

**GENERAL NOTES:**

1. THE PURPOSE OF THIS PROJECT IS THE REMOVAL OF THE EXISTING DAM ACROSS HUNTSVILLE CREEK, LOCATED WITHIN THE LANDS AT HILLSIDE FARMS.
2. THE OWNER / DEVELOPER OF THE PROPERTY SHALL BE RESPONSIBLE FOR ACQUIRING ANY APPLICABLE APPROVALS / PERMITS PRIOR TO PERFORMING ANY SITE DEVELOPMENT.
3. USERS (OWNERS, CONTRACTORS, ETC.) OF THIS PLAN ARE ADVISED THAT ALL PLAN SHEETS SHOWN IN THE SHEET INDEX SHALL BE REVIEWED AND UTILIZED.
4. THE PLANS CONTAINED HEREIN WERE FORMATTED TO BE PRINTED ON 24" BY 36" PAPER. PRINTING ON ANY OTHER SIZE WILL AFFECT THE SCALE.

**CONSTRUCTION NOTES:**

1. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL EXISTING CONDITIONS PRIOR TO CONSTRUCTION.
2. THE CONTRACTOR IS RESPONSIBLE TO MAINTAIN A SECURE AND SAFE SITE AT ALL TIMES.
3. THE CONTRACTOR IS RESPONSIBLE TO REVIEW, AND ADHERE TO, ALL CONDITIONS OF PERMIT AUTHORIZATIONS.
4. UNLESS OTHERWISE SPECIFIED, PROPOSED IMPROVEMENTS SHALL BE CONSTRUCTED IN ACCORDANCE WITH PENNDOT PUBLICATION 408 AND PUBLICATION 72M, AS LAST REVISED.
5. ALL EXCAVATIONS, TRENCHING, AND SHORING OPERATIONS SHALL COMPLY WITH THE REQUIREMENTS OF THE US DEPARTMENT OF LABOR, OSHA.
6. THE CONTRACTOR IS RESPONSIBLE TO FURNISH ALL EQUIPMENT, MATERIALS, AND LABOR NECESSARY FOR THE DEMOLITION OF EXISTING FEATURES, AS INDICATED HEREIN, AND FOR THE CONSTRUCTION OF PROPOSED IMPROVEMENTS.
7. THE CONTRACTOR MUST TAKE ALL PRECAUTIONS TO PROTECT EXISTING UTILITIES TO REMAIN WITHIN AREAS OF DEMOLITION.
8. CONTRACTOR SHALL MAINTAIN ALL EXISTING UTILITIES DURING CONSTRUCTION. ANY SERVICE WHICH MUST BE TEMPORARILY STOPPED SHALL BE COORDINATED AT LEAST SEVEN (7) WORKING DAYS IN ADVANCE WITH THE OWNER AND UTILITY COMPANY.

**EARTHWORK WITHIN STREAM CHANNEL NOTES:**

1. WHENEVER POSSIBLE, WORK SHALL BE SCHEDULED FOR LOW FLOW SEASONS.
2. BASE FLOWS ARE TO BE DIVERTED PAST THE WORK AREA. ALL SUCH BYPASSES MUST BE COMPLETED AND STABILIZED PRIOR TO DIVERTING FLOWS.
3. ALL DISTURBED AREAS WITHIN THE CHANNEL MUST BE STABILIZED PRIOR TO RETURNING BASE FLOW TO THE PORTION OF THE CHANNEL AFFECTED BY THE EARTHWORK.
4. ANY IN-CHANNEL EXCAVATIONS SHOULD BE DONE FROM TOP OF BANK WHEREVER POSSIBLE UNLESS THIS WOULD REQUIRE REMOVAL OF MATURE TREES TO ACCESS THE CHANNEL. WHERE IT IS NOT POSSIBLE TO WORK FROM TOP OF BANK, A TEMPORARY CROSSING OR CAUSEWAY MAY BE USED TO PROVIDE A WORKING PAD FOR ANY EQUIPMENT WITHIN THE CHANNEL.
5. ANY WATER PUMPED FROM EXCAVATED AREAS MUST BE FILTERED PRIOR TO DISCHARGING INTO SURFACE WATERS.

# PERMIT WAIVER PLAN

FOR THE

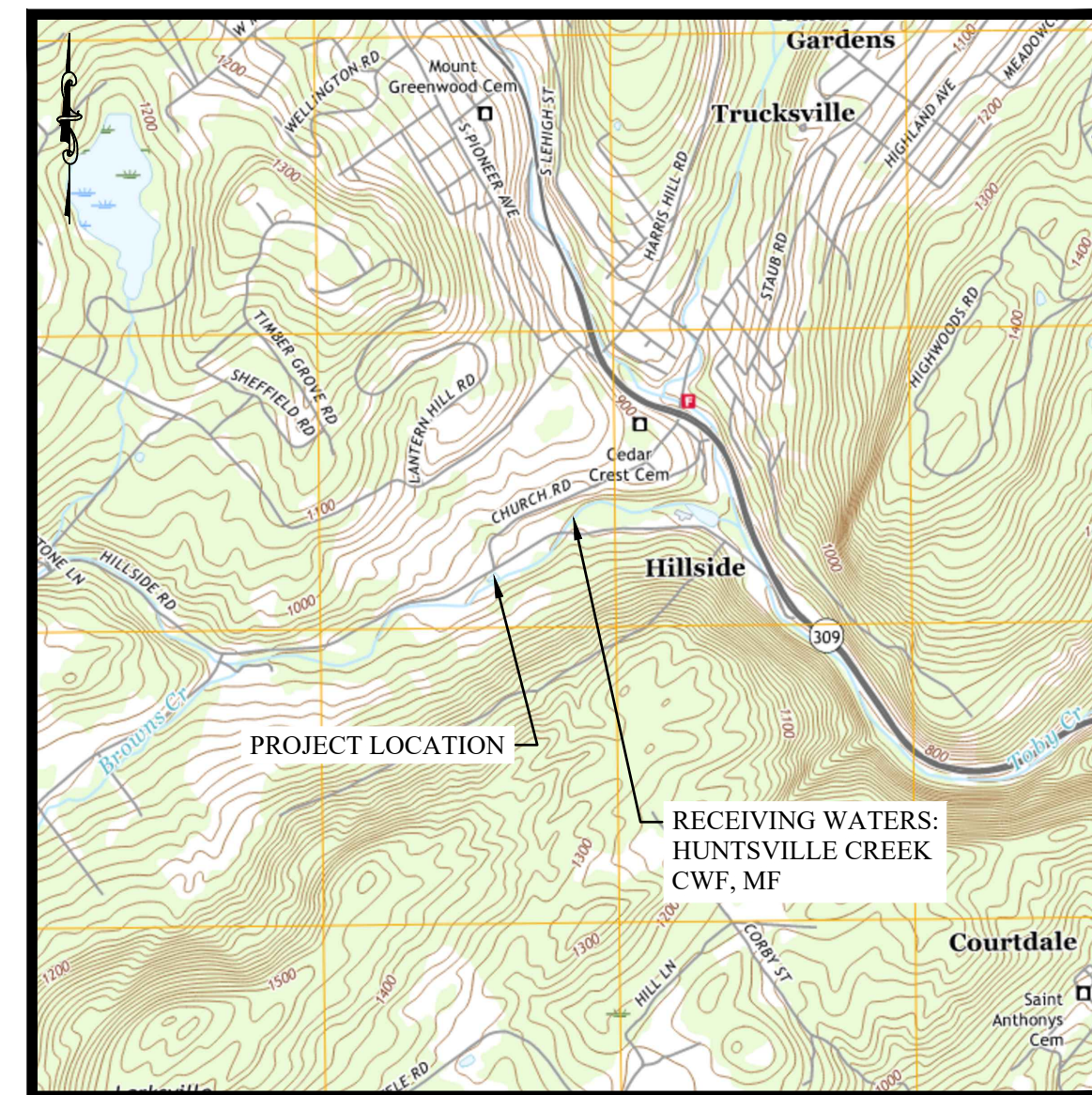
# DAM REMOVAL

AT

# THE LANDS AT HILLSIDE FARMS

KINGSTON AND JACKSON TOWNSHIPS, LUZERNE COUNTY

MARCH 14, 2023  
REVISED JANUARY 5, 2024



PROJECT LOCATION MAP  
SCALE: 1" = 2000'  
SOURCE: USGS 7.5-MINUTE MAP, KINGSTON QUADRANGLE

	EXISTING	PROPOSED
BUILDING		
SIDEWALK		
WATER		
SANITARY SEWER		
STORM SEWER		
OVERHEAD ELECTRIC		
UTILITY POLE		
LUMINAIRE, POLE, AND FOUNDATION		
SIGN		
TREELINE		
PLANTING		
LANDSCAPING		
SOIL BOUNDARY		
CONTOUR		
SPOT ELEVATION		
EDGE OF PAVEMENT		
TYPICAL		
FINISHED FLOOR		
TO BE REMOVED		

**OWNER / APPLICANT:**

THE LANDS AT HILLSIDE FARMS  
65 HILLSIDE ROAD  
SHAVERTOWN, PA 18708

**FUNDING PARTNER:**

LUZERNE CONSERVATION DISTRICT  
325 SMITHS POND ROAD  
SHAVERTOWN, PA 18708

**ENGINEER:**



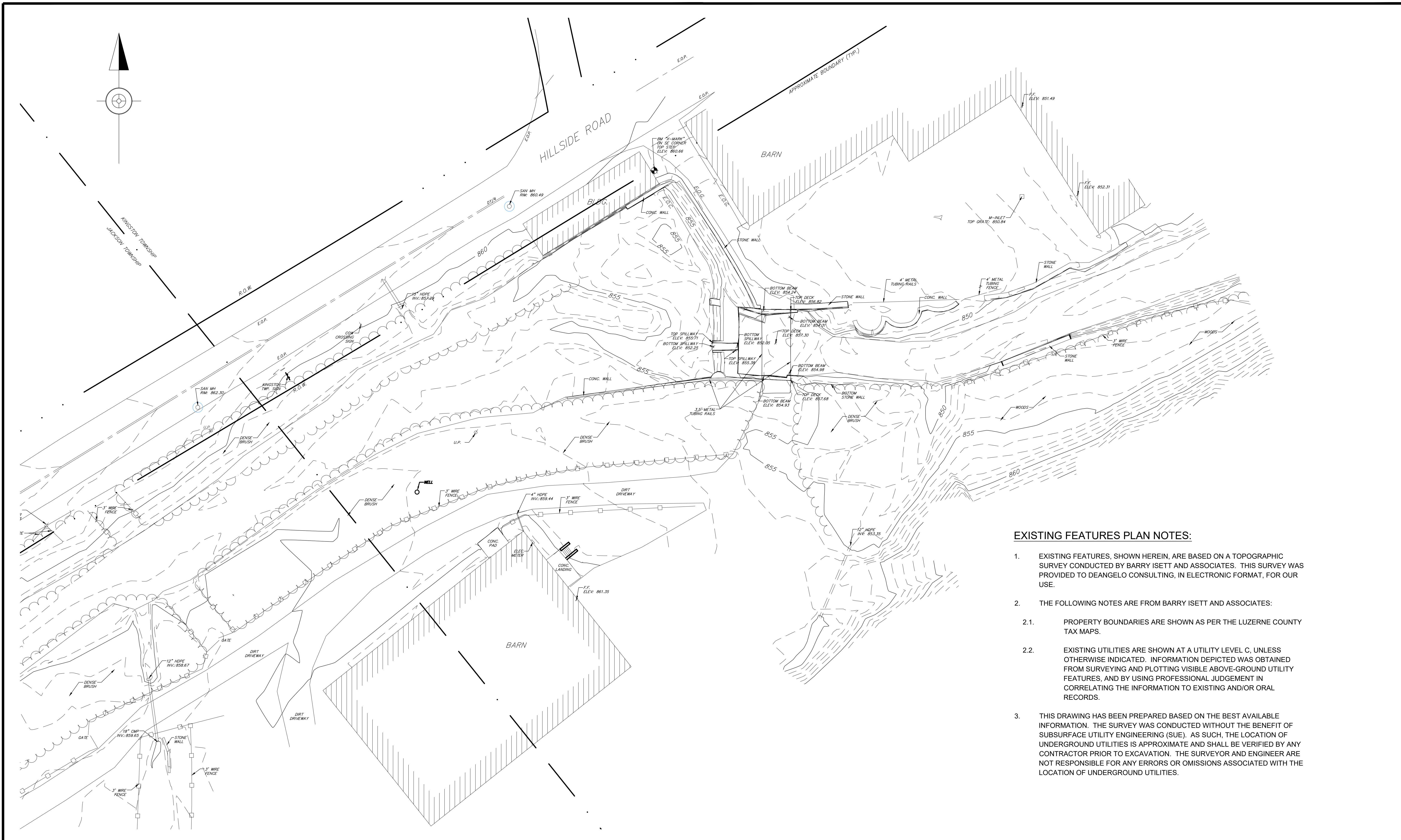
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TRUCKSVILLE, PA 18708  
PHONE: 570-371-9457  
DEANGELO-CONSULTING.COM

SHEET INDEX			
SHEET	SHEET TITLE	SHEET NO.	LAST REV.
TS-1	TITLE SHEET	1	1/5/2024
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SP-1	SITE LAYOUT PLAN	3	1/5/2024
PR-1	PROFILE	4	1/5/2024
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CD-2	CONSTRUCTION DETAILS	6	1/5/2024
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XS-1	CROSS SECTION LOCATION	10	1/5/2024
XS-2	CROSS SECTION	11	1/5/2024
XS-3	CROSS SECTION	12	1/5/2024



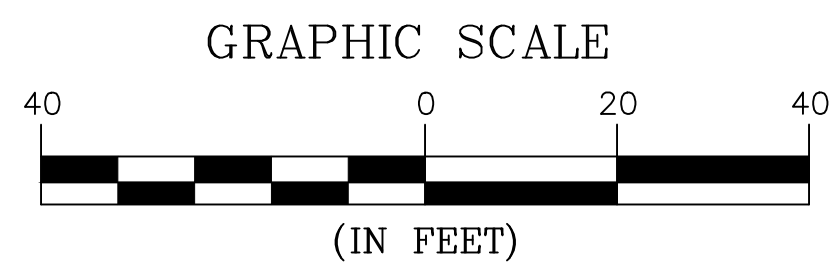
	<b>TITLE SHEET</b>		
	PERMIT WAIVER PLAN FOR THE DAM REMOVAL AT THE LANDS AT HILLSIDE FARMS 65 HILLSIDE ROAD SHAVERTOWN, PA 18708		
	DATE:	03/07/2023	
	SCALE:	NTS	
PROJ. #:	2022012	SHEET:	1 OF 12
<b>TS-1</b>			


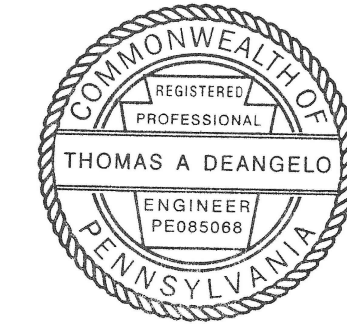




**EXISTING FEATURES PLAN NOTES:**

1. EXISTING FEATURES, SHOWN HEREIN, ARE BASED ON A TOPOGRAPHIC SURVEY CONDUCTED BY BARRY ISETT AND ASSOCIATES. THIS SURVEY WAS PROVIDED TO DEANGELO CONSULTING, IN ELECTRONIC FORMAT, FOR OUR USE.
2. THE FOLLOWING NOTES ARE FROM BARRY ISETT AND ASSOCIATES:
  - 2.1. PROPERTY BOUNDARIES ARE SHOWN AS PER THE LUZERNE COUNTY TAX MAPS.
  - 2.2. EXISTING UTILITIES ARE SHOWN AT A UTILITY LEVEL C, UNLESS OTHERWISE INDICATED. INFORMATION DEPICTED WAS OBTAINED FROM SURVEYING AND PLOTTING VISIBLE ABOVE-GROUND UTILITY FEATURES, AND BY USING PROFESSIONAL JUDGEMENT IN CORRELATING THE INFORMATION TO EXISTING AND/OR ORAL RECORDS.
3. THIS DRAWING HAS BEEN PREPARED BASED ON THE BEST AVAILABLE INFORMATION. THE SURVEY WAS CONDUCTED WITHOUT THE BENEFIT OF SUBSURFACE UTILITY ENGINEERING (SUE). AS SUCH, THE LOCATION OF UNDERGROUND UTILITIES IS APPROXIMATE AND SHALL BE VERIFIED BY ANY CONTRACTOR PRIOR TO EXCAVATION. THE SURVEYOR AND ENGINEER ARE NOT RESPONSIBLE FOR ANY ERRORS OR OMISSIONS ASSOCIATED WITH THE LOCATION OF UNDERGROUND UTILITIES.

