

STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION

ENVIRONMENTAL DIVISION

SUITE 900, JAMES K. POLK BUILDING 505 DEADERICK STREET NASHVILLE, TENNESSEE 37243-1402 (615) 741-3655

JOHN C. SCHROER
COMMISSIONER

BILL HASLAM GOVERNOR

February 11, 2016

Mr. Jim McAdoo, Permit Section TN Department of Environment and Conservation Division of Water Pollution Control 11th Floor William R. Snodgrass Tennessee Tower 312 Rosa L. Parks Avenue Nashville, Tennessee 37243

RE: NOI and SWPPP Submittals for TDOT Construction Activities

Dear Mr. McAdoo:

We request coverage under the General NPDES Permit for Discharges of Storm Water Associated with Construction Activities for the subject project. Attached is the signed Notice of Intent (NOI) for Construction Activity – Storm Water Discharges and Quad Map. The Storm Water Pollution Prevention Plan and the full submittal package will be available on the TDOT FTP site.

Project # 83011-1233-94, PIN 121823.00 State Route 109 intersection at Old State Highway 109 Sumner County

By copy of this letter, we are sending three hard copies of the permits and documentation binder and one CD of this SWPPP to the Region Construction Office (one copy for the contractor).

Please forward our office the Notice of Coverage (NOC) for this project as soon as it becomes available. Please contact me at (615) 532-9945 if I can be of any assistance.

Sincerely,

Anthony Myers

Anthony R. Myen

Environmental Permits Section

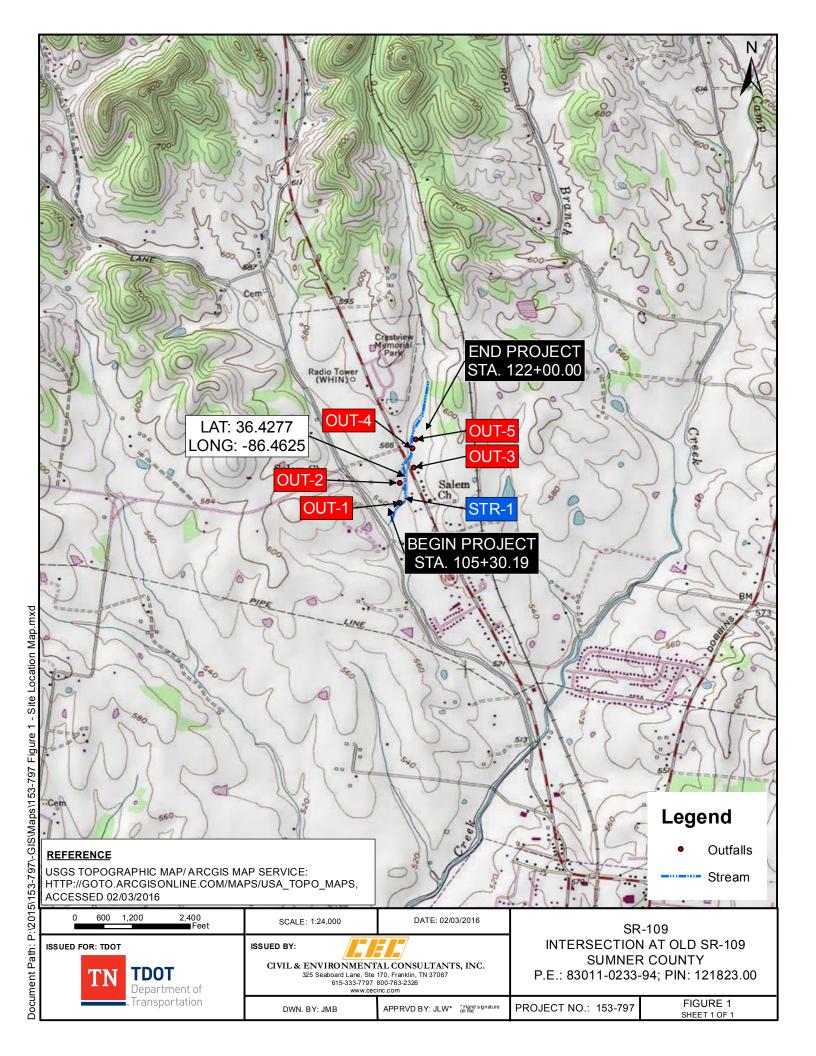
Enclosures

JLH: ARM: MDW

Enclosures for:

cc: Mr. Mike Brown, Region 3 Construction (CD)

Reading File, NPDES File



Index Of Sheets SEE SHEET IA

STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION BUREAU OF ENGINEERING

TENN. 2016 1 FED. AID PROJ. NO. HSIP-109(36) STATE PROJ. NO. 83011-3233-94

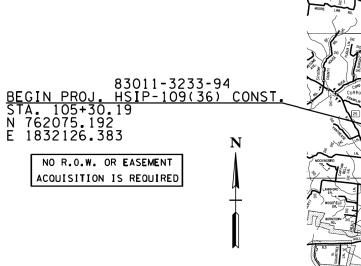
SUMNER COUNTY

STATE ROUTE 109 INTERSECTION AT OLD STATE HIGHWAY 109.

CONSTRUCTION

STATE HIGHWAY NO. 109 F.A.H.S. NO. 109





SOUTH TURNED STATE STATE

SCALE: 1"= 1 MILE

ROADWAY LENGTH BRIDGE LENGTH BOX BRIDGE LENGTH PROJECT LENGTH 0.316 MILES 0.000 MILES 0.000 MILES 0.316 MILES 83011-3233-94 END PROJ. HSIP-109(36) CONST. STA. 122+00.00 (SR-109) N 763481.382 E 1832823.223

UNOFFICIAL SET NOT FOR BIDDING

NO EXCLUSIONS
NO EQUATIONS

TRAFFIC	DATA
ADT (2016)	16,080
ADT (2036)	33,440
DHV (2036)	3,669
D	52 - 48
T (ADT)	10 %
T (DHV)	7 %
٧	65 MPH

SURVEY RECEIVED: 06/09/15



APPROVED! PAUL D. DEGGES, CHIEF ENGINEER
DATE:

JOHN SCHROER, COMMISSIONE

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HICHWAY ADMINISTRATION

APPROVED:

DIVISION ADMINISTRATOR

DATE

TDOT ROAD SP. SV. 2 BRAD ABEL, P.E.

DESIGNER __ JACOB_BROOKS_AND_SCOTT_JOHNSON___ CHECKED_BY __ RYAN_SWEENEY, P.E.__

THIS PROJECT TO BE CONSTRUCTED UNDER THE STANDARD SPECIFICATIONS OF THE TENNESSEE DEPARTMENT OF TRANSPORTATION DATED JANUARY 1, 2015 AND ADDITIONAL SPECIFICATIONS AND SPECIAL PROVISIONS CONTAINED IN THE PLANS AND IN THE PROPOSAL CONTRACT.

PROPOSALS MAY BE REJECTED BY THE COMMISSIONER IF ANY OF THE UNIT PRICES CONTAINED THEREIN ARE OBVIOUSLY UNBALANCED, EITHER EXCESSIVE OR BELOW THE REASONABLE COST ANALYSIS VALUE.

P.E. NO. 83011-1233-94 (DESIGN)

PIN NO. 121823.00

-FEB-2016 13±37

D.0.	VISION
TENNESSEE	DESIGN DI

SWPPP INDEX OF SHEETS

DES	SCRIPTION	SHT.
1.	SWPPP REQUIREMENTS	S-1
2.	SITE DESCRIPTION	S-1
3.	ORDER OF CONSTRUCTION ACTIVITIES	S-1
4.	STREAM, OUTFALL, WETLAND, TMDL AND ECOLOGY INFORMATION	S-1
5.	EROSION PREVENTION AND SEDIMENT CONTROL (EPSC) MEASURES	S-2
6.	CONSTRUCTION SUPPORT ACTIVITIES – BORROW AND WASTE AREAS	S-2
7.	MAINTENANCE AND INSPECTION	S-2
8.	SITE ASSESSMENTS	S-3
9.	STORMWATER MANAGEMENT	S-3
	NON-STORMWATER DISCHARGES	
11.	SPILL PREVENTION, MANAGEMENT AND NOTIFICATION	
12.	RECORD-KEEPING	S-4
13.	SITE WIDE/PRIMARY PERMITTEE CERTIFICATION	S-5
14.	SECONDARY PERMITTEE (OPERATOR) CERTIFICATION	S-4
	ENVIRONMENTAL PERMITS	
16.	OUTFALL TABLE	S-6

NOTE: CITATIONS IN PARENTHESIS INDICATE SECTIONS OF THE CURRENT CGP.

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 ☑ NO ☐ (CHECK ALL THAT APPLY BELOW)
 - 1.1.1.

 CERTIFIED PROFESSIONAL IN EROSION AND SEDIMENT CONTROL (CPESC); OR
 - 1.1.2.

 ☐ TDEC LEVEL II
- 1.2. DO THE EPSC PLANS INVOLVE STRUCTURAL DESIGN, HYDRAULIC, HYDROLOGIC OR OTHER ENGINEERING CALCULATIONS FOR EPSC STRUCTURAL MEASURES (SEDIMENT BASINS, ETC.)(3.1.1)? YES ☐ NO ☒ IF YES, HAVE THE EPSC PLANS BEEN PREPARED, STAMPED AND CERTIFIED BY A LICENSED PROFESSIONAL ENGINEER OR LANDSCAPE ARCHITECT? ☐YES ☐ NO
- 1.3. DO THE PROJECT STORMWATER OUTFALLS DIRECTLY DISCHARGE INTO THE FOLLOWING (5.4.1)? YES □ NO ☒ (CHECK ALL THAT APPLY BELOW)
- 1.3.1. IMPAIRED WATERS (303d FOR SILTATION OR HABITAT ALTERATION)
- IF YES TO SECTION 1.3. HAVE THE EPSC PLANS BEEN PREPARED BY AN INDIVIDUAL WHO IS TDEC LEVEL II CERTIFIED? (5.4.1.b)
- ☐YES ☐ NO ☐ N/A (MAY 23, 2013 CGP EXEMPTION); AND
- IF YES TO SECTION 1.3, HAS THE SWPPP TEMPLATE BEEN PREPARED BY AN INDIVIDUAL WHO IS TDEC LEVEL II CERTIFIED? (5.4.1.b)
- ☐YES ☐ NO ☐ N/A (MAY 23, 2013 CGP EXEMPTION)

2. <u>SITE DESCRIPTION</u> (3.5.1)

- 2.1. PROJECT LIMITS (3.5.1.g): REFER TO TITLE SHEET
- 2.2. PROJECT DESCRIPTION (3.5.1.a):

TITLE: SR-109 INTERSECTION AT OLD SR-109

COUNTY: SUMNER PIN: 121823.00

- 2.3. SITE MAP(S) (3.5.1.g): REFER TO TITLE SHEET
- 2.4. DESCRIPTION OF EXISTING SITE TOPOGRAPHY (3.5.1.d): REFER TO EXISTING CONTOURS SHEET(S) 11 & 12, DRAINAGE MAP SHEET(S) 8, USGS QUAD MAP, AND THE OUTFALL TABLE IN SECTION 4.2.3.
- 2.5. MAJOR SOIL DISTURBING ACTIVITIES (3.5.1.b) (CHECK ALL THAT APPLY):
 - 2.5.1.

 CLEARING AND GRUBBING
 - 2.5.2. X EXCAVATION
 - 2.5.3.

 CUTTING AND FILLING
 - 2.5.4. FINAL GRADING AND SHAPING
 - 2.5.5. UTILITIES
 - 2.5.6. OTHER (DESCRIBE): ____
- 2.6. TOTAL PROJECT AREA (3.5.1.c): <u>10.3 ACRES</u>
- 2.7. TOTAL AREA TO BE DISTURBED (3.5.1.c): 6.4 ACRES

IF GREATER THAN 50 ACRES, HAS CONSTRUCTION PROJECT PHASING BEEN SPECIFIED IN SECTION 3 BELOW AND IN THE PLANS (3.5.3.1.k)? YES ☐ NO ☐ N/A ☒

IF YES, SEE SHEET2G FOR NOTE RESTRICTING CONSTRUCTION ACTIVITIES TO LESS THAN 50 ACRES.

- 2.8. ARE THERE ANY SEASONAL LIMITATIONS ON WORK? YES ☑ NO □ IF YES, LIST THE CORRESPONDING PLAN SHEET: 1B
- 2.9. WAS ROW FINALIZED PRIOR TO FEBRUARY 1, 2010 (4.1.2.2)? YES ☐ (DATE) NO ☒

IF ROW WAS FINALIZED PRIOR TO FEBRUARY 1, 2010, THIS PROJECT IS **CONSIDERED A PRE-APPROVED SITE (4.1.2.2)**

- 2.10. ARE UTILITIES INCLUDED IN THE CONTRACT? YES ☐ NO ☒
- 2.11. SOIL PROPERTIES (3.5.1.e)(4.1.1).
 - SOIL PROPERTIES FOR THE PRIMARY SOILS ARE LISTED IN THE TABLE BELOW.

SOIL PROPERTIES			
PRIMARY SOIL NAME	HSG	% OF SITE	ERODIBILITY (k value)
ARRINGTON SILT LOAM, 0 TO 2 PERCENT SLOPES, OCCASIONALLY FLOODED	В	4.1	0.37
BYLER SILT LOAM, 1 TO 4 PERCENT SLOPES	D	92.6	0.43
HARPETH SILT LOAM, 2 TO 5 PERCENT SLOPES, ERODED	В	1.7	0.37
MIMOSA SILT LOAM, 5 TO 12 PERCENT SLOPES ERODED	С	1.6	0.37

- 2.12. IS ACID PRODUCING ROCK (APR) (i.e. PYRITE) LOCATED WITHIN THE PROJECT LIMITS? YES ☐ NO ☒
 - 2.12.1. IF YES TO SECTION 2.12, HAVE APR LOCATIONS BEEN IDENTIFIED WITHIN THE CONSTRUCTION PLANS AND/OR THE GEOTECHNICAL REPORT? ☐YES ☐ NO; AND
 - 2.12.2. IF YES TO SECTION 2.12.1, HAS A SPECIAL HANDLING PLAN AND/OR ADAPTIVE MANAGEMENT PLAN (AMP) BEEN PREPARED FOR THE PROJECT? ☐ YES ☐ NO ☐ N/A (TDOT SP107L WILL BE APPLIED.)
- 2.13. PROJECT RUNOFF COEFFICIENTS AND AREA PERCENTAGES (3.5.1.f).

RUNOFF COEFFICIENTS FOR EXISTING CONDITIONS				
AREA TYPE	AREA(AC)	PERCENTAGE OF TOTAL AREA (%)	RUNOFF CN	C FACTOR
IMPERVIOUS	2.4	37.5	98	
PERVIOUS (WEIGHTED CN)	4.0	62.5	79	
WEIGHTED CURVE NUMBER OR C-FACTOR =		86		

RUNOFF COE	FFICIENTS FOR F	POST-CONSTRUCTI	ON CONDITIO	NS
AREA TYPE	AREA(AC)	PERCENTAGE OF TOTAL AREA (%)	RUNOFF CN	C FACTOR
IMPERVIOUS	4.1	64.1	98	
PERVIOUS (WEIGHTED CN)	2.3	35.9	79	
WEIGHTED CURV	E NUMBER OR C	-FACTOR =	91	

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

3.1. SPECIAL SEQUENCING REQUIREMENTS (SEE SHEETS 11-12B)

SHEET NO. PROJECT NO. YEAR TYPE HSIP-109(36) ROW CONST. HSIP-109(36)

- 3.2. INSTALL STABILIZED CONSTRUCTION EXITS.
- 3.3. INSTALL PERIMETER PROTECTION WHERE RUNOFF SHEETS FROM THE SITE.
- 3.4. INSTALL INITIAL EPSC (EROSION PREVENTION AND SEDIMENT CONTROL) MEASURES.
- 3.5. PERFORM CLEARING AND GRUBBING (NOT MORE THAN 15 DAYS PRIOR TO GRADING OR EARTH-MOVING. REFER TO THE STABILIZATION PRACTICES BELOW.).
- 3.6. REMOVE AND STORE TOPSOIL.
- 3.7. STABILIZE DISTURBED AREAS WITHIN 14 DAYS OF COMPLETING ANY STAGE AND/OR PHASE OF ACTIVITY.
- 3.8. INSTALL STORM SEWERS AND CULVERT STRUCTURE.
- 3.9. INSTALL INLET AND CULVERT PROTECTION ONCE STRUCTURES ARE IN PLACE AND CAPABLE OF INTERCEPTING FLOW.
- 3.10. PERFORM FINAL GRADING AND INSTALL BASE STONE.
- 3.11. COMPLETE FINAL PAVING AND SEALING OF CONCRETE.
- 3.12. INSTALL TRAFFIC CONTROL AND PROTECTION DEVICES.
- 3.13. COMPLETE FINAL STABILIZATION (TOPSOIL, SEEDING, MULCH, EROSION CONTROL BLANKET, SOD, ETC.)
- 3.14. REMOVE TEMPORARY EROSION CONTROLS AND ACCUMULATED SEDIMENT FROM AREAS THAT HAVE ESTABLISHED AT LEAST 70 PERCENT PERMANENT VEGETATIVE COVER.
- 3.15. RE-STABILIZE AREAS DISTURBED BY REMOVAL ACTIVITIES.

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

- 4.1. STREAM INFORMATION
 - 4.1.1. WILL CONSTRUCTION AND/OR EROSION PREVENTION AND SEDIMENT CONTROLS IMPACT ANY STREAMS WITHIN THE PROJECT LIMITS? YES ⊠ NO □
 - 4.1.2. HAVE ANY OF THE RECEIVING WATERS LESS THAN OR EQUAL TO 1 FLOW MILE DOWN GRADIENT OF THE PROJECT LIMITS BEEN CLASSIFIED BY TDEC AS FOLLOWS (CHECK ALL THAT APPLY):
 - 4.1.2.1. 303d IMPAIRED FOR SILTATION
 - 4.1.2.2. 303d IMPAIRED FOR HABITAT ALTERATION
 - 4.1.2.3.

 KNOWN EXCEPTIONAL TENNESSEE WATERS (KETW)
 - 4.1.3. RECEIVING STREAMS (3.5.1.j).

RECEIVING STREAM INFORMATION					
NATURAL RESOURCE LABEL	NAME OF RECEIVING NATURAL RESOURCE	303d IMPAIRED FOR SILTATION OR HABITAT ALTERATION (YES OR NO)	KETW (YES OR NO)	LOCATED WITHIN PROJECT LIMITS (YES OR NO)	LOCATED WITHIN ≤ 1 FLOW MILE DOWN GRADIENT OF PROJECT LIMITS (YES OR NO)
STR-1	UNNAMED TRIBUTARY TO EAST CAMP CREEK	NO	NO	YES	YES

4.1.4.	ARE BUFFER ZONES REQUIRED (4.1.2, 5.4.2)? YES ☑ NO ☐ IF YES, THEY HAVE BEEN INCLUDED ON PLAN SHEET(S) HVF AND SEE NOTE 2 ON SHEETS 11 – 12B.
	IF YES, CHECK THE APPROPRIATE BOX BELOW FOR SIZE OF BUFFER.
	☐ 60-FEET FOR IMPAIRED AND KNOWN EXCEPTIONAL TENNESSEE WATERS (AVERAGE WIDTH PER SIDE WITH A MINIMUM OF 30-FEET)
	☐ 30-FEET FOR ALL OTHER STREAMS (AVERAGE WIDTH PER SIDE
	WITH A MINIMUM OF 15-FEET)
	IF NO, CHECK THE APPROPRIATE BOX BELOW.
	☐ BUFFERS NOT REQUIRED (I.E. NO STREAM, WETLAND, ETC. IMPACTS)
	□ TDEC ARAP APPLIED FOR
	BUFFER ZONE REQUIREMENTS ARE NOT REQUIRED FOR PRE- APPROVED SITES (4.1.2.2.)

4.1.5. ARE THERE BUFFER ZONE EXEMPTIONS (4.1.2.1)? YES ☐ NO ☒ IF YES, EXISTING CONDITIONS DESCRIPTION:

STATE OF TENNESSEE department of transportation

200.000	
J.T.	ION
D.(DIVISION
TENNESSEE	DESTON DI
-	

OUTFALL IN A DRAINAGE AREA:

(5.4.1.f).

TENNESSEE WATERS (3.5.3.3) OR

4.2.3. OUTFALL TABLE (3.5.1.d, 5.4.1.f).

YES ⊠ NO □ N/A □

YES ⊠ NO □

WETLANDS? YES ☐ NO ☒

PERMIT, 401 OR 404 PERMITS.

FROM STATION

LT OR RT

YES □ NO □

4.5. ECOLOGY INFORMATION (3.5.5.e)

4.4. TOTAL MAXIMUM DAILY LOADS (TMDL) INFORMATION (3.5.10)

BEEN ADDED TO THE APPROPRIATE PLAN SHEETS?

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

YES ⊠ NO ☐ NO NOTES REQUIRED ☐

4.3. WETLAND INFORMATION

WETLAND

LABEL

N/A

BASIN(S)? YES ☐ NO ☐ N/A ☒

(3.5.1.g, 5.4.1.f)? YES ⊠ NO □

4.2.1. OF TEN ACRES OR MORE FOR AN OUTFALL(S) THAT DOES NOT

4.2.2. OF FIVE ACRES OR MORE FOR AN OUTFALL(S) THAT DISCHARGES TO

4.2.4. WHERE POSSIBLE, HAS NON-PROJECT RUN-ON BEEN DIVERTED

4.2.5. ARE EQUIVALENT MEASURES BEING SUBSTITUTED FOR A SEDIMENT

4.2.6. HAVE ALL OUTFALLS BEEN LABELED ON THE EPSC PLAN SHEETS

4.2.7. HAVE ALL OUTFALLS BEEN LABELED ON A USGS TOPOGRAPHIC MAP

WILL CONSTRUCTION AND/OR EROSION AND SEDIMENT CONTROLS IMPACT ANY

IF YES. THE STRUCTURAL EPSC MEASURES HAVE BEEN INCLUDED IN THE

TOTAL PROJECT WETLAND IMPACTS AND HAVE BEEN INCLUDED IN THE ARAP

TEMPORARY

IMPACTS (AC)

PERMANENT

IMPACTS (AC)

WETLAND INFORMATION

TO STATION

LT OR RT

4.4.1. IS THIS PROJECT LOCATED IN A HUC-8 WATERSHED THAT MAINTAINS

4.4.2. IF YES, IS THIS PROJECT LOCATED WITHIN A HUC-12 SUBWATERSHED

4.4.3. IF YES, DOES THE PROJECT HAVE A DIRECT DISCHARGE TO A 303(d)

4.4.4. IF YES, HAS A SUMMARY OF THE CONSULTATION (LETTER) BEEN

INCLUDED WITH THE SWPPP DOCUMENTATION? YES INC.

IF SPECIAL NOTES ARE PRESENT IN THE TDOT ECOLOGY REPORT, HAVE THEY

IF YES, LIST ALL PLAN SHEETS WHERE SPECIAL NOTES HAVE BEEN ADDED. 1B

AN EPA APPROVED TMDL FOR SILTATION? YES ☐ NO ☒

WITH A WASTE LOAD ALLOCATION (WLA)? YES ☐ NO ☐

LISTED STREAM FOR SILTATION OR HABITAT ALTERATION?

INCLUDED IN THE "DOCUMENTATION AND PERMITS" BINDER (2.6.2)?

SEE SWPPP SHEET S-6 FOR OUTFALL INFORMATION.

THE DRAINAGE AREA TO ANY ONE OUTFALL?

DISCHARGE TO AN IMPAIRED STREAM OR KNOWN EXCEPTIONAL

AN IMPAIRED STREAM OR KNOWN EXCEPTIONAL TENNESSEE WATERS

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

4.2. OUTFALL INFORMATION: 5.6. HAVE STAGED EPSC PLANS BEEN PREPARED FOR THE PROJECT (3.5.2)?

A SEDIMENT BASIN OR EQUIVALENT MEASURE(S) WILL BE PROVIDED FOR ANY YES ☑ NO ☐ (IF YES, CHECK ONE BELOW)

- 5.6.1.1. PROJECT DISTURBED AREA IS THAN LESS THAN 5 ACRES (MINIMUM OF TWO STAGES OF EPSC PLANS)
- 5.6.1.2. PROJECT DISTURBED AREA IS GREATER THAN 5 ACRES (MINIMUM OF THREE STAGES 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 ☐ N/A ☒
- 5.9. ALL PHYSICAL AND/OR CHEMICAL TREATMENT WILL BE RESEARCHED. APPLIED IN ACCORDANCE WITH MANUFACTURE'S GUIDELINES AMD FULLY DESCRIBED ON THE EPSC PLANS (3.5.3.1.b).
- 5.10. ALL EPSC CONTROL MEASURES WILL BE INSTALLED ACCORDING TO TDOT STANDARDS (E.G. STANDARD DRAWINGS).
- 5.11. EPSC MEASURES WILL NOT BE INSTALLED IN A STREAM WITHOUT FIRST OBTAINING US COE 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 (4.1.7).
- 5.14. THE CONTROL MEASURES LISTED IN THE QUANTITIES TABLE ON SHEET 2 HAVE BEEN SELECTED IN ACCORDANCE WITH TDOT STANDARD DRAWINGS AND GOOD ENGINEERING PRACTICES (3.5.3.1.b).
- 5.15. THE QUANTITIES REQUIRED FOR STABILIZED CONSTRUCTION EXITS PER TDOT STANDARDS HAVE BEEN SPECIFIED ON SHEET 2 (3.5.3.1.n).
- 5.16. 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)
- 5.17. STABILIZATION MEASURES WILL BE INITIATED AS SOON AS POSSIBLE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED TEMPORARY 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)
- 5.18. 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.
- 5.19. 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 (3.5.1.i). REFER TO THE LIST OF APPLICABLE ENVIRONMENTAL PERMITS LOCATED ON SWPPP SHEET S-5. ALL PERMITS WILL BE MAINTAINED ON SITE IN THE "DOCUMENTATION AND PERMITS" BINDER.

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

IF OFFSITE BORROW AND WASTE AREAS BECOME NECESSARY DURING THE LIFE OF THE PROJECT, THIS SUPPORT ACTIVITY SHALL BE ADDRESSED PER THE TDOT WASTE AND BORROW MANUAL AS INDICATED IN THE STATEWIDE STORMWATER MANAGEMENT PLAN (SSWMP).

7. MAINTENANCE AND INSPECTION

- 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 OUTLETS, 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 2-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.n)? YES ⊠ NO □

- 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 A PART (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 TDEC NASHVILLE CENTRAL OFFICE

- AND SUBSEQUENT TDEC APPROVAL. WRITTEN NOTIFICATION MUST INCLUDE THE INTENT TO CHANGE FREQUENCY AND JUSTIFICATION
- 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 "INSPECTOR")
- 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. REVISION(S) WILL BE IMPLEMENTED WITHIN 14 DAYS OF THE INSPECTION (3.8.5.2.e AND 3.8.5.2.f).
- 7.1.7. THE INSPECTOR SHALL CONDUCT PRE-CONSTRUCTION INSPECTIONS TO VERIFY AREAS THAT ARE NOT TO BE DISTURBED HAVE BEEN MARKED IN THE SWPPP AND IN THE FIELD BEFORE LAND DISTURBANCE ACTIVITIES BEGIN AND INITIAL MEASURES HAVE BEEN INSTALLED (10 "INSPECTOR") (3.5.1.n).
- 7.1.8. INSPECTIONS WILL BE DOCUMENTED ON THE TDOT EPSC INSPECTION REPORT (TDEC PRE-APPROVED) 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 (NOC, 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. REPORTS WILL BE SUBMITTED TO THE TDOT PROJECT SUPERVISOR PER THE CONTRACT.
- 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 (3.8.5.2.h).
- 7.2. DULY AUTHORIZED REPRESENTATIVE (7.7.3)
 - THE PROJECT SUPERVISOR MAY DELEGATE AN INDIVIDUAL AND/OR CONSULTANT TO SIGN EPSC INSPECTIONS REPORTS. FOR SATISFYING SIGNATORY REQUIREMENTS FOR EPSC INSPECTION REPORTS. THE PROJECT SUPERVISOR AND NEWLY AUTHORIZED INDIVIDUAL ACCEPTING RESPONSIBILITY MUST PERFORM THE FOLLOWING:
 - 7.2.1. COMPLETE AND SIGN THE TDOT CONSTRUCTION DIVISION EPSC DELEGATION OF AUTHORITY.
 - 7.2.2. SUBMIT THE EPSC DELEGATION OF AUTHORITY TO THE LOCAL TDEC
- 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 24 HOURS AFTER THE NEED IS IDENTIFIED. IN A CASE WHERE THE ACTIVITY IS DEEMED IMPRACTICABLE, ANY SUCH CONDITIONS WILL BE DOCUMENTED (3.5.8.2.e).
 - 7.3.2. ALL CONTROLS WILL BE MAINTAINED IN ACCORDANCE WITH TDOT 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.e).
 - 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
 - 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

STATE OF TENNESSEE epartment of transportation

SHEET NO.

S2

PROJECT NO.

HSIP-109(36)

HSIP-109(36)

YEAR

2016

TYPE

ROW

CONST

E D.O.T	DIVISION	
TENNESSEE	DESIGN	

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 TDOT 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 TDOT 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 SHALL BE PERFORMED ACCORDING TO THE TDOT ENVIRONMENTAL DIVISION COMPREHENSIVE INSPECTIONS OFFICE GUIDELINES.

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.F, 3.5.4): RIPRAP; CONCRETE MEDIAN.
- 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

9.3.1.4. 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

THESE MATERIALS WILL BE HANDLED AS NOTED IN THIS SWPPP.

9.3.2. WASTE MATERIALS (3.5.5.b)

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 PERMIT(S) CORPS OF ENGINEERS SECTION 404 PERMITS, AND TVA SECTION 26A 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).

9.3.5.2. PESTICIDES AND/OR HERBICIDES

9.3.5.3. DIESEL AND GASOLINE

9.3.5.4. MACHINERY LUBRICANTS (OIL AND GREASE)

THESE MATERIALS WILL BE HANDLED AS NOTED 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.n)
 - 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.h)?
 - YES ☐ NO ☒ IF YES, SPECIFY THE LOCATION OF THE ACTIVITY AND ITS PERMIT NUMBER.

11. SPILL PREVENTION, MANAGEMENT AND NOTIFICATION (3.5.5.c, 5.1)

11.1. SPILL PREVENTION (3.5.5.c)

11.1.1. MATERIAL MANAGEMENT

11.1.1.1. HOUSEKEEPING

ONLY NEEDED PRODUCTS 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 PRODUCT 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

- 11.1.3.1. 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 TDOT. 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.

11.2. 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 IMMINENT THREAT OF ESCAPING THE SITE AND ENTERING RECEIVING WATERS, PERSONNEL WILL RESPOND

state of tenmessee Department of transportation

SHEET NO.

S3

PROJECT NO.

HSIP-109(36)

HSIP-109(36)

YEAR

2016

TYPE

ROW

CONST

ROW CONST WILL NOT BE INFLUENCED BY OUTSIDE FACTORS (I.E. A COPY OF ANY CORRESPONDENCE TO THAT EFFECT MUST BE

- 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 SUPERINTENDENT OR THE SUPERINTENDENT'S DESIGNEE WILL BE RESPONSIBLE FOR COMPLETING THE SPILL REPORTING FORM AND FOR REPORTING THE SPILL TO THE TDOT PROJECT SUPERVISOR.
- 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. THE TDOT PROJECT SUPERVISOR IS RESPONSIBLE FOR NOTIFYING THE REGIONAL ENVIRONMENTAL COORDINATOR OR ASSISTANT REGIONAL ENVIRONMENTAL COORDINATOR AS SOON AS HE OR SHE HAS KNOWLEDGE OF THE DISCHARGE.
- 11.3.2. THE TDOT REGIONAL ENVIRONMENTAL COORDINATOR WILL NOTIFY THE LOCAL TDEC ENVIRONMENTAL FIELD OFFICE AND ANY OTHER APPLICABLE REGULATORY AGENCIES WITHIN 24 HOURS OF THE SPILL
- 11.3.3. 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.
- 11.3.4. 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. RECORD-KEEPING

12.1. REQUIRED RECORDS

TDOT OR THEIR DESIGNEE 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
- 12.1.6. COPY OF SITE EPSC INSPECTOR'S TDEC LEVEL 1 CERTIFICATION
- 12.1.7. RAINFALL MONITORING PLAN (3.5.3.1.0):

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 6 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 OR ALONG THE PROJECT SITE. AS DEFINED IN THE NOI OF THE NPDES PERMIT, IN AN OPEN AREA SUCH THAT THE MEASUREMENT

OVERHANGS, GUTTER, TREES, ETC). AT LEAST ONE RAIN GAUGE PER LINEAR MILE IS REQUIRED ALONG (AS MEASURED ALONG THE CENTERLINE OF THE PRIMARY ALIGNMENT) THE PROJECT WHERE CLEARING, GRUBBING, EXCAVATION, GRADING, CUTTING OR FILLING IS ACTIVELY PERFORMED, OR EXPOSED SOIL HAS NOT YET BEEN PERMANENTLY STABILIZED.

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 INCLUDE DATES. AMOUNTS OF RAINFALL. AND THE APPROXIMATE DURATION (OR THE STARTING AND ENDING TIMES). THE RAINFALL RECORDS SHALL BE RECORDED ON THE TDOT RAINFALL RECORD SHEET AND SHALL BE MAINTAINED IN THE "DOCUMENTATION AND PERMITS" BINDER.
- 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)

- TDOT OR THEIR DESIGNEE WILL MODIFY AND UPDATE THE SWPPP WHEN ANY OF THE FOLLOWING CONDITIONS APPLY:
- 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:
- 12.2.2. 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; WHERE LOCAL, STATE, OR FEDERAL OFFICIALS DETERMINE THAT THE SWPPP IS INEFFECTIVE IN ELIMINATING OR SIGNIFICANTLY MINIMIZING POLLUTANT SOURCES.

- 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 FOR A POLLUTANT OF CONCERN (SILTATION AND/OR HABITAT ALTERATION)

12.3. MAKING PLANS ACCESSIBLE

- 12.3.1. TDOT 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. TDOT 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, TDOT OR THEIR DESIGNEE 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, E-MAIL 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 LOCAL 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. TDOT WILL SUBMIT A NOTICE OF TERMINATION (NOT) THAT IS SIGNED IN ACCORDANCE WITH THE PERMIT TO THE TDEC CENTRAL OFFICE IN NASHVILLE, TN.
- 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
 - 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

STATE OF TENNESSEE department of transportation

SHEET NO.

S4

PROJECT NO.

HSIP-109(36)

HSIP-109(36)

TYPE

YEAR

2016

D.0.T.	VICTOR
NNESSEE	TO INO.
TEN	יבים

12.4.2.6. TEMPORARY EPSC 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)

TDOT 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.

La Omo	
AUTHORIZED TOO PERSONNEL SIGNATURE (3.3.1)	
JIM OZMENT	
PRINTED NAME	
ENVIRONMENTAL DIVISION DIRECTOR	
TITLE	
02-11-2016	

14. SECONDARY PERMITTEE (OPERATOR) CERTIFICATION (7.7.6)

DATE

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			

TYPE YEAR PROJECT NO. SHEET NO.

ROW 2016 HSIP-109(36)

CONST. 2016 HSIP-109(36) S5

15. ENVIRONMENTAL PERMITS (9.0)

LIST ALL ENVIRONMENTAL PERMITS AND EXPIRATION DATES FOR PROJECT (TO BE COMPLETED AT THE ENVIRONMENTAL PRECONSTRUCTION MEETING BY TDOT CONSTRUCTION OR THEIR DESIGNEE):

ENVIRO	DNMENTAL PERMITS	
YES OR NO	PERMIT OR TRACKING NO.	EXPIRATION DATE*
		YES OR NO PERMIT

^{*}THE TDOT ENVIRONMENTAL DIVISION MUST BE NOTIFIED SIX MONTHS PRIOR TO PERMIT EXPIRATION DATE.

STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION

E D.O.T.	NOISIAIO	
TENNESSEE	DESIGN D	

OUTFALL TABLE (3.5.1.d, 5.4.1.f)

EPSC STAGE	OUTFALL LABEL	SUB OUT- FALL	STATION CL, LT OR RT	SLOPE WITHIN ROW (%)	STAGE 1 (P1) DRAINAGE AREA (AC)	STAGE 2 (P2) DRAINAGE AREA (AC)	STAGE 3 (P3) DRAINAGE AREA (AC)	SEDIMENT BASIN OR EQUIVALENT MEASURE(S) (YES, NO OR N/A)	RECEIVING NATURAL RESOURCE NAME OR LABEL	COMMENTS
1, 2, 3	1		105+60 RT	2.2	0.6	0.6	0.6	N/A	STR-1	
1, 2, 3	2		111+00 RT	3.7	0.3	0.3	0.3	N/A	STR-1	
1, 2	3		114+70 RT	2.3	1.3	1.3		N/A	STR-1	
3	3		121+50 RT	7.0			0.2	N/A	STR-1	
1, 2, 3	4		117+20 LT	6.1	0.5	0.5	0.5	N/A	STR-1	
1, 2, 3	5		119+50 LT	5.2	0.5	0.5	0.5	N/A	STR-1	

^{*} SEE COMMENTS SECTION FOR ADDITIONAL INFORMATION REGARDING DRAINAGE AREA.

ALL UNUSED FIELDS WITHIN THE OUTFALL TABLE ARE TO BE SHADED OR HATCHED TO INDICATE THEIR NON-USAGE.

SHEET NO. HSIP-109(36) HSIP-109(36)

PROJECT NO.

state of tennessee department of transportation

Index Of Sheets SEE SHEET IA

STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION BUREAU OF ENGINEERING

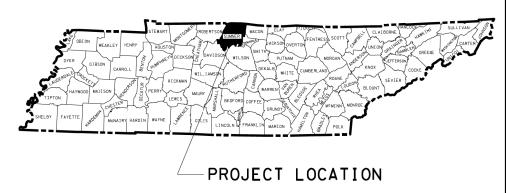
TENN. 2016 1 FED. AID PROJ. NO. HSIP-109(36) STATE PROJ. NO. 83011-3233-94

SUMNER COUNTY

STATE ROUTE 109 INTERSECTION AT OLD STATE HIGHWAY 109.

CONSTRUCTION

STATE HIGHWAY NO. 109 F.A.H.S. NO. 109



83011-3233-94 <u>BEGIN PROJ. HSIP-109(36) CONST.</u> STA. 105+30.19 N 762075.192 E 1832126.383

NO R.O.W. OR EASEMENT ACQUISITION IS REQUIRED

SOUTH TUTTING AST OF THE PROPERTY OF THE PROPE

SCALE: 1"= 1 MILE

ROADWAY LENGTH
BRIDGE LENGTH
BOX BRIDGE LENGTH
PROJECT LENGTH

0.316 MILES 0.000 MILES 0.000 MILES 0.316 MILES 83011-3233-94 END PROJ. HSIP-109(36) CONST. STA. 122+00.00 (SR-109) N 763481.382 E 1832823.223

UNOFFICIAL SET

NOT FOR BIDDING

NO EXCLUSIONS
NO EQUATIONS

TRAFFIC	DATA
ADT (2016)	16,080
ADT (2036)	33,440
DHV (2036)	3,669
D	52 - 48
T (ADT)	10 %
T (DHV)	7 %
٧	65 MPH

SURVEY RECEIVED: 06/09/15



APPROVED:

DATE:

APPROVED:

JOHN SCHROER, COMMISSIONER

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

APPROVED:

DIVISION ADMINISTRATOR

DATE

SPECIAL NOTES

PROPOSALS MAY BE REJECTED BY THE COMMISSIONER IF ANY OF THE UNIT PRICES CONTAINED THEREIN ARE OBVIOUSLY UNBALANCED, EITHER EXCESSIVE OR BELOW THE REASONABLE COST ANALYSIS VALUE.

THIS PROJECT TO BE CONSTRUCTED UNDER THE STANDARD SPECIFICATIONS OF THE TENNESSEE DEPARTMENT OF TRANSPORTATION DATED JANUARY 1, 2015 AND ADDITIONAL SPECIFICATIONS AND SPECIAL PROVISIONS CONTAINED IN THE PLANS AND IN THE PROPOSAL CONTRACT.

TDOT ROAD SP. SV. 2 BRAD ABEL, P.E.

DESIGNER JACOB BROOKS AND SCOTT JOHNSON CHECKED BY RYAN SWEENEY, P.E.

P.E. NO. 83011-1233-94 (DESIGN)

PIN NO. 121823.00

INDEX

STANDARD ROADWAY DRAWINGS

DWG. NO REV.

T-M-3

T-M-4

T-M-16

T-PBR-1

T-PBR-2

T-S-9

T-S-10

T-S-16

T-S-16A

T-S-17

T-S-18

T-S-19

T-WZ-10

T-WZ-11

T-WZ-18

T-WZ-40

T-WZ-41

EC-STR-2

EC-STR-3B

EC-STR-3C

EC-STR-3E

EC-STR-6

EC-STR-19

EC-STR-25

EC-STR-27

EC-STR-33

EC-STR-34

EC-STR-37

STD-17-10

STD-17-14

EC-STR-11A 08-01-12

EC-STR-33A 08-01-12

07-24-14

07-24-14

07-24-14

06-30-09

11-01-11

16-10-14

04-04-12

07-02-15

07-02-15

07-02-15

02-14-14

07-19-15

04-02-12

03-13-09

03-13-09

04-02-12

04-02-12

08-01-12

08-01-12

08-01-12

04-01-08

08-01-12

04-01-08

08-01-12

08-01-12

08-01-12

08-01-12

06-10-14

DESCRIPTION

ROADS

DELINEATORS

DETAILS

FREEWAYS

DIVIDED HIGHWAYS

INTERSECTIONS

INTERSECTIONS

SEDIMENT FILTER BAG

ROCK CHECK DAM

INSTALLATION

BRIDGE APPURTENANCES (LRFD BOX CULVERTS)

SEDIMENT TUBE

SILT FENCE WITH WIRE BACKING

CULVERT PROTECTION TYPE 2

CATCH BASIN PROTECTION

EXIT, CONSTRUCTION FORD

SILT FENCE FABRIC JOINING DETAILS

TEMPORARY SLOPE DRAIN AND BERM

SUSPENDED PIPE DIVERSION (DOWNSTREAM)

SUSPENDED PIPE DIVERSION (UPSTREAM)

EROSION CONTROL BLANKET FOR SLOPE

TYPICAL WINGWALL DETAILS AND NOTES

WINGWALL DIMENSIONS AND QUANTITIES

TEMPORARY CULVERT CROSSING, CONSTRUCTION

EROSION PREVENTION AND SEDIMENT CONTROL

SILT FENCE

ALUMINUM-STEEL DESIGN

MARKING STANDARDS FOR TRAFFIC ISLANDS,

MEDIANS & PAVED SHOULDERS ON CONVENTIONAL

ASPHALT SHOULDER RUMBLE STRIPE INSTALLATION

DETAILS FOR NON-ACCESS CONTROLLED ROUTES

INTERCONNECTED PORTABLE BARRIER RAIL

DETAIL FOR VERTICAL PANELS AND FLEXIBLE

STANDARD LAYOUT GROUND MOUNTED SIGNS

STANDARD MOUNTING DETAILS FLAT SHEET SIGNS

GROUND MOUNTED ROADSIDE SIGN PLACEMENT

GROUND MOUNTED ROADSIDE SIGN PLACEMENT

END OF ROADWAY AND DEAD END SIGNS, METAL BARRICADES (TYPE III) & WORK ZONE SPEED SIGNS

ADVANCE ROAD WORK SIGNING ON HIGHWAYS AND

ONE LANE CLOSURE DETAIL ON DIVIDED HIGHWAYS

SHOULDER CLOSURE DETAIL FOR FREEWAYS AND

RIGHT LANE CLOSURES AT NEAR SIDE OF

LEFT LANE CLOSURES AT NEAR SIDE OF

STANDARD GROUND MOUNTED SIGN USING PERFORATED/KNOCKOUT SQUARE TUBE

STANDARD STEEL SIGN SUPPORTS

STANDARD INTERSECTION PAVEMENT MARKINGS

SHEET NAME	SHEET NO.
TITLE SHEET	1
ROADWAY INDEX AND STANDARD DRAWINGS INDEX	1A
PROJECT COMMITMENTS	1B
ESTIMATED ROADWAY QUANTITIES	2
TYPICAL SECTIONS AND PAVING SCHEDULE	2A – 2E
GENERAL & SPECIAL NOTES	2F – 2H
TABULATED QUANTITIES	2 J
RAISED MEDIAN DETAILS	2K
PROPERTY MAPS AND RIGHT-OF-WAY ACQUISITION TABLES	3 – 3A
PRESENT LAYOUTS	4 - 5
PROPOSED LAYOUTS	4A - 5A
PROPOSED PAVEMENT	4B – 5B
PROPOSED PROFILES	4C – 5C
PROFILE OF SIDE ROADS AND STREETS	6
PROFILE OF PRIVATE DRIVES	7
DRAINAGE MAP	8
CULVERT SECTIONS	9
EROSION PREVENTION AND SEDIMENT CONTROL (EPSC) NOTES.	10
EROSION PREVENTION AND SEDIMENT CONTROL PLAN	11–11B, 12–12B
TRAFFIC CONTROL NOTES	13
TRAFFIC CONTROL PHASE I	14 – 14A
TRAFFIC CONTROL PHASE II	15 – 15A
TRAFFIC CONTROL PHASE III	16 – 16A
PAVEMENT STRIPING DETAILS	17 – 17A
PROPOSE SIGNING DETAILS	18 – 18A
SIGN SCHEDULE	19 – 19A
SOILS SHEETS	20
ROADWAY CROSS SECTIONS	21 - 32
SIDE ROAD CROSS SECTIONS	33 - 34
STORM WATER POLLUTION PREVENTION PLAN (SWPPP) INDEX	S-1

DWG. NO	REV.	DESCRIPTION
ROADWAY	DESIGN S	TANDARDS
RD-A-1	12-18-99	STANDARD ABBREVIATIONS
RD-L-1	10-26-94	STANDARD LEGEND
RD-L-2	09-05-01	STANDARD LEGEND FOR UTILITY INSTALLATIONS
RD-L-5	05-01-08	STANDARD LEGEND FOR EROSION PREVENTION AND SEDIMENT CONTROL
RD-L-6	03-30-10	STANDARD LEGEND FOR EROSION PREVENTION AND SEDIMENT CONTROL
RD-L-7	05-24-12	STANDARD LEGEND FOR EROSION PREVENTION AND SEDIMENT CONTROL
RD-UD-3	09-05-96	UNDERDRAIN DETAILS
RD-UD-4	05-27-01	UNDERDRAIN LATERAL DETAILS
RD-UD-9	12-18-94	LATERAL UNDERDRAIN ENDWALL DETAIL FOR 6:1 SLOPES
RD01-S-11	04-04-03	DESIGN AND CONSTRUCTION DETAILS FOR ROADSIDE SLOPE DEVELOPMENT
RD01-S-11A	10-15-02	ROADSIDE DITCH DETAILS FOR DESIGN AND CONSTRUCTION
RD01-S-12	08-01-09	CLEAR ZONE CRITERIA
RD01-SD-1		INTERSECTION SIGHT DISTANCE DESIGN AND GENERAL NOTES
RD01-SD-2		INTERSECTION SIGHT DISTANCE LANDSCAPE AND OBSTRUCTION
RD01-SD-5		INTERSECTION SIGHT DISTANCE 4-LANE DIVIDED HIGHWAYS
RD01-TS-1	10-15-02	DESIGN STANDARDS FOR LOCAL ROADS AND STREETS
RD01-TS-3A	10-15-02	DESIGN STANDARDS 4 AND 6 LANE ARTERIAL HIGHWAYS WITH DEPRESSED MEDIANS
DRAINAGE	- CULVER	TS AND ENDWALL
D-PB-1	01-29-14	STANDARD DETAILS CLASS "B" BEDDING AND CULVERT EXCAVATION
D-PB-2	04-23-15	STANDARD DETAILS FOR PLASTIC PIPE INSTALLATION
D-PE-4	04-23-15	STRAIGHT TYPE CONCRETE ENDWALL
D-PE-18A	01-06-15	18" CONCRRETE ENDWALL CROSS DRAIN
D-PE-18B		18" CONCRRETE ENDWALL CROSS DRAIN
DRAINAGE	-CATCH B	ASINS AND MANHOLES
D-CB-38S	08-01-12	STANDARD 32" X 32" SQUARE CONCRETE NO. 38
ROADWAY	AND PAVI	EMENT APPURTENANCES
RP-DHO-1	10-26-93	MEDIAN OPENINGS ON 4-LANE DIVIDED HIGHWAY
RP-R-1	05-27-01	STANDARD RAMPS TO SIDE ROADS
TRAFFIC C	ONTROL A	PPURTENANCES
T-FAB-1	05-27-97	FLASHING YELLOW ARROW BOARD
INSTALLATION	I	
T-M-1	07-24-14	DETAILS OF PAVEMENT MARKINGS FOR CONVENTIONAL ROADS AND MARKING ABBREVIATIONS
T-M-2	07-24-14	DETAILS OF PAVEMENT MARKINGS FOR CONVENTIONAL ROADS

TYPE	YEAR	PROJECT NO.	NO.
CONST.	2016	HSIP-109(36)	1 A

REV. 02-01-16: ADDED SHEET NOS. 11B AND 12B TO INDEX. REMOVED EC-STR-11 FROM STANDARD ROADWAY DRAWINGS. ADDED EC-STR-2, EC-STR-11A, EC-STR-33, AND EC-STR-33A TO STANDARD ROADWAY DRAWINGS.

UNOFFICIAL SET NOT FOR BIDDING



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

INDEX OF STANDARD DRAWINGS

TYPE	YEAR	PROJECT NO.	NO.
CONST.	2016	HSIP-109(36)	1 B

PROJECT COMMITMENTS						
COMMITMENT ID	SOURCE DIVISON	DESCRIPTION	STA. / LOCATION			
EDEC001	ENVIRONMENTAL DIVISION, ECOLOGY	TDOT HAS COMMITTED TO SEASONAL TREE REMOVAL ON THIS PROJECT. THE USFWS HAS GIVEN TDOT A FINDING OF NOT LIKELY TO ADVERSELY AFFECT FOR THE INDIANA BAT AND NORTHERN LONG-EARED BAT, PROVIDED THAT THE TREE CUTTING ON THIS PROJECT IS DONE BETWEEN OCTOBER 15 AND MARCH 31.				



