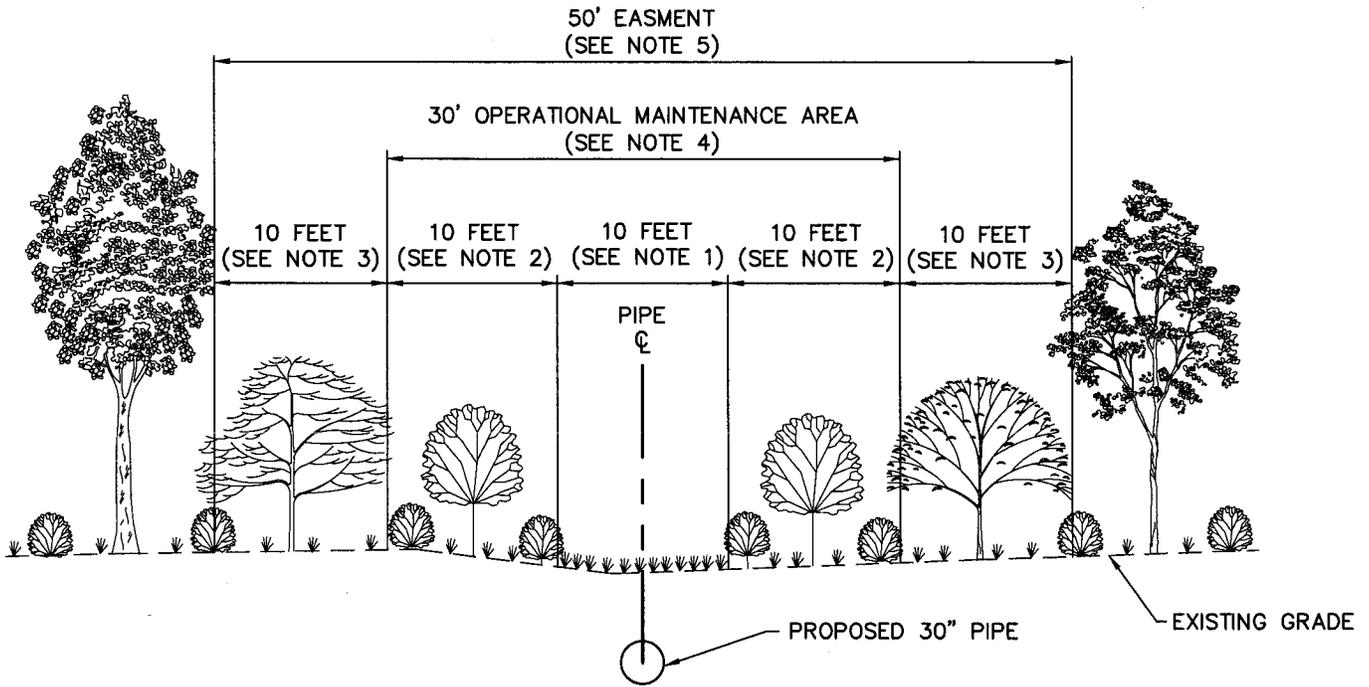


ATTACHMENT 3
Standard Environmental Detail
Drawings

OPERATIONAL MAINTENANCE IN FORESTED WETLANDS



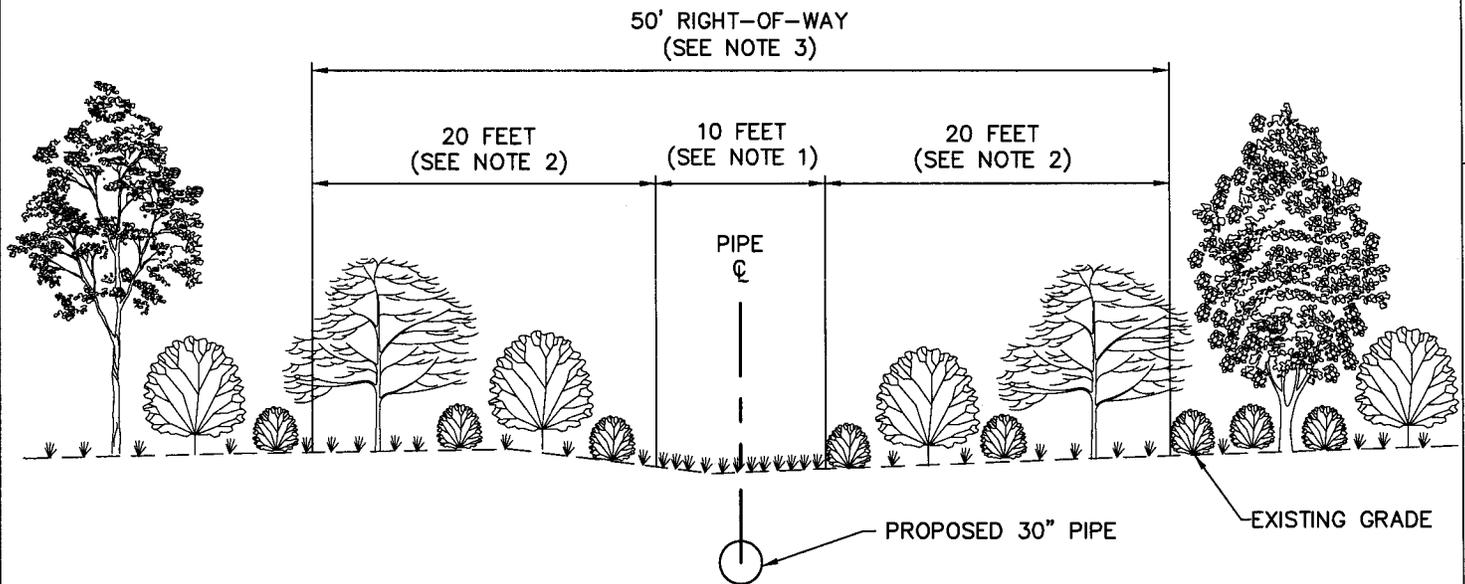
NOTES

1. ROUTINE VEGETATION MOWING OR CLEARING WILL NOT BE CONDUCTED OVER THE FULL WIDTH OF THE PERMANENT RIGHT-OF-WAY IN WETLANDS. IN ORDER TO FACILITATE PERIODIC CORROSION/LEAK SURVEYS, THIS 10 FOOT WIDE CORRIDOR, CENTERED ON THE PIPELINE, WILL BE CLEARED AT A FREQUENCY NECESSARY TO MAINTAIN THE 10-FOOT CORRIDOR IN AN HERBACEOUS STATE (E.G. WETLAND PLANTS AND GRASSES).
2. THIS CORRIDOR WILL BE MAINTAINED IN A SCRUB-SHRUB STATE WITH LOW LYING GROUND COVER. TREES WITHIN 15 FEET OF EITHER SIDE OF THE PIPELINE WITH ROOTS THAT COULD COMPROMISE THE INTEGRITY OF PIPELINE COATING WILL BE SELECTIVELY CUT AND REMOVED FROM THE PERMANENT RIGHT-OF-WAY.
3. THIS AREA WILL BE MAINTAINED AS FORESTED WETLANDS WITH LIMITED TREE TRIMMING AND SELECTIVE REMOVAL. TREES WITHIN 15' OF THE PIPELINE WITH ROOT SYSTEMS THAT COULD COMPROMISE THE INTEGRITY OF PIPELINE COATING WILL BE SELECTIVELY CUT AND REMOVED FROM THE PERMANENT RIGHT-OF-WAY. IN ADDITION, DEAD TREES THAT MAY FALL ON TOP OF THE PIPELINE AND ACROSS THE 10 FOOT CORROSION/LEAK DETECTION CORRIDOR WILL BE SELECTIVELY CUT AND REMOVED FROM THIS AREA.
4. OPERATIONAL MAINTENANCE THROUGH SCRUB-SHRUB WETLANDS WILL GENERALLY BE CONFINED TO A 30' CORRIDOR CENTERED OVER THE PIPELINE, EXCEPT AS NOTED IN NOTES 2 AND 3 ABOVE.
5. CONSTITUTION PIPELINE COMPANY LLC. WILL LEASE A 50 FOOT EASEMENT CENTERED OVER THE PIPELINE FOR THE ENTIRE LENGTH OF THE PIPELINE. THE EASEMENT WILL BE MAINTAINED AS NOTED ABOVE DURING OPERATION.

NO.	DATE	BY	REVISION DESCRIPTION	CHK.	APP.	
						CONSTITUTION PIPELINE COMPANY, LLC STANDARD ENVIRONMENTAL DETAIL OPERATIONAL MAINTENANCE IN FORESTED WETLANDS



