

**GENERAL CIVIL NOTES:**

1. THE LOCATIONS OF UNDERGROUND UTILITIES AND STRUCTURES, AS SHOWN ON THE DRAWINGS, ARE APPROXIMATE AND MAY NOT BE COMPLETE. THE LOCATION OF EXISTING UNDERGROUND UTILITIES ARE BASED ON PREVIOUS CONSTRUCTION DESIGN PLANS, WHICH ARE AVAILABLE FOR INSPECTION AT THE ENGINEER'S OFFICE. NO GUARANTEES ARE MADE THAT UTILITIES OR STRUCTURES WILL BE FOUND AT THE LOCATIONS AND DEPTHS SHOWN ON THE DRAWINGS. EXISTING UTILITIES AND STRUCTURES SHALL BE VERIFIED IN THE FIELD WITH TEST PITS PRIOR TO BEGINNING CONSTRUCTION. THE CONTRACTOR WILL REALIGN NEW PIPE LOCATIONS AS REQUIRED TO CONFORM TO EXISTING LINES AND AS APPROVED BY THE ENGINEER.
2. UNLESS OTHERWISE NOTED, THERE IS NO KNOWN ASBESTOS WITHIN THE SCOPE OF THIS PROJECT. THE CONTRACTOR SHALL NOTIFY THE OWNER AND THE ENGINEER IMMEDIATELY. DISPOSAL OF ASBESTOS SHALL BE IN ACCORDANCE WITH STATE OF MAINE REGULATIONS.
3. ALL PIPE LINES SHALL SLOPE UNIFORMLY BETWEEN ELEVATIONS INDICATED ON THE DRAWINGS. NO CRESTS IN PIPING WILL BE PERMITTED. PROVIDE ALL BENDS (HORIZONTAL AND VERTICAL) AS REQUIRED TO MEET THE GRADES AND ALIGNMENT INDICATED ON THE DRAWINGS.
4. ALL BURIED CONNECTIONS TO STRUCTURES SHALL HAVE STEEP, FLEXIBLE CONNECTIONS APPROXIMATELY 4 FEET FROM THE STRUCTURES. ALL STEEP TYPE COUPLINGS ON PRESSURE LINES SHALL BE RESTRAINED (SOLID SLEEVE). REFER TO SPECIFICATION SECTION 150988.
5. NEW PENETRATIONS THROUGH EXISTING STRUCTURE WALLS SHALL BE BY CORING MACHINE AND "LINK-SEAL" TYPE SEALS, UNLESS OTHERWISE INDICATED. OPENINGS TO BE COMPATIBLE WITH REQUIRED PIPING AND STANDARD LINK SEAL SIZES. SEE DRAWING PR-9 FOR DETAILS.
6. REFER TO SPECIFICATION SECTION 02200 FOR PIPE AND STRUCTURE BEDDING AND BACKFILL REQUIREMENTS.
7. COMPACTON TESTS WILL BE PERFORMED IN ACCORDANCE WITH SPECIFICATION SECTION 02200. ANY SETTLEMENT OCCURRING WITHIN ONE YEAR OF FINAL COMPLETION OF THE WORK SHALL BE CORRECTED BY THE CONTRACTOR AT NO ADDITIONAL COST.
8. ALL AREAS THAT ARE EXCAVATED, FILLED OR OTHERWISE DISTURBED BY THE CONTRACTOR SHALL BE REPAIRED TO ORIGINAL CONDITION. SEEDED AND MULCHED. THE TOP 4 INCHES OF SOIL SHALL BE LOAM. REFER TO SPECIFICATIONS SECTION 02485.
9. THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE REGULATIONS OF THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA).
10. REFER TO SECTION 01050 OF THE SPECIFICATIONS FOR INFORMATION REGARDING COORDINATION WITH OTHERS, INCLUDING RESPONSIBILITIES AND RELATED COSTS.
11. WHERE NEW PIPING IS TO BE CONNECTED TO EXISTING PIPING, THE CONTRACTOR SHALL FURNISH AND INSTALL ALL ADAPTERS, FITTINGS, AND ADDITIONAL PIPE AS REQUIRED TO COMPLETE THE CONNECTION. CONTRACTOR SHALL VERIFY LOCATION, ELEVATION, ORIENTATION AND MATERIAL OF CONSTRUCTION.
12. ALL EXISTING UTILITIES ENCOUNTERED DURING CONSTRUCTION ARE TO REMAIN IN SERVICE UNLESS OTHERWISE NOTED.
13. CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVAL AND DISPOSAL OF ALL DEMOLITION MATERIALS IN ACCORDANCE WITH SPECIFICATION SECTION 02050.
14. ALL STRUCTURES AND PRELINES LOCATED ADJACENT TO ANY TRENCH EXCAVATION SHALL BE PROTECTED AND FENCED. SPARKED BY THE CONTRACTOR SHALL BE REPAIRED. ALL TRENCHES SHALL BE PROTECTED BY CONTRACTOR'S OPERATIONS SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE. ALL UTILITIES REQUIRING REPAIR, RELOCATION OR ADJUSTMENT AS A RESULT OF THE PROJECT SHALL BE COORDINATED THROUGH THE OWNER.
15. REFER TO SPECIFICATION SECTION 01010, WHICH CONTAINS INFORMATION ON CONSTRAINTS OF CONSTRUCTION SEQUENCING.
16. ALL PIPING, EQUIPMENT AND MATERIALS TO BE DEMOLISHED AND/OR REMOVED FROM SERVICE SHALL BE COORDINATED WITH THE OWNER AND CONDUIT DESIGNERS AS "ABANDONED" MAY BE REQUIRED IF THE CONTRACTOR SO CHOOSES. IF ABANDONED PIPE CONTACTS WITH PROPOSED YARD PIPING, THEN A PORTION OF THE ABANDONED PIPE SHALL BE REMOVED AND THE NEW ENDS OF ABANDONED PIPE CAPPED, OR PLUGGED WITH CONCRETE.
17. SEVERING OF EXISTING UTILITIES FOR ABANDONMENT OR REMOVAL OF A SEGMENT FROM SERVICE SHALL BE PERFORMED IN SUCH A MANNER AS TO ALLOW THE REMAINING ACTIVE SEGMENT TO CONTINUE IN SERVICE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING FITTINGS, JOINT RESTRAINT, ETC. TO ENSURE THEIR INTEGRITY. PLUG ENDS OF ABANDONED PIPE SEGMENTS WITH CONCRETE UNLESS SPECIAL CIRCUMSTANCES DICTATE PLUGGING ABANDONED PIPES WITH BLIND FLANGES, RESTRAINED MECHANICAL JOINT PLUGS, ETC. AS APPROPRIATE.

18. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING AND DISPOSING OF ALL DEMOLISHED PIPING, EQUIPMENT AND MATERIALS. CONTRACTOR SHALL BE IN ACCORDANCE WITH ALL STATE AND LOCAL REGULATIONS. THE OWNER RESERVES THE RIGHT TO REPAIR ANY DEMOLITION FOR HIS USE. SUCH MATERIALS TO BE REPAIRED SHALL BE PROPERLY STORED IN AN ON-SITE LOCATION, COORDINATE LOCATION AND MATERIALS TO BE SALVAGED WITH THE OWNER/ENGINEER.
19. THE CONTRACTOR SHALL KEEP A RECORD OF DEMOLITION AS PART OF THE PROJECT RECORD DOCUMENTS IN ACCORDANCE WITH SPECIFICATION SECTION 01720.
20. THE CONTRACTOR SHALL TAKE ALL NECESSARY STEPS TO ENSURE THAT ALL PROCESS FLOWS ARE MAINTAINED DURING CONSTRUCTION. GRADITY OR PUMPED BYPASSES AND OTHER MEANS OF MAINTAINING FLOW SHALL BE SUBJECT TO THE REVIEW AND ACCEPTANCE OF THE ENGINEER. THE CONTRACTOR SHALL COORDINATE ANY TEMPORARY STOPPAGES OR BYPASSES WITH THE OWNER AND ENGINEER.
21. THE LOCATION AND LIMITS OF ALL ON-SITE WORK AND STORAGE AREAS SHALL BE REVIEWED/COORDINATED WITH, AND ACCEPTABLE TO, THE OWNER AND ENGINEER. THE CONTRACTOR SHALL LIMIT HIS ACTIVITIES TO THESE AREAS.
22. WRITTEN DIMENSIONS SHALL PREVAIL. DO NOT SCALE DISTANCES FROM THE DRAWINGS. REPORT ANY DISCREPANCIES IMMEDIATELY TO THE ENGINEER.
23. ALL ELEVATIONS ARE BASED ON USGS MEAN SEA LEVEL DATUM = 1929 NGVD.
24. CONTRACTOR TO NOTE THAT "SCANNED" IMAGES HAVE BEEN USED IN THE DRAWINGS. CONTRACTOR TO VERIFY EXISTING CONDITIONS. REFER TO PROCESS GENERAL NOTE NO. 1, THIS DRAWING.
25. CONTRACTOR SHALL PROVIDE TWO CHEMICAL MANHOLES FOR INSTALLATION OF TUBING AND FUTURE ACCESS. MANHOLES SHALL BE LOCATED APPROXIMATELY 10' APART. FIELD LOCATE CHEMICAL MANHOLES WITH PRIOR REVIEW AND APPROVAL OF THE ENGINEER. CONTRACTOR TO NOTE CHEMICAL MANHOLE NO.1 IS NOT SHOWN ON THIS DWG.
26. CONTRACTOR SHALL REMOVE AND REPLACE OR REPAIR ALL CURBS, SIDEWALK, PAVEMENT AND OTHER ITEMS DAMAGED BY HIS CONSTRUCTION ACTIVITIES TO AT LEAST THEIR ORIGINAL CONDITION AND TO THE SATISFACTION OF THE OWNER AND ENGINEER.