RYAN RYAN AGRICULTURE

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PROJECT COMMITMENTS

	ESTIMATED ROADWAY QUANTITIES	1	ī
ITEM NO.	DESCRIPTION	UNIT	QUANTIT
105-01	CONSTRUCTION STAKES, LINES AND GRADES	LS	1
201-01	CLEARING AND GRUBBING	LS	1
202-02.01	REMOVAL OF PIPE (48" RCP ,OLD STATE HWY 109 STA.21+05.03)	L.F.	74
203-01	ROAD & DRAINAGE EXCAVATION (UNCLASSIFIED)	C.Y.	3318
203-02.01	BORROW EXCAVATION (GRADED SOLID ROCK)	TON	306
209-02.05	12" TEMPORARY SLOPE DRAIN	L.F.	200
209-05	SEDIMENT REMOVAL	C.Y.	1000
209-08.02	TEMPORARY SILT FENCE (WITH BACKING)	L.F.	2750
209-08.03	TEMPORARY SILT FENCE (WITHOUT BACKING)	L.F.	1900
209-08.07	ROCK CHECK DAM PER	EACH	12
209-09.03	SEDIMENT FILTER BAG (15' X 15')	EACH	2
209-40.30	CATCH BASIN PROTECTION (TYPE A)	EACH	4
209-40.31	CATCH BASIN PROTECTION (TYPE B)	EACH	1
209-10.01	TEMPORARY DEWATERING STRUCTURE	C.Y.	8
303-01	MINERAL AGGREGATE, TYPE A BASE, GRADING D	TON	5851
307-01.01	ASPHALT CONCRETE MIX (PG64-22) (BPMB-HM) GRADING A	TON	175
307-01.08	ASPHALT CONCRETE MIX (PG64-22) (BPMB-HM) GRADING B-M2	TON	125
307-02.01	ASPHALT CONCRETE MIX (PG70-22) (BPMB-HM) GRADING A	TON	1175
307-02.02	ASPHALT CEMENT (PG70-22)(BPMB-HM) GRADING A-S	TON	50
307-02.03	AGGREGATE (BPMB-HM) GRADING A-S MIX	TON	825
307-02.08	ASPHALT CONCRETE MIX (PG70-22) (BPMB-HM) GRADING B-M2	TON	750
402-01	BITUMINOUS MATERIAL FOR PRIME COAT (PC)	TON	24
402-02	AGGREGATE FOR COVER MATERIAL (PC)	TON	52
403-01	BITUMINOUS MATERIAL FOR TACK COAT (TC)	TON	12
411-01.07	ACS MIX (PG64-22) GRADING E SHOULDER	TON	426
411-01.10	ACS MIX(PG64-22) GRADING D	TON	151
411-02.10	ACS MIX(PG70-22) GRADING D	TON	1024
411-12.01	SCORING SHOULDERS (CONTINUOUS) (16IN WIDTH)	L.M.	1
411-12.02	SCORING SHOULDERS (NON-CONTINUOUS) (16IN WIDTH)	L.M.	1
415-01.01	COLD PLANING BITUMINOUS PAVEMENT	TON	911
604-01.01	CLASS A CONCRETE (RAISED PAVEMENT ISLAND)	C.Y.	685
604-02.01	CLASS A CONCRETE (BOX BRIDGES)	C.Y.	130
604-02.02	STEEL BAR REINFORCEMENT (BOX BRIDGES)	LB.	19545
607-09.30	48" PIPE CULVERT	L.F.	103
607-50.06	PRECAST CONCRETE BOX CULVERT (12' X 8')	L.F.	62
702-01	CONCRETE CURB	C.Y.	108
705-02.02	SINGLE GUARDRAIL (TYPE 2)	L.F.	1026
705-04.03	GUARDRAIL TERMINAL (TYPE 13)	EACH	2
705-04.07	TAN ENERGY ABSORBING TERM (NCHRP 350, TL3)	EACH	8
705-08.51	PORTABLE IMPACT ATTENUATOR NCHRP350 TL-3	EACH	8
706-01	GUARDRAIL REMOVED	L.F.	776
707-08.11	HIGH-VISIBILITY CONSTRUCTION FENCE	L.F.	400
709-05.05	MACHINED RIP-RAP (CLASS A-3)	TON	150
709-05.06	MACHINED RIP-RAP (CLASS A-1)	TON	250

FOOTNOTES

1,2 1,2 1,2 1,2 1,2 1,2 1,2 1,2

- . SEE SUBSECTION 209.07 OF THE STANDARD SPECIFICATIONS FOR MAINTANCE REPLACEMENT.
- 2. ALL QUANTITIES TO BE USED AS DIRECTED BY THE ENGINEER.
- 3. THE CONTRACTOR SHALL COMPLY WITH SECTION 712 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION REGARDING TEMPORARY TRAFFIC CONTROL AND THE CURRENT EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
- 4. IN THE EVENT THAT A CONSTRUCTION AND/OR REGULATORY SIGN IS TEMPORAIRILY DESIGNATED NOT IN USE DURING THE CONSTRUCTION PHASE OF A PROJECT, THE CONTRACTOR SHALL CHOOSE A SIGN COVERING METHOD FROM A DESIGNATED LIST OF METHODS ACCEPTED BY THE DEPARTMENT. SAID SIGN COVERING METHOD SHALL BE SELECTED FROM QUALIFIED PRODUCTS LIST 10, SECTION D OR APPROVED BY THE DIVISION OF MATERIALS AND TEST AND SHALL BE USED TO COVER THESE SIGNS. NO OTHER METHOD FOR SIGN COVERING WILL BE ALLOWED. TEMPORARY SIGN COVERINGS SHALL NOT BE PAID FOR DIRECTLY BUT SHALL BE INCLUDED IN THE PRICE BID FOR ITEM NO. 712-06 SIGNS (CONSTRUCTION).
- 5. REMOVE SIGNS, SUPPORTS AND FOOTINGS ON APPROXIMATELY 20 EXISTING SIGNS WITHIN THE PROJECT LIMITS OR AS DIRECTED BY THE ENGINEER.

	ESTIMATED ROADWAY QUANTITIES								
	ITEM NO.	DESCRIPTION	UNIT	QUANTITY					
3	712-01	TRAFFIC CONTROL	LS	1					
	712-02.02	INTERCONNECTED PORTABLE BARRIER RAIL	L.F.	7140					
	712-04.01	FLEXIBLE DRUMS (CHANNELIZING)	EACH	155					
	712-05.01	WARNING LIGHTS (TYPE A)	EACH	20					
4	712-06	SIGNS (CONSTRUCTION)	S.F.	336					
	712-08.03	ARROW BOARD (TYPE C)	EACH	2					
	713-11.01	"U" SECTION STEEL POSTS	LB.	200					
	713-11.02	PERFORATED/KNOCKOUT SQUARE TUBE POST	LB.	1200					
	713-11.21	P POST SLIP BASE	EACH	8					
	713-11.22	U POST SLIP BASE	EACH	2					
	713-13.02	FLAT SHEET ALUMINUM SIGNS (0.080" THICK)	S.F.	182					
	713-13.03	FLAT SHEET ALUMINUM SIGNS (0.100" THICK)	S.F.	198					
5	713-15	REMOVAL OF SIGNS, POSTS AND FOOTINGS	LS	1					
	716-01.23	SNWPLWBLE PVMT MRKRS (BI-DIR)(2 COLOR)	EACH	145					
	716-02.04	PLASTIC PAVEMENT MARKING(CHANNELIZATION STRIPING)	S.Y.	145					
	716-02.05	PLASTIC PAVEMENT MARKING (STOP LINE)	L.F.	40					
	716-02.06	PLASTIC PAVEMENT MARKING (TURN LANE ARROW)	EACH	20					
	716-03.01	PLASTIC WORD PAVEMENT MARKING (ONLY)	EACH	7					
	716-04.12	PLASTIC PAVEMENT MARKING (YIELD LINE)	S.F.	123					
	716-05.20	PAINTED PAVEMENT MARKING (6" LINE)	L.M.	2					
6	716-05.50	PAINTED PAVEMENT MARKINGS(8" LINE)	L.F.	740					
	716-12.02	ENHANCED FLATLINE THERMO PVMT MRKNG (6IN LINE)	L.M.	2					
	716-12.05	ENHANCED FLATLINE THERMO PVMT MRKNG (6IN DOTTED LINE)	L.F.	1950					
6	716-12.06	ENHANCED FLAT LINE THERMO (8IN LINE)	L.F.	740					
	717-01	MOBILIZATION	LS	1					
1,2	740-10.03	GEOTEXTILE (TYPE III)(EROSION CONTROL)	S.Y.	590					
1,2	740-10.04	GEOTEXTILE (TYPE IV) (STABILIZATION)	S.Y.	204					
1,2	801-01.07	TEMPORARY SEEDING (WITH MULCH)	UNIT	7					
1,2	801-02	SEEDING (WITHOUT MULCH)	UNIT	21					
1,2	801-03	WATER (SEEDING & SODDING)	M.G.	5					
1,2	803-01	SODDING (NEW SOD)	S.Y.	4500					
1,2	805-12.02	EROSION CONTROL BLANKET (TYPE II)	S.Y.	743					

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2016	HSI P-1 09(36)	2

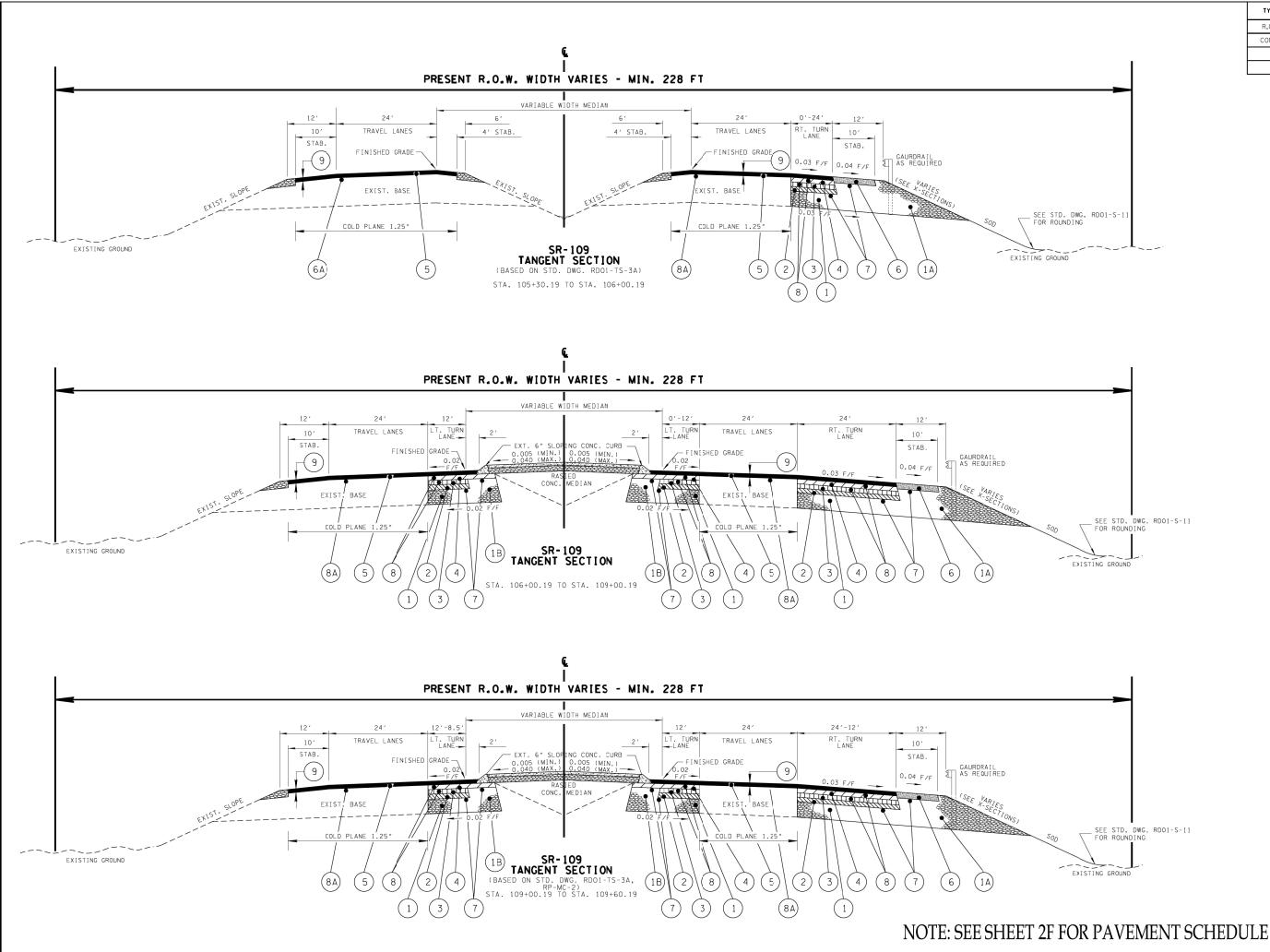
REV. 02-01-16: ADDED ITEM NOS. 209-09.03, 209-40.31, AND 209-10.01 TO ESTIMATED ROADWAY QUANTITIES.





STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

ESTIMATED ROADWAY QUANTITIES



 TYPE
 YEAR
 PROJECT NO.
 SHEET NO.

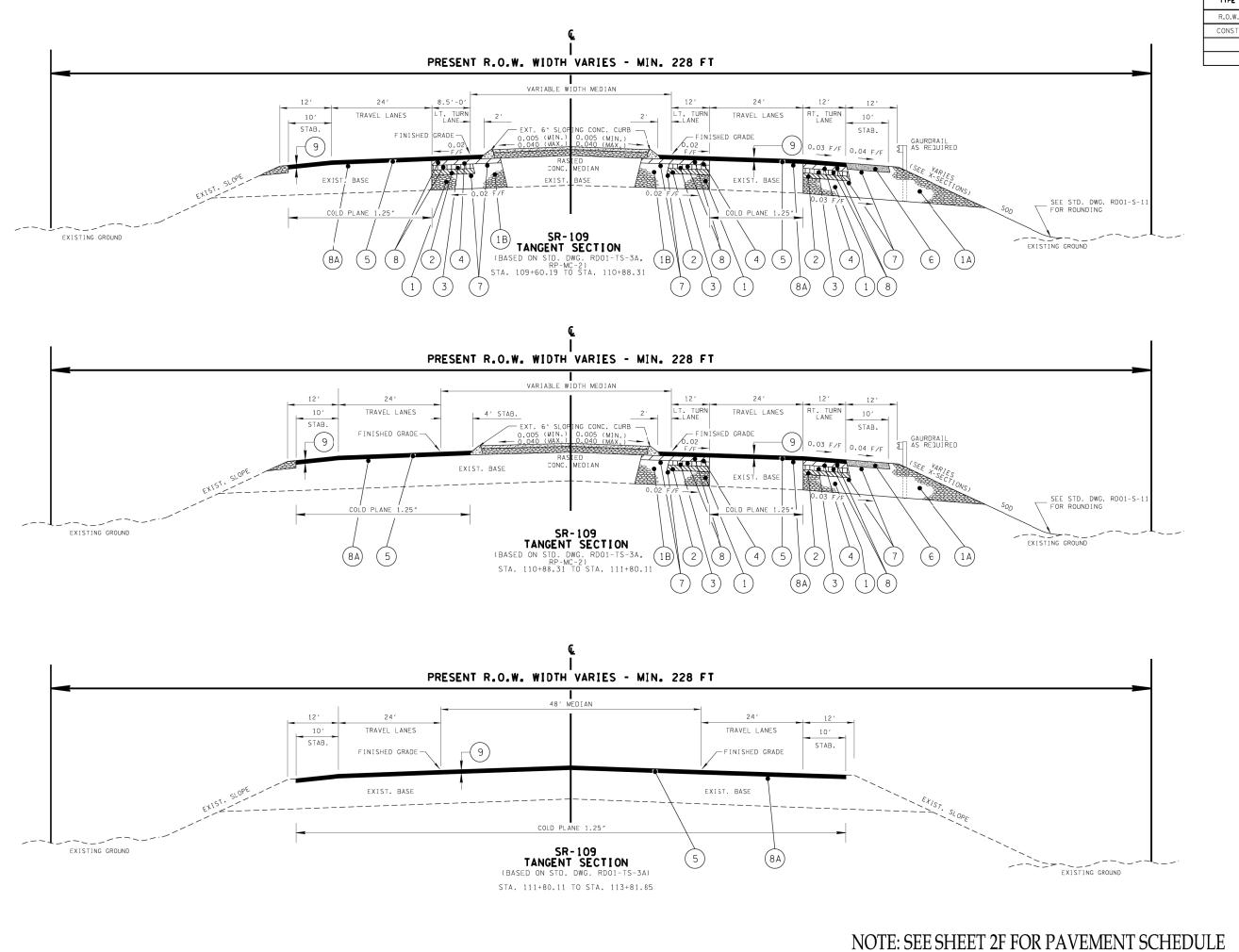
 R.O.W.
 2015
 HSIP-109(36)
 2

 CONST.
 2016
 HSIP-109(36)
 2A

UNOFFICIAL SET NOT FOR BIDDING



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION



 TYPE
 YEAR
 PROJECT NO.
 SMEET NO.

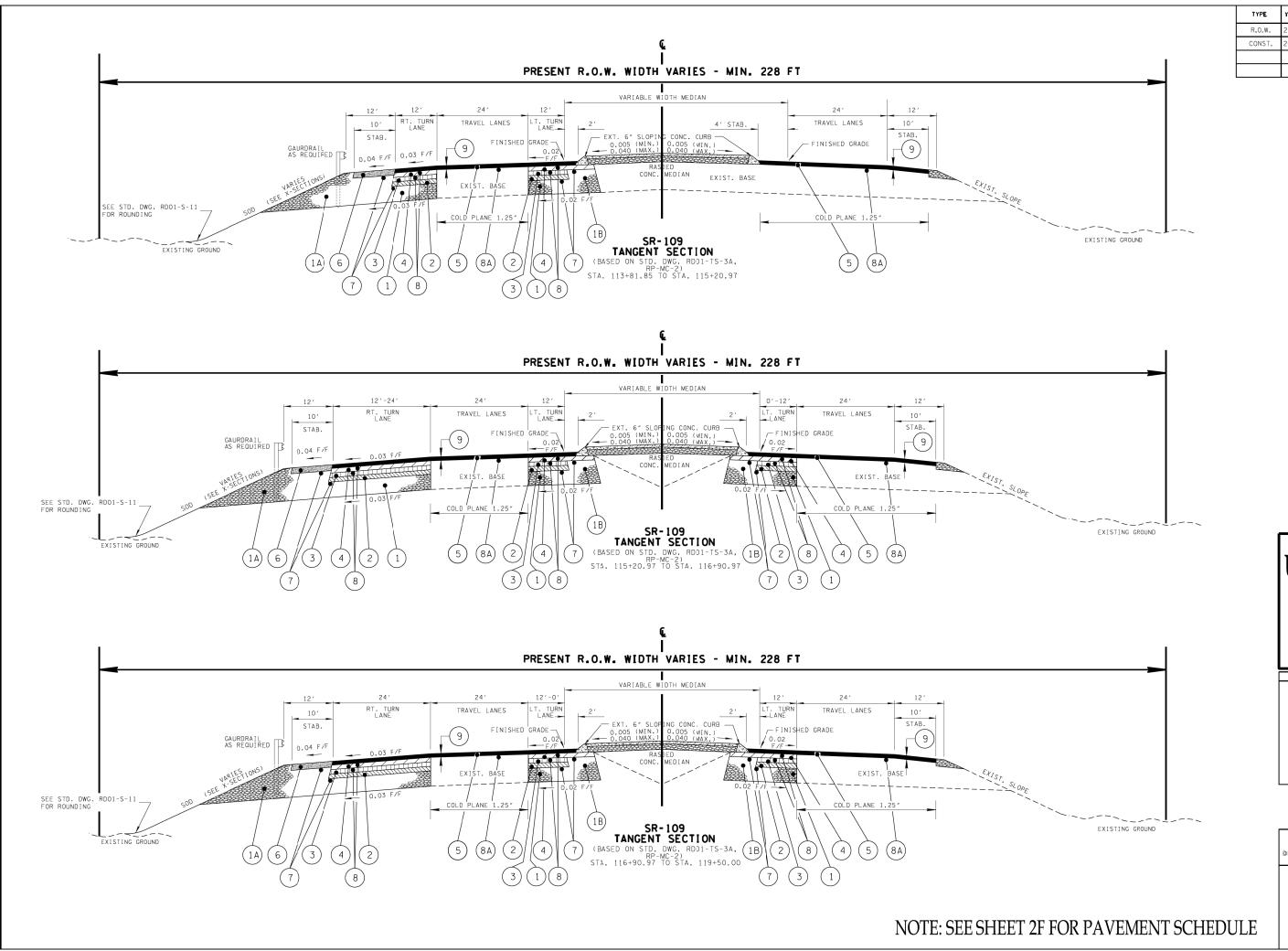
 R.O.W.
 2015
 HSI P-1 09(36)
 2A

 CONST.
 2016
 HSI P-1 09(36)
 2B

UNOFFICIAL
SET
NOT FOR
BIDDING



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION



 TYPE
 YEAR
 PROJECT NO.
 SHEET NO.

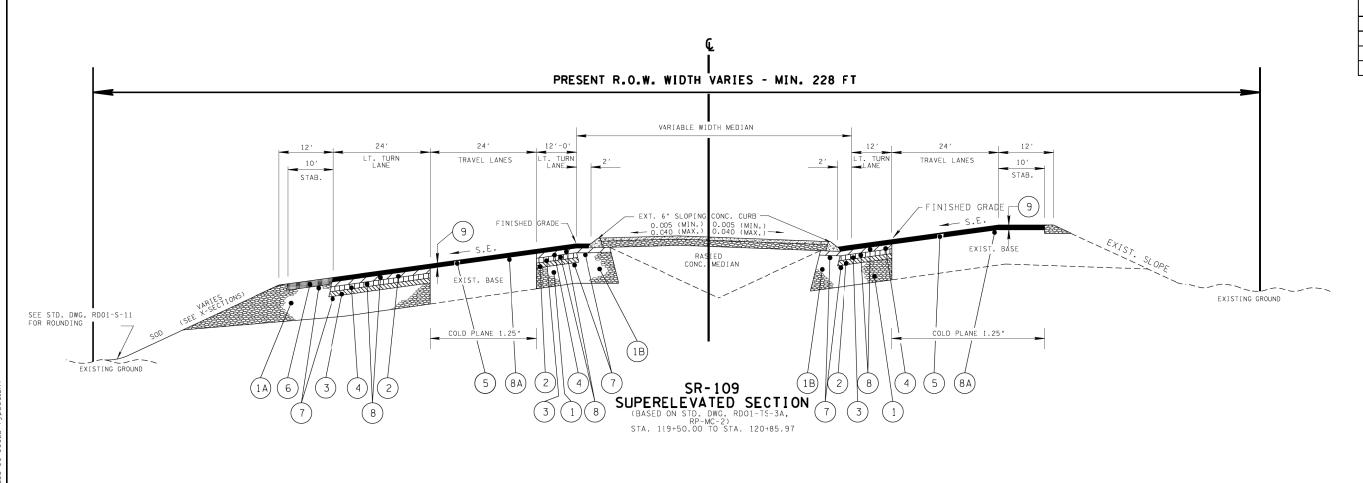
 R.O.W.
 2015
 HSIP-109(36)
 2B

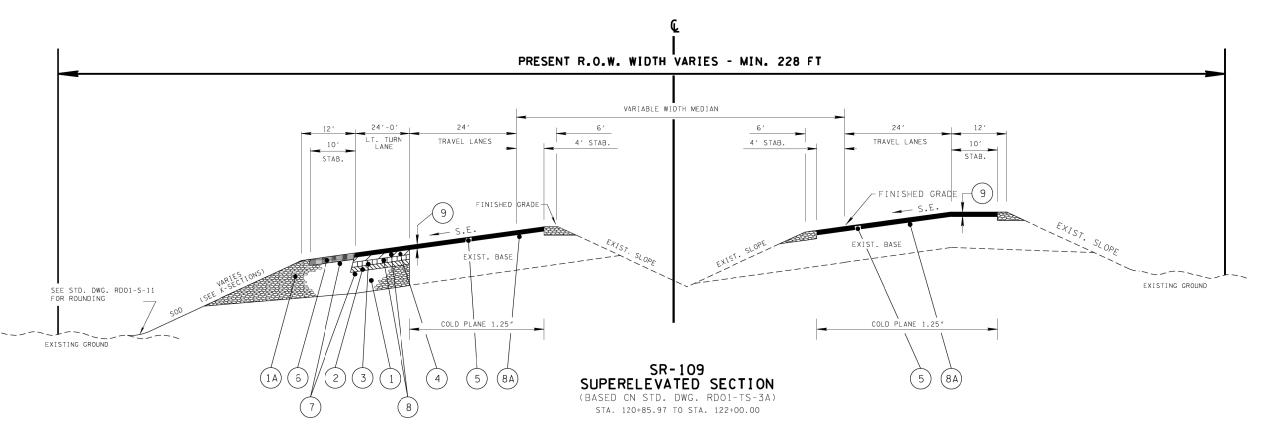
 CONST.
 2016
 HSIP-109(36)
 2C

UNOFFICIAL
SET
NOT FOR
BIDDING



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION



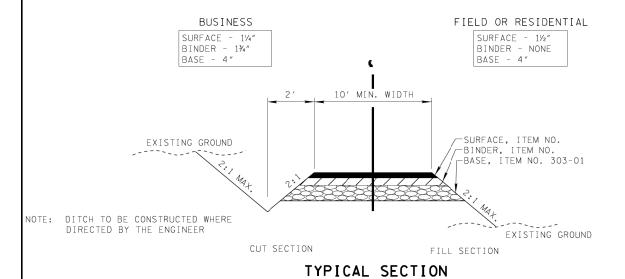




HSI P-1 09(36)



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION



PRIVATE DRIVE TO BUSINESS, FIELD, OR RESIDENTIAL PROPERTY

PROPOSED PAVE	EMENT SCHEDULE
1 STONE @ 8" THICK 303-01 MIN. AGG., TYPE A BASE, GRADING D	5 SURFACE @ 1.25" THICK (APPROX. 132.5 LBS/SY) 411-02.10 ACS MIX (PG70-22) GRADING D
STONE @ 15.75" THICK 303-01 MIN. AGG., TYPE A BASE, GRADING D	6 SURFACE @ 1.50 THICK (APPROX. 154.5 LBS/SY) 411-02.07 ACS
(1B) STONE @ 14" THICK 303-01 MIN. AGG., TYPE A BASE, GRADING D	7 PRIME COAT 402-01 BITUMINOJS MATERIAL FOR PRIME COAT (PC) @ 0.35 GAL/SY 402-02 AGGREGATE FOR COVER MATERIAL (PC) @ 12 LSB/SY
2 BASE @ 3" THICK (APPROX. 270 LBS/SY) 307-02.02 ASPHALT CEMENT (PG70-22) (BPMB-HM) GRADING A-S 307-02.03 AGGREGATE (BPMB-HM) GRADING A-S MIX	8 TACT COAT @ 0.07 GAL/SY 403-01 BITUMINOJS MATERIAL FOR TACT COAT (TC)
3 BASE @ 3" THICK (APPROX. 345 LBS/SY) 307-02.01 ASPHALT CONCRETE MIX (PG70-22) (BPMB-HM) GRADING A	8A) TACT COAT @ 0.1 GAL SY 403-01 BITUMINOJS MATERIAL FOR TACT COAT (TC)
4 BINDER @ 2" THICK (APPROX. 226 LBS/SY) 307-02.08 ASPHALT CONCRETE MIX (PG70-22) (BPMB-HM) GRADING B-M2	9 COLD PLANING @ 1.25" THICK 415-01.01 COLD PLANING BITUMINOUS PAVEMENT

SEALED BY

RYAN

RYAN

AGRICULTURE

OF TENNE

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES

GRADING

- (1) ANY AREA THAT IS DISTRESSED OUTSIDE LIMITS OF CONSTRUCTION DURING THE LIFE OF THIS PROJECT SHALL BE REPAIRED BY THE CONTRACTOR AT HIS EXPENSE
- (2) CERTIFICATION FOR ALL BORROW PITS MUST BE OBTAINED IN ACCORDANCE WITH SUBSECTION 107.06 OF THE STANDARD SPECIFICATIONS.
- 3) THE CONTRACTOR SHALL NOT DISPOSE OF ANY MATERIAL EITHER ON OR OFF STATE-OWNED R.O.W. IN A REGULATORY FLOODWAY AS DEFINED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY WITHOUT APPROVAL BY THE SAME. ALL MATERIAL SHALL BE DISPOSED OF IN UPLAND (NON-WETLAND) AREAS AND ABOVE ORDINARY HIGH WATER OF ANY ADJACENT WATERCOURSE. THIS DOES NOT ELIMINATE THE NEED TO OBTAIN ANY OTHER LICENSES OR PERMITS THAT MAY BE REQUIRED BY ANY OTHER FEDERAL, STATE, OR LOCAL AGENCY.

SEEDING AND SODDING

- (4) SOD SHALL BE PLACED AT LOCATIONS SHOWN ON THE PLANS TO PREVENT DAMAGE TO ADJACENT FACILITIES AND PROPERTY DUE TO EROSION ON ALL NEWLY GRADED CUT AND FILL SLOPES AS WORK PROGRESSES.
- (5) ITEM NO. 801-01.07, TEMPORARY SEEDING (WITH MULCH), SHALL BE USED WHERE EROSION CONTROL BLANKET OR SOD ARE NOT APPLIED.

DRAINAGE

- (6) THE CONTRACTOR SHALL SHAPE DITCHES TO THE SPECIFIED DESIGN. THIS WORK WILL NOT BE MEASURED AND PAID FOR DIRECTLY, BUT THE COST WILL BE INCLUDED IN THE COST OF OTHER ITEMS.
- (7) CULVERT EXCAVATION FOR CONCRETE BOX OR SLAB TYPE CULVERTS OR BRIDGES WILL NOT BE MEASURED AND PAID FOR DIRECTLY, BUT THE COST WILL BE INCLUDED IN THE COST OF OTHER ITEMS.
- (8) THE CUTTING OF INLET AND OUTLET DITCHES WHERE SHOWN ON PLANS OR AS DIRECTED BY THE ENGINEER WILL BE MEASURED AND PAID FOR AS ITEM NO. 203-01 ROAD AND DRAINAGE EXCAVATION (UNCLASSIFIED).
- (9) WHERE A CULVERT (PIPE, SLAB, OR BOX) IS MOVED TO A NEW LOCATION OTHER THAN THAT SHOWN IN THE PLANS, INCREASING OR DECREASING THE AMOUNT OF CULVERT EXCAVATION, NO INCREASE OR DECREASE IN THE AMOUNT OF PAYMENT WILL BE MADE DUE TO SUCH CHANGE.
- (10) DURING CONSTRUCTION OF DRAINAGE STRUCTURES ALL COST ASSOCIATED WITH MAINTAINING THE FLOW OF WATER AND TRAFFIC, AT THESE STRUCTURES, DURING THE PHASED CONSTRUCTION OF THIS PROJECT ARE TO BE INCLUDED IN THE UNIT PRICE OF THE DRAINAGE STRUCTURES AND TRAFFIC CONTROL ITEMS.

UTILITIES

- (11) THE LOCATIONS OF UTILITIES SHOWN WITHIN THESE PLANS ARE APPROXIMATE ONLY. EXACT LOCATIONS SHALL BE DETERMINED IN THE FIELD BY CONTACTING THE UTILITY COMPANIES INVOLVED. NOTIFICATION BY CALLING THE TENNESSEE ONE CALL SYSTEM INC., AT 1-800-351-1111 AS REQUIRED BY TCA 65-31-106 WILL BE REQUIRED.
- (12) UNLESS OTHERWISE NOTED, ALL UTILITY ADJUSTMENTS WILL BE PERFORMED BY THE UTILITY OR IT'S REPRESENTATIVE. THE CONTRACTOR AND UTILITY OWNERS WILL BE REQUIRED TO COOPERATE WITH EACH OTHER IN ORDER TO EXPEDITE THE WORK REQUIRED BY THIS CONTRACT. ON CONTRACTORS WHERE CONSTRUCTION STAKES, LINES, AND GRADES ARE CONTRACT ITEMS, THE CONTRACTOR WILL BE REQUIRED TO PROVIDE RIGHT-OF-WAY OR SLOPE STAKES, DITCH OR STREAM BED GRADES, OR OTHER ESSENTIAL SURVEY STAKING TO PREVENT CONFLICTS WITH THE HIGHWAY CONSTRUCTION. FREQUENTLY, THIS WILL BE REQUIRED AS THE FIRST ITEM OF WORK AND AT ANY LOCATION ON THE PROJECT DIRECTED BY THE ENGINEER.

- (13) THE CONTRACTOR WILL PROVIDE ALL NECESSARY PROTECTIVE MEASURES TO SAFEGUARD EXISTING UTILITIES FROM DAMAGE DURING CONSTRUCTION OF THE PROJECT. IN THE EVENT THAT SPECIAL EQUIPMENT IS REQUIRED TO WORK OVER AND AROUND THE UTILITIES, THE CONTRACTOR WILL BE REQUIRED TO FURNISH SUCH EQUIPMENT. THE COST OF PROTECTING UTILITIES FROM DAMAGE AND FURNISHING WILL BE INCLUDED IN THE PRICE BID FOR OTHER ITEMS OF CONSTRUCTION.
- (14) PRIOR TO SUBMITTING HIS BID, THE CONTRACTOR WILL BE SOLELY RESPONSIBLE FOR CONTACTING OWNERS OF ALL AFFECTED UTILITIES IN ORDER TO DETERMINE THE EXTENT TO WHICH UTILITY RELOCATIONS AND/OR ADJUSTMENTS WILL HAVE UPON THE SCHEDULE OF WORK FOR THE PROJECT. WHILE SOME WORK MAY BE REQUIRED 'AROUND' UTILITY FACILITIES THAT WILL REMAIN IN PLACE, OTHER UTILITY FACILITIES MAY NEED TO BE ADJUSTED CONCURRENTLY WITH THE CONTRACTORS OPERATIONS. ADVANCE CLEAR CUTTING MAY BE REQUIRED BY THE ENGINEER AT ANY LOCATION WHERE CLEARING IS CALLED FOR IN THE SPECIFICATIONS AND CLEAR CUTTING IS NECESSARY FOR A UTILITY RELOCATION. ANY ADDITIONAL COST WILL BE INCLUDED IN THE UNIT PRICE BID FOR THE CLEARING ITEM SPECIFIED IN THE PLANS
- (15) THE CONTRACTOR SHALL NOTIFY EACH INDIVIDUAL UTILITY OWNER OF HIS PLAN OF OPERATION IN THE AREA OF THE UTILITIES, PRIOR TO COMMENCING WORK, THE CONTRACTOR SHALL CONTACT THE UTILITY OWNERS AND REQUEST THEM TO PROPERLY LOCATE THEIR RESPECTIVE UTILITY ON THE GROUND. THIS NOTIFICATION SHALL BE GIVEN AT LEAST THREE (3) BUSINESS DAYS PRIOR TO COMMENCEMENT OF OPERATIONS AROUND THE UTILITY IN ACCORDANCE WITH TCA 65-31-106.

MISCELLANEOUS

- (16) THE CONTRACTOR SHALL BE REQUIRED TO REMOVE AND RESET MAILBOXES WHERE AND AS DIRECTED BY THE ENGINEER.
- (17) NOTHING IN THE GENERAL NOTES OR SPECIAL PROVISIONS SHALL RELIEVE THE CONTRACTOR FROM HIS RESPONSIBILITIES TOWARD THE SAFETY AND CONVENIENCE OF THE GENERAL PUBLIC AND THE RESIDENTS ALONG THE PROPOSED CONSTRUCTION AREA.

PAVEMENT MARKINGS

FINAL PAVEMENT MARKING IF 4" SPRAY THERMO PLASTIC (60 mil) IS USED

(18) PERMANENT PAVEMENT LINE MARKINGS SHALL BE 4" SPRAY THERMOPLASTIC
(60 MIL) INSTALLED TO PERMANENT STANDARDS AT THE END OF EACH DAY'S
WORK. SHORT UNMARKED SECTIONS SHALL NOT BE ALLOWED. PAVEMENT
MARKINGS WILL BE MEASURED AND PAID FOR UNDER ITEM NO. 716-13.01,
SPRAY THERMO PVMT MRKNG (60 MIL) (4IN LINE), L.M. THE CONTRACTOR SHALL
HAVE THE OPTION OF USING REFLECTORIZED PAINT INSTALLED TO
PERMANENT STANDARDS AT THE END OF EACH DAY'S WORK AND THEN
INSTALLING THE PERMANENT MARKINGS AFTER THE PAVING OPERATION IS
COMPLETED. THE TEMPORARY MARKINGS FOR THE FINAL SURFACE WILL NOT
BE MEASURED AND PAID FOR DIRECTLY, BUT THE COSTS ARE TO BE INCLUDED
IN THE PRICE BID FOR THE PERMANENT MARKINGS.

TEMPORARY PAVEMENT MARKING ON INTERMEDIATE LAYERS

(19) TEMPORARY PAVEMENT LINE MARKINGS ON INTERMEDIATE LAYERS OF PAVEMENT SHALL BE REFLECTIVE TAPE OR REFLECTORIZED PAINT INSTALLED TO PERMANENT STANDARDS AT THE END OF EACH DAYS WORK. SHORT, UNMARKED SECTIONS SHALL NOT BE ALLOWED. THESE MARKINGS WILL BE MEASURED AND PAID FOR UNDER ITEM NO. 716-05.01, PAINTED PAVEMENT MARKING (4" LINE), L.M.

SIGNING

(20) AFTER THE SIGN LOCATIONS HAVE BEEN STAKED, BUT PRIOR TO ORDERING ANY MATERIAL FOR THE SUPPORTS, THERE SHALL BE A FIELD INSPECTION AND APPROVAL BY THE REGIONAL CONSTRUCTION OFFICE.

- (21) THE LENGTHS OF ALL SIGN SUPPORTS SHOWN ON THE SIGN SCHEDULE ARE
 APPROXIMATE AND ARE FOR ESTIMATING PURPOSES ONLY. THE CONTRACTOR
 SHALL VERIFY ALL SUPPORT LENGTHS AT THE SITE PRIOR TO ERECTION.
- (22) THE LETTERS, DIGITS, ARROWS, BORDERS, AND ALPHABET ACCESSORIES ON ALL FLAT SHEET SIGNS SHALL BE APPLIED BY SILK SCREENING PROCESS.
- (23) ALL SIGNS MARKED "TO BE REMOVED" ARE TO BE REMOVED BY THE CONTRACTOR AND PAID FOR UNDER ITEM 713-15 AND BECOME THE PRIORITY OF THE CONTRACTOR.

CONSTRUCTION WORK ZONE & TRAFFIC CONTROL

- (24) ADVANCED WARNING SIGNS SHALL NOT BE DISPLAYED MORE THAN FORTY-EIGHT (48) HOURS BEFORE PHYSICAL CONSTRUCTION BEGINS. SIGNS MAY BE ERECTED UP TO ONE WEEK BEFORE NEEDED, IF THE SIGN FACE IS FULLY COVERED.
- (25) IF THE CONTRACTOR MOVES OFF THE PROJECT, HE SHALL COVER OR REMOVE ALL UNNEEDED SIGNS AS DIRECTED BY THE ENGINEER. COSTS OF REMOVAL, COVERING, AND REINSTALLING SIGNS SHALL NOT BE MEASURED AND PAID FOR SEPARATELY, BUT ALL COSTS SHALL BE INCLUDED IN THE ORIGINAL UNIT PRICE BID FOR ITEM NO 712-06, SIGNS (CONSTRUCTION) PER SQUARE FOOT.
- (26) A LONG TERM BUT SPORADIC USE WARNING SIGN, SUCH AS A FLAGGER SIGN, MAY REMAIN IN PLACE WHEN NOT REQUIRED PROVIDED THE SIGN FACE IS FULLY COVERED.
- (27) TRAFFIC CONTROL DEVICES SHALL NOT BE DISPLAYED OR ERECTED UNLESS RELATED CONDITIONS ARE PRESENT NECESSITATING WARNING.
- (28) USE OF BARRICADES, PORTABLE BARRIER RAILS, VERTICAL PANELS, AND DRUMS SHALL BE LIMITED TO THE IMMEDIATE AREAS OF CONSTRUCTION WHERE A HAZARD IS PRESENT. THESE DEVICES SHALL NOT BE STORED ALONG THE ROADWAY WITHIN THIRTY (30) FEET OF THE EDGE OF THE TRAVELED WAY BEFORE OR AFTER USE UNLESS PROTECTED BY GUARDRAIL, BRIDGE RAIL, AND/OR BARRIERS INSTALLED FOR OTHER PURPOSES FOR ROADWAYS WITH CURRENT ADT'S LESS THAN 1500 AND DESIGN SPEED OF LESS THAN 60 MPH. THIS DISTANCE SHALL INCREASE TO FORTY-FIVE (45) FEET FOR ROADWAYS WITH CURRENT ADT'S OF 1500 OR GREATER AND DESIGN SPEED OF 60 MPH OR GREATER OR ON THE OUTSIDE OF A HORIZONTAL CURVE. THESE DEVICES SHALL BE REMOVED FROM THE CONSTRUCTION WORK ZONE WHEN THE ENGINEER DETERMINES THEY ARE NO LONGER NEEDED. WHERE THERE IS INSUFFICIENT RIGHT-OF-WAY TO PROVIDE FOR THIS REQUIRED SETBACK, THE CONTRACTOR SHALL DETERMINE THE ALTERNATE LOCATIONS AND REQUEST THE ENGINEER'S APPROVAL TO USE THEM.
- (29) THE CONTRACTOR SHALL NOT BE PERMITTED TO PARK ANY VEHICLES OR CONSTRUCTION EQUIPMENT DURING PERIODS OF INACTIVITY, WITHIN THIRTY (30) FEET OF THE EDGE OF PAVEMENT WHEN THE LANE IS OPEN TO TRAFFIC UNLESS PROTECTED BY GUARDRAIL, BRIDGE RAIL, AND/OR BARRIERS INSTALLED FOR OTHER PURPOSES FOR ROADWAYS WITH CURRENT ADT'S LESS THAN 1500 AND DESIGN SPEED OF LESS THAN 60 MPH. THIS DISTANCE SHALL BE INCREASED TO FORTY-FIVE (45) FEET FOR ROADWAYS WITH CURRENT ADT'S OF 1500 OR GREATER AND DESIGN SPEED OF 60 MPH OR GREATER OR ON THE OUTSIDE OF A HORIZONTAL CURVE. PRIVATELY OWNED VEHICLES SHALL NOT BE ALLOWED TO PARK WITHIN THIRTY (30) FEET OF A OPEN TRAFFIC LANE AT ANY TIME UNLESS PROTECTED AS DESCRIBED ABOVE FOR ROADWAYS WITH CURRENT ADT'S LESS THAN 1500 AND DESIGN SPEED OF LESS THAN 60 MPH. THIS DISTANCE SHALL BE INCREASED TO FORTY-FIVE (45) FEET FOR ROADWAYS WITH CURRENT ADT'S OF 1500 OR GREATER AND DESIGN SPEED OF 60 MPH OR GREATER OR ON THE OUTSIDE OF A HORIZONTAL CURVE.. WHERE THERE IS INSUFFICIENT RIGHT-OF-WAY TO PROVIDE FOR THIS REQUIRED SETBACK, THE CONTRACTOR SHALL DETERMINE THE ALTERNATE LOCATIONS AND REQUEST THE ENGINEER'S APPROVAL TO USE THEM.
- (30) ALL DETOUR AND CONSTRUCTION SIGNING SHALL BE IN STRICT ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
- (31) ALL DETOURS SHALL BE PAVED, STRIPED, SIGNED AND THE VERTICAL PANELS ARE TO BE IN PLACE BEFORE IT IS OPENED TO TRAFFIC.



PROJECT NO.

HI SP-1 09(36)

CONST.



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES

GENERAL NOTES (CON'T)

EROSION PREVENTION AND SEDIMENT CONTROL

DISTURBED AREA

- (1) AREAS TO BE UNDISTURBED SHALL BE CLEARLY MARKED IN THE FIELD BEFORE CONSTRUCTION ACTIVITIES BEGIN.
- (2) PRE-CONSTRUCTION VEGETATIVE GROUND COVER SHALL NOT BE DESTROYED, REMOVED OR DISTURBED (i.e. CLEARING AND GRUBBING INITIATED) MORE THAN 15 CALENDAR DAYS PRIOR TO GRADING OR EARTH MOVING ACTIVITIES UNLESS THE AREA IS MULCHED, SEEDED WITH MULCH, OR OTHER TEMPORARY COVER IS INSTALLED.
- (3) CLEARING, GRUBBING, AND OTHER DISTURBANCE TO RIPARIAN VEGETATION SHALL BE LIMITED TO THE MINIMUM NECESSARY FOR SLOPE CONSTRUCTION AND EQUIPMENT OPERATIONS. EXISTING VEGETATION SHOULD BE PRESERVED TO THE MAXIMUM EXTENT POSSIBLE. UNNECESSARY VEGETATION REMOVAL IS PROHIBITED.
- (4) ALL DISTURBED AREAS SHALL BE PROPERLY STABILIZED AS SOON AS PRACTICABLE. PRIORITY SHALL BE GIVEN TO FINISHING OPERATIONS AND PERMANENT EPSC MEASURES ON ALL PROJECTS.
- (5) CONSTRUCTION SHALL BE SEQUENCED AND STAGED TO MINIMIZE THE EXPOSURE OF GRADED OR DENUDED SOIL AREAS, PRESERVE TOPSOIL, AND MINIMIZE SOIL COMPACTION.
- 6) NO MORE THAN 50 ACRES OF ACTIVE SOIL DISTURBANCE IS ALLOWED AT ANY TIME DURING THE CONSTRUCTION OF THE PROJECT. OFF-SITE BORROW OR WASTE AREAS ARE TO BE INCLUDED IN THE TOTAL DISTURBED AREA IF THE BORROW OR WASTE AREA IS EXCLUSIVE TO THE PROJECT PER TDOT'S WASTE AND BORROW MANUAL.

SEDIMENT CONTROL

- (7) EPSC MEASURES SHALL BE INSTALLED AND FUNCTIONAL PRIOR TO ANY EARTH MOVING OPERATIONS, AND SHALL BE MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD.
- B) THE CONTRACTOR SHALL ESTABLISH AND MAINTAIN A PROACTIVE METHOD TO PREVENT THE OFF-SITE MIGRATION OR DEPOSIT OF SEDIMENT ON ROADWAYS USED BY THE GENERAL PUBLIC. IF SEDIMENT ESCAPES THE CONSTRUCTION SITE, OFF-SITE ACCUMULATIONS OF SEDIMENT THAT HAVE NOT REACHED A STREAM MUST BE REMOVED AT A FREQUENCY SUFFICIENT TO MINIMIZE OFF-SITE IMPACTS (E.G. FUGITIVE SEDIMENT THAT HAS ESCAPED THE CONSTRUCTION SITE AND COLLECTED IN A STREET MUST BE REMOVED SO THAT IT IS NOT SUBSEQUENTLY WASHED INTO STORM SEWERS AND STREAMS BY THE NEXT RAIN AND/OR SO THAT IT DOES NOT POSE A SAFETY HAZARD TO USERS OF PUBLIC STREETS). ARRANGEMENTS CONCERNING REMOVAL OF SEDIMENT ON ADJOINING PROPERTY MUST BE SETTLED WITH THE ADJOINING PROPERTY OWNER BEFORE REMOVAL OF SEDIMENT.
- PROPERTY OWNER BEFORE REMOVAL OF SEDIMENT.

 WATER PUMPED FROM WORK AREAS AND EXCAVATION MUST BE HELD IN SETTLING BASINS OR TREATED BY FILTRATION OR CHEMICAL TREATMENT PRIOR TO ITS DISCHARGE INTO SURFACE WATERS. ALL PHYSICAL AND/OR CHEMICAL TREATMENT WILL BE APPLIED IN ACCORDANCE WITH MANUFACTURES GUIDELINES AND FULLY DESCRIBED IN THE EPSC PLANS. WATER MUST BE HELD IN SETTLING BASINS UNTIL AT LEAST AS CLEAR AS THE RECEIVING WATER. SETTLING BASINS MUST NOT BE LOCATED CLOSER THAN 20 FEET FROM THE TOP BANK OF A STREAM. SETTLING BASINS AND SEDIMENT TRAPS SHALL BE PROPERLY DESIGNED ACCORDING TO THE SIZE OF THE DRAINAGE AREAS OR VOLUME OF WATER TO BE TREATED. TREATED WATER MUST BE DISCHARGED THROUGH A PIPE OR WELL VEGETATED OR LINED CHANNEL, SO THAT THE DISCHARGE DOES NOT CAUSE EROSION OR SEDIMENT TRANSPORT. DISCHARGE FROM BASINS AND IMPOUNDMENTS SHALL UTILIZE OUTLET STRUCTURES THAT ONLY WITHDRAW WATER FROM NEAR THE SURFACE OF THE BASIN OR THE IMPOUNDMENT. DISCHARGES MUST NOT CAUSE AN OBJECTIONABLE COLOR CONTRAST WITH THE RECEIVING STREAM.
- (10) FOR AN OUTFALL IN A DRAINAGE AREA OF 10 ACRES OR MORE, A TEMPORARY (OR PERMANENT) SEDIMENT BASIN OR EQUIVALENT CONTROL MEASURES THAT PROVIDES STORAGE FOR A CALCULATED VOLUME OF RUNOFF FROM A MINIMUM 2-YEAR/24-HOUR STORM EVENT, SHALL BE PROVIDED UNTIL FINAL STABILZATION OF THE SITE. THE ENVIRONMENTAL AND DESIGN DIVISIONS MAY BE CONTACTED TO REVIEW AND CONCUR WITH ANY REVISION OF THE SWPPP BEFORE DISTURBANCE OF THE OUTFALL PROCEEDS.

- (11) CHECK DAMS SHALL BE USED WHERE RUNOFF IS CONCENTRATED. CLEAN ROCK, BRUSH, GABION, OR SANDBAG CHECK DAMS SHALL BE PROPERLY CONSTRUCTED TO REDUCE VELOCITY AND CONTROL EROSION.
- (12) OFFSITE VEHICLE TRACKING OF SEDIMENTS AND THE GENERATION OF DUST SHALL BE MINIMIZED. A STABILIZED CONSTRUCTION ACCESS (A POINT OF ENTRANCE/EXIT TO THE CONSTRUCTION PROJECT) SHALL BE PROVIDED, AS NEEDED, TO REDUCE THE TRACKING OF MUD AND DIRT ONTO PUBLIC ROADS BY CONSTRUCTION VEHICLES.
- (13) TEMPORARY EPSC MEASURES MAY BE REMOVED AT THE BEGINNING OF THE WORKDAY, BUT MUST BE REPLACED AT THE END OF THE WORKDAY.
- (14) TEMPORARY EPSC MEASURES MAY BE REMOVED AT THE BEGINNING OF THE WORK DAY, BUT MUST BE REPLACED AT THE END OF THE WORKDAY.

STREAM/WETLAND

- (15) SOIL MATERIALS MUST BE PREVENTED FROM ENTERING WATERS OF THE STATE/U.S. EPSC MEASURES TO PROTECT WATER QUALITY MUST BE MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD. APPROPRIATE EPSC MEASURES MUST BE INSTALLED ALONG THE BASE OF ALL FILLS AND CUTS, ON THE DOWNHILL SIDE OF STOCKPILED SOIL, AND ALONG STREAM BANKS IN CLEARED AREAS TO PREVENT SEDIMENT MIGRATION INTO STREAMS IN ACCORDANCE WITH TDOT STANDARDS. THEY MUST BE INSTALLED ON THE CONTOUR, ENTRENCHED AND STAKED, AND EXTEND THE WIDTH OF THE AREA TO BE CLEARED.
- (16) NEW CHANNEL CONSTRUCTION SHALL BE COMPLETED IN THE DRY AND STABILIZED FOR AT LEAST 72 HOURS PRIOR TO DIVERTING WATER FROM THE EXISTING AND/OR TEMPORARY CHANNEL.
- EXISTING AND/OR TEMPORARY CHANNEL.