OPERATIONAL MAINTENANCE IN SCRUB SHRUB WETLANDS

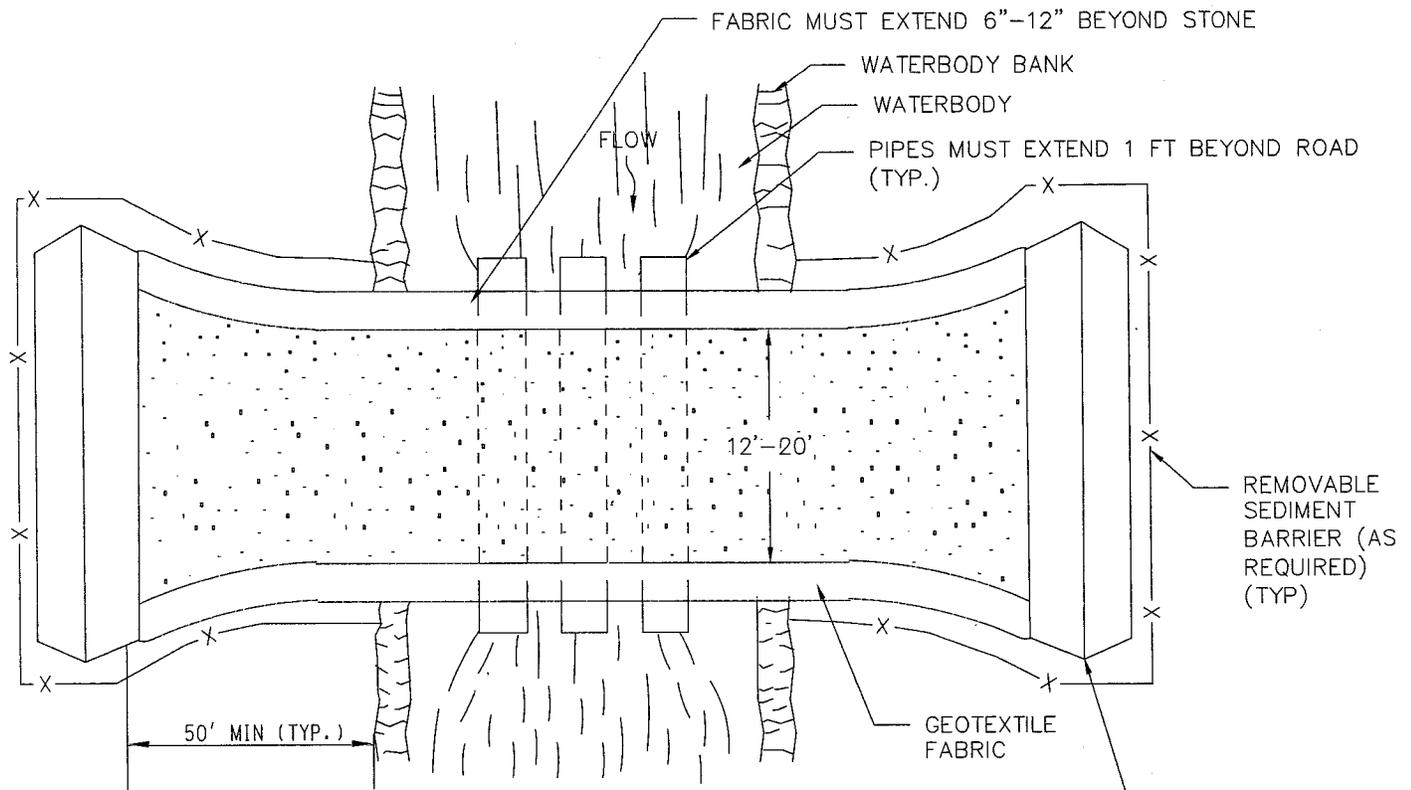


NOTES

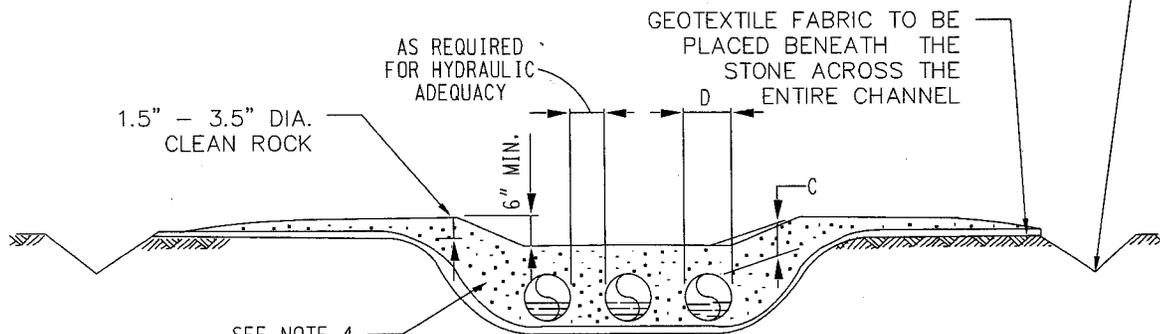
1. ROUTINE VEGETATION MOWING OR CLEARING WILL NOT BE CONDUCTED OVER THE FULL WIDTH OF THE PERMANENT RIGHT-OF-WAY IN WETLANDS. IN ORDER TO FACILITATE PERIODIC CORROSION/LEAK SURVEYS, THIS 10 FOOT WIDE CORRIDOR, CENTERED ON THE PIPELINE, WILL BE CLEARED AT A FREQUENCY NECESSARY TO MAINTAIN THE 10-FOOT CORRIDOR IN AN HERBACEOUS STATE (E.G. WETLAND PLANTS AND GRASSES).
2. THIS AREA WILL BE MAINTAINED IN A SCRUB-SHRUB STATE WITH LOW LYING GROUND COVER, SHRUBS AND TREES ROOT SYSTEMS THAT ARE NOT ANTICIPATED TO COMPROMISE THE INTEGRITY OF THE PIPELINE COATING. HOWEVER, TREES WITHIN 15 FEET OF THE PIPELINE WITH ROOTS THAT COULD COMPROMISE THE INTEGRITY OF PIPELINE COATING WILL BE SELECTIVELY CUT AND REMOVED FROM THE PERMANENT RIGHT-OF-WAY.
3. CONSTITUTION PIPELINE COMPANY LLC. WILL LEASE A 50 FOOT EASEMENT CENTERED OVER THE PIPELINE FOR THE ENTIRE LENGTH OF THE PIPELINE. THE EASEMENT WILL BE MAINTAINED AS NOTED ABOVE DURING OPERATION.

NO.	DATE	BY	REVISION DESCRIPTION	CHK.	APP.	
						CONSTITUTION PIPELINE COMPANY, LLC STANDARD ENVIRONMENTAL DETAIL OPERATIONAL MAINTENANCE IN SCRUB-SHRUB WETLANDS





PLAN VIEW
SCALE: N.T.S.



PROFILE
SCALE: N.T.S.

WHERE:
D = PIPE DIAMETER
C = COVER DEPTH

NOTES:

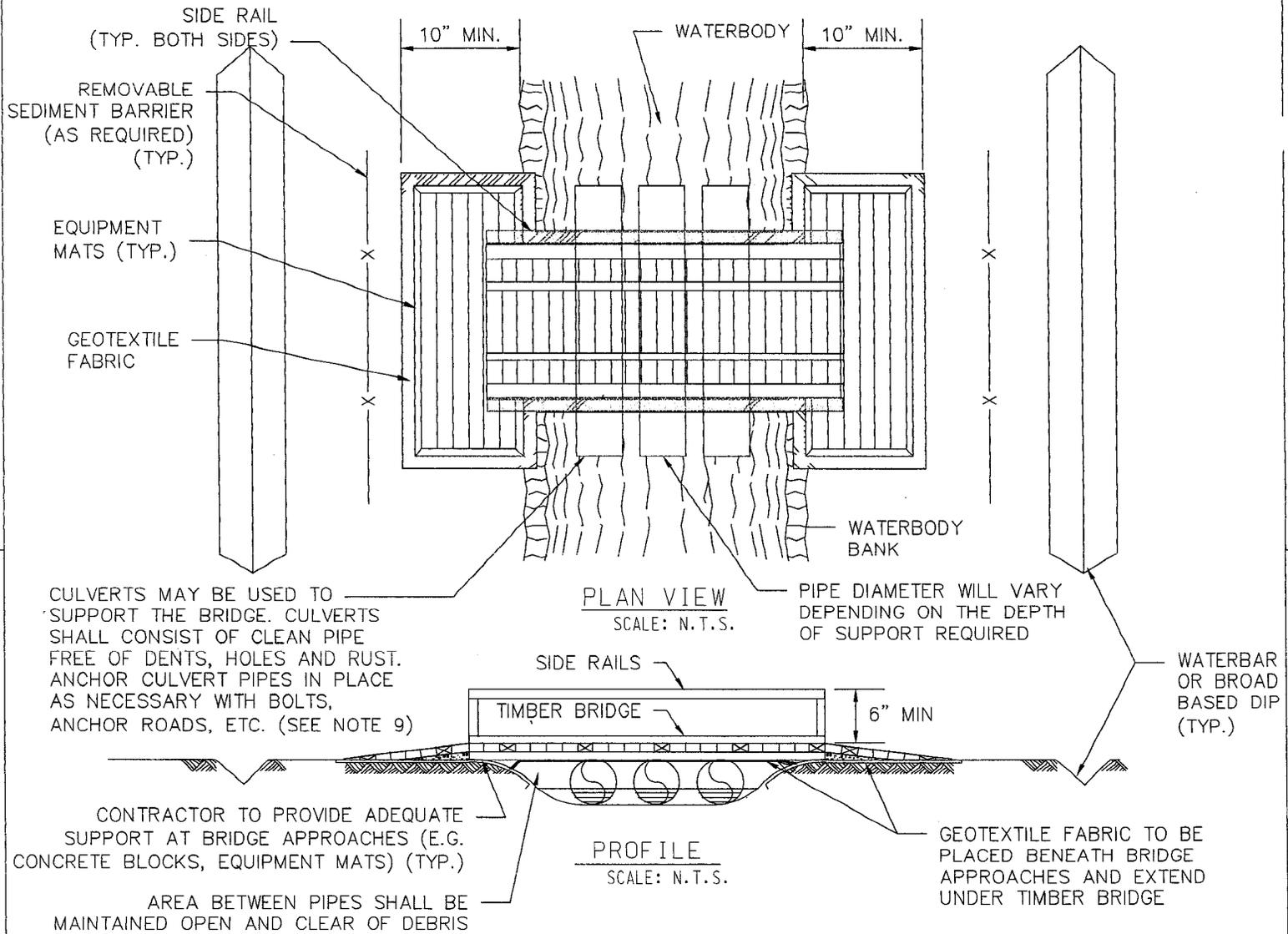
1. TEMPORARY STREAM CROSSING SHALL BE INSPECTED ON A DAILY BASIS AND BUILD-UP OF SEDIMENT OR DEBRIS ON BRIDGE SHALL BE REMOVED.
2. CULVERTS SHALL BE PLACED AT LEAST ONE- HALF (1/2) THEIR DIAMETER APART.
3. ALL MATERIAL AND EQUIPMENT PLACED IN THE WATERBODY CHANNEL SHALL BE COMPLETELY REMOVED DURING FINAL CLEAN-UP. REMOVAL OF THESE ITEMS ARE NOT CONTINGENT UPON ESTABLISHMENT OF PERMANENT VEGETATION.
4. ONLY CLEAN ROCK WILL BE USED. THE ROCK MUST BE SIZED ACCORDING TO THE ANTICIPATED FLOW CONDITIONS. THE ROCK SIZE USED SHALL CONFORM TO CHAPTER 105 GENERAL PERMIT REQUIREMENTS. THE ROCK FILL SHOULD BE EXTENDED A MINIMUM OF 50' FROM THE TOP OF BANK ON EACH SIDE OF THE CROSSING. THE FILL SHOULD BE DEPRESSED A MINIMUM OF 6" OVER THE CHANNEL TO ALLOW FOR OVERFLOW. THE MAXIMUM DEPTH OF FILL OVER THE CULVERT IS THE MINIMUM THE MANUFACTURER REQUIRES.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL LOAD CALCULATIONS REQUIRED TO ENSURE THE INSTALLED PIPES CAN STRUCTURALLY SUPPORT THE CONSTRUCTION EQUIPMENT. THIS SHALL INCLUDE, BUT IS NOT LIMITED TO, PIPE MATERIAL SELECTION AND REQUIRED PIPE COVER DEPTH.

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DATE	BY	REVISION DESCRIPTION	CHK.	APP.

CONSTITUTION PIPELINE COMPANY, LLC
STANDARD ENVIRONMENTAL DETAIL
CULVERT EQUIPMENT CROSSING
FIGURE NO. 1





NOTES:

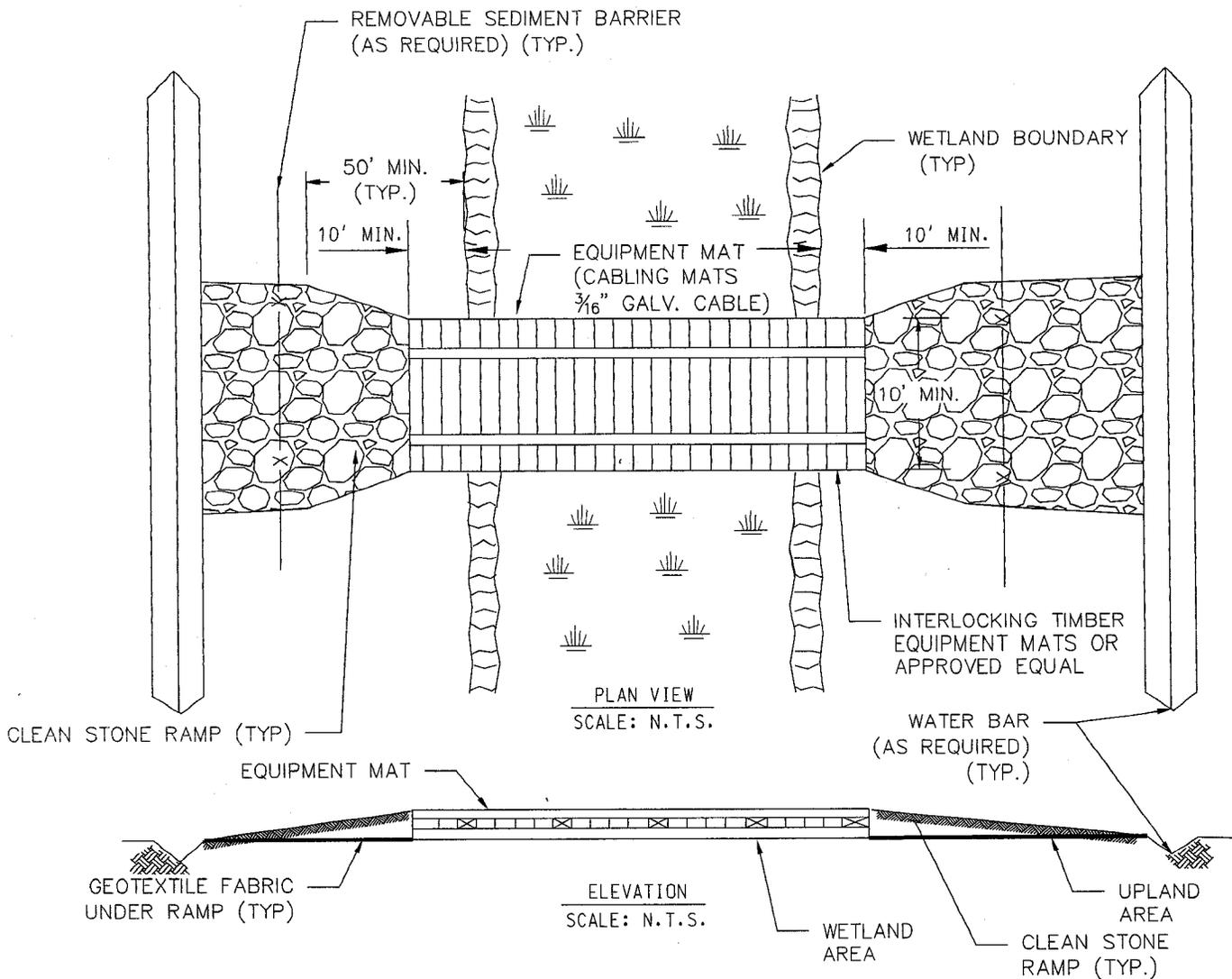
1. TIMBER BRIDGES SHALL BE ADEQUATELY ANCHORED AT BOTH ENDS.
2. TEMPORARY STREAM CROSSINGS SHALL BE INSPECTED ON A DAILY BASIS AND BUILD UP OF SEDIMENT OR DEBRIS SHALL BE REMOVED.
3. BRIDGE APPROACHES SHALL BE SUPPORTED WITH EQUIPMENT MATS OR APPROVED EQUAL.
4. MATERIALS PLACED WITHIN THE WATERBODY CHANNEL SHALL BE COMPLETELY REMOVED DURING FINAL CLEAN-UP. REMOVAL OF THIS STRUCTURE IS NOT CONTINGENT UPON ESTABLISHMENT OF PERMANENT VEGETATION.
5. TEMPORARY CULVERT PIPES MAY BE USED TO SUPPORT THE TIMBER BRIDGE TO PREVENT SETTLING OF THE BRIDGE IF THE GEOMETRY OF THE WATERBODY ALLOWS FOR IT. THE TIMBER BRIDGE SHALL BE INSTALLED TO THE ELEVATION NOTED ON THE PLANS OR ABOVE THE MAXIMUM ANTICIPATED WATER SURFACE ELEVATION DURING THE TIME OF CROSSING.
6. SIDE RAILS SHALL BE INSTALLED ON BOTH SIDES OF THE BRIDGE EQUIPMENT CROSSING IN ORDER TO PREVENT SEDIMENT FROM ENTERING THE WATERBODY. SIDE RAILS ARE TO BE CONSTRUCTED OF PLYWOOD NAILED TO THE OUTER EDGES OF THE EQUIPMENT MATS.
7. EQUIPMENT MATS SHALL EXTEND A MINIMUM OF 10 FEET OUTSIDE OF THE WATERBODY OR WETLAND BOUNDARIES.
8. UNLESS OTHERWISE INDICATED ON PLAN, CROSSING SHALL BE REMOVED IMMEDIATELY AFTER CONSTRUCTION IS COMPLETED.
9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL LOAD CALCULATIONS REQUIRED TO ENSURE THE INSTALLED PIPES CAN STRUCTURALLY SUPPORT THE CONSTRUCTION EQUIPMENT. THIS SHALL INCLUDE, BUT IS NOT LIMITED TO, PIPE MATERIAL SELECTION AND REQUIRED PIPE COVER DEPTH.