**EROSION AND SEDIMENTATION CONTROL NOTES**

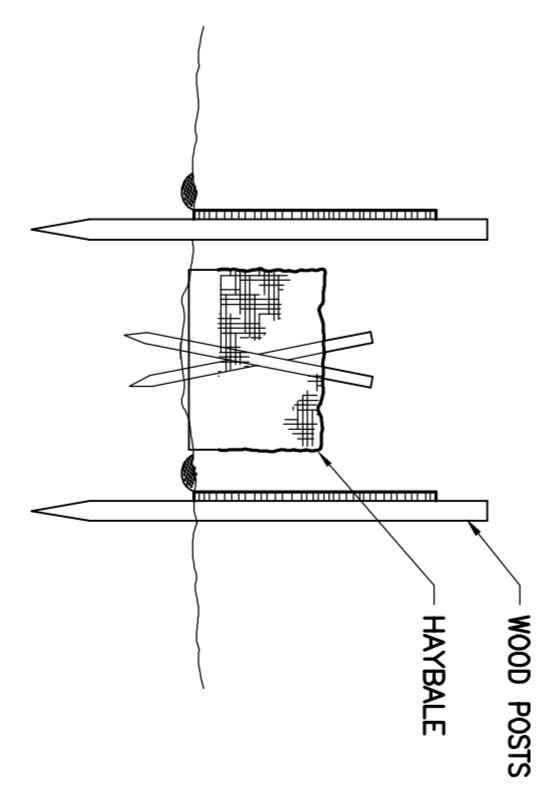
- THIS PLAN HAS BEEN DEVELOPED AS A STRATEGY TO CONTROL SOIL EROSION AND SEDIMENTATION DURING AND AFTER CONSTRUCTION. THIS PLAN IS BASED ON THE STANDARDS AND SPECIFICATIONS FOR EROSION PREVENTION IN DEVELOPING AREAS AS CONTAINED IN THE "MAINE EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES", MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION DATED MARCH 2003.
1. ALL SEDIMENT AND EROSION CONTROL MEASURES SHALL BE DONE IN ACCORDANCE WITH THE "MAINE EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES", MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION, DATED MARCH 2003.
  2. THOSE AREAS UNDERGOING ACTUAL CONSTRUCTION WILL BE MAINTAINED IN AN UNTREATED OR UNVEGETATED CONDITION FOR THE MINIMUM TIME REQUIRED. IN GENERAL, AREAS SHOULD BE REVEGETATED WITHIN 30 DAYS OF INITIAL DISTURBANCE OF THE SOIL.
  3. SEDIMENT BARRIERS (SILT FENCE, STONE CHECK DAMS, ETC.) SHOULD BE INSTALLED PRIOR TO ANY SOIL DISTURBANCE OF UPGRADIENT DRAINAGE AREAS.
  4. INSTALL SILT FENCE AT TOE OF SLOPES TO FILTER SILT FROM RUNOFF. SEE SILT FENCE DETAIL FOR PROPER INSTALLATION. SILT FENCE WILL REMAIN IN PLACE PER NOTE #5.
  5. ALL EROSION CONTROL STRUCTURES WILL BE INSPECTED, REPAIRED AND/OR REBUILT EVERY 7 DAYS AND IMMEDIATELY FOLLOWING ANY SIGNIFICANT RAINFALL OR SNOW MELT OR WHEN NO LONGER SERVICEABLE DUE TO SEDIMENT ACCUMULATION OR DECOMPOSITION. SEDIMENT DEPOSITS MUST BE REMOVED WHEN THEY SHOULD BE REMOVED AFTER EACH STORM EVENT. THEY MUST BE REMOVED WHEN DEPOSITS REACH APPROXIMATELY ONE HALF THE HEIGHT OF THE BARRIER. SEDIMENT CONTROL DEVICES SHALL REMAIN IN PLACE AND BE MAINTAINED BY THE CONTRACTOR UNTIL AREAS UPSLOPE ARE PERMANENTLY STABILIZED.
  6. NO SLOPES, EITHER PERMANENT OR TEMPORARY, SHALL BE STEEPER THAN TWO HORIZONTAL TO ONE VERTICAL (2 TO 1). UNLESS STABILIZED WITH REPAIR OR OTHER STRUCTURAL MEANS.
  7. IF FINAL SEEDING AND SODDING IS NOT EXPECTED PRIOR TO THE ANTICIPATED DATE OF THE FIRST KILLING FROST, THE CONTRACTOR SHALL REQUEST SEEDING AND MULCHING PRIOR TO THE END OF THE SEASON TO PROTECT THE SITE AND DELAY PERMANENT LOANING, FINE GRADING, AND SEEDING OR SODDING UNTIL SPRING.
  8. WHEN FEASIBLE, TEMPORARY SEEDING OF DISTURBED AREAS THAT HAVE NOT BEEN FINISH GRADED SHALL BE COMPLETED PRIOR TO OCTOBER 1.
  9. DURING THE CONSTRUCTION PHASE, INTERCEPTED SEDIMENT WILL BE RETURNED TO THE SITE AND REGRADED ONTO OPEN AREAS. POST SEEDING SEDIMENT, IF ANY, WILL BE DISPOSED OF IN AN ACCEPTABLE MANNER.
  10. REVEGETATION MEASURES WILL COMMENCE UPON COMPLETION OF CONSTRUCTION EXCEPT AS NOTED ABOVE. ALL DISTURBED AREAS NOT OTHERWISE STABILIZED WILL BE GRADED, SMOOTHED AND REVEGETATED.
  11. ALL TEMPORARY EROSION CONTROL MEASURES SHALL BE REMOVED ONCE THE SITE IS STABILIZED.
  12. WETLANDS AND SURFACE WATERS (EXCEPTING THOSE WHICH ARE TO BE FILLED IN ACCORDANCE WITH STATE AND FEDERAL REGULATIONS) WILL BE PROTECTED WITH SILT FENCE INSTALLED AT THE EDGE OF THE WETLAND OR THE BOUNDARY OF WETLAND DISTURBANCE.