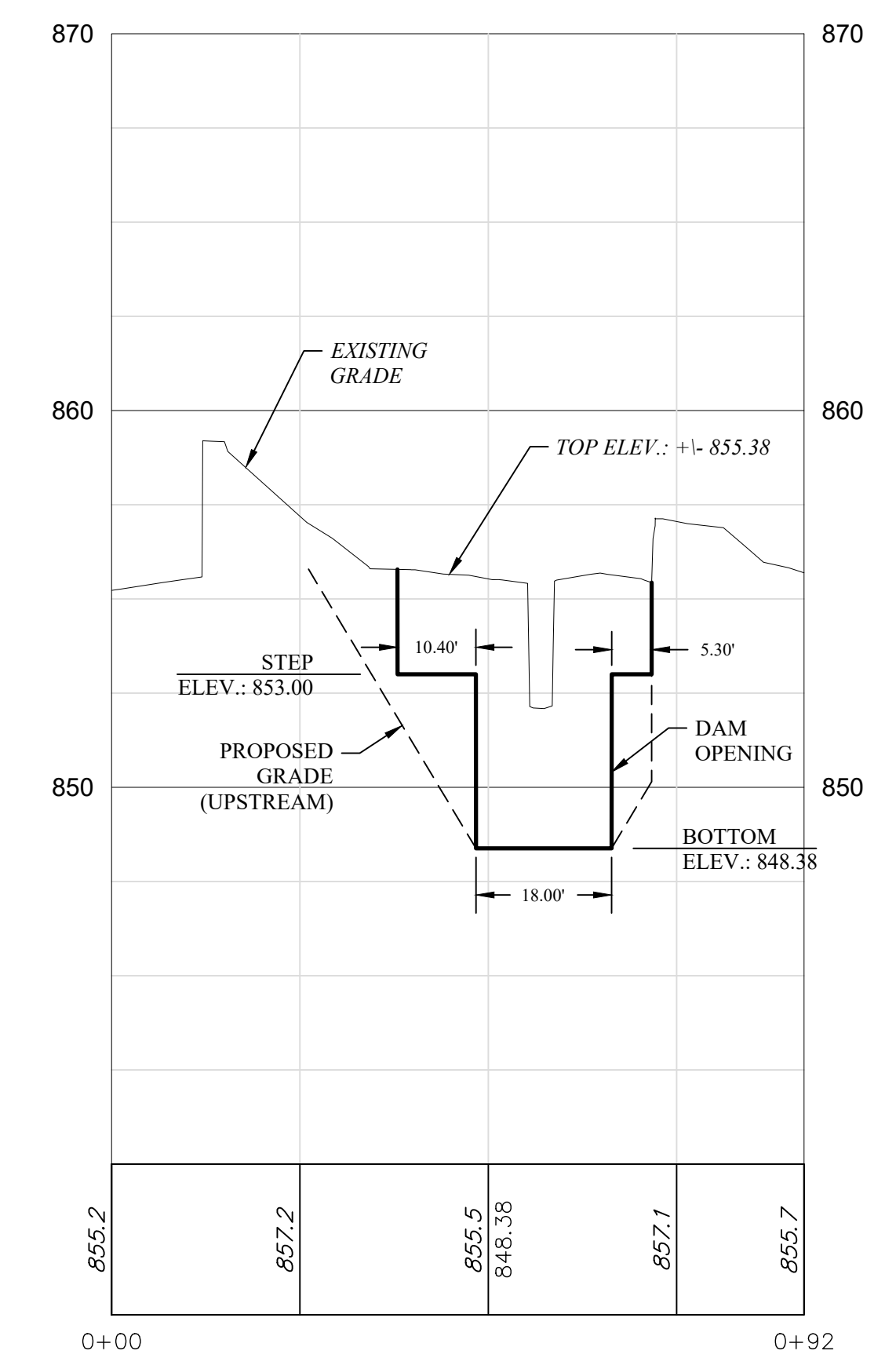
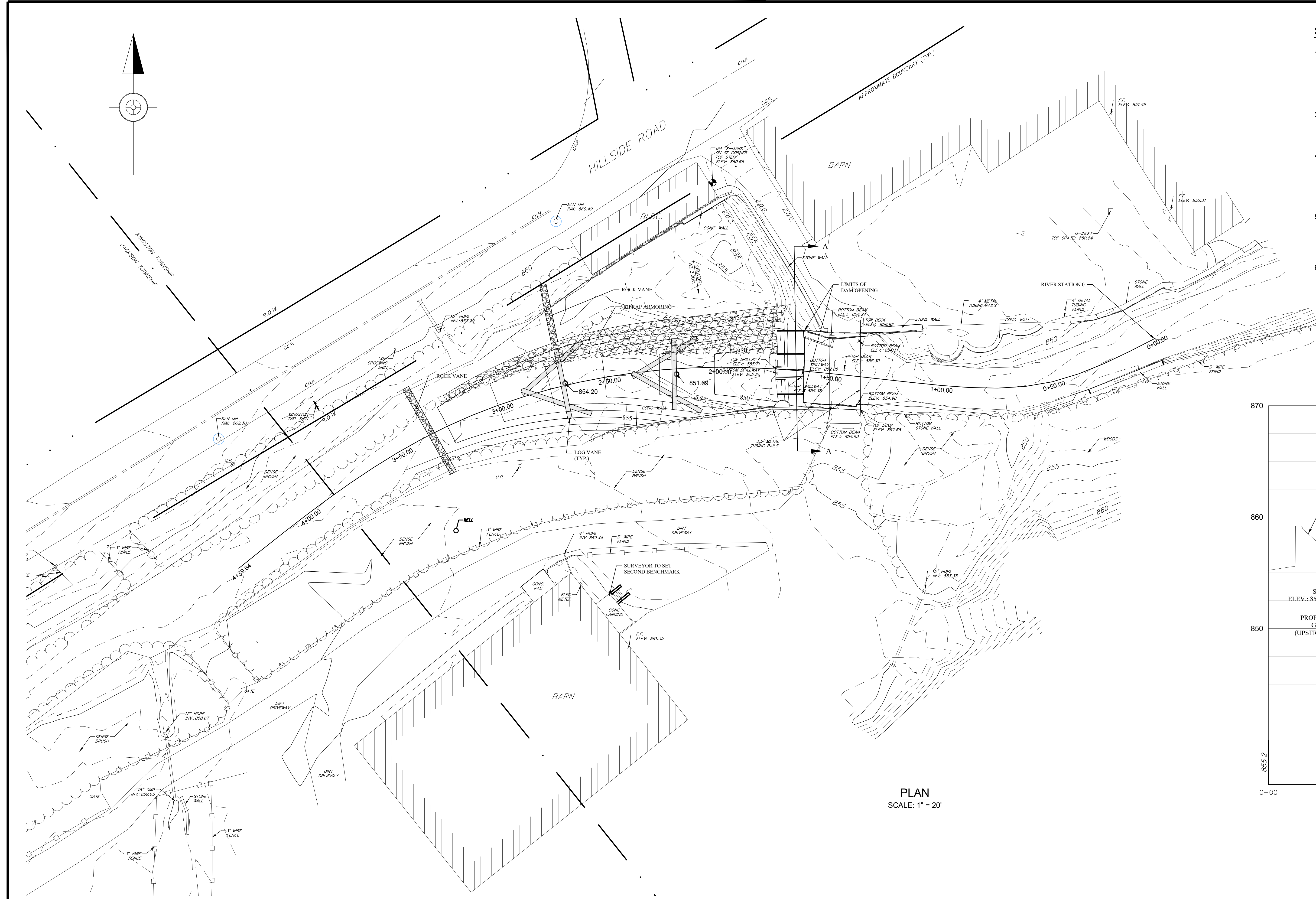


 234 MAPLE STREET TRUCKSVILLE, PA 18708 PHONE: 570-371-9457 DEANGELO-CONSULTING.COM <small>COPYRIGHT 2023</small>	REVISIONS			EXISTING FEATURES PLAN	
	DATE	DESCRIPTION		PERMIT WAIVER PLAN	
	12/12/2023	DEP AND LCD COMMENTS		FOR THE	
	1/5/2024	DEP AND LCD COMMENTS		DAM REMOVAL	
				AT	
				THE LANDS AT HILLSIDE FARMS	
				65 HILLSIDE ROAD	
				SHAVERTOWN, PA 18708	
			DATE: 03/14/2023		
			SCALE: 1" = 20'		
			PROJ. #: 2022012		
			SHEET: 2 OF 12	<b>EX-1</b>	



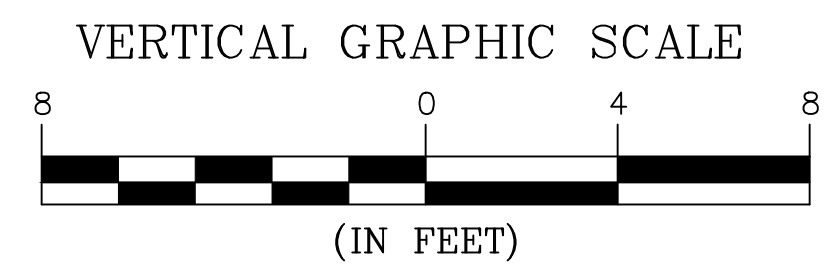
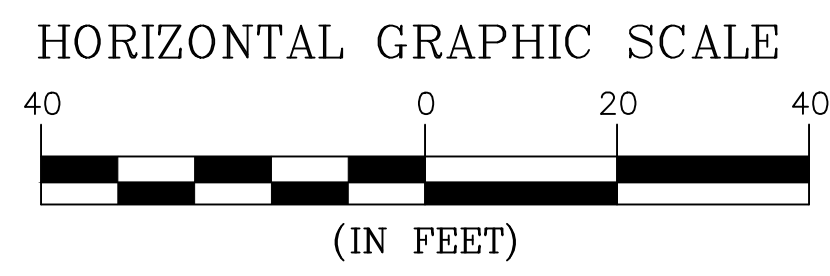
**SITE LAYOUT PLAN NOTES:**

1. PROPOSED GRADE, AS INDICATED HEREIN, IS BASED ON PROPOSED GRADING WITHOUT LOG VANES. REFER TO PROFILE SHEET FOR MORE INFORMATION.
3. SPOT ELEVATIONS LOCATED ON LOG VANES INDICATE ELEVATION OF THE TOP OF LOG.
4. LOG VANE LOCATIONS AND ELEVATIONS ARE APPROXIMATE. FINAL LOCATIONS AND ELEVATIONS ARE TO BE SET IN THE FIELD BY LUZERNE CONSERVATION DISTRICT PERSONNEL.
5. ALL MATERIAL EXCAVATED FOR CHANNEL OPENING TO BE USED FOR FORMER POND FILL. EXCESS SOIL WILL BE DISPOSED OF ONSITE.
6. REFER TO THE TYPICAL CHANNEL SECTION / PLANTING DETAIL ON SHEET CD-1 FOR MORE INFORMATION.



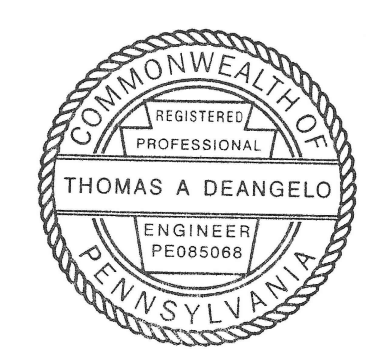
PLAN  
SCALE: 1" = 20'

SECTION A-A  
HORIZONTAL SCALE: 1" = 20'  
VERTICAL SCALE: 1" = 4'



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REVISIONS	
DATE	DESCRIPTION
12/12/2023	DEP AND LCD COMMENTS
1/5/2024	DEP AND LCD COMMENTS



**SITE LAYOUT PLAN**  
**PERMIT WAIVER PLAN**  
FOR THE  
**DAM REMOVAL**  
AT  
THE LANDS AT HILLSIDE FARMS  
65 HILLSIDE ROAD  
SHAVERTOWN, PA 18708

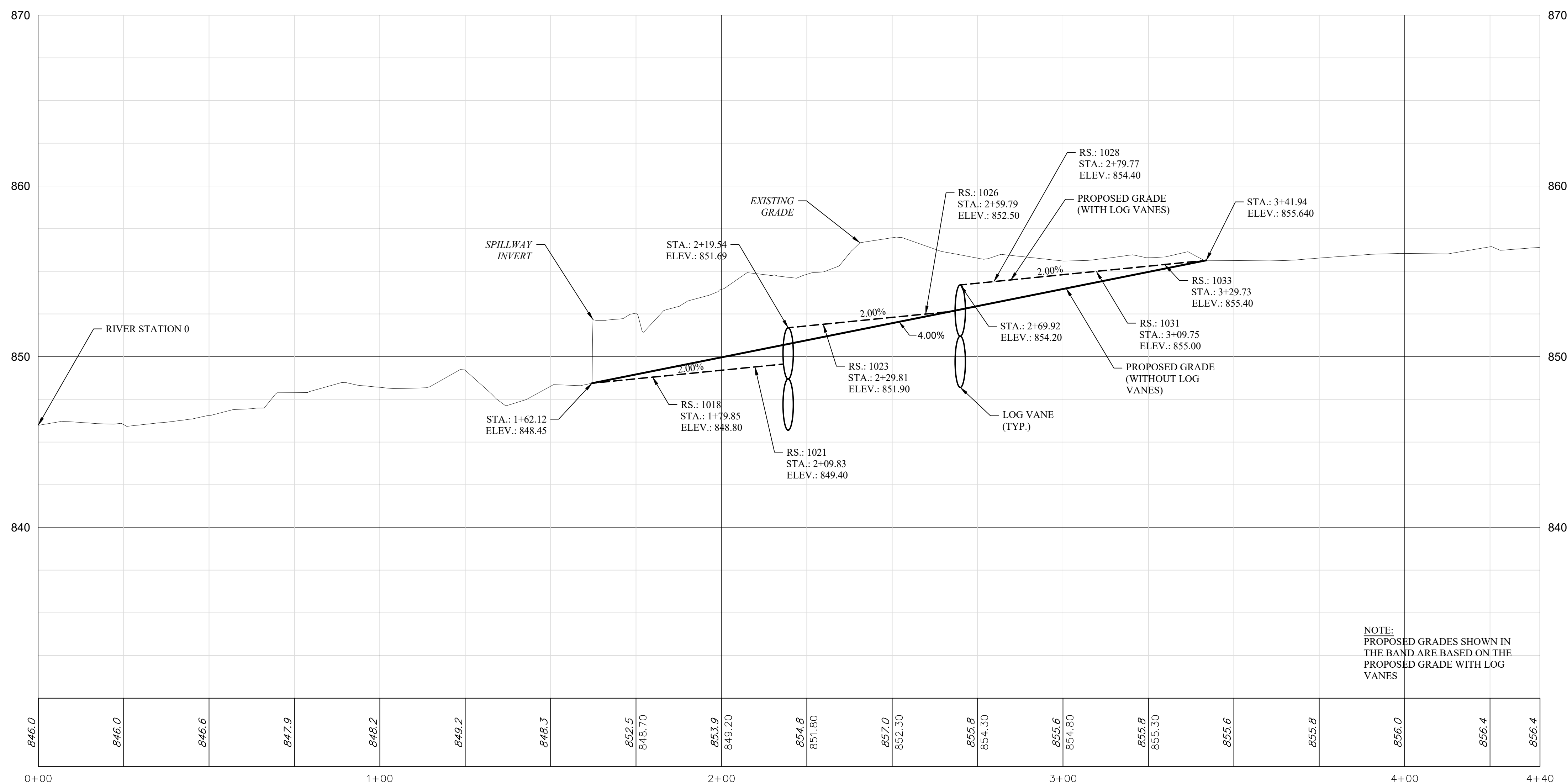
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SCALE:	AS NOTED
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**SP-1**

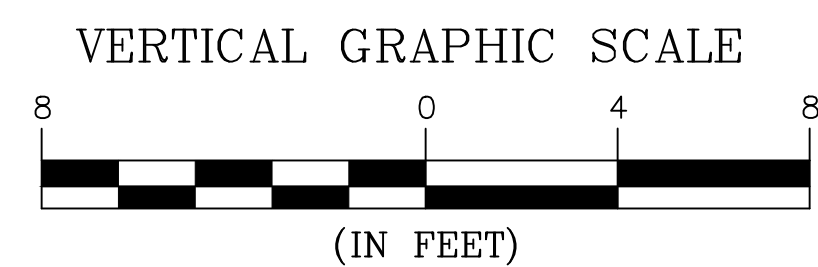
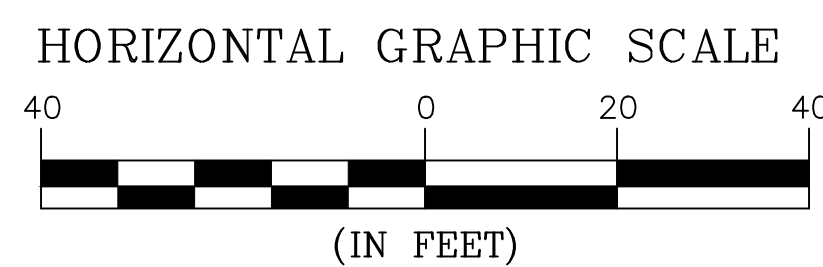


**PROFILE NOTES:**

- EXISTING GRADE IS SHOWN BENEATH STREAM CENTERLINE. REFER TO THE SITE LAYOUT PLAN FOR MORE INFORMATION. TOP OF DAM NOT SHOWN FOR CLARITY.
- PROPOSED GRADE ELEVATIONS SHOWN AT THE BOTTOM ARE BASED ON THE PROPOSED GRADE (WITHOUT LOG VANE) PROFILE.
- LOG VANE LOCATIONS AND ELEVATIONS ARE APPROXIMATE. FINAL LOCATIONS AND ELEVATIONS ARE TO BE SET IN THE FIELD BY LUZERNE CONSERVATION DISTRICT PERSONNEL.