NEW YORK

NO.	DATE	BY	REVISION DESCRIPTION	CHK.	APP.

CONSTITUTION PIPELINE COMPANY, LLC
 STANDARD ENVIRONMENTAL DETAIL
 BRIDGE EQUIPMENT CROSSING
 FIGURE NO. 2





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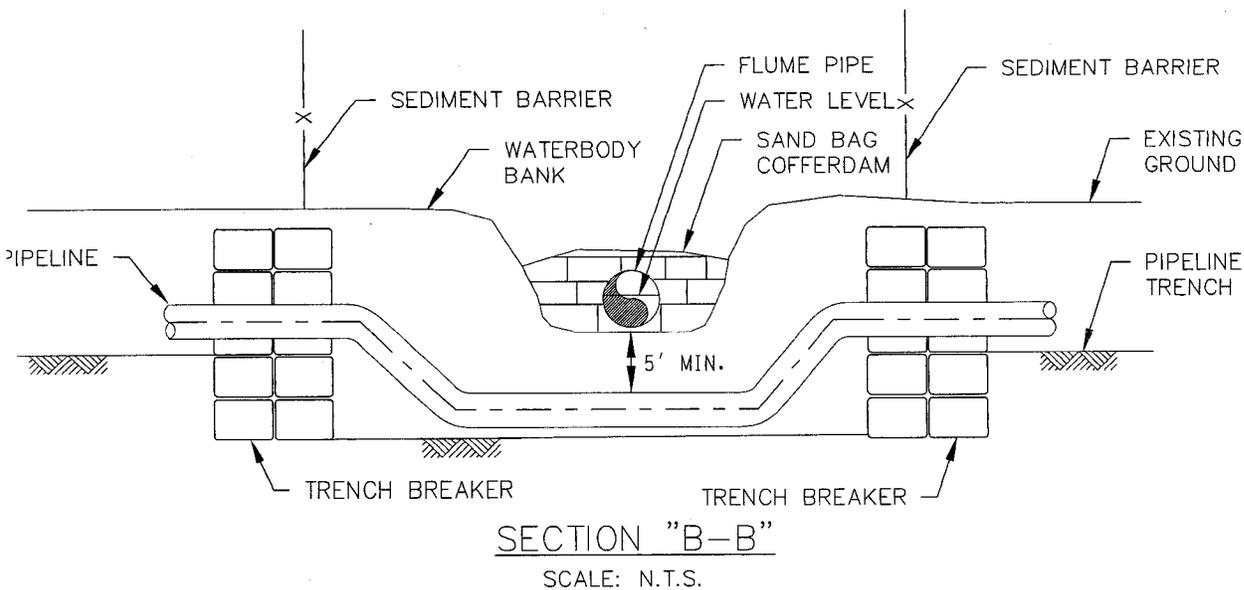
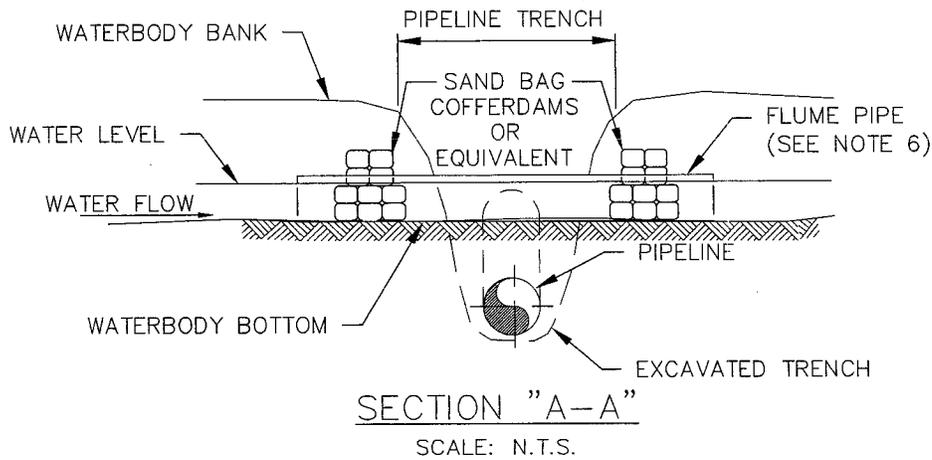
1. INSPECT ON A DAILY BASIS AND REMOVE BUILD-UP OF SEDIMENT AND DEBRIS.
2. MATERIALS PLACED IN WETLANDS SHALL BE COMPLETELY REMOVED DURING FINAL CLEAN-UP. REMOVAL OF THESE MATERIALS IS NOT CONTINGENT UPON ESTABLISHMENT OF PERMANENT VEGETATION.
3. IF A WATERBODY IS LOCATED WITHIN A WETLAND, EXTEND EQUIPMENT MATS TO THE BRIDGE EQUIPMENT CROSSING CONSTRUCTED TO CROSS THE WATERBODY IN ORDER TO ALLOW FOR CONTINUOUS EQUIPMENT MAT COVERAGE THROUGH THE WETLAND AND WATERBODY AREA.
4. USE ADDITIONAL EQUIPMENT MATS TO RAISE THE CROSSING ABOVE THE ELEVATION WHERE POOR SOIL CONDITIONS EXIST. A MAXIMUM OF 2 TIMBER MAT LAYERS MAY BE USED WITHIN WETLANDS UNLESS OTHERWISE APPROVED BY THE ENVIRONMENTAL INSPECTOR.
5. EQUIPMENT MATS SHALL EXTEND A MINIMUM OF 10 FEET OUTSIDE OF THE WETLAND AND WATERBODY BOUNDARIES.
6. INSTALL CLEAN STONE RAMP APPROACHES TO EQUIPMENT MATS IN WETLAND AREAS.
7. EQUIPMENT MATS ARE TO BE CONSTRUCTED OF 4'X4' WOOD MEMBERS, LINKED WITH 3/16 GALVANIZED STEEL CABLE TO ENSURE REMOVAL OF ALL MATS.

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DATE	BY	REVISION DESCRIPTION	CHK.	APP.

CONSTITUTION PIPELINE COMPANY, LLC
 STANDARD ENVIRONMENTAL DETAIL
 WETLAND EQUIPMENT CROSSING
 FIGURE NO. 3





7. EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSPECTED DAILY AND REPAIRED IF NECESSARY.
8. INSTALL DIVERSION TRENCHES AT THE BASE OF ALL SLOPES ADJACENT TO THE WATERBODY AND AT 50' FROM WATERBODY BANKS.
9. CHEMICALS, FUELS AND LUBRICATING OILS SHALL NOT BE STORED AND EQUIPMENT SHALL NOT BE REFUELED WITHIN 100 FEET OF THE WATERBODY UNLESS OTHERWISE APPROVED BY THE ENVIRONMENTAL INSPECTOR.
10. ANY WATER ACCUMULATING IN THE WORK SPACE SHALL BE PUMPED TO A FILTER BAG PRIOR TO DISCHARGE TO A WATERBODY.
10. INSTALL TRENCH BREAKERS ON BOTH SIDES OF THE WATERBODY TO PREVENT DIVERSION OF WATER INTO UPLAND PORTIONS OF THE PIPELINE TRENCH AND TO KEEP ANY ACCUMULATED TRENCH WATER OUT OF THE WATERBODY.
11. ALL MATERIAL AND EQUIPMENT PLACED IN THE WATERBODY CHANNEL SHALL BE COMPLETELY REMOVED DURING FINAL CLEAN-UP. REMOVAL OF THESE ITEMS ARE NOT CONTINGENT UPON ESTABLISHMENT OF PERMANENT VEGETATION.
12. THE CONTRACTOR SHALL POSTPONE ROUGH GRADING AND GRUBBING OF THE RIGHT OF WAY WITHIN 50' OF TOP OF BANK UNTIL THE STAGING AREA IS PREPARED AND WORK IN THE WATERBODY IS READY TO COMMENCE. ALL DISTURBED AREAS WITHIN 50 FEET OF TOP OF BANK SHALL BE BLANKETED OR MATTED WITHIN 24 HOURS OF INITIAL DISTURBANCE FOR MINOR STREAMS OR 48 OF INITIAL DISTURBANCE FOR MAJOR STREAMS UNLESS OTHERWISE AUTHORIZED.
13. EXCEPT FOR BLASTING AND OTHER ROCK BREAKING MEASURES, THE CONTRACTOR SHALL COMPLETE IN WATERBODY CONSTRUCTION ACTIVITIES (INCLUDING TRENCHING, PIPE INSTALLATION, BACKFILL, AND RESTORATION OF THE WATERBODY CHANNEL CONTOURS) WITHIN 24 HOURS. WATERBODY BANKS AND UNCONSOLIDATED WATERBODY CHANNELS MAY REQUIRE ADDITIONAL RESTORTION AFTER THIS PERIOD.
14. THE CONTRACTOR SHALL COORDINATE THE ENVIRONMENTAL INSPECTOR TO DETERMINE THE APPROPRIATE DRY CROSSING METHOD THAT SHOULD BE UTILIZED DURING CONSTRUCTION.