 (17) INSTREAM EPSC DEVICES REQUIRE THE ENVIRONMENTAL DIVISION'S PERMITS SECTION REVIEW AND MUST BE PROCESSED BY THE PERMITS SECTION TO OBTAIN TDEC, USACE, AND TVA PERMITS.
- 18) THE OPERATION OF EQUIPMENT IN WATERS OF THE STATE/U.S., INCLUDING WETLANDS, SHALL BE ONLY AS SHOWN ON THE PROJECT PLANS AND/OR AS SO SPECIFIED IN THE ARAP/401, SECTION 404 PERMIT(S) AND/OR TVA26(A), IF APPLICABLE. ANY ADDITIONAL PERMITS REQUIRED BY THE CONTRACTOR'S METHOD OF OPERATION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN, AFTER RECEIVING THE APPROVAL OF TDOT ENVIRONMENTAL DIVISION.
- (19) THE WIDTH OF THE FILL ASSOCIATED WITH TEMPORARY CROSSINGS SHALL BE LIMITED TO THE MINIMUM NECESSARY FOR THE ACTUAL CROSSING.
- (20) STREAM BEDS SHALL NOT BE USED AS TRANSPORTATION ROUTES FOR CONSTRUCTION EQUIPMENT. TEMPORARY CROSSINGS MUST BE LIMITED TO ONE POINT PER STREAM AND EPSC MEASURES MUST BE USED WHERE THE STREAM BANKS ARE DISTURBED. WHERE THE STREAMBED IS NOT COMPOSED OF BEDROCK, A PAD OF CLEAN ROCK MUST BE USED AT THE CROSSING POINT AND CULVERTED TO PREVENT THE IMPOUNDMENT OF WATER FLOW. CLEAN ROCK IS ROCK OF VARIOUS TYPE AND SIZE, DEPENDING UPON APPLICATION, WHICH CONTAINS NO FINES, SOILS, OR OTHER WASTES OR CONTAMINANTS. OTHER MATERIALS USED FOR ALL TEMPORARY FILLS MUST BE COMPLETELY REMOVED IN THEIR ENTIRETY AFTER THE WORK IS COMPLETED AND THE AFFECTED AREAS RETURNED TO THEIR PREEXISTING ELEVATION. ALL TEMPORARY CROSSINGS MUST BE CONSTRUCTED IN ACCORDANCE WITH STD. DWG. EC-STR-25 UNLESS SPECIFICALLY ADDRESSED IN THE EPSC PLANS. ALTERNATIVELY, PLACING A TEMPORARY BRIDGE (BAILEY BRIDGE OR EQUIVALENT, TIMBERS, ETC.) FROM TOP OF BANK TO TOP OF BANK OR THE APPROPRIATE USE OF BARGES AT THE CROSSING TO AVOID DISTURBANCE OF THE STREAMBED IS AN ACCEPTABLE OPTION.
- (21) HEAVY EQUIPMENT WORKING IN WETLANDS MUST BE PLACED ON MATS, OR OTHER MEASURES MUST BE TAKEN TO MINIMIZE SOIL DISTURBANCE UNLESS SPECIFICALLY ADDRESSED IN THE EPSC PLANS. ANY MATS AND OTHER MEASURES USED FOR HEAVY EQUIPMENT MUST BE REMOVED IN THEIR ENTIRETY AFTER THE WORK IS COMPLETED.
- (22) WETLANDS SHALL NOT BE USED AS EQUIPMENT STORAGE, STAGING, OR TRANSPORTATION AREAS. UNLESS PROVIDED FOR IN THE PLANS.

TYPE	YEAR	PROJECT NO.	NO.
CONST.	2016	HI SP-109(36)	2G

REV. 02-01-16: REVISED NOTE NOS. 6, 7, 27, 28, 29, AND 30.

SPECIES

(23) NO ACTIVITY MAY SUBSTANTIALLY DISRUPT THE MOVEMENT OF THOSE SPECIES OF AQUATIC LIFE INDIGENOUS TO THE WATER BODY, INCLUDING THOSE SPECIES THAT NORMALLY MIGRATE THROUGH THE AREA. EPSC MEASURES SHALL BE ADDED TO PREVENT NEGATIVE IMPACTS TO LEGALLY PROTECTED STATE OR FEDERAL FAUNA OR FLORA OR AS INDICATED IN THE ECOLOGICAL STUDIES OR ON THE PERMIT(S).

INSPECTION, MAINTENANCE, REPAIR

- (24) EPSC CONTROLS WILL BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH TDOT STANDARD DRAWINGS AND GOOD ENGINEERING PRACTICES.
- (25) INSPECTION, REPAIR, AND MAINTENANCE OF EPSC MEASURES/STRUCTURES IS TO BE PERFORMED ON A REGULAR BASIS. SEDIMENT SHALL BE REMOVED FROM SEDIMENT CONTROL STRUCTURES WHEN THE DESIGN CAPACITY HAS BEEN REDUCED BY FIFTY PERCENT (50%). DURING SEDIMENT REMOVAL, THE CONTRACTOR SHALL TAKE CARE TO ENSURE THAT STRUCTURAL COMPONENTS OF EPSC MEASURES ARE NOT DAMAGED AND THUS MADE INEFFECTIVE. IF DAMAGE DOES OCCUR, THE CONTRACTOR SHALL REPAIR THE STRUCTURES AT THE CONTRACTOR'S OWN EXPENSE.
- (26) SEDIMENT REMOVED FROM SEDIMENT CONTROL STRUCTURES SHALL BE PLACED AND BE TREATED IN A MANNER SO THAT THE SEDIMENT IS CONTAINED WITHIN THE PROJECT LIMITS AND DOES NOT MIGRATE INTO WATERS OF THE STATE/U.S. COST FOR THIS TREATMENT IS TO BE INCLUDED IN PRICE BID FOR ITEM NO. 209-05 SEDIMENT REMOVAL, C.Y.
- (27) THE CONTRACTOR SHALL INSTALL A RAIN GAUGE EVERY LINEAR MILE AT ALL SITES WHERE CLEARING, GRUBBING, EXCAVATION, GRADING CUTTING OR FILLING IS BEING ACTIVELY PERFORMED, OR EXPOSED SOIL HAS NOT YET BEEN PERMANENTLY STABILIZED. IF THE PROJECT LENGTH IS LESS THAN ONE LINEAR MILE, ONE RAIN GAUGE SHALL BE INSTALLED AT THE CENTER OF THE PROJECT OR AS INDICATED BY THE TDOT EPSC INSPECTOR. THE CONTRACTOR SHALL ENSURE THAT EACH GAUGE IS MAINTAINED IN GOOD WORKING CONDITION. TDOT AND/OR THE CONTRACTOR SHALL RECORD DAILY PRECIPITATION AND FORECASTED PERCENTAGE OF PRECIPITATION IN DETAILED RECORDS OF RAINFALL EVENTS INCLUDING DATES, AMOUNTS OF RAINFALL PER GAUGE, THE ESTIMATED DURATION (OR STARTING AND ENDING TIMES), AND FORECASTED PERCENTAGE OF PRECIPITATION FOR THE PROJECT. THIS INFORMATION SHALL BE PROVIDED TO THE ENGINEER ON A MONTHLY BASIS. THE COST FOR THE RAIN GAUGES IS TO BE INCLUDED IN THE UNIT BID PRICES FOR OTHER ITEMS. RAIN GAUGES SHALL BE AS SPECIFIED IN THE APPROVED TDOT RAINFALL MONITORING PLAN.
- (28) INSPECTION OF EPSC MEASURES SHALL BE DONE AT LEAST TWICE PER CALENDAR WEEK AT LEAST 72 HOURS APART. A CALENDAR WEEK IS DEFINED AS SUNDAY THROUGH SATURDAY. QUALITY ASSURANCE/QUALITY CONTROL SITE ASSESSMENT OF EPSC SHALL BE PERFORMED PER THE TDOT ENVIRONMENTAL DIVISION'S COMPREHENSIVE INSPECTION OFFICE GUIDELINES.
- (29) OUTFALL POINTS SHALL BE INSPECTED TO ASCERTAIN WHETHER EPSC MEASURES ARE EFFECTIVE IN PREVENTING SIGNIFICANT IMPACTS TO SURROUNDING WATERS. WHERE DISCHARGE LOCATIONS ARE INACCESSIBLE, NEARBY DOWNSTREAM LOCATIONS SHALL BE INSPECTED. LOCATIONS WHERE VEHICLES ENTER AND EXIT THE SITE SHALL BE INSPECTED FOR EVIDENCE OF OFF-SITE ROADWAY SEDIMENT TRACKING.
- (30) UPON CONCLUSION OF THE INSPECTIONS, EPSC MEASURES FOUND TO BE INEFFECTIVE SHALL BE REPAIRED, REPLACED, OR MODIFIED BEFORE THE NEXT RAIN EVENT, IF POSSIBLE, BUT IN NO CASE MORE THAN 24 HOURS AFTER THE INSPECTION OR WHEN THE CONDITION IS IDENTIFIED. IF THE REPAIR, REPLACEMENT OR MODIFICATION IS NOT PRACTICAL WITHIN THE TIMEFRAME, WRITTEN DOCUMENTATION MUST BE PROVIDED IN THE FIELD BOOK AND AN ESTIMATED REPAIR, REPLACEMENT OR MODIFICATION SCHEDULE SHALL BE DOCUMENTED WITHIN 24 HOURS AFTER IDENTIFICATION.

UNOFFICIAL SET NOT FOR BIDDING

A AGRICULTURE AND MARKET AND MARK

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES

GENERAL NOTES (CON'T)

INSPECTION, MAINTENANCE, REPAIR (CON'T)

(1) THE TDOT 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 TDOT PROJECT SUPERVISOR OR THEIR DESIGNEE WILL COMPLETE THE INSPECTION REPORTS AND DISTRIBUTE COPIES PER THE CONTRACT.

PERMITS, PLANS, RECORDS

- (2) THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR AND OBTAIN ANY NECESSARY ENVIRONMENTAL PERMITS OR APPROVALS, INCLUDING BUT NOT LIMITED TO TDEC ARAP/401, USACE SECTION 404, TVA SECTION 26A, AND TDEC NPDES PERMITS, FROM FEDERAL, STATE AND/OR LOCAL AGENCIES REGARDING THE OPERATION OF ANY PROJECT-DEDICATED ASPHALT AND/OR CONCRETE PLANTS.
- (3) ANY DISAGREEMENT BETWEEN THE PROJECT PLANS, THE PROJECT AS CONSTRUCTED, AND THE PERMIT(S) ISSUED FOR THE PROJECT, SHALL BE BROUGHT TO THE ATTENTION OF THE TDOT PROJECT RESPONSIBLE PARTY. THE ENVIRONMENTAL DIVISION, DESIGN DIVISION, AND HEADQUARTERS CONSTRUCTION OFFICE SHALL BE CONTACTED IN THESE INSTANCES AND DECIDE WHICH HAS PRECEDENCE AND WHETHER PERMIT OR PLANS REVISIONS ARE NEEDED. IN GENERAL, PERMIT CONDITIONS WILL PREVAIL.
- (4) THE FOLLOWING INFORMATION SHALL BE MAINTAINED ON OR NEAR THE SITE:
 DATES THAT MAJOR GRADING ACTIVITIES OCCUR, DATES WHERE
 CONSTRUCTION ACTIVITIES TEMPORARILY OR PERMANENTLY CEASE ON A
 PORTION OF THE SITE, DATES WHEN STABILIZATION MEASURES ARE INITIATED,
 EPSC INSPECTION RECORDS, QUALITY ASSURANCE SITE ASSESSMENT
 RECORDS, PRECIPITATION RECORDS, SWPPP, PROJECT ENVIRONMENTAL
 PERMITS, AND A COPY OF THE PROJECT EPSC INSPECTOR'S TDEC LEVEL 1
 CERTIFICATION.
- 5) ALL WATER QUALITY AND STORM WATER PERMITS, INCLUDING A COPY OF THE NOC WITH NPDES PERMIT TRACKING NUMBER AND THE LOCATION OF THE SWPPP, SHALL BE POSTED NEAR THE MAIN ENTRANCE OF THE CONSTUCTION SITE ACCESSIBLE TO THE PUBLIC. THE NAME, COMPANY NAME, EMAIL ADDRESS, TELEPHONE NUMBER AND ADDRESS OF THE PROJECT SITE OWNER, OPERATOR, OR A LOCAL CONTACT PERSON WITH A BREIF DESCRIPTION OF THE PROJECT SHALL ALSO BE POSTED. IF POSTING THIS INFORMATION NEAR A MAIN ENTRANCE IS INFEASIBLE, THE INFORMATION SHALL BE PLACED IN A PUBLICLY ACCESSIBLE LOCATION NEAR WERE THE CONSTRUCTION IS ACTIVELY UNDERWAY AND MOVED AS NECESSARY. THIS LOCATION SHALL BE POSTED AT THE CONSTRUCTION SITE. ALL POSTINGS SHALL BE MAINTAINED IN LEGIBLE CONDITION.
- (6) IF A CHANGE IN PROJECT SCOPE OCCURS DURING CONSTRUCTION, INCLUDING VALUE ENGINEERING, THE ENFVIRONMENTAL DIVISION SHALL BE CONTACTED TO DETERMINE WHETHER PERMIT REVISIONS OF MODIFICATIONS OF THE SWPPP ARE NEEDED. THE ROADWAY DESIGN DIVISION SHALL BE CONTACTED TO DETERMINE IF ANY PLAN REVISIONS ARE NEEDED.
- THE SWPPP SHALL BE UPDATED BY CONSTRUCTION WHENEVER EPSC INSPECTIONS INDICATE, OR WHERE STATE OR FEDERAL OFFICIALS DETERMINE EPSC MEASURES ARE PROVING INEFFECTIVE IN ELIMINATING OR SIGNIFICANTLY MINIMIZING POLLUTANT SOURCES OR ARE OTHERWISE NOT ACHIEVING THE GENERAL OBJECTIVES OF CONTROLLING POLLUTANTS IN STORM WATER DISCHARGES ASSOCIATED WITH THE CONSTRUCTION ACTIVITY. THE ENVIRONMENTAL DIVISION SHALL BE CONTACTED WHEN MAJOR DESIGN REVISIONS ARE REQUESTED BY CONSTRUCTION THE ENVIRONMENTAL DIVISION MAY BE CONTACTED FOR GUIDANCE ON SPECIFIC SWPPP NEEDS. A COPY OF THE SWPPP OR EPSC CONTROLS SHALL BE RETAINED IN THE SWPPP.

 8) THE SWPPP SHALL BE UPCATED BY CONSTRUCTION WHENEVER A CHANGE IN CHEMICAL TREATMENT METHODS IS MADE INCLUDING USE OF A DIFFERENT

CHEMICAL, DIFFERENT DOSAGE OR APPLICATION RATE, OR A DIFFERENT AREA

(9) IF A TMDL IS DEVELOPED FOR TE RECEIVING WATERS FOR A POLLUTANT OF CONCERN (SILTATION AND/OR HABITAT ALTERATION) THE SWPPP SHALL BE MODIFIED OR UPDATED. (10) PROJECT INSPECTORS AND SUPERVISORS (INCLUDING TDOT STAFF, CONSULTANTS AND CONTRACTOR STAFF) RESPONSIBLE FOR THE IMPLEMENTATION AND MAINTENANCE OF EPSC PLANS SHALL SUCCESSFULLY COMPLETE THE TDEC "LEVEL 1 – FUNDAMENTALS FO EROSION PREVENTION AND SEDIMENT CONTROL FOR CONSTRUCTION SITES" COURSE AND ANY REFRESHER COURSES AS REQUIRED TO MAINTAIN CERTIFICATION. A COPY OF CERTIFICATION RECORDS FOR THE COURSES SHALL BE KEPT ON SITE AND AVAILABLE UPON REQUEST.

LITTER, DEBRIS, WASTE, PETROLEUM

- (11) THE CONTRACTOR SHALL ESTABLISH AND MAINTAIN A PROACTIVE METHOD TO PREVENT LITTER, CONSTRUCTION DEBRIS, AND CONSTRUCTION WASTES FROM ENTERING WATERS OF THE STATE/U.S. THESE MATERIALS WILL BE PICKED UP AND REMOVED FROM STORMWATER EXPOSURE PRIOR TO ANTICIPATED STORM EVENTS. AFTER USE, MATERIALS USED FOR EPSC WILL BE REMOVED FROM THE SITE.
- (12) THE CONTRACTOR SHALL TAKE APPROPRIATE STEPS TO ENSURE THAT PETROLEUM PRODUCTS OR OTHER CHEMICAL POLLUTANTS ARE PREVENTED FROM ENTERING WATERS OF THE STATE/U.S. ALL EQUIPMENT REFUELING, SERVICING, AND STAGING AREAS SHALL COMPLY WITH ALL LOCAL, STATE, AND FEDERAL LAWS, RULES, REGULATIONS, AND ORDINANCES, INCLUDING THOSE OF THE NATIONAL FIRE PROTECTION ASSOCIATION (NFPA). APPROPRIATE CONTAINMENT MEASURES FOR THESE AREAS SHALL BE USED. ALL SPILLS MUST BE REPORTED TO THE APPROPRIATE AGENCY, AND MEASURES SHALL BE TAKEN IMMEDIATELY TO PREVENT THE POLLUTION OF WATERS OF THE STATE/U.S., INCLUDING GROUNDWATER, SHOULD A SPILL OCCUR.

SPECIAL NOTES

EROSION PREVENTION AND SEDIMENT CONTROL

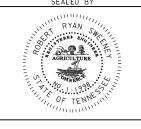
NPDES

(1) REFER TO THE EROSION PREVENTION AND SEDIMENT CONTROL PLAN, SHEET 10, FOR NOTES REGARDING SEASONAL WORK LIMITATION OR LIMITATION OF THE TOTAL AREA OF EXPOSED SOIL.

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2016	HI SP-109(36)	2 H

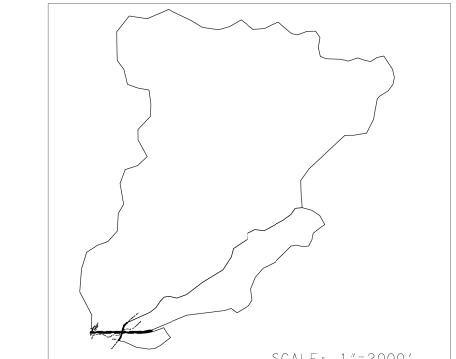
REV. 02-01-16: ADDED NOTE NOS. 1, 8, 9, AND 10. REVISED NOTE NOS. 4, 5, 6. AND 7.

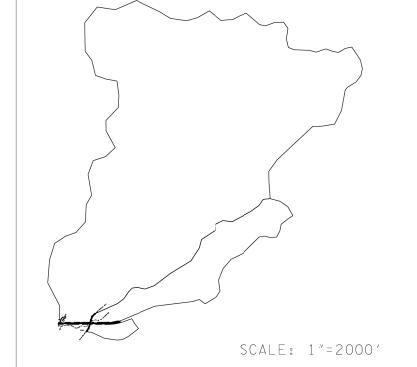
UNOFFICIAL SET NOT FOR BIDDING



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES
AND
SPECIAL NOTES





DRAINAGE DATA FOR PIPE STATION 101+58.59

DIRECTION OF FLOW RIGHT DRAINAGE AREA 2028.796 AC. ,()FLAT;(X)ROLLING;()HILLY;()MTNS. PRESENT STRUCTURE: (3)18'x6' BOX CULVERTS EXISTING STRUCTURE CONDITION: GOOD REMARKS:_ 105 110 115 100

LIMIT OF CONSTRUCTION SCOTTY PARKER RD. STA. 12+38.13 OLD HWY. 109 STA. 20+00.00 = SCOTTY PARKER RD. STA. 14+50.00 = S.R.109 STA. 112+71.45

LIMIT OF CONSTRUCTION OLD STATE HWY. 109 STA. 22+49.97 BEGIN PROJ. HSIP-109(36) STA. 105+30.19 N 762075.192 E 1832126.383

120

DRAINAGE DATA FOR PIPE STATION 112+73.33

DIRECTION OF FLOW RIGHT CRAINAGE AREA 248.348 AC. ,()FLAT;(X)ROLLING;()HILLY;()MTNS. FRESENT STRUCTURE: 12'x8' BOX CUL VERT EXISTING STRUCTURE CONDITION: GOOD Q50 = 420.2 CFS Q100 = 480.2 CFS END PROJ. HS[P-109(36) STA. 122+00.00 (SR-109) N 763481.382 E 1832823.223

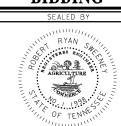
ENDWALLS REQD. : STD. DWG. NOS. Q100 = W.S. ELEV. (50) = W.S. ELEV. (100) =

DRAINAGE DATA FOR PIPE STATION 21+05.03

REMARKS:__

DIRECTION OF FLOW LEFT DRAINAGE AREA 24.875 AC. ,()FLAT;(X)ROLLING;()HILLY;()MTNS. PRESENT STRUCTURE: 48" RCP EXISTING STRUCTURE CONDITION: GOOD

UNOFFICIAL **SET** NOT FOR **BIDDING**



COORDINATES ARE NAD/83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00002 AND TIED TO

EPARTMENT OF TRANSPORTATION

DRAINAGE MAP

BEGIN PROJ. TO END PROJ. SCALE: 1"=200'

STREAM/WETLAND

- (1) ANY WORK WITHIN THE STREAM CHANNEL AREA (E.G., FOR PIER FOOTING, RIP-RAP PLACEMENT, MULTI-BARREL CULVERT/BRIDGE CONSTRUCTION, ETC.) SHALL BE SEPARATED FROM FLOWING WATER OR EXPECTED FLOW PATH AND PERFORMED DURING LOW FLOW CONDITIONS. ALL ITEMS USED WITHIN THE STREAM CHANNEL AREA FOR DIVERSION OF FLOW (OR EXPECTED FLOW), UNLESS SPECIFIED IN THE PLANS, SHALL NOT BE PAID FOR DIRECTLY BUT SHALL BE INCLUDED IN THE COST OF OTHER ITEMS. THIS NOTE EXCLUDES ANY ITEMS SPECIFIED IN THE PLANS FOR THE TEMPORARY DIVERSION CHANNELS, EC-STR-31 AND TEMPORARY DIVERSION CULVERTS, EC-STR-32 FOR SINGLE BARREL CULVERT CONSTRUCTION.
- A 30 FOOT NATURAL RIPARIAN BUFFER ZONE ADJACENT TO AND ON BOTH SIDES OF THE RECEIVING STREAM SHALL BE PRESERVED, TO THE MAXIMUM EXTENT PRACTICABLE, DURING CONSTRUCTION ACTIVITIES AT THE SITE. BUFFER ZONES ARE NOT SEDIMENT CONTROL MEASURES AND SHOULD NOT BE RELIED UPON AS PRIMARY SEDIMENT CONTROL MEASURES. THE RIPARIAN BUFFER ZONE SHALL BE ESTABLISHED BETWEEN THE TOP OF THE STREAM BANK AND THE DISTURBED CONSTRUCTION AREA. THE 30 FOOT CRITERION FOR THE WIDTH OF THE BUFFER ZONE CAN BE ESTABLISHED ON AN AVERAGE WIDTH BASIS AT A PROJECT. AS LONG AS THE MINIMUM WIDTH OF THE BUFFER ZONE IS MORE THAN 15 FEET AT ANY MEASURED LOCATION. EVERY ATTEMPT SHALL BE MADE FOR CONSTRUCTION ACTIVITIES NOT TO TAKE PLACE WITHIN THE BUFFER ZONES. BEST MANAGEMENT PRACTICES (BMPS) PROVIDING EQUIVALENT PROTECTION AS THE NATURAL RIPARIAN ZONE MAY BE USED. A JUSTIFICATION FOR USE AND DESIGN EQUIVALENCY SHALL BE DOCUMENTED WITHIN THE SWPPP. THE ENVIRONMENTAL AND ROADWAY DESIGN DIVISIONS SHALL REVIEW AND APPROVE THIS REVISION OF THE SWPPP BEFORE DISTURBANCE OF THE SITE PROCEEDS, UNLESS PREVIOUSLY EXEMPT IN THE NPDES CONSTRUCTION GENERAL PERMIT. WHERE ISSUED, ARAP/401 REQUIREMENTS WILL PREVAIL IF IN CONFLICT WITH THESE BUFFER ZONE REQUIREMENTS.

NPDES

- (3) NO WORK SHALL BE STARTED UNTIL THE CONTRACTOR'S PLAN FOR THE STAGING OF THEIR OPERATIONS, INCLUDING THE PLAN FOR STAGING OF TEMPORARY AND PERMANENT EPSC MEASURES, HAS BEEN ACCEPTED BY THE ENGINEER. THE CONTRACTOR'S EPSC PLAN SHALL INCORPORATE AND SUPPLEMENT, AS ACCEPTABLE, THE BASIC EPSC DEVICES ON THE EPSC PLAN CONTAINED IN THE APPROVED SWPPP.
- (4) THE EPSC MEASURES AND/OR PLAN SHALL BE MODIFIED AS NECESSARY SO THAT THEY ARE EFFECTIVE AT ALL TIMES THROUGHOUT THE COURSE OF THE PROJECT.
- (5) THE ACCEPTED EPSC PLAN SHALL REQUIRE THAT EPSC MEASURES BE IN PLACE BEFORE CLEARING, GRUBBING, EXCAVATION, GRADING, CUTTING OR FILLING OCCURS, EXCEPT AS SUCH WORK MAY BE NECESSARY TO INSTALL EPSC MEASURES, INCLUDING WITHOUT LIMITATION AS FOLLOWS:
 - A. INITIAL CLEARING AND GRUBBING SHALL BE LIMITED TO THAT NECESSARY FOR THE INSTALLATION OF APPLICABLE EPSC MEASURES IN ACCORDANCE WITH THE ACCEPTED EPSC PLAN INCORPORATED INTO THE SWPPP.
 - B. NO OTHER CLEARING AND GRUBBING OPERATIONS SHALL BE STARTED BEFORE APPLICABLE EPSC MEASURES ARE IN PLACE IN ACCORDANCE WITH THE ACCEPTED EPSC PLAN INCORPORATED INTO THE SWPPP
 - C. NO CULVERT OR BRIDGE CONSTRUCTION SHALL BE STARTED BEFORE APPLICABLE EPSC MEASURES ARE IN PLACE IN ACCORDANCE WITH THE ACCEPTED EPSC PLAN INCORPORATED INTO THE SWPPP.
 - D. NO GRADING, EXCAVATION, CUTTING, FILLING, OR OTHER EARTHWORK SHALL BE STARTED BEFORE EPSC MEASURES ARE IN PLACE IN ACCORDANCE WITH THE ACCEPTED EPSC PLAN INCORPORATED INTO THE SWPPP.

- (6) PERMANENT EPSC MEASURES SHALL BE INITIATED WITHIN 14 CALENDAR DAYS AFTER FINAL GRADING OF ANY SEQUENCE OR PHASE. TEMPORARY OR PERMANENT STABILIZATION SHALL BE INITIATED WITHIN 14 CALENDAR DAYS AFTER FINAL GRADING OR WHEN CONSTRUCTION ACTIVITIES ON A PORTION OF THE SITE ARE TEMPORARILY CEASED AND EARTH DISTURBING ACTIVITIES WILL NOT RESUME UNTIL AFTER 14 CALENDAR DAYS. PERMANENT STABILIZATION WITH PERENNIAL VEGETATION OR OTHER PERMANENTLY STABLE NON-ERODING SURFACE SHALL REPLACE ANY TEMPORARY MEASURES AS SOON AS PRACTICABLE. UNPACKED GRAVEL CONTAINING FINES (SILT AND CLAY SIZED PARTICLES) OR CRUSHER-RUN WILL NOT BE CONSIDERED A NON-ERODIBLE SURFACE.
- (7) STEEP SLOPES (A NATURAL OR CREATED SLOPE OF 35% GRADE (2.8H:1V) OR GREATER REGARDLESS OF HEIGHT) SHALL BE TEMPORARILY STABILIZED NO LATER THAN 7 CALENDAR DAYS AFTER CONSTRUCTION ACTIVITY ON THE SLOPE HAS TEMPORARILY OR PERMANENTLY CEASED.
- (8) FOR STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION SUPPORT ACTIVITIES; TDOT PROJECTS ARE COVERED UNDER THE "WASTE AND BORROW" MANUAL PER THE SWPPP.
- (9) EXCEPT AS OTHERWISE SPECIFIED, THERE ARE NO KNOWN SPECIAL ENVIRONMENTAL FACTORS PRESENT ON THIS PROJECT THAT INDICATE A NEED FOR SEASONAL LIMITATIONS ON THE CLEARING, GRUBBING, EXCAVATION, GRADING, CUTTING OR FILLING OPERATIONS OR ON THE TOTAL AREA OF EXPOSED SOIL.

STREAM RELOCATION

(10) ONCE WATER IS DIVERTED INTO A NEWLY CONSTRUCTED AND STABILIZED RELOCATED STREAM/CHANNEL THE ECOLOGY SECTION MUST BE NOTIFIED. THE STREAM NAME, STREAM NUMBER, AND DATE THE WATER WAS DIVERTED INTO THE STREAM/CHANNEL IS TO BE SUPPLIED WITH THE NOTIFICATION.

PROJECT COMMITMENTS

(11) SEE PROJECT COMMITMENTS, SHEET 1B, FOR DETAILS RELATING TO SPECIAL ENVIRONMENTAL COMMITMENTS REQUIRED BY THIS PROJECT.

OUTFALL TABLE						
OUTFALL SLOPE DRAINAGE AREA						
NO.	(%)	(ACRES)				
1	2.20	0.558				
2	3.70	0.313				
3	2.28	1.345				
4	6.10	0.515				
5	5.20	0.486				

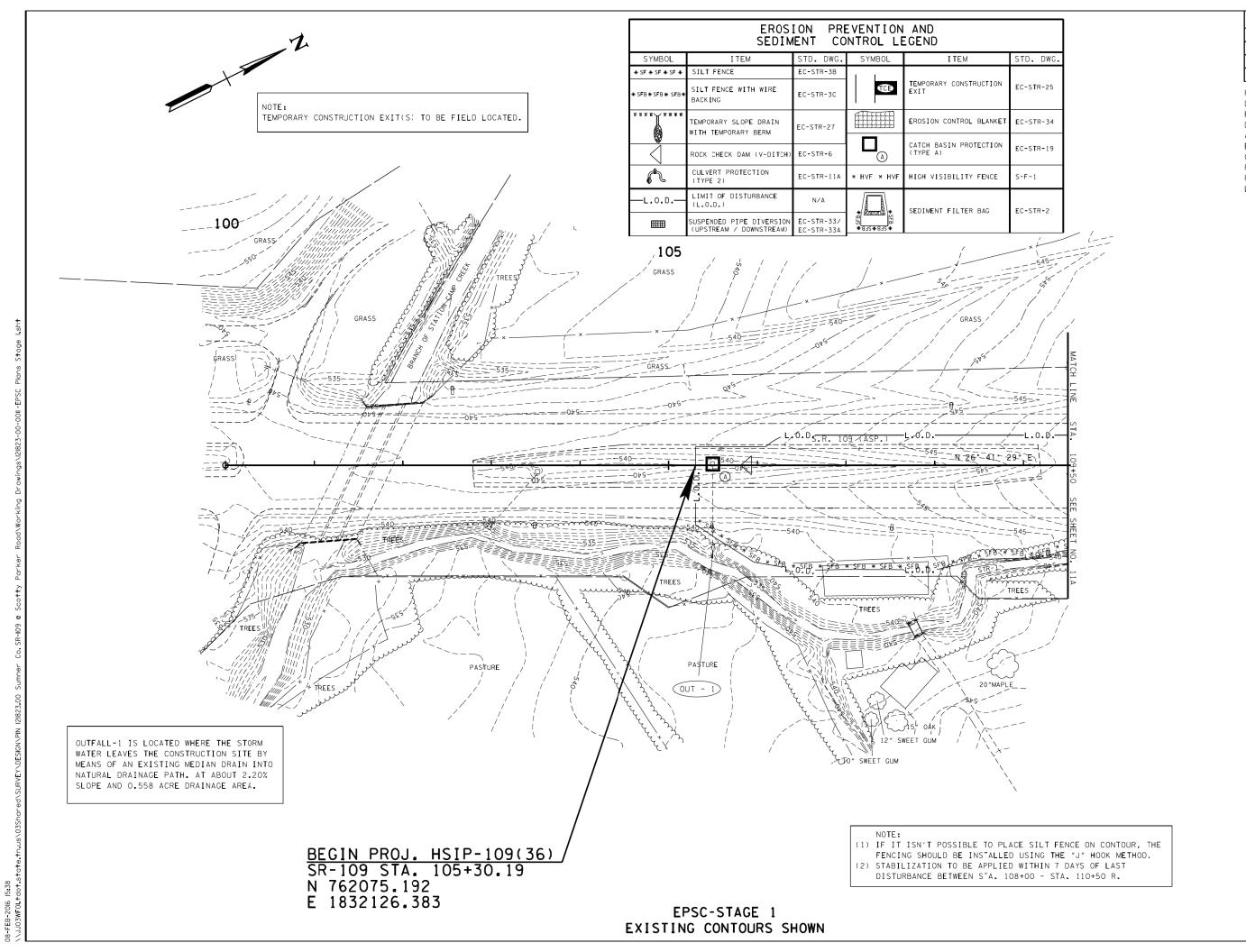
TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2016	HI SP-1 09(36)	10

REV. 02-01-16: ADJUSTED OUTFALL TABLE.



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

EROSION PREVENTION AND SEDIMENT CONTROL PLAN

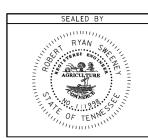


 TYPE
 YEAR
 PROJECT NO.
 SHEET NO.

 R.O.W.
 2015
 HSIP-109(36)
 11

 CONST.
 2016
 HSIP-109(36)
 11

REV. 02-08-16: ADDED LIMIT OF DISTURBANCE (L.O.D.), SEDIMENT FILTER BAG, SUSPENDED PIPE DIVERSION (UPSTREAM/DOWNSTREAM), AND CULVERT PROTECTION (TYPE 2) TO EROSION PREVENTION AND SEDIMENT CONTROL LEGEND. REMOVED CULVERT PROTECTION (TYPE 1) FROM EROSION PREVENTION AND SEDIMENT CONTROL LEGEND. ADDED NOTE (2).

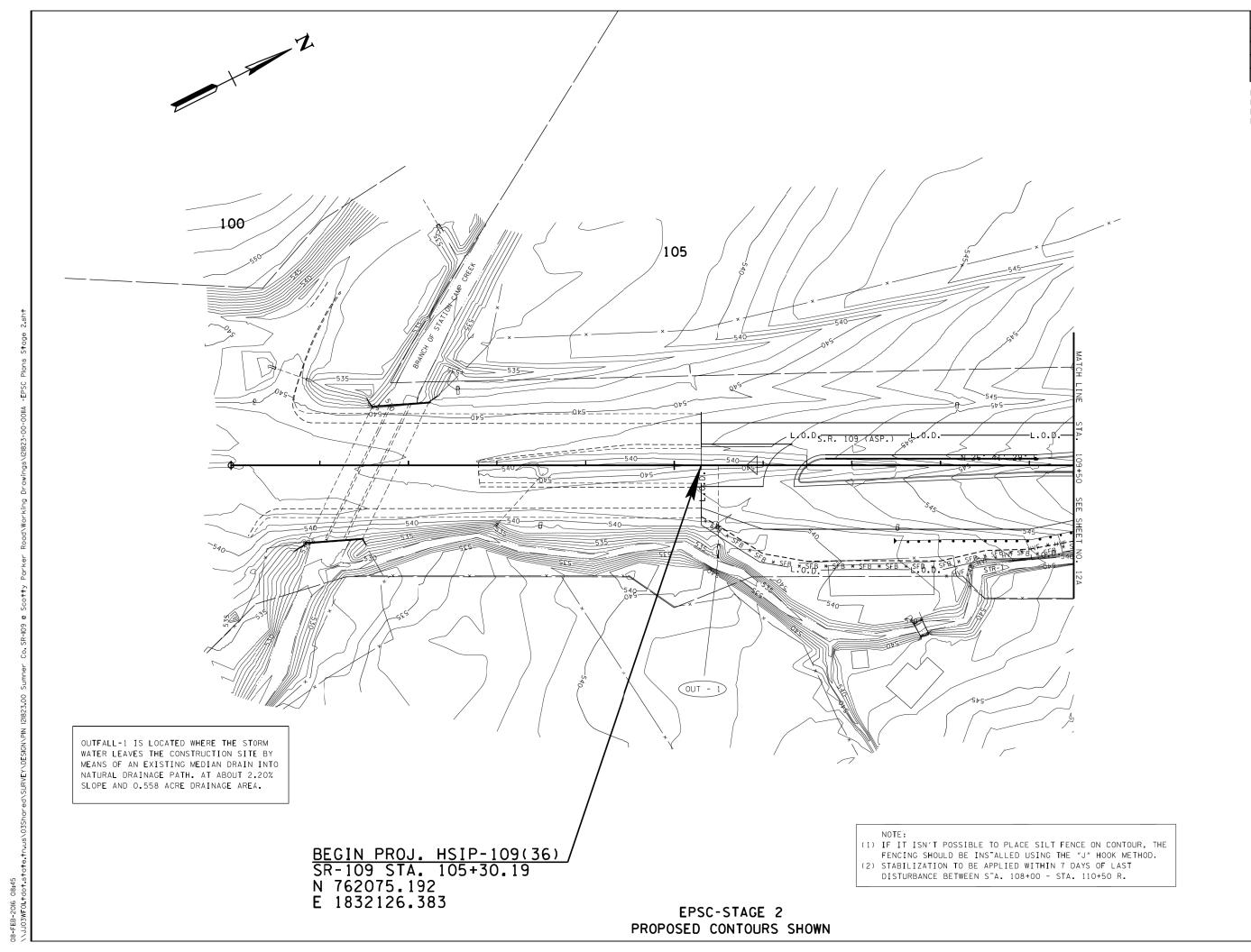


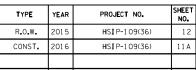
COORDINATES ARE NAD/83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF LOOCO2 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988.

STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION

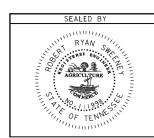
EROSION PREVENTION AND SEDIMENT CONTROL PLAN

BEGIN PROJ. TO STA. 109+50





REV. 02-08-16: REVISED SHEET NUMBERING. ADDED LIMIT OF DISTURBANCE (L.O.D.). ADDED NOTE (2).



COORDINATES ARE NAD/83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF LOOCOZ AND TIED TO THE TORN, ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988.

STATE OF TENNESSEE Department of transportation

EROSION
PREVENTION
AND SEDIMENT
CONTROL PLAN

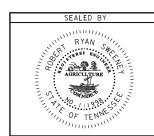
BEGIN PROJ. TO STA. 109+50 SCALE: 1"= 50'

105 * SEB * SFB OUT - 1 OUTFALL-1 IS LOCATED WHERE THE STORM WATER LEAVES THE CONSTRUCTION SITE BY MEANS OF AN EXISTING MEDIAN DRAIN INTO NATURAL DRAINAGE PATH. AT ABOUT 2.20% SLOPE AND 0.558 ACRE DRAINAGE AREA. (1) IF IT ISN'T POSSIBLE TO PLACE SILT FENCE ON CONTOUR, THE FENCING SHOULD BE INSTALLED USING THE "J" HOOK METHOD.
(2) STABILIZATION TO BE APPLIED WITHIN 7 DAYS OF LAST BEGIN PROJ. HSIP-109(36) SR-109 STA. 105+30.19 N 762075.192 E 1832126.383 DISTURBANCE BETWEEN STA. 108+00 - STA. 110+50 R. EPSC-STAGE 3 PROPOSED CONTOURS SHOWN

 TYPE
 YEAR
 PROJECT NO.
 SHEET NO.

 CONST.
 2016
 HSIP-109(36)
 118

REV. 02-08-16: ADDED SHEET NO. 11B.

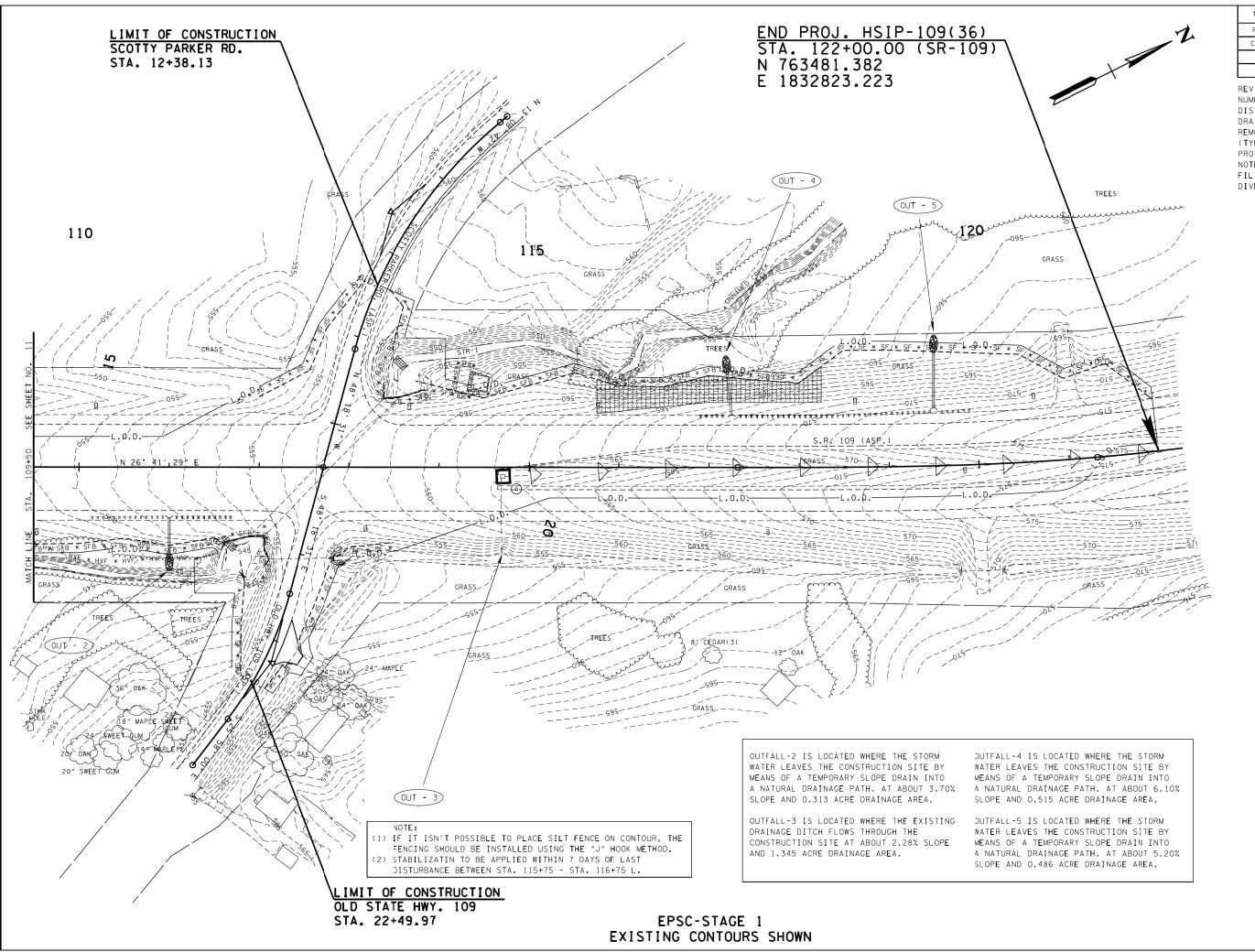


COORDINATES ARE NAD/83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF LOOCOZ AND TIED TO THE TORN, ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988.

STATE OF TENNESSEE Department of transportation

EROSION
PREVENTION
AND SEDIMENT
CONTROL PLAN

BEGIN PROJ. TO STA. 109+50 SCALE: 1"= 50'

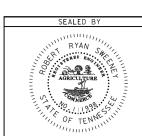


 TYPE
 YEAR
 PROJECT NO.
 SHEET NO.

 R.O.W.
 2015
 HSIP-109(36)
 11 A

 CONST.
 2016
 HSIP-109(36)
 12

REV. 02-08-16: REVISED SHEET NUMBERING. ADDED LIMIT OF DISTURBANCE (L.O.D.). REVISED DRAINAGE AREA OF OUTFALL-3. REMOVED CULVERT PROTECTION (TYPE 1). ADDED CULVERT PROTECTION (TYPE 2). ADDED NOTE (2). ADDED SEDIMENT FILTER BAG AND SUSPENDED PIPE DIVERSION.

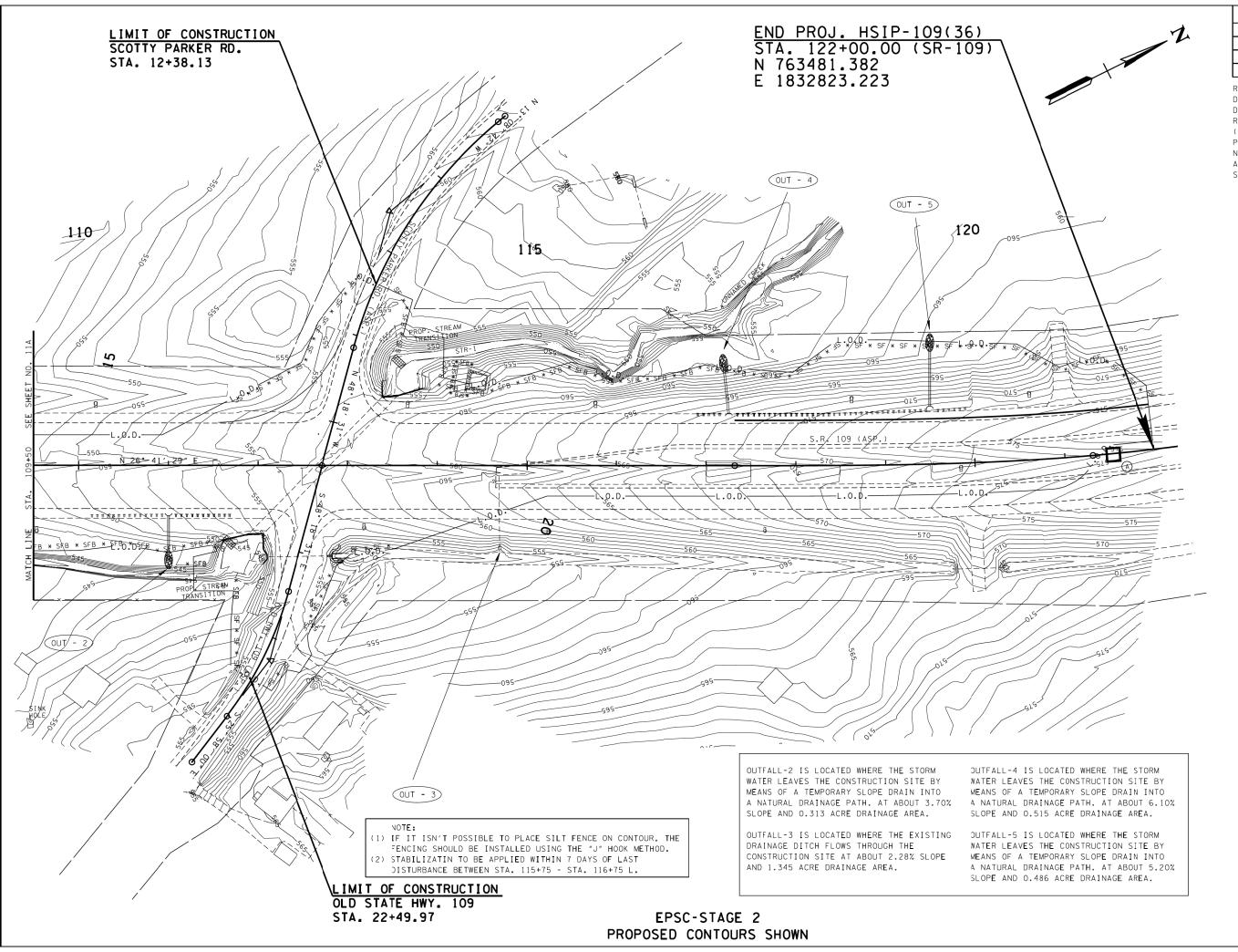


COORDINATES ARE NAD/83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF LOOCO2 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988.

STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION

EROSION
PREVENTION
AND SEDIMENT
CONTROL PLAN

STA. 109+50 TO END PROJ. SCALE: 1"= 50'

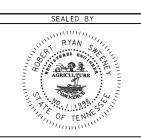


 TYPE
 YEAR
 PROJECT NO.
 SHEET NO.

 R.O.W.
 2015
 HSIP-109(36)
 12A

 CONST.
 2016
 HSIP-109(36)
 12A

REV. 02-08-16: ADDED LIMIT OF DISTURBANCE (L.O.D.). REVISED DRAINAGE AREA OF OUTFALL-3. REMOVED CULVERT PROTECTION (TYPE 1). ADDED CULVERT PROTECTION (TYPE 2). ADDED NOTE (2). ADDED NOTE (2). ADDED SEDIMENT FILTER BAG AND SUSPENDED PIPE DIVERSION.

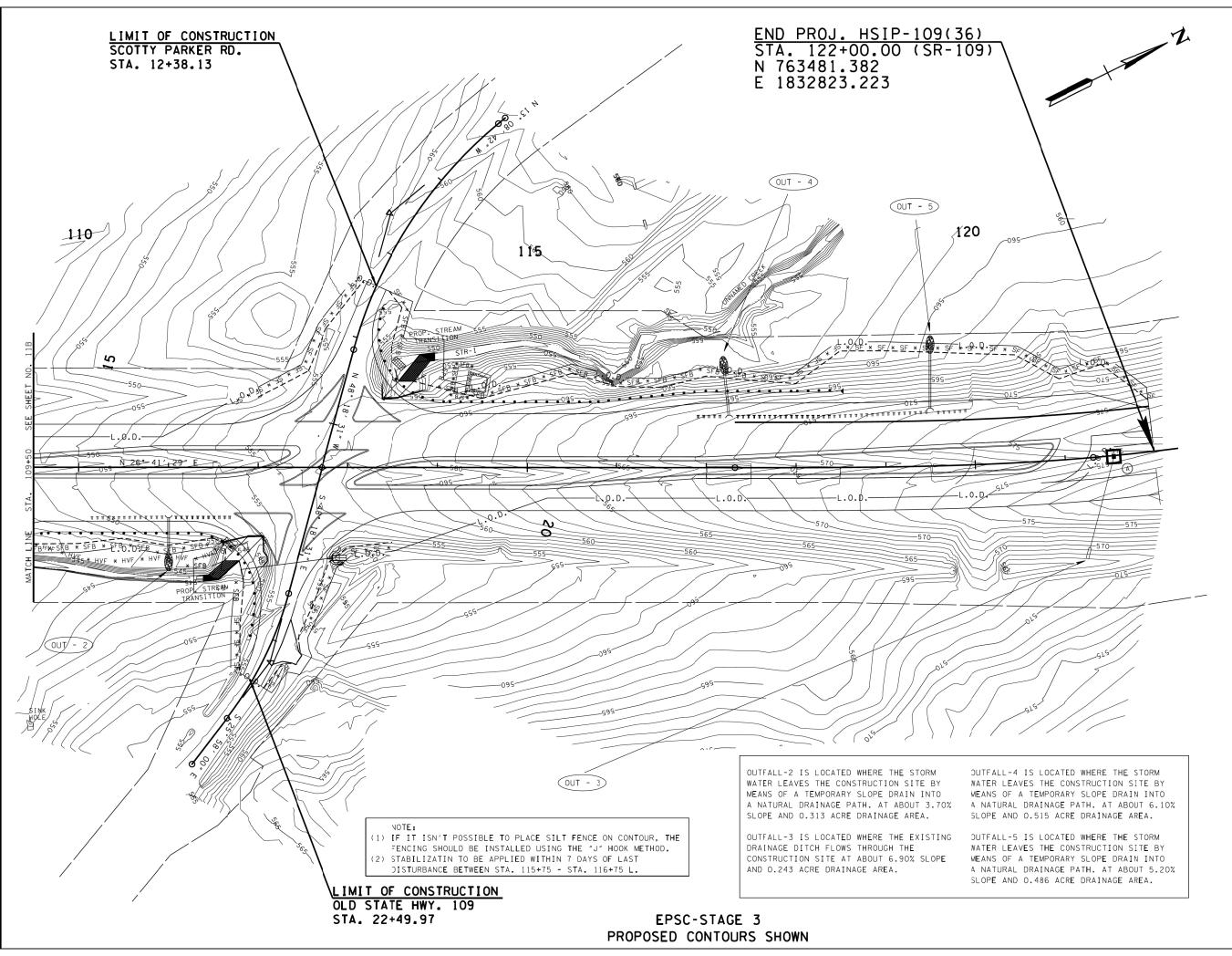


COORDINATES ARE NAD/83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00C02 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988.

