ABANDONED MINE DRAINAGE REMEDIATION PROJECT FOR THE

PINE FOREST DISCHARGE PHASE 2 – TREATMENT SYSTEM CONSTRUCTION SCHUYLKILL HEADWATERS ASSOCIATION, INC.

LOCATED IN

RETTEW ASSOCIATES, INC. HEREBY STATES THAT, PURSUANT TO THE PROVISIONS OF ACT NO. 287 OF 1974, AS AMENDED BY ACT 187 OF 1996, OF THE PENNSYLVANIA LEGISLATURE, IT HAS PERFORMED THE FOLLOWING IN PREPARING THESE DRAWINGS REQUIRING EXCAVATION OR DEMOLITION WORK AT SITES WITHIN THE POLITICAL SUBDIVISION(S) SHOWN ON THE DRAWINGS:

1. PURSUANT TO SECTION 4, CLAUSE (2) OF SAID ACT, RETTEW ASSOCIATES, INC. REQUESTED FROM EACH USER'S OFFICE DESIGNATED ON SUCH LIST PROVIDED BY THE ONE CALL SYSTEM NOTIFICATION, THE INFORMATION PRESCRIBED BY SECTION 2, CLAUSE (4) OF SAID ACT, NOT LESS THAN (10) NOR MORE THAN (90) WORKING DAYS BEFORE FINAL DESIGN IS TO BE COMPLETED.

ACT 187 UNDERGROUND UTILITY PROTECTION ACT

2. PURSUANT TO SECTION 4, CLAUSE (5) OF SAID ACT, RETTEW ASSOCIATES, INC. HAS MET THEIR OBLIGATIONS OF CLAUSE (2) BY CALLING THE ONE CALL SYSTEM SERVING THE LOCATION WHERE EXCAVATION IS TO BE PERFORMED.

3. PURSUANT TO SECTION 4, CLAUSE (3) OF SAID ACT, RETTEW ASSOCIATES, INC. HAS SHOWN UPON THESE DRAWINGS "THE POSITION AND TYPE OF EACH LINE, AS DERIVED PURSUANT TO THE REQUEST MADE AS REQUIRED BY CLAUSE (2), THE SERIAL NUMBER PROVIDED BY THE ONE CALL SYSTEM, THE TOLL—FREE ONE CALL SYSTEM PHONE NUMBER, AND THE NAME OF THE USER, THE USER'S DESIGNATED OFFICE ADDRESS AND PHONE NUMBER AS SHOWN ON THE LIST REFERRED TO IN SECTION 4, CLAUSE (5) OF

AND RETTEW ASSOCIATES, INC DOES NOT MAKE ANY REPRESENTATION, WARRANTY, ASSURANCE OR GUARANTEE THAT THE INFORMATION RECEIVED PURSUANT TO SAID REQUEST AND AS REFLECTED ON THESE DRAWINGS IS CORRECT OR ACCURATE, BUT RETTEW ASSOCIATES, INC. IS REFLECTING SAID INFORMATION ON THESE DRAWINGS ONLY DUE TO THE REQUIREMENTS OF THE SAID ACT NO. 187 OF DECEMBER 19, 1996.

ONE CALL SYSTEM SERIAL NO. NOTIFICATION BY RETTEW ASSOCIATES, INC. DATE: 05/18/05 1387223 (E. NORWEGIAN TWP.)

SYSTEM, INC. 1-800-242-1776

ONE CALL SYSTEM SERIAL NUMBER: _

CALL BEFORE YOU DIG!

PENNSYLVANIA LAW REQUIRES

(3) WORKING DAYS NOTICE FOR

CONSTRUCTION PHASE AND (10) WORKING

DAYS IN DESIGN STAGE - STOP CALL

1387224 (ST. CLAIR BOROUGH)

BLYTHE TOWNSHIP MUNICIPAL AUTHORITY 375 VALLEY STREET NEW PHILADELPHIA, PA 17959 CONTACT: MICHAEL E. BURDA

UTILITIES RESPONDED:

COMCAST CABLE COMMUNICATIONS 2323 WEST END AVENUE POTTSVILLE, PA 17901 CONTACT: KEITH DOVE

GREATER POTTSVILLE AREA SEWER AUTHORITY
401 NORTH CENTER STREET
P.O. BOY 1163

POTTSVILLE, PA 17901
CONTACT: TIMOTHY R. YINGLING
PPL ELECTRIC UTILITIES CORPORATION

4810 LYCOMING MALL DRIVE MONTOURSVILLE, PA 17754 CONTACT: PAM SEITZER

PPL GAS UTILITIES CORPORATION 555 CAMARGO ROAD QUARRYVILLE, PA 17566 CONTACT: SCOTT KINTER SAINT CLAIR BOROUGH 16 SOUTH THIRD STREET SAINT CLAIR, PA 17970 CONTACT: OFFICE PERSONNEL

SAINT CLAIR SEWER AUTHORITY 16 SOUTH THIRD STREET ST CLAIR, PA 17970 CONTACT: EDNA SHAFFER

SCHUYLKILL COUNTY MUNICIPAL AUTHORITY 221 SOUTH CENTRE STREET P.O. BOX 960 POTTSVILLE, PA 17901 CONTACT: DAVID J. HOLLEY

SERVICE ELECTRIC COMPANY 15 J CAMPBELL COLLINS DRIVE WILKES BARRE, PA 18702 CONTACT: JIM HUNTER

VERIZON PENNSYLVANIA INC STRAWBERRY SQUARE 11TH FLOOR HARRISBURG, PA 17101 CONTACT: SHERRY IMHOF

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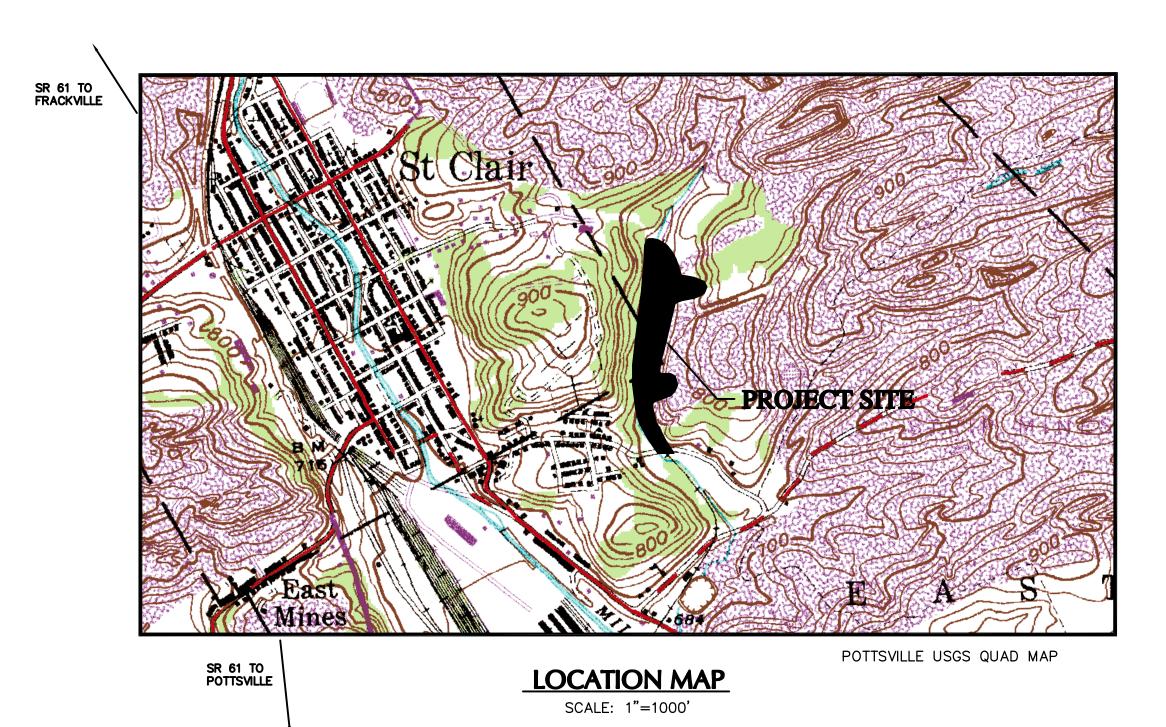
SHT. 4 PROPOSED SITE PLAN
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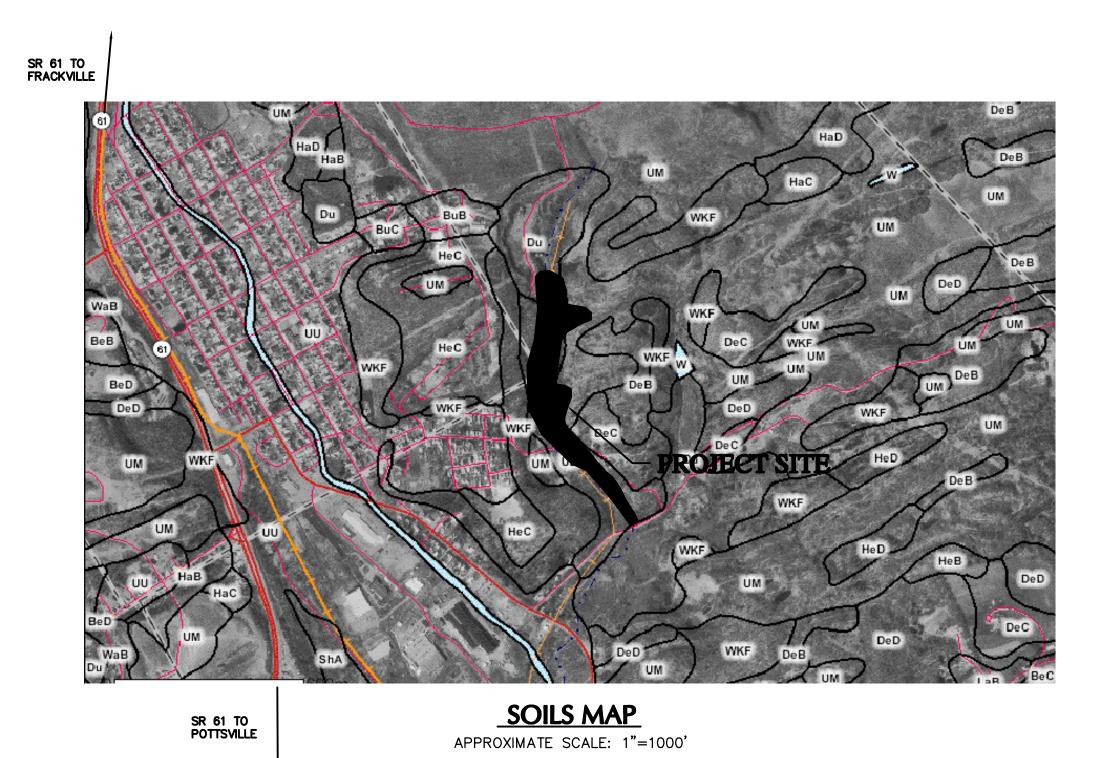
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SITE DETAILS - ALD DETAILS

ST. CLAIR BOROUGH AND EAST NORWEGIAN TOWNSHIP, SCHUYLKILL COUNTY, PA





GENERAL NOTES

1. BENCHMARK— TRAVERSE POINT #5 LOCATED APPROXIMATELY 48' FROM THE SOUTHEAST CORNER OF THE 6' HIGH CHAIN LINK FENCE SURROUNDING THE PINE FOREST DISCHARGE ELEVATION: 740.84', DATUM: NAVD 88.

