

CITATIONS IN PARENTHESIS INDICATE SECTIONS OF THE CURRENT CBP.

1. SWPPP REQUIREMENTS (3.0)

1.1. HAS THE SWPPP TEMPLATE BEEN PREPARED BY AN INDIVIDUAL THAT HAS THE FOLLOWING CERTIFICATIONS (3.1.1) YES [X] NO [ ] (CHECK ALL THAT APPLY BELOW)

1.1.1. [ ] CERTIFIED PROFESSIONAL IN EROSION AND SEDIMENT CONTROL (PESCO); OR

1.1.2. [X] TDEC LEVEL II

1.2. DOES THE EPSC PLANS INVOLVE STRUCTURAL DESIGN, HYDRAULIC, HYDROLOGIC OR OTHER ENGINEERING CALCULATIONS FOR EPSC STRUCTURAL MEASURES (SEDIMENT BASINS, ETC.)? YES [X] NO [ ] (3.1.1)

IF YES, HAVE THE EPSC PLANS BEEN PREPARED, STAMPED AND CERTIFIED BY A LICENSED PROFESSIONAL ENGINEER OR LANDSCAPE ARCHITECT?

[X] YES [ ] NO

1.3. DO THE PROJECT STORMWATER OUTFALLS DISCHARGE INTO THE FOLLOWING? (3.4.1) YES [ ] NO [X] (CHECK ALL THAT APPLY BELOW)

1.3.1. [ ] IMPAIRED WATERS (303d) FOR SILTATION OR HABITAT ALTERATION

1.3.2. [ ] TENNESSEE KNOWN EXCEPTIONAL WATERS

IF YES, HAVE THE EPSC PLANS BEEN PREPARED BY AN INDIVIDUAL WHO HAS COMPLETED TDEC LEVEL II? [ ] YES [ ] NO [X] N/A (3.4.1b) AND

IF YES, HAS THE SWPPP TEMPLATE BEEN PREPARED BY AN INDIVIDUAL WHO HAS COMPLETED TDEC LEVEL II? [ ] YES [ ] NO [X] N/A (3.4.1b)

NOTE: ALTHOUGH THE RECEIVING WATERS ARE NOT CLASSIFIED AS IMPAIRED BY SILTATION OR HABITAT ALTERATION OR AS EXCEPTIONAL WATERS OF THE STATE, THE RECEIVING WATERS WILL BE ASSUMED TO BE EXCEPTIONAL WATERS OF THE STATE FOR CONSERVATIVE DESIGN AND CONSTRUCTION PURPOSES.

2. SITE DESCRIPTION (3.5.1)

2.1. PROJECT LIMITS REFER TO EROSION CONTROL PLAN SHEET C-5, C-6, AND C-7 (3.5.1g)

2.2. PROJECT DESCRIPTION: (3.5.1a) TITLE: THE UNIVERSITY OF TENNESSEE STORMWATER MANAGEMENT, ASSISTANCE RESEARCH & TRAINING (SMART) CENTER

COUNTY: ROANE COUNTY LOCATION: UNION VALLEY ROAD, OAK RIDGE, TN

2.3. SITE MAP(S) REFER TO APPENDIX 3 - USGS QUADRANGLE MAP (3.5.1g)

2.4. DESCRIPTION OF EXISTING SITE TOPOGRAPHY (3.5.1d): THE TRACT GENERALLY DRAINS FROM THE NORTHWEST TO THE SOUTHEAST FROM THE TOP OF PINE RIDGE TOWARDS AN EMBANKMENT OF MELTON HILL RESERVOIR. REFER TO APPENDIX 3 - USGS QUADRANGLE MAP.

2.5. MAJOR SOIL DISTURBING ACTIVITIES (3.5.1b) (CHECK ALL THAT APPLY)

2.5.1. [X] CLEARING AND GRUBBING

2.5.2. [X] EXCAVATION

2.5.3. [X] CUTTING AND FILLING

2.5.4. [X] FINAL GRADING AND SHAPING

2.5.5. [ ] UTILITIES

2.5.6. [ ] OTHER (DESCRIBE): \_\_\_\_\_

2.6. TOTAL PROJECT AREA (3.5.1c): 100 ACRES

IF GREATER THAN 50 ACRES, HAS CONSTRUCTION PROJECT PHASING BEEN SPECIFIED IN SECTION 3 BELOW AND IN THE PLANS (3.5.3.1k)?

[ ] YES [ ] NO [X] N/A

NOTE: BECAUSE THE ENTIRE DISTURBED AREA WILL NOT EXCEED 50 ACRES, ONLY ONE PHASE IS REQUIRED FOR THE PROJECT. HOWEVER, THE PROJECT WILL BE SEQUENCED IN THE THREE STAGES DESCRIBED BELOW. IN THIS WAY, THE TOTAL UNSTABILIZED DISTURBED AREA SHOULD NEVER EXCEED APPROXIMATELY 10 ACRES.

2.8. ARE THERE ANY SEASONAL LIMITATIONS ON WORK? YES [ ] NO [X] IF YES, DESCRIBE AND LIST THE CORRESPONDING PLAN SHEET: \_\_\_\_\_

2.9. SOIL PROPERTIES (3.5.1e)(4.1.1) SOIL PROPERTIES FOR THE PRIMARY SOILS ARE LISTED IN THE TABLE BELOW.

Table with columns: PRIMARY SOIL NAME, HSG, % OF SITE, ERODIBILITY (k value). Rows include AMUICHEE SILT LOAM, MONTEVALLO CHANNERY SILT LOAM, etc.

2.10. PROJECT RUNOFF COEFFICIENTS AND AREA PERCENTAGES (3.5.1f)

Table with columns: AREA TYPE, AREA(AC), PERCENTAGE OF WATERSHED (%), RUNOFF COEFFICIENT. Rows include WOODS: GOOD SOIL D, WOODS: GOOD SOIL D, etc.

3. ORDER OF CONSTRUCTION ACTIVITIES (3.5.1b, 3.5.2a)

Table with columns: STAGE, DESCRIPTION. Rows include CLEAR, GRUB, AND GRADE CONSTRUCTION EXIT, INSTALL CULVERT AND EAST ACCESS ROAD, etc.

3.1. PERFORM CLEARING AND GRUBBING (NOT MORE THAN 15 DAYS PRIOR TO GRADING OR EARTH-MOVING, REFER TO THE STABILIZATION PRACTICES BELOW).

3.2. STABILIZE DISTURBED AREAS WITHIN 14 DAYS OF COMPLETING ANY PHASE OF ACTIVITY.

4. STREAM, OUTFALL, WETLAND, TMDL AND ECOLOGY INFORMATION

4.1. STREAM INFORMATION WILL CONSTRUCTION AND/OR EROSION PREVENTION AND SEDIMENT CONTROLS IMPACT ANY STREAMS? YES [X] NO [ ]

4.1.1. STREAM INFORMATION 4.1.1.1. THE STRUCTURAL EPSC MEASURES HAVE BEEN INCLUDED IN THE TOTAL PROJECT IMPACTS AND HAVE BEEN INCLUDED IN THE AQUATIC RESOURCE ALTERATION (ARAP) PERMIT OR SECTION 401 CERTIFICATION (3.5.1i). REFER TO THE LIST OF APPLICABLE ENVIRONMENTAL PERMITS. ALL PERMITS WILL BE MAINTAINED ON SITE IN THE DOCUMENTATION AND PERMITS BINDER.

4.1.1.2. RECEIVING STREAMS (3.5.1j) RECEIVING STREAM INFORMATION

Table with columns: NATURAL RESOURCE LABEL, NAME OF RECEIVING NATURAL RESOURCE, IMPAIRED FOR SILTATION OR HABITAT ALTERATION (YES OR NO), KNOWN EXCEPTIONAL QUALITY WATERS (YES OR NO). Rows include STR-1, STR-2.

NOTE: ALTHOUGH THE RECEIVING WATERS ARE NOT CLASSIFIED AS IMPAIRED BY SILTATION OR HABITAT ALTERATION OR AS EXCEPTIONAL WATERS OF THE STATE, THE RECEIVING WATERS WILL BE ASSUMED TO BE EXCEPTIONAL WATERS OF THE STATE FOR CONSERVATIVE DESIGN AND CONSTRUCTION PURPOSES.

4.1.2. ARE BUFFER ZONES REQUIRED? YES [X] NO [ ] (4.1.2, 5.4.2)

IF YES, THEY HAVE BEEN INCLUDED ON PLAN SHEET(S) \_\_\_\_\_

IF YES, CHECK THE APPROPRIATE BOX BELOW FOR SIZE OF BUFFER

[ ] 60 FEET FOR IMPAIRED AND EXCEPTIONAL WATERS (AVERAGE WIDTH PER SIDE WITH A MINIMUM OF 30 FEET)

[X] 30 FEET FOR ALL OTHER STREAMS (AVERAGE WIDTH PER SIDE WITH A MINIMUM OF 15 FEET)

4.1.3. ARE THERE BUFFER ZONE EXEMPTIONS? YES [ ] NO [X] N/A [ ] (4.1.2.1)

4.2. OUTFALL INFORMATION: A SEDIMENT BASIN OR EQUIVALENT MEASURE(S) WILL BE PROVIDED FOR ANY OUTFALL IN A DRAINAGE AREA.

4.2.1. OF TEN ACRES OR MORE FOR AN OUTFALL(S) THAT DOES NOT DISCHARGE TO AN IMPAIRED STREAM OR KNOWN EXCEPTIONAL QUALITY WATER (3.5.3.3)

4.2.2. OF FIVE ACRES OR MORE FOR AN OUTFALL(S) THAT DISCHARGES TO AN IMPAIRED STREAM OR KNOWN EXCEPTIONAL QUALITY WATER (3.5.3.3)



UNIVERSITY OF TENNESSEE SMART CENTER UNION VALLEY ROAD, OAK RIDGE, TN 37830 ROANE COUNTY, TENNESSEE STORMWATER POLLUTION PREVENTION PLAN

DRAWN BY: JMB CHECKED BY: SEC DATE: 4/25/2014 PROJECT NO: 103-270 SHEET NO: 1

4.2.3. OUTFALL TABLE (3.5.1.4, 5.4.1.1)

OUTFALL INFORMATION				
OUTFALL LABEL	SLOPE (%)	DRAINAGE AREA (AC)	SEDIMENT BASIN OR EQUIVALENT MEASURES (YES, NO OR N/A)	RECEIVING NATURAL RESOURCE NAME OR LABEL
OUT-1	10-20	9.5	Y	EAST STREAM
OUT-2	5-10	0.2	N	EAST STREAM
OUT-3	5-10	0.1	N	EAST STREAM
OUT-4	5-10	0.1	N	EAST STREAM
OUT-5	5-10	0.1	N	EAST STREAM
OUT-6	10-20	6.8	Y	EAST STREAM
OUT-7	10-20	6.8	Y	EAST STREAM
OUT-8	10-20	6.8	Y	WEST STREAM

NOTE: SUB-OUTFALLS ARE DEFINED AS OUTFALLS THAT DISCHARGE WITHIN THE PROJECT AND DO NOT DIRECTLY DISCHARGE OFF ROW OR INTO WATERS OF THE STATE.