STATE OF TENNESSEE Department of transportation

EROSION
PREVENTION
AND SEDIMENT
CONTROL PLAN

STA. 109+50 TO END PROJ.



 TYPE
 YEAR
 PROJECT NO.
 SHEET NO.

 CONST.
 2016
 HSIP-109(36)
 12B

REV. 02-08-16: ADDED SHEET NO. 12B.



COORDINATES ARE NAD/83(1995), ARE DATUM ADJUSTED BY THE FACTOR OF 1.00C02 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988.

STATE OF TENNESSEE Department of transportation

EROSION
PREVENTION
AND SEDIMENT
CONTROL PLAN

STA. 109+50 TO END PROJ.



Documentation and Permits Binder

SR-109 Intersection at Old SR-109

Project No.: 83011-0233-94

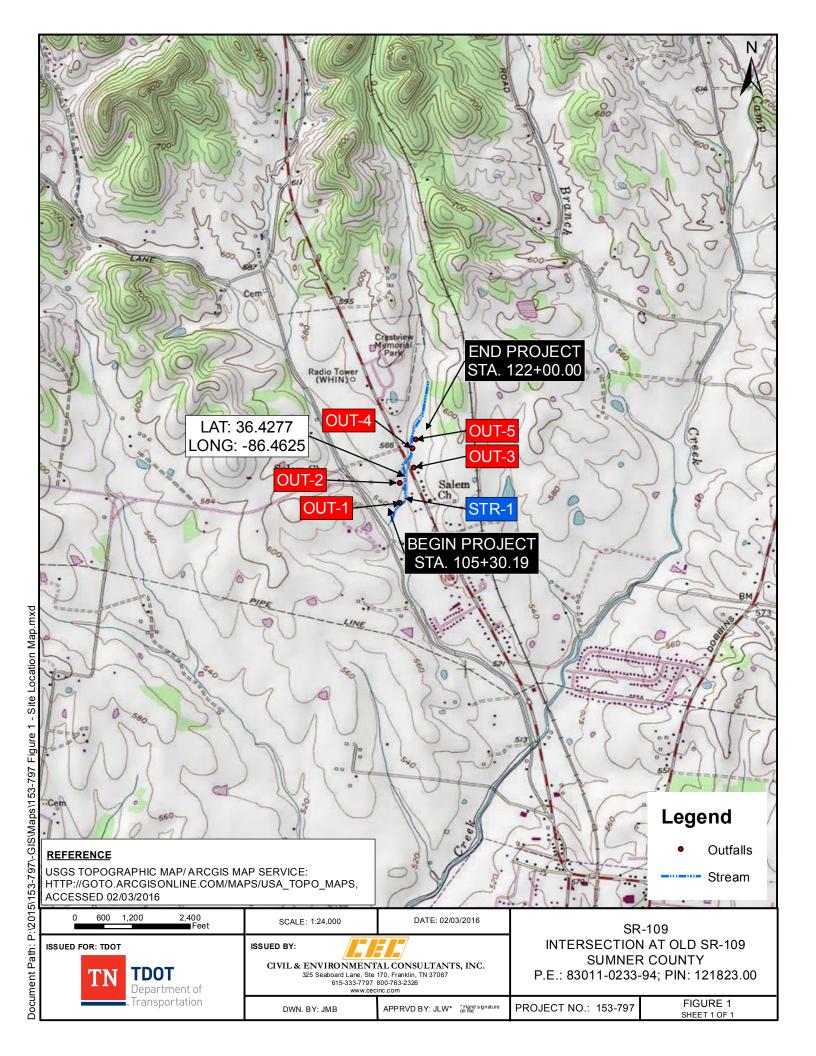
PIN: 121823.00

Sumner County, Tennessee



Prepared for:Tennessee Department of Transportation

Prepared by:
Civil & Environmental Consultants, Inc.



Content Checklist



DOCUMENTS AND PERMITS BINDER

CHECKLIST

PRO	: 121823.00 DJECT NO. : 83011-0233-94 UNTY: Sumner
1.	☑ INDEX OF REVISIONS
2.	☑ RAINFALL RECORD SHEETS
3.	
4.	⋈ NOI AND □ NOC
5.	☑ BLANK NOT
6.	□ CONSTRUCTION GENERAL PERMIT (CGP)
7.	ENVIRONMENTAL PERMITS 7.1 ☑ PERMIT APPLICATION LETTER 7.2 PERMITS a. ☑ TDEC ARAP b. ☐ CORPS OF ENGINEERS (COE) c. ☐ TVA 26A d. ☐ OTHER
8.	□ ECOLOGY REPORT
9.	TRAINING CERTIFICATIONS
	TDEC LEVEL I a. EPSC INSPECTOR b. TDOT PROJECT SUPERVISOR c. TDOT PROJECT SUPERVISOR MANAGER d. CONTRACTOR PROJECT SUPERVISOR
	TDEC LEVEL II e. □ TDOT PROJECT SUPERVISOR MANAGER
10.	TMDL INFORMATION REQUIRED
	a. □ Yes
	h ⊠ No

PROJECT NAME: SR-109 Intersection at Old SR-109



1. Index of Revisions



	Index of SWPPP Revisions						
	_		Revision on	Signature of	Signature of TDOT		
Revision #	Date	Revision Description	EC Sheet #	Contractor	Project Supervisor		

2. Rainfall Record Sheets



State Route (SR) / US Route or Road Name:	TDOT Construction No.:	TDOT Contract No.:
otate route (ort) oo route or rout rame.	i DO i Odlišti učtičii i io	i DO i Golitiact No



TDOT EPSC Inspection Monthly Rainfall Data Log

Date	Day of Week ¹	Predicted Precipitation (%) ²	Rainfall Gage 1 (in)	Rainfall Gage 2 (in)	Rainfall Gage 3 (in)	Rainfall Gage 4 (in)	Rainfall Gage 5 (in)	Duration (hr)
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								
28								
29								
30								
		M Tu W Th F Sa						

Day of Week= Su,M,Tu,W,Th,F,Sa

² Predicted Precipitation Source: ______



NOAA Atlas 14, Volume 2, Version 3 Location name: Gallatin, Tennessee, US* Latitude: 36.4277°, Longitude: -86.4625° Elevation: 562 ft* * source: Google Maps



POINT PRECIPITATION FREQUENCY ESTIMATES

G.M. Bonnin, D. Martin, B. Lin, T. Parzybok, M.Yekta, and D. Riley NOAA, National Weather Service, Silver Spring, Maryland

PF tabular | PF graphical | Maps & aerials

PF tabular

PI	PDS-based point precipitation frequency estimates with 90% confidence intervals (in inches) ¹										
Duration				Avera	ge recurren	ce interval (y	/ears)				
Duration	1	2	5	10	25	50	100	200	500	1000	
5-min	0.386 (0.357-0.422)	0.453 (0.418-0.495)	0.521 (0.479–0.568)	0.574 (0.528-0.626)	0.641 (0.585-0.699)	0.690 (0.627-0.752)	0.738 (0.666-0.806)	0.783 (0.701–0.857)	0.840 (0.744-0.921)	0.883 (0.775-0.972)	
10-min	0.617 (0.570-0.673)	0.725 (0.669-0.792)	0.834 (0.767-0.909)	0.918 (0.844-1.00)	1.02 (0.932-1.11)	1.10 (0.998–1.20)	1.17 (1.06–1.28)	1.24 (1.11–1.36)	1.33 (1.18–1.46)	1.39 (1.22–1.53)	
15-min	0.772 (0.712-0.842)	0.912 (0.841-0.995)	1.06 (0.970-1.15)	1.16 (1.07–1.27)	1.29 (1.18–1.41)	1.39 (1.26–1.52)	1.48 (1.34–1.62)	1.57 (1.40–1.71)	1.67 (1.48–1.83)	1.74 (1.53–1.92)	
30-min	1.06 (0.976-1.15)	1.26 (1.16–1.38)	1.50 (1.38–1.63)	1.68 (1.55–1.84)	1.92 (1.75–2.09)	2.10 (1.90-2.29)	2.27 (2.05–2.48)	2.44 (2.18–2.67)	2.66 (2.36–2.92)	2.83 (2.48-3.11)	
60-min	1.32 (1.22-1.44)	1.58 (1.46–1.73)	1.92 (1.77-2.10)	2.19 (2.01–2.39)	2.55 (2.33-2.78)	2.84 (2.58-3.10)	3.13 (2.82-3.41)	3.42 (3.06-3.74)	3.82 (3.38-4.19)	4.12 (3.62-4.54)	
2-hr	1.56 (1.44-1.70)	1.86 (1.72–2.03)	2.25 (2.07–2.45)	2.57 (2.36–2.79)	3.00 (2.74–3.26)	3.34 (3.04-3.64)	3.70 (3.35-4.03)	4.07 (3.65-4.44)	4.58 (4.06-5.02)	4.99 (4.38-5.48)	
3-hr	1.69 (1.56–1.85)	2.02 (1.86–2.21)	2.44 (2.25–2.67)	2.79 (2.56–3.05)	3.27 (2.98–3.57)	3.66 (3.32–3.99)	4.07 (3.66-4.44)	4.49 (4.01–4.91)	5.08 (4.48-5.58)	5.56 (4.85-6.12)	
6-hr	2.05 (1.88–2.27)	2.44 (2.23–2.71)	2.96 (2.70–3.28)	3.40 (3.09–3.75)	4.01 (3.62-4.43)	4.52 (4.04-5.00)	5.06 (4.48-5.60)	5.63 (4.94–6.25)	6.44 (5.57-7.17)	7.11 (6.07–7.93)	
12-hr	2.44 (2.24–2.68)	2.91 (2.66–3.19)	3.52 (3.22–3.88)	4.04 (3.68-4.44)	4.78 (4.32-5.26)	5.38 (4.83-5.92)	6.03 (5.37–6.64)	6.72 (5.91–7.40)	7.69 (6.66-8.50)	8.49 (7.25–9.44)	
24-hr	2.98 (2.79–3.19)	3.55 (3.33–3.81)	4.33 (4.06-4.64)	4.97 (4.65–5.32)	5.86 (5.46-6.27)	6.59 (6.12–7.06)	7.36 (6.79–7.88)	8.17 (7.49–8.75)	9.30 (8.44-9.99)	10.2 (9.19–11.0)	
2-day	3.56 (3.32–3.84)	4.25 (3.96-4.59)	5.20 (4.84–5.61)	5.99 (5.56-6.45)	7.11 (6.57-7.66)	8.03 (7.39–8.65)	9.01 (8.24-9.71)	10.0 (9.11–10.8)	11.5 (10.3–12.5)	12.7 (11.3–13.8)	
3-day	3.78 (3.52-4.06)	4.51 (4.20-4.85)	5.50 (5.12–5.92)	6.31 (5.87–6.78)	7.45 (6.90–8.01)	8.39 (7.73–9.01)	9.36 (8.59–10.1)	10.4 (9.46–11.2)	11.8 (10.7–12.8)	13.0 (11.6–14.1)	
4-day	3.99 (3.73-4.29)	4.76 (4.45–5.12)	5.80 (5.41-6.23)	6.64 (6.18–7.12)	7.80 (7.24-8.37)	8.74 (8.08-9.37)	9.72 (8.94–10.4)	10.7 (9.80–11.5)	12.2 (11.0–13.1)	13.3 (11.9–14.4)	
7-day	4.78 (4.45–5.16)	5.70 (5.30-6.15)	6.95 (6.46-7.50)	7.97 (7.39–8.59)	9.42 (8.70–10.1)	10.6 (9.75–11.4)	11.8 (10.8–12.8)	13.2 (12.0–14.2)	15.0 (13.5–16.3)	16.5 (14.7–17.9)	
10-day	5.48 (5.12–5.87)	6.53 (6.11–6.99)	7.87 (7.36–8.43)	8.95 (8.35–9.57)	10.4 (9.69–11.1)	11.6 (10.7–12.4)	12.8 (11.8–13.7)	14.0 (12.9–15.0)	15.7 (14.3–16.9)	17.1 (15.4–18.3)	
20-day	7.44 (7.02-7.92)	8.82 (8.31–9.39)	10.4 (9.82–11.1)	11.7 (11.0–12.4)	13.3 (12.5–14.1)	14.5 (13.6–15.4)	15.7 (14.7–16.8)	16.9 (15.7–18.0)	18.5 (17.1–19.7)	19.7 (18.1–21.0)	
30-day	9.14 (8.64–9.67)	10.8 (10.2–11.4)	12.6 (11.9–13.3)	14.0 (13.2–14.8)	15.9 (15.0–16.8)	17.3 (16.3–18.3)	18.7 (17.5–19.8)	20.1 (18.7–21.3)	21.9 (20.3–23.2)	23.2 (21.4–24.7)	
45-day	11.5 (10.9–12.1)	13.5 (12.8–14.2)	15.5 (14.7–16.4)	17.1 (16.2–18.1)	19.2 (18.1–20.3)	20.7 (19.5–21.9)	22.2 (20.8–23.5)	23.6 (22.1–25.1)	25.4 (23.7–27.1)	26.7 (24.9–28.5)	
60-day	13.8 (13.1–14.6)	16.2 (15.4–17.1)	18.6 (17.7–19.6)	20.4 (19.3–21.4)	22.6 (21.4–23.8)	24.2 (22.9–25.5)	25.7 (24.3–27.1)	27.2 (25.6–28.7)	28.9 (27.1–30.6)	30.2 (28.2–32.0)	

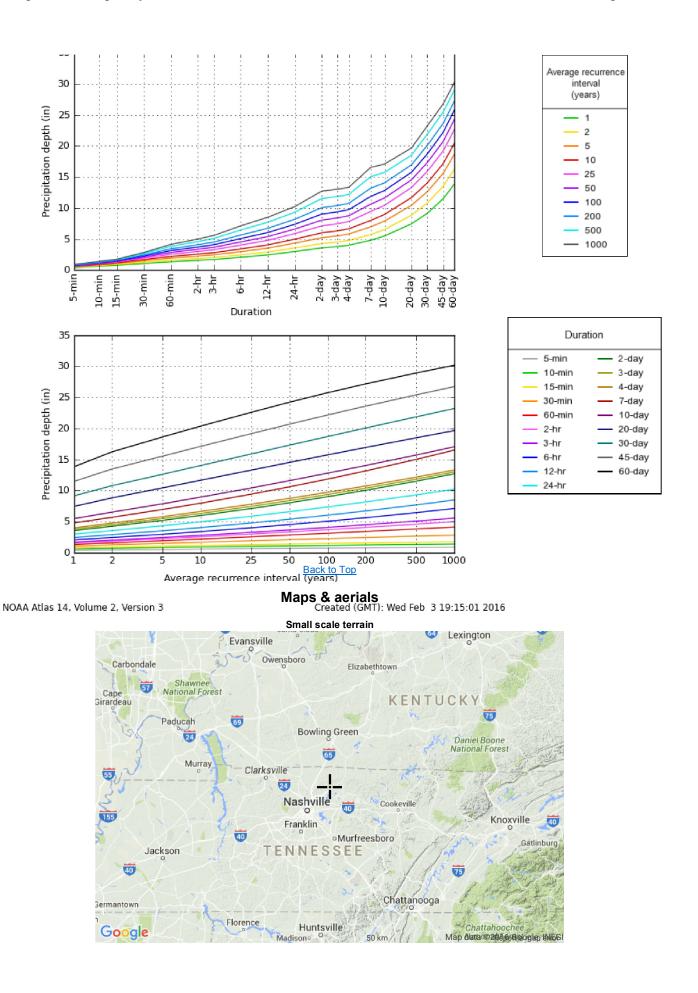
¹ Precipitation frequency (PF) estimates in this table are based on frequency analysis of partial duration series (PDS).

Back to Top

PF graphical

Numbers in parenthesis are PF estimates at lower and upper bounds of the 90% confidence interval. The probability that precipitation frequency estimates (for a given duration and average recurrence interval) will be greater than the upper bound (or less than the lower bound) is 5%. Estimates at upper bounds are not checked against probable maximum precipitation (PMP) estimates and may be higher than currently valid PMP values.

Please refer to NOAA Atlas 14 document for more information.









Back to Top

US Department of Commerce
National Oceanic and Atmospheric Administration
National Weather Service
National Water Center
1325 East West Highway
Silver Spring, MD 20910

3. EPSC Inspection Reports





CONSTRUCTION DIVISION EPSC DELEGATION OF AUTHORITY

Discharges of Stormwater Associated with Construction	resentative) of the Tennessee General NPDES Permit for Activities, I
	e reporting responsibility of coordination with the erosion
prevention and sediment control (EPSC) inspection serv	ices consultant for TDOT contract #
to:	
Name:	(print name of TDOT delegate)
Title:	
Address:	
Phone No.:	
Email Address:	
I am providing delegation of authority as stated above ar knowledge of the subject project and the ability to discus	nd confirm that the TDOT delegate stated above has direct
inspection services consultant on the subject project dire	•
(signat	ure of TDOT Project Supervisor)
(signat	ure of TDOT delegate)
(date)	

The EPSC Delegation of Authority shall be submitted to the local TDEC WPC Environmental Field Office (EFO) address (see table below) for record keeping. A copy shall be placed within the on-site SWPPP Documentation and Permits Binder.

EFO	Street Address	Zip Code	EFO	Street Address	Zip Code
Memphis	8383 Wolf Lake Drive, Bartlett	38133	Cookeville	1221 South Willow Ave.	38506
Jackson	1625 Hollywood Drive	38305	Chattanooga	540 McCallie Avenue STE 550	37402
Nashville	711 R S Gass Boulevard	37243	Knoxville	3711 Middlebrook Pike	37921
Columbia	1421 Hampshire Pike	38401	Johnson City	2305 Silverdale Road	37601



TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION (TDEC)

Division of Water Resources

William R. Snodgrass Tennessee Tower, 312 Rosa L. Parks Avenue, 11th Floor, Nashville, Tennessee 37243 1-888-891-8332 (TDEC)

General NPDES Permit for Stormwater Discharges from Construction Activities (CGP)

Construction Stormwater Inspection Certification (Twice-Weekly Inspections)

Primary Permittee Name:		Date of Inspection:									
	Primary Permittee Name:										
Current approximate Has rainfall been checked/documented daily? Name of Inspector: Yes No											
Current weather conditions: Inspector's TNEPSC Certification Number:											
Please check the box if the following items are on-site:											
Notice of Coverage (NOC) Stormwater Pollution Prevention Plan (SWPPP) Twice-weekly inspection documentation											
Site contact information Rain Gage Off-site Reference Rain Gage Location:											
Best Management Practices (BMPs):											
Are the Erosion Prevention and Sediment Controls (EPSCs) functioning correctly: If "No," describe below in Comment Section											
Are all applicable EPSCs installed and mai	ntained per the SWPPP?		□Yes	□No							
2. Are EPSCs functioning correctly at all dist			□Yes	□No							
3. Are EPSCs functioning correctly at outfall receiving stream, and no other water qualit		ectionable color contrast in th	ne □Yes	□No							
4. Are EPSCs functioning correctly at ingress	egress points such that there is no eviden	ce of track out?	□Yes	□No							
5. If applicable, have discharges from dewate "No," describe below the measures to be in		te controls per section 4.1.4?	? If ☐Yes	□No							
6. If construction activity at any location on-site has temporarily/permanently ceased, was the area stabilized within 14 days per section 3.5.3.2? If "No," describe below each location and measures taken to stabilize the area(s).											
Have pollution prevention measures been installed, implemented, and maintained to minimize the discharge of pollutants 7. from equipment and vehicle washing, wheel wash water, and other wash waters per section 4.1.5? If "No," describe below the measures to be implemented to address deficiencies.											
8. If a concrete washout facility is located on site, is it clearly identified on the project and maintained? If "No," N/A Yes describe below the measures to be implemented to address deficiencies.											
9. Have all previous deficiencies been addres Check if deficiencies/corrective measu			tion. Yes	□No							
Check if deficiencies/corrective measures have been reported on a previous form. Comment Section. If the answer is "No" for any of the above, please describe the problem and corrective actions to be taken. Otherwise, describe any pertinent observations:											
Certification and Signature (must be signed by L certify under penalty of law that this document											
I certify under penalty of law that this document and all attachments were prepared by me, or under my direction or supervision. The submitted information 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. As specified in Tennessee Code Annotated Section 39-16-702(a)(4), this declaration is made under penalty of perjury.											
Inspector Name and Title:	Signature:		Date:								
Primary Permittee Name and Title:	Signature:		Date:								

Construction Stormwater Inspection Certification Form (Twice-Weekly Inspections)

Purpose of this form/ Instructions

An inspection, as described in section 3.5.8.2. of the General Permit for Stormwater Discharges from Construction Activities ("Permit"), shall be performed at least twice every calendar week and documented on this form. Inspections shall be performed at least 72 hours apart. Where sites or portion(s) of construction sites have been temporarily stabilized, or runoff is unlikely due to winter conditions (e.g., site covered with snow or ice), such inspection only has to be conducted once per month until thawing results in runoff or construction activity resumes.

Inspectors performing the required twice weekly inspections must have an active certification by completing the "Fundamentals of Erosion Prevention and Sediment Control Level I" course. (http://www.tnepsc.org/). A copy of the certification or training record for inspector certification should be kept on site.

Qualified personnel, as defined in section 3.5.8.1 of the Permit (provided by the permittee or cooperatively by multiple permittees) shall inspect disturbed areas of the construction site that have not been finally stabilized, areas used for storage of materials that are exposed to precipitation, structural control measures, locations where vehicles enter or exit the site, and each outfall.

Disturbed areas and areas used for storage of materials that are exposed to precipitation shall be inspected for evidence of, or the potential for, pollutants entering the site's drainage system. Erosion prevention and sediment control measures shall be observed to ensure that they are operating correctly.

Outfall points (where discharges leave the site and/or enter waters of the state) shall be inspected to determine whether erosion prevention and sediment control measures are effective in preventing significant impacts to receiving waters. Where discharge locations are inaccessible, nearby downstream locations shall be inspected. Locations where vehicles enter or exit the site shall be inspected for evidence of offsite sediment tracking.

Based on the results of the inspection, any inadequate control measures or control measures in disrepair shall be replaced or modified, or repaired as necessary, before the next rain event if possible, but in no case more than 7 days after the need is identified.

Based on the results of the inspection, the site description identified in the SWPPP in accordance with section 3.5.1 of the Permit and pollution prevention measures identified in the SWPPP in accordance with section 3.5.2 of the Permit, shall be revised as appropriate, but in no case later than 7 days following the inspection. Such modifications shall provide for timely implementation of any changes to the SWPPP, but in no case later than 14 days following the inspection.

All inspections shall be documented on this Construction Stormwater Inspection Certification form. Alternative inspection forms may be used as long as the form contents and the inspection certification language are, at a minimum, equivalent to the division's form and the permittee has obtained a written approval from the division to use the alternative form. Inspection documentation will be maintained on site and made available to the division upon request. Inspection reports must be submitted to the division within 10 days of the request.

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.

TN T	ОТ	State/US Route or Road Name:						Inspection Date:							
Dep	artment of sportation	Contract #:				PIN:		County:			_	TNR#			
_	C Inspection Report Did the contractor accompany the EPSC inspector on the inspection as required by SP107FP? Yes No							_	Number of Corrective Actions						
			_		_			on the attached TDEC form			?	Number of I	Recurrin	ng Corr. Act	S.
		Yes No	If no, it is the	responsibly	of the cor	ntractor to pr	ovide wr	itten comments that detail their dis	sagreement v	with the noted findings.		Number o	of Sedir	nent Release	es
		Contractor's Sign	ature:					Date:							
Outfall # / STR or WTL #	Entry Type	App. Station # From/To	Date La Disturbe	st ed -	abilization Type T = Temp P= Perma	e oorary	Action Code		Action R	equired / Clarification				Object. Color Contrast (Y)	Sed. Release (Y)
E	Entry Type	e Codes				<u>i </u>		Actio	on Codes					<u> </u>	
RCA R	orrective A ecurring Co ture Maint	orrective Action	CL Cle CO Ou CW Ins	ean out me itfall is clos itall concre	easure sed ete washo		DIV HV I LIT	Install diversion Install high visibility fence Install measure Pick up litter/debris	R REM SR TRAC	Repair/Replace meas Remove measure Clean up sediment re Clean off tracking from	elease* m road	W		de measure vet to work	
			DC Im	plement dι	ust contro	ol	PS	Permanently stabilize area	TS	Temporarily stabilize	area				

^{*}Approval from TDEC is needed prior to removal of sediment from a stream or wetland.



Contract #:	SR/US Road Name:	County:	Inspection Date:	
·			TNR#	

Outfall # / STR or WTL #	Entry Type	App. Station # From/To	Date Last Disturbed	Stabilizatior Type T = Temp P= Perma	Date / orary nent	Action Code	Action Required / Clarification	Object. Color Contrast (Y)	Sed. Release (Y)

CIRCULAR LETTER

SECTION: 209-01 Number: 209.01-02

SUBJECT: EROSION PREVENTION AND SEDIMENT CONTROL (EPSC) INSPECTION REPORT

DATE: OCTOBER 2, 2015

The inspection report and monthly rain gauge log identified in the Tennessee Department of Transportation Erosion Prevention Sediment Control (EPSC) Inspection Manual, November 14 2014 or most current version, located on the TDOT Construction Division website, shall be utilized as the standard statewide report for the evaluation of EPSC measures on all Department projects that are subject to the requirements of the NPDES General Permit for Storm Water Discharges from Construction Activities (CGP). This report should also be used to document Contractor compliance with EPSC requirements in conformance with ARAP, Corps of Engineers, and/or TVA permits. The report shall be completed according to guidance provided by the Tennessee Department of Transportation EPSC Inspection Manual, November 2014 or most current version.

CIRCULAR LETTER

SECTION: 209-01 Number: 209.01-03

SUBJECT: CONSTRUCTION RELATED SEDIMENT REMOVAL

DATE: JULY 1, 2015

This Circular Letter establishes the procedures for removal and/or stabilization of sediment discharges caused by active construction projects to non-jurisdictional areas (e.g., grassed or treed areas, wet weather conveyances, etc.), as well as jurisdictional areas (e.g., streams (including ephemeral streams), wetlands, sinkholes, etc.), within or beyond the project construction limits. Sediment caused by active construction projects must be removed and/or stabilized when it has accumulated beyond the last Erosion Prevention Sediment Control (EPSC) measure on the construction site before leaving the construction limits. Any sediment beyond the TDOT project right-of-way (ROW) is considered sediment discharge regardless of whether or not it is in a jurisdictional area. The District Operations Supervisor shall notify the Regional Environmental Coordinator (EC) immediately after it is discovered that a sediment release has occurred. The District Operations Supervisor or his/her designee shall complete all applicable information on the attached "Sediment Release Form". The District Operations Supervisor or his designee shall email the completed "Sediment Release Form" to the Regional EC, who will determine the appropriate course of action.

The Regions will only apply for activities included in the <u>TDEC General Aquatic Resources Alteration Permit (ARAP) for Sediment Removal and Stream Remediation</u>. This general permit authorizes certain stream remediation activities that serve the purpose of removing recently deposited sediment from stream beds, stream banks and riparian lands that result from construction related sediment releases from construction sites. These deposits shall be confined within areas that can be readily accessed and removed (stream restored or repaired) without additional harm to the shape or stability of the stream channel. Also, refer to standard specifications **Subsection 107.08 (Protection of Streams, Lakes and Reservoirs)** for additional information. The Nashville USACE District does not require notification of these activities since they do not regulate the removal of material from Waters of the U.S. The Memphis USACE District does not require notification prior to sediment removal activities. If TDOT sends a follow-up notification to TDEC after the sediment is removed, the Memphis USACE District would like to be copied on the notification letter. TVA does not need notification of these activities.

Attached are the Standard Operating Procedure (SOP), permit requirements, and sediment release form to use for this activity. The issuance of a permit does not authorize trespassing or discharges of storm water or non-stormwater across private property.

Work shall not commence in jurisdictional areas until TDOT has been notified by TDEC that the proposed activities may proceed under a general permit or that an individual permit has been issued. Email or verbal communication is an acceptable form of notification, if necessary.

Time is of the essence so that the extent of sediment migration is minimized and little or no delay is caused in construction progress.

Standard Operating Procedures (SOP) for Sediment Removal for Stream Remediation

Non-jurisdictional areas and waters:

Action to prevent the potential for additional discharges of sediment beyond the EPSC measures shall be started immediately. The removal and/or stabilization process for a sediment discharge in non-jurisdictional areas shall be started within twenty-four (24) hours after discovery. Since these accumulations of sediment have not yet reached a jurisdictional area, approval from the regulatory agencies is not necessary, but the terms and conditions of the <u>TDEC General ARAP</u> for the Alteration of Wet Weather Conveyances shall be followed. Removal of this sediment is the preferred method. The Regional Environmental Coordinator must approve the sediment cleanup activities if the contractor desires to stabilize and leave in place the sediment discharge. However, there cannot be a potential for the sediment to migrate into jurisdictional areas or for any other negative impact from leaving the sediment in place,

Attempts to remove and/or stabilize any off-site sediment discharges to non-jurisdictional areas outside of the ROW will require permission of the landowner. Arrangements concerning removal or stabilization of sediment on adjoining property must be settled by the contractor with the adjoining landowner before removal or stabilization can occur. If permission is not allowed, the EPSC inspector shall document the effort to remove and/or stabilize the sediment discharge in the EPSC inspection report, and the District Operation Supervisor shall contact the Regional Director of Operations, TDOT HQ Construction Office, the Regional Environmental Coordiator and the Compliance and Field Servicesof this effort.

For sediment releases beyond the last measure and off ROW, the District Operations Supervisor or designee shall complete the TDOT Sediment Release Form attached to this circular.

Jurisdictional waters:

The Regional Environmental Coordinator shall call the TDEC Environmental Field Office to report the release and go through the plan to remove and stabilize or clean up the area. Once verbal or written approval from TDEC has been given, the sediment can be removed and the area stabilized, as agreed upon with TDEC. Immediately following the sediment release and removal, the District Operations Supervisor or Regional Environmental Coordinator shall complete the TDOT Sediment Release Form attached to this circular for all sediment releases to streams and/or wetlands.

Actions to prevent the potential for additional discharges of sediment beyond the EPSC measures and into the stream or wetland shall be taken immediately. The removal and/or stabilization process of a sediment discharge in jurisdictional areas shall be started as soon as approval is received from the appropriate regulatory agencies. The Regional Environmental Coordinator shall be notified immediately after it is discovered that sediment has discharged to a

jurisdictional area. Approval by the regulatory agencies will be required for removal of all construction related sediment discharges to jurisdictional waters.

For situations where the General ARAP is not authorized for coverage, the sediment removal and/or stabilization activity must be covered by an Individual ARAP.

General ARAP:

For sediment releases covered by the TDEC General ARAP for Sediment Removal and Stream Remediation, the Regional Environmental Coordinator shall receive approval to proceed before removing the sediment deposits as well as prepare and submit an application package to the appropriate regulatory agencies. The District Operations Supervisor (or designee) or Regional Environmental Coordinator must also complete the TDOT Sediment Release Form attached to this circular.

In the event sediment releases are covered under the <u>TDEC General ARAP for Sediment Removal and Stream Remediation</u>, the following steps shall occur.

- 1. The Regional Environmental Coordinator shall be the single point of contact for this activity and shall coordinate with all regulatory agencies and TDOT personnel.
- 2. The District Operations Supervisor (or their designee) shall notify the Regional Environmental Coordinator and the Regional Director of Operations of all sediment releases with the locations of sediment release identified on site sketches or plans, an explanation why the discharge occurred, a topographic map of location(s), a completed TDEC Form CN-1091 (located on TDEC's website), a summary of the impacts, and description of what will be done to prevent the further or continued loss of sediment from the site.
- **3.** The Regional Environmental Coordinator shall notify the TDOT HQ Construction Office, the Regional Director of Operations, and the Compliance and Field Services with the information received from the District Operations Supervisor (or their designee) and the coordination efforts proposed with the regulatory agencies.
- **4.** The Regional Environmental Coordinator shall contact the TDEC Environmental Field Office to report the release and discuss removal and remediation. Once TDEC has given verbal or written approval of the removal and remediation plan, sediment removal can begin. The Regional Environmental Coordinator shall complete the TDOT Sediment Release Form attached to this circular and include all necessary information. The package of information shall then be sent to TDEC with a copy to the Compliance and Field Services.
- 5. If necessary, the Regional Environmental Coordinator may request an on-site field visit with the appropriate regulatory agencies and the District Operations Supervisor (or their designee) to determine the appropriate course of action. If, after the on-site visit, TDEC requires a more detailed plan than proposed by the Regional Environmental Coordinator or requires an Individual Permit, the Regional Environmental Coordinator shall provide the sediment release and site visit information to the TDOT Natural Resources Office for further action. A more detailed plan is known as a Sediment Assessment and Remediation Plan

- (SARP) which will be prepared, submitted to the regulatory agencies and overseen by the TDOT Natural Resources Office. In the case an Individual ARAP is required, instead of the Regions, the TDOT Natural Resources Office will be responsible for the next steps (#6 & #7 below). The TDOT Natural Resources Office shall provide this application package and regulatory approval to the Regional Environmental Coordinator in order to continue the next process step (#8).
- **6.** The District Operations Supervisor (or their designee) shall submit to the Regional Environmental Coordinator the application package, including the materials required within this Circular Letter, for each sediment release off ROW or into a jurisdictional area. These include the following items: completed TDOT Sediment Release Form, completed TDEC CN-1091 form, and the items listed in the "Permit Information Required With General ARAP Application" section below.
- 7. The Regional Environmental Coordinator shall review the application package to ensure all required information necessary for the permit acquisition is accurate and complete. The Regional Environmental Coordinator shall submit the application package to the appropriate TDEC Environmental Field Office.
- **8.** Once approval is received (either written or verbal with written follow-up) from TDEC, the Regional Environmental Coordinator shall distribute all applicable permits/approvals to the HQ Construction Office, the Compliance and Field Services and the District Operations Supervisor (or their designee).
- **9.** The District Operations Supervisor (or their designee) shall oversee the sediment removal and/or stabilization activities of the contractor until complete. If a SARP is processed by the TDOT Natural Resources Office on this project, the TDOT Natural Resources Office and the Memphis USACE shall also be involved with the coordination of this activity.
- **10.** The District Operations Supervisor (or their designee) shall notify the Regional Environmental Coordinator within two (2) calendar days after the sediment removal and /or stabilization is complete.
- **11.** At this time, the Regional Environmental Coordinator shall visit the locations identified in the application and provide written and photographic documentation of the location where removal and/or stabilization was performed. This shall also be included in the EPSC inspection report.
- 12. Within seven (7) calendar days after the completion of each activity, the Regional Environmental Coordinator shall submit the documentation above, electronic color copy via email, to the regulatory agencies, TDOT HQ Construction Office and TDOT Compliance and Field Services. An electronic color copy (e.g. .pdf) shall be sent via email and one color copy shall be mailed to TDEC. Please be aware that TDEC may impose a fee (Natural Resource Damage Assessment) to cover the damages to the affected jurisdictional area if a significant amount of damage was done to the area and total recovery of the sediment was not achieved. This fee shall only be imposed following a SARP conducted by the TDOT Natural Resources Office, in conjunction with, or approved by, TDEC.

Individual ARAP:

If the sediment release to jurisdictional waters meets one of the exceptions to the General ARAP coverage listed above, the Regional EC shall provide sediment release information to the TDOT Natural Resources Office for the application for an Individual Permit. The District Operations Supervisor or designee will also complete the TDOT Sediment Release Form attached to this circular for submittal to the Regional Environmental Coordinator.

PERMIT INFORMATION REQUIRED WITHARAP APPLICATIONS

- Cover Letter Description of the basic nature and scope of the project, including events that lead to the discharge, the characteristics of the discharge and the proposed method of sediment removal/stabilization. This application letter and any forms shall be signed by the Regional Construction Supervisor (or their designee).
- 7½-minute USGS Topographic Quadrangle Map Located in the appendix of the Storm Water Pollution Prevention Plan (SWPPP)* as the Vicinity Map or within the Water Quality Permit Application.
- **Permit Identification Numbers** Located on the NPDES Notice of Coverage (NOC), the USACE, TDEC and TVA permits.
- Latitude/Longitude In-stream location of sediment accumulation. This can be found on the internet (e.g., www.topozone.com), with a GPS unit or on the topographic quadrangle map. In the form of (Latitude XX.XXXX N, Longitude XX.XXXX W)
- Receiving Stream Located within the text of the SWPPP* or in the Ecology information within the Appendix of the SWPPP* or within the Water Quality Permit Application.
- Threatened or Endangered Species Located in the Ecology information within the appendix of the SWPPP* or within the Water Quality Permit Application.
- **Photos** Before sediment removal work (to submit with the application) and, once the work has been completed, after sediment cleanup (to submit after completion of the activity) representative photos.
- Plan sheets and/or sketches –Use Erosion Prevention and Sediment Control (EPSC) Sheet from within the Appendix of the SWPPP* to show EPSC methods being maintained. Provide sketch showing the approximate dimensions of the sediment deposit, the proposed diversion methods and any additional EPSC measures needed for sediment removal, if appropriate.
- Provide copies of the TDOT Standard Drawings, as appropriate
- **Proposed Commencement Date** Upon issuance of permit
- **Proposed Completion Date** (e.g., 30 days) from issuance of permit. The permit will state the expiration date based upon the proposed completion date. If additional time is needed after the stated expiration date within the permit, the Regional EC shall contact the regulatory agencies at least one week before the expiration date with a request for time extension and the amount of time requested.
- **Identify if the stream is listed as one of the following waters** This information is available on TDEC's website.

National Wild and Scenic Rivers in TN Tennessee's Designated State Scenic Rivers Outstanding National Resource Waters

*A SWPPP will not be provided on all projects. A SWPPP is only provided on construction projects that disturb one (1) acre or more of land.

TENNESSEE DEPARTMENT OF TRANSPORTATION EROSION PREVENTION/SEDIMENT CONTROL SEDIMENT RELEASE FORM FOR USE FOR SEDIMENT RELEASES OFF ROW AND/OR INTO STREAMS/WETLANDS

State Route (SR) / US Route or Road Name and Description:									
County(ies):	TDOT PIN:	:	NPDES Permit (NOC) #:						
Other Applicable Permits (ARAP, TVA, etc.)									
TDOT Contract No.:		Contractor:							
Date of Sediment Release:		wetland? Yes/No	e the ROW or discharge into a stream or If No, no further documentation beyond on report is required.						
TDOT/Consultant EPSC Inspector:									
Form Completed By: (TDOT Project S	Supervisor/D	esignee)	Date						
Received and Reviewed By: (Regiona	al Environme	ental Coordinator)	Date						
Forwarded to Local TDEC EFO (if app	olicable)		(Initial and Date)						
Forwarded back to Local TDOT Const	truction Offic	ce	(Initial and Date)						
			roximate stationing, which side of centerline int release to Clear Creek at Outfall 2, Sta.						
BMPs in area and if they were installe A 1.25" rain event (three hour duration working condition and installed per the	ed per the sit n) occurred o e updated ei 0% capacity.	te erosion control pla on October 1, 2009. rosion control plans Sediment-laden ru	se. Include relative rainfall totals, installed an and SWPPP requirements, etc. Example: Sediment trap above Outfall 2 was in in the SWPPP; however, 3 rock check dams noff from active cut slope exceeded check ment release into Clear Creek]						

TENNESSEE DEPARTMENT OF TRANSPORTATION EROSION PREVENTION/SEDIMENT CONTROL SEDIMENT RELEASE FORM FOR USE FOR SEDIMENT RELEASES OFF ROW AND/OR INTO STREAMS/WETLANDS

Environmental Impacts of Sediment Release: [Describe the environmental impacts of the sediment release including impacts to habitat (i.e. fish kills), dimensions of the sediment impacts, and potential impacts to Threatened and Endangered Species list in the Ecology Report and SWPPP. State if any jurisdictional waters were impacted by sediment. Example: A sediment release impacted permitted stream of Clear Creek (STR-3). The observed impacts are sediment deposition approximately 750 ft downstream and approximately 2 ft wide, culminating at log weir. Average sediment depth was 3", ranging from 12" to ½" thick. No endangered species are noted in the area and no signs of aquatic life was impacted]
Plans to Remove off-ROW Sediment: [Describe how TDOT plans on removing sediment and who will be involved in removal. Example: TDOT notified TDEC Environmental Field Office on October 2, 2009 about sediment release to Clear Creek. TDOT plans to install a sandbag cofferdam upstream of sediment release and pipe stream flow around impacted area, discharging back into stream below log weir. Sediment will be removed from stream with hand tools and disposed of per requirements outlined in project SWPPP. Once sediment is removed, sandbag cofferdam will be removed; returning flow to stream. The contractor will perform sediment removal under supervision of Region Environmental Coordinator.]
Plans to Prevent Future Impacts: [Describe additional EPSC measure or change in drainage planned (or completed) to prevent repetitive sediment release in this location. Example: EPSC measures will be increased at and above Outfall 2. Two additional rock check dams have been constructed in ditch leading to Outfall 2 and sediment trap storage capacity has been increased. In addition, seed and erosion control blanket are scheduled to be installed on the cut slope at the end of the week.] Attach Additional Information: such as Photographs and Erosion Control Plans indicating location of sediment
release. For sediment releases to jurisdictional waters that qualify for coverage under <u>General ARAP for Sediment Removal and Stream Remediation</u> , the TDEC CN-1091 form must also be completed.

CIRCULAR LETTER

SECTION: 209.01 Number: 209.01-04

SUBJECT: TDOT INSPECTION OF CONTRACTOR WASTE & BORROW SITES

DATE: OCTOBER 2, 2015

Effective with the June 18, 2010 Letting, Waste & Borrow Sites for TDOT projects will be subject to the requirements of the <u>Procedures for Providing Offsite Waste and Borrow on TDOT Construction Projects</u>.

After the contractor has secured approval for use of a waste and/or borrow site, he/she is responsible for performing twice weekly EPSC Inspections of that site, if applicable. The contractor must have a certified EPSC inspector as required by the TDEC Construction General Permit (CGP). The certified EPSC inspector must document the inspections on the inspection form in the CGP or on TDOT's inspection report (see CL 209.01-02).

All aspects of the oversight and inspection of Waste and Borrow sites associated with TDOT construction projects shall follow the terms and conditions of the Procedures for Providing Offsite Waste and Borrow on TDOT Construction Projects dated June 2012, or most current version.

TDOT Construction Exclusive Waste/Borrow Site Weekly EPSC Inspection Review Report

Date of Review:	County:				
TDOT Project Description:					
TDOT Contract Number:	Contractor:				
Contractor's Waste/Borrow Area Name/Description:	Contractor's Waste/Borrow Area Name/Description:				
Waste/Borrow NPDES Number:					
Contractor's Certified EPSC Inspector: Inspector's Certification Number:					
Location of Contractor's Waste/Borrow Area Permits:					
Dates of Contractor's EPSC inspections (since last review):					
Name of TDOT Representative Completing Documentation Review:					

Instructions: This checklist covers the basic erosion prevention and sediment control and other stormwater construction requirements for Exclusive Waste/Borrow Areas used for TDOT projects. This report shall be completed weekly by the TDOT EPSC Representative verifying the documentation of the contractor's previous week's twice weekly EPSC inspection reports. Questions that are not applicable for the site must be marked as "N/A". Checks placed under the "No" column that indicate a deficiency requires a written explanation and/or a written corrective action and required completion date in the "TDOT EPSC Representative's Comments and Corrective Actions" section of this form. Both the TDOT EPSC Representative and the Contractor's Certified EPSC Inspector should sign the form immediately following each review.

General Information – Only need to complete during first review unless there are changes to report at subsequent reviews

	Yes I	No	N/A	
1.				Is the waste/borrow area exclusive to the above referenced TDOT project? (If not exclusive or if exempt
				exclusive, do not complete or answer any other questions.)
2.				Is the NOC posted on site?
3.				Are the SWPPP and other required CGP information available on site?
4.				Are rain gages present and installed per requirements?
5.				Are Streams/Wetlands/Sinkholes present on site?
6.				If 5 is "Yes", have the applicable permits been obtained for the impacts (ARAP, USACE, TVA)?
7.				If 5 is "Yes", are Streams/Wetlands/Sinkholes shown in the SWPPP with appropriate buffers noted?
8.				Do the EPSC measures shown in the SWPPP and installed in the field appear adequate for the site?
9.				Are outfall locations shown in the SWPPP? Are there outfalls in the field that aren't included in the SWPPP?
10.				Are on-site outfall drainage areas included in the SWPPP?
11.				Is a sediment basin required at any on-site outfalls per the TN CGP?
12.				If 11 is "Yes", are a sediment basin and its calculations included in the SWPPP?
13.				Does the SWPPP limit the disturbed area of the Waste/Borrow site to less than 50 acres at one time?
14.				Does the SWPPP include at least two separate EPSC plan sheets (sites disturbing < 5 acres) or at least 3
				separate EPSC plan sheets (sites disturbing > 5 acres) as required by TN CGP?

W&B Inspection Review Checklist May 2012 1

Site Specific Information - Complete during each review Yes No N/A 15. \square Have EPSC inspections been documented twice weekly and at least 72 hours apart? 16. \Box Do the EPSC inspection reports document daily rainfall for the site? 17. 🔲 🔲 🔲 Do the EPSC inspection reports document that the project outfalls have been inspected? 18. □ □ □ Did the EPSC inspection report document sediment deposits off the permitted area? 19. \square If 18 is "Yes", did the EPSC inspection report the sediment release was into a Stream or Wetland? 20. If 19 is "Yes", did the EPSC inspection report document that contractor self-reported the sediment release to TDEC EFO? 21. \square If 19 is "No", did the EPSC inspection report document that the off site sediment was removed or stabilized? 22. \square \square Have any new project outfalls been added according to the EPSC inspection reports? 23. 🗌 🗎 🗎 If 22 is "Yes", have new project outfalls been updated in the SWPPP? 24. Do the EPSC inspection reports document that EPSC measures have been installed per the SWPPP in all active areas? 25. \square \square Do the EPSC inspection reports document that the installed EPSC measures appear to be adequate for the 26. 🗌 🗎 🖺 Do the EPSC inspection reports document that the EPSC measures are being maintained according to the SWPPP and the CGP? 27. Do the EPSC inspection reports document any new EPSC measures being installed? If 27 is "Yes", has the SWPPP been updated to reflect the new EPSC measures? 28. □ □ □ Have the dates of major grading activities been documented in accordance with the SWPPP? 29. \square 30. 🗌 🗎 🗎 Have the dates when construction activities temporarily or permanently ceased been documented in accordance with the SWPPP? 31. \square \square Do the EPSC inspection reports document that disturbed areas idle for more than 14 days have been temporarily or permanently stabilized? 32. \square \square Do the EPSC inspection reports document that temporary stabilization has been applied to any areas of the site? 33. 🔲 🔲 🔲 Do the EPSC inspection reports document that permanent stabilization has been applied to any areas of the site? 34. \square Do the EPSC inspection reports document that steep slope areas have been stabilized in 7 days? 35. \square \square Do the inspection reports document the total disturbed acreage, including haul roads, stockpile areas, and other disturbances?

TDOT EPSC Representative's Comments and Corrective Actions

Signatures - Complete during each review I certify that I have completed the inspection review documented in this report. TDOT EPSC Representative's Signature Date I certify that any EPSC deficiency noted in the twice-weekly inspection report will be addressed in conformance with the requirements of the TN CGP. I also agree that items listed above are accurate and that any discrepancies to this report are listed below in the comments section. Contractor's Certified Inspector Signature Date Contractor's Certified Inspector's Comments

CIRCULAR LETTER

SECTION: 209.01 PROJECT EROSION AND SILTATION CONTROL

Number: 209.01-05

SUBJECT: UTILITIES AND ENVIRONMENTAL CONSTRUCTION PERMITS

DATE: OCTOBER 2, 2015

This circular letter addresses utility work within or adjacent to the TDOT right-of-way (ROW) and the associated environmental construction permits. The "Guidebook for Utility Relocation Related to TDOT Construction Projects" produced by the TDOT ROW Division Utilities Office contains additional information related to oversight of utility work on TDOT ROW or in TDOT Construction projects. Utilities are responsible for obtaining any needed easements or right-of-way for utility construction that extends beyond the TDOT ROW. All utility work that occurs within or adjacent to TDOT's ROW may be classified in one of the two following categories:

- 1. In Contract Moves: Utility work included in a TDOT Construction contract; or
- 2. Prior to Moves: Utility work not included in a TDOT Construction contract, including utility relocations performed by the utility prior to the beginning of a TDOT Construction contract.

The Project Supervisor should coordinate with the TDOT Regional Utility Office to determine which of these categories applies to each type of associated utility work and to obtain contact names and information for each utility. The Project Supervisor should discuss In-Contract Moves at the pre-construction meeting and at the environmental pre-construction meeting. This discussion should address areas where In-Contract Moves and Prior-To Moves extend outside the TDOT ROW. In addition, the Project Supervisor may direct the TDOT EPSC Inspector to conduct a pre-disturbance EPSC inspection before the utility work begins.

In-Contract Moves

For In-Contract Moves, the Prime Contractor for the construction project will coordinate all construction work activities (including utility work) for the contract. The utility work will be performed by either the Prime Contractor's forces or a subcontractor's forces. Any issues related to the utility construction process need to be brought to the Project Supervisor's and the Prime Contractor's attention immediately to allow for corrective action.

For In-Contract Moves, the TDOT Environmental Division's Natural Resources Office (NRO) obtains the environmental construction permits for the construction project, including the utility construction or installation work. Utility companies remain responsible for obtaining their own railroad permits, TDEC water or sewer approval permits or other operational permits for the utility facilities. The utility completes and signs the "Memorandum of Understanding (For Environmental Permits Required by Utility Construction)" (Form 2011-19) for the TDOT Right-of-Way Division. If the utility construction or installation work extends off the TDOT ROW, the utility is responsible for obtaining easements or additional right-of-way for areas adjacent to the TDOT ROW. In addition, the utility supplies the needed permit submittal information for all

utility construction or installation work to the Regional Utility Office and/or the Project Supervisor, who then provides the permit information to the TDOT NRO. Any environmental construction permit modifications or changes for In-Contract Moves should be coordinated with the TDOT NRO. The TDOT NRO will work with the regulatory agencies to obtain the permit modifications or changes.

For In-Contract Moves, the utility work cannot begin until the following steps are completed:

- (1) the TDOT project's pre-construction meeting has been completed and
- (2) notice has been given by the Prime Contractor to the TDOT Project Supervisor that utility work will commence and the Project Supervisor has approved the commencement. This notification process allows the Project Supervisor to arrange for personnel to conduct the required EPSC inspections.

The Prime Contractor will be responsible for installing the EPSC measures based on the TDOT EPSC plans and before construction starts. If the utility construction and installation extends outside the TDOT ROW, the Prime Contractor shall also be responsible for installing EPSC measures for the utility construction and installation. The TDOT EPSC plans for roadway construction may or may not be suitable or sufficient for the utility construction and installation. If installing the roadway construction EPSC measures at the time of utility relocation is not practical or suitable, the Prime Contractor may develop and submit an EPSC plan specifically for the utility relocation. Where an EPSC plan is developed specifically for utility relocation, the Prime Contractor must submit this EPSC plan to the TDOT District Operations Supervisor, or their designee, for acceptance. This specific EPSC plan for utility relocation should address utility construction and installation areas within the TDOT ROW and outside of the TDOT ROW. The cost for additional EPSC measures for specific EPSC plans for utility relocations shall be paid as increases in TDOT's roadway construction EPSC items.