2. ALL EXISTING UTILITIES HAVE BEEN SHOWN IN ACCORDANCE WITH THE BEST AVAILABLE INFORMATION.

3. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL ABOVE GROUND AND BELOW GROUND UTILITIES AND STRUCTURES AND WILL BE RESPONSIBLE FOR THE PROTECTION OF THESE UTILITIES AND STRUCTURES AT ALL TIMES.

4. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES AND MAINTAIN UNINTERRUPTED SERVICE AND ANY DAMAGE SHALL BE REPAIRED IMMEDIATELY AND COMPLETELY AT HIS EXPENSE.
5. CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPLACEMENT OF LANDSCAPE

6. THE PLAN LOCATIONS AND DIMENSIONS SHALL BE STRICTLY ADHERED TO UNLESS OTHERWISE DIRECTED BY THE ENGINEER. PLAN CHANGES, SHOULD THEY BE REQUIRED, ARE SUBJECT TO MUNICIPAL AND COUNTY ORDINANCES.

7. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING A COPY OF ALL PERMITS RELATED TO THE CONSTRUCTION SHOWN ON THESE PLANS ON THE JOB SITE AT ALL

8. CONTRACTOR SHALL VERIFY ALL DIMENSIONS ON THE SITE PROJECT PRIOR TO THE START OF CONSTRUCTION.

9. CONTRACTOR SHALL NOTIFY ALL UTILITIES REQUIRED PER ACT 187 FOR VERIFICATION AND LOCATION OF UTILITIES PRIOR TO CONSTRUCTION.

10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL JOB SITE SAFETY, ALL TRAFFIC CONTROL, TRENCH BARRICADING, COVERING, SHEETING AND SHORING.

11. ALL BERMS AND IMPOUNDMENTS SHALL BE CONSTRUCTED IN 6" LIFTS AND COMPACTED TO 95% PROCTOR DENSITY.

12. THE CONTRACTOR SHALL BE REPONSIBLE FOR COORDINATING ACCESS TO THE SITE WITH THE READING ANTHRACITE COMPANY.

13. THE LIMESTONE AGGREGATE SHALL CONTAIN NOT LESS THAN NINETY PERCENT (90%) CALCIUM CARBONATE, NOT MORE THAN FIVE PERCENT (5%) MAGNESIUM OXIDE (MgO), AND NOT MORE THAN FIVE PERCENT (5%) IRON OXIDE (Fe2O3). A SAMPLE OF THE LIMESTONE MUST BE TESTED BY A THIRD PARTY LABORATORY AND THE RESULTS MUST BE SUBMITTED FOR REVIEW PRIOR TO PLACEMENT OF ANY LIMESTONE. ALL LIMESTONE AGGREGATE USED ON SITE SHALL MEET THE ABOVE SPECIFICATION. CERTIFICATION WILL BE REQUIRED FOR QUALITY AND CLASSIFICATION OF ALL AGGREGATE USED ON SITE.

14. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL AND DISPOSAL FOR ALL UNUTILIZED MATERIAL ON THE SITE.

15. THE CONTRACTOR SHALL COORDINATE WITH THE PROPER ENTITIES CONCERNING THE REMOVAL OF ANY COAL DIRT THAT MAY BE ONSITE. ANY COAL DIRT FOUND ON SITE MAY NOT BE UTILIZED IN THE CONSTRUCTION OF THE TREATMENT SYSTEM. THIS PRODUCT MUST BE STORED IN AN ACCESSIBLE AREA ON THE SITE.

16. ALL CLAY MATERIAL SHALL BE COMPACTED TO ELIMINATE SEEPAGE.

ORGANIC MATERIAL AND STONES IN EXCESS OF 6" IN DIAMETER.

18. WETLAND PLANTING SHALL BE THE RESPONSIBILITY OF THE SCHUYLKILL HEADWATERS ASSOCIATION. ALL OTHER PLANTING SHALL BE THE RESPONSIBILITY OF

19. TRACKED EQUIPMENT SHALL BE ALLOWED ONSITE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO REPAIR ANY DAMAGE CAUSED BY SUCH EQUIPMENT.

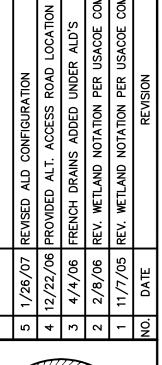
20. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING ST. CLAIR BOROUGH, EAST NORWEGIAN TOWNSHIP, THE SCHUYLKILL HEADWATERS ASSOCIATION, INC.,

RETTEW ASSOCIATES, INC. AND THE SCHUYLKILL CONSERVATION DISTRICT TEN (10) WORKING DAYS PRIOR TO THE START OF CONSTRUCTION.

21. THE PLAN LOCATIONS AND DIMENSIONS SHALL BE STRICTLY ADHERED TO UNLESS OTHERWISE DIRECTED BY THE ENGINEER. PLAN CHANGES, SHOULD THEY BE REQUIRED, ARE SUBJECT TO MUNICIPAL AND COUNTY ORDINANCES.

22. CONCRETE REINFORCING DESIGN TO BE PERFORMED BY MANUFACTURER.23. ALL CONCRETE SHALL BE MINIMUM 3,300 PSI.

LEGEND:	EXISTING	PROPOSED
UTILITY LINE/POLE GAS LINE/GATE VALVE & BOX	—— 0E/T — Ø—— —— G —— ÖV	. Z.
WATER LINE/HYD./VALVE SEWER LINE/MANHOLE LOW PRESSURE SEWER/FORCE MAIN	6"W	8"W
STORM LINE/INLET/ENDWALL CONTOUR	======================================	100
ADJOINERS/PROPERTY LINE UNDERGROUND ELECTRICAL		
OVERHEAD ELECTRICAL WETLANDS		
EASEMENT LINE RIGHT-OF-WAY LINE BOUNDARY LINE CENTERLINE EDGE OF PAVEMENT DRIVEWAY SILT FENCE FENCE WOODS LINE GUY WIRE TREE SHRUB MAIL BOX		F—
SIGN SOIL SAMPLE POINT	- ●S#6	



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	COMPANIES ON REGISTRED	CLAYTON E. BUBECK	ENGINEER PED60197	THE THE PARTY OF T
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MANAGER: CLAYTON E.	MANAGER: CLAYTON E. BUBECK, P.E. R. ORNER	SURV. CHIEF: R. ORNER	FIELDBOOM DATA COLLE
DESIGN BY: CEB/CH	снкр ву:	DRAWN BY: CH	СЕВ СЕВ
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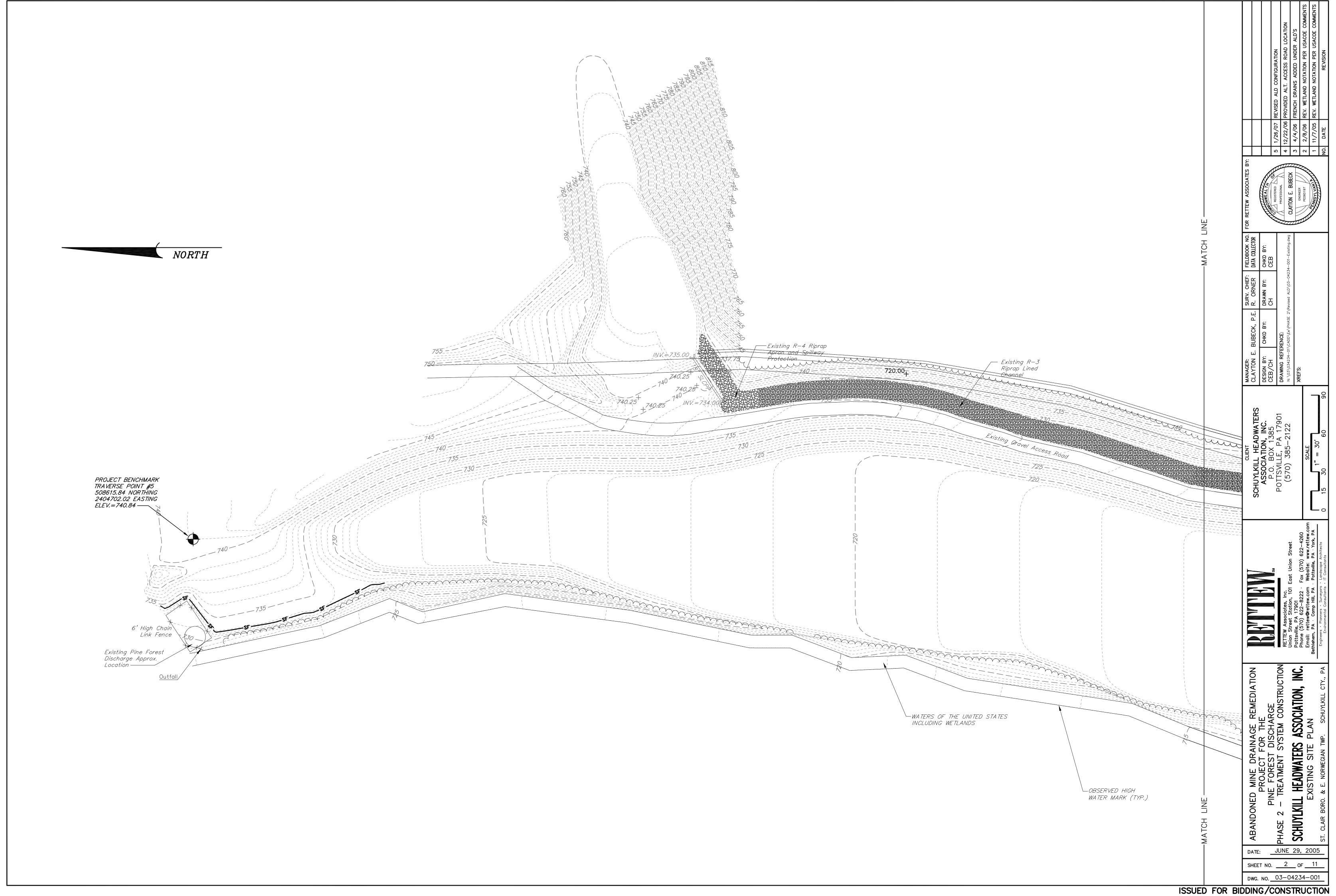
ASSOCIATION, INC. P.O. BOX 1385 POTTSVILLE, PA 17901 (570) 385–2122
ASSOCIATION, P.O. BOX 13 POTTSVILLE, PA (570) 385-2