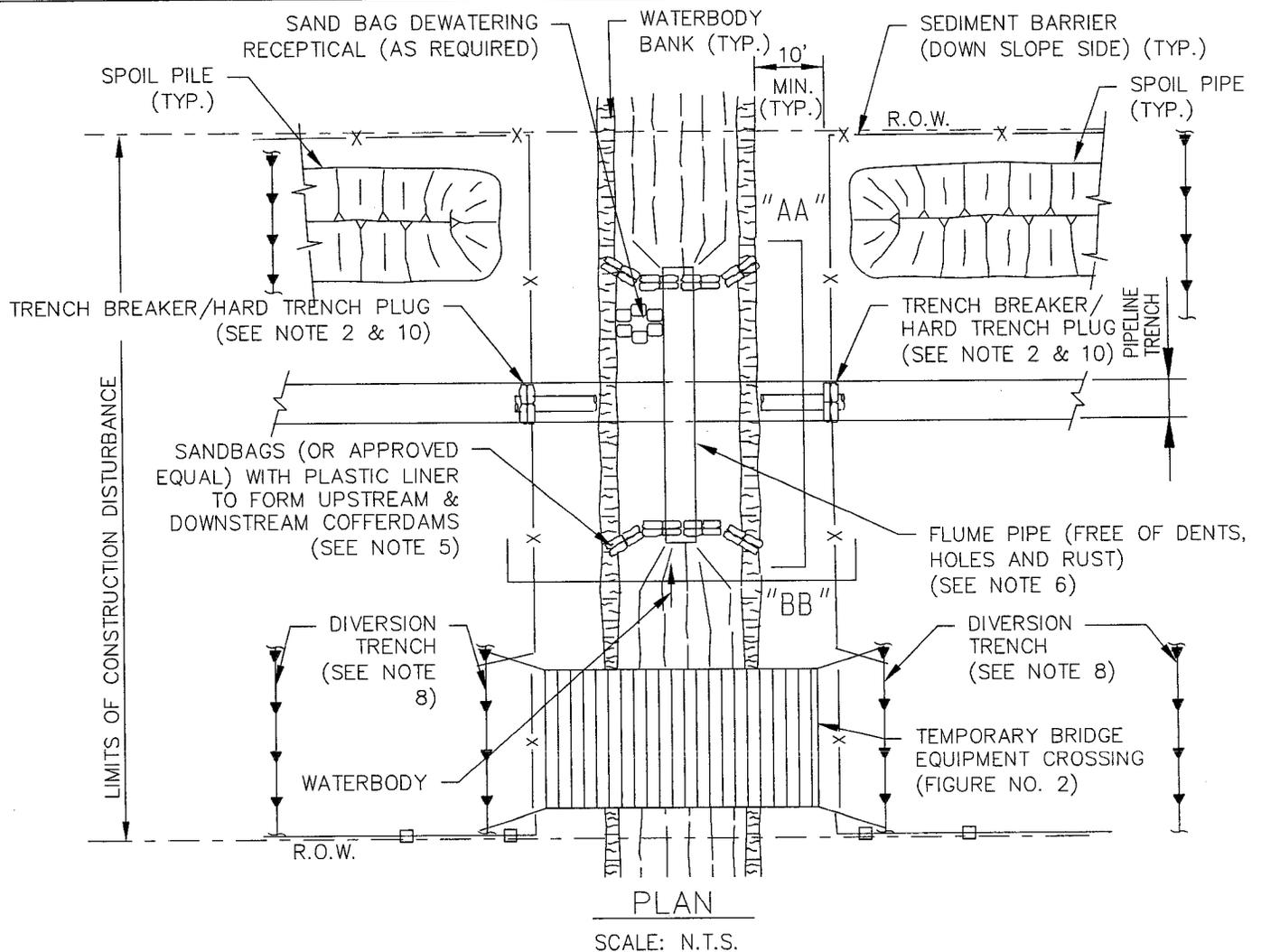
NEW YORK

NO.	DATE	BY	REVISION DESCRIPTION	W.O. NO.	CHK.	APP.

CONSTITUTION PIPELINE COMPANY, LLC
STANDARD ENVIRONMENTAL DETAIL

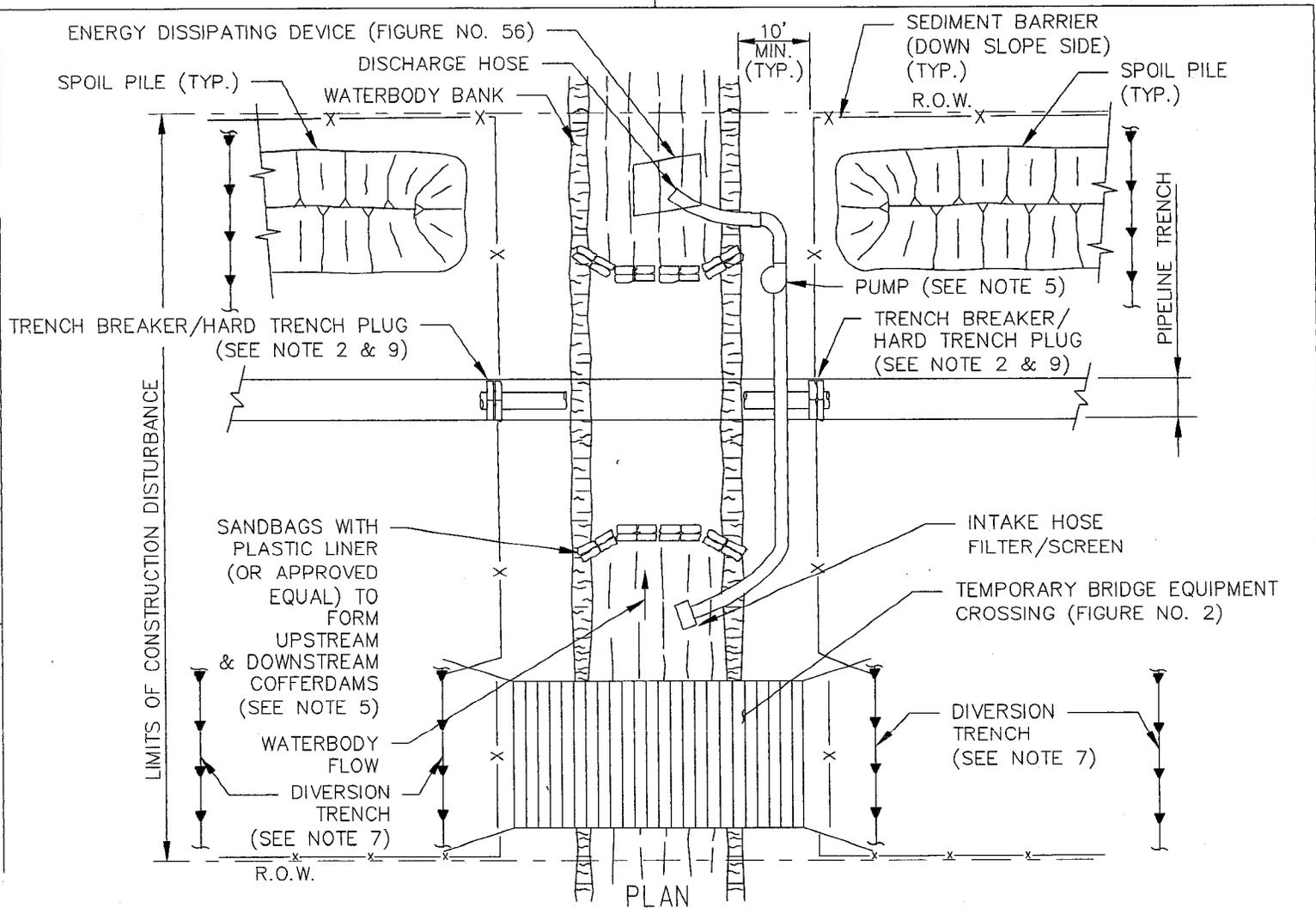
FLUME CROSSING
FIGURE NO. 5





NOTES:

1. SEDIMENT BARRIERS SHALL BE INSTALLED AS DEPICTED AND ALONG DOWN GRADIENT SIDES OF WORK AREAS AND STAGING AREAS SUCH THAT NO HEAVY SILT LADEN WATER ENTERS THE WATERBODY OR LEAVES THE CONSTRUCTION RIGHT-OF-WAY.
2. HARD TRENCH PLUGS MUST REMAIN IN PLACE AT CONVENIENT LOCATIONS TO SEPARATE THE MAINLINE DITCH FROM THE WATERBODY CROSSING UNTIL THE WATERBODY CROSSING IS INSTALLED AND BACKFILLED.
3. EQUIPMENT OPERATING IN THE WATERBODY SHALL BE LIMITED TO THAT NEEDED TO PERFORM CONSTRUCTION. IF OTHER TYPES OF EQUIPMENT MUST CROSS THE WATERBODY, THE CONTRACTOR SHALL PROVIDE AND USE A TEMPORARY BRIDGE EQUIPMENT CROSSING.
4. STAGING AREA(S) FOR WATERBODY CROSSING(S), WHEN REQUIRED, SHALL BE LOCATED AT LEAST 50 FEET FROM THE WATER'S EDGE AND SHALL BE OF A MINIMUM SIZE NEEDED FOR CONVENIENT PREPARATION.
5. FLUME CROSSING METHOD REQUIREMENTS INCLUDE:
 - (A) INSTALL FLUME PIPE(S) AFTER BLASTING (IF NECESSARY), BUT BEFORE ANY TRENCHING.
 - (B) USE SAND BAG OR SAND BAG AND PLASTIC SHEETING DIVERSION STRUCTURES OR EQUIVALENT TO DEVELOP AN EFFECTIVE SEAL AND TO DIVERT WATERBODY FLOW THROUGH THE FLUME PIPE (SOME MINOR MODIFICATIONS TO THE WATERBODY BOTTOM MAY BE REQUIRED TO ACHIEVE AN EFFECTIVE SEAL).
 - (C) PROPERLY ALIGN FLUME PIPE(S) TO PREVENT BANK EROSION AND WATERBODY CHANNEL BED SCOUR.
 - (D) DO NOT REMOVE FLUME PIPE DURING TRENCHING, PIPE LAYING, OR BACKFILLING ACTIVITIES, OR INITIAL STREAM BED RESTORATION EFFORTS.
 - (E) REMOVE ALL FLUME PIPES AND DAMS THAT ARE NOT ALSO PART OF THE EQUIPMENT BRIDGE AS SOON AS FINAL CLEANUP OF THE STREAM BED AND BANK IS COMPLETE.
6. THE FLUME PIPE MUST BE SIZED TO ADEQUATELY CONVEY MAXIMUM ANTICIPATED FLOW RATES AT THE TIME OF THE CROSSING WITHOUT FLOODING THE TRENCH, WHILE TO MAINTAINING ADEQUATE FLOW RATES TO PROTECT AQUATIC LIFE AND PREVENT THE INTERRUPTION OF EXISTING DOWNSTREAM USES.



SCALE: N.T.S.

NOTES:

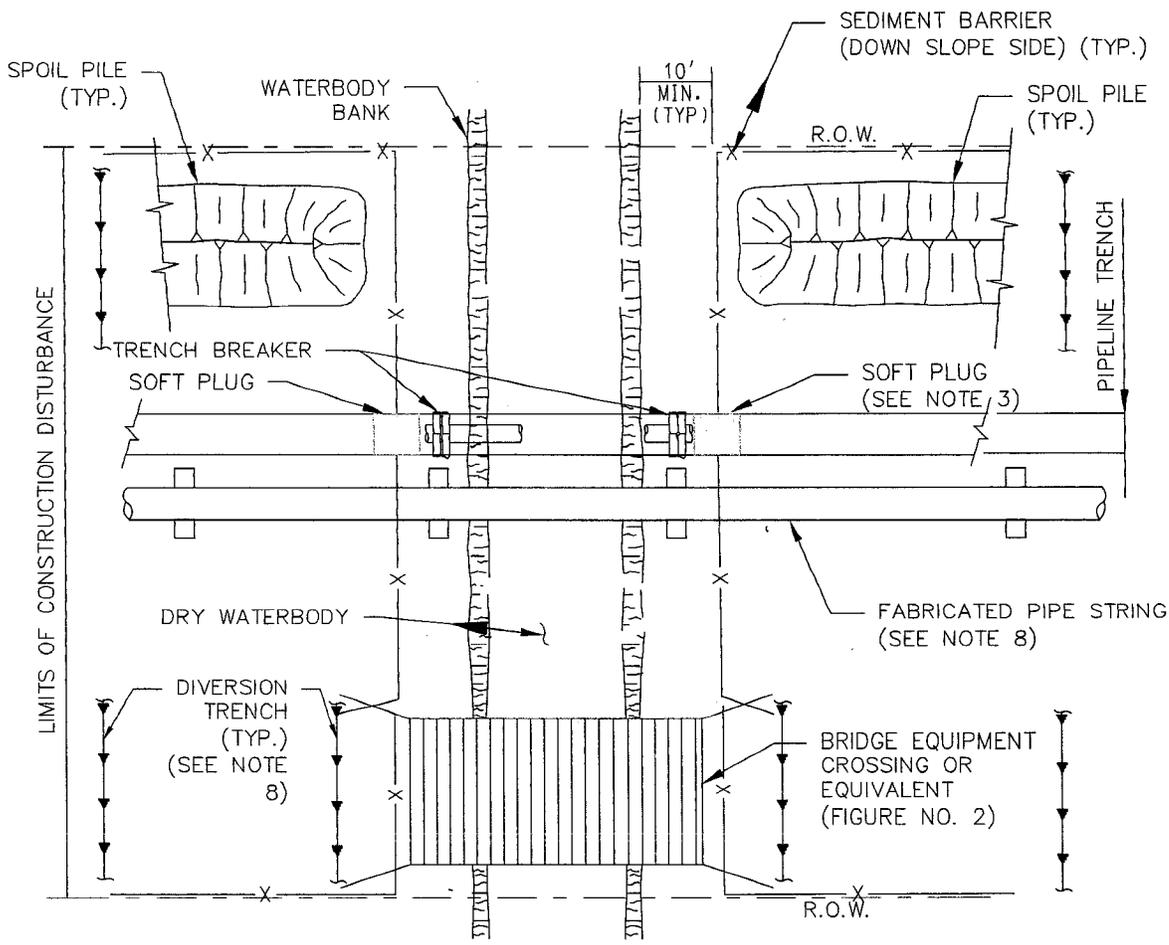
1. SEDIMENT BARRIERS SHALL BE INSTALLED AS DEPICTED AND ALONG DOWN GRADIENT SIDES OF WORK AREAS AND STAGING AREAS SUCH THAT NO HEAVY SILT LADEN WATER ENTERS THE WATERBODY OR LEAVES THE CONSTRUCTION RIGHT-OF-WAY
2. HARD TRENCH PLUGS MUST REMAIN IN PLACE AT CONVENIENT LOCATIONS TO SEPARATE THE MAINLINE DITCH FROM THE WATERBODY CROSSING UNTIL THE WATERBODY CROSSING IS INSTALLED AND BACKFILLED.
3. EQUIPMENT OPERATING IN THE WATERBODY SHALL BE LIMITED TO THAT NEEDED TO PERFORM CONSTRUCTION. IF OTHER TYPES OF EQUIPMENT MUST CROSS THE WATERBODY, THE CONTRACTOR SHALL PROVIDE AND USE A TEMPORARY BRIDGE EQUIPMENT CROSSING.
4. STAGING AREA(S) FOR WATERBODY CROSSING(S), WHEN REQUIRED, SHALL BE LOCATED AT LEAST 50 FEET FROM WATER'S EDGE AND SHALL BE OF A MINIMUM SIZE NEEDED FOR PREPARATION TO SAFELY AND EFFICIENTLY CONSTRUCT THE CROSSING.
5. IMPLEMENTATION OF THE DAM-AND-PUMP CROSSING METHOD MUST MEET THE FOLLOWING PERFORMANCE CRITERIA:
 - (A) USE SUFFICIENT PUMPS, INCLUDING ON-SITE BACKUP PUMPS, TO MAINTAIN DOWNSTREAM FLOWS.
 - (B) CONSTRUCT DAMS WITH MATERIALS THAT PREVENT SEDIMENT AND OTHER POLLUTANTS FROM ENTERING THE WATERBODY (E.G., SANDBAGS OR CLEAN GRAVEL WITH PLASTIC LINER).
 - (C) SCREEN PUMP INTAKES;
 - (D) PREVENT STREAM BED SCOUR AT PUMP DISCHARGE WITH AN ENERGY DISSIPATING DEVICE (SEE FIGURE NO. 56).
 - (E) MONITOR THE DAM AND PUMPS TO ENSURE PROPER OPERATION THROUGHOUT THE WATERBODY CROSSING. INTAKE SHALL BE MAINTAINED A SUFFICIENT DISTANCE FROM THE BOTTOM TO PREVENT PUMPING OF SUBSTRATE MATERIALS.
- (F) INTAKE SHALL BE MAINTAINED AT A SUFFICIENT DISTANCE FROM THE CHANNEL BOTTOM TO PREVENT PUMPING OF SUBSTRATE MATERIALS.
6. EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSPECTED DAILY AND REPAIRED IF NECESSARY.
7. INSTALL DIVERSION TRENCHES AT THE BASE OF ALL SLOPES ADJACENT TO THE WATERBODY AND AT MINIMUM 50' FROM WATERBODY BANK.
8. CHEMICALS, FUELS AND LUBRICATING OILS SHALL NOT BE STORED AND EQUIPMENT SHALL NOT BE REFUELED WITHIN 100 FEET OF THE WATERBODY, UNLESS OTHERWISE APPROVED BY THE ENVIRONMENTAL INSPECTOR. ANY WATER ACCUMULATING IN THE WORK SPACE SHALL BE PUMPED TO A FILTER BAG PRIOR TO DISCHARGE TO WATERBODY.
9. INSTALL TRENCH BREAKERS ON BOTH SIDES OF THE WATERBODY TO PREVENT DIVERSION OF WATER INTO UPLAND PORTIONS OF THE PIPELINE TRENCH AND TO KEEP ANY ACCUMULATED TRENCH WATER OUT OF THE WATERBODY.
10. THE CONTRACTOR SHALL POSTPONE GRUBBING AND ROUGH GRADING OF THE RIGHT-OF-WAY WITHIN 50' OF TOP OF BANK UNTIL ALL MATERIALS REQUIRED TO COMPLETE CROSSING ARE ON SITE, THE STAGING AREA IS PREPARED, AND WORK IN THE WATERBODY IS READY TO COMMENCE. ALL DISTURBED AREAS WITHIN 50' OF TOP OF BANK SHALL BE STABILIZED WITHIN 24 HOURS OF INITIAL DISTURBANCE FOR MINOR STREAMS OR 48 HOURS OF INITIAL DISTURBANCE FOR MAJOR STREAMS UNLESS OTHERWISE AUTHORIZED. APPROPRIATE STREAMBANK PROTECTION SHALL BE PROVIDED WITHIN THE CHANNEL.
11. ANY WATER ACCUMULATING IN THE WORKSPACE SHALL BE PUMPED TO A FILTER BAG PRIOR TO DISCHARGE.

NEW YORK

DATE	BY	REVISION DESCRIPTION	CHK.	APP.

CONSTITUTION PIPELINE COMPANY, LLC
 STANDARD ENVIRONMENTAL DETAIL
 DAM AND PUMP CROSSING
 FIGURE NO. 6





NOTES:

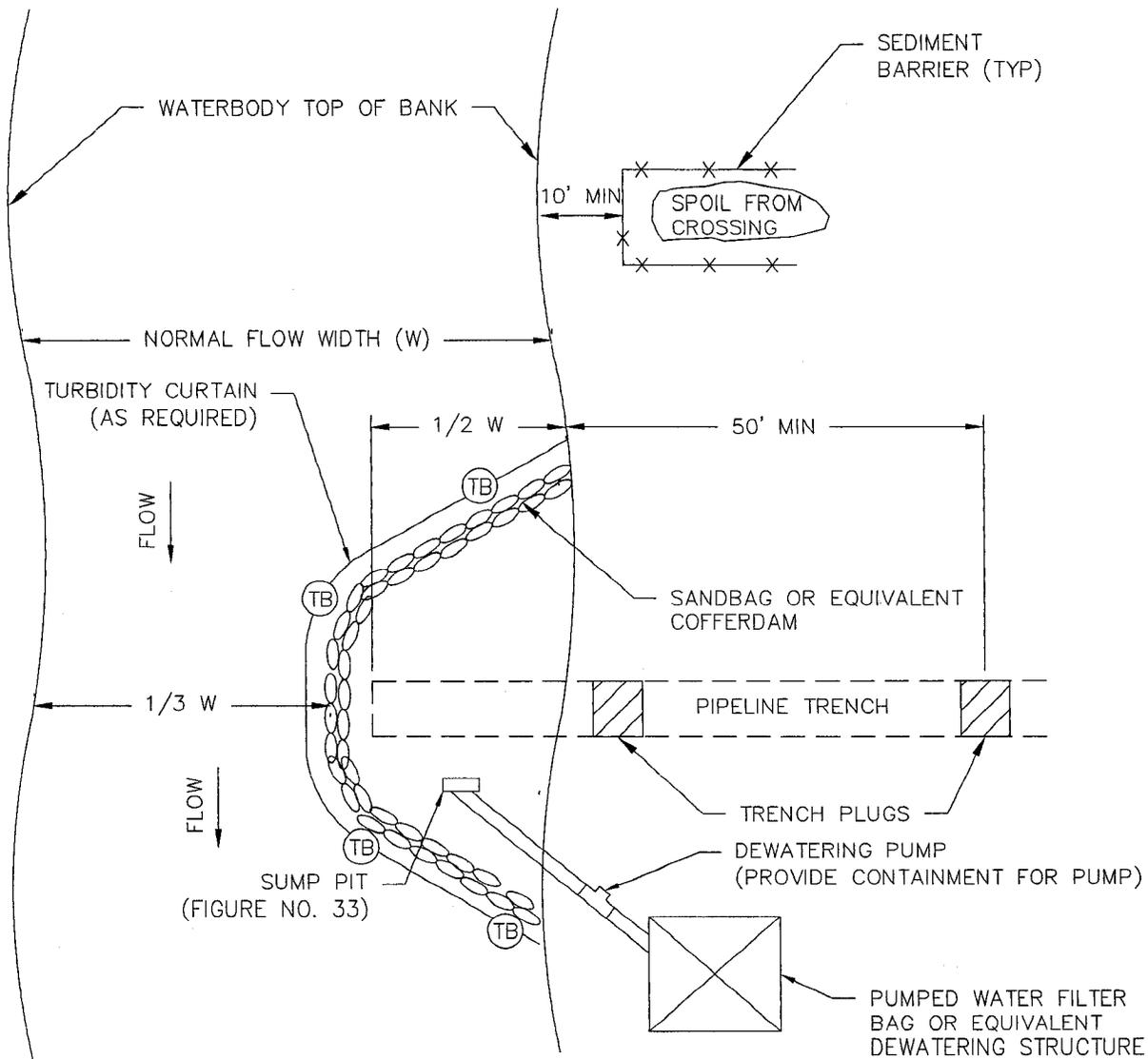
1. THIS METHOD APPLIES TO WATERBODIES THAT ARE DRY AT THE TIME OF CROSSING.
2. SEDIMENT BARRIERS SHALL BE INSTALLED AS DEPICTED AND ALONG DOWN GRADIENT SIDES OF WORK AREAS SUCH THAT HEAVILY SILT LADEN WATER ENTERS THE WATERBODY OR LEAVES THE CONSTRUCTION RIGHT OF WAY.
3. SOFT PLUGS SHALL BE INSTALLED FOLLOWING EXCAVATION OF THE MAINLINE TRENCH THROUGH THE WATERBODY.
4. INSTALL TRENCH BREAKERS ON BOTH SIDES OF THE WATERBODY TO PREVENT DIVERSION OF WATER INTO UPLAND PORTIONS OF THE PIPELINE TRENCH AND TO KEEP ANY ACCUMULATED TRENCH WATER OUT OF THE WATERBODY.
5. EQUIPMENT OPERATING IN THE WATERBODY SHALL BE LIMITED TO THAT NEEDED TO PERFORM CONSTRUCTION. IF OTHER TYPES OF EQUIPMENT MUST CROSS THE WATERBODY, THE CONTRACTOR SHALL PROVIDE AND USE A TEMPORARY BRIDGE EQUIPMENT CROSSING OR EQUIVALENT AS APPROVED BY THE ENVIRONMENTAL INSPECTOR.
6. EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED DAILY AND REPAIRED IF NECESSARY.
7. CHEMICALS, FUELS AND LUBRICATING OILS SHALL NOT BE STORED AND EQUIPMENT SHALL NOT BE REFUELED WITHIN 100 FEET OF WATERBODY, UNLESS OTHERWISE APPROVED BY THE REGULATORY AUTHORITY. ANY WATER ACCUMULATING IN THE WORKSPACE SHALL BE PUMPED TO A FILTER BAG PRIOR TO DISCHARGE TO A WATERBODY.
8. INSTALL DIVERSION TRENCHES AT THE BASE OF ALL SLOPES ADJACENT TO THE WATERBODY AND AT MINIMUM 50' FROM WATERBODY BANK.
9. THE FABRICATED PIPE STRING MAY SPAN THE DRY WATERBODY CROSSING IN PREPARATION FOR THE LOWERING-IN PHASE OF CONSTRUCTION.
10. THE DRY WATERBODY MAY BE TRENCHED IN SEQUENCE WITH NORMAL TRENCHING OPERATIONS AND THE PIPE INSTALLED THROUGH THE DRY WATERBODY CROSSING IN CONJUNCTION WITH UPSTREAM AND DOWN STREAM PIPE.
11. THE CONTRACTOR SHALL POSTPONE GRUBBING AND ROUGH GRADING OF THE RIGHT-OF-WAY WITHIN 50' OF TOP OF BANK UNTIL ALL MATERIALS REQUIRED TO COMPLETE CROSSING ARE ON SITE, THE STAGING AREA IS PREPARED AND WORK IN THE WATERBODY IS READY TO COMMENCE. ALL DISTURBED AREAS WITHIN 50 FEET OF TOP OF BANK SHALL BE BLANKETED OR MATTED WITHIN 24 HOURS OF INITIAL DISTURBANCE OR MINOR STREAMS OR 48 HOURS OF INITIAL DISTURBANCE FOR MAJOR STREAMS UNLESS OTHERWISE AUTHORIZED. APPROPRIATE STREAMBANK PROTECTION SHALL BE PROVIDED WITHIN THE CHANNEL.
12. ANY WATER ACCUMULATING IN THE WORKSPACE SHALL BE PUMPED TO A FILTER BAG PRIOR TO DISCHARGE.

