

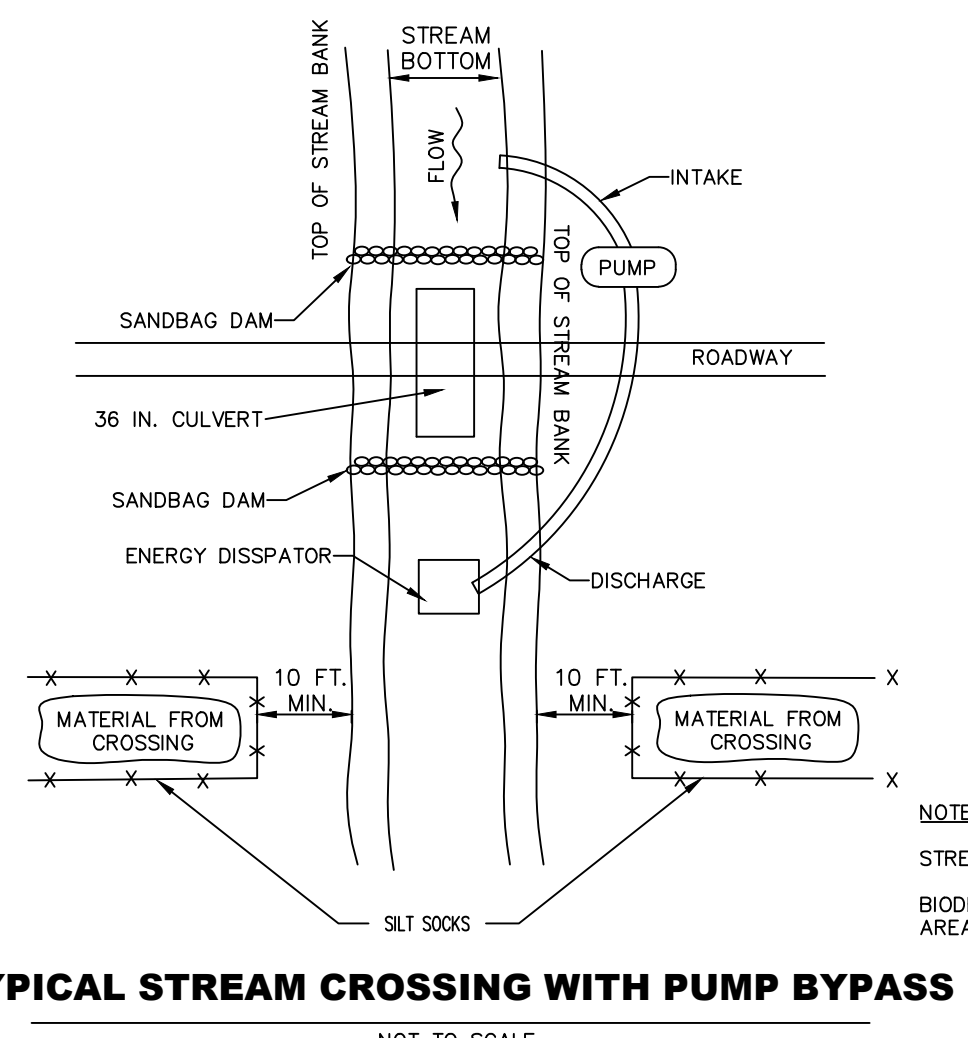
- LEGEND**
- EXISTING MAJOR CONTOUR
 - EXISTING MINOR CONTOUR
 - PROPOSED MAJOR CONTOUR
 - PROPOSED MINOR CONTOUR
 - DELINEATED WETLAND
 - PERENNIAL STREAM
 - 12" COMPOST FILTER SOCK ROADWAY
 - FEMA FLOODPLAIN
 - FEMA FLOODWAY
 - TOP OF BANK
 - OVERHEAD ELECTRIC LINE

CONSTRUCTION SEQUENCE

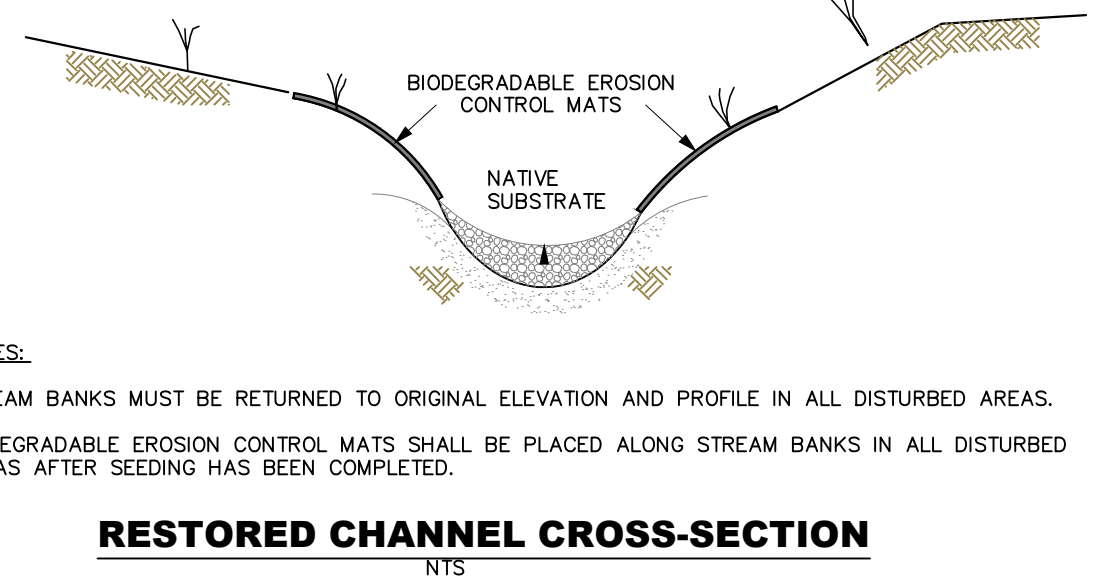
- No earth moving activities will commence until all materials have been assembled at the site.
- Lay out limits of the site and establish benchmarks and reference points.
 - Any brush (if any) will be felled into the construction work area to prevent off-construction work area damage to trees. Brush will be stockpiled to the edge of the construction work area, but not within 50 feet of streams, floodplains, or wetlands.
 - Install silt sock in locations shown on site plan. Silt sock should be installed parallel to contours as shown on detail.
 - Construct a temporary dike at the upstream end of the stream crossing area using sandbags and plastic or other appropriate barrier materials to be utilized by the pump around bypass system that will be installed concurrently.
 - Install concrete footer, wingwalls, and headwalls as shown on plans using upstream dike and pump around so work can be performed under dry non-flowing conditions. Install bridge beams and decking.
 - Stabilize the adjacent roadway with clean stone.
 - Remove any stockpiled material not used for construction and haul it to an approved non-wetland, non-floodplain disposal area.
 - Turbid water generated within the construction work zone (if any) will be pumped into a filter bag placed in a well-vegetated area along the stream bank or on an adjacent floodplain terrace.
 - Grade stockpile areas to original elevation.
 - Remove construction equipment and materials from construction work area. All areas where the roadway was disturbed should be graveled to achieved stabilization.
 - Seeding should not be performed prior to heavy precipitation. Seed mixes, as specified in the E&S plan narrative, shall be broadcast on soil with hand-held seed spreaders. Disturbed upland areas will be mulched with clean straw (3 tons/acre) following seeding.
 - Silt sock shall be removed after a uniform 70% permanent, perennial vegetative cover has been achieved over the entire disturbed areas and roadways, roadway berms have clean subbase in place.

