

Vermont Department of Environmental Conservation

Watershed Management Division
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Agency of Natural Resources

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AUTHORIZATION TO CONDUCT NEXT FLOOD MEASURES

Pursuant to Section F Next Flood Protective Measure of the Vermont Stream Alteration General Permit

Project Number: **SA-05-016-2016 Potash Brook Road Culvert**

Applicant Name: Chester Highway Department, Chester, Vermont

Contact: Graham Kennedy

Mailing Address: P.O. Box 370, 556 Elm Street, Chester, Vermont 05143

Phone: (802) 875-2173 or (802) 875-2737

Project Location: Potash Brook Road over Potash Brook to Williams River

Email: jhchester@vermontel.net

The Secretary of the Vermont Agency of Natural Resources (VT ANR) has determined that:


1. This project authorizes replacing a 5' CMP culvert damaged by T.S. Irene with a 8' x 6' concrete box. The stream bed inside the culvert shall be stabilized with stone & sediments in Appendix M Stream Bed Stone Fill Type E1 stone.
2. The proposed activity is eligible for coverage under the VT ANR Stream Alteration General Permit – Next Flood Protective Measures.
3. The proposed activity will meet the terms and conditions of Section F of the General Permit provided:
 - a) The project will be completed and approved as shown on the plans dated April 13, 2016, prepared by Dufresne Group, as approved by the Vermont Agency of Natural Resources as attached herein.
 - b) The project is proportional to the threat and conditioned to cease when the threat to life or to improved property has ended.
 - c) The project will not result in a threat to life, public health or safety.
 - d) The project will meet the standards detailed in subsection C.2.2.4 of the General Permit.
 - e) The project will meet Stream Alteration Standards to the greatest extent possible.
 - f) A pre-construction meeting is held between the contractor, owner/applicant, and the ANR River Management Engineer.
 - g) The River Management Engineer is notified by phone or email when construction begins and when the project is complete.
 - h) In-stream working dates for all GP activities are from July 1st through October 1st; any in-stream work outside these dates will require an Individual Stream Alteration Permit authorization by the River Management Engineer.
 - i) This authorization has been posted for public access and this authorization constitutes final approval.

If there are any changes in the project plan or deviation in construction from the plan, the Permittee must notify the River Management Engineer immediately.

If the project is constructed as you have described, as shown on the above referenced approved plans and according to the above conditions, there is no reason to expect any violation of Vermont Water Quality Standards.

Signed this 28th day of June, 2016
Alyssa B. Schuren, Commissioner
Department of Environmental Conservation

This permit expires October 1, 2016.

by: 

Todd Menees, P.E., P.H., River Management Engineer

Streambed Stone Fill Design Guidance

Type	Velocity Range (fps)*	Embeddedness (in)
E1	$V \leq 9$	18
E2	$9 < V \leq 11$	24
E3	$11 < V \leq 13$	36
E4	$13 < V \leq 15$	48

*Maximum velocity should be based on a minimum 50-year design flow rate and calculated at the structure outlet.

Item xxx.xxx CY Streambed Stone Fill Specification

Type E1. The longest dimension of the stone shall be at least 18 inches, and at least 50 percent of the volume of the stone in place shall have a least dimension of 12 inches, and at least 25 percent of the particles shall have a maximum dimension of 2 inches and be well graded material.

Type E2. The longest dimension of the stone shall be at least 24 inches, and at least 50 percent of the volume of the stone in place shall have a least dimension of 18 inches, and at least 25 percent of the particles shall have a maximum dimension of 2 inches and be well graded material.

Type E3. The longest dimension of the stone shall be at least 36 inches, and at least 50 percent of the volume of the stone in place shall have a least dimension of 24 inches, and at least 25 percent of the particles shall have a maximum dimension of 2 inches and be well graded material.

Type E4. The longest dimension of the stone shall be at least 48 inches, and at least 50 percent of the volume of the stone in place shall have a least dimension of 36 inches, and at least 25 percent of the particles shall have a maximum dimension of 2 inches and be well graded material.

Notes

- The streambed stone fill shall be hard, blasted, angular rock other than serpentine rock containing the fibrous variety chrysotile (asbestos). Similar sized river sediment is an acceptable alternative as is a mixture of angular material and river sediment.
- Stone placed inside of a closed structure shall be placed such that the structure is not damaged.
- Care shall be taken to limit segregation of the materials.
- Add sand borrow item as needed to seal the bed and prevent subsurface flow.
- There shall be no subsurface flow upon final inspection.

GENERAL NOTES:

1. SURVEY COMPLETED BY DUFRESNE GROUP IN MAY 2015. COORDINATE SYSTEM IS VERMONT STATE PLANE. VERTICAL DATUM IS NAVD88.
2. EXPLORATORY EXCAVATION IS REQUIRED TO LOCATE UNDERGROUND UTILITIES. CONTRACTOR SHALL USE EXTREME CAUTION TO PREVENT DAMAGE TO EXISTING UTILITIES. CONTRACTOR SHALL COORDINATE WITH DIG SAFE (1-888-DIG SAFE) A MINIMUM OF 72 HOURS PRIOR TO EXCAVATION.
4. ALL EXISTING UNDERGROUND UTILITIES WERE LOCATED USING THE BEST AVAILABLE INFORMATION. CONTRACTOR IS RESPONSIBLE FOR PROTECTION OF ALL UTILITIES WHETHER OR NOT THEY ARE SHOWN ON THE PLANS. ALL REPAIRS TO DAMAGED UTILITIES SHALL BE MADE BY THE CONTRACTOR USING MATERIALS APPROVED BY THE ENGINEER PRIOR TO INSTALLATION.
5. CONTRACTOR SHALL VERIFY LOCATION OF ALL OVERHEAD AND UNDERGROUND ELECTRIC, CABLE AND TELEPHONE LINES AND TAKE NECESSARY PRECAUTIONS IN STRICT ACCORDANCE WITH OSHA STANDARDS DURING CONSTRUCTION. CONTRACTOR SHALL CONTACT THE LOCAL POWER UTILITY AND TELEPHONE UTILITY REGARDING ANY NECESSARY SUPPORT OF ANY UTILITY POLES DURING CONSTRUCTION. LOCAL ELECTRIC UTILITY IS GREEN MOUNTAIN POWER. LOCAL PHONE UTILITY IS VERMONT TELEPHONE COMPANY.
7. GENERALLY HEAVY OR DARK LINE WORK OR NOTES REFER TO PROPOSED IMPROVEMENTS. LIGHT LINE WORK OR SCREENED GENERALLY DENOTES EXISTING FEATURES.
9. TECHNICAL SPECIFICATIONS PROVIDE NECESSARY INFORMATION AND ARE PART OF THE CONTRACT DOCUMENTS FOR THIS PROJECT.
8. ALL DISTURBED AREAS SHALL BE RESTORED TO CLASS A RESTORATION UNLESS OTHERWISE SHOWN. CONTRACTOR IS RESPONSIBLE FOR REMOVAL, CARE & REPLANTING OF ALL PLANTINGS AND SHRUBS DISTURBED DURING CONSTRUCTION.
9. THE CONTRACTOR SHALL BE REQUIRED TO STAKE OUT THE CULVERT AND MAINTAIN THE THREE DIMENSIONAL CONTROL OF THE SITE USING A COORDINATE SYSTEM AND ELEVATION THAT EXACTLY COINCIDES WITH THE DESIGN DRAWINGS.
10. THE CONTRACTOR SHALL MAINTAIN A MINIMUM OF ONE LANE FOR TRAFFIC FOR THE DURATION OF THE PROJECT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TRAFFIC CONTROL AND BARRICADES. THE CONTRACTOR SHALL NOT CLOSE OFF ACCESS TO DRIVEWAYS. CONTRACTOR SHALL ERECT SAFETY BARRIERS AND INSTALL ADEQUATE EXCAVATION SUPPORT AS SPECIFIED AND LIMIT CONSTRUCTION ACTIVITIES TO THE CURRENT ACTIVE AREA TO ACCOMMODATE TRAFFIC IMMEDIATELY ADJACENT TO THE WORK AREA. CONTRACTOR SHALL SUBMIT TRAFFIC CONTROL PLAN AND PHASING TO THE ENGINEER FOR REVIEW AND APPROVAL PRIOR TO ANY ALTERATION OF TRAFFIC PATTERNS.
11. CONTRACTOR TO USE EXTREME CAUTION WHEN EXCAVATING NEAR BUILDINGS AND OTHER STRUCTURES. ANY DAMAGE TO BUILDINGS AND STRUCTURES SHALL BE REPAIRED BY THE CONTRACTOR TO THE SATISFACTION OF THE ENGINEER AT NO ADDITIONAL COST TO THE OWNER.
12. THE CONTRACTOR'S EROSION PREVENTION AND SEDIMENT CONTROL MEASURES SHALL COMPLY WITH VERMONT STANDARDS AND SPECIFICATIONS FOR EROSION PREVENTION AND SEDIMENT CONTROL. THE CONTRACTOR SHALL SUBMIT PROPOSED MEASURES TO THE ENGINEER FOR APPROVAL PRIOR TO CONSTRUCTION.
13. REFER TO CIVIL AND STRUCTURAL DETAILS FOR CONSTRUCTION DETAILS.
14. CONTRACTOR'S STAGING AREA SHALL BE LOCATED WITHIN THE CONSTRUCTION EASEMENT AREAS DESIGNATED ON THESE PLANS.
15. REFER TO SPECIFICATIONS FOR BORING LOGS.
16. ALL CONSTRUCTION ACTIVITIES SHALL BE CONFINED TO THE PUBLIC RIGHT-OF-WAY OR EASEMENT AREAS.