- 4.2.4. WHERE POSSIBLE, HAS NON-PROJECT RUN-ON BEEN DIVERTED THROUGH THE PROJECT SO THAT THE OFF-SITE RUN-ON WILL NOT FLOW OVER DISTURBED AREAS WITHIN THE ROW, THUS SEPARATING NON-PROJECT RUN-OFF FROM PROJECT RUN-OFF THEREBY REDUCING THE DRAINAGE AREA TO ANY ONE OUTFALL? YES  NO
- 4.2.5. ARE EQUIVALENT MEASURES BEING SUBSTITUTED FOR A SEDIMENT BASIN(S)? YES  NO
- 4.2.6. HAVE ALL OUTFALLS BEEN LABELED ON THE EPSC PLAN SHEETS (3.5.1.4, 5.4.1.1)? YES  NO
- 4.2.7. HAVE ALL OUTFALLS BEEN LABELED ON A USGS TOPOGRAPHIC MAP INCLUDED IN THE DOCUMENTATION AND PERMITS' BINDER (2.6.2)? YES  NO

- 4.3. WETLAND INFORMATION  
WILL CONSTRUCTION AND/OR EROSION AND SEDIMENT CONTROLS IMPACT ANY WETLANDS? YES  NO
- 4.4. TOTAL MAXIMUM DAILY LOADS (TMDL) INFORMATION (3.5.1.0)  
4.4.1. IS THIS PROJECT LOCATED IN A WATERSHED THAT MAINTAINS AN EPA APPROVED TMDL FOR SILTATION? YES  NO
- 4.4.2. IF YES, IS THIS PROJECT LOCATED WITHIN A SUBWATERSHED WITH A WASTE LOAD ALLOCATION (WLA)? YES  NO
- 4.4.3. IF YES, DOES THE PROJECT HAVE A DIRECT DISCHARGE TO A 303(d) LISTED STREAM FOR SILTATION OR HABITAT ALTERATION?  
YES  NO  N/A

- 4.4.4. IF YES, HAS A SUMMARY OF THE CONSULTATION (LETTER) BEEN INCLUDED WITH THE SWPPP DOCUMENTATION? YES  NO

**4.5. ECOLOGY INFORMATION (3.5.5.8)**  
ARE THERE STATE OR FEDERALLY LISTED SPECIES LOCATED WITHIN THE PROJECT AREA? SPECIAL NOTES ARE REQUIRED TO DESCRIBE MEASURES NECESSARY TO PREVENT 'TAKING' OF LEGALLY PROTECTED STATE OR FEDERALLY LISTED THREATENED OR ENDANGERED AQUATIC FAUNA AND/OR CRITICAL HABITAT.  
YES  NO  NO NOTES REQUIRED

IF YES, LIST ALL PLAN SHEETS WHERE SPECIAL NOTES HAVE BEEN ADDED.

**5. EROSION PREVENTION AND SEDIMENT CONTROL (EPSC) MEASURES (3.5.3)**

- 5.1. EPSC MEASURES MUST BE DESIGNED, INSTALLED AND MAINTAINED TO CONTROL STORMWATER VOLUME AND VELOCITY WITHIN THE SITE TO MINIMIZE EROSION. (4.1.1)
- 5.2. EPSC MEASURES MUST CONTROL STORMWATER DISCHARGES, INCLUDING BOTH PEAK FLOWS AND TOTAL STORMWATER VOLUME, TO MINIMIZE EROSION AT OUTFALLS, STREAM CHANNELS AND STREAM BANKS. (4.1.1)

- 5.3. HAVE THE CONTROL MEASURES BEEN DESIGNED ACCORDING TO THE SIZE AND SLOPE OF THE DISTURBED DRAINAGE AREA (3.5.3.3)? YES  NO
- 5.4. THE CONTROL MEASURES HAVE, AT A MINIMUM, BEEN DESIGNED FOR THE 5-YEAR, 24 HOUR STORM EVENT (3.5.3.3, 5.4.1.a).

- 5.5. ARE THE LIMITS OF DISTURBANCE CLEARLY MARKED ON THE EPSC PLANS? (3.5.1.1) YES  NO

- 5.6. HAVE PHASED EPSC PLANS BEEN PREPARED FOR THE PROJECT? (3.5.2)  
YES  NO  (IF YES, CHECK ONE BELOW)

- 5.6.1.  PROJECT DISTURBED AREA IS LESS THAN 5 ACRES (MINIMUM OF TWO PHASES OF EPSC PLANS)

- 5.6.2.  PROJECT DISTURBED AREA IS GREATER THAN 5 ACRES (MINIMUM OF THREE PHASES OF EPSC PLANS)

- 5.7. IS ADDITIONAL PHYSICAL OR CHEMICAL TREATMENT OF STORMWATER RUNOFF NECESSARY (5.4.1.a)? YES  NO

- 5.8. HAVE STEEP SLOPES (GREATER THAN 35%) BEEN MINIMALLY DISTURBED AND/OR PROTECTED BY CONVEYING RUNOFF NON-EROSIVELY AROUND OR OVER THE SLOPE? (3.5.3.2) (10 STEEP SLOPE)  
YES  NO

- 5.9. ALL PHYSICAL AND/OR CHEMICAL TREATMENT WILL BE RESEARCHED, APPLIED IN ACCORDANCE WITH MANUFACTURERS' GUIDELINES AND FULLY DESCRIBED ON THE EPSC PLANS (3.5.3.1.b).

- 5.10. ALL EPSC CONTROL MEASURES WILL BE INSTALLED ACCORDING TO REFERENCED STANDARDS.

- 5.11. EPSC MEASURES WILL NOT BE INSTALLED IN A STREAM WITHOUT FIRST OBTAINING US CODE SECTION 404, TDEC ARAP, AND TVA PERMITS.

- 5.12. DISCHARGES FROM DEWATERING ACTIVITIES ARE PROHIBITED UNLESS MANAGED BY CONTROLS PROVIDING EQUIVALENT LEVEL OF TREATMENT (FILTRATION) (4.14)

- 5.13. DISCHARGES FROM SEDIMENT BASINS AND IMPOUNDMENTS MUST USE OUTLET STRUCTURES THAT ONLY WITHDRAW WATER FROM NEAR THE SURFACE OF THE BASIN OR IMPOUNDMENT, UNLESS INFEASIBLE. (4.17)

- 5.14. STABILIZATION PRACTICES  
PRE-CONSTRUCTION VEGETATIVE COVER WILL NOT BE DESTROYED, REMOVED OR DISTURBED MORE THAN 15 DAYS PRIOR TO GRADING OR EARTH MOVING UNLESS THE AREA WILL BE SEEDED AND/OR MULCHED OR OTHER TEMPORARY COVER IS INSTALLED. (3.5.3.1.h)

- 5.15. STABILIZATION MEASURES WILL BE INITIATED AS SOON AS POSSIBLE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, OR PERMANENT STABILIZATION WILL BE COMPLETED WITHIN 14 DAYS AFTER ACTIVITY HAS TEMPORARILY OR PERMANENTLY CEASED IN THAT AREA. PERMANENT STABILIZATION WILL REPLACE TEMPORARY MEASURES AS SOON AS PRACTICABLE. (3.5.3.2)

- 5.16. STEEP SLOPES (3.5.3.2)  
STEEP SLOPES ARE DEFINED AS A NATURAL OR CREATED SLOPE OF 35% GRADE OR STEEPER REGARDLESS OF HEIGHT. STEEP SLOPES SHALL BE TEMPORARILY STABILIZED NOT LATER THAN 7 DAYS AFTER CONSTRUCTION ACTIVITY ON THE SLOPE HAS TEMPORARILY OR PERMANENTLY CEASED.

**6. CONSTRUCTION SUPPORT ACTIVITIES - BORROW AND WASTE AREAS (1.2.2) (3.5.3.1.g)**

WASTE MATERIAL (EARTH, ROCK, ASPHALT, CONCRETE, ETC) NOT REQUIRED FOR THE CONSTRUCTION OF THE PROJECT WILL BE DISPOSED OF BY THE CONTRACTOR. THE CONTRACTOR WILL OBTAIN ANY AND ALL NECESSARY PERMITS, INCLUDING, BUT NOT LIMITED TO NPDES, AQUATIC RESOURCES ALTERATION PERMITS(S) CORPS OF ENGINEERS SECTION 404 PERMITS, AND TVA SECTION 26A PERMITS TO DISPOSE OF WASTE MATERIALS.

**7. MAINTENANCE AND INSPECTION**

**7.1. INSPECTION PRACTICES (3.5.8)**

- 7.1.1. INSPECTORS MUST HAVE SUCCESSFULLY COMPLETED THE TDEC FUNDAMENTALS OF EROSION AND SEDIMENT CONTROL COURSE (TDEC LEVEL I) AND MAINTAIN THE CERTIFICATION. A COPY OF THE INSPECTOR'S CERTIFICATION SHOULD BE KEPT ON SITE. (3.5.8.1)

- 7.1.2. INSPECTIONS WILL BE CONDUCTED AT LEAST TWICE EVERY CALENDAR WEEK AND AT LEAST 72 HOURS APART. (3.5.8.2.a)

- 7.1.3. THE FREQUENCY OF EPSC INSPECTIONS MAY BE REDUCED TO ONCE A MONTH (I.E. EXTREME DROUGHT CONDITIONS, FROZEN GROUND, ETC) WITH WRITTEN NOTIFICATION TO THE LOCAL ENVIRONMENTAL FIELD OFFICE AND SUBSEQUENT TDEC APPROVAL. WRITTEN NOTIFICATION MUST INCLUDE THE INTENT TO CHANGE FREQUENCY AND JUSTIFICATION. (3.5.8.2.a)

- 7.1.4. ALL DISTURBED AREAS OF THE SITE THAT HAVE NOT BEEN FINALLY STABILIZED, AREAS USED FOR MATERIAL STORAGE THAT ARE EXPOSED TO PRECIPITATION, STRUCTURAL CONTROL MEASURES, AND LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE, AND EACH OUTFALL WILL BE INSPECTED. (3.5.8.2.b)

- 7.1.5. THE INSPECTOR WILL OVERSEE THE REQUIREMENTS OF OTHER CONSTRUCTION-RELATED WATER QUALITY PERMITS (I.E. TDEC ARAP, US COE AND TVA SECTION 26a PERMITS) FOR CONSTRUCTION ACTIVITIES AROUND WATERS OF THE STATE. (10)

- 7.1.6. THE SWPPP WILL BE REVISED AS NECESSARY BASED ON THE RESULTS OF THE INSPECTION. REVISION(S) WILL BE RECORDED WITHIN 7 DAYS OF THE INSPECTION. (3.5.8.2.a AND 3.5.5.2.1)

- 7.1.7. THE INSPECTOR SHALL CONDUCT PRE-CONSTRUCTION INSPECTIONS TO VERIFY AREAS THAT ARE NOT TO BE DISTURBED HAVE BEEN MARKED IN BEGIN AND INITIAL MEASURES HAVE BEEN INSTALLED. (10) INSPECTOR(S) (3.5.1.9)

- 7.1.8. INSPECTIONS WILL BE DOCUMENTED ON THE CONSTRUCTION STORMWATER INSPECTION CERTIFICATION FORM PROVIDED IN APPENDIX C OF THE CGS AND INCLUDE THE SCOPE OF THE INSPECTION, NAME(S), TITLE AND TN EPSC CERTIFICATION NUMBER OF PERSONNEL MAKING THE INSPECTION, THE DATE(S) OF THE INSPECTION, CURRENT APPROXIMATE DISTURBED ACREAGE AT TIME OF INSPECTION, CHECKLIST (NO. SWPPP, RAIN GAUGE, SITE CONTACT INFORMATION, ETC.) AND MAJOR OBSERVATIONS RELATING TO THE IMPLEMENTATION OF THE SWPPP. (3.5.8.2.g)

- 7.1.9. DOCUMENTATION OF INSPECTIONS WILL BE MAINTAINED ON SITE IN THE DOCUMENTATION AND PERMITS' BINDER.