EPSC inspections and Quality Assurance (QA) Audits shall include utilities in their routine inspections and assessments where the utilities are included in the Construction contract or where utility work is being performed at the same time as the construction project. The project's EPSC Inspector will be responsible for inspecting all areas included in the TDOT Construction contract. This includes roadway construction within the TDOT ROW and utility work on and off TDOT ROW. All EPSC recommendations related to utility work will be communicated to the Prime Contractor as directed by the TDOT District Operations Supervisor, or their designee, The QA Audit Team should include all areas included in the environmental construction permits in the QA Audit, including off-ROW utility work performed on utility easements or ROW. If the QA Auditor observes an issue related to the utility construction or installation work, the issue will be identified as a field observation or as a nonconformance according to the QA Audit procedures. Where necessary, the District Operations Supervisor, or their designee, will coordinate with the Prime Contractor, utility if performing the work, and/or the Regional Field Services Specialist to resolve the issue

Following construction completion, TDOT will terminate environmental construction permit coverage using TDOT's standard procedures. The utility is required to promptly complete Form DT-1716 following work completion and to submit the completed form to the Project Supervisor.

Prior-To Moves and Other Utility Work Not Included in a TDOT Construction Contract

When utility work is not included in a TDOT Construction contract, the Utility will perform the utility work separately from the construction project, but within or adjacent to TDOT's ROW. For these activities, the work will be performed by the Utility's contractor or work forces. The "Guidebook for Utility Relocation Related to TDOT Construction Projects" produced by the TDOT ROW Division Utilities Office instructs Utilities to notify TDOT Construction no less than three (3) days before beginning utility construction.

The Utility will be responsible for obtaining and complying with all environmental construction permits for Prior-To Moves and other utility work. The Utility will submit a completed and signed "Environmental Agreement for Utility Projects" form to the TDOT Right-of-Way Division prior to being released by TDOT to begin utility work on TDOT's ROW. The Utility will be responsible for installing EPSC measures and for performing EPSC inspections and other permit compliance items relative to its environmental construction permits. These projects are divided into two groups based on the following: (1) project disturbing more than one acre and (2) disturbed acreage less than one acre.

- (1) rojects disturbing more than one acre the Utility must submit a copy of the TDEC Notice of Coverage (NOC), SWPPP, any applicable water quality/resource alteration permits, and the completed "Environmental Agreement for Utility Projects" form (Form 2011-20) to the Regional Utility Office.
- (2) Projects disturbing less than one acre the Utility must submit the "Environmental Agreement for Utility Projects" form (Form 2011-20) to the Regional Utility Office.

If the utility relocation work is ongoing when the TDOT construction project begins construction, the TDOT EPSC Inspector will inspect all areas within TDOT's ROW (including utility work areas), but excluding any utility work areas that are outside the TDOT ROW. If directed by the TDOT District Operations Supervisor, or designee, and if the Utility is in agreement, the TDOT EPSC Inspector will attempt to conduct joint EPSC inspections with the Utility's EPSC Inspector. If the TDOT EPSC inspector's observations note an EPSC issue or other permit issue related to the utility work, the TDOT EPSC inspector will notify the TDOT District Operations Supervisor, or their designee, will coordinate with the Regional Utility Office and the Regional Field Services Specialist. The utility will be required to coordinate erosion control measures with the Project Supervisor in order that the Prime Contractors' erosion control and the Utility's erosion control are not disturbed, duplicated, or compromised by activities of the other.

The project's QA Auditor will begin QA Audits after the Prime Contractor starts TDOT project construction work using the QA Audit procedures. The QA Auditor will assess all areas within TDOT's ROW, but will not assess off-ROW utility work areas. If the QA Auditor observes an issue related to the utility construction or installation work at the QA Audit, the issue will be identified as a field observation or as a nonconformance according to the QA Auditor. Where necessary, the District Operations Supervisor, or their designee, will coordinate with the Right-of-Way Division Utilities Coordinator and/or the Regional Field Services Specialist to resolve the issue.

Following construction completion, the utility will be responsible for following the permit conditions to terminate the environmental construction permit coverage.

4. NOI & NOC





TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION

Division of Water Resources

William R. Snodgrass Tennessee Tower, 312 Rosa L. Parks Avenue, 11th Floor, Nashville, TN 37243 1-888-891-8332 (TDEC)

Notice of Intent (NOI) for General NPDES Permit for Stormwater Discharges from Construction Activities (TNR100000)

	,							
Site or Project Name: PIN		Existing NPDES Tracking Number: TNR						
Street Address or SR-109 a		Start date: May 2016						
Location:		Estimated end date: May 2021						
Site Activity SPOT Safety	y to East Camp	Latitude (dd.ddd						
Description: Creek	· 			Longitude (dd.dd	ldd): -86.4625			
County(ies):	Sumner	MS4	TDOT	Acres Disturbed:	6.4			
		Jurisdiction:		Total Acres: 10.3				
Does a topographic map show dotted or solid blue lines and/or wetlands on or adjacent to the construction site? If wetlands are located on-site and may be impacted, attach wetlands delineation report. If an Aquatic Resource Alteration Permit has been obtained for this site, what is the permit number? ARAP permit No.: NRS15.352								
Receiving waters: TN0513	0201041_0200 Unnamed tri	butary to East Camp	Creek					
Attach the SWPPP with the	NOI SW	PPP Attached	Attach a site location map	Map Attac	hed			
	y (Primary Permittee): (persor	n, company, or legal en	ntity that has operation	onal or design con	trol over consti	ruction plans and		
specifications): Tennesse	e Department of Transportat	tion						
Site Owner/Developer Sign below): (individual respons	atory (V.P. level/higher - signs	certification	Signatory's Title of below): Environ			ns certification		
*	es K. Polk Building 505 Dea	derick Street	City: Nashville		State: TN	Zip: 37243-0334		
Phone: (615) 741-537) N/A	E-mail: Environmental.NPDES.TDOT@tn.gov					
Optional Contact: Anthony			Title or Position: Senior Transportation Project Specialist					
	es K. Polk Building 505 Dea	derick Street	City: Nashville		State: TN	Zip: 37243-0334		
Phone: (615) 532-994) N/A	E-mail: Anthony.	Myers@tn.gov				
Owner or Developer Certi	fication (must be signed by pre	esident, vice-president	or equivalent, or rar	nking elected offici	ial) (Primary P	ermittee)		
Owner or Developer Certification (must be signed by president, vice-president or equivalent, or ranking elected official) (Primary Permittee) I certify under penalty of law that this document and all attachments were prepared by me, or under my direction or supervision. The submitted information 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. As specified in Tennessee Code Annotated Section 39-16-702(a)(4), this declaration is made under penalty of perjury.								
Owner or Developer Name;	(print or type) Jim Ozment		Signature:	L Om	_	Date: 02-11-2016		
Contractor(s) Certification	(must be signed by president,	vice-president or equi	valent, or ranking el	ected official) (Se	condary Permi	ttee)		
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.								
Contractor company name (print or type):							
Contractor signatory (print/t	ype): (V.P. level or higher)		Signature:			Date:		
Mailing Address:			City:		State:	Zip:		
Phone: ()	Fax	x: ()	E-mail:					
Other Contractor company	name (print or type):							
Other Contractor signatory	(print/type): (V.P. level or high	er)	Signature:			Date:		
Mailing Address:	City:		State:	Zip:				
Phone: ()	Fax: ()	E-mail:			•		
OFFICIAL CTATE LICE ONLY								
OFFICIAL STATE USP Received Date:		eld Office:	Permit Number TNR		Exceptional T	N Water:		
Fee(s):	T & E Aquatic Flora and Fauna:		Impaired Receiving Stre	eam:	Notice of Cov	rerage Date:		

Notice of Intent (NOI) for General NPDES Permit for Stormwater Discharges from Construction Activities (TNR100000)

<u>Purpose of this form</u> A completed notice of intent (NOI) must be submitted to obtain coverage under the Tennessee General NPDES Permit for Discharges of Stormwater Associated with Construction Activity (permit). **Requesting coverage under this permit means that an applicant has obtained and examined a copy of this permit, and thereby acknowledges applicant's claim of ability to be in compliance with permit terms and conditions.** This permit is required for stormwater discharge(s) from construction activities including clearing, grading, filling and excavating (including borrow pits) of one or more acres of land. This form should be submitted at least 30 days prior to the commencement of land disturbing activities, or no later than 48 hours prior to when a new operator assumes operational control over site specifications or commences work at the site.

<u>Permit fee</u> (see table below) must accompany the NOI and is based on total acreage to be disturbed by an entire project, including any associated construction support activities (e.g. equipment staging yards, material storage areas, excavated material disposal areas, borrow or waste sites).

Acres	= or > 150	= or > 50 < 150	= or > 20 < 50	= or > 5 < 20	= or > 1 < 5	Subsequent
Disturbed	acres	acres	acres	acres	acres	coverage*
Fee	\$10,000	\$6,000	\$3,000	\$1,000	\$250	\$100

^{*} Subsequent Primary Operators seeking coverage under an actively covered larger common plan of development or sale

Who must submit the NOI form? Per Section 2 of the permit, all site operators must submit an NOI form. "Operator" for the purpose of this permit and in the context of stormwater associated with construction activity means any person associated with a construction project who meets either or both of the following two criteria: (1) The person has operational or design control over construction plans and specifications, including the ability to make modifications to those plans and specifications. This person is typically the owner or developer of the project or a portion of the project (e.g. subsequent builder), or the person that is the current land owner of the construction site. This person is considered the primary permittee; or (2) The person has day-to-day operational control of those activities at a project which are necessary to ensure compliance with a SWPPP for the site or other permit conditions. This person is typically a contractor or a commercial builder who is hired by the primary permittee, and is considered a secondary permittee.

Owners, developers and all contractors that meet the definition of the operator in subsection 2.2 of the permit shall apply for permit coverage on the same NOI, insofar as possible. After permit coverage has been granted to the primary permittee, any subsequent NOI submittals must include the site's previously assigned permit tracking number and the project name. The comprehensive site-specific SWPPP shall be prepared in accordance with the requirements of part 3 of the permit and must be submitted with the NOI unless the NOI being submitted is to only add a contractor (secondary permittee) to an existing coverage.

Notice of Coverage The division will review the NOI for completeness and accuracy and prepare a notice of coverage (NOC). Stormwater discharge from the construction site is authorized as of the effective date of the NOC.

<u>Complete the form</u> Type or print clearly, using ink and not markers or pencil. Answer each item or enter "NA," for not applicable, if a particular item does not fit the circumstances or characteristics of your construction site or activity. If you need additional space, attach a separate piece of paper to the NOI form. **The NOI will be considered incomplete without a permit fee, a map, and the SWPPP.**

Describe and locate the project Use the legal or official name of the construction site. If a construction site lacks street name or route number, give the most accurate geographic information available to describe the location (reference to adjacent highways, roads and structures; e.g. intersection of state highways 70 and 100). Latitude and longitude (expressed in decimal degrees) of the center of the site can be located on USGS quadrangle maps. The quadrangle maps can be obtained at the USGS World Wide Web site: http://www.usgs.gov/; latitude and longitude information can be found at numerous other web sites. Attach a copy of a portion of a 7.5 minute quad map, showing location of site, with boundaries at least one mile outside the site boundaries. Provide estimated starting date of clearing activities and completion date of the project, and an estimate of the number of acres of the site on which soil will be disturbed, including borrow areas, fill areas, stockpiles and the total acres. For linear projects, give location at each end of the construction area.

MS4 Jurisdiction: If this construction site is located within a Municipal Separate Storm Sewer System (MS4), please list name of MS4. A current list of MS4s in Tennessee may be found at http://www.state.tn.us/environment/water/water-quality_storm-water.shtml

Give name of the receiving waters Trace the route of stormwater runoff from the construction site and determine the name of the river(s), stream(s), creek(s), wetland(s), lake(s) or any other water course(s) into which the stormwater runoff drains. Note that the receiving water course may or may not be located on the construction site. If the first water body receiving construction site runoff is unnamed ("unnamed tributary"), determine the name of the water body that the unnamed tributary enters.

ARAP permit may be required **Resource Alteration Permit (ARAP).** If you have a question about the ARAP program or permits, contact your local Environmental Field Office (EFO).

<u>Submitting the form and obtaining more information</u> Note that this form must be signed by the company President, Vice-President, or a ranking elected official in the case of a municipality, for details see subpart 2.5. For more information, contact your local EFO at the toll-free number 1-888-891-8332 (TDEC). Submit the completed NOI form (keep a copy for your records) to the appropriate EFO for the county(ies) where the construction activity is located, addressed to **Attention: Stormwater NOI Processing**.

Tennessee Department of Environment and Conservation Division of Water Pollution Control, Permit Section Attn: Storm Water NOI Processing William R. Snodgrass Tennessee Tower 312 Rosa L. Parks Avenue, 11th Floor Nashville, TN 37243 Index Of Sheets SEE SHEET IA

STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION BUREAU OF ENGINEERING

TENN. 2016 1 FED. A1D PROJ. NO. HSIP-109(36) STATE PROJ. NO. 83011-3233-94

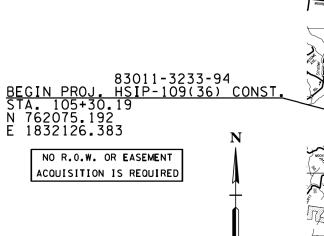
SUMNER COUNTY

STATE ROUTE 109 INTERSECTION AT OLD STATE HIGHWAY 109.

CONSTRUCTION

STATE HIGHWAY NO. 109 F.A.H.S. NO. 109





ONST

ONST

SCALE: 1"= 1 MILE

ROADWAY LENGTH BRIDGE LENGTH BOX BRIDGE LENGTH PROJECT LENGTH 0.316 MILES 0.000 MILES 0.000 MILES 0.316 MILES 83011-3233-94 END PROJ. HSIP-109(36) CONST. STA. 122+00.00 (SR-109) N 763481.382 E 1832823.223

UNOFFICIAL SET NOT FOR BIDDING

NO EXCLUSIONS
NO EQUATIONS

TRAFFIC	DATA
ADT (2016)	16,080
ADT (2036)	33,440
DHV (2036)	3,669
D	52 - 48
T (ADT)	10 %
T (DHV)	7 %
٧	65 MPH

SURVEY RECEIVED: 06/09/15



APPROVED:

PAUL D. DEGGES, CHIEF ENGINEER

DATE:

APPROVED:

JOHN SCHROER, COMMISSION

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HICHWAY ADMINISTRATION

APPROVED:

DIVISION ADMINISTRATOR

DATE

SPECIAL NOTES

PROPOSALS MAY BE REJECTED BY THE COMMISSIONER IF ANY OF THE UNIT PRICES CONTAINED THEREIN ARE OBVIOUSLY UNBALANCED, EITHER EXCESSIVE OR BELOW THE REASONABLE COST ANALYSIS VALUE.

THIS PROJECT TO BE CONSTRUCTED UNDER THE STANDARD SPECIFICATIONS OF THE TENNESSEE DEPARTMENT OF TRANSPORTATION DATED JANUARY 1, 2015 AND ADDITIONAL SPECIFICATIONS AND SPECIAL PROVISIONS CONTAINED IN THE PLANS AND IN THE PROPOSAL CONTRACT.

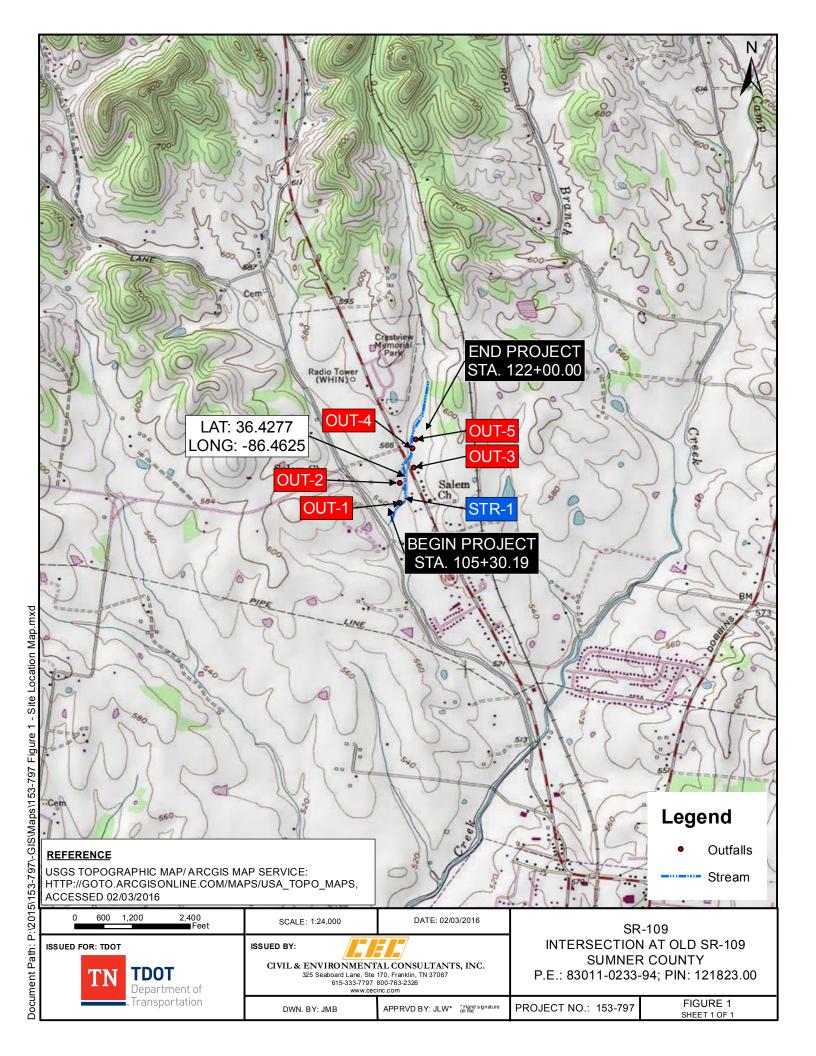
TDOT ROAD SP. SV. 2 BRAD ABEL, P.E.

DESIGNER __JACOB_BROOKS_AND_SCOTT_JOHNSON___ CHECKED_BY __RYAN_SWEENEY, P.E.

P.E. NO. 83011-1233-94 (DESIGN)

PIN NO. 121823.00

-FEB-2016 15±37



5. Blank NOT





TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION (TDEC)

Division of Water Resources

William R. Snodgrass Tennessee Tower, 312 Rosa L. Parks Avenue, 11th Floor, Nashville, Tennessee 37243 1-888-891-TDEC (8332)

Notice of Termination (NOT) for General NPDES Permit for Stormwater Discharges from Construction Activities (CGP)

This form is required to be submitted when requesting termination of coverage from the CGP. The purpose of this form is to notify the TDEC that either all stormwater discharges associated with construction activity from the portion of the identified facility where you, as an operator, have ceased or have been eliminated; or you are no longer an operator at the construction site. Submission of this form shall in no way relieve the permittee of permit obligations required prior to submission of this form. Please submit this form to the local DWR Environmental Field Office (EFO) address (see table below). For more information, contact your local EFO at the toll-free number 1-888-891-8332 (TDEC).

Type or print clearly, using ink.

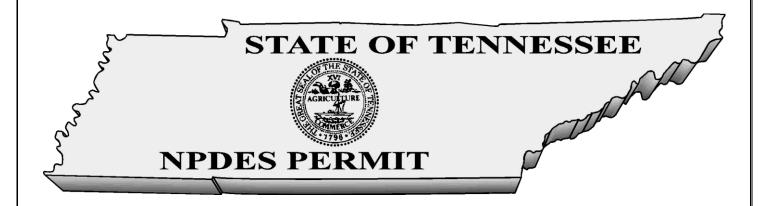
Site or Project Name:			NPDES Tracking Number: TNR					
Street Address or Location:			County(ies):					
Nan	ne of Permittee Requesting Termination of Coverage:							
Pern	nittee Contact Name:	Title or Position:						
Mai	ling Address:	City:	State:	Zip:				
Pho	ne:	E-mail:						
Che	cck the reason(s) for termination of permit coverage:							
	Stormwater discharge associated with construction activity is no longer occurring and the permitted area has a uniform 70% permanent vegetative cover OR has equivalent measures such as rip rap or geotextiles, in areas not covered with impervious surfaces.							
	You are no longer the operator at the construction site (i.e., termina	ation of site-wide, primary or	secondary po	ermittee coverage	e).			
Cer	tification and Signature: (must be signed by president, vice-	president or equivalent rai	nking electe	ed official)				
I certify under penalty of law that either: (a) all stormwater discharges associated with construction activity from the portion of the identified facility where I was an operator have ceased or have been eliminated or (b) I am no longer an operator at the construction site. I understand that by submitting this notice of termination, I am no longer authorized to discharge stormwater associated with construction activity under this general permit, and that discharging pollutants in stormwater associated with construction activity to waters of the United States is unlawful under the Clean Water Act where the discharge is not authorized by a NPDES permit. I also understand that the submittal of this notice of termination does not release an operator from liability for any violations of this permit or the Clean Water Act. For the purposes of this certification, elimination of stormwater discharges associated with construction activity means that all stormwater discharges associated with construction activities from the identified site that are authorized by a NPDES general permit have been eliminated from the portion of the construction site where the operator had control. Specifically, this means that all disturbed soils at the portion of the construction site where the operator had control have been finally stabilized, the temporary erosion and sediment control measures have been								
removed, and/or subsequent operators have obtained permit coverage for the site or portions of the site where the operator had control. I certify under penalty of law that this document and all attachments were prepared by me, or under my direction or supervision. The submitted information 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. As specified in Tennessee Code Annotated Section 39-16-702(a)(4), this declaration is made under penalty of perjury.								
Pern	nittee name (print or type):	Signature:		Date:				
	T D CF		-					

Tennessee Department of Environment and Conservation Division of Water Pollution Control, Permit Section Attn: Storm Water NOT Processing William R. Snodgrass Tennessee Tower 312 Rosa L. Parks Avenue, 11th Floor Nashville, TN 37243

CN-1175 (Rev. 12-14) RDA 2366

6. Construction General Permit





GENERAL NPDES PERMIT FOR DISCHARGES OF STORMWATER ASSOCIATED WITH CONSTRUCTION ACTIVITIES

PERMIT NO. TNR100000

Under authority of the Tennessee Water Quality Control Act of 1977 (T.C.A. 69-3-101 et seq.) and the authorization by the United States Environmental Protection Agency under the Federal Water Pollution Control Act, as amended by the Clean Water Act of 1977 (33 U.S.C. 1251, et seq.) and the Water Quality Act of 1987, P.L. 100-4, including special requirements as provided in part 5.4 (Discharges into Impaired or Exceptional Tennessee Waters) of this general permit, operators of point source discharges of stormwater associated with construction activities into waters of the State of Tennessee, are authorized to discharge stormwater associated with construction activities in accordance with the following permit monitoring and reporting requirements, effluent limitations, and other provisions as set forth in parts 1 through 10 herein, from the subject outfalls to waters of the State of Tennessee.

This permit is issued on: May 23, 2011

This permit is effective on: May 24, 2011

This permit expires on: May 23, 2016

for Paul E. Davis, P.E., Director Division of Water Pollution Control

CN-0759 RDAs 2352 and 2366

Table of Contents

1.	COVERAGE UNDER THIS GENERAL PERMIT	1
1.1.	Permit Area	1
1.2.	Discharges Covered by this Permit	1
1.2.1.	Stormwater discharges associated with construction activities	
1.2.2.	Stormwater discharges associated with construction support activities	1
1.2.3.	Non-stormwater discharges authorized by this permit	
1.2.4.	Other NPDES-permitted discharges	2
1.3.	Limitations on Coverage	2
1.4.	Obtaining Permit Coverage	4
1.4.1.	Notice of Intent (NOI)	
1.4.2.	Stormwater Pollution Prevention Plan (SWPPP)	5
1.4.3.	Permit application fees	
1.4.4.	Submittal of a copy of the NOC and NOT to the local MS4	
1.4.5.	Permit Coverage through Qualifying Local Program	6
1.5.	Effective Date of Coverage	6
1.5.1.	Notice of Coverage (NOC)	
1.5.2.	Permit tracking numbers	
2.	NOTICE OF INTENT (NOI) REQUIREMENTS	7
2.1.	Who Must Submit an NOI?	7
2.2.	Typical Construction Site Operators	8
2.2.1.	Owner/Developer	8
2.2.2.	Commercial builders	8
2.2.3.	Contractors	8
2.3.	Responsibilities of Operators	8
2.3.1.	Permittee(s) with design control (owner/developer)	
2.3.2.	Permittee(s) with day-to-day operational control (contractor – secondary	
	permittee)	9
2.4.	NOI Submittal	10
2.4.1.	Existing site	10
2.4.2.	Application for new permit coverage	10
2.4.3.	New operator	
2.4.4.	Late NOIs	11
2.5.	Who Must Sign the NOI?	11
2.6.	NOI Form	11

2.6.1.2.6.2.2.6.3.	Construction site map	11
2.7.	Where to Submit the NOI, SWPPP and Permitting Fee?	12
2.8.	List of the TDEC Environmental Field Offices (EFOs) and Corresponding Counties	12
3.	STORMWATER POLLUTION PREVENTION PLAN (SWPPP) REQUIREMENTS	13
3.1.	The General Purpose of the SWPPP	13
3.1.1. 3.1.2.	Registered engineer or landscape architect requirement Site Assessment	13
3.2.	SWPPP Preparation and Compliance	15
3.2.1. 3.2.2.	Existing site	15
3.3.	Signature Requirements, Plan Review and Making Plans Available	15
3.3.1.	Signature Requirements for a SWPPP	
3.3.2.	SWPPP Review	15
3.3.3.	Making plans available	15
3.4.	Keeping Plans Current	15
3.4.1.	SWPPP modifications	15
3.5.	Components of the SWPPP	16
3.5.1.	Site description	
3.5.2.	Description of stormwater runoff controls	
3.5.3.	Erosion prevention and sediment controls	
3.5.4.	Stormwater management	22
3.5.5.	Other items needing control	23
3.5.6.	Approved local government sediment and erosion control requirements	23
3.5.7.	Maintenance	23
3.5.8.	Inspections	
3.5.9.	Pollution prevention measures for non-stormwater discharges	25
3.5.10.	Documentation of permit eligibility related to Total Maximum Daily Loads (TMDL)	25
4.	CONSTRUCTION AND DEVELOPMENT EFFLUENT GUIDELINES	25
4.1.	Non-Numeric Effluent Limitations	25
4.1.1.	Erosion Prevention and Sediment Controls	25
4.1.2.	Buffer zone requirements	26
4.1.3.	Soil stabilization	27
4.1.4.	Dewatering	27
4.1.5.	Pollution prevention measures	28
4.1.6.	Prohibited discharges	28
4.1.7.	Surface outlets	28

5.	SPECIAL CONDITIONS, MANAGEMENT PRACTICES, AND OTHER NON-NUMERIC LIMITATIONS	28
5.1.	Releases in Excess of Reportable Quantities	
5.2.	Spills	29
5.3.	Discharge Compliance with State Water Quality Standards	29
5.3.1. 5.3.2.	Violation of Water Quality Standards	29
5.4.	Discharges into Impaired or Exceptional Tennessee Waters	
5.4.1.	Additional SWPPP/BMP Requirements for discharges into impaired or exceptional TN Waters	
5.4.2.	Buffer zone requirements for discharges into impaired or exceptional TN	
5.4.3.	watersPre-Approved sites	
6.	RETENTION, ACCESSIBILITY AND SUBMISSION OF RECORDS	
6.1.	Documents	32
6.2.	Accessibility and Retention of Records	
6.2.1.	Posting information at the construction site	
6.3.	Electronic Submission of NOIs, NOTs and Reports	33
7.	STANDARD PERMIT CONDITIONS	34
7.1.	Duty to Comply	34
7.1.1.	Permittee's duty to comply	
7.1.2. 7.1.3.	Penalties for violations of permit conditions	
7.1.3. 7.1.4.	Liability under state law	
7.2.	Continuation of the Expired General Permit	35
7.3.	Need to Halt or Reduce Activity Not a Defense	35
7.4.	Duty to Mitigate	35
7.5.	Duty to Provide Information	35
7.6.	Other Information	35
7.7.	Signatory Requirements	36
7.7.1.	Signatory requirements for a Notice of Intent (NOI)	36
7.7.2.	Signatory requirements for reports and other items	
7.7.3.	Duly authorized representative	
7.7.4.	Changes to authorization	
7.7.5. 7.7.6.	Signatory requirements for primary permittees	
7.7.0. 7.8.	Penalties for Falsification of Reports	
7.9.	Oil and Hazardous Substance Liability	

7.10.	Property Rights	38
7.11.	Severability	39
7.12.	Requiring an Individual Permit	39
7.12.1. 7.12.2.	Director can require a site to obtain an individual permit Permittee may request individual permit instead of coverage under this general permit	
7.12.3.	Individual permit terminates general permit	
7.13.	Other, Non-Stormwater, Program Requirements	40
7.14.	Proper Operation and Maintenance	40
7.15.	Inspection and Entry	40
7.16.	Permit Actions	40
8.	REQUIREMENTS FOR TERMINATION OF COVERAGE	41
8.1.	Termination of Developer and Builder Coverage	41
8.1.1. 8.1.2.	Termination process for primary permittees	
8.2.	Termination of Builder and Contractor Coverage	42
8.2.1.	Termination process for secondary permittees	42
8.3.	NOT certification	42
8.4.	Where to Submit a Notice of Termination (NOT)?	43
9.	AQUATIC RESOURCE ALTERATION PERMITS (ARAP)	43
10.	DEFINITIONS	43
11.	LIST OF ACRONYMS	50
	APPENDIX A – Notice of Intent (NOI) Form APPENDIX B – Notice of Termination (NOT) Form APPENDIX C – Inspection Report Form APPENDIX D – Stormwater Monitoring Report Form	

1. COVERAGE UNDER THIS GENERAL PERMIT

1.1. Permit Area

This construction general permit (CGP) covers all areas of the State of Tennessee.

1.2. Discharges Covered by this Permit

1.2.1. Stormwater discharges associated with construction activities

This permit authorizes point source discharges of stormwater from construction activities including clearing, grading, filling and excavating (including borrow pits and stockpile/material storage areas containing erodible material), or other similar construction activities that result in the disturbance of one acre or more of total land area. Projects or developments of less than one acre of land disturbance are required to obtain authorization under this permit if the construction activities at the site are part of a larger common plan of development or sale that comprise at least one acre of land disturbance. One or more site operators must maintain coverage under this permit for all portions of a site that have not been finally stabilized.

Projects or developments of less than one acre of total land disturbance may also be required to obtain authorization under this permit if:

- a) the director has determined that the stormwater discharge from a site is causing, contributing to, or is likely to contribute to a violation of a state water quality standard;
- b) the director has determined that the stormwater discharge is, or is likely to be a significant contributor of pollutants to waters of the state, or
- c) changes in state or federal rules require sites of less than one acre that are not part of a larger common plan of development or sale to obtain a stormwater permit.

Note: Any discharge of stormwater or other fluid to an improved sinkhole or other injection well, as defined, must be authorized by permit or rule as a Class V underground injection well under the provisions of TDEC Rules, Chapter 1200-4-6.

1.2.2. Stormwater discharges associated with construction support activities

This permit also authorizes stormwater discharges from support activities associated with a permitted construction site (e.g., concrete or asphalt batch plants, equipment staging yards, material storage areas, excavated material disposal areas, borrow areas) provided all of the following are met:

- a) the support activity is primarily related to a construction site that is covered under this general permit;
- b) the operator of the support activity is the same as the operator of the construction site;
- c) the support activity is not a commercial operation serving multiple unrelated construction projects by different operators;
- d) the support activity does not operate beyond the completion of the construction activity of the last construction project it supports; and

e) support activities are identified in the Notice of Intent (NOI) and the Stormwater Pollution Prevention Plan (SWPPP). The appropriate erosion prevention and sediment controls and measures applicable to the support activity shall be described in a comprehensive SWPPP covering the discharges from the support activity areas.

TDOT projects shall be addressed in the Waste and Borrow Manual per the <u>Statewide</u> <u>Stormwater Management Plan (SSWMP)</u>. Stormwater discharges associated with support activities that have been issued a separate individual permit or an alternative general permit are not authorized by this general permit. This permit does not authorize any process wastewater discharges from support activities. Process wastewater discharges from support activities must be authorized by an individual permit or other appropriate general permit.

1.2.3. Non-stormwater discharges authorized by this permit

The following non-stormwater discharges from active construction sites are authorized by this permit provided the non-stormwater component of the discharge is in compliance with section 3.5.9 below (*Pollution prevention measures for non-stormwater discharges*):

- a) dewatering of work areas of collected stormwater and ground water (filtering or chemical treatment may be necessary prior to discharge);
- b) waters used to wash vehicles (of dust and soil, not process materials such as oils, asphalt or concrete) where detergents are not used and detention and/or filtering is provided before the water leaves site;
- c) water used to control dust in accordance with section 3.5.5 below;
- d) potable water sources including waterline flushings from which chlorine has been removed to the maximum extent practicable;
- e) routine external building washdown that does not use detergents or other chemicals;
- f) uncontaminated groundwater or spring water; and
- g) foundation or footing drains where flows are not contaminated with pollutants (process materials such as solvents, heavy metals, etc.).

All non-stormwater discharges authorized by this permit must be free of sediment or other solids and must not cause erosion of soil or the stream bank, or result in sediment impacts to the receiving stream.

1.2.4. Other NPDES-permitted discharges

Discharges of stormwater or wastewater authorized by and in compliance with a different NPDES permit (other than this permit) may be mixed with discharges authorized by this permit.

1.3. Limitations on Coverage

Except for discharges from support activities, as described in section 1.2.2 above and certain non-stormwater discharges listed in section 1.2.3 above, all discharges covered by this permit shall be composed entirely of stormwater. This permit does <u>not</u> authorize the following discharges:

a) <u>Post-Construction Discharges (Permanent Stormwater Management)</u> - Stormwater discharges associated with construction activity that originate from the construction site

- after construction activities have been completed, the site has undergone final stabilization, and the coverage under this permit has been terminated.
- b) <u>Discharges Mixed with Non-Stormwater</u> Discharges that are mixed with sources of non-stormwater, other than discharges which are identified in section 1.2.4 above (*Other NPDES-permitted discharges*) and in compliance with section 3.5.9 below (*Pollution prevention measures for non-stormwater discharges*) of this permit.
- c) <u>Discharges Covered by Another Permit</u> Stormwater discharges associated with construction activity that have been issued an individual permit in accordance with subpart 7.12 below (*Requiring an Individual Permit*).
- d) <u>Discharges Threatening Water Quality</u> Stormwater discharges from construction sites, that the director determines will cause, have the reasonable potential to cause, or contribute to violations of water quality standards. Where such determination has been made, the discharger will be notified by the director in writing that an individual permit application is necessary as described in subpart 7.12 below (*Requiring an Individual Permit*). However, the division may authorize coverage under this permit after appropriate controls and implementation procedures have been included in the <u>SWPPP</u> that are designed to bring the discharge into compliance with water quality standards.
- e) <u>Discharges into Impaired Streams</u> This permit does not authorize discharges that would add loadings of a pollutant that is identified as causing or contributing to the impairment of a water body on the list of <u>impaired waters</u>. <u>Impaired waters</u> means any segment of surface waters that has been identified by the division as failing to support its designated classified uses. Compliance with the additional requirements set forth in sub-part 5.4 is not considered as contributing to loadings to <u>impaired waters</u> or degradation unless the division determines upon review of the SWPPP that there is a reason to limit coverage as set forth in paragraph d) above and the SWPPP cannot be modified to bring the site into compliance.
- f) <u>Discharges into Outstanding National Resource Waters</u> The director shall not grant coverage under this permit for discharges into waters that are designated by the Water Quality Control Board as Outstanding National Resource Waters (ONRWs). Designation of ONRWs are made according to TDEC Rules, <u>Chapter 1200-4-3-.06</u>.
- g) <u>Discharges into Exceptional Quality Waters</u> The director shall not grant coverage under this permit for potential discharges of pollutants which would cause degradation to waters designated by TDEC as exceptional quality waters (see sub-part 5.4 (Discharges into Impaired or Exceptional Tennessee Waters for additional permit requirements). Compliance with the additional requirements set forth in sub-part 5.4 is not considered as contributing to loadings to exceptional quality waters or degradation unless the division determines upon review of the SWPPP that there is a reason to limit coverage as set forth in paragraph d) above and the SWPPP cannot be modified to bring the site into compliance. Identification of exceptional quality waters is made according to TDEC Rules, Chapter 1200-4-3-.06.
- h) <u>Discharges Not Protective of Federal or State listed Threatened and Endangered Species, Species Deemed in Need of Management or Special Concern Species</u> Stormwater discharges and stormwater discharge-related activities that are not protective of legally protected listed or proposed threatened or endangered aquatic fauna or flora (or species proposed for such protection) in the receiving stream(s); or discharges or activities that would result in a "take" of a state or federal listed endangered or threatened aquatic or wildlife species deemed in need of management or special concern species, or such species' habitat. If the division finds that stormwater discharges or stormwater related activities are likely to result in any of the above effects, the director will deny the

- coverage under this general permit unless and until project plans are changed to adequately protect the species.
- i) <u>Discharges from a New or Proposed Mining Operation</u> This permit does not cover discharges from a new or proposed mining operation.
- j) <u>Discharges Negatively Affecting a Property on the National Historic Register</u> -Stormwater discharges that would negatively affect a property that is listed or is eligible for listing in the <u>National Historic Register</u> maintained by the Secretary of Interior.
- k) Discharging into Receiving Waters With an Approved Total Maximum Daily Load Analysis - Discharges of pollutants of concern to waters for which there is an EPAapproved total maximum daily load (TMDL) for the same pollutant are not covered by this permit unless measures or controls that are consistent with the assumptions and requirements of such TMDL are incorporated into the SWPPP. If a specific wasteload allocation has been established that would apply to the discharge, that allocation must be incorporated into the SWPPP and steps necessary to meet that allocation must be implemented. In a situation where an EPA-approved or established TMDL has specified a general wasteload allocation applicable to construction stormwater discharges, but no specific requirements for construction sites have been identified, the permittee should consult with the division to confirm that adherence to a SWPPP that meets the requirements of this permit will be consistent with the approved TMDL. Where an EPAapproved or established TMDL has not specified a wasteload allocation applicable to construction stormwater discharges, but has not specifically excluded these discharges, adherence to a SWPPP that meets the requirements of the CGP will generally be assumed to be consistent with the approved TMDL. If the EPA-approved or established TMDL specifically precludes construction stormwater discharges, the operator is not eligible for coverage under the CGP.

1.4. Obtaining Permit Coverage

Submitting a complete NOI, a SWPPP and an appropriate permitting application fee are required to obtain coverage under this general permit. Requesting coverage under this permit means that an applicant has obtained and examined a copy of this permit, and thereby acknowledges applicant's claim of ability to comply with permit terms and conditions. Upon completing NOI review, the division will:

- a) issue a notice of coverage (NOC) to the operator identified as a primary permittee on the NOI form (see subpart 1.5 below *Effective Date of Coverage*); or
- b) notify the applicant of needed changes to their NOI submittal (see section 2.6.3 below *Application completeness*); or
- c) deny coverage under this general permit (see subpart 7.12 below *Requiring an Individual Permit*).

1.4.1. Notice of Intent (NOI)

Operators wishing to obtain coverage under this permit must submit a completed NOI in accordance with requirements of part 2 below, using the NOI form provided in Appendix A of this permit (or a copy thereof). The division will review NOIs for completeness and accuracy and, when deemed necessary, investigate the proposed project for potential impacts to the waters of the state.

1.4.2. Stormwater Pollution Prevention Plan (SWPPP)

Operators wishing to obtain coverage under this permit must develop and submit a site-specific SWPPP with the NOI. The initial, comprehensive SWPPP, developed and submitted by the site-wide permittee (typically owner/developer who applied for coverage at project commencement¹), should address all construction-related activities from the date construction commences to the date of termination of permit coverage, to the maximum extent practicable. The SWPPP must be developed, implemented and updated according to the requirements in part 3 below (SWPPP Requirements) and subpart 2.3 below (Responsibilities of Operators). The SWPPP must be implemented prior to commencement of construction activities.

If the initial, comprehensive SWPPP does not address all activities until final stabilization of the site, an updated SWPPP or addendums to the plan addressing all aspects of current site disturbance must be prepared. An active, updated SWPPP must be in place for all disturbed portions of a site until each portion has been completed and finally stabilized.

Preparation and implementation of the comprehensive SWPPP may be a cooperative effort with all operators at a site. New operators with design and operational control of their portion of the construction site are expected to adopt, modify, update and implement a comprehensive SWPPP. Primary permittees at the site may develop a SWPPP addressing only their portion of the project, as long as the proposed Best Management Practices (BMPs) are compatible with the comprehensive SWPPP and complying with conditions of this general permit.

1.4.3. Permit application fees

The permit application fee should accompany the site-wide permittee's NOI form. The fee is based on the total acreage planned to be disturbed by an entire construction project for which the site-wide permittee is requesting coverage, including any associated construction support activities (see section 1.2.2 above). *The disturbed area* means the total area presented as part of the development (and/or of a larger common plan of development) subject to being cleared, graded, or excavated during the life of the development. The area cannot be limited to only the portion of the total area that the site-wide owner/developer initially disturbs through the process of various land clearing activities and/or in the construction of roadways, sewers and water utilities, stormwater drainage structures, etc., to make the property marketable. The site-wide owner/developer may present documentation of common areas in the project that will not be subject to disturbance at anytime during the life of the project and have these areas excluded from the fee calculation.

The application fees shall be as specified in the TDEC Rules, <u>Chapter 1200-4-11</u>. The application will be deemed incomplete until the appropriate application fee is paid in full. Checks for the appropriate fee should be made payable to "Treasurer, State of Tennessee." There is no additional fee for subsequent owner/operator to obtain permit coverage (see section 2.4.3 below - *New operator*), as long as the site-wide primary permittee has active permit coverage at the time of receipt of the subsequent operator's application, because the site-wide primary permittee paid the appropriate fee for the entire area of site disturbance. If a project was previously permitted, but permit coverage was terminated (see section 8.1.1 below - Termination process for primary permittees), and subsequent site disturbance or re-development occurs, the new operator must obtain coverage and pay the appropriate fee for the disturbed acreage.

¹ See sub-part 2.1 on page 7 for a definition of an site-wide permittee.

1.4.4. Submittal of a copy of the NOC and NOT to the local MS4

Permittees who discharge stormwater through an NPDES-permitted municipal separate storm sewer system (MS4) who are not exempted in section 1.4.5 below (*Permit Coverage through Qualifying Local Program*) must submit a courtesy copy of the notice of coverage (NOC), and at project completion, a copy of the signed notice of termination (NOT) to the MS4 upon their request. Permitting status of all permittees covered (or previously covered) under this general permit as well as the most current list of all MS4 permits is available at the division's DataViewer web site².

1.4.5. Permit Coverage through Qualifying Local Program

Coverage equivalent to coverage under this general permit may be obtained from a qualifying local erosion prevention and sediment control Municipal Separate Storm Sewer System (MS4) program. A qualifying local program (QLP) is a municipal stormwater program for stormwater discharges associated with construction activity that has been formally approved by the division. More information about Tennessee's QLP program and MS4 participants can be found at: http://www.tn.gov/environment/water/water-quality_storm-water-qualifying-local-programs.shtml.

If a construction site is within the jurisdiction of and has obtained a notice of coverage from a QLP, the operator of the construction activity is authorized to discharge stormwater associated with construction activity under this general permit without the submittal of an NOI to the division. The permittee is also not required to submit a SWPPP, a notice of termination or a permit fee to the division. At the time of issuance of this permit, there were no qualifying local erosion prevention and sediment control MS4 programs in Tennessee. Permitting of stormwater runoff from construction sites from federal or state agencies (including, but not limited to the Tennessee Department of Transportation (TDOT) and Tennessee Valley Authority (TVA)) and the local MS4 program itself will remain solely under the authority of TDEC.

The division may require any owner/developer or operator located within the jurisdiction of a QLP to obtain permit coverage directly from the division. The operator shall be notified in writing by the division that coverage by the QLP is no longer applicable, and how to obtain coverage under this permit.

1.5. Effective Date of Coverage

1.5.1. Notice of Coverage (NOC)

The NOC is a notice from the division to the primary permittee, which informs the primary permittee that the NOI, the SWPPP and the appropriate fee were received and accepted, and stormwater discharges from a specified area of a construction activity have been approved under this general permit. The permittee is authorized to discharge stormwater associated with construction activity as of the effective date listed on the NOC.

Assigning a permit tracking number by the division to a proposed discharge from a construction site does <u>not</u> confirm or imply an authorization to discharge under this permit. Correspondence

² http://tnmap.tn.gov/wpc/

with the permittee is maintained through the Site Owner or Developer listed in the NOI, not the optional contact or the secondary permittee.

If any Aquatic Resource Alteration Permits (ARAP) are required for a site in areas proposed for active construction, the NOC will not be issued until ARAP application(s) are submitted and deemed by TDEC to be complete. The treatment and disposal of wastewater (including, but not limited to sanitary wastewater) generated during and after the construction must be also addressed. The issuance of the NOC may be delayed until adequate wastewater treatment and accompanying permits are issued.

1.5.2. <u>Permit tracking numbers</u>

Construction sites covered under this permit will be assigned permit tracking numbers in the sequence TNR100001, TNR100002, etc. An operator presently permitted under a previous construction general permit shall be granted coverage under this new general permit. Permit tracking numbers assigned under a previous construction general permit will be retained (see section 2.4.1 below). An operator receiving new permit coverage will be assigned a new permit tracking number (see section 2.4.2 below).

2. NOTICE OF INTENT (NOI) REQUIREMENTS

2.1. Who Must Submit an NOI?

All site operators must submit an NOI form. "Operator" for the purpose of this permit and in the context of stormwater associated with construction activity means any person associated with a construction project who meets either or both of the following two criteria:

- a) The person has operational or design control over construction plans and specifications, including the ability to make modifications to those plans and specifications. This person is typically the owner or developer of the project or a portion of the project (e.g. subsequent builder), or the person that is the current land owner of the construction site. This person is considered the primary permittee; or
- b) The person has day-to-day operational control of those activities at a project which are necessary to ensure compliance with a SWPPP for the site or other permit conditions.
 This person is typically a contractor or a commercial builder who is hired by the primary permittee, and is considered a secondary permittee.

The site-wide permittee is the first primary permittee to apply for coverage at the site. There may be other primary permittees for a project, but there is only one site-wide permittee. Where there are multiple operators associated with the same project, all operators are required to obtain permit coverage. Once covered by a permit, all such operators are to be considered as copermittees if their involvement in the construction activities affects the same project site, and are held jointly and severally responsible for complying with the permit.

2.2. Typical Construction Site Operators

2.2.1. Owner/Developer

An owner or developer(s) of a project is a primary permittee. This person has operational or design control over construction plans and specifications, including the ability to make modifications to those plans and specifications. This person may include, but is not limited to a developer, landowner, realtor, commercial builder, homebuilder, etc. An owner or developer's responsibility to comply with requirements of this permit extends until permit coverage is terminated in accordance with requirements of part 8 below.

2.2.2. Commercial builders

A commercial builder can be a primary or secondary permittee at a construction site.

A commercial builder who purchases one or more lots from an owner/developer (site-wide permittee) for the purpose of constructing and selling a structure (e.g., residential house, non-residential structure, commercial building, industrial facility, etc.) and has design or operational control over construction plans and specifications is a primary permittee for that portion of the site. A commercial builder may also be hired by the end user (e.g., a lot owner who may not be a permittee). In either case the commercial builder is considered a new operator and must submit a new NOI following requirements in section 2.4.3 below.

The commercial builder may also be hired by the primary permittee or a lot owner to build a structure. In this case, the commercial builder signs the primary permittee's NOI and SWPPP as a contractor (see section 2.2.3 below) and is considered a secondary permittee.

2.2.3. Contractors

A contractor is considered a secondary permittee. This person has day-to-day operational control of those activities at a project which are necessary to ensure compliance with a SWPPP for the site or other permit conditions (e.g., contractor is authorized to direct workers at a site to carry out activities required by the SWPPP or comply with other permit conditions).

A contractor may be, but is not limited to a general contractor, grading contractor, erosion control contractor, sub-contractor responsible for any land disturbing activities and/or erosion prevention and sediment control (EPSC) implementation/maintenance, commercial builder hired by the owner/developer, etc. The contractor may need to include in their contract with the party that hired them specific details for the contractor's responsibilities concerning EPSC measures. This includes the ability of the contractor to make EPSC modifications. The contractor should sign the NOI and SWPPP associated with the construction project at which they will be an operator.

2.3. Responsibilities of Operators

A permittee may meet one or more of the operational control components in the definition of "operator" found in subpart 2.1 above. Either section 2.3.1 or 2.3.2 below, or both, will apply depending on the type of operational control exerted by an individual permittee.

2.3.1. Permittee(s) with design control (owner/developer)

Permittee(s) with <u>design</u> control (i.e., operational control over construction plans and specifications) at the construction site, including the ability to make modifications to those plans and specifications (e.g., owner/developer) must:

- a) Ensure the project specifications they develop meet the minimum requirements of part 3 below (stormwater pollution prevention plan SWPPP) and all other applicable conditions:
- b) Ensure that the SWPPP indicates the areas of the project where they have design control (including the ability to make modifications in specifications), and ensure all other permittees implementing and maintaining portions of the SWPPP impacted by any changes they make to the plan are notified of such modifications in a timely manner;
- c) Ensure that all common facilities (i.e., sediment treatment basin and drainage structures) that are necessary for the prevention of erosion or control of sediment are maintained and effective until all construction is complete and all disturbed areas in the entire project are stabilized, unless permit coverage has been obtained and responsibility has been taken over by a new (replacement) owner/operator.
- d) If parties with <u>day-to-day operational control</u> of the construction site have not been identified at the time the comprehensive <u>SWPPP</u> is initially developed, the permittee with design control shall be considered to be the responsible person until such time the supplemental NOI is submitted, identifying the new <u>operator(s)</u> (see section 2.4.3 below). These new <u>operators</u> (e.g., general contractor, utilities contractors, subcontractors, erosion control contractors, hired commercial builders) are considered secondary permittees. The <u>SWPPP</u> must be updated to reflect the addition of new <u>operators</u> as needed to reflect operational or design control.
- e) Ensure that all operators on the site have permit coverage, if required, and are complying with the SWPPP.

2.3.2. Permittee(s) with day-to-day operational control (contractor – secondary permittee)

Permittee(s) with <u>day-to-day operational control</u> of those activities at a project which are necessary to ensure compliance with the <u>SWPPP</u> for the site or other permit conditions (e.g., general contractor, utilities contractors, sub-contractors, erosion control contractors, hired commercial builders) must:

- a) Ensure that the SWPPP for portions of the project where they are operators meets the minimum requirements of part 3 below (SWPPP Requirements) and identifies the parties responsible for implementation of control measures identified in the plan;
- b) Ensure that the SWPPP indicates areas of the project where they have operational control over day-to-day activities;
- c) Ensure that measures in the SWPPP are adequate to prevent erosion and control any sediment that may result from their earth disturbing activity;
- d) Permittees with operational control over only a <u>portion</u> of a larger construction project are responsible for compliance with all applicable terms and conditions of this permit as it relates to their activities on their portion of the construction site. This includes, but is not limited to, implementation of <u>Best Management Practices (BMPs)</u> and other controls required by the <u>SWPPP</u>. Permittees shall ensure either directly or through coordination with other permittees, that their activities do not render another person's pollution control ineffective. All permittees must implement their portions of a comprehensive <u>SWPPP</u>.