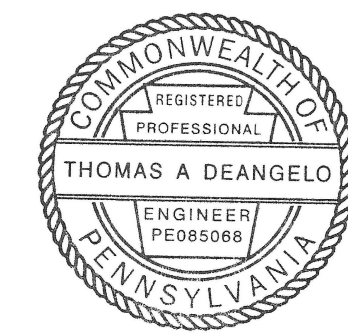


**PROFILE**  
 HORIZONTAL SCALE: 1" = 20'  
 VERTICAL SCALE: 1" = 4'



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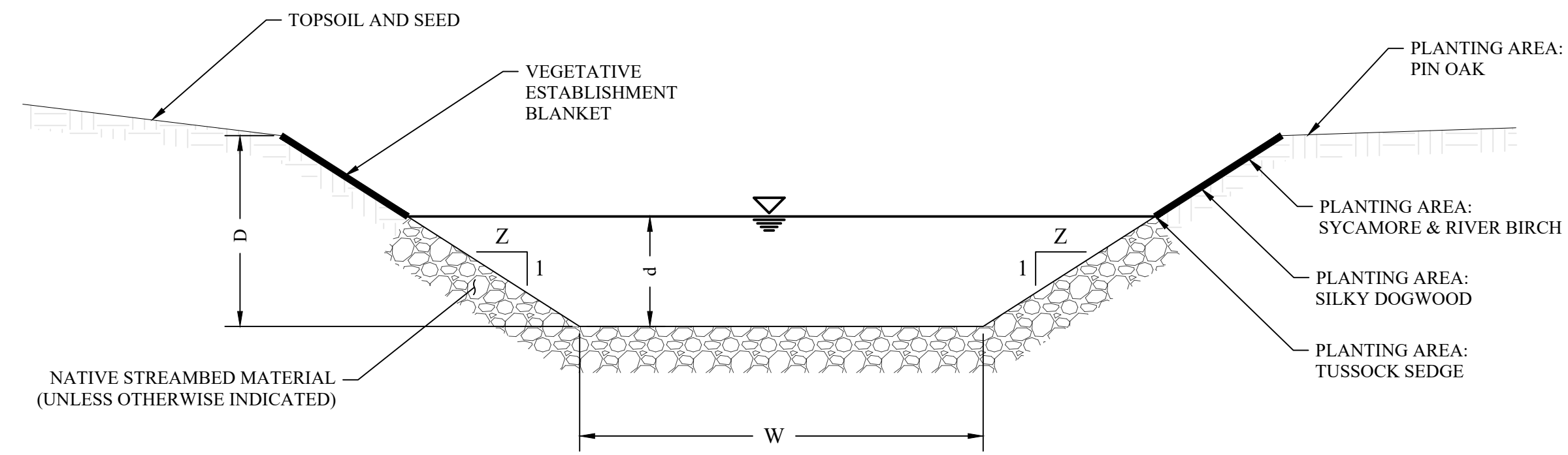


**PROFILE**  
 PERMIT WAIVER PLAN  
 FOR THE  
**DAM REMOVAL**  
 AT  
 THE LANDS AT HILLSIDE FARMS  
 65 HILLSIDE ROAD  
 SHAVERTOWN, PA 18708

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**PR-1**



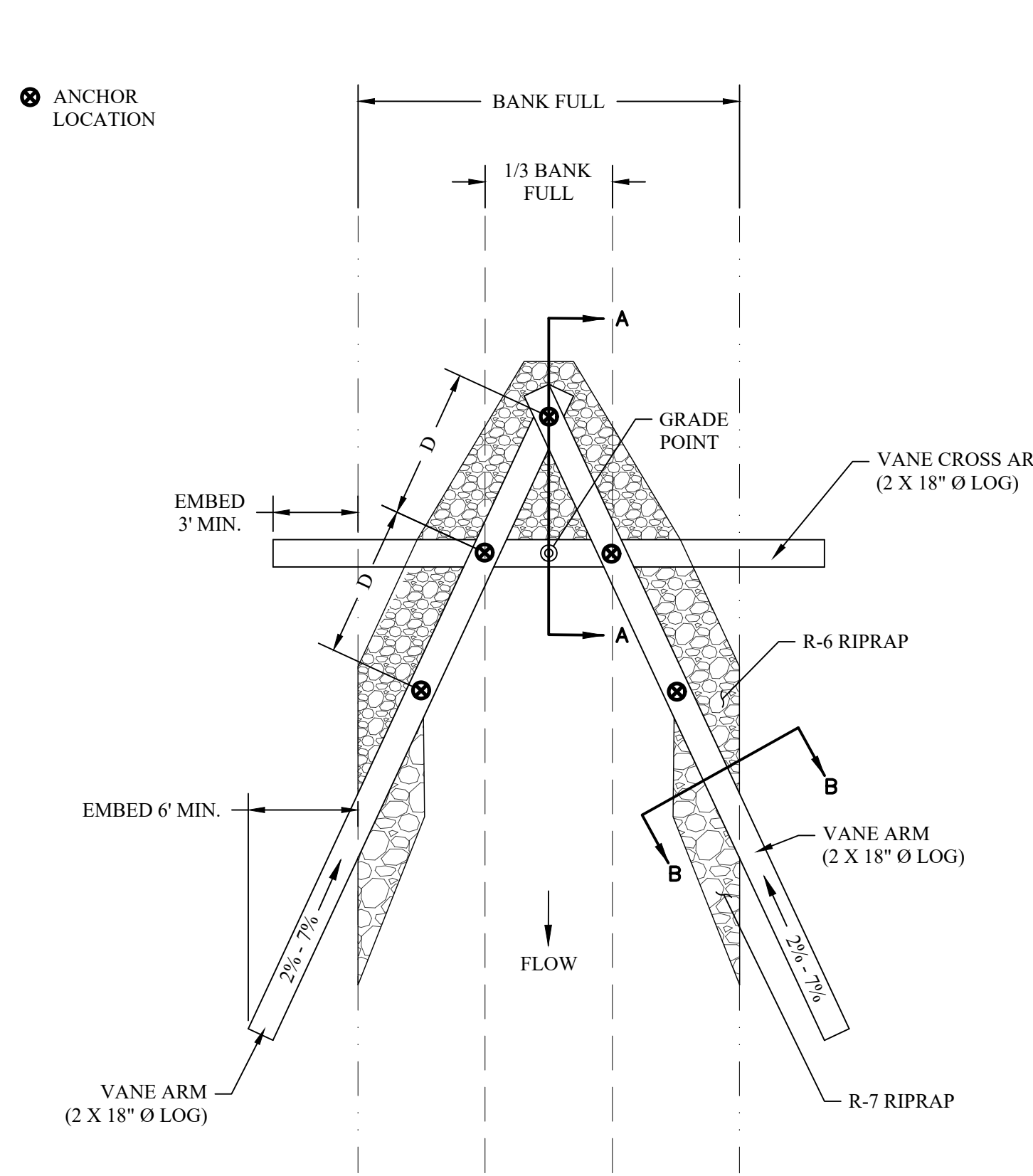


TYPICAL CHANNEL SECTION / PLANTING PLAN  
NTS

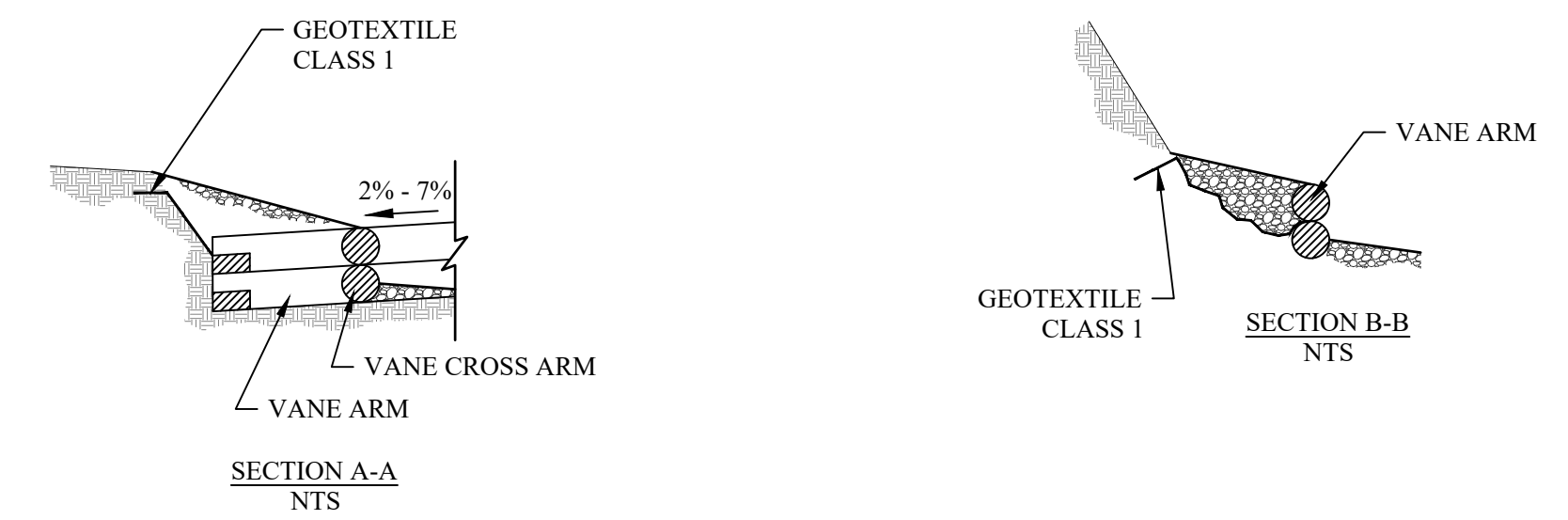
GENERAL NOTES

- VEGETATIVE ESTABLISHMENT BLANKET SHALL BE FUTURA F4 NETLESS, OR APPROVED EQUAL, AND SHALL BE INSTALLED AS PER THE MANUFACTURER'S RECOMMENDATIONS.

RIVER STATION	CHANNEL DEPTH (D)	FLOW DEPTH (d)	SIDE SLOPE (Z)	BOTTOM WIDTH (W)
1031	VARIABLES	1.00 FT	3	18 FT
1028	VARIABLES	1.00 FT	3	18 FT
1026	VARIABLES	1.00 FT	3	18 FT
1023	VARIABLES	1.00 FT	3	18 FT
1021	VARIABLES	1.00 FT	3	18 FT
1018	VARIABLES	1.00 FT	3	18 FT



TYPICAL LOG CROSS VANE  
NTS



NOTES

- VANE ARMS SHALL BE 2 X 18" Ø NOMINAL LOGS, STACKED VERTICALLY. LOGS SHALL BE PINNED AT 5' O.C. AND AT CONNECTION POINTS. VANE ARMS SHALL BE CONSTRUCTED 20° TO 30° TO BANK.
- VANE CROSS ARM SHALL BE 2 X 18" Ø NOMINAL LOGS, STACKED VERTICALLY. LOGS SHALL BE PINNED AT 5' O.C. AND AT CONNECTION POINTS. VANE CROSS ARM SHALL BE SET LEVEL.
- JOINTS SHALL BE HALF LAP AND PINNED.
- REFER TO RIPRAP PLACEMENT DETAIL FOR MORE INFORMATION.
- FOR TERMINATION OF GEOTEXTILE, PROVIDE AN 18" LENGTH AT LEAST 12" BELOW GRADE. WHEN ADJACENT TO THE LOGS, ATTACH GEOTEXTILE TO LOG.
- ANCHORS SHALL BE DUCKBILL MODEL 88, OR APPROVED EQUAL. INSTALL IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS. INSTALLATION DEPTH SHALL BE 66" INCHES BELOW FINISHED GRADE, OR AS PER MANUFACTURER'S RECOMMENDATIONS, WHICHEVER IS GREATER.

PLANTING SCHEDULE				
TREE AND SHRUB INSTALLATION PLANTED THROUGH VEGETATIVE ESTABLISHMENT BLANKET:				
SYMBOL	GENUS SPECIES	COMMON NAME	NUMBER	NOTES
N/A	PLATANUS OCCIDENTALIS	SYCAMORE	14	2' VERTICAL ABOVE OHWM @ 15' O.C.
N/A	QUERCUS PALUSTRIS	PIN OAK	25	4' VERTICAL ABOVE OHWM @ 15' O.C.
N/A	BETULA NIGRA	RIVER BIRCH	12	2' VERTICAL ABOVE OHWM @ 15' O.C.
ROOTED HERBACEOUS AND SHRUB PLUGS PLANTED THROUGH VEGETATIVE ESTABLISHMENT:				
N/A	CORNUS AMOMUM	SILKY DOGWOOD	100	1' VERTICAL ABOVE OHWM @ 4' O.C.
N/A	CAREX STRICTA	TUSSOCK SEDGE	400	@ OHWM @ 1' O.C.

PLANTING NOTES

- ALL PLANTING INSTALLATIONS SHALL BE COORDINATED WITH AND SUPERVISED BY THE LUZERNE CONSERVATION DISTRICT WATERSHED SPECIALIST.
- REFER TO THE PERMANENT VEGETATIVE RESTORATION DETAIL FOR TOPSOIL AND SEEDING REQUIREMENTS.
- TREES SHALL BE 2" CALIPER 5' HIGH MINIMUM WITH BARK PROTECTION FROM ANIMAL DAMAGES.
- SHRUBS SHALL BE TUBLINGS OR PLUGS WITH 2' HIGH MINIMUM AND PROTECTION FROM ANIMAL DAMAGE.