- 7.1.10. THESE INSPECTION REQUIREMENTS DO NOT APPLY TO DEFINABLE AREAS OF THE SITE THAT HAVE MET FINAL STABILIZATION REQUIREMENTS AND HAVE BEEN NOTED IN THE SWPPP.

- 7.1.11. TRAINED CERTIFIED INSPECTORS SHALL COMPLETE INSPECTION DOCUMENTATION TO THE BEST OF THEIR ABILITY, FALSIFYING INSPECTION RECORDS OR OTHER DOCUMENTATION OR FAILURE TO COMPLETE INSPECTION DOCUMENTATION SHALL RESULT IN A VIOLATION OF THIS PERMIT AND ANY OTHER APPLICABLE ACTS OR RULES. (3.5.8.2.h)

- 7.2. DULY AUTHORIZED REPRESENTATIVE (7.7.4)

THE PROJECT SUPERVISOR/CONTRACTOR MAY DELEGATE AN INDIVIDUAL AND/OR CONSULTANT TO SIGN EPSC INSPECTION REPORTS. FOR SATISFYING SIGNATORY REQUIREMENTS FOR EPSC INSPECTION REPORTS, THE PROJECT SUPERVISOR/CONTRACTOR AND NEWLY AUTHORIZED INDIVIDUAL ACCEPTING RESPONSIBILITY MUST SUBMIT WRITTEN AUTHORIZATION TO THE LOCAL TDEC EFO.



UNIVERSITY OF TENNESSEE SMART CENTER  
UNION VALLEY ROAD, OAK RIDGE, TN 37830  
ROANE COUNTY, TENNESSEE  
STORMWATER POLLUTION PREVENTION PLAN

DRAWN BY: JMB  
DATE: 4/30/2014

CHECKED BY: SEC  
DATE: 4/30/2014

PROJECT NO: 103-010  
SHEET NO: 2

7.3. MAINTENANCE PRACTICES (3.5.3.1 AND 3.5.7)

7.3.1. ALL CONTROLS WILL BE MAINTAINED IN GOOD AND EFFECTIVE OPERATING ORDER. NECESSARY REPAIRS OR MAINTENANCE WILL BE ACCOMPLISHED BEFORE THE NEXT STORM EVENT AND IN NO CASE MORE THAN 7 DAYS AFTER THE NEED IS IDENTIFIED. IN A CASE WHERE THE ACTIVITY IS DEEMED IMPRACTICABLE, ANY SUCH CONDITIONS WILL BE DOCUMENTED (3.5.3.2.e).

7.3.2. ALL CONTROLS WILL BE MAINTAINED IN ACCORDANCE WITH STANDARD DRAWINGS AND GOOD ENGINEERING PRACTICES. (3.5.3.1.b)

7.3.3. SEDIMENT WILL BE REMOVED FROM SEDIMENT TRAPS, SILT FENCE, SEDIMENT BASINS, AND OTHER CONTROLS WHEN THE DESIGN CAPACITY HAS BEEN REDUCED BY 50%. (3.5.3.1.a)

7.3.4. CHECK DAMS WILL BE INSPECTED FOR STABILITY. SEDIMENT WILL BE REMOVED WHEN DEPTH REACHES ONE-HALF (1/2) THE HEIGHT OF THE DAM.

7.3.5. LITTER, CONSTRUCTION DEBRIS, AND CONSTRUCTION CHEMICALS EXPOSED TO STORMWATER WILL BE PICKED UP AND REMOVED FROM STORMWATER EXPOSURE PRIOR TO ANTICIPATED STORM EVENTS OR BEFORE BEING CARRIED OFF OF THE SITE BY WIND, OR OTHERWISE PREVENTED FROM BECOMING A POLLUTANT SOURCE FOR STORMWATER DISCHARGES. AFTER USE, MATERIALS USED FOR EROSION CONTROL WILL BE REMOVED. (3.5.3.1.f)

7.3.6. ALL SEEDED AREAS WILL BE CHECKED FOR BARE SPOTS, EROSION WASHOUTS, AND VIGOROUS GROWTH FREE OF SIGNIFICANT WEED INFESTATIONS.

7.3.7. THE PROJECT SUPERVISOR OR THEIR DESIGNEE AND THE CONTRACTOR'S SITE SUPERINTENDENT ARE RESPONSIBLE FOR INSPECTIONS, MAINTENANCE AND REPAIR ACTIVITIES. ARE THE RESPONSIBILITY OF THE CONTRACTOR. THE PROJECT SUPERVISOR OR THEIR DESIGNEE WILL COMPLETE THE INSPECTION REPORTS AND DISTRIBUTE COPIES PER THE CONTRACT.

8. SITE ASSESSMENTS (3.1.2)

QUALITY ASSURANCE SITE ASSESSMENTS OF EROSION PREVENTION AND SEDIMENT CONTROLS REQUIRED:  
YES  NO

9. STORMWATER MANAGEMENT (3.5.4)

9.1. STORMWATER MANAGEMENT WILL BE HANDLED BY TEMPORARY CONTROLS OUTLINED IN THIS SWPPP AND ANY PERMANENT CONTROLS NEEDED TO MEET PERMANENT STORMWATER MANAGEMENT NEEDS IN THE POST CONSTRUCTION PERIOD. PERMANENT CONTROLS WILL BE SHOWN ON THE PLANS AND NOTED AS PERMANENT.

9.2. DESCRIBE ANY SPECIFIC POST-CONSTRUCTION MEASURES THAT WILL CONTROL VELOCITY, POLLUTANTS, AND/OR EROSION (3.5.1.1, 3.5.4); EXISTING POND, RIPRAP APRONS, CATCH BASIN INSERTS

9.3. OTHER ITEMS NEEDING CONTROL (3.5.5)

9.3.1. CONSTRUCTION MATERIALS  
THE FOLLOWING MATERIALS OR SUBSTANCES ARE EXPECTED TO BE PRESENT ON THE SITE DURING THE CONSTRUCTION PERIOD. (CHECK ALL THAT APPLY).

9.3.1.1.  LUMBER, GUARDRAIL, TRAFFIC CONTROL DEVICES

9.3.1.2.  CONCRETE WASHOUT

9.3.1.3.  CONCRETE AND CORRUGATED METAL PIPES

9.3.1.4.  MINERAL AGGREGATES, ASPHALT

9.3.1.5.  EARTH

9.3.1.6.  LIQUID TRAFFIC STRIPING MATERIALS, PAINT

9.3.1.7.  ROCK

9.3.1.8.  CURING COMPOUND

9.3.1.9.  EXPLOSIVES

9.3.1.10.  OTHER

THESE MATERIALS WILL BE HANDLED AS NOTED IN THIS SWPPP.

9.3.2. WASTE MATERIALS (3.5.5.6)  
WASTE MATERIAL (EARTH, ROCK, ASPHALT, CONCRETE, ETC.), NOT REQUIRED FOR THE CONSTRUCTION OF THE PROJECT WILL BE DISPOSED

OF BY THE CONTRACTOR. THE CONTRACTOR WILL OBTAIN ANY AND ALL NECESSARY PERMITS INCLUDING, BUT NOT LIMITED TO, ARDES, AQUATIC RESOURCES ALTERATION PERMITS(CORPS OF ENGINEERS SECTION 404 PERMITS, AND TVA SECTION 20A PERMITS TO DISPOSE OF WASTE MATERIALS.

9.3.3. HAZARDOUS WASTE (3.5.5.c) (7.9)  
ALL HAZARDOUS WASTE MATERIALS WILL BE DISPOSED OF IN A MANNER WHICH IS COMPLIANT WITH LOCAL OR STATE REGULATIONS. SITE PERSONNEL WILL BE INSTRUCTED IN THESE PRACTICES, AND THE INDIVIDUAL DESIGNATED AS THE CONTRACTOR'S ON-SITE REPRESENTATIVE WILL BE RESPONSIBLE FOR SEEING THAT THESE PRACTICES ARE FOLLOWED. THE CONTRACTOR WILL OBTAIN ANY AND ALL NECESSARY PERMITS TO DISPOSE OF HAZARDOUS MATERIAL.

9.3.4. SANITARY WASTE (3.5.5.b)  
PORTABLE SANITARY FACILITIES WILL BE PROVIDED ON ALL CONSTRUCTION SITES. SANITARY WASTE WILL BE COLLECTED FROM THE PORTABLE UNITS IN A TIMELY MANNER BY A LICENSED WASTE MANAGEMENT CONTRACTOR OR AS REQUIRED BY ANY LOCAL REGULATIONS. THE CONTRACTOR WILL OBTAIN ANY AND ALL NECESSARY PERMITS TO DISPOSE OF SANITARY WASTE.

9.3.5. OTHER MATERIALS  
THE FOLLOWING MATERIALS OR SUBSTANCES ARE EXPECTED TO BE PRESENT ON THE SITE DURING THE CONSTRUCTION PERIOD. (CHECK ALL THAT APPLY).

9.3.5.1.  FERTILIZERS AND/OR HERBICIDES

9.3.5.2.  PESTICIDES AND/OR HERBICIDES

9.3.5.3.  DIESEL AND GASOLINE

9.3.5.4.  MACHINERY LUBRICANT'S OIL AND GREASE

THESE MATERIALS WILL BE HANDLED AS NOTED IN THIS SWPPP.

10. NON-STORMWATER DISCHARGES (3.5.9)

10.1. THE FOLLOWING NON-STORMWATER DISCHARGES ARE ANTICIPATED DURING THE COURSE OF THIS PROJECT(CHECK ALL THAT APPLY):

10.1.1.  DEWATERING OF WORK AREAS OF COLLECTED STORMWATER AND GROUND WATER

10.1.2.  WATERS USED TO WASH VEHICLES (OF DUST AND SOIL) WHERE DETERGENTS ARE NOT USED AND DETENTION AND/OR FILTERING IS PROVIDED BEFORE THE WATER LEAVES SITE

10.1.3.  WATER USED TO CONTROL DUST (3.5.3.1.f)

10.1.4.  POTABLE WATER SOURCES INCLUDING WATERLINE FLUSHINGS FROM WHICH CHLORINE HAS BEEN REMOVED TO THE MAXIMUM EXTENT PRACTICABLE

10.1.5.  UNCONTAMINATED GROUNDWATER OR SPRING WATER

10.1.6.  FOUNDATION OR FOOTING DRAINS WHERE FLOWS ARE NOT CONTAMINATED WITH POLLUTANTS

10.1.7.  OTHER:

10.2. ALL ALLOWABLE NON-STORMWATER DISCHARGES WILL BE DIRECTED TO STABLE DISCHARGE STRUCTURES PRIOR TO LEAVING THE SITE. FILTERING OR CHEMICAL TREATMENT MAY BE NECESSARY PRIOR TO DISCHARGE.

10.3. THE DESIGN OF ALL IMPACTED EPSC MEASURES RECEIVING FLOW FROM ALLOWABLE NON-STORMWATER DISCHARGES MUST BE DESIGNED TO HANDLE THE VOLUME OF THE NON-STORMWATER COMPONENT.