NEW YORK

NO.	DATE	BY	REVISION DESCRIPTION	CHK.	APP.

CONSTITUTION PIPELINE COMPANY, LLC
 STANDARD ENVIRONMENTAL DETAIL
 DRY WATERBODY CROSSING
 FIGURE NO. 7





PLAN VIEW

NOTES:

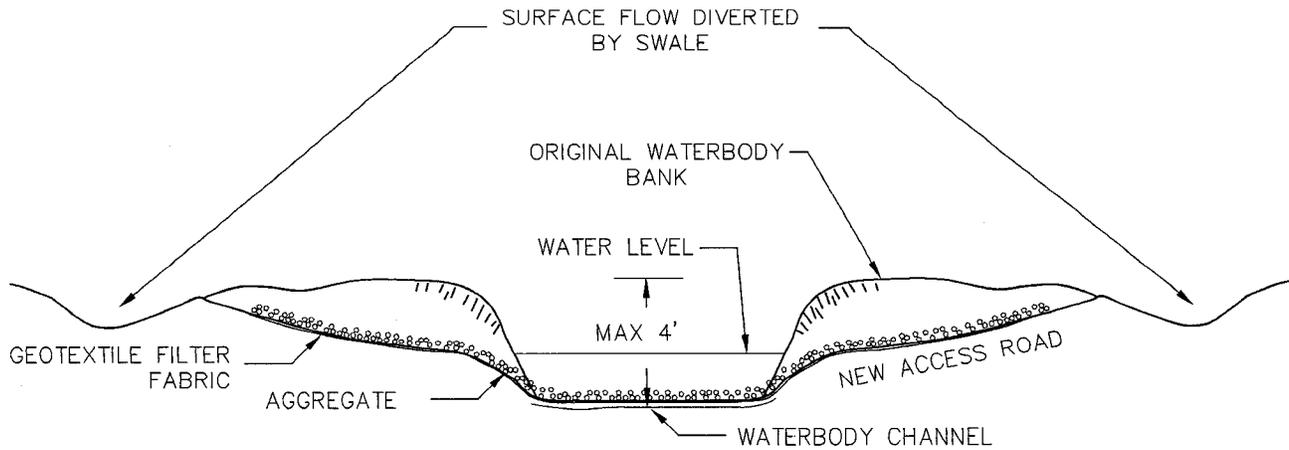
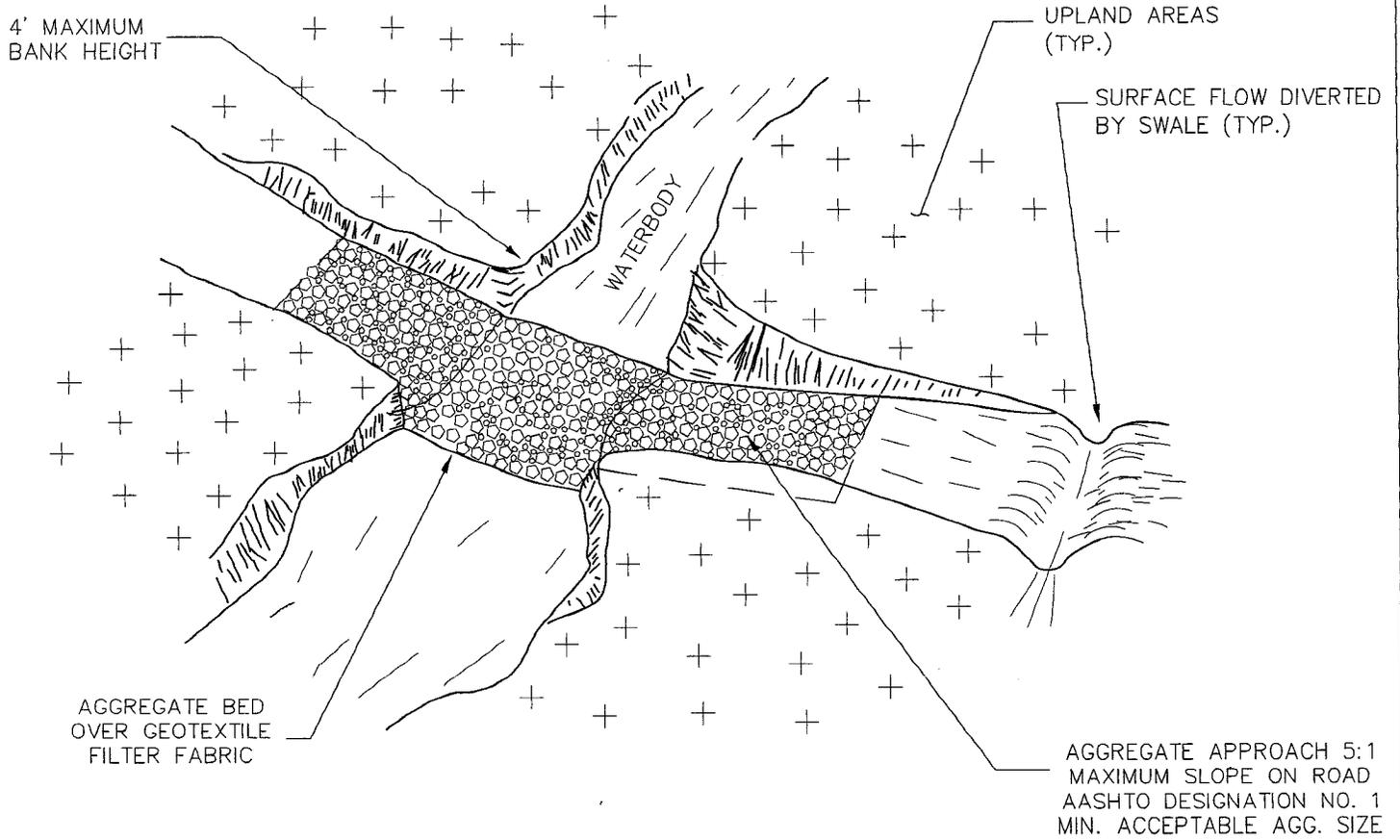
1. GRUBBING SHALL NOT TAKE PLACE WITHIN 50 FEET OF TOP-OF-BANK UNTIL ALL MATERIALS REQUIRED TO COMPLETE CROSSING ARE ON SITE AND PIPE IS READY FOR INSTALLATION.
2. TRENCH BREAKER SHALL BE INSTALLED WITHIN THE TRENCH ON BOTH SIDES OF THE WATERBODY CHANNEL (FIGURE NO. 20)
3. WATER ACCUMULATING WITHIN THE WORK AREA SHALL BE PUMPED TO A PUMPED WATER FILTER BAG OR SEDIMENT TRAP PRIOR TO DISCHARGING INTO ANY SURFACE WATER.
4. HAZARDOUS OR POLLUTANT MATERIAL STORAGE AREAS SHALL BE LOCATED AT LEAST 100 FEET BACK FROM THE TOP OF WATERBODY BANK.
5. ALL EXCESS EXCAVATED MATERIAL SHALL BE IMMEDIATELY REMOVED FROM THE WATERBODY CROSSING AREA.
6. ALL DISTURBED AREAS WITHIN 50 FEET OF TOP-OF-BANK SHALL BE BLANKETED OR MATTED WITHIN 24 HOURS OF INITIAL DISTURBANCE FOR MINOR WATERBODIES OR 48 HOURS OF INITIAL DISTURBANCE FOR INTERMEDIATE WATERBODIES UNLESS OTHERWISE AUTHORIZED.
7. APPROPRIATE WATERBODY BANK PROTECTION SHALL BE PROVIDED WITHIN THE CHANNEL.
8. THE WATERBODY CROSSING WILL GENERALLY BE COMPLETED IN 2 STAGES. THE DETAIL DEPICTS STAGE 1. STAGE 2 WILL GENERALLY BE COMPLETED USING THE SAME CONFIGURATION FROM THE OPPOSITE BANK.

NEW YORK

NO.	DATE	BY	REVISION DESCRIPTION	CHK.	APP.

CONSTITUTION PIPELINE COMPANY, LLC
 STANDARD ENVIRONMENTAL DETAIL
 TYPICAL UTILITY LINE CROSSING
 WITH COFFERDAM
 FIGURE NO. 9





NOTES

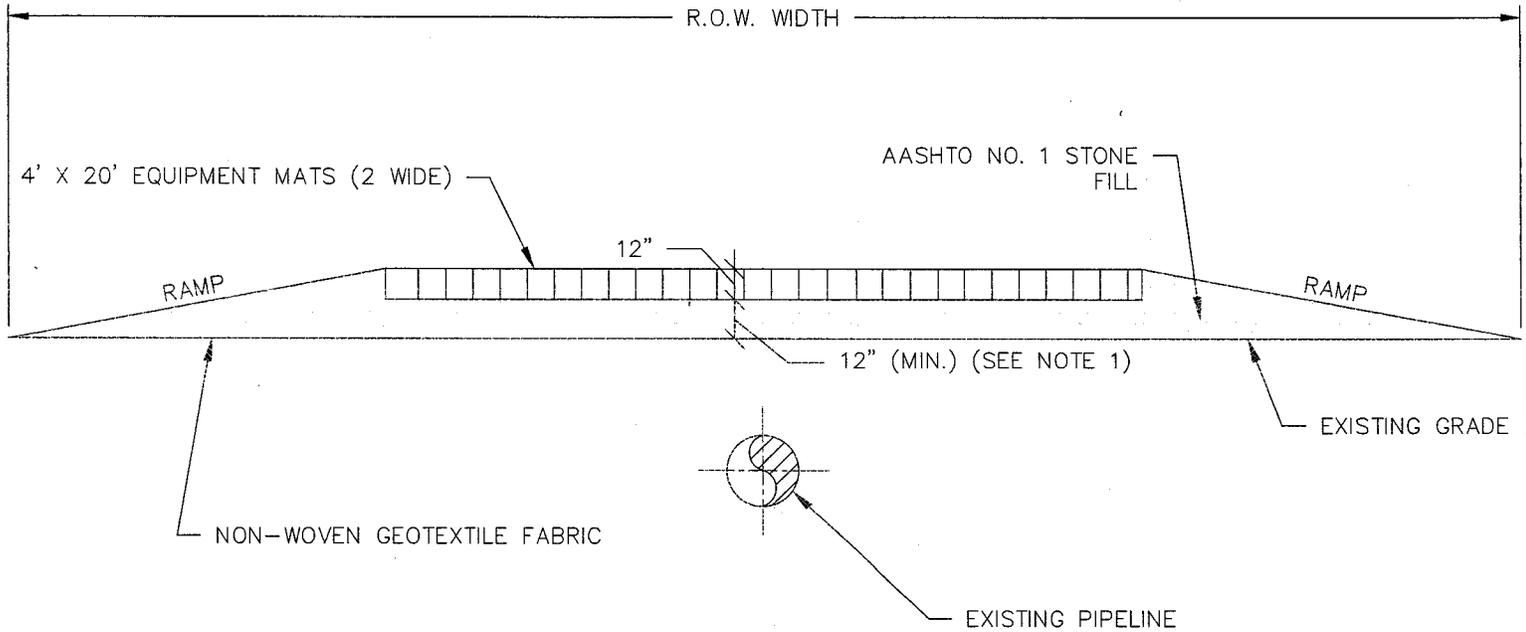
1. THIS METHOD SHALL ONLY BE USED IF IT WILL NOT AFFECT AQUATIC LIFE SUCH AS FISH MIGRATION OR SPAWNING. COORDINATION WITH THE APPLICABLE PERMITTING AGENCY WILL BE REQUIRED PRIOR TO INSTALLATION.
2. THE ACCESS FORD SHALL BE CONSTRUCTED PERPENDICULAR TO THE WATERBODY BANKS TO MINIMIZE IMPACTS
3. A SWALE SHALL BE CONSTRUCTED AT BOTH APPROACHES A MAXIMUM OF 50' FROM THE EDGE OF THE WATERBODY BANK TO DIVERT RUNOFF AND PREVENT IT FROM DIRECTLY ENTERING THE WATERBODY.
4. THE MAXIMUM HEIGHT BETWEEN THE INVERT OF THE WATERBODY AND THE WATERBODY TOP OF BANK IS 4'. THIS METHOD SHALL NOT BE USED IF THE BANK HEIGHT EXCEEDS 4'.
5. ALL AREAS DISTURBED BY THE ACCESS FORD SHALL BE STABILIZED AS SOON AS PRACTICAL, BUT NO LATER THAN 14 CALENDAR DAYS AFTER REMOVAL.