SITE RESTORATION

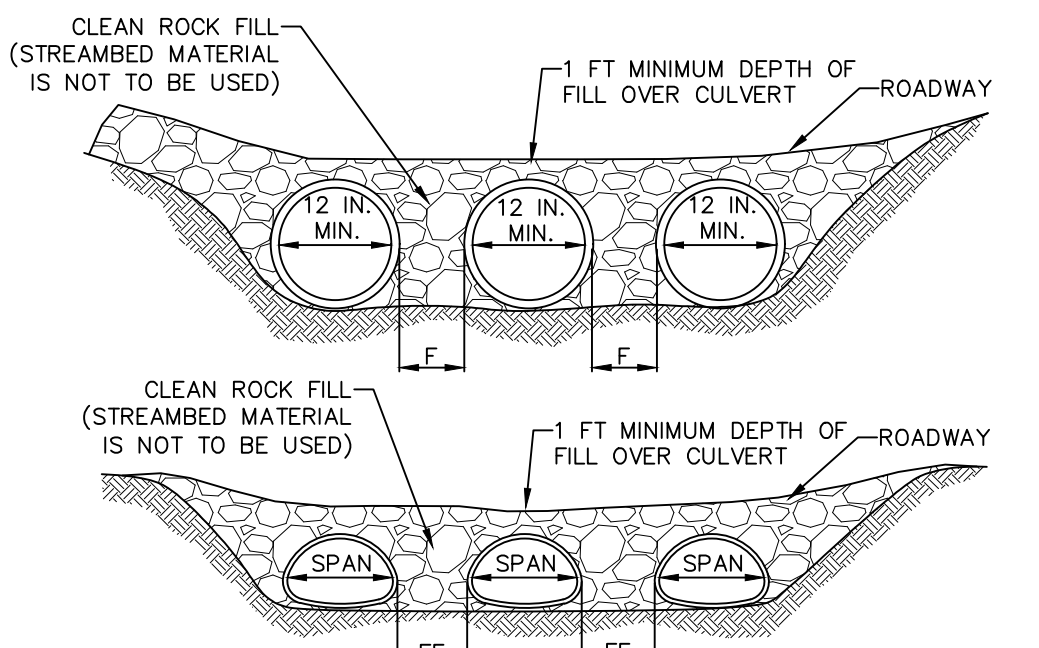
- Crossing shall be removed post mining.
- Restore the stream channel as per the detail below.