**EROSION CONTROL - WINTER CONSTRUCTION**

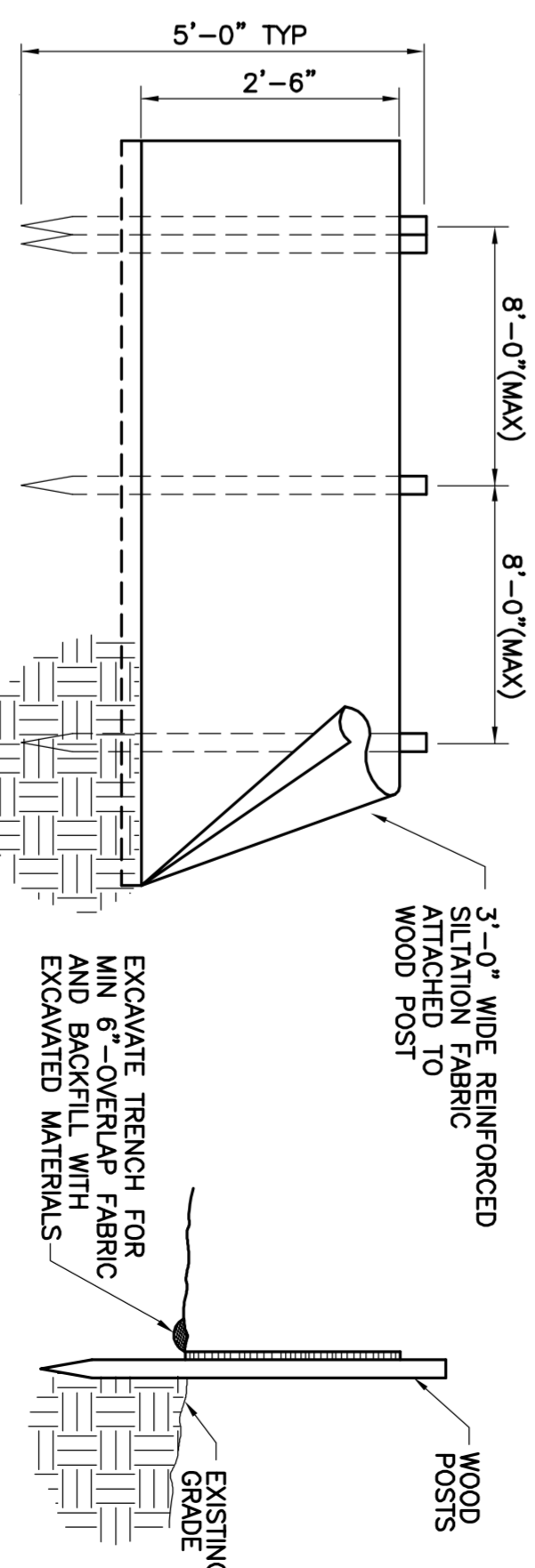
1. WINTER CONSTRUCTION PERIOD DEFINED: NOVEMBER 1 THROUGH APRIL 15
2. WINTER EXCAVATION AND EARTHWORK SHALL BE DONE SUCH THAT NO MORE THAN 1 ACRE OF THE SITE IS WITHOUT STABILIZATION AT ANY ONE TIME.
3. EXPOSED AREA SHOULD BE LIMITED SUCH THAT THE AREA CAN BE MULCHED IN ONE DAY PRIOR TO ANY SNOW EVENT.
4. CONTINUATION OF EARTHWORK OPERATIONS ON ADDITIONAL AREAS SHALL NOT BEGIN UNTIL THE EXPOSED SOIL SURFACE ON THE AREA BEING WORKED HAS BEEN STABILIZED SUCH THAT NO LARGER AREA OF THE SITE IS WITHOUT EROSION CONTROL PROTECTION AS LISTED IN ITEM 2 ABOVE.
5. AN AREA SHALL BE CONSIDERED TO HAVE BEEN STABILIZED WHEN EXPOSED SURFACES HAVE BEEN EITHER DORMANT SEEDED, MULCHED AND ADEQUATELY ANCHORED BY AN APPROVED ANCHORING TECHNIQUE, IN ALL CASES, MULCH SHALL BE APPLIED SUCH THAT SOIL SURFACE IS NOT VISIBLE THROUGH THE MULCH.
6. BETWEEN THE DATES OF OCTOBER 15 AND APRIL 15TH, LOAM OR SEED WILL NOT BE REQUIRED. DURING PERIODS OF ABOVE-FREEZING TEMPERATURES, THE SLOPES SHALL BE FINE GRADED AND EITHER PROTECTED WITH MULCH OR TEMPORARILY SEEDED AND MULCHED UNTIL SUCH TIME AS THE FINAL TREATMENT CAN BE APPLIED. IF THE DATE IS AFTER NOVEMBER 1ST AND IF THE EXPOSED AREA HAS BEEN LOAMED, FINE GRADED AND IS SMOOTH, THE MULCH SHALL BE APPLIED WITHIN 7 