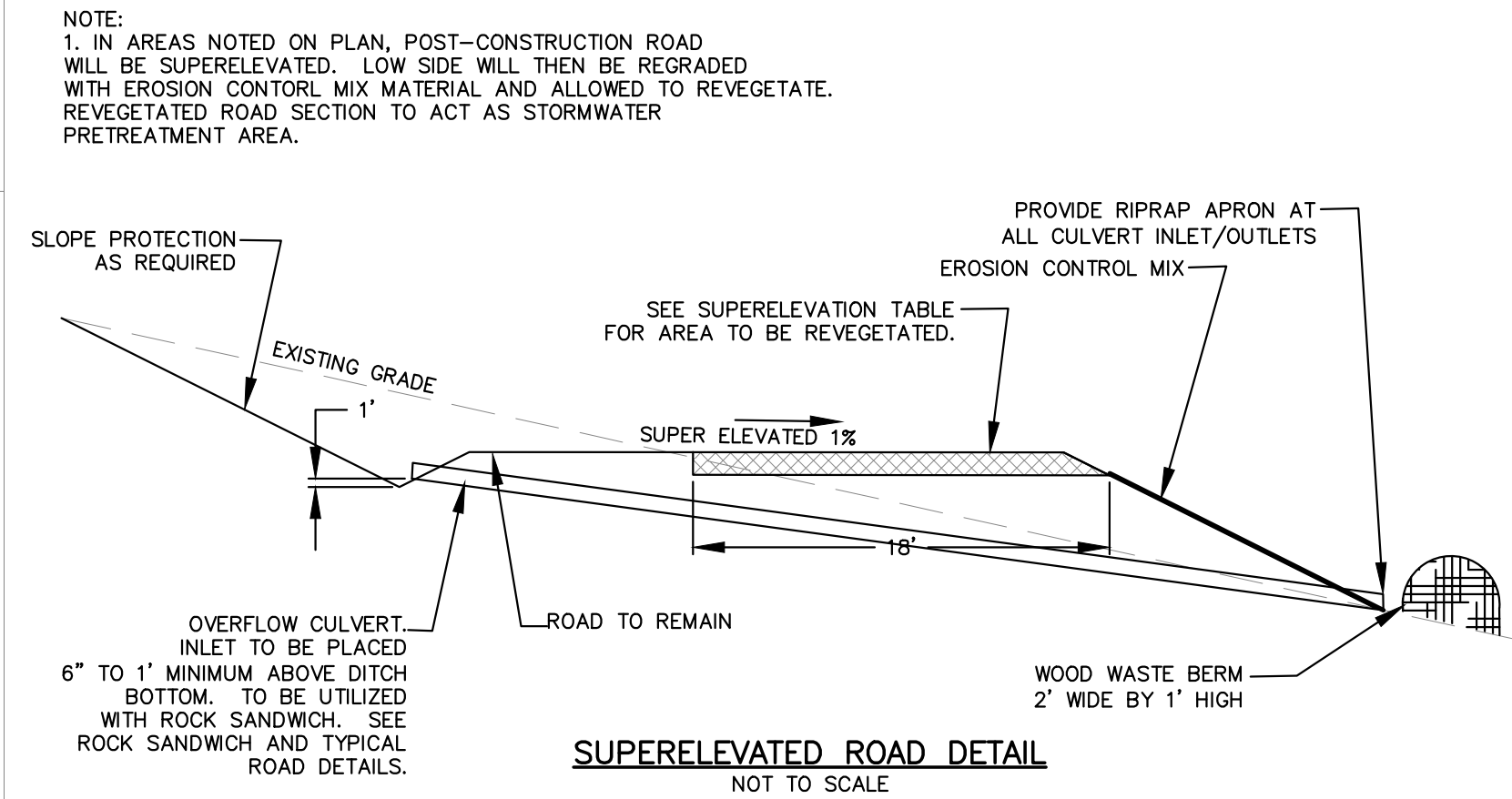
**SPECIFIC MAINTENANCE INSTRUCTION:**

- STRAW/HAY BALE BARRIERS, SILT FENCE, FILTER BARRIERS— MAKE ANY REQUIRED REPAIRS IMMEDIATELY. REPLACE W/ TEMPORARY CHECK DAM IF THERE IS UNDERCUTTING AT CENTER OR EDGES, OR IF LARGE VOLUMES OF WATER ARE IMPOUNDED. REPLACE DECOMPOSED OR INEFFECTIVE FABRIC IMMEDIATELY. REMOVE SEDIMENT DEPOSITS AFTER EACH STORM. DEPOSITS REMAINING IN PLACE AFTER SILT FENCE OR FILTER FABRIC IS NO LONGER REQUIRED SHALL BE DRESSED TO CONFORM W/ EXISTING GRADE, PREPARED AND STABILIZED.
- CULVERTS — CULVERTS SHOULD BE CHECKED MONTHLY FOR ACCUMULATION OF DEBRIS. IF NEEDED THEY SHOULD BE DRESSED.
- A STORMWATER MAINTENANCE LOG SHOULD BE MAINTAINED TO DOCUMENT COMPLIANCE WITH THE SUGGESTED SCHEDULE.