2.4. NOI Submittal

2.4.1. Existing site

An operator presently permitted under the 2005 construction general permit shall be granted coverage under this new general permit. There will be no additional fees associated with an extension of coverage for existing sites under the new permit. The division may, at its discretion, require permittees to confirm their intent to be covered under this new general permit following its effective date through submission of an updated NOI. Should the confirmation be required and is not received, coverage under the new general permit will be terminated. Should a site with terminated coverage be unstable or construction continues, a new NOI, SWPPP and an appropriate fee must be submitted.

2.4.2. Application for new permit coverage

Except as provided in section 2.4.3 below, operators must submit a complete NOI, SWPPP and an appropriate fee in accordance with the requirements described in subpart 1.4 above. The complete application should be submitted at least 30 days prior to commencement of construction activities. The permittee is authorized to discharge stormwater associated with construction activity as of the effective date listed on the NOC. The land disturbing activities shall not start until a NOC is prepared and written approval by the division staff is obtained according to subpart 1.5 above.

2.4.3. New operator

For stormwater discharges from construction sites or portions of the sites where the operator changes (new owner), or projects where an operator is added (new contractor) after the initial NOI and comprehensive SWPPP have been submitted, the supplemental (submitted by a new contractor) or additional (submitted by a new owner) NOI should be submitted as soon as practicable, and always before the new operator commences work at the site. The supplemental NOI must reference the project name and tracking number assigned to the primary permittee's NOI.

If the site under the control of the new owner is inactive and all areas disturbed are completely stabilized, the NOI may not need to be submitted immediately upon assuming operational control. However, the division should be notified if a new operator obtains operational control at a site, but commencement of construction under the direction of the operator at the site is going to be delayed.

If upon the sale or transfer of the site's ownership does not change the signatory requirements for the NOI (see section 7.7.1 below), but the site's owner or developer's company name has changed, a new, updated NOI should be submitted to the division within 30 days of the name change. If the new operator agrees to comply with an existing comprehensive SWPPP already implemented at the site, a copy of the supplemental or modified SWPPP does not have to be submitted with the NOI. There will be no additional fees associated with the sale or transfer of ownership for existing permitted sites.

If the transfer of ownership is due to foreclosure or a permittee filing for bankruptcy proceedings, the new owner (including but not limited to a lending institution) must obtain permit coverage if the property is inactive, but is not stabilized sufficiently. If the property is sufficiently stabilized permit coverage may not be necessary, unless and until construction activity at the site resumes.

2.4.4. Late NOIs

Dischargers are not prohibited from submitting late NOIs. When a late NOI is submitted, and if the division authorizes coverage under this permit, such authorization is only for future discharges; any prior, unpermitted, discharges or permit noncompliances are subject to penalties as described in section 7.1.2 below.

2.5. Who Must Sign the NOI?

All construction site operators as defined in subsection 2.2 above (*Typical Construction Site Operators*) must sign the NOI form. Signatory requirements for a NOI are described in section 7.7.1 below. All signatures must be original. An NOI that does not bear an original signature will be deemed incomplete. The division recommends that signatures be in blue ink.

2.6. NOI Form

2.6.1. Contents of the NOI form

NOI for construction projects shall be submitted on the form provided in Appendix A of this permit, or on a copy thereof. This form and its instructions set forth the required content of the NOI. The NOI form must be filled in completely. If sections of the NOI are left blank, a narrative explaining the omission must be provided as an attachment.

Owners, developers and all contractors that meet the definition of the operator in subsection 2.2 above (*Typical Construction Site Operators*) shall apply for permit coverage on the same NOI, insofar as possible. The NOI is designed for more than one contractor (secondary permittee). The division may accept separate NOI forms from different operators for the same construction site when warranted.

After permit coverage has been granted to the primary permittee, any subsequent NOI submittals must include the site's previously assigned permit tracking number and the project name. The comprehensive site-specific SWPPP shall be prepared in accordance with the requirements of part 3 below, and must be submitted with the NOI unless the NOI being submitted is to only add a contractor (secondary permittee) to an existing coverage.

2.6.2. Construction site map

An excerpt (8 ½" by 11" or 11" by 17") from the appropriate 7.5 minute <u>United States</u> <u>Geological Survey</u> (USGS) topographic map, with the proposed construction site centered, must be included with the NOI. The entire proposed construction area must be clearly identified (outlined) on this map. The total area to be disturbed (in acres) should be included on the map. The map should outline the boundaries of projects, developments and the construction site in relation to major roads, streams or other landmarks. All outfalls where runoff will leave the property should be identified. Stream(s) receiving the discharge, and storm sewer system(s)

conveying the discharge from all site outfalls should be clearly identified and marked on the map. The map should also list and indicate the location of EPSCs that will be used at the construction site. NOIs for linear projects must specify the location of each end of the construction area and all areas to be disturbed. Commercial builders that develop separate SWPPPs that cover only their portion of the project shall also submit a site or plat map that clearly indicates the lots which they purchased and for which they are applying for permit coverage and the location of EPSCs that will be used at each lot.

2.6.3. <u>Application completeness</u>

Based on a review of the NOI or other available information, the division shall:

- 1. prepare a notice of coverage (NOC) for the construction site (see subpart 1.5 above); or
- 2. prepare a deficiency letter stating additional information must be provided before the NOC can be issued; or
- 3. deny coverage under this general permit and require the discharger to obtain coverage under an individual NPDES permit (see subpart 7.12 below).

2.7. Where to Submit the NOI, SWPPP and Permitting Fee?

The applicant shall submit the NOI, SWPPP and permitting fee to the appropriate TDEC Environmental Field Office (EFO) for the county(ies) where the construction activity is located and where stormwater discharges enters waters of the state. If a site straddles a county line of counties that are in areas of different EFOs, the operators shall send NOIs to each EFO. The permitting fee should be submitted to the EFO that provides coverage for the majority of the proposed construction activity.

A list of counties and the corresponding EFOs is provided in subpart 2.8 below. The division's Nashville Central Office will serve as a processing office for NOIs submitted by federal or state agencies (including, but not limited to the Tennessee Department of Transportation (TDOT), Tennessee Valley Authority (TVA) and the local MS4 programs).

2.8. List of the TDEC Environmental Field Offices (EFOs) and Corresponding Counties

EFO Name	List of Counties
Chattanooga	Bledsoe, Bradley, Grundy, Hamilton, Marion, McMinn, Meigs, Polk, Rhea, Sequatchie
Columbia	Bedford, Coffee, Franklin, Giles, Hickman, Lawrence, Lewis, Lincoln, Marshall, Maury,
	Moore, Perry, Wayne
Cookeville	Cannon, Clay, Cumberland, De Kalb, Fentress, Jackson, Macon, Overton, Pickett,
	Putnam, Smith, Van Buren, Warren, White
Jackson	Benton, Carroll, Chester, Crockett, Decatur, Dyer, Gibson, Hardeman, Hardin,
	Haywood, Henderson, Henry, Lake, Lauderdale, Madison, McNairy, Obion, Weakley
Johnson City	Carter, Greene, Hancock, Hawkins, Johnson, Sullivan, Unicoi, Washington
Knoxville	Anderson, Blount, Campbell, Claiborne, Cocke, Grainger, Hamblen, Jefferson, Knox,
	Loudon, Monroe, Morgan, Roane, Scott, Sevier, Union
Memphis	Fayette, Shelby, Tipton
Nashville	Cheatham, Davidson, Dickson, Houston, Humphreys, Montgomery, Robertson,
	Rutherford, Stewart, Sumner, Trousdale, Williamson, Wilson

TDEC may be reached by telephone at the toll-free number 1-888-891-8332 (TDEC). Local EFOs may be reached directly when calling this number from the construction site, using a land line.

3. STORMWATER POLLUTION PREVENTION PLAN (SWPPP) REQUIREMENTS

3.1. The General Purpose of the SWPPP

A comprehensive SWPPP must be prepared and submitted along with the NOI as required in section 1.4.2 above. The primary permittee must implement the SWPPP as written from commencement of construction activity until final stabilization is complete, or until the permittee does not have design or operational control of any portion of the construction site. Requirements for termination of site coverage are provided in part 8 below.

A site-specific SWPPP must be developed for each construction project or site covered by this permit. The design, inspection and maintenance of Best Management Practices (BMPs) described in SWPPP must be prepared in accordance with good engineering practices. At a minimum, BMPs shall be consistent with the requirements and recommendations contained in the current edition of the Tennessee Erosion and Sediment Control Handbook (the handbook). The handbook is designed to provide information to planners, developers, engineers, and contractors on the proper selection, installation, and maintenance of BMPs. This permit allows the use of innovative or alternative BMPs, whose performance has been documented to be equivalent or superior to conventional BMPs as certified by the SWPPP designer.

Once a definable area has been finally stabilized, the permittee may identify this area on the site-specific SWPPP. No further SWPPP or inspection requirements apply to that portion of the site (e.g., earth-disturbing activities around one of three buildings in a complex are done and the area is finally stabilized, one mile of a roadway or pipeline project is done and finally stabilized, etc).

For more effective coordination of BMPs a cooperative effort by the different operators at a site to prepare and participate in a comprehensive SWPPP is expected. Primary permittees at a site may develop separate SWPPPs that cover only their portion of the project. In instances where there is more than one SWPPP for a site, the permittees must ensure the stormwater discharge controls and other measures are compatible with one another and do not prevent another operator from complying with permit conditions. The comprehensive SWPPP developed and submitted by the primary permittee must assign responsibilities to subsequent (secondary) permittees and coordinate all BMPs at the construction site. Assignment and coordination can be done by name or by job title.

3.1.1. Registered engineer or landscape architect requirement

The narrative portion of the SWPPP may be prepared by an individual that has a working knowledge of erosion prevention and sediment controls, such as a Certified Professional in Erosion and Sediment Control (CPESC) or a person that successfully completed the "Level II Design Principles for Erosion Prevention and Sediment Control for Construction Sites" course. Plans and specifications for any building or structure, including the design of sediment basins or other sediment controls involving structural, hydraulic, hydrologic or other engineering calculations shall be prepared by a licensed professional engineer or landscape architect and

stamped and certified in accordance with the <u>Tennessee Code Annotated</u>, Title 62, Chapter 2 (see part 10 below) and the rules of the <u>Tennessee Board of Architectural and Engineering Examiners</u>. Engineering design of sediment basins and other sediment controls must be included in <u>SWPPPs</u> for construction sites involving drainage to an outfall totaling 10 or more acres (see subsection 3.5.3.3 below) or 5 or more acres if draining to an impaired or exceptional quality waters (see subsection 5.4.1 below).

3.1.2. Site Assessment

Quality assurance of erosion prevention and sediment controls shall be done by performing site assessment at a construction site. The site assessment shall be conducted at each outfall involving drainage totaling 10 or more acres (see subsection 3.5.3.3 below) or 5 or more acres if draining to an impaired or exceptional quality waters (see subsection 5.4.1 below), within a month of construction commencing at each portion of the site that drains the qualifying acreage of such portion of the site. The site assessment shall be performed by individuals with following qualifications:

- a licensed professional engineer or landscape architect;
- a Certified Professional in Erosion and Sediment Control (CPESC) or
- a person that successfully completed the "<u>Level II Design Principles for Erosion Prevention and Sediment Control for Construction Sites</u>" course.

As a minimum, site assessment should be performed to verify the installation, functionality and performance of the EPSC measures described in the SWPPP. The site assessment should be performed with the inspector (as defined in part 10 below – Definitions), and should include a review and update (if applicable) of the SWPPP. Modifications of plans and specifications for any building or structure, including the design of sediment basins or other sediment controls involving structural, hydraulic, hydrologic or other engineering calculations shall be prepared by a licensed professional engineer or landscape architect and stamped and certified in accordance with the Tennessee Code Annotated, Title 62, Chapter 2 (see part 10 below) and the rules of the Tennessee Board of Architectural and Engineering Examiners.

The site assessment findings shall be documented and the documentation kept with the SWPPP at the site. At a minimum, the documentation shall include information included in the inspection form provided in Appendix C of this permit. The documentation must contain the printed name and signature of the individual performing the site assessment and the following certification:

"I certify under penalty of law that this report and all attachments are, 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."

The site assessment can take the place of one of the twice weekly inspections requirement from subsection 3.5.8.2 below.

The division may require additional site assessment(s) to be performed if site inspection by division's personnel reveals site conditions that have potential of causing pollution to the waters of the state.

3.2. SWPPP Preparation and Compliance

3.2.1. Existing site

Operator(s) of an existing site presently permitted under the division's previous construction general permit shall maintain full compliance with the current SWPPP. The current SWPPP should be modified, if necessary, to meet requirements of this new general permit, and the SWPPP changes implemented no later than 12 months following the new permit effective date (May 24, 2011), excluding the buffer zone requirements as stated in section 4.1.2 below. The permittee shall make the updated SWPPP available for the division's review upon request.

3.2.2. New site

For construction stormwater discharges not authorized under an NPDES permit as of the effective date of this permit, a SWPPP that meets the requirements of subpart 3.5 below of this permit shall be prepared and submitted along with the NOI and an appropriate fee for coverage under this permit.

3.3. Signature Requirements, Plan Review and Making Plans Available

3.3.1. Signature Requirements for a SWPPP

The SWPPP shall be signed by the operator(s) in accordance with subpart 7.7 below, and if applicable, certified according to requirements in section 3.1.1 above. All signatures must be original. A SWPPP that does not bear an original signature will be deemed incomplete. The division recommends that signatures be in blue ink.

3.3.2. SWPPP Review

The permittee shall make updated plans and inspection reports available upon request to the director, local agency approving erosion prevention and sediment control plan, grading plans, land disturbance plans, or stormwater management plans, or the operator of an MS4.

3.3.3. Making plans available

A copy of the SWPPP shall be retained on-site at the location which generates the stormwater discharge in accordance with part 6 below of this permit. If the site is inactive or does not have an onsite location adequate to store the SWPPP, the location of the SWPPP, along with a contact phone number, shall be posted on-site. If the SWPPP is located offsite, reasonable local access to the plan, during normal working hours, must be provided.

3.4. Keeping Plans Current

3.4.1. SWPPP modifications

The permittee must modify and update the SWPPP if any of the following are met:

a) whenever there is a change in the scope of the project, which 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. If applicable, the SWPPP must be modified or updated whenever there is a change in chemical treatment methods, including the use of different treatment chemical, different dosage or application rate, or different area of application;
- b) 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 sources identified under section 3.5.2 below of this permit, or is otherwise not achieving the general objectives of controlling pollutants in stormwater discharges associated with construction activity. Where local, state or federal officials determine that the SWPPP is ineffective in eliminating or significantly minimizing pollutant sources, a copy of any correspondence to that effect must be retained in the SWPPP:
- c) to identify any new operator (typically contractor and/or subcontractor) as needed to reflect operational or design control that will implement a measure of the SWPPP (see subparts 2.1 and 2.2 above for further description of which operators must be identified);
 and
- d) to include measures necessary to prevent a negative impact to legally protected state or federally listed fauna or flora (or species proposed for such protection – see subpart 1.3 above). Amendments to the SWPPP may be reviewed by the division, a local MS4, the EPA or an authorized regulatory agency; and
- e) a TMDL is developed for the receiving waters for a pollutant of concern (siltation and/or habitat alteration).

3.5. Components of the SWPPP

The SWPPP shall include the following items, as described in sections 3.5.1 to 3.5.10 below: site description, description of stormwater runoff controls, erosion prevention and sediment controls, stormwater management, description of other items needing control, approved local government sediment and erosion control requirements, maintenance, inspections, pollution prevention measures for non-stormwater discharges, and documentation of permit eligibility related to Total Maximum Daily Loads (TMDL). The SWPPP must:

- a) identify all potential sources of pollution which are likely to affect the quality of stormwater discharges from the construction site;
- b) describe practices to be used to reduce pollutants in stormwater discharges from the construction site; and
- c) assure compliance with the terms and conditions of this permit.

3.5.1. Site description

Each plan shall provide a description of pollutant sources and other information as indicated below:

- a) a description of all construction activities at the site (not just grading and street construction);
- b) the intended sequence of major activities which disturb soils for major portions of the site (e.g., grubbing, excavation, grading, utilities and infrastructure installation, etc.);
- c) estimates of the total area of the site and the total area that is expected to be disturbed by excavation, grading, filling, or other construction activities;

- d) a description of the topography of the site including an estimation of the percent slope and the variation in percent slope found on the site; such estimation should be on a basis of a drainage area serving each outfall, rather than an entire project;
- e) any data describing the soil (data may be referenced or summarized) and how the soil type will dictate the needed control measures and how the soil may affect the expected quality of runoff from the site;
- f) an estimate of the runoff coefficient of the site after construction activities are completed and how the runoff will be handled to prevent erosion at the permanent outfall and receiving stream, as well as the estimate of the percentage of impervious area before and after construction;
- g) an erosion prevention and sediment control plan of the site with the proposed construction area clearly outlined. The plan should indicate the boundaries of the permitted area, drainage patterns and approximate slopes anticipated after major grading activities, areas of soil disturbance, an outline of areas which are not to be disturbed, the location of major structural and nonstructural controls identified in the SWPPP, the location of areas where stabilization practices are expected to occur, surface waters including wetlands, sinkholes, and careful identification on the site plan of outfall points intended for coverage under the general permit for stormwater discharges from the site. The erosion control plan must meet requirements stated in section 3.5.2 below;
- h) a description of any discharge associated with industrial activity other than construction stormwater that originates on site and the location of that activity and its permit number;
- i) identification of any stream or wetland on or adjacent to the project, a description of any anticipated alteration of these waters and the permit number or the tracking number of the <u>Aquatic Resources Alteration Permit</u> (ARAP) or Section 401 Certification issued for the alteration;
- j) the name of the receiving water(s), and approximate size and location of affected wetland acreage at the site;
- k) if applicable, clearly identify and outline the buffer zones established to protect waters of the state located within the boundaries of the project;
- some construction projects, such as residential or commercial subdivisions and/or developments or industrial parks are subdivided. Subdivided lots are sometimes sold to new owners prior to completion of construction. The site-wide developer/owner must describe EPSC measures implemented at those lots. Once the property is sold, the new operator must obtain coverage under this permit;
- m) for projects of more than 50 acres, the construction phases must be described (see subsection 3.5.3.1 below); and
- n) if only a portion of the total acreage of the construction site is to be disturbed, then the protections employed to limit the disturbance must be discussed, i.e., caution fence, stream side buffer zones, etc. Limits of disturbance shall be clearly marked in the SWPPP and areas to be undisturbed clearly marked in the field before construction activities begin.

3.5.2. <u>Description of stormwater runoff controls</u>

The SWPPP shall include a description of appropriate erosion prevention and sediment controls and other Best Management Practices (BMPs) that will be implemented at the construction site. The SWPPP must clearly describe each major activity which disturbs soils for major portions of the site (e.g., grubbing, excavation, grading, utilities and infrastructure installation, etc.):

- a) appropriate control measures and the general timing for the measures to be implemented during construction activities; and
- b) which permittee is responsible for implementation of which controls.

The SWPPP must include erosion prevention and sediment control (EPSC) plans showing the approximate location of each control measure along with a description of the timing during the construction process for implementing each measure (e.g., prior to the start of earth disturbance, as the slopes are altered and after major grading is finished). The different stages of construction (initial/major grading, installation of infrastructure, final contours, etc.) and the erosion preventions and sediment control measures that will be utilized during each stage should be depicted on multiple plan sheets (see paragraphs below). Half sheets are acceptable. One sheet showing all EPSCs that will be used during the life of the multi-phase project implementing different EPSC controls at each stage will not be considered complete.

For site disturbances less than 5 acres, at least two separate EPSC plan sheets shall be developed. At least two stages shall be identified, with associated EPSC measures addressed. The plan stages shall be addressed separately in plan sheets, with each stage reflecting the conditions and EPSC measures necessary to manage stormwater runoff, erosion and sediment during the initial land disturbance (initial grading) and the conditions and EPSC measures necessary to manage stormwater, erosion and sediment at final grading.

For site disturbances more than 5 acres, at least 3 separate EPSC plan sheets shall be developed. Three stages shall be identified. The first plan sheet should reflect the conditions and EPSC measures necessary to manage stormwater runoff, during the initial land disturbance (initial grading). The second plan sheet shall reflect the conditions and the EPSC measures necessary to manage stormwater runoff from interim land disturbance activities. The third plan sheet shall reflect the conditions and EPSC measures necessary to manage stormwater runoff, erosion and sediment at final grading.

The description and implementation of controls shall address the following minimum components, as described in sections 3.5.3, 3.5.4 and 3.5.5 below. Additional controls may be necessary to comply with section 5.3.2 below.

3.5.3. Erosion prevention and sediment controls

3.5.3.1. General criteria and requirements

- a) The construction-phase erosion prevention controls shall be designed to eliminate (or minimize if complete elimination is not possible) the dislodging and suspension of soil in water. Sediment controls shall be designed to retain mobilized sediment on site to the maximum extent practicable.
- b) The design, inspection and maintenance of Best Management Practices (BMPs) described in SWPPP must be prepared in accordance with good engineering practices and, at a minimum, shall be consistent with the requirements and recommendations contained in the current edition of the Tennessee Erosion and Sediment Control Handbook. In addition, all control measures must be properly selected, installed, and maintained in accordance with the manufacturer's specifications (where applicable). All control measures selected must be able to slow runoff so that rill and gully formation is prevented. When steep slopes and/or fine particle soils are present at the site, additional physical or chemical treatment of stormwater runoff may be required. Proposed physical

- and/or chemical treatment must be researched and applied according to the manufacturer's guidelines and fully described in the SWPPP. If periodic inspections or other information indicates a control has been used inappropriately, or incorrectly, the permittee must replace or modify the control for relevant site situations.
- c) If permanent or temporary vegetation is to be used as a control measure, then the timing of the planting of the vegetation cover must be discussed in the SWPPP. Planning for planting cover vegetation during winter months or dry months should be avoided.
- d) If sediment escapes the permitted area, off-site accumulations of sediment that have not reached a stream must be removed at a frequency sufficient to minimize offsite impacts (e.g., fugitive sediment that has escaped the construction site and has collected in a street must be removed so that it is not subsequently washed into storm sewers and streams by the next rain and/or so that it does not pose a safety hazard to users of public streets). Permittees shall not initiate remediation/restoration of a stream without consulting the division first. This permit does not authorize access to private property. Arrangements concerning removal of sediment on adjoining property must be settled by the permittee with the adjoining landowner.
- e) Sediment should be removed from sediment traps, silt fences, sedimentation ponds, and other sediment controls as recommended in the <u>Tennessee Erosion and Sediment Control</u> Handbook, and must be removed when design capacity has been reduced by 50%.
- f) Litter, construction debris, and construction chemicals exposed to stormwater shall be picked up prior to anticipated storm events or before being carried off of the site by wind (e.g., forecasted by local weather reports), or otherwise prevented from becoming a pollutant source for stormwater discharges (e.g., screening outfalls, daily pick-up, etc.). After use, materials used for erosion prevention and sediment control (such as silt fence) should be removed or otherwise prevented from becoming a pollutant source for stormwater discharges.
- g) Erodible material storage areas (including but not limited to overburden and stockpiles of soil etc.) and borrow pits used primarily for the permitted project and which are contiguous to the site are considered a part of the site and shall be identified on the NOI, addressed in the SWPPP and included in the fee calculation. TDOT projects shall be addressed in the Waste and Borrow Manual per the Statewide Stormwater Management Plan (SSWMP).
- h) Pre-construction vegetative ground cover shall not be destroyed, removed or disturbed more than 15 days prior to grading or earth moving unless the area is seeded and/or mulched or other temporary cover is installed.
- i) Clearing and grubbing must be held to the minimum necessary for grading and equipment operation. Existing vegetation at the site should be preserved to the maximum extent practicable.
- j) Construction must be sequenced to minimize the exposure time of graded or denuded areas.
- k) Construction phasing is required on all projects regardless of size as a major practice for minimizing erosion and limiting sedimentation. Construction must be phased to keep the total disturbed area less than 50 acres at any one time. Areas of the completed phase must be stabilized within 14 days (see subsection 3.5.3.2 below). No more than 50 acres of active soil disturbance is allowed at any time during the construction project. This includes off-site borrow or disposal areas that meet the conditions of section 1.2.2 above of this general permit.

The 50 acre limitation does not apply to linear construction projects (such as roadway, pipeline, and other infrastructure construction activities) if the following conditions are met:

- Where no one area of active soil disturbance is greater than 50 acres and the various areas of disturbance have distinct receiving waters; or
- Where contiguous disturbances amount to greater than 50 acres, but no one distinct water is receiving run off from more than 50 disturbed acres; or
- With the department's written concurrence, where more than 50 acres of disturbance is to occur and where one receiving water will receive run-off from more than 50 acres; or
- Where no one area of active soil disturbance is greater than 50 acres and the various areas of disturbance are more than 5 miles apart.

In order for a linear project to take advantage of the 50 acre rule exemption outlined in this paragraph, the contractor shall conduct monthly site assessments as described in section 3.1.2 above until the site is permanently stabilized.

- Erosion prevention and sediment control measures must be in place and functional before earth moving operations begin, and must be constructed and maintained throughout the construction period. Temporary measures may be removed at the beginning of the workday, but must be replaced at the end of the workday.
- m) The following records shall be maintained on or near site: the dates when major grading activities occur; the dates when construction activities temporarily or permanently cease on a portion of the site; the dates when stabilization measures are initiated; inspection records and rainfall records.
- n) Off-site vehicle tracking of sediments and the generation of dust shall be minimized. A stabilized construction access (a point of entrance/exit to a construction site) shall be described and implemented, as needed, to reduce the tracking of mud and dirt onto public roads by construction vehicles.
- o) Permittees shall maintain a rain gauge and daily rainfall records at the site, or use a reference site for a record of daily amount of precipitation.

3.5.3.2. Stabilization practices

The SWPPP shall include a description of interim and permanent stabilization practices, including site-specific scheduling of the implementation of the practices. Site plans should ensure that existing vegetation is preserved where attainable and that disturbed portions of the site are stabilized. Site plans should comply with buffer zone requirements (see sections 4.1.2 and 5.4.2 below), if applicable, in which construction activities, borrow and/or fill are prohibited. Stabilization practices may include: temporary seeding, permanent seeding, mulching, geotextiles, sod stabilization, vegetative buffer strips, protection of trees, preservation of mature vegetation, and other appropriate measures. Use of impervious surfaces for final stabilization in lieu of a permanent vegetative cover should be avoided where practicable. No stabilization, erosion prevention and sediment control measures are to be installed in a stream without obtaining a Section 404 permit and an Aquatic Resources Alteration Permit (ARAP), if such permits are required and appropriate.

Stabilization measures shall be initiated as soon as possible in portions of the site where construction activities have temporarily or permanently ceased. Temporary or permanent soil stabilization at the construction site (or a phase of the project) must be completed no later than 14 days after the construction activity in that portion of the site has temporarily or permanently ceased. In the following situations, temporary stabilization measures are not required:

- a) where the initiation of stabilization measures is precluded by snow cover or frozen ground conditions or adverse soggy ground conditions, stabilization measures shall be initiated as soon as practicable; or
- b) where construction activity on a portion of the site is temporarily ceased, and earth disturbing activities will be resumed within 14 days.

Steep slopes shall be temporarily stabilized not later than 7 days after construction activity on the slope has temporarily or permanently ceased.

Permanent stabilization with perennial vegetation (using native herbaceous and woody plants where practicable) or other permanently stable, non-eroding surface shall replace any temporary measures as soon as practicable. Unpacked gravel containing fines (silt and clay sized particles) or crusher runs will not be considered a non-eroding surface.

3.5.3.3. Structural practices

The SWPPP shall include a description of structural practices to divert flows from exposed soils, store flows or otherwise limit runoff and discharge of pollutants from exposed areas of the site. Such practices may include silt fences, earth dikes, drainage swales, sediment traps, check dams, subsurface drains, pipe slope drains, level spreaders, storm drain inlet protection, rock outlet protection, reinforced soil retaining systems, gabions, and temporary or permanent sediment basins. Structural controls shall not be placed in streams or wetlands except as authorized by a section 404 permit and/or Aquatic Resources Alteration Permit (ARAP).

Erosion prevention and sediment control measures must be prepared in accordance with good engineering practices and the latest edition of the <u>Tennessee Erosion and Sediment Control Handbook</u>. In addition, erosion prevention and sediment controls shall be designed to minimize erosion and maximize sediment removal resulting from a 2-year, 24-hour storm (the design storm – see part 10 below: "2-year and 5-year design storm depths and intensities"), as a minimum, either from total rainfall in the designated period or the equivalent intensity as specified on the following website http://hdsc.nws.noaa.gov/hdsc/pfds/orb/tn_pfds.html. When clay and other fine particle soils are present at the construction site, chemical treatment may be used to minimize amount of sediment being discharged.

For an on-site outfall which receives drainage from 10 or more acres, a minimum sediment basin volume that will provide treatment for a calculated volume of runoff from a 2 year, 24 hour storm and runoff from each acre drained, or equivalent control measures as specified in the Tennessee Erosion and Sediment Control Handbook, shall be provided until final stabilization of the site. A drainage area of 10 or more acres includes both disturbed and undisturbed portions of the site or areas adjacent to the site, all draining through the common outfall. Where an equivalent control measure is substituted for a sediment retention basin, the equivalency must be justified to the division. Runoff from any undisturbed acreage should be diverted around the disturbed area and the sediment basin. Diverted runoff can be omitted from the volume calculation. Sediment storage expected from the disturbed areas must be included.

All calculations of drainage areas, runoff coefficients and basin volumes must be provided in the SWPPP. The discharge structure from a sediment basin must be designed to retain sediment during the lower flows. Muddy water to be pumped from excavation and work areas must be held in settling basins or filtered or chemically treated prior to its discharge into surface waters. Water must be discharged through a pipe, well-grassed or lined channel or other equivalent means so that the discharge does not cause erosion and sedimentation. Discharged water must not cause an objectionable color contrast with the receiving stream.

3.5.4. Stormwater management

The SWPPP shall include a description of any measures that will be installed during the construction process to control pollutants in stormwater discharges that will occur <u>after</u> construction operations have been completed.

For projects discharging to waters considered impaired by sediment or habitat alteration due to in-channel erosion, the SWPPP shall include a description of measures that will be installed during the construction process to control pollutants and any increase in the volume of stormwater discharges that will occur after construction operations have been completed. For steep slope sites, the SWPPP shall also include a description of measures that will be installed to dissipate the volume and energy of the stormwater runoff to pre-development levels.

This permit only addresses the installation of stormwater management measures, and not the ultimate operation and maintenance of such structures after the construction activities have been completed, the site has undergone final stabilization, and the permit coverage has been terminated. Permittees are only responsible for the installation and maintenance of stormwater management measures prior to final stabilization of the site, and are not responsible for maintenance after stormwater discharges associated with construction activity have been eliminated from the site. All permittees are encouraged to limit the amount of post construction runoff, if not required by local building regulations or local MS4 program requirements, in order to minimize in-stream channel erosion in the receiving stream.

Construction stormwater runoff management practices may include: stormwater detention structures (including ponds with a permanent pool); stormwater retention structures; flow attenuation by use of open vegetated swales and natural depressions; infiltration of runoff onsite; and sequential systems (which combine several practices).

Velocity dissipation devices shall be placed at discharge locations and along the length of any outfall channel to provide a non-erosive velocity flow from the structure to the receiving stream so that the natural physical and biological characteristics and functions of the stream are maintained and protected (e.g., there should be no significant changes in the hydrological regime of the receiving water). The SWPPP shall include an explanation of the technical basis used to select the velocity dissipation devices to control pollution where flows exceed pre-development levels. The Tennessee Erosion and Sediment Control Handbook provides measures that can be incorporated into the design or implemented on site to decrease erosive velocities. An Aquatic Resources Alteration Permit (ARAP) may be required if such velocity dissipation devices installed would alter the receiving stream and/or its banks.

3.5.5. Other items needing control

- a) No solid materials, including building materials, shall be placed in waters of the state, except as authorized by a section 404 permit and/or <u>Aquatic Resources Alteration Permit</u> (ARAP)(see part 9 below).
- b) For installation of any waste disposal systems on site, or sanitary sewer or septic system, the SWPPP shall identify these systems and provide for the necessary EPSC controls. Permittees must also comply with applicable state and/or local waste disposal, sanitary sewer or septic system regulations for such systems to the extent these are located within the permitted area.
- c) The SWPPP shall include a description of construction and waste materials expected to be stored on-site. The SWPPP shall also include a description of controls used to reduce pollutants from materials stored on site, including storage practices to minimize exposure of the materials to stormwater, and spill prevention and response.
- d) A description of stormwater sources from areas other than construction and a description of controls and measures that will be implemented at those sites.
- e) A description of measures necessary to prevent "taking" of legally protected state or federal listed threatened or endangered aquatic fauna and/or critical habitat (if applicable). The permittee must describe and implement such measures to maintain eligibility for coverage under this permit.

3.5.6. Approved local government sediment and erosion control requirements

Permittees must comply with any additional erosion prevention, sediment controls and stormwater management measures required by a local municipality or permitted <u>MS4</u> program.

3.5.7. Maintenance

The SWPPP shall describe procedures to ensure that vegetation, erosion and sediment control measures, buffer zones, and other protective measures identified in the site plan are kept in good and effective operating condition. Maintenance needs identified in inspections or by other means shall be accomplished before the next storm event, but in no case more than 7 days after the need is identified.

3.5.8. Inspections

3.5.8.1. Inspector training and certification

Inspectors performing the required twice weekly inspections must have an active certification by completing the "Fundamentals of Erosion Prevention and Sediment Control Level I" course. A copy of the certification or training record for inspector certification should be kept on site.

3.5.8.2. Schedule of inspections

a) Inspections described in paragraphs b, c and d below, shall be performed at least twice every calendar week. Inspections shall be performed at least 72 hours apart. Where sites or portion(s) of construction sites have been temporarily stabilized, or runoff is unlikely due to winter conditions (e.g., site covered with snow or ice) or due to extreme drought, such inspection only has to be conducted once per month until thawing or precipitation results in runoff or construction activity resumes. Inspection requirements do not apply

- to definable areas that have been finally stabilized, as described in subpart 3.1 above. Written notification of the intent to change the inspection frequency and the justification for such request must be submitted to the local Environmental Field Office, or the division's Nashville Central Office for projects of the Tennessee Department of Transportation (TDOT) and the Tennessee Valley Authority (TVA). Should the division discover that monthly inspections of the site are not appropriate due to insufficient stabilization measures or otherwise, twice weekly inspections shall resume. The division may inspect the site to confirm or deny the notification to conduct monthly inspections.
- b) Qualified personnel, as defined in section 3.5.8.1 above (provided by the permittee or cooperatively by multiple permittees) shall inspect disturbed areas of the construction site that have not been finally stabilized, areas used for storage of materials that are exposed to precipitation, structural control measures, locations where vehicles enter or exit the site, and each outfall.
- c) Disturbed areas and areas used for storage of materials that are exposed to precipitation shall be inspected for evidence of, or the potential for, pollutants entering the site's drainage system. Erosion prevention and sediment control measures shall be observed to ensure that they are operating correctly.
- d) Outfall points (where discharges leave the site and/or enter waters of the state) shall be inspected to determine whether erosion prevention and sediment control measures are effective in preventing significant impacts to receiving waters. Where discharge locations are inaccessible, nearby downstream locations shall be inspected. Locations where vehicles enter or exit the site shall be inspected for evidence of offsite sediment tracking.
- e) Based on the results of the inspection, any inadequate control measures or control measures in disrepair shall be replaced or modified, or repaired as necessary, before the next rain event, but in no case more than 7 days after the need is identified.
- f) Based on the results of the inspection, the site description identified in the SWPPP in accordance with section 3.5.1 above and pollution prevention measures identified in the SWPPP in accordance with section 3.5.2 above shall be revised as appropriate, but in no case later than 7 days following the inspection. Such modifications shall provide for timely implementation of any changes to the SWPPP, but in no case later than 14 days following the inspection.
- g) All inspections shall be documented on the Construction Stormwater Inspection Certification form provided in Appendix C of this permit for all construction sites. An alternative inspection form may be used as long as the form contents and the inspection certification language are, at a minimum, equivalent to the division's form (Appendix C) and the permittee has obtained a written approval from the division to use the alternative form. Inspection documentation will be maintained on site and made available to the division upon request. Inspection reports must be submitted to the division within 10 days of the request. If the division requests the Construction Stormwater Inspection Certification form to be submitted, the submitted form must contain the printed name and signature of the trained certified inspector and the person who meets the signatory requirements of section 7.7.2 below of this permit.
- h) 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.
- i) Subsequent operator(s) (primary permittees) who have obtained coverage under this permit should conduct twice weekly inspections, unless their portion(s) of the site has been temporarily stabilized, or runoff is unlikely due to winter conditions or due to

extreme drought as stated in paragraph a) above. The primary permittee (such as a developer) is no longer required to conduct inspections of portions of the site that are covered by a subsequent primary permittee (such as a home builder).

3.5.9. Pollution prevention measures for non-stormwater discharges

Sources of non-stormwater listed in section 1.2.3 above of this permit that are combined with stormwater discharges associated with construction activity must be identified in the SWPPP. The plan shall identify and ensure the implementation of appropriate pollution prevention measures for the non-stormwater component(s) of the discharge. Any non-stormwater must be discharged through stable discharge structures. Estimated volume of the non-stormwater component(s) of the discharge must be included in the design of all impacted control measures.

3.5.10. Documentation of permit eligibility related to Total Maximum Daily Loads (TMDL)

The SWPPP must include documentation supporting a determination of permit eligibility with regard to waters that have an approved TMDL for a pollutant of concern, including:

- a) identification of whether the discharge is identified, either specifically or generally, in an approved TMDL and any associated wasteload allocations, site-specific requirements, and assumptions identified for the construction stormwater discharge;
- b) summaries of consultation with the division on consistency of SWPPP conditions with the approved TMDL, and
- c) measures taken to ensure that the discharge of TMDL identified pollutants from the site is consistent with the assumptions and requirements of the approved TMDL, including any specific wasteload allocation that has been established that would apply to the construction stormwater discharge.

4. CONSTRUCTION AND DEVELOPMENT EFFLUENT GUIDELINES

4.1. Non-Numeric Effluent Limitations

Any point source authorized by this general permit must achieve, at a minimum, the effluent limitations representing the degree of effluent reduction attainable by application of best practicable control technology (BPT) currently available and is described in sections 4.1.1 through 4.1.7 below.

4.1.1. Erosion Prevention and Sediment Controls

Design, install and maintain effective erosion prevention and sediment controls to minimize the discharge of pollutants. At a minimum, such controls must be designed, installed and maintained to:

- (1) Control stormwater volume and velocity within the site to minimize soil erosion;
- (2) Control stormwater discharges, including both peak flow rates and total stormwater volume, to minimize erosion at outlets and to minimize downstream channel and streambank erosion;
- (3) Minimize the amount of soil exposed during construction activity;
- (4) Minimize the disturbance of steep slopes;

- (5) Eliminate (or minimize if complete elimination is not possible) sediment discharges from the site. The design, installation and maintenance of erosion prevention and sediment controls must address factors such as the design storm (see sub-section 3.5.3.3 above) and soil characteristics, including the range of soil particle sizes expected to be present on the site:
- (6) Provide and maintain natural buffers around surface waters, direct stormwater to vegetated areas to increase sediment removal and maximize stormwater infiltration, unless infeasible (see section 4.1.2 below); and
- (7) Minimize soil compaction and, unless infeasible, preserve topsoil.

4.1.2. <u>Buffer zone requirements</u>

Buffer zone requirements in this section apply to all streams adjacent to construction sites, with an exception for streams designated as impaired or Exceptional Tennessee waters (see section 5.4.2 below). A 30-foot natural riparian buffer zone adjacent to all streams at the construction site shall be preserved, to the maximum extent practicable, during construction activities at the site. The water quality buffer zone is required to protect waters of the state (e.g., perennial and intermittent streams, rivers, lakes, wetlands) located within or immediately adjacent to the boundaries of the project, as identified using methodology from Standard Operating Procedures for Hydrologic Determinations (see rules to implement a certification program for Qualified Hydrologic Professionals, TN Rules Chapter 0400-40-17). Buffer zones are not primary sediment control measures and should not be relied on as such. Rehabilitation and enhancement of a natural buffer zone is allowed, if necessary, for improvement of its effectiveness of protection of the waters of the state. The buffer zone requirement only applies to new construction sites, as described in section 2.4.2 above.

The riparian buffer zone should be preserved between the top of stream bank and the disturbed construction area. The 30-feet criterion for the width of the buffer zone can be established on an average width basis at a project, as long as the minimum width of the buffer zone is more than 15 feet at any measured location.

Every attempt should be made for construction activities not to take place within the buffer zone. BMPs providing equivalent protection to a receiving stream as a natural riparian zone may be used at a construction site. Such equivalent BMPs shall be designed to be as effective in protecting the receiving stream from effects of stormwater runoff as a natural riparian zone. A justification for use and a design of equivalent BMPs shall be included in the SWPPP. Such equivalent BMPs are expected to be routinely used at construction projects typically located adjacent to surface waters. These projects include, but are not limited to: sewer line construction, roadway construction, utility line or equipment installation, greenway construction, construction of a permanent outfall or a velocity dissipating structure, etc.

This requirement does not apply to any valid <u>Aquatic Resources Alteration Permit</u> (ARAP), or equivalent permits issued by federal authorities. Additional <u>buffer zone</u> requirements may be established by the local <u>MS4</u> program.

4.1.2.1. Buffer zone exemption based on existing uses

Buffer zones as described in section 4.1.2 above shall not be required to portions of the buffer where certain land uses exist and are to remain in place according to the following:

- A use shall be considered existing if it was present within the buffer zone as of the date of
 the Notice of Intent for coverage under the CGP. Existing uses shall include, but not be
 limited to, buildings, parking lots, roadways, utility lines and on-site sanitary sewage
 systems. Only the portion of the buffer zone that contains the footprint of the existing land
 use is exempt from buffer zones. Activities necessary to maintain uses are allowed provided
 that no additional vegetation is removed from the buffer zone.
- 2. If an area with an existing land use is proposed to be converted to another use or the impervious surfaces located within the buffer area are being removed buffer zone requirements shall apply.

4.1.2.2. Pre-Approved Sites

Construction activity at sites that have been pre-approved before February 1, 2010, are exempt from the buffer requirements of section 4.1.2 above. Evidence of pre-approval for highway projects shall be a final right-of-way plan and for other construction projects, the final design drawings with attached dated, written approval by the local, state or federal agency with authority to approve such design drawings for construction.

4.1.3. Soil stabilization

Stabilization of disturbed areas must, at a minimum, be initiated immediately whenever any clearing, grading, excavating or other earth disturbing activities have temporarily or permanently ceased on any portion of the site, and will not resume for a period exceeding 14 calendar days. Soil stabilization (temporary or permanent) of those of disturbed areas must be completed as soon as possible, but not later than 14 days after the construction activity in that portion of the site has temporarily or permanently ceased. In arid, semiarid, and drought-stricken areas where initiating vegetative stabilization measures immediately is infeasible, alternative stabilization measures (such as, but not limited to: properly anchored mulch, soil binders, matting) must be employed.

4.1.4. Dewatering

Discharges from dewatering activities, including discharges from dewatering of trenches and excavations, are prohibited unless managed by appropriate controls. Appropriate controls include, but are not limited to: weir tank, dewatering tank, gravity bag filter, sand media particulate filter, pressurized bag filter, cartridge filter or other control units providing the level of treatment necessary to comply with permit requirements.

4.1.5. <u>Pollution prevention measures</u>

The permittee must design, install, implement, and maintain effective pollution prevention measures to minimize the discharge of pollutants. At a minimum, such measures must be designed, installed, implemented and maintained to:

- (1) Minimize the discharge of pollutants from equipment and vehicle washing, wheel wash water, and other wash waters. Wash waters must be treated in a sediment basin or alternative control that provides equivalent or better treatment prior to discharge;
- (2) Minimize the exposure of building materials, building products, construction wastes, trash, landscape materials, fertilizers, pesticides, herbicides, detergents, sanitary waste and other materials present on the site to precipitation and to stormwater; and
- (3) Minimize the discharge of pollutants from spills and leaks and implement chemical spill and leak prevention and response procedures.

4.1.6. <u>Prohibited discharges</u>

The following discharges are prohibited:

- (1) Wastewater from washout of concrete, unless managed by an appropriate control;
- (2) Wastewater from washout and cleanout of stucco, paint, form release oils, curing compounds and other construction materials;
- (3) Fuels, oils, or other pollutants used in vehicle and equipment operation and maintenance; and
- (4) Soaps or solvents used in vehicle and equipment washing.

4.1.7. Surface outlets

When discharging from basins and impoundments, utilize outlet structures that only withdraw water from near the surface of the basin or impoundment, unless infeasible.

5. SPECIAL CONDITIONS, MANAGEMENT PRACTICES, AND OTHER NON-NUMERIC LIMITATIONS

5.1. Releases in Excess of Reportable Quantities

The discharge of hazardous substances or oil in the stormwater discharge(s) from a facility shall be prevented or minimized in accordance with the applicable stormwater pollution prevention plan for the facility. This permit does not relieve the permittee of the reporting requirements of 40 CFR 117 and 40 CFR 302. 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:

- a) the permittee is required to notify the National Response Center (NRC) (800-424-8802) and the Tennessee Emergency Management Agency (emergencies: 800-262-3300; non-emergencies: 800-262-3400) in accordance with the requirements of 40 CFR 117 or 40 CFR 302 as soon as he or she has knowledge of the discharge;
- b) the permittee shall submit, within 14 days of knowledge of the release, a written description of: the release (including the type and estimate of the amount of material

- released), the date that such release occurred, the circumstances leading to the release, what actions were taken to mitigate effects of the release, and steps to be taken to minimize the chance of future occurrences, to the appropriate Environmental Field Office (see subpart 2.8 above); and
- c) the SWPPP required under part 3 above of this permit must be updated within 14 days of knowledge of the release: to provide a description of the release, the circumstances leading to the release, and the date of the release. This can be accomplished by including a copy of a written description of the release as described in the paragraph b) above. In addition, the SWPPP must be reviewed to identify measures to prevent the reoccurrence of such releases and to respond to such releases, and the plan must be modified where appropriate.

5.2. Spills

This permit does not authorize the discharge of hazardous substances or oil resulting from an onsite spill.

5.3. Discharge Compliance with State Water Quality Standards

5.3.1. Violation of Water Quality Standards

This permit does not authorize stormwater or other discharges that would result in a violation of a state water quality standard (the TDEC Rules, Chapters 1200-4-3, 1200-4-4). Such discharges constitute a violation of this permit.

Where a discharge is already authorized under this permit and the division determines the discharge to cause or contribute to the violation of applicable state water quality standards, the division will notify the operator of such violation(s). The permittee shall take all necessary actions to ensure future discharges do not cause or contribute to the violation of a water quality standard and shall document these actions in the SWPPP.

5.3.2. Discharge quality

- a) The construction activity shall be carried out in such a manner that will prevent violations of water quality criteria as stated in the TDEC Rules, <u>Chapter 1200-4-3-.03</u>. This includes but is not limited to the prevention of any discharge that causes a condition in which visible solids, bottom deposits, or turbidity impairs the usefulness of waters of the state for any of the uses designated for that water body by TDEC Rules, <u>Chapter 1200-4-4</u>. Construction activity carried out in the manner required by this permit shall be considered compliance with the TDEC Rules, <u>Chapter 1200-4-3-.03</u>.
- b) There shall be no distinctly visible floating scum, oil or other matter contained in the stormwater discharge.
- c) The stormwater discharge must not cause an objectionable color contrast in the receiving stream.
- d) The stormwater discharge must result in no materials in concentrations sufficient to be hazardous or otherwise detrimental to humans, livestock, wildlife, plant life, or fish and aquatic life in the receiving stream. This provision includes species covered under subpart 1.3 above.

5.4. Discharges into Impaired or Exceptional Tennessee Waters

5.4.1. Additional SWPPP/BMP Requirements for discharges into impaired or exceptional TN Waters

Discharges that would add loadings of a pollutant that is identified as causing or contributing to an impairment of a water body on the list of impaired waters, or which would cause degradation to waters designated by TDEC as Exceptional Tennessee waters are <u>not</u> authorized by this permit (see subpart 1.3 above). To be eligible to obtain and maintain coverage under this permit, the operator must satisfy, at a minimum, the following additional requirements for discharges into waters impaired by siltation (or discharges upstream of such waters and because of the proximity to the impaired segment and the nature of the discharge is likely to contribute pollutants of concern in amounts measurable in the impaired segment that may affect the impaired waters) and for discharges to waters identified by TDEC as Exceptional Tennessee waters (or discharges upstream of such waters and because of the proximity to the exceptional segment and the nature of the discharge is likely to contribute pollutants of concern in amounts measurable in the exceptional segment that may affect the Exceptional Tennessee waters):

- a) The SWPPP must certify that erosion prevention and sediment controls used at the site are designed to control storm runoff generated by a 5-year, 24-hour storm event (the design storm see part 10 below: "2-year and 5-year design storm depths and intensities"), as a minimum, either from total rainfall in the designated period or the equivalent intensity as specified on the following website http://hdsc.nws.noaa.gov/hdsc/pfds/orb/tn_pfds.html. When clay and other fine particle soils are found on sites, additional physical or chemical treatment of stormwater runoff may be used.
- b) The SWPPP must be prepared by a person who, at a minimum, has completed the department's <u>Level II Design Principles for Erosion Prevention and Sediment Control for Construction Sites</u> course. This requirement goes in effect 24 months following the new permit effective date. A copy of the certification or training record for inspector certification should be included with the SWPPP.
- c) The permittee shall perform inspections described in section 3.5.8 above at least twice every calendar week. Inspections shall be performed at least 72 hours apart.
- d) The permittee must certify on the form provided in Appendix C of this permit whether or not all planned and designed erosion prevention and sediment controls are installed and in working order. The form must contain the printed name and signature of the inspector and the certification must be executed by a person who meets the signatory requirements of section 7.7.2 below of this permit. The record of inspections must be kept at the construction site with a copy of the SWPPP. For record retention requirements, see part 6 below.
- e) In the event the division finds that a discharger is complying with the SWPPP, but contributing to the impairment of receiving stream, then the discharger will be notified by the director in writing that the discharge is no longer eligible for coverage under the general permit. The permittee may update the SWPPP and implement the necessary changes designed to eliminate further impairment of the receiving stream. If the permittee does not implement the SWPPP changes within 7 days of receipt of notification, the permittee will be notified in writing that continued discharges must be covered by an individual permit (see subpart 7.12 below). To obtain the individual permit, the operator must file an individual permit application (EPA Forms 1 and 2F). The project must be stabilized immediately until the SWPPP is updated and the

- individual permit is issued. Only discharges from earth disturbing activities necessary for stabilization are authorized to continue until the individual permit is issued.
- f) For an on-site outfall in a drainage area of a total of 5 or more acres, a minimum temporary (or permanent) sediment basin volume that will provide treatment for a calculated volume of runoff from a 5 year, 24 hour storm and runoff from each acre drained, or equivalent control measures as specified in the Tennessee Erosion and Sediment Control Handbook
- g) , shall be provided until final stabilization of the site. A drainage area of 5 or more acres includes both disturbed and undisturbed portions of the site or areas adjacent to the site, all draining through the common outfall. Where an equivalent control measure is substituted for a sediment retention basin, the equivalency must be justified. Runoff from any undisturbed acreage should be diverted around the disturbed area and the sediment basin and, if so, can be omitted from the volume calculation. Sediment storage expected from the disturbed areas must be included and a marker installed signifying a cleanout need.
- h) The director may require revisions to the SWPPP necessary to prevent a negative impact to legally protected state or federally listed aquatic fauna, their habitat, or the receiving waters.