DAYS OF THE END OF THE EXPOSURE. ALL EXPOSED AREAS SHALL BE GRADED BEFORE FREEZING AND THE SURFACE TEMPORARILY PROTECTED FROM EROSION BY THE APPLICATION OF MULCH. SLOPES SHALL NOT BE LEFT EXPOSED OVER THE WINTER OR ANY OTHER EXTENDED TIME OF WORK. SUSPENSION UNLESS TREATED IN THE ABOVE MANNER. UNTIL SUCH TIME AS WEATHER CONDITIONS ALLOW DITCHES TO BE FINISHED WITH THE PERMANENT SURFACE TREATMENT. EROSION SHALL BE CONTROLLED BY THE INSTALLATION OF BALES OF HAY OR STONE CHECK DAMS IN ACCORDANCE WITH THE STANDARD DETAILS.
7. THE APPLICATION OF MULCH TO FINE GRADED AREAS WILL BE STABILIZED AS FOLLOWS:
  - A) BETWEEN THE DATES OF NOVEMBER 1ST AND APRIL 15TH ALL MULCH SHALL BE SPREAD BY EITHER PERCENT MULCH NETTING, ASPHALT EMULSION, CHEMICAL TACK OR WOOD CELLULOSE FIBER.
  - B) MULCH NETTING SHALL BE USED TO ANCHOR MULCH IN ALL DRAINAGE WAYS WITH A SLOPE GREATER THAN 3% FOR SLOPES EXPOSED TO DIRECT WINDS AND FOR ALL OTHER SLOPES GREATER THAN 8%.
  - C) MULCH NETTING SHALL BE USED TO ANCHOR MULCH IN ALL AREAS WITH SLOPES GREATER THAN 15% AFTER OCTOBER 1ST. THE SAME APPLIES FOR ALL SLOPES GREATER THAN 8%.
8. AFTER NOVEMBER 1ST THE CONTRACTOR SHALL APPLY MULCH AND ANCHORING ON ALL BARE EARTH AT THE END OF EACH WORKING DAY.
9. DURING WINTER CONSTRUCTION PERIODS ALL SNOW SHALL BE REMOVED FROM AREAS OF MULCHING PRIOR TO PLACEMENT.