10.4. WASH DOWN OR WASTE DISCHARGE OF CONCRETE TRUCKS WILL NOT BE PERMITTED ON-SITE UNLESS PROPER SETTLEMENT AREAS HAVE BEEN PROVIDED IN ACCORDANCE WITH BOTH STATE AND FEDERAL REGULATIONS.

10.5. ARE ANY DISCHARGES ASSOCIATED WITH INDUSTRIAL (NON-CONSTRUCTION STORMWATER) ACTIVITY EXPECTED (3.5.1.b)?

YES  NO

IF YES, SPECIFY THE LOCATION OF THE ACTIVITY AND ITS PERMIT NUMBER.

11. SPILL PREVENTION, MANAGEMENT AND NOTIFICATION (3.5.5.c, 3.5.5.e, 3.5.5.g)

11.1. MATERIAL MANAGEMENT

11.1.1. HOUSEKEEPING

ONLY PRODUCTS NEEDED WILL BE STORED ON-SITE BY THE CONTRACTOR, EXCEPT FOR BULK MATERIALS THE CONTRACTOR WILL STORE ALL MATERIALS UNDER COVER AND IN APPROPRIATE CONTAINERS. PRODUCTS MUST BE STORED IN ORIGINAL CONTAINERS AND LABELED. MATERIAL MIXING WILL BE CONDUCTED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. WHEN POSSIBLE, ALL PRODUCTS WILL BE USED COMPLETELY BEFORE PROPERLY DISPOSING OF THE CONTAINER OFF SITE. THE MANUFACTURER'S DIRECTIONS FOR DISPOSAL OF MATERIALS AND CONTAINERS WILL BE FOLLOWED. THE CONTRACTOR'S SITE SUPERINTENDENT WILL INSPECT MATERIALS STORAGE AREAS REGULARLY TO ENSURE PROPER USE AND DISPOSAL. DUST GENERATED WILL BE CONTROLLED IN AN ENVIRONMENTALLY SAFE MANNER. VEGETATION AREAS NOT ESSENTIAL TO THE CONSTRUCTION PROJECT WILL BE PRESERVED AND MAINTAINED AS NOTED ON THE PLANS.

11.1.1.2. HAZARDOUS MATERIALS  
PRODUCTS WILL BE KEPT IN ORIGINAL CONTAINERS UNLESS THE CONTAINER IS NOT RESEALABLE. ORIGINAL LABELS AND MATERIAL SAFETY DATA SHEETS WILL BE RETAINED IN A SAFE PLACE TO RELAY IMPORTANT PRODUCT INFORMATION. IF SURPLUS PRODUCTS MUST BE DISPOSED OF, MANUFACTURER'S LABEL DIRECTIONS FOR DISPOSAL WILL BE FOLLOWED. MAINTENANCE AND REPAIR OF ALL EQUIPMENT AND VEHICLES INVOLVING OIL CHANGES, HYDRAULIC SYSTEM DRAIN DOWN, DE-GREASING OPERATIONS, FUEL TANK DRAIN DOWN AND REMOVAL, AND OTHER ACTIVITIES WHICH MAY RESULT IN THE ACCIDENTAL RELEASE OF CONTAMINANTS WILL BE CONDUCTED ON AN IMPERVIOUS SURFACE AND UNDER COVER DURING WET WEATHER TO PREVENT THE RELEASE OF CONTAMINANTS ONTO THE GROUND. WHEEL WASH WATER WILL BE COLLECTED AND ALLOWED TO SETTLE OUT SUSPENDED SOLIDS PRIOR TO DISCHARGE. WHEEL WASH WATER WILL NOT BE DISCHARGED DIRECTLY INTO ANY STORMWATER SYSTEM OR STORMWATER TREATMENT SYSTEM. POTENTIAL PH-MODIFYING MATERIALS SUCH AS: BULK CEMENT, CEMENT KILN DUST, FLY ASH, NEW CONCRETE WASHINGS AND CURING WATERS, CONCRETE PUMPING AND MIXER WASHOUT WATERS WILL BE COLLECTED ON SITE AND MANAGED TO PREVENT CONTAMINATION OF STORMWATER RUNOFF.

11.1.1.3. PRODUCT SPECIFIC PRACTICES

11.1.1.3.1. PETROLEUM PRODUCTS: ALL ON-SITE VEHICLES WILL BE MONITORED FOR LEAKS AND RECEIVE REGULAR PREVENTIVE MAINTENANCE TO REDUCE THE CHANCE OF LEAKAGE. PETROLEUM PRODUCTS WILL BE STORED IN TIGHTLY SEALED CONTAINERS WHICH ARE CLEARLY LABELED.

11.1.1.3.2. FERTILIZERS: FERTILIZERS WILL BE APPLIED ONLY IN THE AMOUNTS SPECIFIED BY THE MANUFACTURER. ONCE APPLIED, FERTILIZERS WILL BE WORKED INTO THE SOIL TO LIMIT THE EXPOSURE TO STORMWATER. FERTILIZERS WILL BE STORED IN AN ENCLOSED AREA UNDER COVER. THE CONTENTS OF PARTIALLY USED FERTILIZER BAGS WILL BE TRANSFERRED TO SEALABLE CONTAINERS TO AVOID SPILLS.

11.1.1.3.3. PAINTS: ALL CONTAINERS WILL BE TIGHTLY SEALED AND STORED WHEN NOT REQUIRED FOR USE. THE EXCESS WILL BE DISPOSED OF ACCORDING TO THE MANUFACTURER'S INSTRUCTIONS AND APPLICABLE STATE AND LOCAL REGULATIONS.

11.1.1.3.4. CONCRETE TRUCKS: CONTRACTORS WILL PROVIDE DESIGNATED TRUCK WASHOUT AREAS ON THE SITE. THESE AREAS MUST BE SELF CONTAINED AND NOT CONNECTED TO ANY STORMWATER OUTLET OF THE SITE. UPON COMPLETION OF CONSTRUCTION WASHOUT AREAS WILL BE PROPERLY STABILIZED.



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CHECKED BY: SEC  
DATE: 4/20/2014

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ROANE COUNTY, TENNESSEE

STORMWATER POLLUTION  
PREVENTION PLAN

PROJECT NO.: 103-270

SHEET NO.: 3

12.1.6. COPY OF SITE EPSC INSPECTOR'S TDEC LEVEL 1 CERTIFICATION

12.1.7. RAINFALL MONITORING PLAN (3.5.3.1.c)

12.1.7.1. EQUIPMENT

AT A MINIMUM, THE CONTRACTOR WILL INSTALL A FENCE POST TYPE RAIN GAUGE TO MEASURE RAINFALL. THE STANDARD FENCE POST RAIN GAUGE WILL BE A WEDGE-SHAPED GAUGE THAT MEASURES UP TO 8 INCHES OF RAINFALL. AN ENGLISH SCALE WILL BE PROVIDED ON ONE FACE, WITH A METRIC SCALE ON THE OTHER FACE. GRADUATION WILL BE PERMANENTLY MOLDED IN DURABLE WEATHER-RESISTANT PLASTIC. THE MINIMUM GRADUATION WILL BE 0.01 INCH (OR 0.1MM). AN ALUMINUM BRACKET WITH SCREWS MAY BE USED TO MOUNT THE GAUGE ON A WOODEN SUPPORT.

12.1.7.2. LOCATION

THE RAIN GAUGE WILL BE LOCATED AT THE PROJECT SITE IN AN OPEN AREA SUCH THAT THE MEASUREMENT WILL NOT BE INFLUENCED BY OUTSIDE FACTORS (I.E. OVERHANGS, GUTTER, TREES, ETC). ALTERNATIVELY, A REFERENCE SITE MAY BE USED. A REFERENCE SITE IS THE DOCUMENTATION FROM THE CLOSEST GAUGE WITHIN PROXIMITY OF THE PROJECT FROM A RECOGNIZED SOURCE SUCH AS THE NOAA NATIONAL WEATHER SERVICE.

12.1.7.3. METHODS

12.1.7.3.1. RAINFALL MONITORING WILL BE INITIATED PRIOR TO CLEARING, GRUBBING, EXCAVATION, GRADING, CUTTING, OR FILLING, EXCEPT AS SUCH MINIMAL CLEARING MAY BE NECESSARY TO INSTALL A RAIN GAUGE IN AN OPEN AREA. THE RAIN GAUGE WILL BE CHECKED FOR OPERATIONAL SOUNDNESS DAILY (DURING NORMAL BUSINESS HOURS) IN WET TIMES AND WEEKLY IN DRY TIMES. GAUGES WILL BE REPAIRED OR REPLACED ON THE SAME DAY IF FOUND TO BE NON-OPERATIONAL OR MISSING.

12.1.7.3.2. EACH RAIN GAUGE WILL BE READ (FOR DETAILED RECORDS OF RAINFALL) AND EMPTIED AFTER EVERY RAINFALL EVENT OCCURRING ON THE PROJECT SITE AT APPROXIMATELY THE SAME TIME OF THE DAY (DURING NORMAL BUSINESS HOURS). DURING PERIODS OF DRY CONDITIONS, IT WILL NOT BE NECESSARY TO READ THE RAIN GAUGE EVERY DAY. IN LIEU OF THIS REQUIREMENT ON WEEKENDS AND ON STATE HOLIDAYS, THE RAIN GAUGES CAN BE EMPTIED THE NEXT BUSINESS DAY AND A REFERENCE SITE USED FOR A RECORD OF DAILY AMOUNT OF PRECIPITATION FOR THOSE DAYS. A REFERENCE SITE IS THE DOCUMENTATION FROM THE CLOSEST GAUGE WITHIN PROXIMITY OF THE PROJECT FROM A RECOGNIZED SOURCE SUCH AS THE NOAA NATIONAL WEATHER SERVICE.

12.1.7.3.3. DETAILED RECORDS WILL BE RECORDED OF RAINFALL EVENTS INCLUDING DATES, AMOUNTS OF RAINFALL AND THE APPROXIMATE DURATION (OR THE STARTING AND ENDING TIMES).

12.1.7.3.4. IF IN THE EVENT THAT THE RAINFALL EVENT IS STILL IN PROGRESS AT THE DAILY RECORDING TIME, THE GAUGE WILL BE EMPTIED AND THE RECORD WILL INDICATE THAT THE STORM EVENT WAS STILL IN PROGRESS.

12.1.7.3.5. RAIN GAUGE INFORMATION (DETAILED RECORDS), INCLUDING THE LOCATION OF THE NEAREST OUTFALL, WILL BE RECORDED ON THE EPSC INSPECTION REPORT FORMS AT THE TIME OF MEASUREMENT.

12.2. KEEPING PLANS CURRENT (3.4)

CONTRACTOR OR THEIR DESIGNER WILL MODIFY AND UPDATE THE SWPPP WHEN ANY OF THE FOLLOWING CONDITIONS OCCUR:

12.2.1. WHENEVER THERE IS A CHANGE IN THE SCOPE OF THE PROJECT THAT WOULD BE EXPECTED TO HAVE A SIGNIFICANT EFFECT ON THE DISCHARGE OF POLLUTANTS TO THE WATERS OF THE STATE AND WHICH HAS NOT OTHERWISE BEEN ADDRESSED IN THE SWPPP.

12.2. SPILL MANAGEMENT

11.2.1. IN ADDITION TO THE PREVIOUS HOUSEKEEPING AND MANAGEMENT PRACTICES, THE FOLLOWING PRACTICES WILL BE FOLLOWED FOR SPILL PREVENTION AND CLEANUP IF NECESSARY.