5.4.2. Buffer zone requirements for discharges into impaired or exceptional TN waters

For sites that contain and/or are adjacent to a receiving stream designated as impaired or Exceptional Tennessee waters a 60-foot natural riparian buffer zone adjacent to the receiving stream shall be preserved, to the maximum extent practicable, during construction activities at the site. The water quality buffer zone is required to protect waters of the state (e.g., perennial and intermittent streams, rivers, lakes, wetlands) located within or immediately adjacent to the boundaries of the project, as identified using methodology from Standard Operating Procedures for Hydrologic Determinations (see rules to implement a certification program for Qualified Hydrologic Professionals, TN Rules Chapter 0400-40-17). Buffer zones are not primary sediment control measures and should not be relied on as such. Rehabilitation and enhancement of a natural buffer zone is allowed, if necessary, for improvement of its effectiveness of protection of the waters of the state. The buffer zone requirement only applies to new construction sites, as described in section 2.4.2 above.

The natural buffer zone should be established between the top of stream bank and the disturbed construction area. The 60-feet criterion for the width of the buffer zone can be established on an average width basis at a project, as long as the minimum width of the buffer zone is more than 30 feet at any measured location.

Every attempt should be made for construction activities not to take place within the buffer zone. BMPs providing equivalent protection to a receiving stream as a natural riparian zone may be used at a construction site. Such equivalent BMPs shall be designed to be as effective in protecting the receiving stream from effects of stormwater runoff as a natural buffer zone. A justification for use and a design of equivalent BMPs shall be included in the SWPPP. Such equivalent BMPs are expected to be routinely used at construction projects typically located adjacent to surface waters. These projects include, but are not limited to: sewer line construction, roadway construction, utility line or equipment installation, greenway construction, construction of a permanent outfall or a velocity dissipating structure, etc.

This requirement does not apply to an area that is being altered under the authorization of a valid Aquatic Resources Alteration Permit (ARAP), or equivalent permits issued by federal authorities. Additional natural buffer zone requirements may be established by the local MS4 program.

5.4.2.1. Buffer zone exemption based on existing uses

Buffer zones as described in section 5.4.2 above shall not be required to portions of the buffer where certain land uses exist and are to remain in place according to the following:

- 1. A use shall be considered existing if it was present within the buffer zone as of the date of the Notice of Intent for coverage under the CGP. Existing uses shall include, but not be limited to, buildings, parking lots, roadways, utility lines and on-site sanitary sewage systems. Only the portion of the buffer zone that contains the footprint of the existing land use is exempt from buffer zones. Activities necessary to maintain uses are allowed provided that no additional vegetation is removed from the buffer zone.
- 2. If an area with an existing land use is proposed to be converted to another use or the impervious surfaces located within the buffer area are being removed buffer zone requirements shall apply.

5.4.3. <u>Pre-Approved sites</u>

Construction activity at sites that have been pre-approved before June 16, 2005, are exempt from the design storm requirements of section 5.4.1 a) and e) above and the buffer requirements of section 5.4.2 above. Evidence of pre-approval for highway projects shall be a final right-of-way plan and for other construction projects, the final design drawings with attached dated, written approval by the local, state or federal agency with authority to approve such design drawings for construction.

6. RETENTION, ACCESSIBILITY AND SUBMISSION OF RECORDS

6.1. Documents

The permittee shall retain copies of stormwater pollution prevention plans and all reports required by this permit, and records of all data used to complete the NOI and the NOT to be covered by this permit, for a period of at least three years from the date the notice of termination is submitted. This period may be extended by written request of the director.

6.2. Accessibility and Retention of Records

The permittee shall retain a copy of the SWPPP required by this permit (including a copy of the permit) at the construction site (or other local location accessible to the director and the public) from the date construction commences to the date of termination of permit coverage. Permittees with day-to-day operational control over pollution prevention plan implementation shall have a copy of the SWPPP available at a central location onsite for the use of all operators and those identified as having responsibilities under the plan whenever they are on the construction site. Once coverage is terminated, the permittee shall maintain a copy of all records for a period of three years.

6.2.1. Posting information at the construction site

The permittee shall post a notice near the main entrance of the construction site accessible to the public with the following information:

- a) a copy of the NOC with the NPDES permit tracking number for the construction project;
- b) name, company name, E-mail address (if available), telephone number and address of the project site owner/operator or a local contact person;
- c) a brief description of the project; and
- d) the location of the SWPPP (see section 3.3.3 above).

The notice must be maintained in a legible condition. If posting this information near a main entrance is infeasible due to safety concerns, or not accessible to the public, the notice shall be posted in a local public building. If the construction project is a linear construction project (e.g., pipeline, highway, etc.), the notice must be placed in a publicly accessible location near where construction is actively underway and moved as necessary. This permit does not provide the public with any right to trespass on a construction site for any reason, including inspection of a site. This permit does not require that permittees allow members of the public access to a construction site.

The permittee shall also retain following items/information in an appropriate location on-site:

- a) a rain gauge;
- b) a copy of twice weekly inspection reports;
- c) a documentation of quality assurance site assessments, if applicable (see section 3.1.2 above); and
- d) a copy of the site inspector's <u>Fundamentals of Erosion Prevention and Sediment Control</u> Level 1 certification.

6.3. Electronic Submission of NOIs, NOTs and Reports

If the division notifies dischargers (directly by mail or E-mail, by public notice, or by making information available on the world wide web) of electronic forms or other report options that become available at a later date (e.g., electronic submission of forms), the operators may take advantage of those options to satisfy the NOI, NOT and other report notification requirements.

7. STANDARD PERMIT CONDITIONS

7.1. Duty to Comply

7.1.1. Permittee's duty to comply

The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Tennessee Water Quality Control Act (TWQCA) and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

7.1.2. Penalties for violations of permit conditions

Pursuant to <u>T.C.A.</u> § 69-3-115 of The Tennessee Water Quality Control Act of 1977, as amended:

- a) any person who violates an effluent standard or limitation or a water quality standard established under this part (T.C.A. § 69-3-101, et. seq.); violates the terms or conditions of this permit; fails to complete a filing requirement; fails to allow or perform an entry, inspection, monitoring or reporting requirement; violates a final determination or order of the board, panel or commissioner; or violates any other provision of this part or any rule or regulation promulgated by the board, is subject to a civil penalty of up to ten thousand dollars (\$10,000) per day for each day during which the act or omission continues or occurs;
- b) any person unlawfully polluting the waters of the state or violating or failing, neglecting, or refusing to comply with any of the provisions of this part (T.C.A. § 69-3-101, et. seq.) commits a Class C misdemeanor. Each day upon which such violation occurs constitutes a separate offense;
- c) any person who willfully and knowingly falsifies any records, information, plans, specifications, or other data required by the board or the commissioner, or who willfully and knowingly pollutes the waters of the state, or willfully fails, neglects or refuses to comply with any of the provisions of this part (<u>T.C.A. § 69-3-101</u>, et. seq.) commits a Class E felony and shall be punished by a fine of not more than twenty-five thousand dollars (\$25,000) or incarceration, or both.

7.1.3. Civil and criminal liability

Nothing in this permit shall be construed to relieve the discharger from civil or criminal penalties for noncompliance. Notwithstanding this permit, the discharger shall remain liable for any damages sustained by the State of Tennessee, including but not limited to fish kills and losses of aquatic life and/or wildlife, as a result of the discharge to any surface or subsurface waters. Additionally, notwithstanding this permit, it shall be the responsibility of the discharger to conduct stormwater discharge activities in a manner such that public or private nuisances or health hazards will not be created. Furthermore, nothing in this permit shall be construed to preclude the State of Tennessee from any legal action or relieve the discharger from any responsibilities, liabilities, or penalties established pursuant to any applicable state law or the Federal Water Pollution Control Act.

7.1.4. <u>Liability under state law</u>

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable local, state or federal law.

7.2. Continuation of the Expired General Permit

Permittees shall maintain coverage under this general permit until a new general permit is issued. Permittees who choose not to maintain coverage under the expired general permit, or are required to obtain an individual permit, must submit an application (U.S. EPA NPDES Forms 1 and 2F and any other applicable forms) at least 180 days prior to expiration of this general permit. Permittees who are eligible and choose to be covered by the new general permit must submit an NOI by the date specified in that permit. Facilities that have not obtained coverage under this permit by the permit expiration date cannot become authorized to discharge under the continued permit.

Operator(s) of an existing site permitted under the division's 2005 construction general permit shall maintain full compliance with the existing SWPPP. The existing SWPPP should be modified, if necessary, to meet requirements of this new general permit, and the SWPPP changes implemented no later than 12 months following the new permit effective date. The permittee shall make the updated SWPPP available for the division's review upon request.

7.3. Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

7.4. Duty to Mitigate

The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit that has a reasonable likelihood of adversely affecting human health or the environment.

7.5. Duty to Provide Information

The permittee shall furnish to the division or an authorized representative of the division, within a time specified by the division, any information that the division may request to determine compliance with this permit or other information relevant to the protection of the waters of the state. The permittee shall also furnish to the division, upon request, copies of records required to be kept by this permit.

7.6. Other Information

When the permittee becomes aware that he or she failed to submit any relevant facts or submitted incorrect information in the Notice of Intent or in any other report to the director, he or she shall promptly submit such facts or information.

7.7. Signatory Requirements

All Notices of Intent (NOIs), stormwater pollution prevention plans (SWPPPs), requests for termination of permit coverage (NOTs), Construction Stormwater Inspection Certifications, Construction Stormwater Monitoring Report forms, reports, certifications or information either submitted to the director or the operator of a large or medium municipal separate storm sewer system and/or any other information either submitted to the division, or that this permit requires be maintained by the permittee, shall be signed as described in sections 7.7.1 and 7.7.2 below and dated.

7.7.1. Signatory requirements for a Notice of Intent (NOI)³

NOI shall be signed as follows:

- a) For a corporation, by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means:
 - (i) a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or
 - (ii) the manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated site including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

NOTE: The division does not require specific assignments or delegations of authority to responsible corporate officers. The division will presume that these responsible corporate officers have the requisite authority to sign permit applications unless the corporation has notified the director to the contrary. Corporate procedures governing authority to sign permit applications may provide for assignment or delegation to applicable corporate positions rather than to specific individuals.

- b) For a partnership or sole proprietorship, by a general partner or the proprietor, respectively.
- c) For a municipality, state, federal, or other public agency, by either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a Federal agency includes:
 - (i) the chief executive officer of the agency, or

³ As specified in 40 CFR 122.22(a)(1)-(3) [48 FR 14153, Apr. 1, 1983, as amended at 48 FR 39619, Sept. 1, 1983; 49 FR 38047, Sept. 29, 1984; 50 FR 6941, Feb. 19, 1985; 55 FR 48063, Nov. 16, 1990; 65 FR 30907, May 15, 2000]

(ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of EPA).

7.7.2. Signatory requirements for reports and other items

SWPPPs, Construction Stormwater Inspection Certification forms, reports, certifications or other information submittals required by the permit and other information requested by the division, including but not limited to Notice of Violation responses, shall be signed by a person described in section 7.7.1 above, or by a duly authorized representative of that person.

7.7.3. <u>Duly authorized representative</u>

For a purpose of satisfying signatory requirements for reports (see section 7.7.2 above), a person is a duly authorized representative only if:

- a) the authorization is made in writing by a person described in section 7.7.1 above;
- b) the authorization specifies either an individual or a position having responsibility for the overall operation of the regulated site or activity such as the position of plant manager, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company; a duly authorized representative may thus be either a named individual or any individual occupying a named position and,
- c) the written authorization is submitted to the director or an appropriate EFO (see section 2.8 above). The written authorization shall be a written document including the name of the newly authorized person and the contact information (title, mailing address, phone number, fax number and E-mail address) for the authorized person. The written authorization shall be signed by the newly authorized person accepting responsibility and by the person described in section 7.7.1 above delegating the authority.

7.7.4. Changes to authorization

If an authorization under sections 7.7.1 above or 7.7.3 above is no longer accurate because a different individual or position has responsibility as the primary or secondary permittee, but the company name (permittee name) remains the same, a new NOI and SWPPP certification shall be submitted to an appropriate EFO (see section 2.8 above) and signed by the new party who meets signatory authority satisfying the requirements of sections 7.7.1 above or 7.7.3 above. The NOI shall include the new individual's information (title, mailing address, phone number, fax number and E-mail address), the existing tracking number and the project name.

7.7.5. Signatory requirements for primary permittees

Primary permittees required to sign an NOI and SWPPP because they meet the definition of an operator (see subpart 2.2 above) shall sign the following certification statement on the NOI and SWPPP:

"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."

7.7.6. Signatory requirements for secondary permittees

Secondary permittees (typically construction contractors) required to sign an NOI and SWPPP because they meet the definition of an operator but who are not primarily responsible for preparing an NOI and SWPPP, shall sign the following certification statement on the NOI and SWPPP:

"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 onsite 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."

7.8. Penalties for Falsification of Reports

Knowingly making any false statement on any report or form required by this permit may result in the imposition of criminal penalties as provided for in <u>Section 309 of the Clean Water Act</u> and in <u>T.C.A. §69-3-115</u> of the Tennessee Water Quality Control Act.

7.9. Oil and Hazardous Substance Liability

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject to Section 311 of the Clean Water Act or Section 106 of the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA).

7.10. Property Rights

The issuance of this permit does not convey any property rights of any sort, nor any exclusive privileges, nor does it authorize any injury to private property nor any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. The issuance of this permit does not authorize trespassing or discharges of stormwater or non-stormwater across private property.

7.11. Severability

The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit shall not be affected thereby.

7.12. Requiring an Individual Permit

7.12.1. <u>Director can require a site to obtain an individual permit</u>

The director may require any person authorized by this permit to apply for and/or obtain an individual NPDES permit in order to obtain adequate protection of designated uses of a receiving stream. Any interested person may petition the director in writing to take action under this paragraph, but must include in their petition the justification for such an action. Where the director requires a discharger authorized to discharge under this permit to apply for an individual NPDES permit, the director shall notify the discharger in writing that an individual permit application is required. This notification will include a brief statement of the reasons for this decision, an application form, a statement setting a deadline for the discharger to file the application, and a statement that coverage under this general permit shall terminate upon the effective date of an individual NPDES permit or denial of coverage under an individual permit. The notification may require stabilization of the site and suspend coverage under this general permit until the individual permit is issued. Individual permit applications shall be submitted to the appropriate Environmental Field Office of the division as indicated in subpart 2.8 above of this permit. The director may grant additional time to submit the application upon request of the applicant. If a discharger fails to submit in a timely manner an individual NPDES permit application as required by the director under this paragraph, then the applicability of this permit to the discharger will be terminated at the end of the day specified by the director for application submittal.

If the decision to require an individual NPDES permit precedes the issuance of coverage under this general permit, earth disturbing activities cannot begin until the individual permit is issued.

7.12.2. Permittee may request individual permit instead of coverage under this general permit

Any discharger authorized by this permit may request to be excluded from the coverage of this permit by applying for an individual permit. Any discharger that knowingly cannot abide by the terms and conditions of this permit must apply for an individual permit. In such cases, the permittee shall submit an individual application in accordance with the requirements of 40 CFR 122.26(c)(1)(ii), with reasons supporting the request, to the appropriate division's Environmental Field Office. The request may be granted by issuance of an individual permit, or alternative general permit, if the reasons cited by the permittee are adequate to support the request.

7.12.3. Individual permit terminates general permit

When an individual NPDES permit is issued to a discharger otherwise subject to this permit, or the discharger is authorized to discharge under an alternative NPDES general permit, the applicability of this permit to the discharger is terminated on the effective date of the individual permit or the date of authorization of coverage under the alternative general permit, whichever the case may be. When an individual NPDES permit is denied to an owner or operator otherwise

subject to this permit, or the owner or operator is denied for coverage under an alternative NPDES general permit, the applicability of this permit to the individual NPDES permittee is terminated on the date of such denial, unless otherwise specified by the director. Coverage under the Tennessee Multi-Sector General Permit for the Discharge of Stormwater from an Industrial Activity (TMSP) will not be considered as an alternative general permit under this section without being specified by the director.

7.13. Other, Non-Stormwater, Program Requirements

No condition of this permit shall release the permittee from any responsibility or requirements under other environmental statutes or regulations.

7.14. Proper Operation and Maintenance

The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related equipment) which are installed or used by the permittee to achieve compliance with the conditions of this permit and with the requirements of stormwater pollution prevention plans.

Proper operation and maintenance also includes adequate laboratory quality assurance and quality control procedures. Proper operation and maintenance requires the operation of backup or auxiliary facilities or similar systems, installed by a permittee, when determined by the permittee or the division to be necessary to achieve compliance with the conditions of the permit.

7.15. Inspection and Entry

The permittee shall allow authorized representatives of the Environmental Protection Agency, the director or an authorized representative of the commissioner of TDEC, or, in the case of a construction site which discharges through a municipal separate storm sewer, an authorized representative of the MS4 receiving the discharge, upon the presentation of credentials and other documents as may be required by law:

- a) to enter upon the permittee's premises where a regulated facility or activity is located or conducted or where records must be kept under the conditions of this permit;
- b) to have access to and copy at reasonable times, any records that must be kept under the conditions of this permit; and
- c) to inspect any facilities or equipment (including monitoring and control equipment).

7.16. Permit Actions

This permit may be issued, modified, revoked, reissued or terminated for cause in accordance with this permit and the applicable requirements of <u>T.C.A.</u> § 69-3-108. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

8.1.1. Termination of builder and contractor coverage

8. REQUIREMENTS FOR TERMINATION OF COVERAGE

8.1. Termination of Developer and Builder Coverage

8.1.1. <u>Termination process for primary permittees</u>

Primary permittees wishing to terminate coverage under this permit must submit a completed notice of termination (NOT) form, provided in Appendix B of this permit (or copy thereof). Primary permittees who abandon the site and fail to submit the NOT will be in violation of this permit. Signs notifying the public of the construction activity shall be in place until the NOT form has been submitted. Primary permittees may terminate permit coverage only if the conditions described in items 1, 2 or 3 below occur at the site:

- 1. All earth-disturbing activities at the site are completed and, if applicable, construction support activities permitted under section 1.2.2 above, and the following requirements are met:
 - (a) For any areas that
 - were disturbed during construction,
 - are not covered over by permanent structures, and
 - over which the permittee had control during the construction activities the requirements for final vegetative or non-vegetative stabilization described in subsection 3.5.3.2 above are met;
 - (b) The permittee has removed and properly disposed of all construction materials, waste and waste handling devices, and have removed all equipment and vehicles that were used during construction, unless intended for long-term use following termination of permit coverage;
 - (c) The permittee has removed all stormwater controls that were installed and maintained during construction, except those that are intended for long-term use following termination of permit coverage;
 - (d) The permittee has removed all potential pollutants and pollutant-generating activities associated with construction, unless needed for long-term use following termination of permit coverage; and
 - (e) The permittee must identify who is responsible for ongoing maintenance of any stormwater controls left on the site for long-term use following termination of permit coverage; or
- 2. The permittee has transferred control of all areas of the site for which he is responsible (including, but not limited to, infrastructure, common areas, stormwater drainage structures, sediment control basin, etc.) under this permit to another operator, and that operator has submitted an NOI and obtained coverage under this permit; or
- 3. The permittee obtains coverage under an individual or alternative general NPDES permit.

8.1.2. NOT review

The division will review NOTs for completeness and accuracy and, when necessary, investigate the proposed site for which the NOT was submitted. Upon completing the NOT review, the division will:

- 1) prepare and transmit a notification that a NOT form was received;
- 2) notify the applicant of needed changes to their NOT submittal; or
- 3) deny a request for termination of coverage under this general permit.

The division retains the right to deny termination of coverage under this general permit upon receipt of the NOT. If the local Environmental Field Office has information indicating that the permit coverage is not eligible for termination, written notification will be provided that permit coverage has not been terminated. The notification will include a summary of existing deficiencies. When the site meets the termination criteria, the NOT should be re-submitted.

If any permittee files for bankruptcy or the site is foreclosed on by the lender, the permittee should notify the division of the situation so that the division may assess the site to determine if permit coverage should be obtained by any other person or whether other action is needed.

8.2. Termination of Builder and Contractor Coverage

8.2.1. Termination process for secondary permittees

Secondary permittees (builders/contractors) must request termination of coverage under this permit by submitting an NOT when they are no longer an operator at the construction site. Secondary permittees receive coverage under this permit, but are not normally mailed a Notice of Coverage. Consequently, the division may, but is not required to, notify secondary permittees that their notice of termination has been received. If the division has reason to believe that the secondary permittee's NOT should not have been submitted, the division will deny the secondary permittee's NOT in writing, with specific reasons as to why the NOT should not have been submitted.

8.3. NOT certification

The NOT and the following certification must be signed in accordance with subpart 7.7 above (Signatory Requirements) of this permit:

"I certify under penalty of law that either: (a) all stormwater discharges associated with construction activity from the portion of the identified facility where I was an operator have ceased or have been eliminated or (b) I am no longer an operator at the construction site. I understand that by submitting this notice of termination, I am no longer authorized to discharge stormwater associated with construction activity under this general permit, and that discharging pollutants in stormwater associated with construction activity to waters of the United States is unlawful under the Clean Water Act where the discharge is not authorized by a NPDES permit. I also understand that the submittal of this notice of termination does not release an operator from liability for any violations of this permit or the Clean Water Act."

8.4. Where to Submit a Notice of Termination (NOT)?

The NOT shall be submitted to the Environmental Field Office (EFO) which issued the NOC to the primary permittee. A list of counties and the corresponding EFOs is provided in subpart 2.8 above. The appropriate permit tracking number must be clearly printed on the form.

9. Aquatic Resource Alteration Permits (ARAP)

Alterations to channels or waterbodies (stream, wetland and/or other waters of the state) that are contained on, traverse through or are adjacent to the construction site, may require an Aquatic Resources Alteration Permit (ARAP). It is the responsibility of the developer to provide a determination of the water's status⁴. This determination must be conducted using methodology from Standard Operating Procedures for Hydrologic Determinations (see rules to implement a certification program for Qualified Hydrologic Professionals, TN Rules Chapter 0400-40-17). The permittee can make an assumption that streams/wetlands are present at the site in order to expedite the permit process. In some cases, issuance of coverage under the CGP may be delayed or withheld if the appropriate ARAP has not been obtained. At a minimum, any delay in obtaining an ARAP for water body alteration associated with the proposed project must be adequately addressed in the SWPPP prior to issuance of an NOC. Failure to obtain an ARAP prior to any actual alteration may result in enforcement action for the unauthorized alteration.

10. **DEFINITIONS**

"2-year and 5-year design storm depths and intensities" The estimated design rainfall amounts, for any return period interval (i.e., 2-yr, 5-yr, 25-yr, etc,) in terms of either 24-hour depths or intensities for any duration, can be found by accessing the following NOAA National Weather Service Atlas 14 data for Tennessee: http://hdsc.nws.noaa.gov/hdsc/pfds/orb/tn_pfds.html. Other data sources may be acceptable with prior written approval by TDEC Water Pollution Control.

"Best Management Practices" ("BMPs") means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the discharge of pollutants to waters of the state. BMPs also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

"Borrow Pit" is an excavation from which erodible material (typically soil) is removed to be fill for another site. There is no processing or separation of erodible material conducted at the site. Given the nature of activity and pollutants present at such excavation, a borrow pit is considered a construction activity for the purpose of this permit.

"Buffer Zone" is a strip of dense undisturbed perennial native vegetation, either original or reestablished, that borders streams and rivers, ponds and lakes, wetlands, and seeps. Buffer zones are established for the purposes of slowing water runoff, enhancing water infiltration, and

⁴ The EPA considers inventorying a site's natural features is a technique called fingerprinting. More info can be found in EPA's document - EPA's Developing Your SWPPP – A Guide for Construction Sites (EPA-833-R-06-004 May 2007)

minimizing the risk of any potential nutrients or pollutants from leaving the upland area and reaching surface waters. Buffer zones are most effective when stormwater runoff is flowing into and through the buffer zone as shallow sheet flow, rather than in concentrated form such as in channels, gullies, or wet weather conveyances. Therefore, it is critical that the design of any development include management practices, to the maximum extent practical, that will result in stormwater runoff flowing into and through the buffer zone as shallow sheet flow. Buffer zones are established for the primary purpose of protecting water quality and maintaining a healthy aquatic ecosystem in receiving waters.

- "Clearing" in the definition of discharges associated with construction activity, typically refers to removal of vegetation and disturbance of soil prior to grading or excavation in anticipation of construction activities. Clearing may also refer to wide area land disturbance in anticipation of non-construction activities; for instance, clearing forested land in order to convert forestland to pasture for wildlife management purposes. Clearing, grading and excavation do not refer to clearing of vegetation along existing or new roadways, highways, dams or power lines for sight distance or other maintenance and/or safety concerns, or cold planing, milling, and/or removal of concrete and/or bituminous asphalt roadway pavement surfaces. The clearing of land for agricultural purposes is exempt from federal stormwater NPDES permitting in accordance with Section 401(1)(1) of the 1987 Water Quality Act and state stormwater NPDES permitting in accordance with the Tennessee Water Quality Control Act of 1977 (T.C.A. 69-3-101 et seq.).
- "Commencement of construction" The initial disturbance of soils associated with clearing, grading, or excavating activities or other construction activities.
- "Common plan of development or sale" is broadly defined as any announcement or documentation (including a sign, public notice or hearing, sales pitch, advertisement, drawing, permit application, zoning request, computer design, etc.) or physical demarcation (including boundary signs, lot stakes, surveyor markings, etc.) indicating construction activities may occur on a specific plot. A common plan of development or sale identifies a situation in which multiple areas of disturbance are occurring on contiguous areas. This applies because the activities may take place at different times, on different schedules, by different operators.
- "Control measure" As used in this permit, refers to any Best Management Practice (BMP) or other method used to prevent or reduce the discharge of pollutants to waters of the state.
- "CWA" means the Clean Water Act of 1977 or the Federal Water Pollution Control Act (33 U.S.C. 1251, et seq.)
- "Department" means the Department of Environment and Conservation.
- **"Director"** means the director, or authorized representative, of the Division of Water Pollution Control of the State of Tennessee, Department of Environment and Conservation.
- "Discharge of stormwater associated with construction activity" As used in this permit, refers to stormwater point source discharges from areas where soil disturbing activities (e.g., clearing, grading, excavation, etc.), or construction materials or equipment storage or maintenance (e.g., earth fill piles, fueling, waste material etc.) are located.

"**Division**" means the Division of Water Pollution Control of the State of Tennessee, Department of Environment and Conservation.

"Final Stabilization" means that all soil disturbing activities at the site have been completed and one of the three following criteria is met:

- a. A uniform (e.g., evenly distributed, without large bare areas) perennial vegetative cover with a uniform density of at least 70 percent of the (preferably) native vegetative cover for the area has been established on all unpaved areas and areas not covered by permanent structures, and all slopes and channels have been permanently stabilized against erosion, or
- b. Equivalent permanent stabilization measures (such as the use of riprap; permanent geotextiles, hardened surface materials including concrete, asphalt, gabion baskets, or Reno mattresses) have been employed, or
- c. For construction projects on land used for agricultural or silvicultural purposes, final stabilization may be accomplished by returning the disturbed land to its preconstruction agricultural or silvicultural use.

"Exceptional Tennessee waters" are surface waters of the State of Tennessee that satisfy characteristics of exceptional Tennessee waters as listed Chapter 1200-4-3-.06 of the official compilation - Rules and Regulations of the State of Tennessee. Characteristics include waters designated by the Water Quality Control Board as Outstanding National Resource Waters (ONRW); waters that provide habitat for ecologically significant populations of certain aquatic or semi-aquatic plants or animals; waters that provide specialized recreational opportunities; waters that possess outstanding scenic or geologic values; or waters where existing conditions are better than water quality standards.

"Impaired waters" (unavailable conditions waters) means any segment of surface waters that has been identified by the division as failing to support one or more classified uses. For the purpose of this permit, pollutants of concern include, but are not limited to: siltation (silt/sediment) and habitat alterations. Based on the most recent assessment information available to staff, the division will notify applicants and permittees if their discharge is into, or is affecting, impaired waters. Resources to be used in making this determination include biennial compilations of impaired waters, databases of assessment information, updated GIS coverages (http://tnmap.tn.gov/wpc/), and the results of recent field surveys. GIS coverages of the streams and lakes not meeting water quality standards, plus the biennial list of impaired waters, can be found at http://www.tn.gov/environment/water/docs/wpc/2012 pf 303d list.pdf.

"Improved sinkhole" is a natural surface depression that has been altered in order to direct fluids into the hole opening. Improved sinkhole is a type of injection well regulated under the Underground Injection Control (UIC) program. Underground injection constitutes an intentional disposal of waste waters in natural depressions, open fractures, and crevices (such as those commonly associated with weathering of limestone).

"Inspector" An inspector is a person that has successfully completed (has a valid certification from) the "Fundamentals of Erosion Prevention and Sediment Control Level I" course or equivalent course. An inspector performs and documents the required inspections, paying

particular attention to time-sensitive permit requirements such as stabilization and maintenance activities. An inspector may also have the following responsibilities:

- a) oversee the requirements of other construction-related permits, such as <u>Aquatic</u> <u>Resources Alteration Permit</u> (ARAP) or Corps of Engineers permit for construction activities in or around waters of the state;
- b) update field SWPPPs;
- c) conduct pre-construction inspection to verify that undisturbed areas have been properly marked and initial measures have been installed; and
- d) inform the permit holder of activities that may be necessary to gain or remain in compliance with the CGP and other environmental permits.

"Linear Project" – is a land disturbing activity as conducted by an underground/overhead utility or highway department, including but not limited to any cable line or wire for the transmission of electrical energy; any conveyance pipeline for transportation of gaseous or liquid substance; any cable line or wire for communications; or any other energy resource transmission ROW or utility infrastructure, e.g., roads and highways. Activities include the construction and installation of these utilities within a corridor. Linear project activities also include the construction of access roads, staging areas, and borrow/spoil sites associated with the linear project. Land disturbance specific to the development of a residential and/or commercial subdivision or high-rise structures is not considered a linear project.

"Monthly" refers to calendar months.

"Municipal Separate Storm Sewer System" or "MS4" is defined at 40 CFR §122.26(b)(8) to mean a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, manmade channels, or storm drains):

- 1. Owned and operated by a state, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to state law) having jurisdiction over disposal of sewage, industrial wastes, stormwater, or other wastes, including special districts under state law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under section 208 of the CWA that discharges to waters of the United States;
- 2. Designed or used for collecting or conveying stormwater;
- 3. Which is not a combined sewer; and
- 4. Which is not part of a Publicly Owned Treatment Works (POTW) as defined at 40 CFR \$122.2.

"NOI" means notice of intent to be covered by this permit (see part 2 above of this permit.)

"NOT" means notice of termination (see part 8 above of this permit).

"Operator" for the purpose of this permit and in the context of stormwater associated with construction activity, means any person associated with a construction project that meets either of the following two criteria:

a) This person has operational or design control over construction plans and specifications, including the ability to make modifications to those plans and specifications. This person

- is typically the owner or developer of the project or a portion of the project, and is considered the primary permittee; or
- b) This person has day-to-day operational control of those activities at a project which are necessary to ensure compliance with a SWPPP for the site or other permit conditions. This person is typically a contractor or a commercial builder who is hired by the primary permittee, and is considered a secondary permittee.

It is anticipated that at different phases of a construction project, different types of parties may satisfy the definition of "operator."

"Point source" means any discernible, confined, and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel or other floating craft from which pollutants are or may be discharged. This term does not include introduction of pollutants from non point-source agricultural and silvicultural activities, including stormwater runoff from orchards, cultivated crops, pastures, range lands, and forest lands or return flows from irrigated agriculture or agricultural stormwater runoff.

"Qualifying State, Tribal, or local erosion and sediment control program" is one that includes, as defined in 40 CFR 122.44(s):

- (i) Requirements for construction site operators to implement appropriate erosion and sediment control best management practices;
- (ii) Requirements for construction site operators to control waste such as discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste at the construction site that may cause adverse impacts to water quality;
- (iii) Requirements for construction site operators to develop and implement a stormwater pollution prevention plan. (A stormwater pollution prevention plan includes site descriptions, descriptions of appropriate control measures, copies of approved State, Tribal or local requirements, maintenance procedures, inspection procedures, and identification of non-stormwater discharges); and
- (iv) Requirements to submit a site plan for review that incorporates consideration of potential water quality impacts.
- "Quality Assurance Site Assessment" means documented site inspection to verify the functionality and performance of the SWPPP and for determining if construction, operation and maintenance accurately comply with permit requirements, as presented in the narrative, engineering specifications; maps, plans and drawings; and details for erosion prevention, sediment control and stormwater management.
- "Registered Engineer" and "Registered Landscape Architect" An engineer or landscape architect certified and registered by the <u>State Board of Architectural and Engineer Examiners</u> pursuant to <u>Section 62-202</u>, <u>Tennessee Code Annotated</u>, to practice in Tennessee.
- **"Runoff coefficient"** means the fraction of total rainfall that will appear at the conveyance as runoff. Runoff coefficient is also defined as the ratio of the amount of water that is NOT absorbed by the surface to the total amount of water that falls during a rainstorm.

- "Sediment" means solid material, both inorganic (mineral) and organic, that is in suspension, is being transported, or has been moved from the site of origin by wind, water, gravity, or ice as a product of erosion.
- "Sediment basin" A temporary basin consisting of an embankment constructed across a wet weather conveyance, or an excavation that creates a basin or by a combination of both. A sediment basin typically consists of a forebay cell, dam, impoundment, permanent pool, primary spillway, secondary or emergency spillway, and surface dewatering device. The size and shape of the basin depends on the location, size of drainage area, incoming runoff volume and peak flow, soil type and particle size, land cover, and receiving stream classification (i.e., impaired, HQ, or unimpaired).
- "**Sedimentation**" means the action or process of forming or depositing sediment.
- "Significant contributor of pollutants to waters of the state" means any discharge containing pollutants that are reasonably expected to cause or contribute to an impairment of receiving stream water quality or designated uses.
- "**Soil**" means the unconsolidated mineral and organic material on the immediate surface of the earth that serves as a natural medium for the growth of plants.
- "Steep Slope" A natural or created slope of 35% grade or greater. Designers of sites with steep slopes must pay attention to stormwater management in the SWPPP to engineer runoff non-erosively around or over a steep slope. In addition, site managers should focus on erosion prevention on the slope(s) and stabilize the slope(s) as soon as practicable to prevent slope failure and/or sediment discharges from the project.
- "Stormwater" means rainfall runoff, snow melt runoff, and surface runoff and drainage.
- "Stormwater associated with industrial activity" is defined at 40 CFR 122.26(b)(14) and incorporated here by reference. Most relevant to this permit is 40 CFR 122.26(b)(14)(x), which relates to construction activity including clearing, grading, filling and excavation activities (including borrow pits containing erodible material). Disturbance of soil for the purpose of crop production is exempted from permit requirements, but stormwater discharges from agriculture-related activities which involve construction of structures (e.g., barn construction, road construction, pond construction, etc.) are considered associated with industrial activity. Maintenance performed to maintain the original line and grade, hydraulic capacity, or original purpose of the facility, e.g. re-clearing, minor excavation performed around an existing structure necessary for maintenance or repair, and repaving of an existing road, is not considered a construction activity for the purpose of this permit.
- "Stormwater discharge-related activities" include: activities which cause, contribute to, or result in point source stormwater pollutant discharges, including but not limited to: excavation, site development, grading and other surface disturbance activities; and measures to control stormwater including the siting, construction and operation of best management practices (BMPs) to control, reduce or prevent stormwater pollution.
- "Stormwater Pollution Prevention Plan" (SWPPP): A written plan required by this permit that includes site map(s), an identification of construction/contractor activities that could cause

pollutants in the stormwater, and a description of measures or practices to control these pollutants. It must be prepared and approved before construction begins. In order to effectively reduce erosion and sedimentation impacts, Best Management Practices (BMPs) must be designed, installed, and maintained during land disturbing activities. The SWPPP should be prepared in accordance with the <u>Tennessee Erosion and Sediment Control Handbook</u>. The handbook is designed to provide information to planners, developers, engineers, and contractors on the proper selection, installation, and maintenance of BMPs. The handbook is intended for use during the design and construction of projects that require erosion and sediment controls to protect waters of the state. It also aids in the development of SWPPPs and other reports, plans, or specifications required when participating in Tennessee's water quality regulations.

"Take" of an endangered species means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect, or attempt to engage in any such conduct.

"Temporary stabilization" is achieved when vegetation and/or a non-erodible surface have been established on the area of disturbance and construction activity has temporarily ceased. Under certain conditions, temporary stabilization is required when construction activities temporarily cease. However, if future construction activity is planned, permit coverage continues.

"Total maximum daily load" (TMDL) The sum of the individual wasteload allocations for point sources and load allocations for nonpoint sources and natural background (40 CFR 130.2(I)). TMDL is a study that: quantifies the amount of a pollutant in a stream, identifies the sources of the pollutant, and recommends regulatory or other actions that may need to be taken in order for the stream to cease being polluted. Some of the actions that might be taken are:

- 1.) Re-allocation of limits on the sources of pollutants documented as impacting streams. It might be necessary to lower the amount of pollutants being discharged under NPDES permits or to require the installation of other control measures, if necessary, to ensure that water quality standards will be met.
- 2.) For sources over which the division does not have regulatory authority, such as ordinary agricultural or forestry activities, provide information and technical assistance to other state and federal agencies that work directly with these groups to install appropriate Best Management Practices (BMPs).

Even for impacted streams, TMDL development is not considered appropriate for all bodies of water: if enforcement has already been taken and a compliance schedule has been developed; or if best management practices have already been installed for non-regulated activities, the TMDL is considered not applicable. In cases involving pollution sources in other states, the recommendation may be that another state or EPA perform the TMDL . TMDLs can also be described by the following equation:

TMDL = sum of non point sources (LA)+ sum of point sources (WLA)+ margin of safety

A list of completed TMDLs that have been approved by EPA cab found at our web site: http://www.tn.gov/environment/water/watersheds/

"Turbidity" is the cloudiness or haziness of a fluid caused by individual particles (suspended solids) that are generally invisible to the naked eye, similar to smoke in air.

"Waters" or "waters of the state" means any and all water, public or private, on or beneath the surface of the ground, which are contained within, flow through, or border upon Tennessee or any portion thereof except those bodies of water confined to and retained within the limits of private property in single ownership which do not combine or effect a junction with natural surface or underground waters.

"Waste site" is an area where material from a construction site is disposed of. When the material is erodible, such as soil, the site must be treated as a construction site.

"Wet weather conveyances" are man-made or natural watercourses, including natural watercourses that have been modified by channelization that flow only in direct response to precipitation runoff in their immediate locality; whose channels are at all times above the ground water table; that are not suitable for drinking water supplies; and in which hydrological and biological analyses indicate that, under normal weather conditions, due to naturally occurring ephemeral or low flow there is not sufficient water to support fish or multiple populations of obligate lotic aquatic organisms whose life cycle includes an aquatic phage of at least two months. (Rules and Regulations of the State of Tennessee, Chapter 1200-4-3-.04(3)).

11. LIST OF ACRONYMS

ADAD	Agnotio	Resource	Alteration	Dormit
ARAP	Aduatic	Resource.	Aneranon	Perillit

BMP Best Management Practice

CERCLA Comprehensive Environmental Response, Compensation and Liability Act

CGP Construction General Permit

CWA Clean Water Act

EFO Environmental Field Office

EPA (U.S.) Environmental Protection Agency EPSC Erosion Prevention and Sediment Control MS4 Municipal Separate Storm Sewer System

NOC Notice of Coverage NOI Notice of Intent NOT Notice of Termination

NPDES National Pollutant Discharge Elimination System

ONRW Outstanding National Resource Waters
POTW Publicly Owned Treatment Works
SWPPP Stormwater Pollution Prevention Plan

TDEC Tennessee Department of Environment and Conservation

TDOT Tennessee Department of Transportation

TMDL Total Maximum Daily Load

TMSP Tennessee Multi-Sector General Permit for the Discharge of Stormwater from an

Industrial Activity

TVA Tennessee Valley Authority

TWQCA Tennessee Water Quality Control Act
UIC Underground Injection Control
USGS United States Geological Survey

(End of body of permit; appendices follow.)

APPENDIX A – Notice of Intent (NOI) Form

You may access a copy of the NOI at the division's Web page:

http://www.tn.gov/environment/water/water-quality_storm-water.shtml

If you do not have access to the Internet, Please contact the division at 1-888-891-8332 (TDEC) or E-mail a request for the NOI at Storm.Water@tn.gov

APPENDIX B – Notice of Termination (NOT) Form

You may access a copy of the NOT at the division's Web page:

http://www.tn.gov/environment/water/water-quality_storm-water.shtml

If you do not have access to the Internet, Please contact the division at 1-888-891-8332 (TDEC) or E-mail a request for the NOI at Storm.Water@tn.gov

APPENDIX C – Twice-Weekly Inspection Report Form

You may access a copy of the Twice Weekly Inspection Form at the division's Web page:

http://www.tn.gov/environment/water/water-quality_storm-water.shtml

If you do not have access to the Internet, Please contact the division at 1-888-891-8332 (TDEC) or E-mail a request for the NOI at Storm.Water@tn.gov (This page intentionally left blank)

7. Environmental Permits





STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION

ENVIRONMENTAL DIVISION

SUITE 900, JAMES K, POLK BUILDING 505 DEADERICK STREET NASHVILLE, TENNESSEE 37243-1402 (615) 741-3655

JOHN C. SCHROER COMMISSIONER BILL HASLAM GOVERNOR

December 1, 2015

Mr. Jimmy Smith
Natural Resource Section
Tennessee Department of Environment and Conservation
11th Floor William R. Snodgrass Tennessee Tower
312 Rosa L. Parks Avenue
Nashville, Tennessee 37243

Subject: TDOT Project # 83011-1233-94

PIN 121823.00

Federal Funding # HSIP-109(36)

State Route 109

Intersection at Old State Highway 109

Sumner County

Permits Needed by 1/20/2016

Dear Mr. Smith:

The Tennessee Department of Transportation is proposing to the installation of a modified intersection at the intersection of State Route 109 (SR-109) and Old State Highway 109 in Sumner County. This geometric improvement will redirect thru and left-turning traffic movements from the side street approach (Old State Highway 109/Scotty Parker Road) to turn right, proceed to a nearby U-turn, an then return to the original course. In accordance with T.C.A. 69-3-108(b), this office is submitting form CN-1091 identifying where permits may be needed.

The primary purpose of the proposed project is to address safety issues. Vehicles turning onto SR-109 are entering a high-speed facility with no designated median refuge area. This project will address these safety issues with SPOT Safety geometric improvements described above. This intersection design will minimize conflicting traffic points and reduce crashes.

No U.S. Army Corps of Engineers, TVA or Coast Guard permit required for this project.

Please refer to the enclosed feature impact and summary tables for detailed information regarding environmental feature locations, proposed environmental feature impacts, required environmental permits, FEMA floodplain designations, etc.

Mr. Jimmy Smith: December 1, 2015 Page 2

This project does not include temporary or permanent wetland impacts.

As mitigation for stream impacts we propose to obtain 78 stream credits through the In-Lieu Fee Stream Mitigation Program. TDOT is proposing a total payment of \$18,720.00 for 78 credits to the Tennessee Wildlife Resources Foundation(TWRF). See attached preliminary authorization and credit availability request form that was sent to TWRA on December 1, 2015. Once we receive a response we will forward to your office.

Efforts were made during the planning and design phases of this project to avoid impacts to waters of the U.S. and waters of the State to the extent practicable, and to minimize impacts that were not avoidable.

A letter was sent from TDOT to the USFWS on August 6, 2015, requesting information on species that may be present in the vicinity of the proposed project. In a response letter dated September 1, 2015, the USFWS acknowledges that TDOT has committed to removal of trees between October 15 and March 31, and therefore the project comes under the consultation herein referenced with determinations of "not likely to adversely affect" for the Indiana bat and northern long-eared bat.

A search of the TDEC Division of Natural Areas, endangered species database, was conducted on November 23, 2015. This database search, paired with the findings from a site visit conducted on November 20, 2015, identified two (2) listed species within four miles of the proposed site. However, no habitat for either of these species exists within the proposed project limits:

- Southern Cavefish (Typhlichthys subterraneus), animal
- Bewick's Wren (Thryomanes bewickii), animal

An email was sent from TDOT to the TWRA, requesting information on species that may be present in the vicinity of the proposed project. In a response email dated November 20, 2015, the TWRA stated that they understand from what was sent that this project is not expected to impact any state listed species that are Deemed-in-Need-of-Management, Threatened, or Endangered. They request that all applicable TDEC and US EPA approved EPSC measures and Best Management Practices are scheduled, implemented, monitored, and maintained.

According to the Memorandum of Understanding (MOU) between TDOT and the Tennessee Historical Commission (State Historic Preservation Officer) (THC/TN-SHPO) for federally-Funded or Permitted Minor Transportation Projects (May 2015), the agencies agree that Minor Transportation Projects meeting the criteria set forth in the MOU will not adversely affect Historic Properties as defined in the National Historic Preservation Act of 1966, the implementing regulations of 36 Code of Federal Regulations (CFR) as amended, and Tennessee Public Law 699 that no further consultation or documentation is necessary. The MOU remains in effect until June 30, 2025.

In addition to the impacts enclosed, we are requesting that the Tennessee Department of Environment and Conservation includes approval for all proposed outfall structures (ditches, pipes, etc.) associated with the proposed project in your permits.

By copy of this letter, we are also requesting that the TDEC please include approval of a potential temporary stream crossing in your permits. Temporary crossings will be located within right-of-way or easements. Copies of TDOT Standard Drawings EC-STR-25 (Temporary Road

Mr. Jimmy Smith: December 1, 2015 Page 3

Stabilization and Temporary Culvert Crossing), EC-STR-31 (Temporary Diversion Channels), EC-STR-31A (Temporary Diversion Channel Design), and EC-STR-32 (Temporary Diversion Culverts) are enclosed for your information and use.

This project is currently scheduled for the January 20, 2016 turn-in. We would greatly appreciate your initial review and request for additional information needed as soon as possible. Additionally, we are requesting TDEC to issue a 20 day public notice period for this project to expedite a safer and more efficient traffic facility for the motoring public. This will help to address the high number of accidents for this intersection.

If you have any questions or we can be of further assistance please contact me at (615) 532-9945 or Claire Sichko at (615) 741-2613.

Sincerely,

Anthony Myers

Senior Transportation Project Specialist, Environmental Permits Section

Enclosures

JLH: ARM: CSS

cc: Mr. Jimmy Smith, TDEC

trutos h. Myn

ec:

Water Permits, TDEC

Mr. Jay Norris, HQ Construction Office

Mr. Jamie Fitzpatrick, HQ Construction Office

Mr. Jason Blankenship, HQ Construction Office

Mr. Mike Brown, Region 3 Construction

Ms. Kim Bramlett, Region 3 Construction

Mr. David Sizemore, Region 3 Environmental Coordinator

Mr. Dennis Crumby, Ecology Supervisor

Ms. Jennifer Thompson, Region Ecology Section

Mr. Ronnie Porter, Program Operations Office

Mr. Trent Thomas, TDOT Environmental Supervisor

Ms. DJ Wiseman, Natural Resources Office

Mr. Anthony Myers, Region 3 Permits Section

Mr. Steve Casey, CEC (SWPPP Consultant)

Permit File



TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION

Division of Water Resources

William R. Snodgrass Tennessee Tower, 312 Rosa L. Parks Avenue, 11th Floor, Nashville, Tennessee 37243 1-888-891-8332 (TDEC)

Application for Aquatic Resource Alteration Permit (ARAP) & State §401 Water Quality Permit

OFFICIAL STATE USE ONLY Si	te #:		Permi	t #:		
Section 1. Applicant Information (individual responsible for site, signs certification below)						
Applicant Name: *Anthony R. Myers						
Company: Tennessee Department of Tran	Company: Tennessee Department of Transportation Signatory's Title or Position: Sr. Transportation Project Speciali					Project Specialist
Mailing Address: 505 Deaderick Street Sui	te 900 J.K. Polk Bl	ldg.	City: Nashville State: TN Zip: 37243			Zip: 37243
Phone: (615) 253-9945	Fax: N/A		E-mail: Anthony.	Myers@tn.gov		
Section 2. Alternate Contact/Consultant In	formation (a consu	ltant is not requ	ired)			
Alternate Contact Name: Claire Sichko						
Company: Tennessee Department of Tran	sportation		Title or Position: (Consultant		
Mailing Address: 505 Deaderick Street Su	ite 900 J.K. Polk B	ldg.	City: Nashville State: TN Zip: 37243			
Phone: (615) 741-2613	Fax: N/A		E-mail: Claire.Sicl	hko@tn.gov	"	
Section 3. Fee (check appropriate box and su	bmit requisite fee w	ith application)				
■ No Fee Submitted	Fee Submitted with	h Application	Amou	ınt Submitted:	\$	
Current fee schedules for Aquatic Resource A http://www.tn.gov/environment/permits/arap	lteration Permit pro <u>shtml</u> or by calling (ocessing may be (615) 532-0625.	found at the Division Make checks payal	on of Water Resor ble to "Treasurer,	urces webpage State of Tenne	at essee".
Section 4. Project Details (fill in information	and check appropi	riate boxes)				
Site or Project Name: PIN 121823.00, Proj N	lo. 83011-1233-9	4	Nearest City, Town or Major Landmark: Gallatin, TN			
Street Address or Location: State Route 109	, Intersection at C	Old State Highv	vay 109			
Countylingly Survey		MS4 Jurisdict	tion: TROT Latitude (dd.dddd): 36.4282			
County(ies): Sumner			Longitude (dd.dddd): -86.4627			
Resource Proposed for Alteration: ✓ Stream Wetland Reservoir						
Name of Water Resource: UT to East Camp	Creek					
Brief Project Description (a more detailed description is required under Section 8):						
SPOT Safety geometric improvements						
Does the proposed activity require approval from the U.S. Army Corps of Engineers, the Tennessee Valley Authority, or any other federal, state, or local government agency? Yes						
If Yes, provide the permit reference numbers: Pending						
e criums						
Is the proposed activity associated with a larger common plan of development? Yes No If Yes, submit site plans and identify the location and overall scope of the common plan of development. Plans attached? Yes No						
If applicable, indicate any other federal, state, or local permit authorizations that the overall project site (common plan of development) has obtained in						
the past (i.e. construction general permit coverage and/or other ARAPs):						
N/A						
Section 5. Project Schedule (fill in information and check appropriate boxes)						
Start date: 04-01-2016 Estimated end date: 04-01-2021						
Is any portion of the activity complete now? Yes No If yes, describe the extent of the completed portion:						
N/A						

Application for Aquatic Resource Alteration Permit (ARAP) & State §401 Water Quality Permit

The required information in Sections 6-11 must be submitted on a separate sheet(s) and submitted in the same numbered format as presented below.

If any question in not applicable, state the reason why it is not applicable. Please refer to the enclosed feature impact and summary tables.