TYPICAL STREAM CROSSING WITH PUMP BYPASS
NOT TO SCALE

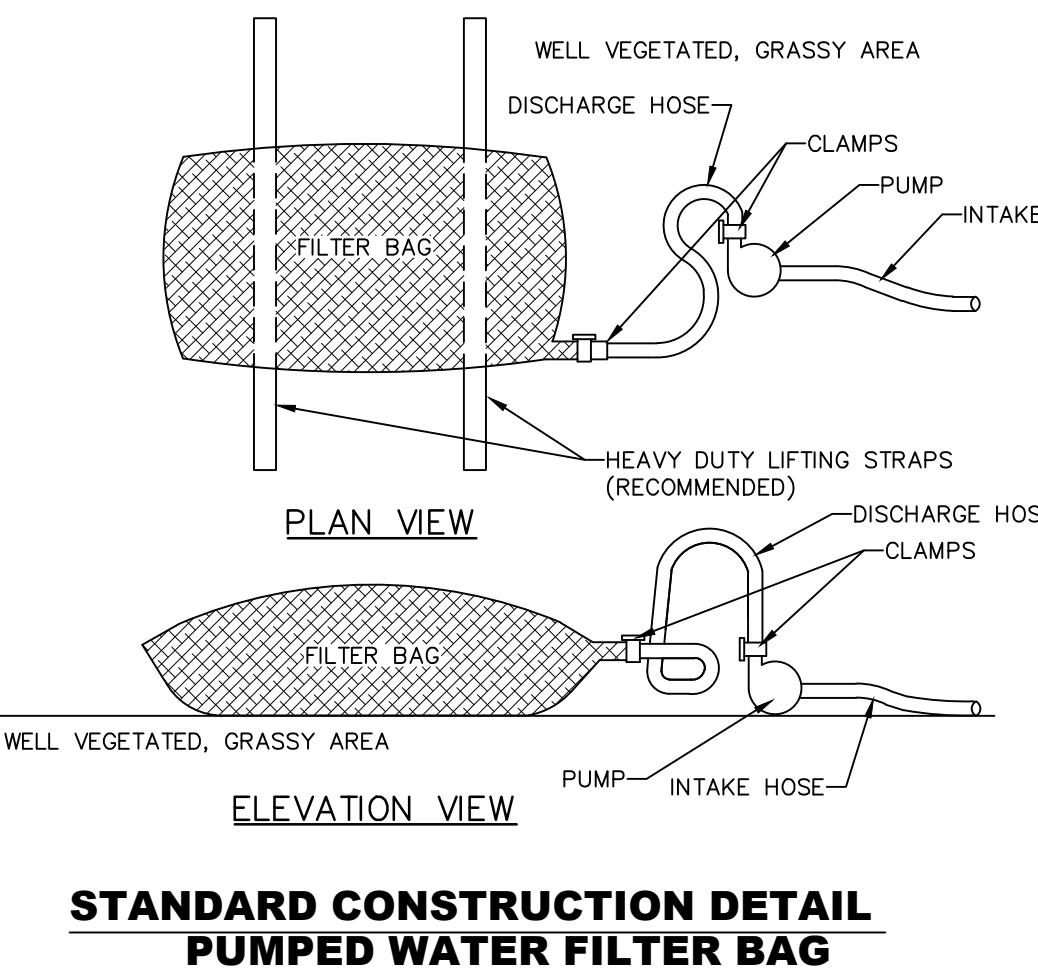


RESTORED CHANNEL CROSS-SECTION
NOT TO SCALE

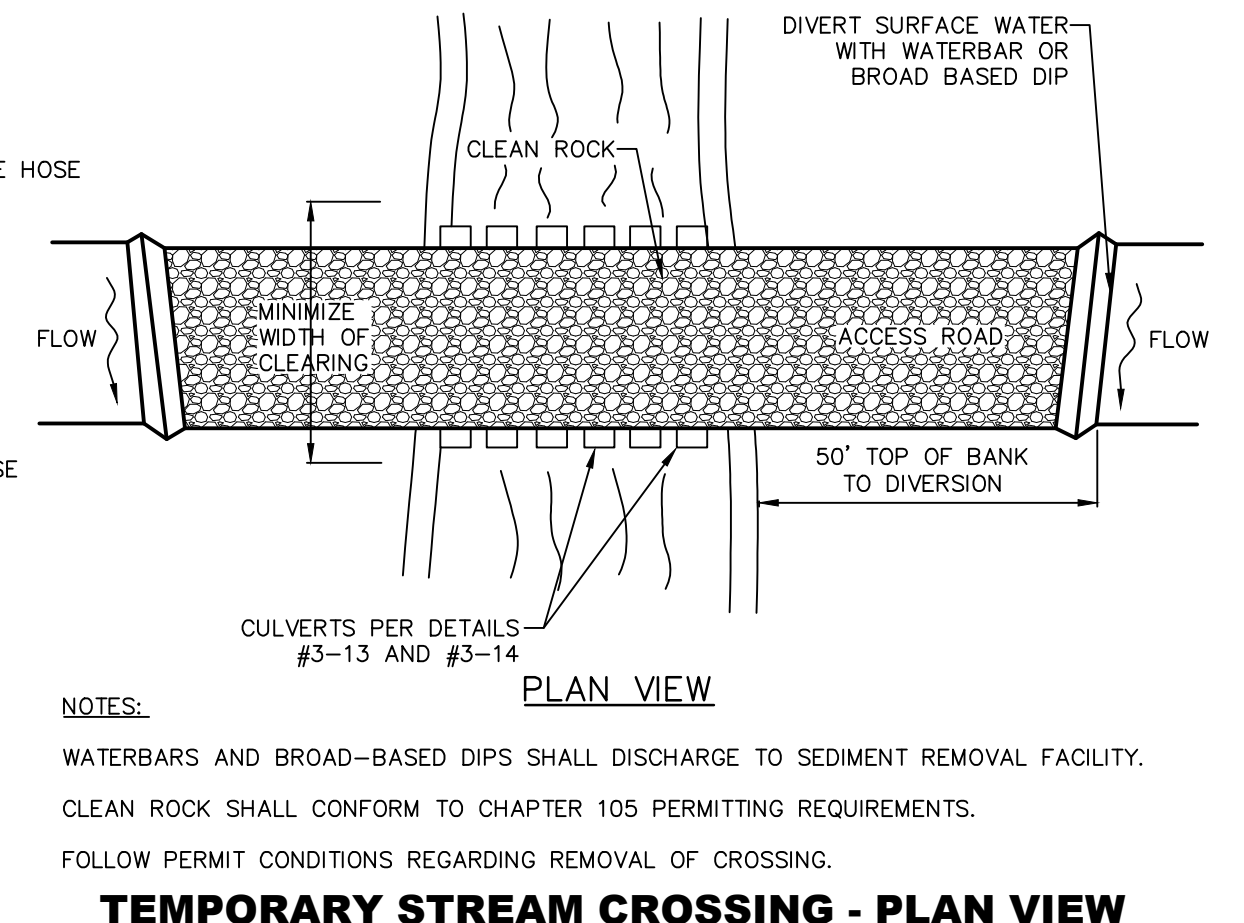


- CROSS-SECTIONS**
- NOTES:**
- MULTIPLE PIPES AND MULTIPLE SPAN BRIDGES AND CULVERTS WHICH MAY TEND TO COLLECT DEBRIS, CONTRIBUTE TO THE FORMATION OF ICE JAMS AND INCREASE HEAD LOSSES SHALL BE AVOIDED TO THE MAXIMUM EXTENT PRACTICABLE. CROSSINGS OF LESS THAN 15 FEET SHALL BE BY ONE SPAN, EXCEPT WHERE CONDITIONS MAKE IT IMPRACTICAL TO AFFECT THE CROSSING WITHOUT MULTIPLE SPANS (SECTION 105.162).
- SEE TABLE 3.5 OF THE PA DEP EROSION CONTROL MANUAL FOR DISTANCE VALUES "F" AND "FF". FOR ARCH PIPES, USE CLOSEST AVAILABLE STANDARD SIZES THAT PROVIDE THE SAME WATERWAY OPENING AREA SHOULD SIZES WITHIN THE TABLE BE UNAVAILABLE.
- PROVIDE 50' STABILIZED ACCESS TO CROSSING ON BOTH SIDES OF STREAM CHANNEL (SEE STANDARD CONSTRUCTION DETAIL #3-12).
- PIPES SHALL EXTEND BEYOND THE TOE OF THE ROADWAY.
- RUNOFF FROM THE ROADWAY SHALL BE DIVERTED OFF THE ROADWAY AND INTO A SEDIMENT REMOVAL BMP BEFORE IT REACHES THE ROCK APPROACH TO THE CROSSING.
- MAINTENANCE**
- TEMPORARY STREAM CROSSINGS SHALL BE INSPECTED ON A DAILY BASIS.
 - DAMAGED CROSSINGS SHALL BE REPAIRED WITHIN 24 HOURS OF THE INSPECTION AND BEFORE ANY SUBSEQUENT USE.
 - SEDIMENT DEPOSITS ON THE CROSSING OR ITS APPROACHES SHALL BE REMOVED WITHIN 24 HOURS OF THE INSPECTION.
- AS SOON AS THE TEMPORARY CROSSING IS NO LONGER NEEDED, IT SHALL BE REMOVED. ALL MATERIALS SHALL BE DISPOSED OF PROPERLY AND DISTURBED AREAS STABILIZED.