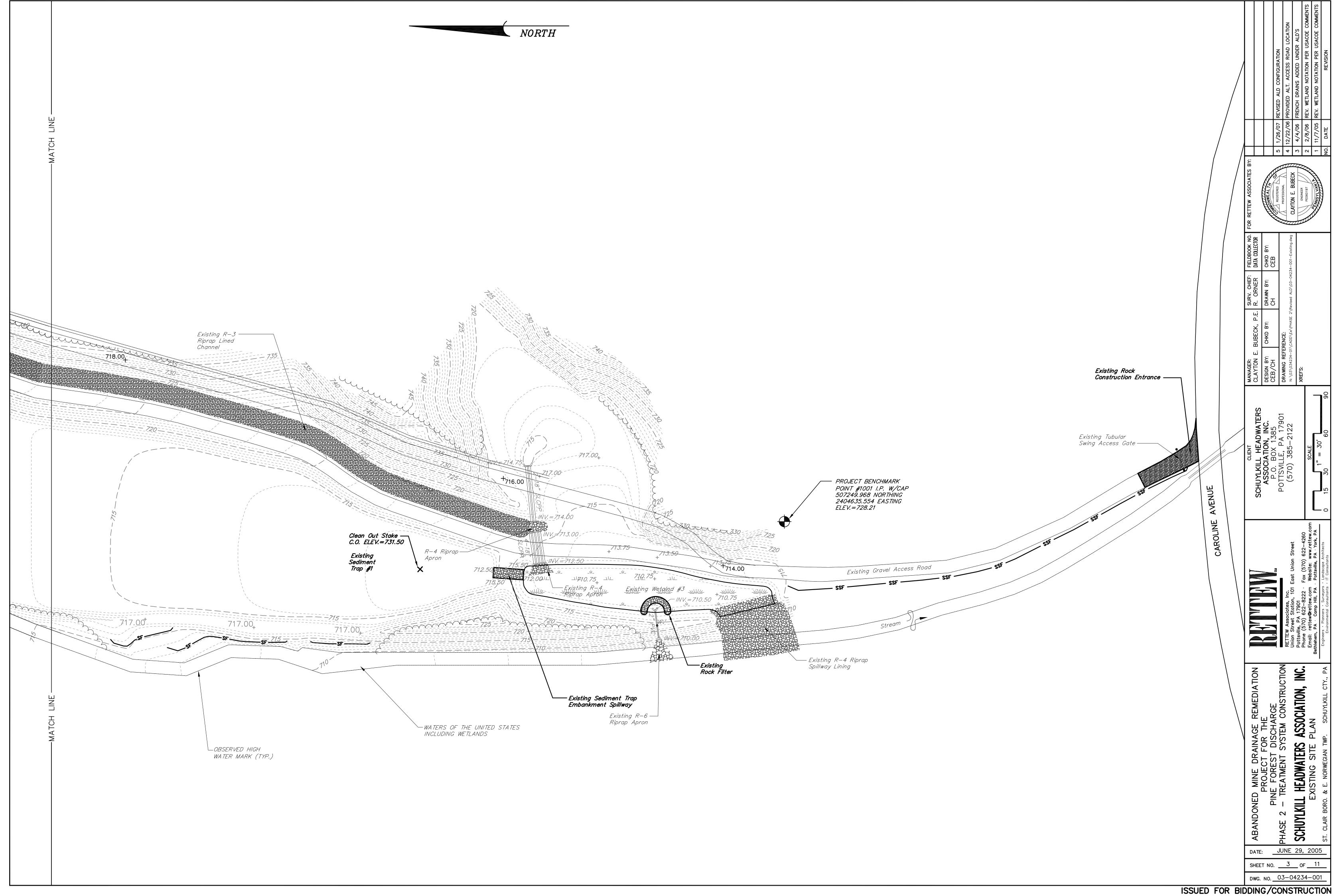


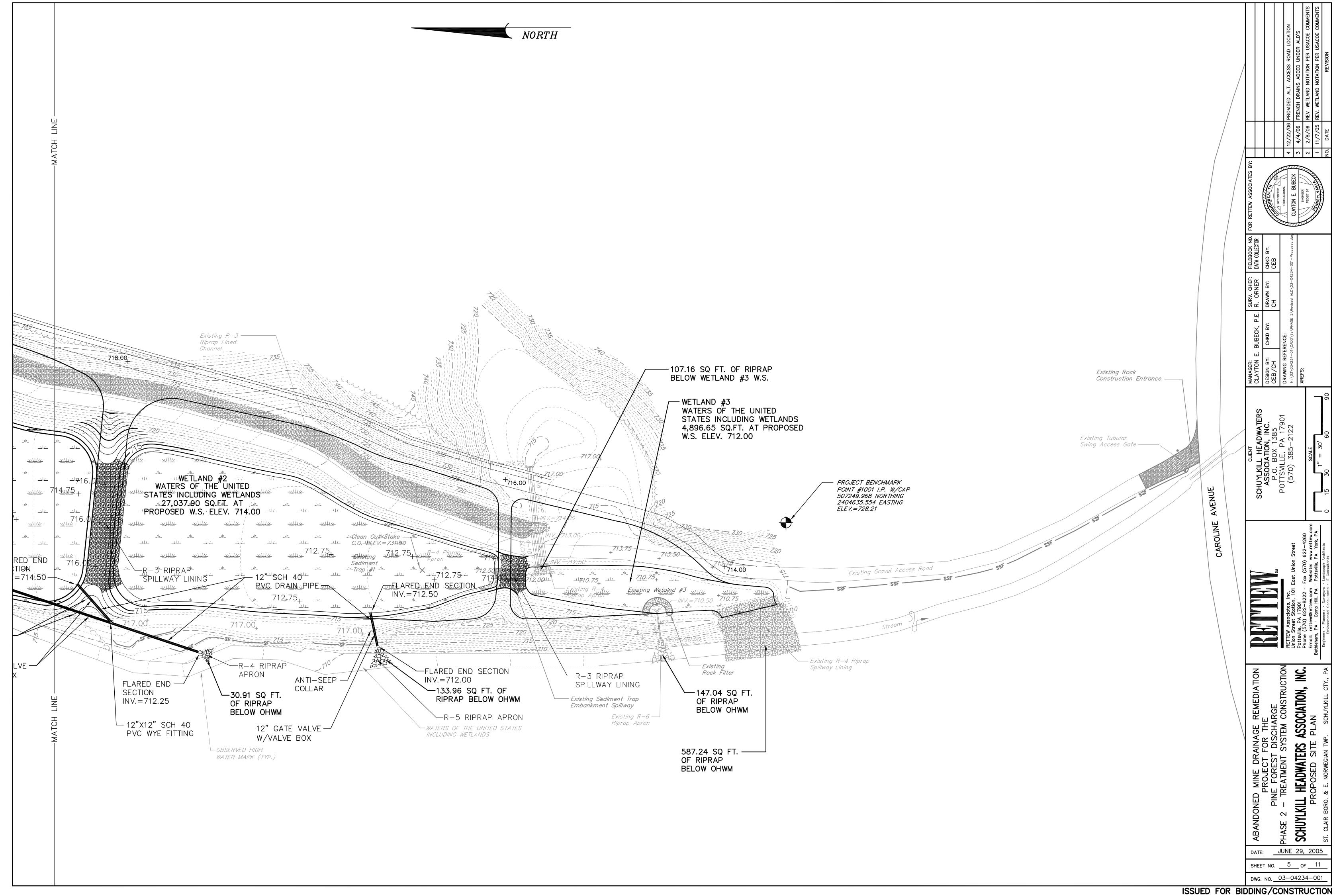


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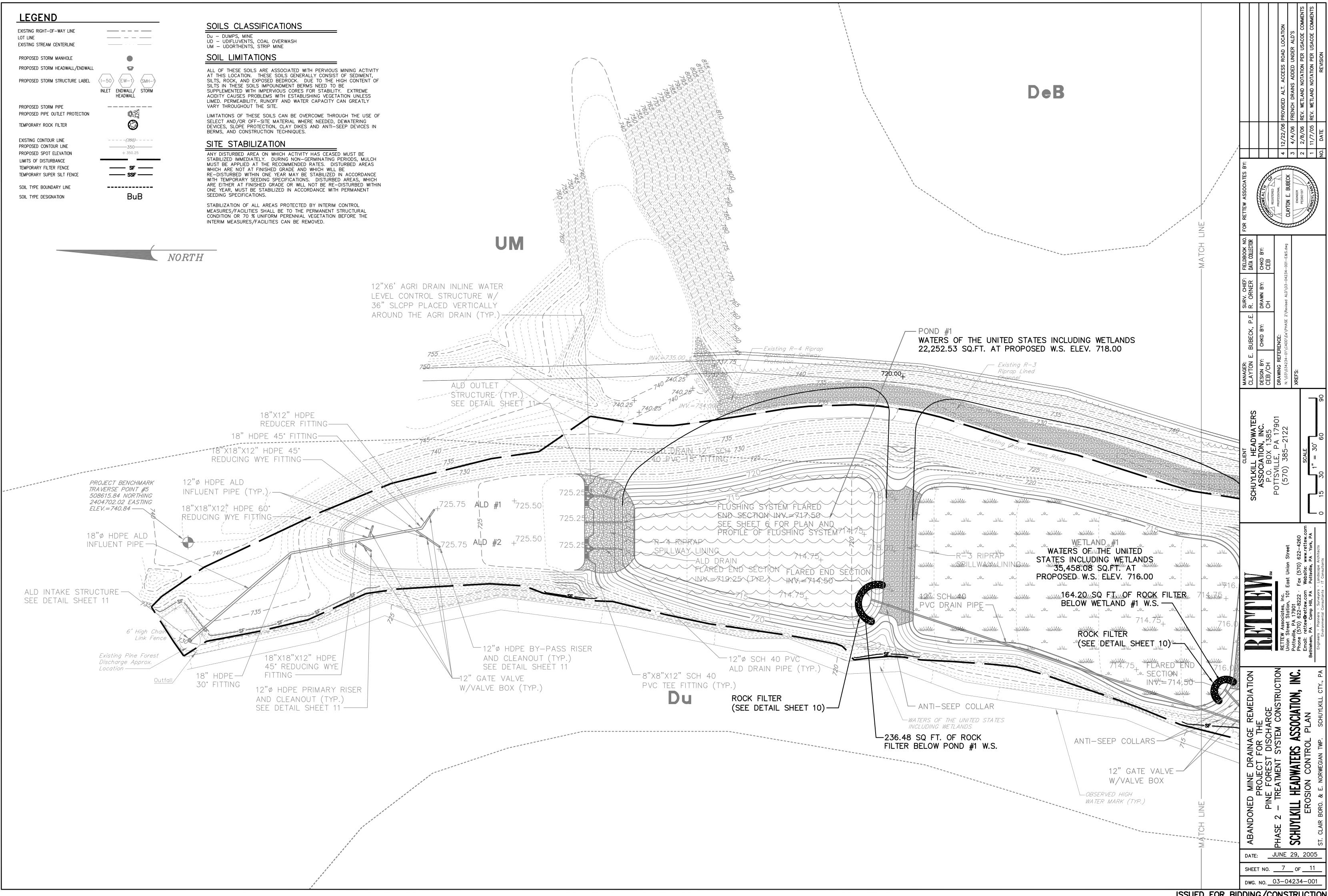
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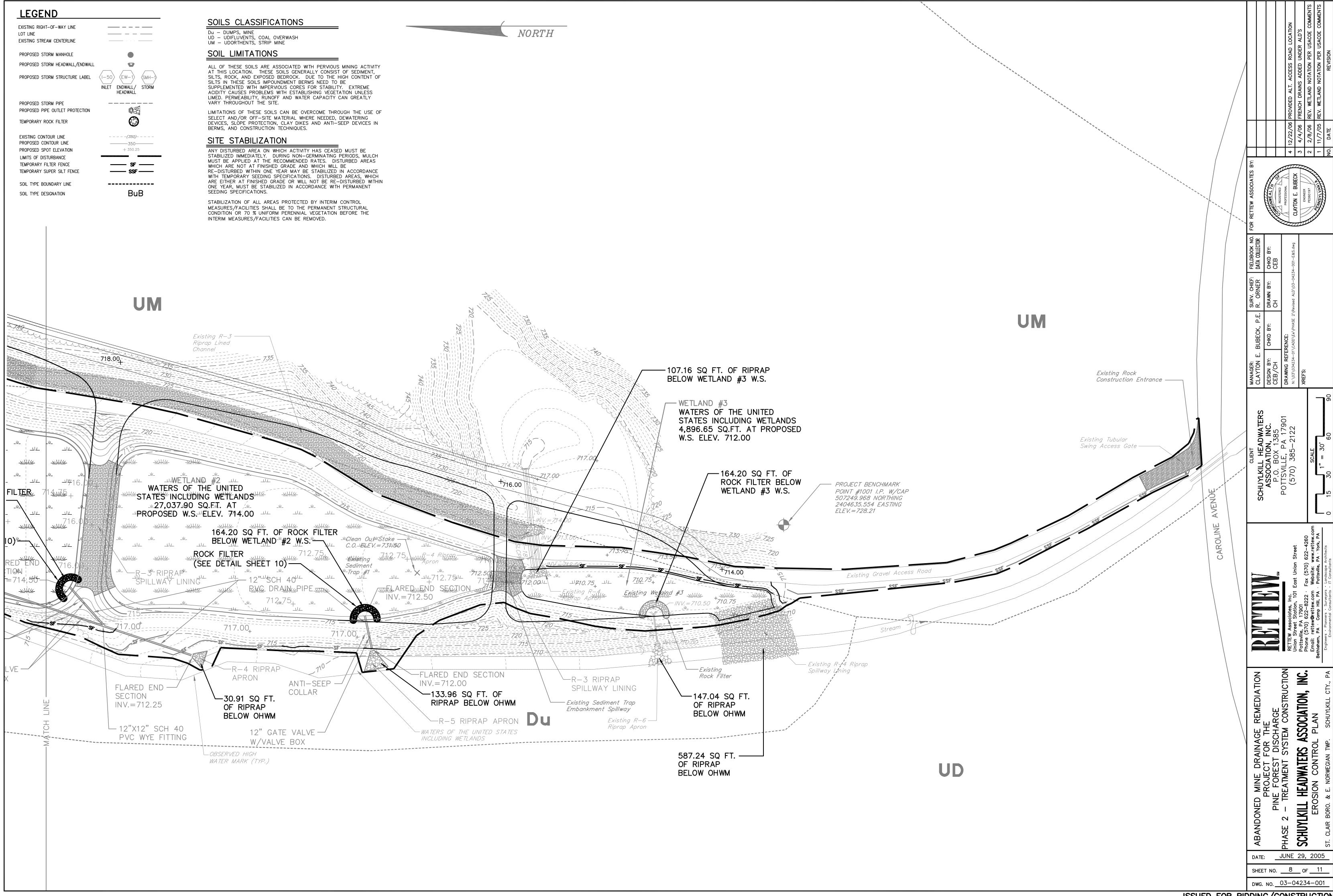






ISSUED FOR BIDDING/CONSTRUCTION





EROSION & SEDIMENT POLLUTION CONTROL NOTES:

A. GENERAL EROSION AND SEDIMENT CONTROL GUIDELINES

1. A COPY OF THIS PLAN SHALL BE KEPT AVAILABLE FOR INSPECTION ON THE CONSTRUCTION SITE AT ALL TIMES THROUGH THE TERMS OF THE

2. THE INTENT OF THIS PLAN/NARRATIVE IS TO INDICATE GENERAL MEANS OF COMPLIANCE WITH THE REQUIREMENTS OF THE RULES AND REGULATIONS OF CHAPTER 102 OF THE PENNSYLVANIA CLEAN STREAMS LAW. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO IMPLEMENT THESE METHODS PLUS ADDITIONAL METHODS AS MAY BE NECESSARY BECAUSE OF THE CONDITIONS CREATED BY LOCALIZED SITE CONDITIONS, AND/OR CONSTRUCTION PROCEDURES IN ORDER TO ASSURE COMPLIANCE WITH APPLICABLE LAW. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO MAINTAIN ALL SEDIMENT AND EROSION CONTROL FACILITIES SO THAT THEY PERFORM AS REQUIRED BY LAW.

3. IF SPOIL MATERIAL OR SOIL IS REMOVED FROM THE SITE THE CONTRACTOR SHALL PREPARE AND SUBMIT TO THE APPROPRIATE CONSERVATION DISTRICT AN EROSION AND SEDIMENTATION CONTROL PLAN FOR THE SITE WHICH WILL RECEIVE THE SPOIL MATERIAL.