11.2.2. FOR ALL HAZARDOUS MATERIALS STORED ON SITE, THE MANUFACTURER'S RECOMMENDED METHODS FOR SPILL CLEAN UP WILL BE CLEARLY POSTED. SITE PERSONNEL WILL BE MADE AWARE OF THE PROCEDURES AND THE LOCATIONS OF THE INFORMATION AND CLEANUP SUPPLIES.

11.2.3. APPROPRIATE CLEANUP MATERIALS AND EQUIPMENT WILL BE MAINTAINED BY THE CONTRACTOR IN THE MATERIALS STORAGE AREA ON-SITE AND UNDER COVER, AS APPROPRIATE. EQUIPMENT AND MATERIALS MAY INCLUDE ITEMS SUCH AS BOOMS, DUST PANS, MOPS, RAGS, GLOVES, GOGGLES, KITTY LITTER, SAND, SAWDUST, AND PLASTIC AND METAL TRASH CONTAINERS SPECIFICALLY FOR CLEAN UP PURPOSES.

11.2.4. ALL SPILLS WILL BE CLEANED IMMEDIATELY AFTER DISCOVERY AND THE MATERIALS DISPOSED OF PROPERLY. THE SPILL AREA WILL BE KEPT WELL VENTILATED AND PERSONNEL WILL WEAR APPROPRIATE PROTECTIVE CLOTHING TO PREVENT INJURY FROM CONTACT WITH A HAZARDOUS SUBSTANCE.

11.2.5. THE CONTRACTOR'S SITE SUPERINTENDENT WILL BE THE SPILL PREVENTION AND CLEANUP COORDINATOR. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT THE SITE SUPERINTENDENT HAS HAD APPROPRIATE TRAINING FOR HAZARDOUS MATERIALS HANDLING, SPILL MANAGEMENT, AND CLEANUP.

11.2.6. IF SPILLS REPRESENT AN IMMEDIATE THREAT OF ESCAPING THE SITE AND ENTERING RECEIVING WATERS, PERSONNEL WILL RESPOND IMMEDIATELY TO CONTAIN THE RELEASE AND NOTIFY THE SUPERINTENDENT AFTER THE SITUATION HAS BEEN STABILIZED.

11.2.7. IF OIL SHEEN IS OBSERVED ON SURFACE WATER (E.G. SETTLING PONDS, DETENTION PONDS, SWALES), ACTION WILL BE TAKEN IMMEDIATELY TO REMOVE THE MATERIAL CAUSING THE SHEEN. THE CONTRACTOR WILL USE APPROPRIATE MATERIALS TO CONTAIN AND ABSORB THE SPILL. THE SOURCE OF THE OIL SHEEN WILL ALSO BE IDENTIFIED AND REMOVED OR REPAIRED AS NECESSARY TO PREVENT FURTHER RELEASES.

11.2.8. IF A SPILL OCCURS THE CONTRACTOR WILL BE RESPONSIBLE FOR COMPLETING THE SPILL REPORTING FORM.

11.2.9. SPILL RESPONSE EQUIPMENT WILL BE INSPECTED AND MAINTAINED BY THE CONTRACTOR AS NECESSARY TO REPLACE ANY MATERIALS USED IN SPILL RESPONSE ACTIVITIES.

11.3. SPILL NOTIFICATION (5.1)

WHERE A RELEASE CONTAINING A HAZARDOUS SUBSTANCE IN AN AMOUNT EQUAL TO OR IN EXCESS OF A REPORTABLE QUANTITY ESTABLISHED UNDER EITHER 40 CFR 117 OR 40 CFR 302 OCCURS DURING A 24 HOUR PERIOD:

11.3.1. A WRITTEN DESCRIPTION OF THE RELEASE, DATE OF RELEASE AND CIRCUMSTANCES LEADING TO THE RELEASE, WHAT ACTIONS WERE TAKEN TO MITIGATE EFFECTS OF THE RELEASE, AND STEPS TAKEN TO MINIMIZE THE CHANCE OF FUTURE OCCURRENCES WILL BE SUBMITTED TO THE APPROPRIATE TDEC ENVIRONMENTAL FIELD OFFICE WITHIN 14 DAYS OF KNOWLEDGE OF THE RELEASE.

11.3.3. THE SWPPP MUST BE MODIFIED WITHIN 14 DAYS OF KNOWLEDGE OF THE RELEASE PROVIDING A DESCRIPTION OF THE RELEASE, CIRCUMSTANCES LEADING TO THE RELEASE, AND THE DATE OF RELEASE. THE SWPPP WILL BE REVIEWED AND MODIFIED AS NECESSARY TO IDENTIFY MEASURES TO PREVENT THE REOCCURRENCE OF SUCH RELEASES AND TO RESPOND TO SUCH RELEASES.

12.2. RECORD-KEEPING

12.1. REQUIRED RECORDS

CONTRACTOR OR THEIR DESIGNER WILL MAINTAIN AT THE SITE THE FOLLOWING RECORDS OF CONSTRUCTION ACTIVITIES (3.5.3.1.m) (6.2.1):

12.1.1. THE DATES WHEN MAJOR GRADING ACTIVITIES OCCUR

12.1.2. THE DATES WHEN CONSTRUCTION ACTIVITIES TEMPORARILY OR PERMANENTLY CEASE ON A PORTION OF THE SITE

12.1.3. THE DATES WHEN STABILIZATION MEASURES ARE INITIATED

12.1.4. RECORDS OF TWICE WEEKLY EPSC INSPECTION REPORTS AND CORRECTIVE MEASURES

12.1.5. RECORDS OF QUALITY ASSURANCE SITE ASSESSMENTS

12.2.2. WHENEVER INSPECTIONS OR INVESTIGATIONS BY SITE OPERATORS, LOCAL, STATE, OR FEDERAL OFFICIALS INDICATE THE SWPPP IS PROVING INEFFECTIVE IN ELIMINATING OR SIGNIFICANTLY MINIMIZING POLLUTANTS FROM CONSTRUCTION ACTIVITY SOURCES OR IS OTHERWISE NOT ACHIEVING THE GENERAL OBJECTIVES OF CONTROLLING POLLUTANTS IN STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITY, THE LOCAL, STATE, OR FEDERAL OFFICIALS DETERMINE THAT THE SWPPP IS INEFFECTIVE IN ELIMINATING OR SIGNIFICANTLY MINIMIZING POLLUTANT SOURCES, A COPY OF ANY OR APPROPRIATE TO THAT EFFECT MUST BE RETAINED IN THE SWPPP.

12.2.3. WHEN ANY NEW OPERATOR AND/OR SUB-OPERATOR IS ASSIGNED OR RELIEVED OF THEIR RESPONSIBILITY TO IMPLEMENT A PORTION OF THE SWPPP.

12.2.4. TO PREVENT A NEGATIVE IMPACT TO LEGALLY PROTECTED STATE OR FEDERALLY LISTED OR PROPOSED THREATENED OR ENDANGERED AQUATIC FAUNA;

12.2.5. WHEN THERE IS A CHANGE IN CHEMICAL TREATMENT METHODS INCLUDING USE OF DIFFERENT TREATMENT CHEMICALS, DIFFERENT DOSAGE OR APPLICATION RATES, OR A DIFFERENT AREA OF APPLICATION NOT SPECIFIED ON THE EPSC PLANS OR

12.2.6. WHEN A TMDL IS DEVELOPED FOR THE RECEIVING WATERS FROM A POLLUTANT OF CONCERN (SILTATION AND/OR HABITAT ALTERATION)

12.3. MAKING PLANS ACCESSIBLE

12.3.1. CONTRACTOR WILL RETAIN A COPY OF THIS SWPPP (INCLUDING A COPY OF THE DOCUMENTATION AND PERMITS BINDER AT THE CONSTRUCTION SITE (OR OTHER LOCATION ACCESSIBLE TO TDEC AND THE PUBLIC) FROM THE DATE CONSTRUCTION COMMENCES TO THE DATE OF FINAL STABILIZATION. CONTRACTOR WILL HAVE A COPY OF THE SWPPP AVAILABLE AT THE LOCATION WHERE WORK IS OCCURRING ON-SITE FOR THE USE OF OPERATORS AND THOSE IDENTIFIED AS HAVING RESPONSIBILITIES UNDER THE SWPPP WHENEVER THEY ARE ON THE CONSTRUCTION SITE. (6.2)

12.3.2. PRIOR TO THE INITIATION OF LAND DISTURBING ACTIVITIES AND UNTIL THE SITE HAS MET THE FINAL STABILIZATION CRITERIA, CONTRACTOR OR THEIR DESIGNER WILL POST A NOTICE NEAR THE MAIN ENTRANCE OF THE CONSTRUCTION SITE WITH THE FOLLOWING INFORMATION (3.3.3) (6.2.1):

12.3.2.1. A COPY OF THE NOTICE OF COVERAGE (NOC) WITH THE NPDES PERMIT NUMBER FOR THE PROJECT;

12.3.2.2. THE INDIVIDUAL NAME, COMPANY NAME, EMAIL ADDRESS (IF APPLICABLE) AND TELEPHONE NUMBER OF THE LOCAL PROJECT SITE OWNER AND OPERATOR CONTACT;

12.3.2.3. A BRIEF DESCRIPTION OF THE PROJECT; AND

12.3.2.4. THE LOCATION OF THE SWPPP.

12.3.3. ALL INFORMATION DESCRIBED IN SECTION 10.3.2 MUST BE MAINTAINED IN LEGIBLE CONDITION. IF POSTING THIS INFORMATION NEAR A MAIN ENTRANCE IS INFEASIBLE DUE TO SAFETY CONCERNS, THE NOTICE SHALL BE POSTED IN A LOCK BUILDING. THE NOTICE MUST BE PLACED IN A PUBLICLY ACCESSIBLE LOCATION WHERE CONSTRUCTION IS ACTIVELY UNDERWAY AND MOVED AS NECESSARY.

12.4. NOTICE OF TERMINATION (8.0)

12.4.1. WHEN ALL STORMWATER DISCHARGES FROM CONSTRUCTION ACTIVITIES THAT ARE AUTHORIZED BY THE PERMIT ARE ELIMINATED BY FINAL STABILIZATION, CONTRACTOR WILL SUBMIT A NOTICE OF TERMINATION (NOT) THAT IS SIGNED IN ACCORDANCE WITH THE PERMIT TO THE LOCAL ENVIRONMENTAL FIELD OFFICE.