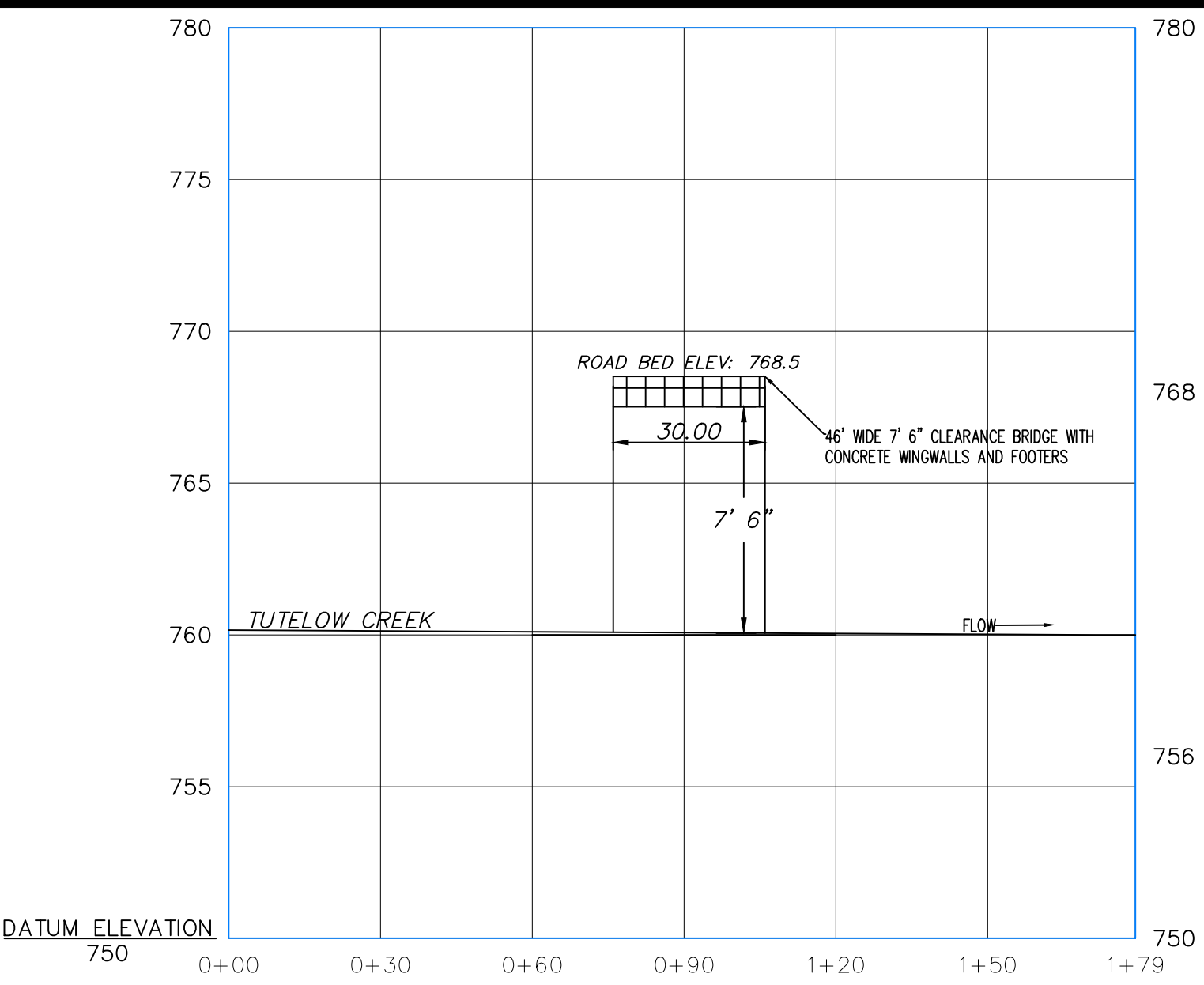
TEMPORARY STREAM CROSSING - MULTIPLE PIPES
NOT TO SCALE



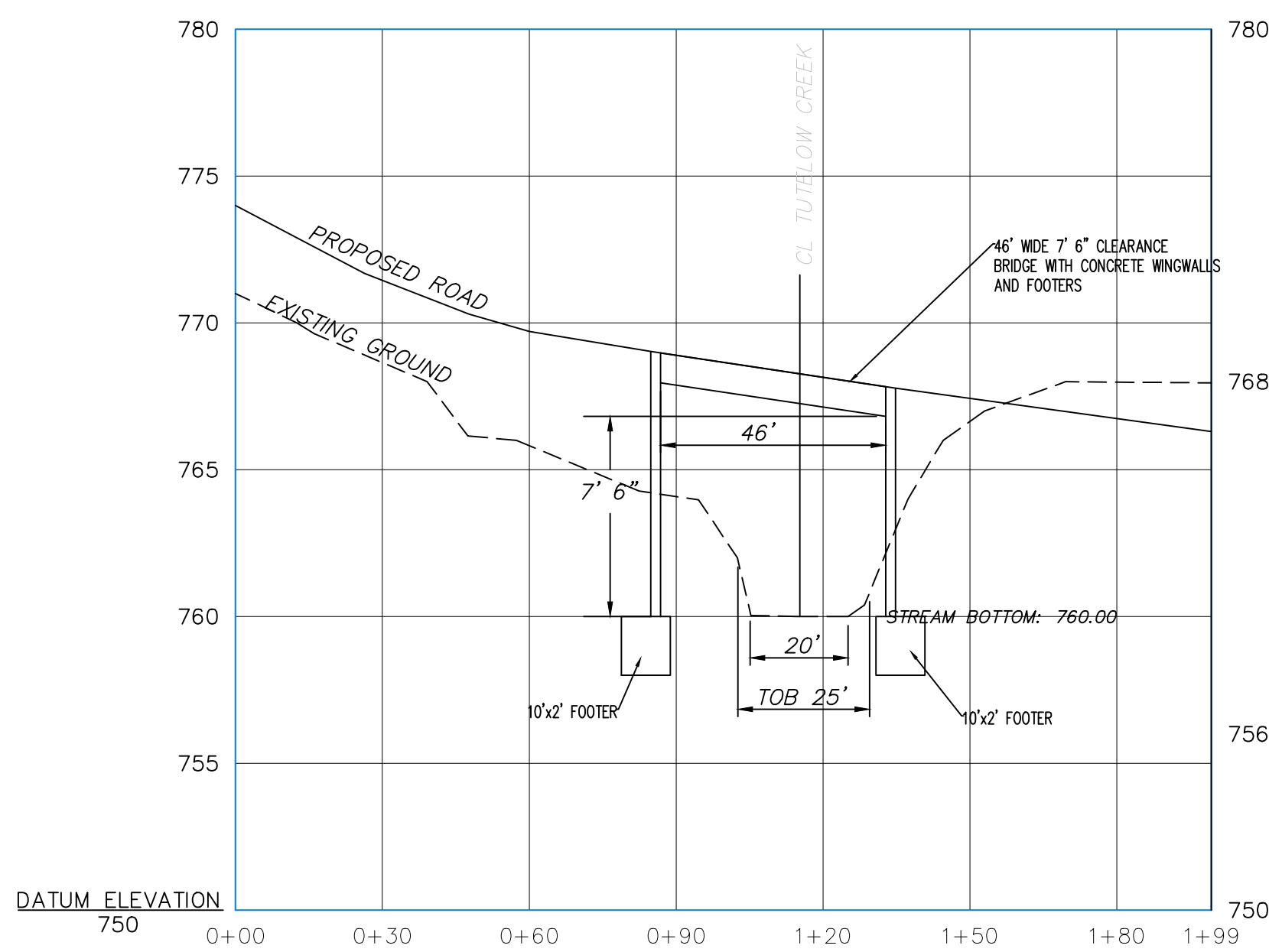
STANDARD CONSTRUCTION DETAIL PUMPED WATER FILTER BAG
NOT TO SCALE



- NOTES:**
- WATERBARS AND BROAD-BASED DIPS SHALL DISCHARGE TO SEDIMENT REMOVAL FACILITY. CLEAN ROCK SHALL CONFORM TO CHAPTER 105 PERMITTING REQUIREMENTS. FOLLOW PERMIT CONDITIONS REGARDING REMOVAL OF CROSSING.
- TEMPORARY STREAM CROSSING - PLAN VIEW**
NOT TO SCALE



A-A' STA. 0+00 TO STA. 1+79 PROFILE
HORIZ SCALE: 1"=30' VERT SCALE: 1"=5'



B-B' STA. 0+00 TO STA. 1+99 PROFILE
HORIZ SCALE: 1"=30' VERT SCALE: 1"=5'

Seal	Date
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No.	Sheet Revisions	Date
1	PRE-APPLICATION RESPONSE	05-01-2023

Scale 1" = 30'	Date 12-6-2021	Drawn By MVF	Checked By JPS	Project No. 0250-20-292	File No. MINARD-MODULE 14_RECORDER
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THE EADS GROUP
ENGINEERING ARCHITECTURE AND DESIGN SERVICES

ALTOONA, PA
CLARION, PA
LEWISTOWN, PA
PITTSBURGH, PA
SOMERSET, PA
CUNDELFORD, MD

15392 ROUTE 322
CLARION, PA 16214
Phone: 814-764-5050
Fax: 814-764-5055
www.eadsgroup.com

BISHOP BROTHERS CONSTRUCTION COMPANY, INC.