B. GENERAL SEDIMENT AND EROSION CONTROL METHODS/PROCEDURES 1. IN ALL CASES, THE SMALLEST PRACTICAL AREA OF STABLE LAND SURFACE SHALL BE DISTURBED.

2. ALL RELATED SEDIMENT AND EROSION CONTROL FACILITIES SHALL BE IN PLACE AND CAPABLE OF FUNCTIONING AS INTENDED PRIOR TO EARTHMOVING ACTIVITY WITHIN THEIR CONTRIBUTING WATERSHED AREAS.

3. UTILITY EXCAVATIONS SHALL BE OPEN ONLY LONG ENOUGH TO PROPERLY INSTALL AND INSPECT ALL UNDERGROUND FACILITIES IN ACCORDANCE WITH APPLICABLE SPECIFICATIONS.

4. EXCAVATED MATERIAL (SPOIL) SHALL BE PLACED UP SLOPE FROM THE EXCAVATION WHENEVER POSSIBLE. RUNOFF FROM SPOIL PILES SHALL BE DIRECTED THROUGH A SEDIMENT FILTER STRUCTURE AND DISCHARGED IN A NON-EROSIVE MANNER.

5. DEWATERING EQUIPMENT DISCHARGE SHALL BE DIRECTED ONTO A STABILIZED SURFACE SO THAT EROSION DOES NOT OCCUR. DISCHARGES SHALL BE DIRECTED THROUGH A SEDIMENT FILTER STRUCTURE AND DISCHARGED IN A NON-EROSIVE MANNER.

6. BACKFILLED EXCAVATIONS SHALL BE RESTORED TO ORIGINAL TYPE OF COVER AND GRADE AS PER SPECIFICATIONS. SEEDING SHALL BE DONE ACCORDING TO SCHEDULE FOR PERMANENT SEEDING. TEMPORARY STABILIZATION IS REQUIRED FOR ANY AND ALL ERODIBLE/SOLUBLE AREAS AND MATERIALS TO BE EXPOSED.