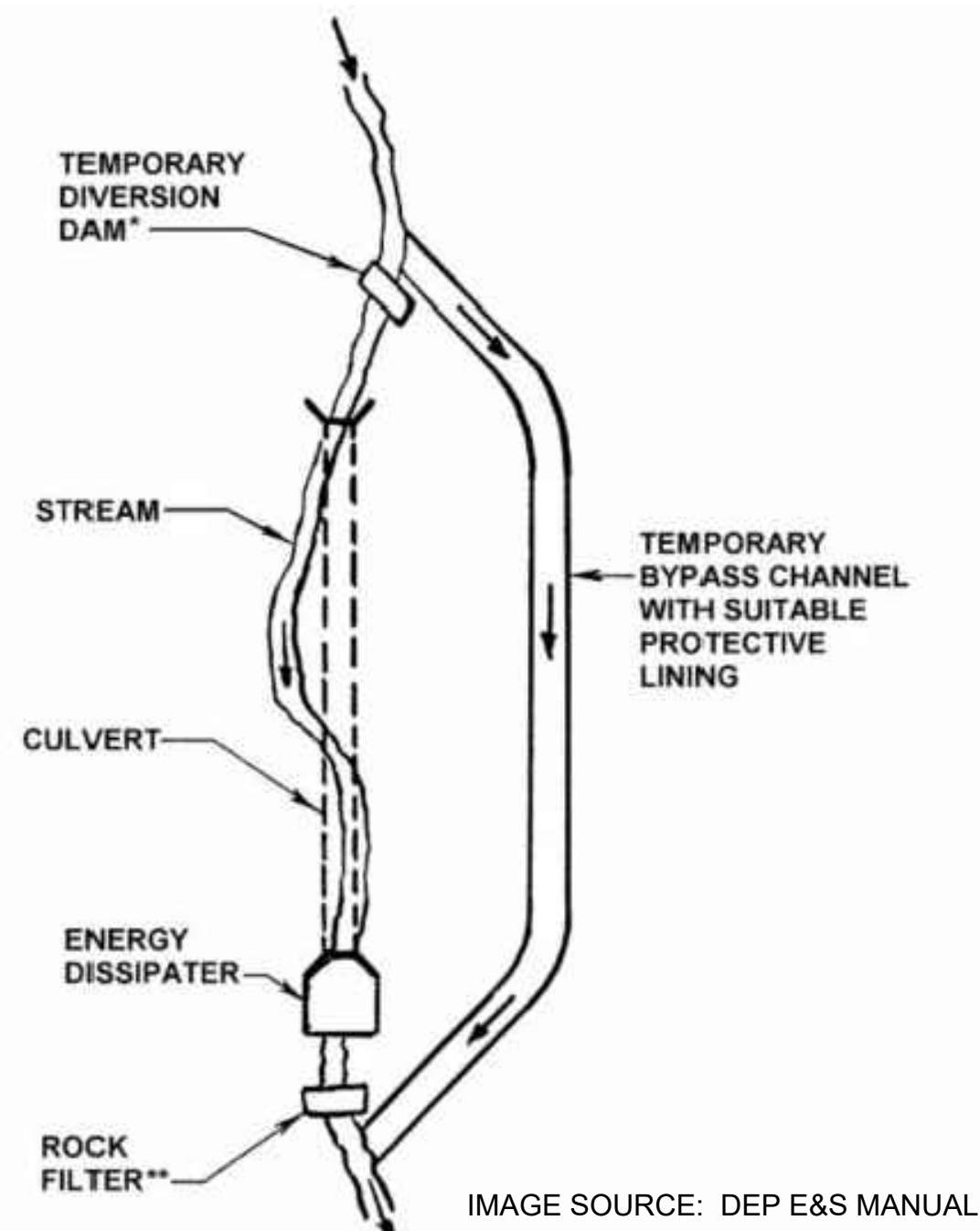


IMAGE SOURCE: DEP E&S MANUAL

NOTES

- REFER TO TEMPORARY DIVERSION DAM DETAIL FOR MORE INFORMATION.
- REFER TO ROCK FILTER DETAIL FOR MORE INFORMATION.
- FOR LOW GRADIENT CHANNELS, THE ROCK FILTER MAY BE REPLACED BY AN IMPERVIOUS COFFERDAM TO PREVENT BACKFLOW INTO THE WORK AREA.
- UPON COMPLETION OF WORK, AFTER FLOW HAS BEEN RETURNED TO THE MAIN CHANNEL, THE BYPASS CHANNEL SHALL BE REMOVED AND THE AREA RESTORED TO PRE-CONSTRUCTION CONDITIONS.

TEMPORARY BYPASS CHANNEL  
NTS

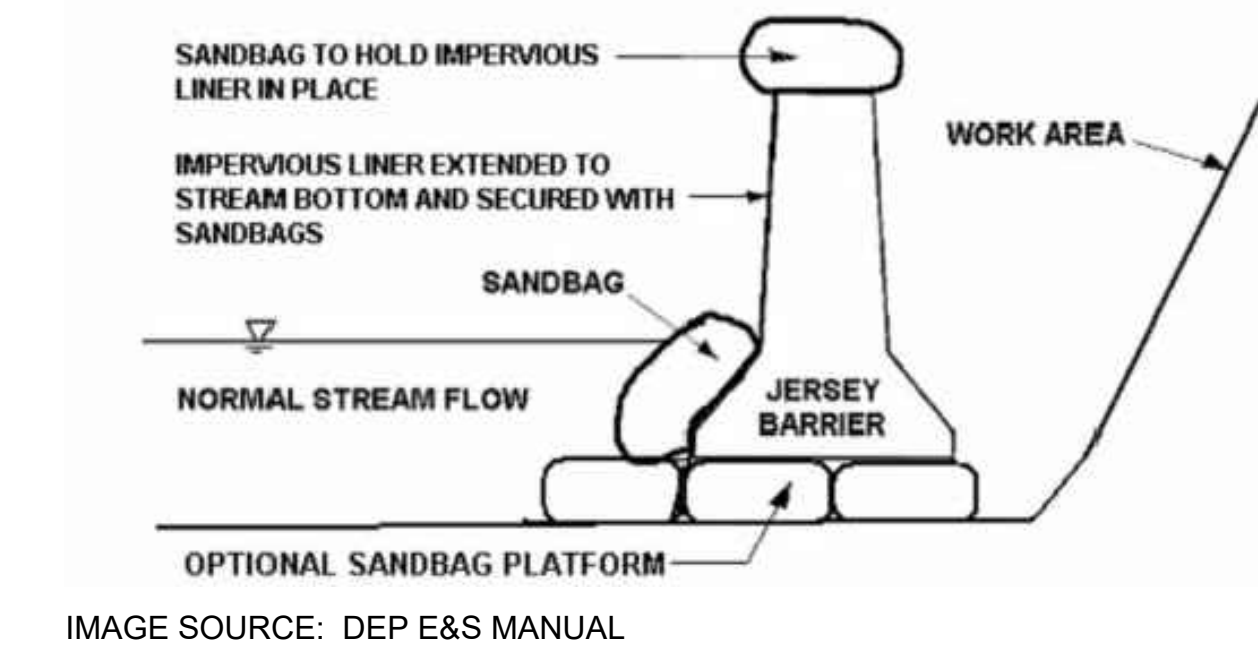
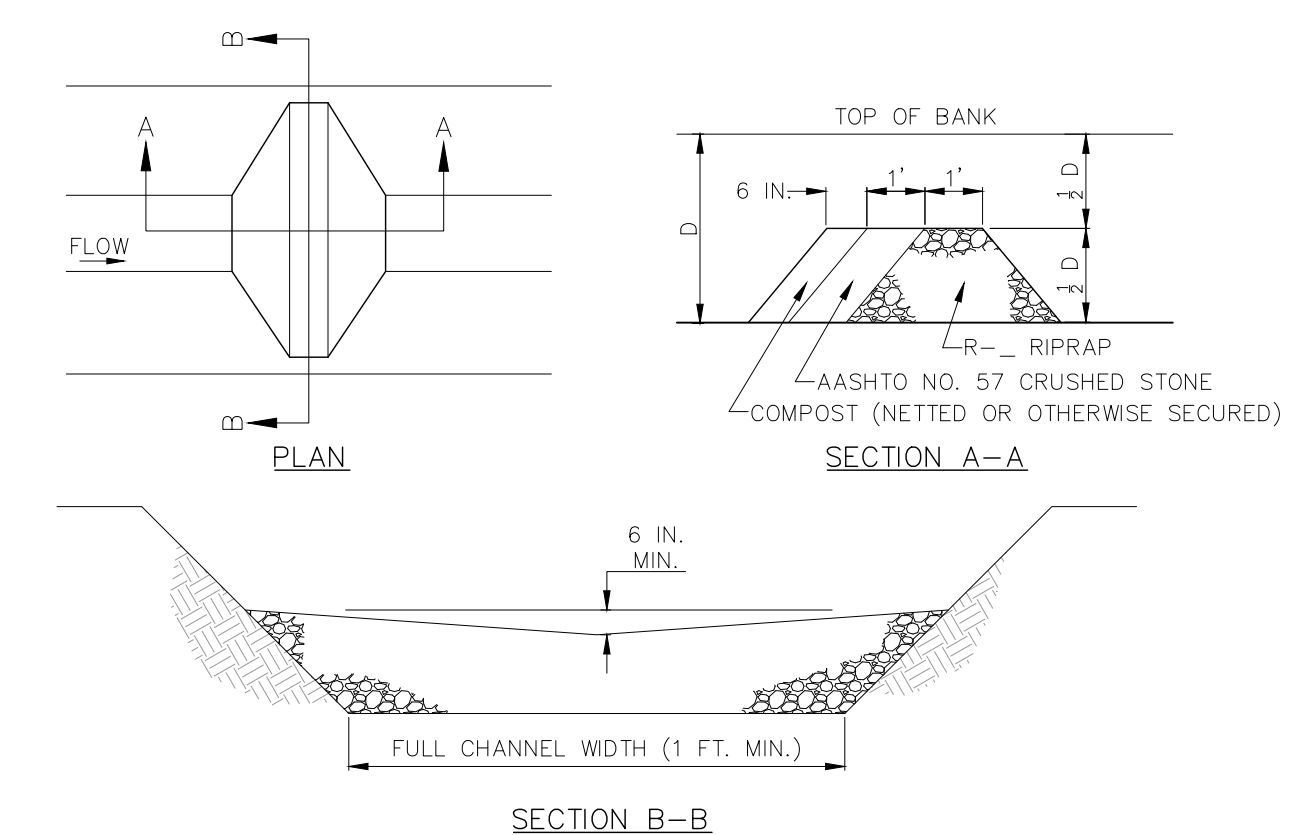


IMAGE SOURCE: DEP E&S MANUAL

TEMPORARY DIVERSION DAM  
NTS



ROCK FILTER NO.	LOCATION	D (FT)	RIPRAP SIZE (R-#)
01	REFER TO PLAN	4	4

FOR D ≥ 3 FT. - USE R-4  
FOR D > 2 FT. TO D < 3 FT. - USE R-3  
NOT APPLICABLE FOR D < 2 FT.

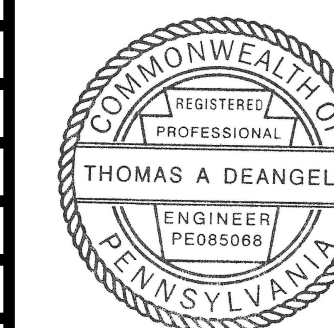
NOTES:

SEDIMENT MUST BE REMOVED WHEN ACCUMULATIONS REACH 1/2 THE HEIGHT OF THE FILTERS. IMMEDIATELY UPON STABILIZATION OF EACH CHANNEL, REMOVE ACCUMULATED SEDIMENT, REMOVE ROCK FILTER, AND STABILIZE DISTURBED AREAS.

STANDARD CONSTRUCTION DETAIL #4-14  
ROCK FILTER  
NOT TO SCALE

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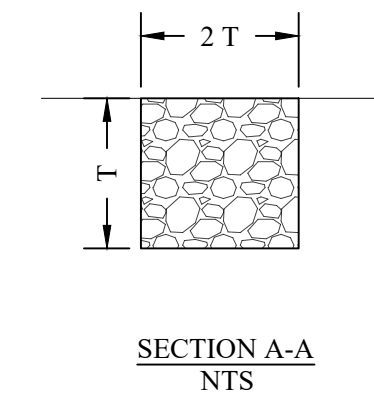


**CONSTRUCTION DETAILS**  
PERMIT WAIVER PLAN  
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DAM REMOVAL  
AT  
THE LANDS AT HILLSIDE FARMS  
65 HILLSIDE ROAD  
SHAVERTOWN, PA 18708

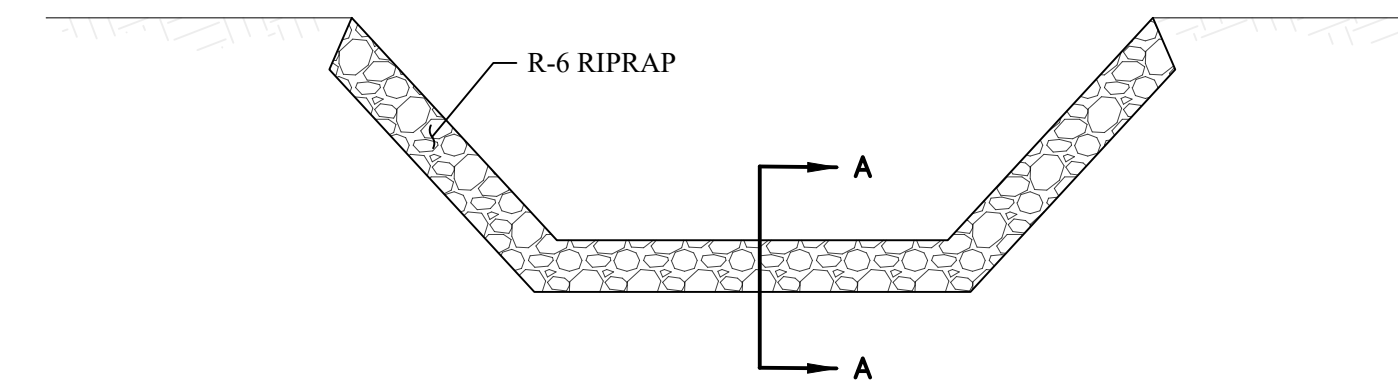
DATE:	03/14/2023
SCALE:	AS NOTED
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**CD-1**



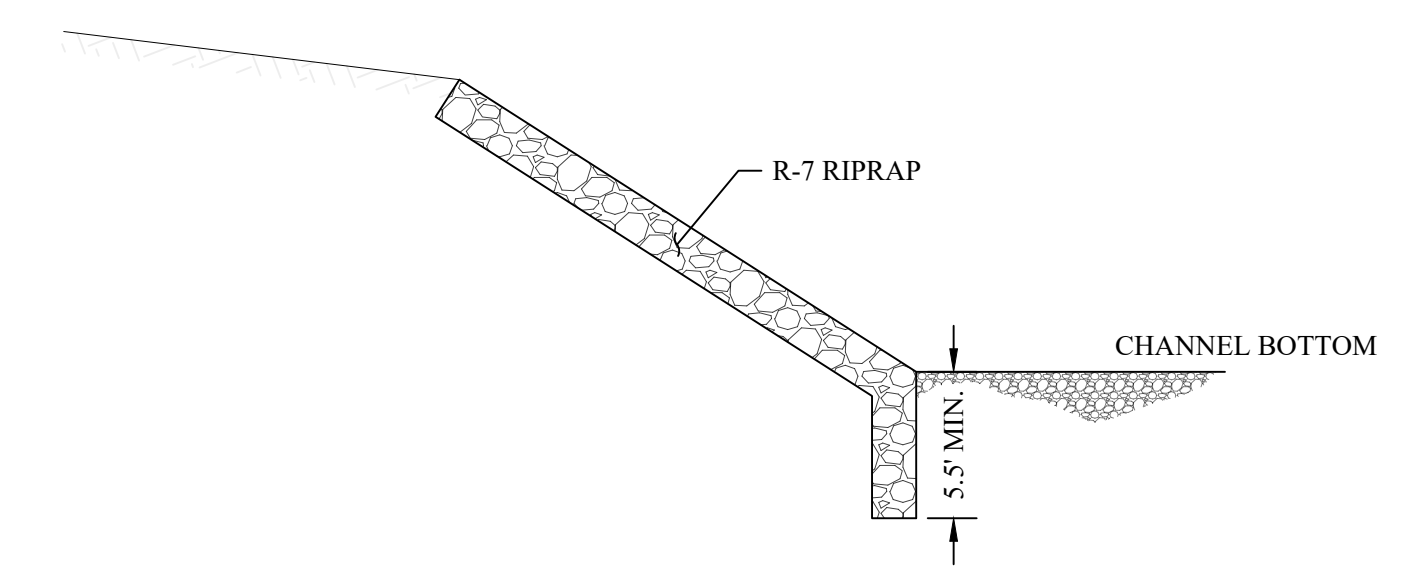


SECTION A-A  
NTS



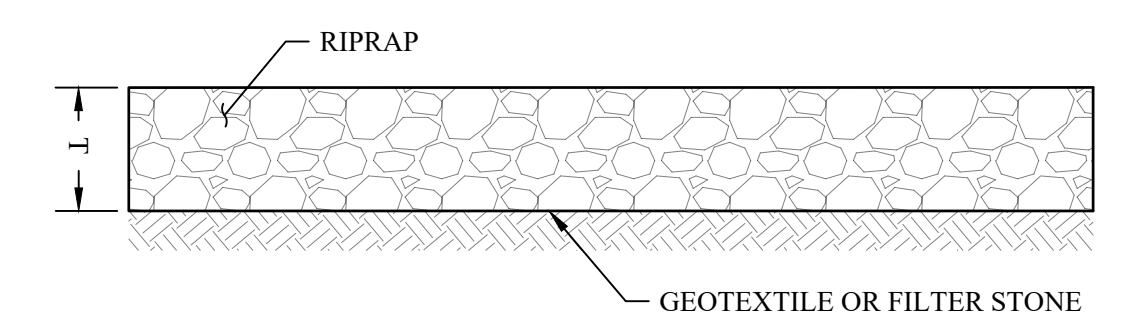
ROCK VANE DETAIL  
NTS

- NOTES**
- REFER TO RIPRAP PLACEMENT DETAIL FOR MORE INFORMATION.
  - INSTALLATION SHALL BE IN ACCORDANCE WITH PA DEP E&S MANUAL REQUIREMENTS.



RIPRAP ARMORING DETAIL  
NTS

- NOTES**
- REFER TO RIPRAP PLACEMENT DETAIL FOR MORE INFORMATION.
  - INSTALLATION SHALL BE IN ACCORDANCE WITH PA DEP E&S MANUAL REQUIREMENTS.