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DATE	BY	REVISION DESCRIPTION	CHK.	APP.

CONSTITUTION PIPELINE COMPANY, LLC
 STANDARD ENVIRONMENTAL DETAIL
 TEMPORARY ACCESS FORD
 FIGURE NO. 10





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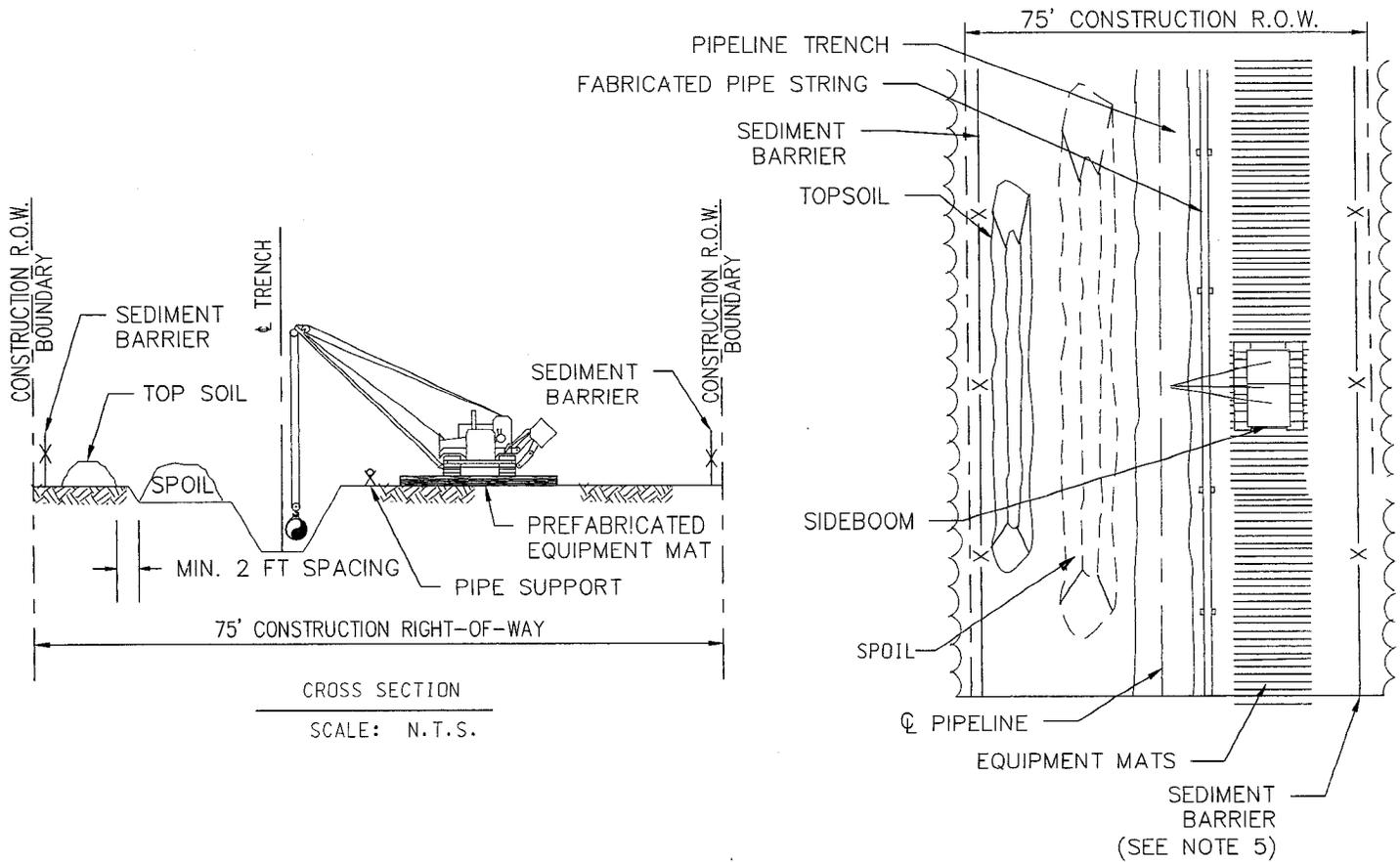
1. ADDITIONAL STONE DEPTH MAY BE REQUIRED DEPENDING ON THE DEPTH OF COVER OVER THE EXISTING PIPE. THE CONTRACTOR SHALL COORDINATE WITH THE ENGINEER FOR THE REQUIRED DEPTH OF STONE.
2. INSTALL 1 (ONE) LAYER OF NON-WOVEN GEOTEXTILE FABRIC PRIOR TO INSTALLING THE STONE.
3. THE CONTRACTOR SHALL COORDINATE WITH THE ENGINEER TO DETERMINE THE NUMBER OF EQUIPMENT MATS REQUIRED.

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CONSTITUTION PIPELINE COMPANY, LLC
 STANDARD ENVIRONMENTAL DETAIL
 TEMPORARY WOODEN MAT
 PIPELINE CROSSING
 FIGURE NO. 11





CONSTRUCTION PROCEDURE NOTES:

1. FLAG WETLAND BOUNDARIES AND INSTALL BOUNDARY SIGNS PRIOR TO CLEARING.
2. NO OVERNIGHT PARKING OR REFUELING OF MOBILE EQUIPMENT IS ALLOWED WITHIN 100 FEET OF WETLAND. PLACE "NO FUELING" SIGN POSTS 100 FEET BACK FROM WETLAND BOUNDARY. REFUEL STATIONARY EQUIPMENT AS PER SPCP PLAN.
3. INSTALL TEMPORARY SLOPE BREAKERS UPSLOPE OF WETLAND BOUNDARIES (AS SHOWN IN BMP FIG. 19)
4. INSTALL PREFABRICATED EQUIPMENT MATS THROUGH THE ENTIRE WETLAND AREA ON THE WORKING SIDE OF THE CONSTRUCTION CORRIDOR.
5. AVOID ADJACENT WETLANDS. INSTALL SEDIMENT BARRIERS AT THE OUTER BOUNDARIES OF THE WETLAND. INSTALL SEDIMENT BARRIERS ALONG THE EDGE OF THE SPOIL SIDE OF THE CONSTRUCTION CORRIDOR THROUGH THE WETLAND AND ALONG THE DOWN SLOPE EDGE OF THE WETLAND. IF THE DOWN SLOPE EDGE OF THE WETLAND IS THE SPOIL SIDE, THEN SEDIMENT BARRIERS ARE NOT REQUIRED ON THE WORKING SIDE OF THE CORRIDOR UNLESS EQUIPMENT TRAVERSING THROUGH THE WETLAND CAUSES SPOIL AND SEDIMENT TO EXIT THE CONSTRUCTION CORRIDOR.
6. LIMIT PULLING OF TREE STUMPS AND GRADING ACTIVITIES TO DIRECTLY OVER THE TRENCH LINE. DO NOT GRADE OR REMOVE STUMPS OR ROOT SYSTEMS FROM THE REST OF THE RIGHT-OF-WAY IN WETLANDS UNLESS THE CHIEF INSPECTOR AND COMPANY ENVIRONMENTAL INSPECTOR DETERMINE THAT SAFETY RELATED CONSTRUCTION CONSTRAINTS REQUIRE REMOVAL OF TREE STUMPS FROM UNDER THE WORKING SIDE OF THE RIGHT-OF-WAY.
7. CONDUCT TRENCH LINE TOPSOIL STRIPPING (IF TOPSOIL IS NOT SATURATED OR FROZEN). SALVAGE TOPSOIL TO ACTUAL DEPTH OR A MAXIMUM DEPTH OF 12 INCHES, AS DETERMINED BY THE ENVIRONMENTAL INSPECTOR. SEGREGATED TOPSOIL PILE MAY BE LOCATED ON SPOIL SIDE, AS REQUIRED.
8. LEAVE HARD PLUGS AT THE EDGES OF WETLAND UNTIL JUST PRIOR TO TRENCHING.
9. TRENCHING THROUGH WETLANDS MAY PROCEED WHEN THE PIPE SECTION IS FABRICATED AND READY TO LAY. ONCE TRENCHING COMMENCES, CONSTRUCTION THROUGH THE WETLAND IS TO PROCEED CONTINUOUSLY UNTIL THE CROSSING IS COMPLETED, BACK FILLED AND RESTORED IN ORDER TO MINIMIZE THE LENGTH OF TIME THE TRENCH IS OPEN.
10. PIPE SECTION MAY BE FABRICATED WITHIN THE WETLAND ADJACENT TO PIPE TRENCH, OR IN STAGING AREA OUTSIDE THE WETLAND AND WALKED IN. NO CONCRETE COATING ACTIVITY SHALL OCCUR WITHIN 100 FEET OF WETLAND BOUNDARY UNLESS APPROVED BY ENVIRONMENTAL INSPECTOR.
11. LOWER-IN PIPE. PRIOR TO BACK FILLING TRENCH, INSTALL TRENCH BREAKERS IN ACCORDANCE WITH DRAWINGS AND SPECIFICATIONS.
12. RESTORE GRADE TO NEAR PRE-CONSTRUCTION TOPOGRAPHY, REPLACE TOPSOIL AND INSTALL PERMANENT EROSION CONTROL MEASURES.
13. REMOVE PREFABRICATED MATS FROM WETLANDS UPON COMPLETION.
14. SEED DISTURBED WETLAND AREAS (UNLESS STANDING WATER IS PRESENT) AS DETERMINED BY THE ENVIRONMENTAL INSPECTOR AND AS SHOWN ON DRAWINGS AND ECP. 48 LB PLS/ACRE ANNUAL RYE GRASS AND STRAW MULCH AT 3T/ACRE OR AS APPROVED BY THE APPLICABLE PERMITTING AGENCY.
15. NO FERTILIZER OR LIME IS PERMITTED.
16. DO NOT USE LIQUID MULCH BINDERS WITHIN 100 FT OF WETLANDS OR WATERBODIES.

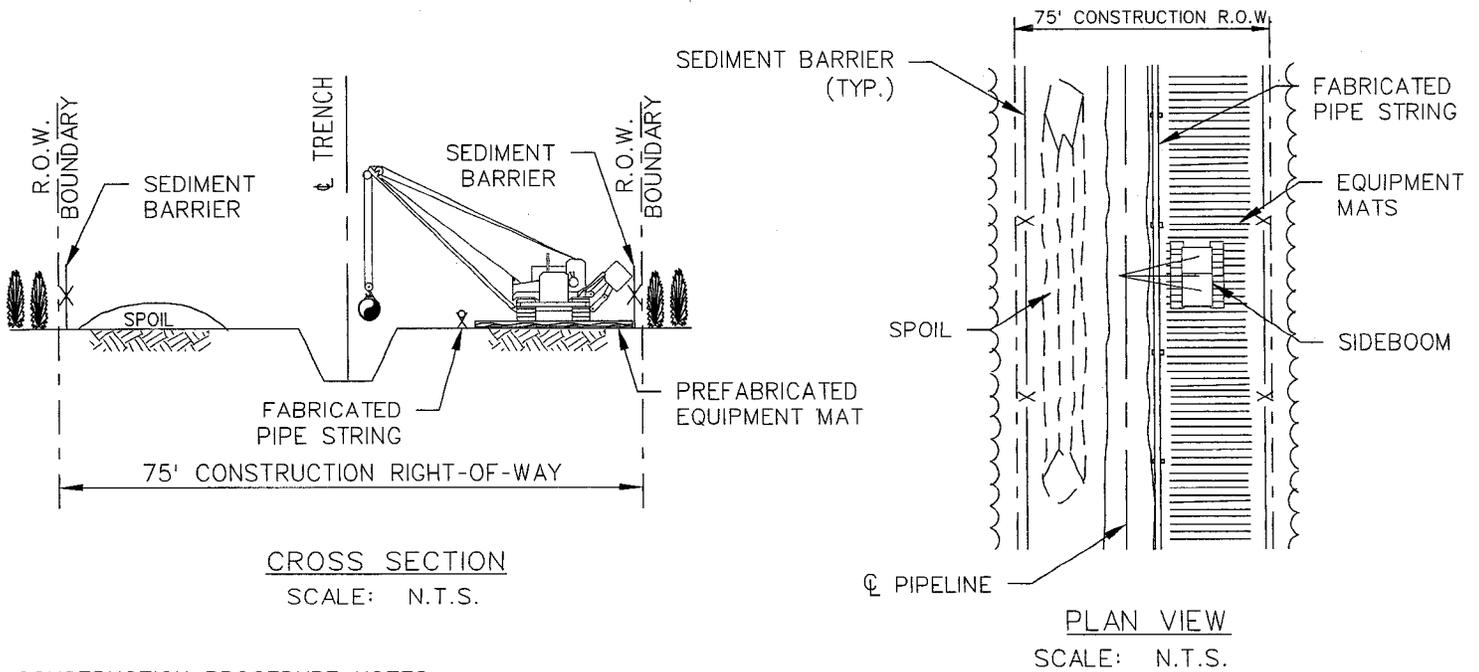
PLAN VIEW
SCALE: N.T.S.