Sectio	n 6. Project Description	Atta				
6.1	A narrative description of the scope of the project	Yes	No □			
6.2	USGS topographic map indicating the exact location of the project (can be a photographic copy)					
6.3	Photographs of the resource(s) proposed for alteration with location description (photo locations should be noted on map)	⊡				
6.4	A narrative description of the existing stream and/or wetland characteristics including, but not limited to, dimensions (e.g., depth, length, average width), substrate and riparian vegetation	⊡				
6.5	A narrative description of the proposed stream and/or wetland characteristics including, but not limited to, dimensions (e.g., depth, length, average width), substrate and riparian vegetation	o				
6.6	In the case of wetlands, include a wetland delineation with delineation forms and site map denoting location of data points					
6.7	A copy of all hydrologic or jurisdictional determination documents issued for water resources on the project site	▣				
Section	n 7. Project Rationale	Atta Yes	ched No			
	be the need for the proposed activity, including, but not limited to, the purpose, alternatives considered, and what will be done to or minimize impacts to streams or wetlands.	▣				
Section	n 8. Technical Information	Atta Yes	ched No			
8.1	Detailed plans, specifications, blueprints, or legible sketches of present site conditions and the proposed activity. Plans must be 8.5.x 11 inches. Additional larger plans may also be submitted to aid in application review. The detailed plans should be superimposed on existing and new conditions (e.g., stream cross sections where road crossings are proposed)					
8.2	For both the proposed activity and compensatory mitigation, provide a discussion regarding the sequencing of events and construction methods					
8.3	Depiction and narrative on the location and type of erosion prevention and sediment control (EPSC) measures for the proposed alterations					
	19. Water Resources Degradation (degree of proposed impact) Note that in most cases, activities that exceed the scope of the Cions are considered greater than de minimis degradation to water quality.	General F	Permit			
My act	ivity, as proposed: Please refer to the enc	locod				
a.	feature impact and summary					
b.	tables.					
c.						
d. Unsure/need more information						
For information and guidance on the definition of de minimis and degradation, refer to the Antidegradation Statement in Chapter 0400-40-0306 of the Tennessee Water Quality Criteria Rule: https://www.tn.gov/sos/rules/0400/0400-40/0400-40-03.20131216.pdf . For more information on specifics on what General Permits can cover, refer to the Natural Resources Unit webpage at http://www.tn.gov/environment/permits/arap.shtml						
If you checked "c." above in Section 9, complete the following 2 sections, 10-11. Please refer to the enclosed feature impact and summary tables						
Section	10. Detailed Alternative Analysis	Atta Yes	ched No			
10.1	Analyze all reasonable alternatives and describe the level of degradation caused by each of the feasible alternatives		▣			
10.2	2 Discuss the social and economic consequences of each alternative					
10.3	Demonstrate that the degradation associated with the preferred alternative will not violate water quality criteria for uses designated in the receiving waters, and is necessary to accommodate important economic and social development in the area					

Application for Aquatic Resource Alteration Permit (ARAP) & State §401 Water Quality Permit

Section 11 Company Mitigation				Atta	Attached	
Section 11. Compensatory Mitigation		Yes	No			
11.1 A detailed discussion of the proposed compensatory mitigation					⊡	
11.2	Describe how the compensatory m	itigation would result in no net loss of resou	urce value		⊡	
11.3	Provide a detailed monitoring plan	for the compensatory mitigation site			⊡	
Describe the long-term protection measures for the compensatory mitigation site (e.g., deed restrictions, conservation easement)					⊡	
Certification and Signature						
proprie		must be signed by a principal executive offi state, federal or other public agency or facili ly authorized employee.			utive	
"I certify under penalty of law that this document and all attachments were prepared by me, or under my direction or supervision. The submitted information 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. As specified in Tennessee Code Annotated Section 39-16-702(a)(4), this declaration is made under penalty of perjury".						
Antho	ny R. Myers	Sr. Transportation Project Specialist	Anthon h. Mynn	12/1/15		
Printed Name Official Title Signature Date		Date				

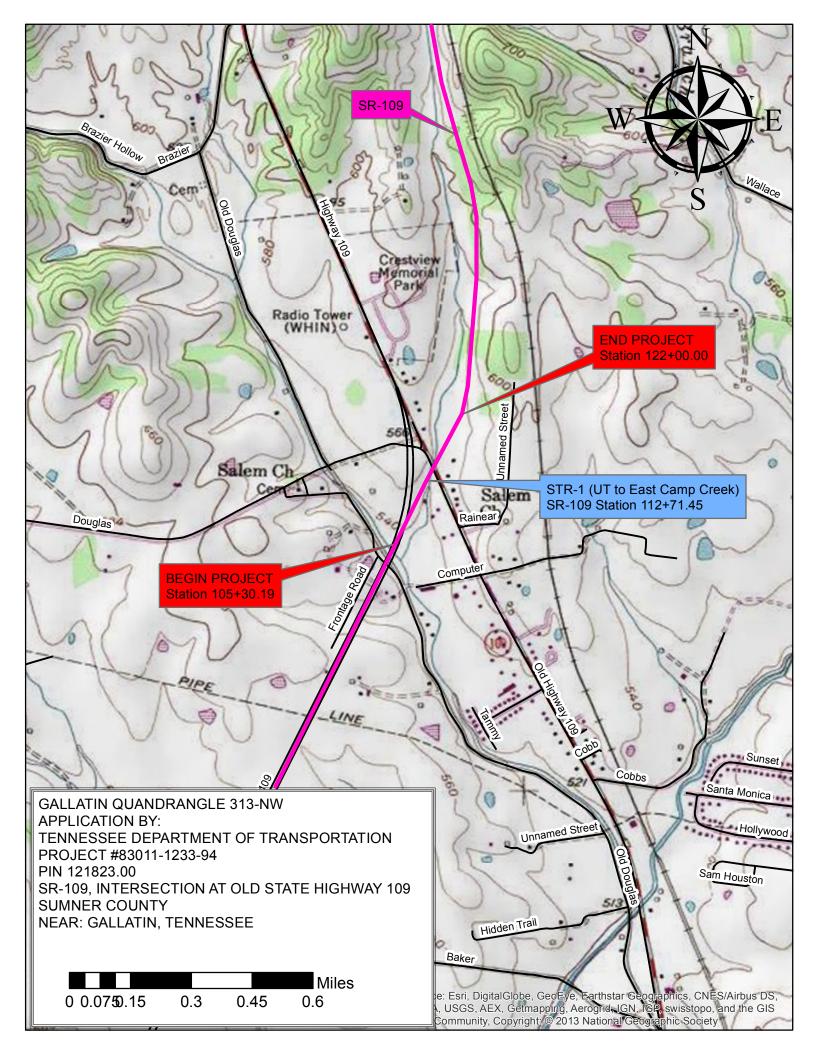
Submitting the form and obtaining more information Note that this form must be signed by the principal executive officer, partner or proprietor, or a ranking elected official in the case of a municipality; for details see Certification and Signature statement above. For more information, contact your local EFO at the toll-free number 1-888-891-8332 (TDEC). Submit the completed ARAP Application form (keep a copy for your records) to the appropriate EFO for the county(ies) where the ARAP activity is located, addressed to Attention: ARAP Processing. You may also electronically submit the complete application and all associated attachments (e.g., maps, wetland delineations and narrative portions) to water.permits@tn.gov.

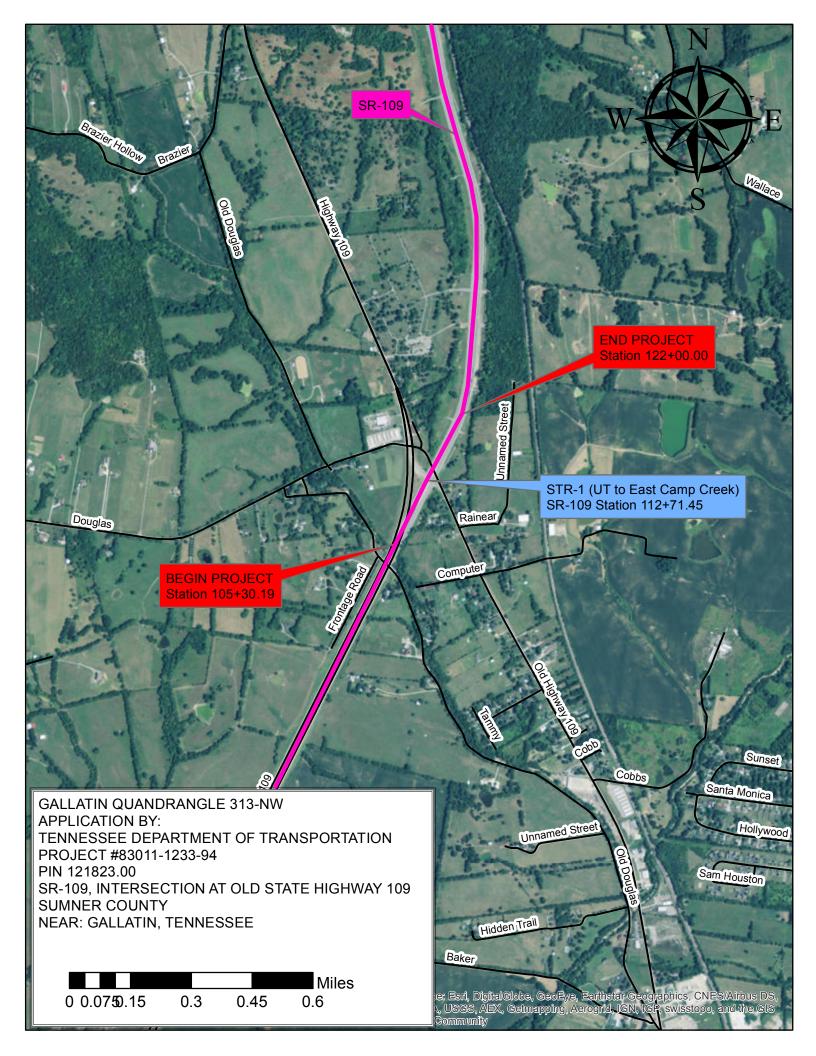
EFO	Street Address	Zip Code	EFO	Street Address	Zip Code
Memphis	8383 Wolf Lake Drive, Bartlett	38133-4119	Cookeville	1221 South Willow Ave.	38506
Jackson	1625 Hollywood Drive	38305-4316	Chattanooga	540 McCallie Avenue STE 550	37402-2013
Nashville	711 R S Gass Boulevard	37243	Knoxville	3711 Middlebrook Pike	37921
Columbia	1421 Hampshire Pike	38401	Johnson City	2305 Silverdale Road	37601



OFFICIAL STATE USE ONLY

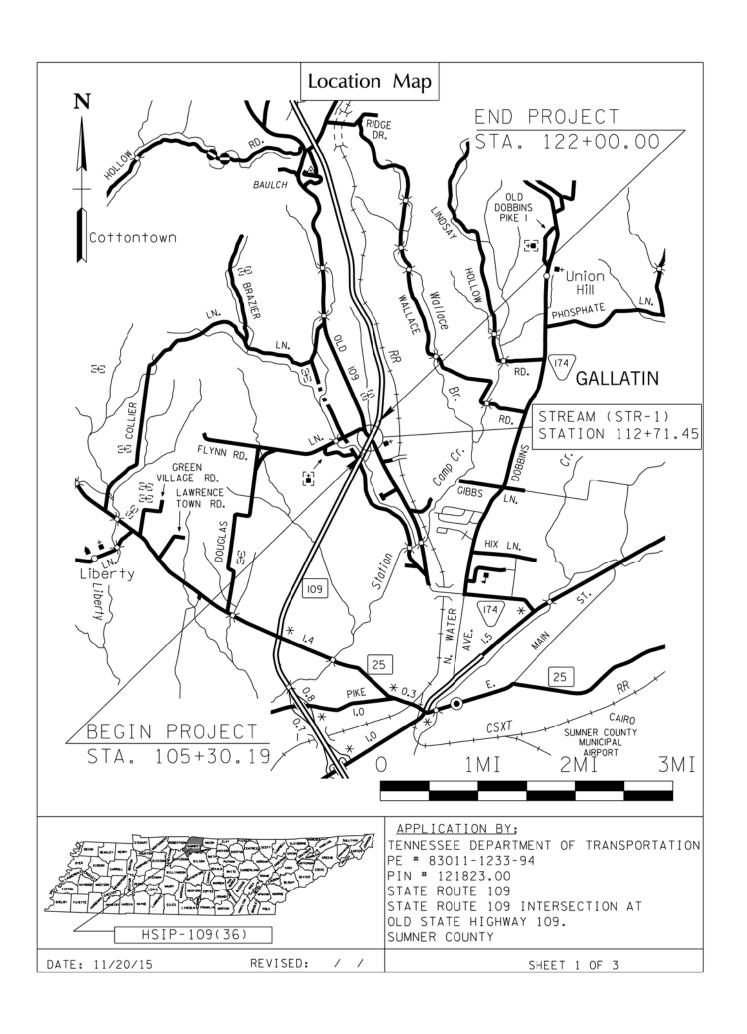
Received Date:	Permit Number:	Reviewer:		Field Office:	
Fee amount paid:	T & E Aquatic Flora and Fauna:		Impaired Receiving Stream:	Application Review:	
Date:	,			Deficient Date:	
Check #:	Exceptional TN Water:			Complete Date:	

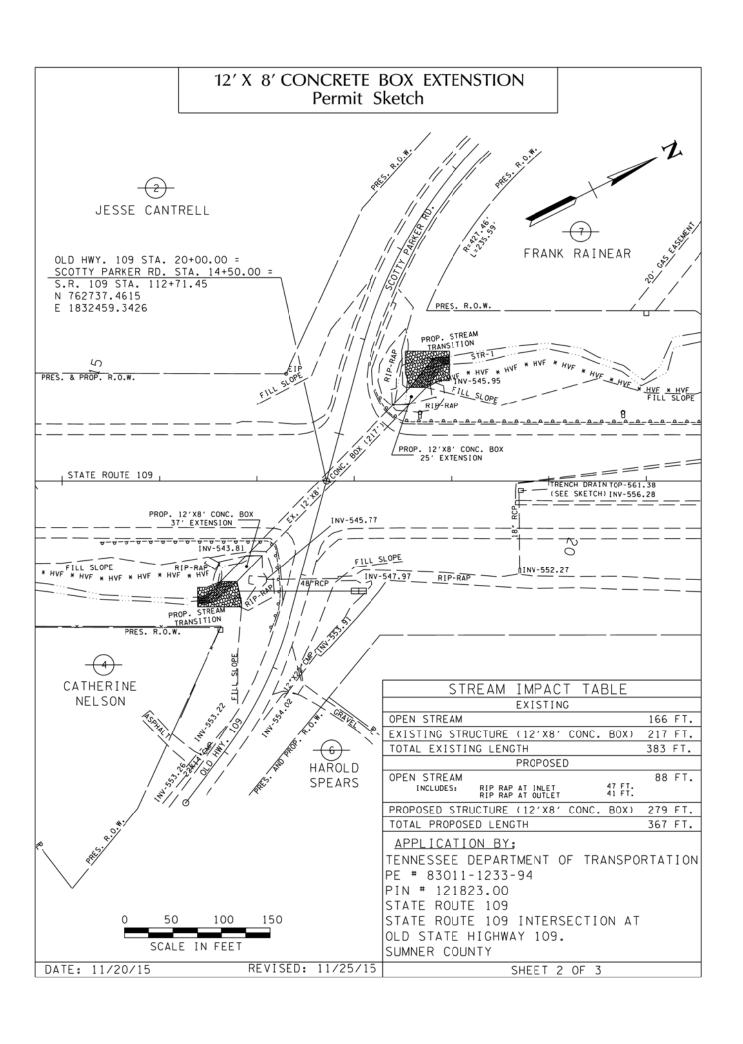


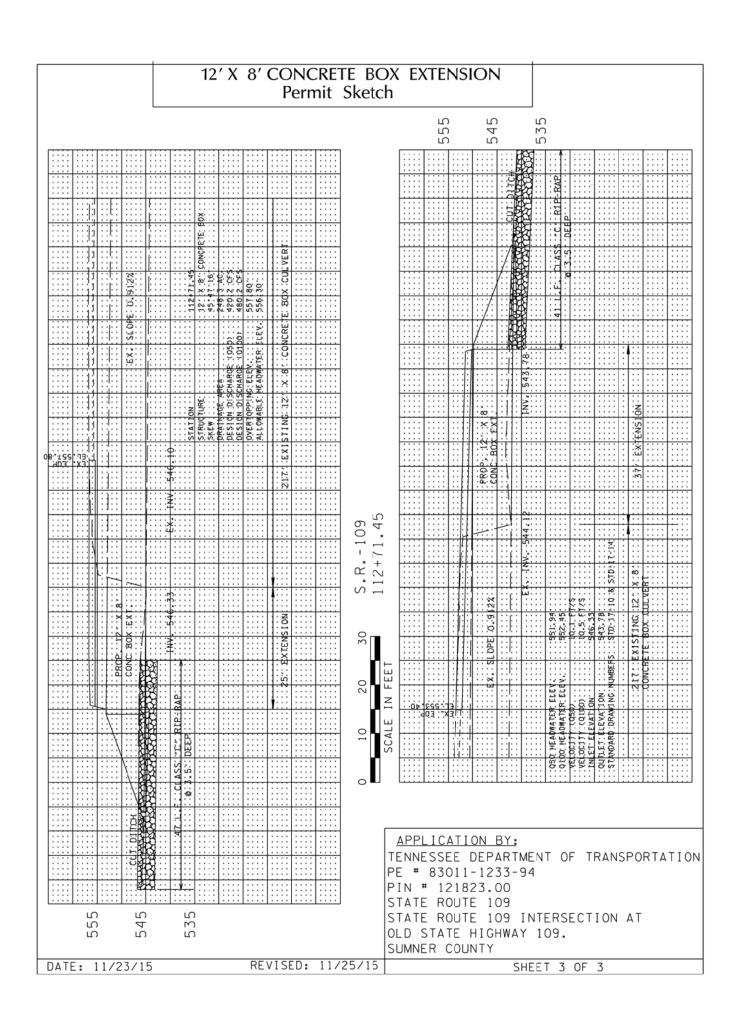


FEATURE IMPACT TABLE:	Location #1 / STR-1 (UT to East Camp Creek)
Location Information	
Location #	Location #1
Feature Name:	STR-1 (UT to East Camp Creek)
Latitude:	36.4278°
Longitude:	-86.4625°
Stationing:	Sta. 112+71.45 (SR-109)
FEMA Floodplain Designation	Zone A
Permits Required	
TDEC:	INDIVIDUAL AQUATIC RESOURCE ALTERATION PERMIT
	Non-Notification - Nationwide #14: (no-verification needed):
	This roadway crossing meets all of the following criteria required for non-notification under
	Nationwide #14:
	Discharge results in the loss of less than a tenth of an acre
Corps:	Does not affect a special aquatic site
	Does not affect federally listed species
	Does not affect historic properties
	All conditions of the Nationwide #14 General Permit will be followed during construction.
TVA:	N/A
Narrative description of impact	Extend existing culvert
randive description of impace	Existing structure: 217 ft of 12' x 8' box culvert
	Existing open stream: 166 ft
Existing feature characteristics	Total Existing Length: 383 ft
	Please refer to the enclosed Environmental Boundaries Report for more information
	Proposed structure: 279 ft of 12' x 8' box culvert (including extensions)
	Inlet extension: 25 ft
	Outlet extension: 37 ft
Proposed feature characteristics	Proposed open stream (rip-rap): 88 ft
	Rip-rap at inlet: 47 ft
	Rip-rap at outlet: 41 ft
	Total proposed length: 367 ft
Impact acreage to waters of the US (acres):	0.05
Alternatives, and Impact minimization	Please refer to enclosed cover letter for project rationale.
Stream Mitigation	STREAMS: IN-LIEU FEE
	As mitigation for 62 ft. (62 ft. x 1.0) of stream encapsulation and 16 ft. (16 ft x 1.0) of length losses,
	we propose a payment of \$18,720. A total payment of \$18,720 is proposed to the In-Lieu Fee
	Stream Mitigation Program. Please cite this payment to the TWRF in your permits.
Makland Bilinatian	
Wetland Mitigation	N/A
My activity, as proposed, will not cause measurable degradation to	
water quality	
My activity, as proposed, will only cause de minimis degradation to	
water quality	X
My activity, as proposed, will cause more than de minimis degradation	
to water quality.	
to water quanty.	

Page 1 of 1 (Feature Impact Table)









STATE OF TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION DIVISION OF WATER RESOURCES

William R. Snodgrass - Tennessee Tower 312 Rosa L. Parks Avenue, 11th Floor Nashville, Tennessee 37243-1102

January 27, 2015

TN Dept of Transportation c/o Anthony Myers 505 Deadrick St. #900 Nashville, TN 37243

Subject: Individ

Individual ARAP Permit/§401 Water Quality Certification

NRS15.352 PIN #121823.00

State Route 109

Old Hickory Lake Watershed

Sumner County, TN

Contacted Vena Jones on 2/2/2016 via phone. Only one (1) stream will be impacted. Permit remains valid with additional temporary impacts listed.

Dear Mr. Myers:

We have reviewed your proposal to modify the intersection of State Route 109 and Old State Highway 109 in Sumner County which will impact five (5) streams. One stream, an unnamed tributary to East Camp Creek, will have permanent impacts from encapsulation and length loss totaling 78 linear feet. The applicant proposes to offset these impacts through the Tennessee Stream Mitigation Program in the East Lower Cumberland Service Area. Four of the streams will have temporary impacts that include temporary road crossings, stabilization and temporary channel diversions.

The attached Aquatic Resource Alteration Permit/§401 Water Quality Certification authorizes the work you have proposed in your application.

This activity is governed by the enclosed permit. The work must be accomplished in conformance with accepted plans and information submitted in support of application NRS15.352 and the limitations and conditions set forth in the permit (enclosed). It is the responsibility of the permittee to ensure that all contractors involved with this project have read and understand the permit conditions before the project begins.

Coverage Termination

Authorization under this permit cannot be extended beyond the expiration date. If all work is not completed on or before January 26, 2021 it is the applicants responsibility to apply for additional coverage.

Thank you for your time and consideration. If you have any questions please contact me by email at <u>Vena.L.Jones@tn.gov</u> or by phone at (615) 253-5320

Sincerely,

Vena Jones

Natural Resources Unit

Encl: copy of permit

CC: DWR, Nashville Environmental Field Office

U.S. Army Corps of Engineers, Nashville Regulatory Branch

Anthony Myers, TDOT Eric Chance, TSMP

File copy



AQUATIC RESOURCE ALTERATION PERMIT NRS15.352

Pursuant to §401 of *The Federal Clean Water Act* (33 U.S.C. 1341), any applicant for a Federal license or permit to conduct any activity which may result in any discharge into the waters of the U.S., shall provide the federal licensing or permitting agency a certification from the State in which the discharge originates or will originate. Accordingly, the Division of Water Resorces requires reasonable assurance that the activity will not violate provisions of *The Tennessee Water Quality Control Act of 1977* (T.C.A. §69-3-101 et seq.) or provisions of §§301, 302, 303, 306 or 307 of *The Clean Water Act*.

Subject to conformance with accepted plans, specifications and other information submitted in support of the application, pursuant to 33 U.S.C. 1341 the State of Tennessee hereby certifies the activity described below. This shall serve as authorization under T.C.A. §69-3-101 et seq.

PERMITTEE:

TN Dept of Transportation

c/o Anthony Myers 505 Deadrick St. #900 Nashville, TN 37243

AUTHORIZED WORK: The Tennessee Department of Transportation is authorized to modify the intersection of State Route 109 and Old State Highway 109 in Sumner County which will impact five (5) streams. One stream, an unnamed tributary to East Camp Creek, will have permanent impacts from encapsulation and length loss totaling 78 linear feet. The applicant proposes to offset these impacts through the Tennessee Stream Mitigation Program in the East Lower Cumberland Service Area. Four of the streams will have temporary impacts that include temporary road crossings, stabilization and temporary channel diversions.

LOCATION:

State Route 109, Intersection at Old State Highway 109

Sumner County, TN

Latitude 36.4278° Longitude -86.4625°

EFFECTIVE DATE:

January 28, 2016

EXPIRATION DATE:

January 27, 2021

Tisha Calabrese Benton
Director, Division of Water Resources

Table of Contents

PART I	3
AUTHORIZED WORK:	3
SPECIAL CONDITIONS:	3
GENERAL CONDITIONS:	4
PART II	4
MITIGATION REQUIREMENTS	4
PART III	5
DUTY TO REAPPLY	5
PROPERTY RIGHTS	5
OTHER INFORMATION	5
CHANGES AFFECTING THE PERMIT	5
Transfer/Change of Ownership	5
Change of Mailing Address	6
NONCOMPLIANCE	6
Effect of Noncompliance	6
Reporting of Noncompliance	6
Adverse Impact	
LIABILITIES	7
Civil and Criminal Liability	
Liability under State Law	7
REOPENER CLAUSE	7
APPENDIX I	
Location/Topographic Map	
	9

PART I

Authorized Work:

STR-1: Unnamed tributary to East Camp Creek
Latitude 36.4278° Longitude -86.4625°
Extension of a 12' x 8' box culvert
Current box is 217 linear feet
Extension of box is 62 linear feet
16 linear feet of channel length loss
Impacts to be mitigated through the TN Stream Mitigation Program
62 linear feet @ 1:1 plus 16 linear feet @ 1:1 = 78 credits are required

Special Conditions:

- 1. The work shall be accomplished in conformance with the accepted plans, specifications, data and other information submitted in support of application NRS15.352 and the limitations, requirements and conditions set forth herein.
- 2. The bottom of culverts shall be constructed below the stream bed elevation, in a manner that allows natural substrate to reestablish.
- 3. Culverts shall not be constructed in a manner that would permanently disrupt the movement of fish and aquatic life.
- 4. All riprap areas shall be placed as to mimic the existing/proposed contours of the stream channel. Riprap shall be countersunk and placed at the grade with the existing stream substrate.
- 5. Voids within the riprap shall be filled with suitable substrate to prevent loss of stream within the riprap areas. Do not over-excavate for placement of riprap. Grouting of riprap is prohibited.
- 6. Construction and removal of bridges and culverts shall be in the dry to the maximum extent practicable, by diverting flow utilizing cofferdams, berms, and/or temporary channels or pipes. Temporary diversion channels shall be protected by non-erodible material and lines to the expected high water level.
- 7. The use of monofilament-type erosion control netting or blanket is prohibited.
- 8. This does not authorize the removal of riparian trees or shrubs along the banks of the streams outside the limits of disturbance for activity authorized under this permit along Richland Branch, Britton Branch, and Smithson Branch or any of the tributaries to those streams. Authorization may need to be obtained through the local jurisdiction before riparian zones are modified in any way.
- 9. Best Management Practices (BMPs) shall be stringently implemented throughout the construction period to prevent sediments, oils, or other project-related pollutants from being discharged into the East Camp Creek or its tributaries.
- 10. Streambeds shall not be used as transportation routes for construction equipment. Temporary stream crossings shall be limited to one point in the construction area and erosion prevention and sediment control measures shall be utilized where stream banks are disturbed.

11. Appropriate steps shall be taken to ensure that petroleum products or other chemical pollutants are prevented from entering waters of the state. All spills must be reported to the appropriate emergency management agency, and measures shall be taken immediately to prevent the pollution of waters of the state, including groundwater, should a spill occur.

General Conditions:

- 1. It is the responsibility of the permittee to convey all terms and conditions of this permit to all contractors. A copy of this permit, approved plans and any other documentation pertinent to the activities authorized by this permit shall be maintained on site at all times during periods of construction activity.
- 2. Work shall not commence until the permittee has received the federal §404 permit from the U. S. Army Corps of Engineers, a §26a permit from the Tennessee Valley Authority or authorization under a Tennessee NPDES Storm Water Construction Permit where necessary. The permittee is responsible for obtaining these permits.
- 3. All work shall be carried out in such a manner as will prevent violations of water quality criteria as stated in Rule 0400-40-03-.03 of the Rules of the Tennessee Department of Environment and Conservation. This includes, but is not limited to, the prevention of any discharge that causes a condition in which visible solids, bottom deposits, or turbidity impairs the usefulness of waters of the state for any of the uses designated by Rule 0400-40-04. These uses include fish and aquatic life (including trout streams and naturally reproducing trout streams), livestock watering and wildlife, recreation, irrigation, industrial water supply, domestic water supply, and navigation.
- 4. Impacts to waters of the state other than those specifically addressed in the plans and this permit are prohibited. All streams, springs and wetlands shall be fully protected prior, during and after construction until the area is stabilized. Any questions, problems or concerns that arise regarding any stream, spring or wetland either before or during construction, shall be addressed to the Division of Water Resource's Nashville Environmental Field Office (615-687-7000), or the permit coordinator in the division's Natural Resources Unit (615-253-5320).
- 5. Adverse impact to formally listed state or federal threatened or endangered species or their critical habitat is prohibited.
- 6. This permit does not authorize adverse impacts to cultural, historical or archeological features or sites.

PART II

Mitigation Requirements

Third Party Mitigation:

1. The permittee is required to offset losses from stream impacts that total 78 linear feet of stream debits. The permittee will purchase credits for stream impacts from the Tennessee Stream Mitigation Program (TSMP) in the East Lower Cumberland Service Area. The payment must be made to the inlieu fee program within sixty (60) days of invoice. Please be advised that this conditional permit is not valid until this compensatory mitigation requirement has been fulfilled. Legal liability for completion and success of the compensatory mitigation is transferred to the TSMP through the purchase of stream mitigation credits. A copy of the purchase agreement shall be submitted to this office.

PART III

Duty to Reapply

Permittee is not authorized to work after the expiration date of this permit. In order to receive authorization beyond the expiration date, the permittee shall submit such information and forms as are required to the Director of Water Resources. Such applications must be properly signed and certified.

Property Rights

The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Federal, State, or local laws or regulations.

Other Information

If the permittee becomes aware that he/she failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Director, then he/she shall promptly submit such facts or information.

Changes Affecting the Permit

Transfer/Change of Ownership

- a. This permit may be transferred to another party, provided there are no activity or project modifications, no pending enforcement actions, or any other changes which might affect the permit conditions contained in the permit, by the permittee if:
- b. The permittee notifies the Director of the proposed transfer at least 30 days in advance of the proposed transfer date;
- c. The notice includes a written agreement between the existing and new permittees containing a specified date for transfer of permit responsibility, coverage, and contractual liability between them; and
- d. The Director does not notify the current permittee and the new permittee, within 30 days, of his intent to modify, revoke, reissue, or terminate the permit, or require that a new application be filed rather than agreeing to the transfer of the permit.
- e. The permittee must provide the following information to the division in their formal notice of intent to transfer ownership:
 - i. the permit number of the subject permit;
 - ii. the effective date of the proposed transfer;
 - iii. the name and address of the transferor;
 - iv. the name and address of the transferee;
 - v. the names of the responsible parties for both the transferor and transferee;
 - vi. a statement that the transferee assumes responsibility for the subject permit;
 - vii. a statement that the transferor relinquishes responsibility for the subject permit;
 - viii. the signatures of the responsible parties for both the transferor and transferee, and;

ix. a statement regarding any proposed modifications to the permitted activities or project, its operations, or any other changes which might affect the permit conditions contained in the permit.

Change of Mailing Address

The permittee shall promptly provide to the Director written notice of any change of mailing address. In the absence of such notice the original address of the permittee will be assumed to be correct.

Noncompliance

Effect of Noncompliance

All discharges shall be consistent with the terms and conditions of this permit. Any permit noncompliance constitutes a violation of applicable State and Federal laws and is grounds for enforcement action, permit termination, permit modification, or denial of permit reissuance.

Reporting of Noncompliance

24-Hour Reporting

- a. In the case of any noncompliance which could cause a threat to public drinking supplies, or any other discharge which could constitute a threat to human health or the environment, the required notice of non-compliance shall be provided to the Division of Water Resources in the appropriate Environmental Field Office within 24-hours from the time the permittee becomes aware of the circumstances. (The Environmental Field Office should be contacted for names and phone numbers of environmental response personnel).
- b. A written submission must be provided within five (5) days of the time the permittee becomes aware of the circumstances unless this requirement is waived by the Director on a case-by-case basis. The permittee shall provide the Director with the following information:
 - 1. A description of the discharge and cause of noncompliance;
 - 2. The period of noncompliance, including exact dates and times or, if not corrected, the anticipated time the noncompliance is expected to continue; and
 - 3. The steps being taken to reduce, eliminate, and prevent recurrence of the non-complying discharge.

Scheduled Reporting

For instances of noncompliance which are not reported under subparagraph a. above, the permittee shall report the noncompliance by contacting the permit coordinator, and provide all information concerning the steps taken or planned to reduce, eliminate, and prevent recurrence of the violation and the anticipated time the violation is expected to continue.

Adverse Impact

The permittee shall take all reasonable steps to minimize any adverse impact to the waters of Tennessee resulting from noncompliance with this permit, including but not limited to, accelerated or additional

monitoring as necessary to determine the nature and impact of the noncompliance. It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

Liabilities

Civil and Criminal Liability

Nothing in this permit shall be construed to relieve the permittee from civil or criminal penalties for noncompliance. Notwithstanding this permit, the permittee shall remain liable for any damages sustained by the State of Tennessee, including but not limited to fish kills and losses of aquatic life and/or wildlife, as a result of the discharge of pollutants to any surface or subsurface waters. Additionally, notwithstanding this Permit, it shall be the responsibility of the permittee to conduct its discharge activities in a manner such that public or private nuisances or health hazards will not be created.

Liability under State Law

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable State law or the Federal Water Pollution Control Act, as amended.

This permit does not preclude requirements of other federal, state or local laws. This permit also serves as a State of Tennessee Aquatic Resource Alteration Permit (ARAP) pursuant to the Tennessee Water Quality Control Act of 1977 (T.C.A. §69-3-101 et seq.).

Reopener Clause

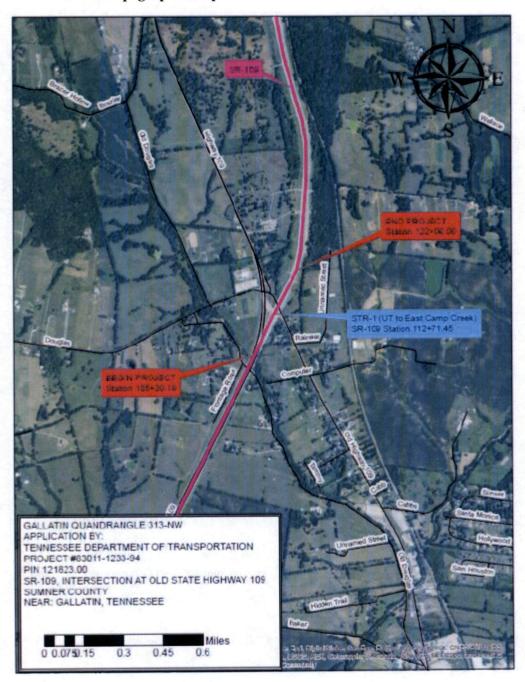
This permit may be revoked, suspended, or modified for cause, including:

- 1. Violation of any of the terms or conditions of this permit or of T.C.A § 69-3-101 et. seq.;
- 2. Obtaining the permit by misrepresentation or failing to disclose fully all relevant facts;
- 3. A change in any condition that requires either a temporary or permanent change in the conditions of this permit.

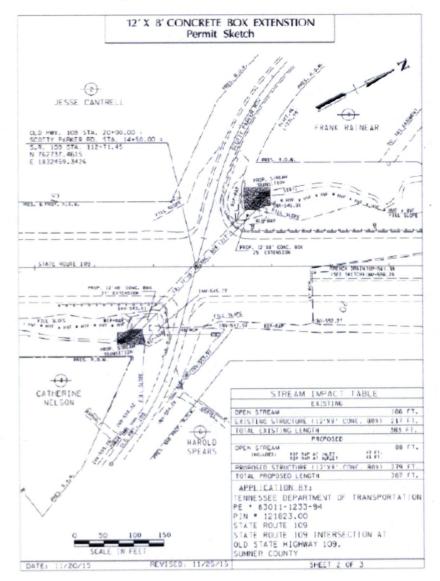
An appeal of this action may be made as provided in T.C.A. §69-3-105(i) and Rule 0400-40-05-.12 by submitting a petition for appeal. This petition must be filed within THIRTY (30) DAYS after public notice of the issuance of the permit. The petition must specify what provisions are being appealed and the basis for the appeal. It should be addressed to the technical secretary of the Tennessee Board of Water Quality, Oil and Gas at the following address: Tisha Calabrese Benton, Director, Division of Water Resources, William R. Snodgrass - Tennessee Tower, 312 Rosa L. Parks Avenue, Nashville, Tennessee 37243-1102. Any hearing would be in accordance with T.C.A. §869-3-110 and 4-5-301 et seq.

APPENDIX I

Location/Topographic Map



Site Designs



8. Ecology Report





STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION ENVIRONMENTAL DIVISION

SUITE 900 - JAMES K. POLK BUILDING 505 DEADERICK STREET NASHVILLE, TENNESSEE 37243-0334

MEMORANDUM

To: Ryan Sweeney

TDOT Design

From: Dennis Crumby

TDOT Ecology Section

Date: November 23, 2015

Subject: ENVIRONMENTAL BOUNDARIES REPORT FOR:

Sumner County; SR-109, Intersection @ Old SR-109

P.E. 83011-0233-94 PIN 121823.00

An ecological evaluation of the subject project has been conducted with the following results:

- No wetlands identified.
- One stream present; STR-1, unnamed tributary to East Camp Creek.
- No protected species identified within project impact area: The project was previously coordinated with the USFWS and TWRA. Response letters are attached. The TDEC Endangered Species Database was reviewed on 11/23/2015. Records of two, state-listed animals were noted within 4 miles, but no habitat for either of these species exists within the proposed project limits.
- **TDOT has a commitment to the U.S. Fish and Wildlife Service to clear trees on this project during the period from October 15 through March 30.

If you have any questions or comments, please contact me at Dennis.Crumby@tn.gov, 615-253-2465.

Copy: John Hewitt – Environmental Division

Melissa Portell – Survey Shane Hester – Design

Aana Taylor Smith – NEPA Section

Wesley Peck – Hydraulics

Anthony Myers – Permits Section

ED Project file:

Ecology Field Data Sheet: Water Resources Sumner County: SR-109, Intersection @ Old SR-109 **Project: TDOT ED** 11/20/2015 D. Crumby Date of survey:_ **Biologist:** Affiliation: **1-Station**: from plans 101+00R to 118+50L 2-Map label and name STR-1, unnamed tributary to East Camp Creek 3-Latitude/Longitude 36.428183 -86.462733 **4-Potential impact** Encapsulation 5-Feature description: Perennial stream what is it blue-line on topo? (y/n) No [Yes ✓]Yes ✓ defined channel (y/n) No [Straight Meandering straight or meandering channel bottom width 10-12' 12-14' top of bank width bank height and slope ratio Height up to 5' in upstream, un-channelized section avg. gradient of stream (%) substratum Large slab-rock, bedrock, mud, covered by sediment in pools. Approx. 25' of riprap riffle upstream of box inlet riffle/run/pool 10/10/80 width of buffer zone RDB: LDB: No Riparian Buffer upstream end of box culvert water flow Yes Up to 18" approx. water depth water width 10-12' general water quality fair to good OHWM indicators Water mark along grass line in channelized section. groundwater connection LDB: Stable Eroding Undercutting Slumping/Sloughing Roots Exposed bank stability: LDB, RDB RDB: Stable ✓ Eroding Undercutting Slumping/Sloughing Roots Exposed LDB: dominant species: LDB, RDB RDB: Approx 6-7 small black willows upstream of box culvert. No canopy along upstream, channelized section of stream. overhead canopy (%) 1% at box inlet, 0% in upstream, channelized section benthos YES YES, cyprinidae and etheostoma sp. observed fish algae or other aquatic life Yes, filamentous algae 114 habitat assessment score photo number (s) CoCoRaHS data, Gallatin WNW ST, TN-SR-1 11/16 - 0.0" 11/17- 0.0" 11/18 - 0.03" 11/19 - 0.90" 11/20 - 0.0" rainfall information 6-HUC code & name 051302010501 East Camp Creek (12-digit) 7-Confirmed by: 8-Mitigation No [☐ Yes ✓ (include on Mitigation Form) No ✓ Yes□ **9-ETW** No 🔽 10-303 (d) List Siltation Other Yes Habitat 11-Assessed No 🗀 Yes 🗸 12-Notes Form completed on upstream end of box culvert. This section of stream has Estimate size (acres) of lake or pond if applicable; provide any been channelized and over-widened. pertinent information needed to TDEC ARAP database shows stream is Fully Supporting. better describe feature; indicate Mitigation will be covered by the In-Lieu Fee program. if hydrologic determination form was completed.

HABITAT ASSESSMENT FIELD DATA SHEET—HIGH GRADIENT STREAMS

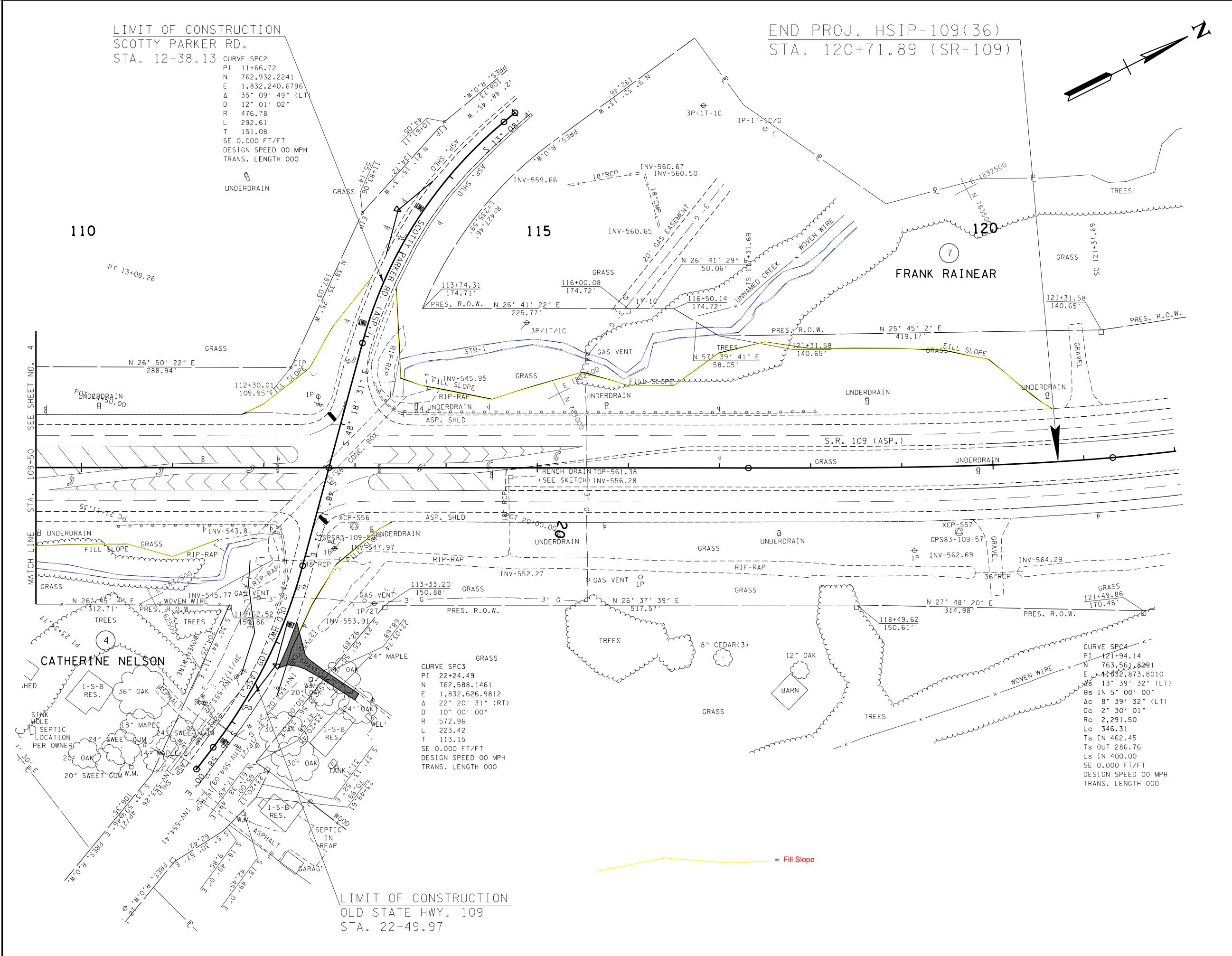
STREAM NAME Un-named Trib. E. Camp Cr.	M NAME Un-named Trib. E. Camp Cr. LOCATION SR-109 @ Old SR-109 36.428183N -86.462733W			
SITE ID #_ REACH ID _	STREAM CLASS Perennial			
UTM N UTM E _	RIVER BASIN Cumberland/Station Camp Creek/East Camp Creek			
STORET#	AGENCY TDOT			
INVESTIGATORS D. Crumby				
FORM COMPLETED BY D. Crumby	DATE 11/20/20 REASON FOR SURVEY Intersection Improvement			

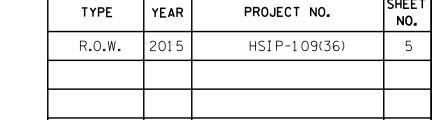
	Habitat	Condition Category			
Parameters to be evaluated in sampling reach	Habitat Parameter	Optimal	Suboptimal	Marginal	Poor
	1. Epifaunal Substrate/ Available Cover	Greater than 70% of substrate favorable for epifaunal colonization and fish cover; mix of snags, submerged logs, undercut banks, cobble or other stable habitat and at stage to allow full colonization potential (i.e., logs/snags that are not new fall and not transient).	40-70% mix of stable habitat; well-suited for full colonization potential; adequate habitat for maintenance of populations; presence of additional substrate in the form of newfall, but not yet prepared for colonization (may rate at high end of scale).	20-40% mix of stable habitat; habitat availability less than desirable; substrate frequently disturbed or removed.	Less than 20% stable habitat; lack of habitat is obvious; substrate unstable or lacking.
	SCORE 13	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0
	2. Embeddedness	Gravel, cobble, and boulder particles are 0- 25% surrounded by fine sediment. Layering of cobble provides diversity of niche space.	Gravel, cobble, and boulder particles are 25- 50% surrounded by fine sediment.	Gravel, cobble, and boulder particles are 50- 75% surrounded by fine sediment.	Gravel, cobble, and boulder particles are more than 75% surrounded by fine sediment.
	SCORE 12	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0
	3. Velocity/Depth Regime	All four velocity/depth regimes present (slow-deep, slow-shallow, fast-deep, fast-shallow). (Slow is < 0.3 m/s, deep is > 0.5 m.)	Only 3 of the 4 regimes present (if fast-shallow is missing, score lower than if missing other regimes).	Only 2 of the 4 habitat regimes present (if fast-shallow or slow-shallow are missing, score low).	Dominated by 1 velocity/ depth regime (usually slow-deep).
ırame	SCORE 15	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0
Pa	4. Sediment Deposition	Little or no enlargement of islands or point bars and less than 5% of the bottom affected by sediment deposition.	Some new increase in bar formation, mostly from gravel, sand or fine sediment; 5-30% of the bottom affected; slight deposition in pools.	Moderate deposition of new gravel, sand or fine sediment on old and new bars; 30-50% of the bottom affected; sediment deposits at obstructions, constrictions, and bends; moderate deposition of pools prevalent.	Heavy deposits of fine material, increased bar development; more than 50% of the bottom changing frequently; pools almost absent due to substantial sediment deposition.
	SCORE 10	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0
	5. Channel Flow Status	Water reaches base of both lower banks, and minimal amount of channel substrate is exposed.	Water fills >75% of the available channel; or <25% of channel substrate is exposed.	Water fills 25-75% of the available channel, and/or riffle substrates are mostly exposed.	Very little water in channel and mostly present as standing pools.
	SCORE 19	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0

HABITAT ASSESSMENT FIELD DATA SHEET—HIGH GRADIENT STREAMS

	Habitat	Condition Category				
	Parameter	Optimal	Suboptimal	Marginal	Poor	
	6. Channel Alteration	Channelization or dredging absent or minimal; stream with normal pattern.	Some channelization present, usually in areas of bridge abutments; evidence of past channelization, i.e., dredging, (greater than past 20 yr) may be present, but recent channelization is not present.	Channelization may be extensive; embankments or shoring structures present on both banks; and 40 to 80% of stream reach channelized and disrupted.	Banks shored with gabion or cement; over 80% of the stream reach channelized and disrupted. Instream habitat greatly altered or removed entirely.	
	score 4	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0	
g reach	7. Frequency of Riffles (or bends)	Occurrence of riffles relatively frequent; ratio of distance between riffles divided by width of the stream <7:1 (generally 5 to 7); variety of habitat is key. In streams where riffles are continuous, placement of boulders or other large, natural obstruction is important.	Occurrence of riffles infrequent; distance between riffles divided by the width of the stream is between 7 to 15.	Occasional riffle or bend; bottom contours provide some habitat; distance between riffles divided by the width of the stream is between 15 to 25.	Generally all flat water or shallow riffles; poor habitat; distance between riffles divided by the width of the stream is a ratio of >25.	
mpli	SCORE 11	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1 0	
Parameters to be evaluated broader than sampling reach	8. Bank Stability (score each bank) Note: determine left or right side by facing downstream.	Banks stable; evidence of erosion or bank failure absent or minimal; little potential for future problems. <5% of bank affected.	Moderately stable; infrequent, small areas of erosion mostly healed over. 5-30% of bank in reach has areas of erosion.	Moderately unstable; 30-60% of bank in reach has areas of erosion; high erosion potential during floods.	Unstable; many eroded areas; "raw" areas frequent along straight sections and bends; obvious bank sloughing; 60-100% of bank has erosional scars.	
eva	SCORE 9 LB)	Left Bank 10 9	8 7 6	5 4 3	2 1 0	
to be	SCORE 9 RB)	Right Bank 10 9	8 7 6	5 4 3	2 1 0	
Parameters t	9. Vegetative Protection (score each bank)	More than 90% of the streambank surfaces and immediate riparian zone covered by native vegetation, including trees, understory shrubs, or nonwoody macrophytes; vegetative disruption through grazing or mowing minimal or not evident; almost all plants allowed to grow naturally.	70-90% of the streambank surfaces covered by native vegetation, but one class of plants is not well-represented; disruption evident but not affecting full plant growth potential to any great extent; more than one-half of the potential plant stubble height remaining.	50-70% of the streambank surfaces covered by vegetation; disruption obvious; patches of bare soil or closely cropped vegetation common; less than one- half of the potential plant stubble height remaining.	Less than 50% of the streambank surfaces covered by vegetation; disruption of streambank vegetation is very high; vegetation has been removed to 5 centimeters or less in average stubble height.	
	SCORE 6 LB)	Left Bank 10 9	8 7 6	5 4 3	2 1 0	
	SCORE 6 RB)	Right Bank 10 9	8 7 6	5 4 3	2 1 0	
	10. Riparian Vegetative Zone Width (score each bank riparian zone)	Width of riparian zone >18 meters; human activities (i.e., parking lots, roadbeds, clear-cuts, lawns, or crops) have not impacted zone.	Width of riparian zone 12-18 meters; human activities have impacted zone only minimally.	Width of riparian zone 6- 12 meters; human activities have impacted zone a great deal.	Width of riparian zone <6 meters: little or no riparian vegetation due to human activities.	
	SCORE 0 LB)	Left Bank 10 9	8 7 6	5 4 3	2 1 0	
1	SCORE 0 RB)	Right Bank 10 9				

Total Score _ 114





PRELIMINARY PLANS

SEALED BY

COORDINATES ARE NAD/83(1995), ARE DATUM ADJUSTED BY THE

FACTOR OF 1.00002 AND TIED TO THE TGRN. ALL ELEVATIONS ARE REFERENCED TO THE NAVD 1988.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

PRESENT LAYOUT

STA.109+50 TO STA.120+71.89

SCALE: 1"= 50'

9. Training Certifications



TRAINING CERTIFICATIONS

TO BE INSERTED BY THE CONSTRUCTION DIVISION

10. TMDL Information



NO TMDL CONSULTATION IS REQUIRED FOR THIS PROJECT.