ABBREVIATION LIST

APPROX	APPROXIMATELY
CL	CENTER LINE
CMP	CORRUGATED METAL PIPE
DIA	DIAMETER
ED	EDGE
ELEV	ELEVATION
GND	GROUND
H	HORIZONTAL
INV	INVERT
OHW	OVERHEAD WIRE
PL	PROPERTY LINE
PT	POINT
ROW	RIGHT-OF-WAY
STA	STATION
TBM	TEMPORARY BENCH MARK
TYP	TYPICAL
UG	UNDERGROUND
UP	UTILITY POLE
W	WATER LINE
V	VERTICAL

LEGEND	
EXISTING:	
	MAJOR CONTOUR
	MINOR CONTOUR
	RIGHT-OF-WAY
	EDGE OF GRAVEL ROAD/DRIVE
	BORING LOCATION
	CENTERLINE OF ROAD
	ORDINARY HIGH WATER
	STREAM FLOW DIRECTION
	EDGE OF STREAM
PROPOSED:	
	BOX CULVERT COMPONENTS
	TYPE II RIP RAP
	GRAVEL
	MAJOR CONTOUR
	MINOR CONTOUR



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Manchester, VT • Tel: (802) 768-8291 Fax: (802) 768-6315

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REVISIONS	DATE	COMMENTS	BY	
			DATE	COMMENTS

POTASH BROOK ROAD
BOX CULVERT #2

**GENERAL NOTES, LEGEND
AND ABBREVIATIONS**

CHESTER, VERMONT

Project #	7150015
Project Mgr.	NRJ
Design by	NRJ
Drawn by	TPK
Reviewed by	NRJ
Approved by	TPK
Date	APRIL 13, 2016
Scale	AS SHOWN

BID DOCUMENTS
DO NOT REVISE

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REVISIONS	DATE	COMMENTS	BY

POTASH BROOK ROAD
 BOX CULVERT #2
 EROSION CONTROL AND SEDIMENT PREVENTION PLAN AND DETAILS
 CHESTER, VERMONT

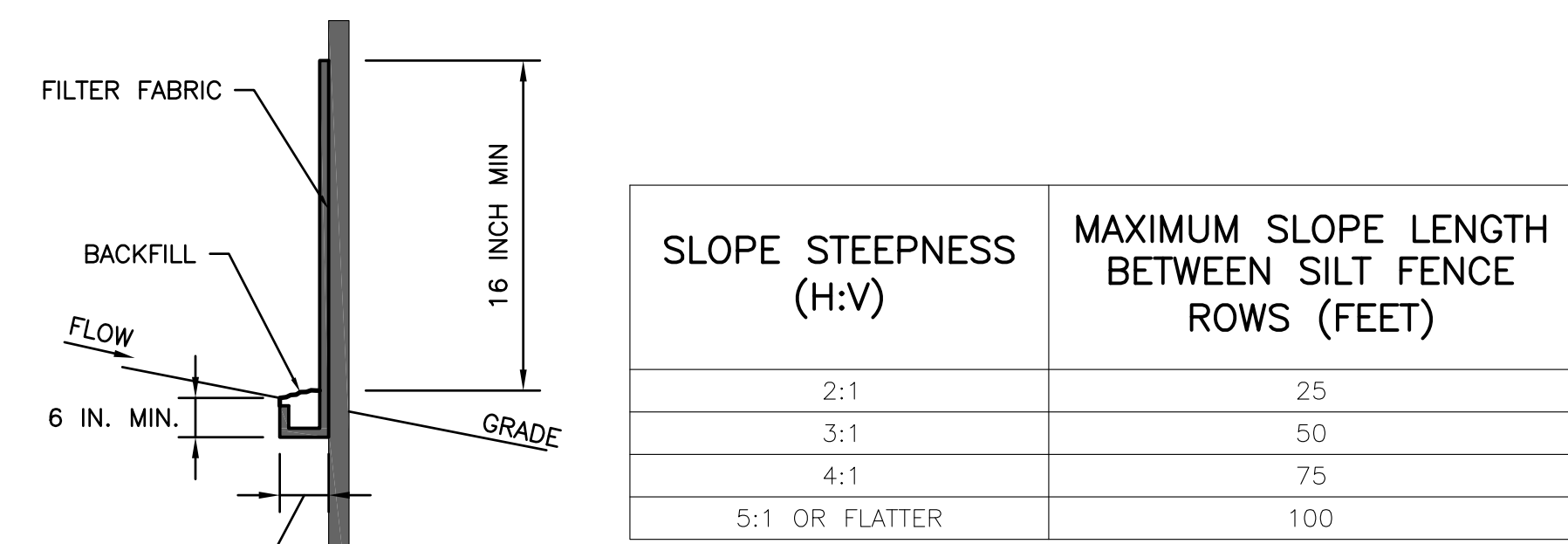
Project #	7150015
Project Mgr.	NRJ
Design by	ADM
Drawn by	ADM
Reviewed by	NRJ
Approved by	TPK
Date	APRIL 13, 2016
Scale	AS SHOWN