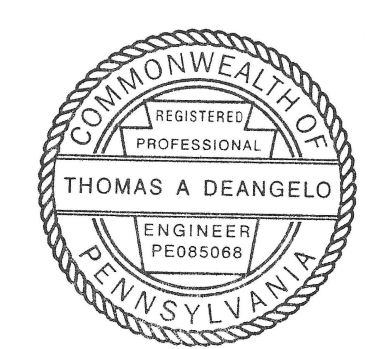
RIPRAP PLACEMENT DETAIL  
NTS

- NOTES**
- PROVIDE MATERIALS AND CONSTRUCTION MEETING THE REQUIREMENTS OF PUBLICATION 408., UNLESS OTHERWISE NOTED.
  - REFER TO PA DEP E&S MANUAL FOR MORE INFORMATION.
  - GEOTEXTILE SHALL BE PENNDOT CLASS 1.

RIPRAP CLASS (R- )	NOMINAL PLACEMENT THICKNESS (T)	FILTER STONE
8	63"	AASHTO #1
7	45"	AASHTO #1
6	36"	AASHTO #1
5	27"	AASHTO #3
4	18"	AASHTO #3

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1/5/2024	DEP AND LCD COMMENTS



**CONSTRUCTION DETAILS**  
 PERMIT WAIVER PLAN  
 FOR THE  
 DAM REMOVAL  
 AT  
 THE LANDS AT HILLSIDE FARMS  
 65 HILLSIDE ROAD  
 SHAVERTOWN, PA 18708

DATE:	03/14/2023
SCALE:	AS NOTED
PROJ. #:	2022012
SHEET:	6 OF 12

**CD-2**



**PLAN PREPARER CONTACT INFORMATION**

DEANGELO CONSULTING, LLC  
 THOMAS A. DEANGELO, P.E.  
 234 MAPLE STREET  
 TRUCKSVILLE, PA 18708  
 PHONE: 570-371-9457

**PLANNING AND DESIGN**

THE EARTH CONSTRUCTION ACTIVITIES, PROPOSED BY THIS PLAN, HAVE BEEN PLANNED AND IMPLEMENTED TO THE MAXIMUM EXTENT PRACTICABLE, IN ACCORDANCE WITH THE FOLLOWING:

- MINIMIZE THE EXTENT AND DURATION OF THE EARTH DISTURBANCE.
- MAXIMIZE PROTECTION OF EXISTING DRAINAGE FEATURES AND VEGETATION.
- MINIMIZE SOIL COMPACTION.
- UTILIZE OTHER MEASURES OR CONTROLS THAT PREVENT OR MINIMIZE THE GENERATION OF INCREASED STORMWATER RUNOFF.

**SEQUENCE OF CONSTRUCTION**

ALL EARTH DISTURBANCE ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE FOLLOWING SEQUENCE. EACH STAGE SHALL BE COMPLETED BEFORE ANY FOLLOWING STAGE IS INITIATED. CLEARING AND GRUBBING SHALL BE LIMITED ONLY TO THOSE AREAS DESCRIBED IN EACH STAGE.

AT LEAST SEVEN DAYS PRIOR TO STARTING ANY EARTH DISTURBANCE ACTIVITIES, THE OPERATOR SHALL INVITE ALL CONTRACTORS INVOLVED IN THOSE ACTIVITIES, THE LAND OWNER, THE LUZERNE CONSERVATION DISTRICT, THE E&S CONTROL PLAN PREPARER, AND THE PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION (DEP) DAM SAFETY TO AN ON-SITE PRE-CONSTRUCTION MEETING.

AT LEAST THREE DAYS BEFORE STARTING ANY EARTH DISTURBANCE ACTIVITIES, ALL CONTRACTORS INVOLVED IN THOSE ACTIVITIES SHALL NOTIFY THE PENNSYLVANIA ONE CALL SYSTEM, INC. AT 1-800-242-1776 FOR BURIED UTILITY LOCATIONS.

IN NO CASE SHALL AN AREA EXCEEDING 15,000 SQUARE FEET, WHICH IS TO BE STABILIZED BY VEGETATION, REACH FINAL GRADE WITHOUT BEING SEEDED AND MULCHED.

WHENEVER POSSIBLE, IN CHANNEL WORK SHOULD BE SCHEDULED FOR LOW FLOW SEASONS.

THE FOLLOWING SEQUENCE SHALL BE IMPLEMENTED FOR EACH LOT INDIVIDUALLY:

- FIELD MARK LIMITS OF DISTURBANCE AND ANY ENVIRONMENTALLY SENSITIVE AREAS (I.E. RIPARIAN BUFFERS, WETLANDS, SPRINGS, EXISTING TREES TO REMAIN, AND FLOODWAYS) AS NEEDED.
- ESTABLISH STOCKPILE / STAGING AREAS.
- CONTRACTOR SHALL TAKE THE APPROPRIATE MEASURES TO PROTECT THE EXISTING WELL AND UTILITY POLE.
- BEGIN CONSTRUCTION OF TEMPORARY FLOW CHANNEL. CONSTRUCTION SHALL BE BEGIN DOWNSTREAM (I.E. CONNECTION TO EXISTING BYPASS CHANNEL) AND PROCEED UPSTREAM. THIS IS TO INCLUDE ASSOCIATED TEMPORARY DIVERSION DAMS.
- INSTALL TEMPORARY DIVERSION DAM, ROCK FILTER, TEMPORARY STORM SEWER PIPING, AND COMPOST FILTER SOCK.
- BEGIN IN CHANNEL WORK. COMPOST FILTER SOCK IN CHANNEL CAN BE REMOVED WHEN NECESSARY.
- UPON COMPLETION OF IN CHANNEL WORK, REMOVE ROCK FILTER AND TEMPORARY DIVERSION DAM, AND RETURN FLOWS TO THE MAIN CHANNEL.
- REMOVE TEMPORARY FLOW CHANNEL AND RESTORE THE AREA TO PRE-CONSTRUCTION CONDITIONS.
- IF WORK AT THE SITE CEASES FOR A PERIOD OF FOUR OR MORE DAYS, TEMPORARY STABILIZATION SHALL BE PROVIDED.
- UPON REACHING FINAL GRADE AND AS PRACTICABLE, IMMEDIATELY STABILIZE ALL AREAS ACCORDING TO PLAN. AN AREA SHALL BE CONSIDERED TO HAVE ACHIEVED FINAL STABILIZATION WHEN IT HAS A MINIMUM UNIFORM 70% PERENNIAL VEGETATIVE COVER OR OTHER PERMANENT NON-VEGETATIVE COVER WITH A DENSITY SUFFICIENT TO RESIST ACCELERATED SURFACE EROSION AND SUBSURFACE CHARACTERISTICS SUFFICIENT TO RESIST SLIDING AND OTHER MOVEMENT.
- UPON COMPLETION OF ALL EARTH DISTURBANCE ACTIVITIES AND PERMANENT STABILIZATION OF ALL DISTURBED AREAS, CONTACT DEP DAM SAFETY FOR AN ON-SITE INSPECTION PRIOR TO REMOVAL / CONVERSION OF THE EROSION AND SEDIMENT POLLUTION CONTROL BMPS.
- REMOVE REMAINING EROSION AND SEDIMENT POLLUTION CONTROL BMPS. STABILIZE THE ASSOCIATED AREAS.

**E&S OPERATION AND MAINTENANCE**

THE CONTRACTOR SHALL FURNISH, INSTALL, OPERATE, AND MAINTAIN ALL EROSION AND SEDIMENT POLLUTION CONTROL (E&S) BEST MANAGEMENT PRACTICES (BMPS) IDENTIFIED HEREIN. E&S BMPS SHALL BE MAINTAINED IN ACCORDANCE WITH THIS E&S PLAN AND THE PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION (DEP) EROSION AND SEDIMENT POLLUTION CONTROL PROGRAM MANUAL (E&S MANUAL), MARCH 2012.

E&S BMPS SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT, UNLESS OTHERWISE INDICATED. THE CONTRACTOR SHALL KEEP RECORD OF ALL INSPECTIONS USING THE VISUAL SITE INSPECTION REPORT FORM (FORM 3150-FM-BWEW0083). E&S BMPS WHICH NEED REPAIR OR REPLACEMENT, SHALL BE REMEDIED IMMEDIATELY. DISPOSAL OF MATERIALS REMOVED FROM THE BMPS SHALL BE PERFORMED IN ACCORDANCE WITH THE RECYCLING OR DISPOSAL OF MATERIALS NOTES HEREIN.

**RECYCLING OR DISPOSAL OF MATERIALS**

ALL BUILDING MATERIALS AND WASTES SHALL BE REMOVED FROM THE SITE AND RECYCLED OR DISPOSED OF IN ACCORDANCE WITH THE DEPARTMENT'S SOLID WASTE MANAGEMENT REGULATIONS AT 25 PA. CODE 260.1 ET SEQ., 271.1, AND 287.1 ET. SEQ. NO BUILDING MATERIALS OR WASTES OR UNUSED BUILDING MATERIALS SHALL BE BURNED, BURIED, DUMPED, OR DISCHARGED AT THE SITE.

ACCUMULATED SEDIMENT IS A SOLID WASTE, AND SHALL BE DISPOSED OF AS OUTLINED ABOVE.

**E&S NOTES**

- ALL EARTH DISTURBANCES, INCLUDING CLEARING AND GRUBBING AS WELL AS CUTS AND FILLS SHALL BE DONE IN ACCORDANCE WITH THE APPROVED E&S PLAN. A COPY OF THE APPROVED DRAWINGS (STAMPED, SIGNED, AND DATED BY THE REVIEWING AGENCY) MUST BE AVAILABLE AT THE PROJECT SITE AT ALL TIMES. THE REVIEWING AGENCY SHALL BE NOTIFIED OF ANY CHANGES TO THE APPROVED PLAN PRIOR TO IMPLEMENTATION OF THOSE CHANGES. THE REVIEWING AGENCY MAY REQUIRE A WRITTEN SUBMITTAL OF THOSE CHANGES FOR REVIEW AND APPROVAL AT ITS DISCRETION.
- AT LEAST 7 DAYS PRIOR TO EARTH DISTURBANCE ACTIVITIES, INCLUDING CLEARING AND GRUBBING, THE OWNER AND/OR OPERATOR SHALL INVITE ALL CONTRACTORS, THE LANDOWNER, THE LUZERNE CONSERVATION DISTRICT, APPROPRIATE MUNICIPAL OFFICIALS, THE E&S PLAN PREPARER, THE PCSM PLAN PREPARER, THE LICENSED PROFESSIONAL RESPONSIBLE FOR OVERSIGHT OF CRITICAL STAGES OF IMPLEMENTATION OF THE PCSM PLAN, AND A REPRESENTATIVE FROM DEP DAM SAFETY TO AN ON-SITE PRECONSTRUCTION MEETING.
- AT LEAST 3 DAYS PRIOR TO STARTING ANY EARTH DISTURBANCE ACTIVITIES, OR EXPANDING INTO AN AREA PREVIOUSLY UNMARKED, THE PENNSYLVANIA ONE CALL SYSTEM INC. SHALL BE NOTIFIED AT 1-800-242-1776 FOR THE LOCATION OF EXISTING UNDERGROUND UTILITIES.
- ALL EARTH DISTURBANCE ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE SEQUENCE PROVIDED ON THE PLAN DRAWINGS. DEVIATION FROM THE SEQUENCE MUST BE APPROVED IN WRITING FROM DEP DAM SAFETY PRIOR TO IMPLEMENTATION.
- AREAS TO BE FILLED ARE TO BE CLEARED, GRUBBED, AND STRIPPED OF TOPSOIL TO REMOVE TREES VEGETATION, ROOTS, AND OTHER OBJECTIONABLE MATERIAL.
- CLEARING, GRUBBING, AND TOPSOIL STRIPPING SHALL BE LIMITED TO THOSE AREAS DESCRIBED IN EACH STAGE OF THE CONSTRUCTION SEQUENCE. GENERAL SITE CLEARING, GRUBBING, AND TOPSOIL STRIPPING MAY NOT COMMENCE IN ANY STAGE OR PHASE OF THE PROJECT UNTIL THE E&S BMPS SPECIFIED BY THE BMP SEQUENCE FOR THAT STAGE OR PHASE HAVE BEEN INSTALLED AND ARE FUNCTIONING AS DESCRIBED IN THE E&S PLAN.
- AT NO TIME SHALL CONSTRUCTION VEHICLES BE ALLOWED TO ENTER AREAS OUTSIDE THE LIMIT OF DISTURBANCE BOUNDARIES SHOWN ON THE PLAN MAPS. THESE AREAS MUST BE CLEARLY MARKED AND FENCED OFF BEFORE CLEARING AND GRUBBING OPERATIONS BEGIN.
- TOPSOIL REQUIRED FOR THE ESTABLISHMENT OF VEGETATION SHALL BE STOCKPILED AT THE LOCATIONS(S) SHOWN ON THE PLAN MAP(S) IN THE AMOUNT NECESSARY TO COMPLETE THE FINISH GRADING OF ALL EXPOSED AREAS THAT ARE TO BE STABILIZED BY VEGETATION. EACH STOCKPILE SHALL BE PROTECTED IN THE MANNER SHOWN ON THE PLAN DRAWINGS. STOCKPILE HEIGHTS SHALL NOT EXCEED 35 FEET. STOCKPILE SLOPES SHALL BE 2H:1V OR FLATTER.
- IMMEDIATELY UPON DISCOVERING UNFORESEEN CIRCUMSTANCES POSING THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION, THE OPERATOR SHALL IMPLEMENT APPROPRIATE BEST MANAGEMENT PRACTICES TO MINIMIZE THE POTENTIAL FOR EROSION AND SEDIMENT POLLUTION AND NOTIFY DEP DAM SAFETY.
- ALL BUILDING MATERIALS AND WASTES SHALL BE REMOVED FROM THE SITE AND RECYCLED OR DISPOSED OF IN ACCORDANCE WITH THE DEPARTMENT'S SOLID WASTE MANAGEMENT REGULATIONS AT 25 PA. CODE 260.1 ET. SEQ., 271.1, AND 287.1 ET. SEQ. NO BUILDING MATERIALS OR WASTES OR UNUSED BUILDING MATERIALS SHALL BE BURNED, BURIED, DUMPED, OR DISCHARGED AT THE SITE.
- ALL OFF-SITE WASTE AND BORROW AREAS MUST HAVE AN E&S PLAN APPROVED BY THE LOCAL CONSERVATION DISTRICT OR THE DEPARTMENT FULLY IMPLEMENTED PRIOR TO BEING ACTIVATED.