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CONSTITUTION PIPELINE COMPANY, LLC
STANDARD ENVIRONMENTAL DETAIL
TYPE I "NON-SATURATED WETLAND"
INSTALLATION PROCEDURE
FIGURE NO. 12





CONSTRUCTION PROCEDURE NOTES:

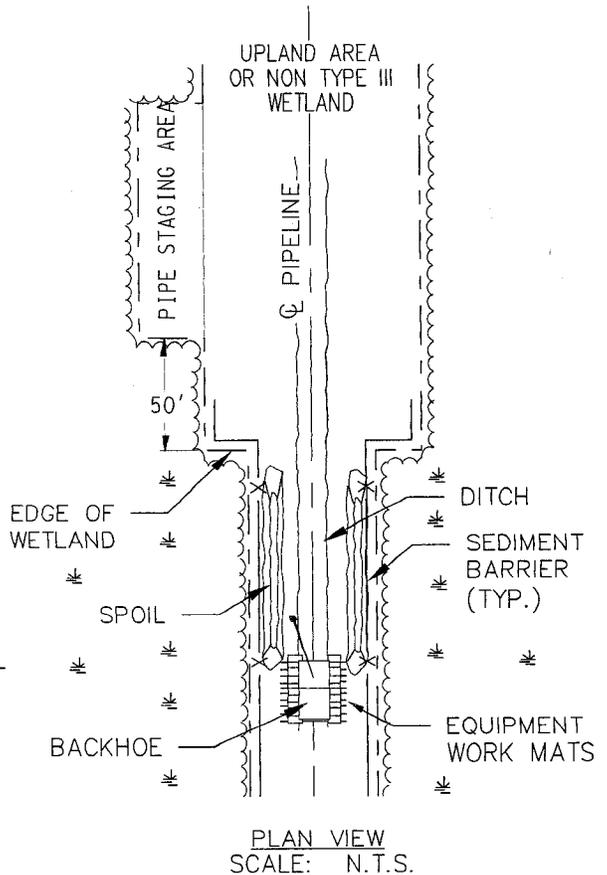
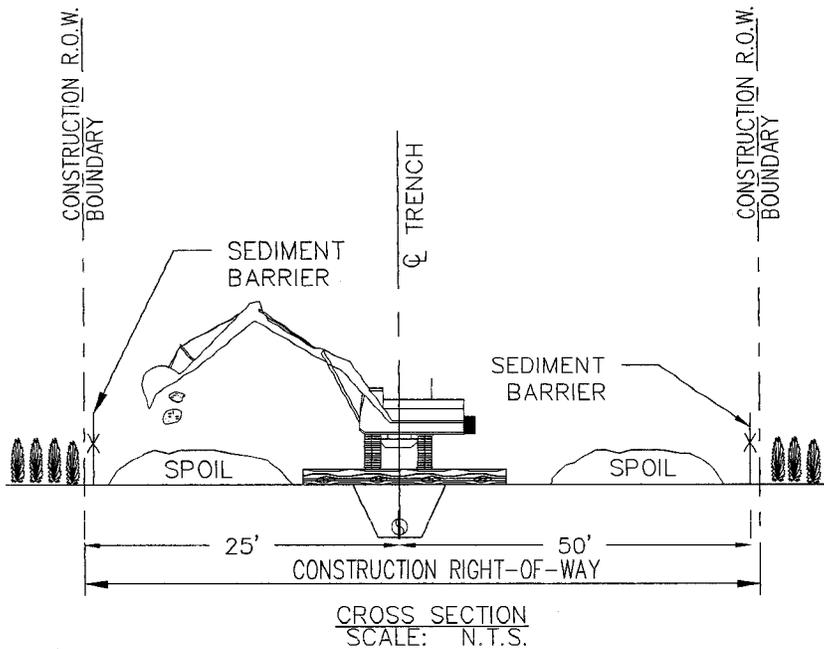
1. FLAG WETLAND BOUNDARIES AND INSTALL BOUNDARY SIGNS PRIOR TO CLEARING.
2. NO OVERNIGHT PARKING OR REFUELING OF MOBILE EQUIPMENT IS ALLOWED WITHIN 100 FEET OF WETLAND. PLACE "NO FUELING" SIGN POSTS 100 FEET BACK FROM WETLAND BOUNDARY. REFUEL STATIONARY EQUIPMENT AS PER SPCC PLAN.
3. INSTALL TEMPORARY SLOPE BREAKERS UPSLOPE OF WETLAND BOUNDARIES (AS SHOWN ON BMP FIGURE 19)..
4. INSTALL PREFABRICATED EQUIPMENT MATS THROUGH ENTIRE WETLAND AREA ON THE WORKING SIDE OF THE CONSTRUCTION CORRIDOR.
5. AVOID ADJACENT WETLANDS. INSTALL SEDIMENT BARRIERS AT OUTER BOUNDARIES OF WETLAND AND ALONG BOTH WETLAND EDGES.
6. LIMIT PULLING OF TREE STUMPS AND GRADING ACTIVITIES TO DIRECTLY OVER THE TRENCHLINE. DO NOT GRADE OR REMOVE STUMPS OR ROOT SYSTEMS FROM THE REST OF THE RIGHT-OF-WAY IN WETLANDS UNLESS THE CHIEF INSPECTOR AND COMPANY ENVIRONMENTAL INSPECTOR DETERMINE THAT SAFETY RELATED CONSTRUCTION CONSTRAINTS REQUIRE REMOVAL OF TREE STUMPS FROM UNDER THE WORKING SIDE OF THE RIGHT-OF-WAY.
7. TOPSOIL STRIPPING SHALL NOT BE REQUIRED IN SATURATED SOIL CONDITIONS.
8. LEAVE HARD PLUGS AT THE EDGES OF WETLAND UNTIL JUST PRIOR TO TRENCHING.
9. TRENCHING THROUGH WETLANDS MAY PROCEED WHEN THE PIPE SECTION IS FABRICATED AND READY TO LAY. ONCE TRENCHING COMMENCES, CONSTRUCTION THROUGH THE WETLAND IS TO PROCEED CONTINUOUSLY UNTIL THE CROSSING IS COMPLETED, BACKFILLED AND RESTORED IN ORDER TO MINIMIZE THE LENGTH OF TIME THE TRENCH IS OPEN.
10. PIPE SECTION MAY BE FABRICATED WITHIN THE WETLAND ADJACENT TO PIPE TRENCH, OR IN STAGING AREA OUTSIDE THE WETLAND AND WALKED IN. NO CONCRETE COATING ACTIVITY WITHIN 100 FEET OF WETLAND BOUNDARY, UNLESS APPROVED BY COMPANY ENVIRONMENTAL INSPECTOR.
11. LOWER-IN PIPE PRIOR TO BACKFILLING, INSTALL TRENCH PLUGS IN ACCORDANCE WITH DRAWINGS AND SPECIFICATIONS.
12. RESTORE GRADE TO NEAR PRE-CONSTRUCTION TOPOGRAPHY AND INSTALL PERMANENT EROSION CONTROL MEASURES.
13. REMOVE PREFABRICATED MATS FROM WETLANDS UPON COMPLETION.
14. SEED DISTURBED WETLAND AREA (UNLESS STANDING WATER IS PRESENT) AS DETERMINED BY THE ENVIRONMENTAL INSPECTOR AND AS SHOWN ON DRAWINGS AND ECP. 48 LB PLS/ACRE ANNUAL RYE GRASS AND STRAW MULCH AT 3T/ACRE OR AS APPROVED BY THE APPLICABLE PERMITTING AGENCY.
15. NO FERTILIZER OR LIME IS PERMITTED.
16. DO NOT USE LIQUID MULCH BINDERS WITHIN 100 FT OF WETLANDS OR WATERBODIES.

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CONSTITUTION PIPELINE COMPANY, LLC
STANDARD ENVIRONMENTAL DETAIL
TYPE II "SATURATED WETLAND"
INSTALLATION PROCEDURE
FIGURE NO. 13





CONSTRUCTION PROCEDURE NOTES:

1. FLAG WETLAND BOUNDARIES AND INSTALL WETLAND BOUNDARY SIGNS PRIOR TO CLEARING.
2. NO OVERNIGHT PARKING OR REFUELING OF MOBILE EQUIPMENT IS ALLOWED WITHIN 100 FEET OF WETLAND. PLACE "NO FUELING" SIGN POSTS 100 FEET BACK FROM WETLAND BOUNDARY. REFUEL STATIONARY EQUIPMENT AS PER SPCC PLAN.
INSTALL TEMPORARY SLOPE BREAKERS WITHIN 50' UPSLOPE OF WETLAND BOUNDARIES (AS SHOWN ON BMPS - FIG. 19)
4. AVOID ADJACENT WETLANDS. INSTALL SEDIMENT BARRIERS AT OUTER BOUNDARIES OF WETLAND AND ALONG BOTH WETLAND EDGES.
5. LIMIT PULLING OF TREE STUMPS AND GRADING ACTIVITIES TO DIRECTLY OVER TRENCH LINE. DO NOT REMOVE STUMPS OR ROOT SYSTEMS FROM THE REST OF THE RIGHT-OF-WAY IN WETLANDS UNLESS THE CHIEF INSPECTOR AND COMPANY ENVIRONMENTAL INSPECTOR DETERMINE THAT SAFETY RELATED CONSTRUCTION CONSTRAINTS REQUIRE REMOVAL OF TREE STUMPS FROM UNDER THE WORKING SIDE OF THE RIGHT-OF-WAY.
6. TOPSOIL STRIPPING SHALL NOT BE REQUIRED IN SATURATED SOIL CONDITIONS.
7. UTILIZE AMPHIBIOUS EXCAVATORS (PONTOON MOUNTED BACKHOES) OR TRACKED BACKHOES SUPPORTED BY PREFABRICATED EQUIPMENT MATS OR FLOATS, TO EXCAVATE TRENCH. IF PREFABRICATED EQUIPMENT MATS ARE USED FOR STABILIZATION, THE BACKHOE SHALL GRADUALLY MOVE ACROSS THE WETLAND BY MOVING THE MATS FROM IMMEDIATELY BEHIND TO IMMEDIATELY IN FRONT OF THE BACKHOE'S PATH.
8. FABRICATE PIPE IN A STAGING AREA OUTSIDE THE TYPE III WETLAND AS INDICATED ON THE CONSTRUCTION DRAWINGS. NO CONCRETE COATING ACTIVITY SHALL OCCUR WITHIN 100 FEET OF THE WETLAND BOUNDARY, UNLESS APPROVED BY THE ENVIRONMENTAL INSPECTOR.
9. LEAVE HARD PLUGS AT THE EDGE OF TYPE III WETLAND UNTIL JUST PRIOR TO PIPE PLACEMENT.
10. FLOAT PIPE IN PLACE, LOWER-IN, INSTALL TRENCH PLUGS IN ACCORDANCE WITH DRAWINGS AND SPECIFICATIONS, AND BACKFILL.
11. RESTORE GRADE TO NEAR PRE-CONSTRUCTION TOPOGRAPHY AND INSTALL PERMANENT EROSION CONTROL.
12. REMOVE ANY MATS UTILIZED TO SUPPORT AMPHIBIOUS EQUIPMENT FROM WETLANDS UPON COMPLETION.
13. WETLANDS CROSSED USING PUSH/PULL METHOD TEND TO BE TOO WET FOR EFFECTIVE SEEDING AND WILL NOT BE SEEDDED IF STANDING WATER IS PRESENT.
14. NO FERTILIZER OR LIME IS PERMITTED.
15. DO NOT USE LIQUID MULCH BINDERS WITHIN 100 FT OF WETLANDS OR WATERBODIES.

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CONSTITUTION PIPELINE COMPANY, LLC
STANDARD ENVIRONMENTAL DETAIL
TYPE III "INUNDATED WETLAND"
INSTALLATION PROCEDURE
FIGURE NO. 14