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SHEET 2 OF 4

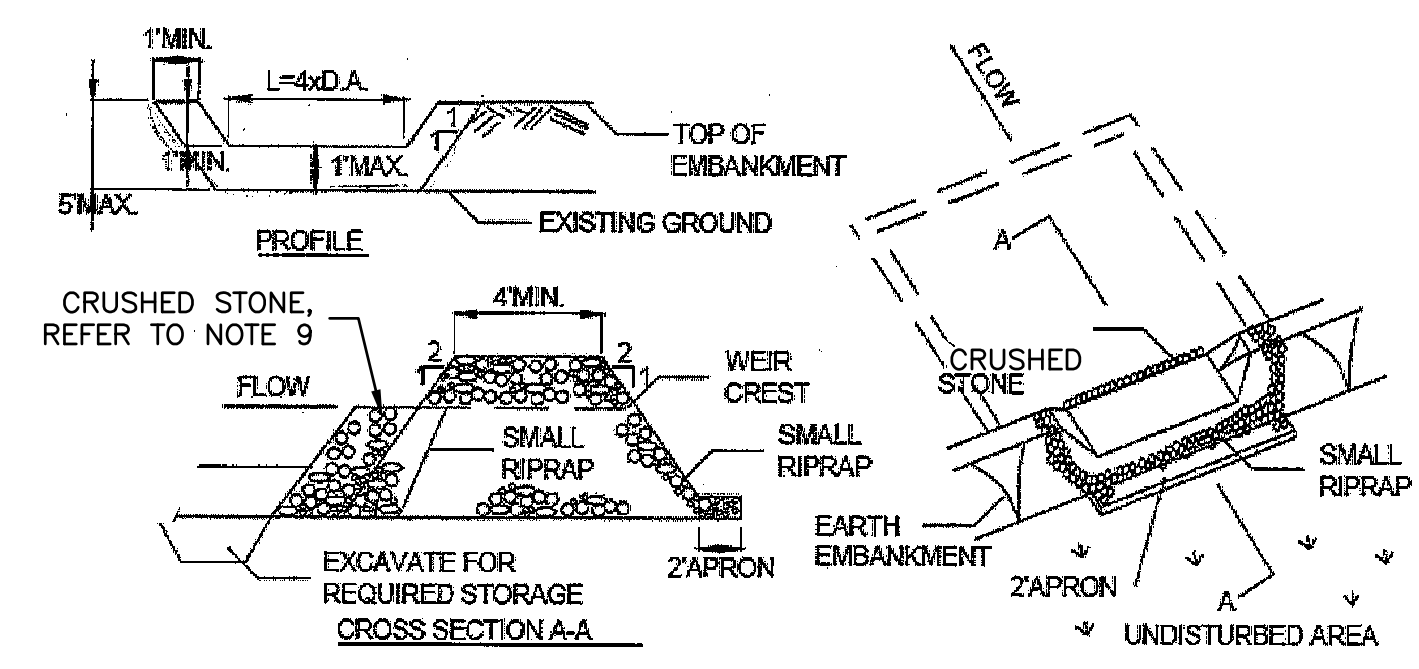
GENERAL NOTES:

- ANY WATER FROM DEWATERING OR STREAM BYPASS SHALL BE TREATED WITH A SEDIMENT TRAP PRIOR TO ENTERING THE STREAM CHANNEL.
- THE PROPOSED METHOD OF DEWATERING THE CONSTRUCTION EXCAVATION IS BY USED OF A TEMPORARY BYPASS CULVERT AS SHOWN ON THIS SHEET. ALL WATER PUMPED OUT OF THE EXCAVATION SHALL BE DISCHARGE UPSTREAM OF THE SEDIMENT TRAP OR THROUGH A SEDIMENT BAG. CONTRACTOR SHALL SUBMIT PLAN FOR STREAM DIVERSION TO ENGINEER FOR APPROVAL PRIOR TO CONDUCTING IN-STREAM WORK.
- CONTRACTOR SHALL CONSTRUCT STABILIZED CONSTRUCTION ENTRANCES AS NECESSARY TO PREVENT TRACKING OF MATERIALS ONTO RESERVOIR ROAD. ADDITIONAL EROSION CONTROL AND SEDIMENT PREVENTION MEASURES, SUCH AS SILT FENCE AND STABILIZATION MAY BE REQUIRED DURING CONSTRUCTION AND WILL BE PROVIDED BY THE CONTRACTOR.
- REFER TO CIVIL SHEETS FOR ADDITIONAL CULVERT AND UTILITY DETAILS.
- INSTALL SILT FENCE AROUND SOIL STOCK PILES AND ALONG CONTOURS AT BASE OF DISTURBED AREAS. ACTUAL LOCATIONS TO BE FIELD DETERMINED.



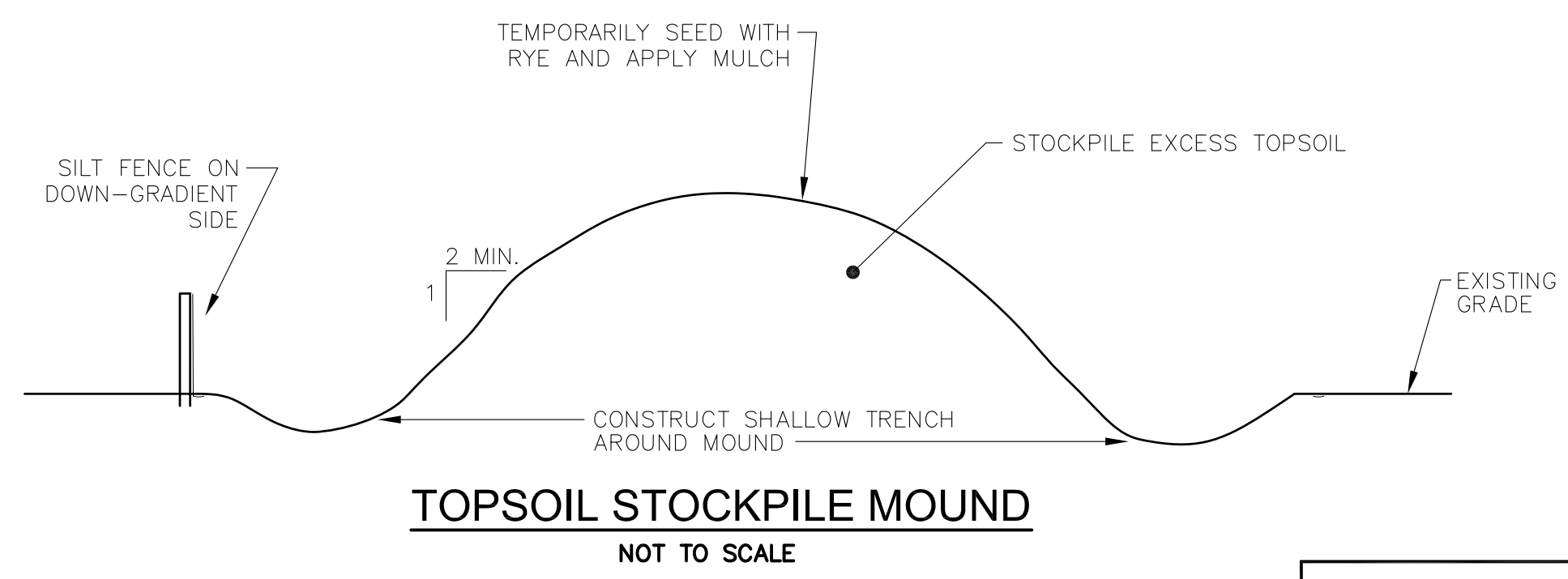
SILT FENCE INSTALLATION DETAIL

NOT TO SCALE



STONE OUTLET SEDIMENT TRAP CONSTRUCTION SPECIFICATIONS:

- AREA UNDER EMBANKMENT SHALL BE CLEARED, GRUBBED, AND STRIPPED OF ANY VEGETATION AND ROOT MATERIAL. THE POOL AREA SHALL BE CLEARED.
- THE FILL MATERIAL FOR THE EMBANKMENT SHALL BE FREE OF ROOTS AND OTHER WOODY VEGETATION AS WELL AS OVER-SIZED STONES, ROCKS, ORGANIC MATERIAL, OR OTHER OBJECTIONABLE MATERIAL. THE EMBANKMENT SHALL BE COMPACTED BY TRAVERSING WITH EQUIPMENT WHILE IT IS BEING CONSTRUCTED.
- ALL CUT AND FILL SLOPES SHALL BE 2:1 OR FLATTER.
- THE STONE USED IN THE OUTLET SHALL BE SMALL RIP RAP (TYPE I STONE FILL) WITH A 1 FOOT THICKNESS OF 2" AGGREGATE (WASHED CRUSHED STONE) PLACED ON THE UP-GRADE SIDE ON THE SMALL RIP RAP OR EMBEDDED FILTER CLOTH IN THE RIP RAP.
- SEDIMENT SHALL BE REMOVED AND TRAP RESTORED TO ITS ORIGINAL DIMENSIONS WHEN THE SEDIMENT HAS ACCUMULATED TO 1/2 THE DESIGN DEPTH OF THE TRAP. IT SHALL BE PLACED ON SITE AND STABILIZED.
- THE STRUCTURE SHALL BE INSPECTED AFTER EACH RAIN AND AS REQUIRED BY THE ENGINEER.
- CONSTRUCTION OPERATIONS SHALL BE CARRIED OUT IN SUCH A MANNER THAT EROSION AND SEDIMENT ARE CONTROLLED.
- THE STRUCTURE SHALL BE REMOVED AND THE AREA STABILIZED WHEN THE DRAINAGE AREA HAS BEEN PROPERLY STABILIZED.
- A ONE FOOT LAYER OF CRUSHED STONE MAY BE PLACED ON THE UPSTREAM SIDE OF THE RIP RAP IN PLACE OF THE EMBEDDED FILTER CLOTH.