12.4.2. FOR THE PURPOSES OF THE CERTIFICATION REQUIRED BY THE NOT, THE ELIMINATION OF STORMWATER DISCHARGES ASSOCIATED WITH THE CONSTRUCTION ACTIVITY MEANS THE FOLLOWING:

12.4.2.1. ALL EARTH-DISTURBING ACTIVITIES ON THE SITE ARE COMPLETED AND ALL DISTURBED SOILS AT THE PORTION OF THE CONSTRUCTION SITE WHERE THE OPERATOR HAD CONTROL HAVE BEEN FINALLY STABILIZED; AND



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CHECKED BY: SEC  
DATE: 4/29/2014

PROJECT NO.: 103-270  
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- 12.4.2.2. ALL CONSTRUCTION MATERIALS, WASTE AND WASTE HANDLING DEVICES, AND ALL EQUIPMENT AND VEHICLES THAT WERE USED DURING CONSTRUCTION HAVE BEEN REMOVED AND PROPERLY DISPOSED; AND
- 12.4.2.3. ALL STORMWATER CONTROLS THAT WERE INSTALLED AND MAINTAINED DURING CONSTRUCTION, EXCEPT THOSE THAT ARE INTENDED FOR LONG-TERM USE FOLLOWING TERMINATION OF PERMIT COVERAGE, HAVE BEEN REMOVED; AND
- 12.4.2.4. ALL POTENTIAL POLLUTANTS AND POLLUTANT GENERATING ACTIVITIES ASSOCIATED WITH CONSTRUCTION HAVE BEEN REMOVED; AND
- 12.4.2.5. THE PERMITTEE HAS IDENTIFIED WHO IS RESPONSIBLE FOR ONGOING MAINTENANCE OF ANY STORMWATER CONTROLS LEFT ON THE SITE FOR LONG-TERM USE FOLLOWING TERMINATION OF PERMIT COVERAGE; AND
- 12.4.2.6. TEMPORARY EPCSC MEASURES HAVE BEEN OR WILL BE REMOVED AT AN APPROPRIATE TIME TO ENSURE FINAL STABILIZATION IS MAINTAINED; AND
- 12.4.2.7. ALL STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITIES FROM THE IDENTIFIED SITE THAT ARE AUTHORIZED BY A NPDES GENERAL PERMIT HAVE OTHERWISE BEEN ELIMINATED FROM THE PORTION OF THE CONSTRUCTION SITE WHERE THE OPERATOR HAD CONTROL.
- 12.5. RETENTION OF RECORDS (6.2)  
 THE PERMITTEE WILL RETAIN COPIES OF THE SWPPP, ALL REPORTS REQUIRED BY THE PERMIT, AND RECORDS OF ALL DATA USED TO COMPLETE THE NOTICE OF INTENT FOR THE PROJECT FOR A PERIOD OF AT LEAST THREE (3) YEARS FROM THE DATE THE NOT WAS FILED.

**13. SITE WIDE PRIMARY PERMITTEE CERTIFICATION (7.7.5)**

I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHER AND EVALUATE THE INFORMATION SUBMITTED, BASED ON MY INQUIRY OF THE PERSON OR PERSONS WHO MANAGE THE SYSTEM, OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION, THE INFORMATION SUBMITTED IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS.

\_\_\_\_\_  
 AUTHORIZED PERSONNEL SIGNATURE (3.3.1)

\_\_\_\_\_  
 PRINTED NAME

\_\_\_\_\_  
 TITLE

\_\_\_\_\_  
 DATE

**14. SECONDARY PERMITTEE (OPERATOR) CERTIFICATION (7.7.6)**

I CERTIFY UNDER PENALTY OF LAW THAT I HAVE REVIEWED THIS DOCUMENT, ANY ATTACHMENTS, AND THE SWPPP REFERENCED ABOVE. BASED ON MY INQUIRY OF THE CONSTRUCTION SITE OWNER/DEVELOPER IDENTIFIED ABOVE AND/OR MY INQUIRY OF THE PERSON DIRECTLY RESPONSIBLE FOR ASSEMBLING THIS NOI AND SWPPP, I BELIEVE THE INFORMATION SUBMITTED IS ACCURATE. I AM AWARE THAT THIS NOI, IF APPROVED, MAKES THE ABOVE-DESCRIBED CONSTRUCTION ACTIVITY SUBJECT TO NPDES PERMIT NUMBER TNR100000, AND THAT CERTAIN OF MY ACTIVITIES ON-SITE ARE THEREBY REGULATED. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS, AND FOR FAILURE TO COMPLY WITH THESE PERMIT REQUIREMENTS.

\_\_\_\_\_  
 AUTHORIZED OPERATOR (CONTRACTOR) SIGNATURE (3.3.1)

\_\_\_\_\_  
 PRINTED NAME

\_\_\_\_\_  
 TITLE

\_\_\_\_\_  
 DATE

**15. ENVIRONMENTAL PERMITS (9.0)**

LIST ALL ENVIRONMENTAL PERMITS AND EXPIRATION DATES FOR PROJECT

PERMIT	ENVIRONMENTAL PERMITS		EXPIRATION DATE
	YES OR NO	PERMIT OR TRACKING NO.	
TDEC ARAP	YES	PENDING	
CORPS OF ENGINEERS (COE)	NO		
TVA 46A	NO		
TDEC CGP	YES	PENDING	
OTHER:	N/A		



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 ROANE COUNTY, TENNESSEE

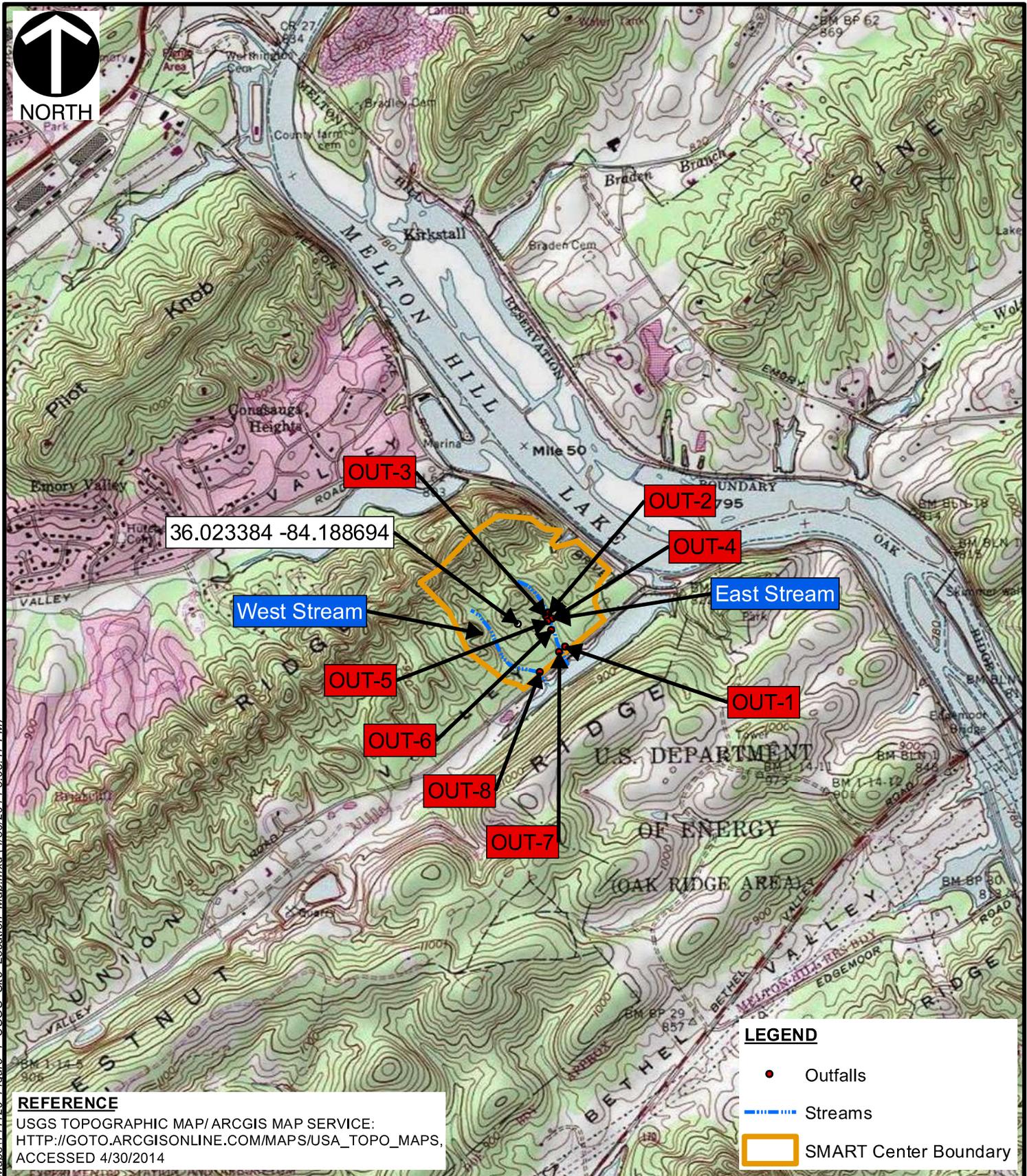
STORMWATER POLLUTION  
 PREVENTION PLAN

DRAWN BY: JMB  
 DATE: 4/30/2014

CHECKED BY: SEC  
 DATE: 4/30/2014

PROJECT NO.: 103-270

SHEET NO.: 5



**REFERENCE**  
 USGS TOPOGRAPHIC MAP/ ARCGIS MAP SERVICE:  
[HTTP://GOTO.ARCGISONLINE.COM/MAPS/USA\\_TOPO\\_MAPS](http://gto.arcgis.com/maps/usa_topo_maps),  
 ACCESSED 4/30/2014

**LEGEND**

- Outfalls
- — — Streams
- SMART Center Boundary



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**USGS SITE LOCATION MAP**

DRAWN BY:	JMB	CHECKED BY:	SEC	APPROVED BY:	DRAFT	FIGURE NO:	<b>1</b>
DATE:	4/30/2014	SCALE:	1" = 2,000'	PROJECT NO:	141-120		

I:\SVR\NASH\P\120141120\GIS\Maps\141120\_Location\_Map.mxd (4/30/2014 3:08:47 PM)



Melton Lake Dr

Union Valley Rd



**LEGEND**

 SMART Center Boundary

**Soils**

**HSG**

 C

 D

**REFERENCE**

ESRI WORLD IMAGERY / ARCGIS MAP SERVICE:  
HTTP://GOTO.ARCGISONLINE.COM/MAPS/WORLD\_IMAGERY,  
ACCESSED 4/30/2014, IMAGERY DATE: 2010.