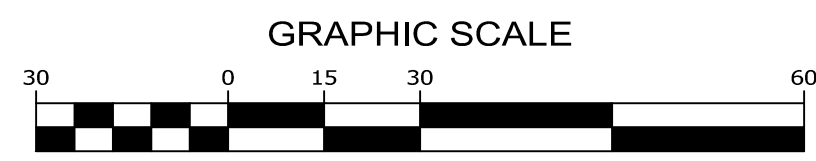
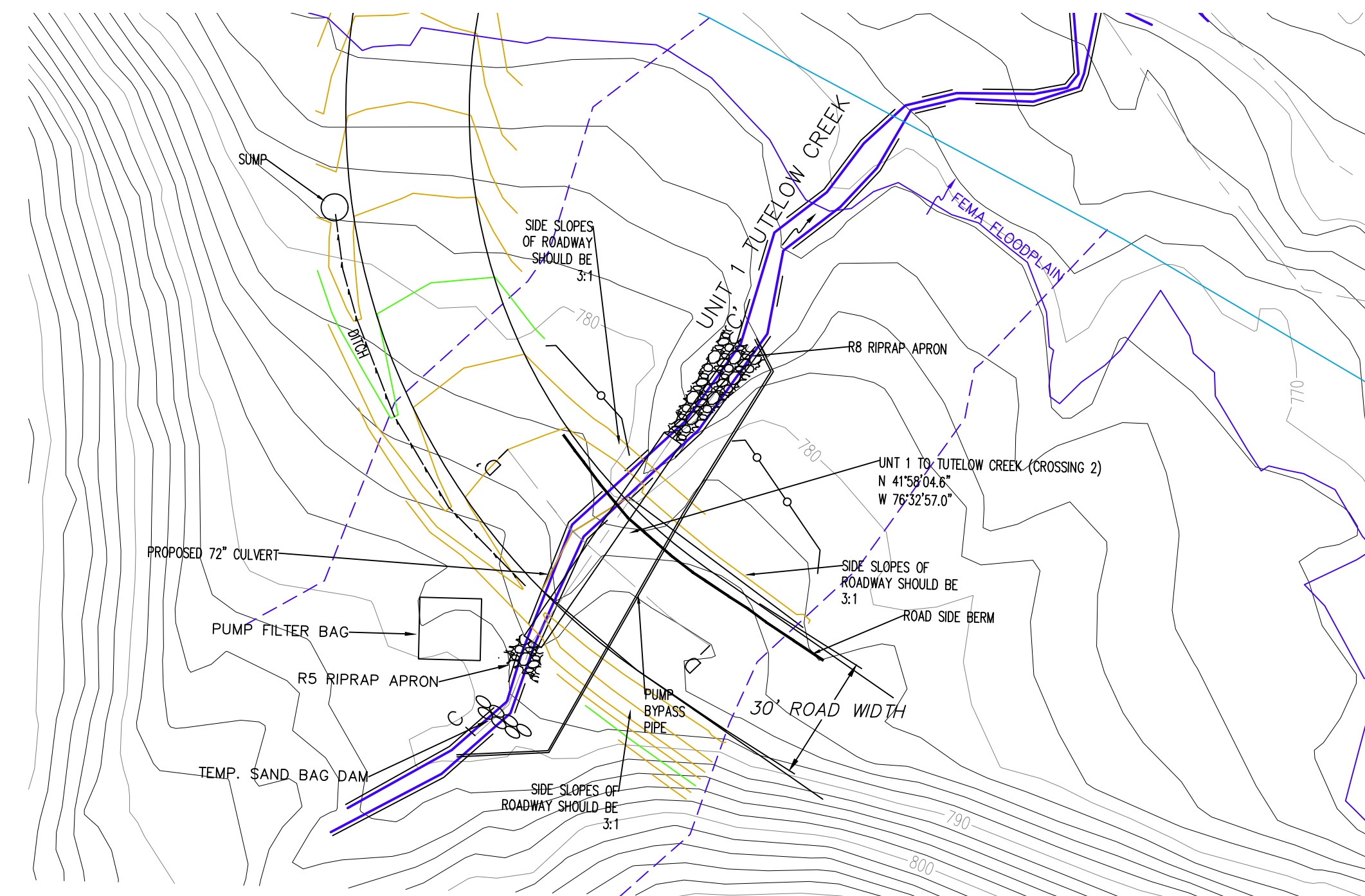
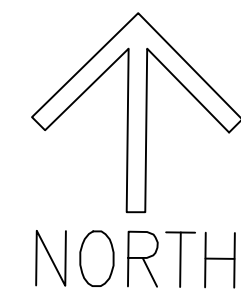
MINARD MINE