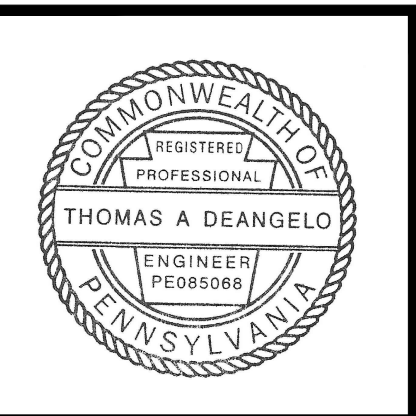
- THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ANY MATERIAL BROUGHT ON SITE IS CLEAN FILL. FORM FP-001 MUST BE RETAINED BY THE PROPERTY OWNER OF ANY FILL MATERIAL AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE BY QUALIFYING AS CLEAN FILL DUE TO ANALYTICAL TESTING.
- ALL PUMPING OF WATER FROM ANY WORK AREA SHALL BE DONE ACCORDING TO THE PROCEDURE DESCRIBED IN THIS PLAN, OVER DISTURBED VEGETATED AREAS.
- VEHICLES AND EQUIPMENT MAY ONLY ACCESS THE SITE FROM ESTABLISHED ENTRANCES.
- UNTIL THE SITE IS STABILIZED, ALL EROSION AND SEDIMENT BMPS SHALL BE MAINTAINED PROPERLY. MAINTENANCE SHALL INCLUDE INSPECTIONS OF ALL EROSION AND SEDIMENT BMPS AFTER EACH RUNOFF EVENT AND ON A WEEKLY BASIS. ALL PREVENTATIVE AND REMEDIAL MAINTENANCE WORK, INCLUDING CLEAN OUT, REPAIR, REPLACEMENT, REGRADING, RESEEDING, REMULCHING, AND RENETTING MUST BE PERFORMED IMMEDIATELY. IF THE E&S BMPS FAIL TO PERFORM AS EXPECTED, REPLACEMENT BMPS, OR MODIFICATIONS OF THOSE INSTALLED WILL BE REQUIRED.
- A LOG SHOWING DATES THAT E&S BMPS WERE INSPECTED AS WELL AS ANY DEFICIENCIES FOUND AND THE DATE THEY WERE CORRECTED SHALL BE MAINTAINED ON THE SITE AND BE MADE AVAILABLE TO REGULATORY AGENCY OFFICIALS AT THE TIME OF INSPECTION.
- SEDIMENT TRACKED ONTO ANY PUBLIC ROADWAY OR SIDEWALK SHALL BE RETURNED TO THE CONSTRUCTION SITE BY THE END OF EACH WORK DAY AND DISPOSED IN THE MANNER DESCRIBED IN THIS PLAN. IN NO CASE SHALL THE SEDIMENT BE WASHED, SHOEVELED, OR SWEEPED INTO ANY ROADSIDE DITCH, STORM SEWER, OR SURFACE WATER.
- ALL SEDIMENT REMOVED FROM BMPS SHALL BE DISPOSED OF IN THE MANNER DESCRIBED ON THE PLAN DRAWINGS.
- AREAS WHICH ARE TO BE TOPSOILED SHALL BE SCARIFIED TO A MINIMUM DEPTH OF 3 TO 5 INCHES - 6 TO 12 INCHES ON COMPACTED SOILS - PRIOR TO PLACEMENT OF TOPSOIL. AREAS TO BE VEGETATED SHALL HAVE A MINIMUM 4 INCHES OF TOPSOIL IN PLACE PRIOR TO SEEDING AND MULCHING. FILL OUTSLOPES SHALL HAVE A MINIMUM OF 2 INCHES OF TOPSOIL.
- ALL FILLS SHALL BE COMPACTED AS REQUIRED TO REDUCE EROSION, SLIPPAGE, SETTLEMENT, SUBSIDENCE, OR OTHER RELATED PROBLEMS. FILL INTENDED TO SUPPORT BUILDINGS, STRUCTURES, AND CONDUITS, ETC. SHALL BE COMPACTED IN ACCORDANCE WITH LOCAL REQUIREMENTS OR CODES.
- ALL EARTHEN FILL SHALL BE PLACED IN COMPACTED LAYERS NOT TO EXCEED 9 INCHES IN THICKNESS.
- FILL MATERIALS SHALL BE FREE OF FROZEN PARTICLES, BRUSH, ROOTS, SOD, OR OTHER FOREIGN, OR OBJECTIONABLE MATERIALS THAT WOULD INTERFERE WITH OR PREVENT CONSTRUCTION OF SATISFACTORY FILLS.
- FROZEN MATERIALS OR SOFT, MUCKY, OR HIGHLY COMPRESSIBLE MATERIALS SHALL NOT BE INCORPORATED INTO FILLS.
- FILL SHALL NOT BE PLACED ON SATURATED OR FROZEN SURFACES.
- SEEPS OR SPRINGS ENCOUNTERED DURING CONSTRUCTION SHALL BE HANDLED IN ACCORDANCE WITH THE STANDARD AND SPECIFICATION FOR SUBSURFACE DRAIN OR OTHER APPROVED METHOD.
- ALL GRADED AREAS SHALL BE PERMANENTLY STABILIZED IMMEDIATELY UPON REACHING FINISHED GRADE. CUT SLOPES IN COMPETENT BEDROCK AND ROCK FILLS NEED NOT BE VEGETATED. SEEDED AREAS WITHIN 50 FEET OF A SURFACE WATER, OR AS OTHERWISE SHOWN ON THE PLAN DRAWINGS, SHALL BE BLANKETED ACCORDING TO THE STANDARDS OF THIS PLAN.
- IMMEDIATELY AFTER EARTH DISTURBANCE ACTIVITIES CEASE IN AN AREA OR SUBAREA OF THE PROJECT, THE OPERATOR SHALL STABILIZE ALL DISTURBED AREAS. DURING NON-GERMINATING MONTHS, MULCH OR PROTECTIVE BLANKETING SHALL BE APPLIED AS DESCRIBED IN THE PLAN. AREAS NOT AT FINISHED GRADE, WHICH WILL BE REACTIVATED WITHIN 1 YEAR SHALL BE STABILIZED IN ACCORDANCE WITH THE PERMANENT STABILIZATION SPECIFICATIONS.
- PERMANENT STABILIZATION IS DEFINED AS A MINIMUM UNIFORM, PERENNIAL 70% VEGETATIVE COVER OR OTHER PERMANENT NON-VEGETATIVE COVER WITH A DENSITY SUFFICIENT TO RESIST ACCELERATED EROSION. CUT AND FILL SLOPES SHALL BE CAPABLE OF RESISTING FAILURE DUE TO SLUMPING, SLIDING, OR OTHER MOVEMENTS.
- E&S BMPS SHALL REMAIN FUNCTIONAL AS SUCH UNTIL ALL AREAS TRIBUTARY TO THEM ARE PERMANENTLY STABILIZED OR UNTIL THEY ARE REPLACED BY ANOTHER BMP APPROVED BY DEP DAM SAFETY.

- UPON COMPLETION OF ALL EARTH DISTURBANCE ACTIVITIES AND PERMANENT STABILIZATION OF ALL DISTURBED AREAS, THE OWNER AND/OR OPERATOR SHALL CONTACT DEP DAM SAFETY FOR AN INSPECTION PRIOR TO REMOVAL / CONVERSION OF THE E&S BMPS.
- AFTER FINAL SITE STABILIZATION HAS BEEN ACHIEVED, TEMPORARY EROSION AND SEDIMENT BMPS MUST BE REMOVED OR CONVERTED TO PERMANENT POST CONSTRUCTION STORMWATER MANAGEMENT BMPS. AREAS DISTURBED DURING REMOVAL OR CONVERSION OF THE BMPS SHALL BE STABILIZED IMMEDIATELY. IN ORDER TO ENSURE RAPID REVEGETATION OF DISTURBED AREAS, SUCH REMOVAL / CONVERSIONS ARE TO BE DONE ONLY DURING THE GERMINATION SEASON.
- UPON COMPLETION OF ALL EARTH DISTURBANCE ACTIVITIES AND PERMANENT STABILIZATION OF ALL DISTURBED AREAS, THE OWNER AND / OR OPERATOR SHALL CONTACT DEP DAM SAFETY TO SCHEDULE A FINAL INSPECTION.
- FAILURE TO CORRECTLY INSTALL E&S BMPS, FAILURE TO PREVENT SEDIMENT-LADEN RUNOFF FROM LEAVING THE CONSTRUCTION SITE, OR FAILURE TO TAKE IMMEDIATE CORRECTIVE ACTION TO RESOLVE FAILURE OF E&S BMPS MAY RESULT IN ADMINISTRATIVE, CIVIL, AND / OR CRIMINAL PENALTIES BEING INSTITUTED BY THE DEPARTMENT AS DEFINED IN SECTION 602 OF THE PENNSYLVANIA CLEAN STREAMS LAW. THE CLEAN STREAMS LAW PROVIDES FOR UP TO \$10,000 PER DAY IN CIVIL PENALTIES, UP TO \$10,000 IN SUMMARY CRIMINAL PENALTIES, AND UP TO \$25,000 IN MISDEMEANOR CRIMINAL PENALTIES FOR EACH VIOLATION.



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REVISIONS	
DATE	DESCRIPTION
12/12/2023	DEP AND LCD COMMENTS
1/5/2024	DEP AND LCD COMMENTS

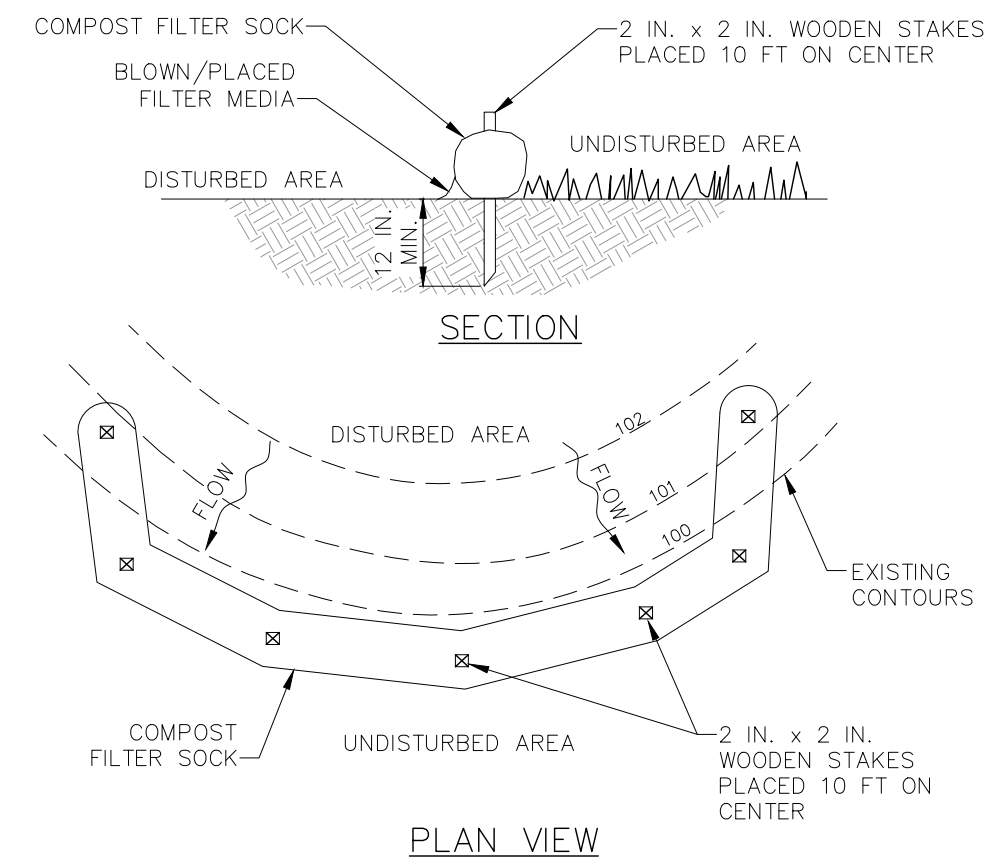


E&S PLAN NOTES	
<b>PERMIT WAIVER PLAN</b> FOR THE <b>DAM REMOVAL</b> AT THE LANDS AT HILLSIDE FARMS 65 HILLSIDE ROAD SHAVERTOWN, PA 18708	
DATE:	03/14/2023
SCALE:	NTS
PROJ. #:	2022012
SHEET:	7 OF 12
<b>ES-1</b>	









**NOTES:**  
 SOCK FABRIC SHALL MEET THE STANDARDS OF 3 MIL HDPE OF TABLE 4.1 OF THE PA DEP EROSION CONTROL MANUAL.  
 COMPOST SHALL MEET THE STANDARDS OF TABLE 4.2 OF THE PA DEP EROSION CONTROL MANUAL.  
 COMPOST FILTER SOCK SHALL BE PLACED AT EXISTING LEVEL GRADE. BOTH ENDS OF THE BARRIER SHALL BE EXTENDED AT LEAST 8 FEET UP SLOPE AT 45 DEGREES TO THE MAIN BARRIER ALIGNMENT. MAXIMUM SLOPE LENGTH ABOVE ANY BARRIER SHALL NOT EXCEED THAT SPECIFIED FOR THE SIZE OF THE SOCK AND THE SLOPE OF ITS TRIBUTARY AREA.  
 TRAFFIC SHALL NOT BE PERMITTED TO CROSS COMPOST FILTER SOCKS.  
 ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN IT REACHES 1/2 THE ABOVE GROUND HEIGHT OF THE BARRIER AND DISPOSED IN THE MANNER DESCRIBED ELSEWHERE IN THE PLAN.  
 COMPOST FILTER SOCKS SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT. DAMAGED SOCKS SHALL BE REPAIRED ACCORDING TO MANUFACTURER'S SPECIFICATIONS OR REPLACED WITHIN 24 HOURS OF INSPECTION.  
 BIODEGRADABLE COMPOST FILTER SOCKS SHALL BE REPLACED AFTER 6 MONTHS; PHOTODEGRADABLE SOCKS AFTER 1 YEAR. POLYPROPYLENE SOCKS SHALL BE REPLACED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.  
 UPON STABILIZATION OF THE AREA TRIBUTARY TO THE SOCK, STAKES SHALL BE REMOVED. THE SOCK MAY BE LEFT IN PLACE AND VEGETATED OR REMOVED. IN THE LATTER CASE, THE MESH SHALL BE CUT OPEN AND THE MULCH SPREAD AS A SOIL SUPPLEMENT.

**MODIFIED CONSTRUCTION DETAIL #4-1  
 COMPOST FILTER SOCK**  
 NOT TO SCALE

**TABLE 4.1  
 Compost Sock Fabric Minimum Specifications**

Material Type	3 mil HDPE	5 mil HDPE	5 mil HDPE	Multi-Filament Polypropylene (MFPP)	Heavy Duty Multi-Filament Polypropylene (HDMFPP)
<b>Material Characteristics</b>	Photo-degradable	Photo-degradable	Bio-degradable	Photo-degradable	Photo-degradable
<b>Sock Diameters</b>	12" 18"	12" 18" 24" 32"	12" 18" 24" 32"	12" 18" 24" 32"	12" 18" 24" 32"
<b>Mesh Opening</b>	3/8"	3/8"	3/8"	3/8"	1/8"
<b>Tensile Strength</b>		26 psi	26 psi	44 psi	202 psi
<b>Ultraviolet Stability % Original Strength (ASTM G-155)</b>	23% at 1000 hr.	23% at 1000 hr.		100% at 1000 hr.	100% at 1000 hr.
<b>Minimum Functional Longevity</b>	6 months	9 months	6 months	1 year	2 years

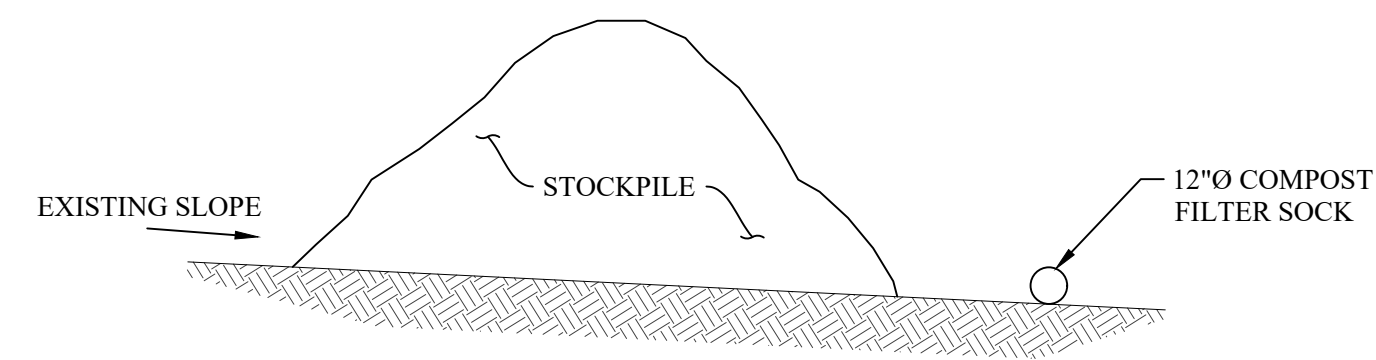
**Two-ply systems**

<b>Inner Containment Netting</b>	HDPE biaxial net
	Continuously wound Fusion-welded junctures 3/4" X 3/4" Max. aperture size
<b>Outer Filtration Mesh</b>	Composite Polypropylene Fabric (Woven layer and non-woven fleece mechanically fused via needle punch)
	3/16" Max. aperture size