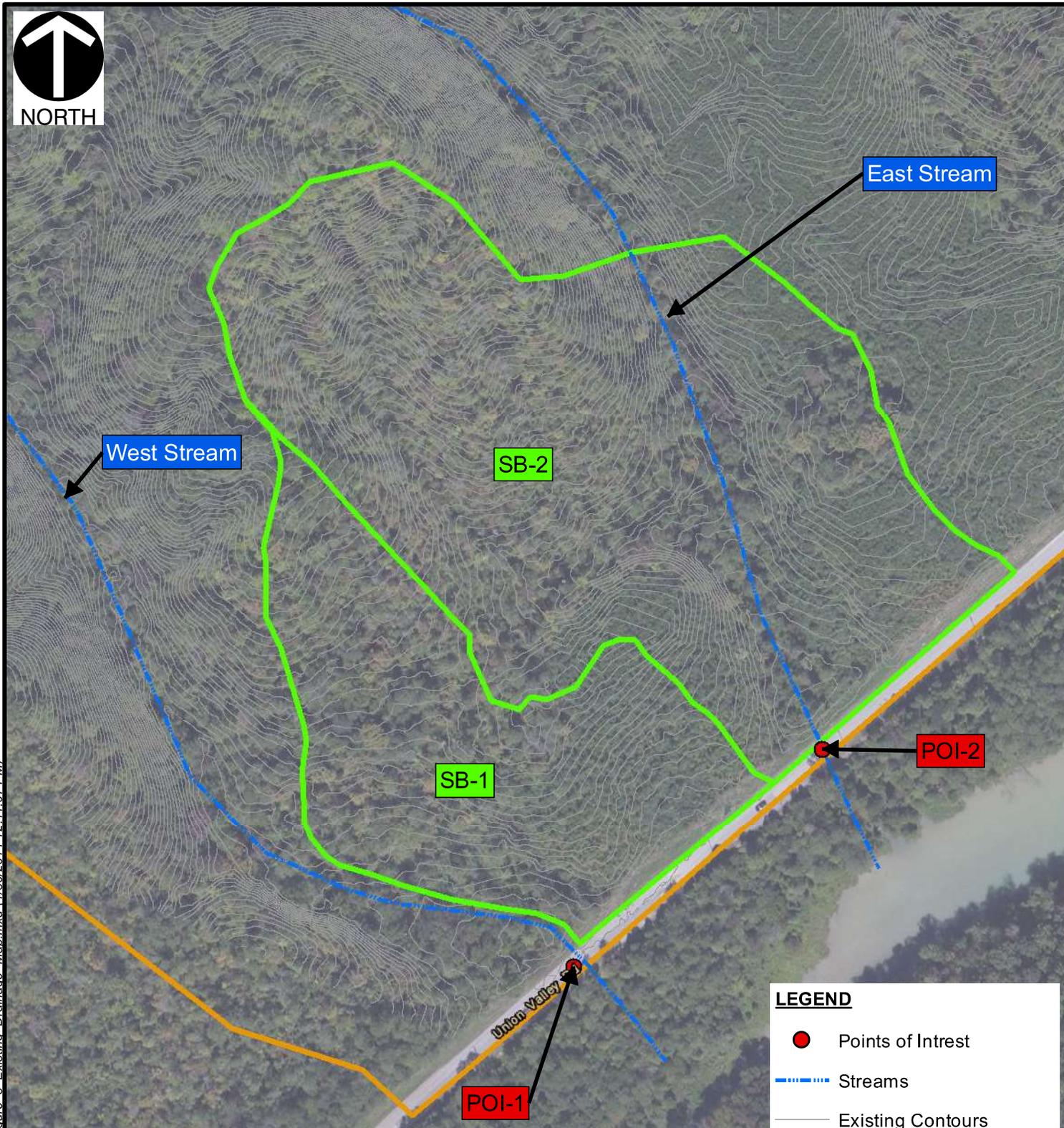


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**SOILS MAP**

DRAWN BY:	JMB	CHECKED BY:	SEC	APPROVED BY:	DRAFT	FIGURE NO:	<b>2</b>
DATE:	4/30/2014	SCALE:	1" = 400'	PROJECT NO:	141-120		

\\SVR-NASH\P\20141141-120-GIS\Maps\141120\_Figure 2 Soils\_Map.mxd (4/30/2014 12:08:07 PM)



\\SVR-NASH1\P\20141141-120-GIS\Maps\141120\_Figure 3\_Existing\_Drainage\_Map.mxd (4/30/2014 12:11:07 PM)

**REFERENCE**  
ESRI WORLD IMAGERY / ARCGIS MAP SERVICE:  
[HTTP://GOTO.ARCGISONLINE.COM/MAPS/WORLD\\_IMAGERY](http://gto.arcgis.com/maps/world_imagery),  
ACCESSED 4/30/2014, IMAGERY DATE: 2010.

**LEGEND**

-  Points of Intrest
-  Streams
-  Existing Contours
-  Existing Watershed
-  SMART Center Boundary



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**EXISTING DRAINAGE MAP**

DRAWN BY:	JMB	CHECKED BY:	SEC	APPROVED BY:	DRAFT	FIGURE NO:	<b>3</b>
DATE:	4/30/2014	SCALE:	1" = 200'	PROJECT NO:	141-120		



East Stream

SB-2A

SB-1A

SB-2B

SB-1B

POI-2

West Stream

POI-1

**LEGEND**

-  Points of Interest
-  Streams
-  Proposed Contours
-  Proposed Watershed
-  Limits of disturbance
-  SMART Center Boundary

**REFERENCE**  
 ESRI WORLD IMAGERY / ARCGIS MAP SERVICE:  
[HTTP://GOTO.ARCGISONLINE.COM/MAPS/WORLD\\_IMAGERY](http://gto.arcgis.com/maps/world_imagery),  
 ACCESSED 4/30/2014, IMAGERY DATE: 2010.

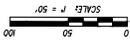


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 OAK RIDGE, TN

PROPOSED DRAINAGE MAP

DRAWN BY:	JMB	CHECKED BY:	SEC	APPROVED BY:	DRAFT	FIGURE NO:	<b>4</b>
DATE:	4/30/2014	SCALE:	1" = 200'	PROJECT NO:	141-120		

\\SVR-NASH1\P\20141141-120-GIS\Maps\141120\_Figure 4 Proposed Drainage Map.mxd (4/30/2014 12:10:26 PM)



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 2506 E.L. CHALKMAN DRIVE  
 KNOXVILLE, TN 37996-4531  
 CONTACT: DANIEL YODER, P.E.  
 TELEPHONE NO.: 606.974.7116

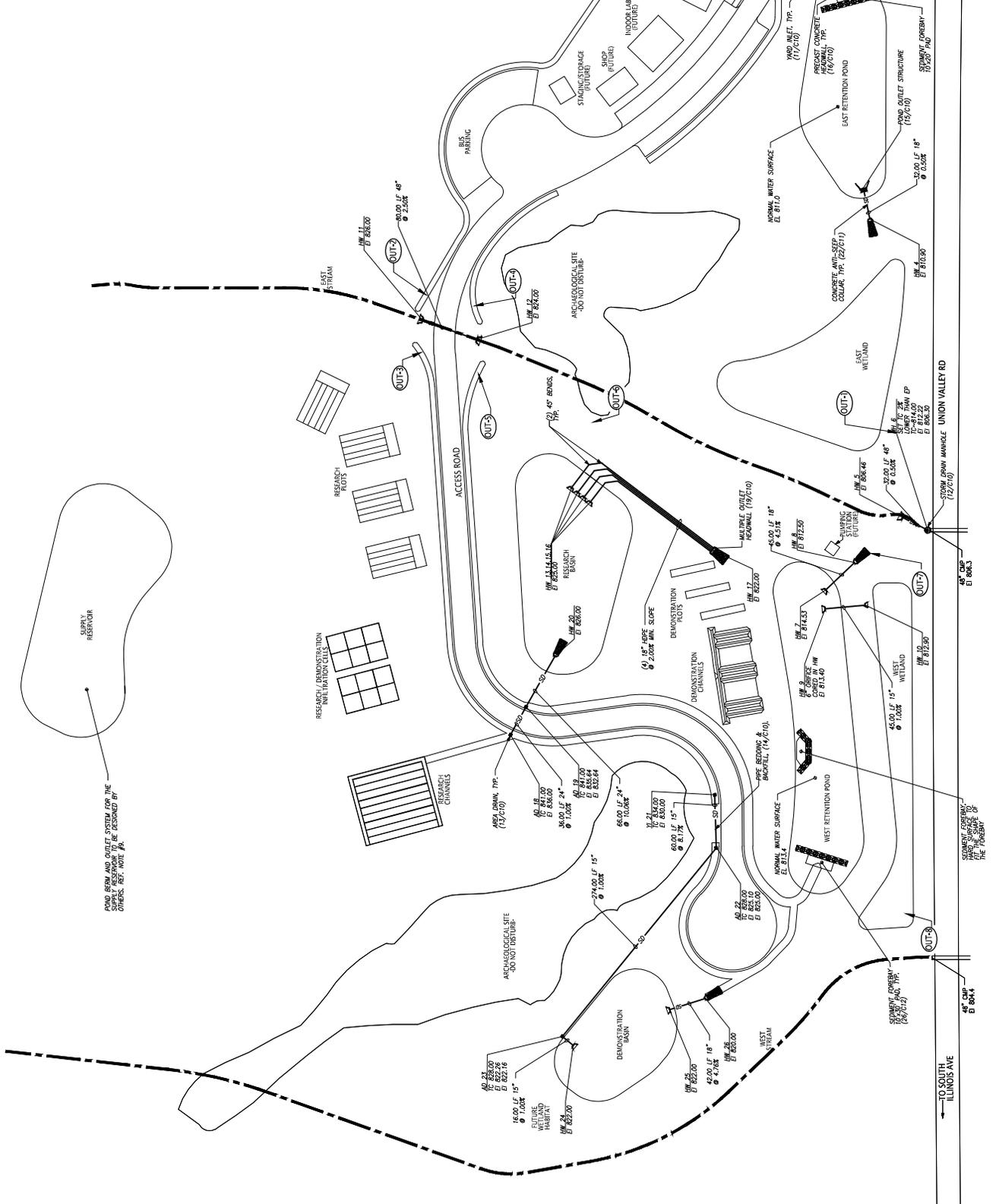
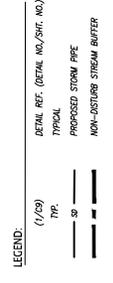
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 OAK RIDGE, TENNESSEE 37830

MASTER STORMWATER  
 DRAINAGE PLAN



Sheet: **C8**

- STORM PIPE NOTES:**
1. INSTALL STORM SEWER PIPING AND APPURTENANCES TO MEET THE REQUIREMENTS OF THE CITY OF OAK RIDGE STANDARD SPECIFICATIONS.
  2. FRENCH DESIGN AND SAFETY FOR PIPELINE CONSTRUCTION IS THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL COMPLY WITH ALL APPLICABLE LOCAL, STATE, AND FEDERAL REGULATIONS.
  3. UNLESS NOTED OTHERWISE, STORM SEWER PIPE SHALL BE 18" DIA. 15' SLOPE. ALL JOINTS SHALL BE MADE OF POLYETHYLENE GLASS REINFORCED WITH AN INTERIOR HIGH DENSITY POLYETHYLENE PIPE IN ACCORDANCE WITH AASHTO M29 OR EQUAL.
  4. ALL STORM SEWER PIPING SHALL BE INSTALLED WITH SLOPE METERS AT MANHOLE AND VENT TERMINATIONS. SLOPE SHALL BE MADE OF POLYETHYLENE AND INSTALLED AND COVERED WITH 18" DIA. 15' SLOPE.
  5. PIPE SELECTION AND ALIGNMENT SHALL BE CHECKED AFTER BACKFILLING & COMPACTION ARE COMPLETE & PRIOR TO OTHER APPROVED METHOD. DEFLECTION WITH A MANHOLE OR OTHER APPROVED METHOD.
  6. PIPE WITH DEFLECTION 5% OR GREATER OR WITH UNDOE ALIGNMENT SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
  7. PRE-COLLECTORS ARE MEASURED IN TERMS OF HORIZONTAL LENGTH COMPLETE IN PLACE REGARDLESS OF TYPE, DEPTH, OR MATERIAL. MEASUREMENT SHALL BE TAKEN FROM THE CENTER OF STRUCTURE TO CENTER OF STRUCTURE AND NOT FROM THE CENTER OF STRUCTURE TO THE END OF THE MANHOLE. THE CONTRACTOR SHALL VERIFY AND INSTALL THE MANHOLE AS SHOWN. INSULATION AND JOINTS SHALL BE COMPLETELY SHOWN. FINISHING AND INSTALLATION OF PIPES, JOINTS, AND MANHOLES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. JOINTS SHALL BE GREATER THAN 12" USE JOINT USE OF JOINT FASTENERS AS SPECIFIED BY THE MANUFACTURER. 15% LOSS CONCRETE PIPE ALLOWED AS SPECIFIED BY THE MANUFACTURER.
  8. PRIOR TO THE START OF CONSTRUCTION, CONTRACTOR SHALL VERIFY THE SCHEDULED AND CONSTRUCTION OF THE DISCHARGE SYSTEM FOR THE SUPPLY RECEIVER.