SUPER ELEVATION SCHEDULE				SUPER ELEVATION SCHEDULE			
ROAD NAME	STA. BEGIN	STA. END	SIDE ELEVATED	ROAD NAME	STA. BEGIN	STA. END	SIDE ELEVATED
ACCESS ROAD	0+00	61+00	LEFT	C.P. W1	1+25	83+75	RIGHT
ACCESS TURN	1+00	2+50	RIGHT	C.P. W2	1+50	7+50	RIGHT
O&M ROAD	0+50	3+50	RIGHT	C.P. W3	0+50	13+50	LEFT
CONNECTOR STUB	0+50	1+50	LEFT	C.P. W3	13+50	25+00	RIGHT
CONNECTOR ROAD	0+50	46+75	RIGHT	C.P. W8	1+00	9+25	RIGHT
CONNECTOR ROAD	46+75	61+00	LEFT	C.P. W8	9+25	25+25	LEFT
CONNECTOR ROAD	61+00	63+00	CROWNED	C.P. W8	25+25	54+68	RIGHT
CONNECTOR ROAD	63+00	75+75	RIGHT	C.P. W9	1+00	6+75	RIGHT
CONNECTOR ROAD	75+75	79+00	CROWNED	C.P. W10	0+00	11+00	LEFT
CONNECTOR ROAD	79+00	103+00	RIGHT	C.P. W10	11+00	29+50	RIGHT
CONNECTOR ROAD	103+00	113+00	LEFT	C.P. W10	29+50	59+50	LEFT
CONNECTOR ROAD	113+00	126+25	RIGHT	C.P. W10	59+50	89+00	RIGHT
CONNECTOR ROAD	126+25	174+50	LEFT	C.P. W15	1+00	19+25	LEFT
CONNECTOR ROAD	174+50	286+50	RIGHT	C.P. WC	0+00	11+89	RIGHT
CONNECTOR STUB	0+50	1+50	RIGHT	C.P. W18	2+00	7+50	LEFT
SUBSTATION MAIN	0+00	4+15	CROWNED	C.P. W19	0+00	4+00	RIGHT
SUB SIDE STUB	0+00	4+15	LEFT	C.P. W19	4+00	8+00	LEFT
MET ROAD E28	0+00	5+05	RIGHT	C.P. W19	8+00	51+00	RIGHT
C.P. E31	1+00	33+50	RIGHT	C.P. W20	1+50	3+50	RIGHT
C.P. E31	12+30	51+25	LEFT	C.P. W21	1+00	9+00	LEFT
C.P. E33	1+50	30+50	RIGHT	C.P. W21	9+00	15+75	RIGHT
C.P. E36	0+00	8+00	LEFT	C.P. W23	0+75	34+50	RIGHT
C.P. E36	8+00	31+25	RIGHT	C.P. W26	0+00	13+50	RIGHT
C.P. E36	31+25	46+50	LEFT	C.P. W26	13+50	17+00	LEFT
C.P. E36	46+50	51+25	RIGHT	C.P. W26	17+00	39+75	RIGHT
C.P. E36	51+25	54+50	LEFT	MET ROAD W1	0+00	5+20	LEFT
C.P. E36	54+50	59+90	RIGHT	MET ROAD W13	0+00	4+15	LEFT
C.P. E37	0+00	27+00	RIGHT	MET ROAD W14	0+00	5+60	LEFT
C.P. E43	0+00	10+50	RIGHT				
C.P. E43	10+50	50+50	LEFT				
C.P. E43	50+50	59+50	RIGHT				
C.P. E43	59+50	90+07	LEFT				
C.P. E46	0+00	8+25	LEFT				
C.P. E46	8+25	59+00	RIGHT				
C.P. E47	1+75	21+25	RIGHT				
C.P. E47	21+25	58+75	LEFT				
C.P. E47 STUB	1+00	6+00	LEFT				
MET ROAD E40	0+00	2+15	LEFT				
MET ROAD E41	0+00	6+80	LEFT				

\* PROVIDE APPROPRIATE TRANSITION BETWEEN SUPERELEVATION SECTIONS.



**HIGHLAND WIND PROJECT**  
**HIGHLAND WIND LLC**  
 Project Location: HIGHLAND PLANTATION  
 Drawing Description: DETAILS  
 Designed By: BOH  
 Date: 12/20/2010  
 Scale: NTS  
 Approved: BOH  
 Checked: JT  
 Project No: 6060E  
 Engineer: SEWALL  
 on integrated team of geospatial, engineering, surveying and NATURAL RESOURCE consultants  
 JAMES W. SEWALL COMPANY / Since 1881  
 800 648 4202  
 PERMIT  
 Sheet No: C-4