**CIVIL ABBREVIATIONS:**

DEC	DECHLOR
DIA	DIAMETER
DMS	DRAWING
ED	FLOOR DRAIN
HDD	HORIZONTAL
HPP	SODIUM HYPOCHLORITE
HPV	INVERT
LP	LOW POINT
MAX	MAXIMUM
MIN	MINIMUM
OD	OUTSIDE DIAMETER
OC	ON CENTER
PC	POLYETHYLENE PIPE
PE	POLYETHYLENE PIPE
PAS	RETURN ACTIVATED SLUDGE-HYPPOCHLORITE
TP	TYPICAL



**COMBINATION SILT FENCE AND HAY BALE BARRIER**



**SILT FENCE INSTALLATION DETAIL**

NO	REVISIONS	APP'D	DATE	PROGRESS PRINTS
1				ISSUED FOR REVIEW: 12-15-04
2				ISSUED FOR BIDDING: 2-18-05
3				VAULT LOCATION: FF 56
4				LAST WORKED ON:
5				FILENAME:

DRAWN BY: SAL	CHECKED BY: DWS/PFB
DATE: 2-18-05	APPROVED BY: PFB
DATE: 2-18-05	PROJECT NO.: 10301C
BOOK NO.: 1	SCALE: AS NOTED

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 GENERAL CIVIL NOTES,  
 EROSION CONTROL NOTES  
 AND ABBREVIATIONS