EXHIBIT 14

PLANS & DETAILS

ATHENS TOWNSHIP
BRADFORD COUNTY

Drawing No.
1 OF 2

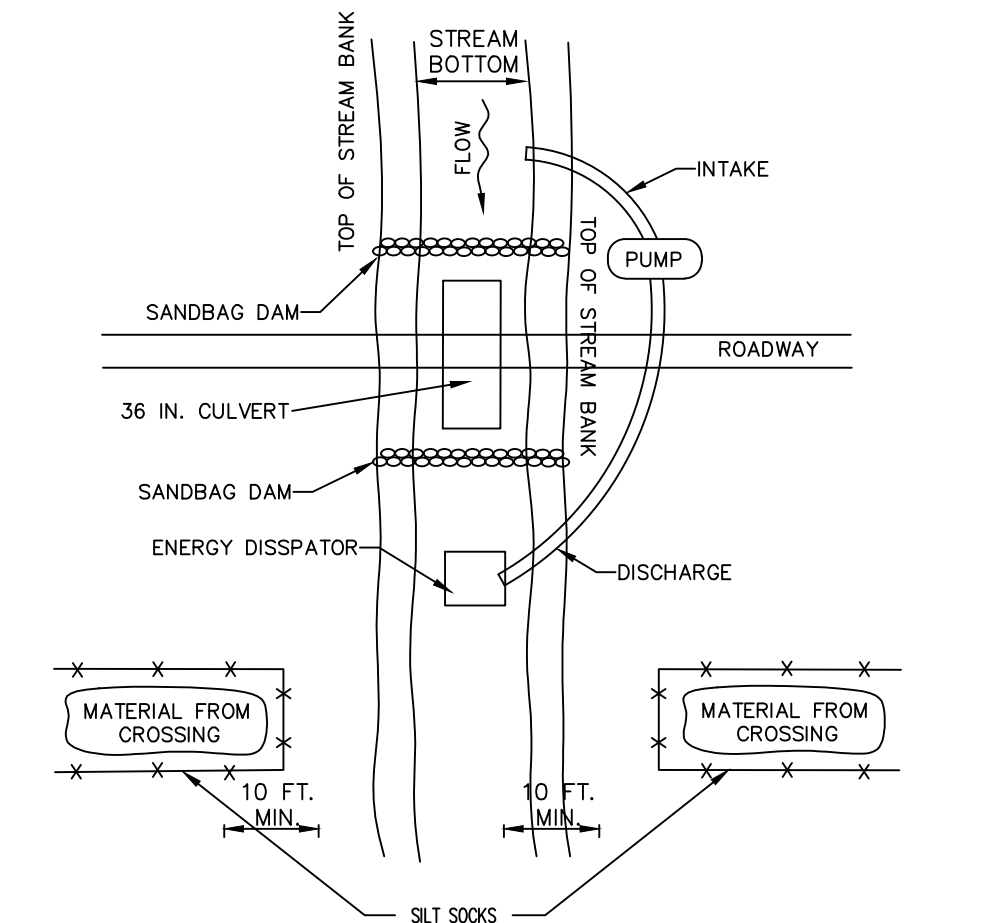


CONSTRUCTION SEQUENCE

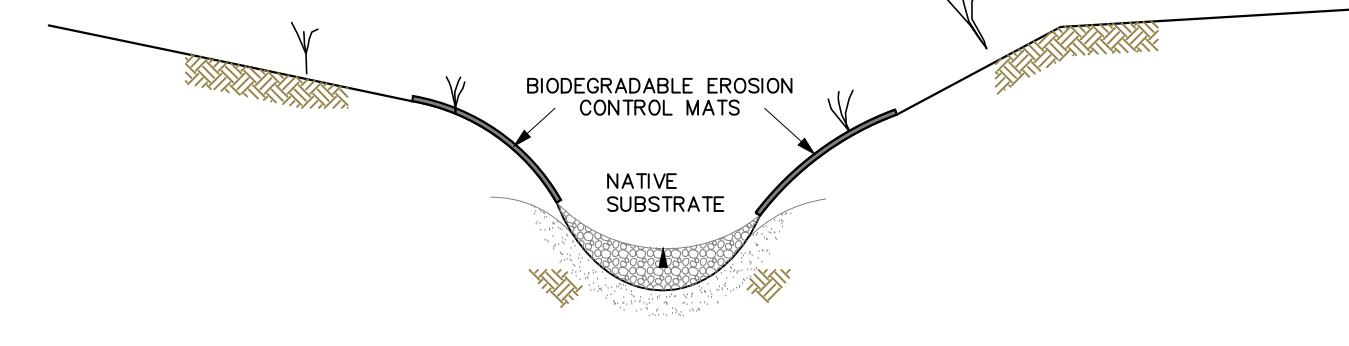
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 - Install culvert pipe, inlet protection, and outlet protection as shown on plans using upstream dike and pump around so work can be performed under dry non-flooding conditions.
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SITE RESTORATION

- Crossing shall be removed post mining.
- Restore the stream channel as per the detail below.



TYPICAL STREAM CROSSING WITH PUMP BYPASS
NOT TO SCALE

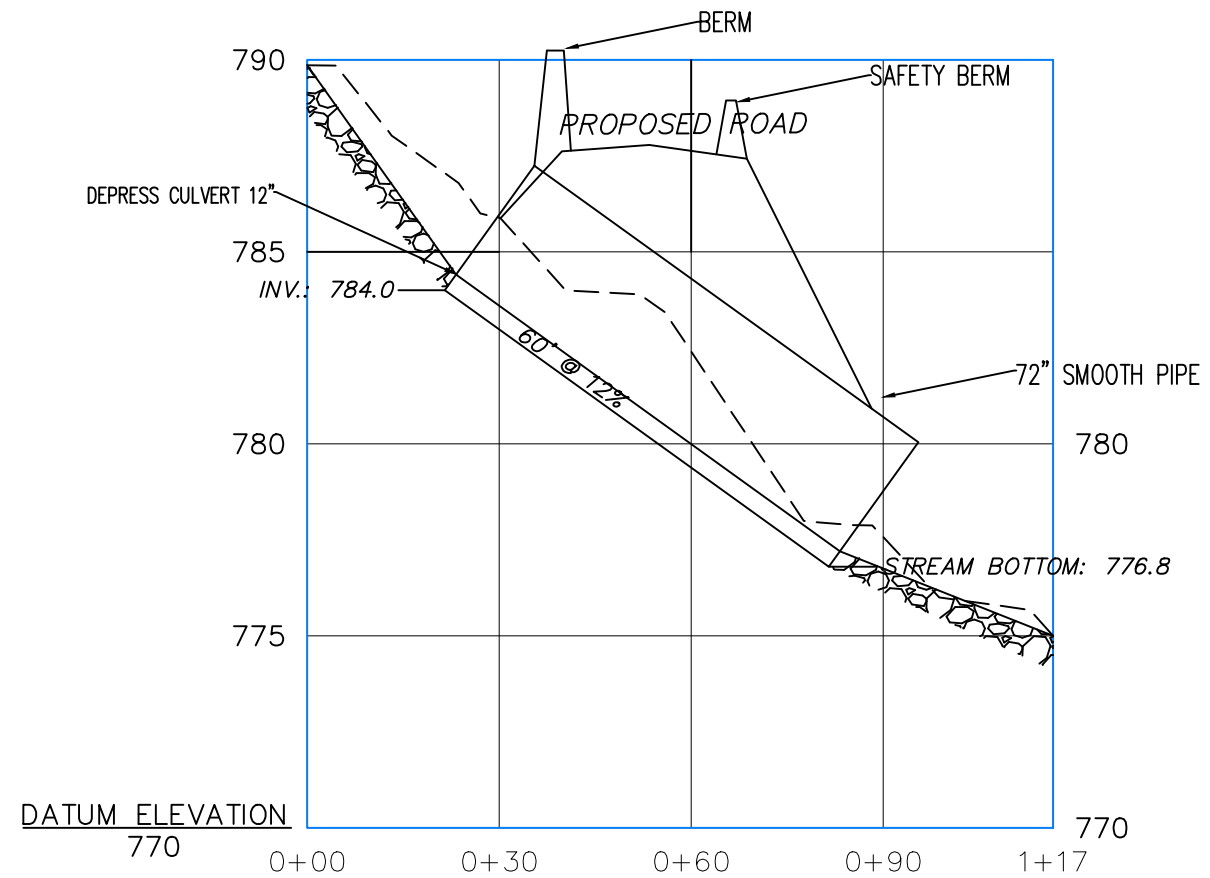


NOTES:
STREAM BANKS MUST BE RETURNED TO ORIGINAL ELEVATION AND PROFILE IN ALL DISTURBED AREAS.
BIODEGRADABLE EROSION CONTROL MATS SHALL BE PLACED ALONG STREAM BANKS IN ALL DISTURBED AREAS AFTER SEEDING HAS BEEN COMPLETED.