7. LAWN AREAS SHALL BE FINISHED GRADED WITH 6-INCHES OF TOPSOIL UNLESS OTHERWISE NOTED. POSITIVE DRAINAGE SHALL BE MAINTAINED AWAY FROM ALL STRUCTURES. NO ISOLATED LOW SPOTS SHALL BE CREATED.

8. CONSTRUCTION ACCESS INTO UNPAVED AREAS FROM PAVED AREAS OR STREETS (PUBLIC OR PRIVATE) SHALL BE VIA A STABILIZED CONSTRUCTION ENTRANCE.

9. SEDIMENT SPILLED, DROPPED OR TRACKED ONTO PAVED SURFACES SHALL BE REMOVED IMMEDIATELY.

10. AT THE END OF EACH WORKING DAY, ANY SEDIMENT TRACKED OR CONVEYED ONTO A PUBLIC ROADWAY WILL BE REMOVED AND RE-DEPOSITED ONTO THE CONSTRUCTION SITE. REMOVAL CAN BE COMPLETED THROUGH USE OF MECHANICAL OR HAND TOOLS, BUT MUST NEVER BE WASHED OFF THE ROAD BY USE OF WATER.

11. SEDIMENT REMOVED FROM THE E&SPC CONTROLS & FACILITIES SHALL BE DISPOSED OF IN LANDSCAPED AREAS OUTSIDE OF STEEP SLOPES, WETLANDS, FLOODPLAINS OR DRAINAGE SWALES AND IMMEDIATELY STABILIZED OR PLACED IN TOPSOIL STOCKPILES. AN E&S PLAN SHALL BE SUBMITTED TO THE CONSERVATION DISTRICT FOR ALL OFF-SITE SPOIL AREAS.

12. ALL PUMPING OF SEDIMENT-LADEN WATER SHALL BE THROUGH A DIRT BAG FILTRATION DEVICE, OR EQUIVALENT SEDIMENT REMOVAL FACILITY, OVER NON-DISTURBED VEGETATED AREAS. DISCHARGE POINTS SHOULD BE ESTABLISHED TO PROVIDE FOR MAXIMUM DISTANCE TO ACTIVE WATERWAYS.

13. SHOULD UNFORESEEN EROSIVE CONDITIONS DEVELOP DURING CONSTRUCTION, THE CONTRACTOR SHALL TAKE ACTION TO REMEDY SUCH CONDITIONS AND TO PREVENT DAMAGE TO ADJACENT PROPERTIES AS RESULT OF INCREASED RUNOFF AND/OR SEDIMENT DISPLACEMENT. STOCKPILES OF WOOD CHIPS, HAY BALES, CRUSHED STONE AND OTHER MULCHES SHALL BE IN READINESS TO DEAL IMMEDIATELY WITH EMERGENCY PROBLEMS OF EROSION.

14. A COPY OF THIS EROSION AND SEDIMENTATION CONTROL REPORT AND PLANS MUST BE POSTED AT THE CONSTRUCTION SITE.

15. FILTER FABRIC FENCE MUST BE INSTALLED AT LEVEL GRADE. BOTH ENDS OF EACH FENCE SECTION MUST EXTEND AT LEAST 8' UPSLOPE AT 45 DEGREES TO THE MAIN FENCE ALIGNMENT.

16. ANY FENCE SECTION, WHICH HAS BEEN UNDERMINED OR TOPPED, MUST BE IMMEDIATELY REPLACED WITH A ROCK FILTER OUTLET. (SEE ROCK FILTER OUTLET DETAIL.)

17. WHERE ENDS OF FILTER FABRIC COME TOGETHER, THEY MUST BE OVERLAPPED, FOLDED AND STAPLED TO PREVENT SEDIMENT BYPASS. THE TOE ANCHOR MUST BE BACKFILLED AND COMPACTED TO A DENSITY EQUAL TO THE SURROUNDING SOILS.

18. STOCKPILE HEIGHTS MUST NOT EXCEED 35'. STOCKPILE SLOPES MUST BE 2:1 OR FLATTER.

19. ANY DISTURBED AREA ON WHICH ACTIVITY HAS CEASED MUST BE STABILIZED IMMEDIATELY. DURING NON-GERMINATING PERIODS, MULCH MUST BE APPLIED AT THE RECOMMENDED RATES. DISTURBED AREAS WHICH ARE NOT AT FINISHED GRADE AND WHICH WILL BE RE—DISTURBED 1 YEAR MAY BE STABILIZED IN ACCORDANCE WITH TEMPORARY SEEDING SPECIFICATIONS. DISTURBED AREAS, WHICH ARE EITHER AT FINISHED GRADE OR WILL NOT BE RE-DISTURBED WITHIN ONE YEAR, MUST BE STABILIZED IN ACCORDANCE WITH PERMANENT SEEDING SPECIFICATIONS

20. DIVERSION CHANNELS, SEDIMENTATION BASINS, SEDIMENT TRAPS, AND STOCKPILES MUST BE STABILIZED IMMEDIATELY.

21. SEDIMENT MUST BE REMOVED WHEN ACCUMULATIONS REACH 1/3 THE HEIGHT OF THE OUTLETS.

22. THE HEIGHT OF THE ROCK FILTER SHOULD EQUAL 5/6 THE HEIGHT OF THE STRAW BALES OR FILTER FABRIC.

23. ROCK CONSTRUCTION ENTRANCE THICKNESS WILL BE CONSTANTLY MAINTAINED TO THE SPECIFIED DIMENSIONS BY ADDING ROCK. A STOCKPILE OF ROCK MATERIAL WILL BE MAINTAINED ON THE SITE FOR THIS PURPOSE. AT THE END OF EACH CONSTRUCTION DAY, ALL SEDIMENT DEPOSITED ON PUBLIC ROADWAYS WILL BE REMOVED AND RETURNED TO THE CONSTRUCTION SITE.

24. STABILIZATION OF ALL AREAS PROTECTED BY INTERIM CONTROL MEASURES/FACILITIES SHALL BE TO THE PERMANENT STRUCTURAL CONDITION OR 70% UNIFORM PERENNIAL VEGETATION BEFORE THE INTERIM MEASURES/FACILITIES CAN BE REMOVED.

25. THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE D.E.P. REGULATIONS RELATING TO SOLID WASTE DISPOSAL/RECYCLING.

C. MAINTENANCE OF SEDIMENT AND EROSION CONTROL FACILITIES

CORRECT AND ELIMINATE THEM BEFORE THEY DEVELOP INTO

SHALL BE REPAIRED, STABILIZED AND PERMANENTLY SEEDED.

UNMANAGEABLE PROBLEMS.

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF ALL EROSION AND SEDIMENT POLLUTION CONTROL MEASURES. IF EROSION CONTROL MEASURES FAIL OR OTHER EROSION PROBLEMS ARISE, THE CONTRACTOR SHALL TAKE IMMEDIATE ACTION TO

2. MAINTENANCE MUST INCLUDE INSPECTION OF ALL EROSION AND SEDIMENTATION CONTROLS AFTER EACH RUNOFF EVENT AND ON A WEEKLY BASIS. ANY AREAS DISTURBED BY REMOVAL OF CONTROLS D. RESTORATION OF PLANTING AREAS

1. IF EARTH DISTURBANCE OCCURS DURING THE MONTHS OF NOVEMBER THROUGH MARCH, THEN AROOSTOOK WINTER RYE SHALL BE APPLIED TO DISTURBED AREAS AS A TEMPORARY SEED MIXTURE. IF STABILIZATION CANNOT BE ACHIEVED WITH AROOSTOOK WINTER RYE THEN MULCH WITH TACKIFIER SHALL BE APPLIED TO DISTURBED AREAS. MULCH SHALL BE CLEAN OAT OR WHEAT STRAW AND SHALL BE APPLIED AT THE RATE OF 3 TONS PER ACRE. TACKIFIER SHALL BE APPLIED AT THE MANUFACTURER'S APPLIED RATE. AREAS THAT LOSE THE MULCH COVER SHALL BE REMULCHED.

FINAL RESTORATION SHALL BE PERFORMED NO LATER THAN THE START OF THE NEXT PLANTING SEASON FOLLOWING CONSTRUCTION. THE PLANTING SEASON SHALL BE AS ESTABLISHED BY THE U.S. AGRICULTURAL SERVICE FOR THE AREA OF CONSTRUCTION.

TOPSOIL SHALL BE FREE FROM SUBSOIL, BRUSH, WEEDS, OR OTHER LITTER, CLAY LUMPS AND STONES, BUT MAY CONTAIN DECAYING VEGETABLE MATTER AS IS PRESENT IN GOOD TOPSOIL.

4. PRECAUTIONS SHALL BE EXERCISED AS NECESSARY TO CONFORM WITH LAWS RELATING TO EROSION AND SEDIMENT CONTROL.

. SEED SHALL BE NOT MORE THAN TWO (2) YEARS OLD. GERMINATION TESTS OF SEEDS SHALL BE MADE NOT MORE THAN SIX (6) MONTHS PRIOR TO SEEDING. SEED THAT HAS BECOME WET, MÓLDY, OR OTHERWISE DAMAGED SHALL NOT BE USED.

6. ALL SEED MIXTURES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO SEEDING

THE CONTRACTOR SHALL BE RESPONSIBLE TO PRODUCE A STAND OF GRASS IN ALL SEEDED OR SODDED AREAS. EROSION, DROUGHT. OR ANY OTHER CONDITION ENCOUNTERED SHALL NOT RELIEVE THE CONTRACTOR OF THIS REQUIREMENT

<u>SEEDING NOTES:</u> TEMPORARY

MULCH - CLEAN OAT OR WHEAT STRAW SHALL BE FREE FROM MATURE SEED-BEARING STALKS OR ROOTS OF PROHIBITED OR NOXIOUS WEEDS AS DEFINED BY THE PENNSYLVANIA SEED ACT OF 1947. APPLY AT A RATE 3 TONS PER ACRE. PRECAUTIONS SHALL BE TAKEN TO STABILIZE THE MULCH UNTIL THE VEGETATIVE COVER IS ESTABLISHED.