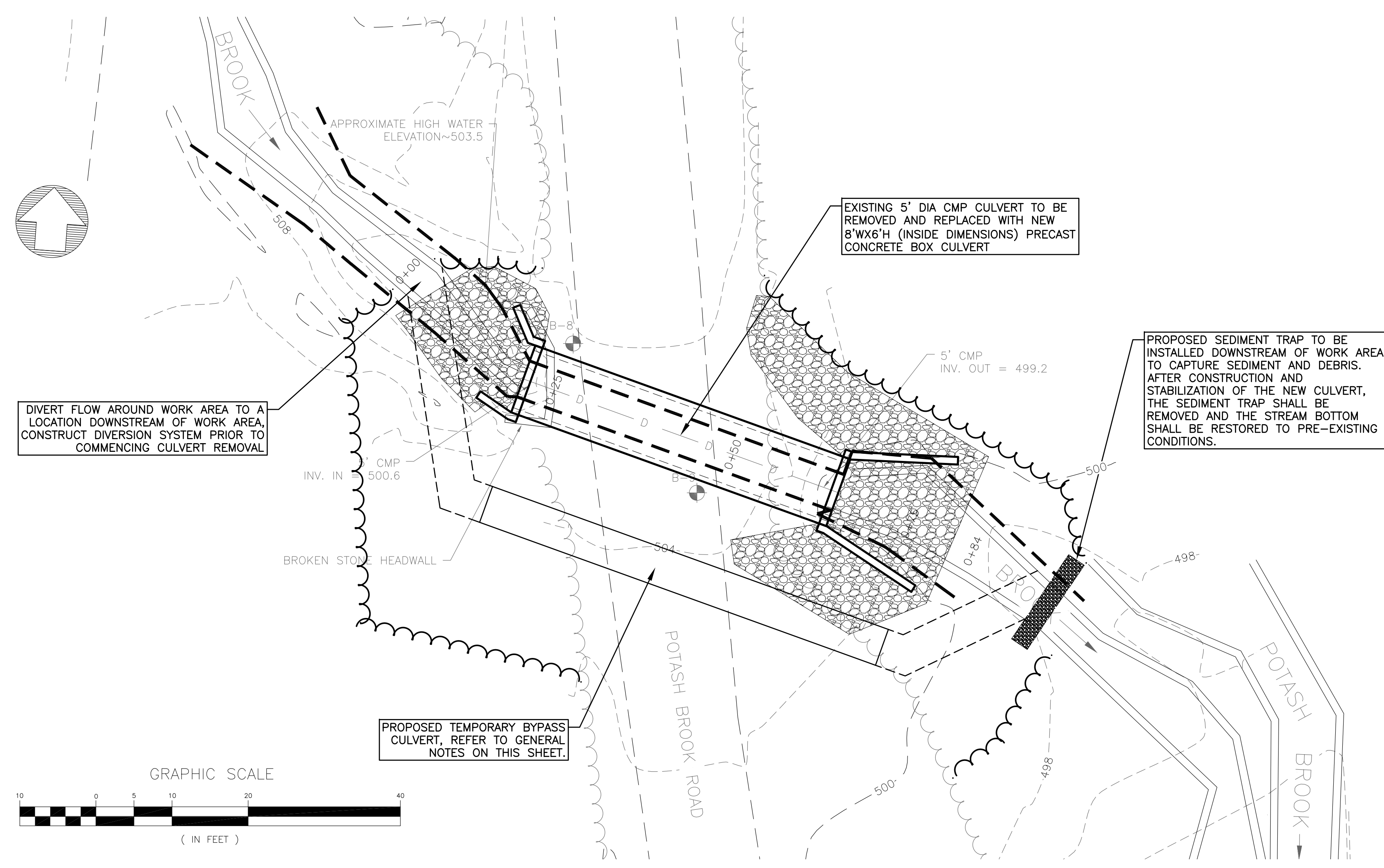


TOPSOIL STOCKPILE MOUND

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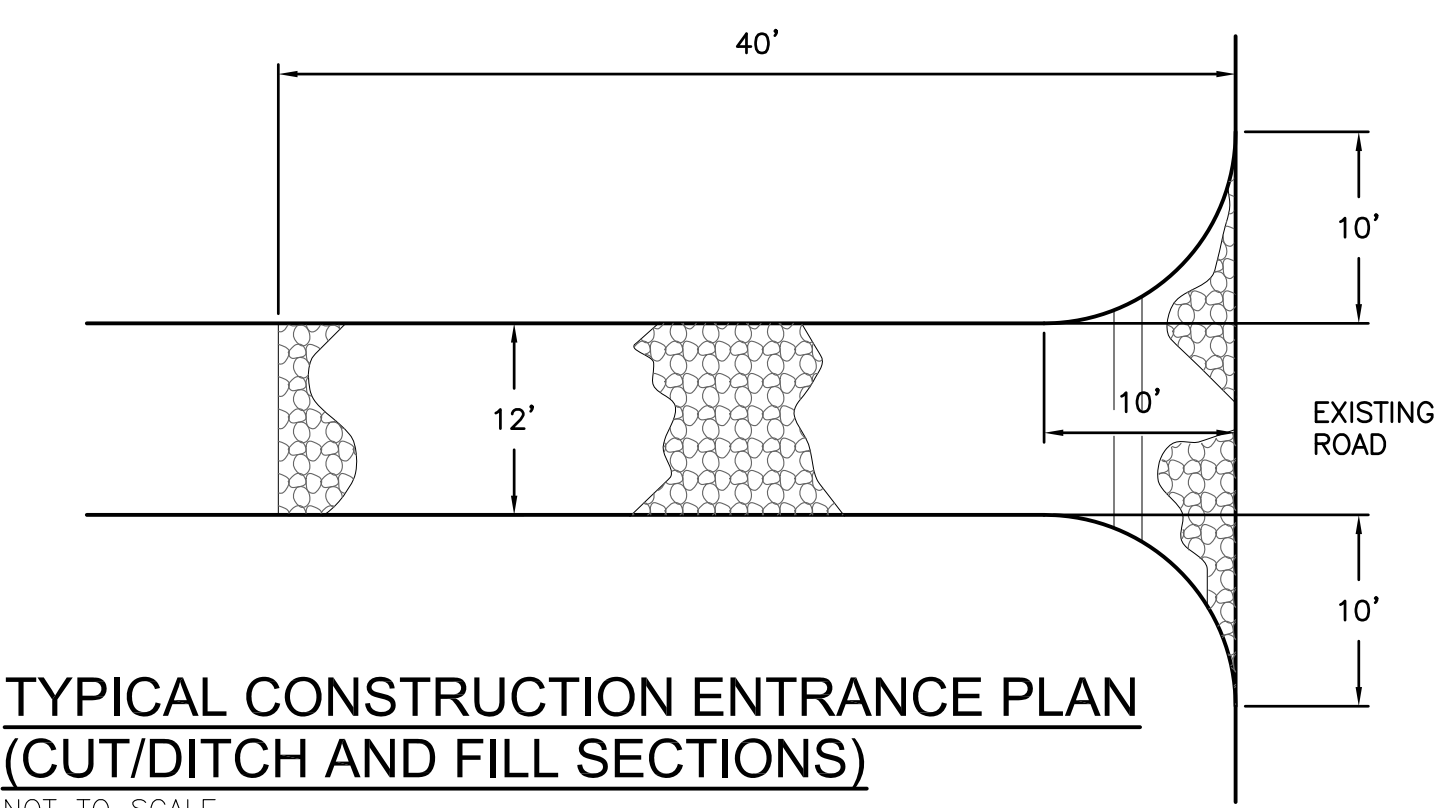
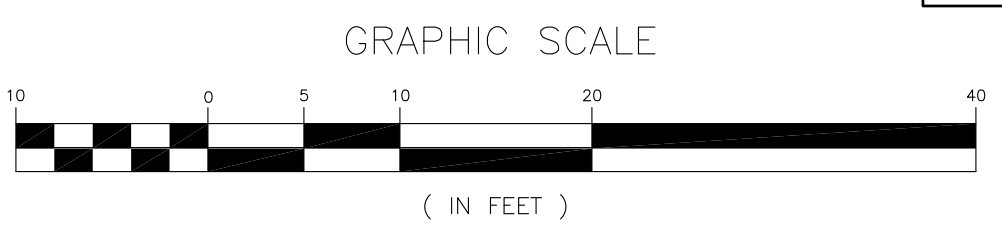
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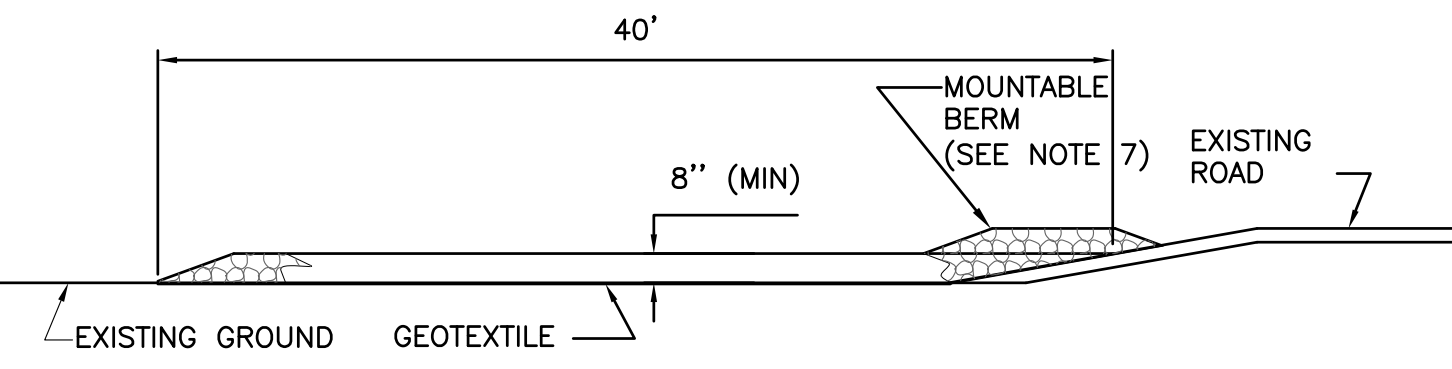
EROSION CONTROL AND SEDIMENT PREVENTION PLAN

SCALE: 1"=10'