**Sox fabrics composed of burlap may be used on projects lasting 6 months or less.**  
 Filtrex & JMD

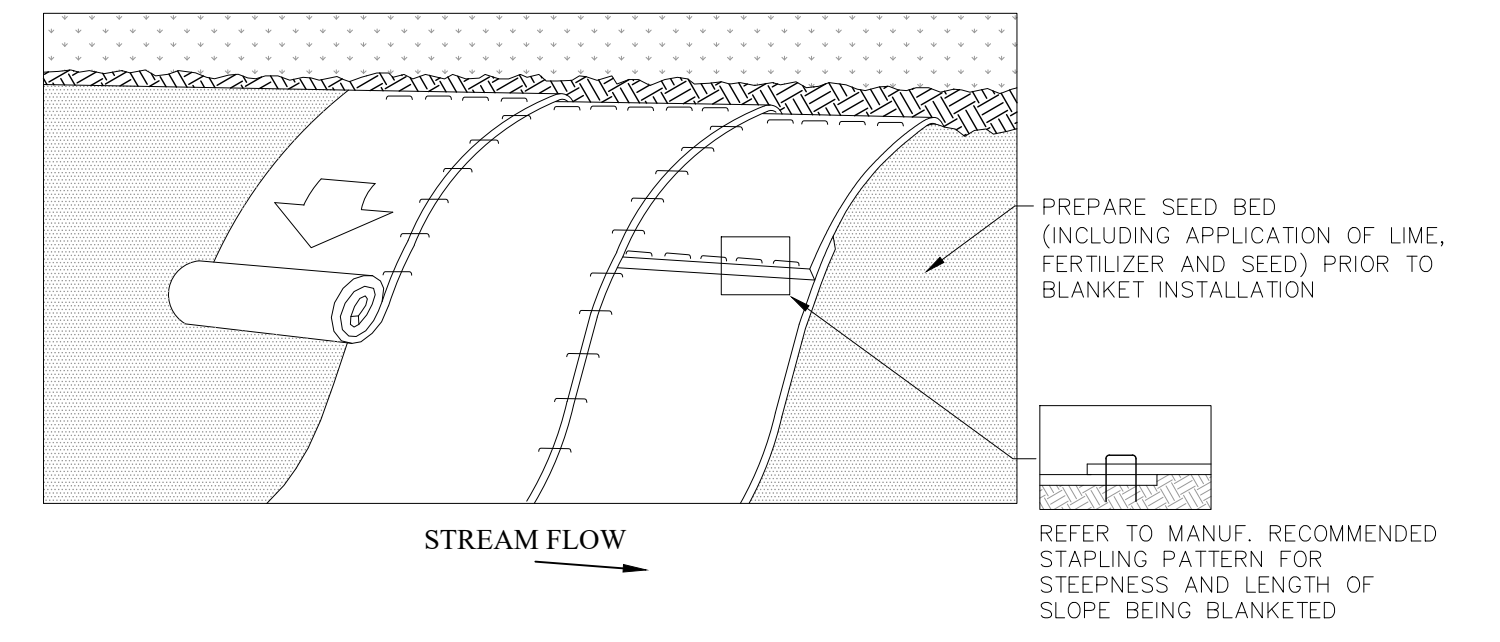
**TABLE 4.2  
 Compost Standards**

Organic Matter Content	25% - 100% (dry weight basis)
Organic Portion	Fibrous and elongated
pH	5.5 - 8.5
Moisture Content	30% - 60%
Particle Size	30% - 50% pass through 3/8" sieve
Soluble Salt Concentration	5.0 dS/m (mmhos/cm) Maximum



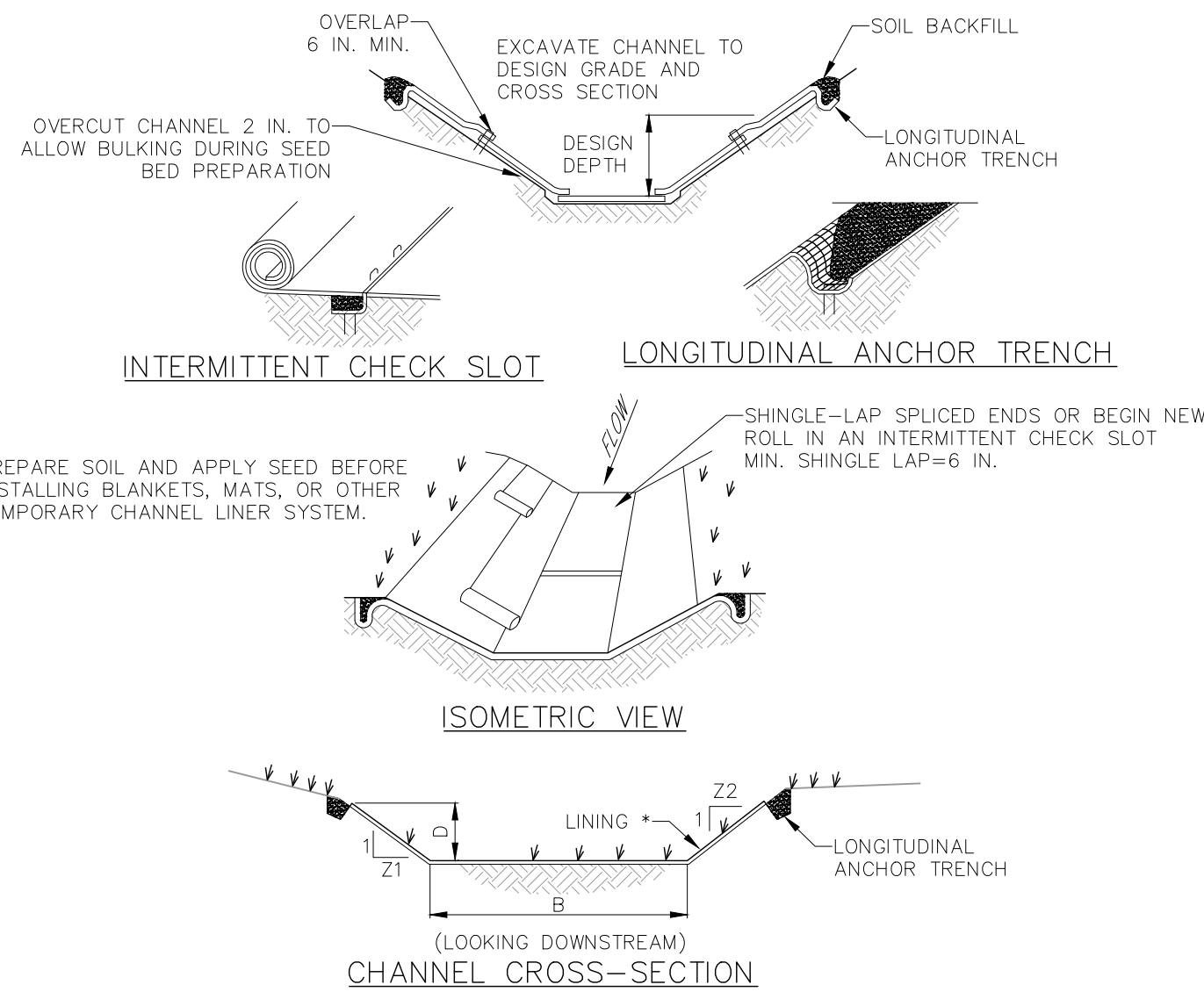
**NOTES:**  
 PLACE COMPOST FILTER SOCK DOWN GRADE OF STOCKPILE LOCATION.  
 STOCKPILES TO BE NO MORE THAN 35FT IN HEIGHT.  
 SIDE SLOPES SHALL NOT EXCEED 2H:1V.

**STOCKPILE**  
 NOT TO SCALE



**NOTES:**  
 EROSION CONTROL BLANKETS SHALL BE FUTERRA F4 NETLESS OR APPROVED EQUAL.  
 SEED AND SOIL AMENDMENTS SHALL BE APPLIED ACCORDING TO THE RATES IN THE PLAN DRAWINGS PRIOR TO INSTALLING THE BLANKET.  
 THE BLANKET SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.  
 BLANKETED AREAS SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT UNTIL PERENNIAL VEGETATION IS ESTABLISHED TO A MINIMUM UNIFORM 70% COVERAGE THROUGHOUT THE BLANKETED AREA. DAMAGED OR DISPLACED BLANKETS SHALL BE RESTORED OR REPLACED WITHIN 4 CALENDAR DAYS.

**MODIFIED CONSTRUCTION DETAIL #11-1  
 EROSION CONTROL BLANKET INSTALLATION**  
 NOT TO SCALE



\* SEE MANUFACTURER'S LINING INSTALLATION DETAIL FOR STAPLE PATTERNS, VEGETATIVE STABILIZATION FOR SOIL AMENDMENTS, SEED MIXTURES AND MULCHING INFORMATION

CHANNEL NO.	STATIONS	BOTTOM WIDTH B (FT)	DEPTH D (FT)	TOP WIDTH W (FT)	Z1 (FT)	Z2 (FT)	LINING *
TEMPORARY FLOW CHANNEL	REFER TO PLAN	8	2	20	3	3	FUTERRA F4 NETLESS OR APPROVED EQUAL

**NOTES:**  
 ANCHOR TRENCHES SHALL BE INSTALLED AT BEGINNING AND END OF CHANNEL IN THE SAME MANNER AS LONGITUDINAL ANCHOR TRENCHES.  
 CHANNEL DIMENSIONS SHALL BE CONSTANTLY MAINTAINED. CHANNEL SHALL BE CLEANED WHENEVER TOTAL CHANNEL DEPTH IS REDUCED BY 25% AT ANY LOCATION.  
 SEDIMENT DEPOSITS SHALL BE REMOVED WITHIN 24 HOURS OF DISCOVERY OR AS SOON AS SOIL CONDITIONS PERMIT ACCESS TO CHANNEL WITHOUT FURTHER DAMAGE. DAMAGED LINING SHALL BE REPAIRED OR REPLACED WITHIN 48 HOURS OF DISCOVERY.  
 NO MORE THAN ONE THIRD OF THE SHOOT (GRASS LEAF) SHALL BE REMOVED IN ANY MOWING. GRASS HEIGHT SHALL BE MAINTAINED BETWEEN 2 AND 3 INCHES UNLESS OTHERWISE SPECIFIED. EXCESS VEGETATION SHALL BE REMOVED FROM PERMANENT CHANNELS TO ENSURE SUFFICIENT CHANNEL CAPACITY.

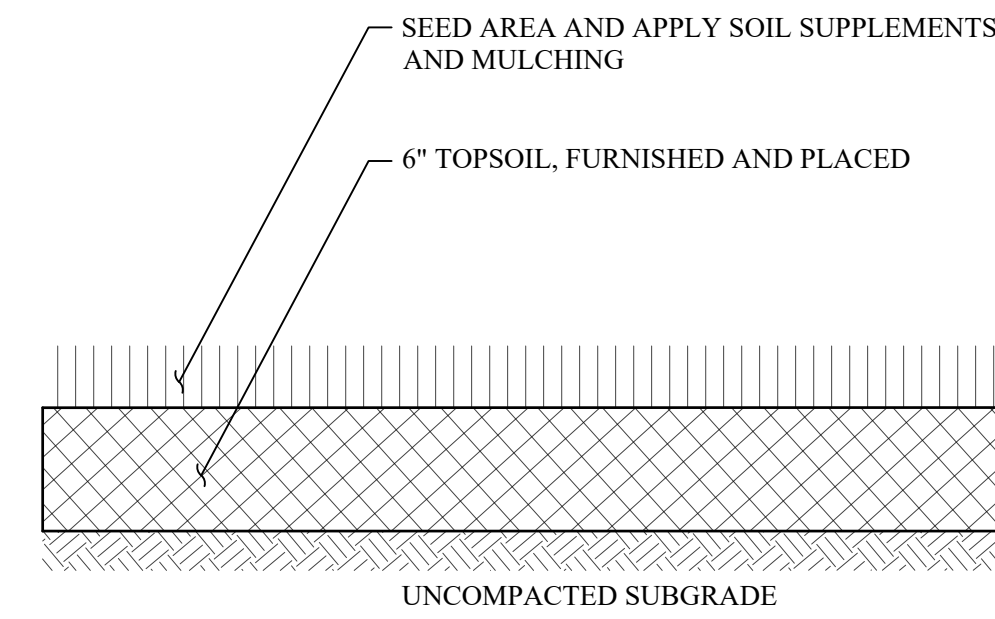
**MODIFIED CONSTRUCTION DETAIL #6-1  
 VEGETATED CHANNEL**  
 NOT TO SCALE

**NOTES**

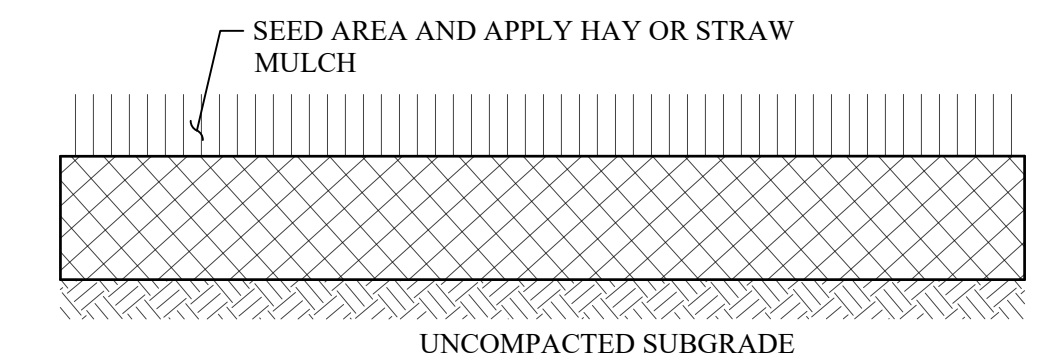
- SEED AREA WITH ERNST SEED PA NORTHERN ALLEGHENY PALTEAU PROVINCE RIPARIAN MIX (ERNMX-213), OR APPROVED EQUAL.
- FOR MULCHING, PROVIDE MATERIAL AND CONSTRUCTION IN ACCORDANCE WITH PENNDOT PUB 408, SECTION 805, AS LAST REVISED, AND SPECIFIED HEREIN.
- FOR TOPSOIL PLACEMENT:
  - GRADED AREAS SHOULD BE SCARIFIED OR OTHERWISE LOOSENED TO A DEPTH OF 3 TO 5 INCHES. COMPACTED SOILS SHOULD BE SCARIFIED 6 TO 12 INCHES WHEREVER POSSIBLE PRIOR TO SEEDING.
  - TOPSOIL SHOULD BE UNIFORMLY DISTRIBUTED. SPREADING SHOULD BE DONE IN SUCH A MANNER THAT SODDING OR SEEDING CAN PROCEED WITH A MINIMUM OF ADDITIONAL PREPARATION OR TILLAGE.
  - TOPSOIL SHOULD NOT BE PLACED WHILE THE TOPSOIL IS IN A FROZEN OR MUDDY CONDITION, WHEN THE SUBSOIL IS EXCESSIVELY WET, OR IN A CONDITION THAT MY OTHERWISE BE DETRIMENTAL TO PROPER GRADING AND SEEDBED PREPARATION.

**PERMANENT SOIL SUPPLEMENTS AND MULCHING**

ITEM	TYPE	APPLICATION RATE (LBS / 1000 SY)
LIME		800
FERTILIZER	10 - 20 - 20	140
MULCH	HAY OR STRAW	1,200



**PERMANENT VEGETATIVE RESTORATION**  
 NTS



**TEMPORARY VEGETATIVE RESTORATION DETAIL**  
 NTS

**NOTES**

- SEED AREA WITH PENNDOT FORMULA E, OR APPROVED EQUAL. PROVIDE MATERIAL AND CONSTRUCTION IN ACCORDANCE WITH PENNDOT PUB 408, SECTION 804, AS LAST REVISED, AS SPECIFIED HEREIN.
- FOR MULCHING, PROVIDE MATERIAL AND CONSTRUCTION IN ACCORDANCE WITH PENNDOT PUB 408, SECTION 805, AS LAST REVISED, AND AS SPECIFIED HEREIN.