SEED MIXTURE SHALL BEAR A GUARANTEED STATEMENT OF ANALYSIS AND SHALL BE COMPOSED OF THE VARIETIES FOLLOWING AND MIXED IN THE PROPORTIONS SPECIFIED.

TEMPORARY SEED MIXTURE	PROPORTION BY WEIGHT	MINIMUM PURITY	MINIMUM GERMINATION
KENTUCKY 31 TALL FESCUE	75%	95%	80%
RYEGRASS OR RED FESCUE	25%	95%	80%
TUDEE DEDOENT DEDTOD MA	. V DE ADDED	TO THE LAWN M	VILIDE ON

THREE-PERCENT REDTOP MAY BE ADDED TO THE LAWN MIXTURE ON SLOPE AREAS OR FOR LATE SPRING OR LATE FALL SEEDING.

TEMPORARY SEEDING SHALL BE APPLIED AT THE RATE OF ONE (1) POUND PER THOUSAND (1,000) SQUARE FEET. ALL AREAS TO BE SEEDED SHALL BE LOOSENED TO A DEPTH OF AT

LEAST TWO INCHES BY MECHANICAL MEANS.

MULCH SEEDED AREAS IMMEDIATELY AFTER SEEDING. LIMESTONE AND FERTILIZER SHALL BE APPLIED UNIFORMLY TO AREAS TO BE SEEDED, AND WORKED INTO THE SOIL TO A DEPTH OF 2".

LIMESTONE - PULV. AG. LIMESTONE - 50 LBS./1000 S.F FERTILIZER - 10-20-20

FERTILIZER - 5 LBS./1000 S.F.

SEEDING - SEED ALL DISTURBED AREAS WITH THE TEMPORARY SEED MIXTURE. SEEDING SHALL OCCUR MARCH 15-JUNE 15 OR AUGUST 15-OCTOBER 15. UNLESS OTHERWISE DIRECTED BY THE ENGINEER. MULCH (HAY OR STRAW) SHALL BE APPLIED AT A RATE OF 3 TONS PER ACRE DURING THE NON-GERMINATING PERIOD OF OCTOBER 15-MARCH 15.

SEEDING NOTES: PERMANENT

ALL TOPSOIL SHALL BE LOOSENED TO A DEPTH OF AT LEAST 4". ALL OBJECTIONABLE MATERIAL LARGER THAN 2" SHALL BE REMOVED.

LIMESTONE AND FERTILIZER SHALL BE APPLIED UNIFORMLY TO AREAS TO BE SEEDED, AND WORKED INTO THE SOIL TO A DEPTH OF 6".

LIMESTONE - PULV. AG.

LIMESTONE - 6 TONS PER ACRE FERTILIZER - 10-20-20 FERTILIZER - 500 LBS. PER ACRE

WILDLIFE MIX SEED SHALL BE BROADCAST AT THE RATE AND KIND INDICATED BELOW:

ANDROPOGON GERARDII	BIG BLUESTEM	15%
SILPHIUM PERFOLIATUM	BIG BLUESTEM CUP PLANT	10%
ELYMUS CANADENSIS		10%
PANICUM CLANDESTINUM		10%
ELYMUS VIRGINICUS	VIRGINIA WILD RYE	10%
SORGHASTRUM NUTANS	INDIANGRASS	10%
PENSTEMON DIGITALIS	BEARD-TONGUE	5%
VERBESINA ALTERNIFOLIA	WINGSTEM	5%
BIDENS CONNATA	BEGGAR-TICKS	4%
RATIBIDA CONNATA	GREY-HEADED CONEFLOWER	4%
ELYMUS VILLOSUS	EASTERN BLUE WILD RYE	3%
RUDBECKIA HIRTA	BLACK-EYED SUSAN	2%
VERNONIA NOVEBORACENSIS	IRONWEED	2%
EUPATORIUM FISTULOSUM	JOE-PYE WEED	2%
PANICUM VIRGATUM	SWITCHGRASS	2%
MONARDA FISTULOSA	WILD BERGAMOT	2%
ZIZIA AUREA	GOLDEN ALEXANDERS	1%
ASTER NOVAE-ANGLIAE	NEW ENGLAND ASTER	1%
SOLIDAGO RUGOSA	ROUGH STEMMED GOLDENROD	1%

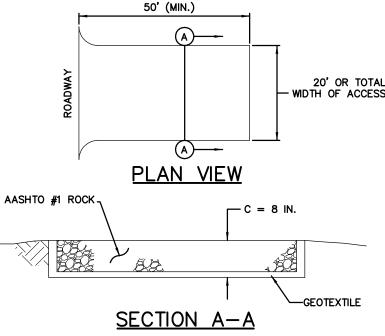
DESMODIUM CANADENSE AVAILABLE AT:

EARNST CONSERVATION SEEDS 9006 MERCER PIKE MEADVILLE, PA 16335

*ORDER BY PHONE (800) 873-3321 *BY FAX (814) 336-5191 *BY E-MAIL: earnstsales@earnstseed

SHOWY TICK TREFOIL

SEED ANNUAL RYEGRASS AT 15 LBS/ACRE ALONG WITH WILDLIFE MIX. THE ANNUAL RYEGRASS WILL SERVE AS A "NURSE CROP" AND PROVIDE TEMPORARY COVER UNTIL THE WILDLIFE MIX BECOMES ESTABLISHED.



MAINTENANCE: ROCK CONSTRUCTION ENTRANCE THICKNESS SHALL BE CONSTANTLY MAINTAINED TO THE SPECIFIED DIMENSIONS BY ADDING ROCK. A STOCKPILE SHALL BE MAINTAINED ON SITE FOR THIS PURPOSE. AT THE END OF EACH CONSTRUCTION DAY, ALL SEDIMENT DEPOSITED ON PAVED ROADWAYS SHALL BE REMOVED AND RETURNED TO THE CONSTRUCTION SITE.

ROCK CONSTRUCTION ENTRANCE

<u>NPDES PERMIT REQUIREMENTS</u>

HE PERMITTEE AND THE CO-PERMITTEE MUST ENSURE THAT VISUAL SITE INSPECTIONS ARE CONDUCTED BIWEEKLY. AND AFTER EACH PRECIPITATION EVENT BY QUALIFIED PERSONNEL TO ASSURE THE EFFECTIVE OPERATION OF

BMP'S. A WRITTEN REPORT OF EACH INSPECTION SHALL BE KEPT AS WELL 2. WHERE BMP'S ARE FOUND TO BE INOPERATIVE THE PERMITTEE AND CO-PERMITTEE SHALL CONTACT THE REVIEWING ENTITY IMMEDIATELY, FOLLOWED

BY A WRITTEN REPORT WITHIN FIVE DAYS OF INITIAL CONTACT. 3. THE PERMITTEE AND CO-PERMITTEE SHALL RETAIN RECORDS OF ALL MONITORING INFORMATION INCLUDING INSPECTION REPORTS AS REQUIRED BY

THIS PERMIT FOR A PERIOD OF THREE YEARS FROM THE DATE OF THE TERMINATION OF COVERAGE UNDER THIS PERMIT. 4. THE PERMITTEE AND CO-PERMITTEE SHALL TAKE ALL REASONABLE STEPS TO MINIMIZE OR PREVENT ANY DISCHARGE IN VIOLATION OF THIS PERMIT THAT

HAS REASONABLE LIKELIHOOD OF ADVERSELY AFFECTING HUMAN HEALTH OR

5. UPON REDUCTION, LOSS OR FAILURE OF A BMP, THE PERMITTEE AND CO-PERMITTEE SHALL TAKE IMMEDIATE ACTION TO RESTORE THE BMP OR

PROVIDE AN ALTERNATIVE METHOD OF TREATMENT. 6. THE PERMITTEE AND CO-PERMITTEE MUST COMPLY WITH ALL TERMS AND CONDITIONS OF THIS GENERAL PERMIT. ANY PERMIT NONCOMPLIANCE IS GROUNDS FOR ENFORCEMENT ACTION. THE PERMITTEE AND CO-PERMITTEE MAY BE SUBJECT TO CRIMINAL AND / OR CIVIL PENALTIES FOR VIOLATIONS OF

THE TERMS AND CONDITIONS OF THIS GENERAL PERMIT. 7. THE OWNER OR OPERATOR OF A FACILITY WITH STORMWATER DISCHARGE COVERED BY THIS PERMIT SHALL MAKE PLANS AVAILABLE TO THE PUBLIC UPON REQUEST. EROSION AND SEDIMENT CONTROL PLANS MUST BE MADE AVAILABLE AT THE SITE OF THE CONSTRUCTION ACTIVITY AT ALL TIMES.

8. THE STAGING OF EARTH DISTURBANCE ACTIVITIES AND MAINTENANCE REQUIREMENTS CONTAINED IN THE E&S PLAN MUST BE FOLLOWED.

9. ALL BUILDING MATERIALS AND WASTES MUST BE REMOVED FROM THE SITE AND RECYCLED OR DISPOSED IN ACCORDANCE WITH THE SOLID WASTE MANAGEMENT REGULATIONS. NO MATERIALS MAY BE BURIED, BUMPED, OR DISCHARGED AT THE SITE.

10. THE PERMITTEE OR CO-PERMITTEE SHALL CONTACT THE REVIEWING ENTITY AT LEAST SEVEN DAYS PRIOR TO THE BEGINNING OF CONSTRUCTION TO DETERMINE IF A PRE-CONSTRUCTION CONFERENCE IS REQUIRED.

11. AN EROSION AND SEDIMENT POLLUTION CONTROL PLAN SHALL BE DEVELOPED AND IMPLEMENTED FOR ALL OFF-SITE SPOIL AND BORROW AREAS.

12. PRIOR TO EARTH DISTURBANCE COMMENCEMENT FOR ADDITIONAL PHASES OF THE PROJECT. THE PERMITTEE OR CO-PERMITTEE SHALL SUBMIT AN EROSION AND SEDIMENT POLLUTION CONTROL PLAN FOR EACH PHASE FOR

13. THE OWNER AND/OR CONTRACTOR IS REQUIRED TO HAVE A PREPAREDNESS PREVENTION AND CONTINGENCY (PPC) PLAN ON SITE DURING CONSTRUCTION AND ALL EARTH DISTURBANCE ACTIVITIES RELATED TO CONSTRUCTION.