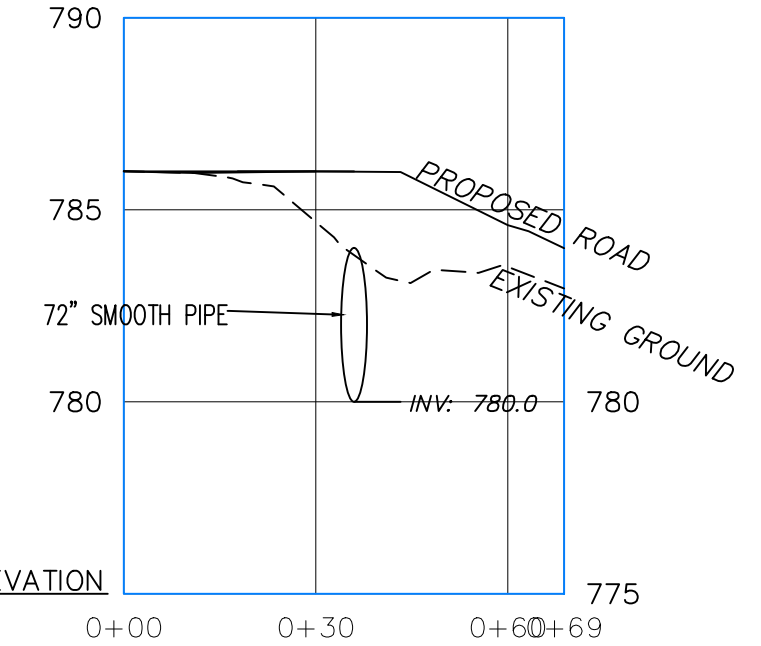
RESTORED CHANNEL CROSS-SECTION
NTS

LEGEND

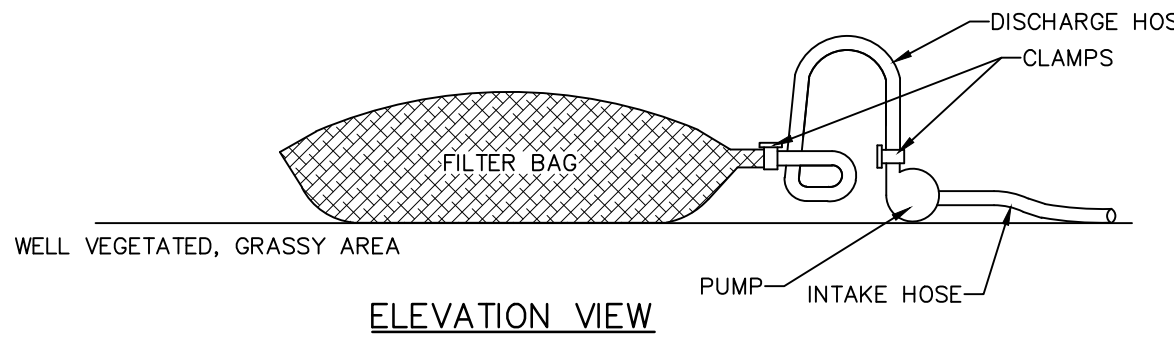
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- 12" COMPOST FILTER SOCK ROADWAY
- FEMA FLOODPLAIN
- FEMA FLOODWAY
- 50' TOP OF BANK FLOODWAY
- TOP OF BANK



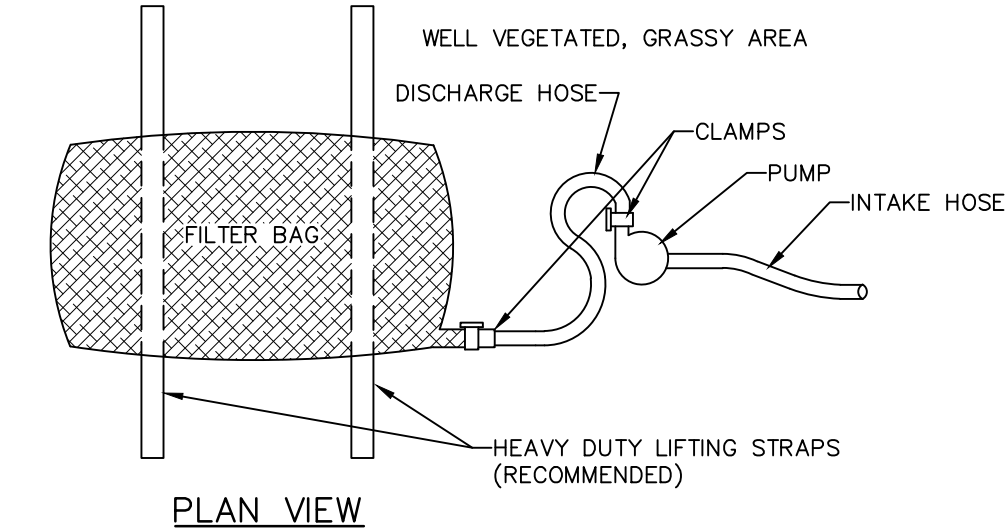
C-C' STA. 0+00 TO STA. 1+17 PROFILE
HORIZ SCALE: 1"=30' VERT SCALE: 1"=5'



D-D' STA. 0+00 TO STA. 0+69 PROFILE
HORIZ SCALE: 1"=30' VERT SCALE: 1"=5'



STANDARD CONSTRUCTION DETAIL PUMPED WATER FILTER BAG
NOT TO SCALE



PLAN VIEW

Seal	Date
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No.	Sheet Revisions	Date
1	PRE-APPLICATION RESPONSE	05-01-2023

Scale 1" = 30'	Drawn By MVF	Checked By JPS
Date 12-6-2021	Project No. 0250-20-292	File No. MINARD-MODULE 14_RECOVER

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MINARD MINE

**EXHIBIT 14
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ATHENS TOWNSHIP
BRADFORD COUNTY

Drawing No.
2 OF 2