**TEMPORARY SOIL SUPPLEMENTS AND MULCHING**

ITEM	TYPE	APPLICATION RATE (LBS / 1000 SY)
MULCH	HAY OR STRAW	1,200

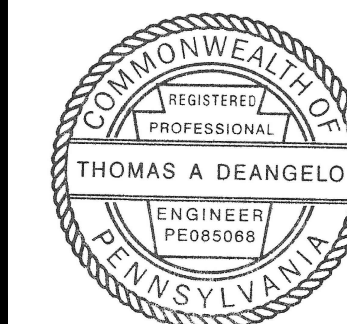
**TEMPORARY SEEDING REQUIREMENTS**

FORMULA	SPECIES	% BY WEIGHT	MIN. % PURITY	MIN. % GERMINATION	SEEDING RATE (LB / 1000 SY)
PENNDOT FORMULA E	ANNUAL RYEGRASS (LOLIUM MULTIFLORUM)	100	95	90	10.0
TOTAL					10.0

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**REVISIONS**

DATE	DESCRIPTION
12/12/2023	DEP AND LCD COMMENTS
1/5/2024	DEP AND LCD COMMENTS



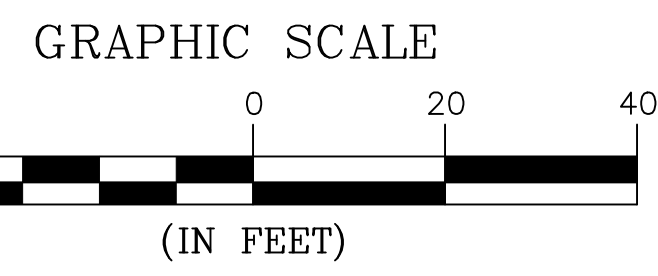
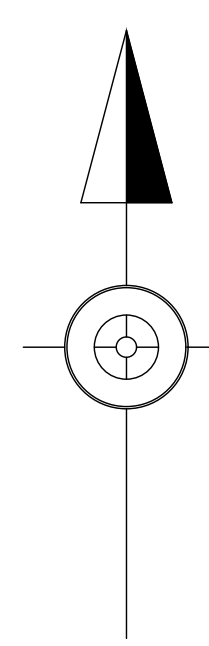
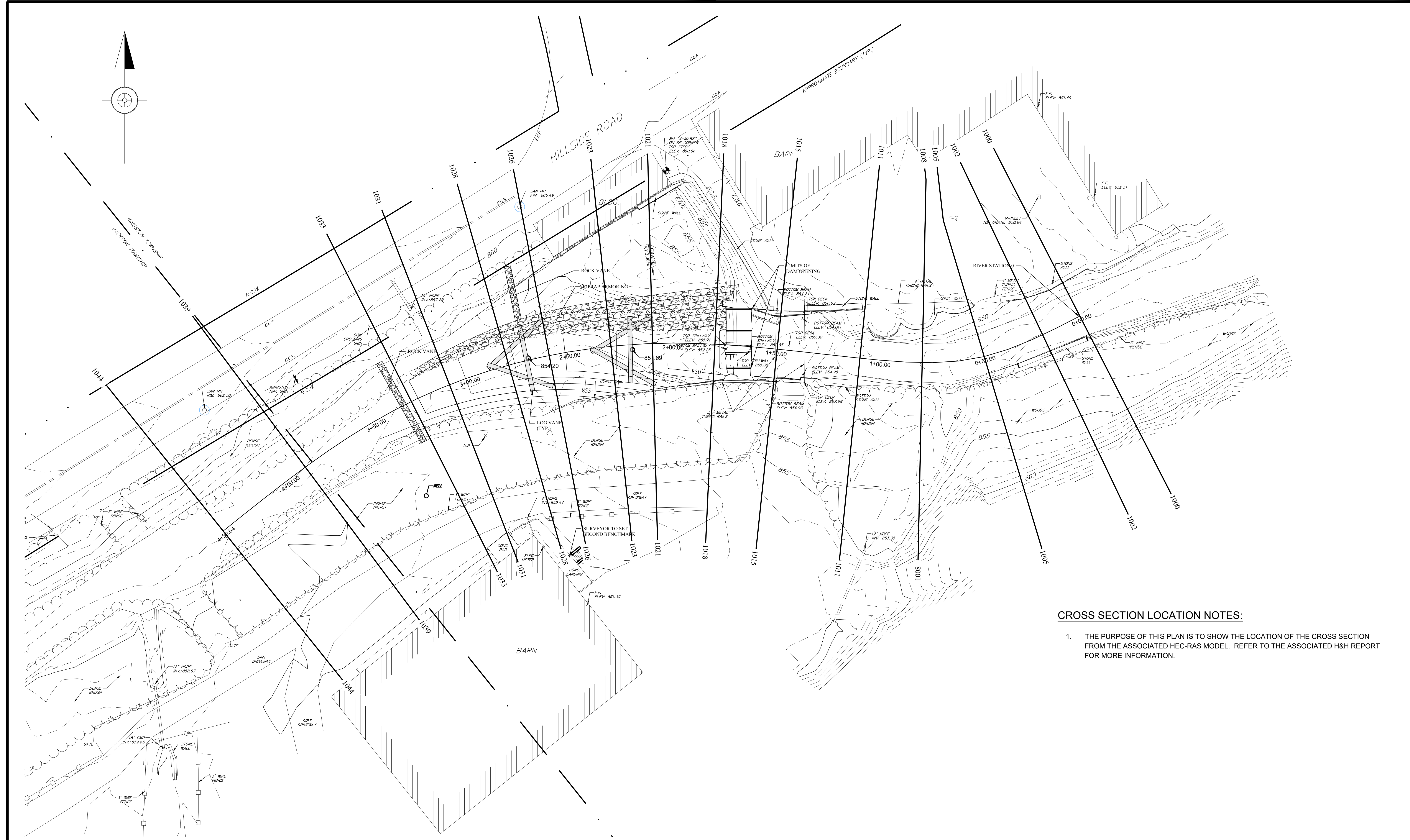
**E&S PLAN DETAILS**

**PERMIT WAIVER PLAN FOR THE DAM REMOVAL AT THE LANDS AT HILLSIDE FARMS 65 HILLSIDE ROAD SHAVERTOWN, PA 18708**

DATE: 03/14/2023  
 SCALE: AS NOTED  
 PROJ. #: 2022012  
 SHEET: 9 OF 12

**ES-3**



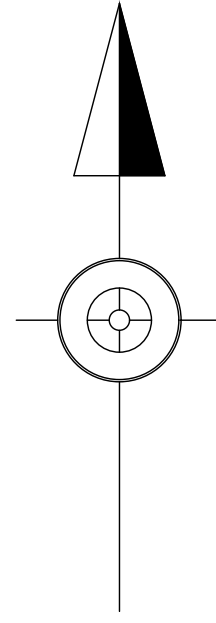


**CROSS SECTION LOCATION NOTES:**

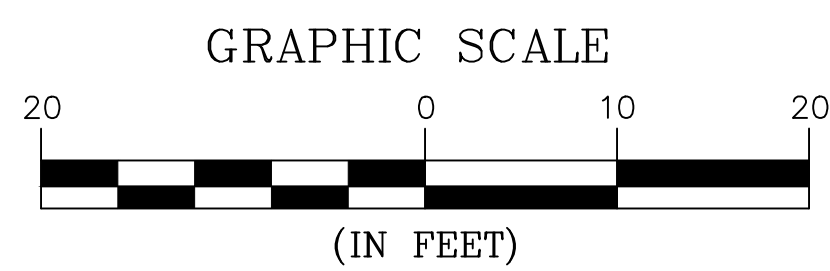
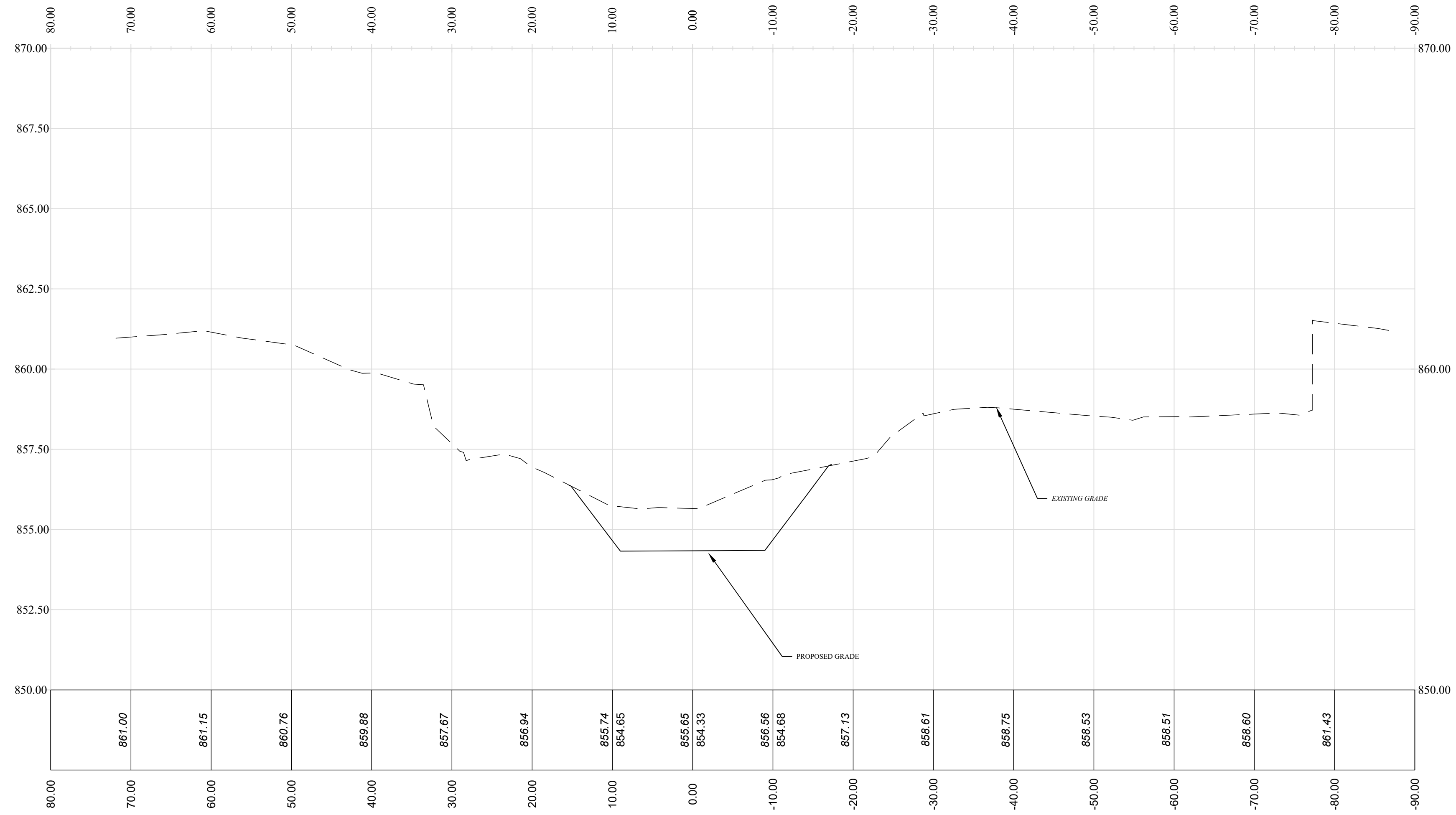
1. THE PURPOSE OF THIS PLAN IS TO SHOW THE LOCATION OF THE CROSS SECTION FROM THE ASSOCIATED HEC-RAS MODEL. REFER TO THE ASSOCIATED H&H REPORT FOR MORE INFORMATION.

 234 MAPLE STREET TRUCKSVILLE, PA 18708 PHONE: 570-371-9457 DEANGELO-CONSULTING.COM COPYRIGHT 2023	REVISIONS		CROSS SECTION LOCATION	
	DATE	DESCRIPTION	PERMIT WAIVER PLAN FOR THE DAM REMOVAL AT THE LANDS AT HILLSIDE FARMS 65 HILLSIDE ROAD SHAVERTOWN, PA 18708	
	12/12/2023	DEP AND LCD COMMENTS	DATE:	03/14/2023
	1/5/2024	DEP AND LCD COMMENTS	SCALE:	1" = 20'
		PROJ. #:	2022012	
		SHEET:	10 OF 12	
		 <b>XS-1</b>		



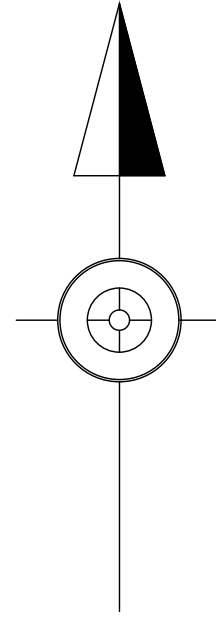


RIVER STATION 1031

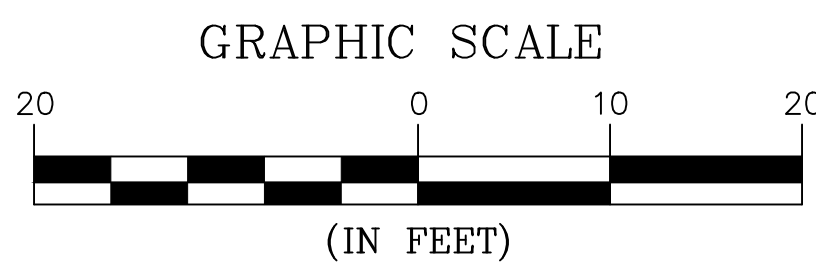
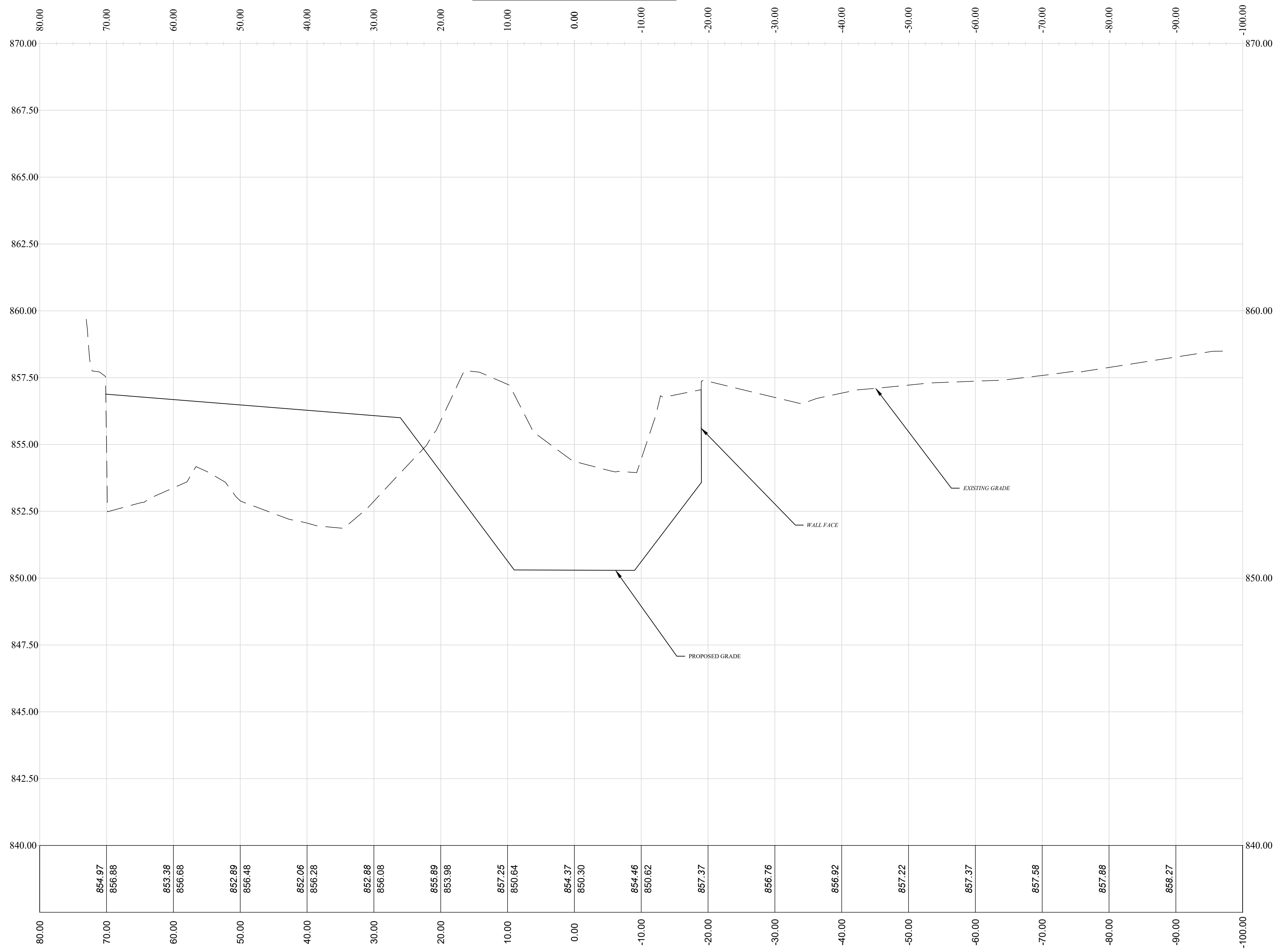


 234 MAPLE STREET TRUCKSVILLE, PA 18708 PHONE: 570-371-9457 DEANGELO-CONSULTING.COM COPYRIGHT 2023	REVISIONS			CROSS SECTION		
	DATE	DESCRIPTION		PERMIT WAIVER PLAN	DATE:	03/14/2023
	12/12/2023	ADDED TO SET		FOR THE	SCALE:	1" = 10'
	1/5/2024	DEP AND LCD COMMENTS		DAM REMOVAL	PROJ. #:	2022012
				AT	SHEET:	11 OF 12
		THE LANDS AT HILLSIDE FARMS	<b>XS-2</b>			
		65 HILLSIDE ROAD SHAVERTOWN, PA 18708				





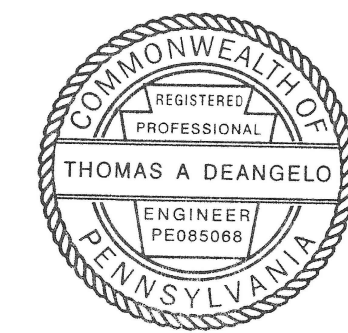
RIVER STATION 1021



**DEANGELO**  
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REVISIONS	
DATE	DESCRIPTION
12/12/2023	ADDED TO SET
1/5/2024	DEP AND LCD COMMENTS



CROSS SECTION	
PERMIT WAIVER PLAN FOR THE <b>DAM REMOVAL</b> AT THE LANDS AT HILLSIDE FARMS 65 HILLSIDE ROAD SHAVERTOWN, PA 18708	
DATE:	03/14/2023
SCALE:	1" = 10'
PROJ. #:	2022012
SHEET:	12 OF 12
<b>XS-3</b>	