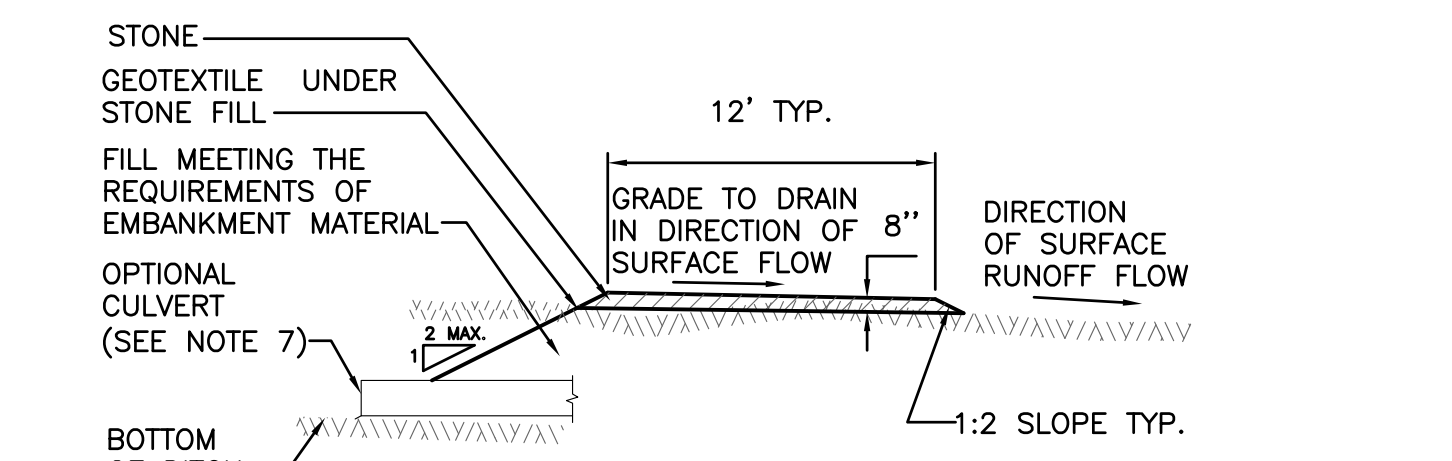
TYPICAL CONSTRUCTION ENTRANCE PLAN (CUT/DITCH AND FILL SECTIONS)

NOT TO SCALE



TYPICAL CONSTRUCTION ENTRANCE PROFILE (CUT AND DITCH SECTIONS)

NOT TO SCALE



TYPICAL CONSTRUCTION ENTRANCE SECTION

NOT TO SCALE

CONSTRUCTION ENTRANCE NOTES:

- THE PURPOSE OF A STABILIZED CONSTRUCTION ENTRANCE IS TO REDUCE OR ELIMINATE THE TRACKING OF SEDIMENT ONTO PUBLIC RIGHTS OF WAY OR STREETS.
- STONE SIZE - USE CLEAN STONE WITH GRADATION BETWEEN 1 INCHES AND 4 INCHES.
- LENGTH - 40 FEET (MIN)
- THICKNESS - 8 INCHES (MIN)
- WIDTH - 12 FEET (MIN)
- GEOTEXTILE UNDER STONE WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE.
- SURFACE WATER - ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED ACROSS THE ENTRANCE AS DIRECTED BY THE ENGINEER. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.
- PROPOSED DRAINAGE PIPES SHALL BE SIZED WITH SUFFICIENT CAPACITY TO CARRY DITCH FLOWS. ALTERNATIVE WAYS OF TRANSPORTING DITCH DRAINAGE ACROSS CONSTRUCTION ENTRANCES MAY BE PROPOSED BY THE CONTRACTOR FOR APPROVAL BY THE ENGINEER.
- WHEN WASHING OF VEHICLE IS NECESSARY, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
- MEASURES SHALL BE INSPECTED EVERY SEVEN (7) CALENDAR DAYS AND WITHIN 24 HOURS OF A STORM EVENT GREAT ENOUGH TO CAUSE WATER TO LEAVE THE CONSTRUCTION SITE.
- MAINTENANCE- THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. ALL SEDIMENT SPILLED, DROPPED, WASHED, OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
- AT THE TIME OF REMOVAL OF THE STABILIZED CONSTRUCTION ENTRANCE THE DISTURBED AREA SHALL BE REPAIRED AND STABILIZED.