PCSWM OPERATION AND MAINTENANCE SCHEDULE

REVIEW AND AUTHORIZATION.

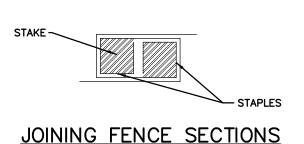
1. THE PROPERTY OWNER SHALL OWN, MAINTAIN AND BE RESPONSIBLE FOR ALL STORMWATER MANAGEMENT AND PERMANENT BMP FACILITIES THAT ARE LOCATED OUTSIDE OF STREET RIGHT-OF-WAYS AS PROPOSED ON THIS POST CONSTRUCTION STORMWATER MANAGEMENT PLAN.

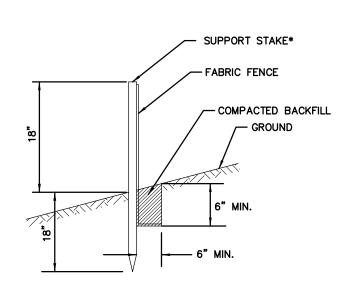
2. THE OWNER SHALL CONDUCT A VISUAL INSPECTION OF ALL STORMWATER MANAGEMENT AND PERMANENT BMP FACILITIES AT LEAST ONCE EVERY THREE MONTHS AND IMMEDIATELY AFTER STORM EVENTS. SUCH VISUAL EXAMINATION SHALL AT LEAST INVOLVE AN EXAMINATION OF THE STORMWATER COLLECTION, CONVEYANCE AND DETENTION/BMP FACILITIES FOR DEBRIS DEPOSITION (SUCH DEBRIS MAY INCLUDE, BUT SHALL NOT BE LIMITED TO AGGREGATE MATERIAL. LEAVES, GRASS CLIPPINGS, SOIL AND TRASH), AND AN EXAMINATION OF THE STORMWATER DETENTION/BMP FACILITY FOR SOIL AND STRUCTURAL SETTLEMENT, DEPRESSIONS, SINKHOLES, SEEPS, STRUCTURAL CRACKING, ANIMAL BURROWS, EXCESSIVE VEGETATION, CLOGGING, EROSION AND FOUNDATION MOVEMENT.

3. THE OWNER SHALL REMOVE ANY ACCUMULATION OF DEBRIS AND REPAIR ANY DAMAGE TO THE STORMWATER MANAGEMENT AND PERMANENT BMP FACILITIES. REPAIRS SHALL BE MADE USING MATERIAL THAT MEETS OR EXCEEDS THE SPECIFICATIONS PROVIDED ON THE PLANS.

N ACCORDANCE WITH THE NPDES PERMIT. THE OWNER IS REQUIRED MAINTAIN A RECORD OF ALL INSPECTIONS, REPAIRS AND MAINTENANCE ACTIVITIES ASSOCIATED WITH THE STORMWATER MANAGEMENT AND PERMANENT BMP FACILITIES AT THIS PROJECT SITE. THE OWNER SHALL IMMEDIATELY NOTIFY THE MUNICIPALITY AND THE CONSERVATION DISTRICT PRIOR TO INITIATING ANY MAJOR REPAIR ACTIVITIES (SUCH AS REPAIRS THAT MAY BE REQUIRED AS A RESULT OF SETTLEMENT, SINKHOLES, SEEPS, STRUCTURAL CRACKING OR FOUNDATION MOVEMENT).

5. THE OWNER SHALL ALSO COMPLY WITH ANY OTHER MAINTENANCE NOTES THAT MAY BE ON THESE PLANS.





WHERE ENDS OF FILTER FABRIC COME TOGETHER, THEY MUST BE OVERLAPPED, FOLDED AND STAPLED TO PREVENT SEDIMENT BYPASS. THE TOE ANCHOR MUST BE BACKFILLED AND COMPACTED TO A DENSITY EQUAL TO THE SURROUNDING SOILS. * STAKES SPACED @ 8' MAXIMUM. USE 2" X 2" WOOD OR EQUIVALENT STEEL STAKES. FILTER FABRIC FENCE MUST BE PLACED AT LEVEL EXISTING GRADE. BOTH ENDS OF THE BARRIER MUST BE EXTENDED AT LEAST 8 FEET UP SLOPE AT 45 DEGREES TO THE

SEDIMENT MUST BE REMOVED WHEN ACCUMULATIONS REACH 1/2 THE ABOVE GROUND ANY SECTION OF FILTER FABRIC FENCE WHICH HAS BEEN UNDERMINED OR TOPPED MUST BE IMMEDIATELY REPLACED WITH A ROCK FILTER OUTLET. SEE DETAIL "ROCK FILTER

> STANDARD 18" HIGH FILTER FABRIC FENCE NOT TO SCALE ES\DEP019

CONSTRUCTION SEQUENCE

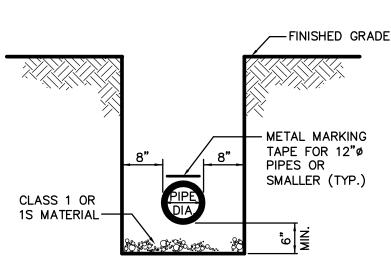
- CONTACT THE SCHUYLKILL CONSERVATION DISTRICT TEN DAYS PRIOR TO START OF CONSTRUCTION AT (570) 622–1555. ADDITIONALLY, CONTACT THE PA ONE—CALL SYSTEM AT LEAST THREE DAYS PRIOR TO THE START OF CONSTRUCTION AT 1-800-242-1776.
- 2. RESTORE THE EXISTING STABILIZED CONSTRUCTION ENTRANCE AS NECESSARY. REPAIR EXISTING FILTER FABRIC FENCE AND INSTALL ADDITIONAL FILTER
- FABRIC FENCE AS INDICATED. REPAIR AND RESTORE THE EMBANKMENT SPILLWAY SEDIMENT TRAP #1 AS
- BEGIN GRADING AND CONSTRUCTION OF THE ANOXIC LIMESTONE DRAINS (ALDs) INCLUDING THE 10" INFLUENT PIPING, PERFORATED DRAIN PIPING, FLUSHING SYSTEM, OUTLET SPILLWAY AND STRUCTURES, AND PLACEMENT OF THE ALD DIVIDING STRUCTURES, HDPE LINER, AND LIMESTONE. TEMPORARILY CAP THE 10" INFLUENT PIPES AT THE JUNCTION WITH THE 18" INFLUENT PIPE. PERMANENTLY SEED AND STABILIZE AREAS UPSLOPE OF THE ALD THAT WILL NOT BE DISTURBED DURING THE REMAINDER OF THE PROJECT WITH MULCH/EROSION MATTING AS NEEDED
- PROCEED DOWNSTREAM AND CONSTRUCT POND #1, WETLAND #1, AND WETLAND #2 WHILE PRESERVING THE SEDIMENT TRAP UNTIL CONSTRUCTION OF WETLAND #2'S SPILLWAY IS REQUIRED. INSTALL THE DRAINS AND RIPRAP SPILLWAYS FOR THE POND AND WETLANDS AS THE CONSTRUCTION PROCEEDS DOWNSTREAM. ROCK FILTERS AS INDICATED SHALL BE PLACED AROUND THE DRAIN PIPES AND THE VALVES ON THE DRAINS SHALL REMAIN IN THE OPEN
- PLACE THE WETLAND CELL SUBSTRATE IN WETLANDS #1, 2, & 3 AS DETAILED AND STABILIZE DISTURBED AREAS WITH PERMANENT SEEDING AND
- MULCH/EROSION MATTING AS INDICATED. 8. ENSURE THAT THE INFLUENT PIPING VALVES ARE IN THE CLOSED POSITION.

REMOVE THE TEMPORARY CAPS ON THE 10" INFLUENT LINES. BEGIN INSTALLING

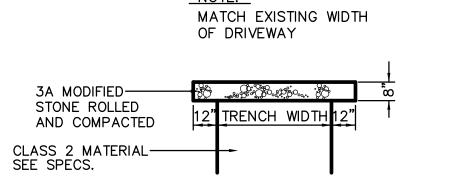
- THE 18" INFLUENT PIPING FROM THE JUNCTION WITH THE 10" PIPES AND WORKING UPSTREAM TO THE TOP OF THE EMBANKMENT SURROUNDING THE BOREHOLE OR TO WITHIN 10' OF THE BOREHOLE. COMPLETE INSTALLATION WITH CLAY DIKES AS SPECIFIED AS CONSTRUCTION PROGRESSES AND BACKFILL THE TRENCH. TRENCHING <u>WILL NOT</u> BE PERMITTED WITHIN 10' OF THE BOREHOLE UNTIL THE TRENCH IS BACKFILLED AND CLAY DIKES ARE INSTALLED.
- 10. INSTALL THE CLAY DIKE LOCATED 10' FROM THE BOREHOLE WITH SUFFICIENT PIPE PROTRUDING THROUGH IT TO ALLOW ADDITIONAL PIPE TO BE ATTACHED.
- 1. ASSEMBLE THE ALD INTAKE STRUCTURE.

ELEVATION OF THE BOREHOLE.