POND BERM AND OUTLET SYSTEM FOR THE OTHERS, REF. NOTE #1.

STORMWATER SHALL BE DISCHARGED TO THE SOUTH OF THE FOREST.

TO SOUTH ILLINOIS AVE

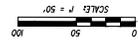
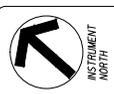
TO WELTON LAKE DR











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EROSION PREVENTION &  
 SEDIMENT CONTROL DETAILS  
 SHEET 2



Sheet: **C10**

**TYPE 1**  
 VERTICAL BACKFILL & PIPE BEDDING FOR  
 12\"/>

**TYPE 2**  
 VERTICAL BACKFILL & PIPE BEDDING FOR  
 18\"/>

**NOTES:**

1. BEDDING MATERIAL SHALL HAVE A MINIMUM FINISH MODULUS OF RIGIDITY (FM) OF 1000 LBS./SQ. FT. (AS DETERMINED BY THE MATERIAL MANUFACTURER) AND SHALL BE COMPACTED TO 95% RELATIVE COMPACTION WITH THE PIPE MANUFACTURER'S RECOMMENDED COMPACTOR.
2. BEDDING MATERIAL TO BE SET CROWNED STONE.
3. BACKFILL SHALL BE 3/4\"/>

**TYPE 3 (RIP-RAP ARROYO)**

**NOTES:**

1. RIP-RAP ARROYOS SHALL BE CONSTRUCTED WITH A MINIMUM CHANNEL WIDTH OF 18\"/>

PIPE SIZE (IN)	PIPE (IN)	ARROYO (IN)	MIN. CH. WIDTH (IN)	MIN. CH. DEPTH (IN)
12	12	12	18	12
15	15	15	24	15
18	18	18	30	18
24	24	24	42	24
30	30	30	54	30
36	36	36	66	36
42	42	42	78	42
48	48	48	90	48

**17** PIPE BEDDING & BACKFILL  
**C10** N.T.S.

**18** BRIDLE PATH ARROYO  
**C10** N.T.S.

**NOTES:**

1. CONCRETE: 4000 PSI @ 28 DAYS.
2. REINFORCING: #4 BAR @ 12\"/>

**19** MULTIPLE OUTLET HEADWALL (POUR-IN-PLACE)  
**C10** N.T.S.

**NOTES:**

1. CONCRETE: 4000 PSI @ 28 DAYS.
2. REINFORCING: #4 BAR @ 12\"/>

**13** AREA DRAIN  
**C10** N.T.S.

**NOTES:**

1. AREA DRAIN SHALL BE CONSTRUCTED OF CONCRETE OR POLYMER CONCRETE. CONCRETE SHALL BE 4000 PSI @ 28 DAYS. POLYMER CONCRETE SHALL BE 4000 PSI @ 28 DAYS. THE DRAIN SHALL BE 18\"/>

**12** STORM DRAIN MANHOLE  
**C10** N.T.S.

**NOTES:**

1. CONCRETE: 4000 PSI @ 28 DAYS.
2. REINFORCING: #4 BAR @ 12\"/>

**16** PRECAST CONCRETE HEADWALL  
**C10** N.T.S.

PIPE SIZE (IN)	PIPE (IN)	ARROYO (IN)	MIN. CH. WIDTH (IN)	MIN. CH. DEPTH (IN)
12	12	12	18	12
15	15	15	24	15
18	18	18	30	18
24	24	24	42	24
30	30	30	54	30
36	36	36	66	36
42	42	42	78	42
48	48	48	90	48

**15** SEDIMENT FOREBAY  
**C10** N.T.S.

**NOTES:**

1. THE FOREBAY SURFACE SHALL BE CONSTRUCTED OF BLOCK AND SHALL BE 18\"/>

**11** HARD INLET  
**C10** N.T.S.

**NOTES:**

1. HARD INLET SHALL BE CONSTRUCTED OF CONCRETE OR POLYMER CONCRETE. CONCRETE SHALL BE 4000 PSI @ 28 DAYS. POLYMER CONCRETE SHALL BE 4000 PSI @ 28 DAYS. THE INLET SHALL BE 18\"/>

**12** STORM DRAIN MANHOLE  
**C10** N.T.S.

**NOTES:**

1. CONCRETE: 4000 PSI @ 28 DAYS.
2. REINFORCING: #4 BAR @ 12\"/>

**15** RETENTION POND OUTLET STRUCTURE  
**C10** N.T.S.

**NOTES:**

1. INSTALL SURFACE DRAINAGE (WHATEVER DEVICE SIZE SPECIFIED) TO PREVENT WATER FROM PENETRATING RETENTION POND STRUCTURE.
2. OUTLET STRUCTURE SHALL BE CONCRETE PRECAST CONCRETE STRUCTURE IN ACCORDANCE WITH THE LATEST NATIONAL STANDARD SPECIFICATIONS FOR PRECAST/PREFABRICATED CONCRETE TO MEET THE REQUIREMENTS OF THE DESIGNER.
3. LARGER BARS SHALL BE PROVIDED PER CODE REGULATIONS.
4. CONCRETE SHALL CORROSE WITH THE SAME AS THE CONSTRUCTION.

**11** HARD INLET  
**C10** N.T.S.

**NOTES:**

1. HARD INLET SHALL BE CONSTRUCTED OF CONCRETE OR POLYMER CONCRETE. CONCRETE SHALL BE 4000 PSI @ 28 DAYS. POLYMER CONCRETE SHALL BE 4000 PSI @ 28 DAYS. THE INLET SHALL BE 18\"/>

**12** STORM DRAIN MANHOLE  
**C10** N.T.S.

**NOTES:**

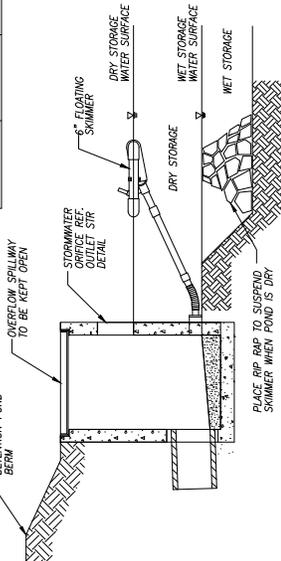
1. CONCRETE: 4000 PSI @ 28 DAYS.
2. REINFORCING: #4 BAR @ 12\"/>

**15** RETENTION POND OUTLET STRUCTURE  
**C10** N.T.S.

**NOTES:**

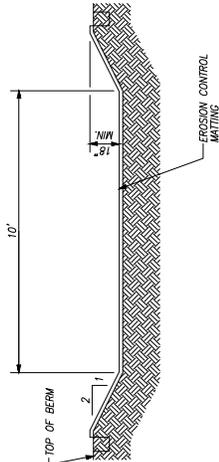
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2. OUTLET STRUCTURE SHALL BE CONCRETE PRECAST CONCRETE STRUCTURE IN ACCORDANCE WITH THE LATEST NATIONAL STANDARD SPECIFICATIONS FOR PRECAST/PREFABRICATED CONCRETE TO MEET THE REQUIREMENTS OF THE DESIGNER.
3. LARGER BARS SHALL BE PROVIDED PER CODE REGULATIONS.
4. CONCRETE SHALL CORROSE WITH THE SAME AS THE CONSTRUCTION.

	WEST BASIN	EAST BASIN
DRY STORAGE WATER ELEV.	814.53	814.50
DRY STORAGE VOLUME (CF)	11,718	39,160
WET STORAGE WATER ELEV.	813.40	811.16
WET STORAGE VOLUME (CF)	24,089	29,185



- NOTES:
1. INSTALL & MAINTAIN FLOATING SKIMMER PER THE MANUFACTURER'S SPECIFICATIONS.
  2. CONNECT SKIMMER TO OUTLET STRUCTURE AT WET STORAGE WATER SURFACE. WET STORAGE WATER SURFACE ELEVATION SHALL BE MAINTAINED OR BLOTTED UNTIL SITE IS FULLY STABILIZED.
  3. DETERMINING DEVICE SHALL BE FIBRO-CLOTH SKIMMER, OR APPROVED EQUAL.

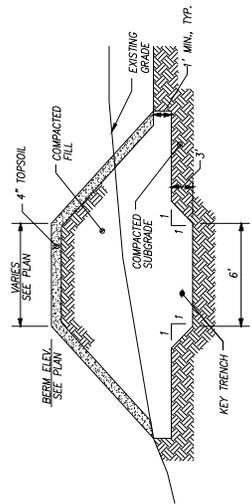
20 SURFACE SKIMMER DEWATERING DEVICE  
C11 N.T.S.



FRONT VIEW

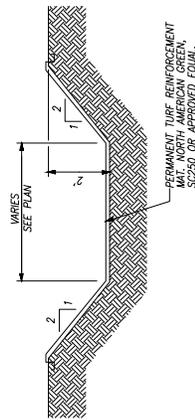
- NOTES:
1. EROSION CONTROL MAT SHALL BE PYRAMAT BY SYNTHETIC INDUSTRIES OR EQUAL AND INSTALLED PER THE MANUFACTURER'S SPECIFICATIONS.
  2. EXTEND MATTING 10' BEYOND TOE OF SLOPE ON THE DOWNHILL SIDE AND 10' BEYOND THE TOP OF SPILLWAY ON THE POND SIDE.

23 EMERGENCY SPILLWAY  
C11 N.T.S.

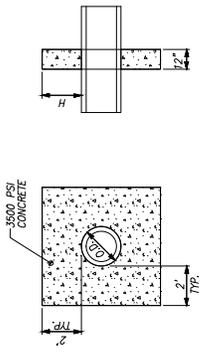


- NOTES:
1. CONSTRUCT/INSTALL ANTI-SEEP COLLARS (REFER TO DETAIL) ON ALL PIPES THAT GO THROUGH THE BERM.

21 RETENTION POND BERM  
C11 N.T.S.

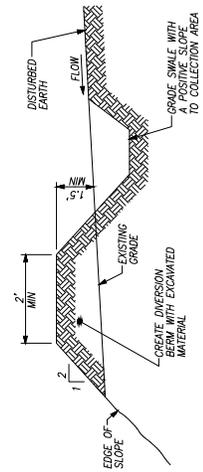


24 DITCH SECTION  
C11 N.T.S.



- NOTES:
1. MAXIMUM SPACING SHALL BE 14 TIMES THE COLLAR HEIGHT (H) OR 25 FT WHICHEVER IS LESS. MINIMUM SPACING IS 10 FT.
  2. PROVIDE A COLLAR AT THE HALF-WAY POINT IN THE BERM.
  3. PROVIDE A MINIMUM OF ONE COLLAR FOR BERMS LESS THAN 8 FT HIGH AND AT LEAST TWO COLLARS FOR BERMS EQUAL TO OR GREATER THAN 8 FT.

22 CONCRETE ANTI-SEEP COLLAR  
C11 N.T.S.

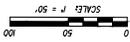


- NOTES:
1. PROVIDE SLOPE GRASS AS NECESSARY TO CONVEY RUNOFF TO STABILIZED OUTLET.
  2. PIPE DIAMETER SHALL CONFORM TO TDEC REQUIREMENTS.

25 DIVERSION BERM  
C11 N.T.S.



INSTRUMENT NORTH



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EROSION PREVENTION & SEDIMENT CONTROL DETAILS  
SHEET 3



Sheet: C11