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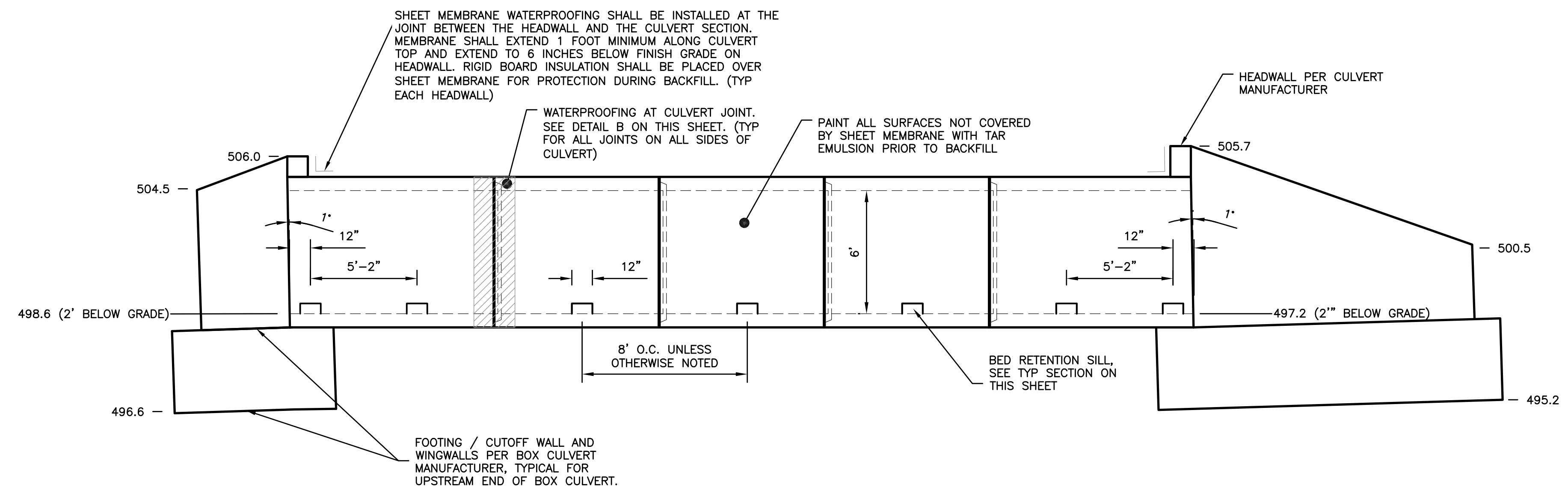
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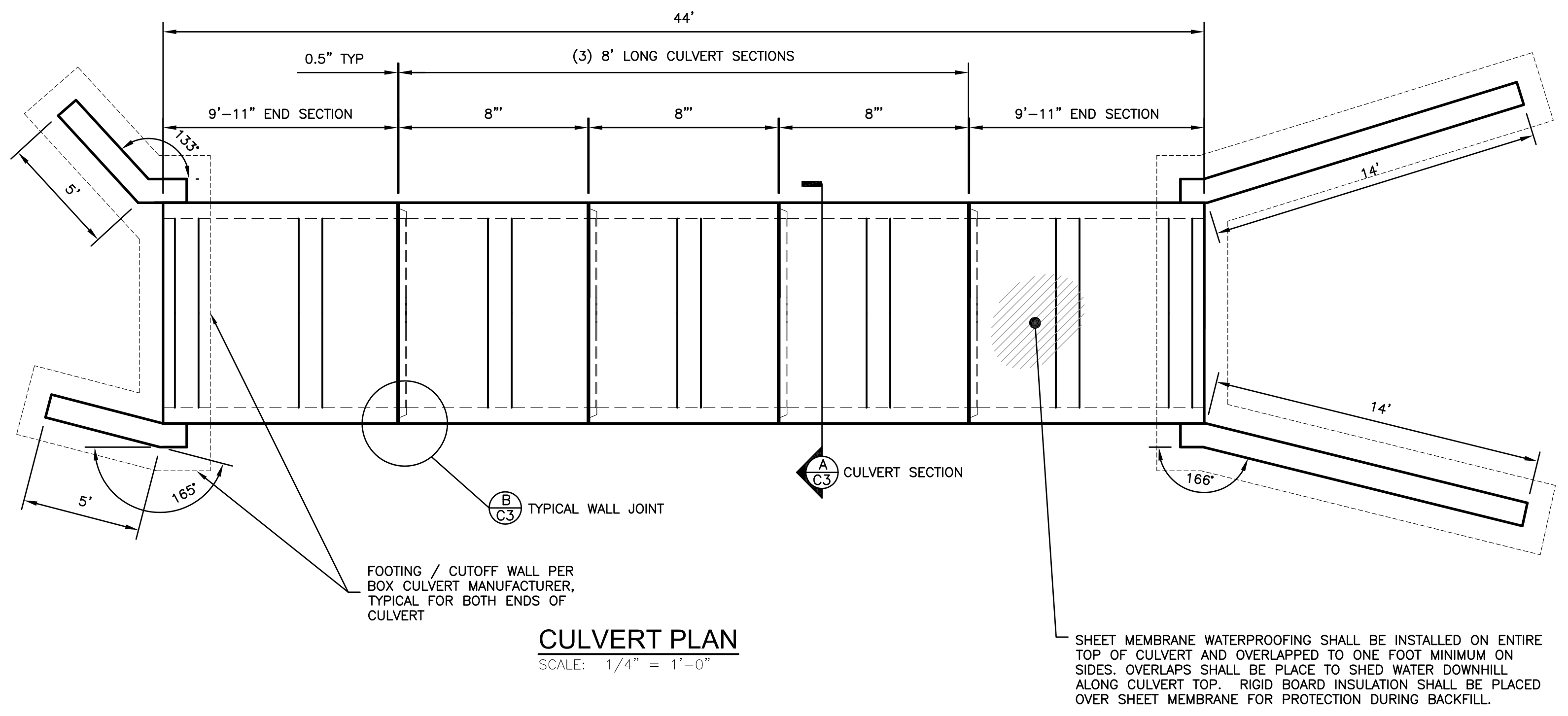
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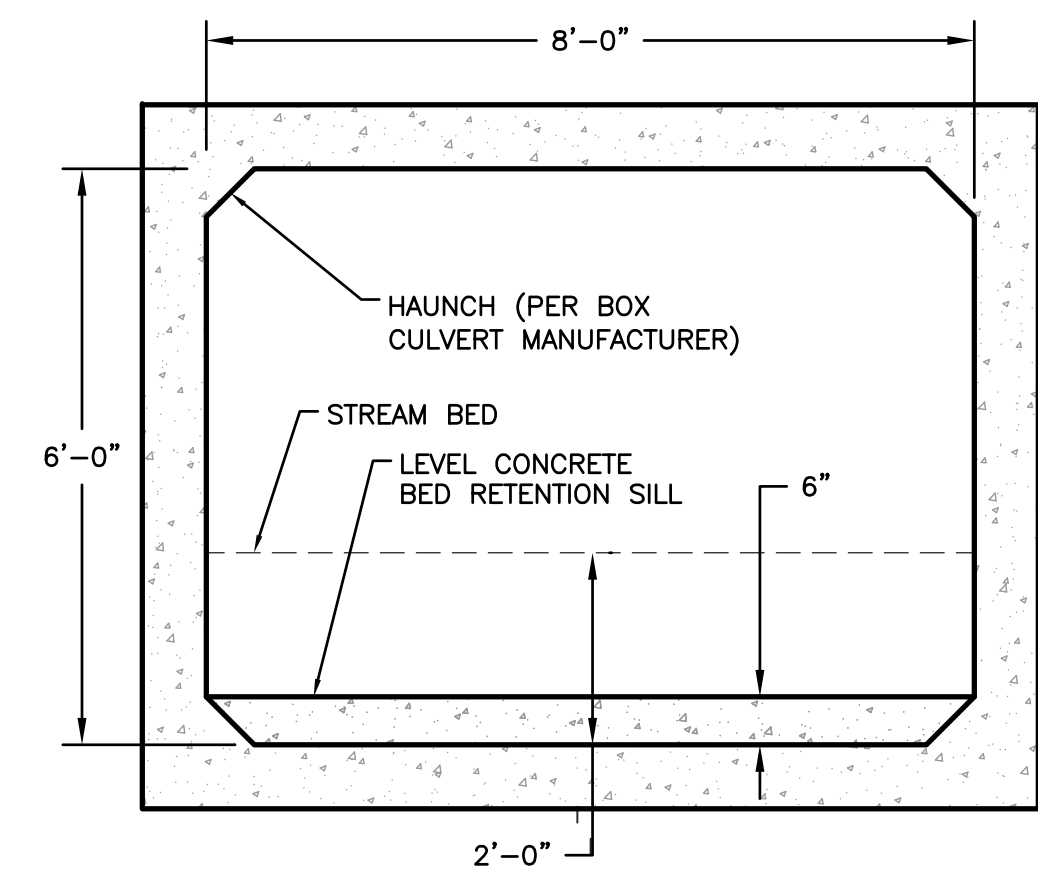
CULVERT ELEVATION
SCALE: 1/4" = 1'-0"



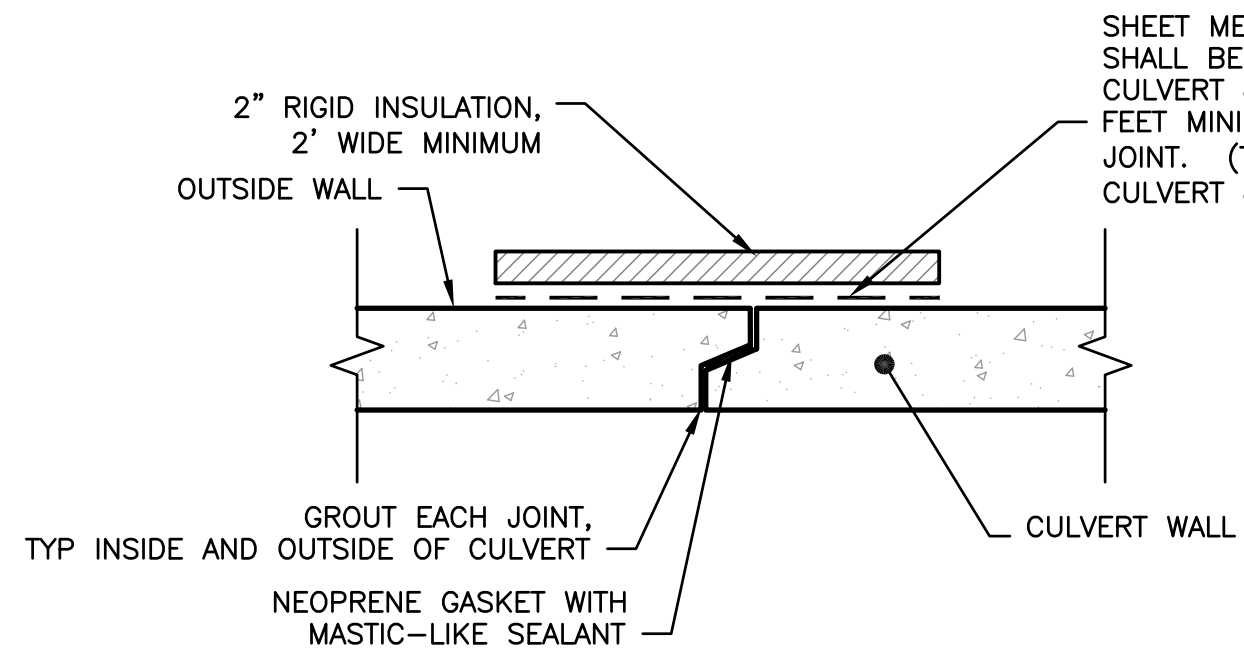
CULVERT PLAN
SCALE: 1/4" = 1'-0"