- 12. EXCAVATE THE REMAINDER OF THE TRENCH TO AND INTO THE BOREHOLE. DO <u>NOT</u> ALLOW EXCESSIVE SOIL OR DEBRIS TO FALL INTO THE BOREHOLE. THE TRENCH SHALL BE ALLOWED TO FILL WITH WATER AND THE EXISTING WATER SURFACE ELEVATION MAINTAINED ALONG WITH THE CURRENT OUTFALL
- 13. PLACE THE ASSEMBLED ALD INTAKE STRUCTURE IN THE BOREHOLE AND CONNECT TO THE 18" PIPING PREVIOUSLY INSTALLED.
- 14. UPON MAKING THE PIPE CONNECTION SANDBAGS SHALL BE PLACED AROUND THE PIPE IN THE TRENCH AT THE EDGE OF THE BOREHOLE TO FACILITATE PUMPING THE TRENCH DRY WITHOUT CHANGING THE WATER SURFACE
- 15. INSTALL THE REMAINING CLAY DIKE AT 5' FROM THE BOREHOLE AND BACKFILL
- 16. REMOVE THE SAND BAGS AND BACKFILL THE TRENCH WHERE THE SANDBAGS WERE LOCATED, DO NOT ALLOW EXCESSIVE SOIL OR DEBRIS TO FALL INTO THE
- 17. UPON COMPLETION OF INSTALLATION OF THE 18" INFLUENT PIPING AND ALD INTAKE STRUCTURE, PERMANENTLY SEED AND MULCH ANY REMAINING DISTURBED AREAS.
- 18. AFTER THE ENTIRE SITE IS STABILIZED, REMOVE THE ROCK FILTERS, FILTER FABRIC FENCE AND ALL OTHER EROSION CONTROL MEASURES. SEED, MULCH AND MAINTAIN ANY AREAS DISTURBED BY THE REMOVAL OF THE EROSION CONTROL DEVICES WITH PERMANENT GRASS SEEDING AND MULCH.
- 19. UNTIL SUCH TIME AS THE SITE IS PERMANENTLY STABILIZED, ALL EROSION AND SEDIMENTATION CONTROLS MUST BE MAINTAINED IN WORKING ORDER. MAINTENANCE MUST INCLUDE INSPECTION OF ALL EROSION AND SEDIMENTATION CONTROLS AFTER EACH STORM EVENT AND ON A WEEKLY BASIS.



TYPICAL TRENCH DETAIL



TOPSOIL-CLASS 2-MATERIAL

O.D. + 40"

TYPICAL BACKFILL

(NON-PAVED AREAS)

NO SCALE

WIDTH VARIES

FOR FINAL RESTORATION.

SEE APPROPRIATE DETAIL

— METAL MARKING TAPE

FOR PVC SEWER LINE

LAWN/FIELD RESTORATION STONE DRIVE RESTORATION

CLASSIFICATION OF MATERIALS: CLASS 1 - THIS MATERIAL SHALL CONSIST OF 2A COARSE AGGREGATE OR 2 RC STONE FREE OF SLAG,

EXCEPT IN WET OR UNSTABLE AREAS WHERE THE BEDDING MAY BE NO. 8 OR NO. 57 COARSE

AGGREGATE. ALL MATERIALS SHALL CONFORM TO PennDOT PUBLICATION 408, SECTION 703.3.

SELECT GRANULAR -

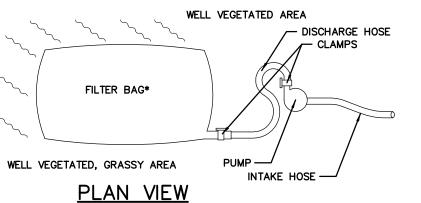
CLASS 2 BACKFILL ----

MATERIAL

CLASS 1 OR 1S MATERIAL

CLASS 1S - THIS MATERIAL SHALL CONSIST OF NO. 8 COARSE AGGREGATE FREE OF SLAG, EXCEPT IN WET OR UNSTABLE AREAS WHERE THE BEDDING MAY BE NO. 8 OR NO. 57 COARSE AGGREGATE. ALL MATERIALS SHALL CONFORM TO PennDOT PUBLICATION 408, SECTION 703.3.

CLASS 2 - THIS MATERIAL SHALL CONSIST OF EXCAVATED MATERIAL FREE FROM CINDERS, ASHES, REFUSE, VEGETABLE OR ORGANIC MATERIAL, BOULDERS, ROCKS NO LARGER THAN FOUR (4) INCHES IN DIMENSION, STONE OR OTHER MATERIAL WHICH IN THE OPINION OF THE ENGINEER IS UNSUITABLE.



DISCHARGE HOSE —

INTAKE HOSE -

FILTER BAG*

WELL VEGETATED, GRASSY AREA

ELEVATION VIEW

CONSTRUCTION NOTES:

1. FILTER BAGS MAY BE USED TO FILTER WATER PUMPED FROM DISTURBED AREAS PRIOR TO DISCHARGING TO WATERS OF THE COMMONWEALTH. THEY MAY ALSO BE USED TO FILTER WATER PUMPED FROM THE SEDIMENT STORAGE AREAS OF SEDIMENT BASINS.

UPON ACTUAL AMOUNT OF GROUNDWATER ENCOUNTERED DURING CONSTRUCTION. PUMPING RATES WILL VARY DEPENDING ON THE SIZE OF THE FILTER BAG, AND THE TYPE AND AMOUNT OF SEDIMENT DISCHARGED TO THE 3. FILTER BAGS SHALL BE MADE FROM NON-WOVEN GEOTEXTILE MATERIAL SEWN

2. THE PUMPING RATE SHOULD BE DETERMINED BY THE CONTRACTOR BASED

WITH HIGH STRENGTH, DOUBLE STICHTED "J" TYPE SEAMS. THEY SHALL BE CAPABLE OF TRAPPING PARTICLES LARGER THAN 150 MICRONS. 4. A SUITABLE MEANS OF ACCESSING THE BAG WITH MACHINERY REQUIRED FOR

DISPOSAL PURPOSES MUST BE PROVIDED. FILTER BAGS SHALL BE REPLACED

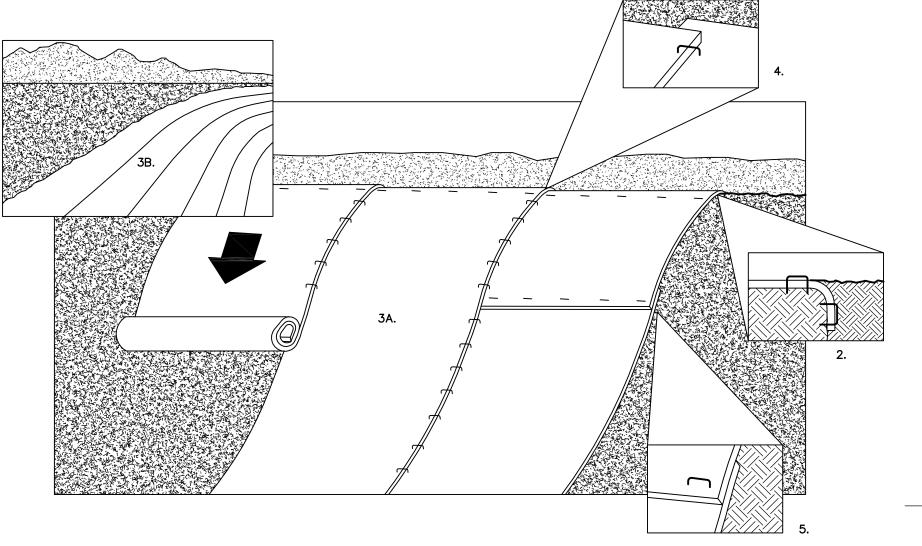
WHEN THEY BECOME 1/2 FULL. SPARE BAGS SHALL BE KEPT AVAILABLE FOR

REPLACEMENT OF THOSE THAT HAVE FAILED OR ARE FILLED. 5. BAGS SHALL BE LOCATED IN WELL-VEGETATED (GRASSY) AREA, AND DISCHARGE ONTO STABLE, EROSION RESISTANT AREAS. WHERE THIS IS NOT POSSIBLE, A GEOTEXTILE FLOW PATH SHALL BE PROVIDED. BAGS SHALL NOT BE PLACED ON SLOPES GREATER THAN 5%.

6. THE PUMP DISCHARGE HOSE SHALL BE INSERTED INTO THE BAGS IN THE MANNER SPECIFIED BY THE MANUFACTURER AND SECURELY CLAMPED. 7. THE PUMPING RATE SHALL BE NO GREATER THAN 750 GPM OR 1/2 THE MAXIMUM SPECIFIED BY THE MANUFACTURER, WHICHEVER IS LESS. PUMP

INTAKES SHOULD BE FLOATING AND SCREENED.

PUMPED WATER FILTER BAG

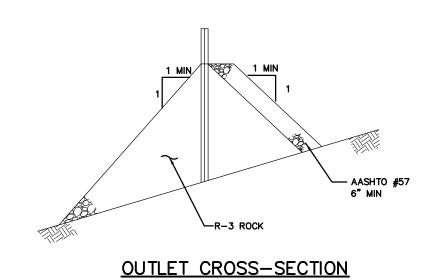


1. PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING APPLICATION OF LIME, FERTILIZER, AND SEED. 2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE BLANKET IN 6" WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. SEE STAPLING INSTRUCTIONS IN "CURLEX INSTALLATION" DETAIL. 3. ROLL THE BLANKETS (A.) DOWN OR (B.) HORIZONTALLY ACROSS THE SLOPE. 4. THE EDGES OF PARALLEL BLANKETS MUST BE STAPLED WITH APPROXIMATELY 2" OVERLAP.

5. WHEN BLANKETS MUST BE SPLICED DOWN THE SLOPE, PLACE BLANKETS END OVER END (SHINGLE STYLE)

WITH APPROXIMATELY 4" OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" APART.

STEEP SLOPE EROSION MATTING INSTALLATION



STRAW BALES OR FILTER FABRIC-3' MIN. HEIGHT OF ROCK FILTER = 5/6 HEIGHT OF STRAW BALES OR FILTER FABRIC FENCE

<u>UP-SLOPE FACE</u>

ROCK FILTER OUTLETS SHALL ONLY BE USED AS A REPLACEMENT FOR A SECTION OF SILT FENCE WHICH HAS BEEN UNDERMINED OR TOPPED. SEDIMENT MUST BE REMOVED WHEN ACCUMULATIONS REACH 1/3 THE HEIGHT OF THE OUTLET. STONE SHALL BE REMOVED AND REPLACED WHEN CLOGGED WITH SEDIMENT.

> ROCK FILTER OUTLETS NOT TO SCALE

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ASSOCIATION, SCHUYLKILL DETAIL SP

ISSUED FOR BIDDING/CONSTRUCTION

<u>JUNE</u> 29, 2005 DWG. NO. 03-04234-001

SHEET NO. 9 OF 11