CULVERT NOTES:

- ALL PRECAST CONCRETE STRUCTURAL COMPONENTS SHALL BE FABRICATED PER THE SPECIFICATIONS THE PRECAST CONCRETE BOX CULVERT COMPONENTS SHALL BE CONSTRUCTED AND INSTALLED IN ACCORDANCE WITH FABRICATOR'S SPECIFICATIONS. ACTUAL WALL AND SLAB THICKNESS, REINFORCEMENT SIZE, LOCATION, AND SPACING TO BE DETERMINED AND SPECIFICALLY DESIGNED BY THE FABRICATOR'S ENGINEER. PRECAST CONCRETE CULVERT SHALL BE DESIGNED FOR H-25-44 LOADING.
- CULVERT SECTIONS SHALL BE EQUIPPED WITH CLOSURE HARDWARE TO ENSURE A FULLY WATERTIGHT SEAL AT EACH SECTION JOINT. DESIGN SHALL BE PER MANUFACTURER'S SPECIFICATIONS. ALL BOLT HOLES AND OTHER EXPOSED ITEMS SHALL BE FILLED WITH MORTAR AT THE COMPLETION OF THE BOX CULVERT CONSTRUCTION.
- ALL NECESSARY LIFTING ANCHORS SHALL BE PER MANUFACTURER'S DESIGN AND SHALL ENSURE PROPER AND SAFE LIFTING OF THE BOX CULVERT.
- EXTERIOR WALLS AND TOP OF CULVERT SECTIONS SHALL BE COATED WITH DAMPROOFING.
- WINGWALL TIE-BACKS, IF NECESSARY, SHALL BE DESIGNED AND INSTALLED PER MANUFACTURER'S SPECIFICATIONS.
- NECESSARY DRAINAGE PIPE (I.E. BEHIND WINGWALLS) SHALL BE DESIGNED AND INSTALLED PER MANUFACTURER'S SPECIFICATIONS.
- ALL CONNECTIONS OF ONE BOX CULVERT SECTION TO ANOTHER SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS AND SPECIFICATIONS.
- NO BACKFILL SHALL BE PLACED AGAINST ANY STRUCTURAL ELEMENTS UNTIL THEY HAVE BEEN APPROVED BY THE ENGINEER.
- BACKFILL AND USE OF EQUIPMENT ON OR ADJACENT TO THE PRECAST STRUCTURES SHALL BE IN ACCORDANCE WITH FABRICATOR'S RECOMMENDATIONS.
- FABRICATOR SHALL PROVIDE SHOP DRAWINGS INCLUDING CALCULATIONS CONFORMING TO SUBMITTAL REQUIREMENTS FOUND IN THE SPECIFICATIONS. THE SHOP DRAWINGS SHALL BE SIGNED, STAMPED AND DATED BY A PROFESSIONAL STRUCTURAL ENGINEER LICENSED TO PRACTICE ENGINEERING IN THE STATE OF VERMONT. WRITTEN APPROVAL FROM THE ENGINEER, CONFIRMING ACCEPTANCE OF THE PRECAST CULVERT AND WINGWALL SHOP DRAWINGS SHALL BE OBTAINED BY THE FABRICATOR PRIOR TO FABRICATION OF THE BOX CULVERT.
- THE DRILLING OF HOLES IN THE CULVERT SHALL NOT BE PERMITTED, UNLESS APPROVED IN WRITING BY THE ENGINEER OR CULVERT FABRICATOR.
- EXTERNAL PROTECTION OF JOINTS MADE BY TWO ADJOINING PRECAST CONCRETE BOX CULVERT SECTIONS SHALL BE TREATED IN ACCORDANCE WITH THE SPECIFICATIONS AND THE FABRICATOR'S RECOMMENDATIONS.
- ALL CULVERT SECTIONS SHALL BE NUMBERED AND LABELED BEFORE SHIPMENT TO THE CONSTRUCTION SITE.
- THE EXTERIOR (TOP AND SIDES) AND INTERIOR (SIDES AND BOTTOM) OF ALL CONCRETE BOX JOINTS ALONG WITH ALL LIFTING HOLES SHALL BE FILLED WITH MORTAR AFTER BEING SET IN THEIR FINAL POSITION. MORTAR SHALL BE WET CURED A MINIMUM OF 24 HOURS PRIOR TO THE WATERPROOFING.
- AFTER APPLICATION OF THE TAR EMULSION, A TWO FOOT WIDE STRIP OF SHEET MEMBRANE WATERPROOFING SHALL BE APPLIED AT EACH SIDE JOINT. THE MEMBRANE SHALL EXTEND TO FULL HEIGHT OF THE SIDE JOINTS. THE ENTIRE TOP OF CULVERT SHALL BE COVERED WITH A MEMBRANE. THE TOP MEMBRANE SHEETS SHALL OVERLAP THE EDGES OF THE SIDE MEMBRANE BY ONE FOOT ON EACH SIDE. AFTER MEMBRANE PLACEMENT, RIGID BOARD INSULATION SHALL BE USED TO PROTECT THE MEMBRANE DURING BACKFILL.
- MAXIMUM SILL SPACING IS 8'-0". ADDITIONAL SILLS SHALL BE CAST AT BOTH THE INLET AND OUTLET, AS SHOWN.
- INSULATION FOR BOX CULVERT IS INCIDENTAL TO BOX CULVERT BID ITEM.



CULVERT SECTION (A/C3)
SCALE: 1/2" = 1'-0"
NOTE: REBAR NOT SHOWN, REFER TO CULVERT NOTES, THIS SHEET



TYPICAL WALL JOINT (B/C3)
NOT TO SCALE

POTASH BROOK ROAD
BOX CULVERT #2

PRECAST BOX CULVERT DETAILS

CHESTER, VERMONT

Project #	7150015
Project Mgr.	NRJ
Design by	NRJ
Drawn by	TPK
Reviewed by	NRJ
Approved by	NRJ
Date	APRIL 13, 2016
Scale	AS SHOWN

BID DOCUMENTS
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SHEET 5 OF 4

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